Bolton Water and Wastewater Capacity Improvements Schedule 'C' Class EA

Public Information Centre (PIC) No. 1

Albion Bolton Community Centre – Auditorium 150 Queen Street South, Bolton ON, L7E 1E3

Date: Thursday, November 16, 2023

Time: 5-7 p.m.





Public Information Centre (PIC) No. 1



Key Dates

November 16, 2023



PIC No. 1 materials posted to project website (access via link or scan the QR code with a smart-phone):

https://www.peelregion.ca/public-works/environmental-assessments/caledon/bolton.asp

November 16 to November 30, 2023

If you have any questions or wish to provide your input, please speak with one of the project team members, and/or contact the Region of Peel Project Manager at ltalia.Ponce@peelregion.ca

December 11, 2023

Responses to questions and comments related to PIC No. 1 posted to project website.

Public Information Centre (PIC) Objectives



Present the study area and objectives.



Present the environmental assessment process.



Present environmental and technical background relevant to the development of servicing alternatives.



Receive feedback on the study process and servicing opportunities and constraints.

This is the first of three PIC for this study.

Stay Engaged!



- ✓ Please sign in and take a comment sheet.
- ✓ Have a look at the project information on display and chat with the Project Team.
- ✓ Provide your feedback regarding the information presented.



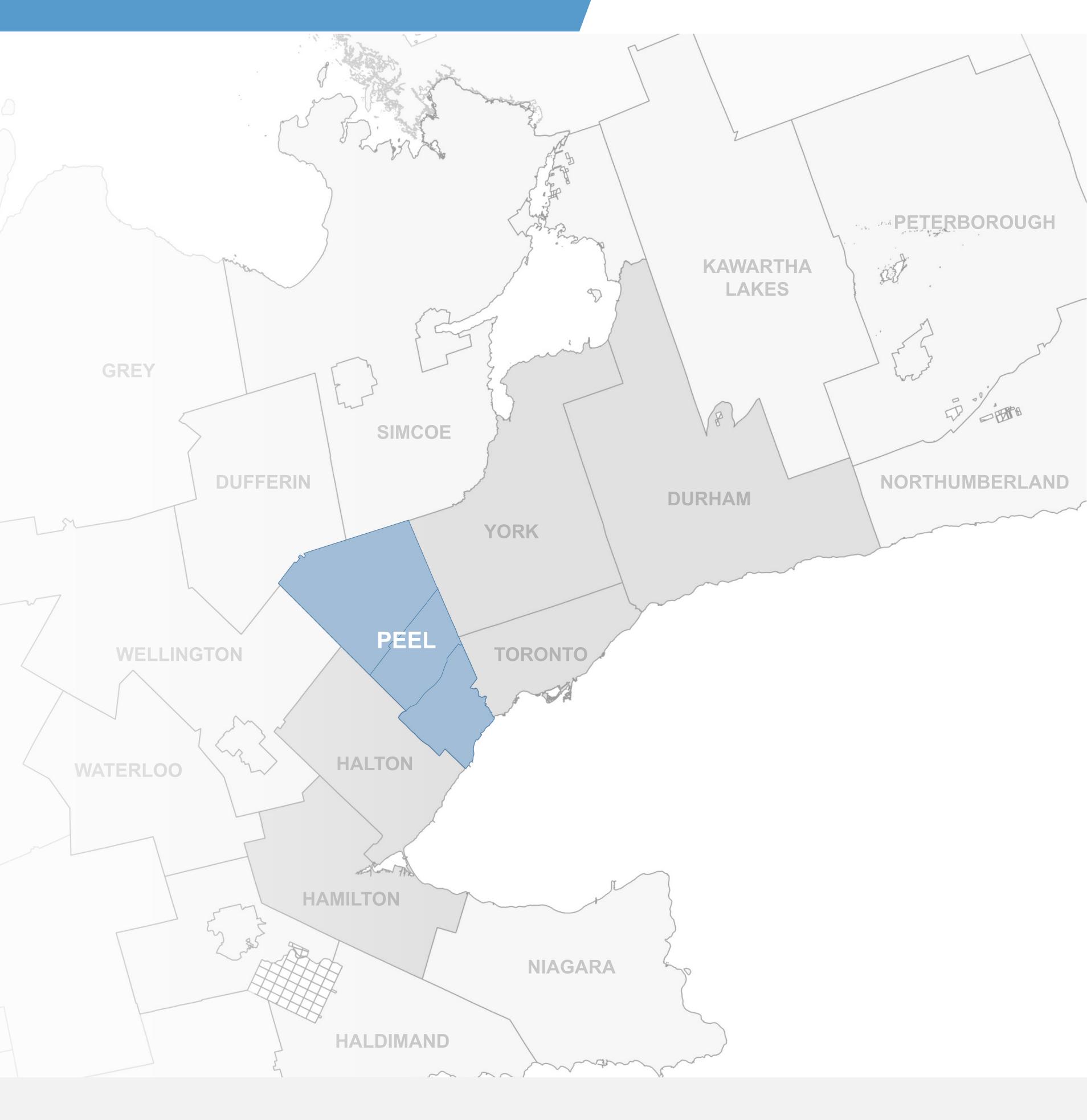
Land Acknowledgement



We would like to begin by acknowledging the land on which we gather, and which the Region of Peel operates, is part of the Treaty Lands and Territory of the Mississaugas of the Credit. For thousands of years, Indigenous peoples inhabited and cared for this land, and continue to do so today.

In particular we acknowledge the territory of the Anishinabek, Huron-Wendat, Haudenosaunee and Ojibway/Chippewa peoples; the land that is home to the Metis; and most recently, the territory of the Mississaugas of the Credit First Nation who are direct descendants of the Mississaugas of the Credit.

We are grateful to have the opportunity to work on this land, and by doing so, give our respect to its first inhabitants.





What is this study about?

