Town of Espanola 2024 Asset Management Plan

This Asset Management Plan is based on Assets owned on December 31, 2022. It is established to comply with O. Reg 588/17 section 5 to include all municipal infrastructure as required before July 1, 2024. Qualitative descriptions and technical metrics are based on data from 2022 and 2021.

Endorsed by CAO Joseph Burke on _____: _____ (Signature)

Endorsed by Council on _____ via resolution # _____

Contents

1 INTRODUCTION

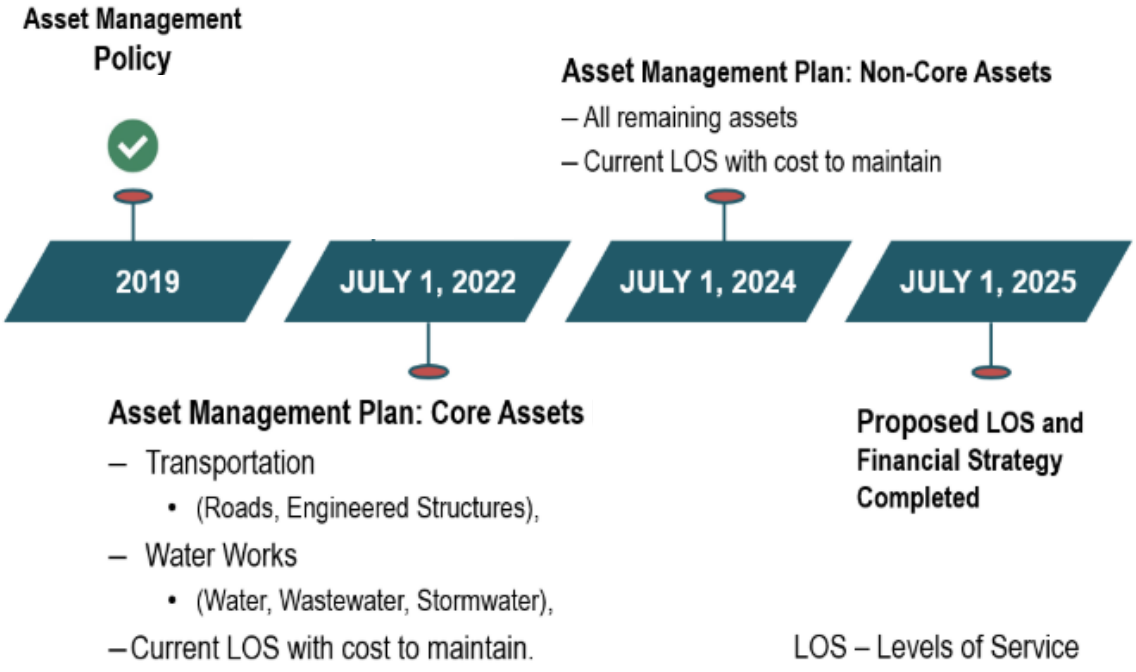
Municipalities are responsible for managing and maintaining a broad portfolio of infrastructure assets to deliver services to the community. The goal of asset management is to minimize the lifecycle costs of delivering infrastructure services, manage the associated risks, while maximizing the value ratepayers receive from the asset portfolio. The acquisition of capital assets accounts for only 10-20% of their total cost of ownership. The remaining 80-90% derives from operations and maintenance.

This AMP focuses its analysis on the capital costs to maintain, rehabilitate, and replace existing municipal infrastructure assets.

These costs can span decades, requiring planning and foresight to ensure financial responsibility is spread equitably across generations. An asset management plan is critical to long term planning. The industry-standard approach and sequence to developing a practical asset management program, as defined by the Institute of Asset Management (IAM), begins with understanding legislation, followed by a Strategic Plan, an Asset Management Policy and an Asset Management Strategy, concluding with an Asset Management Plan.

1.1 Understanding Legislation: Ontario Regulation 588/17

As part of the Infrastructure for Jobs and Prosperity Act, 2015, the Ontario government introduced Regulation 588/17 - Asset Management Planning for Municipal Infrastructure. Along with creating better performing organizations, more liveable and sustainable communities, the regulation is a key mandated driver of asset management planning and reporting. It places substantial emphasis on current and proposed levels of service and the lifecycle costs incurred in delivering them. The diagram outlines key reporting requirements under O. Reg 588/17 and the associated timelines.



1.2 Strategic Planning

Strategic planning is a process that helps municipalities establish an overall corporate vision, mission, and goal. It is a critical process that examines where a municipality is now, where it wants to go, and how it should get there. It will help the municipality identify priorities that are consistent with the established corporate goals. A strategic plan is a "living document" that is regularly updated (usually every 5 years).

AM-related missions and goals can become a component of the overall corporate strategic plan. Moreover, the decisions made within the strategic planning process can provide valuable input into the AM planning process.

1.3 Asset Management Policy

An asset management policy represents a statement of the principles guiding the municipality's approach to asset management activities. It aligns with the organizational strategic plan and provides clear direction to municipal staff on their roles and responsibilities as part of the asset management program.

The Town adopted Policy No. F06-01876 on April 23, 2019 in accordance with Ontario Regulation 588/17. The policy is scheduled to be updated in December 2024.

1.4 Asset Management Plan

The development of this AMP leverages the Town's best available information in relation to level of service, infrastructure assets and financial information gathered from staff input, subject matter expert professional judgement, and Asset Management (AM) best practices. The following steps were followed:

1. Conduct a Level of Service (LoS) analysis.
2. Assess current performance of the assets based on existing information.
3. Develop a complete listing of infrastructure assets by category to be included in the AMP (state of infrastructure).
4. Identify the lifecycle activities that would need to be undertaken to maintain the current levels of service for 2023 to 2032.
5. A description of assumptions regarding future changes in population or economic activity and related impact on the lifecycle activities.

All background information and reports used to develop the content of this AMP is available upon request.

1.4.1 Current Levels of Service (LOS) Analysis – O Reg. 588/17 S.5(2)1

Levels of Service (LOS) Analysis is a pivotal component within the realm of asset management planning, holding particular significance for the Town of Espanola as it endeavors to deliver essential public services to its residents and stakeholders. In this framework, the municipality's physical assets serve as foundational pillars, facilitating the provision of diverse service levels as mandated by the community. Central to this process is the imperative to ensure that infrastructure operates at optimal levels, meeting predefined service standards while remaining financially viable and sustainable in the long term. At its core, LOS Analysis aims to strike a delicate equilibrium between the anticipated service levels and the associated costs of delivery. By meticulously examining this balance, the Town of Espanola can make informed decisions, maximizing the

efficiency and effectiveness of their asset management strategies to better serve the evolving needs of their constituents.

- Community (Customer) Levels of Service - how the customer and community receive the service. Examples of measures that relate specifically to the customer include:
    - Appearance of assets (e.g. facilities).
    - Frequency of service disruptions.
    - Accessibility to users (e.g. 24 hours a day, 7 days a week).
    - Availability of a service; and
    - Incidences of illness or injury
    - Appropriateness of service.
    - Affordability.
    - Relevance of the service being provided in terms of demand characteristics, future demographics, current backlogs and where the pressure points are.
    - Speed of service; and
    - Attitude and ease of dealing with the municipality.
- Technical LOS - how staff deliver the service. Technical levels of service can relate to:
    - Legislative compliance / Design standards.
    - Levels of functionality.
    - Levels of financial return or asset cost.
    - Reduction in the dependency for new asset solutions.
    - Specific lifecycle costs (maintenance, rehabilitation, replacement, expansion).
    - Maintenance intervention levels
    - Levels of asset condition (standards).
    - Response times; and
    - Risk and safety.

  Each technical level of service is intended to ensure a particular service standard is met from a municipal or staff perspective (i.e., what an organization must do). For example, at what point will we repair, renew or upgrade to meet the strategic (customer) LOS?
- Expected LoS and Key Performance Indicators will be determined and presented in the 2025 version of the Town of Espanola's Asset Management Plan.

The following services departments have been identified for the Town of Espanola along with their related Community (Customer) Levels of Service:

Department	Services	Applicable Assets	Community Expectations
Transportation Services	Administration	PWD buildings	Available spaces for queries, complaints, etc.
	Active Transportation	- Trails: Trail Base, asphalt surface, retaining wall, fitness equipment - Sidewalks	Smooth trails that take me where I want or need to go safely.
	Roads	Road base, surface, turning lanes, curb and gutter Buildings(shop), Salt/Sand Domes, accessory sheds <u>Safety:</u> - Streetlight: Poles, arms fixtures - Traffic Lights: Poles, arms, lights, controllers, etc. - Winter Control: Vehicles, equipment - Summer maintenance: equipment	Available, convenient and smooth roads that take me where I need to go safety.
	Bridges and Culverts	Abutments (structure), deck, surface, retaining wall	Bridges and culverts that are solid enough to withhold significant natural events, to ensure convenience and safety.
	Public Transit	Vehicles	Access to public transit for seniors to allow me to get where I need to go on a reasonable schedule.
	Parking	Lots, lights, roadside parking	Accessible, Safe and convenient parking is available, where/when needed.

Department	Services	Applicable Assets	Community Expectations
Environmental	Water Distribution	Water mains, towers, valves, valve chambers, hydrants, service lines and curb stop etc.	Clean water, when I need it, that tastes good, has adequate pressure, at a reasonable cost.
	Water Treatment	Treatment plant (treatment systems, chlorination, pumps, chemical injection and filtration, piping, SCADA, pump houses, etc.	
	Wastewater Collection	Mains, Lift stations, force main, manholes, service lines etc.	Wastewater systems that take my wastewater away and treats it with no harm to the environment
	Wastewater Treatment	Treatment plant (separators, aeration systems, pumps, chemical systems, SCADA, digester, Geotubes (Biosolids) facilities, etc.)	
	Stormwater	Urban: Stormwater mains, catch basins, ponds, headwalls, etc.	No flooding on our streets or properties.
		Rural: Open ditches, culverts, ponds, headwalls, etc.	
	Solid Waste Collection	Public space Waste receptacles MSW waste is subcontracted,	My garbage and recycling to be picked up each week and processed with no harm to the environment.
	Solid Waste Disposal	NA – landfill services are subcontracted	Landfill is available at convenient times.
	Solid Waste Diversion	N/A - Recycling collection and disposal are subcontracted, Municipal Household Special Waste is subcontracted,	An available location to divert items that are non blue box recyclable such as hazardous waste and yard waste.

Department	Services	Applicable Assets	Community Expectations
		Leaf and Yard Waste Depot: land, equipment	
Protection Services	Fire	Vehicles, equipment (including hydrants), facilities,	The fire department responds to fire and emergencies as fast as possible with capable firefighters.
	Emergency Management	Facilities, equipment	The Town will be available and responsive to emergencies of larger scale.
	Police	NA – Police services are subcontracted to OPP	-Police will respond to emergencies in a timely manner. -Police will have a balanced visible presence in the community.
	Protective Inspection and Control	Vehicles, equipment, facilities By-law and animal control assets are subcontracted.	-Ability to ensure by-laws and building code are being adhered to. -By-law enforcement will have a balanced visible presence in the community.
Recreation and Cultural Services	Recreation Facilities	Facilities (arenas, pools, community halls, etc.), vehicles, equipment.	- Good, clean and safe recreation facilities to meet the demands of the community. - Access to community halls for community functions. - Accessible - Hours of operation are sufficient to make the facility available at various times.
	Parks and beaches	Vehicles, equipment, facilities, active parks,	- Parks that are clean, safe, with

Department	Services	Applicable Assets	Community Expectations
		passive parks, playground equipment, splash pad, athletic fields, etc.	playgrounds and open fields. - Beach is supervised by lifeguards for safety.
	Libraries	Facilities, equipment, resources, etc.	- Good facilities to meet the demands of the community. - Relevant programs and resources. - Technological equipment is available and in good working order. - Availability of on demand services and resources. - Accessible
Health Services	Public Health/Hospitals	N/A – Town of Espanola supports the Public Health Sudbury and Districts and initiatives from upper levels of governments.	-Access to health services to enhance / maintain my quality of life. -Full suite of health and social services available in my community.
	Ambulance Services	N/A- Subcontracted to Manitoulin-Sudbury District Services Board (MSDSB)	Properly equipped ambulance personnel will be dispatched and arrive on-site when needed.
	Cemeteries	Vault, equipment building, equipment	Availability of a well-maintained and private site for internment needs.
Social Services and Social Housing	Assistance to Aged Persons	N/A - Subcontracted to MSDSB	Accessible and well-maintained housing for senior citizens.
	Child Care	N/A - Subcontracted to MSDSB	Availability of childcare services, so parents can pursue their careers
	Housing/Co-op/Rent	N/A Subcontracted to MSDSB	-Opportunities for independent living. - Affordable and attainable housing.

Department	Services	Applicable Assets	Community Expectations
Planning and Development Services	Residential / Industrial / Commercial / Agriculture	Land, services, etc.	A balance of land available for development, as needed while retaining greenspace and parkland.
General Government	Administration	Equipment, vehicles, facilities	-A Town Hall that allows me to attend Council meetings, pay taxes/fees. -Receive professional and courteous customer services in a timely fashion. -Other Commercial facilities that facilitate auxiliary services (OPP).

In section 4, each asset category will undergo a Level of Service (LoS) analysis which will take into accounts factors such as quality, quantity, reliability, responsiveness, environmental, acceptability and cost.

1.4.2 Asset Performance / Current performance - O Reg. 588/17 S.5(2)2

Asset performance is defined as "the ability of an asset to fulfill the organization's objectives or requirements".

