OLD DUNDAS ROAD SEWAGE PUMPING STATION
SCHEDULE 'C' CLASS ENVIRONMENTAL ASSESSMENT (EA)
Community Liaison Committee (CLC) – Meeting #1

Meeting Minutes

Location: 300 Wilson St. E, Ancaster, Ontario
Lower Level Meeting Room
Time: 6:00 pm – 8:00 pm
Date: January 23, 2017

In Attendance:

Name	Email Address
Udo Ehrenberg (Hamilton Water)	udo.ehrenberg@hamilton.ca
Esther De La Cruz (Hamilton Water)	esther.delacruz@hamilton.ca
Kathy Bishop (Councilor Ferguson's Office – (Alternate CLC Member)	kathy.bishop@hamilton.ca
Allan Beattie (Resident)	allanjb@sympatico.ca
John Chaffey (CLC Member)	chaffey@sympatico.ca
Malcolm Stagg (Resident)	malcolm.stagg@miralco.com
Alan Hansell (CLC Member)	alanhansell@gmail.com
Dave Maunder (Aquafor Beech)	maunder.d@aquaforbeech.com
Peter Hebert (Aquafor Beech)	hebert.p@aquaforbeech.com

No. **Item**

1. **Introductions**

Each attendee introduces themselves:

Allan B: Ancaster Creek runs through his property. His primary interest is the creek, specifically water quality.

John: Lives across from the pumping station. He is concerned with watercourse health.

Malcolm: Lives next to the pumping station. He has been in contact with the City about odors from the pumping station. He is concerned with water quality, preserving Sherman Falls and the general quality of life in the neighbourhood.

Alan H: Alan is interested in removing watershed stressors and restoration projects as he currently works with Stewards of Cootes Watershed.

Kathy: Works as an assistant for local Councilor Lloyd Ferguson. Their office is interested in improving service level to residents and protecting the local creek.

Udo: Udo is the Project Sponsor and was involved in the 2014 Master Plan.

Esther: As a Senior Project Manager, she will be involved in the project management and in a technical advisory role.

Dave: Will be the consultant's (Aquafor Beech) Project Manager. He was involved in the 2014 Master Plan.

Peter: Is an engineer at the Aquafor Beech and will serve as a technical resource for the CLC.

Note: Sharon MacPherson-Nemeth is the City's Project Manager (currently off due to illness).

2. **Presentation**

Dave presented a PowerPoint slideshow to bring CLC members up to speed on the project. A PDF copy of the presentation is included as **Appendix A** to these meeting minutes. A summary of the Presentation is presented below. Questions and comments from CLC members during the presentation are indicated in italics.

Slides 1 -3: Dave introduces the 2014 Old Dundas Sewage Pumping Station Wet Weather Relief Master Plan and Class Environmental Assessment. A general overview of the catchment for the Old Dundas Road Sewage Pumping Station is shown showing flow direction of pipes to the pumping station and forcemain out from the pumping station to the City's pipe network external to the catchment area/ study area.

Slide 4: A schematic of residential drainage is shown. The concepts of sanitary sewer contributors are introduced. Sewer network components are discussed (sanitary sewers, laterals, manholes, etc.).

Slide 5: The concepts of inflow and infiltration are introduced. Sources of inflow such as roof drains and private catch basins connected to the sanitary (against building code and the City's Sewer Use By-law) are depicted. Sources of infiltration such as root intrusion, broken pipes, and leaky manholes are depicted.

Slide 6-7: The purpose and technical components of the 2014 Old Dundas Sewage Pumping Station Wet Weather Relief Master Plan and Class Environmental Assessment are discussed. Technical components of the study are:

- Field work was undertaken to define potential sources of infiltration / inflow. This included smoke testing and scoping (camera) into the pipes.

- Flow monitoring identified the magnitude of infiltration / inflow.
- Computer modelling was undertaken to define the extent of the problems.

Slide 8: Causes of inflow and infiltration are shown. The ratio of inflow and infiltration to domestic sewage is too high (in the range of 6:1 during extreme events). Smoke testing indicated that 18 properties had roof drains that were directly or indirectly connected to the sanitary sewer.