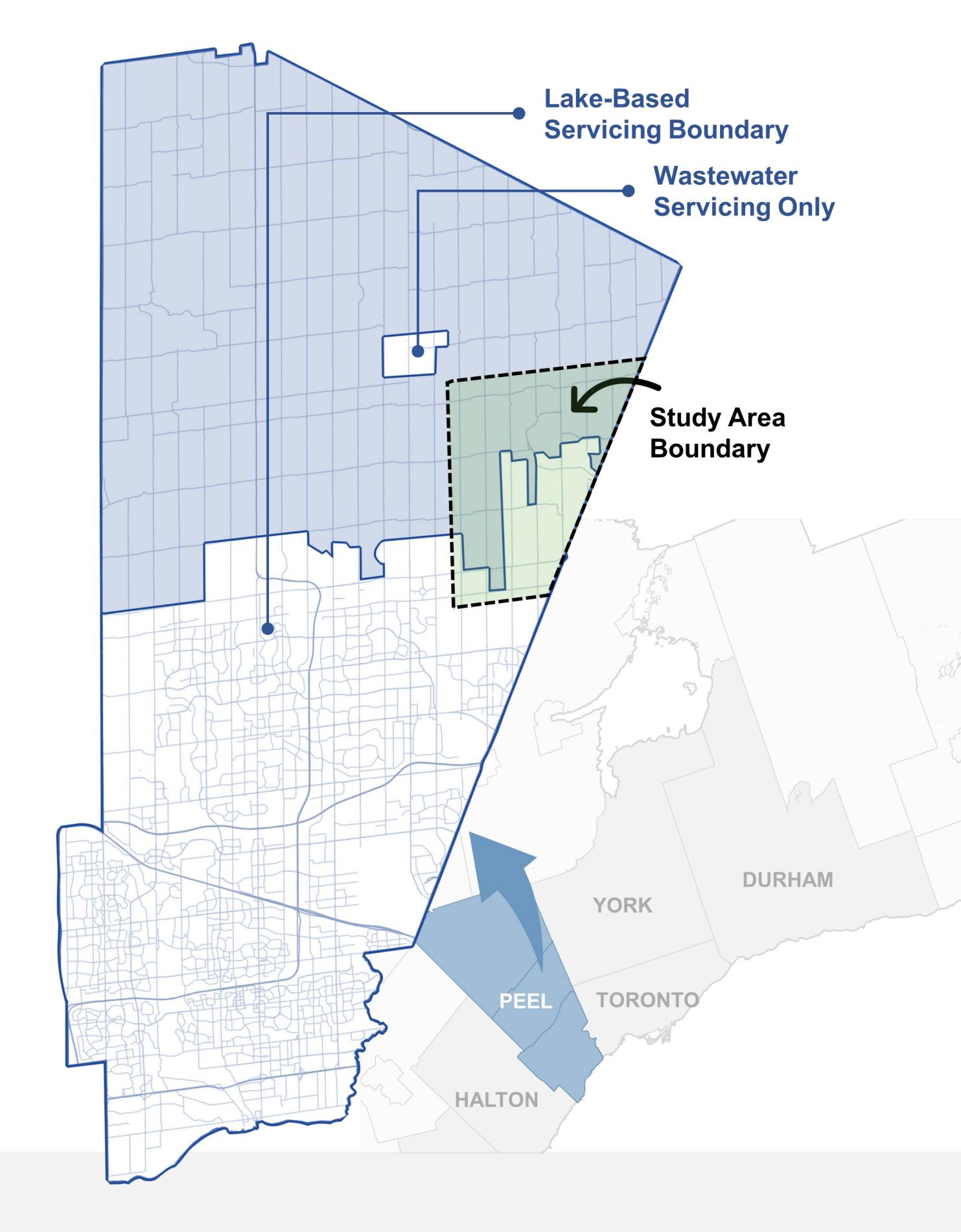
Background and Study Purpose



The Region of Peel completed a **Water and Wastewater Master Servicing Plan Update (2020)** which identified the need to construct new water and wastewater linear distribution and collection pipes and pumping facilities to service future planned population growth in the community of Bolton.

The Bolton Water and Wastewater Capacity Improvements Schedule 'C' Class Environmental Assessment (EA) builds off a Feasibility Study recently completed by the Region that outlined conceptual projects to service additional development proposed within both the intensification and greenfield growth areas in the community of Bolton. This study will develop, evaluate, and identify the optimal water and wastewater servicing solutions through the Class EA process to meet existing needs and growth.

- 1. Fulfil the Class Environment Assessment process.
- 2. Extend water and wastewater infrastructure to service future growth.
- 3. Ensure the best use of the existing water and wastewater infrastructure.
- 4. Develop, evaluate and select a preferred linear (piped) and pumped infrastructure solution.





How is the study being conducted?

Municipal Class Environmental Assessment Process



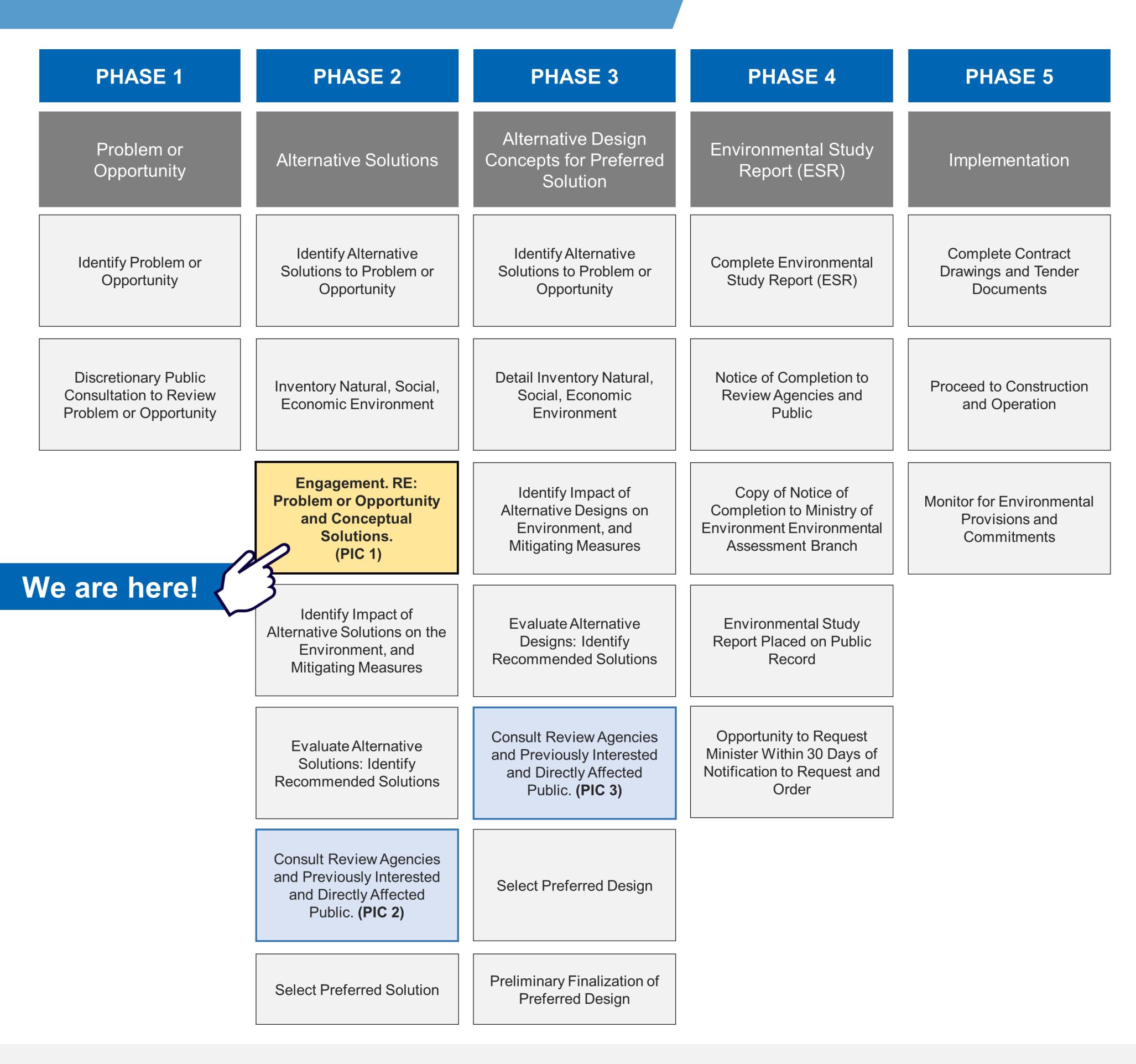
The Bolton Water and Wastewater

Capacity Improvements Study is being undertaken as a Schedule 'C' Class

Environmental Assessment (EA), satisfying Phases 1 to 4 of the Municipal Class

Environmental Assessment (MCEA) process (October 2000, as amended in 2007, 2011, 2015, and 2023).

