



2024 Asset Management Plan

Cemetery
Non-Core Assets
City of Brantford, Ontario



Prepared by: Infrastructure Planning Asset Management, Public Works
Corporation of the City of Brantford, June 2024

RECORD SHEET

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RECORD SHEET

Asset Management Document Set	Asset Group	First Issuance
Strategic Asset Management Policy	All	May 2019
Asset Management Plan Core Assets Overview	Core Assets Replaced by Core & Non-Core Assets Overview	September 2021
Asset Management Plan, Core Assets	Environmental Services Transportation	September 2021
Asset Management Plan Core & Non-Core Assets Overview	Core & Non-Core Assets	June 2024
Asset Management Plan, Non-Core Assets	Cemetery	This Document
Asset Management Plan, Non-Core Assets	Airport Clerks Services Economic Development & Tourism Facilities Fire Fleet & Transit Forestry & Horticulture Golf Human Resources IT Services Library Parking Parks & Recreation Police Solid Waste	June 2024
Asset Management Plan, Non-Core Assets	Housing JNH	TBD

ASSET MANAGEMENT PLAN CEMETERY

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CEMETERY OPERATIONS INTRODUCTION

Per O.Reg 588/17 all municipal infrastructure assets which fall outside of the core asset categories (water, wastewater, stormwater and roads) and their respective subcategories, shall be non-core or “other” infrastructure assets. These assets shall have qualitative descriptions and technical metrics established by the municipality.

Table 1 below outlines which Asset Types are included under each Asset Class and will be reported on in this AMP document. In addition, it is important to note that the AMP only includes assets owned by the City or Local Boards and does not include assets that are owned privately or by other organizations.

Cemetery assets are managed by City staff from the Cemetery department.

Table 1: Asset Type Breakdown

	Asset Class
	Cemetery
Asset Type:	Buildings
	Monuments
	Site Works

1. CEMETERY ASSETS

1.1. INTRODUCTION

The City of Brantford owns and maintains assets under the Cemetery asset class. The purpose of this section is to present specific information about the Cemetery asset class to answer the questions posed in **Section 2** of the **Asset Management Plan (AMP) Overview Document**, and includes the following:

- Cemetery Assets' Data Inventory and Condition Approach;
- Summary of Cemetery Assets;
- Lifecycle Activities and Cost of Cemetery Assets;
- Current Cemetery Assets' Levels of Service;
- Current Cemetery Assets' Performance; and
- Conclusion.

1.2. CEMETERY ASSETS' DATA INVENTORY AND CONDITION APPROACH

Information related to the City's data collection methodologies as well as data confidence level definitions are defined in the **Asset Management Plan Overview Document**.

The City of Brantford currently has three (3) approaches to establishing the inventory and condition of Cemetery assets due to available resources, technologies, and budget restrictions:

- Condition assessments outsourced to consultants;
- Periodic inspection programs conducted by City staff; and
- Estimated condition based on asset specific information.

A list of all condition assessments for all non-core assets can be found in **Table 7** in the **Asset Management Plan Overview Document**.

The origin of the Cemetery asset data for inventory, replacement cost, and condition, as well as data confidence in each are provided in **Table 2** below.

Table 2: Cemetery Assets' Data Origin and Confidence Level

	Inventory			Replacement Cost			Condition		
Asset Type	Inventory (incl. Quantity and Age) From	Data Confidence Level	Data Confidence Description	Replacement Cost From	Data Confidence Level	Data Confidence Description	Condition From	Data Confidence Level	Data Confidence Description
Buildings	Inventory from GIS Condition Assessments Staff Knowledge	High	Verified by Staff and/or Condition Assessment	.Tangible Capital Asset Registry .Industry Reference .Staff Knowledge	Medium	Estimated costs	Age Condition Assessments	Medium	Formal condition assessments of buildings within last 10 years
Monuments	Inventory from GIS Staff Knowledge	Medium	GIS requires updated field verification	.Tangible Capital Asset Registry .Staff Knowledge	Medium	Estimated costs	Age Staff Knowledge	Medium	No formal condition assessment
Site Works	Inventory from GIS Condition Assessments Staff Knowledge	Medium	GIS requires updated field verification	.Tangible Capital Asset Registry .Staff Knowledge	Medium	Estimated costs	Age Condition Assessments	Medium	Pathways assessed as part of road condition assessment

Per **Table 2** above, Cemetery assets' data for all three criteria are typically at a Medium to High confidence level with an overall average confidence level of Medium for all asset categories.

Replacement costing for Buildings is based on estimates provided in condition assessments, an industry standard cost guide published by a third party or Tangible Capital Asset costs brought forward to 2024 \$ from their original purchase/install dates. Replacement costing for monuments and site works are based on a combination of standard unit costs developed internally by the City for estimation purposes based on previous jobs, estimates provided in condition assessments, staff knowledge and based on costing information from the Tangible Capital Asset registry (TCA).

1.2.1 SERVICE LIFE

Formal condition assessments are periodically completed on Cemetery assets but informal ones are more frequent. Where formal condition assessments have not been completed in the last five years, the condition has been estimated based on the estimated service life of the asset shown below in **Table 3**. The average overall estimated service life for assets can be found in **Table 5**. Provided that assets are maintained they are expected to remain structurally sound and functional under normal conditions for the Estimated Service Lives outlined below before replacement or significant rehabilitation is required. Environmental conditions and operating practices may result in a shorter or longer useful lifetime.

