



Schedule 'C' Municipal Class EA Environmental Assessment

Wastewater Capacity Improvements in Central Mississauga

Environmental Study Report

For Public Review

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Executive Summary

Study Objective

The Region of Peel initiated this Municipal Class EA Study to investigate alternative wastewater strategies for the Central Mississauga area with the goal to address a system-wide Problem/Opportunity Statement. The EA confirms the preferred solution including routes, sites, design, and construction timing. Based on current growth projections to 2041, the current capacity to convey future flow from the Mississauga City Centre (MCC), Hurontario and Dundas corridors within the Central Mississauga study area will not be sufficient to maintain level of service. The objectives of the study were to:

- Develop a comprehensive list of alternative solutions.
- Confirm the overall Central Mississauga servicing objectives and perform first principal engineering analysis of the servicing alternatives.
- Satisfy the Municipal Class EA requirements for the servicing solution.
- Consider the unique opportunities and challenges associated with utility and infrastructure services, environment and natural features, and socio-economic impacts.
- Provide effective communication and consultation with stakeholders, agencies, Indigenous communities, and the public throughout the Class EA study process.
- Analyze and develop the preferred solution to ensure successful implementation of the infrastructure components.
- Identify all potential impacts and associated mitigation measures.
- Provide sufficient level of preliminary design to demonstrate the extents of the infrastructure, improve project lifecycle cost estimating, provide detailed phasing and implementation requirements, identify overall operational concepts, and identify permit and approval requirements.
- Deliver comprehensive documentation of the strategy, evaluation, and recommendations in line with Class EA requirements.

Municipal Class EA Process

This Class EA study was completed as a Schedule 'C' undertaking in accordance with the requirements of the Municipal Class Environmental Assessment process (October 2000, as amended in 2007, 2011 and 2015) and includes Phases 1 to 5 of the Class EA process. The Class EA process includes public and review agency consultation, identification and evaluation of servicing strategy alternatives, an assessment of the preferred alternative, identification and evaluation of design alternatives and a comprehensive identification of measures to mitigate potential adverse effects.

Public Consultation

Public consultation is an important component of the Class EA process and includes informing members of the community and stakeholders to provide balanced and objective information as well as to obtain valuable feedback on the study process, alternatives, and preliminary preferred solution.

The Region of Peel coordinated with key stakeholders including Indigenous Communities, City of Mississauga, City of Toronto, Toronto and Region Conservation Authority (TRCA), Credit Valley Conservation (CVC), Ministry of Environment, Conservation and Parks and Hydro One as well as other interested and potentially impacted stakeholders regarding the evaluation and selection of the preferred design.

The primary goals and objectives of the public consultation process are to:

- Present clear and concise information at key stages of the study process.
- Solicit community, regulatory, Regional and Local staff input.
- Identify concerns that might arise from the undertaking.
- Undertake a comprehensive Indigenous consultation to fulfill the Region's *Duty to Consult* with Indigenous communities.
- Consider stakeholder comments when developing the preferred solution.
- Meet Municipal Class EA Consultation requirements.

Phase 1 Problem/Opportunity Statement

As part of Phase 1 of the Municipal Class EA process, a Problem/Opportunity Statement provides a clear identification of the opportunities and challenges that are being addressed through the study. The Problem/Opportunity Statement for this Class EA is summarized as follows:

“Increase the conveyance capacity of key trunk sewers to service future growth and ensure alignment with the Region’s long-term plan for providing wastewater services within the Mississauga City Centre, Hurontario Corridor and Dundas Corridor areas.”

Phase 2 Alternative Solutions

New sewers on Burnhamthorpe Rd (Area 1), Cawthra Rd and Queensway E (Area 2) were selected as the preferred strategy for the Wastewater Capacity Improvements in Central Mississauga. This solution provides the Region with maximized flow flexibility to meet servicing needs to 2041 and beyond. This solution also minimizes the overall constructability risk with fewer shaft locations and greater shaft accessibility.