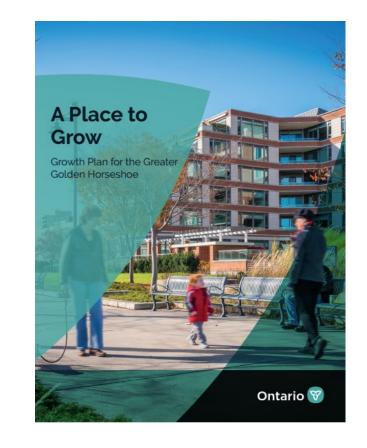
This study will hold three Public Information Centres (PICs) which are consultation and engagement milestones highlighted in yellow and blue.



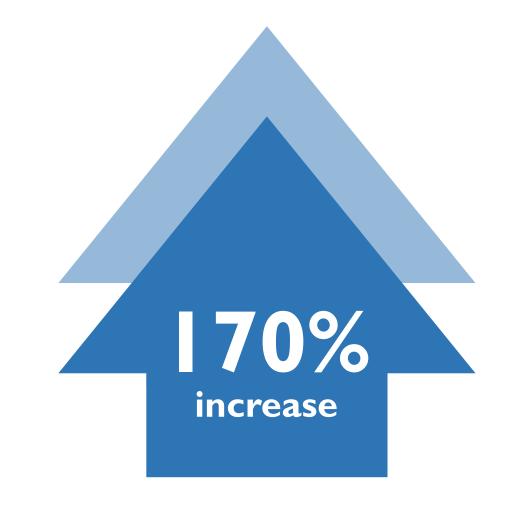


Why is this study being conducted? Problem and Opportunity Statement





A Place to Grow is the provincial framework for implementing growth in the Greater Golden Horseshoe (GGH) which the Region of Peel is situated within. The 2051 growth projections require extended water and wastewater services to the approved Regional Official Plan Amendment (ROPA) 30 areas in the Town of Bolton.



2021

90k

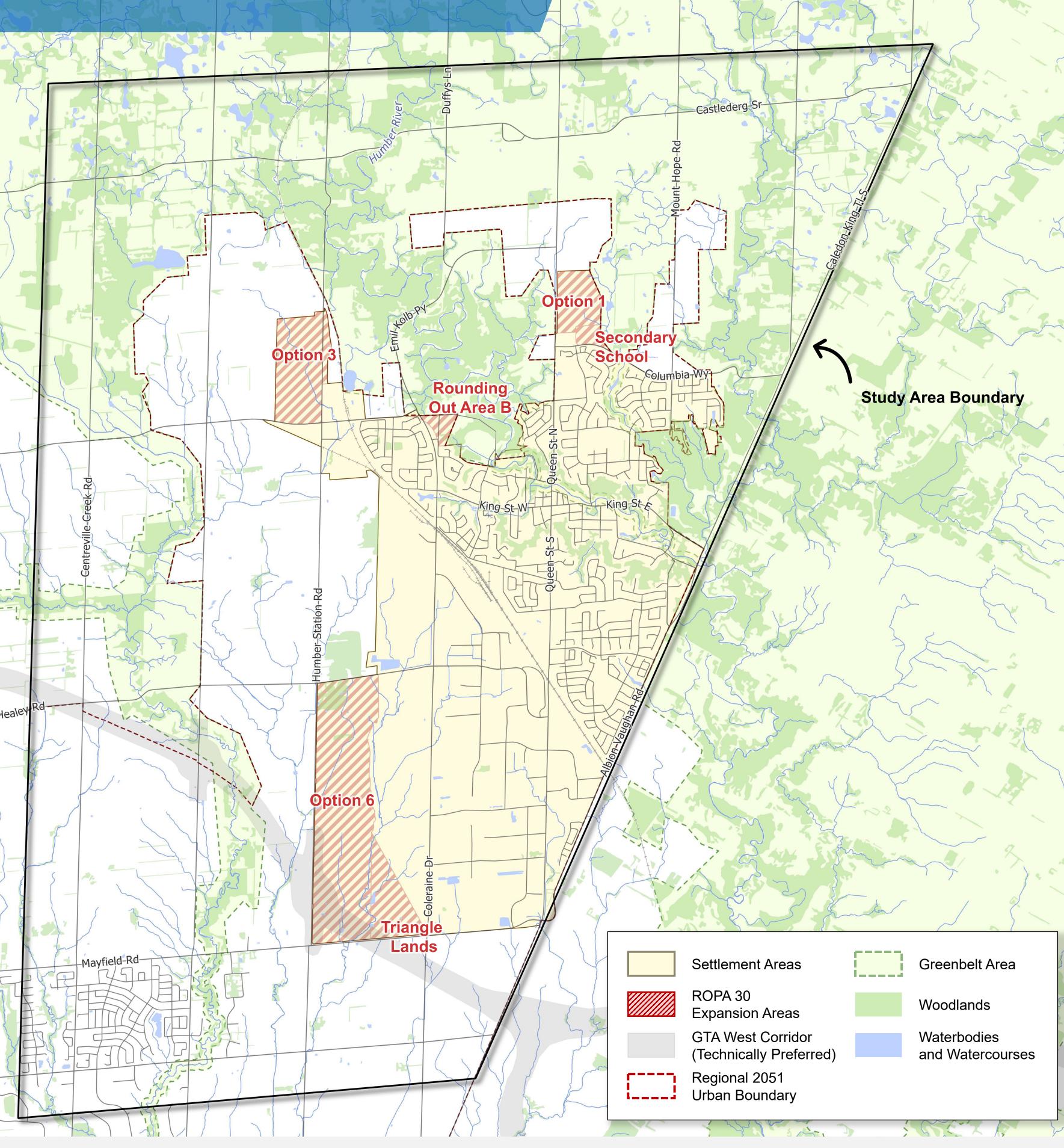
2051

241k

Population projections for the Bolton growth service area to 2051.

Problem and Opportunity Statement

To develop optimal water and wastewater servicing solutions to improve linear and pumping infrastructure to meet both existing needs and approved growth within the Region Official Plan Amendment (ROPA) 30 lands in the Community of Bolton.





Why is this study being completed? Project History and Timeline



2018

Bolton Residential Expansion Study (BRES)

Town of Caledon led study that recommended water and wastewater servicing solutions to meet existing and future (2041) needs within Bolton.

June 2020

Water and Wastewater Master Plan for the Lake-Based System

Region of Peel led study that recommended high level water and wastewater servicing solutions with the Region of Peel Lake-based systems, including Bolton, to support growth forecasts to 2041.

October 2020

Bolton Residential Expansion Study (BRES) ROPA 30

Region of Peel led study that recommended water and wastewater servicing solutions for the expanded settlement boundary of the Bolton Rural Service Centre to support the Town's Regional Official Plan Amendment (ROPA) application.

November 2020

Approved Region of Peel Official Plan Amendment 30

Amendment established an expansion to the Bolton Rural Service Centre. ROPA 30 approved the (245 hectares) to accommodate the short-term growth within the expansion area.

February 2023

Bolton Water and Wastewater Feasibility Study

Reviewed the technical water and wastewater servicing needs for within the Amended ROPA 30 lands and consideration of long-term servicing needs. Identified the project components required to meet servicing needs.

June 2023

Bolton Water and Wastewater Capacity Improvement Class EA

Reviewed the Feasibility Study projects component against the new MEA Guidance Determined Class Approach and kick started the Schedule 'C' Class EA Study. This EA will identify preferred infrastructure to service future growth.



