East Side Lands

Wastewater Servicing Class EA

Public Consultation Centre

November 8, 2016
5:00pm ~ 7:30pm

Deer Ridge Golf Club
200 Deer Ridge Drive, Kitchener
East Side Lands

The East Side Lands is an area of growth in the Region of Waterloo. Development requires wastewater servicing to support planned development primarily for employment development with some residential growth.

The East Side Lands is an area of growth in the Region of Waterloo.

Stage 1 lands referred to as the "East Side Lands" by the Region of Waterloo for development planning. The focus of the Stage 1 lands is an area of growth in the Region of Waterloo.

Wastewater servicing is required to support this planned development.

Initially, wastewater from the East Side Lands will be treated at the Kitchener WTP (Wastewater Treatment Plant). However, as the area grows, it is expected that wastewater servicing will be provided by the East Side Lands Wastewater Treatment Plant (ESL WTP). In the long term, wastewater from the East Side Lands will be treated at the broader East Side Lands Wastewater Treatment Plant (ESL WTP).

The ESL WTP was completed in early 2014. The ESL WTP was completed as part of the Master Environmental Study Plan (MESP) for the East Side Lands.
Project Overview

What is this project about?
Determining the long-term wastewater servicing solution to support growth in the East Side Lands.

What is the short term strategy?
To make the best use of existing infrastructure until the long term solution is needed. Initially, wastewater from the East Side Lands will be treated at the Preston Wastewater Treatment Plant (WWTP).

What is the long term strategy?
Ultimately, wastewater from the East Side Lands will be treated at the Kitchener WWTP.

What is the focus of this study?
How the wastewater flows will reach the Kitchener WWTP.

We would like your input on the proposed wastewater servicing strategy.

Region of Waterloo Water Services | www.regionofwaterloo.ca/water
EA Planning Process

Identify the problem and complete an inventory of existing conditions
Develop alternative solutions
Evaluate the alternatives
Select a preferred solution

Stakeholder Consultation

This study is being completed as a Schedule ‘B’ Class EA.

It builds on the previous work of the East Side Lands Master Environmental Servicing Plan (MESP).
Project Approach

The project approach is to divide the servicing strategy into two parts:

**Part 1: Route**
Considers the alignment of the sanitary servicing infrastructure (pipeline) from the East Side Lands to the Kitchener Wastewater Treatment Plant (WWTP)

**Part 2: Wastewater Transfer**
Considers options for gravity or pumped wastewater flows
- and -
Options for crossing the Grand River to reach the Kitchener WWTP.
A preferred solution for the sewer pipe route was identified first (Part 1), then a preferred solution for transferring wastewater was identified (Part 2).
Part 1 - Route Options

Five options were evaluated for the route of the sewer pipe.
### Part 1

Evaluation of Routes

<table>
<thead>
<tr>
<th>Pipeline Route</th>
<th>Length (km)</th>
<th>Natural Impacts</th>
<th>Social Impacts</th>
<th>Technical Impacts</th>
<th>Total Length Weighted Impact Score</th>
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</table>

**Pipeline Route B is currently the preferred option**

Key advantages include:
- Shortest overall length (and therefore cost)
- Avoids impacts to important natural features
- Mostly located within existing public utility corridors and roads to minimize impacts to the community

### Impact Ranking Scale

<table>
<thead>
<tr>
<th>Score</th>
<th>Impact Ranking Scale</th>
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<tbody>
<tr>
<td>0</td>
<td>Beneficial Impact / Ideal Conditions</td>
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<tr>
<td>1</td>
<td>No Adverse Impacts</td>
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<tr>
<td>2</td>
<td>Low Impact / Neutral After Mitigation</td>
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<tr>
<td>3</td>
<td>Medium Impact</td>
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<tr>
<td>4</td>
<td>High Impact</td>
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Part 2
Wastewater Transfer Options

Option 1
Gravity sewer and pumping station in the Deer Ridge Subdivision

Option 2
Gravity sewer and pumping station at Kitchener Wastewater Treatment Plant

Option 3
Gravity sewer only with a dedicated service bridge across the Grand River

Three wastewater transfer options were evaluated
Part 2 - Evaluation of Wastewater Transfer Options

Option 3 is currently the preferred solution
- Key advantages include:
  - No pumping station required
  - Lower capital and operating cost
  - Lower risk of impacts to the Grand River

<table>
<thead>
<tr>
<th>WASTEWATER TRANSFER OPTIONS</th>
<th>Natural Environment</th>
<th>Social Environment</th>
<th>Technical Environment</th>
<th>Economic Environment</th>
<th>Overall Evaluation</th>
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<tr>
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<td>OPTION #3 Gravity Sewer Only with a dedicated Service Bridge Across the Grand River</td>
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<td><img src="image11" alt="Score" /></td>
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Score Impact Ranking Scale

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Crossing the Grand River

A new service bridge across the Grand River is proposed to carry the sewer pipe to the treatment plant.
Proposed Timing

Public Input
- Finalize the Environmental Study Report
  - Fall 2016

Public Input
- Request Council Approval
  - Winter 2017
- 30 Day Public Review Period
- Finalize the Class EA
  - Fall 2017

Public Input
- Complete the Wastewater Treatment Master Plan
  - Fall 2017

Future (to be confirmed)
- Construct the East Side Lands Long Term Servicing Solution
Factors Affecting Timing

The timing for construction will depend on:
• rate of population growth; and
• wastewater flows

The Wastewater Treatment Master Plan is currently underway to estimate the timing for construction of the long term solution.
Thank You for Participating

Please deposit your comment sheet in the box provided or forward to the Region.

For more information, please contact:

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