This preferred solution will provide the following key benefits:

- Alignment within large road right of way, with supporting sites for construction shaft compounds and permanent manhole locations.
- Increased buffer available to surrounding existing land use that will minimize potential impact and need for mitigation measures during construction.
- Minimized number of tunnel shaft sites required to facilitate construction minimizing surface disturbance during construction.
- Alignment with the least number of turns and curves reducing construction complexity and improving long term operations.

- On overall avoidance of most constrained alignments and areas.

Phase 3 Design Concept Alternatives

The Preferred Solution and Design Concept includes 4 new sanitary trunk sewer alignments in the Central Mississauga study area to increase capacity within the existing system. The proposed new sewers will connect to 6 key existing trunk sewers and 4 local sewers and have flow control capabilities through flow control gates and Real Time Control (RTC) strategies. This will increase flow flexibility and support maintenance and rehabilitation works.

The proposed sewers are:

- 1500 mm diameter gravity sewer along Burnhamthorpe Road between Central Parkway and Cawthra Road (~ 1 km).
- 1500 mm diameter gravity sewer along Cawthra Road between Dundas Street East and Queensway East (~ 1 km).
- 1500 mm diameter gravity sewer along Queensway East between Hurontario Street and Cawthra Road (~ 2.1 km).
- 1800 mm diameter gravity sewer along Queensway East between Cawthra Road and Etobicoke Creek (~ 2.9 km).
- 1800 mm diameter gravity sewer along Etobicoke Creek Valley between Queensway East and Sherway Drive (~ 0.4 km)

The majority of the sewers will use trenchless construction, minimizing surface disturbance and local community impacts. Connections to local sewers, the connection to Cooksville Creek Trunk sewer and the Etobicoke Creek crossing will use trenching construction due to shallower depth at these locations.

The Preferred Design overview is provided in **Figure E-1**. Detailed shaft locations are provided in **Figure E-2** to **Figure E-6**.

Impacts and Mitigation Measures

Studies were completed to support the preferred design by identifying potential impacts and recommending mitigation measures. Studies included natural environment, archaeological, cultural heritage, traffic, community, hydrogeological, contamination, geomorphic/fluvial/scour and geotechnical assessment. Mitigation measures are provided to minimize the potential impacts.

Design Commitments

Design commitments for the Detailed Design and Construction stages are outlined to minimize potential impacts and ensure any required next steps and consultation with stakeholders are completed.

Implementation

The overall cost estimate for the preferred design is \$190.2 million. It is estimated that the full project will be in operation by 2028.

Approvals and Permits

A number of permits and approvals will be required from review and governmental agencies to implement the Preferred Design. The Region of Peel will coordinate with these agencies to ensure any applications and requests are acceptable and submitted at the correct stage of the project.

Preferred Design

- Proposed Alignment
- Proposed Shaft Compound

Other Features

- Existing Trunk Sewer Mains
- Existing Local Sewer Mains
- Railway
- Property Parcel

