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1. Terms & Definitions

The following definitions are used throughout this policy and are consistent with those outlined in Ontario Regulation 588/17, Asset Management Planning for Municipal Infrastructure, under the Infrastructure for Jobs & Prosperity Act, 2015:

- a) **Asset-** An item, thing or entity that has potential or actual value to an organization.
- b) **Asset Management-** A systematic process to guide the planning, acquisition, operation and maintenance, rehabilitation and disposal of Assets. Its objective is to maximize Asset service delivery potential, manage related risks and minimize costs of ownership while delivering acceptable levels of service to the public in a sustainable manner.
- c) **Asset Management Plan-** A strategic document that states how a group of assets are to be managed over a period of time. The plan describes the characteristics and condition of infrastructure assets, the levels of service expected from them, planned actions to ensure the assets are providing the expected level of service, and financing strategies to implement the planned actions.
- d) **Asset Management System-** A set of interrelated and interacting elements of an organization used to affect the Asset Management Policy, objectives and processes to achieve those objectives. Elements that can make up the Asset Management System can include documents, procedures, tools, data and assets.
- e) **Capitalization Threshold-** The value of a municipal capital infrastructure asset at or above which a Municipality will capitalize the asset's value and below which it will expense the asset's value.
- f) **Goal-** Desired result or what we want to achieve; an objective.
- g) **Green Infrastructure Asset-** An infrastructure asset consisting of natural or human-made elements that provide ecological and hydrological functions and processes and includes natural heritage features and systems, parklands, stormwater management systems, trees, urban forests, natural channels, permeable surfaces and green roofs.



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- h) **Level of Service-** Parameters, or combination of parameters, which reflect social, political, environmental and economic outcomes that the organization delivers. Parameters can include but are not necessarily limited to, safety, customer satisfaction, quality, quantity, capacity, reliability, responsiveness, environmental acceptability, cost and availability.
- i) **Lifecycle Activities-** Activities undertaken with respect to a municipal infrastructure asset over its service life, including constructing, maintaining, renewing, operating and decommissioning and all engineering and design work associated with those activities.
- j) **Lifecycle Costs-** The total cost of ownership over the life of an Asset. This may include but is not limited to capital costs, operating costs, maintenance costs, renewal costs, replacement costs, environmental costs and user delay.
- k) **Principle-** A fundamental concept that serves as the foundation for how we will go about “doing business”; things we want to do, or avoid doing, as we develop and implement the plan.
- l) **Replacement Cost-** The total cost of replacing the Asset in today’s dollar. It is not the same valuation done for accounting purposes which uses the historic cost of assets, or the actual cost of acquiring the asset.
- m) **Resilience-** The capacity to function, survive and thrive no matter what changes, stresses or shocks encountered.
- n) **Sustainability-** Meeting the needs of today without compromising the needs of future generations. It is about maintaining or improving the standard of living by protecting human health, conserving the environment, using resources efficiently and advancing long-term economic competitiveness. It requires the integration of environmental, economic and socio-cultural priorities into policies and programs with actions at all levels.
- o) **Tangible Capital Asset-** Non-financial assets having physical substance that are acquired, constructed or developed, including land, land improvements, roads, buildings, vehicles, equipment, and capital assets acquired by capital lease or through donation.



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2. Asset Management Vision

The Municipality's vision is to proactively manage its assets to best serve the Municipality's objectives, including:

- Effectively and efficiently delivering services through asset lifecycle management.
- Supporting sustainability, economic development and the existing and future needs by aligning and prioritizing service level expectations.
- Maintaining prudent financial planning and decision making.

3. Asset Management Policy Goals & Purpose

The goals and/or purpose of the policy are to:

- Provide a level of commitment & develop a framework for implementing asset management to enable a consistent and strategic approach at all levels of the organization. This allows the organization to facilitate logical and evidence-based decision-making for the management of municipal assets and to support the delivery of sustainable community services now and in the future.
- Provide transparency and accountability by demonstrating to community stakeholders the legitimacy of decision-making processes which combine strategic plans, budgets, service levels and risk.
- Provide guidance to staff responsible for asset management and support the implementation of the plan consistent with the priority objectives of Council.

4. Asset Management Policy Statement

The Municipality of Highlands East aims to uphold the following policy statements in managing its capital infrastructure:

- i. The Municipality will implement a municipal-wide asset management program that will promote lifecycle and risk management of the Municipality's capital infrastructure assets. A primary goal will be to achieve the lowest total cost of ownership while meeting desired levels of service. Levels of service refer to the outcomes or service attributes that the Municipality aims to deliver for its residents and can include both technical and qualitative components.



