

Halton Hills #4 Wastewater Pumping Station Municipal Class Environmental Assessment Study

Phase 2B of the Premier Gateway Employment Area, Halton Hills

Public Information Centre – October 23 to November 23, 2024



Welcome!

The purpose of this Public Information Centre is to:

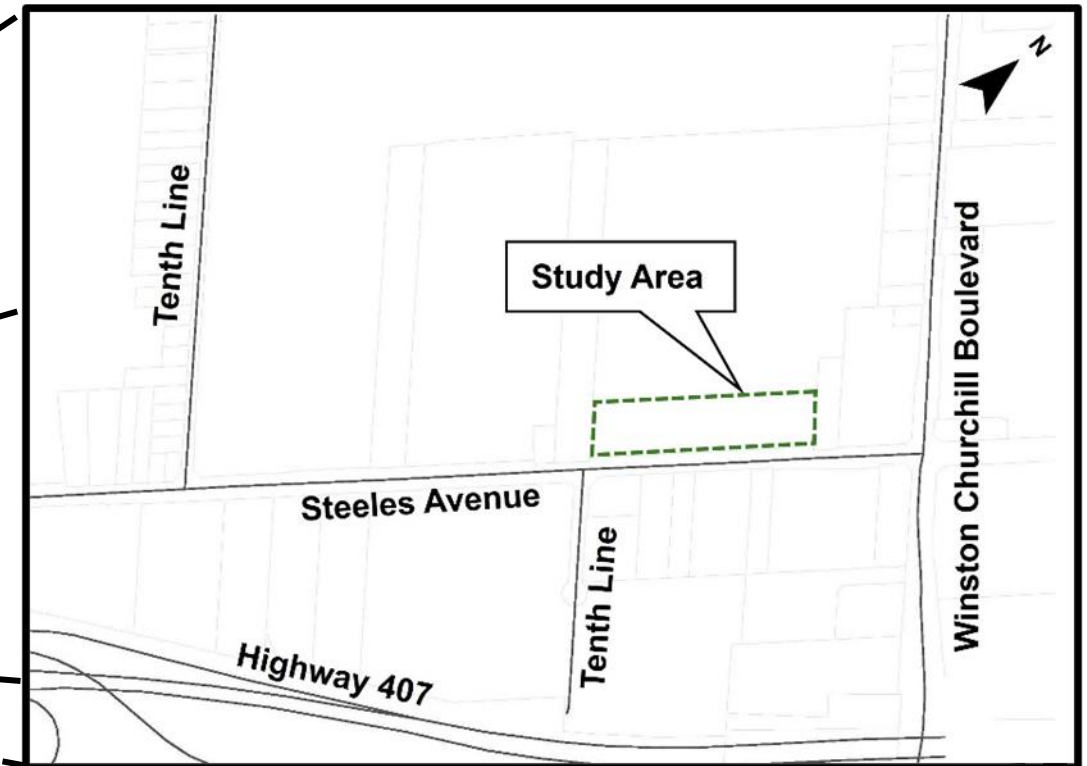