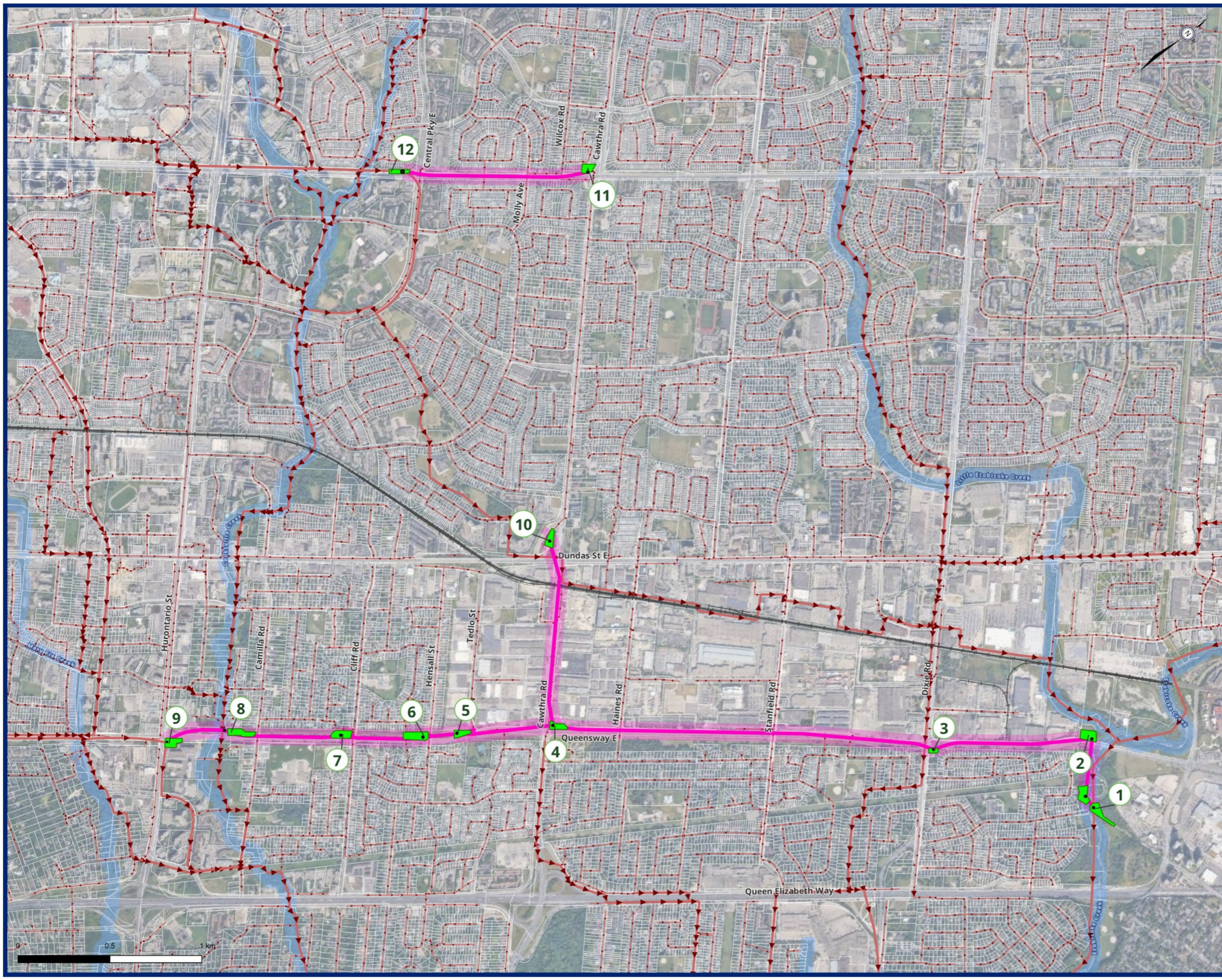