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- ii. The Municipality will continually enhance and improve asset management protocols.
- iii. The Municipality will develop and maintain an asset inventory of all municipal capital infrastructure assets which includes unique asset ID's, description, location, historical & replacement value, performance characteristics and/or condition, estimated remaining life and estimated repair costs, rehabilitation or replacement date and rehabilitation or replacement costs.
- iv. The Municipality will develop an Asset Management Plan that incorporates all infrastructure categories and municipal capital infrastructure assets as per the legislated requirements. The capitalization threshold guidelines in the Municipality's Tangible Capital Asset Policy will apply. The Asset Management Plan will address its core municipal capital infrastructure by 2021 and all other municipal capital infrastructure assets by July 1, 2023. The Asset Management plan is to be updated at least every five years thereafter in accordance with Ontario Regulation 588/17 but it will be the municipality's practice to update the plan on an annual basis to incorporate any changes from year to year.
- v. The Municipality will integrate asset management plans and practices with its long-term financial planning and annual capital and operating budget strategies.
- vi. Department Heads will reference the asset management plan for their department in order to look up forecasted spending needs identified in the plan, verify progress made on the plan to identify potential gaps and prioritize spending needs, across the gap identified in the plan and recent developments, for the year to be budgeted for.
- vii. Finance staff will be involved in the asset management planning process to coordinate the information from the Department Heads in the preparation of the budget submission.
- viii. The Municipality will develop a set of performance metrics and reporting tools to transparently communicate the current state of the asset management plan to Council and community stakeholders.
- ix. Climate change will be considered as part of the Municipality's risk management approach embedded in local asset management planning methods. This approach will balance the potential cost of vulnerabilities to climate change impacts and other risks with the cost of reducing these vulnerabilities. The balance will be struck in the levels of service delivered through operations,



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maintenance schedules, disaster response plans, contingency funding and capital investments.

- x. The Municipality will ensure that asset management planning is aligned with the following financial plans:
 - Financial reports related to the Municipality's water & wastewater capital assets, including any financial plans prepared under the Safe Drinking Water Act, 2002 and annual Water & Sewer Rates By-Laws.
- xi. The Municipality will align asset management planning with the Province of Ontario's land-use planning framework, including any relevant policy statements issued under section 3 (1) of the Planning Act.
- xii. Asset management planning will be aligned with the Municipality's Official Plan. The asset management plans will reflect how the community is projected to change and the related asset impact. The Municipality will achieve this by consulting with our Municipal Planning Consultant to analyze future costs and the viability of projected changes. Methods, assumptions and data used in the selection of projected changes should be documented to support the recommendations in the Asset Management Plan.
- xiii. The Municipality will provide opportunities for community members and stakeholders to offer input into the Municipality's asset management planning, where appropriate.

5. Asset Management Policy Scope

This policy applies to all departments involved in planning, maintaining or operating the Municipality's capital infrastructure assets.

The Municipality is responsible for providing a range of services to the community, including but not limited to: transportation networks & infrastructure, potable water, waste water collection & treatment, fire services and recreation opportunities. To effectively deliver these services, the Municipality owns and manages a diverse capital infrastructure asset portfolio of roads, bridges, culverts, parks, watermains, wells, sanitary sewers, water & waste water treatment plants & lagoons, septage trench facility, recreational trails, libraries, recreational facilities (community centres, arena, curling rinks), administrative facilities and equipment.



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Asset Management refers to the set of policies, practices and procedures that enable the Municipality to realize maximum value from its capital infrastructure assets. The Municipality is responsible for operating and maintaining machinery, equipment and other capital assets to support the delivery of services to residents. The Municipality recognizes the importance of implementing an effective approach to the management of its capital infrastructure assets in order to maximize asset lifecycles cost-effectively and deliver appropriate levels of service for residents.

The Municipality's asset management plan will comply with all relevant legislation, regulatory and statutory requirements.

The approval of this policy is an important step towards integrating the Municipality's strategic mission, vision and goals with its asset management program and ensuring that critical municipal capital infrastructure assets and vital services are maintained and provided to the community in a reliable and sustainable manner.

6. Strategic Plan Alignment

This policy aligns with the Municipality of Highlands East's 2019 Strategic Plan, which integrates concepts around community development, positive outdoor experiences, maintaining and providing adequate services, financial sustainability and responsibility and local governance.

This policy will be reviewed in conjunction with strategic plan updates to ensure continued alignment. The strategic plan is approved and adopted by Council.

Annual updates and reports to Council will provide members of Council and the community apprised of the progress in implementing the asset management program and advancing the municipality's strategic objectives.

