



WATER RESOURCES

Municipal Infrastructure Assessment

Georgetown Inflow/Infiltration Reduction Study

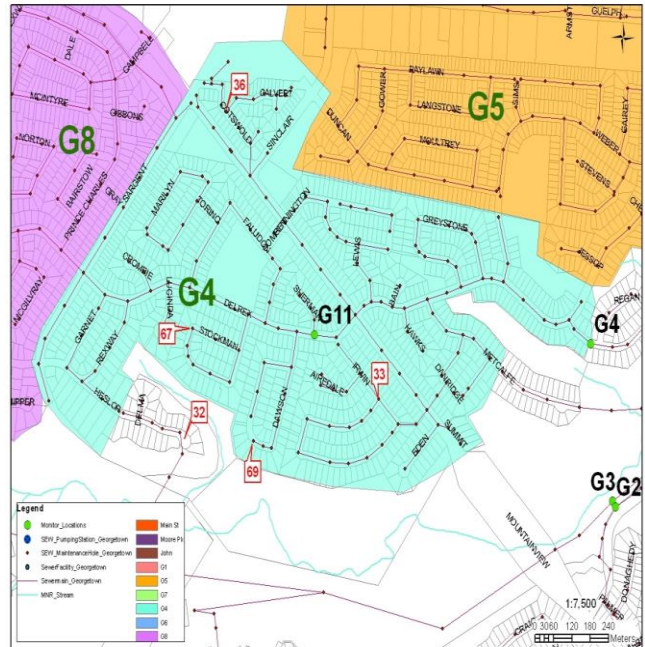
Client: Regional Municipality of Halton

Location: Halton Hills, Ontario

The population of the Regional Municipality of Halton was expected to increase to 530,000 by 2011. In anticipation of this growth, the Region embarked on a program to address the issue of capacity at its wastewater treatment plants (WWTP) in the identified growth areas. GREENLAND was retained to identify the sources of inflow and infiltration (I/I) into the sanitary sewer system for the Town of Halton Hills and to determine remedial strategies for rehabilitation.

The first phase of the program was to develop a monitoring program that would use up to 10 monitors over a year to isolate the neighbourhoods that exhibit high sources of inflow or infiltration. The areas were prioritized and the sources identified.

GREENLAND conducted field investigations to identify the neighbourhoods with roof leaders connected to the foundation drains, locations where sanitary maintenance holes were susceptible to storm surface flows, and locations of high groundwater.



Area G4	Quantity	Units	Cost
CCTV Required	4250.0	I.m.	\$16,150
Priority Pipe Lining	0.0	I.m.	\$0
Future Pipe Lining	2309.4	I.m.	\$536,230
Priority Manhole Inspections	0	Per MH	\$0
Future Manhole Inspections	53	Per MH	\$15,900
Total Smoke Tests	732	Per House	\$366,000
Replacement Cost of Priority Pipe (Pipe Cost Only)			\$0

The Region had already identified aging sewers to be replaced however some of these areas also had poor lot grading which suggested that drains may be connected to the sanitary sewer. The town was divided into several neighbourhoods where the remedial measures were listed by ease of completion to complex infrastructure assignments that would be placed in future capital works programs.

Several sewer lining locations were identified where sewers crossed small watercourses.

Completed 2011.