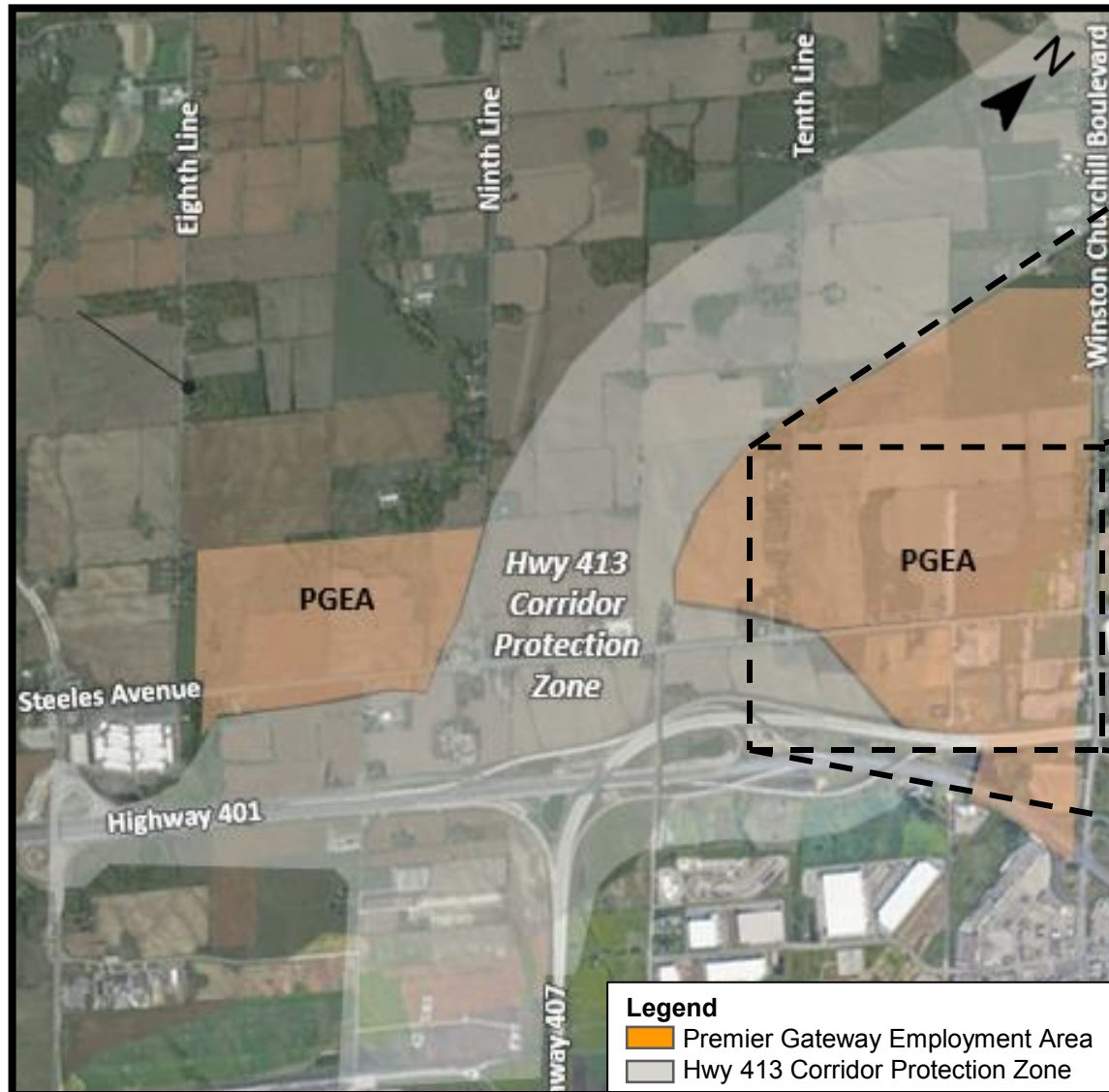
- Introduce the project
- Describe the Municipal Class Environmental Assessment (MCEA) planning process
- Present the problem and opportunity statement
- Identify and evaluate alternative solutions
- Present the preliminary preferred solution
- Share how to provide comments and feedback on the study



