



Report to: General Committee

Date Report Authored: September 30, 2015

SUBJECT: Backflow Prevention Program Update and the Establishment of New Administrative Fees
PREPARED BY: Rebecca Fei, Compliance Engineer – Ext 2687
Gord Miokovic, Manager, System Engineering – Ext 2519

RECOMMENDATION:

- (1) THAT the report entitled “Backflow Prevention Program Update and the Establishment of New Administrative Fees” be received;
- (2) THAT new Waterworks Administrative Fees be established to encourage those private backflow prevention contractors (i.e. Qualified Persons) to use the online submission system, as opposed to the previous manual submissions, and to help automate the administrative process in our Program, namely:
 - “Manually Processing Fee for a Test Report” in the amount of \$25;
 - “Manually Processing Fee for a Survey Report” in the amount of \$50;
 - “Manually Processing Fee for a Device Upgrade Report” in the amount of \$30.
- (3) THAT three new Waterworks Administrative Fees be added to the Fee By-Law (By-law # 2002-276) and the Fees be effective on January 1, 2016; and further,
- (4) AND THAT Staff be authorized and directed to do all things necessary to give effect to this resolution.

PURPOSE:

This report will update Council on three improvements made to our Backflow Prevention Program as delivered to our Industrial, Commercial and Institutional (ICI) and Multi Residential properties. It will also explain the need for new Waterworks Administrative Fees to support the automation of Markham’s Backflow Prevention Program.

BACKGROUND:

Through report entitled “Backflow Prevention Status Update” dated May 16, 2014, Council was informed on the initiatives staff was undertaking to improve the Program delivery while keeping the Program timelines, managing associated work load and maintaining excellent customer service. The identified initiatives were:

- (1) Automating our administrative process;
- (2) Standardizing our backflow prevention practice;
- (3) Establishing a site visit/inspection process.

Our Program applies to 3000⁺ ICI and Multi-Residential properties in Markham. Once our Program is fully rolled out, we anticipate receiving 5000 Test Reports, 600 Survey Reports and 300 Device Upgrade Reports **every year**.

OPTIONS/ DISCUSSION:

Status of the three Initiatives to the Program:

1. Automating our administrative process

- In February 2015, a new “Backflow Prevention Program Online Services” website and associated software were designed, developed and rolled out. Both property owners and qualified persons in the Program have been advised of the website. As part of the communication and education component in launching the new website, information brochures and cards were developed and distributed to the customers along with our notification. These brochures were also posted on that website.
- As was originally planned, the February 2015 version of the website was revised in October 2015 to accommodate initial customer comments and feedback. Staff strived to make the website easy to use and have its interface consistent with what is available in the portal industry. Training sessions have been provided to ensure that those registered qualified persons will use its functionalities correctly. At those training sessions, as a form of continuous program improvement, further feedback on its interface, existing feature improvements and new feature additions were solicited from the participants.
- Utilization of the “Online Services” website and new software has automated our administrative process as follows:
 - a) The website validates the 5 credentials of each registered qualified person necessary to maintain their registration with the City before allowing their online submission. It also advises the users to submit their reviewed certificates to the City through a uploading function in the Portal;
 - b) The website pre-screens the submission for many potential errors or omissions that would otherwise require significant amount of staff follow-up with the customers. It also flags issues in the submission. As long as these pre-screen identified issues are not resolved, the website will not accept the submission. Once the submission has been **received** successfully, an email is automatically generated to notify the submitter as such;
 - c) All online submissions will be kept in our staging database. Staff will use the new software to review and process each submission. Once a submission has been reviewed and accepted, the new software will import that submission into our database. This way can eliminate massive manual data entry by staff and avoid large volumes of paper records generated from the program;
 - d) The new software will automatically generate an email to the registered qualified person and property owner after the City’s **acceptance** of submissions, greatly decreasing our letter generation and mailing costs.
- Implementation of “Online Services” website and new software not only benefits the City but also to the registered qualified persons and property owners:

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- a) The forms in the website can auto-populate data from the current City records for the registered qualified persons. They can submit their reports in a secure, fast and easy way on a 24/7 basis;
 - b) Since staff can use the new software to process all online submissions, the registered qualified persons can receive prompt response from the City after their online submissions;
 - c) Since “online submission + software processing” approach allows us to have better and completely electronic records management, we can provide more transparency to the property owners. The website allows the property owners to access the City’s records securely for their facilities, to check their backflow prevention compliance status anytime and to submit their contact updates if necessary.