7. Responsibility

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

CAO/Treasurer & Deputy CAO/Treasurer

Under the direction of the CAO/Treasurer, the Deputy CAO/Treasurer will assume the lead role and be responsible for the maintenance of and reporting on the activity related to the management of Municipal assets. The Deputy CAO/Treasurer will oversee the policy implementation and ensure both the Asset Management Plan and the Asset



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Management Policy are in compliance with Provincial Asset Management Regulations. The CAO/Treasurer will ensure that current year and long range asset requirements are incorporated into the budget presented to Council annually.

The Deputy CAO/Treasurer will update the Policy and Plan to reflect changes as needed and present them for Council approval, at least every five years. Best practices will have updates presented to Council on an annual basis. Changes will include those reflected in updates to the Roads Needs Study, Bridge Inspection Reports, Structural assessment reports and all other condition assessments commissioned for assets covered by the plan.

Department Heads

Department Heads will assist with updates to the Policy and Plan through the utilization of condition assessment information and service level requirements to update the long and short term asset requirements. This information will be reviewed for consideration annually during budget deliberations.

Council

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

8. General

This policy shall be administered by the Municipality's CAO/Treasurer with assistance from all Departments.

This Policy shall be referred to as the 'Strategic Asset Management Policy'.

This Policy shall come into force and effect on the day of passage.

This Policy shall be reviewed and, if necessary, updated at least every five years following July 1st, 2019.

9. Schedules

Schedule A- Statutory Requirements

Schedule B- Asset Management Program Figure



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Schedule C- Related & Referenced Documents

Schedule D- Ontario Regulation 588/17: Asset Management Planning for Municipal Infrastructure



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Schedule A
Statutory Requirements

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

Customer Focused

The Municipality will have clearly defined levels of service and apply asset management practices to maintain the confidence of customers in how Municipal assets are managed.

Service Focused

The Municipality will consider all the assets in a service context and take into account their interrelationships as opposed to optimizing individual assets in isolation.

Risk-Based

The Municipality will manage the asset risk associated with attaining the agreed levels of service by focusing resources, expenditures and priorities based upon risk assessments and the corresponding cost/benefit, recognizing that public safety is the priority.

Value-Based

The Municipality will choose practices, interventions and operations that aim at reducing the lifecycle cost of asset ownership, while satisfying agreed levels of service. Decisions are based on balancing service levels, risks and costs.

Forward Looking

The Municipality shall take a long-term view while considering demographic and economic trends in the region.

Budgeting & Planning

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

Prioritizing

The Municipality shall clearly identify infrastructure priorities which will drive investment decisions.



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Economic Development

The Municipality shall promote economic competitiveness, productivity, job creation and training opportunities.

Transparency

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

Consistency

The Municipality shall ensure the continued provision of core public services.

Environmentally Conscious

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

Health & Safety

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

Community Focused

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

Innovation

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

Integration

The Municipality shall where relevant and appropriate, be mindful and consider the principles and content of non-binding provincial or municipal plans and strategies