Project Background

- Halton Region is responsible for collecting, conveying and treating municipal wastewater through a system of sewers, pumping stations and treatment plants
- The wastewater servicing strategies for Phase 2B of the Premier Gateway Employment Area were identified in the Region's 2008 and 2011 Water and Wastewater Master Plans
- A new wastewater pumping station (Halton Hills #4 wastewater pumping station) was identified to service this area
- Following provincial requirements, a Schedule 'B' MCEA study is required to identify the location of Halton Hills #4 wastewater pumping station

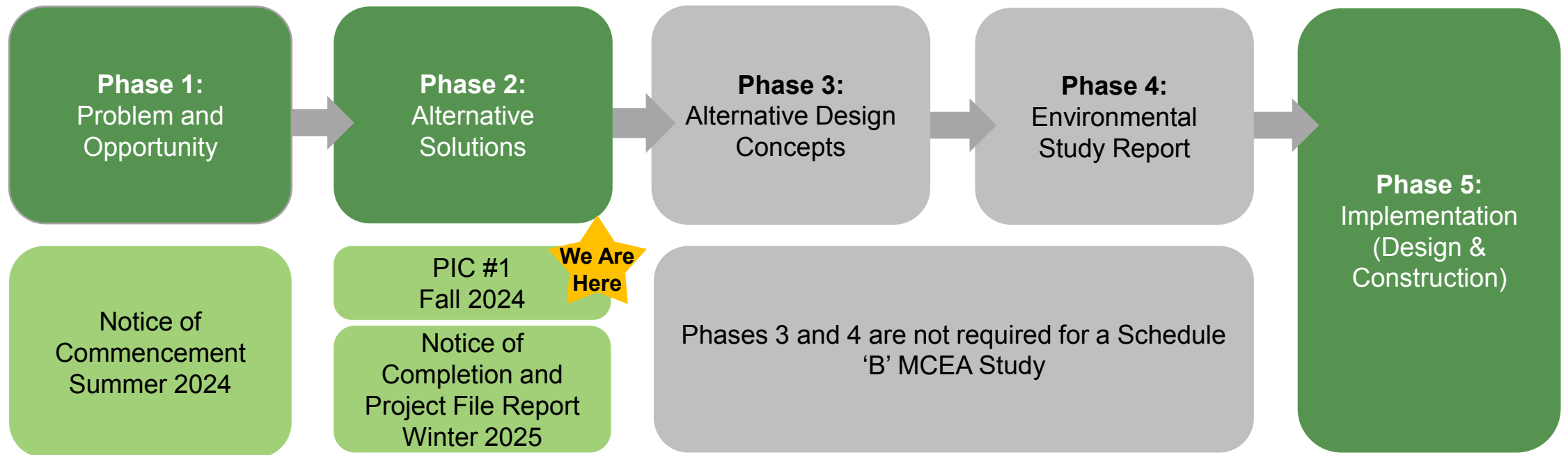
Study Area



Shown left: Premier Gateway Employment Area
Shown above: study area

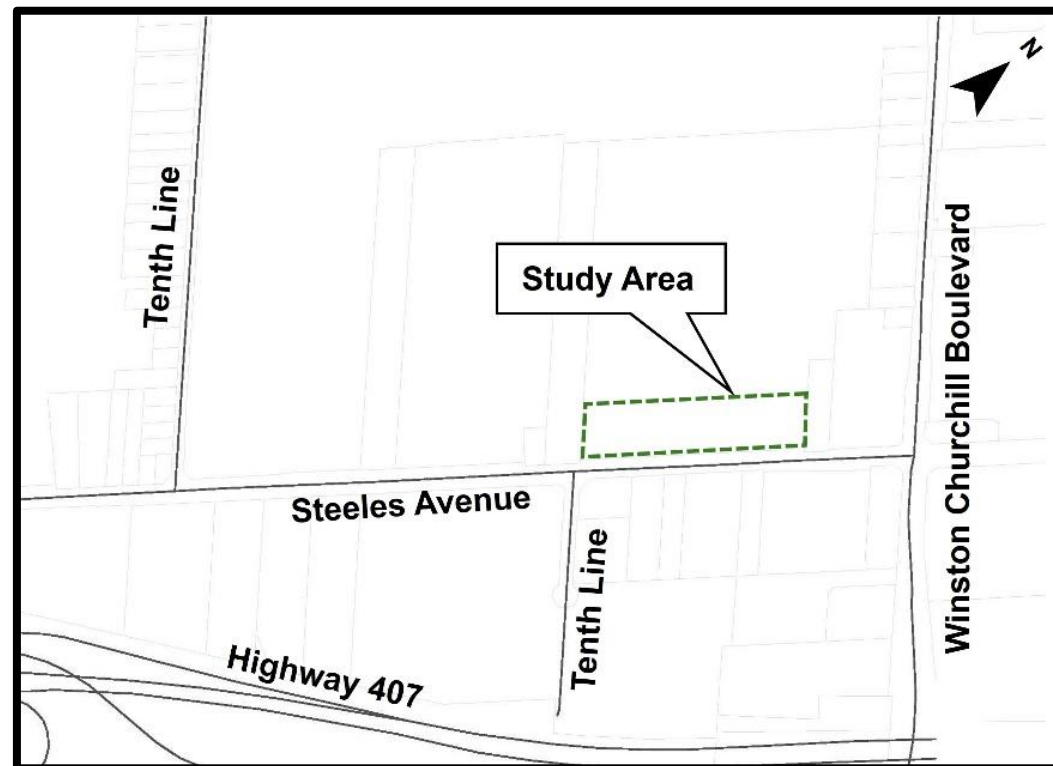
Municipal Class Environmental Assessment Process

- The MCEA is a planning and approval process for municipal infrastructure that follows Ontario's *Environmental Assessment Act*
- This study has been identified as a **Schedule 'B'** project and will follow **Phases 1, 2 and 5** of the MCEA process



