



Beach Street Sewage Pumping Station Diversion

Municipal Class Environmental
Assessment Study
Schedule B

Virtual Engagement Opportunity



Land Acknowledgement

We would like to begin by acknowledging the land on which we gather, and with 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 lands of the Anishinabek, Huron-Wendat, Haudenosaunee and Ojibway/Chippewa peoples; the land that is home of the Métis; 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.



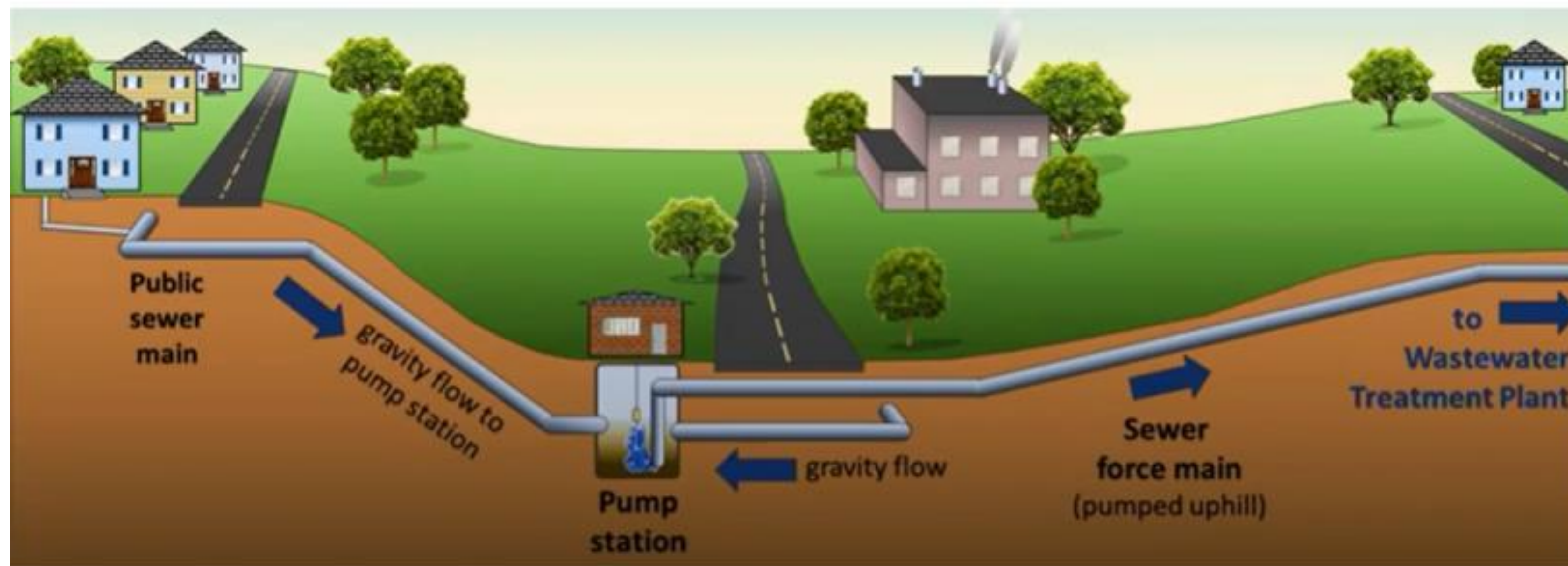
Project Overview

Meeting Objectives:

- ❖ To introduce you to the study and learn more about the **Municipal Class Environmental Assessment Process** being followed.
- ❖ To provide an **overview of the alternative solutions developed for the project**
- ❖ To present the **evaluation of alternative solutions**
- ❖ To present the **proposed preferred solution**
- ❖ To collect **feedback and comments** on the preferred solution by **May 19, 2023**.

What is a Sanitary Pumping Station?

Sewers use gravity to move wastewater from high to low points in the sanitary system. Sanitary pumping stations are installed at low points to convey wastewater from lower to higher points so that wastewater will flow to the wastewater treatment plant.

