

City of Hamilton
Infrastructure & Source Water Planning
Hamilton Water, City of Hamilton
77 James St N, Suite 400
Hamilton, ON
NL8R 2K3

February 28, 2013

Attention: Chris Gainham, Senior Project Manager

Bhajan Sarker, P.Eng., Project Manager

Dear Mr. Gainham and Mr. Sarker:

Re: Summary of Findings from the February 20-26th, 2013 Smoke Testing of the HC005 Catchment Area in Ancaster.

TQI is pleased to submit this summary report of the approximate **15 findings** for the February 20-26th, 2013 Smoke Testing of the HC005 Catchment Area in Ancaster. Unfortunately, weather conditions were not conducive to isolating **all possible** findings. When the ground is frozen and covered with snow, it is very difficult to locate the more subtle indirect connections to the sanitary sewer as there may not be enough pressure to penetrate the snow and frozen ground and difficult to observe even if it does.

This report includes only the findings pertinent to the smoke testing procedure. Other noted problems identified, such as sanitary manholes with infiltration and low-lying sanitary manholes susceptible to inflow, will be included in the forthcoming Manhole Inspection Report.

BACKGROUND

Small sections of the sanitary sewer system were isolated by blocking the pipe air space above the flow. Our smoke tester was then used to blow mist (smoke) into the isolated portion under pressure. Observers then walked along the sections being tested looking for and documenting any improper locations where smoke exited.

A summary of results is provided in this document and a **full report with an edited video**, is being prepared.

As there was not a great number of findings this summary is simply organized in the order that the problems were identified:

Montgomery Dr (1 Finding)

- [REDACTED] drain at [REDACTED]

Alexander Rd (1 Finding)

- Catch basin [REDACTED]
[REDACTED] "smoked" lightly suggesting an indirect connection to the sanitary sewer

English Pl (1 Finding)

- At [REDACTED] downspouts "smoked" heavily suggesting a direct connection to the sanitary sewer

Stonegate Dr (1 Finding)

- [REDACTED] sanitary mh A106A007 has a hole in the frame that will allow for inflow

Rousseaux St (1 Finding)

- At [REDACTED] downspouts "smoked" heavily suggesting a direct connection to the sanitary sewer

Academy St (2 Findings)

- At [REDACTED] a lateral cleanout [REDACTED] isn't completely sealed
- At [REDACTED] "smoked", indicating that the weeping tile is probably connected to the sanitary sewer

Lodor St (1 Finding)

- At [REDACTED]
[REDACTED] internal weeping tile had been installed [REDACTED] and connected to the sanitary sewer

Mount Mary Retreat Centre (3 Findings)

- On the property of 437 Wilson St E, [REDACTED]
[REDACTED] downspouts connected to the sanitary sewer. "Smoke" also emitted through cracks in small roads adjacent to 2 different sanitary manholes [REDACTED]

Wilson St E (4 Findings)

- At [REDACTED] roof drain "smoked"
- At [REDACTED] a lateral cleanout [REDACTED] has a broken cap on it
- 2 sanitary mhs were discovered to have open grid storm lids on them. They are located Opp 371, mh AK08A022 and Opp 342, mh AK08A019

Concluding Remarks

TQI will be happy to respond to any inquiries you may have regarding this summary report for the smoke testing of HC005 Catchment in Ancaster. **The full report with video will follow .**

Yours truly,



Thompson Flow Investigations inc. (TQI)

Nancy L Lockhart
Field Services Engineering

Bus. (905) 607-2728 Home: [REDACTED]