

City of Toronto - Evans Avenue Watermain



*SUE Investigation
revealed best route
for new 500 mm
watermain*



TSH/TBE completed a Subsurface Utility Engineering (SUE) investigation for the new Evans Avenue watermain project. The project involved the installation of a new section of 500 mm diameter watermain, which will replace the existing 300 mm cast iron watermain, crossing under the QEW and tying into the existing valve locations on Evans Avenue. The new watermain will be installed using a combination of traditional open cut construction and jack and bore techniques for crossing under the QEW.

The investigation area was located where Evans Avenue crosses over the Gardiner Expressway. Records research and a survey of all surface features were completed to get a feel for the general

congestion of utilities over the project area. Electromagnetic cable locate equipment was then used to designate the horizontal location of over 1000m of underground utilities in close proximity to the new watermain. A total of 7 conflict locations were identified, and test holes were installed to get the exact vertical depth and size of pipes and structures at points where the new watermain crosses the existing utilities.

The information obtained from the study was vital in the design of the new watermain. The information helped to establish clear areas for the jack and bore pits, and influenced the overall alignment of the new watermain.



Client: City of Toronto

Date: 2003

Location: Evans Avenue, Toronto

Project Value: \$ 17,000

Reference: Tom Ellerbusch, P.Eng - Manager, Design and Construction, District 2, 416-394-8399