### **Purpose:**

The purpose of the policy is to guide the municipal process of infrastructure asset management planning.

### Goal:

The goal of the policy is to help the Municipality of Brooke-Alvinston provide an optimal environment for the community's socio-economic well-being, by allowing the municipal administration to allocate infrastructure funding according to expected infrastructure asset performance (level of service) over time.

### Articles:

- The Asset Management Plan is to be the starting and terminal point of financial, engineering, and administrative activities regarding municipal infrastructure assets needs and allocations. This includes, but is not limited to the development and maintenance of: master plans, strategic plans, long-term financial plans, policies, capital and operational budgets, and multi-year forecasts. Schedule 1 provides a schematic of the relationship between the documents.
- 2. The Asset Management Plan development process is to be built on top of the existing organizational processes. This will minimize the necessary time and effort to full asset management implementation (operationalization) within the municipality. Schedule 2 provides the Operationalizing Asset Management Framework.
- 3. Upon exhausting internal capacities, the municipality will pro-actively seek assistance from appropriate academic, private, public, and non-profit service providers in order to continuously improve and adopt appropriate asset management planning practices.
- 4. The following principles are to be considered in practicing asset management planning:
  - a. 25 year performance (level of service) and corresponding expenditure graphs are to be created for each asset class (category), as well as, for all asset classes (categories) aggregated into one.
  - b. Performance (level of service) measures break down into four main categories,
    - i. conditional defined by professionals
    - ii. conditional defined by public (e.g. citizenry)
    - iii. functional defined by professionals
    - iv. functional defined by public (e.g. citizenry)
  - c. Performance measure (level of service indicator) development and future projections are to be based upon the following methods:
    - i. Application of reliability (risk) theory to financial, engineering, and administrative information, and / or,
    - ii. Application of asset inspection information, and / or,
    - iii. Application of industry averages, and / or,
    - iv. Application of asset age.

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- d. Over time, the goal is to have performance (level of service) of all asset classes (categories) based upon the method in section c.i.
- e. An Asset Management System composed of the interaction between the organization (staff) and its technology (computer applications) is to be developed, implemented, and maintained.
- f. The Asset Management System is to be used to:
  - i. Model assets' service cycles (life cycles)
  - ii. Model 25 year deterioration of all asset classes (categories) at the most granular (detailed) level of asset information inventory
  - iii. Program 25 year scenario(s) of improvement activities at the most granular (detailed) level of asset information inventory
  - iv. Generate multi-year work plans
  - v. Generate improvement activity project sheets
- g. Infrastructure planning principles as per *Infrastructure for Jobs and Prosperity Act, 2015*, provided in Schedule 3.
- 5. Asset management planning will consider climate change aspects as they relate to the management of infrastructure assets. This includes, but is not limited to:
  - a. Identifying vulnerable assets at the most granular (detailed) level of asset information inventory
  - b. Capturing climate change items (e.g. greenhouse gas emission scenarios) in 25 year programming of infrastructure improvement activities
  - c. Developing infrastructure performance (level of service) vs. expenditure scenarios, which include sensitivity analysis of disaster planning items, and climate change mitigation and adaptation factors.
- 6. As per Article 4, asset management planning will address municipality relevant information provided in any of the following:
  - a. Water asset financial plans, including any prepared under the *Safe Drinking Water Act*, 2002,
  - b. Sanitary asset financial plans,
  - c. Ontario's land-use planning framework,
  - d. Policy statements under subsection 3 (1) of the Planning Act,
  - e. Provincial plans as defined by the *Planning Act*, and
  - f. Municipality's official plan.
- 7. A list of asset classes (categories) included within the asset management plan is provided in Schedule 4. As per section 1 (1)(b) of Ontario Regulation 588/17, each class (category) is composed of numerous more granular components or aggregates of municipal infrastructure assets that provide the same type of service attributed to the defined asset classes (categories) in Schedule 4. Should the replacement value of a new asset class (category), of a different type of service other than of those in Schedule 4, surpass a capitalization threshold of \$ 5,000, the asset class (category) is to be included within the municipal asset management plan.

