

## Section III – Items for the Information of the Board

**TO:** Chair and Members of the Board of Directors  
Friday, February 26, 2021 Meeting

**FROM:** Michael Tolensky, Chief Financial and Operating Officer

**RE: TORONTO AND REGION CONSERVATION AUTHORITY'S ASSET  
MANAGEMENT PROGRAM UPDATE**  
Progress Status and Timeline for Completion of the Asset Management Plans

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### KEY ISSUE

Update to the Board of Directors regarding the development of Toronto and Region Conservation Authority's ("TRCA") Asset Management Program ("AMP").

### RECOMMENDATION

**IT IS RECOMMENDED THAT the staff report regarding the update on the development of TRCA's Asset Management Plans be received.**

### BACKGROUND

To improve long-term planning and overall asset management, TRCA has undertaken the development of an AMP to manage our existing assets effectively and efficiently. The proper management of our asset portfolio will ensure TRCA is providing satisfactory levels of service to the general public, as well as our municipal and provincial partners. Additionally, it will ensure the sustainability of our properties and infrastructure to meet any future demands and growth.

As part of the AMP, Asset Management Plans ("AMPs") are being developed and are specific to TRCA's individual infrastructure assets that assist in making decisions regarding overall management. Although AMPs are not currently a legislated requirement for Conservation Authorities, they are an industry best practice and partner municipalities are encouraging TRCA to undertake comprehensive asset management planning to support requests for municipal capital funding. AMPs provide a systematic process that guides decision-making related to the planning, acquisition, operation, maintenance, rehabilitation, and disposal of assets. Undertaking an organizational AMP will allow TRCA to achieve desired levels of service and compliance with regulatory requirements in the most cost-effective manner, enable better integration with funding partners' capital planning processes and help to minimize unexpected requests for capital. TRCA's policy regarding Asset Management, included as **Attachment 1**, was written and approved by the Board of Directors in 2017. The Policy outlines the principles that will inform TRCA's AMP, and ensures that asset management planning will be regulatory driven, sustainable and based on all lifecycle activities required to keep our assets in a state of good repair.

TRCA is currently in the process of developing its AMPs. In this first version of the AMP, the intention is to take a broad view of the TRCA's objectives, initiatives and strategies and interpret these for some of the major service areas, thereby showing the linkage between corporate targets and individual service area targets. The AMPs together will form a strategic document that includes an integrated, life cycle approach to effective management of infrastructure assets to maximize benefits, manage risk and meet desired levels of service in a sustainable and environmentally responsible manner. The AMPs will set out how TRCA's assets will be

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managed to achieve the commitments and principles outlined in the aforementioned Policy. Specifically, this Strategy, included as **Attachment 2**, will:

- Define TRCA's responsibilities related to asset management;
- Outline long term goals, processes and steps to deliver optimized whole life cycle cost.
- Be based on current inventories and conditions, projected performance and remaining service life, and consequences of failures.
- Outline guidelines and processes to developing a sustainable financial plan with understanding of risk and financial requirements and impacts on the levels of service.
- Outline opportunities to include green infrastructure in asset management planning in cooperation with municipalities and other TRCA partners, where applicable.

Further to this strategy document, AMPs will be developed to identify long term goals, processes and steps to deliver optimized whole lifecycle cost for TRCA's assets based on current inventories and condition assessments, projected performance and remaining service life and consequences of failures. These plans will also include guidelines and processes towards developing a sustainable financial plan that considers risk and financial requirements and impacts on levels of service.

TRCA assets are a complex portfolio, spanning 15 local municipalities and consisting of a variety of separate and diverse operational areas. With finite resources, primarily provided by TRCA's partner municipalities, TRCA is required to analyze and weigh competing asset management priorities to maximize value. AMPs will be operationalized by implementing an internal Tangible Asset Management (TAM) group comprised of representatives from Education and Training, Parks and Culture, Restoration and Infrastructure, Policy Planning, Development and Engineering Services, Corporate Services and Government and Community Relations departments within TRCA. The TAM group will:

1. Provide operational analysis and recommendations for acquisitions/dispositions, including the lifecycle cost analysis;
2. Integrate Enterprise Risk Management analysis into TRCA's Asset Management planning;
3. Review and prioritize operational capital needs pursuant to the AMP for annual budgeting requirements; and
4. Assist in the development of operational business plans to support scheduled activities to maintain state of good repair through ongoing proactive maintenance, repairs, end-of-life replacement or retirement.

