

Staff Report

Report To: Operations Committee
Report From: Matt Prentice, Manager of Public Works
Meeting Date: December 7, 2021
Report Code: OP-21-051
Subject: Backflow Prevention By-law

Recommendations:

THAT in consideration of Staff Report OP-21-051 respecting the Backflow Prevention By-law, the Operations Committee recommends that City Council direct staff to bring forward a by-law to authorize backflow prevention requirements within the City of Owen Sound, as outlined in the draft by-law attached to this report.

Highlights:

- In 2020 the approved capital budget included monies towards implementing a backflow prevention program as outlined in previous reports to committee, including a draft by-law
- Further in early 2020 the City began the hiring process to retain a contract Backflow Coordinator position to implement the program. With the beginning of the COVID-19 pandemic, these hiring plans and the capital program were put on hold
- In the fall of 2021, with the end of the pandemic in sight, staff began the recruitment process to fill the Coordinator position to begin to implement a program. The successful candidate is able to start in January 2022.
- With a view to expediting the beginning of the program, it is intended to formally adopt the by-law previously provided for information to Committee and Council.

Strategic Plan Alignment:

[Strategic Plan](#) Priority: This report supports the delivery of Core Service

Background:

The 2021 Capital Budget includes item 17N.3, the Cross Connection Control Program. "Cross Connection", in this context, means the prevention of the flow of non-potable water into the potable water system, through the use of backflow prevention devices, installed in accordance with the building code.

In the absence of this by-law, backflow prevention devices are only required to be installed:

1. Where a new building is constructed and the current plumbing requirements must be met; or
2. When plumbing changes within a building, requiring a permit, provide the opportunity for the municipality to require the installation of backflow prevention as a condition of the permit.

Therefore, in order to address the relatively high rate of non-conformance in existing buildings, as reported to committee previously, the by-law and subsequent program are required.

The following definitions are provided for clarity:

- "Premise Isolation" - The installation of a backflow prevention device at a location to protect **the City system** from contamination from the premise. Normally installed at the point of entry near the water meter.
- "Zone Isolation" - The installation of a backflow prevention device at a location in the building plumbing to protect **others within the building** from a high-risk use within the building. A large industrial or institutional building (hospital) would typically require that.

Analysis:

Please see attached the proposed by-law. Note the following characteristics of the program reflected in the draft by-law:

1. The by-law spells out the roles and responsibilities of the City, Owner, and Contractors retained to correct inadequate backflow prevention.

2. As discussed in previous reports to committee, the bylaw is structured to target risks associated with Industrial, Commercial, or Institutional use. Residential use is exempt at this time.
3. As discussed in previous reports to committee, the intent of the by-law is to subsidize work to comply. Subsidy provisions will only apply to buildings which achieve approved occupancy permit status by December 31, 2021. Section 26 of the by-law spells out those requirements. Premise and Fire System isolation subsidy is contemplated in the by-law but not Zone isolation.
4. As previously reported, the intent is to utilize a contract employee to deliver the program, assisted with the database on existing conformance provided by BSI (Backflow Solutions Inc). The by-law as written is consistent with that model.

Financial Implications:

The program costs as previously reported to Committee, are estimated at \$350,000 per year for 5 years, under the subsidy model proposed, including the cost of the abovementioned contract employee. This is based upon estimated costs to comply calculated by BSI during their field surveys. Budget for 2021 was approved at a reduced amount of \$200,000, which will carry over into 2022. The costs include the cost of the contract employee as well as the backflow prevention devices.

Communication Strategy:

There is no regulatory requirement to have a public meeting associated with the by-law once finalized, but one is contemplated early in 2022 due to the likelihood of some considerable level of public interest.

Consultation:

The Director of Public Works and Engineering and the Manager of Legislative Services were consulted in the preparation of the by-law.

Attachments:

Backflow Prevention By-law

Recommended by:

Matt Prentice, Manager of Public Works

Reviewed by:

Dennis Kefalas, Director of Public Works and Engineering

Submission approved by:

Tim Simmonds, City Manager

For more information on this report, please contact Matt Prentice at mprentice@owensound.ca.