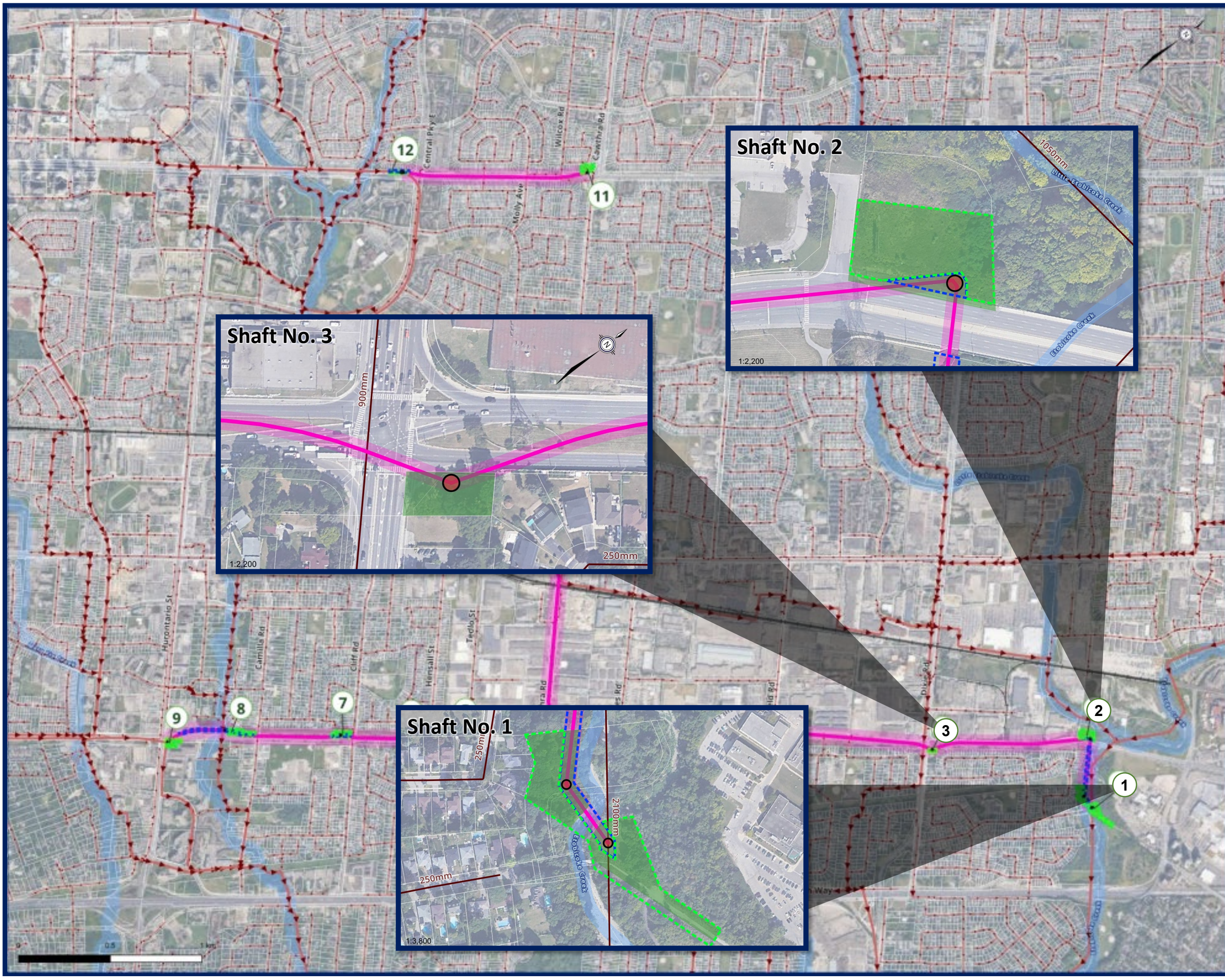


