



Report to Council

Department: Infrastructure Services
Division: Infrastructure Services
Date: May 17, 2021
Prepared by: Kevin Girard, P.Eng., MBA
Director, Infrastructure Services
Report Number: Infrastructure Services-2021-07
Subject: Amherstburg-McGregor Downspout Disconnections
Number of Pages: 7 (plus 9 appended)

Recommendation(s)

That Infrastructure Services – 2021 – 07 entitled, “Amherstburg-McGregor Downspout Disconnections” prepared by Kevin Girard, Director of Infrastructure Services dated May 17, 2021 be received, and

That Council direct Administration to develop a by-law specific to the community of McGregor to support the mandatory downspout disconnection program proposed by the Town of Amherstburg.

Purpose

To present Council with the request for mandatory downspout disconnections proposed by the Town of Amherstburg within the community of McGregor.

Background

In recent years, the frequency of significant rain events has increased tremendously. These local climate changes have caused major flooding in the Town of Essex and triggered the need for increased studies and capital spending. In addition to the improvements that the Town is completing to mitigate flooding concerns, there are many things that private properties owners can do to mitigate flooding on private property and basements. Residents are encouraged to visit the Town of Essex website at <https://www.essex.ca/en/live/Basement-Flooding.aspx> to find out what they can do to mitigate private property damage and help protect the Town of Essex public infrastructure.

During significant rain events, downspouts that are connected directly to the municipal sewer systems introduce large volumes of water into storm sewers that are not designed to handle them. For this reason, the Town of Essex currently encourages residents to disconnect their downspouts from their sewer connections onto the ground and away from buildings wherever possible. This initiative helps to protect the private property and the other residents on the Town's sewer networks. Directly from the Town of Essex website, the disconnection of a downspout is generally described in the following steps:

- **1** **Measure**
Measure according to the system you are installing. A typical measurement is 9 inches (23 centimetres) from where the downspout enters the sewer connection.
- **2** **Cut**
Using a hacksaw, cut the downspout above the ground at the 9-inch (23cm) mark. Remove and dispose of the cut piece. Use a metal file to remove the rough edges of the downspout.
- **3** **Cap**
Cap the sewer standpipe to prevent water and small animals from entering the opening. Use a simple rubber cap secured by a hose clamp or a PVC cap.



Insert Elbow

Insert the downspout into the elbow. You may need to crimp the end of the downspout with a pair of pliers to ensure a tight fit and avoid leaks.



Attach Pipe Extension

Attach a downspout pipe extension to the elbow. The extension should carry water at least 1 metre away from the house and foundation without discharging on walkways or neighbouring property. Secure the elbow and extension with sheet metal screws. If necessary, secure the downspout to the building with a bracket. Place a splash pad at the end of the downspout extension to prevent soil erosion.

It is important to note that this program is currently voluntary, but encouraged in the Town of Essex. Further, there is currently a subsidy offered by the Town for 100% of the cost (up to \$75) to encourage residents to disconnect their downspouts. The details of the subsidy can be found on the Town's website.

Discussion

On September 14, 2020, the Town of Amherstburg passed by-law 2020-044 being a by law to impose mandatory downspout disconnections in designated areas within Amherstburg for the purpose of regulating storm water drainage, as appended to this report. One of the designated areas, as identified in the Amherstburg Council Report, is the community of McGregor in both the Towns of Essex and Amherstburg as shown in Figure 1. Since the passage of this by-law has a direct impact on the Town of Essex, the Town of Amherstburg has requested that Essex Council participate in their mandatory downspout disconnection program within the community of McGregor.

As noted in Amherstburg's appended Council Report, our region has experienced several severe weather events that caused flooding in municipalities across the Windsor-Essex region, including the Town of Essex and the Town of Amherstburg. Downspout disconnection has been recognized as a key source control measure to help reduce the amount of storm water runoff entering a municipal storm system and thereby reduces the frequency of basement flooding. Often an additional benefit to downspout disconnection is the reduction of storm

water entering the sanitary sewer system through private inflow as a result of cross-connection between storm and sanitary services (ie. Downspout connected to the sanitary service).