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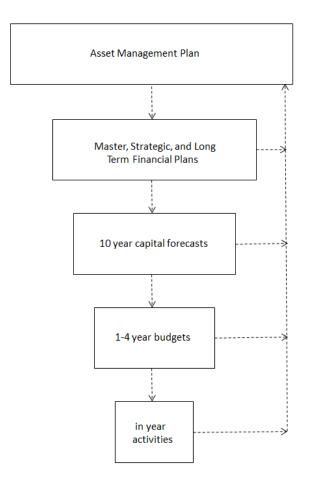
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- 8. As per Article 4, asset management planning will address Brooke-Alvinston's relevant information of connected or interrelated public infrastructure assets of other communities, public organizations, and levels of government.
- 9. All positions with the organization are responsible for asset management planning to varying extents. The Clerk-Administrator, Treasurer, and Public Works Manager are the leaders of this team effort.
- 10. Council's role is to increase asset management awareness at the elected officials' level of the organization, and collaborate with municipal staff through already established communicative and authoritative responsibilities of respective departments and positions.
- 11. Public input is to be obtained through a public engagement effort on asset management. The results of which should readily be incorporated through Article 4.

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Schedule 1 – Documental Asset Management Framework

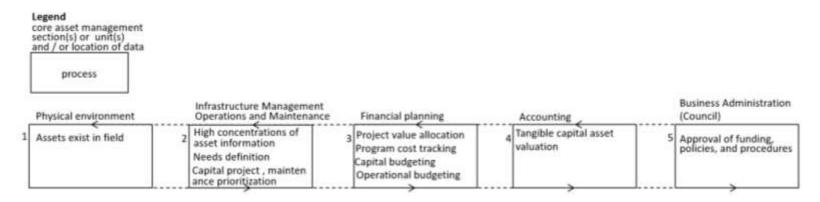


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#### Schedule 2 – Operationalizing Asset Management Framework



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**Schedule 3** – *Infrastructure for Jobs and Prosperity Act, 2015* – *Section 3,* Infrastructure Planning Principles

#### INFRASTRUCTURE PLANNING PRINCIPLES

**3** The Government, and every broader public sector entity, shall consider the following principles when making decisions respecting infrastructure:

- 1. Infrastructure planning and investment should take a long-term view, and decision-makers should take into account the needs of Ontarians by being mindful of, among other things, demographic and economic trends in Ontario.
- Infrastructure planning and investment should 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 or Part VII of the *City of Toronto Act*, 2006.
- 3. Infrastructure priorities should be clearly identified in order to better inform investment decisions respecting infrastructure.
- 4. Infrastructure planning and investment should ensure the continued provision of core public services, such as health care and education.
- 5. Infrastructure planning and investment should promote economic competitiveness, productivity, job creation and training opportunities.
- 6. Infrastructure planning and investment should ensure that the health and safety of workers involved in the construction and maintenance of infrastructure assets is protected.
- 7. Infrastructure planning and investment should foster innovation by creating opportunities to make use of innovative technologies, services and practices, particularly where doing so would utilize technology, techniques and practices developed in Ontario.
- 8. Infrastructure planning and investment should be evidence based and transparent, and, subject to any restrictions or prohibitions under an Act or otherwise by law on the collection, use or disclosure of information,
- i. investment decisions respecting infrastructure should be made on the basis of information that is either publicly available or is made available to the public, and
- ii. information with implications for infrastructure planning should be shared between the Government and broader public sector entities, and should factor into investment decisions respecting infrastructure.
  - 9. Where provincial or municipal plans or strategies have been established in Ontario, under an Act or otherwise, but do not bind or apply to the Government or the broader public sector entity, as the case may be, the Government or broader public sector entity should nevertheless be mindful of those plans and strategies and make investment decisions respecting infrastructure Copyright © 2018 by Milos Posavljak and The Corporation of the Municipality of Brooke-Alvinston

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that support them, to the extent that they are relevant. Examples of plans and strategies to which this paragraph may apply include,

i. policy statements issued under section 3 of the Planning Act, and provincial plans as defined by that Act,

- ii. municipal water sustainability plans submitted under the Water Opportunities Act, 2010,
- iii. the Lake Simcoe Protection Plan established under the Lake Simcoe Protection Act, 2008, and
- iv. transportation plans adopted under the Metrolinx Act, 2006.
  - 10. Infrastructure planning and investment should promote accessibility for persons with disabilities.
  - 11. Infrastructure planning and investment should minimize the impact of infrastructure on the environment and respect and help maintain ecological and biological diversity, and infrastructure should be designed to be resilient to the effects of climate change.
  - 12. Infrastructure planning and investment should endeavour to make use of acceptable recycled aggregates.
  - 13. Infrastructure planning and investment should 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 (including for apprentices, within the meaning of section 9), improvement of public space within the community, and any specific benefits identified by the community.
  - 14. Any other principles that may be prescribed for the Government or the broader public sector entity, as the case may be.

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Schedule 4 - Asset classes (categories) included within the asset management plan

Facilities, Roads, Bridges, Culverts, Storm Sewer, Water Distribution, Sanitary Sewer, Equipment, Furnishings, Fleet, Land Improvements, Sidewalks, and Road Illumination.

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