

Request for Decision

New Sudbury Trunk Sewer Rehabilitation Project

Presented To:	Operations Committee
Presented:	Monday, Feb 04, 2013
Report Date	Tuesday, Jan 22, 2013
Type:	Presentations

Recommendation

That Council authorize a 2013 Capital Project to rehabilitate a portion of the New Sudbury Trunk Sewer;

AND That Council approves the funding of \$1.5 M for this project from the Capital Financing Reserve Fund - Wastewater.

Finance Implications

The total project budget is estimated at \$1,500,000 and will be funded from the Capital Financing Reserve Fund - Wastewater. This estimate includes the construction and removal of a construction access road, the bypass pumping system, the installation of a fully structural CIPP, and contract administration.

Background

The New Sudbury Trunk Sewer is one of the most critical sewer lines in the City in that it conveys wastewater from a large portion of New Sudbury and Garson, to the Rock Tunnel drop shaft located near the Adanac Ski Hill. This large diameter sewer was constructed in the early 1960's in conjunction with the Rock Tunnel, which conveys all wastewater in the Sudbury Collection system to the Sudbury Wastewater Treatment Plant located on Kelly Lake Rd. The length of the trunk sewer is over nine (9) km and it progressively increases in diameter from 300 mm in Garson to 1350 mm prior to entering the Rock Tunnel.

Much of the trunk sewer is located adjacent to Junction Creek making access for maintenance or inspection limited or inaccessible so a project was included in the 2010 Capital program to provide an assessment of the New Sudbury Trunk Sewer and approved by Council.

In 2012 a zoom camera inspection of the sewer was completed. The results of that inspection project proved the nearly 50 year old New Sudbury Trunk sewer to be in very good condition from Garson to Adanac, however significant groundwater infiltration was detected in the portion of the sewer south of Lasalle near the former Barrydowne Arena. This infiltration requires corrective action because large volumes of clean groundwater are entering the sewer and ultimately being treated at the Sudbury

Signed By

Report Prepared By

Paul Javor
Water/Wastewater Operations
Engineer
Digitally Signed Jan 22, 13

Division Review

Nick Benkovich
Director of Water/Wastewater Services
Digitally Signed Jan 28, 13

Recommended by the Department

Tony Cecutti
General Manager of Infrastructure
Services
Digitally Signed Jan 28, 13

Recommended by the C.A.O.

Doug Nadorozny
Chief Administrative Officer
Digitally Signed Jan 28, 13

Wastewater Treatment Plant. This unnecessary treatment of groundwater is not only very costly, but also reduces the capacity of the trunk sewer and the plant for the intended wastewater.

Proposed 2013 Project

CIPP is a trenchless technology that can be installed within the existing pipe providing an additional 50 year lifespan to the existing pipe. Staff is recommending that a section of the trunk sewer pipe be rehabilitated to eliminate the infiltration via a Cured-in-Place-Pipe (CIPP) rehabilitation method.

This method is proven effective for such applications and is significantly cheaper than replacement of the existing pipes. It is most appropriate for this situation because the structure of the existing pipe is still in good condition and the ground conditions in the vicinity of the pipe are very poor which would make normal open cut methods extremely difficult and costly. As part of the work, a bypass pumping system will be required to facilitate the installation of the CIPP in dry conditions without a disruption to service.