



Staff Report for Committee of the Whole Meeting

Date of Meeting: May 21, 2019

Report Number: SREIS.19.008

Department: Environment and Infrastructure Services

Division: Asset Management Planning and Environment Services

Subject: **SREIS.19.008 - Asset Management Policy and Strategy**

Purpose:

To present the Corporate Asset Management Policy for Council's approval in accordance with *Ontario Regulation 588/17*.

Recommendation(s):

1. That the Asset Management Policy be approved in accordance with the requirements of *Ontario Regulation 588/17*.
2. That SREIS.19.008 be received for information.

Contact Person:

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Report Approval:

Submitted by: Italo Brutto, Commissioner of Environment and Infrastructure Services

Approved by: Neil Garbe, City Manager

All reports are electronically reviewed and/or approved by the Division Director, Treasurer (as required), City Solicitor (as required), Commissioner, and City Manager. Details of the reports approval are attached.

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Background:

Asset Management Planning is recognized as an effective approach to address the growing gap between infrastructure needs and the public funding available to support them. Ontario's *Building Together: Guide for Municipal Asset Management Plans, 2012* was introduced as guidance on preparing Asset Management Plans to help inform long-term decisions with respect to the stewardship of municipal assets. The City of Richmond Hill's first Asset Management Plan was completed and adopted by Council in December 2016 (SRCAO.16.36) and made available to the Province to secure Federal Gas Tax funding.

In December 2017, the province released *Ontario Regulation 588/17: Asset Management Planning for Municipal Infrastructure* as a part of the *Infrastructure for Jobs and Prosperity Act*. Although Richmond Hill's 2016 Asset Management Plan provides a basis for future asset management planning, *O.Reg.588/17* takes a broader, more integrated approach to Asset Management Planning, and requires the City to evolve its practices and processes once more to achieve compliance.

In preparation for the first regulatory deadline for an Asset Management Policy by July 1, 2019, the City approved a project for the development of **Asset Management Policy, Strategy and Governance Framework** (SREIS.18.009). This initiative entailed conducting a maturity assessment of the City's Asset Management processes by comparing them to the internationally recognized principles and best practices of the Institute for Asset Management (IAM) Maturity Scale.

Key findings from the maturity assessment determined the need to build upon existing asset management practices and better align them with organizational objectives, and to integrate many existing or developing business processes to allow for cross-corporate, evidence-based decision-making. The findings also identified approaches that would secure the City's asset management maturity rating as "Competent" within the Maturity Scale (aligned with ISO 55000) and establish an Asset Management System to produce a compliant Asset Management Plan for core infrastructure by July 2021. Recommendations included:

- Enhance and improve system-wide decision making approaches and modeling tools
- Integrate capital planning and renewal activities with future growth projections and development planning functions
- Develop a customer centric levels of service framework
- Develop formalized capital project prioritization methodologies
- Develop a corporate asset information strategy
- Create a collaborative committee to address risk management
- Create a culture of Asset Management
- Build a coordinated Asset Management corporate function

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These recommendations guided the development of the Asset Management Policy, as well as the City's Asset Management Strategy and implementation plans.

Asset Management Policy

Ontario Regulation 588/17 requires that each municipality adopt an Asset Management Policy before July 1, 2019. The Policy is presented in Appendix A. In compliance with the Regulation's requirements, once approved by Council the Policy it will be posted electronically and be made available to the public.