Figure E-1

Preferred Alignment

Overview



- Preferred Design**
- █ Proposed Shaft
 - █ Proposed Alignment
 - █ Proposed Compound Easement
 - █ Proposed Permanent Easement
 - █ Proposed Temporary Easement
- Other Features**
- Existing Wastewater Mains
 - Railway
 - █ Property Parcel

Preferred Design Overview

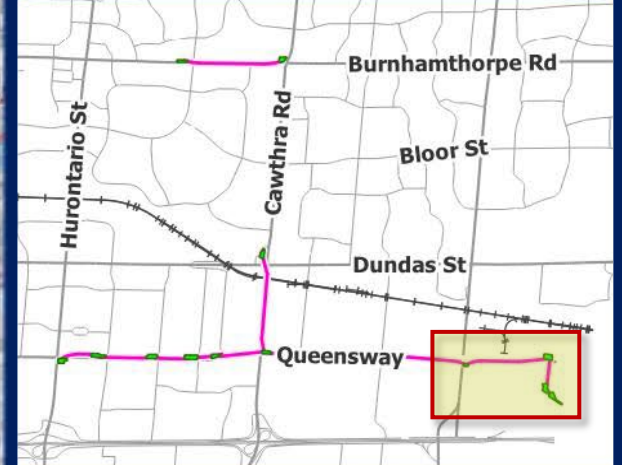
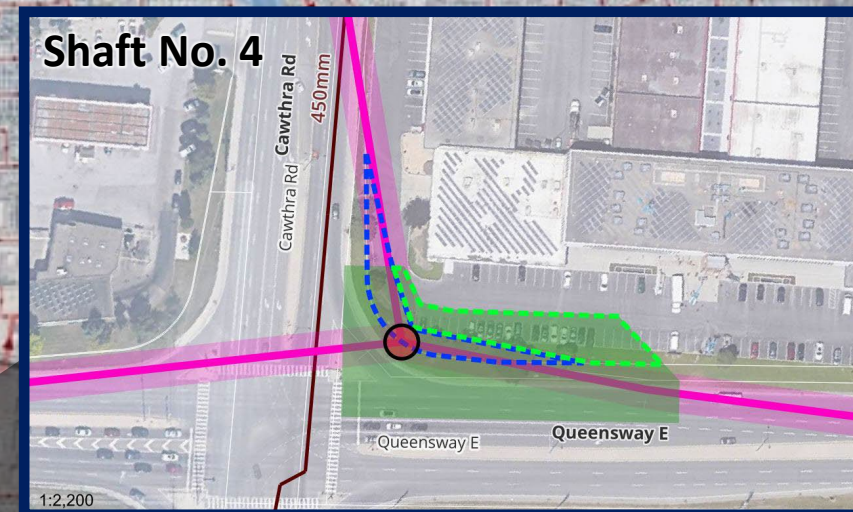
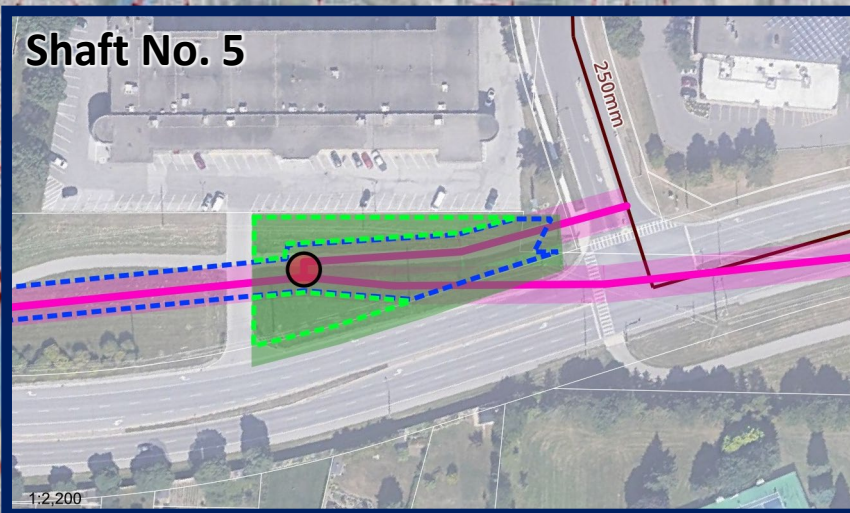


Figure E-2
**Dixie and Etobicoke Creek
Route (Shaft 1 - 3)**
Preferred Design



Preferred Design

- █ Proposed Shaft
- █ Proposed Alignment
- █ Proposed Compound Easement
- █ Proposed Permanent Easement
- █ Proposed Temporary Easement