Problem and Opportunity Statement

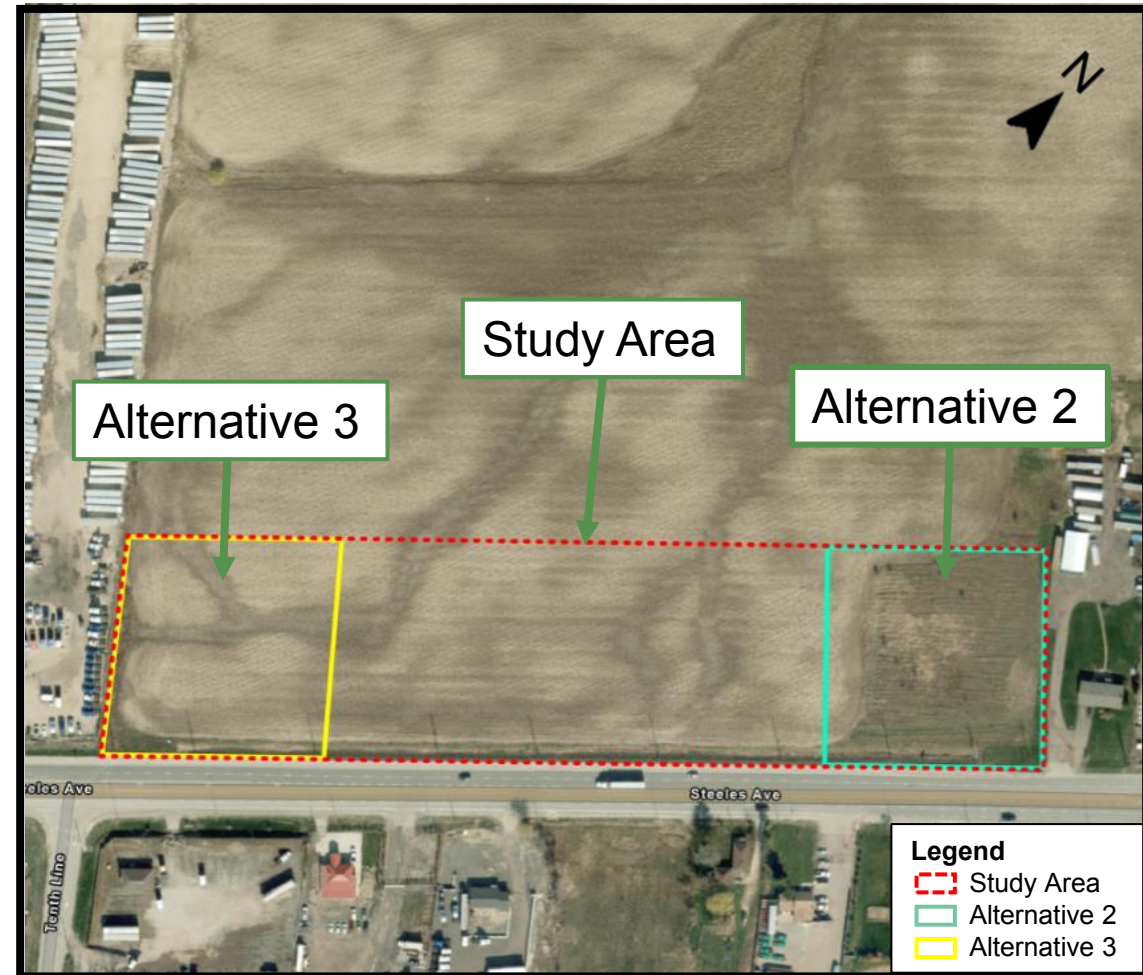
- To select the location of the new Halton Hills #4 wastewater pumping station to allow for the development of the Premier Gateway Employment Area



Shown above: study area

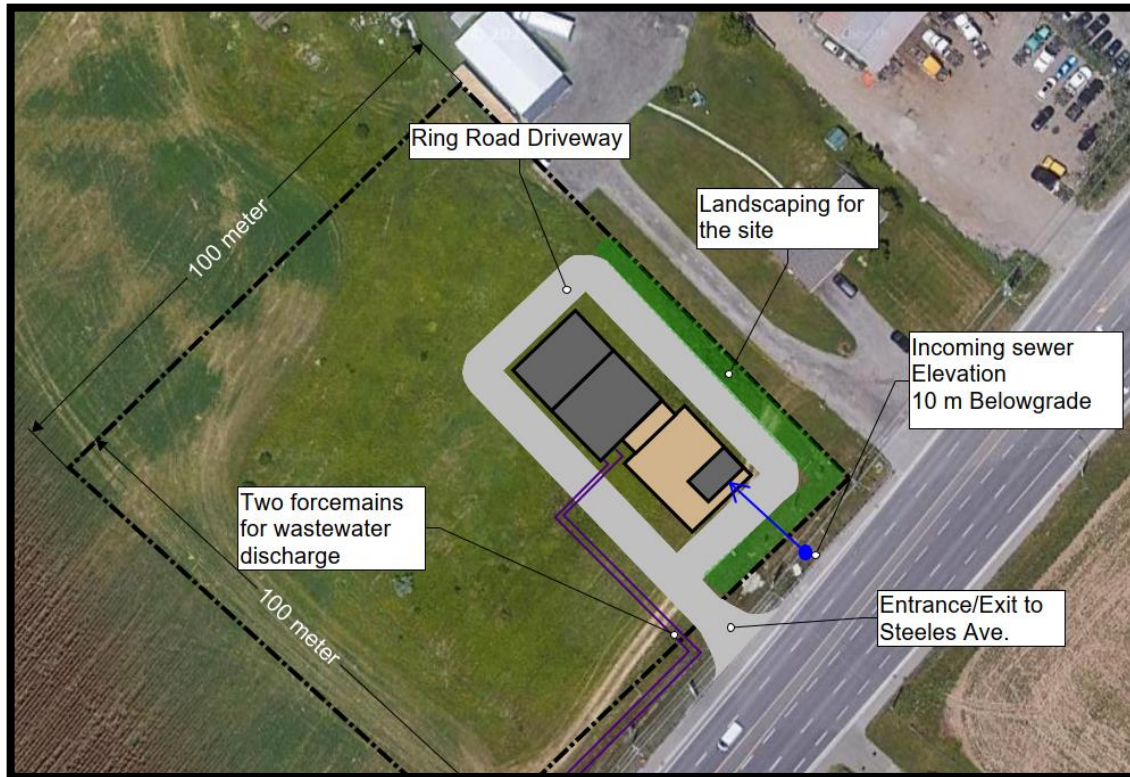
Alternative Locations for the Wastewater Pumping Station

