



Report to: General Committee

Meeting Date: May 19, 2020

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<b>SUBJECT:</b>	Pilot Private Plumbing Protection Program (5P) Update
<b>PREPARED BY:</b>	Rob Grech, Manager, Stormwater, ext. 2357
	Lijing Xu, Wastewater Hydraulic Engineer, ext. 2967

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**RECOMMENDATION:**

1. That the report titled “Pilot Private Plumbing Protection Program (5P) Update” be received; and,
2. That Staff be authorized to extend the Private Plumbing Protection Program (project #18324) for an additional two years starting on May 1, 2020 until April 30, 2022; and,
3. That the two year program extension be funded by the remaining funds allocated to the original pilot program through the Stormwater Fee Reserve; and,
4. That the consulting engineering services required to support the two year extended program be continued with R.V. Anderson & Associates Limited with the remaining funds under their existing purchase order PO PD18054 and PD18073; and,
5. That By-law 2018-20 be repealed and replaced in its entirety with the Private Plumbing Protection Rebate By-law 2020-XXX substantially in the form attached as Appendix “A” to this Staff report; and,
6. That Staff report back to Council after the two year extension period to assess the further extension of the program; and further,
7. That Staff be authorized and directed to do all things necessary to give effect to this resolution.

**PURPOSE:**

The purpose of this report is to obtain Council approval to extend the Private Plumbing Protection Program for an addition two years until April 30, 2022.

**BACKGROUND:**

In May 2018, Council approved a two-year Pilot Private Plumbing Protection Program (5P). The program aims to incent property owners to install devices on their plumbing systems to isolate the private system from the municipal system, in order to prevent back up during large storm events. The program is complementary to the City’s Flood Control program, which focuses on long-term upgrades to the municipal storm sewer system. The 5P program allows property owners to install these devices in the short term, which reduces risk prior to the implementation of long-term sewer upgrade projects.

A series of private plumbing protection measures were approved by Council in May 2018, to help with the costs for property owners who had installed the devices since May 1, 2017.

The table below summarizes the maximum rebate amounts for each eligible protection measure approved by Council in May 2018. Property Owners have the option to install one or more protection measures under the program, based on the specific conditions at each property.

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Protection Measure	Maximum Rebate Amount
Backwater Valve on Sanitary Lateral (indoor)	\$1,750
Backwater Valve on Storm Lateral (indoor)	\$1,750
Backwater Valve on Storm Lateral (outdoor)	\$2,000
Weeping Tile Disconnection	\$3,000
Sump Pump Installation	\$5,000
Storm Lateral Relining/Repair	\$2,500
Sanitary Lateral Relining/Repair	\$2,500

The existing rebate application process is as follows:

1. Property owners determine required work in consultation with qualified contractor and confirm eligible rebate amount
2. Property owners submit building permit application
3. Building Department issues the permit
4. Property owners hire qualified contractors to complete the installation
5. Building Department inspects completed works
6. Property owners submit rebate application form, including invoices to Environmental Services
7. City issues rebate cheque to property owners

Property owners are eligible for rebates subject to the following under the pilot program:

- The property is connected to the City's sewer system
- The property is not subject to any contraventions, work orders or outstanding municipal requirements
- No outstanding municipal fines, tax payments, or fees
- Downspouts have been disconnected from the City's sewer system
- The property owner provides the necessary documentation required in the application forms, and complies with program requirements
- The property owner has obtained any necessary permits for the new installation
- The new installation adheres to the *Building Code Act, 1992*, S.O. 1992, c. 23 and the Ontario Building Code O. Reg. 332/12, as amended or any successor thereof;
- The property owner signs a release form in favour of the City

The City originally estimated 250 applications would be received in the first two years of the pilot program, with an average rebate per application of approximately \$5,200.

#### **OPTIONS/ DISCUSSION:**

Since the program was initiated in May 2018, the City has received a total of 195 applications, with an average rebate per application of about \$4,000. The majority of the installations have been installed in flood prone areas identified through the City's Flood Control Program, as shown in Attachment B and summarized in the table below.

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Area	Number of Applications
Thornhill	117
Markham Village	44
Don Mills	2
Unionville	7
Other Areas	25
TOTAL	195

While the number of applications have been less than the City's original estimates, the program awareness and applications are increasing through time due to the City's education program brochures and web site. Since public feedback has generally been positive, Staff recommend continuing with this program for another two years as an effective method to reduce flood risk within the City of Markham.

Through the pilot program, the City has identified the following issues and proposed mitigation measures to improve the program administration and effectiveness:

Issue #1:

Currently, any property within the City of Markham is eligible for the rebate. Based on the results of the two year pilot, the majority of the applications are within flood prone areas.

Recommended Program Change:

Staff recommend that this eligibility be changed to restrict the rebate to areas where flood risks are known to the City, or where risks can be demonstrated by the property owner. As part of the rebate application process, Staff will conduct a review prior to the devices being installed in order to:

- Ensure devices are being installed in areas that are prone to flooding
- Ensure appropriate device selection

Issue #2:

If a property is not connected to the City's municipal sewer system, the property owner is currently not eligible for the rebate program, even though they may be at risk of flooding. This policy limits participation for property owners who would benefit from the program in flood prone areas.

Recommended Program Change:

Program eligibility should be changed to remove the requirement that a property have a municipal sewer connection. Any property that is in a known flood prone area, or can demonstrate that flood risk exists are eligible for the rebate.

Issue #3:

The installation of flood proofing devices is a *Building Code* requirement for the completion of other works, in certain situations, such as infill development in flood prone

areas. The rebate program should not apply to these installations, as it is a requirement of the building approval process.