Table 3: Cemetery Assets' Estimated Service Life

Asset Class	Estimated Service Life
Buildings & Monuments	Buildings are composed of various sub-systems including structure, mechanical and electrical with different service lives. The different sub-system Estimated Service Lives are as follows: Structure & Substructure: 80 years Mechanical: 30 years Electrical: 25 years Interior: 15 years
Monuments	100 years
Site Works	Benches: 25 years Fencing: 20 years Garbage Cans: 5 years Lighting: 25 years Light Supports: 40 years Parking Lots & Site Roads: 30 years Pathways: 30 years Plaques: 15 years Retaining Walls: 25 years Security: 15 years Signs: 10 years

1.2.2 CONDITION SCORING

For the purpose of this report and standardizing condition scores across all assets in the Asset Management Plan, the Condition Rating is defined by three (3) Condition Scores as defined in the table below. For assets with formal consultant condition assessments, the conditions have been modified to fit into this model.

Table 4: Condition Score Description

Condition Score	Condition Rating	Description
1 – 1.4	Good	Assets are in working order, have no or minor deficiencies. Where condition data is not available, this category applies to assets which are within the first 40% of their estimated service life.
1.5 – 2.4	Fair	Assets show general signs of deterioration/age, some elements may have significant deficiencies, and asset will likely require repairs/removal in the next 10 years. Where condition data is not available, this category applies to assets which are within 41% - 80% of their estimated service life.
2.5 - 3	Poor	Asset is below standard showing signs of significant deterioration, is in danger of imminent failure, and will require repair, replacement or removal within the next year. Where condition data is not available, this category applies to assets which have exceeded 80% of their estimated service life.

1.3. SUMMARY OF CEMETERY ASSETS

The summary of assets for the Cemetery Asset Class can be found below. The summary of assets includes: Quantity, Replacement Cost, Average Age, and Average Condition Score for each asset type in accordance with O. Reg 588/17.

1.3.1 TOTAL SUMMARY OF ASSETS

A table summarizing all Cemetery assets is included in **Table 5** below. Detailed information about each asset is included in individual sections. Calculations of averages have been weighted by the overall replacement value of assets. This means that assets of higher estimated replacement value will have a stronger influence on the average than if the average was calculated based on the number of assets.

The total replacement cost for all Cemetery assets is approximately \$13.6M and they are a weighted average of 79 years old which exceeds the overall average estimated service life of 49 years. Overall Cemetery assets are in Fair condition with a weighted average condition score of 2.3.

Table 5: Total Summary of Cemetery Assets

Asset	Quantity	Unit	Replacement Cost	Average Age (years)	Average Estimated Service Life (years)	% of Estimated Service Life Expended	Average Condition Score	Average Condition Description
Cemetery Assets Total			\$13.6M	79	49	100%	2.3	FAIR
Buildings	5	Ea	\$6.7M	105	57	100%	2.39	FAIR
Monuments	127	Ea	\$1.0M	70	100	70%	1.1	GOOD
Site Works	Varies	Varies	\$5.9M	49	29	100%	2.5	POOR

1.3.2 BUILDINGS

Assets within the Buildings group consists of five (5) buildings which support Cemetery Services this includes the mausoleum.

It can be seen in **Figure 1** that there is estimated to be over 1,600 sq. m. of area with a total replacement cost of \$6.7M in buildings for Cemetery assets. Assets are typically in Poor condition with a weighted average condition score of 2.8. Four (4) of the five (5) Cemetery buildings have had condition assessments completed within the last 10 years, three (3) of the assessments were completed within the last five (5) years.

The average age for the City's Cemetery Buildings is 105 years which exceeds the weighted average estimated service life of 57 years for all buildings. The values are weighted based on estimated replacement value.

The condition rating for the four buildings formally assessed ranged from Poor to Fair and matched the condition that was assessed based on age alone. It should be noted that extensive repairs are planned for the mausoleum from 2024 to 2027. As it has the highest value of all cemetery buildings, upon rehabilitation its improved condition is expected to result in an increase to the overall condition score of the cemetery building assets.

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AREA OF BUILDINGS (sq m)	REPLACEMENT COST (\$)	WEIGHTED AVG AGE (YEARS)	WEIGHTED AVG ESTIMATED SERVICE LIFE (YEARS)	WEIGHTED AVG CONDITION SCORE	WEIGHTED AVG CONDITION DESCRIPTION
1.6K	6.7M	105	57	2.4	Fair

