

# ONLINE PUBLIC ENGAGEMENT

## Municipal Class Environmental Assessment Schedule “B” CAWTHRA PHASE 3 SANITARY TRUNK SEWER

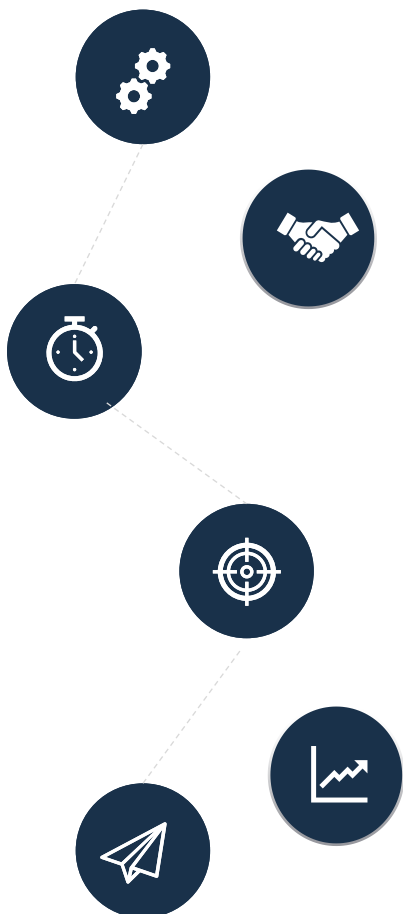
Date: May 06, 2024

Project No :18-2252, 20-2453, & 22-2254

# Purpose of Public Engagement



# Agenda



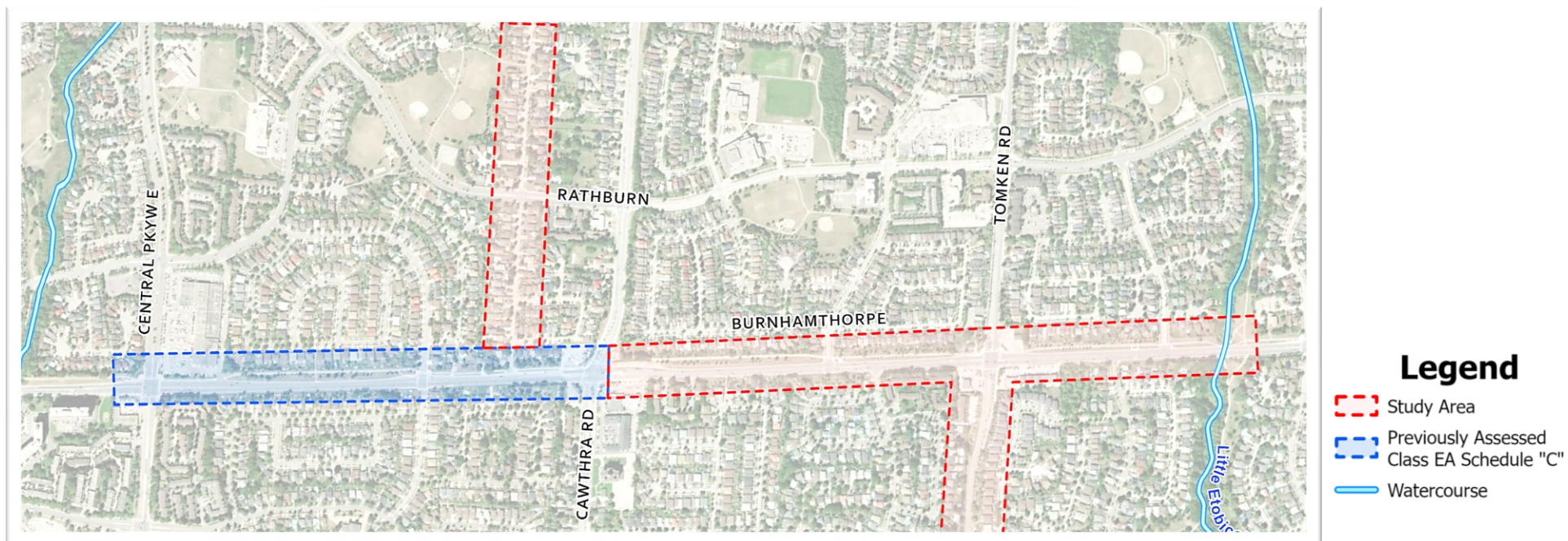
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# Project Background

The Region of Peel has identified the need for a trunk sewer along Burnhamthorpe Road from Cawthra Road to Little Etobicoke Creek (LEC); and for the potential to improve local sanitary services along Wilcox and Tomken Road.

These upgrades would be necessary to enhance wastewater servicing capacity and operational flexibility as part of Central Mississauga Capacity Improvements identified in the 2020 Water and Wastewater Master Plan to facilitate future growth and development.

This Study is intended to address the Region’s State of Good Repair Basement Flooding Mitigation Program within the Wilcox Road and Runningbrook Drive sewersheds by diverting wastewater flows away from areas prone to sewer surcharging.