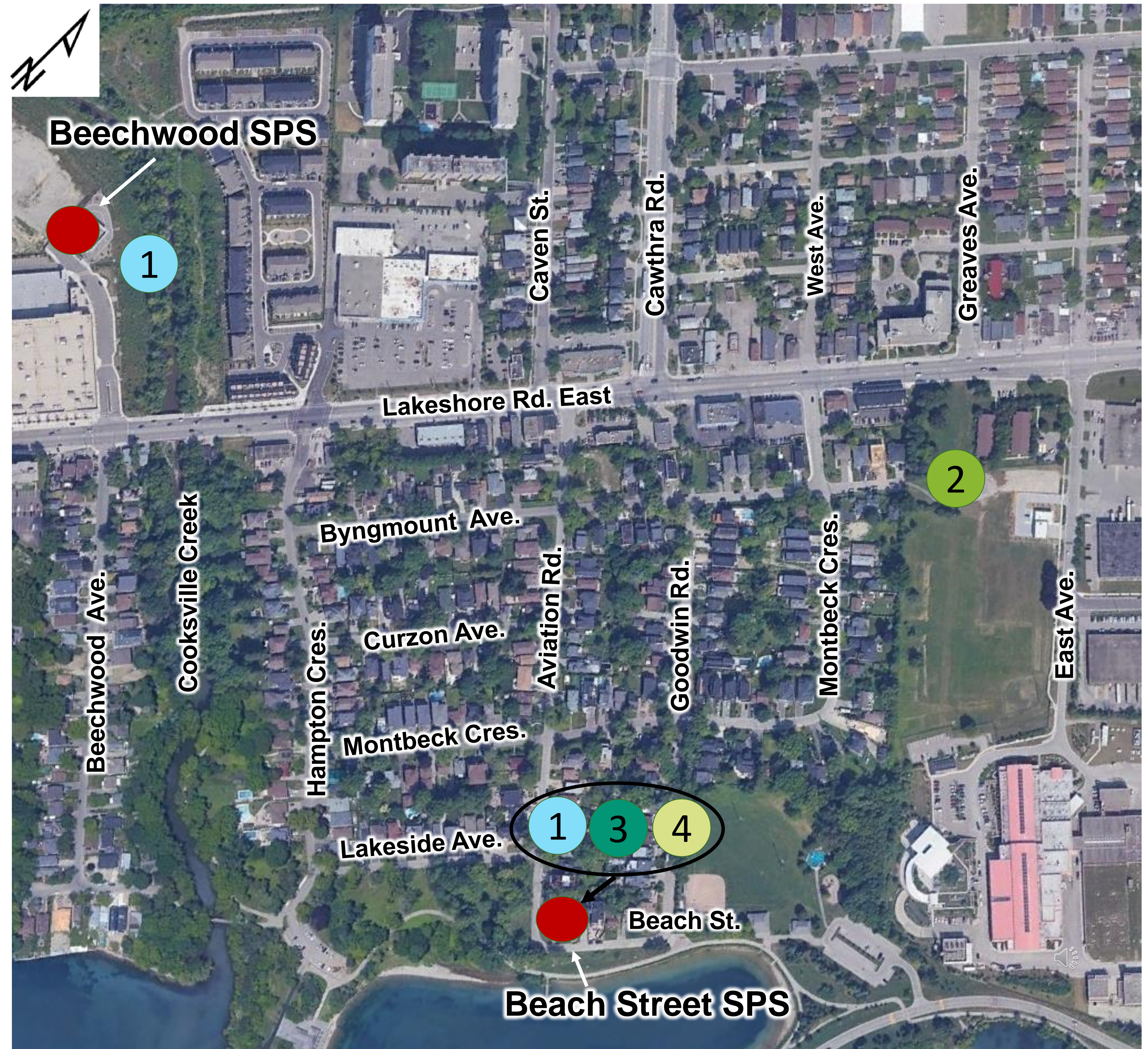


Study Purpose

The Region of Peel has retained WSP to undertake a Schedule B Municipal Class Environmental Assessment (MCEA) study to review existing sanitary sewer infrastructure and evaluate options to divert flow from the aging Beach Street Sewage Pumping Station (SPS) to the modernized Beechwood SPS in the City of Mississauga.

Project Objectives

- 1 Provide flows via a gravity sewer from Beach Street SPS area to Beechwood SPS to repurpose the Beach Street SPS from continuous operation to contingency operation only.
- 2 Provide additional capacity to accommodate development to East Avenue.
- 3 Rehabilitate Beach Street SPS to modernize to meet current Region design standards.
- 4 Modify Beach Street SPS so that it can be used in contingency operations including major equipment failure or extreme wet weather events.




Problem Solving Process

Problem/Opportunity

The study will address the following objectives:

- Provide flows from Beach Street SPS to Beechwood SPS to reduce the daily use of Beach Street SPS.
- Provide additional capacity to accommodate development east of Aviation Road.
- Rehabilitate Beach Street SPS to bring it up to current Region standards.
- Modify Beach Street SPS to be used as training facility in addition to an overflow management asset during overflow events.

