Flow
Building our future, faster.

Welcome

Kennedy Road Sanitary Trunk Sewer Project

Public Information Centre #2

June 25, 2025

https://peelregion.ca/construction/environmental-assessments/kennedy-road-sanitary-trunk-sewer-project

About the Kennedy Road Sanitary Trunk Sewer Project

Flow
Building our future, faster.

The existing trunk sewer system in Brampton does not have enough capacity to handle the expected increase in sewage from future growth.

Peel Region must increase sewer capacity by 2030 to support planned development in central Brampton and parts of Caledon.

To address this, Peel Region is planning to build a new large sanitary trunk sewer, between 1.5 and 2.1 metres in diameter. It will carry sewage from the area near Old School Road and Hurontario Street in Caledon to a new sewer being built on Kennedy Road in Brampton.

An additional connection is also needed at Queen Street. This will include extending a smaller 0.9 metre sewer pipe about 900 metres, from Kennedy Road to Rutherford Road North, to connect to the existing system.

In order to meet capacity demands by **2030**, the construction will need to **start in 2027**. Construction will be coordinated, where possible, with other municipal infrastructure projects.

What is a Sanitary Trunk Sewer?

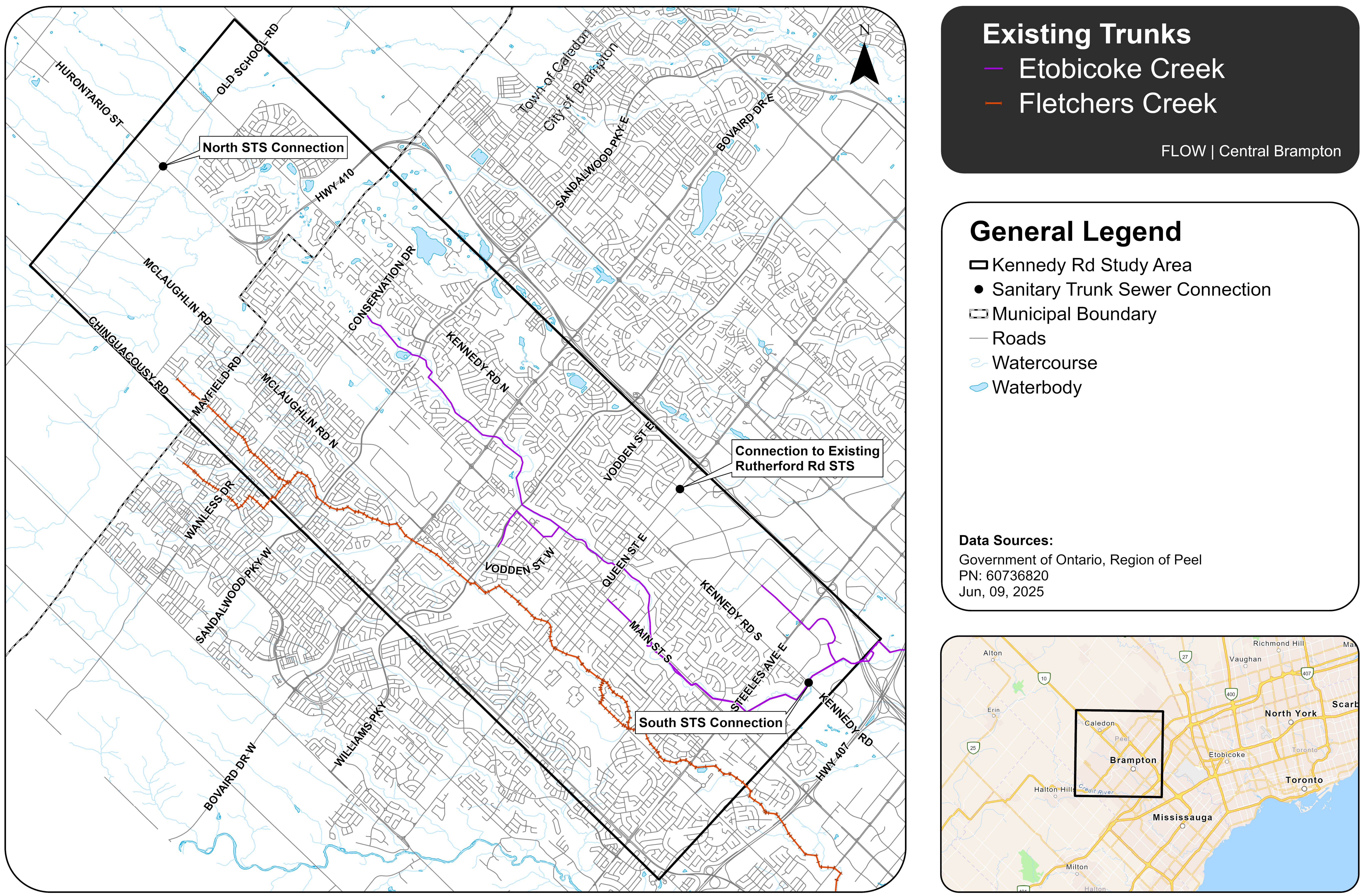
A large pipe that collects and moves wastewater by gravity from nearby and upstream areas to wastewater treatment plants. Designed to handle large volumes of wastewater, making them critical to maintaining public health and environmental quality.

https://peelregion.ca/construction/environmental-assessments/kennedy-road-sanitary-trunk-sewer-project

Peel Region

Study Area

The Study Area is bounded by Old School Road to the north in the Town of Caledon and just south of Steeles Avenue to the south. Highway 410 forms the easterly border and Chinguacousy Road forms the westerly border of the Study Area.



https://peelregion.ca/construction/environmental-assessments/kennedy-road-sanitary-trunk-sewer-project

Municipal Class EA Schedule C Planning Process

Phases

1 Problem and Opportunity	2 Alternative Solutions	3 Alternative Design Concepts	4 Environmental Study Report	5 Implementation
Review background planning and policy documents, identify study area needs, problems and opportunities.	Review existing environment, identify and evaluate feasible alternative sanitary sewer routing options, and identify short-list routing options. Evaluate short-list routing options and confirm preferred route.	Develop and evaluate alternative designs (e.g., construction methods) for the preferred route. Identify environmental impacts and required mitigation measures, and select the Recommended Design Alternative. WE ARE HERE	Document the decision-making process in an Environmental Study Report and publish Notice of Study Completion for 30-day comment period.	Complete the detailed design, tender and construction following the completion of the EA study and review period.
August 2024	Winter 2024/2025 – Fall 2025		Fall 2025	Winter 2025 - 2030

Continuous Consultation & Engagement

What Have We Heard?

Flow
Building our future, faster.

High level feedback themes we've heard and how the feedback has been considered:

Positive feedback from City of Brampton on the Flow | Central Brampton delivery approach and commitment to be an active partner.

Request to expand study area to capture future Hurontario Employment Secondary Plan area.

Peel Region Hurontario Employment Secondary Plan municipal water and wastewater infrastructure requirements are being confirmed as part of the current the 2025 Water and Wastewater Master Plan Update. Additionally, Peel Region has initiated a Water and Wastewater Program for South Caledon which will capture required infrastructure design and approvals for various water and wastewater projects.

Work Completed To Date

Flow
Building our future, faster.

Water (Aquatics)

What we did:

- Assessed the condition of aquatic habitats.

What we found:

- 15 potential fish habitats, including one critical habitat for the Redside Dace fish species.

Why it matters:

- Although no in-water construction is planned, these watercourses and habitats need to be protected through mitigation measures based on Project design. Efforts will be made to avoid or minimize impacts.