## What is an EA?

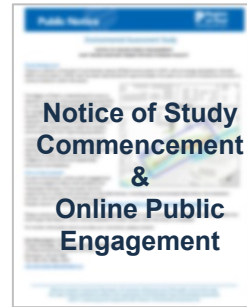
A **Municipal Class Environmental Assessment (Class EA)** is a planning and approval process for municipal infrastructure projects, following Ontario's Environmental Assessment Act.

The Class EA study for this project is being conducted in accordance with **Schedule 'B'** of the Municipal Class EA document (March 2023).

# Municipal Class EA Process

**Phase 1: Problem or Opportunity**

- Identify the problems or opportunities



**Online Public Engagement**

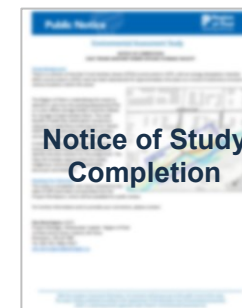
**Phase 2: Alternative Solutions**

- Identify alternative solutions
- Inventory natural, cultural and social-economic environments
- Identify potential impacts of the alternative solutions after mitigation
- Evaluate the alternative solutions considering environmental and technical impacts
- Identify a recommended solution
- Confirm the preferred solution based on input from the OPE and review agencies



**Project File Report:**

- Prepare project file report to describe the activities undertaken through Phases 1 and 2
- Notify stakeholders of completion of the study and of the Part II Order provision in the EA Act
- Place project file report on public record for review for 30 calendar days



**Implementation:**

- Detailed design and construction



# Municipal Class EA Process (continued)

## Community Outreach



## Problem/Opportunity Statement

Phase 1 of the Municipal Class EA process defines the starting point for any Class EA as the “Problem/Opportunity Statement.”

The Problem/Opportunity Statement for Phase 3 of the Cawthra Sanitary Trunk Sewer Municipal Class EA is defined as follows:

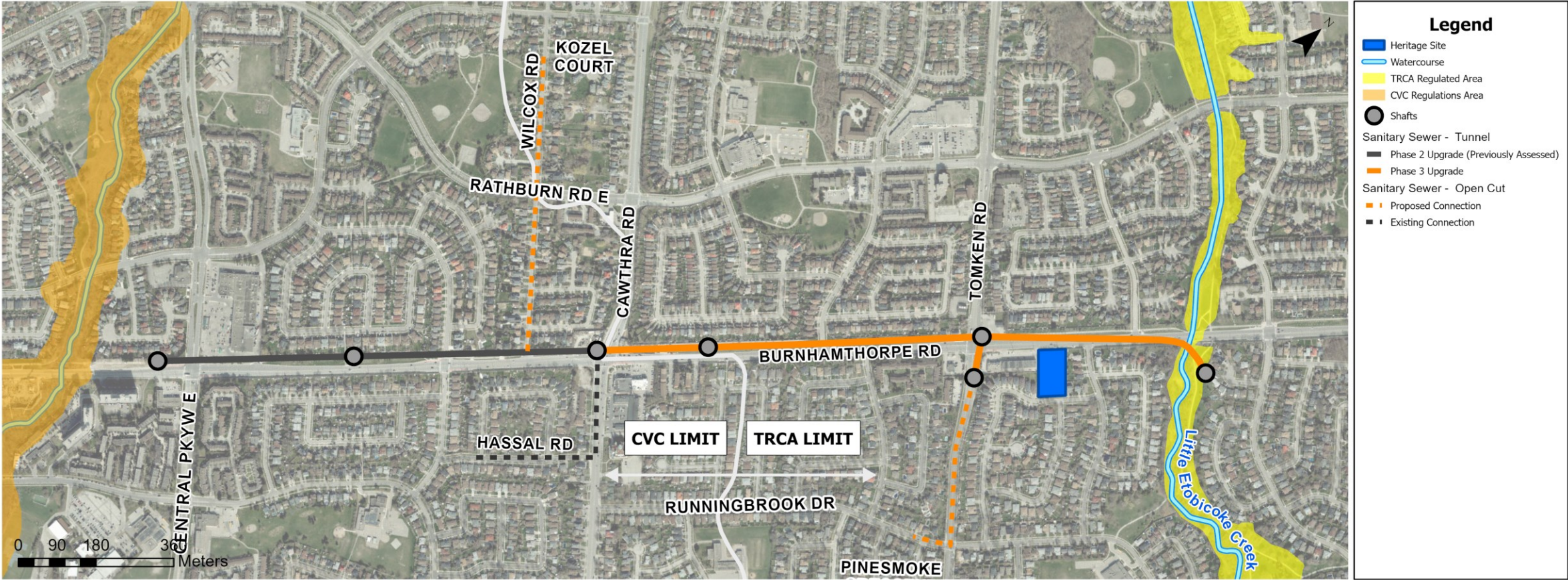
*“To enhance wastewater servicing capacity and operational flexibility as part of Central Mississauga Capacity Improvements identified in the 2020 Water and Wastewater Master Plan for the Lake-Based (South Peel) system. This includes implementation of control sites designed to balance flow for infrastructures which are constructed to facilitate future growth and development.*

*In addition, to address the Region’s State of Good Repair Basement Flooding Mitigation Program within the Wilcox Road and Runningbrook Drive sewersheds and by diverting wastewater flows away from areas prone to sewer surcharging.”*

In accordance with the requirements of the Municipal Class EA planning process, the Region of Peel initiated this Municipal Class EA to identify and evaluate alternative solutions to address this Problem/Opportunity Statement.