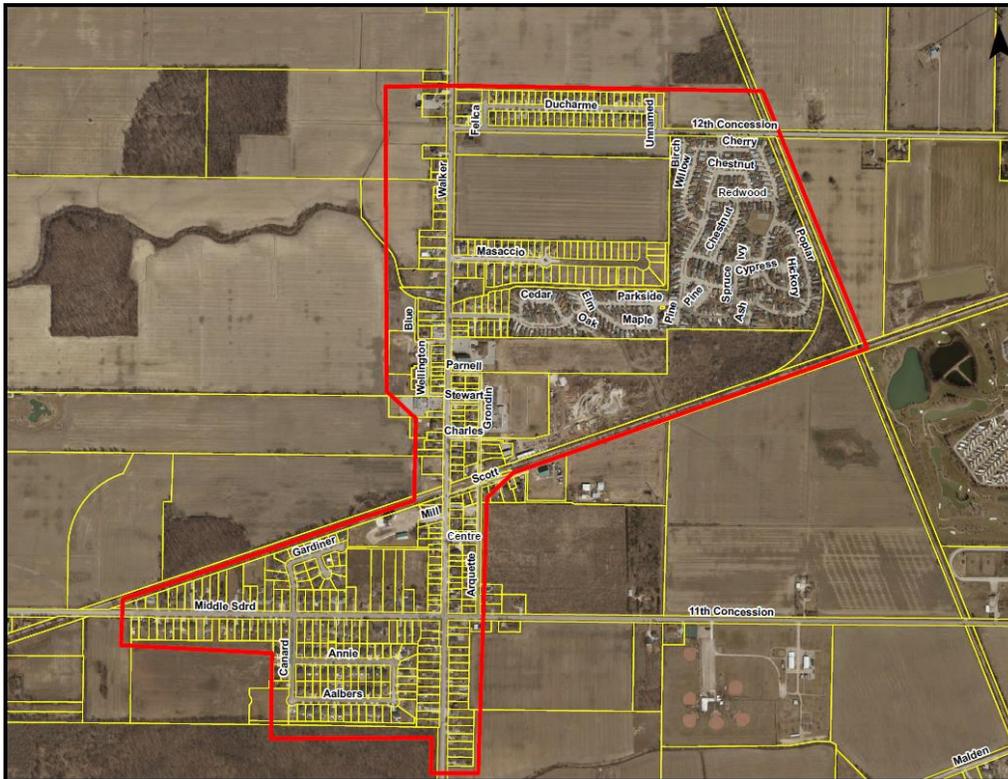


Figure 1: Area Identified by Amherstburg for Downspout Disconnection

The proposed disconnection program would evaluate each property on a case-by-case basis. Not every downspout will be able to be disconnected, especially those that are within driveways and walkways where disconnection would cause a tripping hazard for homeowners. The intention of the program is to disconnect the downspout in areas where it is safe to do so and will not cause adverse effects on the property or the neighbouring property.

In addition, the Town of Amherstburg by-law allows for application for an exemption to the Mandatory Downspout Disconnection by-law. From the Amherstburg Council report:

While property owners are encouraged to take action to disconnect their downspouts, it is recognized that not all downspouts are suitable for disconnection and should be avoided in particular situations. Under the proposed By-law, property owners can make an application to the Town for an exemption from the By-law provisions, where disconnection of downspouts would create a hazardous condition or is not technically

feasible. Exemptions would be granted for extenuating, site specific conditions, such as flooding of adjacent properties or contributing to slope failure or erosion in ravines, or where disconnection would require internal reconstruction or plumbing retrofits. Before applying for an exemption, property owners are required to make every effort to disconnect their downspouts safely. This includes relocating one or more downspouts and/or re-grading eaves troughs, as well as correcting slope/grading on the property.

The pros and cons of allowing Amherstburg to proceed with the mandatory disconnection program within McGregor in the Town of Essex are as follows:

Benefits to Amherstburg's Mandatory Disconnection

- Increased capacity in existing storm sewers during major rain events.
- No additional costs to the Town of Essex or its residents.
- Environmental benefit of groundwater recharge.
- Cost-effective method to mitigate the risk of flooding to vulnerable homes.
- Potential reduction of Inflow and Infiltration (I&I) in sanitary sewer system.
- Potential to regain sanitary capacity in McGregor Lagoon for future development.

Negatives to Amherstburg's Mandatory Disconnection

- Increase in surface flooding complaints to the Town of Essex.
- Possible flooding of adjacent properties.
- Resident resistance to providing access to their private property.
- Inequity across Town of Essex Wards.

Given the growing interest for development within McGregor and the limited treatment capacity to accommodate this growth, along with the evaluation of the pros and cons listed above, it is recommended that Council direct Administration to create a by-law specific to the McGregor community to support the mandatory downspout disconnection program proposed by the Town of Amherstburg.

Financial Impact

There is no additional cost to the Town of Essex for this initiative as the cost for administration and to physically disconnect downspouts will be borne 100% by the Town of Amherstburg.

Although there is no additional cost to the Town of Essex, the cost of this program is being **funded by the Town of Amherstburg's Wastewater** budget. As Council is aware, the residents in McGregor that have wastewater sewer service are serviced by the Town of Amherstburg and pay rates and bills directly to the Town of Amherstburg. Therefore, McGregor residents are paying for this service as part of their wastewater rates.

Consultations

Lori Chadwick, Director, Development Services

Kevin Carter, Chief Building Official

Jeffrey Morrison, Director, Corporate Services/Treasurer

Robert Auger, Town Solicitor, Legal and Legislative Service/Clerk

Chris Nepszy, Chief Administrative Officer

Link to Strategic Priorities

- Manage, invest and plan for sustainable municipal infrastructure which meets current and future needs of the municipality and its citizens.
- Create a safe, friendly and inclusive community which encourages healthy, active living for people of all ages and abilities.
- Provide a fiscal stewardship and value for tax dollars to ensure long-term financial health to the municipality.
- Manage responsible and viable growth while preserving and enhancing the unique rural and small town character of the community.
- Improve the experiences of individuals, as both citizens and customers, in their interactions with the Town of Essex.
- Improve the Town's capacity to meet the ongoing and future service needs of its citizens** while ensuring the corporation is resilient in the face of unanticipated changes or disruptions.

Report Approval Details

Document Title:	Amherstburg-McGregor Downspout Disconnections - Infrastructure Services-2021-07.docx
Attachments:	- By-law No. 2020-044 - Require Downspout Disconnection in Designated Areas for the Purpose of Regulating Stormwater Drainage.pdf - 2020 09 14 - Mandatory Downspout Disconnection - revised (002).pdf
Final Approval Date:	May 12, 2021

This report and all of its attachments were approved and signed as outlined below:



Chris Nepszy, Chief Administrative Officer - May 12, 2021 - 4:52 PM