Halton Hills #4 Wastewater Pumping Station Municipal Class Environmental Assessment (MCEA) Public Information Centre

The following provides a text version of the audio included in the Halton Hills #4 Wastewater Pumping Station M-C-E-A Public Information Centre video.

Slide 1 – Public Information Centre

Hi there, and welcome to Halton Region's Public Information Centre for the Halton Hills #4 Wastewater Pumping Station. This study is being carried out under Schedule B of the Municipal Class Environmental Assessment, or M-C-E-A Study.

Slide 2 – Welcome!

In this video, we will:

Introduce the project, describe the M-C-E-A process, present the problem and opportunity statement, describe how we identify and evaluate alternative solutions and present the preliminary preferred solution. We will also detail the next steps and share how to get involved in the project.

Please note that comments received during this study will be reviewed and used to help confirm the recommended alternative for the Halton Hills #4 Wastewater Pumping Station M-C-E-A Study.

In the next slide, we will discuss the project background and how this project came about.

Slide 3 – 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 (named Halton Hills #4 wastewater pumping station) was identified to service this area. To follow provincial requirements, a Schedule 'B' M-C-E-A study is required to identify the location of the Halton Hills #4 wastewater pumping station.

Given this information, we can now take a look at the study area of this project.

Slide 4 – Study Area

The map on the left of the slide shows the Premier Gateway Employment Area in orange and a corridor protection zone for the future Highway 413 transportation project in white. The M-C-E-A study area is to the northwest of the Winston Churchill Boulevard and Steeles Avenue

intersection and is shown on the map to the right in green. Before discussing project specifics further, we will first describe the M-C-E-A process on the next slide.

Slide 5 – M-C-E-A Process

A Municipal Class Environmental Assessment, or M-C-E-A, is a decision-making process that all municipalities in Ontario follow for building new infrastructure. The process ensures you, the public, are informed about the study and have an opportunity to ask questions and provide your input. The diagram goes through the steps of the M-C-E-A process.

This study is being completed under Schedule 'B' of the Municipal Class Environmental Assessment and will follow Phases 1, 2 and 5 of the M-C-E-A process. Phases 3 and 4 of the M-C-E-A process are not required for Schedule 'B' projects.

Phase 1 is to identify the problem and opportunity. In other words, identify the purpose of the project. This phase was completed this past summer.

During Phase 2, we develop and evaluate solutions, identify the preliminary preferred solution and hold a Public Information Centre to present the project and gather input from interested parties. We are currently in this phase.

After Phase 2, a Project File Report will be prepared to document the planning and decision-making process. A Notice of Completion will be issued, and the Project File Report will be made available for a 30-day public review period.

The final phase, or Phase 5, is the implementation of the study findings, in this case, the design and construction of the facility.

Now that we understand the M-C-E-A process, we can take a look at the problem and opportunity statement, which describes the purpose of the study.

Slide 6 – Problem and Opportunity Statement

The problem and opportunity statement describes the purpose of the study, which is to select the location of the new Halton Hills #4 wastewater pumping station to allow for the development of the Premier Gateway Employment Area. A map of the study area is also provided on this slide, with the study area shown in green.

Now that the purpose of the project is presented, let's get back to the specifics of the study.

Slide 7 – Alternative Locations for the Wastewater Pumping Station

This slide has a map that shows the location of two alternatives within the study area. Alternative 2, shown in blue, is at the eastern limit of the study area, and Alternative 3, shown in yellow, is at the western limit. Each alternative on the map is 100 meters by 100 meters. Alternative 1 is not pictured and represents a "Do Nothing" approach. This approach is common in M-C-E-A studies, as it allows for comparing the alternatives against the existing conditions or

base case. In this M-C-E-A study, this alternative will not be considered further as it does not address the problem and opportunity statement.