Key performance indicators (KPI) are the measure of performance of an asset, and it is directly related to the level of service it provides:

- An asset in the good performance category is one which is meeting the expectations of the community (i.e. providing an appropriate level of service); and
- An asset in the poor performance category is one which is not meeting expectations (i.e. not providing an appropriate level of service) and requires spending to have it meet expectations.

The community's asset performance expectations balance costs and affordability and are therefore unique to each community based on its infrastructure inventory, financial status and community/corporate priorities.

The Town's asset inventory contains performance information for all infrastructure assets. This includes information related to both asset condition and asset function. The performance information is collected from a variety of sources, ranging from sophisticated technologies to investigate the assets to visual observations from qualified professionals & system generated information.

All asset performance data is combined with the professional judgment of subject matter experts to establish the current performance of each asset as defined in Table 3.

PERFORMANCE CATEGORY	DESCRIPTION	STATE OF ASSET
Very Good	The asset performs as expected, delivering consistent, optimal output with minimal maintenance. There are no observable deficiencies, and the asset is fully capable of meeting future demand.	The asset is new or nearly new, with no signs of wear or deterioration.
Good	The asset performs well, meeting all operational requirements with only minor issues. Maintenance is routine, and the asset's efficiency is close to its original design capacity.	The asset shows slight signs of wear.
Fair	The asset operates adequately but may exhibit some deficiencies or inefficiencies. More frequent maintenance or minor repairs are needed to keep it functional. Performance may be affected during peak demand.	The asset shows moderate wear and tear, with visible signs of aging.
Poor	The asset performs below expectations, with frequent breakdowns or inefficiencies.	The asset is in a state of deterioration, with substantial wear and aging.
Very Poor	The asset is unreliable and often fails to perform its intended function. It may pose a risk to safety or operations and requires constant maintenance, making it inefficient to operate.	The asset is at the end of its useful life, with extensive deterioration and wear.

1.4.3 State of Infrastructure - O Reg. 588/17 S.5(2)3

The state of infrastructure refers to the overall condition, functionality, and quality of the physical structures and systems that support various department and services. A complete listing of infrastructure assets by category will be included in the AMP including:

a. Summary of assets per category.
b. Total replacement costs of assets in the category.
c. Average age of the assets in the category.
d. Condition information and related approach to determining conditions.

Assessing the state of infrastructure is crucial for the Town to make informed decisions about investment priorities, maintenance needs, and resilience planning to ensure the continued functioning and development of essential services and systems.

1.4.4 Lifecycle Management Strategy - O Reg. 588/17 S.5(2)4

The condition or performance of most assets will deteriorate over time. This process is affected by a range of factors including an asset's characteristics, location, utilization, maintenance history and environment. Asset deterioration has a negative effect on the ability of an asset to fulfill its intended function, and may be characterized by increased cost, risk and even service disruption. To ensure that municipal assets are performing as expected and meeting the needs of customers, it is important to establish a lifecycle management strategy to proactively manage asset deterioration. There are several field intervention activities that are available to extend the life of an asset. These activities can generally fall within the categories of maintenance, rehabilitation, and replacement. The following table provides a description of each type of activity and the general difference in cost.

Lifecycle Activity	Description	Example (Roads)	Cost
Inspection	Activities that are completed periodically to assess the overall condition of assets, along with the condition of each major component part. Routine inspections are usually completed by staff however in specialised areas 3rd party experts are used.	PCI inspections	Low to no cost
Maintenance	Activities that prevent defects or deteriorations from occurring	Crack Seal	Low Cost
Rehabilitation/ Renewal	Activities that rectify defects or deficiencies that are already present and may be affecting asset performance	Mill & Resurface, Spot resurfacing	Moderate Cost
Replacement/ Reconstruction	Asset end-of-life activities that often involve the complete replacement of assets	Full Reconstruction	Costly

The Town's approach to lifecycle management is described within each asset category outlined in this AMP. Developing and implementing a proactive lifecycle strategy will help staff to determine which activities to perform on an asset and when they should be performed to maximize useful life at the lowest total cost of ownership.

1.4.5 Changes in population or economic activity - O Reg. 588/17 S.5(2)5

The Town of Espanola does not anticipate significant population growth in the near term, as its current population remains stable at just under 5,000. However, it is committed to enhancing the quality of life for residents through various initiatives, including improvements in housing, infrastructure, and community services. The current Strategic Plan "Our Gateway to Growth 2023-2027" reflect a clear strategy for ensuring Espanola remains a viable and attractive community, even if significant population growth is not expected.

Here are examples of how future changes can impact the lifecycle management strategies:

	Population Growth	Economic Activity
Infrastructure Assets (e.g., roads, bridges, water and sewer)	If population growth is expected in an area, it might necessitate upgrades or expansions to existing infrastructure to accommodate increased demand. Lifecycle management strategies would need to incorporate plans for regular maintenance, as well as potential expansions or enhancements to handle future loads	Increased economic activity often leads to higher demand for infrastructure services. This could mean more wear and tear on roads, bridges, and utilities such as water and sewer. Lifecycle management strategies would need to prioritize maintenance schedules, potentially allocating more resources to areas experiencing higher economic activity.
Facilities	Changes in population demographics, such as an aging population or shifts in urbanization patterns, can impact the types of facilities needed. For example, an aging population might require more healthcare facilities or retirement homes. Lifecycle management strategies would need to consider these demographic shifts and adapt building maintenance and renovation plans accordingly	Economic trends can influence the demand for commercial and industrial space. For instance, during periods of economic growth, there may be more demand for office buildings and manufacturing facilities. Lifecycle management strategies would need to align with market demand, potentially involving renovations, expansions, or repurposing of existing buildings.
Technology Assets	As populations grow and become more connected, there's typically an increased demand for technology infrastructure. This could involve expanding broadband networks, upgrading software	Economic innovation often drives the adoption of new technologies. For example, advancements in artificial intelligence or automation may require updates to IT infrastructure and software

	systems, or investing in new technology solutions. Lifecycle management strategies would need to prioritize upgrades and replacements to keep pace with technological advancements and changing user needs.	systems to remain competitive. Lifecycle management strategies would need to incorporate plans for ongoing innovation, potentially involving regular assessments of technology assets and investments in research and development.
Natural Resources (e.g., water resources, forests, parks)	Population growth and urbanization can put pressure on natural resources such as water supplies and green spaces. Lifecycle management strategies would need to prioritize conservation efforts, sustainable management practices, and potentially investments in infrastructure to protect and preserve these resources for future generations.	Economic development often involves the exploitation of natural resources for energy, raw materials, or recreational purposes. Lifecycle management strategies would need to balance economic development with environmental conservation, potentially involving regulatory measures, land-use planning, and investments in restoration and rehabilitation efforts.

Understanding and incorporating assumptions about future changes in population or economic activity is essential for developing effective lifecycle management strategies that ensure the continued provision of services at the desired level

1.5 Updating the Asset Management Plan - O Reg. 588/17 S.7

The AMP should be updated on a periodic basis to reflect the latest information and respond to evolving asset performance expectations in the community. An annual review will be conducted in conjunction with the Town's budget processes, or more frequently if required to support funding applications. Per O. Reg 588/17 S.6 a further update will be required on or before July 1, 2025, to include Proposed Level of Service and Financial Strategy.

Information available to the public O Reg. 588/17 S.5(3):

All background information and reports used to draft this plan are available as hyperlinked in this plan. All hyperlinks are also listed here:

- Strat Plan
- Asset Management Policy
- Water and Sewer Capacity Study
- Facility studies (2016)
- Road Map
- Water Service Map
- Wastewater and Storm Sewer Map

2 Scope and Methodology

2.1 Asset Management Plan Scope

This AMP includes all Town assets funded through property taxes, water and wastewater fees and Provincial/Federal Government Specific Grants. This AMP includes the following asset categories:

Asset Category
Facilities / Buildings
Transportation System (Road Network and Appurtenances)
Drinking Water Linear Assets
Wastewater Linear Assets
Vehicles, Machinery & Equipment
Storm Sewer System Linear Assets
Bridges & Culverts

2.2 Replacement cost

There are a range of methods used for determining asset replacement costs. This AMP relies on two approaches: user-defined costs and cost inflation/CPI tables. User-defined costs rely on data from municipal staff, including recent contracts, engineering reports, and staff estimates, offering reasonably accurate and reliable results. Cost inflation, utilizing Consumer Price Index or Non-Residential Building Construction Price Index, is used when reliable replacement cost data is lacking, particularly for recently purchased or constructed assets. However, its reliability diminishes over time as assets age and new technologies emerge.

2.3 Useful Life

The estimated useful life (EUL) of an asset refers to the duration during which the Town anticipates the asset to be operational and in service before needing replacement or disposal. The EUL for each asset in the Asset Management Plan (AMP) was determined based on the insights and knowledge of municipal staff, with additional guidance from subject matter experts or industry standards when applicable.

2.4 Assumptions, Limitations and Constraints - O Reg. 588/17 S.6(7)

Developing this Asset Management Plan (AMP) demanded considerable dedication from our staff. We meticulously crafted it using the best available data, although it was subject to several broad limitations, constraints, and assumptions:

- Exclusion of Land: Land assets were omitted from the analysis.
- Exclusion of Social Services Assets: Ambulatory and Social Service Assets are managed by a separate organisation. – Manitoulin-Sudbury District Services Board.

- Inventory: Asset inventory for all groups was based on data from the Town's Asset Management software. Asset conditions were projected from software exported reports, with replacement costs derived from historical data, presumed to be higher than indicated in this plan.
- Public Works Equipment List: Costs and remaining life of equipment were updated using the Public Works Equipment List and Replacement Schedule.
- Full Replacement Assumption: All assets not covered by specific schedules were assumed to require full replacement at the end of their life cycle.
- Componentization of Buildings: Buildings constructed post-2018 were componentized based on breakdowns provided by contractors/engineers. Pre-2018 buildings will undergo componentization during replacement of old assets (e.g., HVAC units, hot water tanks, roof replacement, machinery/equipment at water treatment and wastewater treatment plants).
- Road PCI Determination: Road PCI was determined via visual inspection, with the entire network reviewed and updated on a 4-year cycle.
- Critical Data Fields Sensitivity: The accuracy of this AMP heavily relies on several critical data fields, including estimated useful life, replacement cost, quantity, and in-service date. Inaccuracies in these fields can significantly impact reporting and analytics.
- Estimation Methods: User-defined and unit cost estimates provide the most precise approximations of replacement costs. Historical costs can be adjusted to present-day values, if necessary, though this may lead to inaccuracies.
- Condition Estimation by Age: In the absence of condition assessment data, asset condition ratings were estimated based on age, which may result in over- or understatement of asset needs, leading to differing financial requirements.
- Building Componentization Challenges: Some buildings and facilities lack effective componentization into individual elements, major components, and minor components, limiting the accuracy of condition ratings, age profiles, and forecasts.
- These limitations directly impact most of the analysis presented in this AMP, including condition summaries, age profiles, long-term replacement and rehabilitation forecasts, and shorter-term 10-year forecasts generated by the Town's primary asset management system.

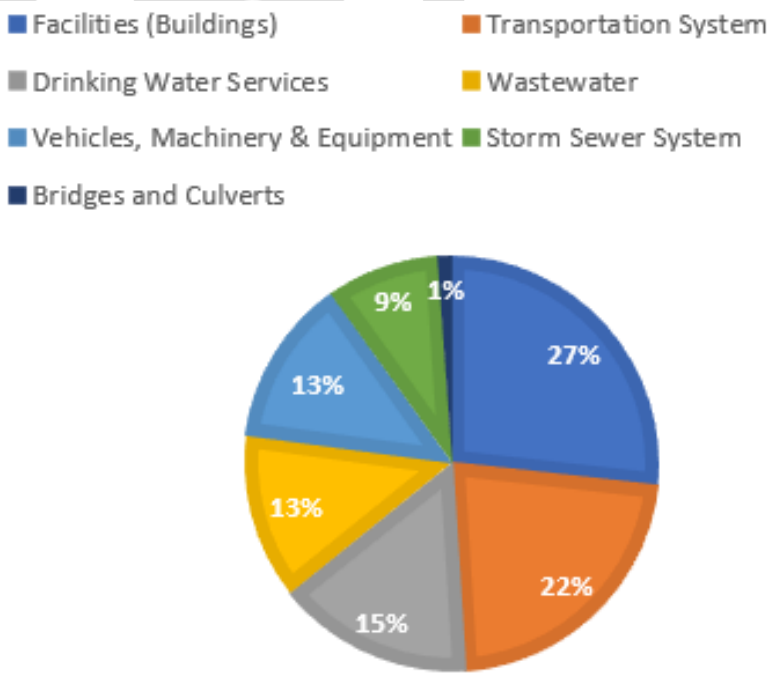
Addressing these challenges requires a sustained commitment from our staff. As our asset management program evolves, the quality of future AMPs and supporting documents will continue to improve.