 **Notice of Commencement issued**

Phase 1: Strategies

- 1. Do Nothing**
Does not address objectives
- 2. Limit Growth**
Does not address objectives
- 3. Upgrade existing infrastructure.***
In combination with #4, meets project objectives.
- 4. Addition of new infrastructure.***
In combination with #3, meets project objectives.

*includes necessary upgrades to the Beach Street SPS

Phase 2: Evaluation of Alternatives

1. Upgrade sewers along Goodwin Avenue, Montbeck Crescent, and Aviation Road to accept new development flows.*
2. Install gravity sewer from Beach Street SPS north along Aviation Avenue and west along Lakeshore Road East. Extend sewer along Lakeshore Road East from Aviation Road to East Avenue.*







Check out our website to learn more about Environmental Assessments:
<https://www.peelregion.ca/public-works/environmental-assessments/>

Alternative Strategies

The alternative strategies identified as part of this study were screened to see if they can meet the four “must meet” project objectives and future servicing needs.

Alternative Strategies Evaluation

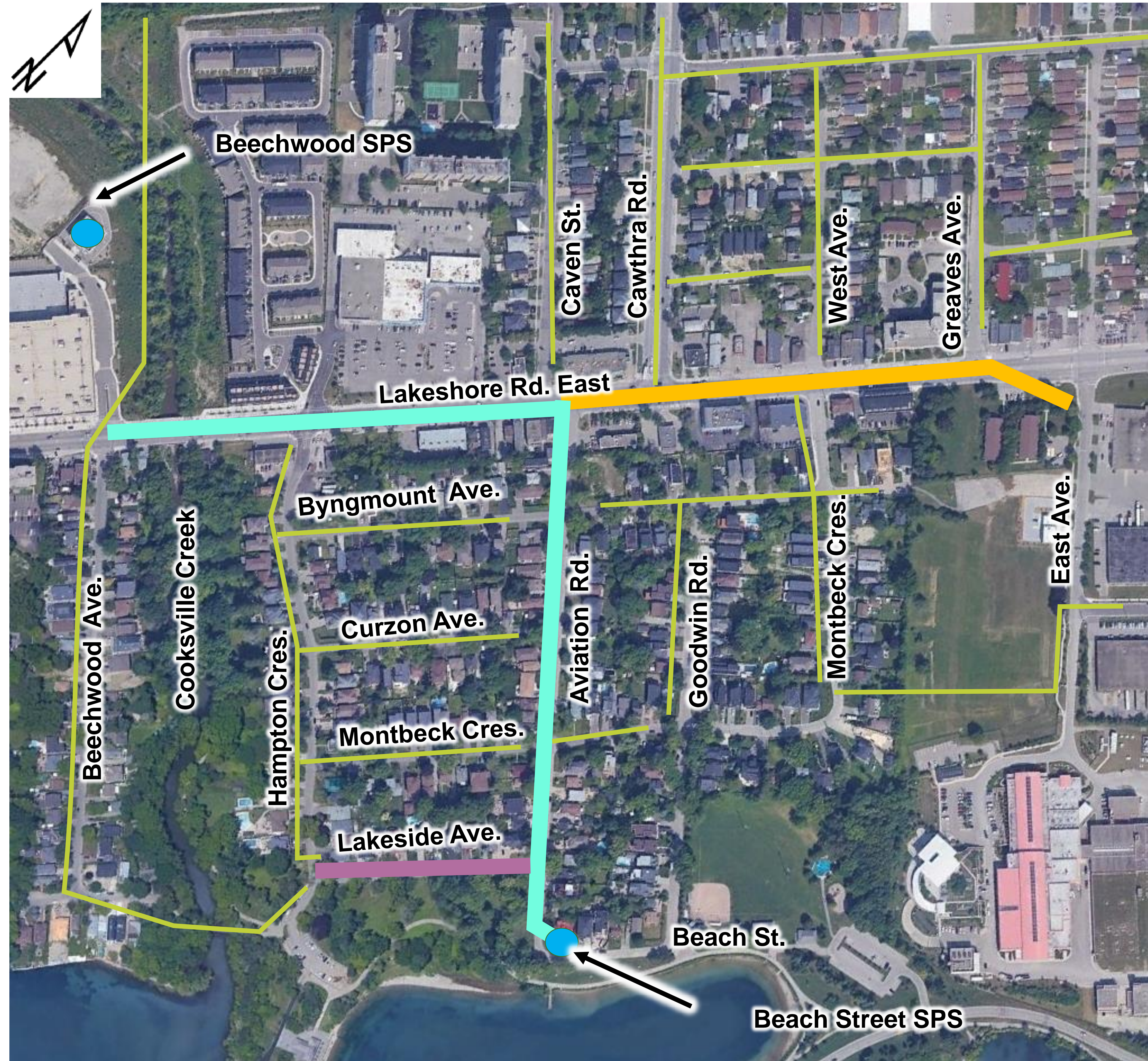
Solutions	Comments	Carry Forward?
Do Nothing	Does not meet any objectives	
Limit Growth	Does not meet any objectives	
Upgrade existing infrastructure*	Somewhat meets project objectives	
Addition of new infrastructure*	Somewhat meets project objectives	