- Alternative 1 is a “Do nothing” approach
 - If we do nothing, new businesses and employers will not be able to move into the Premier Gateway Employment Area because municipal wastewater services will not be available.
 - As this alternative does not address the problem and opportunity statement, it was not considered further
- Alternatives 2 and 3 are 100 m by 100 m sites on either end of the study area

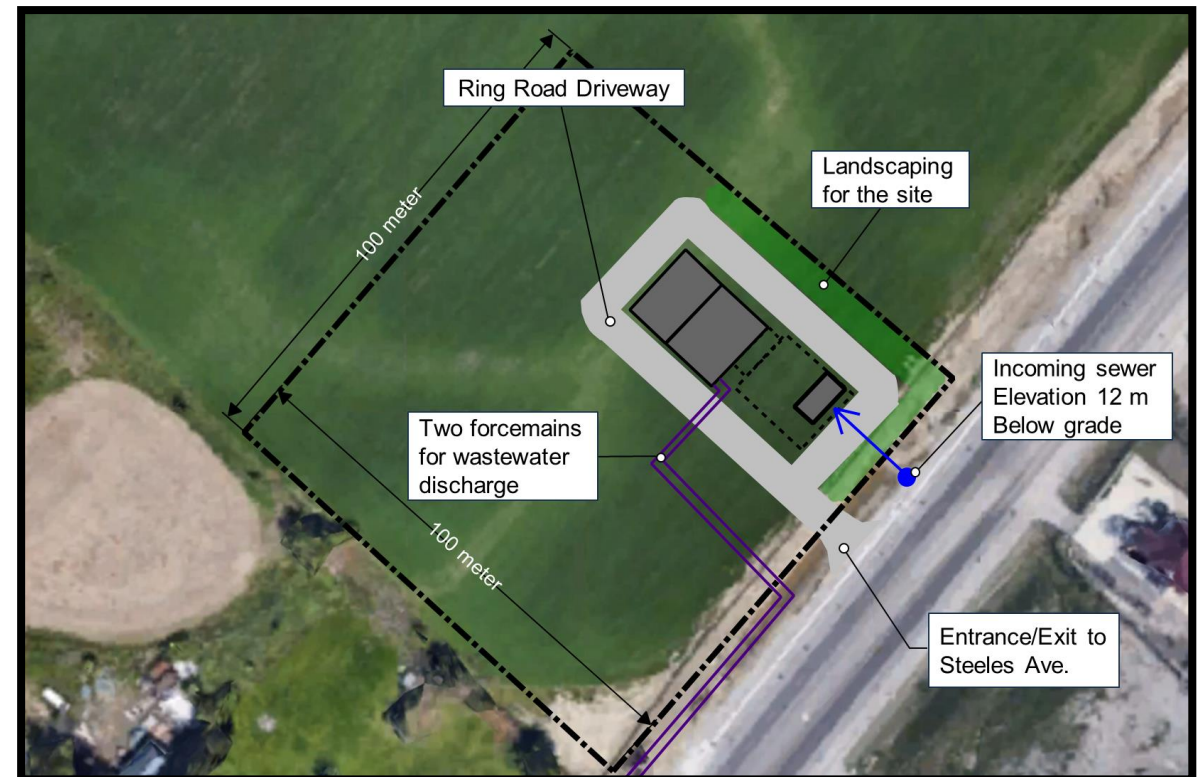


Shown above: alternative locations

Short-Listed Alternative Locations



Shown above: Alternative 2



Shown above: Alternative 3

Existing Site Conditions and Evaluation Criteria

- Both Alternatives 2 and 3 are reviewed based on the following six criteria:



Social

- Land use
- Odour and noise
- Aesthetics
- Property requirements
- Archaeological and Cultural Resources

Environmental

- Regulated area encroachment
- Environmental impacts
- Environmental Approvals

Technical

- Implementation phasing
- Operational issues
- Maintenance
- Constructability

Legal

- Land acquisition
- Planning permits
- Easement requirements

Economic

- Financial impacts
- Operation and maintenance costs
- Lifecycle cost-benefit analyses

