Welcome

Water Street Sanitary Sewage Pumping Station Capacity Expansion

Municipal Class Environmental Assessment Study

Public Information Centre #1

Date: June 4, 2019
Time: 2 p.m. to 4 p.m. and 6 p.m. to 8 p.m.
Meeting Overview

This Public Information Centre (PIC) focuses on:

- Introduction to the project
- Background on the Water Street Sanitary Sewage Pumping Station (SSPS) drainage area
- Factors driving the SSPS upgrades / capacity expansion
- The Class Environmental Assessment process
- Alternative solutions being considered to upgrade / expand capacity of the Water Street SSPS
- Draft evaluation criteria for assessing alternative solutions

We want to hear from you!
Questions? Suggestions?
Project team members are available for discussion
Background and Purpose of the Study

The existing Water Street Sanitary Sewage Pumping Station (SSPS) was built in 1971 and has undergone several upgrades since, however due to the age of the structure additional recommended refurbishments have been recommended. The projected growth in the Water Street SSPS drainage area indicates that the current capacity of the pumping station will be insufficient for future needs. It has been identified as in need of upgrades and capacity expansion to service the Water Street SSPS service area.

The purpose of this study is to identify the preferred solution to provide the current and projected pumping capacity for the Water Street Sanitary Sewage Pumping Station

The study will:
- Confirm the problem statement by identifying the current and projected pumping capacity requirements for the Water Street SSPS
- Identify and evaluate feasible alternative solutions
- Recommend the preferred solution to provide the additional required pumping capacity
To meet the requirements of Ontario’s Environmental Assessment (EA) Act, the Region is undertaking a Schedule B Class EA to fulfill the requirements of Phases 1 and 2 of the Municipal Class EA in accordance with the Municipal Engineers Association’s Municipal Class EA document dated October 2000 as amended in 2007, 2011, and 2015.

### Phase 1
- Identify the problem or opportunity statement
- **Notice of Commencement** May 2019

### Phase 2
- Collect and review background studies, information on existing conditions
- Identify a short-list of feasible alternative solutions
- Develop draft evaluation criteria
- **PIC #1 June 2019**

### Documentation
- Inventory of environmental, and social features of the Study Area
- Evaluate alternative solutions
- Establish the Preferred Alternative Solution
- Develop Conceptual Design
- **PIC #2 Fall 2019**
- Incorporate Comments
- Complete the Project File Report, Winter 2019/2020

### Design and Construction
- Design, construct and monitor
- 30 Day Review
Water Street Sanitary Sewage Pumping Station and Drainage Area

- The station services the majority of the Port Perry sanitary service area, with its drainage area approximately bound by Reach Street in the north, King Street in the south, Old Simcoe Road to the west and Lake Scugog to the east.

- The area serviced by the Water Street SSPS is over 90% residential land use, with the remainder commercial/industrial.

<table>
<thead>
<tr>
<th>Service Requirements</th>
<th>Population (people)</th>
<th>Sanitary Service Area (hectares)</th>
<th>Projected Peak Pumping Design Flow (Litres per second)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing Conditions (2017)</td>
<td>6,642</td>
<td>237</td>
<td>213</td>
</tr>
<tr>
<td>Phase 1 Service A, B</td>
<td>10,500</td>
<td>337</td>
<td>275</td>
</tr>
<tr>
<td>Full Build-out Service B</td>
<td>13,000</td>
<td>523</td>
<td>350</td>
</tr>
</tbody>
</table>

A. The Region’s Official Plan Population Forecast for the Urban Area in Port Perry for the year 2031 is 11,880 people.

B. Includes both increase due to population growth as per the Region’s Official Plan, as well as connecting private existing septic systems (a serviceable population of 251 and a not readily serviceable population of 896)
Port Perry Sanitary Sewer Network

Legend:
- Drainage Area
- Property Parcels
- Existing Private Service Areas
- Sanitary Gravity Sewer
- Sanitary Force Main
- Sanitary Pumping Station
  - Canterbury Common SSPS
  - Reach St SSPS
  - Water St SSPS
Water Street Sanitary Sewage Pumping Station Drainage Area
Drainage Area Land Use

Data Source: Township of Scugog Official Plan, September, 2017
Phase 1: Problem Identification

The purpose of this study is to review the existing and future pumping capacity requirement for the Water Street SSPS drainage area and to develop and evaluate alternative solutions to meet capacity requirements. A preferred solution will be selected based on the evaluation, and a conceptual design developed.