Rivers and Streams (Fluvial Geomorphology)

What we did:

- Surveyed and assessed river and stream channels.

What we found:

- 14 river sections along the recommended preferred route, mapped erosion zones, and checked how deep pipes must be buried to avoid being exposed by erosion.

Why it matters:

- Improved understanding of river stability, now and in the future, and where erosion and sedimentation might occur.

Work Completed To Date

Flow
Building our future, faster.

Land (Terrestrial)

What we did:
- Studied plants and wildlife, including habitats.

What we found:
- Some areas could be home to at-risk species, including several bats, birds and trees.

Why it matters:
- Construction works in these areas could pose harm to these species; special permits and mitigation measures will be required based on Project design. Efforts will be made to avoid or minimize impacts.

Archaeology (Stage 1 Assessment)

What we did:
- Took photos from the public road allowance to identify known and potential areas of archaeological potential or disturbance along or adjacent to the recommended preferred route.

What we found:
- Multiple locations along the recommended preferred route with high archaeological potential that have the potential to be impacted by the Project.

Why it matters:
- This work helps plan future archaeological work (Stage 2) and provides a roadmap for areas that require further archaeological assessment to identify potential unknown archaeological sites.

Cultural Heritage

What we did:
- Took photos from the public road allowance to identify known and potential built heritage resources and cultural heritage landscapes along or adjacent to the recommended preferred route.

What we found:
- Twelve important built heritage resources and cultural heritage landscapes were identified. Six of them have the potential to be impacted by the Project.

Why it matters:
- Efforts will be made to avoid or minimize impacts to built and cultural heritage resources. Mitigation measures have been suggested to reduce or avoid harm.

Upcoming Work

Flow
Building our future, faster.

Traffic Impact Assessment

- Identifying impacts of lane closures and construction traffic on the road network through use of the City of Brampton travel demand model.
- Assessing localized impacts to individual intersections, temporary driveways and detours for large transport trucks / long-combination vehicles.

Subsurface Utility Engineering

- Locate underground utilities (e.g., storm sewers, sanitary sewers, watermains, power lines, internet cables) to help identify any conflicts with the proposed sewer.
- These will be important especially at shaft locations where surface digging will be required; shallow utilities are typically buried closer to the surface.

Geotechnical and Hydrogeology

- Borehole analysis along the Recommended Preferred Route alignment to understand soil / rock and groundwater conditions to inform the Project design phases.

Stage 2 Archaeology Assessment

- Test pit analysis to confirm or clear archaeological sites or material.
- This will help finalize shaft location.
- Typically, it is preferred to construct the shafts outside of areas where archaeological resources are present.

Alternative Solutions (Phase 2)

Flow
Building our future, faster.

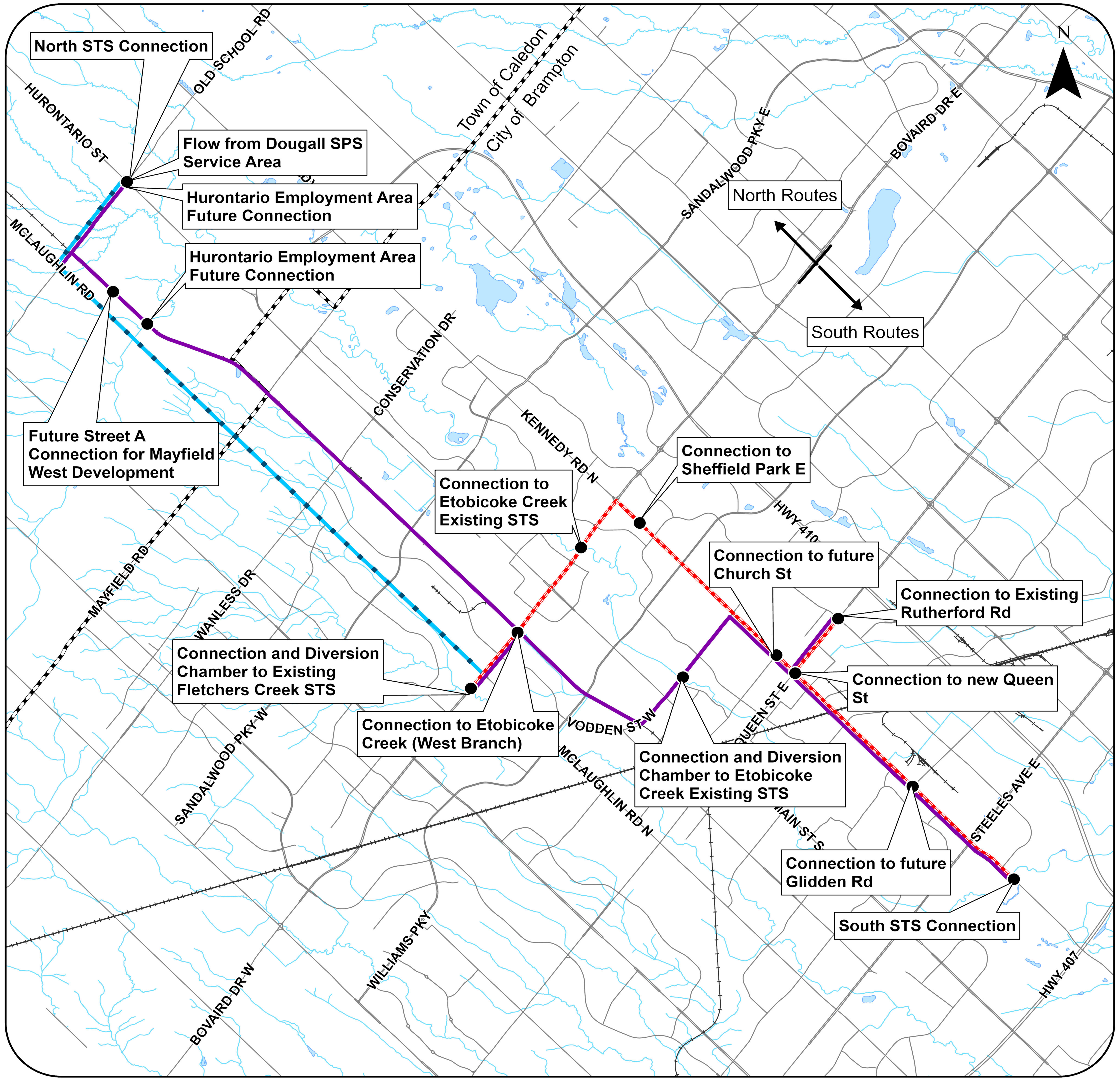
In this Phase of the EA process, we:

- Developed a routing evaluation methodology where we looked at the long list of alternatives to arrive at a short list for north and south routes (see next section of boards)
- Evaluated the short-listed routes using the information obtained from the technical studies and infrastructure analysis
- Selected a recommended preferred route for which design alternatives (e.g., construction methodology, shaft locations) will be considered in Phase 3.

Phase 1: Problem and Opportunity	Phase 2: Alternative Solutions
Review background planning and policy documents, identify study area needs, problems and opportunities.	Review existing environment, identify and evaluate feasible alternative sanitary sewer routing options, and identify short-list routing options. Evaluate short-list routing options and confirm preferred route.

Combined Short-listed South and North Routes

Flow
Building our future, faster.