*includes necessary upgrades to the Beach Street SPS

The two solutions carried forward include the upgrade existing infrastructure and addition of new infrastructure. In combination, these solutions meet the objectives of the project.

Alternatives were developed for each solution carried forward and are presented on the following slide.

Alternative 1



Description

- ❖ Installation of a new gravity sewer between Beach Street SPS and Beechwood SPS along Aviation Road and Lakeshore Road East via microtunneling.
- ❖ Installation of a new gravity sewer on Lakeshore Road East from Aviation Road to East Avenue via microtunnelling.
- ❖ Replacement of existing gravity sewer on Lakeside Avenue via open cut methods.
- ❖ Includes necessary Beach Street SPS upgrades.

Technical Features

- ❖ Provides increased capacity to support future development.
- ❖ Provides system redundancy and operational flexibility during major equipment failure or extreme wet weather events to reduce basement flooding.

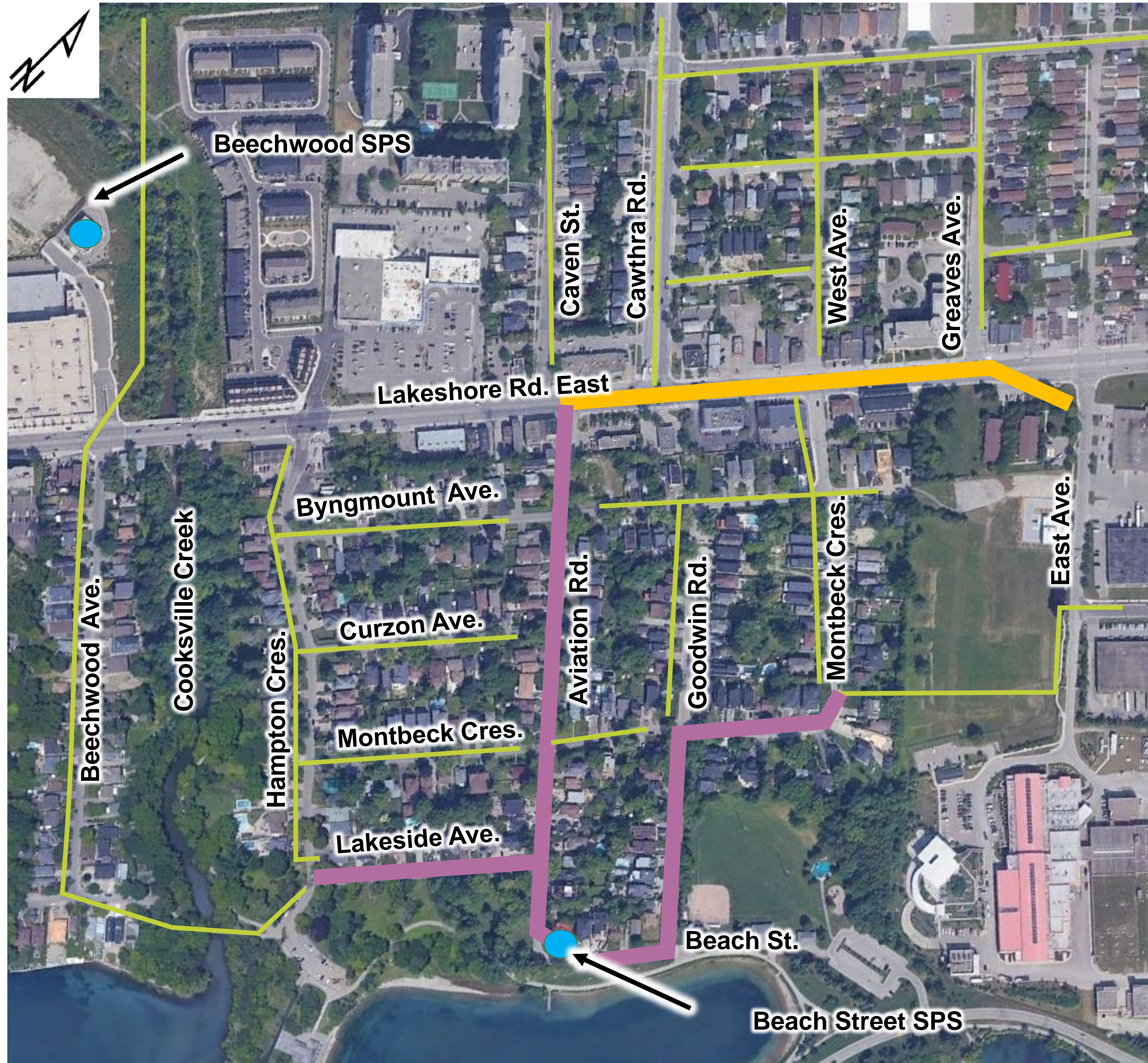
Possible Concerns

- ❖ Lane closures on Lakeshore Road East required to accommodate microtunneling exit shaft at the Beechwood Avenue intersection.
- ❖ Full closure of Caven Street required at Lakeshore Road East intersection to accommodate microtunneling entry shaft.

Legend:

- Existing sanitary infrastructure
- New gravity sewer to be installed via microtunneling
- New gravity sewer to be installed via microtunneling
- Gravity sewer replacement via open cut methods

Alternative 2



Description

- ❖ Replacement of existing gravity sewers including pipe upgrades on Goodwin Avenue and Montbeck Crescent via open cut methods.
