Replacement, Rehabilitation or Relocation of the Aldershot Creek Wastewater Main

Municipal Class Environmental Assessment Study
Schedule 'B'

Public Information Centre
Virtual Consultation

March 30 to April 20, 2023

Halton REGION

Associated Engineering

Purpose of the Public Information Centre

Halton Region is undertaking a Municipal Class Environmental Assessment (MCEA) Study to assess options for the replacement, rehabilitation or relocation of the Aldershot Creek wastewater main in the City of Burlington.

The purpose of this Public Information Centre (PIC) virtual consultation is to present the work completed to date including:

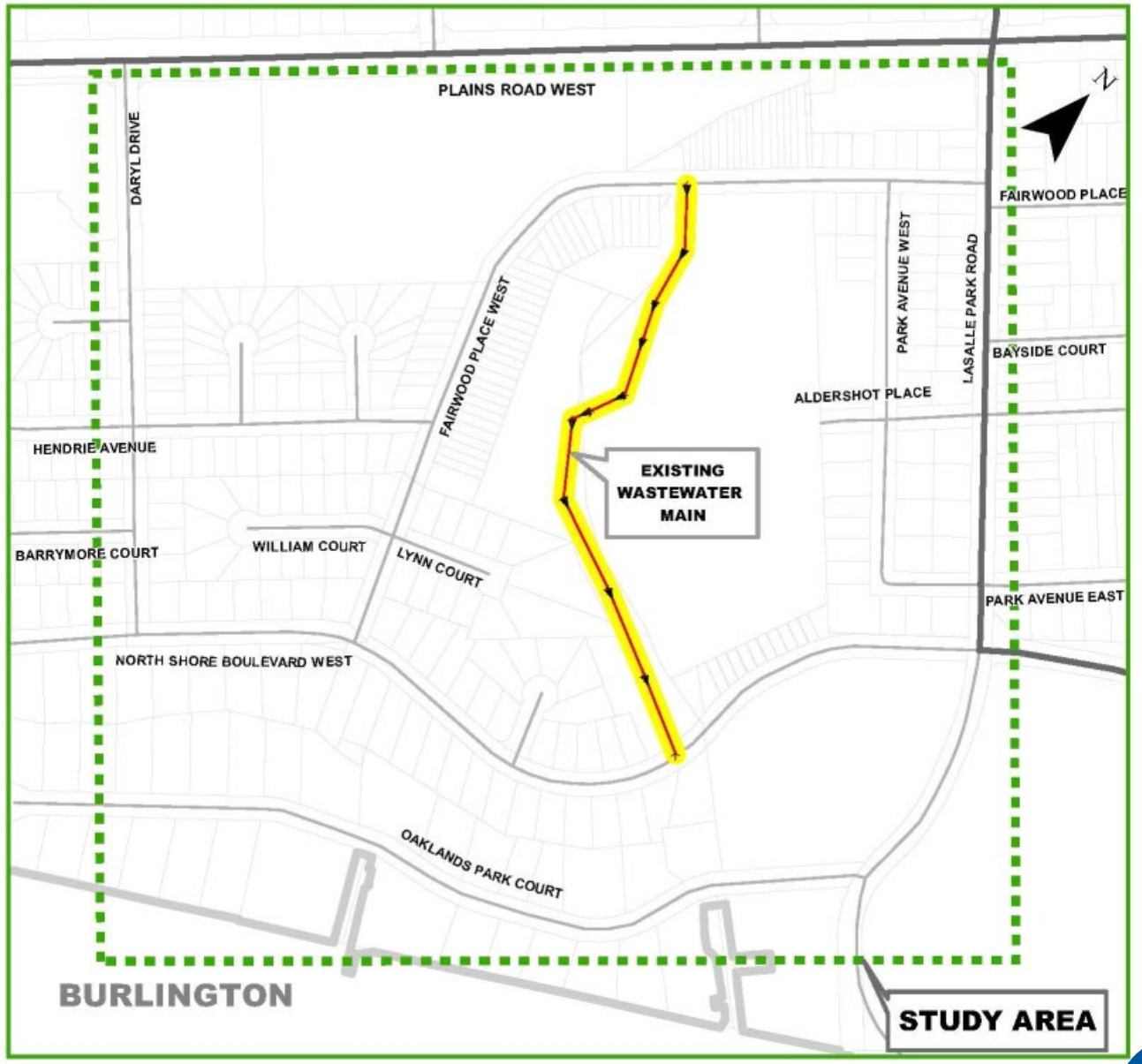
- the study process;
- problem and opportunity being considered for this study;
- existing conditions and key project requirements;
- alternative servicing options;
- evaluation criteria and process;
- recommended preferred solution; and
- next steps in the MCEA process.