Shortlist Routes

- S1
- N1
- S2
- N2

FLOW | Central Brampton

General Legend

- Sanitary Trunk Sewer (STS) Connections
- Municipal Boundary
- Railway
- Roads
- Waterbody
- Watercourse

Data Sources:
Government of Ontario, Region of Peel
PN: 60736820
Jun, 19, 2025

https://peelregion.ca/construction/environmental-assessments/kennedy-road-sanitary-trunk-sewer-project

Peel Region

Evaluation Method

Flow
Building our future, faster.

An evaluation framework was created based on environmental components, as outlined the *Environmental Assessment Act:*

- Natural Environment
- Socio-economic Environment
- Cultural Environment
- Legal/Jurisdictional
- Technical Environment
- Economic/Financial
- Climate Change

An evaluation of short-list routing options is complete. The routing options were rated based on their potential constraints relative to other routes, as follows:

- Low Constraints (Preferred)
- Medium Constraints (Less Preferred)
- High Constraints (Least Preferred)

Recommended Preferred Route – South

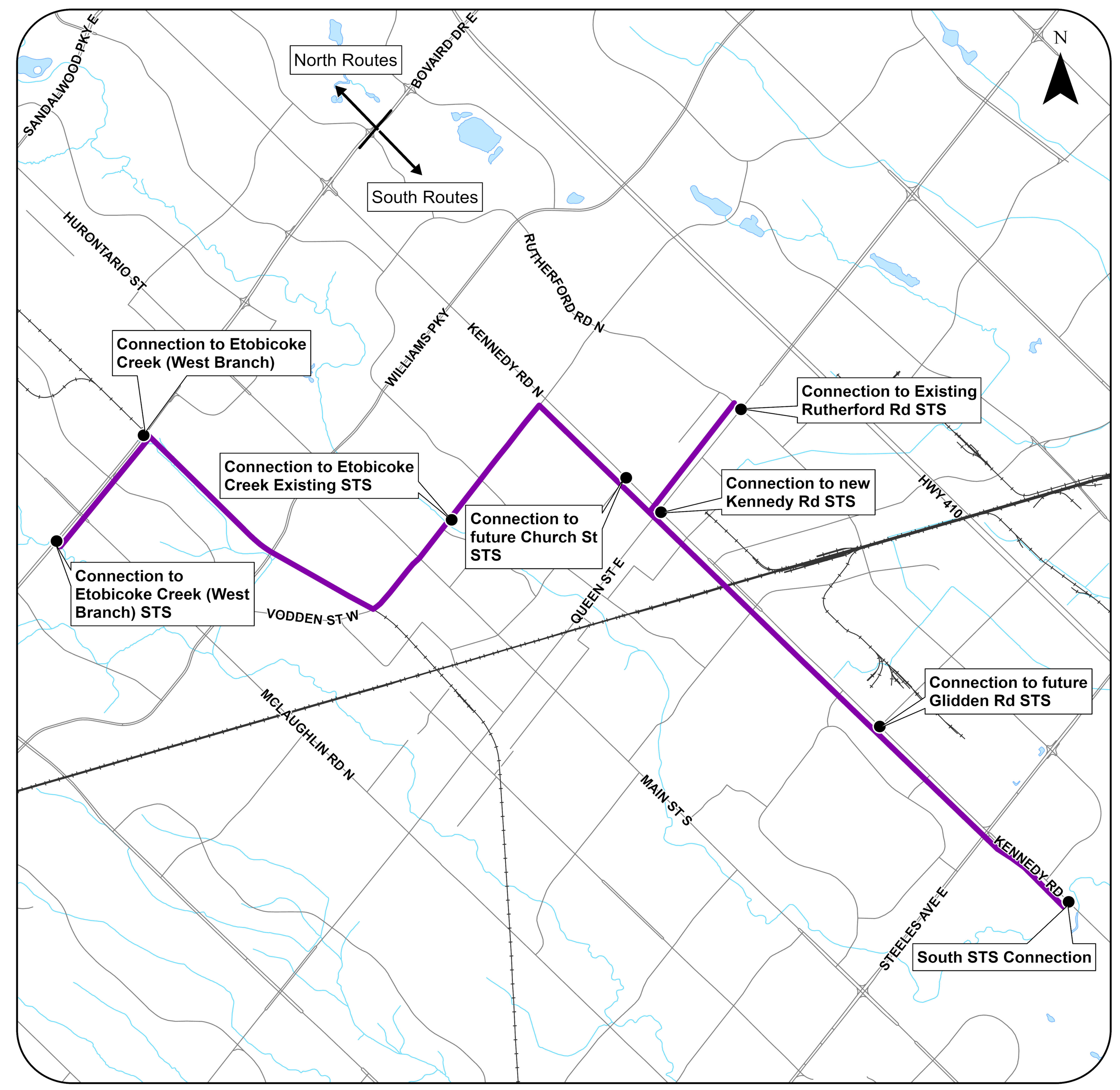
Flow Building our future, faster.

- Route S1: Kennedy Road including Bovaird Drive
- Route S2: Kennedy Road including Vodden Street and Orangeville-Brampton Railway (OBR) Corridor Route, including a small section of Bovaird Drive
- Queen Street Sanitary Sewer Extension (common to S1 and S2): Queen Street from Rutherford Road North to Kennedy Road North
- **Route S2: Kennedy Road including Vodden Street and Orangeville- Brampton Railway (OBR) Corridor Route is the recommended preferred south route, based on evaluation results.**

Evaluation Category	Route S1: Kennedy/Bovaird	Route S2: Kennedy/Vodden/OBR
Natural Environment	Preferred	Less Preferred
Socio-economic Environment	Less Preferred	Preferred
Cultural Environment	Preferred	Preferred
Legal / Jurisdictional	Preferred	Preferred
Technical	Least Preferred	Less Preferred
Climate Change	Preferred	Preferred
Economic / Financial	Least Preferred	Less Preferred
		Preferred overall in the south section

Legend

Preferred | Less Preferred | Least Preferred



Shortlist Routes - South

S2

FLOW | Central Brampton

General Legend

- Sanitary Trunk Sewer (STS) Connections
- Municipal Boundary
- Railway
- Roads
- Waterbody
- Watercourse