- ❖ Installation of a new gravity sewer on Lakeshore Road East from Aviation Road to East Avenue via open cut methods.
- ❖ Replacement of existing gravity sewer on Lakeside Avenue via open cut methods.
- ❖ Includes necessary Beach Street SPS upgrades.

Technical Features

- ❖ Provides increased capacity to support future development.

Possible Concerns

- ❖ Does not provide a redundant system during major equipment failure or extreme wet weather events.
- ❖ Traffic impacts will result in heavier congestion but shorter duration at the Cawthra Road and Lakeshore Road East intersection.

Legend:

- Existing sanitary infrastructure
- New gravity sewer to be installed via open cut methods
- Gravity sewer replacement via open cut methods

Evaluation of Alternatives

Evaluation Criteria		Alternative 1	Alternative 2
Natural Environment	Proximity to Environmentally Sensitive Areas including Impacts to Wildlife and Species at Risk	Yellow	Green
	Impacts to Watercourses	Green	Green
	Impacts to Vegetation	Yellow	Yellow
	Potential for Contamination	Yellow	Yellow
Socio-Economic and Cultural Environment	Impact to Cultural Heritage and Archaeological Resources	Green	Green
	Land Use / Zoning Compliance	Green	Green
	Traffic Impacts during Construction	Yellow	Yellow
	Noise Impacts during Construction	Red	Yellow
	Dust Impacts during Construction	Yellow	Red
	Removal of Recreational Space	Green	Green
Technical Considerations	Constructability	Green	Yellow
	Impact to Existing Utilities	Yellow	Red
	Permits and Approvals	Green	Green
Economics	Capital Costs	Yellow	Green
	Life Cycle (Maintenance) Costs	Green	Yellow