3 Infrastructure Portfolio Overview

3.1 State of Infrastructure O Reg. 588/17 S.5(2)3

The table below includes the Major Service Category, quantity, replacement cost method and total replacement cost of each asset segment in the Town's facilities inventory:

Major Service Category	Number (or length) of Assets	Replacement Approach	Replacement Cost	Condition	Condition Approach
Facilities (Buildings)	101	CPI Tables/User-Defined	59,733,841	Fair	Age Based
Transportation System	809	CPI Tables/User-Defined	49,633,132	Good	Condition inspection/Age Based
Drinking Water Services	849	CPI Tables	34,024,106	Good	Age-Based
Wastewater	989	CPI Tables	28,762,445	fair	Age-Based
Vehicles, Machinery & Equipment	191	CPI Tables/User-Defined	29,128,800	Poor	Age-Based
Storm Sewer System	2018	CPI Tables	19,593,578	Fair	Age-Based
Bridges and Culverts	13	CPI Tables	2,322,109	Good	Condition inspection/Age Based
Total	**4970**	**Mixed**	**223,198,011**	**Fair**	**Mixed**



3.2 Lifecycle activities required to maintain the current level of service - O Reg. 588/17 S.5(2)4

	Backlog	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Grand Total
Facilities (Buildings)	1,763,546	1,173,051	2,817,084	248,950	813,740	40,404	609,080	439,925	687,549	255,840	2,859,220	11,708,389
Transportation System	0	1,763,546	1,175,074	2,819,108	250,975	815,766	42,431	611,108	441,954	689,579	257,871	8,867,412
Drinking Water Services	0	492,800	573,100	560,340	289,300	225,500	721,050	330,000	464,200	629,200	722,700	5,008,190
Wastewater	0	105,119	130,287	168,415	135,929	160,003	88,226	131,928	121,772	159,353	215,503	1,416,535
Storm Sewer System	0	207,835	219,768	285,276	258,551	216,847	96,335	284,778	165,634	167,188	350,348	2,252,560
Vehicles, Machinery & Equipment	343,846	736,199	251,950	845,595	1,123,268	1,388,580	334,261	709,591	936,068	391,150	341,593	7,402,101
Bridges and Culverts	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	2,107,392	4,478,550	5,167,263	4,927,684	2,871,763	2,847,100	1,891,383	2,507,331	2,817,177	2,292,310	4,747,235	36,655,187

The average is $3.5 Million per year.

3.3 Capital requirement compared to capital investments

The Town's average re-investment rate for 2021 and 2022 stands at 2.02%, significantly lower than the 3.77% needed to maintain our current Level of Service (LoS). This shortfall is contributing to a growing infrastructure deficit. It's important to note that our current re-investment rate is largely sustained by infrastructure grants, underscoring how critical these funds are to our asset management efforts. Without these grants, our ability to address and prevent further infrastructure deterioration would be severely compromised.

4 Infrastructure Portfolio Detail

4.1 Asset Category: Facilities (Buildings) and the related land

Facilities (Buildings) includes all the facilities, owned by the Municipality, that are used for public administration purposes, operations and community programming. The majority of asset management information for Facilities has been derived from the Building Condition Assessments (BCA) completed in late 2018 and early 2019. The Municipality contracted an external engineering consultant to conduct detailed condition assessments of all major facilities within the Municipality. The BCA's provide updated replacement values, condition assessments, and lifecycle management costs.

Current level of service O Reg. 588/17 S.5(2)1 and Current performance O Reg. 588/17 S.5(2)2

The current level of service and performance for each asset is determined by the key performance indicators. Detail specific to each of the facilities can be found in sections 4.1.1 to 4.1.6.

State of Facilities (Buildings) O Reg. 588/17 S.5(2)3

The average age of the assets are 25 years old of an average estimated useful life of 51 years.

The table below includes the Major Service Category, quantity, replacement cost method and total replacement cost of each asset segment in the Town's facilities inventory:

Major Service Category	Number of Assets	Replacement Approach	Replacement Cost	Condition	Condition Approach
HS - Cemetery	2	CPI Tables	$235,390	71.34 (Good)	Age Based
ES - Fire	39	CPI Tables	$5,276,119	89.44 (Very Good)	Age Based
GG – Adm. and Other Real Estate	3	CPI Tables	$6,752,256	48.22 (Poor)	Age Based
RS – Recreation and Library	16	CPI Tables/User-Defined	$18,466,366	51.03 (Fair)	Age Based
TS - Transportation	7	CPI Tables/User-Defined	$4,799,562	44.21 (Fair)	Age Based
EnvS – Wastewater and Drinking Water	34	CPI Tables	$24,204,148	84.07 (Very Good)	Age Based
Total	**101**	**Mixed**	**$59,733,841**	**Fair**	**Age Based**

Lifecycle activities required to maintain the current level of service - O Reg. 588/17 S.5(2)4

The Municipality undertakes four main types of lifecycle activities to ensure Facilities assets maintain their current level of service.

Inspection activities are completed periodically to assess the overall condition of each facility, along with the condition of each major component part (e.g. roof, plumbing, electrical, etc.). Routine inspections are completed by staff, including quarterly mechanical inspections and

monthly visual building inspections. Detailed 3rd party assessments are completed approximately every 5-years and help identify the potential maintenance requirements over a forecast horizon. The cost of 3rd party inspections represents a lifecycle cost to the Municipality and have been captured in the annual lifecycle costing.

Minor repair and maintenance activities are performed throughout the useful life of an asset. These activities include the general maintenance required to ensure the assets remain in good working order. Minor expenses are funded through repair and maintenance accounts in the Municipalities operating budget and have not been included in annual lifecycle costing.

Major expenses are funded through the Municipalities capital budget. Major repair and maintenance activities are also performed throughout the asset's lifecycle. Major repairs and maintenance occur when the cost to perform the activity exceeds $10,000 and the cost becomes a capital expense. The 3rd party assessments provide a ten-year forecast for repair and maintenance activities required to maintain the facilities in good working order. The forecasts from the 3rd party inspections have been used as the basis for the lifecycle costing estimates in the AMP. The AMP assumes that minor costs ($10,000 or less) will flow through the municipal operating budget and have not been included in lifecycle costing.

Replacement activities involve the full replacement of an asset at the end of its useful life. The AMP does not forecast the full replacement of any Facilities over the ten-year forecast period.

The below table identifies the lifecycle activities and the related cost that would need to be undertaken to maintain the current level for each of the following 10 years.

	Backlog	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Grand Total
EnvS – Wastewater and Drinking Water	57,000	0	35,000		531,285		26,000				2,744,300	3,393,585
ES - Fire		0										0
GG – Administration and Other Real-estate	113,100	152,204	101,400		26,000	40,404	41,600		122,439	10,660	11,700	619,507
HS - Cemetery		13,738			164,000		13,000					190,738
RS – Recreation and Library	1,583,046	1,007,109	1,628,820	149,500	92,455		528,480	439,925	565,110	245,180	53,300	6,292,925
TS - Transportation	10,400		1,051,864	99,450							49,920	1,211,634
Grand Total - Facilities	**1,763,546**	**1,173,051**	**2,817,084**	**248,950**	**813,740**	**40,404**	**609,080**	**439,925**	**687,549**	**255,840**	**2,859,220**	**11,708,389**

4.1.1 Major Service Category: PS - Fire

The Fire Hall is located at 592 Second Avenue, Espanola, Ontario. It was constructed in 2019 and officially opened in June of 2019. The Fire Hall consists of four bay garages with a training room, kitchen, administration area (3 offices), a bunker gear room, SCBA room, equipment storage rooms (2) and washrooms (5). The total gross floor area is xx square feet (sf). The site includes an asphalt surfaced parking area (space for approx. 55) with tarmac in front of the bays and a flagpole.

Current level of service - O Reg. 588/17 S.5(2)1 and Current performance - O Reg. 588/17 S.5(2)2

Who are the customers? What do the customers value? Does the customer directly use the asset?

1. Residents / Tourists (campers) – indirect
    a. Efficient design for Prompt service
2. MNR and other senior government services- indirect
    a. Access to training room, office space, kitchen, etc.
    b. Access to facilities and supplies for major fire (ex: forest fire)
3. Staff and Volunteer Fire Fighters (VFF) - direct
    a. Cleanliness / Organised
    b. Safety
    c. Efficient design (for ER traffic flow)
4. Other department staff- direct
    a. Availability

Overall, the building is meeting the needs of Fire Services.

Expected Community (Customer) Level of Service: According to section 1.4.1 customers expect a facility that support the fire department to enable firefighters to respond to fire and emergencies as fast as possible with capable firefighters.

Service Attribute	Level of Service Statement	Key performance Indicator (Measure)	Current Performance
Quality	Ensuring Fire Facilities are in suitable condition for staff and volunteer firefighters.	• % of facilities in Fair or better condition • # of issues that have interrupted public administration. • Average # of issues outstanding more than 3 months per scheduled inspections for 2021 and 2022.	100% None in 2021/2022 Fire Safety: 0 & no re-occurring HVAC: 0 & no re-occurring Generator: 0 & no re-occurring Exhaust extraction: 0 & no re-occurring. ESA: 0 & no re-occurring

Service Attribute	Level of Service Statement	Key performance Indicator (Measure)	Current Performance
		• Pass a comprehensive assessment every 5 years without any major issues. • Facility complaints are less than 3 per year • Become / Remain AODA compliant • Average response time compared to provincial average • % of Joint Health and safety issue that are outstanding past 3 months in 2021/2022	New build 2019 first assessment scheduled for 2024. 1 complaint received in 2021/2022 – still outstanding Compliant per 2024 review. 6 minutes compared to xx minutes 0% (2021/2022)
Enviro Impacts / Sustainability	Providing public administrative services in an environmentally sustainable manner The facility was built with 2019 energy standards	• Staff awareness and knowledge in relation to sustainability. • Annual electric energy consumption / sq. ft. • Annual natural gas consumption / sq. ft • Annual water consumption / sq. ft. • Current Energy Usage Rating	LOW - We currently have a low lens for sustainable improvements. 63.82kwh / sqf 0.40 GJ / sqf 1.49M3 / sqf TBD with Net Zero study
Affordability / Cost Effective	Managing facilities in a fiscally sustainable manner.	• # Minor failures or cosmetic issues backlogged on the maintenance and rehabilitation plan	TBD - Repairs are done reactive (complaint based) – target would be to have a maintenance and rehabilitation plan.

Service Attribute	Level of Service Statement	Key performance Indicator (Measure)	Current Performance
		• Repair and Maintenance re-investment rate R&M cost / replacement cost • Facility Site replacement reserve re-investment rate	0.17% (2021) and 0.37% (2022) Note: 1.3% to 2.5% is target 0% (we are refunding a loan from reserves so a negative re-investment rate) Note: 1.6% - 4.3% is target

State of Facilities - O Reg. 588/17 S.5(2)3

The state of infrastructure refers to the overall condition, functionality, and quality of the physical structures and systems that support Emergency Services – Fire.

Major Service Category	Number of Assets	Replacement Approach	Replacement Cost	Condition	Condition Approach
ES - Fire	37	CPI Tables	$5,190,641	89.44 (Very Good)	Age Based

Lifecycle Activities O Reg. 588/17 S.5(2)4

There is no lifecycle activities required to maintain the current levels of service for each of the following 10 years due to the age of the facility.

4.1.2 Major Service Category: GG – Administration and other real estate

The Espanola Town Hall is located at 100 Tudhope Street, Espanola, Ontario. The building was constructed in 1954 by WP Company Limited with an addition in 1978. The front entrance was renovated in 2012 along with the installation of a hydraulic elevator. Basement renovations occurred in 2007 and 2014. Further extensive renovations were completed in 2017, at a cost of approximately $200,000. The two-story building has offices on the main floor, courtroom and waiting areas at the 2nd Floor with offices, service rooms and kitchenette within the basement. Building has a gross floor area of 5,250 square feet (sf), excluding finished basement, with footprint area of 2,900 sf.

The Espanola Commercial Space currently occupied by the OPP is located at 76 Centre Street, Espanola. Constructed circa 1968 and renovated in 2000, the single-story building, with basement has an estimated gross floor area of 5,218 square feet (sf). The site includes an asphalt surfaced parking area to the northwest.

Current level of service - O Reg. 588/17 S.5(2)1 and Current performance - O Reg. 588/17 S.5(2)2

Who are the customers? What do the customers value? Does the customer directly use the asset?

1. Residents / property owners and General Public – direct
    a. Availability and enough space for me to attend / discuss with Council
    b. Hours of service that are convenient to do business
    c. Courteous customer services in a timely fashion
2. Public Service tenant– direct
    a. Timely maintenance
    b. Consistent contract administration
    a. Cleanliness
    b. Access to their rented facilities (no restrictions)
    c. Safety features
    d. Adequate washroom facilities
3. Staff – direct
    a. Cleanliness
    b. Safety features
    c. Adequate washroom facilities
    d. Air quality (scent free)

Overall, the building is meeting the needs of Administration.

Expected Community (Customer) Level of Service: According to section 1.4.1 customers expect:

- A Town Hall that allows me to attend Council meetings, pay taxes/fees.
- Receive professional and courteous customer services in a timely fashion.
- Other Commercial facilities that facilitate auxiliary services (OPP).
- A facility to report by-law infraction and a facility where I can enquire to ensure by-laws and building code are being adhered to.

Service Attribute	Level of Service Statement	Key performance Indicator (Measure)	Current Performance
Quality	Ensuring Admin Facilities are in suitable condition for public administration.	• % of facilities in Fair or better condition • # of issues that have interrupted public administration. • Average # of issues outstanding more than 3 months per scheduled inspections for 2021 and 2022. • Pass a comprehensive assessment every 5 years without any major issues. • Facility complaints are less than 3 per year • Become / Remain AODA compliant	TBD% - age based is not an adequate measure None in 2021/2022 Fire Safety: 0 & no re-occurring Elevator: 0 & no re-occurring HVAC: 0 & no re-occurring ESA: 0 & no re-occurring Last assessment 2018 due 2023. No facility complaints received in 2021/2022 Compliant per 2024 review.
Quantity / Capacity / Availability / Safety	Ensuring Admin Facilities are sufficient for staff use.	• % of facilities occupied by staff • % of Joint Health and safety issue that are outstanding past 3 months	98% - All staff space is taken no room for additional staff for expanding levels of services or increased legislative requirements. 0% (2021 / 2022)
Enviro Impacts / Sustainability	Providing public administrative services in an environmentally sustainable manner	• Staff awareness and knowledge in relation to sustainability. • Annual electric energy consumption / sq. ft.	LOW - We currently have a low lens for sustainable improvements. 118.4kwh /sqf

Service Attribute	Level of Service Statement	Key performance Indicator (Measure)	Current Performance
		• Annual natural gas consumption / sq. ft • Annual water consumption / sq. ft. • Current Energy Usage Rating	0.25GJ/sqf 0.41M3 /sqf TBD with Net Zero study
Affordability / Cost Effective	Managing facilities in a fiscally sustainable manner.	• # Minor failures or cosmetic issues backlogged on the maintenance and rehabilitation plan • Repair and Maintenance re-investment rate R&M cost / replacement cost • Facility Site replacement reserve re-investment rate	TBD - Repairs are done reactive (complaint based) – target would be to have a maintenance and rehabilitation plan. 0.33% (2021) and 0.64% (2022) Note: 1.3% to 2.5% is target 0% Note: 1.6% - 4.3% is target

State of Facilities - O Reg. 588/17 S.5(2)3

The state of infrastructure refers to the overall condition, functionality, and quality of the physical structures and systems that support Administration and other Services.