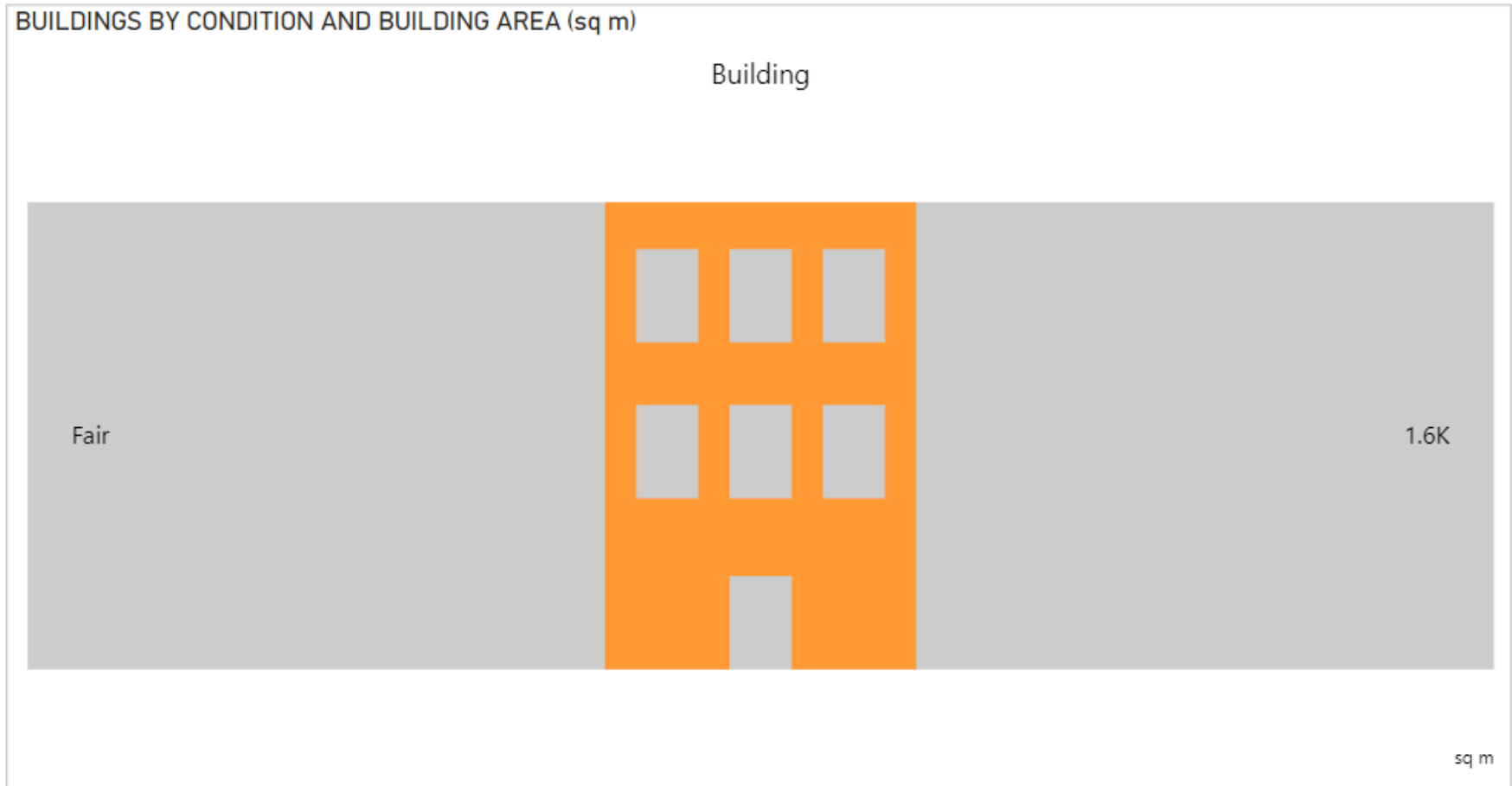


Figure 1: Buildings Asset Summary by Condition and Building Area

1.3.3 MONUMENTS

Assets within the Buildings group consists of eight (8) columbariums, one (1) crypt, and 104 plaques.

It can be seen in **Figure 2** that the total replacement cost for cemetery monuments is \$1.0M. Assets are typically in Good condition with a weighted average condition score of 1.1. The Waddington Crypt is in poor condition. The plaques and columbariums are in good condition. The values are weighted based on estimated replacement value.

The average age for the City's cemetery monuments is 70 years which is 70% of the average estimated service life of 100 years for all monuments.



Figure 2: Monuments Asset Summary by Condition and Count

1.3.4 SITE WORKS

Site works refers to assets which are present at the cemeteries and support cemetery operations. Assets within the Site Works group include: parking lots, access roadways, pathways, fencing, gates, signage, parking lot lighting, security bollards, irrigation systems, fuel tanks, specialty lifts and benches.

As summarized in **Figure 3** the Site Works assets include: 0.9 kms of fencing, 33K sq m of access road, 3 specialty equipment assets, 3 outdoor lights, 15 security bollards and 4 signs with a total replacement cost of \$5.9M. Assets are in overall poor condition with a weighted average condition score of 2.5, the breakdown of condition by asset subtype is shown in **Figure 3**. The values are weighted based on estimated replacement value.

The average age for the City's cemetery site works assets is 49 years which exceeds the weighted average estimated service life of 29 years.

1.4. LIFECYCLE OF CEMETERY ASSETS

The lifecycle of Cemetery assets is described under four (4) categories which are described in this section:

- Key Lifecycle Stages of Cemetery Assets;
- Lifecycle Activities;
- Risks of Lifecycle Activities; and
- 10 Year Lifecycle Costs of Cemetery Assets.