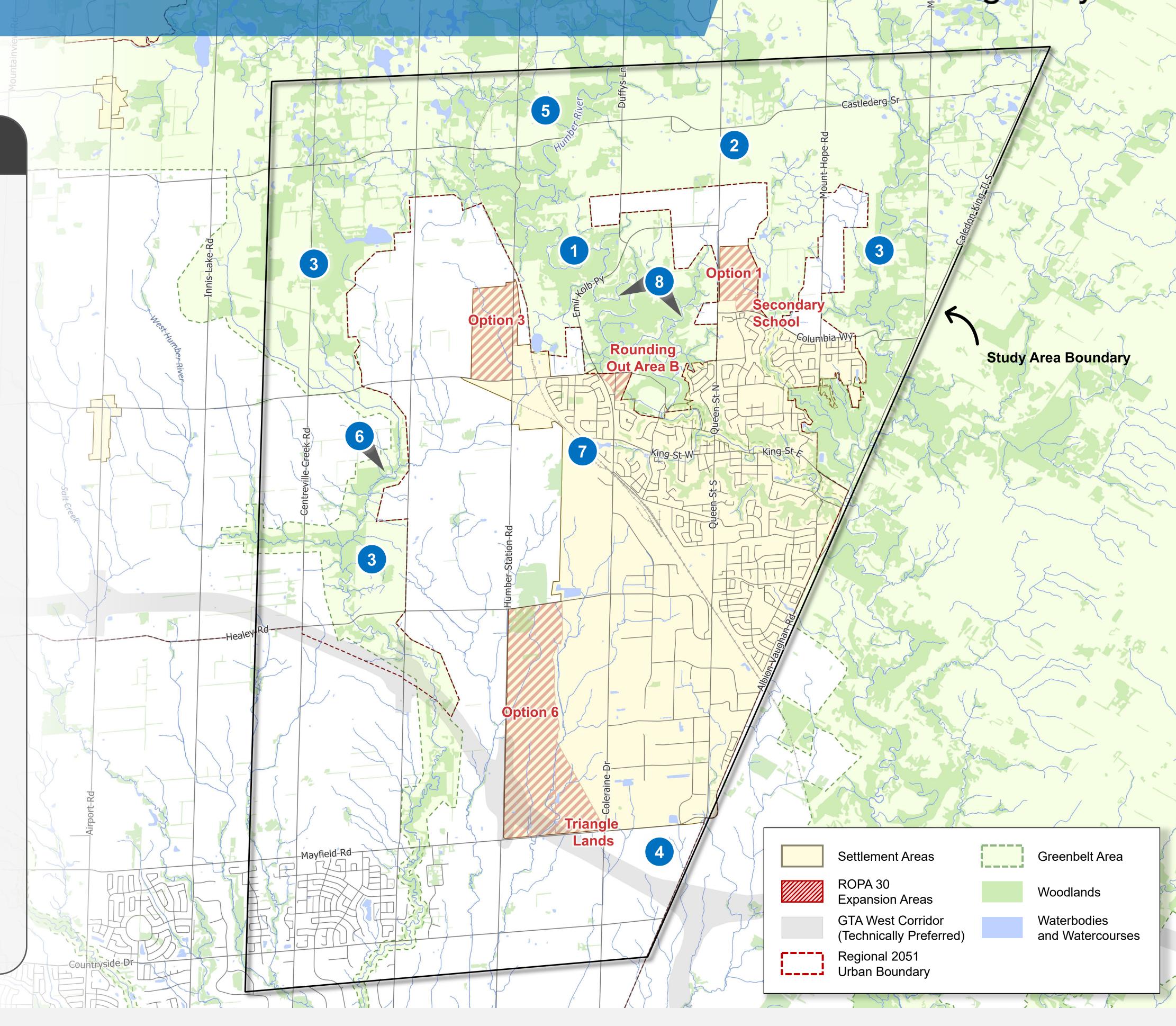
What's in the study area? Baseline Understanding

Region of Peel working with you

Study Area Baseline Understanding

The Study Area is located largely within the Town of Caledon and a portion of the City of Brampton. It is bounded by the following:

- Albion-Vaughan Road to the east,
- Countryside Drive to the south,
- Centreville Creek Road to the west, and,
- Castlederg Street to the north.
- 1. Highly vulnerable aquifers are present within the study area. No wellhead protection or intake protection zones within the study area.
- 2. Growth areas and settlement areas surrounded by the Oak Ridges Moraine Conservation Plan to the north.
- 3. Growth areas and settlement areas surrounded by the Greenbelt boundary.
- 4. Technically preferred GTA West Corridor.
- 5. Study area lies within the Humber River Watershed and is within the Toronto and Region Conservation Authority (TRCA) jurisdiction.
- 6. West Humber River.
- 7. Railway.
- 8. Humber River.