Preferred Solution 

EVALUATION COLOUR RATING SYSTEM

Most Preferred  Less Preferred  Least Preferred 

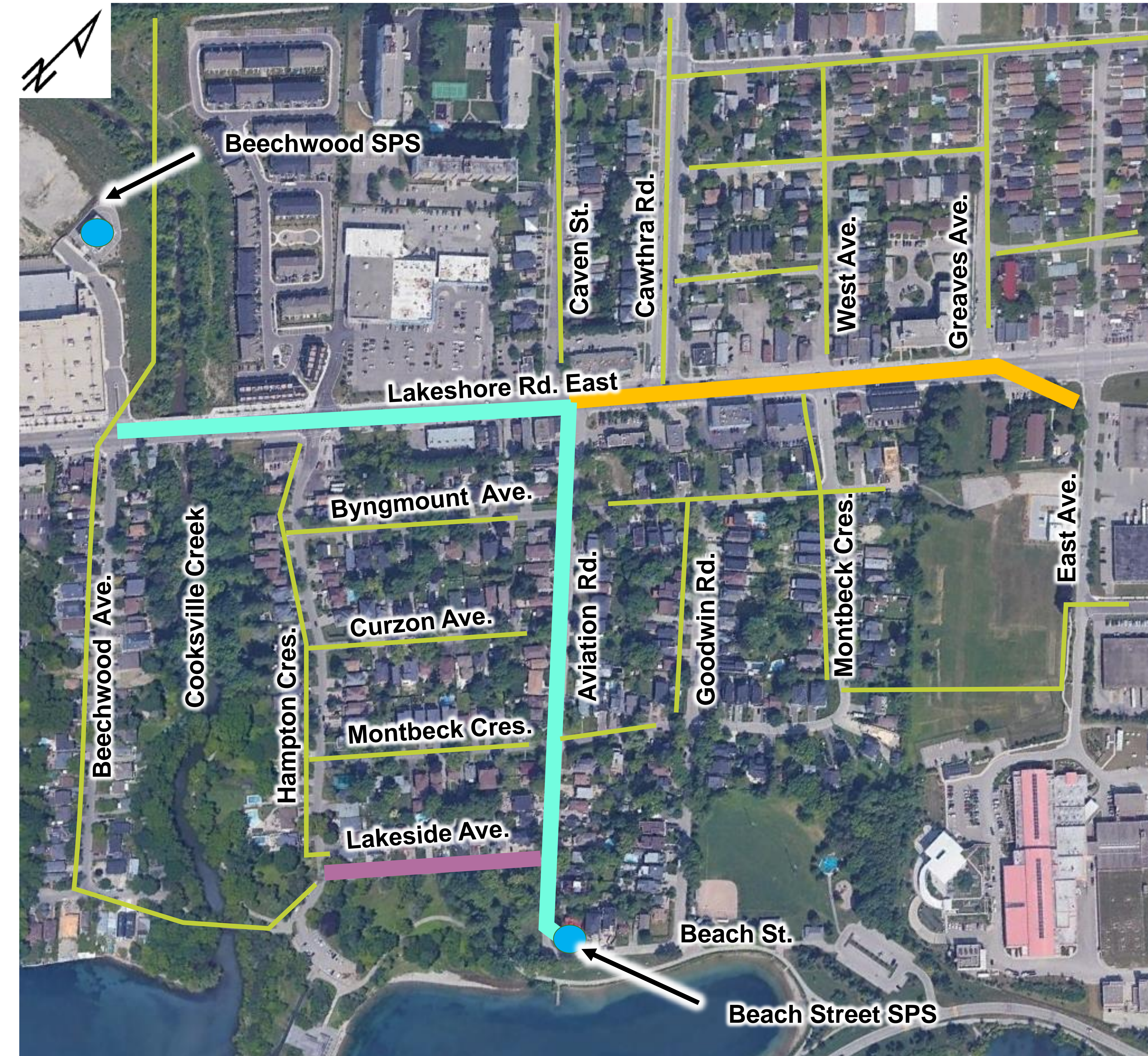
Preferred Solution

Alternative 1

- ❖ Provides increased capacity to support future development.
- ❖ New gravity sewers and modifications to Beach Street SPS provides system redundancy and operational flexibility during major equipment failure or extreme wet weather events to reduce basement flooding.
- ❖ Microtunneling technology is proven and significantly reduces the potential impact to existing infrastructure on a major road.

Legend:

- Existing sanitary infrastructure
- New gravity sewer to be installed via microtunneling
- New gravity sewer to be installed via microtunneling
- Gravity sewer replacement via open cut methods



Mitigation of Environmental Impacts Due to Construction Activity

Traffic

- ❖ Trenchless construction methods will be used to limit traffic impacts.
- ❖ Traffic will be reduced to a single lane in each direction along Lakeshore Road East at the Beechwood Avenue intersection during construction.
- ❖ Lane closures will be kept to the minimum extent possible to facilitate construction.

Noise and Dust

- ❖ Excess noise will be mitigated, and construction will comply with the City of Mississauga's noise by law.
- ❖ Truck movements will be scheduled to minimize noise.
- ❖ Trenchless construction methods will be used to limit noise and dust impacts.

Natural Environment

- ❖ Tunneling entry shafts will be located outside of natural areas.
- ❖ No impacts to Cooksville Creek are anticipated as part of construction as shafts will be located more than 50 m away from the creek.
- ❖ Trees will be preserved as much as possible, and three trees will be planted for every tree removed.
- ❖ Standard mitigation measures, including erosion and sediment control measures, will be implemented during construction to minimize impacts on the natural environment.