1.4.1 KEY LIFECYCLE STAGES OF CEMETERY ASSETS

The lifecycle of an asset refers to the following stages: Planning, Creation/Acquisition, Operations and Maintenance, Renewal/Disposal which are defined in the Main Body of the report. For Cemetery assets specifically our general process is as follows:

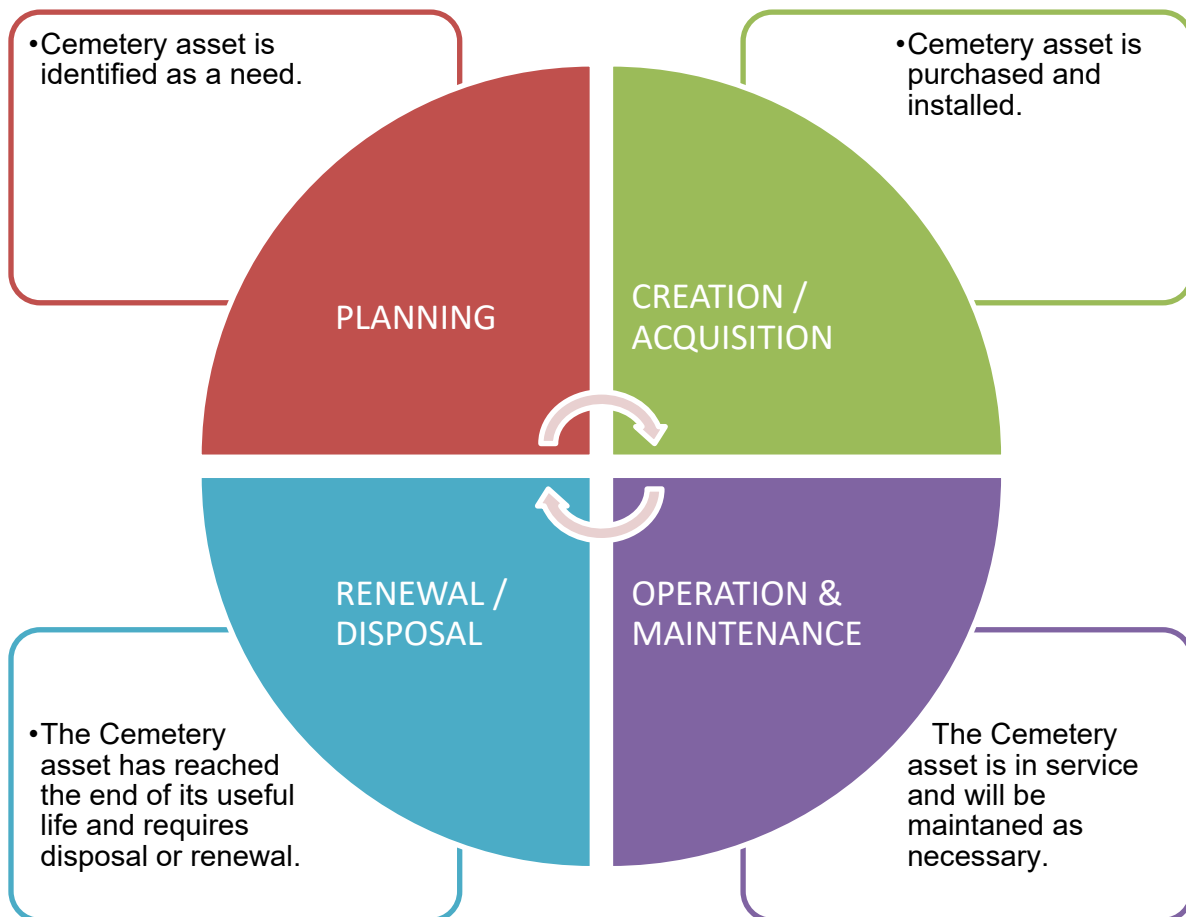


Figure 4: Lifecycle Stages of Cemetery Assets

1. **Planning** –The Cemetery asset has been identified as a need. The asset is purchased considering all needs, City policies and Master Plans.

2. **Creation / Acquisition / Replacement** – The cost and requirements for the new asset are defined considering all City needs and policies. The asset is purchased and installed/planted.
3. **Operation and Maintenance** – The Cemetery asset has been installed and is providing benefits to the community. Maintenance (Lifecycle) Activities are completed on the asset at specific time intervals as shown in **Table 6** to prevent premature failures of the asset. Additional monitoring and potential improvements are evaluated during this process.
4. **Renewal / Disposal / Monitoring** – The Cemetery asset has reached the end of its useful life or has been replaced and requires disposal. Disposal considers the effect on customers such as required detouring or service disruptions which are taken into account in the Planning stage thereby restarting the cycle. The City follows industry standards when disposing of these assets. Some cemetery assets, such as historic buildings or monuments, would not be replaced at the end of their useful life and will instead undergo a renewal or, if renewal is not possible, be evaluated for how best to safely preserve the asset or create a historic record of the asset.

1.4.2 LIFECYCLE ACTIVITIES

A list of the planned Lifecycle Activities, annual cost, and frequency for each Cemetery Asset Type can be found in **Table 6** below. These activities are currently being undertaken to maintain these Cemetery assets and therefore maintain the current levels of service.