Major Service Category	Number of Assets	Replacement Approach	Replacement Cost	Condition	Condition Approach
GG – Administration and Other Real Estate	3	CPI Tables	$6,752,256	48.22 (Poor)	Age Based

Lifecycle Activities O Reg. 588/17 S.5(2)4

The lifecycle activities required to maintain the current levels of service are detailed in the table below for each of the following 10 years.

	Backlog	2023	2024	2025	2026	2027	2028	2030	2031	2032	Grand Total
Commercial Space (OPP station)	42,796		42,619	136,846				48,620	10,660		281,541
Town Hall	113,100	152,204	101,400		10,400	27,404	41,600			11,700	457,808
Grand Total	**155,896**	**152,204**	**144,019**	**136,846**	**10,400**	**27,404**	**41,600**	**48,620**	**10,660**	**11,700**	**739,349**

4.1.3 Major Service Category: RS – Recreation and Library Facilities

The Recreation Complex is located 175 Avery Drive, Espanola, Ontario. It was constructed in 1997 and officially opened in 1999, the Recreation Complex consists of a single pad ice rink, natatorium, and fitness area. The detached storage building was constructed in 2009.The two-storey building has an estimated gross floor area of 70,307 square feet (sf). The site includes an asphalt surfaced parking area to the northeast, service lane, curbing, unit paver walks, flagpoles, lighting and the detached service/storage building.

The Espanola Public Library is located at 245 Avery Drive, Espanola, Ontario. The building was constructed in 1978. The single storey assembly type building is affixed to the southeast side of the Espanola Recreation Centre. The site includes an asphalt surfaced parking area, unit paved surfaces and soft landscaping plantings at the north and east elevations.

The park facilities consist of several brick exterior buildings, each serving specific functions. Cold Storage #1 is used as a break room and for storing yard maintenance equipment for summer students, while Cold Storage #2 houses equipment related to Parks and Public Works. Cold Storage #3, with its gravel floors, is designated for long-term storage for the Public Works Department. The A-Field Announcers Booth is a small structure that contains an electrical panel and field supplies. The Ballfield Canteen, a large brick building, provides public washrooms and a food service area for events, and the nearby Ballfield Pavilion offers an expansive outdoor event space with a covered roof, cement floors, and open walls. The W.P. Foster Park Building, once used for a summer parks program, is medium-sized, like the Pinegrove Park Building, which includes a common changeroom, two public washrooms, and a mechanical room for the outdoor rink. Lastly, the Clear Lake Changerooms are small facilities with two changerooms and an electrical panel but lack washroom amenities.

Current level of service - O Reg. 588/17 S.5(2)1 and Current performance - O Reg. 588/17 S.5(2)2

Who are the customers? What do the customers value? Does the customer directly use the asset?

1. Residents and non-residents– direct
    a. Cleanliness and upkeep
    b. Availability of the facilities and resources (make use of the amenities)
    c. Customer Service
    d. Technological (fast and reliable) resources and services
    e. Safety
2. Staff – direct
    a. Clean, safe and efficient work environment

Overall, the buildings are meeting the needs of Administration.

Expected Community (Customer) Level of Service: According to section 1.4.1 customers expect:

- Good, clean and safe recreation facilities to meet the demands of the community.
- Access to community halls for community functions.
- Accessible Facilities for all to enjoy
- Hours of operation are sufficient to make facilities available at various times.
- Facilities that support Parks enjoyment - that are clean, safe, with playgrounds and open fields.

- Beach is supervised by lifeguards for safety.
- Library Facilities that can accommodate:
    a. Relevant programs and resources
    b. Technological equipment is available and in good working order.
    c. Availability of on demand services and resources.
    d. Availability of public space for community members.

Service Attribute	Level of Service Statement	Key performance Indicator (Measure)	Current Performance
Quality	Ensuring Recreation Facilities are in suitable condition for public use.	• % of facilities in Fair or better condition	TBD% - age based is not an adequate measure
		• # of issues that have interrupted public recreation.	Average of 7 days per year in 2021/2022
		• Average # of issues outstanding more than 3 months per scheduled inspections for 2021 and 2022.	**2021/2022** Fire Safety: 0 & no re-occurring Elevator: 0 & no re-occurring HVAC: 0 & no re-occurring ESA: 0 & no re-occurring Water Testing: 0 & no re-occurring Ice Plan inspections: 0 & no re-occurring Water Slide inspection: 0 & no re-occurring Mechanical inspection: 0 & no re-occurring TSSA inspections: 0 & no re-occurring
		• Pass a comprehensive assessment every 5 years without any major issues.	Last assessment 2018 due 2023.
		• Facility complaints are less than 3 per year	24 on average received in 2021/2022.
		• Become / Remain AODA compliant	Compliant per 2024 review.

Service Attribute	Level of Service Statement	Key performance Indicator (Measure)	Current Performance
Quantity / Capacity / Availability / Safety	Ensuring Recreation and Library Facilities are sufficient for public, and staff use.	• # of times the facility was at 90% capacity or greater	0 in 2021/2022
		• # or % of staff spaces / offices that are vacant	Staff space is at 100% capacity.
		• Facility size per capita it serves: Library	Library has approximately 5,200 square feet available to the public, meeting the guideline minimum. - The Administrators of Rural and Urban Public Libraries of Ontario (ARUPLO) recommends libraries serving populations of 5,000-10,000 have a size of 5000 to 10,000 square feet. The library has 30 seats available to community members, meeting the guideline minimum. - ARUPLO recommends libraries serving populations of 5,000-10,000 have 30-60 seats available.
		Rec Facility	TBD
		• # of refused bookings due to capacity: Recreation Center	36 per year (2021/2022) 50 kids per year are denied access to team due to lack of space

Service Attribute	Level of Service Statement	Key performance Indicator (Measure)	Current Performance
		Parks: Library: • % of Joint Health and safety issue that are outstanding past 3 months Recreation Center Parks Library	Unknown number of adults TBD The library meeting room has refused approximately 10 external room bookings per year due to lack of capacity 0% (2021 / 2022) 0%
Enviro Impacts / Sustainability	Providing recreation services in an environmentally sustainable manner	• Staff awareness and knowledge in relation to sustainability. • Annual electric energy consumption / sq. ft. • Annual natural gas consumption / sq. ft • Annual water consumption / sq. ft. • Current Energy Usage Rating	LOW - We currently have a low lens for sustainable improvements. 134.96kwh / SQF 0.97GJ / SQF 4.16M3 / SQF TBD with Net Zero study
Affordability	Managing facilities in a fiscally sustainable manner.	• # Minor failures or cosmetic issues backlogged on the maintenance and rehabilitation plan • Repair and Maintenance re-investment rate	TBD - Repairs are done reactive (complaint based) – target would be to have a maintenance and rehabilitation plan. 0.04% (2021) and 0.16% (2022) Note: 1.3% to 2.5% is target

Service Attribute	Level of Service Statement	Key performance Indicator (Measure)	Current Performance
		R&M cost / replacement cost • Facility Site replacement reserve re-investment rate	0.08% Note: 1.6% - 4.3% is target

State of Facilities - O Reg. 588/17 S.5(2)3

The state of infrastructure refers to the overall condition, functionality, and quality of the physical structures and systems that support Recreation and Library Services.

Major Service Category	Number of Assets	Replacement Approach	Replacement Cost	Condition	Condition Approach
RS – Recreation and Library	16	CPI Tables/User-Defined	$18,466,366	51.03 (Fair)	Age Based

Lifecycle Activities O Reg. 588/17 S.5(2)4

The lifecycle activities required to maintain the current levels of service are detailed in the table below for each of the following 10 years.

	Backlog	2023	2024	2025	2026	2028	2029	2030	2031	2032	2034	Grand Total
Library	192,000		8,500		30,055	74,000	40,000					344,555
Recreation Complex	1,241,546	947,288	1,620,320	149,500	62,400	366,730	399,925	565,110	245,180	53,300	214,500	5,865,799
Ballfield Canteen	84,500					87,750						172,250
Clear Lake Change Room	19,500	33,821										53,321
Pinegrove Park	32,500											32,500
Sherwood Park Washrooms	13,000											13,000
Ballfield Pavilion		26,000										26,000
Complex storage builiding		0										0
A-Field		0										0
Cold Sorate 1,2,3		0										0
Grand Total	**1,583,046**	**1,007,109**	**1,628,820**	**149,500**	**92,455**	**528,480**	**439,925**	**565,110**	**245,180**	**53,300**	**214,500**	**6,507,425**

4.1.4 Major Service Category: TS – Transportation

The Public Works Department is located at 596 Second Avenue, Espanola, Ontario. The facility includes the Administration and Garage (7,926 square feet (sf)), Recycling Building (2,500 sf), Salt/Storage Shed (1,400 sf), Storage Building-tire shed (676 sf), Sign Shed – pipefitter (882 sf) and Sand Dome (6,051 sf). The Administration Office and Maintenance Garage buildings were constructed in 1975, Storage Sheds in 1986, Recycle and Water Storage Tower in 1997, the Sand Dome in 1999 and the Salt Shed in 2009. The site includes gravel and asphalt surfaced storage and parking areas, perimeter chain link fencing with minimal soft landscaping features.

Current level of service - O Reg. 588/17 S.5(2)1 and Current performance - O Reg. 588/17 S.5(2)2

Who are the customers? What do the customers value? Does the customer directly use the asset?

1. Residents – direct for complaints, queries and services
    a. Accessibility
    b. Availability
    c. Customer Service
2. Residents – indirect for other transportation services
    a. Capacity for staff to have maintained equipment to operate without inhibitions.
3. Other Municipal departments- indirect
    a. Capacity for staff to maintained equipment required to provide their service levels.
    b. Availability
4. Staff - direct
    a. Safety
    b. Technology
5. Vendors – direct
    a. Availability of resources

Overall, the building is not meeting the needs of Transportation services.

Expected Community (Customer) Level of Service: According to section 1.4.1 customers expect:

- Available spaces for queries, complaints, etc.
- Facilities to work on or store equipment and vehicles to provide: Available, convenient and smooth roads that take me where I need to go safety.
- Facilities to assist in Storm Water Mgt to support: No flooding on our streets or properties.
- Facilities to assist in housing parts and equipment to support the following services:
- Water and Wastewater, Recreation, Cemetery, Beautification, Public Transportation, Fire

Service Attribute	Level of Service Statement	Key performance Indicator (Measure)	Current Performance
Quality / Quantity / Capacity / Availability / Safety	Ensuring Transportation Facilities are in suitable condition for staff and limited public access.	• % of facilities in Fair or better condition	TBD% - age based is not an adequate measure
		• # of issues that have interrupted public administration.	None in 2021/2022
		• Average # of issues outstanding more than 3 months per scheduled inspections for 2021 and 2022.	Fire Safety: 0 & no re-occurring HVAC: 0 & no re-occurring Generator: 0 & no re-occurring Exhaust extraction: To be determined ESA: 0 & no re-occurring
		• Pass a comprehensive assessment every 5 years without any major issues.	Last assessment 2018 due 2023.
		• Facility complaints are less than 3 per year	Multiple complaints received in 2021/2022 – still outstanding
		• Become / Remain AODA compliant	Will be compliant for public access by end of 2024.
		• % of Joint Health and safety issue that are outstanding past 3 months in 2021/2022	0% (2021/2022)
Enviro Impacts / Sustainability	Providing transportation services in an environmentally sustainable manner	• Staff awareness and knowledge in relation to sustainability.	LOW – We currently have a low lens for sustainable improvements.
		• Annual electric energy consumption / sq. ft.	99.6kwh /SQF
		• Annual natural gas consumption / sq. ft	

Service Attribute	Level of Service Statement	Key performance Indicator (Measure)	Current Performance
		• Annual water consumption / sq. ft. • Current Energy Usage Rating	0.75GJ /sqf 1.28 M3 / SQF TBD with Net Zero study
Affordability / Cost Effective	Managing facilities in a fiscally sustainable manner.	• # Minor failures or cosmetic issues backlogged on the maintenance and rehabilitation plan • Repair and Maintenance re-investment rate R&M cost / replacement cost • Facility Site replacement reserve re-investment rate	TBD – Repairs are done reactive (complaint based) – target would be to have a maintenance and rehabilitation plan. 0.00% (2021 / 2022) Note: 1.3% to 2.5% is target 0% Note: 1.6% - 4.3% is target

State of Facilities – O Reg. 588/17 S.5(2)3

The state of infrastructure refers to the overall condition, functionality, and quality of the physical structures and systems that support Transportation Services.

Major Service Category	Number of Assets	Replacement Approach	Replacement Cost	Condition	Condition Approach
TS – Transportation	7	CPI Tables/User-Defined	$4,799,562	44.21 (Fair)	Age Based

Lifecycle Activities O Reg. 588/17 S.5(2)4

The lifecycle activities required to maintain the current levels of service are detailed in the table below for each of the following 10 years.