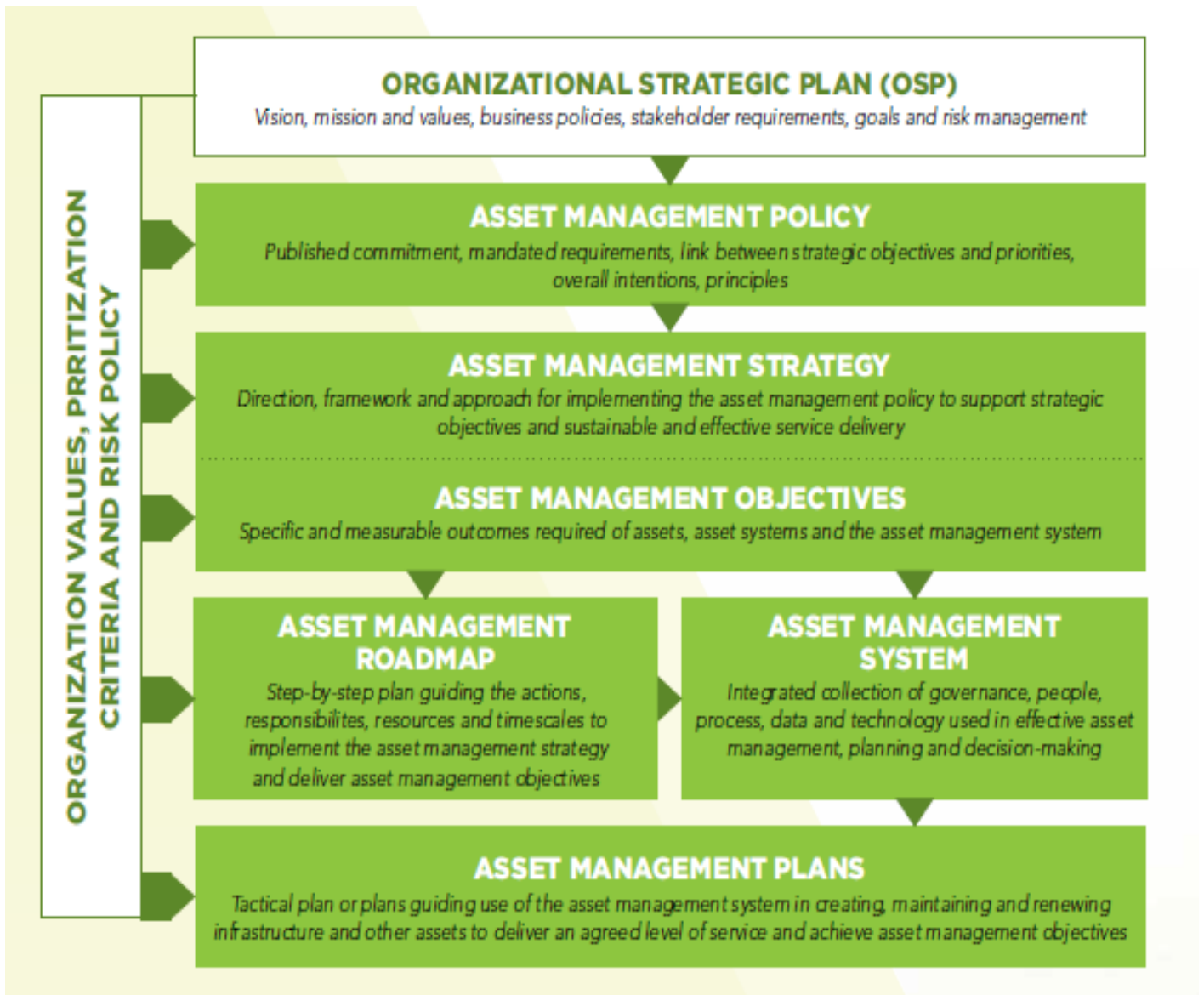
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established under an Act or otherwise in planning and making decisions surrounding the infrastructure that supports them.

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Schedule B
Asset Management Program Figure



The figure above is from the Federation of Canadian Municipalities’ “Municipal Asset Management Program-Asset Management Readiness Scale”.



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**Schedule C
Related & Referenced Documents**

An Asset Management Program is multi-faceted and impacts all areas of the organization. The following policies, plans and frameworks impact or have an impact on the Policy and will be referenced when going through the Asset Management Plan exercise:

1. 2019 Strategic Plan
2. Municipality of Highlands East Asset Management Plan (Version 5.0)
3. Tangible Capital Asset Policy
4. Annual Capital & Operating Budgets
5. 5 Year Capital Forecasting
6. Cardiff & Dyno Estate Drinking Water Systems Financial Plan #245-301A
7. Energy Conservation & Demand Management Plan
8. Annual Water & Waste Water Reports
9. Emergency Management Plan
10. Official Plan
11. 2018 Bridge Study Inspection Report (OSIM)
12. 2019 Comprehensive Roads Needs Study



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Schedule D
Ontario Regulation 588/17
Asset Management Planning for Municipal Infrastructure

ONTARIO REGULATION 588/17
made under the
INFRASTRUCTURE FOR JOBS AND PROSPERITY ACT, 2015

Made: December 13, 2017
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ASSET MANAGEMENT PLANNING FOR MUNICIPAL INFRASTRUCTURE

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INTERPRETATION AND APPLICATION

Definitions

1. (1) In this Regulation,
“asset category” means a category of municipal infrastructure assets that is,
(a) an aggregate of assets described in each of clauses (a) to (e) of the definition of core municipal infrastructure asset, or
(b) composed of any other aggregate of municipal infrastructure assets that provide the same type of service; (“catégorie de biens”)
“core municipal infrastructure asset” means any municipal infrastructure asset that is a,



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- (a) water asset that relates to the collection, production, treatment, storage, supply or distribution of water,
- (b) wastewater asset that relates to the collection, transmission, treatment or disposal of wastewater, including any wastewater asset that from time to time manages stormwater,
- (c) stormwater management asset that relates to the collection, transmission, treatment, retention, infiltration, control or disposal of stormwater,
- (d) road, or
- (e) bridge or culvert; (“bien d’infrastructure municipale essentiel”)

“ecological functions” has the same meaning as in Ontario Regulation 140/02 (Oak Ridges Moraine Conservation Plan) made under the *Oak Ridges Moraine Conservation Act, 2001*; (“fonctions écologiques”)

