To: Council File No.: 1855-01

From: Director of Infrastructure and Environmental Engineering Date: July 31, 2024

Subject: 2024 MMA Infrastructure Planning Grant Program Application

PURPOSE:

The purpose of this report is to describe a potential grant opportunity, nominate a project for the grant, and secure a council resolution supporting the project.

EXECUTIVE SUMMARY:

This report describes an intended grant application to produce an enterprise-wide technology blueprint for asset management applications and data to document and illustrate how technology, applications and supporting data are connected to integrate asset management information and support infrastructure decisions for sustainable service delivery including long term financial planning.

BACKGROUND:

The Local Government Infrastructure Planning Grant Program is a provincial grant provided by the Ministry of Municipal Affairs (MMA) for local governments to support asset management objectives. A maximum grant amount of \$10,000 can be provided for each approved project for 100% of the first \$5,000 and 50% of the next \$10,000 of approved costs. Criteria include the principles of sustainability and resilience.

The primary focus of this grant application and project is proposed to be data, software and tools. The International Infrastructure Management Manual (IIMM) defines an Asset Management Information System (AMIS) as a "combination of processes, data, software, and hardware applied to provide the essential outputs for effective AM such as reduced risk and optimum infrastructure investment".

The City's AMIS is comprised of many parts and has become an essential tool for managing infrastructure assets. Various technology tools are implemented to effectively deal with the extent of analysis required to support the City's community infrastructure systems and their operations as well as current practices that optimize and justify capital renewal investments.

Asset Management for Sustainable Service Delivery: A BC Framework ("the Framework") was developed to provide local governments with a high-level overview of the process of asset management. The Framework aligns with the BC approach for asset management which is being led by Asset Management British Columbia (AMBC). It is based on current international best practices, as well as best practices that have been developed and endorsed by BC local government practitioners.

The Framework recognizes the need for sharing information, transferring knowledge, and building sustainable service delivery, and identifies "strategies for data, software and tools" in both basic and advanced asset management practices.

Lastly, this project is aligned with other industry leading best practices. International Standard (ISO) 55001 (Asset Management System Requirements) recommends reporting on the asset management system to management, documenting information necessary for its effectiveness and establishing priorities to improve its performance.

DISCUSSION:

Asset knowledge management is important as it is concerned with defining the asset information needed, how it is gathered, analysed, interpreted and managed, and then applied.

Currently, the asset management technology used at the City is composed of centralized and decentralized technology systems that require different levels of manual processing and human resources to maintain the information requirements of core business functions. Digital platforms requiring hardware, software, data, procedures and standards are used by staff every day to deliver cost-effective management of assets and efficient customer service. Some platforms are owned and managed by the City, others are third party.

By documenting a line of sight across all relevant data, software and tools, an enterprise-level blueprint will provide the City with a consistent corporate approach to system development and the foundation to enable ease and efficiency for AMIS users.

An enterprise-level blueprint also enables a governance and management structure, which is critical to provide overall direction and control of the City's AMIS. Without this documentation in place, many AMIS components that required thoughtful effort to produce are at risk of losing advanced capabilities, and over time may no longer be able to accommodate regulatory requirements, creating data silos that limit decision makers from viewing asset information in a holistic fashion.

This project is proposed to use a facilitator who will leverage a collaborative approach with internal departments to capture how their asset data, accounting information, work history and decision tools are currently implemented and to what extent information is passed between systems including the City's geographical information system (GIS) and other corporate systems.

The intended outcome of this project is to optimize the performance of City assets throughout their lifecycle and improve asset management practices across all departments by capturing how information is stored in technology systems including where time is spent to reconcile information, manage assets and create reports needed by multiple stakeholders.

With this blueprint in hand, longer-term impacts from this project would be streamlining and standardizing asset management data governance practices to enable data consistency, reliability and timeliness.

With a consistent corporate approach for technology systems across different activity areas, it is envisioned this project will simplify continuous improvement and equip office and field staff with modern and easy to use tools that provide advanced analytics for the needs of generic business functions through data sharing between systems without requiring additional resources to conduct technical and manual integrations.

POLICY ANALYSIS:

There are no policy implications associated with approving this grant application as it will be focused on capturing the current state of existing applications that support business processes and procedures.

FINANCIAL IMPLICATIONS:

A maximum grant amount of \$10,000 can be provided for each approved project for 100% of the first \$5,000 and 50% of the next \$10,000 of approved costs. Total project costs are estimated to be \$25,000.

ADMINISTRATIVE IMPLICATIONS:

Staff time from various departments including Infrastructure and Environmental Engineering Services and Operational Services will be required for interdepartmental coordination and collaboration. These activities are expected to include workshops, information sharing, and deliverable reviews to ensure the full spectrum of users, use cases and system interfaces are captured. Physical condition assessment projects in 2024 will be delayed to future years as a result of the recommended funding source.

A project management approach will be taken in the future for further efforts that are expected to follow for the City's asset management system regarding data management, staff training, performance monitoring and continuous improvement including any subsequent opportunities for technology integrations.

STRATEGIC PRIORITIES REFERENCE:

This initiative addresses the following strategic priorities:

- Organizational Well-Being and Sustainability Ensure capacity to accommodate big change resulting from direct and indirect impacts to our community
- Financial Sustainability Ensure capacity to accommodate big change

PUBLIC ENGAGEMENT:

Staff would inform the public based on the IAP2 Spectrum of Public Participation:

| | | | Increasing Level of Public Impact | | | |
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| Ir | nform | Consult | Involve | Collaborate | Empower | |
| poarticipation be goal in to un properties and properties are properties and properties are properties and properties are properties and properties are prop | To provide the sublic with alanced and bjective nformation o assist them in understanding the problem, lternatives, pportunities nd/or solutions. | To obtain public feedback on analysis, alternatives and/or decisions. | To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered. | To partner with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution. | To place final decision-making in the hands of the public. | |

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OPTIONS:

- 1. THAT Council approve submission of an application to the Local Government Infrastructure Planning Grant program for \$10,000 for the documentation of an enterprise-wide technology blueprint for asset management applications and data.
- 2. THAT Council provide alternative direction to staff.

ATTACHMENTS:

1. Example of Advanced Asset Management Information System Modules and Interfaces

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