To learn more about this study, please visit the Municipal Class Environmental Assessments page on **halton.ca.**

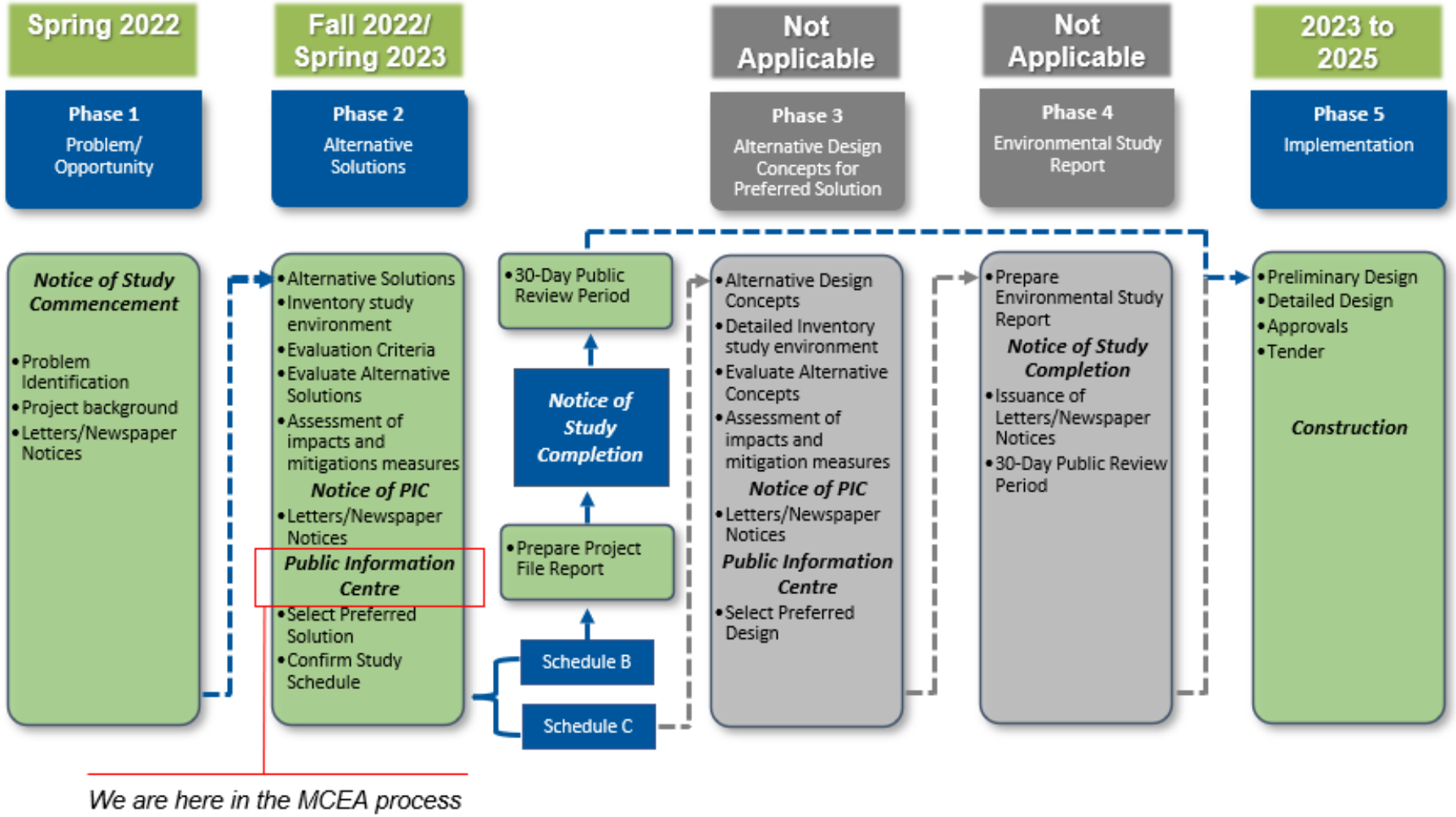
We invite you to share your comments and questions about the information presented by completing the online comment form on the consultation webpage, or by contacting the Halton Region Project Manager Mark Bajor at 905-825-6000 ext. 7921 or mark.bajor@halton.ca.