Backlog	2024	2025	2032	2033	Grand Total
Public Works	10,400	1,051,864	99,450	49,920	49,953	1,261,587
Small Storage Shed (Boat)– Asset 3189						0
Storage Shed (Pipefitter)- Asset 3188						0
Grand Total	**10,400**	**1,051,864**	**99,450**	**49,920**	**49,953**	**1,261,587**

4.1.5 Major Service Category: EnvS – Wastewater and Drinking Water

The Espanola Wastewater Treatment Plant is located at 200 Bois Street, Espanola, Ontario. The facility was constructed in 1995 and includes five separate buildings: Administration/Main Garage, Inlet Building, RAS Building, Generator Building and the Digester Building. The site includes asphalt surfaced parking areas and interior service roads, chain link fencing, retaining walls and soft landscaping plantings.

The Geo-tube Sludge Thickening Facility (Bio Solids) was completed in 2022 and consists of a laydown pad for three (3) geo-tubes, a pre-engineered building to enclose 1 geo-tube for winter operations.

Pumping stations include wet wells and their equipment enclosures which are included in sewer system distribution assets.

The Espanola Water Treatment Plant is located at 1151 Bass Lake Road, Espanola, Ontario by McIntosh Perry Limited (MPL) for the Town of Espanola (Town). Located at the west side of Apsey Lake, the facility was constructed in 1997 with upgrades and additions from 2009 to 2010. The total building area is estimated at 22,921 square feet with estimated value of approximately $5M. The facility consists of two buildings.

1. The Low Lift Pumping Station (LLPS) includes an intake chamber and screen channel.
2. The main Treatment Building (1320 SM GFA and 683 SM building area) includes three filters, three backwash storage tanks, MCC Room, and Generator Room located in the Basement. The Main Floor includes the Fluoride Room, Polymer Room, Chlorine Room, Locker Rooms, Laboratory, Office, Lunchroom, Workshop, Receiving Area, Chemical Rooms 1 and 2, Chemical Storage Room, Soda Ash Room (constructed in 2010), High Lift Pumping Station, reservoir and two clear wells for treated water. The site includes asphalt surfaced drive and parking areas, gravel surfaced rear yard, chain link fencing, retaining walls and soft landscaping plantings.

The facility includes two solids contact clarifiers, three dual media filters, a clear well, a pumping station with low lift pumps, three high lift pumps, two backwash pumps, backwash water holding tank with pumps discharging to the sanitary sewer system. As raw water enters the facility, potassium permanganate is added to improve oxidation of iron and manganese. Alkalinity is boosted and pH is adjusted prior to coagulation and flocculation. After the water is through the reactivator clarifiers and 3 dual media filters, sodium hypochlorite is added for disinfection and hydrofluosilicic acid (fluoride) is added to the water. The water is then pushed through into the facility's reservoir. PH levels are again adjusted and then fed to the 2 clear wells. Prior to entering the distribution, polyphosphates (corrosion control) and sodium hypochlorite is added. The system is equipped with a 275KW diesel generator on site for emergency power. The distribution includes an elevated storage tank, 5 bleeders with backflow prevention (air gap), a continuous chlorine analyzer and approximately 150 hydrants. Most of the components described above are included in the equipment section of this asset management plan 4.5.5.

The water tower was constructed in 1995 and is 40' in diameter. It consists of a steel tank on a concrete ring support structure on sheet piling. The interior components consist of a valve chamber, access ladder and a top landing structure.
*Note some users are only connected to one of the two services.

Current level of service – O Reg. 588/17 S.5(2)1 and Current performance – O Reg. 588/17 S.5(2)2

Who are the customers? What do the customers value? Does the customer directly use the asset?

1. Residents and tenants who are plugged into water/wastewater – indirect
    a. Water on demand
    b. Wastewater that drains immediately
2. Commercial, Industrial, Institutional properties who are plugged into water/wastewater – indirect
    a. Water on demand
    b. Wastewater that drains immediately
    c. Higher capacity
3. Staff – direct
    a. Safety
    b. Comfort

Overall, the buildings are meeting the needs of Drinking Water and Wastewater.

Expected Community (Customer) Level of Service: According to section 1.4.1 customers expect:

- Facilities that support the distribution of clean water, when I need it, that tastes good, has adequate pressure, at a reasonable cost.
- Facilities that support the Wastewater systems to take my wastewater away and treats it with no harm to the environment.

Service Attribute	Level of Service Statement	Key performance Indicator (Measure)	Current Performance
Quality	Ensuring Drinking water and wastewater facilities are in suitable condition for processing and treatment of water and wastewater.	• % of facilities in Fair or better condition	TBD% - age based is not an adequate measure
		• # of issues that have interrupted public distribution of water.	None in 2021/2022
		• # of issues that have required bypass distribution of wastewater.	None in 2021/2022 No blockages / backup due to plant (2021/2022)
		• Average # of issues outstanding more than 3 months per scheduled inspections for 2021 and 2022.	Fire Safety: 0 & no re-occurring HVAC: 0 & no re-occurring ESA: 0 & no re-occurring MECP: 0 Water Tower:

Service Attribute	Level of Service Statement	Key performance Indicator (Measure)	Current Performance
		• Pass a comprehensive assessment every 5 years without any major issues.	Last assessment 2018 due 2023.
Quantity / Capacity / Availability / Safety	Ensuring Drinking water and wastewater facilities are sufficient for the water and wastewater demand as well as staff and contractor use.	• % of capacity used Water Wastewater • # of staff / contractor complaints outstanding past 3 months • % of Joint Health and safety issue that are outstanding past 3 months	67%- Licenced to take 10,500 m3/day 73% - Licenced to treat 4,500 m3/day 1 NA not currently in our H&S program
Enviro Impacts / Sustainability	Providing public administrative services in an environmentally sustainable manner	• Staff awareness and knowledge in relation to sustainability. • Annual electric energy consumption / sq. ft. • Annual natural gas consumption / sq. ft • Annual water consumption / sq. ft. • Current Energy Usage Rating	LOW – We currently have a low lens for sustainable improvements. 2298.04 kwh (1350kWh / SQF) is current target 2.48M3 (17M3) is current target 30.87M3 (0.44M3) is current target TBD with Net Zero study

Service Attribute	Level of Service Statement	Key performance Indicator (Measure)	Current Performance
Affordability / Cost Effective	Managing facilities in a fiscally sustainable manner.	• # Minor failures or cosmetic issues backlogged on the maintenance and rehabilitation plan • Repair and Maintenance re-investment rate • R&M cost / replacement cost	TBD – Repairs are done reactive (complaint based) – target would be to have a maintenance and rehabilitation plan. Note: 1.3% to 2.5% is target 0% Note: 1.6% - 4.3% is target

State of Facilities – O Reg. 588/17 S.5(2)3

The state of infrastructure refers to the overall condition, functionality, and quality of the physical structures and systems that support Drinking Water and Wastewater.

Major Service Category	Number of Assets	Replacement Approach	Replacement Cost	Condition	Condition Approach
EnvS – Wastewater and Drinking Water	34	CPI Tables	$24,204,148	84.07 (Very Good)	Age Based

Lifecycle Activities O Reg. 588/17 S.5(2)4

The lifecycle activities required to maintain the current levels of service are detailed in the table below for each of the following 10 years.

	Backlog	2023	2024	2025	2026	2027	2028	2030	2031	2032	Grand Total
Wastewater Treatment Plant	501,800	99,840		571,350			85,150	185,900			1,444,040
Water Treatment Plant	639,720	157,690	88,660	93,600	235,430	11,700	90,545	187,200	96,200	20,800	1,621,545
Grand Total	**1,141,520**	**257,530**	**88,660**	**664,950**	**235,430**	**11,700**	**175,695**	**373,100**	**96,200**	**20,800**	**3,065,585**

4.1.6 Major Service Category: HS - Cemetery

The vault building was constructed in 2003, and the garage building was constructed in 2013. The single storey service buildings are bounded located at the east side of the cemetery grounds, north of Duplessis Road. The site includes a paved ring road and soft landscaping features.

Current level of service - O Reg. 588/17 S.5(2)1 and Current performance - O Reg. 588/17 S.5(2)2

Who are the customers? What do the customers value? Does the customer directly use the asset?

1. Grieving families - direct
    a. Privacy
    b. Availability of plots and niches
    c. Well maintained (respectful)
2. Friends / Family looking for deceased - direct
    a. Well organised records and labels

Overall, the buildings are meeting the needs of Cemetery Services.

Expected Community (Customer) Level of Service: According to section 1.4.1 customers expect:

- Availability of a well-maintained and private site for interment needs.

Service Attribute	Level of Service Statement	Key performance Indicator (Measure)	Current Performance
Quality / Safety	Ensuring Cemetery Facilities are in suitable condition.	• % of facilities in Fair or better condition	80% - very good
		• # of issues that have interrupted cemetery services. (downtime in hours)	None in 2021/2022
		• Pass a comprehensive assessment every 5 years without any major issues.	Last assessment 2018 due 2023.
		• Facility complaints are less than 3 per year	No facility complaints received (2021/2022)
		• # of vandalism reported	1 (2021/2022)

Service Attribute	Level of Service Statement	Key performance Indicator (Measure)	Current Performance
Appearance / Accessibility/ Availability	Providing a well-maintained and private site for interment needs	• # of complaints on the Cemetery care and maintenance • # of plots Occupancy rate (# and %) • # of requests for alternatives services: • # of clients refused: xx per year	2021/2022: 0 per year (less than 10 is performing well) To be determined (TBD) TBD per year (2021/2022) TDB per year (2021/2022)
Enviro Impacts / Sustainability	Providing cemetery services in an environmentally sustainable manner	• Staff awareness and knowledge in relation to sustainability. • Annual electric energy consumption / sq. ft. • Annual natural gas consumption / sq. ft • Annual water consumption / sq. ft.	LOW - We currently have a low lens for sustainable improvements. To be determined (in kwh) To be determined (in M3) To be determined (in M3)
Affordability / Cost Effective	Managing facilities in a fiscally sustainable manner.	• # Minor failures or cosmetic issues backlogged on the maintenance and rehabilitation plan • Repair and Maintenance re-investment rate R&M cost / replacement cost • Facility Site replacement reserve re-investment rate	TBD - Repairs are done reactive (complaint based) – target would be to have a maintenance and rehabilitation plan. 0.00% (2021 / 2022) Note: 1.3% to 2.5% is target 0% Note: 1.6% - 4.3% is target

State of Facilities - O Reg. 588/17 S.5(2)3

The state of infrastructure refers to the overall condition, functionality, and quality of the physical structures and systems that support Health Services – Cemetery.

Major Service Category	Number of Assets	Replacement Approach	Replacement Cost	Condition	Condition Approach
HS - Cemetery	2	CPI Tables	$235,390	71.34 (Good)	Age Based

Lifecycle activities required to maintain the current level of service - O Reg. 588/17 S.5(2)4

The lifecycle activities required to maintain the current levels of service are detailed in the table below for each of the following 10 years.

Backlog	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Grand Total
Cemetery	13,738			164,000		13,000					190,738

4.2 Asset Category: Transportation System (Road Network and Appurtenances)

Transportation infrastructure includes all the infrastructure used to ensure the safe and efficient transportation of pedestrians, cyclists and vehicles. Transportation Infrastructure includes items such as roads, sidewalks, streetlights, traffic signals, and guiderails. Transportation Infrastructure does not include the vehicles and equipment used to maintain the road infrastructure. Vehicle and Equipment are included in section 4.5.

Current level of service – O Reg. 588/17 S.5(2)1 and Current performance – O Reg. 588/17 S.5(2)2

Who are the customers? What do the customers value? Does the customer directly use the asset?

1. Residents and tenants who commute, Tourists and other visitors - directly
    a. Safety
    b. No traffic delays
    c. Smooth
2. Emergency Vehicles and Commercial Large Vehicle Operators – directly
    a. Enough space to detour traffic
    b. Smooth

Expected Community (Customer) Level of Service: According to section 1.4.1 customers expect available, convenient and smooth roads that take me where I need to go safety.