Policy Commitments and Principles

The purpose of the Asset Management Policy is to establish the City of Richmond Hill's commitment to corporate asset management planning through defined principles and processes, as well as to outline the scope of assets to be included within the City's Asset Management Plan. Key commitments recommended for Richmond Hill's Asset Management Policy aim to satisfy Section 3 of *Regulation 588/17*, and are as follows:

1. Integrate with the City's Strategic Plan, Official Plan and Master Plans to ensure alignment between asset decision-making and the City's Strategic Objectives, as well as growth and service demand forecasts. (Section 3.7)
2. Manage municipal infrastructure assets using an integrated business approach that delivers desired service results by planning and investing in infrastructure within the context of City-wide responsibilities. (Section 3.1)
3. Enable residents, businesses and other interested parties to provide input in asset management planning. (Section 3.12)
4. Coordinate planning for management of assets shared with other governmental agencies, including the Regional Municipality of York, neighbouring municipalities and the Conservation Authorities. (Section 3.9)
5. Align asset management planning activities to water and wastewater financial plans to ensure that these critical municipal services are appropriately funded over the long term. (Section 3.6)
6. Commit to consider the Asset Management Plan recommendations when developing municipal budgets and long term financial plans. (Section 3.2, 3.4)
7. Commit to consider risks, including those related to climate change, when reporting asset management planning needs. (Section 3.3, 3.5)

In addition to these Commitments, the Policy also lists Asset Management principles (Section 3.8) that the City intends to uphold. These principles are written to adhere to the requirements of *Regulation 588/17*, as well as include responsible practices in Asset Management Planning.

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Role of Council and Staff

In accordance with Section 3 of the Regulation, the Asset Management Policy must include the role of Council in asset management planning and the persons responsible for asset management planning, including the Executive Lead.

Council is responsible for endorsing the Asset Management Policy and future Asset Management Plans. Council has the authority to approve or modify the Policy, Plans and municipal budgets that support asset management planning, prioritize capital works, and deliver operations and maintenance programs.

By defining the role of Council, the Policy aims to set a transparent process for decision-making, as well as commit to the discussion of infrastructure needs in a public forum, and to both inform Council on the state of infrastructure, and seek public input into future sustainability plans.

The Policy also appoints the City Manager (Executive Lead) as responsible for overseeing the development and implementation the Asset Management Policy and future Asset Management Plans. The City Manager will assign administrative authorities and resources to ensure the Asset Management Policy and Plans are developed, implemented and updated as required.

Policy Implementation: The Asset Management Strategy

The City's Asset Management System is comprised of three parts:

- The Asset Management Policy, which outlines the City's principles and commitments to Asset Management planning;
- The Asset Management Strategy, which outlines specific business processes and practices that must exist within a municipality to implement the Policy and deliver sound Asset Management planning; and,
- Future Asset Management Plans, which report on the state of infrastructure and disclose operational and financial strategies to meet required service levels.

Over the past year, staff have developed an Asset Management Strategy (as described below) to support evidence-based asset management planning and align infrastructure decisions with the City's overall vision and goals. The Strategy sets out to achieve the commitments and principles of the Asset Management Policy through a set of integrated business processes needed to produce a sound Asset Management Plan.

Asset Management Business Processes

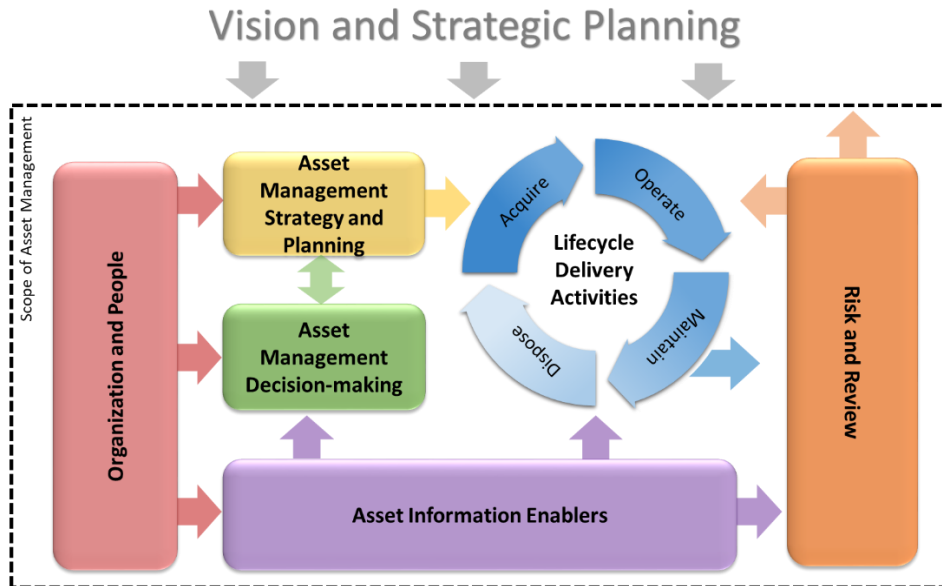
Staff has chosen the IAM Framework as the basis for its Asset Management Strategy. This approach is internationally recognized, and aligned with *Ontario Regulation 588/17*. This Framework was utilized to align current, developing and future asset management planning processes to the six (6) major categories:

