



Bathurst & Teston Road Watermain

LOCATION: Richmond Hill, Ontario, Canada

OWNER: Region of York

OWNER CONTACT: Mandy Paglia
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ARCHITECT OR ENGINEER: Memme Construction
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PROJECT PROFILE

CRS Tunnelling, Inc., has been awarded a subcontract to provide trenchless work for the General Contractor Memme Construction on York Region's Bathurst Street and Teston Road Watermain project, Richmond Hill and Vaughan. The primary scope of the subcontract includes the construction of two water-tight secant pile shafts (launch and retrieval), the construction of a 685m long tunnel with three (3) 600m radius curves, and the installation of a 1050mm CPP Watermain inside the tunnel.

The project was originally designed to use a slurry microtunnel machine and RCP pipe, however, CRS Tunnelling proposed through Memme, to use an Earth Pressure Balance TBM with the installation of a precast segmental liner, due to multiple reasons including resources availability and construction risk mitigation. The TBM utilized is a Lovat RME 137SE, and will install a 3m internal diameter concrete segmental liner. The segments were cast by Canadian Precast, using Buchan molds, and the design was verified by Hatch Mott MacDonald. The segments were made using steel fibers, and are bolted segment to segment, and connected ring to ring via dowels. Geology is mixed ground under the water table.

Mining commenced September 21, 2015 and was completed February 6, 2016.

TOTAL VALUE OF CONTRACT:
\$ 5,800,000

COMPLETION TIMELINE:
AUGUST 2015 - May 31, 2016

COMPLETED AS:
SUBCONTRACTOR

