

**THE CORPORATION OF THE  
TOWNSHIP OF ARMSTRONG**

**BY-LAW 2019-30**

**BEING a By-law to adopt a Strategic Asset Management Policy for the Corporation  
of the Township of Armstrong.**

**WHEREAS** Section 5(3) of the Municipal Act, 2001 S.O. 2001, Chapter 25, as amended, provides that a municipal power, including a municipality's capacity, rights, powers and privileges under section 9, shall be exercised by by-law unless the municipality is specifically authorized to do otherwise;

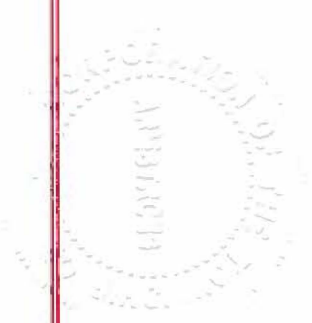
**AND WHEREAS** Ontario Regulation 588/17 enacted under Infrastructure for Jobs and Prosperity Act, 2015, S.O. 2015, c. 15 took effect January 1, 2018 and sets out specific requirements for asset management planning with proposed phase-in timelines and the requirement of a municipal strategic asset management policy;


**AND WHEREAS** the Corporation of the Township of Armstrong deems it desirable to adopt a policy for a viable and structured approach to asset management for the Municipality;


**NOW THEREFORE BE IT RESOLVED THAT** the Corporation of the Township of Armstrong hereby enacts as follows:

1. **THAT** the Strategic Asset Management Policy attached hereto as Schedule "A" to this By-Law be adopted.
2. **THAT** the Mayor and Clerk be and they are hereby authorized to sign this By-Law and to affix the corporate seal thereto.
3. **THAT** the provisions of this By-law shall come into force and be in effect upon final passage thereof.
4. **THAT** all other by-laws and resolutions or parts thereof, contrary hereto or inconsistent herewith, be and the same are hereby repealed.

**READ A FIRST, SECOND AND THIRD TIME AND PASSED** this 10<sup>th</sup> day of July, 2019.



  
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Jean Marc Boileau, Mayor

  
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Amy Vickery-Menard, Clerk Treasurer

<b>POLICY TITLE:</b> Strategic Asset Management Policy	<b>SUBJECT:</b> Asset Management
<b>POLICY SECTION:</b> General Government/Planning & Development	<b>ENACTED BY:</b> By-Law No. 2019-30 <b>EFFECTIVE DATE:</b> July 10, 2019

Schedule "A" to By-Law No. 2019-30



## Strategic Asset Management Policy

### 1.0 Purpose

The purpose of this policy is to provide a framework for the development and implementation of the Township's asset management program. It is intended to guide the consistent use of **asset management** across the organization, to facilitate logical and evidence-based decision-making for the management of **municipal infrastructure assets** and to support the delivery of sustainable community services now and in the future.

By using sound asset management practices, the Township will work to ensure that all municipal infrastructure assets meet expected performance levels and continue to provide desired service levels in the most efficient and effective manner. Linking service outcomes to infrastructure investment decisions will assist the Township in focusing on service, rather than budget, driven asset management approaches.

This policy demonstrates an organization-wide commitment to the good stewardship of municipal infrastructure assets, and to improved accountability and transparency to the community through the adoption of best practices regarding asset management planning.

### 2.0 Background

The Township is responsible for providing a range of essential services to the community, including transportation networks, water service, wastewater networks, stormwater networks, and parks and recreation services. To deliver these services, it owns and manages a diverse municipal infrastructure asset portfolio of roads, bridges & culverts, water and sewer mains, machinery & equipment, land improvements, buildings, and vehicles. As the social, economic, and environmental wellbeing of the community depends



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on the reliable performance of these municipal infrastructure assets it is critical to implement a systemic, sustainable approach to their management.

Asset management is such an approach, and refers to the set of policies, practices and procedures that allow an organization to realize maximum value from its municipal infrastructure assets. An asset management approach allows organizations to make informed decisions regarding the planning, building, operating, maintaining, renewing, replacing and disposing of municipal infrastructure assets through a wide range of **lifecycle activities**. Furthermore, it is an organization-wide process that involves the coordination of activities across multiple departments and service areas such as Public Works, Finance, and Parks and Recreation. As such, it is useful to adopt a structured and coordinated approach to outlining the activities, roles and responsibilities required of organizational actors, as well as the key principles that should guide all asset management decision-making.