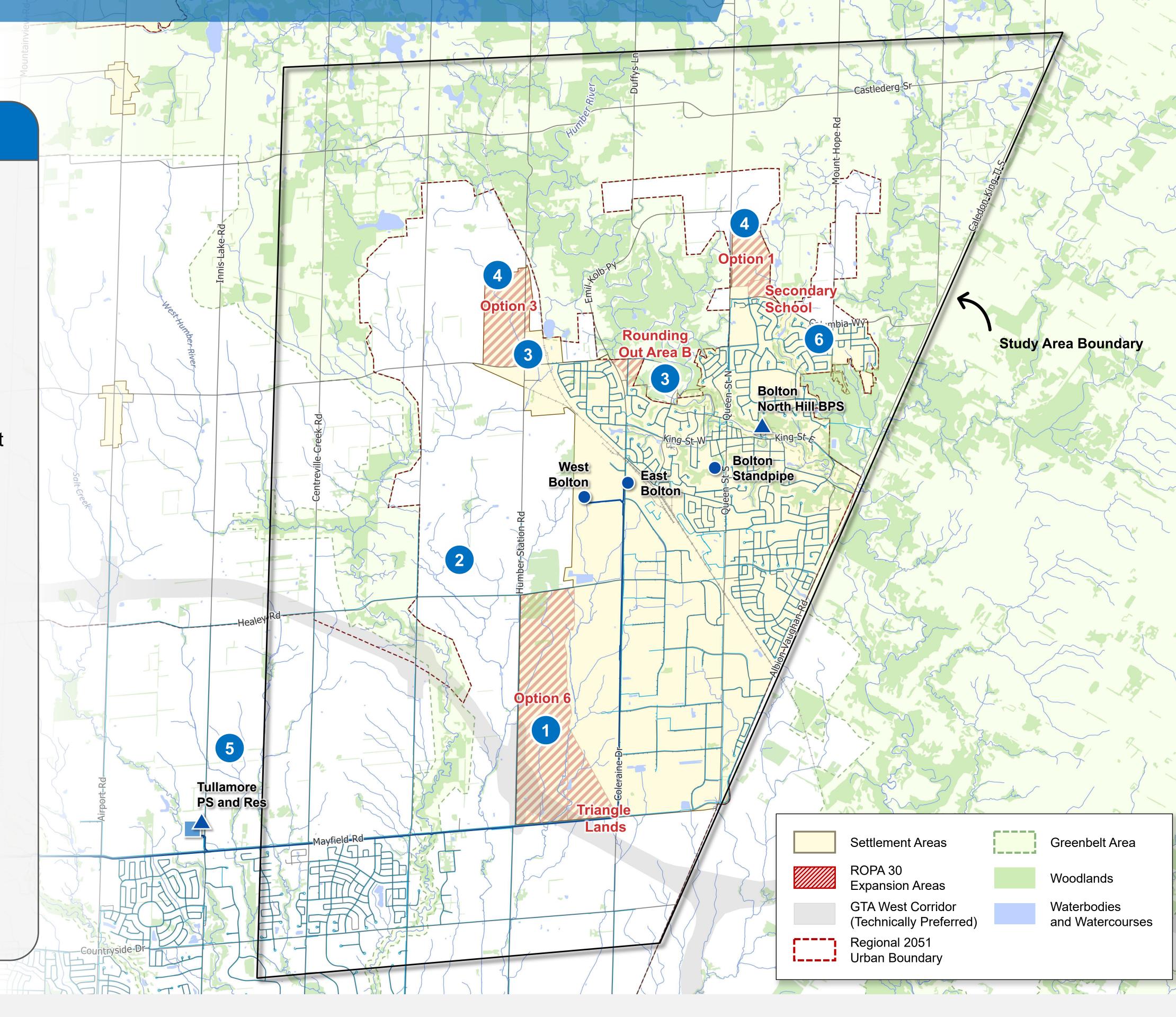


Existing system understanding Opportunities and Constraints

Region of Peel working with you

Water System Servicing

- 1. Future growth area. Water servicing partially covered through planned Master Plan projects. Most recent 2051 projections extend servicing needs well beyond ROPA 30 Areas.
- Over the long-term, there may be operational challenges operating large Zone 6 area with minimal floating storage.
 Opportunity to investigate a dedicated Zone 6 East storage.
- 3. Opportunity for interim pumping station solution to support growth in Zone 7B prior to implementation of long-term solutions.
- 4. Extension of servicing required. Pumping required and potential storage needs, depending on extents of new service area, level of risk and operational considerations.
- 5. Potential need of Zone 5 East storage to help support growth in both Zone 6 and 7 and to be less dependent on Tullamore Pumping Station and Reservoir.
- 6. Low pressure in north areas of existing Pressure Zone 6.

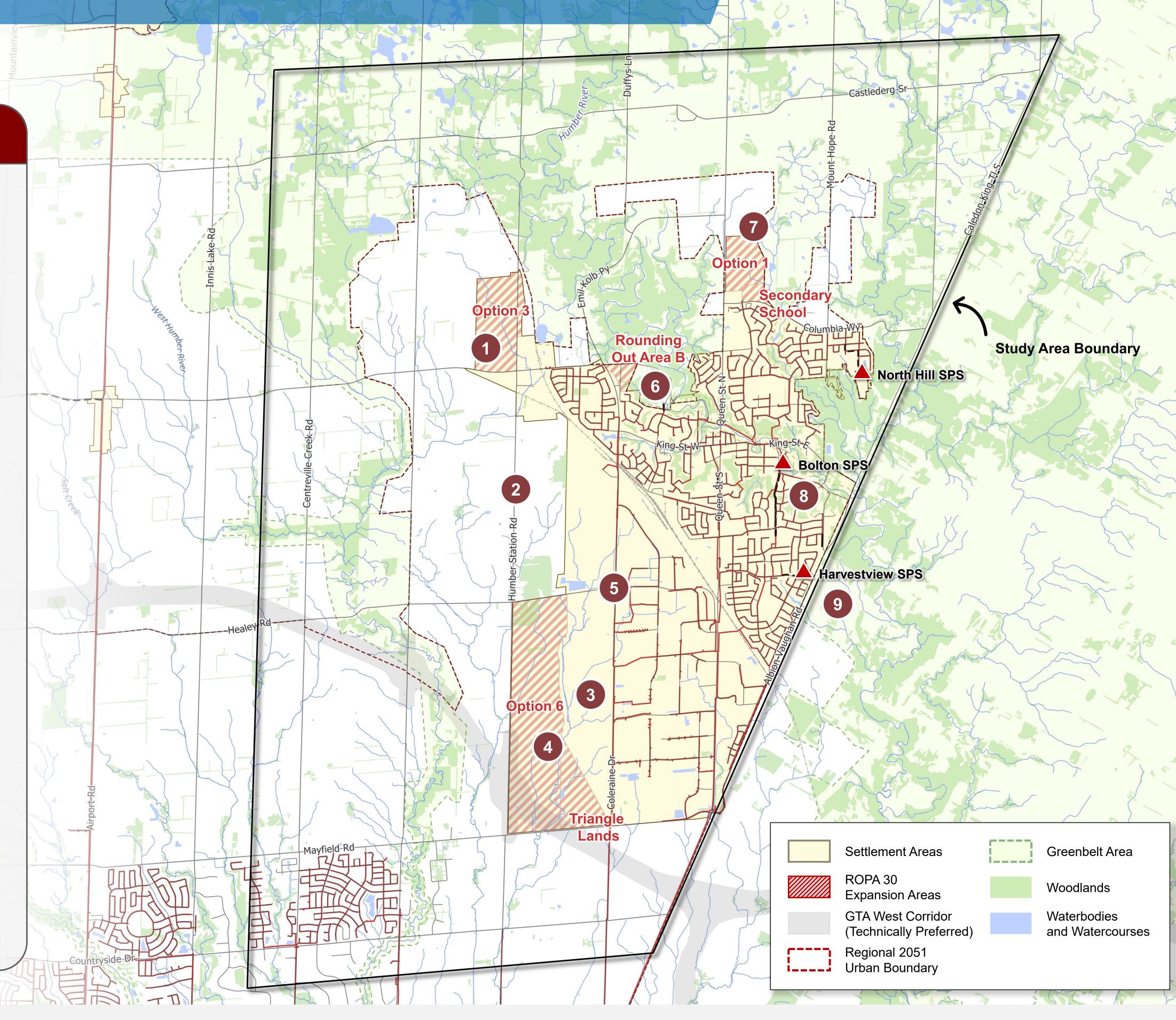




Existing system understanding Opportunities and Constraints

Wastewater System Servicing

- Potential to integrate with servicing growth beyond the current approved servicing boundaries.
- Opportunity to extend planned master plan infrastructure to service projected growth to 2051 north of King Street.
- Direct servicing to existing shallow sewers on Coleraine Drive may be challenging for larger development sites due to ground elevations. Detailed review required during this Environmental Assessment to ensure feasibility of connections and strategy.
- New growth areas without existing adjacent wastewater infrastructure.
- Coleraine Drive sewer capacity constraints to service future growth in the catchment area.
- Opportunity to extend servicing from existing adjacent infrastructure.
- Extension of servicing required. Opportunity for strategic oversizing and/or integration with future growth outside the current approved boundaries.
- Opportunity to better understand flows into Bolton SPS prior to planned upgrades. Opportunity to divert flows away from Coleraine Drive sewer and utilize capacity of existing/extension of Albion-Vaughan trunk sewer.
- Planned decommission of Harvestview SPS and diversion of flows to extension of Albion-Vaughan trunk sewer.