- Additional pumping capacity is required to service the Water Street SSPS drainage area to allow for the planned growth in the area
- The building envelope of the existing pumping station does not allow for the additional required capacity
- The existing station requires upgrades due to the age of the infrastructure
# Phase 2: Short-listed Alternative Solutions

<table>
<thead>
<tr>
<th>Alternative</th>
<th>Description</th>
<th>Feasibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>A: Do Nothing</td>
<td>No changes from the existing conditions, other than continue to maintain the existing Water Street SSPS.</td>
<td>Will not solve the problem.</td>
</tr>
<tr>
<td>B: Limit Development</td>
<td>Inconsistent with the Regional Municipality of Durham and the Township of Scugog Official Plans.</td>
<td>Not feasible. This option will not be carried forward for further evaluation.</td>
</tr>
<tr>
<td>C: Implementation of Water Use Efficiency and Inflow and Infiltration (I/I) Reduction measures</td>
<td>The Region has various programs in place to increase water efficiency and reduce inflow and infiltration. These measures will not be able to reduce flow in the system enough to avoid or delay the need for capacity expansion at the Water Street SSPS.</td>
<td>This option will not be carried forward for further evaluation.</td>
</tr>
<tr>
<td>D: Flow Diversion</td>
<td>The feasibility of diverting flow would be difficult due to the existing hydraulics of the system. Changes would involve significantly more linear works than any other option and would affect the greatest number of property owners when compared with the other options.</td>
<td>Not feasible. will not be carried forward for further evaluation.</td>
</tr>
<tr>
<td><strong>E. Construction of a New Pumping Station and Forcemain at a new Location</strong></td>
<td>Will allow the Region to meet existing and future pumping station capacity requirements in the Water Street SPSS drainage area.</td>
<td>Four alternative locations have been identified for detailed evaluation.</td>
</tr>
<tr>
<td><strong>F: Upgrading and/or Optimizing the Existing Station</strong></td>
<td>This alternative involves upgrades and minor relocations within the existing site area.</td>
<td>This alternative may be feasible and will be assessed in detail.</td>
</tr>
</tbody>
</table>

* Short-listed alternative solutions carried forward for detailed evaluation.
Phase 2: Potential Alternative Solution Locations

Legend
- Wooded Areas
- Sanitary Force Main
- Sanitary Gravity Sewer

Siting of SSPS Within Location Boundary
- Expansion or New (Existing Site)
  - Site 1
  - Site 2
  - Site 3
  - Site 4
Alternative solutions will be evaluated based on their ability to address the Study’s purpose, stakeholder input, and their potential impacts. The following lists are the draft evaluation criteria being considered, comments and/or suggestions for additional criteria to consider are requested.

**Natural Environment**
- Potential impacts on:
  - Terrestrial systems (vegetation, trees, wildlife)
  - Aquatic systems (aquatic life and vegetation)
  - Surface and groundwater
  - Soil and geology

**Economics**
- Capital cost
- Operating and maintenance costs

**Socio-Cultural**
- Existing land use impacts (parks, community uses)
- Future planning policies / initiatives
- Disruption to existing community during construction (traffic, noise)
- Potential impacts to archaeological and cultural resources
- Impacts to First Nations and Métis

**Technical**
- Ability to meet regulatory requirements and/or environmental compliance approvals
- Feasibility of implementation (available space, accessibility, constructability, land acquisition)
- Reliability
- Effectiveness in providing current and future pumping capacity needs
- Compatibility with existing infrastructure
- Flexibility to meet future requirements
Thank you for Attending

We welcome your feedback. Please fill out the comment sheet provided.

Next Steps:

• Following this PIC, the project team will review and consider your comments in the refinement of the evaluation criteria and development of the alternative solutions.

• Public Information Centre #2 is planned for the fall of 2019 to present the findings of the alternative solutions evaluation.

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