# Existing Site Considerations



# Archaeological & Cultural Heritage

## Cultural Heritage

The subject site is situated in close proximity to a heritage property, Copeland House. The project is not anticipated to have any direct or indirect adverse impacts; however, temporary noise and vibratory effects will be considered during the construction phase.

## Archaeological Assessment

On account of deep and extensive land disturbance, it is not expected that the Study Area retain archaeological potential. However, an archaeological assessment stage II is being undertaken in close coordination/consultation with Indigenous communities.

## COMPARATIVELY EVALUATE THE THREE ALTERNATIVES

- Identify evaluation criteria
- Evaluation takes into consideration:
  - Natural
  - Social-cultural
  - Technical
  - Economic (costs)
- Overall, the evaluation considerations are colour coded to easily identify preferences



Rating:	Preferred	Less Preferred	Least Preferred
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# Alternative Solutions

## Overview

Three (3) alternative solutions for Phase 3 have been developed to address the problem statement.

### Alternative 1 & 2

- Extend the 1500mm gravity trunk sewer along Burnhamthorpe Road from Cawthra Road to Little Etobicoke Creek (LEC).
- Propose Five (5) shaft locations along Burnhamthorpe Road.

### Local Upgrades

- A new local sanitary sewer on Wilcox Road, replacing the existing 250mm sanitary sewer.
- A new sanitary sewer on Tomken Road.
- A new sanitary sewer on Runningbrook Road.