A comprehensive and holistic asset management approach will support efficient and effective delivery of expected **levels of service** and ensure that due regard and process are applied to the long-term management and stewardship of all municipal infrastructure assets. In addition, it will align the Township with provincial and national standards and regulations such as the Infrastructure for Jobs and Prosperity Act, 2015 and Ontario Regulation 588/17, enabling the organization to take full advantage of available grant funding opportunities.

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

### **3.0 Alignment with the Township's Strategic Direction**

This policy aligns with the Township of Armstrong's Mission Statement and Official Plan 2017-2037. The following passages outline key strategic priorities listed within these documents that the development of an asset management program will support:

- **Continue Predominance of Agriculture:** the Township is rural in nature and is expected to remain so, therefore, agriculture will continue to play a major role in its economy and in planning for assets.
- **Importance of Economic Development:** the Township needs to be recognized as a leader in growing, expanding, and creating local value-added businesses that utilize local assets

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- **Importance of Municipal Leadership:** It shall undertake a logical, orderly, and economic approach for development
- **Financial Control:** To plan and implement municipal services and facility improvements within the Corporation's financial capabilities and priority ranking
- **Environmental Protection:** All development must recognize the need to protect, maintain, and/or improve identified significant environmental features and areas including water quality and quantity.

#### 4.0 Policy Statement

To guide the Township, the following policy statements have been developed as guiding principles:

1. The Township will strive to implement an enterprise-wide asset management program through all departments. The program will promote lifecycle and risk management of all municipal infrastructure assets, with the goal of achieving the lowest total cost of ownership while meeting desired levels of service.
2. The Township will work towards implementing continuous improvement protocols and adopt best practices regarding asset management planning, including:
  - i. **Complete and Accurate Asset Data;**
  - ii. **Condition Assessment Protocols:** Collecting more accurate and up-to-date attribute data against assets allows for more informed decision-making and less reliance on the age of the assets
  - iii. **Risk and Criticality Models:** risk management allows for optimised decision-making when staff can identify and mitigate the consequences and implications associated with an asset's failure to perform/function as intended.
  - iv. **Whole Lifecycle Management:** Identifying the lifecycle activities that can be performed throughout the entire useful life of the asset is cost-effective and proactive.
  - v. **Financial Strategy Development;**
  - vi. **Level of Service Framework:** Infrastructure assets provide a service to the Public, and their condition and other metrics determine how well they provide this service. Staff must formalize these metrics in a framework in order to identify and track the level of service these assets are meeting.



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3. The Township will develop and maintain an asset inventory of all municipal infrastructure assets which includes unique ID, description, location information, value (both historical and replacement), performance characteristics and/or condition, estimated remaining life and estimated repair, rehabilitation or replacement date; and estimated cost repair, rehabilitation or replacement costs.
4. The Township will develop an **asset management plan** that incorporates all municipal infrastructure assets that meet the **capitalization threshold** outlined in the organization's Tangible Capital Asset Policy. The asset management plan will be updated at least every five years in accordance with O. Reg. 588/17 requirements, to promote, document and communicate continuous improvement of the asset management program.

For management purposes, it can be advantageous to inventory, track, and document municipal infrastructure assets that fall below the relevant capitalization threshold. Recognizing that it may be beneficial to include these types of assets in the asset management plan, the Township will consider incorporating such assets at their own discretion, based on the objective of sustainably managing municipal infrastructure assets (i.e. gravel roads, culverts).

5. The Township will strive to integrate asset management plans and practices with its long-term financial planning and budgeting strategies. This includes the development of financial plans that determine the level of funding required to achieve short-term operating and maintenance needs, in addition to long-term funding needs to replace and/or renew municipal infrastructure assets based on full lifecycle costing.
6. The Township will explore innovative funding and service delivery opportunities, including but not limited to grant programs, public-private partnerships (P3), alternative financing and procurement (AFP) approaches, and shared provision of services, as appropriate.
7. The Township will consider the risks and vulnerabilities of municipal infrastructure assets to climate change and the actions that may be required including, but not limited to, anticipated costs that could arise from these impacts, adaptation opportunities, mitigation approaches, disaster planning and contingency funding.

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Impacts may include matters relating to operations, levels of service and lifecycle management.

8. The Township will ensure that all asset management planning is aligned with any of the following financial plans:
  - i. Financial plans related to the Township's water assets including any financial plans prepared under the Safe Drinking Water Act, 2002;
  - ii. Financial plans related to the Township's wastewater assets.
  
9. The Township will align all 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*; shall conform with the provincial plans that are in effect on that date; and, shall be consistent with all municipal official plans, strategic plans, operational plans and municipal studies
  
10. The Township will coordinate planning for asset management, where municipal infrastructure assets connect or are interrelated with those of its neighbouring municipalities or jointly-owned municipal bodies wherever viable and beneficial.
  