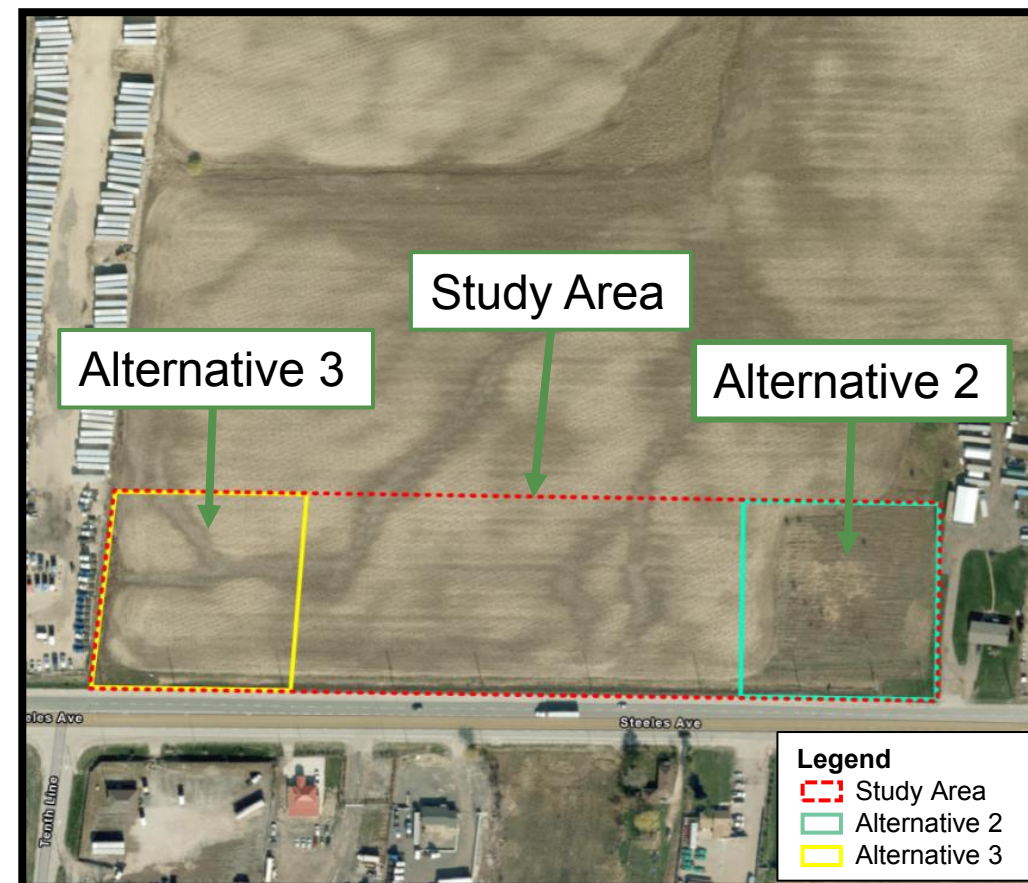
Climate Change

- Climate change mitigation
- Climate change adaptation

Social Criteria



- Neither alternative location has been developed
- The facility will be built following relevant urban design guidelines
- During construction, temporary measures will be employed for dust and noise control
- Once the facility is operational, dust generation will not be present, and the facility will have an odour control unit
- Neither alternative:
 - Contains archaeological resources
 - Contains a cultural heritage resource or cultural heritage landscape
 - Is a property that is listed in the *Ontario Heritage Act* Register