Data Sources:
Government of Ontario, Region of Peel
PN: 60736820
Jun, 19, 2025

Recommended Preferred Route – North

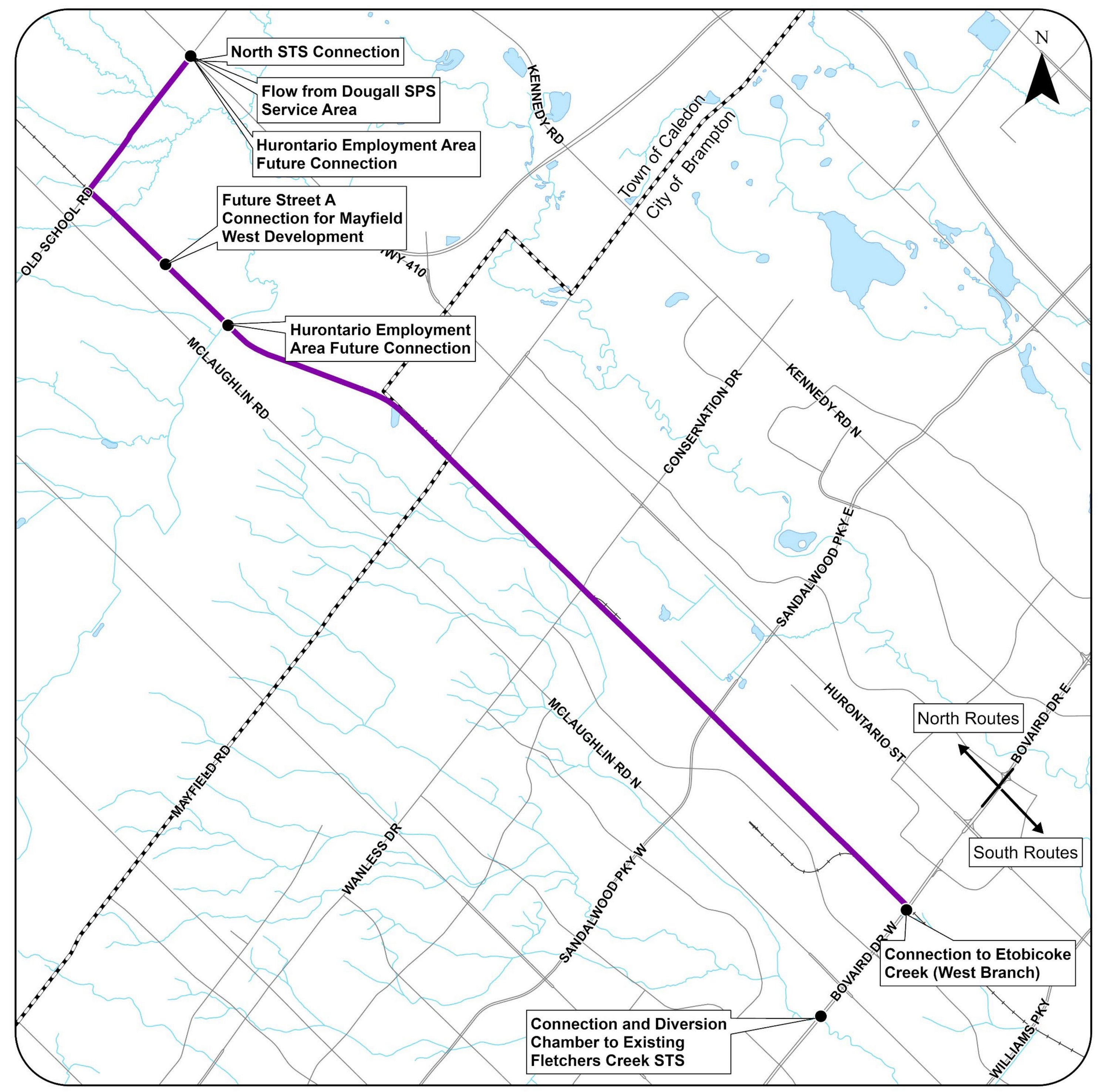
Flow
Building our future, faster.

- Route N1: Orangeville-Brampton Railway (OBR) Corridor including Old School Road Route
- Route N2: McLaughlin Road including Old School Road Route

Route N1: Orangeville-Brampton Railway (OBR) Corridor including Old School Road Route was selected as the recommended preferred south route based on the evaluation results.

Evaluation Category	Route N1: OBR/Old School Road	Route N2: McLaughlin/Old School Road
Natural Environment	Less Preferred	Less Preferred
Socio-economic Environment	Preferred	Less Preferred
Cultural Environment	Preferred	Less Preferred
Legal / Jurisdictional	Preferred	Less Preferred
Technical	Less Preferred	Least Preferred
Climate Change	Preferred	Less Preferred
Economic / Financial	Preferred	Less Preferred
	Preferred overall in the north section	

Legend
Preferred · Less Preferred · Least Preferred

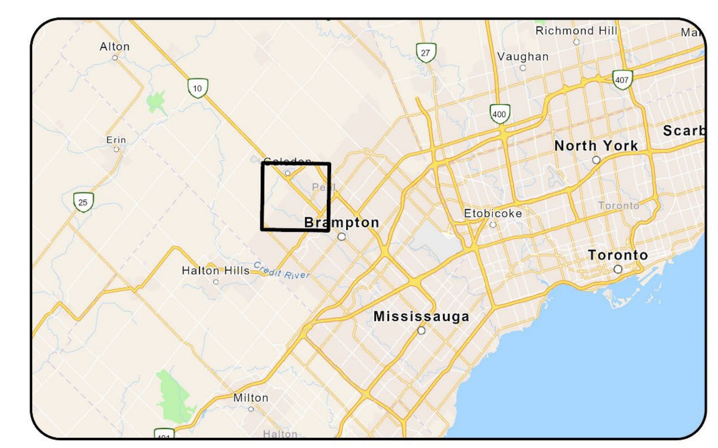


Shortlist Routes - North
N1

FLOW | Central Brampton

General Legend
- Sanitary Trunk Sewer (STS) Connections
- Municipal Boundary
- Railway
- Roads
- Waterbody
- Watercourse

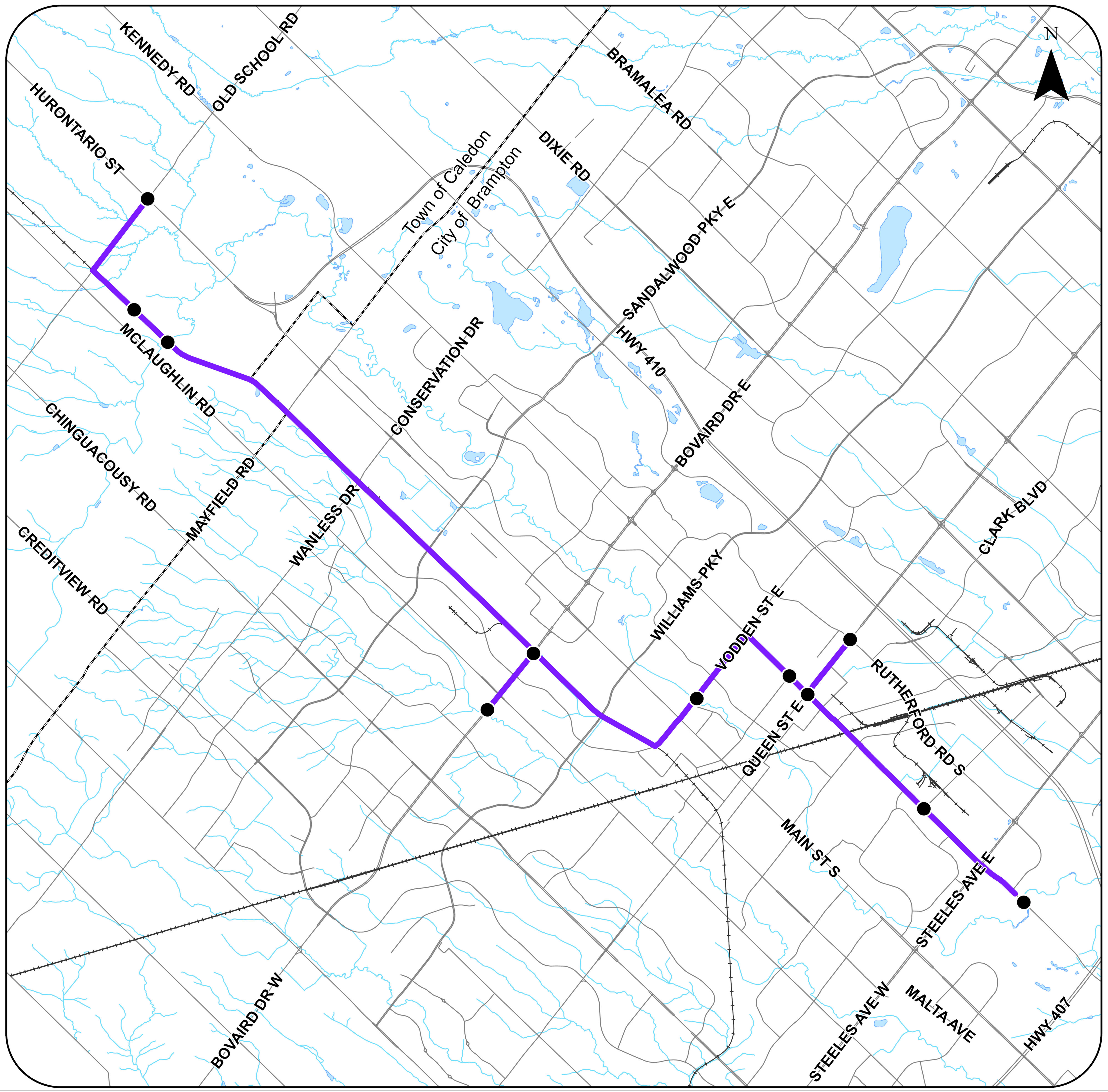
Data Sources:
Government of Ontario, Region of Peel
PN: 60736820
Jun, 23, 2025



Recommended Preferred Route

Flow
Building our future, faster.