Table 6: Lifecycle Activities for Cemetery Assets

Asset Type	Lifecycle Activity	2024 Annual Cost*	Frequency	Completed by
Buildings	Building Operations Utilities	\$33,700	Daily	Cemetery Staff
	Inurnments & Interments	\$13,750	As Required	Cemetery Staff
	Cleaning	\$4,250	Weekly – Mt Hope Monthly - Oakhill	Contractor
	Repairs	\$11,300	As Required	Cemetery Staff or Contractor
Monuments	Inurnments & Interments	\$27,500	As Required	Cemetery Staff
	Repairs	\$4,100	As Required	Cemetery Staff or Contractor
Site Works	Interments	\$253,550	As Required	Cemetery Staff
	Inspections	\$3,000	Annual/As Required	Cemetery Staff or Contractor
	Testing	\$500	Bi-annual for Fuel Tank	Contractor
	Repair	\$13,500	As Required	Contractor
	Irrigation Winterize & Season Start	\$3,200	Seasonal – As Required	Cemetery Staff
	Garbage Removal	\$725	As Required	Parks Staff or Contractor
	Landscaping	\$173,000	Seasonal - As Required	Cemetery or Parks Staff
	Winter Control	\$34,000	Seasonal - As Required	Cemetery Staff

*2024 Annual Cost is typically based on an average of the 4 year cost estimates presented in the 2024 Operating Budget.

Lifecycle activities occur on each of our Cemetery assets classes. Cemetery assets are maintained by Cemetery staff, Parks staff or contractors and activities are currently tracked through a combination of email, excel, the City's customer relationship management system and Stone Orchard software.

1.4.3 RISKS OF LIFECYCLE ACTIVITIES

The identified lifecycle activities in **Table 6** above are historical activities taken on by Cemetery Operations staff or hired contractors. Some risks associated with these activities include:

- **Short Term Operational Disruption** – Depending on the scope of maintenance or repair activities they could result in normal operations being unable to continue while the work is in progress. This can be mitigated by completing maintenance and repairs at the correct time of year, and by appropriately communicating with visitors.
- **Safety Hazards** – Improperly conducted activities could pose risks to workers, the environment and the public.

However, if these activities were not completed, the risks would include:

- **Long Term Operational Disruption** due to maintenance or repair activities being delayed until the scope has increased beyond the initial issue resulting in a more time consuming or costly repair.
- **Safety Hazards to Environment and People** due to undetected issues posing safety risks if inspections were not completed in a timely fashion or safety risks which were not remedied promptly.
- **Compromised Integrity of Remains** due to constructed resting places such as mausoleums, crypts or columbarium not being repaired in a timely fashion or natural resting places being compromised due to soil erosion or loss.
- **Regulatory Non-Compliance** due to failure to maintain record keeping resulting in regulatory standards which are not met.
- **Increased Cost** due to reactive actions which could have been prevented with preventative maintenance.

1.4.4 10 YEAR LIFECYCLE COSTS OF CEMETERY ASSETS

Figure 5 below outlines the 10 year lifecycle costs of Cemetery assets.

Although there are a number of assets needing to be replaced over the 10 years, the average annual cost for Operation and Maintenance of Cemetery Assets outweighs the capital cost for this infrastructure.

Based on the information presented in the figure below, the total annual average capital cost for the next 10 years needed to maintain the state of good repair of these Cemetery assets is \$0.7M, and the average annual Operation and Maintenance cost to maintain the current state of good repair and level of service is \$1.0M. Therefore, it is recommended that the City invest \$1.7M in Cemetery assets annually to maintain the state of good repair and current level of service.

The large spike in cost for site works seen in 2024 is the theoretical date identified through an age based assessment that the access roads/paths and parking areas in Greenwood and Mount Hope cemeteries have exceeded their expected service life. Due to lower traffic volume on these internal access roads compared to typical City streets it is possible that the actual replacement date could be further in the future changing the placement of the peak. As long as the peak remains within the next 10 years adjusting the peak year will not change the total annual average capital cost required for the next 10 years to maintain the state of good repair.