About the Study

- The purpose of the MCEA is to identify and address known issues with the existing wastewater main along West Aldershot Creek.
- Adjacent figure illustrates the MCEA study area.



Timeline and Process



Problem and Opportunity

- The existing wastewater main requires replacement due to age. It is also threatened by severe erosion within the West Aldershot Creek valley, including the sewer section crossing the creek and several maintenance holes, which are located within the creek banks and bed.
- Halton Region has initiated the MCEA study to develop and evaluate servicing options for replacement of the West Aldershot Creek wastewater main.
- Servicing options will accommodate capacity needs, improve accessibility for Regional Operations staff to complete maintenance and repair works, and reduce the environmental impacts on the West Aldershot Creek corridor.

Examples of Exposed Maintenance Holes in West Aldershot Creek Corridor

Existing Conditions – Wastewater Infrastructure

Key Project Requirements

Several key issues and considerations guided the development and evaluation of options. The final option selected must meet the following requirements, as a minimum:

- accommodate future capacity requirements;
- improve accessibility of wastewater infrastructure by Regional Operations staff for maintenance and repairs;
- minimize impact on natural environment and Creek corridor;
- minimize impact to Aldershot High School and surrounding community; and
- minimize construction impact, timing and cost.

Several baseline condition studies have been completed, including the following:

- Archaeological Assessment
- Natural Environment Assessment
- Fluvial Geomorphological Assessment
- Geotechnical Assessment

The findings and recommendations of the listed studies support the evaluation of the proposed options.

The completed studies will be appended to the final Project File Report, which will be filed publicly.

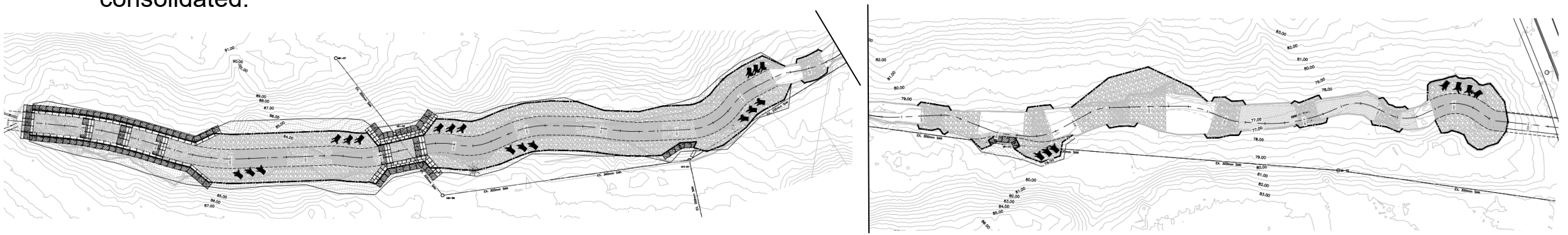
Related Studies and Adjacent Projects

Aldershot Creek Revitalization Project

- City of Burlington completed *West Aldershot Creek Erosion Control MCEA* to identify stabilization and restoration alternatives for West Aldershot Creek.
- Preferred solution will improve channel conditions and mitigate erosion in the long-term.
- Creek rehabilitation works, and the Region's wastewater works will be coordinated to ensure construction and restoration works within the Creek valley are consolidated.