Region of Peel working with you

Where are we in the process? Project Process



Phas

- Prepare profile of Study Area
- Develop Problem and Opportunity Statement
- Project initiation and visioning
- Determine preliminary service area needs

Phase 2

- Identify Water and Wastewater Servicing Strategies
- Develop Screening Criteria and Evaluation Methods



Technical Studies to Support Evaluation of Strategies

- Desktop Baseline of Natural Features Assessment
- Desktop Cultural Heritage Screening
- Desktop Land Use Assessment
- Desktop Archaeological Screening
- Desktop Hydrogeological and Geotechnical



Analysis and Evaluation of Strategies

- Indigenous Engagement, Municipal and other Public Agency Meetings
- Public Information Centre No. 1: Present study and background information to obtain feedback on study process and servicing opportunities / constraints (November 2023)



Analysis and Evaluation of Strategies

- Screening of Long List of Alternative Solutions
- Develop Short List of Alternative Solutions
- Develop Detailed Evaluation Criteria
- Evaluate Short List of Alternative Solutions and Identify preferred Alternative Solutions



Draft Key Decision / Outcome

Alternative Design Concepts and Preferred
Alternative Solutions

Compile Detailed Environmental and Site Information to Support Evaluation of Alternative Design Concepts

Phase 3



Background Studies to Support Evaluation of Long List of Alternative Solutions

- Hydraulic Modelling Analysis
- Natural Features Impact Assessment and Field Reconnaissance
- Cultural Heritage Impacts Assessment and Field Reconnaissance
- Traffic Impact Assessment
- Agricultural Impact Assessment
- Property Impact Study
- Stage 2 Archaeological Assessment
- Environmental Site Assessment (Phase 1)



- Development of Design Concept Alternatives
- Assessment of Impacts / Evaluation of Design Concept Alternatives
- Assessment of Construction Impacts and Development of Mitigation Measures

Phase 4

- Confirm Mitigation Measures, Monitoring and Permitting Requirements
- Prepare Notice of Study Completion
- Support During 30-Day Review

Final ESR



How are the alternatives being evaluated? Evaluation of Strategies





- Ability to meet future needs.
- Minimize need for system upgrades.
- Ease of integration with existing system.
- Ease of construction and operation.



- Cost effective solution.
- Operation and maintenance costs.
- Lifecycle considerations.
- Funding and finance.



Evaluating the Options

With input from the public, Indigenous Rights-holders and Interest-holders, key stakeholders and review agencies (Ministries), the project team will develop and use criteria to evaluate options for: the water servicing and wastewater servicing.



- Proximity to environmental features and protected areas.
- Potential effects on water resources and natural features.
- Geology, hydrogeology, contamination considerations.



- Existing and surrounding land use.
- Noise and odour considerations.
- Cultural heritage resources.
- Archaeological resources.



- Land use, land size, availability and location.
- Existing infrastructure.
- Potential impact on nearby properties.
- Ownership, legal and jurisdictional considerations.



What studies were conducted?

Background Studies to Support Evaluation of Concepts

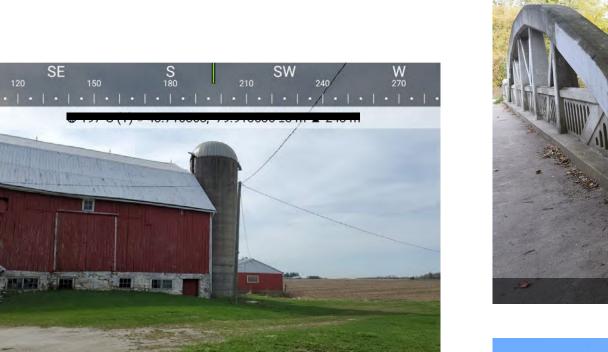


















Desktop Baseline Natural Features Assessment

Description of Study: Inventory of Species at Risk, significant natural features, wildlife

habitats and governing environmental policies.

Study Purpose: Determine the potential impacts to this project and any mitigation

measures required.

Desktop Cultural Heritage / Archaeological Stage 1

Description of Study: Identification of properties within the study area with cultural heritage

classification and archaeological potential.

Study Purpose: Determine the constraints and recommendations for further

investigations or studies.

Desktop Socio-Economic and Agricultural Screening

Description of Study: Identification of the existing and future land uses within the study and

of significant agricultural lands.

Study Purpose: Develop a solution that corresponds with future land uses.

Hydrogeological and Baseline Geotechnical

Description of Study: Establish the existing groundwater, soil, and rock conditions,

hydrogeological conditions and Source Water Protection policy areas.

Study Purpose: Identify necessary mitigation measures on potential impacts to

groundwater and surface water resources.