1. Asset Management Strategy and Planning;
2. Asset Management Decision-making;
3. Lifecycle Delivery Activities;

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4. Asset Information Enablers;
5. Organization and People; and,
6. Risk and Review.

The following graphic, based on the IAM Asset Management Framework, illustrates these six (6) categories, including their inter-relation as part of an Asset Management System.



Processes within the Asset Management **Strategy and Planning** category focus on coordination between the City's Strategic Plan, Official and Master Plans, and the Asset Management System to better inform infrastructure investment priorities. High priority activities include establishing the Asset Management System, defining sustainable customer-centric levels of service, and coordinating the Asset Management Plan.

The Asset Management **Decision-making** category includes methodologies to enable evidence-based prioritization of projects, with consideration to achieving the best value from asset lifecycle investment, reducing risk exposure and meeting customer demand and technical standards. High priority activities recommended within this category include asset lifecycle modeling to predict long-term asset condition, and risk and service level scenarios to arrive at sustainable capital investment strategies.

Lifecycle Delivery processes pertain to the asset lifecycle, including acquisition, operations, maintenance and disposal. High priority Strategy Implementation activities centre on refinement of technical standards for assets to ensure the best value over their useful life, as well as determination of asset specific risk and criticality, to identify asset priorities.

Asset Information Enablers relate to data management, as well as the creation of systems and tools to store robust evidence to inform decisions. High priority activities within this category closely align with the IT Strategy, and include utilization of existing

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systems and future tools to allow for better analysis of long term infrastructure needs and impacts.

Organization and People focuses on establishing a Governance Framework for Asset Management, and ensuring its success through building a culture of Asset Management. High priority activities within this category pertain to creating working groups of inter-department staff to better leverage expertise, continue to share knowledge, and take a collaborative approach to the Strategy implementation plan.

The **Risk and Review** category relates to both the establishment of common Corporate Risk Management tools, as well as to the continual improvement of the Asset Management System. High priority activities in this category will entail creating enhanced Risk Assessment tools to support asset management related decisions.

The City will need to continue to perform, improve or establish various business processes to achieve a compliant Asset Management Plan in time to meet Regulatory deadlines, including the development of a Core Infrastructure Asset Management Plan by July 2021. As this work proceeds, priority activities will be streamlined and bundled to optimize the use of resources. Synergies with existing processes and ongoing initiatives will be identified to help meet implementation timelines and leverage existing resources and roles where possible.

Benefits of Integrated Asset Management Planning

The Strategy described above sets out to define Asset Management as a means to deliver sustainable services to the community, and to ensure asset-related decision-making and investments are approached in a coordinated manner, informed by evidence and guided by the City's overall strategic direction. The primary business driver is one of service delivery that balances risk, levels of service, and affordability.

In addition to achieving compliance with the Regulations, benefits arising from the activities identified within the Asset Management Strategy include better coordination of capital planning and delivery activities with growth, a better understanding of asset needs, and enhancement of evidence for decision-making activities that support delivery of services. Integration of Asset Management with the Capital Budget process will enable better definition of project priorities, and forecast infrastructure needs to support fiscal sustainability analyses, and predict the resulting State of the Infrastructure given different funding scenarios.

