

Date: 2023-06-02

Subject: **Request to Begin Procurement – Construction of Thermal Mitigation Stormwater Pond Retrofit for Cottrelle Blvd Extension**

Contact: **Olivia Sparrow, Manager, Stormwater Programs, olivia.sparrow@brampton.ca**

Report Number: Planning, Bld & Growth Mgt-2023-518

Recommendations:

1. That the report titled **Request to Begin Procurement – Construction of Thermal Mitigation Stormwater Pond Retrofit for Cottrelle Blvd Extension** to the Committee of Council meeting of June 21, 2023 be received; and
2. That the Purchasing Agent be authorized to begin the procurement for the Construction of Thermal Mitigation Stormwater Pond Retrofit for Cottrelle Blvd Extension.

Overview:

- **The City of Brampton is extending Cottrelle Boulevard from Humberwest Parkway to Goreway Drive.**
- **The new road will drain into Provincially regulated aquatic habitat populated by a species (Redside Dace) that is sensitive to stormwater runoff from hard surfaces. These impacts will be mitigated to the extent possible by the proposed stormwater management system within the project area.**
- **There will be residual impacts from the higher temperatures of stormwater discharged into the environment from the stormwater system for the project.**
- **The Endangered Species Act Permit issued by the Ministry of Environment, Conservation and Parks (MECP) for the road extension**

requires that the City retrofit two existing ponds to compensate for these residual impacts of the road extension on Redside Dace habitat.

- **The anticipated construction period for the pond retrofits is from July to September 15, 2024.**

Background:

Stormwater ponds temporarily store and slowly release stormwater runoff to prevent flooding and erosion. While stormwater runoff is stored in a pond, sediment settles at the bottom of the pond so that cleaner water flows back into local rivers and creeks. While this protects the environment from sediment and other solid pollution, older stormwater ponds allow open water to warm up before releasing to the environment. In addition, stormwater runoff is warmed as it runs across hot asphalt and other hard surfaces. Warm stormwater runoff can impair habitat for species that are sensitive to changes in water temperature, including Redside Dace (a fish Species at Risk protected under the *Endangered Species Act*). Thermal pollution can be reduced using current best practices in pond design and low impact development measures.

The City recently initiated a Capital Road construction project to build a new four lane road identified as the Cottrelle Boulevard extension from Goreway Drive to Humberwest Parkway. This project is located in the West Humber Watershed and crosses Redside Dace habitat. The City secured several permits for this road extension project including an Endangered Species Act Permit #AU-C-019-10 issued by the MECP which requires that the City retrofit two existing stormwater ponds to mitigate thermal pollution. The City completed detailed design in 2021 for proposed retrofits to the two ponds listed in Table 1. The pond retrofits will deepen the existing ponds to release colder water to the receiving watercourse compared to the existing ponds.

Table 1: Location of Proposed Stormwater Pond Retrofits

Stormwater Pond	Address	Nearest Intersection	Year Assumed
Burrells Hollow Pond #T09	Unassigned (34 Serviceberry Cr)	Countryside Dr & Goreway Dr	2012
Upper Ridge Pond #T58	58 ValleyCreek Dr	Countryside Dr & Goreway Dr	2009

Current Situation:

Construction of the stormwater pond retrofits for thermal mitigation will involve the following:

- Obtaining a permit from the Toronto and Region Conservation Authority;
- Testing of soil and sediment within the stormwater pond to identify contaminants present and to determine disposal method in accordance with regulations;
- Pumping water out of the pond to lower water levels, and removal of wildlife (small fish);
- Removing accumulated sediment within the pond by dredging;
- Further excavating the pond to provide a permanent pool depth of maximum 3.0 m (increased depth allows water at the bottom of the pond to be cooler);
- Constructing a new outlet structure to pull cooler water from the bottom of the pond;
- Transporting removed sediment to an approved destination in accordance with excess soil regulations; and
- Restoring all disturbed areas such as plantings around the stormwater ponds.

The anticipated construction period for the pond retrofits is from July to September 15, 2024 to comply with the permissible construction window for work in Redside Dace habitat.

Corporate Implications:

Financial Implications:

Sufficient funding exists in the following capital projects:

Initiative	Project
Stormwater Pond Retrofits	194945-001
	214945-002
	234945-002
Stormwater Management - Restoration	144940-001
	174940-001

Staff will monitor and ensure that sufficient funding is in place until the end of the contract, pending Council approval to begin procurement.

Purchasing Implications:

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.

Strategic Plan:

This report achieves the Strategic Plan priorities by meeting the requirements of the Good Government where we will practice proactive, effective and responsible management of municipal assets and services to ensure that the stormwater ponds are in a state of good repair.

Term of Council Priorities:

The recommendation of this report supports the “Brampton is a Green City” Term of Council direction by protecting and revitalizing the environment as a result of these pond retrofits.

Conclusion:

The stormwater retrofits described in this report are an obligation on the City as per the terms of the Endangered Species Act permit issued to facilitate the construction of Cottrelle Boulevard extension where it crosses watercourses that are inhabited by Redside Dace.

Funds are available through the Stormwater Retrofit capital budget.

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

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Attachments: None