



Report to: General Committee

Meeting Date: Nov 18, 2019

SUBJECT: Transfer of Peter St. Watermain from Region of York
PREPARED BY: Shu Min Gao, Water System Engineer, Ext: 6230
Phoebe Fu, Director, Environmental Services, Ext: 3010

RECOMMENDATION:

- 1) That Staff be authorized to assume the ownership of the Peter Street regional watermain from the Regional Municipality of York; and,
- 2) That Staff be authorized to accept payment of \$1,364,000.00, excluding HST, from the Regional Municipality of York for assuming the ownership of the Peter Street regional watermain; and,
- 3) That Staff be authorized to deposit the payment of \$1,364,000.00 to the Waterworks Stabilization/Capital Reserve; and,
- 4) That the Director of Environmental Services be authorized to execute any documents in a form satisfactory to the City Solicitor related to the transfer of Peter Street watermain; and further,
- 5) That Staff be authorized and directed to do all things necessary to give effect to this resolution.

EXECUTIVE SUMMARY:

N/A

PURPOSE:

To seek Council's approval to assume ownership of the regional 400mm Peter Street watermain from 16th Ave to Springdale Street, (see the Attachment) along with their payment of \$1,364,000.00, excluding HST, for that transfer.

BACKGROUND:

The Regional Peter Street watermain conveys water to the local distribution system

The Regional 400 mmm ductile iron Peter Street watermain between 16th Avenue and Springdale Street was installed in 1978, a distance of approximately 620 meters. The watermain conveys water north to south from the Markham Pumping Station along 16th Avenue to the local water distribution system. The majority of the 620 meter watermain is located under the northbound lane of Peter Street at a depth of approximately two to three meters. This Regional main conveys water to the City of Markham's distribution system downstream, therefore, cannot be abandoned.

Two watermains on Peter Street, only one watermain is needed

There is a second 200mm PVC watermain on Peter Street running parallel to the Regional 400mm watermain. This 200mm watermain was constructed in 2000 (19 years old), belongs to the City of Markham and services the fronting properties.

The water hydraulic analysis for the area shows that only one 400mm watermain is needed on Peter Street to satisfy both water transmission and water distribution capacity requirements.

The Regional Peter Street watermain does not meet the “Water and Wastewater Infrastructure Regional Jurisdiction Policy” criteria

The Water and Wastewater Infrastructure Regional Jurisdiction Policy establishes the criteria used to define what should be Regional jurisdiction by service function. The Policy defines York Region’s jurisdiction for water distribution infrastructure to specifically include:

- Watermain and pumping stations that transmit bulk water supply to local municipalities
- Metering to determine flow from York Region to local municipalities

Region staff recommend that the watermain be transferred to the City of Markham and the delineation between Regional and the City jurisdiction be established at the pressure reducing valve chamber at the corner of 16th Ave and Peter Street.

OPTIONS/ DISCUSSION:

Region requested the City of Markham to take over ownership of 400mm main based on Jurisdiction Policy

The Regional Peter Street watermain experienced two watermain breaks within the last six years caused by external corrosion. It was determined by the Region that the Regional Peter Street watermain is nearing the end of its useful life after 40 years of service.

Based on the Water and Wastewater Infrastructure Regional Jurisdiction Policy, Region has requested the City of Markham to take over the ownership of the 400mm main. From an ownership perspective, City staff agrees that the 400mm main should be transferred to the City to make the ownership delineation clear and will benefit system operation and control. It will further enhance service continuity providing enhanced service response to our residents in this area.

Future replacement of the two watermain with one watermain

City Staff evaluated the efficiency of the two watermain on Peter Street, and determined that only one 400mm watermain is needed. To maximize the life of this existing 400 mm watermain and delay the replacement of the two watermain, staff is recommending the City continue monitoring the 400 mm ductile iron watermain performance. At some future date, when financially warranted and the maintenance cost becomes unacceptable, the two watermain (400 mm and 200 mm) would be replaced with one 400 mm local watermain.

The Region agrees to provide a lump sum payment for future rehabilitation or replacement to the City for the transfer of the Peter Street Regional watermain “as is”

The Region recognized that the Region's 400mm main requires rehabilitation/replacement and has agreed to supply a lump sum payment of \$1,364,000.00 to the City for the transfer. The Region would have incurred these costs regardless of the transfer.

City staff evaluated the transfer amount based on 100% of the cost to construct a brand new 400 mm PVC watermain in the 2019 based on previous similar works and associated maintenance costs. Based on those criteria, Environmental Services staff determined the transfer amount is reasonable for City to take over ownership.

The transfer benefits the City by setting clear delineation of jurisdiction and gaining efficiency of combining two pipes

By clearly delineating ownership at the valve chamber at the corner of 16th Avenue and Peter Street, the City can quickly address any service impacts to its local distribution system and appropriately plan and maintain its infrastructure.

Receiving full cost for the 400mm watermain replacement, will provide the City with a brand new (90 years of life expectancy) watermain, replacing the existing approximately 19year old 200 mm watermain at minimum or no additional cost to the City.

FINANCIAL CONSIDERATIONS

Based on the financial analysis conducted by Environmental Services, the acquisition of the 400 mm watermain appears to be reasonable to the Finance Department.

This money will be deposited into the Waterworks Stabilization/Capital Reserve to fund the future watermain replacement.

HUMAN RESOURCES CONSIDERATIONS

N/A

ALIGNMENT WITH STRATEGIC PRIORITIES:

Transfer of Peter Street watermain from the Region complements and supports the City's strategic plan under the goals of High Quality of Municipal Services and Stewardship of Money and Resources.

BUSINESS UNITS CONSULTED AND AFFECTED:

Legal Services and Finance have been consulted in the preparation of this report.

RECOMMENDED BY:

Phoebe Fu
Director, Environmental Services

Brenda Librecz
Commissioner, Community and Fire
Services

ATTACHMENTS:

Transfer of Peter Street Watermain from Region of York report – Attachment: A City of Markham Watermain