Other Features

- Existing Wastewater Mains
- Railway
- █ Property Parcel

Preferred Design Overview

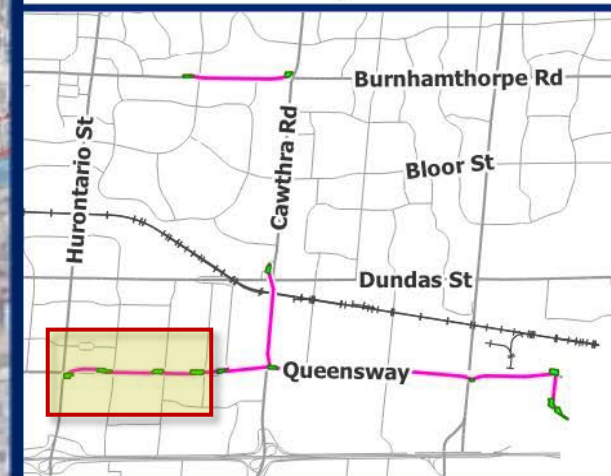
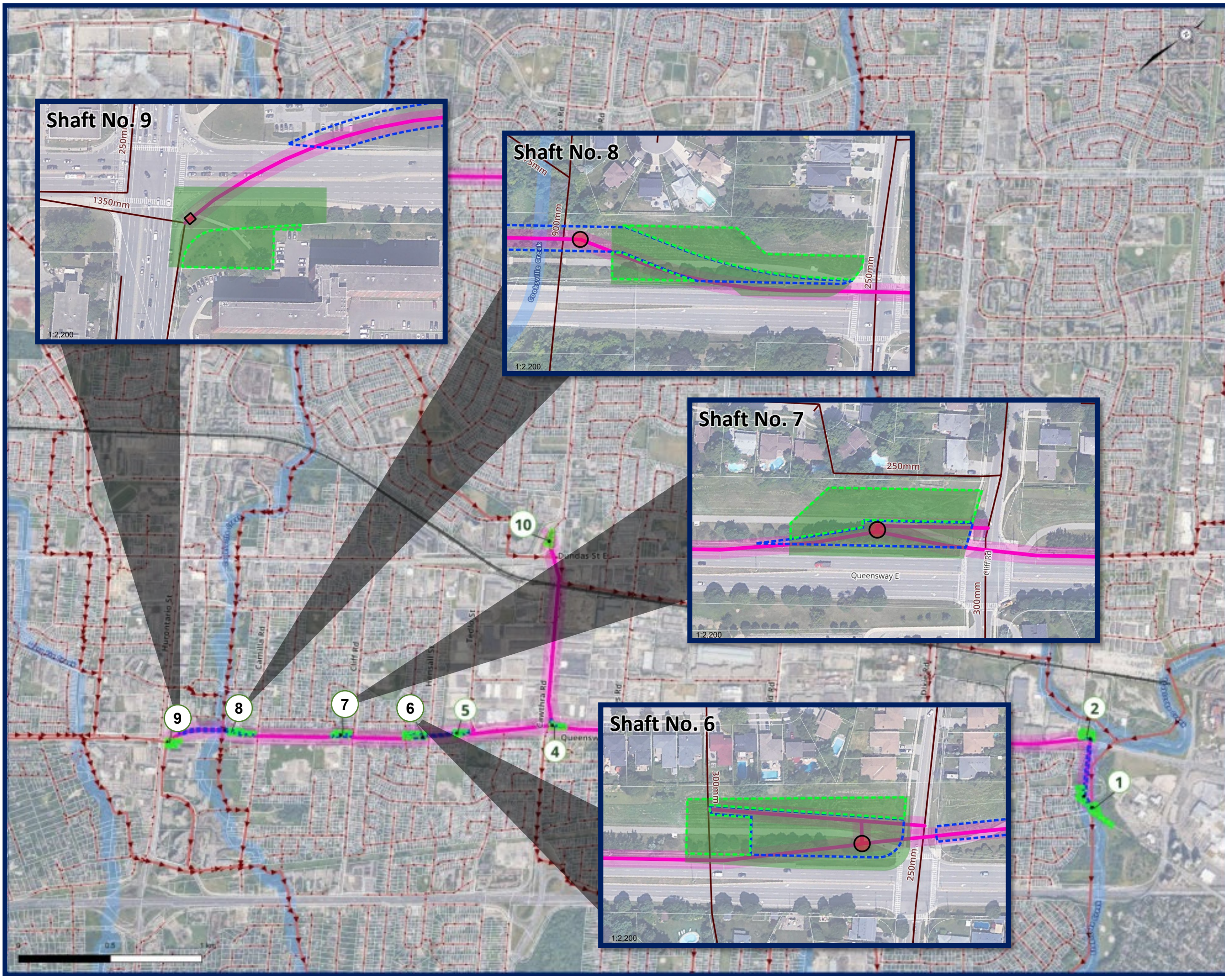