Slide 8 – Short-Listed Alternative Locations

This slide shows Alternative 2 on the left and Alternative 3 on the right. Each alternative shows the proposed site layout, the footprint of the building and storage tank, the ringed driveway, the entrance and exit from Steeles Avenue and the incoming sewer and outgoing forcemains. For reference, forcemains are large wastewater mains that use pressure to help move wastewater through the Region's system.

Slide 9 – Existing Site Conditions and Evaluation Criteria

We will now review the existing site conditions in the study area and describe how we are evaluating the two alternatives. Both Alternatives 2 and 3 are reviewed based on the following six criteria: social, environmental, technical, legal, economic and climate change. The parameters considered for the social criterion are land use, odour and noise, aesthetics, property requirements and archaeological and cultural resources. The parameters considered for the environmental criterion are regulated area encroachment, environmental impacts and environmental approvals. The parameters considered for the technical criterion are implementation phasing, operational issues, maintenance and constructability. The parameters considered for the legal criterion are land acquisition, planning permits and easement requirements. The parameters considered for the economic criterion are financial impacts, operation and maintenance costs and lifecycle cost-benefit analyses. The parameters considered for the climate change criterion are climate change mitigation and climate change adaptation.

Slide 10 – Social Criteria

We will start with the social environment of Alternatives 2 and 3. The map on the right shows the study area and the location of Alternatives 2 and 3. Neither alternative location has been developed. The facility will be built following relevant urban design guidelines for landscape buffers, on-site lighting and architectural features. During construction, temporary measures will be employed to control dust and noise and comply with local by-laws. Once the facility is operational, dust generation will not be present, and the facility will have an odour control unit.

We also conducted an archaeological assessment, which is a study that helps us determine if there are any archaeological resources on site. The study area has been cleared of archaeological potential, meaning that the area is unlikely to contain archaeological resources, and no further studies are required. Neither alternative contains a cultural heritage resource or landscape or is a property listed in the Ontario Heritage Act Register.

Next, let's review the natural environment.

Slide 11 – Environmental Criteria

The map on the right shows the natural environment classifications of the study area and denotes Alternatives 2 and 3. The study area consists of cultural meadow, shown in purple, and agricultural lands, shown in orange. 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 that makes up most of Alternative 2 is a confirmed habitat for monarch butterflies, which is a species of special concern. No other provincially regulated habitats or species were identified during field and desktop reviews. Neither site is within a regulated area such as watercourses or wetlands, and both sites require similar environmental approvals.

Now that we have reviewed the social and natural environment of the study area and the alternatives, we can look at the technical requirements of this project.

Slide 12 – Technical Criteria

Because of the ground elevations in the area, Alternative 3 would be a deeper pumping station and have a deeper sewer entry than Alternative 2. A deeper pumping station is more difficult to construct and may require larger pumps and greater construction dewatering. Both alternatives will have similar operation and maintenance requirements, however.

Either alternative will need to be able to pump a large range of flows as the area develops, from 4 litres per second to 195 litres a second.

Access to either alternative site will consider relevant Region access and transportation requirements and guidelines.

A photo of some pumps at another Halton pumping station is shown on this slide.

In the following slide, we will review the legal background for the alternatives.

Slide 13 – 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 would 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.

The photo on the slide shows the existing Alternative 2 site, looking to the west towards Alternative 3.

Next, we will review the economic criteria.

Slide 14 – Economic Criteria

Economic criteria considers the capital and operating costs of each alternative over its lifecycle.

Capital costs are one-time expenses paid for the construction and setup of the pumping station. The capital costs to build Alternative 2 are approximately $60 million dollars. These include the wastewater pumping station, associated sewers and forcemains. Alternative 3 will cost more, as the pumping station will be deeper, the pumps may be larger, and there may be more dewatering during construction.

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.

The last criteria to review is climate change.

Slide 15 – Climate Change Criteria

Climate change criteria for the alternatives can be viewed under two lenses: climate change mitigation and climate change adaptation.