### Alternative 3

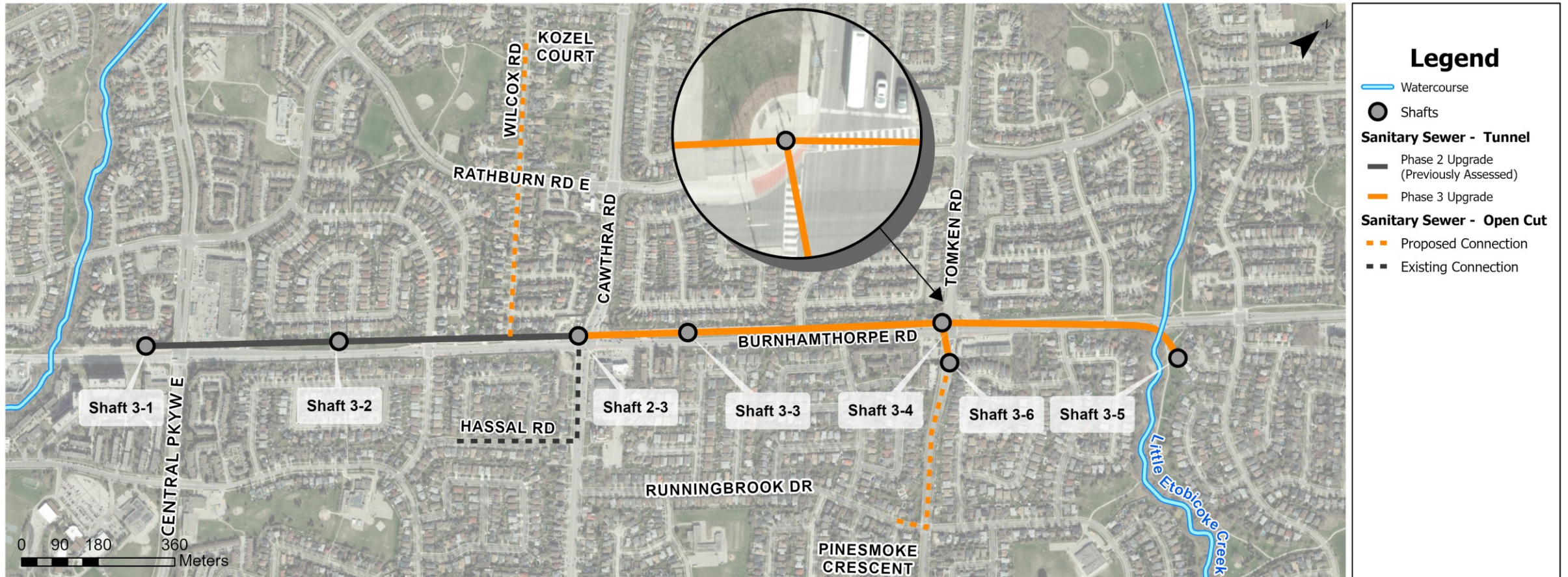
- Do Nothing Approach





# Alternative Solution #1

## Little Etobicoke Creek (LEC) Extension





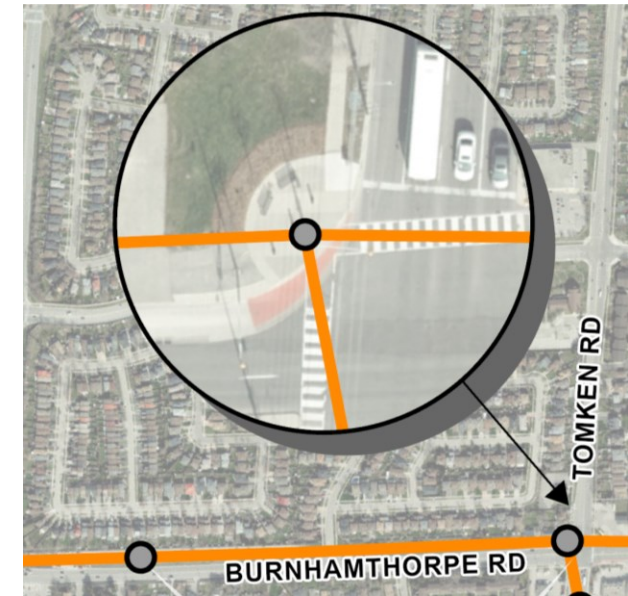
# Alternative Solution #1 (continued)

## Little Etobicoke Creek (LEC) Extension

- Minimize future surcharges and basement flooding.
- Enhance wastewater servicing capacity and operational flexibility to accommodate future growth and development.
- Diverts wastewater flows away from areas prone to sewer surcharging, to the proposed Cawthra Sanitary Trunk Sewer.

## Shaft 3-4 Location

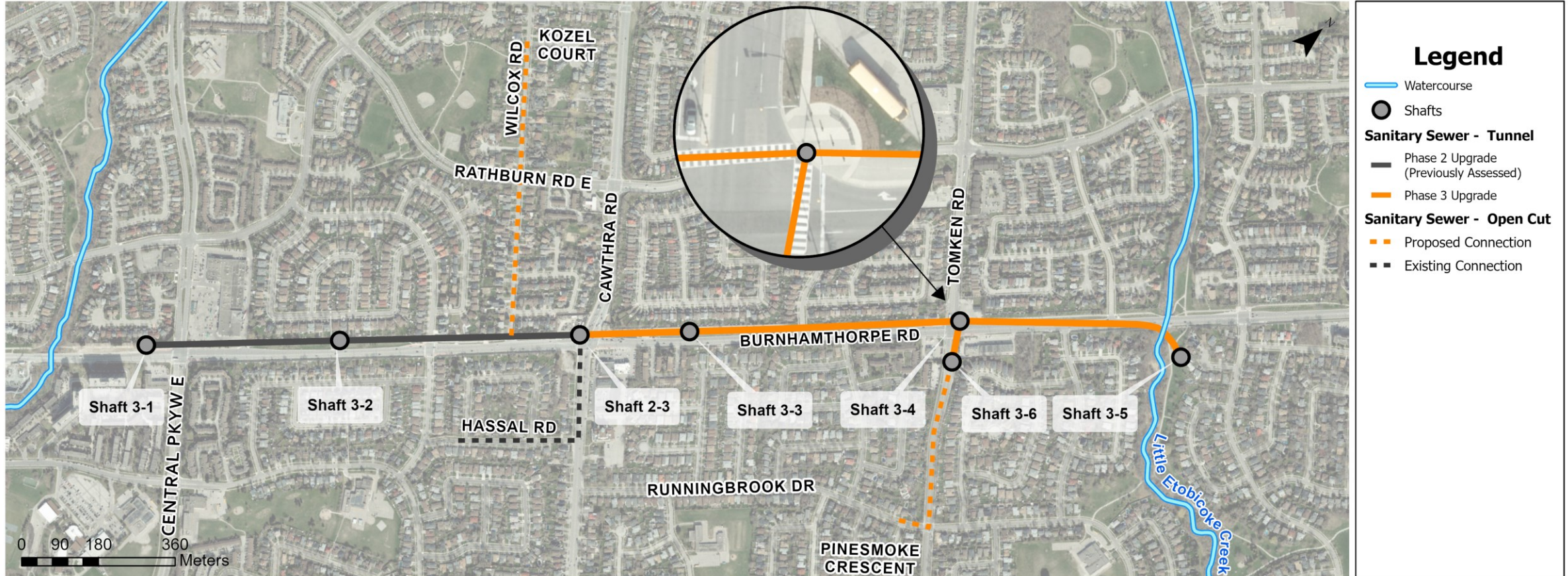
- Located at northwest corner of the intersection of Tomken Road and Burnhamthorpe Road (**Public Property**).
- Consent to Enter on public property required.





# Alternative Solution #2

## Little Etobicoke Creek (LEC) Extension (Alternate Shaft 3-4 Location)





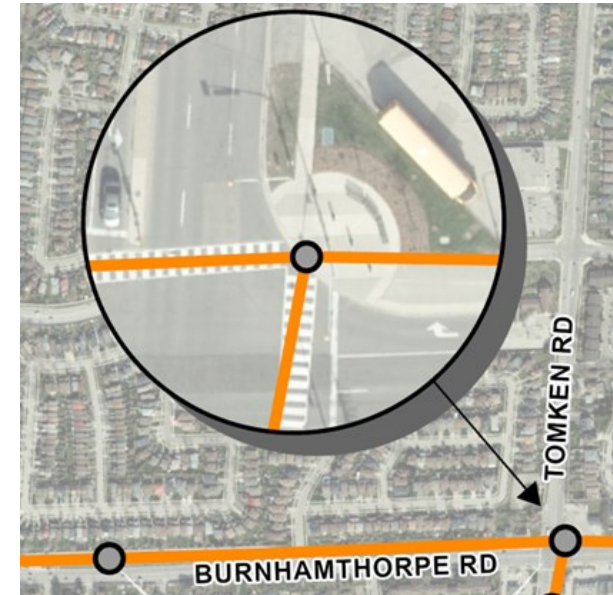
# Alternative Solution #2 (continued)