> ***John****: How many homes were tested for connections via smoke?*
> ***Dave****: All homes in the study area which is several hundred.*
> ***Udo:*** *The consultant report by TQI outlining the smoke testing can be shared with the CLC.*

Slide 9: Properties that have drainage connections to the sanitary sewer are shown on the study area map.

Slides 10-11: Slide 10 shows a flooded basement from the study area and the construction of a sanitary sewage storage tank. Side 11 shows the profile of a sanitary storage tank. A similar tank was recommended during the 2014 study. This has been tendered and construction will start in April 2017.

> ***Malcolm****: How long does the tank take to fill during a storm?*
> ***Dave****: The tank is designed for high intensity, short-duration events. The tank will fill over the course of several hours during significant storm events.*
>
> ***Alan H:*** *Is it the forcemain or the pumping station that are under capacity during extreme events?*
> ***Dave:*** *Both have less capacity than the 1:100-year event.*
>
> ***John****: Does the tank take into consideration the increased sanitary flows of new development in the area?*
> ***Udo****: The sanitary system is designed for the ultimate build-out of the catchment. This is ensured by the Growth Management and Development Engineering Department. Development proposed at the Mount Mary site was not approved as a result of insufficient capacity and the proposed development on that site was not to drain to the study area.*
> ***Dave****: There is redundancy built into the system as a result of the three recommendations (private disconnections, public infiltration reductions and the implementation of the storage tank.) The increased flow from new development is much less significant than inflow and infiltration reductions.*

Slides 12-13: These slides show a simplified diagram of the level of water in the sanitary sewer during different return period flows. Slide 12 shows

this under existing conditions while Slide 13 shows this with the storage tank in place. Computer modelling has indicated that the tank will hypothetically eliminate the surcharging of sanitary sewage into basements.

> ***Alan H:*** *Would backflow valves work for preventing sewage surcharging into residences?*
> ***Udo:*** *The City funds a portion of residential backflow valve installation and has kept stats on their success. In general backflow valves work but require maintenance. The City does not take ownership or conduct maintenance of these and hence cannot assure ongoing success.*

Slides 14: The City has been sealing manholes to prevent infiltration. This was the second recommendation of the 2014 study. Udo mentioned that the sealing compound also extends the lifespan of the manhole.

Slides 15: Removing private property inflow was the third recommendation of the 2014 study. This slide illustrates downspout disconnection. Udo mentioned that some fixes will not be as simple as sawing a downspout and installing a splash-pad (e.g. private driveway catch basins)

> ***General discussion on private property enforcement:*** *How are private property disconnections enforced? Is this enforceable through by-law?*
> ***Udo:*** *CLC members have a duty of care to take private residential disconnection message back to neighbourhood. In 2017 the City's approach will include a private public partnership (3P). Funding and education will be available. Enforcement is difficult because sufficient proof might not be demonstrated via smoke testing per legal advice. Udo can talk to staff in the City's by-law department to clarify.*
>
> ***Malcolm****: Are homeowners contacted before smoke testing is conducted?*
> ***Udo****: Yes, homeowners are notified but the results of smoke testing are not sent to homeowners.*

Slide 16: 1:100-year level of flood protection against basement flooding for the study area provided by tank. This plus private and public works form core of recommendations from 2014 study.

Slides 17-19: These slides introduce the Schedule 'C' EA Study that is currently being undertaken. The purpose is to provide alternatives for storms greater than the 1:100-year return period event.

Slide 20: This figure shows the existing sanitary sewer network and the flow monitoring stations (these will be the location of the water quality monitoring stations). Dave brought up the point that creek restoration projects may need to be added to the recommendations to offset project impacts and produce creek conditions that are better than or equal to existing conditions depending on the water quality results.

> ***Alan H****: What water quality parameters are used for setting targets?*
> ***Peter****: These are specific to the watershed based on stream-type and habitat. Composite water quality scores can be used or individual exceedances.*

Slide 21: Four different alternatives are presented. The project is not limited to these alternatives and CLC members are encouraged to suggest others.