The recommended preferred route is **Route S2: Kennedy Road including Vodden Street and Orangeville-Brampton Railway (OBR) Corridor and Route N1: Orangeville-Brampton Railway (OBR) Corridor including Old School Road to Hurontario Street.**



Recommended Preferred Route

FLOW | Central Brampton

General Legend

- Sanitary Trunk Sewer (STS) Connections
- Municipal Boundary
- Railway
- Roads
- Watercourse
- Waterbody

Data Sources:
Government of Ontario, Region of Peel
PN: 60736820
Jun, 09, 2025

https://peelregion.ca/construction/environmental-assessments/kennedy-road-sanitary-trunk-sewer-project

Peel Region

Alternative Design Concepts (Phase 3)

Flow
Building our future, faster.

Phase 3 of the EA process involves considerations to the following alternative design construction methodologies based on the recommended preferred route identified in Phase 2:

- **Methods of construction:** The following boards describe different methods of construction and preliminary evaluation results. As a first step, profile drawings were created to confirm the required depth of the new sewer. This analysis concluded that the new sewer will need to be between 15 to 30 metres deep, which would be very difficult to construct by the open-cut method based on built-up environment and available road right-of-way width. Therefore, trenchless construction was determined to be the preferred method.
- **Preliminary shaft locations:** From a planning and risk mitigation perspective, all viable potential shaft locations have been identified based on the methodology requiring the most shafts in mind (microtunneling), with shafts being spaced approximately 800 metres apart due to the preliminary machine sizes. Each shaft location requires space to set up equipment for staging and operation. All efforts will be made to maximize right-of-ways and reduce easement needs.
- **Construction impacts and mitigation measures:** Based on the preliminary preferred construction methodology and shaft locations, construction impacts (e.g., tree removals, disruption to vehicular, transit and active transportation) have been identified along with preliminary mitigation measures that will be refined during the subsequent design phases.

Phase 1: Problem and Opportunity

Review background planning and policy documents, identify study area needs, problems and opportunities.

Phase 2: Alternative Solutions

Review existing environment, identify and evaluate feasible alternative sanitary sewer routing options, and identify short-list routing options. Evaluate short-list routing options and confirm preferred route.

Phase 3: Alternative Design Concepts

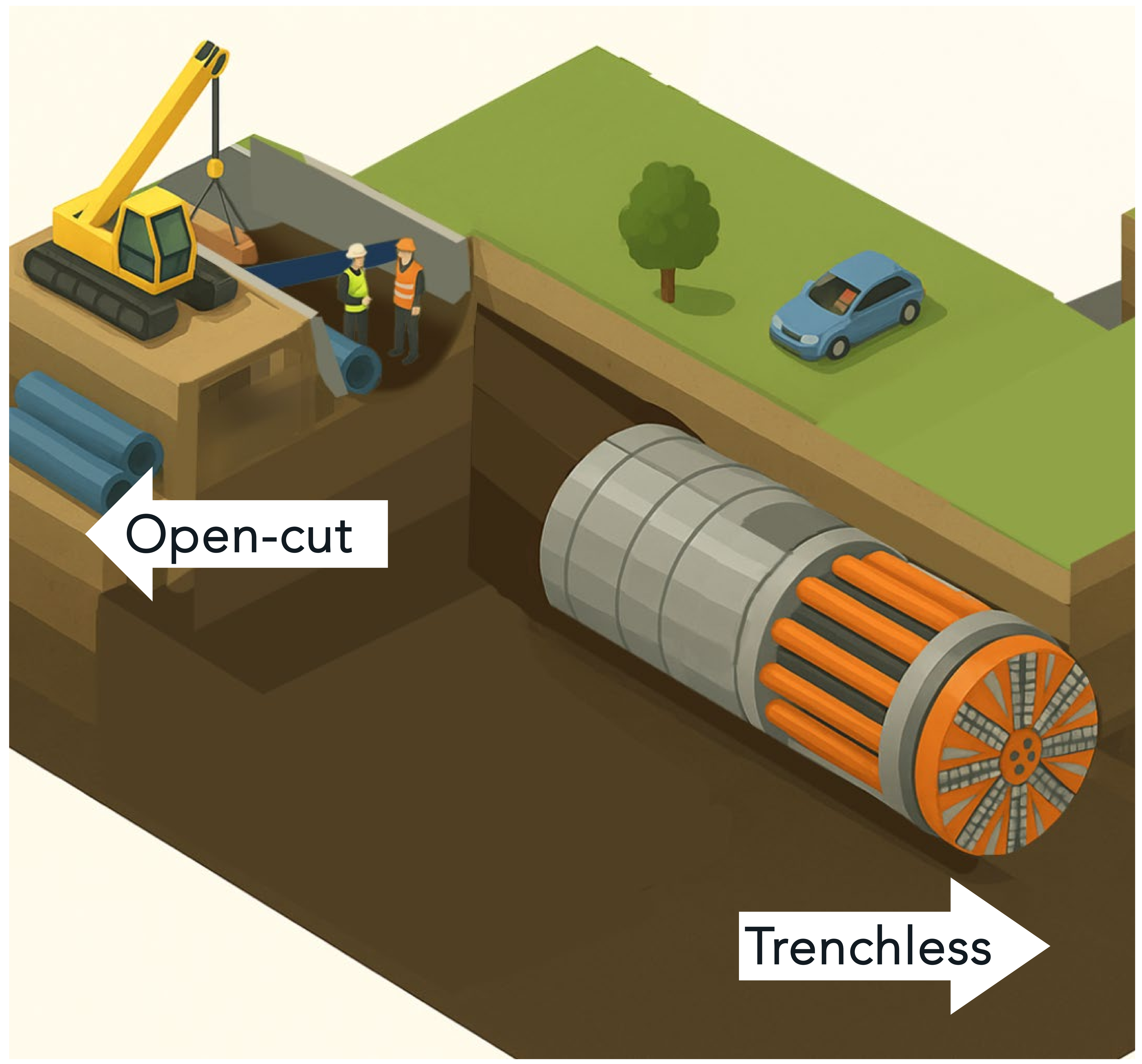
Develop and evaluate alternative designs (e.g., construction methods) for the preferred route. Identify environmental impacts and required mitigation measures, and select the Recommended Design Alternative.

Construction Methods – Open-cut vs. Trenchless

Flow
Building our future, faster.

Open-cut

Construction methodology where a trench is cut into the ground for the installation of the sewer pipe and maintenance holes. All disturbed areas are returned to existing conditions.