## Alternative 2 – Little Etobicoke Creek (LEC) Extension (Alternate Shaft 3-4 Location)

- Minimize future surcharges and basement flooding.
- Enhance wastewater servicing capacity and operational flexibility to accommodate future growth and development.
- Divert wastewater flows away from areas prone to sewer surcharging, to the proposed Cawthra Sanitary Trunk Sewer.

### Shaft 3-4 Location

- Located at northeast corner of the intersection of Tomken Road and Burnhamthorpe Road (**Private Property**).
- Temporary easement on private property required.



# Alternative Solution #3

## “Do Nothing”

The **“Do Nothing”** Alternative, suggests maintaining the current sanitary system without any proposed infrastructure upgrades.

- This option contrasts with the other alternatives, as it does not involve the extension of the sanitary sewer along Burnhamthorpe Rd E to enable the Region flexibility to divert flows partially or fully to the Cawthra Rd Sanitary Trunk Sewer.
- This alternative will increase the risk of sewer system surcharging and overland flooding due to capacity issues currently present within the existing network.

# Evaluation of Alternative Solutions

Criteria		Alternative 1	Alternative 2	Alternative 3 "Do Nothing Option"
NATURAL ENVIRONMENT	Surface Water Impacts	<ul style="list-style-type: none"> <li>Requires excavation within TRCA regulated area and close proximity to the Little Etobicoke Creek at Shaft 3-4, which requires permit and sediment/erosion controls to minimize impacts.</li> <li>The alignment and tunneling construction methodology avoids in-water works.</li> </ul>	<ul style="list-style-type: none"> <li>Requires excavation within TRCA regulated area and close proximity to the Little Etobicoke Creek at Shaft 3-4, which requires permit and sediment/erosion controls to minimize impacts.</li> <li>The alignment and tunneling construction methodology avoids in-water works.</li> </ul>	<ul style="list-style-type: none"> <li>No impacts as construction/excavation is not required.</li> </ul>
	Natural Heritage Area Impacts	<ul style="list-style-type: none"> <li>The alignment is primarily within the R.O.W and outside vegetated area/natural features.</li> <li>Shaft 3-5 is located within natural features (manicured lawn with some planted trees). Mitigation measures should be implemented to reduce or minimize impacts on the natural heritage system form and functions.</li> </ul>	<ul style="list-style-type: none"> <li>The alignment is primarily within the R.O.W and outside vegetated area/ natural features.</li> <li>Shaft 3-5 is located within natural features (manicured lawn with some planted trees). Mitigation measures should be implemented to reduce or minimize impacts on the natural heritage system form and functions.</li> </ul>	<ul style="list-style-type: none"> <li>No impacts as construction is not required.</li> </ul>
	Groundwater / Subsurface Impacts	<ul style="list-style-type: none"> <li>Water taking is anticipated during construction.</li> </ul>	<ul style="list-style-type: none"> <li>Water taking is anticipated during construction.</li> </ul>	<ul style="list-style-type: none"> <li>No impacts as construction is not required.</li> </ul>
	Vegetation / Greenspace Impacts	<ul style="list-style-type: none"> <li>Potential impacts to existing trees, tree canopy and vegetation at compound locations.</li> </ul>	<ul style="list-style-type: none"> <li>Potential impacts to existing trees, tree canopy and vegetation at compound locations.</li> </ul>	<ul style="list-style-type: none"> <li>No impacts as construction is not required.</li> </ul>
SOCIAL AND CULTURAL ENVIRONMENT	Traffic Disruption /Impacts to Private Property/Existing Land Uses (e.g., Businesses)	<ul style="list-style-type: none"> <li>Access for residents and businesses will result in temporary impacts due to shaft compounds and temporary road traffic impacts along Burnhamthorpe Rd during construction.</li> <li>Traffic delays during construction due to staged closures required along Wilcox Rd and rolling closures along Tomken Rd.</li> <li>Shaft 3-4: Potential impacts on MiWay Bus Stop (Route 26 and 76) around shaft compound.</li> </ul>	<ul style="list-style-type: none"> <li>Access for residents and businesses will result in temporary impacts due to shaft compounds and temporary road traffic impacts along Burnhamthorpe Rd during construction.</li> <li>Traffic delays during construction due to staged closures required along Wilcox Rd and rolling closures along Tomken Rd.</li> <li>Shaft 3-4: Potential impacts on MiWay Bus Stop (Route 51) around shaft compound.</li> </ul>	<ul style="list-style-type: none"> <li>No impacts to traffic as construction is not required.</li> <li>Increased possibility of surcharging and basement flooding impacting private properties due to future population growth and insufficient sewer capacity.</li> </ul>
	Nuisance Impacts	<ul style="list-style-type: none"> <li>Noise, dust, vibration, and other nuisance impacts during construction is anticipated.</li> </ul>	<ul style="list-style-type: none"> <li>Noise, dust, vibration, and other nuisance impacts during construction is anticipated.</li> </ul>	<ul style="list-style-type: none"> <li>No impacts as construction is not required.</li> </ul>
	Cultural / Heritage / Archaeological Impacts	<ul style="list-style-type: none"> <li>Potential for limited vibration impacts to an identified heritage property (Copeland House) during construction.</li> <li>No known archaeological resources have been identified during Stage 1 assessment.</li> </ul>	<ul style="list-style-type: none"> <li>Potential for limited vibration impacts to an identified heritage property (Copeland House) during construction.</li> <li>No known archaeological resources have been identified during Stage 1 assessment.</li> </ul>	<ul style="list-style-type: none"> <li>No impacts as construction is not required.</li> </ul>
	Pedestrian Traffic	<ul style="list-style-type: none"> <li>Pedestrian pathways will be temporarily impacted at shaft compound locations.                             <ul style="list-style-type: none"> <li>At Shaft 3-4, pedestrian multi-use trail requires partial closure and detouring along the north boulevard on Burnhamthorpe Rd E.</li> <li>At Shaft 3-5, Etobicoke Creek - Park Trail closure requires alternative route / detour.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Pedestrian pathways will be temporarily impacted at shaft compound locations.                             <ul style="list-style-type: none"> <li>At Shaft 3-4, pedestrian sidewalk closure and detouring required along east side of Tomken Rd.</li> <li>At Shaft 3-4, pedestrian multi-use trail requires partial closure and detouring along the north boulevard on Burnhamthorpe Rd E.</li> <li>At Shaft 3-5, Etobicoke Creek - Park Trail closure requires alternative route / detour.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>No impacts as construction is not required.</li> </ul>