What is needed within the Bolton area? Water and Wastewater Feasibility Concepts

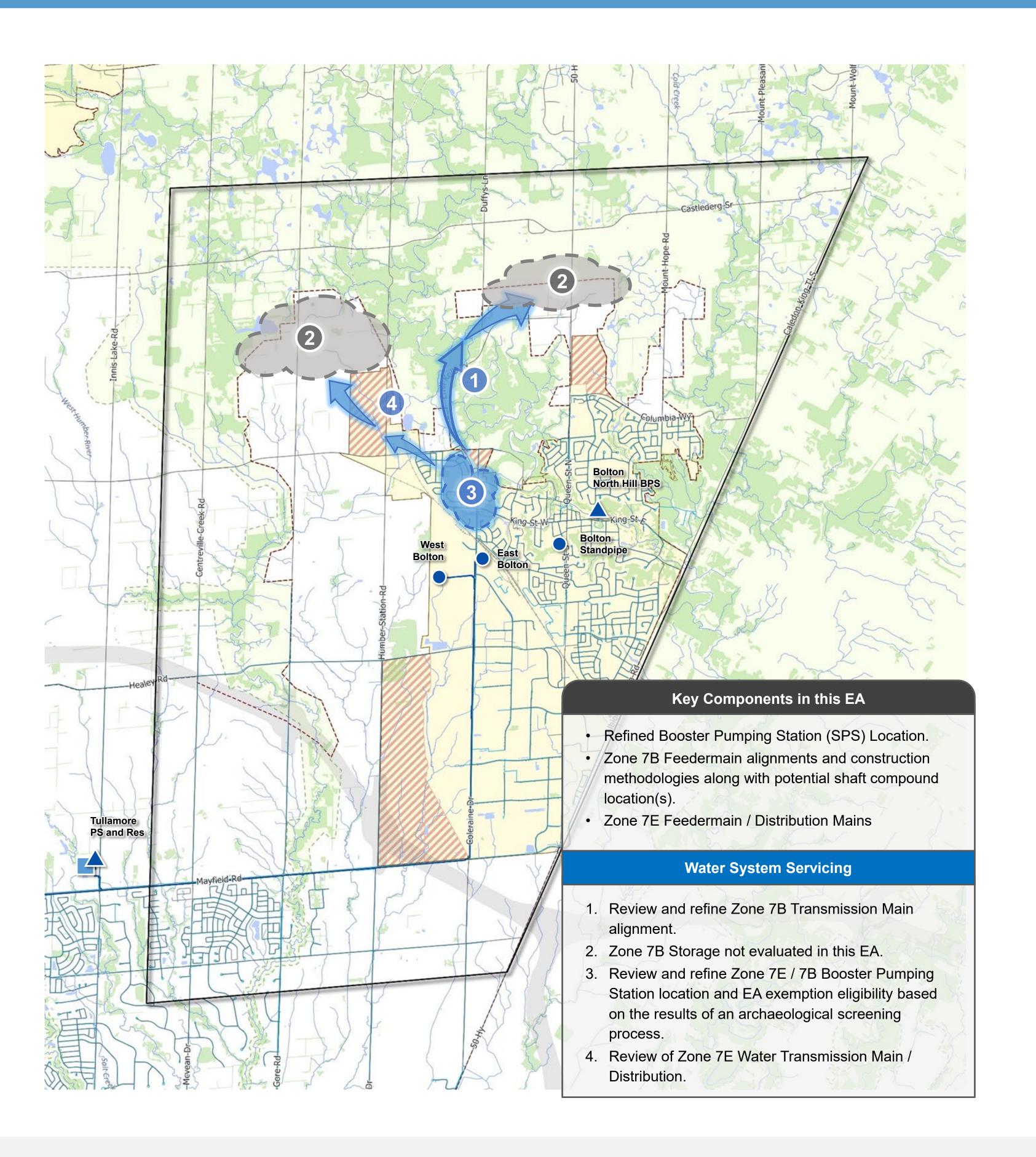


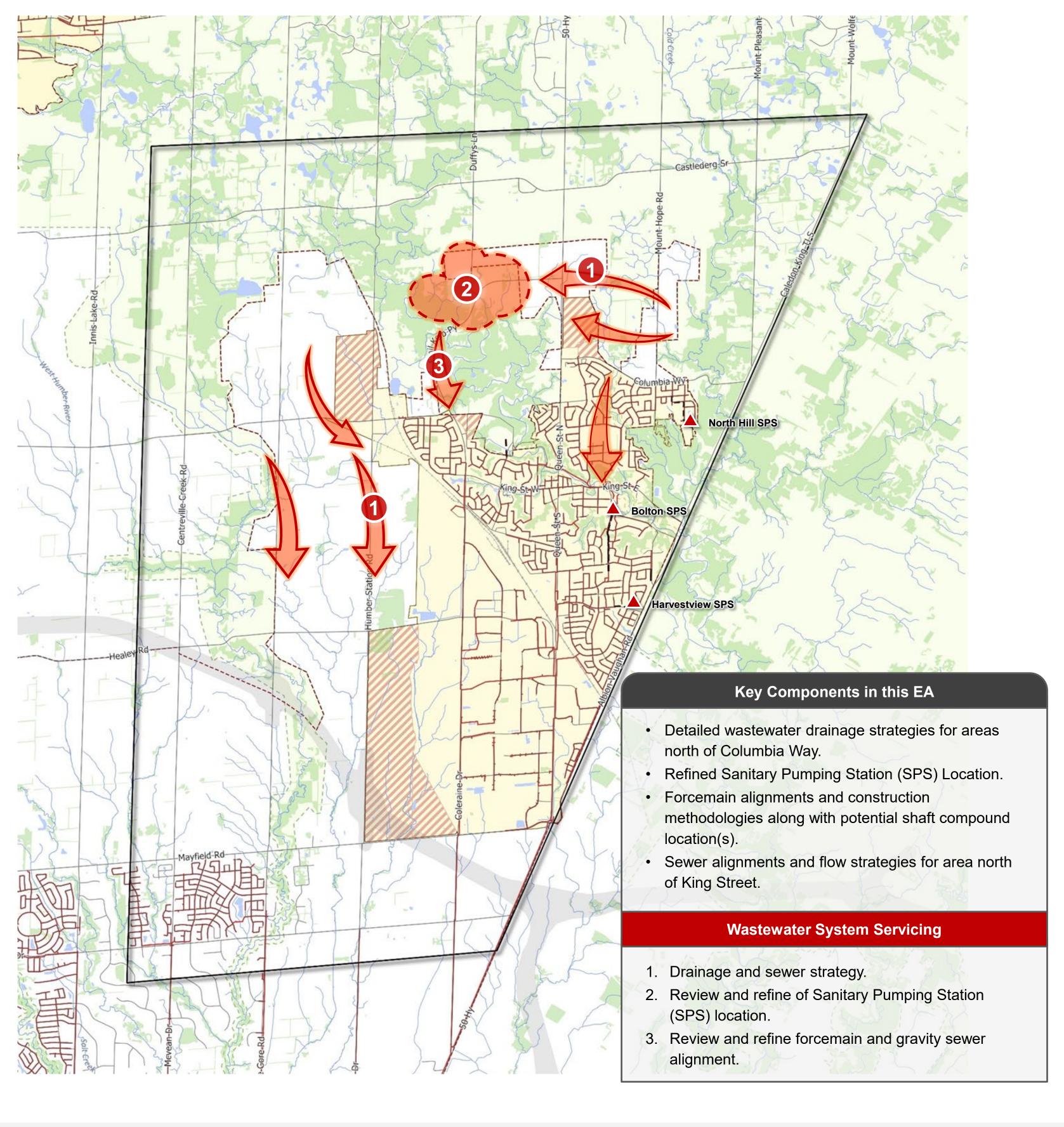
The Bolton Water and Wastewater Feasibility Study identified infrastructure for servicing to buildout. The locations shown are conceptual. **Reviewed in Feasibility Study Reviewed in Feasibility Study** Conceptual Flow strategies: South to existing Bolton SPS and associated Conceptual Booster Pumping Station Locations and downstream upgrade needs. Tullamore PS and Res associated Transmission Main Alignment(s). West along Emil Kolb Parkway, Potential new SPS Long Term Conceptual Facility needs and Locations and Forcemain. (5E, 7E, 7B). Conceptual North-South Flow and capacity needs for growth areas along Humber Station Road and The **Water System Servicing** Gore Road. Conceptual Zone 7B Transmission Main. **Wastewater System Servicing** 2. Zone 7B Storage. 3. Conceptual Zone 7E / 7B Pumping Station (s). Wastewater conveyance. 4. Conceptual Zone 6 and Zone 7 Transmission Main. 2. Conceptual Sanitary Pumping Station (SPS) and Forcemain. 5. Conceptual Zone 5E Storage and Zone 6E / 7E Pumping Station. 3. Wastewater conveyance to existing Bolton Sanitary Pumping Station. 6. Conceptual Zone 5E Transmission Main.



What is being evaluated within this study? Water and Wastewater Servicing Strategies









How will it be constructed?

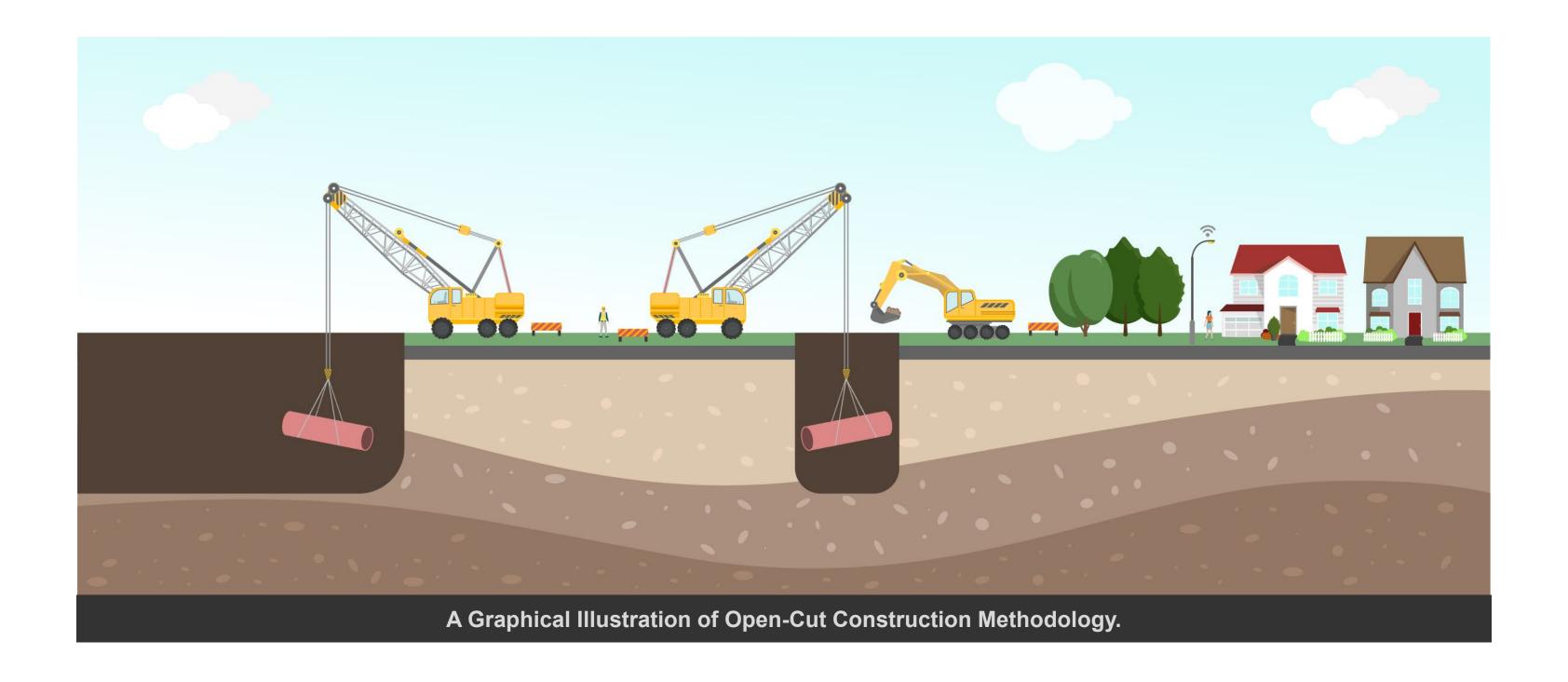
Considering Different Construction Methodologies