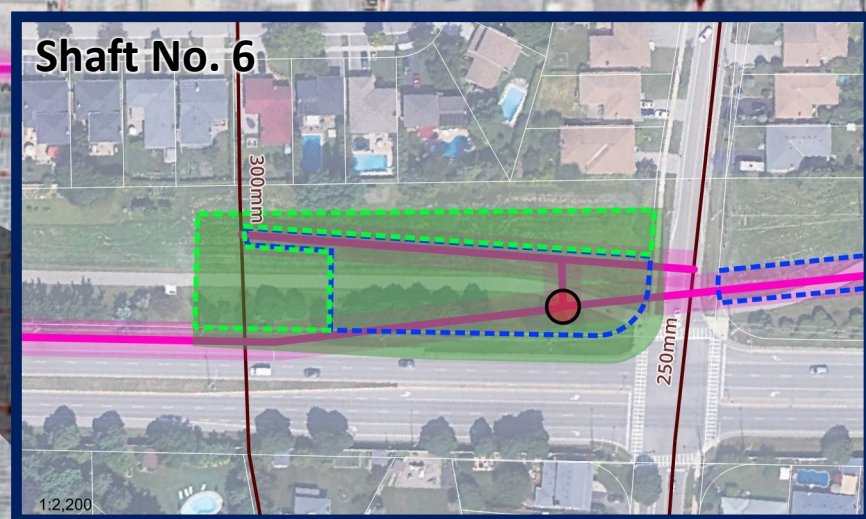
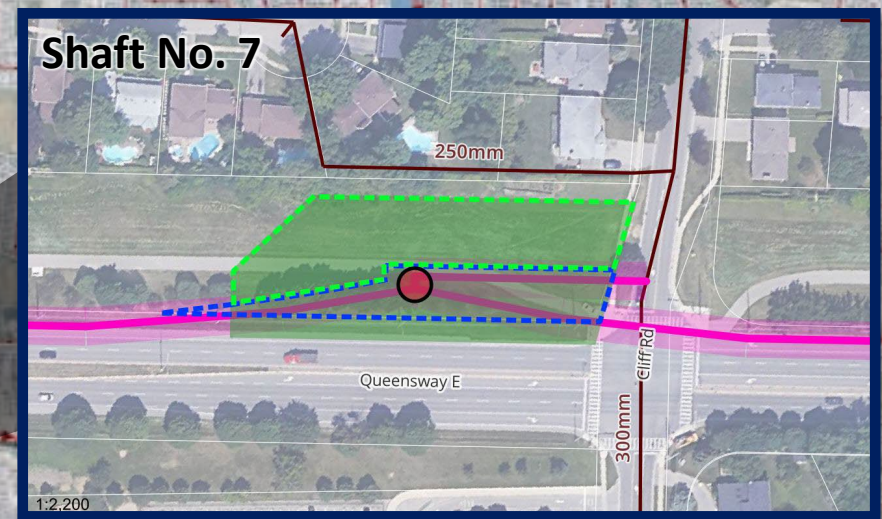
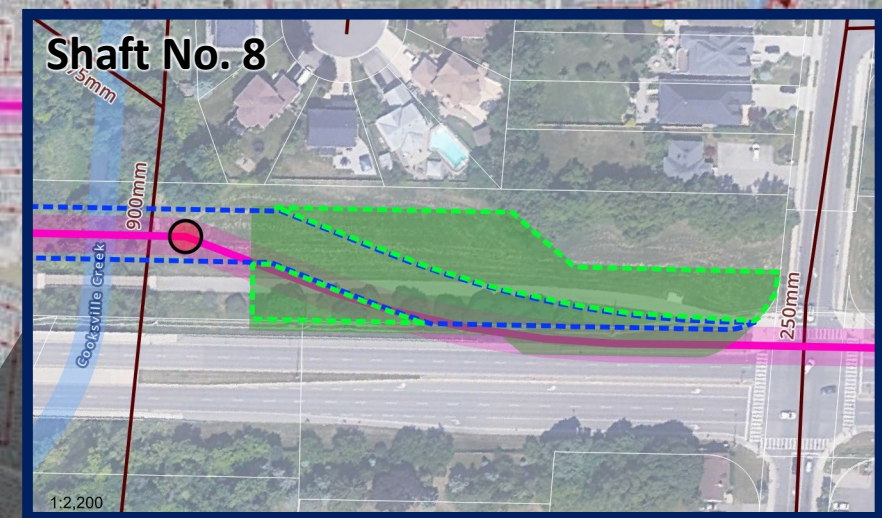
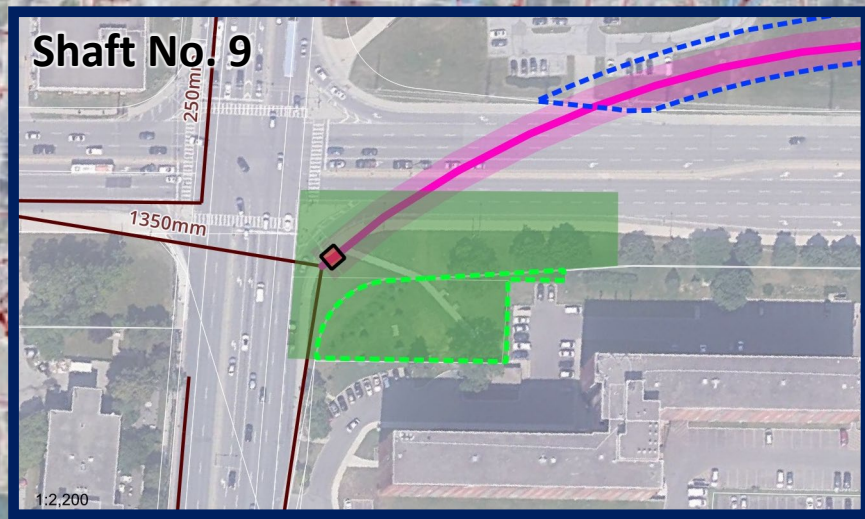