2. Standardizing Markham’s Backflow Prevention Practice

The Ontario Building Code and CSA standards are the framework for the Backflow Program. These standards however leave much room for interpretation. Based on Markham’s experience with the Program, consultation with other City Departments affected by the program, discussions with other municipalities and after third party Consultant assistance, Markham’s Backflow Prevention Technical Guidelines were developed to standardize the backflow prevention practice in Markham. This guide includes 13 different building scenarios with specific backflow prevention requirements for use by various City departments:

- The Building and Fire Services Department may use them when reviewing new construction drawings.
- The Waterworks Department will reference them when responding to public inquiry or when conducting site visits/field inspections.
- The Asset Management Department and Operations Department may use them when constructing or renovating City’s facilities and parks.

The final document has been signed off by those Department heads and the document is currently posted on Intranet for City staff use.

3. Establishing a site visit/inspection process

Routine site visits and field inspections are needed to control the quality of backflow prevention work; educate the customers on the program requirements; answer any specific technical issues; assure program compliance and by-law enforcement; etc. Even though the Building Department issues permits and inspects the backflow device’s initial installation, they do not inspect the premises beyond the plumbing permit limits. A protocol for backflow prevention site visit and inspection will be developed and will be followed in our backflow prevention inspections.

Establishment of New Waterworks Administrative Fees:

Markham's Backflow Prevention Program was implemented on the basis of not charging any Waterworks Administrative Fees to our customers. It was set up to administer the program effectively and efficiently with minimal staff resources while meeting program delivery time lines.

The new approach may not get full and immediate support from all our customers. We now need to take steps to encourage our customers to use the new automated submission and records management system and discourage the manual submission approach. By putting some financial measures in place, we hope to implement those improvements better and sooner.

For those who choose not to follow the new electronic approach and continue to use the manual hard copy submissions, we are asking Council to establish three fees to cover the administrative costs caused by paper based submissions.

- (1) Manual Processing Fee for a Test Report - \$25
- (2) Manual Processing Fee for a Survey Report - \$50
- (3) Manual Processing Fee for a Device Upgrade Report - \$30

Those new Waterworks Administrative Fees are proposed for inclusion in the Fee By-Law (By-law # 2002-276) to become effective on January 1, 2016.

These manual hard copy administrative fees are viewed as a deterrent and staff will make best efforts to encourage the use of the free online submission system. Staff has offered and provided training sessions on the online system to those registered qualified persons before implementing these new administrative fees. We will only apply those fees when the qualified persons refuse to use our online submission system.

Conclusions:

Staff has been striving to improve the Backflow Prevention Program by applying portal technology to minimize staff resources and cost necessary to deliver the program.

Automating our administrative process will allow for better and completely electronic records management; allow the phase-out of our current mail-based correspondence; reduce record storage space requirements; provide better, prompt and more focused customer services to both registered qualified contractors and property owners; achieve reduction of operation costs for running the program and allow existing staff to focus on other aspects of the Program.

We now need to take steps to encourage the use of the City of Markham's online submission system and try to quickly phase out the manual submission system by establishing three new Waterworks Administrative Fees for the Program.

With all these process improvements in place in 2015, the program rollout is still on target for full implementation by the end of 2016. Staff will be providing Council another status update in early 2017.

FINANCIAL CONSIDERATIONS AND TEMPLATE: (external link)

- We are anticipating no revenue contributions from those new administrative fees as we will be working with our customers to get them on the online submission as quickly as possible.
- Staff will monitor the revenue contribution and adjust the budget accordingly (if necessary) as part of the 2017 budget process.
- In case that any registered qualified person chooses to submit their reports in paper format verses our online system, the revenue collected from them will be put into the GL Account 760-161-8899 (Other Service Charges).

HUMAN RESOURCES CONSIDERATIONS

No additional Backflow Prevention Program staffing implication is anticipated at this time,

ALIGNMENT WITH STRATEGIC PRIORITIES:

Municipal Services/Public Safety – Program is one of the components for assuring high quality safe drinking water is available for our residents.

BUSINESS UNITS CONSULTED AND AFFECTED:

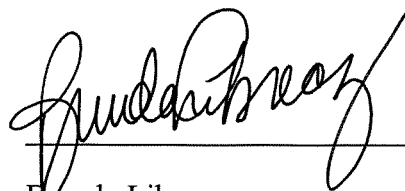
The following departments are involved in the implementation of those initiatives for Backflow Prevention Program:

- Building Standards;
- Asset Management;
- Fire Services;
- Information Technology Services;
- Corporation Communication

RECOMMENDED BY:



Peter Loukes, P.Eng.
Director, Environmental Services



Brenda Librecz
Commissioner, Community
Services and Fire

ATTACHMENTS: Portal Brochures

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