**Recommended Program Change:**

Update the eligibility requirements such that installations that are required by the *Building Code* in completing other works are not eligible for the rebate program.

**Issue #4:**

The pilot program currently only allows for a rebate to be provided for sanitary sewers installed inside a house, as this is how they are usually installed. Property owners have requested that the valve be installed outside the house to avoid digging up the basement during the installation. This option would provide the same level of protection as indoor installations.

**Recommended Program Change:**

Update the Eligible Protection Measures & Maximum Rebate Amounts Table to include outdoor installations on the sanitary line as eligible for rebate, to a maximum amount of \$2,000.

**Issue #5:**

No deadline for submission of rebate applications was specified during the pilot program.

**Recommended Program Change:**

Update eligibility requirements such that the deadline for submitting the rebate application is July 31, 2022.

**Summary of Program Changes:**

**The Proposed Process for Rebate Application:**

1. Property owners determine required work in consultation with qualified contractor and confirm eligible rebate amount
2. Property owners submit proposed work plan to City for review (NEW STEP)
3. Environmental Services Staff review the work plan to ensure that it satisfies the desired outcomes of the City Flood Mitigation Strategy (NEW STEP)
4. Environmental Service Staff inform property owners to proceed or change the work plan (NEW STEP)
5. Property owners submit building permit application
6. Building Department issues the permit
7. Property owners hire qualified contractor to complete the installation
8. Building Department inspects completed works
9. Property owners submit rebate application form including invoices to Environmental Services
10. City issues rebate cheque to property owners

Proposed Eligibility Requirements

Property owners are eligible for rebates subject to the following:

- The property must be located in known flood prone areas, or demonstrate existence of flood risk in the area (NEW REQUIREMENT)
- The property is not subject to any contraventions, work orders or outstanding municipal requirements
- No outstanding municipal fines, tax payments, or fees
- The property owner has obtained approval of the work from the Environmental Services Department prior to installation (NEW REQUIREMENT)
- Downspouts have been disconnected from the City's sewer system
- The property owner provides the necessary documentation required in the application forms, and complies with program requirements
- The property owner has obtained any necessary permits for the new installation
- The new installation adheres to the *Building Code Act, 1992*, S.O. 1992, c. 23 and the Ontario Building Code O. Reg. 332/12, as amended or any successor thereof;
- The property owner signs a release form in favour of the City
- The work is not required as part of other works in meeting Ontario Building Code requirements (NEW REQUIREMENT)
- The deadline to submit applications for rebate is July 31, 2022 (NEW REQUIREMENT)

Proposed Eligible Protection Measures & Maximum Rebate Amounts

The updated eligible measures and associated rebate amounts are summarized in the table below.

<b>Private Plumbing Protection Measure</b>	<b>Maximum Rebate Amount</b>
<b>Backwater Valve</b> – Indoor Installed on Sanitary Lateral	\$1,750
<b>Backwater Valve</b> – Indoor Installed on Storm Lateral	\$1,750
<b>Backwater Valve</b> – Outdoor Installed on Sanitary Lateral (NEW)	\$2,000
<b>Backwater Valve</b> – Outdoor Installed on Storm Lateral	\$2,000
<b>Weeping Tile</b> - Disconnected from Sanitary Lateral and Redirect to Storm Lateral by gravity connection	\$3,000
<b>Weeping Tile</b> - Disconnected from Sanitary Lateral and Sump Pump Installation	\$5,000
<b>Lateral Reline/Repair</b> – Storm	\$2,500
<b>Lateral Reline/Repair</b> – Sanitary	\$2,500

**FINANCIAL CONSIDERATIONS**

The budget and projected actual expenses as of the end of the current program are summarized as follows:

<b>Account</b>	<b>Approved Budget</b>	<b>Projected Amount Spent</b>	<b>Projected Remaining Funds</b>
750-101-5699-18324	\$1,370,000	\$815,898	<b>\$554,102</b>

The estimated costs of the program extension are as follows:

<b>Item</b>	<b>Cost</b>
Rebate Amount (120 at \$4,000 per application)	\$480,000
Contract Extension – RV Anderson & Associates	\$69,102
Marketing & Program Promotion	\$5,000
<b>Total Cost</b>	<b>\$554,102</b>

No new funding is required for the extension of the program – the program extension will be funded by the remaining funds allocated to the original pilot program, funded by the stormwater reserve. The total projected remaining funds available is \$554,102, which is the same as the total cost of the program extension.

The contract with RV Anderson & Associates will be extended to April 30, 2022 to continue support of the program and the unused portion of the existing Purchase Order (PD18054 & PD18073) will fund this work.

#### **HUMAN RESOURCES CONSIDERATIONS**

Not applicable.

#### **ALIGNMENT WITH STRATEGIC PRIORITIES:**

The extension of the private plumbing protection rebate program is aligned with the City's objectives to provide better quality services to the public and is consistent with "Building Markham's Future Together" strategic plan's goal of a Safe, Sustainable & Complete Community.

#### **BUSINESS UNITS CONSULTED AND AFFECTED:**

Finance, Building and Legal Departments have been consulted on the process changes to the building permit approval process.

#### **RECOMMENDED BY:**

Phoebe Fu, Director,  
Environmental Services Dept.

Brenda Librecz, Commissioner  
Fire & Community Services

#### **ATTACHMENTS:**

Appendix A – Private Plumbing Protection Rebates By-law 2020-xxxx

Appendix B – Pilot Private Plumbing Protection Rebate Application Status Map