Service Attribute	Level of Service Statement	Key performance Indicator (Measure)	Current Performance
Scope	Provide an understanding of the town's linear road system.	See website for map: • Class 3 (Brown) Class 4 (Blue) • Class 5 (White) Class 6	Arterial road is a high capacity throughfare passing through the community leading to other points in the province. For the Town of Espanola all class 3 roads are arterial. Average ADD of 8000-9,999 Collector roads serve to collect and distribute traffic between local roads and arterial roads. For the Town of Espanola, class 4 roads are on the higher traffic counts of the ADD of 3000-7,999, Mead, Second, Barber, Tudhope, Queensway, Avery Rural roads are in low density housing areas

Service Attribute	Level of Service Statement	Key performance Indicator (Measure)	Current Performance
			where the land parcels are much larger than urban sector.
Quality	Providing major Transportation Infrastructure assets in an acceptable condition.	• % of paved or surface treated roads with a PCI above 60% • Average # of complaints per year • (2021/2022) • % of sidewalks in Fair or better condition • % of streetlight luminaires in Fair or better condition • # and length of streetlight outages (2021/2022)	58% To be determined To be determined 100% There were xx number of outages with an average length of xx days. To be determined.
Accessibility	Providing Transportation Infrastructure that is accessible for all	• % of sidewalks that comply with AODA minimum clearance width of 1.5m • # of complaints on active transportation per year.	To be determined. 0 (2021/2022)
Cost Effective	Maintaining Transportation Infrastructure in a fiscally sustainable manner	• Transportation Infrastructure Reinvestment Rate • Operating costs as % of asset replacement value	2.28% of 3.10% target 3.26%

State of Transportation Services O Reg. 588/17 S.5(2)3

The table below includes the Major Service Category, quantity, replacement cost method and total replacement cost of each asset segment in the Town's transportation system inventory.:

Major Service Category	Number (or length) of Assets	Replacement Approach	Replacement Cost	Condition	Condition Approach
TS – Roads (Paved)	282 sections 40.878 KM	CPI tables	$28,924,923	Good (67.30)	Condition inspection
TS – Roads (Surface Treated)	44 sections 24.417 KM	CPI tables	$2,774,830	Fair (43.864)	Condition inspection
TS – Roads (Unpaved / gravel)	10 sections 16.824 KM	CPI tables	$2,030,888	Good (60)	Condition inspection
TS – Curb and Gutter	134 sections 30.40535 KM	CPI tables	$4,032,108	Poor (29.076)	Age-Based
TS – Active transportation (trails, sidewalks)	Sidewalks:181 sections 31.405KM	CPI Tables	$8,269,385	Poor (35.81)	Age-based
TS - Streetlights	153 units	CPI Tables	$2,169,126	Poor (30)	Condition inspection
TS – Signalized Intersection	5 group of assets	CPI tables and User Defined based on recent acquisitions	$1,431,872	Fair (55.6)	Age-based
Total	**809 assets**	**Mixed**	**$49,633,132**	**Good**	**Mixed**

Lifecycle activities required to maintain the current level of service - O Reg. 588/17 S.5(2)4

The below table identifies the lifecycle activities and the related cost that would need to be undertaken to maintain the current level for each of the following 10 years.

	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Grand Total
Roads - Paved	1,040,396	1,064,924	703,136	1,069,012	1,064,924	979,076	944,328	1,144,640	1,169,168	1,516,648	10,696,252
Roads - Hard Surface Treated	8,075	-	103,665	29,273	84,285	32,705	709,608	1,098,025	189,565	78,229	2,333,430
Roads - Gravel	-	-	-	-	-	-	-	-	-	-	-
Curbs and Gutter	25,232	-	13,750	-	-	-	48,904	39,690	-	-	127,575
Trails and Sidewalks	45,182	71,117	-	-	-	-	-	-	-	61,835	178,133
Grand Total - Roads	**1,118,884**	**1,136,041**	**820,551**	**1,098,285**	**1,149,209**	**1,011,781**	**1,702,840**	**2,282,355**	**1,358,733**	**1,656,711**	**13,335,389**

The Town of Espanola has an inspection schedule of 4 years for Paved and Hard Surface Treated roads. To date, the PCI inspections have not resulted in value added data that is used for capital planning or optimization. The Town will pause the PCI inspection in 2024 to strategize on use of the data and proper lifecycle activities make better decision, long term financial capital planning at the overall lowest cost. Historically, road projects have been led by the condition and material of the buried water infrastructure.

Gravel roads are not formally inspected as reliance is put on staff expertise. The current condition is 70%-80% in good condition. There are no lifecycle costs.

4.3 Asset Category: Drinking Water

The source of raw water for the Espanola Drinking Water System is Lake Apsey where the intake is located 135 m from shore at a depth of 20m.

Drinking water infrastructure encompasses linear assets such as trunk mains, water mains, water services, valves and hydrants. Water facilities and their associated equipment are addressed separately under sections 4.1.5 and 4.5.5, respectively.

Current level of service - O Reg. 588/17 S.5(2)1 and Current performance - O Reg. 588/17 S.5(2)2

At the Town of Espanola, we understand that our customers, who are the ultimate users of our services, have diverse needs and expectations. This underscores the importance of connecting their varied needs with the level of service we provide. To better develop community expectations, we group users based on their type and specific needs. Therefore, to develop the Expected Level of service and Level of service statements we determine who are the customers. What do the customers value? Does the customer directly use the asset? Staff and Volunteers users directly use the assets while the others are indirect users.

1. Residents and tenants who consume (utilise) the water. They value clean safe consumable water that is available at the tap and has a pleasing taste and color.
2. Emergency Fire Services use the services to fill truck and directly use the hydrants for fire suppression. They value adequate Fire flow, functional and accessible Hydrants
3. Commercial Property owners who are dependant on water value the same as residential users and are concerned about affordable water rates
4. Recreation facilities rely on water services for various critical functions, including maintaining pools, ice rinks, restrooms, and drinking water stations. They value the consistent supply of clean and safe water, efficient wastewater management, and responsive service to handle any issues that may arise, ensuring a safe and enjoyable experience for all visitors. Additionally, they often prioritize sustainability, seeking out water-saving technologies and practices to reduce environmental impact and operational costs.

Expected Community (Customer) Level of Service: According to section 1.4.1 customers expect:

- Clean water, when I need it, that tastes good, has adequate pressure, at a reasonable cost.

Service Attribute	Level of Service Statement	Key performance Indicator (Measure)	Current Performance
Scope	Provide an understanding of the town's linear water system.	See website for map. • Water Source	The drinking water source for Espanola, Ontario, is Lake Apsey. The water undergoes rigorous treatment at the Espanola Water Treatment Plant to ensure it meets safety standards.

Service Attribute	Level of Service Statement	Key performance Indicator (Measure)	Current Performance
		• % of residential properties that are served by water services	72% - 1,688 of 2,336 properties
		• % of Commercial/Industrial /Institutional properties that are served by water services	55% - 117 of 212 properties
		• % of residential properties that are protected by water fire flow services (hydrants)	To be determined.
Reliability	Provide water services that are sufficient and reliable.	• # of connection - days per year where a boil water advisory was in place by number of properties connected to the water system. • (Connection-Days = Number of Connections × Number of Days)	None This metric helps measure the availability of water services over a specific period.
		• # of connection - days per year where services were not available due to water main breaks.	None
		• # of capacity exceedance per year	None _ The Espanola WTP shall not be operated to exceed a maximum flow of 10,500 m3/d to the distribution system. (3.8 million m3 per year) _The daily treated water maximum flow was 5,056

Service Attribute	Level of Service Statement	Key performance Indicator (Measure)	Current Performance
			m3 in June and represents 58% of capacity. _In 2021, the total volume of water sent to the distribution system was 923,855m3.
		• # of Complaints	2021: 35 2022: 25
Cost Effective	Maintaining Water Infrastructure in a fiscally sustainable manner	• Water Infrastructure Reinvestment Rate	4.05% of 2.21% target
		• Operating costs as % of asset replacement value	1.32%

State of Drinking Water Services O Reg. 588/17 S.5(2)3

The table below includes the Major Service Category, quantity, replacement cost method and total replacement cost of each asset segment in the Town's transportation system inventory.:

Major Service Category	Number (or length) of Assets	Replacement Approach	Replacement Cost	Condition	Condition Approach
ES - Hydrant	147 assets	CPI tables	$2,123,706	Good (63.20)	Age-Based
ES – watermains	219 sections 38.01 km	CPI tables	$25,570,710	Fair (58.52)	Age-Based
ES - Valves	250 assets	CPI tables	$1,312,729	Good (68.90)	Age-Based
ES – Water Services (roadside shut off)	233 assets	CPI Tables	$5,016,961	Good (65.85)	Age-based
Total	**849**	**CPI Tables**	**$34,024,106**	**Good**	**Age-Based**

Lifecycle activities required to maintain the current level of service - O Reg. 588/17 S.5(2)4

The below table identifies the lifecycle activities and the related cost that would need to be undertaken to maintain the current level for each of the following 10 years.

	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Pipe and Parts
Pipe and Parts	492,800	573,100	560,340	289,300	225,500	721,050	330,000	464,200	629,200	722,700	5,008,190

Watermain material and condition are the driving factors of major infrastructure projects that involve the replacement of related wastewater, storm sewer and road assets. The major focus has been to eliminate bleeder lines. Bleeder lines are used to increase water flow to maintain chlorine levels that result in improvement of the water quality in areas where natural use is not sufficient due to the material and condition of the water lines. In 2003 there were about 10 bleeder lines in the system. Today, we have approximately 4 bleeder lines remaining. The need for bleeder lines is determined by complaints in the water quality.

4.4 Asset Category: Wastewater

The town of Espanola's sewer system is a comprehensive network that collects and treats wastewater from mostly residential and some commercial and institutional sources. The wastewater collection network is primarily gravity fed and has 4 pumping stations (Panache, Tanners, Merritt, Bois). The pumping stations are equipped with submersible pumps which lifts the wastewater from lower to higher elevations, overcoming gravitational limitations, and transports it to the nearest gravity pipe network that will flow into the wastewater treatment plant. The wastewater treatment plant is equipped to permit the discharge of septic pumping trucks at the beginning of the treatment process. The incoming wastewater passes through screening equipment where objects such as rags, wood fragments, plastics, and grease are removed. The screened wastewater undergoes grit removal. The sewage then flows through a weir meter to the aeration tanks where the sewage undergoes extended aeration, clarifiers, and treatment. The treated wastewater is then discharged into the Spanish River, in accordance with environmental regulations. All the sludge is removed, treated, and is mechanically transferred to the biosolid processing facility. The treated biosolids, which are nutrient-rich organic materials, are the final product produced in the biosolid processing facility. It is sent to the landfill which qualifies as a cover material.

The treatment process involves removing contaminants from the wastewater before it is safely released into the environment. The system is designed to manage the town's wastewater needs efficiently, ensuring compliance with environmental regulations and protecting local water sources. Regular maintenance and upgrades are conducted to maintain system reliability and effectiveness.

Current level of service - O Reg. 588/17 S.5(2)1 and Current performance - O Reg. 588/17 S.5(2)2

At the Town of Espanola, we understand that our customers, who are the ultimate users of our services, have diverse needs and expectations. This underscores the importance of connecting their varied needs with the level of service we provide. To better develop community expectations, we group users based on their type and specific needs. Therefore, to develop the Expected Level of service and Level of service statements we determine who are the customers. What do the customers value? Does the customer directly use the asset? None of the users directly use the assets.

1. Residential Households value reliable and efficient wastewater disposal that ensures a clean, healthy living environment. They also value affordability and the assurance that wastewater is treated in an environmentally responsible way.
2. Commercial Businesses value dependable service that supports their operations, especially for businesses like restaurants, laundromats, and hotels that generate large amounts of wastewater. They prioritize compliance with health and safety regulations and seek cost-effective solutions.
3. Public Institutions (e.g., schools, hospitals, government buildings) value consistent and effective wastewater management to maintain public health standards. They also appreciate responsive service for any issues that might arise, ensuring the uninterrupted operation of essential services.

Expected Community (Customer) Level of Service: According to section 1.4.1 customers expect: a wastewater system that take my wastewater away and treats it with no harm to the environment.

Service Attribute	Level of Service Statement	Key performance Indicator (Measure)	Current Performance
Scope	Provide an understanding of the town's linear wastewater system.	• See website for map. • % of residential properties that are served by wastewater services • % of Commercial/Industrial /Institutional properties that are served by wastewater services	72% - 1,679 of 2,336 properties 52% - 111 of 212 properties
Reliability	Provide wastewater services that are sufficient and reliable.	• Description of combined sewers in the municipal wastewater system including overflow information. • Description of how stormwater can get into sanitary sewers in the municipal wastewater system, causing sewage to overflow into streets or backup into homes. • Description of how sanitary sewers in the municipal wastewater system are designed to be resilient to avoid overflow into streets or backup into homes.	N/A – no combined sewer systems Storm water can get into the sanitary sewer system via sewer access holes. There are no records of backups due to storm water. During the 2021 and 2022 year there were no spills, overflows, bypasses, or non-compliances. Professional Engineers are retained to ensure that any new system is designed to meet MECP guidelines which are inherently resilient.

Service Attribute	Level of Service Statement	Key performance Indicator (Measure)	Current Performance
		• Description of the effluent that is discharged from sewage treatment plants in the municipal wastewater system.	The total effluent discharge from the Sewage Treatment Plant for the year was 1,005,658m3 (61% of capacity) for 2021 and 1,091,268m3 (66% of annual capacity) for 2022.
		• # of events per year where combined sewer flow in the municipal wastewater system exceeds system capacity compared to the total number of properties connected to the municipal wastewater system.	0 events in 2021 1 event in 2022 None in 2021/2022
		• # of connection-days per year due to wastewater backups compared to the total number of properties connected to the municipal wastewater system.	None in 2021/2022
		• # of effluent violations per year due to wastewater discharge compared to the total number of properties connected to the municipal wastewater system.	2021: 13 2022: 18

Service Attribute	Level of Service Statement	Key performance Indicator (Measure)	Current Performance
		# of Complaints	
Cost Effective	Maintaining Wastewater Infrastructure in a fiscally sustainable manner	• Wastewater Infrastructure Reinvestment Rate • Operating costs as % of asset replacement value	0.22% of 0.49% target 0.45%

State of Wastewater O Reg. 588/17 S.5(2)3

The table below includes the Major Service Category, quantity, replacement cost method and total replacement cost of each asset segment in the Town's transportation system inventory.:

Major Service Category	Number (or length) of Assets	Replacement Approach	Replacement Cost	Condition	Condition Approach
ES - Pump Stations	4 assets	CPI tables	$5,519,841	72.22 (Good))	Age-Based
ES – Sewer Mains	449 sections 36.564 km	CPI tables	$15,985,591	36.20 (Poor)	Age-Based
ES – Sewer Manholes	415 assets	CPI tables	$2,908,133	39.99 (Poor)	Age-Based
ES – Sewer Services	121 assets	CPI tables	$4,348,880	51.27 (Fair)	Age-Based
Total	**989 assets**	**CPI Tables**	**$28,762,445**	**Fair**	**Age-Based**

Lifecycle activities required to maintain the current level of service - O Reg. 588/17 S.5(2)4

The below table identifies the lifecycle activities and the related cost that would need to be undertaken to maintain the current level for each of the following 10 years.

