

TO: Mayor J. Lehman and Members of Council

FROM: R. Sutton, P. Eng., Director of Engineering

NOTED: R. J. Forward, MBA, M.Sc., P. Eng., General Manager of Infrastructure & Growth Management

C. Ladd, Chief Administrative Officer

RE: Mapleview Drive East – Huronia Road to Country Lane – Lane Restrictions and Closures (File: T05-2016-014T)

DATE: March 20, 2017

The purpose of this memo is to provide an update on the pending and future road closures that are required to facilitate the underground municipal servicing and widening of Mapleview Drive East – Huronia Road to Country Lane.

Pending Closure of Mapleview Drive East at Huronia Road

The 1050 mm diameter trunk sanitary sewer being installed on Mapleview Drive East reaches depths of 14 metres (46 feet) as it approaches the Mapleview Drive and Huronia Road intersection. The sewer has been installed on Mapleview Drive from Lover's Creek to a point just east of the Huronia Road intersection. The proposed routing of the sewer crosses at the south-east corner of the Mapleview Drive East and Huronia Road intersection. During the December 2016 closure, Mapleview Drive was closed to install this section of sanitary sewer but due to the unanticipated groundwater conditions the installation of this section of sanitary sewer was not able to be completed. This pending closure has a longer duration so that a more complex construction dewatering system can be installed and operated so that this section of sanitary sewer and maintaining a safe and suitable work zone for the contractor, it will not be possible to maintain open lanes of traffic on Mapleview Drive for up to five weeks. The contractor is proposing to work 12 hour days and weekends in order to reopen Mapleview Drive as quickly as possible. This closure is scheduled to commence March 27, 2017. Alternative methods of installing this section of sewer include trenchless methods. However, trenchless methods would be expensive and would not necessarily avoid closure of the road.

There are a number of elements proposed to be completed on the closed segment of roadway by the contractor to take advantage of the closure as follows:

- 1. Completion of the deep 1050 mm diameter trunk sanitary sewer detailed above.
- 2. Completion of a 250 mm diameter local sanitary sewer on Huronia Road for future use when Huronia Road is reconstructed, to the north of Mapleview Drive.
- 3. Completion of the trunk 750 mm diameter watermain that is being installed down Mapleview Drive and also being installed south on Huronia Road.

The detour route to be utilized during the closure is along Yonge Street, Big Bay Point Road and Huronia Road as per the attached Traffic Control Plan (Figure 1). Modifications to Barrie Transit service will be implemented including a shuttle service to minimize disruption during the road closure.

Lane Restrictions

The single lane restriction on Mapleview Drive at Lover's Creek, and associated temporary signalization was in place until the new Lover's Creek Bridge was constructed. Mapleview Drive was reopened, on March 8, with one lane of traffic in each direction over the creek.



Future Closures

<u>Huronia Road</u> - Due to the depth of the 1050 mm diameter trunk sanitary sewer and existing two lane cross-section of Huronia Road, Huronia Road between Mapleview Drive East to Saunders Road will be closed to install the trunk sanitary sewer. Access to all local business entrances will still be maintained. Through traffic cannot be permitted during construction due to the size of the excavation and the deep pre-cut for the dewatering system. This Huronia Road closure is planned immediately after the pending Mapleview Drive East closure noted above, and is anticipated to begin at the beginning of May for a duration of approximately of 8 weeks.

<u>Country Lane at Mapleview Drive East</u> - The 750 mm diameter transmission watermain must be extended easterly along Mapleview Drive East to just east of Country Lane for extension to the east as part of other capital projects. This will require the closure of Country Lane at Mapleview Drive East for three (3) days in June of 2017.

<u>Mapleview Drive East</u> - The removal of the existing Lover's Creek culvert is considered in-water work and can't be undertaken until July 1, 2017 and after the creek is diverted under the new bridge. The removal of the original bridge is expected to take three (3) days and possibly over a weekend in July 2017.

As future closures approach, Engineering staff will provide more details on the individual closures by memorandum to General Committee and by direct communication to surrounding residential properties and businesses.

If there are any questions on the project, please contact Jeff Parent at extension 4362 or email at <u>Jeff.Parent@barrie.ca</u> or Stew Patterson at extension 4481 or email at <u>Stew.Patterson@barrie.ca</u>.

The City of BARRIE

Engineering Department MEMORANDUM