“green infrastructure asset” means an infrastructure asset consisting of natural or human-made elements that provide ecological and hydrological functions and processes and includes natural heritage features and systems, parklands, stormwater management systems, street trees, urban forests, natural channels, permeable surfaces and green roofs; (“bien d’infrastructure verte”)

“hydrological functions” has the same meaning as in Ontario Regulation 140/02; (“fonctions hydrologiques”)

“joint municipal water board” means a joint board established in accordance with a transfer order made under the *Municipal Water and Sewage Transfer Act, 1997*; (“conseil mixte de gestion municipale des eaux”)

“lifecycle activities” means activities undertaken with respect to a municipal infrastructure asset over its service life, including constructing, maintaining, renewing, operating and decommissioning, and all engineering and design work associated with those activities; (“activités relatives au cycle de vie”)

“municipal infrastructure asset” means an infrastructure asset, including a green infrastructure asset, directly owned by a municipality or included on the consolidated financial statements of a municipality, but does not include an infrastructure asset that is managed by a joint municipal water board; (“bien d’infrastructure municipale”)

“municipality” has the same meaning as in the *Municipal Act, 2001*; (“municipalité”)

“operating costs” means the aggregate of costs, including energy costs, of operating a municipal infrastructure asset over its service life; (“frais d’exploitation”)

“service life” means the total period during which a municipal infrastructure asset is in use or is available to be used; (“durée de vie”)

“significant operating costs” means, where the operating costs with respect to all municipal infrastructure assets within an asset category are in excess of a threshold amount set by the municipality, the total amount of those operating costs. (“frais d’exploitation importants”)

(2) In Tables 1 and 2,

“connection-days” means the number of properties connected to a municipal system that are affected by a service issue, multiplied by the number of days on which those properties are affected by the service issue. (“jours-branchements”)

(3) In Table 4,

“arterial roads” means Class 1 and Class 2 highways as determined under the Table to section 1 of Ontario Regulation 239/02 (Minimum Maintenance Standards for Municipal Highways) made under the *Municipal Act, 2001*; (“artères”)

“collector roads” means Class 3 and Class 4 highways as determined under the Table to section 1 of Ontario Regulation 239/02; (“routes collectrices”)

“lane-kilometre” means a kilometre-long segment of roadway that is a single lane in width; (“kilomètre de voie”)

“local roads” means Class 5 and Class 6 highways as determined under the Table to section 1 of Ontario Regulation 239/02. (“routes locales”)

(4) In Table 5,

“Ontario Structure Inspection Manual” means the Ontario Structure Inspection Manual (OSIM), published by the Ministry of Transportation and dated October 2000 (revised November 2003 and April 2008) and available on a Government of Ontario website; (“manuel d’inspection des structures de l’Ontario”)



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“structural culvert” has the meaning set out for “culvert (structural)” in the Ontario Structure Inspection Manual. (“ponceau structure”)

Application

2. For the purposes of section 6 of the Act, every municipality is prescribed as a broader public sector entity to which that section applies.

STRATEGIC ASSET MANAGEMENT POLICIES

Strategic asset management policy

3. (1) Every municipality shall prepare a strategic asset management policy that includes the following:
1. Any of the municipality’s goals, policies or plans that are supported by its asset management plan.
 2. The process by which the asset management plan is to be considered in the development of the municipality’s budget or of any long-term financial plans of the municipality that take into account municipal infrastructure assets.
 3. The municipality’s approach to continuous improvement and adoption of appropriate practices regarding asset management planning.
 4. The principles to be followed by the municipality in its asset management planning, which must include the principles set out in section 3 of the Act.
 5. The municipality’s commitment to consider, as part of its asset management planning,
 - i. the actions that may be required to address the vulnerabilities that may be caused by climate change to the municipality’s infrastructure assets, in respect of such matters as,
 - A. operations, such as increased maintenance schedules,
 - B. levels of service, and
 - C. lifecycle management,
 - ii. the anticipated costs that could arise from the vulnerabilities described in subparagraph i,
 - iii. adaptation opportunities that may be undertaken to manage the vulnerabilities described in subparagraph i,
 - iv. mitigation approaches to climate change, such as greenhouse gas emission reduction goals and targets, and
 - v. disaster planning and contingency funding.
 6. A process to ensure that the municipality’s asset management planning is aligned with any of the following financial plans:
 - i. Financial plans related to the municipality’s water assets including any financial plans prepared under the *Safe Drinking Water Act, 2002*.
 - ii. Financial plans related to the municipality’s wastewater assets.
 7. A process to ensure that the municipality’s asset management planning is aligned with Ontario’s land-use planning framework, including any relevant policy statements issued under subsection 3 (1) of the *Planning Act*, any provincial plans as defined in the *Planning Act* and the municipality’s official plan.
 8. An explanation of the capitalization thresholds used to determine which assets are to be included in the municipality’s asset management plan and how the thresholds compare to those in the municipality’s tangible capital asset policy, if it has one.
 9. The municipality’s commitment to coordinate planning for asset management, where municipal infrastructure assets connect or are interrelated with those of its upper-tier municipality, neighbouring municipalities or jointly-owned municipal bodies.
 10. The persons responsible for the municipality’s asset management planning, including the executive lead.
 11. An explanation of the municipal council’s involvement in the municipality’s asset management planning.
 12. The municipality’s commitment to provide opportunities for municipal residents and other interested parties to provide input into the municipality’s asset management planning.
- (2) For the purposes of this section,