# Evaluation of Alternative Solutions (continued)

Criteria		Alternative 1	Alternative 2	Alternative 3 "Do Nothing Option"
TECHNICAL CONSIDERATIONS	Ease of Construction (e.g., Construction Constraints)	<ul style="list-style-type: none"> <li>Permits and approvals will be required from TRCA due to location of facility within regulated area and floodplain.</li> <li>Construction risks associated with mixed face subsurface ground conditions.</li> <li>Construction vehicle movement and equipment storage constraints due to small compound area for Shaft 3-4.</li> </ul>	<ul style="list-style-type: none"> <li>Permits and approvals will be required from TRCA due to location of facility within regulated area and floodplain.</li> <li>Construction risks associated with mixed face subsurface ground conditions.</li> </ul>	<ul style="list-style-type: none"> <li>No impacts as construction is not required.</li> </ul>
	Compound Locations	<ul style="list-style-type: none"> <li>Smallest construction compound area for Shaft 3-4.</li> <li>Potential conflict with overhead high voltage hydro lines at Shaft 3-4.</li> </ul>	<ul style="list-style-type: none"> <li>Large construction compound area for Shaft 3-4.</li> <li>No major conflicts with utilities.</li> </ul>	<ul style="list-style-type: none"> <li>No impacts as construction is not required.</li> </ul>
	Operational Flexibility	<ul style="list-style-type: none"> <li>Enables the Region flexibility to divert flows partially or fully to the Cawthra Rd Sanitary Trunk Sewer.</li> </ul>	<ul style="list-style-type: none"> <li>Enables the Region flexibility to divert flows partially or fully to the Cawthra Rd Sanitary Trunk Sewer.</li> </ul>	<ul style="list-style-type: none"> <li>Alternative provides no improvement in operational flexibility to the wastewater system.</li> </ul>
	Impacts on Region's Hydraulic Level of Service	<ul style="list-style-type: none"> <li>Enhances wastewater servicing capacity and operational flexibility to the Regions wastewater collection system.</li> <li>Minimizes future surcharges and basement flooding within the service area.</li> </ul>	<ul style="list-style-type: none"> <li>Enhances wastewater servicing capacity and operational flexibility to the Regions wastewater collection system.</li> <li>Minimizes future surcharges and basement flooding within the service area.</li> </ul>	<ul style="list-style-type: none"> <li>No improvement to the wastewater system.</li> <li>Continued surcharging and basement flooding.</li> </ul>
	Locations/Impacts on Other Existing Utilities	<ul style="list-style-type: none"> <li>Relocations of existing traffic signals and poles and buried cables required for Shaft 3-4 construction.</li> <li>Potential conflict with high voltage hydro lines and poles at Shaft 3-4.</li> <li>Potential conflict with overhead telecom cables spanning the Shaft 3-4 compound.</li> </ul>	<ul style="list-style-type: none"> <li>Relocations of existing traffic signals and poles and buried cables required for Shaft 3-4 construction.</li> </ul>	<ul style="list-style-type: none"> <li>No impacts as construction is not required.</li> </ul>
ECONOMIC CONSIDERATIONS	Capital Costs	<ul style="list-style-type: none"> <li>Similar construction and capital costs to Alternative 2.</li> </ul>	<ul style="list-style-type: none"> <li>Similar construction and capital costs to Alternative 1.</li> </ul>	<ul style="list-style-type: none"> <li>No capital costs as construction is not required.</li> </ul>
	Operating and Maintenance Costs	<ul style="list-style-type: none"> <li>Typical operating and maintenance requirements; equivalent to Alternative 2.</li> </ul>	<ul style="list-style-type: none"> <li>Typical operating and maintenance requirements; equivalent to Alternative 1.</li> </ul>	<ul style="list-style-type: none"> <li>Potential costs related to basement flooding.</li> </ul>
	Land Acquisition / Easement Requirements	<ul style="list-style-type: none"> <li>Consent to Enter and permanent easement will be required from the City of Mississauga to accommodate the alignment and Shaft 3-5.</li> <li>Consent to Enter on public property required for Shaft 3-4 construction at the northwest corner of the intersection of Tomken Rd and Burnhamthorpe Rd E.</li> </ul>	<ul style="list-style-type: none"> <li>Consent to Enter and permanent easement will be required from the City of Mississauga to accommodate the alignment and Shaft 3-5.</li> <li>Temporary easement on private property required for Shaft 3-4 construction at the northeast corner of the intersection of Tomken Rd and Burnhamthorpe Rd E.</li> </ul>	<ul style="list-style-type: none"> <li>No land acquisitions.</li> </ul>