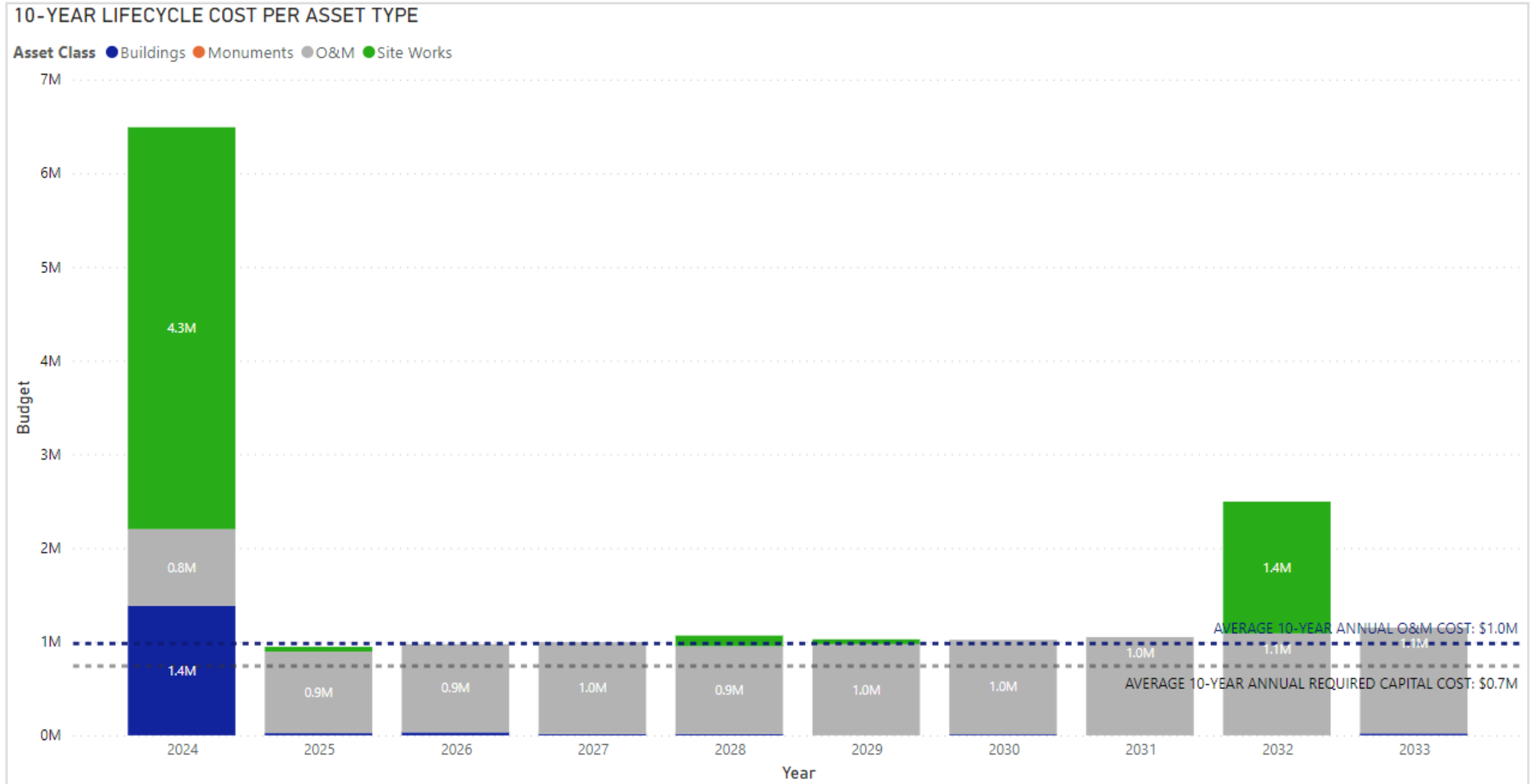


Figure 5: 10-Year Lifecycle Cost Per Cemetery Asset Type

Notes:

1. Operation and Maintenance Costs are estimated based on the 2024 Operating Budget and are inflated by 3.8% each year.
2. For assets where no formal capital forecast was available, the replacement year is based on the estimated remaining service life of each asset or the condition assessment of each asset, as applicable.

Per **Figure 6** below, the existing 10-year forecast from 2024 – 2033, further explained in **Section 8.3 of the Asset Management Plan Overview Document**, indicates that the City is currently planning to spend an average of \$0.2M on Cemetery assets capital work annually, and as noted above, the required 10-year average amount is \$0.7M to maintain the state of good repair for these assets, which indicates there is an annual 10-year funding gap of \$0.5M for Cemetery assets. The impacts resulting from these funding gaps will be monitored and reported as appropriate.

The City of Brantford is currently moving to a four (4) year budget cycle and departments will complete long term planning as opposed to annual planning for projects within this time period. The Prioritization Matrix explained in **Section 9** of the **Asset Management Plan Overview Document** has also been implemented which will help departments confirm priority projects. It is anticipated that the new process for the City's 2024 budget cycle will help departments prepare and request funding in advance of significant replacement costs for assets reaching the end of their useful life.