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“capitalization threshold” is the value of a municipal infrastructure asset at or above which a municipality will capitalize the value of it and below which it will expense the value of it. (“seuil de capitalisation”)

Update of asset management policy

4. Every municipality shall prepare its first strategic asset management policy by July 1, 2019 and shall review and, if necessary, update it at least every five years.

ASSET MANAGEMENT PLANS

Asset management plans, current levels of service

5. (1) Every municipality shall prepare an asset management plan in respect of its core municipal infrastructure assets by July 1, 2021, and in respect of all of its other municipal infrastructure assets by July 1, 2023.

(2) A municipality’s asset management plan must include the following:

1. For each asset category, the current levels of service being provided, determined in accordance with the following qualitative descriptions and technical metrics and based on data from at most the two calendar years prior to the year in which all information required under this section is included in the asset management plan:
 - i. With respect to core municipal infrastructure assets, the qualitative descriptions set out in Column 2 and the technical metrics set out in Column 3 of Table 1, 2, 3, 4 or 5, as the case may be.
 - ii. With respect to all other municipal infrastructure assets, the qualitative descriptions and technical metrics established by the municipality.
2. The current performance of each asset category, determined in accordance with the performance measures established by the municipality, such as those that would measure energy usage and operating efficiency, and based on data from at most two calendar years prior to the year in which all information required under this section is included in the asset management plan.
3. For each asset category,
 - i. a summary of the assets in the category,
 - ii. the replacement cost of the assets in the category,
 - iii. the average age of the assets in the category, determined by assessing the average age of the components of the assets,
 - iv. the information available on the condition of the assets in the category, and
 - v. a description of the municipality’s approach to assessing the condition of the assets in the category, based on recognized and generally accepted good engineering practices where appropriate.
4. For each asset category, the lifecycle activities that would need to be undertaken to maintain the current levels of service as described in paragraph 1 for each of the 10 years following the year for which the current levels of service under paragraph 1 are determined and the costs of providing those activities based on an assessment of the following:
 - i. The full lifecycle of the assets.
 - ii. The options for which lifecycle activities could potentially be undertaken to maintain the current levels of service.
 - iii. The risks associated with the options referred to in subparagraph ii.
 - iv. The lifecycle activities referred to in subparagraph ii that can be undertaken for the lowest cost to maintain the current levels of service.
5. For municipalities with a population of less than 25,000, as reported by Statistics Canada in the most recent official census, the following:
 - i. A description of assumptions regarding future changes in population or economic activity.
 - ii. How the assumptions referred to in subparagraph i relate to the information required by paragraph 4.
6. For municipalities with a population of 25,000 or more, as reported by Statistics Canada in the most recent official census, the following:
 - i. With respect to municipalities in the Greater Golden Horseshoe growth plan area, if the population and employment forecasts for the municipality are set out in Schedule 3 or 7 to the 2017 Growth Plan, those forecasts.



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- ii. With respect to lower-tier municipalities in the Greater Golden Horseshoe growth plan area, if the population and employment forecasts for the municipality are not set out in Schedule 7 to the 2017 Growth Plan, the portion of the forecasts allocated to the lower-tier municipality in the official plan of the upper-tier municipality of which it is a part.
- iii. With respect to upper-tier municipalities or single-tier municipalities outside of the Greater Golden Horseshoe growth plan area, the population and employment forecasts for the municipality that are set out in its official plan.
- iv. With respect to lower-tier municipalities outside of the Greater Golden Horseshoe growth plan area, the population and employment forecasts for the lower-tier municipality that are set out in the official plan of the upper-tier municipality of which it is a part.
- v. If, with respect to any municipality referred to in subparagraph iii or iv, the population and employment forecasts for the municipality cannot be determined as set out in those subparagraphs, a description of assumptions regarding future changes in population or economic activity.
- vi. For each of the 10 years following the year for which the current levels of service under paragraph 1 are determined, the estimated capital expenditures and significant operating costs related to the lifecycle activities required to maintain the current levels of service in order to accommodate projected increases in demand caused by growth, including estimated capital expenditures and significant operating costs related to new construction or to upgrading of existing municipal infrastructure assets.