Preferred Less Preferred Least Preferred



# Evaluation of Alternative Solutions (Summary)

Criteria	Alternative 1	Alternative 2	Alternative 3 "Do Nothing Option"
<b>SUMMARY</b>			
Natural Environment	<ul style="list-style-type: none"> <li>Work requires excavation within TRCA regulated area.</li> <li>Impacts to existing manicured lawn and planted trees at Applewood Hills Park.</li> </ul>	<ul style="list-style-type: none"> <li>Requires excavation within TRCA regulated area.</li> <li>Impacts to existing manicured lawn and planted trees at Applewood Hills Park.</li> </ul>	<ul style="list-style-type: none"> <li>No impacts as construction are not required.</li> </ul>
Social and Cultural Environment	<ul style="list-style-type: none"> <li>Minimal temporary disruptions to vehicle traffic during construction and pedestrian detours.</li> <li>Temporary limited vibration impacts during construction.</li> </ul>	<ul style="list-style-type: none"> <li>Minimal temporary disruptions to vehicle traffic during construction and pedestrian detours.</li> <li>Temporary limited vibration impacts during construction.</li> </ul>	<ul style="list-style-type: none"> <li>Increased possibility of surcharging and basement flooding due to future population growth and insufficient sewer capacity.</li> </ul>
Technical Considerations	<ul style="list-style-type: none"> <li>Enhances wastewater servicing capacity and operational flexibility to the Regions wastewater collection system.</li> <li>Prevents future surcharges and basement flooding.</li> </ul>	<ul style="list-style-type: none"> <li>Enhances wastewater servicing capacity and operational flexibility to the Regions wastewater collection system.</li> <li>Prevents future surcharges and basement flooding.</li> </ul>	<ul style="list-style-type: none"> <li>Increased possibility of surcharging and basement flooding due to future population growth and insufficient sewer capacity.</li> </ul>
Economic Considerations	<ul style="list-style-type: none"> <li>Least number of private land acquisitions.</li> </ul>	<ul style="list-style-type: none"> <li>Most number of private land acquisitions.</li> </ul>	<ul style="list-style-type: none"> <li>Potential indirect costs related to basement and surface flooding.</li> </ul>
<b>OVERALL RANKING</b>	<p><b>LESS RECOMMENDED</b></p> <ul style="list-style-type: none"> <li>Minimizes future surcharges and basement flooding.</li> <li>Enhances wastewater servicing capacity and operational flexibility to accommodate future growth and development.</li> <li>Diverts wastewater flows away from areas prone to sewer surcharging, to the proposed Cawthra Sanitary Trunk Sewer.</li> <li>Consent to Enter on public property required for Shaft 3-4 construction at the northwest corner of the intersection of Tomken Road and Burnhamthorpe Road.</li> <li>Potential conflict with high voltage hydro lines and poles at Shaft 3-4.</li> <li>Construction vehicle movement and equipment storage constraints due to small compound area for Shaft 3-4</li> </ul>	<p><b>RECOMMENDED</b></p> <ul style="list-style-type: none"> <li>Minimizes future surcharges and basement flooding.</li> <li>Enhances wastewater servicing capacity and operational flexibility to accommodate future growth and development.</li> <li>Diverts wastewater flows away from areas prone to sewer surcharging, to the proposed Cawthra Sanitary Trunk Sewer.</li> <li>Temporary easement on private property required for Shaft 3-4 construction at the northeast corner of the intersection of Tomken Road and Burnhamthorpe Road.</li> <li>Large compound area available for Shaft 3-4.</li> </ul>	<p><b>NOT RECOMMENDED</b></p> <ul style="list-style-type: none"> <li>Does not meet the sanitary service demands (e.g., potential surcharging and basement flooding) from a growing population.</li> <li>Potential indirect costs related to basement flooding.</li> </ul>
<div style="display: flex; justify-content: space-around; align-items: center;"> <span>Preferred <span style="display: inline-block; width: 15px; height: 15px; background-color: #c8e6c9; border: 1px solid #000; margin: 0 5px;"></span></span> <span>Less Preferred <span style="display: inline-block; width: 15px; height: 15px; background-color: #fff9c4; border: 1px solid #000; margin: 0 5px;"></span></span> <span>Least Preferred <span style="display: inline-block; width: 15px; height: 15px; background-color: #f8bbd0; border: 1px solid #000; margin: 0 5px;"></span></span> </div>			



# Proposed Mitigation Measures

Work confined to the working area minimizing impacts to adjacent private properties.