11. The Township will develop processes and provide opportunities for municipal residents and other interested parties to offer input into asset management planning wherever and whenever possible.
  
12. The Strategic Asset Management Policy should be reviewed and, if necessary, updated at least every five years.
  
13. Council will conduct an annual review of the Township's asset management progress on or before July 1 in each year, starting the year after the Township's asset management plan is completed to meet the requirements outlined in O.Reg. 588/17

The annual review must address:

- i. The Township's progress in implementing its asset management plan;
- ii. Any factors impeding the Township's ability to implement its asset management plan;
- iii. A strategy to address the factors identified as impeding the Township's ability to implement its asset management plan

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14. The Township will post its asset management policy and asset management plan on a website that is available to the public and will provide a copy of the policy and plan to any person who requests it.

## **5.0 Roles and Responsibilities**

The development and continuous support of the Township's asset management program requires a wide range of duties and responsibilities. The following passages outline the persons responsible for these tasks:

### **1. Council**

- i. Approve the AM policy and direction of the AM program;
- ii. Maintain adequate organizational capacity to support the core practices of the AM program;
- iii. Prioritize effective stewardship of assets in adoption and ongoing review of policy and budgets;
- iv. Establish and monitor levels of service;
- v. Approve the asset management plan by by-law;
- vi. Review the Township's asset management progress annually

### **2. Senior Management Team (Clerk-Treasurer/Administrator/Public Works Superintendent/Overall Responsible Water Operator)**

- i. Development of policy and policy updates;
- ii. Provide corporate oversight to goals and directions and ensure the AM program aligns with the Township's strategic plan;
- iii. Ensure that adequate resources are available to implement and maintain core AM practices;
- iv. Provide departmental staff coordination;
- v. Develop and monitor levels of service and make recommendations to Council;
- vi. Track, analyze and report on AM program progress and results
- vii. Monitor levels of service;

### **3. Executive Lead (Treasurer)**

- i. Manage policy and policy updates;
- ii. Provide organization-wide leadership in AM practices and concepts;
- iii. Provide departmental staff coordination;
- iv. Coordinate and track AM program implementation and progress;
- v. Endorse the asset management plan



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#### 4. Departmental Staff

- i. Utilize the new business processes and technology tools developed as part of the AM program;
- ii. Participate in implementation task teams to carry-out AM activities;
- iii. Implement and maintain levels of service;
- iv. Provide support and direction for AM practices within their department;
- v. Track and analyze AM program progress and results

#### 6.0 Key Principles & Goals

The Township shall consider the following principles as outlined in section 3 of the *Infrastructure for Jobs and Prosperity Act, 2015*, when making decisions regarding asset management:

1. Infrastructure planning and investment should take a long-term view, and decision-makers should take into account the needs of citizens by being mindful of, among other things, demographic and economic trends.
2. Infrastructure planning and investment should take into account any applicable budgets or fiscal plans.
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, including the continuous management and maintenance of other services and infrastructure not specifically identified as core assets however, due to their nature or collectively there is an impact the Township. i.e. gravel roads and culverts.
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.

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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 Township 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 Township, as the case may be, the Township should nevertheless be mindful of those plans and strategies and make investment decisions respecting infrastructure that support them, to the extent that they are relevant.
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, improvement of public space within the community, and any specific benefits identified by the community.

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## 7.0 Definitions

1. **Asset management (AM)** – the coordinated activity of an organization to realize value from assets. It considers all asset types, and includes all activities involved in the asset’s life cycle from planning and acquisition/creation; to operational and maintenance activities, rehabilitation, and renewal; to replacement or disposal and any remaining liabilities. Asset management is holistic and normally involves balancing costs, risks, opportunities and performance benefits to achieve the total lowest lifecycle cost for each asset.
2. **Asset management plan (AMP)** – Documented information that specifies the activities, resources, and timescales required for an individual asset, or a grouping of assets, to achieve the organization’s asset management objectives.
3. **Capitalization threshold** – the value of a municipal infrastructure asset at or above which a Township will capitalize the value of it and below which it will expense the value of it.
4. **Enterprise-Wide Asset Management Program** – the Township must implement a holistic and interdepartmental process for its asset management objectives and plans in order to break down silos at work.
5. **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, street trees, urban forests, natural channels, permeable surfaces and green roofs.
6. **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.
7. **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.



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8. **Municipal infrastructure asset** – an infrastructure asset, including a green infrastructure asset, directly owned by a Township or included on the consolidated financial statements of a Township, but does not include an infrastructure asset that is managed by a joint municipal board or other joint organization