Note: Alternative 1 is "do nothing" (i.e. just construct storage tank and do not provide level-of-service for events greater than 1:100-year)

Slide 22: Illustrates Alternative 2. For this option sewage from the storage tank is released into Ancaster Creek via the 750 mm storm sewer during events that exceed the 1:100-year design storm. It is noted that the flood level extends to an elevation that is higher than the proposed storage tank invert and storm sewer. It is likely that this will cause creek water to fill the sanitary storage tank. The alternative is likely technically unfeasible.

Slide 23: Illustrates Alternative 3. For this option sewage is conveyed along the Old Dundas Road roadside ditch. A series of wetland cells will be constructed in the ditches to provide water quality polishing. Like other options, the technical feasibility of this approach needs to be confirmed.

Slide 24: Illustrates Alternative 4. For this option the pumping station and forcemain capacity are upgraded. One potential issue with this alternative is that the downstream sewershed (downstream of the forcemain) may not have capacity to accept increased flows.

Slide 25: This shows a plan and profile of the originally proposed sanitary sewer replacement. Note that the tank was moved from Old Dundas Road to Montgomery Road.

3. Post-Presentation General Discussion and Questions

What is the cost of the tank and various alternatives?

- The tank will cost approximately $1.5 million. The costs for other options have not been assessed at this stage.

How does inflow and infiltration (I/I) in the study area compare to other areas of the City?

- Other areas of the City have I/I problems. These areas include Binbrook, West 18th, and Stoney Creek Mountain. These areas are all different ages and were built by different developers. Udo can provide a comparison to benchmark this catchment compared to others but in general the 6:1 ratio that is seen in the catchment is very high.

Why are we conducting this Schedule 'C' EA as opposed to solving this by regular infrastructure maintenance and why are we re-opening the overflow alternative when it was not approved by the Ministry of Environment (MOE) in the 1990s?

- This approach was recommended in the 2014 Master Plan and Class Environmental Assessment. The alternatives presented today include those which do not discharge into the creek.

Is the storage tank being constructed in April? What is the impact on road closures?

- Yes. The construction has been phased to minimize the impact on traffic. The upper end of Montgomery requires a complete closure due to excavation depths. The contractor can give a better approximation of expected closure timespan.

Have the open manhole covers been replaced?

- Yes, the two perforated ones have been switched out for closed covers.

Why is equipment brought before storm events?

- These are portable stand-by pumps that are brought in incase the pumps are overwhelmed. These pump sewage into tanker trucks. This is a temporary solution.

4. **CLC Members and Residents Closing Thoughts**

Each member was invited to share final thoughts at the conclusion of the meeting.

Allan B (Resident): Hamilton is the City of Waterfalls and Sherman Falls is one of the better ones in the City. He can't understand why the City would consider the intentional release of untreated sewage to Ancaster Creek. Pumping station improvements may be a better option including adding pumping stations to break up the catchment area. Allan is absolutely opposed to running overflow into the creek.

Malcolm (Resident): Understands that this is a complex problem and thinks that the addition of additional storage tanks should be considered possibly in the old town or in Ancaster Heights.

Kathy (Alternate CLC Member): The 18 properties with storm drainage connections to the sanitary should be the priority because of the relatively low cost to the City. Councilor Ferguson should be involved in discussion with landowners.

Alan H (CLC Member): Microcells are unpredictable and should be an indication of future climate. Backflow valves should be addressed in this plan. Relying on spills into the creek as a fallback option is not an acceptable approach.

John (CLC Member): This is a complex issue with lots covered in the master plan. The storage tank is a step in the right direction. The disconnection of the 18 properties is also a positive step. The municipal backflow valves program is valuable. He would like to see an alternative chosen that does not discharge into the creek.

5. **Action Items**

City of Hamilton:

- Provide consultant report by TQI outlining the smoke testing results with the CLC.
- Talk to by-law enforcement to clarify the City's position on private connections to the sanitary that do not comply with City and provincial requirements.
- Circulate Terms of Reference for the CLC.

Aquafor Beech:

- Provide Meeting Minutes and PDFs of the presentation to the CLC.

Next Meeting is May or June (to be confirmed at a later date)