

Date: 2022-03-11

Subject: **Request to Begin Procurement – Stormwater Management Pond Maintenance (Bloore Pond)**

Contact: Michael Heralall, Senior Manager, Environmental Engineering,
michael.heralall@brampton.ca

Report Number: Public Works & Engineering-2022-297

Recommendations:

1. THAT the report titled **Request to Begin Procurement – Stormwater Management Pond Maintenance (Bloor Pond)** to the Committee of Council meeting of April 13, 2022 be received; and
2. THAT the Purchasing Agent be authorized to begin the procurement to hire a Contractor for the Stormwater Management Pond Maintenance.

Overview:

- **The City has 180 stormwater ponds that serve vital functions in flood control, erosion control and protection of water quality and the environment. Major maintenance and restoration activities must be undertaken, every 10-15 years, to reinstate the Ministry approved stormwater management function to the facility, and to meet the City's regulatory obligations.**
- **The Bloore Pond, located at 10150 Dixie Rd, is the largest stormwater pond in Brampton. It was built in 2004, and services an area of 740 hectares in size. It has not been cleaned since being assumed and the City is planning to clean out this pond in 2022.**
- **The anticipated construction period is from April 15 to November 30, 2022.**

Background:

Stormwater management ponds (SWM ponds) are put in place to accept and control increased amounts of stormwater runoff from rain and melting snow due as a result of development (urbanization) that increases the amount of hard (impervious) surfaces in the development area. Urbanization of land has well documented effects including: increase in stormwater runoff volumes; increase in the rate at which runoff is generated from a rainfall event and increase in pollutants that are picked up by runoff and transported into rivers and creeks.

The health and function of rivers and streams are greatly reduced if stormwater is not managed appropriately. By temporarily detaining stormwater runoff within the facility, SWM ponds allow for a controlled release of stormwater over an extended duration, which reduces erosion and provides flood control. SWM ponds also remove pollutants carried in runoff, thereby improving the quality of water discharged into rivers and streams and increasing the health of aquatic ecosystems. Design and performance of SWM facilities are regulated by the Ministry of the Environment, Conservation and Parks (MECP).

A typical major SWM pond maintenance project involves:

- Preparation of sediment removal plans and obtaining regulatory permits;
- Establishing a bypass of the pond to prevent stormwater from entering the pond;
- Utilizing excavating equipment to remove sediment;
- Testing of sediment to establish contaminant profile and to determine disposal method as per the MECP's excess soil regulations;
- Removal of sediment to approved destination as per the MECP's excess soil regulations; and
- Restoration of all disturbed areas such as vegetated slopes and plantings around the pond.

Pond cleaning costs depend on ease of access for construction equipment, volume of sediment to be removed, and cost of sediment disposal.

Current Situation:

The Bloore Pond, located at 10150 Dixie Rd, was built in 2004. It is the largest SWM pond in Brampton. It services an area of 740 hectares, and requires dredging and sediment removal to restore its full functionality for flood and erosion control, and water quality treatment.

The estimated volume of sediment to be removed is 15,000 cu.m. For comparison, the next largest storm pond cleaning that has been undertaken required the removal of 7,500 cu.m of sediment in 2015.

Due to the size of the pond, and volume of sediment to be removed, cleanout activities are expected to last for approximately 8 months. Appropriate notifications will be provided to nearby residents describing the activities taking place that they may observe, its purpose, and other relevant details. Project signage will be installed at the site as well.

Table 1: 2022 SWM Management Ponds to be maintained

Stormwater Management Pond	Municipal Address	Nearest Intersection	Ward	Built
Bloore Pond #T29	10150 Dixie Rd	Bovaird Dr & Dixie Rd	9	2004

Corporate Implications:

Purchasing Comments:

A public Procurement Process will be conducted and the lowest compliant Bid will be eligible for contract award. Purchase approval shall be obtained in accordance with the Purchasing By-law.

All communication with Bidders involved in the procurement must occur formally, through the contact person identified in the Bid Document.

Financial Implications:

Sufficient funding is available within the Public Works & Engineering approved Capital Budget for this initiative.

Other Implications:

There are no other implications resulting from the approval of the recommendations of this report.

Term of Council Priorities:

The recommendations of this report supports the “Brampton is a Well-Run City” Term of council direction by practice proactive, effective and responsible management of municipal assets and services to ensure that the stormwater ponds are in a state of good repair.

Conclusion:

This report summarizes the 2022 stormwater pond major maintenance activity. Funds are available through the Stormwater Restoration capital budget.

It is recommended that the Purchasing Agent be authorized to commence the procurement as described in this report.

Authored by:

Michael Heralall, P. Eng.
Senior Manager, Environmental
Engineering
Public Works and Engineering

Approved by:

Jason Schmidt-Shoukri, BSc Arch Eng.
MPA Commissioner, Public Works and
Engineering

Reviewed by:

Michael Won, P. Eng.
Director, Environmental Engineering
Public Works and Engineering

Attachments:

Appendix 1: Location Plan