Trenchless

Construction methodology used to install the sewer pipe with minimal surface excavation, except at shaft locations. Shafts are needed to lower or retrieve the tunneling machinery. Shafts can be used for the construction of maintenance holes. All disturbed areas are returned to existing conditions.

Construction Methods – Preliminary Evaluation of Open-cut vs. Trenchless

Flow
Building our future, faster.

Open-Cut	Trenchless
Significant traffic disruptions due to open cut trenching in road right-of-ways	Minimizes surface disruption and traffic impacts, especially in urban corridors ✓
Very challenging to construct considering sewer depths ranging 10-20m below ground	Safer and more practical for deep installations (e.g., 10-20m pipe depths) ✓
Higher groundwater management required due to larger surface impacts	Reduced groundwater management as impacts are limited to shaft locations ✓
More excavated materials to manage due to much larger surface impacts	Less contaminated soil to handle as impacts are limited to shaft locations ✓
Longer timeline to construct	Shorter timeline to construct ✓
	Preferred

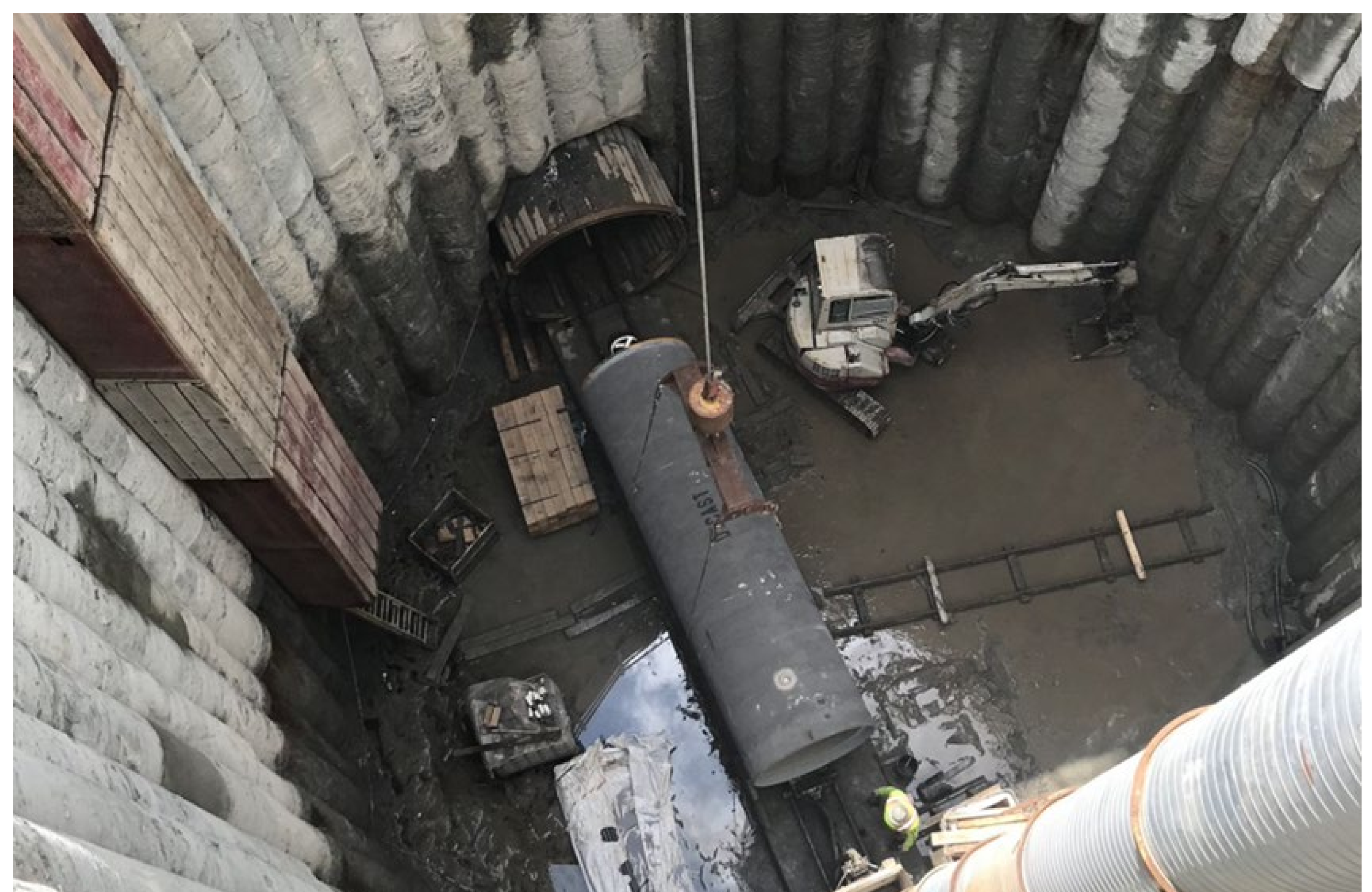
What is a...

Flow
Building our future, faster.

Compound: The fenced area where construction will take place. Each compound will require a staging area where construction equipment can be stored and excavated material can be brought to the surface for disposal (i.e., hauled away in trucks). Once tunnelling operations are completed, the staging area will be restored to original condition or better.

Shaft: A deep hole providing access to underground tunnels where work takes place. The shaft is always inside a compound.