### **RATIONALE**

TRCA's first AMP is being developed following the requirements established for municipalities through the Province's guide *Building Together - Guide for Municipal Asset Management Plans*, as well as guidance provided in the International Infrastructure Management Manual. The AMP will meet O. Reg. 588/17 Asset Management Planning for Municipal Infrastructure (formerly, Bill 6: Infrastructure for Jobs and Prosperity Act, 2015) and ISO 55000 standards for Asset Management. This AMP will support TRCA's key strategic outcomes, focusing on levels of service, lifecycle asset management planning, and the resulting long-term cash flow requirements. This is accomplished by:

- Understanding the current state of TRCA's infrastructure systems;
- Measuring and monitoring Level of Service (LOS) metrics that are established by staff to enable a quantitative connection between aspects of our infrastructure systems and

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the degree to which the systems are achieving the objectives laid out in the Asset Management Policy;

- Developing a relationship between the asset lifecycle management strategies executed by staff (i.e. how TRCA operates, maintains, rehabilitates, or replaces assets) and the LOS metrics. This relationship will detail the method in which the lifecycle management strategies will impact the LOS metrics in the future and enable staff to determine the optimal lifecycle management strategies to achieve the desired LOS metrics; and
- Establishing a financial strategy to fund the expenditures that are required to achieve the desired LOS metrics.

Due to the substantial nature of the comprehensive AMP work, an approach will be taken to complete sections of the plans in phases. The AMP intends to build individual departmental service area plans which will in turn will be consolidated into a comprehensive TRCA AMP. Preparation of the AMP will be completed in phases and include all directly owned assets by TRCA, pertaining to the following asset classes:

- Flood & Erosion Control Infrastructure
- Administration Buildings & Property Management
- Conservation Parks and Education Centres
- Passive Greenspace and Trails
- Vehicles and Equipment

The first phase of the project will focus on Flood Control and Erosion Control Infrastructure, as these assets represent the largest category of amortized assets value and are also the largest area of risk. These infrastructure assets are key resources used to provide services to the public such as the provision of safe communities and protection of infrastructure through the management of flooding control structures and erosion control infrastructure and provide low-flow augmentation to sustain downstream ecology/biology. Key TRCA strategic objectives include enhancing public safety through maintenance and upgrades of flood control structures and modernization of flood management operations to protect communities from severe weather and natural hazards. Also included in this phase will be TRCA's Buildings (Administrative, Operations, etc.). The buildings are key locations for the day-to-day operations for TRCA staff and for the delivery of programs and services. A draft of the Flood Control Infrastructure AMP is included in **Attachment 3**. It should be noted that replacement costs are calculated by converting the original cost of the structure to current prices using the Bank of Canada inflation index. For example, a dam costing \$100,000 in 1960 would have a replacement cost of \$875,159.24 in today's dollars. However, replacement cost should not be used as an indicator of the actual cost to rebuild the structure. This is because engineering standards have evolved substantially since the majority of TRCA flood infrastructure was built. It would be expected that reconstructing a dam or similar structure would require significantly more design work and complex construction to meet current industry standards resulting in much higher costs.

The second phase, to be completed in 2021, will include all other TRCA assets with heavy emphasis on the Conservation Areas and Education Centres as these are the second largest group of amortized assets value. TRCA's Conservation Areas and Education Centres provide an important benefit to users who utilize TRCA's programs and services. Also, in some cases TRCA cultural heritage resources are envisioned as attractions that celebrate the agricultural heritage of southern Ontario while looking forward to the future to promote community-based

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urban agriculture, organic farming, and agricultural research and education. The 'average useful life' does not apply to TRCA owned heritage properties as TRCA is the steward for these heritage resources and must conserve these properties for current and future generations.

Additionally, commencing immediately, TRCA will require AMPs be developed prior to taking ownership of major infrastructure assets. Assuming ownership of major assets creates financial risk for TRCA in terms of the ability to properly fund maintenance and replacement activities as the infrastructure ages. Most recently TRCA has been discussing the development of AMPs for re-channelization of the Lower Don as part of the Port Lands Flood Protection Project to inform ownership decisions for these lands. Requiring AMPs upfront will ensure that TRCA is aware of the long-term management and maintenance commitments needed to maintain the infrastructure in a state of good repair. It will also provide an accurate capital works forecast reducing unexpected expenses related to the structure. The information contained in these plans would also provide TRCA with the ability to develop land agreements for municipalities to maintain adjacent lands based on the financial commitment and best management of the lands. TRCA will work to incorporate this requirement into the existing Asset Management Policy.

### **Relationship to Building the Living City, the TRCA 2013-2022 Strategic Plan**

This report supports the following strategies set forth in the TRCA 2013-2022 Strategic Plan:

**Strategy 1 – Green the Toronto region's economy**

**Strategy 3 – Rethink greenspace to maximize its value**

**Strategy 4 – Create complete communities that integrate nature and the built environment**

**Strategy 11 – Invest in our staff**

### **FINANCIAL DETAILS**

The financing strategy of TRCA's AMP sets out the approach to ensuring that the appropriate funds are available to support the delivery of infrastructure services. This AMP work further provides consistency with the outcomes and expected results of the TRCA's Strategic Plan. The financing strategy is predicated on the current financial state of the TRCA – including factors such as, revenues, operating and capital expenditures, reserves/reserve funds, and forecasted future commitments. The financing strategy is meant to strengthen current budgeting processes by reinforcing a long-term perspective on the impact of providing higher/lower asset-related service levels and the required revenues versus the affordability to the user community/stakeholders. The importance of the assets along with their significant capital and operating budget implications are intended to inform TRCA's long-term financial and service delivery planning.