	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Pipe and Parts
Pipe and Parts	105,119	130,287	168,415	135,929	160,003	88,226	131,928	121,772	159,353	215,503	1,416,535

Historically, wastewater projects have been led by the condition and material of the buried water infrastructure.

4.5 Asset Category: Vehicles, Machinery & Equipment

The Town of Espanola owns and operates a variety of fleet assets, including vehicles and equipment as well as other equipment to support its operations such as communication equipment, operating equipment (sweepers, fire fighting equipment, furniture and fixtures). These vehicles, machinery and equipment are required to ensure the Town can effectively deliver a variety of services to its residents.

Current level of service O Reg. 588/17 S.5(2)1 and Current performance O Reg. 588/17 S.5(2)2

The current level of service and performance for each asset is determined by the key performance indicators. Detail specific to each of the facilities can be found in sections 4.5.1 to 4.5.6.

State of Vehicles, Machinery & Equipment O Reg. 588/17 S.5(2)3

The table below includes the Major Service Category, quantity, replacement cost method and total replacement cost of each asset segment in the Town's facilities inventory:

Major Service Category	Number of Assets	Replacement Approach	Replacement Cost	Condition	Condition Approach
HS - Cemetery	2	CPI Tables/User-Defined Cost	93,898	55.60 (Fair)	Age Based
PS – Fire	8	CPI Tables/User-Defined Cost	$2,165,506	42.70 (Fair)	Age Based
GG – Administration and Other Real Estate	4	CPI Tables/User-Defined Cost	$143,463	58.35 (Fair)	Age Based
RS – Recreation and Library	27	CPI Tables/User-Defined Cost	$9,005,263	26.43 (Poor)	Age Based
TS - Transportation	47	CPI Tables/User-Defined Cost	$5,900,649	46.91 (Fair)	Age Based
EnvS – Wastewater and Drinking Water	103	CPI Tables/User-Defined Cost	$11,820,021	27.02 (Poor)	Age Based
Total	191	Mixed	**$29,128,800**	Poor	Age Based

Lifecycle Activities O Reg. 588/17 S.5(2)4

The lifecycle activities required to maintain the current levels of service are detailed in the table below for each of the following 10 years.

Backlog		2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Grand Total
Administration								33,833				33,833
Fire	343,846	51,974		332,345								728,165
Public Works				273,500	35,000	600,000	191,331	300,000	355,000	275,000	272,793	2,302,624
Recreation					600,068	77,680	77,680	201,708	172,968			1,130,104
Water & Wastewater		684,225	251,950	239,750	488,200	710,900	65,250	174,050	408,100	116,150	68,800	3,207,375
Cemetery												
Grand Total	**343,846**	**736,199**	**251,950**	**845,595**	**1,123,268**	**1,388,580**	**334,261**	**709,591**	**936,068**	**391,150**	**341,593**	**7,402,101**

4.5.1 Major Service Category: PS – Fire

The Town of Espanola's fire services own and operates several equipment assets that are used for the essential services provided by the fire crews. These assets include items used for the front-line delivery of fire protection services, along with items used for the training of front-line fire fighters.

Current level of service - O Reg. 588/17 S.5(2)1 and Current performance - O Reg. 588/17 S.5(2)2

Customer details can be found in section 4.1.1

Overall, the equipment is meeting the needs of Fire Services.

Expected Community (Customer) Level of Service: According to section 1.4.1 customers expect equipment that support the fire department to enable firefighters to respond to fire and emergencies as fast as possible with capable firefighters.

Service Attribute	Level of Service Statement	Key performance Indicator (Measure)	Current Performance
Quality	Ensuring Fire equipment and vehicles are in suitable condition for staff and volunteer firefighters.	• % of equipment and vehicles in Good or Very Good condition • Total annual fire loss per capita compared to provincial average	100% To be determined
Cost Effectiveness	Managing Emergency Services assets in a fiscally sustainable manner	• Reinvestment Rate	To be determined

State of Vehicles, Machinery and Equipment - O Reg. 588/17 S.5(2)3

The state of infrastructure refers to the overall condition, functionality, and quality of the physical structures and systems that support Emergency Services – Fire.

Major Service Category	Number of Assets	Replacement Approach	Replacement Cost	Condition	Condition Approach
ES – Fire - Vehicles	6	CPI Tables/User-Defined Cost	$1,955,430	42.98 (Fair)	Age Based
ES – Fire - Equipment	1	CPI Tables	$125,076	83.72 (Very Good)	Age Based
ES – Fire - Communications	1	User-Defined Cost	85,000	0 (Very Poor)	Age Based
Total	8		$2,165,506	Fair	Age Based

Lifecycle Activities O Reg. 588/17 S.5(2)4

The lifecycle activities required to maintain the current levels of service are detailed in the table below for each of the following 10 years.

	Backlog	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Grand Total
Fire												
Communication	85,000											85,000
Vehicle	258,846	51,974		332,345								643,165
Fire Total	**343,846**	**51,974**		**332,345**								**728,165**

These lifecycles are mostly based on end-of-life replacements.

4.5.2 Major Service Category: GG – Administration

Administration equipment and vehicles contains, vehicles and equipment for administration and building services, town signage and murals.

Current level of service - O Reg. 588/17 S.5(2)1 and Current performance - O Reg. 588/17 S.5(2)2

Customer details can be found in section 4.1.2

Overall, the equipment is meeting the needs of Administration Services.

Expected Community (Customer) Level of Service: According to section 1.4.1 customers expect

- Equipment that supports staff which allows me to attend Council meetings, pay taxes/fees.
- Equipment that supports staff which allows me to receive professional and courteous customer services in a timely fashion.
- Equipment that facilitates auxiliary services (OPP).
- Equipment to support the enforcement of the building code.
- Equipment to ensure that by-law enforcement will have a balanced visible presence in the community

Service Attribute	Level of Service Statement	Key performance Indicator (Measure)	Current Performance
Quality	Ensuring Administration equipment and vehicles are in suitable condition for staff.	• % of equipment and vehicles in Good or Very Good condition	100%
Cost Effectiveness	Managing Administration equipment and vehicles in a fiscally sustainable manner	• Reinvestment Rate	To be determined

State of Vehicles, Machinery and Equipment - O Reg. 588/17 S.5(2)3

The state of infrastructure refers to the overall condition, functionality, and quality of the physical structures and systems that support Administration and other Services.

Major Service Category	Number of Assets	Replacement Approach	Replacement Cost	Condition	Condition Approach
GG – Administration and Other Real Estate - Equipment	2	CPI Table/User - Defined	$88,833	67.4 (Good)	Age Based
GG – Administration and Other Real Estate – Vehicle(s)	2	CPI Tables	$54,629	49.31 (Fair)	Age Based
Total	4		$143,463	Fair	Age Based

Lifecycle Activities O Reg. 588/17 S.5(2)4

The lifecycle activities required to maintain the current levels of service are detailed in the table below for each of the following 10 years.

Backlog	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Grand Total
Administration											
Communication							33,833				33,833
Administration Total							**33,833**				**33,833**

4.5.3 Major Service Category: RS – Recreation and Library

Recreation equipment and vehicles contains, communication signage, vehicles, ice maintenance equipment, lawn equipment, park structures, pool equipment and poolside accessories, etc. to operate:

- the recreation complex, which is a combination of an Arena, a Pool, a Fitness Gym, Squash courts and a rec hall.
- Parks
- Ball Parks
- Splash Pad
- Public Library

The public library contains physical plant infrastructure, technology infrastructure and equipment, and resources, shelving, equipment, and other materials. The library has approximately 30,000 volumes with approximately three-quarters of the collection consisting of adult material and one-quarter consisting of children's and young adult material. Meeting guideline standards. ARUPLO recommends libraries serving populations of 5,000-10,000 have 12,000-24,000 physical items with a balance of two-thirds adult material and one third children's and young adult material. Books and collections are continuously refreshed as part of the annual operating budget and are not included in this asset management plan.

Current level of service - O Reg. 588/17 S.5(2)1 and Current performance - O Reg. 588/17 S.5(2)2

Customer details can be found in section 4.1.3

Expected Community (Customer) Level of Service: According to section 1.4.1 customers expect equipment that supports:

- Accessible, good, clean and safe Library, recreation facilities, halls and parks to meet the demands of the community.

Service Attribute	Level of Service Statement	Key performance Indicator (Measure)	Current Performance
Quality	Ensuring recreation equipment and vehicles are in suitable condition for staff and customer use.	• % of equipment and vehicles in Good or Very Good condition	27%
	Ensuring library equipment is in suitable condition for staff and patron use.	• % equipment over their estimated useful life (in terms of cost) • amount of time offline for repairs (including network issues) – in terms of hours offline as % of open hours	TBD TBD

Service Attribute	Level of Service Statement	Key performance Indicator (Measure)	Current Performance
Quantity	Ensuring library equipment is sufficient condition for staff and patron use.	• Number of public access computers compared to ARUPLO best practice	The library has 7 public access computers available to patrons, meeting the guideline minimum. - ARUPLO recommends libraries serving populations of 5,000-10,000 have 5-6 public access computers available
Cost Effectiveness	Managing Administration equipment and vehicles in a fiscally sustainable manner	• Reinvestment Rate	To be determined

State of Vehicles, Machinery and Equipment - O Reg. 588/17 S.5(2)3

The state of infrastructure refers to the overall condition, functionality, and quality of the physical structures and systems that support Recreation and Library Services.

Major Service Category	Number of Assets	Replacement Approach	Replacement Cost	Condition	Condition Approach
RS – Recreation and Library - Equipment	26	CPI Table/User - Defined	$8,983,313	27.45 (Poor)	Age Based
RS – Recreation and Library – Vehicle(s)	1	CPI Tables	$21,950	0 (Very Poor)	Age Based
Total	27		$9,005,263	Poor	Age Based

Lifecycle Activities O Reg. 588/17 S.5(2)4

The lifecycle activities required to maintain the current levels of service are detailed in the table below for each of the following 10 years.

	Backlog	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Grand Total
Recreation												
Arena								136,430				136,430
Parks					95,267	77,680	77,680					250,627
Pool									84,250			84,250
Recreation Complex					504,801			65,278	88,718			658,797
Recreation Total					**600,068**	**77,680**	**77,680**	**201,708**	**172,968**			**1,130,104**

4.5.4 Major Service Category: TS – Transportation

Transportation equipment and vehicles asset category include light-duty pickups, large trucks, heavy equipment, attachments, and small tools, ensuring the efficient delivery of road maintenance, winter control, and the upkeep of aesthetically pleasing public spaces.

Current level of service - O Reg. 588/17 S.5(2)1 and Current performance - O Reg. 588/17 S.5(2)2

Customer details can be found in section 4.1.4

Expected Community (Customer) Level of Service: According to section 1.4.1 customers expect equipment and vehicles asset that support:

- Available spaces for queries, complaints, etc.
- convenient and smooth roads that take me where I need to go safety.
- Storm Water Mgt to support: No flooding on our streets or properties.
- Water and Wastewater, Recreation, Cemetery, Beautification, Public Transportation, Fire

Service Attribute	Level of Service Statement	Key performance Indicator (Measure)	Current Performance
Quality	Ensuring Transportation equipment and vehicles are in suitable condition for staff.	• % of equipment and vehicles in Good or Very Good condition	45%
Cost Effectiveness	Managing Transportation equipment and vehicles in a fiscally sustainable manner	• Reinvestment Rate	To be determined

State of Vehicles, Machinery and Equipment - O Reg. 588/17 S.5(2)3

The state of infrastructure refers to the overall condition, functionality, and quality of the physical structures and systems that support Administration and other Services.

Major Service Category	Number of Assets	Replacement Approach	Replacement Cost	Condition	Condition Approach
TS – Transportation - Equipment	27	CPI Table/User - Defined	$3,560,731	44.88 (Fair)	Age Based
TS – Transportation – Vehicle(s)	20	CPI Table/User - Defined	$2,339,918	49.66 (Fair)	Age Based
Total	47		$5,900,649	Fair	Age Based

Lifecycle Activities O Reg. 588/17 S.5(2)4

The lifecycle activities required to maintain the current levels of service are detailed in the table below for each of the following 10 years.

Backlog	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Grand Total
Public Works											
Vehicle			73,500			75,000	150,000	275,000	250,000	80,000	903,500
Vehicle - Transit						116,331					116,331
Equipment			200,000	35,000	600,000		150,000	80,000	25,000	192,793	1,282,793
Public Works Total			**273,500**	**35,000**	**600,000**	**191,331**	**300,000**	**355,000**	**275,000**	**272,793**	**2,302,624**

4.5.5 Major Service Category: EnvS – Wastewater, Stormwater and Drinking Water

The vehicle and equipment related to wastewater, stormwater and drinking water are:

Wastewater – Aeration tanks, clarifiers, Holding tanks, Digesters, UV system, Generators, SCADA control system, etc.

Stormwater – steamers, vactor truck

Water - The Low Lift Pumping Station (LLPS) includes an intake chamber, screen channel, one low lift well (71.5 CM), two variable speed vertical turbine pumps (one duty, one standby).

Water - The main Treatment Building (1320 SM GFA and 683 SM building area) includes one in-line mixer, two solids contact clarifiers, auto sludge removal system, three filters, two backwash pumps, and Generator (275-kW standby emergency generator with two 1135-L fuel storage tanks), the sanitary waste pumps (submersible), filter air scour blower, SCADA monitoring and control equipment, three vertical turbine pumps, etc.

Water distribution – Thawing machine and meters.