Related Works

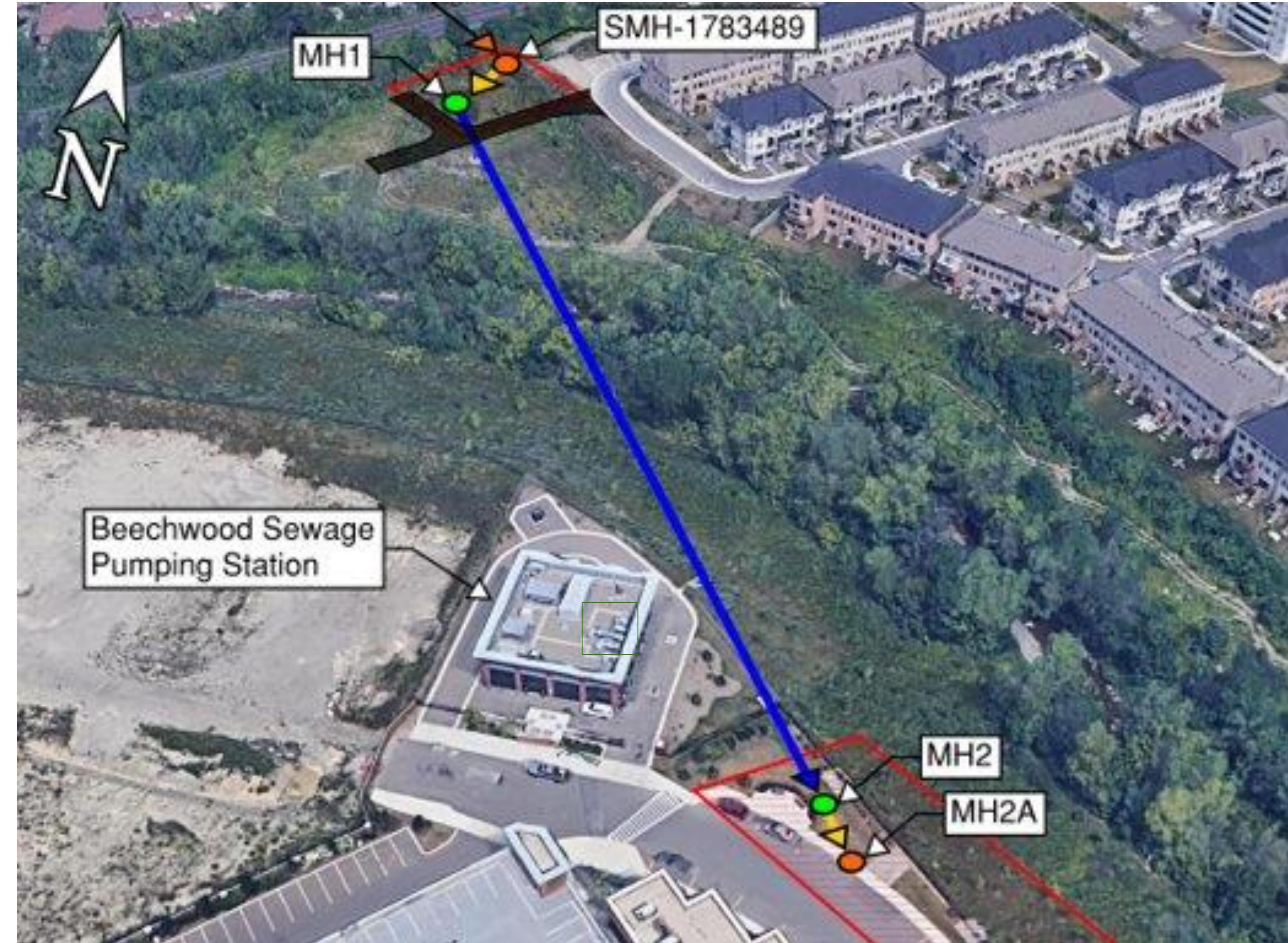
Claredale Environmental Assessment Project

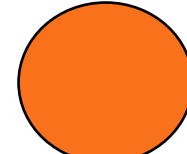
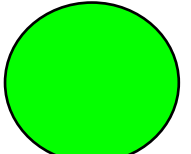





- ❖ Construction will be coordinated with the Claredale Environmental Assessment project.
- ❖ Scope of work includes construction of a new sewer:
 - ❖ Connects to existing maintenance hole south of the C.N. Rail Tracks
 - ❖ Crosses under Cooksville Creek
 - ❖ Discharges into Beechwood Pumping Station.
- ❖ Environmental Assessment completed in 2021.