(3) Every asset management plan must indicate how all background information and reports upon which the information required by paragraph 3 of subsection (2) is based will be made available to the public.

(4) In this section,

“2017 Growth Plan” means the Growth Plan for the Greater Golden Horseshoe, 2017 that was approved under subsection 7 (6) of the *Places to Grow Act, 2005* on May 16, 2017 and came into effect on July 1, 2017; (“Plan de croissance de 2017”)

“Greater Golden Horseshoe growth plan area” means the area designated by section 2 of Ontario Regulation 416/05 (Growth Plan Areas) made under the *Places to Grow Act, 2005*. (“zone de croissance planifiée de la région élargie du Golden Horseshoe”)

Asset management plans, proposed levels of service

6. (1) Subject to subsection (2), by July 1, 2024, every asset management plan prepared under section 5 must include the following additional information:

- 1. For each asset category, the levels of service that the municipality proposes to provide for each of the 10 years following the year in which all information required under section 5 and this section is included in the asset management plan, determined in accordance with the following qualitative descriptions and technical metrics:
 - i. With respect to core municipal infrastructure assets, the qualitative descriptions set out in Column 2 and the technical metrics set out in Column 3 of Table 1, 2, 3, 4 or 5, as the case may be.
 - ii. With respect to all other municipal infrastructure assets, the qualitative descriptions and technical metrics established by the municipality.
- 2. An explanation of why the proposed levels of service under paragraph 1 are appropriate for the municipality, based on an assessment of the following:
 - i. The options for the proposed levels of service and the risks associated with those options to the long term sustainability of the municipality.
 - ii. How the proposed levels of service differ from the current levels of service set out under paragraph 1 of subsection 5 (2).
 - iii. Whether the proposed levels of service are achievable.
 - iv. The municipality’s ability to afford the proposed levels of service.
- 3. The proposed performance of each asset category for each year of the 10-year period referred to in paragraph 1, determined in accordance with the performance measures established by the municipality, such as those that would measure energy usage and operating efficiency.
- 4. A lifecycle management and financial strategy that sets out the following information with respect to the assets in each asset category for the 10-year period referred to in paragraph 1:



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- i. An identification of the lifecycle activities that would need to be undertaken to provide the proposed levels of service described in paragraph 1, based on an assessment of the following:
 - A. The full lifecycle of the assets.
 - B. The options for which lifecycle activities could potentially be undertaken to achieve the proposed levels of service.
 - C. The risks associated with the options referred to in sub-subparagraph B.
 - D. The lifecycle activities referred to in sub-subparagraph B that can be undertaken for the lowest cost to achieve the proposed levels of service.
 - ii. An estimate of the annual costs for each of the 10 years of undertaking the lifecycle activities identified in subparagraph i, separated into capital expenditures and significant operating costs.
 - iii. An identification of the annual funding projected to be available to undertake lifecycle activities and an explanation of the options examined by the municipality to maximize the funding projected to be available.
 - iv. If, based on the funding projected to be available, the municipality identifies a funding shortfall for the lifecycle activities identified in subparagraph i,
 - A. an identification of the lifecycle activities, whether set out in subparagraph i or otherwise, that the municipality will undertake, and
 - B. if applicable, an explanation of how the municipality will manage the risks associated with not undertaking any of the lifecycle activities identified in subparagraph i.
5. For municipalities with a population of less than 25,000, as reported by Statistics Canada in the most recent official census, a discussion of how the assumptions regarding future changes in population and economic activity, set out in subparagraph 5 i of subsection 5 (2), informed the preparation of the lifecycle management and financial strategy referred to in paragraph 4 of this subsection.
6. For municipalities with a population of 25,000 or more, as reported by Statistics Canada in the most recent official census,
- i. the estimated capital expenditures and significant operating costs to achieve the proposed levels of service as described in paragraph 1 in order to accommodate projected increases in demand caused by population and employment growth, as set out in the forecasts or assumptions referred to in paragraph 6 of subsection 5 (2), including estimated capital expenditures and significant operating costs related to new construction or to upgrading of existing municipal infrastructure assets,
 - ii. the funding projected to be available, by source, as a result of increased population and economic activity, and
 - iii. an overview of the risks associated with implementation of the asset management plan and any actions that would be proposed in response to those risks.
7. An explanation of any other key assumptions underlying the plan that have not previously been explained.