Sewer Upsizing

- An upgrade of the wastewater main along Fairwood Place, from Hendrie Avenue to North Shore Blvd and along North Shore Blvd to LaSalle Park WWPS, is planned to address capacity issues.
- Coordination and consolidation (if feasible) between the planned wastewater main upsizing and the Aldershot wastewater main improvements were considered during the MCEA.



West Aldershot Creek Revitalization Project Proposed Rehabilitation Design

Options

Based on the Problem and Opportunity Statement and key project requirements, proposed servicing options for the Aldershot Creek wastewater main include:

- Option 1 – Do Nothing
- Option 2 – Re-routing of Sewers to the Eastern Side of the Creek
- Option 3 – Two Sewer Systems and Pumping Station
- Option 4 – Two Sewer Systems and Gravity Sewers
- Option 5 – Re-routing of Sewers to the Eastern Side of the Creek via Trenchless Crossing
- Option 6 – Two Sewer Systems and Gravity Sewers with Townhouse Complex Flows to East
- Option 7 – Replace the Existing Wastewater Main along a Similar Alignment including Trenchless Creek Crossing

Where applicable, the wastewater main will be sized to accommodate for future growth.

Preliminary screening eliminated Options 1, 3 and 4.

Option 2: Re-routing of Sewers to the Eastern Side of the Creek

- New wastewater main conveying flows from Fairwood Place, behind the Fairwood Place Townhouses, crossing to the east side of the creek, south along Aldershot HS field, to LaSalle Park WWPS
- Private minor system of Townhouses will be modified
- Wastewater main will accommodate capacity requirements for future growth
- New permanent easements required from Townhouses, HDSB and City of Burlington
- Removes existing wastewater infrastructure from creek bed and banks
- Minimal impact on local community during construction

Option 5: Re-routing of Sewers to the Eastern Side of the Creek via Trenchless Crossing

- New wastewater main conveying flows from Fairwood Place to LaSalle Park WWPS via crossing of Aldershot Creek and along Aldershot HS field
- Private minor system of Townhouses will remain as-is
- Wastewater main will accommodate capacity requirements for future growth
- New permanent easements required from HDSB and City of Burlington
- Minimal impact on local community during construction
- Removes existing wastewater infrastructure from creek bed and banks
- One new creek crossing

Option 6: Two Sewer System and Gravity Sewers with Townhouse Complex Flows to East

- Two separate wastewater mains conveying flows on the east and west side of Aldershot Creek
- On west side, new wastewater main conveys flows on Fairwood Place and North Shore Blvd to LaSalle Park WWPS
- On east side, flows from Townhouse complex will be conveyed to new wastewater main along Aldershot HS field to LaSalle Park WWPS
- New permanent easements required from HDSB and City of Burlington
- Significant impact on the community during construction
- Removes existing wastewater infrastructure from creek bed and banks

Option 7: Replace the Existing Wastewater Main along a Similar Alignment including Trenchless Creek Crossing

- New wastewater main conveying flows along Aldershot Creek in similar location as existing wastewater main but removed from the creek bed and banks
- Private minor system of Townhouses will remain as-is
- Wastewater main will accommodate capacity requirements for future growth
- No new permanent easements required
- Minimal impact on local community during construction
- One new creek crossing

Evaluation Criteria

As part of the MCEA process, the developed options were evaluated against five categories and respective criteria, with each criteria assuming an equal weighting of 5%, to determine the preferred solution for the study area.