The completion of the Building Condition Assessments will provide the financial information for TRCA to approach our Municipal Partners regarding additional levy to support current assets within the respective jurisdictions. This work will also be used to inform grants to senior levels of government and for fundraising purposes. The financial support will include the additional resources, software and staffing, required to support the AMP.

### **DETAILS OF WORK TO BE DONE**

Currently the AMPs include the following sections listed below:

1. Executive Summary
2. Introduction
3. State of Local Infrastructure
4. Expected Levels of Service

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5. Asset Management Strategy
6. Financing Strategy
7. Service Area Section
8. Plan Improvement and Monitoring

The AMPs are structured to provide the key components to properly plan for the management of TRCA's assets from beginning to end. Specific to each asset class, the above sections will provide a comprehensive overview that will allow TRCA to make key decisions by answering the following questions:

- What do we own?
- What is its purpose?
- How much is it worth?
- What condition is it in?
- What work do we need to do to rehabilitate the asset?
- When do we need to rehabilitate the asset?
- How much will it cost to rehabilitate the asset?

The plan is based on current asset inventory, condition and replacement value information. It is intended to be a living document that will be updated by staff on an ongoing basis.

TRCA owns a sizable portfolio of assets which vary significantly in terms of their function, age, durability, and many other factors. The first step in drafting the service area plans was to identify the current state of local infrastructure and identify information gaps accordingly. The purpose is to provide a summary of the key physical attributes and current physical state of the asset portfolio. Identifying asset types, replacement cost valuation, asset age distribution and asset age as a proportion of expected useful life and asset condition. Currently, TRCA is in the process of completing 5 Building Condition Assessments (BCA) within the Albion Hills Conservation Area, Heart Lake Conservation Area, Indian Line Campground, Kortright Centre of Conservation, and Lake St. George Field Centre. TRCA has also commenced with BCA for its rental portfolio and will continue to complete all its BCA as annual funding permits. In 2021, TRCA plans to complete its remaining properties including Black Creek Pioneer Village, Boyd Conservation Area, Clareville Conservation Area, Claremont Nature Centre, Petticoat Creek Conservation Area, and Glen Haffy Conservation Area, budget permitting.

### **Asset Management Software**

As the information from the BCA reports are completed, TRCA requires asset management software in order to provide various asset management related functions for TRCA. How TRCA's assets are managed and operated plays a key role in achieving TRCA's strategic goals and objectives. Many of these goals and objectives are reliant on the long-term sustainability of our assets; therefore, one of the aims is to put in place a clear line of sight between those high-level objectives and the day-to-day activities carried out by our assets.

Following corporate direction to promote efficiencies and achieve service delivery excellence, an enterprise asset management solution will enable TRCA to ensure that all critical assets operate at maximum efficiency across all business units. It will also facilitate setting clear priorities, business planning and performance measurement, and enable staff to respond to a changing operating environment. Asset management software will also assist in the coordination of preventative maintenance schedules and work order processing.

As such, the planned asset management solution will have the following objectives:

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- Ensure asset information is consistent, available, easily understood, and in a form common enough to enable sharing, comparisons, and decision-making.
- Guide the planning, construction, maintenance, and operation of TRCA's assets to ensure that we continue to provide the programs and services to our various partners and clients.
- Integrate Enterprise Risk Management controls to minimize operational risks through the built environment.
- Increase efficiency and productivity through a well-managed data capture process.
- Optimize business process, by decreasing the number of steps, and saving time with data entry.
- Provide a preventative maintenance management system for long-term tracking of asset condition and maintenance activities to minimize the risk of asset failures and ensure that current data is utilized in the decision-making process.
- Facilitate priority setting for the maintenance, replacement or retirement of TRCA's assets.
- Improve maintenance and reliability processes and create maintenance and reliability workflows that incorporate best practices and fill gaps where needed.
- Improve audit performance, by providing standardized processes to effectively inventory and account for the performance and condition of TRCA assets.
- Support planning of capital projects, which may span multiple years and have different financial and non-financial characteristics and impacts.
- Facilitate business planning via integration of operations, maintenance and financial plans.
- Ensure value of investment is in-line with the anticipated benefits.

TRCA intends to procure an enterprise asset management solution to ensure a better documentation of our facilities and infrastructure assets and provide strategic planning tools to support operating and capital funding decisions.

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**Attachments: 3**

Attachment 1: Asset Management Policy

Attachment 2: Draft Asset Management Strategy

Attachment 3: Example of Flood Control Asset Management Plans