All excess and unsuitable materials generated (e.g., from excavation work) managed appropriately.

A Traffic/Pedestrian Management and Detour Plan to be developed during detailed design to mitigate traffic/pedestrian impacts.

Noise disturbance controlled by limiting construction during normal working hours and complying with City's noise by law.

Undertaking a vibration assessment with specific focus on the identified protected heritage property to determine potential vibration impacts and implementing Vibration Monitoring Plan to lessen vibration impacts.

Tree/root protection plan developed to mitigate impact on existing trees. Tree removal and compensation to conform to the City of Mississauga by-law and relevant policies regarding tree compensation.

Construction materials, excess material, construction debris and empty containers will be stored and contained within secured solid board hoarding to prevent their entry into the watercourse/creek.

# Proposed Mitigation Measures (continued)

The operation of equipment Adjacent to watercourse/creek will be prohibited.

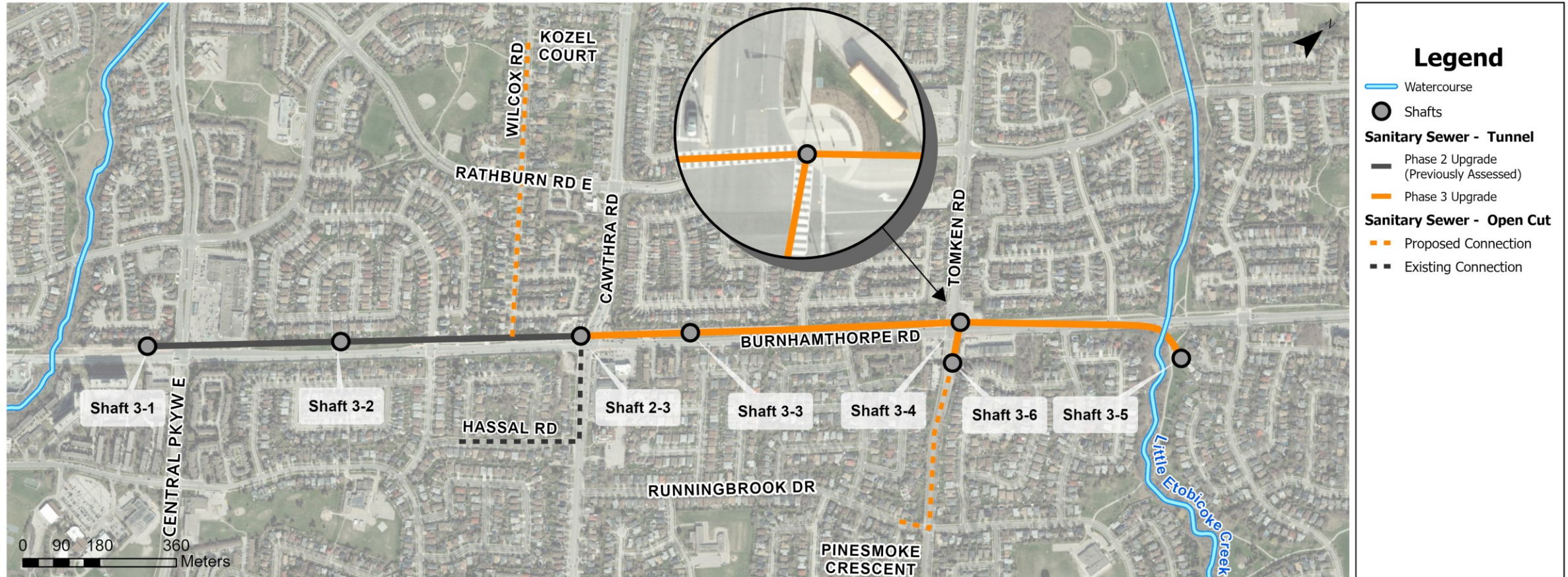
Coordinate with TRCA to develop ecological restoration of disturbed vegetated area along Little Etobicoke Creek, following construction.

Developing and implementing erosion and sedimentation control plan to eliminate sedimentation to Little Etobicoke Creek.

Enforce timing windows (April 1 – September 1) for vegetation removals to avoid sensitive bird breeding including birthing, rearing, and roosting periods.

# Recommended/Preferred Solution

## Alternative 2 – Little Etobicoke Creek (LEC) Extension (Alternate Shaft 3-3)



# Schedule And Next Steps





# Thank you

## Remain involved in the study

Your comments are important as they will be reviewed and considered as part of the study. To indicate your interest to remain involved in the study or if you have any questions, please contact one of the following team members by **June 17, 2024**.



### KEY CONTACT

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