Climate change mitigation is the ability of an alternative to mitigate climate change effects and impacts. For example, considering reducing greenhouse gas emissions from the pumping station.

Climate change adaptation is the ability of an alternative to adapt to changing conditions due to climate change. For example, what would happen if there were more frequent storms?

The table provides some examples of mitigation and adaptation for both alternatives.

Mitigation measures include operating the station remotely, which reduces greenhouse gas emissions for operator travel, or using efficient motors and operational approaches, reducing the unnecessary use of energy.

Adaptation measures for both alternatives include the supply of a standby generator in case of prolonged power failure due to adverse weather events and that both alternatives would be constructed outside of a floodplain, minimizing the chance of future flooding due to severe wet weather events.

Now that all six criteria have been reviewed, we will summarize our findings and determine the preliminary preferred alternative for the location of the pumping station.

Slide 16 – Evaluation of Alternatives – 1

Both alternatives have similar social impacts. Alternatives 2 and 3 are in lands that have not been developed and have no archaeological or cultural heritage potential. During construction, temporary measures will be employed for dust control, and noise will comply with local by-laws. Once the facility is operational, dust generation will not be present, and the facility will have an odour control unit.

From an environmental criteria perspective, Alternative 3 is slightly better than Alternative 2. Both sites are expected to have moderate environmental impacts due to construction. While

Alternative 2 has plants considered habitat for monarch butterflies, provincial guidelines do not offer habitat protection for this species. Neither site is within a regulated area, and similar environmental approvals are required.

Slide 17 – Evaluation of Alternatives – 2

Technical is the next criteria to review. Both alternatives are suitable for the proposed facility. Building at Alternative 2 will result in a shallower station depth compared to Alternative 3 due to the ground elevations. This makes Alternative 2 easier to construct. Both alternatives have similar operation requirements, and site access for each will be designed to meet the Region's guidelines and standards.

With the legal criteria, we see some differences. The land for Alternative 2 is more readily available than Alternative 3. Both alternatives will require the same permits and approvals, and no easements are required for either alternative.

Slide 18 – Evaluation of Alternatives – 3

For the Economic criteria, Alternative 2 has a lower capital cost than Alternative 3, as there are higher construction costs associated with building deeper structures. Approximately $ 60 million dollars is required to build the pumping station, associated sewers, and forcemains at Alternative 2. Alternative 3 would be more costly than that. The operating cost for both alternatives will be about the same over the station's lifecycle.

Lastly, both Alternatives have similar climate change adaptation measures as they are not located in a floodplain. Both alternatives have similar mitigation measures to reduce greenhouse gas emissions, such as the station being operated remotely, which reduces the need for staff to commute to the station.

Slide 19 – Summary Evaluation of Alternatives

Based on the overall evaluation, Alternative 2 is the preliminary preferred alternative, with Alternative 2 scoring equally or better in all criteria except for environmental.

Slide 20 – Preliminary Preferred Alternative

The preferred site is considered preliminary until interested and affected parties provide input to this study. Alternative 2 was selected because it is less expensive and easier to construct.

The Halton Hills #4 wastewater pumping station will be equipped with a dry well that houses pumps, two underground wet well cells for collecting and storing sewage, an electrical room, an odour control room, and an underground tank to store excess sewage during severe wet weather events.

The Alternative 2 site layout is shown on the right for reference.

Slide 21 – Next Steps

The next steps for this project are to document, compile, and respond to questions and comments from this PIC. Next, the project team will draft the Project File Report and provide the Notice of Completion, scheduled for early 2025. The Project File Report and Notice of Completion will be available for 30 days for public review. Construction is scheduled to start in late 2026.

Slide 22 – How to get involved

We want to hear from you! To get involved, you can:

- Watch the PIC videos and 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.

Slide 23 – Contact the Project Team

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. Your input is valuable to us.

Thank you very much for taking the time to watch this video and learn more about the study!