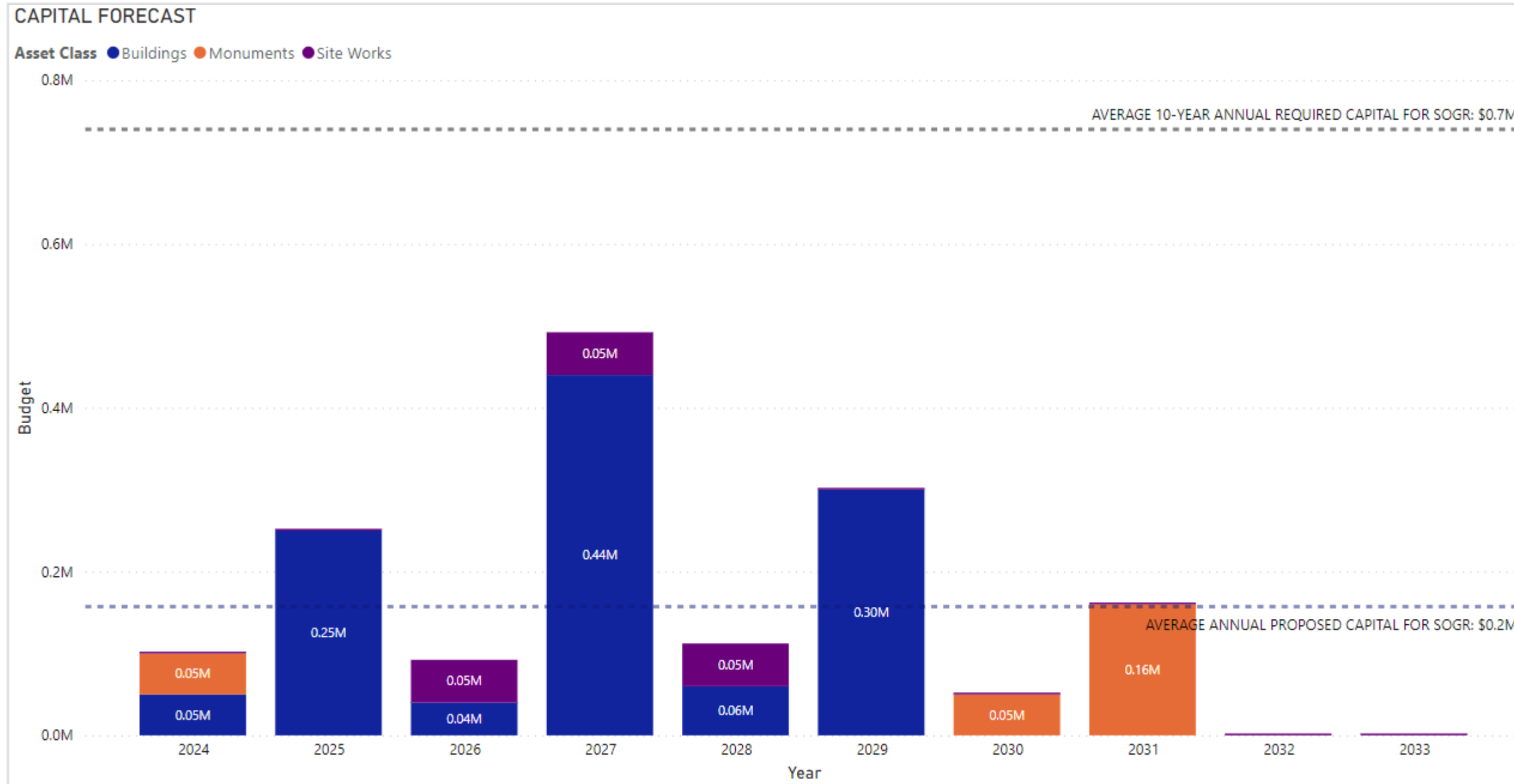


Figure 6: Existing Capital Budget Forecast from 2024 – 2033 for Cemetery Assets

1.5. CURRENT LEVELS OF SERVICE

1.5.1 O. REG 588/17 CUSTOMER LEVELS OF SERVICE

O. Reg 588/17 does not currently have defined customer levels of service for this asset class that must be reported within this plan. This section will be kept for future plan iterations should O. Reg 588/17 be updated and require defined customer levels of service be reported.

1.5.2 O. REG 588/17 TECHNICAL LEVELS OF SERVICE

O. Reg 588/17 does not currently have defined technical levels of service for this asset class that must be reported within this plan. This section will be kept for future plan iterations should O. Reg 588/17 be updated and require defined technical levels of service be reported.

1.5.3 MUNICIPALLY DEFINED CUSTOMER LEVELS OF SERVICE

The customer levels of service are defined in **Section 6.2** of the **Asset Management Plan Overview**. For Cemetery assets, the asset specific interpretation of these levels of service is defined below in **Table 7**.

Table 7: Municipally Defined Customer Levels of Service

Customer Level of Service	Definition
Accessibility	Cemetery assets should be available to and easily accessed by the local population.
Quality	Cemetery assets should deliver their intended services at a certain quality.
Cost Efficiency	Cemetery assets should meet the needs of the user at an affordable cost to the City.
Safety	Cemetery assets should not endanger people, property or the integrity of remains.
Environmental Sustainability	Cemetery assets shall consider measures to improve energy and environmental performance.
Reliability	Cemetery assets should be available as needed.
Responsiveness	Requests for repair or access to Cemetery assets should be completed as quickly as safely practical. Responsiveness should account for the relative risk to the public, the surrounding property, the asset itself and to the staff completing the response.

1.5.4. MUNICIPALLY DEFINED TECHNICAL LEVELS OF SERVICE

The technical levels of service for Cemetery assets have been developed based on the customer levels of service defined in **Table 7**. The currently available customer levels of service with the corresponding technical levels of service and Key Performance Indicators (KPI) metrics are defined in **Table 8**. N/A indicates information which is Not Available for this AMP, and will be reviewed for future iterations. Due to a low response rate on customer surveys conducted from 2023/2024, the confidence level in the applicability of the KPIs derived from the survey data, to the wider population, is Low.

The need for additional KPIs and KPI targets has been identified and the City will look for opportunities to gather and include this information for future iterations of this AMP.