Compound site


Placing pipe down a shaft*

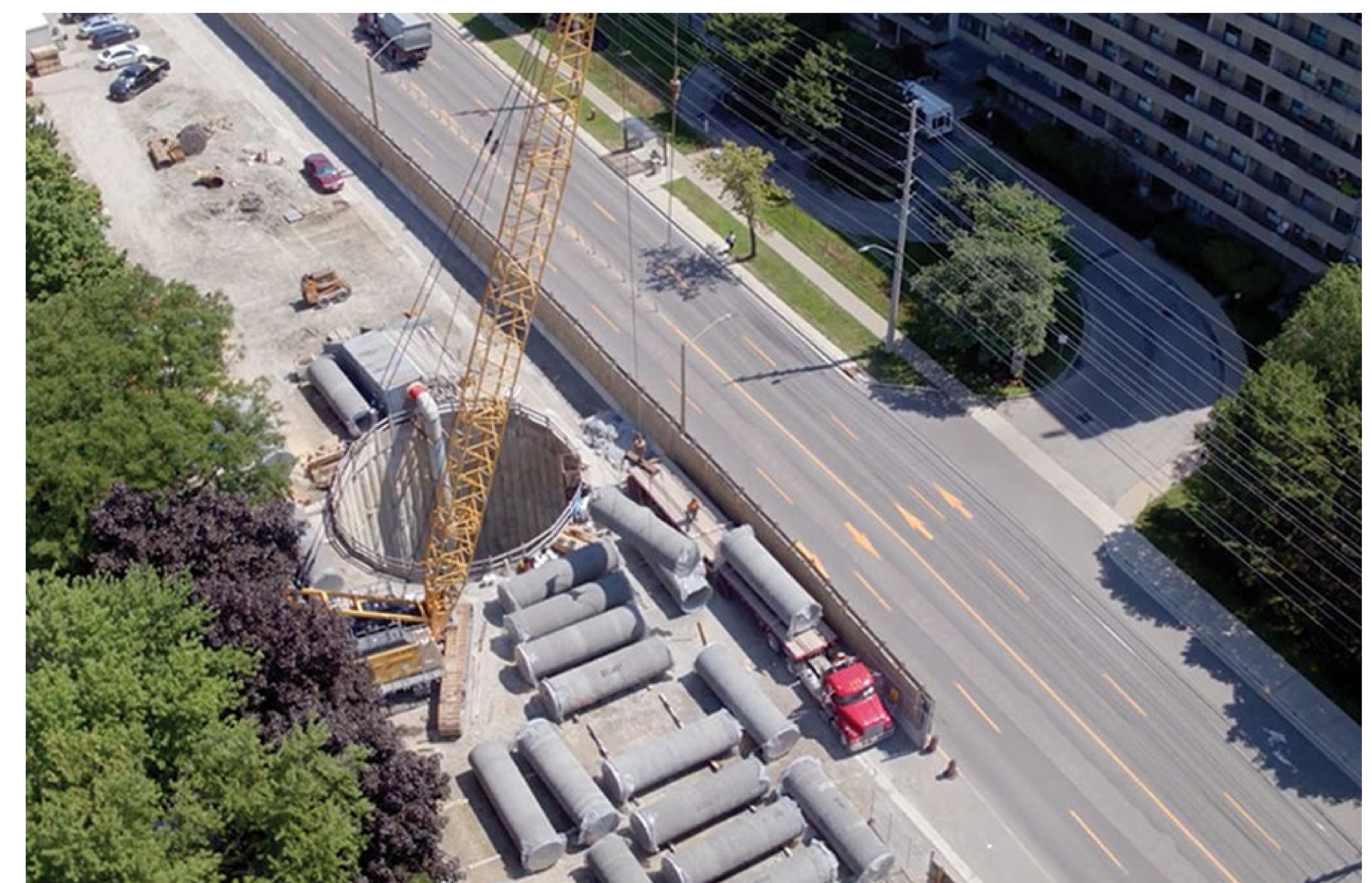
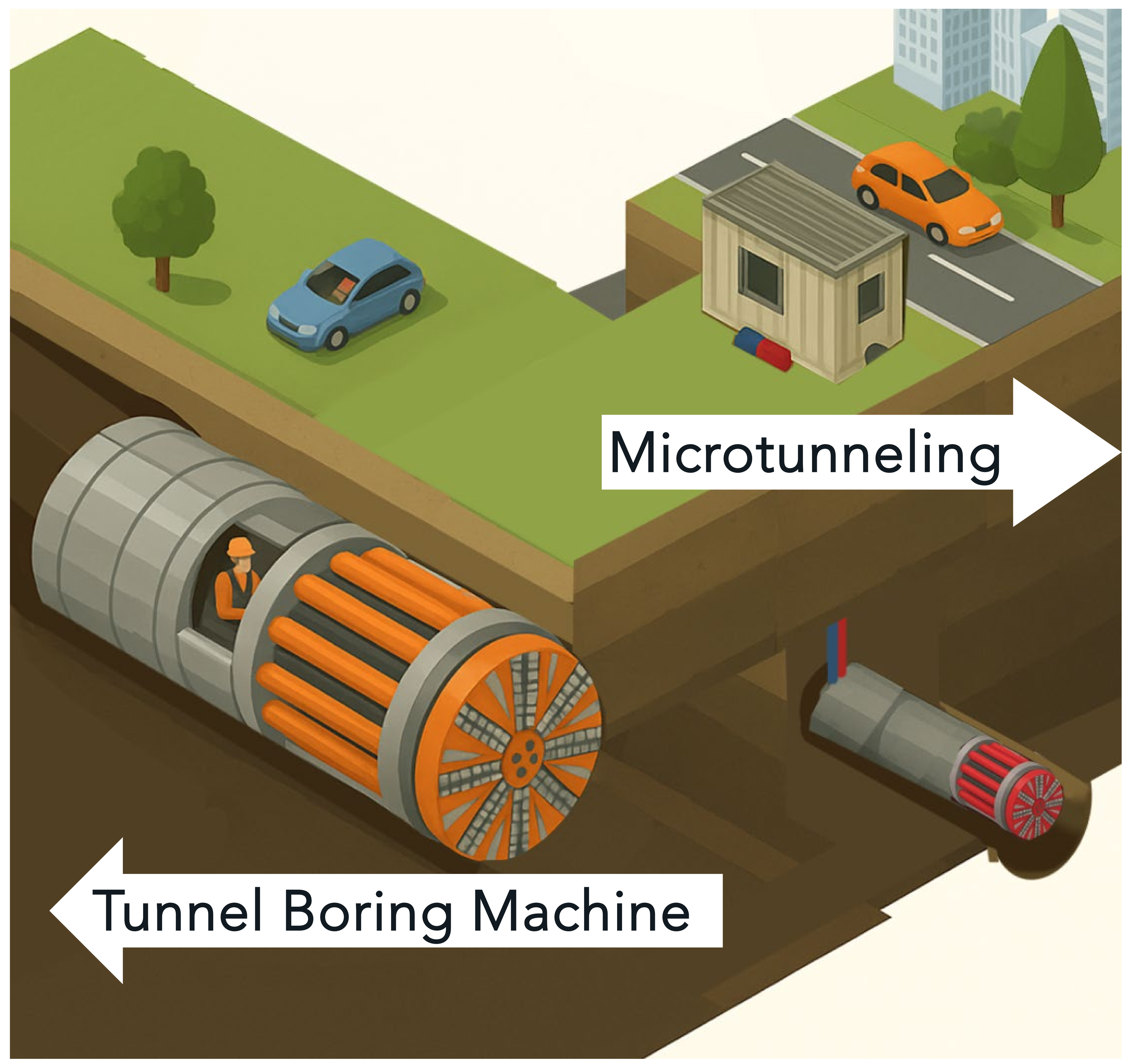

Bird's eye view of shaft*

***Photo credit:** Peel's Burnhamthorpe Water Project;
Consultant: Hatch Ltd

Construction Methods – Tunnel Boring Machine vs. Microtunneling

Flow
Building our future, faster.

Tunnel Boring Machine
This is a type of trenchless tunneling methodology, using a large boring machine. These are typically large in diameter and can tunnel long distances, enabling shafts to be spaced further apart. They are operated by an operator underground.



Microtunneling
Trenchless tunneling methodology, using a micro-tunnel boring machine (MTBM). MTBMs are typically smaller, and tunnel shorter distances, requiring shorter spaced shafts. They are operated from control containers located above ground.

Construction Methods – Preliminary Evaluation of Tunnel Boring Machine vs. Microtunneling

Flow
Building our future, faster.