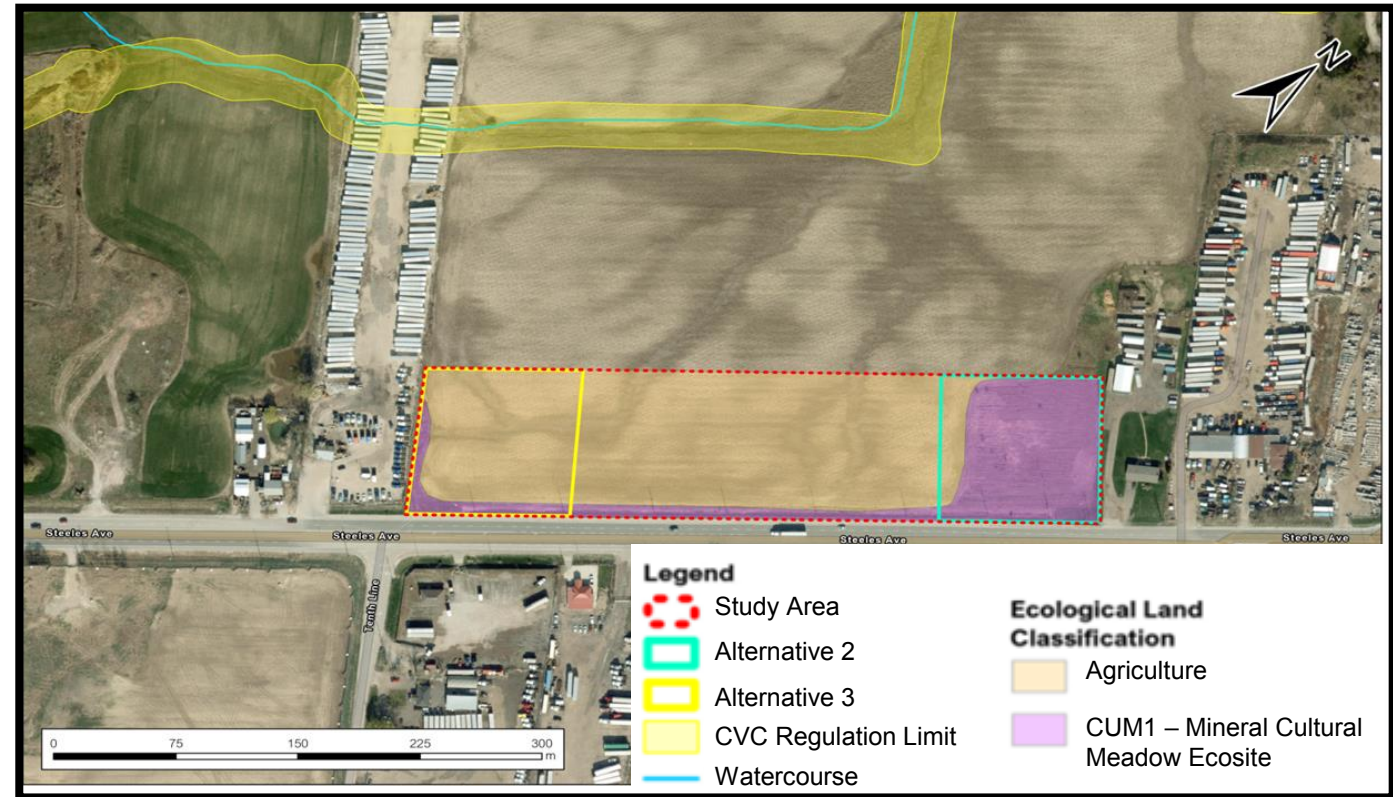


Shown above: study area

Environmental Criteria



- The study area consists of cultural meadow and active agricultural lands
- A cultural meadow is an open habitat typically made up of grasses and flowering plants that have grown in a human-disturbed (for example, weeds) or managed site (for example, a hay field)
- The cultural meadow located in Alternative 2 is a confirmed habitat for monarch butterflies, a species of special concern provincially and federally.
- No other provincially regulated habitats or species were identified during field and desktop review
- Neither site is within a regulated area (for example, watercourses or wetlands) and both sites require similar environmental approvals



Shown above: natural environment classifications

Technical Criteria

- Because of ground elevations in the area, Alternative 3 would be a deeper pumping station. A deeper pumping station is more difficult to construct, may require slightly larger pumps and greater construction dewatering
- Both alternatives would have similar operations and maintenance requirements
- Either alternative will need to be able to pump a large range of flows as the area develops, from 4 L/s to 195 L/s
- Access to either alternative site will be designed to relevant Region access and transportation requirements and guidelines.



Shown above: pumps at a Halton wastewater pumping station

Legal Criteria



- Legal criteria speak to the availability of the property, permitting and approvals associated with the alternatives, and any easement requirements
- The Region does not own the land in the study area. The Region will have to purchase the land needed for either alternative
- Both alternatives will require the same permits and approvals
- No easements will be required for either alternative.



Shown above: Alternative 2 site, looking west

Economic Criteria



- The economic criteria consider capital and operating costs of each alternative over its lifecycle
- Capital Costs:
 - Capital costs are one-time expenses paid for the construction and setup of the pumping station
 - The wastewater pumping station, associated sewers and forcemains for Alternative 2 will cost approximately \$60 million. Alternative 3 will cost more, as the pumping station will be deeper, the pumps may be larger, and there would be more dewatering during construction
- Operating Costs:
 - Operating costs include the cost to operate and maintain the station over its lifecycle, which is from initial operation to decommissioning
 - The lifecycle costs to operate either alternative will be about the same

Climate Change Criteria



- Climate change considerations for the alternatives can be viewed under two lenses: climate change mitigation, and adaptation
 - Climate Change Mitigation: The ability of an alternative to mitigate climate change effects
 - Climate Change Adaptation: The ability of an alternative to adapt to changing conditions due to climate change