(2) With respect to an asset management plan prepared under section 5 on or before July 1, 2021, if the additional information required under this section is not included before July 1, 2023, the municipality shall, before including the additional information, update the current levels of service set out under paragraph 1 of subsection 5 (2) and the current performance measures set out under paragraph 2 of subsection 5 (2) based on data from the two most recent calendar years.

Update of asset management plans

7. (1) Every municipality shall review and update its asset management plan at least five years after the year in which the plan is completed under section 6 and at least every five years thereafter.

(2) The updated asset management plan must comply with the requirements set out under paragraphs 1, 2 and 3 and subparagraphs 5 i and 6 i, ii, iii, iv and v of subsection 5 (2), subsection 5 (3) and paragraphs 1 to 7 of subsection 6 (1).

Endorsement and approval required

8. Every asset management plan prepared under section 5 or 6, or updated under section 7, must be,
- (a) endorsed by the executive lead of the municipality; and
 - (b) approved by a resolution passed by the municipal council.

Annual review of asset management planning progress



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9. (1) Every municipal council shall conduct an annual review of its asset management progress on or before July 1 in each year, starting the year after the municipality’s asset management plan is completed under section 6.

- (2) The annual review must address,
 - (a) the municipality’s progress in implementing its asset management plan;
 - (b) any factors impeding the municipality’s ability to implement its asset management plan; and
 - (c) a strategy to address the factors described in clause (b).

Public availability

10. Every municipality shall post its current strategic asset management policy and asset management plan on a website that is available to the public, and shall provide a copy of the policy and plan to any person who requests it.

TABLE 1
WATER ASSETS

Column 1 Service attribute	Column 2 Community levels of service (qualitative descriptions)	Column 3 Technical levels of service (technical metrics)
Scope	1. Description, which may include maps, of the user groups or areas of the municipality that are connected to the municipal water system. 2. Description, which may include maps, of the user groups or areas of the municipality that have fire flow.	1. Percentage of properties connected to the municipal water system. 2. Percentage of properties where fire flow is available.
Reliability	Description of boil water advisories and service interruptions.	1. The number of connection-days per year where a boil water advisory notice is in place compared to the total number of properties connected to the municipal water system. 2. The number of connection-days per year due to water main breaks compared to the total number of properties connected to the municipal water system.

TABLE 2
WASTEWATER ASSETS

Column 1 Service attribute	Column 2 Community levels of service (qualitative descriptions)	Column 3 Technical levels of service (technical metrics)
Scope	Description, which may include maps, of the user groups or areas of the municipality that are connected to the municipal wastewater system.	Percentage of properties connected to the municipal wastewater system.
Reliability	1. Description of how combined sewers in the municipal wastewater system are designed with overflow structures in place which allow overflow during storm events to prevent backups into homes. 2. Description of the frequency and volume of overflows in combined sewers in the municipal wastewater system that occur in habitable areas or beaches. 3. Description of how stormwater can get into sanitary sewers in the municipal wastewater system, causing sewage to overflow into streets or backup into homes. 4. Description of how sanitary sewers in the municipal wastewater system are designed to be resilient to avoid events described in paragraph 3. 5. Description of the effluent that is discharged from sewage treatment plants in the municipal wastewater system.	1. The number of events per year where combined sewer flow in the municipal wastewater system exceeds system capacity compared to the total number of properties connected to the municipal wastewater system. 2. The number of connection-days per year due to wastewater backups compared to the total number of properties connected to the municipal wastewater system. 3. The number of effluent violations per year due to wastewater discharge compared to the total number of properties connected to the municipal wastewater system.



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TABLE 3
 STORMWATER MANAGEMENT ASSETS

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

TABLE 4
 ROADS

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

TABLE 5
 BRIDGES AND CULVERTS

Column 1 Service attribute	Column 2 Community levels of service (qualitative descriptions)	Column 3 Technical levels of service (technical metrics)
Scope	Description of the traffic that is supported by municipal bridges (e.g., heavy transport vehicles, motor vehicles, emergency vehicles, pedestrians, cyclists).	Percentage of bridges in the municipality with loading or dimensional restrictions.
Quality	<ol style="list-style-type: none"> 1. Description or images of the condition of bridges and how this would affect use of the bridges. 2. Description or images of the condition of culverts and how this would affect use of the culverts. 	<ol style="list-style-type: none"> 1. For bridges in the municipality, the average bridge condition index value. 2. For structural culverts in the municipality, the average bridge condition index value.

COMMENCEMENT

Commencement

11. This Regulation comes into force on the later of January 1, 2018 and the day it is filed.