Current level of service – O Reg. 588/17 S.5(2)1 and Current performance – O Reg. 588/17 S.5(2)2
Customer details can be found in section 4.1.5

Expected Community (Customer) Level of Service: According to section 1.4.1 customers expect equipment and vehicles asset that support:

- The distribution of clean water, when I need it, that tastes good, has adequate pressure, at a reasonable cost.
- The Wastewater systems to take my wastewater away and treats it with no harm to the environment.

Service Attribute	Level of Service Statement	Key performance Indicator (Measure)	Current Performance
Quality	Ensuring Water and Wastewater equipment and vehicles are in suitable condition for staff.	• % of equipment and vehicles in Good or Very Good condition	30%
Cost Effectiveness	Managing Administration equipment and vehicles in a fiscally sustainable manner	• Reinvestment Rate	To be determined

State of Vehicles, Machinery and Equipment - O Reg. 588/17 S.5(2)3

The state of infrastructure refers to the overall condition, functionality, and quality of the physical structures and systems that support Administration and other Services.

Major Service Category	Number of Assets	Replacement Approach	Replacement Cost	Condition	Condition Approach
EnvS – Wastewater, stormwater & drinking water - Equipment	102	CPI Table/User - Defined	$11,520,021	26.49 (Poor)	Age Based
EnvS – Wastewater, stormwater & drinking water – Vehicle(s)	1	User-Defined Cost	$300,000	79.44 (Good)	Age Based
Total	103		$11,820,021	Poor	Age Based

Lifecycle Activities O Reg. 588/17 S.5(2)4

The lifecycle activities required to maintain the current levels of service are detailed in the table below for each of the following 10 years.

Backlog	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Grand Total
Water & Wastewater											
Wasterwater Treatment Plant	176,550	75,500	166,650	358,400	29,700	25,300	102,400	323,400	56,550	22,500	1,336,950
Water Treatment Plant	507,675	176,450	73,100	129,800	681,200	39,950	71,650	84,700	59,600	46,300	1,870,425
Water & Wastewater Total	**684,225**	**251,950**	**239,750**	**488,200**	**710,900**	**65,250**	**174,050**	**408,100**	**116,150**	**68,800**	**3,207,375**

4.5.6 Major Service Category: HS – Cemetery

The vehicle and equipment related to cemetery include small machinery that allow for burial services and maintenance.

Current level of service – O Reg. 588/17 S.5(2)1 and Current performance – O Reg. 588/17 S.5(2)2
Customer details can be found in section 4.1.6

Expected Community (Customer) Level of Service: According to section 1.4.1 customers expect:
- Availability of a well-maintained and private site for interment needs.

Service Attribute	Level of Service Statement	Key performance Indicator (Measure)	Current Performance
Quality	Ensuring Cemetery equipment and vehicles are in suitable condition for staff.	• % of equipment and vehicles in Good or Very Good condition	50%
Cost Effectiveness	Managing Cemetery equipment in a fiscally sustainable manner	• Reinvestment Rate	To be determined

State of Vehicles, Machinery and Equipment - O Reg. 588/17 S.5(2)3
The state of infrastructure refers to the overall condition, functionality, and quality of the physical structures and systems that support Administration and other Services.

Major Service Category	Number of Assets	Replacement Approach	Replacement Cost	Condition	Condition Approach
HS - Cemetery - Equipment	2	CPI Table/User - Defined	$93,898	59.60 (Fair)	Age Based

Lifecycle Activities O Reg. 588/17 S.5(2)4
There is no lifecycle activities required to maintain the current levels of service in the following 10 years.

4.6 Asset Category: Storm Sewer System

The Town of Espanola's storm sewer system is designed to manage and direct stormwater primarily from residential areas, with some input from commercial properties. The system ensures that stormwater is collected from surfaces like roads and properties, channeling it into a network that minimizes flooding risks and protects water quality by preventing untreated runoff from entering natural water bodies. Espanola's storm sewer infrastructure is crucial in managing stormwater, especially during heavy rainfall, and plays a significant role in reducing the environmental impact of urban runoff. The system integrates various stormwater management practices, such as catch basins, underground pipes, and outfall structures, to ensure that stormwater is efficiently handled and does not adversely affect the town's water resources or infrastructure

Current level of service - O Reg. 588/17 S.5(2)1 and Current performance - O Reg. 588/17 S.5(2)2

At the Town of Espanola, we understand that our customers, who are the ultimate users of our services, have diverse needs and expectations. This underscores the importance of connecting their varied needs with the level of service we provide. To better develop community expectations, we group users based on their type and specific needs. Therefore, to develop the Expected Level of service and Level of service statements we determine who are the customers. What do the customers value? Does the customer directly use the asset? None of the users directly use the assets.

1. Homeowners and tenants rely on the storm sewer system to manage runoff from their properties. They value flooding, erosion, and water damage prevention to homes and surrounding areas.
2. Commercial Properties rely on the storm sewer system to manage stormwater from parking lots, roofs, etc. They value accessibility and safety for customers and employees.
3. Municipal Services (parks, roads, and public buildings), schools and the hospital rely on the storm sewer system to maintain infrastructure integrity. They value public safety.
4. Environmental Stakeholders rely on the storm sewer system to prevent untreated runoff from contaminating local water bodies. They value the integration of green infrastructure, regular maintenance, and effective monitoring systems to ensure that pollutants are filtered before entering natural waterways.

The current performance for each asset is determined by the key performance indicators as detailed in the table below.

Expected Community (Customer) Level of Service: According to section 1.4.1 customers expect: a storm sewer system that take my wastewater away and treats it with no harm to the environment.

Service Attribute	Level of Service Statement	Key performance Indicator (Measure)	Current Performance
Scope	Provide an understanding of the town's linear waste storm sewer system.	• % of properties in municipality resilient to a 100-year storm.	To be determined

Service Attribute	Level of Service Statement	Key performance Indicator (Measure)	Current Performance
		• % of the municipal stormwater management system resilient to a 5-year storm.	To be determined
Reliability	Provide stormwater services that are sufficient and reliable.	• # of Complaints	2022: 4
Cost Effective	Maintaining Storm Sewer System Infrastructure in a fiscally sustainable manner	• Reinvestment Rate • Operating costs as % of asset replacement value	1.05% of 1.15% target 0.76%

State of storm sewer system O Reg. 588/17 S.5(2)3

The table below includes the Major Service Category, quantity, replacement cost method and total replacement cost of each asset segment in the Town's transportation system inventory.:

Major Service Category	Number (or length) of Assets	Replacement Approach	Replacement Cost	Condition	Condition Approach
ES – Catch basins	725 assets	CPI tables	$2,734,434	52.39 (Fair)	Age-Based
ES – Ditching & Drainage	3 assets	CPI tables	$149,068	82.74 (Very Good)	Age-Based
ES – Storm Manholes	284 assets	CPI tables	$2,274,235	61.86 (Good)	Age-Based
ES – Storm Lines	1,006 assets 29.93km	CPI tables	$14,435,841	51.06 (Fair)	Age-Based
Total	**2,018 assets**	**CPI Tables**	**$19,593,578**	**Fair**	**Age-Based**

Lifecycle activities required to maintain the current level of service - O Reg. 588/17 S.5(2)4

The below table identifies the lifecycle activities and the related cost that would need to be undertaken to maintain the current level for each of the following 10 years.

	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Pipe and Parts
Pipe and Parts	207,835	219,768	285,276	258,551	216,847	96,335	284,778	165,634	167,188	350,348	2,252,560

Historically, storm sewer projects have been led by the condition and material of the buried water infrastructure.

4.7 Asset Category: Bridges and Culverts

Bridge and Culvert infrastructure category includes all bridges and culverts that fall withing the guidelines of the Ontario Structure Inspection Manual. The manual has been used for bridge inspections in Ontario. According to the manual, the following structures shall be inspected every two years (Biennially):

- All bridges, culverts and tunnels with spans of 3 metres or greater
- All retaining walls
- All movable bridges

Culverts that are smaller than the 3 meter do get capitalised if they exceed the capitalisation threshold. There is no requirement to inspect any bridge or culvert under 3m therefore when these culverts are changed, we use (High Density Poly Ethaline (HDPE) or specify epoxy coated CSP pipe to prevent corrosion. Driveway culverts are excluded from asset management.

The Town's only bridge is Black Creek Bridge and is located on Panache Lake Road and has a west-east orientation crossing Black Creek. The structure is a one (1) span, 9.347-metre-long bridge with a steel
deck supported by steel girders. Black Creek Bridge carries one lane of traffic with a lane width of 3.6 metres and an overall width of 4.674 metres. The bridge was originally constructed in 2021 with no rehabilitation or inspection history.

Current level of service – O Reg. 588/17 S.5(2)1 and Current performance – O Reg. 588/17 S.5(2)2

At the Town of Espanola, we understand that our customers, who are the ultimate users of our services, have diverse needs and expectations. This underscores the importance of connecting their varied needs with the level of service we provide. To better develop community expectations, we group users based on their type and specific needs. Therefore, to develop the Expected Level of service and Level of service statements we determine who are the customers. What do the customers value? Does the customer directly use the asset?

1. Residents: They use the bridge for daily commutes, access to local amenities, and connection to other parts of the town or surrounding areas. They value reliability, safety, and accessibility, ensuring smooth transit without long detours.

2. Commuters: People traveling to and from work, even if the bridge is not part of a major route. They value efficiency, minimal traffic delays, and consistent maintenance.

3. Commercial Vehicles and Businesses: Delivery trucks, service vehicles, and businesses depend on the bridge for transporting goods and services. They value load capacity, durability, and minimal downtime due to maintenance or repairs.

4. Tourists and Visitors: The bridge connects to recreational areas such as the dog park and trail system, the boat launch and fishing areas. They value the aesthetics, safety, and the overall experience of their journey.

5. Emergency Services: Police, fire, and medical services rely on the bridge for rapid response times. They value quick, unobstructed access and structural integrity that supports the weight and frequency of emergency vehicles.

The current performance for each asset is determined by the key performance indicators as detailed in the table below.

Expected Community (Customer) Level of Service: According to section 1.4.1 customers expect bridges and culverts that are solid enough to withhold significant natural events, to ensure convenience and safety.

Service Attribute	Level of Service Statement	Key performance Indicator (Measure)	Current Performance
Scope	Description of the traffic that is supported by municipal bridges (e.g., heavy transport vehicles, motor vehicles, emergency vehicles, pedestrians, cyclists)	1 bridge 0 culverts over 3 meters 8 culverts under 3 meters	Bridges and structural culverts support the movement of motor vehicles, heavy transport vehicles, emergency vehicles, pedestrians, and cyclists throughout the Town's Road network. Bridges and Structural culverts are a key component of the municipal transportation network. Currently, there are no bridges with a load limit by-law.
Quality	Providing bridges and culvert assets in an acceptable condition.	• Bridge: OSIM inspection results and number of recommendations • Culverts under 3M: # of culverts with a condition of 60% or better. • # of bridges with load restrictions (%) • # of Culverts with load restrictions (%) • # of bridge failures	Based on the findings of this inspection, the bridge is generally in good to excellent condition. X of 8 (xx%) 0 – 0% 0 – 0% 0

Service Attribute	Level of Service Statement	Key performance Indicator (Measure)	Current Performance
		# of culvert failures	0
Cost Effective	Maintaining Bridges and Culvert Infrastructure in a fiscally sustainable manner	• Bridges and Culvert Infrastructure Reinvestment Rate • Operating costs as % of capital	10.96% of 1.76% target 0%

State of Bridges and Culverts O Reg. 588/17 S.5(2)3

The table below includes the Major Service Category, quantity, replacement cost method and total replacement cost of each asset segment in the Town's Bridges and Culvert inventory.:

Major Service Category	Number (or length) of Assets	Replacement Approach	Replacement Cost	Condition	Condition Approach
Bridge	4 assets 8.3 Meters	CPI tables	$597,824	Good (67.30)	Condition inspection
Culverts under 3M	9 assets Total length – ___ m	CPI tables	$1,724,285	Good (76.55)	Age-Based
Total	13	CPI Tables	**$2,322,109**	Good	**Mixed**

Lifecycle activities required to maintain the current level of service - O Reg. 588/17 S.5(2)4

There is no lifecycle activities required to maintain the current levels of service for each of the following 10 years due to the age of the facility.

5 DISCUSSION AND NEXT STEPS

This asset management plan (AMP) represents the tactical output of a corporate management system. The corporate management system is the series of interconnected processes that work together to realize value from assets. This AMP has been developed using the best available asset and financial information. The AMP is a living document that should be updated on a periodic basis to reflect new information and changing community priorities.

Moving forward, it is recommended that the Town update the progress of the AMP biennially. The practical steps to complete these activities are as follows:

1. Review the Asset Management Policy, Capitalisation policy and Reserve Policy to ensure alignment with current practices and regulatory requirements, and to identify any necessary updates or improvements.
2. Each asset category will undergo an analysis to identify Data Gaps including mapping, condition-based assessments, useful life analysis, level of component details and disaggregation as well as lifecycle events.
3. Each year, the asset inventory is updated with the best available asset data. This ensures that assets are added/removed as appropriate and any new technical performance indicator data is used to adjust the current performance category of assets.
4. Re-investment rates formula to include net use of reserve.
5. Review current level of service, the related cost and work with Council to establish desired level of service that balance needs and costs.
6. Start the identification of risk, establish basic risk matrix and explore the impact of risk on lifecycle investment decisions.
7. Improve record management of assets and transparency to the public through the town website.

The overall approach to monitor and improving the assets management program and AMP will be consistent with the Plan-Do -Check-Action (PDA) model. Following this model, staff will monitor the performance of the assets and continue to plan and implement corrective actions to ensure that there is improvement over time in line with Council set desired level of services.