Table 8 Technical Levels of Service KPIs

Customer Level of Service	Technical LOS	2024 KPI	Units
Accessibility	Not Available (N/A)	N/A	N/A
Quality*	Citizen Assessment of Value for Money	98%	% of survey responses on value for money indicating an assessment of average or higher
Cost Efficiency**	Annual Cost per developed area of cemetery land	\$4.57	\$/developed sq m
Safety	N/A	N/A	N/A
Environmental Sustainability	N/A	N/A	N/A
Reliability*	N/A	N/A	N/A
Responsiveness	N/A	N/A	N/A

*Information obtained from external surveys conducted in 2023/2024, more details available in Overview Document. Note due to a low response rate the confidence level in the applicability of survey results to the wider City population is Low

**Developed area from 2018 Parks and Recreation Master Plan

1.6. CURRENT ASSET PERFORMANCE

The current asset performance for Cemetery assets have been separated into two (2) categories for this section of the report:

- Energy Performance; and
- Operating Performance

1.6.1 CEMETERY ASSETS CURRENT ENERGY PERFORMANCE

The City of Brantford has a Corporate Energy Management Plan (CEMP) which emphasizes energy efficiency within the City. The goals of the CEMP are to reduce energy use, energy intensity, and greenhouse gas (GHG) emissions in our Facilities. In addition, through the City’s Climate Change Action Plan and Climate Lens Tool explained in **Section 10** of the **Asset Management Plan Overview Document**, the City has been working to improve our facilities’ energy efficiency and reduce the associated carbon footprint.

Under the CEMP, annual energy management data is reported, but has a reporting delay of two (2) years. **Table 9** contains data from the 2020 Corporate Energy Management Report which is available on the City’s website. The weighted average energy intensity by area for all City buildings is 41.25 ekWh/sq ft.

Table 9: Current Energy Performance of Cemetery Facilities*

Building	Address	Avg Hours Per Week	Electricity (kWh)	Natural Gas (m3)	GHG Emissions (kg)	Energy Intensity (ekWh/sq ft)
Mt Hope Cemetery	169 Charing Cross St	38	12,824.2	2,593.0	5,228.75	2.99
Oakhill Cemetery	17 Jennings Rd	38	8,903.59	7,717.0	14,816.55	8.66

*Based on information provided in the 2022 Corporate Energy Management Report

1.6.2 CEMETERY ASSETS CURRENT OPERATING PERFORMANCE

Table 10 contains criteria by which the City’s Cemetery operating performance can be assessed. The City does not currently have easily accessible data that would permit the calculation of the below KPIs at this time. Data availability and access will be improved in future iterations of the AMP.

Table 10: Cemetery Operating Performance

Criteria	Possible Performance Measure	Possible Improvement
Record Accuracy	Number of incomplete records vs owned interment sites	Blanks in records to be corrected over time, where information is available.
Utilization Rates	% of privately owned interment locations	Set a target percentage of ownership* of available interment locations.
City Stewardship Rates	% of occupied interment locations under direct City stewardship	Record keeping improvements to try and reduce percentage.
Regulatory Compliance	Number of Compliance Orders Issued	Set a target upper limit on the number of compliance orders in any five year period.

*For the avoidance of doubt, ownership refers to plots, crypts or niches whose interment rights have been purchased it is not an indication of occupancy or vacancy of the plot, crypt or niche.

1.7. DISCUSSION AND CONCLUSIONS

In conclusion, the City of Brantford operates and maintains many Cemetery assets. These assets are in overall Fair condition with a total estimated replacement cost of approximately \$6.7M. The asset inventory and condition data confidence for Cemetery is typically at a Medium to High level. It should be noted that extensive repairs are planned for the mausoleum which has the highest value of all cemetery buildings. Upon rehabilitation it is expected to result in an increase to the overall condition score of the cemetery assets.

The lifecycle stages for Cemetery assets includes: Planning, Creation, Operation and Maintenance, and Renewal/Disposal/Monitoring. During the Planning stage, the City identifies the need for the asset; during the Creation stage, the asset is purchased and installed/planted or deployed; during the Operation and Maintenance stage, the asset is operating and lifecycle activities (i.e. maintenance) occur on each of our assets to maintain the state of good repair; and the Renewal/Disposal stage is when the asset has reached the end of its useful life and requires renewal or disposal. As many of the cemetery assets are of historic value to the City it is expected that a higher percentage of assets than typical would be renewed rather than disposed of.

Lifecycle activities are currently typically tracked through a combination of email, excel, and the City's customer relationship management system. For more information on key database applications and work order management, please refer to **Section 4.2**, in the **AMP Overview** document. As staff continue to track data and review opportunities to improve tracking, the frequency and costs associated with specific activities will be better represented.

It is estimated based on the average annual cost in the 10 Year Life Cycle Costing that the City should be spending an average \$0.7M annually for capital Cemetery asset costs and will be spending an average of \$1.0M on Operating and Maintenance activities. The City is currently proposing to spend an average of \$1.2M annually on capital for Cemetery assets' state of good repair, resulting in a deficit of \$0.5M per year from the forecasted capital need.

While some Current Levels of Service have been identified, additional metrics have been identified as a need for Cemetery assets. Brantford is working to continue to develop the process to track these metrics which will assist in tracking these and any further identified KPIs for future iterations.

Asset performance is separated into operating and energy performance in the City's AMPs. Currently only two of the cemetery buildings are tracked as part of the Corporate Energy Management report. This is partly due to some of the cemetery buildings not having utility hookups. The two buildings have an energy intensity of 2.99 ekWh/sq ft

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and 8.66 ekWh/sq ft. This energy performance is better than the weighted average energy intensity by area for all City buildings is 41.25 ekWh/sq ft.

For operating performance at this time, the City's data was not readily available to use in calculations. The City has identified a number of measures which could be used to track operating performance in the future including utilization rates, record keeping accuracy, stewardship rates and regulatory compliance levels. The data to support these measures will be developed and analyzed in future iterations of the AMP.