Mitigation	Adaptation
<ul style="list-style-type: none"> • Both alternatives are remotely monitored, reducing greenhouse gas (GHG) emissions for operator travel • Both alternatives will employ efficient motors and operational approaches, reducing the unnecessary use of energy 	<ul style="list-style-type: none"> • Both alternatives will be supplied with a standby generator in case of prolonged power failure due to adverse weather events. • Both alternatives are constructed outside of a floodplain, minimizing the chance of future flooding due to severe wet weather events

Evaluation of Alternatives – 1

Alternative 2

- The land has not been developed
- No archaeological or cultural heritage potential
- Dust and noise control during construction
- Odour control once the facility is operational



Alternative 3

- The land has not been developed
- No archaeological or cultural heritage potential
- Dust and noise control during construction
- Odour control once the facility is operational

-
- Monarch butterfly habitat
 - Minor terrestrial environmental impacts due to construction
 - Neither site is within a regulated area
 - Similar environmental approvals are required



- Minor terrestrial environmental impacts due to construction
- Neither site is within a regulated area
- Similar environmental approvals are required

Evaluation of Alternatives – 2

Alternative 2

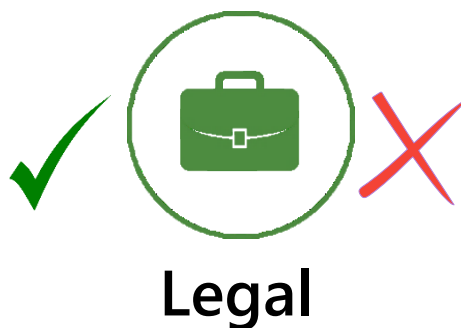
- Suitable for the proposed wastewater pumping station
- Shallower station than Alternative 3. Easier to construct.
- Site access will be designed to meet Region guidelines and standards



Alternative 3

- Suitable for the proposed wastewater pumping station
- Deeper Station than Alternative 2 due to deeper sewer entries. More difficult to construct.
- Site access will be designed to meet Region guidelines and standards

-
- Land more readily available
 - Both alternatives will require the same permits and approvals.
 - No easements are required for either alternative



- Land less readily available
- Both alternatives will require the same permits and approvals.
- No easements are required for either alternative

Evaluation of Alternatives – 3

Alternative 2

- Approximately \$60 million to build the pumping station, associated sewers and forcemains
- Operating cost for both alternatives will be about the same over the station's lifecycle



Alternative 3

- More than \$60 million to build the pumping station, associated sewers and forcemains as the pumping station will be deeper than Alternative 2
- Operating cost for both alternatives will be about the same over the station's lifecycle

-
- Similar climate change mitigation and adaptation measures as Alternative 3



- Similar climate change mitigation and adaptation measures as Alternative 2

Summary Evaluation of Alternatives

Criteria	Alternative 2	Alternative 3
Social	✓	✓
Environmental	—	✓
Technical	✓	—
Legal	✓	✗
Economic	✓	—
Climate Change	✓	✓
Overall	✓	✗



Preferred Alternative: Alternative 2

Preliminary Preferred Alternative

- Based on the evaluation, Alternative 2 is the preliminary preferred solution, subject to input received from the public
- Alternative 2 was selected because it is less expensive and easier to construct
- The wastewater pumping station will have a dry well that houses pumps, two underground wet well cells for sewage collection and storage, an electrical room, an odour control room, and an underground tank to store excess sewage during severe wet weather events



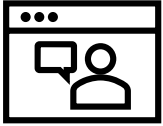
Shown above: preferred wastewater pumping station site layout

Next Steps

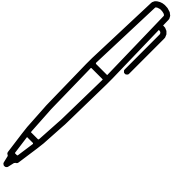
Following this Public Information Centre, the project team will:

- Review and consider feedback from the public, agencies, Indigenous Communities and First Nations, and other interested and affected parties
- Finalize the Project File Report and issue a Notice of Completion in early 2025 (Available for 30 days for public review)
- Start construction on the facility in late 2026

How to get involved



Watch the PIC video and/or review the presentation



Provide comments and feedback through our online survey by November 23, 2024



Visit the [Municipal Class Environmental Assessment studies webpage](#) on **halton.ca**



Contact the Region's Project Manager, Carlos Alonzo Moya, to join the study mailing list or provide feedback in an alternate manner. We will review your comments and take your feedback into consideration as we move into the next phase

Contact the Project Team

We want to hear from you!

If you prefer to provide comments by phone or email or require an alternative format of these materials, please contact a member of the project team:

Carlos Alonzo Moya, M.A.Sc., P.Eng.

Project Manager, Water & Wastewater Planning

Halton Region

905-825-6000 ext. 7426

carlos.alonzomoya@halton.ca

Jonathan Rudyk, M.Eng., P.Eng.

Consultant MCEA Lead

R.V. Anderson Associates Limited

416-497-8600 ext. 1497

jrudyk@rvanderson.com