Beechwood SPS

For more information on the Claredale Environmental Assessment project, please visit: www.peelregion.ca/public-works/environmental-assessments/mississauga/beecewood-pumping-station.asp



- | | | | |
|---|--|---|--|
|  | Existing Maintenance Hole |  | Proposed Maintenance Hole |
|  | Existing Sanitary Sewer Flow Direction |  | Proposed Sanitary Sewer Flow Direction (Open Cut Installation) |
|  | Proposed Construction Compound |  | Proposed Sanitary Sewer Flow Direction (Trenchless Installation) |
|  | Permanent Access Road | | |

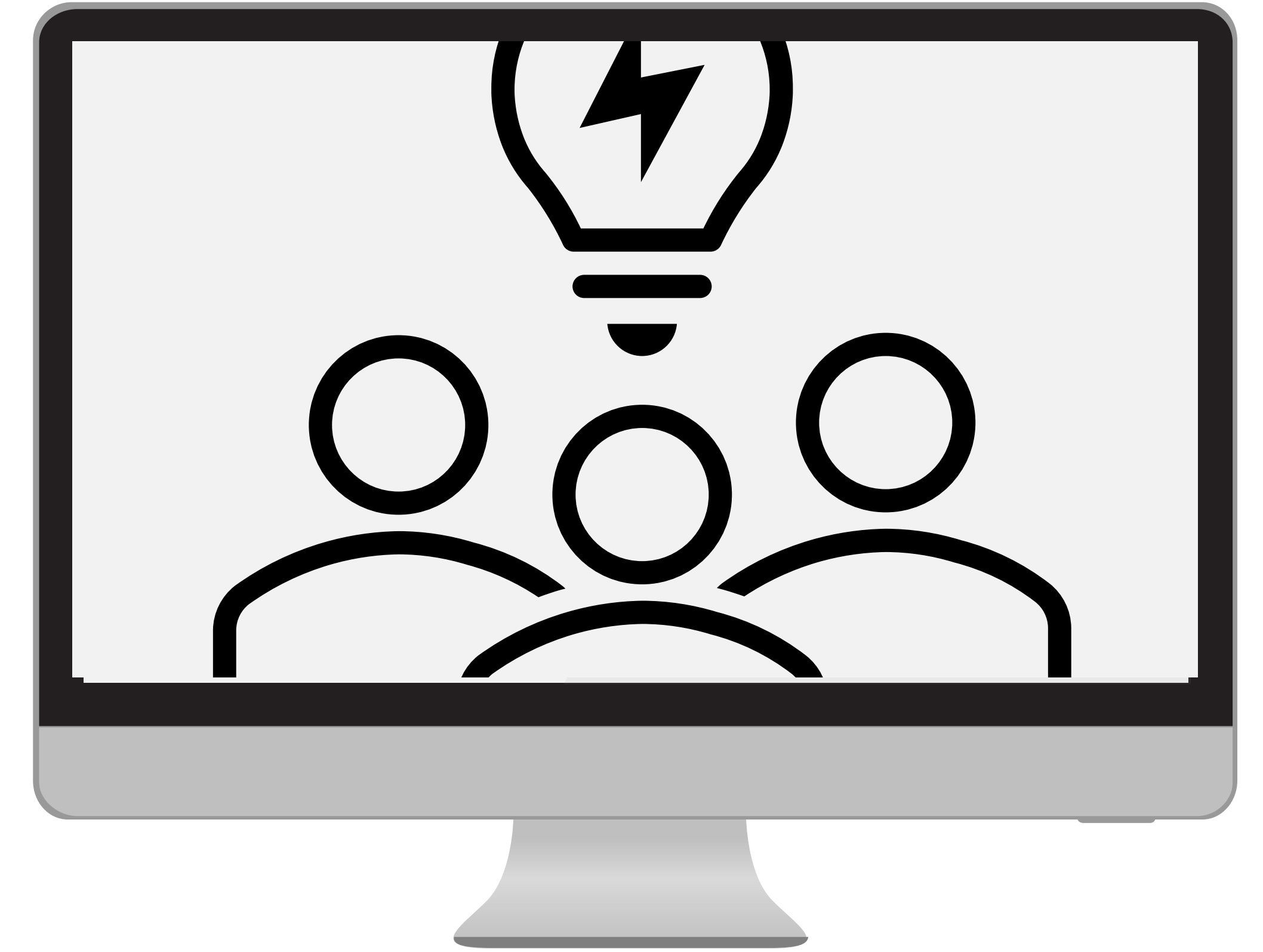
Next Steps



The project team will respond to any questions received and will further refine the preferred solution to minimize impacts and disruption during construction.




Upon completion of the study, a Project File Report will be prepared and filed for a 30-day comment period. Notification will be advertised on the project website and mailed to residents in the study area.



Stay Informed!

Please submit any questions or comments you may have by **May 19, 2023** to:



For more information about this project, please visit our project webpage:

www.peelregion.ca/public-works/environmental-assessments/mississauga/beach-street-sewage-station.asp

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