Financial/Staffing/Other Implications:

There are no immediate financial implications associated with this report at the present time.

Moving forward, implementation of the business processes and activities necessary to support a compliant Asset Management System will require a nominal time commitment (<5%) from a large number of staff. It is expected that a large portion of incremental demands can be managed by approaching current practices differently; for example,

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field staff collecting condition assessment data may need to collect new or different information while undertaking the same assessments.

Staff in capital planning roles or subject matter expert staff will experience moderate demands on their time (~20%). Key staff members will need to participate in committees that collectively establish capital priorities, however, these tasks can likely be accommodated within existing staff resources and by streamlining existing processes.

Finally, some divisions will see increased workloads (>50%) due to the introduction of new processes.

The vast majority of implementation activities will fall to the City's Corporate Asset Management section, which is currently staffed to initiate Asset Management planning activities required by *Ontario Regulation 588/17*. Based on a maturity assessment recently conducted to compare the City's Asset Management processes to best practices outlined by the Institute for Asset Management (IAM), it was recognized that additional staff will be required to achieve compliance with the timelines and requirements specified by the provincial Regulation. Future resourcing needs will be brought forward as part of ongoing Operating and Capital budget cycles, together with a business cases outlining any business requirements and associated risks.

The Information Technology team will be tasked with the development of the Enterprise Asset Management (EAM) solution, as well as with improvement to existing information, such as the Geographical Information System (GIS) asset repository. The EAM system will draw data from all major corporate databases for the purpose of analysis and evidence-based decision-making about operating, maintenance and capital programs, as well as risk management. Implementation and on-going maintenance of an EAM system, as well as the task of improving asset information within GIS, may require additional resources in future. The need for these resources will be assessed in concert with other initiatives within the IT Strategy and through future operating budget cycles supported by business cases.

In the short term, external consulting support will be required to deliver several of the high priority activities tied to legislative deadlines and to provide specialty expertise, such as developing capital project prioritization tools and risk frameworks, or completing level of service studies and lifecycle strategies for various asset classes. It is anticipated that these projects will qualify for gas tax funding.

As part of the IT Strategy, capital funding was previously approved to initiate an Enterprise Asset Management software solution in 2019. The solution's purchase and implementation will require additional funding, which has been forecasted as part of the 2020 Information Technology budget.

Funding requirements for the noted external consultant support and solution purchase will be included within future budget cycles.

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Relationship to the Strategic Plan:

Progressing the City's Asset Management Program aligns with the Strategic Plan Goal Four: Wise Management of Resources. Asset management allows the City to make the right investments at the right time to maintain or improve our services while managing our risks.

Conclusion:

Ongoing collaboration between City Departments will be necessary to ensure that Asset Management practices become embedded into day-to-day planning activities, and will be essential to the continual improvement approach prescribed within the Regulation. In some cases, new or enhanced processes will be accommodated with expansion of existing roles, or additional tasks and responsibilities. In other cases, consideration will be given between adjustment of work task, additional training to meet additional demands, and the possibility of expanding the existing team to meet the added workload.

The Asset Management Policy is the first milestone towards achieving compliance with *Regulation 588/17*. Overall, the Asset Management Strategy will position the City towards sound management of its infrastructure assets, by increasing the health of the asset base and optimizing the support that infrastructure provides to service delivery.

Attachments:

The following attached documents may include scanned images of appendixes, maps and photographs. If you require an alternative format please call contact person listed in this document.

- Appendix A - Asset Management Policy

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Report Approval Details

Document Title:	SREIS.19.008 Asset Management Policy and Strategy.docx
Attachments:	- AppendixA_DraftAMPolicy.docx
Final Approval Date:	May 1, 2019

This report and all of its attachments were approved and signed as outlined below:

Terry Ricketts - May 1, 2019 - 11:33 AM

Italo Brutto - May 1, 2019 - 2:05 PM

David Dexter - May 1, 2019 - 3:07 PM

Neil Garbe - May 1, 2019 - 4:06 PM