Tunnel Boring Machine	Microtunneling*
More grouting between tunnel and pipe as TBMs are much larger than the pipe size identified for this project.	Less grouting between tunnel and pipe as MTBMs are available in a range of smaller sizes, closer to the pipe size needed for this project. ✓
Needs man-entry and tunnel ventilation	No need for man-entry. Safer, remotely operated from the surface ✓
Larger shaft footprint – more difficult to install	Smaller shaft footprint – easier to install in tight urban locations ✓
Results in fewer shaft compounds due to longer tunnel drives ✓	Requires greater number of shaft compounds due to shorter tunnel drives
Larger minimum diameter tunnel results in more spoil to manage	Generates less spoil ✓
Less maneuverability for alignment changes	Better alignment control in constrained areas ✓
Greater volume of excavation can increase settlement risks if not carefully managed	Reduced risk of surface settlement: Pressure-balanced excavation method ✓
Longer timeline to construct and more costly	Shorter timeline to construct and less costly ✓
	Preferred

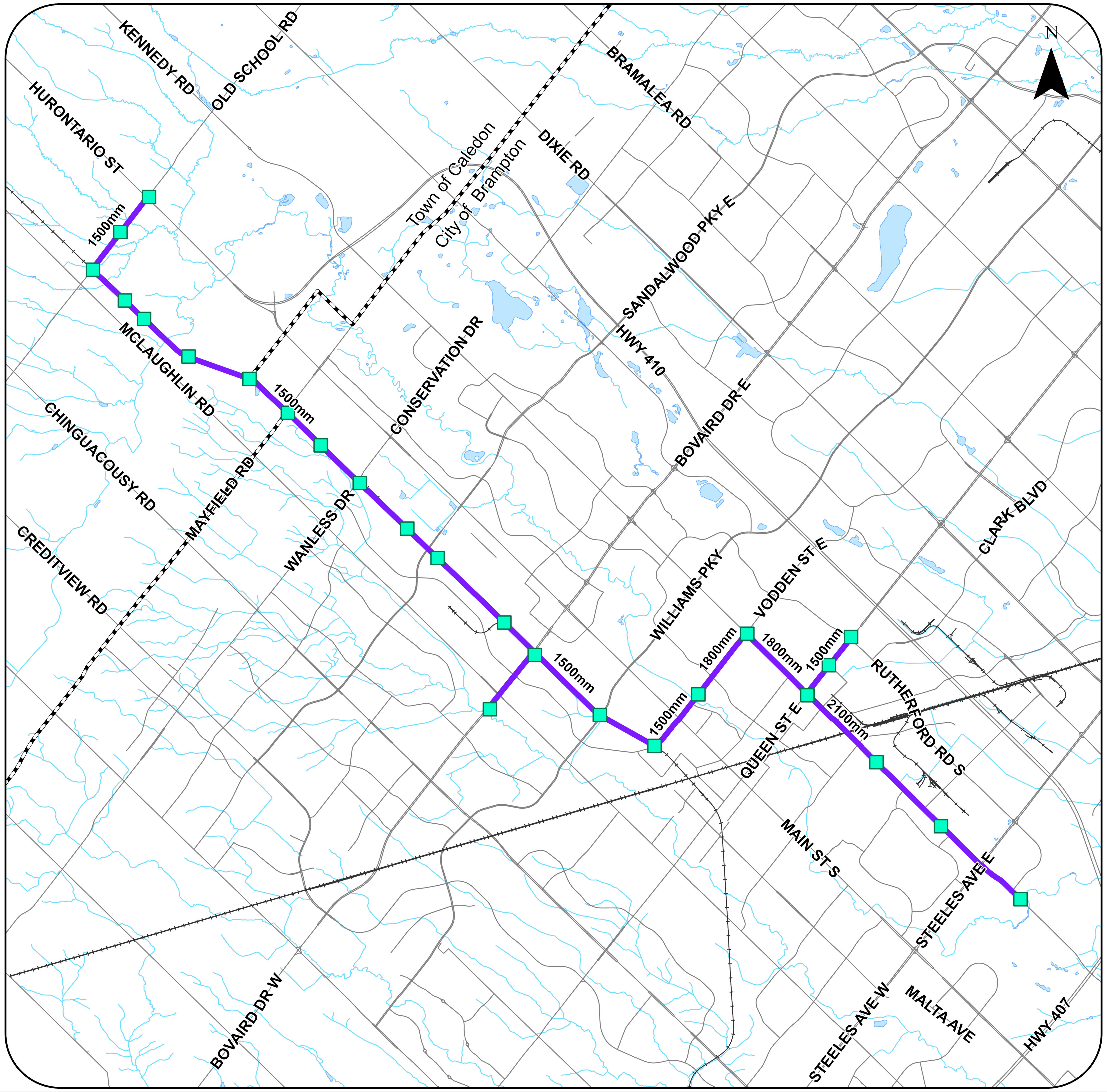
*Note: microtunneling may not be a preferred option for other projects.

https://peelregion.ca/construction/environmental-assessments/kennedy-road-sanitary-trunk-sewer-project

Peel Region

Potential Shaft Locations

Flow
Building our future, faster.



Preliminary Shaft Locations

FLOW | Central Brampton

General Legend

- Recommended Preferred Route
- Municipal Boundary
- Railway
- Roads
- Watercourse
- Waterbody

Data Sources:
Government of Ontario, Region of Peel
PN: 60736820
Jun, 19, 2025

https://peelregion.ca/construction/environmental-assessments/kennedy-road-sanitary-trunk-sewer-project

Peel Region

Managing Construction Impacts

Flow
Building our future, faster.

Water Crossings and Connections including Floodplain Management:

- Use trenchless technology at watercourse crossings where applicable
- Follow MNRF fisheries construction timing windows where applicable
- Connections to existing sanitary trunk sewers will avoid in-water works
- Follow erosion / sedimentation control strategy
- Restore disturbed areas to natural or better conditions

Noise/Vibration/Dust:

- Restrict high noise construction activities to day shift where required
- Adhere to noise by-laws where possible
- Complete preconstruction building structure surveys
- Dust control by spraying water / street sweeping
- Fence/hoarding of construction site along property limits and access roadway

Trees and Vegetation:

- Minimize tree and vegetation removal
- Prepare Tree Protection Plan
- Compensate for lost trees

Groundwater Management:

- Minimize dewatering
- Implement dewatering plan based on hydrogeological assessment

Contaminated Soils Through Spills:

- Soil contamination mitigation strategies will address any risks with contaminated soil and groundwater.
- Ensure proper handling / maintenance of construction equipment
- Prepare and follow contingency plans for control and cleanup should a spill occur

Traffic Management and Access:

- Prepare Traffic Management Plan
- Minimize access disruption
- Provide alternate pedestrian access
- Provide advanced notification

Project Progress and Next Steps

Flow
Building our future, faster.

November 2024

Phase 1
Problem or Opportunity

- Notice of Commencement and Public Information Centre (PIC) #1

Winter 2024/2025 – Fall 2025

Phase 2 and 3
Alternative Solutions and Design Concepts

WE ARE HERE

- PIC #1 January 28, 2025
- Notice of PIC #2
- PIC #2 June 25, 2025
- PIC #3 Late Fall, 2025

- Project background
- Study area
- Short list of alternative routes
- Proposed evaluation criteria
- Construction methods

- Evaluate shortlisted routes
- Identify recommended preferred north and south routes
- Identify and evaluate design concepts for the preferred north and south routes including construction methods
- Proposed mitigation measures

Fall 2025

Phase 4
Environmental Study Report

- Prepare and file Environmental Study Report and Notice of study completion
- 30-day review and commenting period

Winter 2025 - 2030

Phase 5
Implementation

Detailed design, tender and approvals

- Pending permits, approvals and property acquisition, construction to start in 2027 with a target completion date of 2030

Dates and timelines are approximate and may be subject to change

Ongoing consultation and engagement

https://peelregion.ca/construction/environmental-assessments/kennedy-road-sanitary-trunk-sewer-project

Peel Region

Stay Connected

Flow
Building our future, faster.

Fill out the online survey by July 9, 2025:

Sign up for the mailing list or send any feedback, questions or concerns to:

Italia Ponce, P. Eng.,
Project Manager, Peel Region
italia.ponce@Peelregion.ca

Faranak Amirsalari, MES, MCIP, RPP
Environmental Planner, AECOM
Faranak.Amirsalari@aecom.com

Please view the Kennedy Road Sanitary Trunk Sewer Project website for more information, and to stay up to date:

https://peelregion.ca/construction/environmental-assessments/kennedy-road-sanitary-trunk-sewer-project

Peel Region