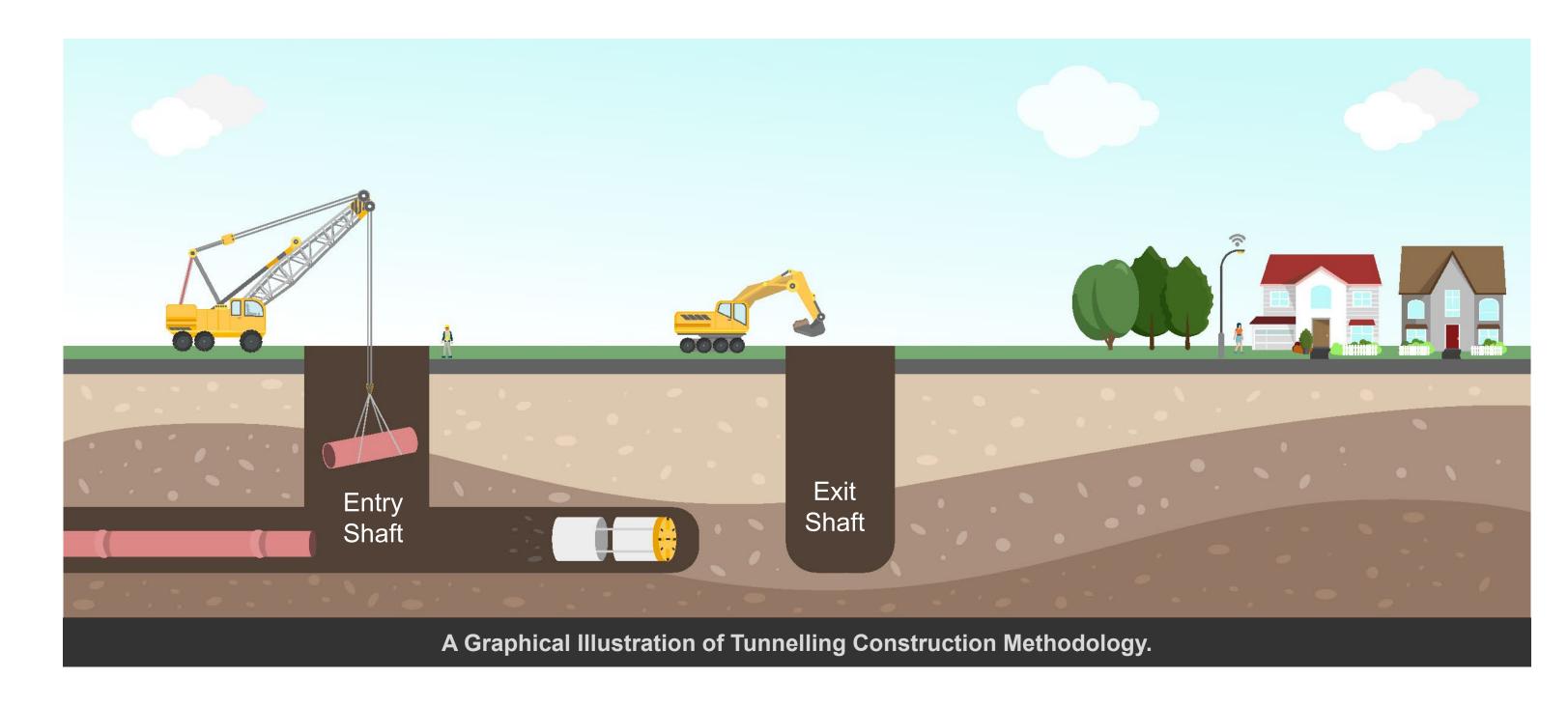


When evaluation servicing solutions for the **Bolton Water and** Wastewater Capacity Improvements Study, various construction methodologies will be considered including:

Open-Cut Construction: involves digging a trench to facilitate the installation of linear infrastructure (e.g., sewers). Because construction occurs on the surface over a stretch of time, open cut construction has the potential to increase traffic impacts and inconvenience to local residents and businesses.

Tunnelling Construction: involves digging shafts and using special equipment to tunnel underground between shafts. It is less intrusive than open cutting minimizing traffic disruptions and impacts to local residents and businesses. The only surface works for tunnelled construction are the entry and exit shafts located between tunnel drive lengths that could vary between 0.2 km and 2.1 km apart depending on the technology used.







Thank you! How to Stay Involved



What are we doing next?

- Review and incorporate responses from PIC No. 1
- Investigate alternative water and wastewater servicing strategies, routes, and design concepts.
- Complete additional supporting technical studies:
 - Hydraulic Modelling Analysis
 - Natural Features Field Validation
 - Cultural Heritage Field Validation
 - Traffic Impact Assessment
 - Agricultural Impact Assessment
 - Property Impact Assessment
 - Stage 2 Archaeological Assessment
 - Environmental Site Assessment (Phase 1)
- Engagement with Indigenous Rights and Interest Holders.
- Consultation with public review agencies, and other interested stakeholders.
- Prepare for PIC No. 2

Stay Engaged!





✓ Provide your feedback regarding the information presented.

Do you have any questions, comments, or want to stay up to date?

Please contact us anytime!

Italia Ponce, P.Eng.

Project Manager, Regional Municipality of Peel 10 Peel Centre Drive Brampton, ON L6T 4B9 905-791-7800 ext. 4583 ltalia.ponce@peelregion.ca









Additional project information can be found on the project website, which can be accessed by scanning the QR code with your smartphone.



Please note that information related to this study will be collected in accordance with the *Freedom of Information and Protection of Privacy Act*. All comments received will become part of the public record and may be included in the study documentation prepared for public review.

If you need any accommodations to provide comments and/or feedback for this study, please contact the Project Manager.