Evaluation Category	Overall Weight	Evaluation Criteria
Natural environment	20%	Terrestrial environment impacts
		Aquatic environment impacts
		Geotechnical considerations
		Climate change considerations
Socio-cultural environment	25%	Impact on existing land use
		Short-term/construction impact to local residents/community
		Short-term/construction impact to school community
		Long-term impact on local residents/community
		Impact on archaeological resources, Indigenous lands, treaty rights

Evaluation Category	Overall Weight	Evaluation Criteria
Legal/ jurisdictional environment	15%	Land acquisition/easement requirements
		Complexity of approval process/regulatory constraints
		Accessibility and ownership considerations
Technical/ operational environment	25%	Complexity of construction
		Ability to meet Region design standards/ CH requirements
		Implementation phasing
		Impacts to utilities
		Complexity of operation and maintenance
Economic environment	15%	Capital construction costs
		Land acquisition costs
		Operation and maintenance costs

Evaluating the Options

Category	Option 2	Option 5	Option 6	Option 7
Natural environment	Less Preferred	More Preferred	Moderately Preferred	More Preferred
Socio-cultural	Moderately Preferred	More Preferred	Less Preferred	Most Preferred
Legal and jurisdictional	Less Preferred	Moderately Preferred	More Preferred	More Preferred
Technical / operational	Moderately Preferred	More Preferred	Less Preferred	Most Preferred
Economic	Less Preferred	Moderately Preferred	More Preferred	More Preferred
Overall Summary	**Least Preferred** • Option 2 is least preferred as it ranks lower in several categories and has the highest capital cost • It has the greatest impact on existing vegetation and need for tree removal • It will have a minor impact on the community in general, but will significantly impact the Townhouse residents and Aldershot High School community during construction	**More Preferred** • Option 5 is more preferred than Options 2 and 6, but slightly less preferred than Option 7 due to the higher capital and maintenance costs • It has low impact on the natural environment and community compared to Options 2 and 6 • Option 5 will include a new creek crossing, which meets Conservation Halton design requirements	**Moderately Preferred** • Option 6 has the greatest impact on community during construction due to significant road closures / detours required along Fairwood Place and North Shore Blvd compared to Options 2, 5 and 7 • It will require significant coordination with utilities and may require regrading of the Townhouse rear yard • It has a lower capital cost compared to Options 2 and 5	**Most Preferred** • Option 7 is most preferred as it ranks higher in all categories • It has the least amount of impact on the natural environment and community • It requires no new permanent easements • Option 7 will include a new creek crossing which meets Conservation Halton design requirements • It has the lowest capital cost

The full detailed evaluation matrix will be included in the final Project File Report, which will be filed publicly.

Preliminary Preferred Option

Option 7 – Replace the Existing Wastewater Main along a Similar Alignment including Trenchless Creek Crossing

- Accommodates capacity requirements
- It has minimal impact to community
- It has minor impact on existing vegetation / minor tree removal
- It will remove at-risk wastewater infrastructure from the sensitive creek corridor
- Mitigation of impacts due to creek crossing and wastewater main installation will be identified in the Project File Report for this study

Next Steps

- Review and respond to questions and comments received through this PIC
- Make refinements to the preferred option (as needed) based on feedback received
- Undertake additional design review with regulatory agencies and directly affected Stakeholders as needed
- Prepare conceptual design of preferred option and identify mitigation measures and considerations for detailed design
- Document the MCEA study process, including all supporting technical studies, in the Project File Report (Spring/Summer 2023)
- File the Project File Report with the Notice of Study Completion for 30-day public review

How You Can Get Involved:

- Submit feedback through the online comment form or by reaching out to the Halton Region Project Manager Mark Bajor at 905-825-6000 ext. 7921 or mark.bajor@halton.ca
- Visit the Municipal Class Environmental Assessment Studies page on **halton.ca** to learn more about the study
- Review the Project File Report (Spring/Summer 2023)

Please submit your comments by **April 20, 2023**

Thank you for your participation!