Figure E-3
Queensway Route
(Shaft 4 - 5)
Preferred Design



- Preferred Design**
- Proposed Shaft
 - Proposed Alignment
 - Proposed Compound Easement
 - Proposed Permanent Easement
 - Proposed Temporary Easement
- Other Features**
- Existing Wastewater Mains
 - Railway
 - Property Parcel

Preferred Design Overview

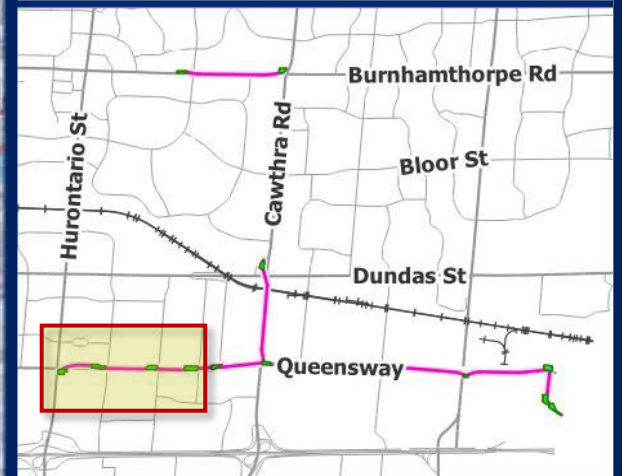


Figure E-4
Queensway Route
(Shaft 6 - 9)
Preferred Design

Preferred Design

-  Proposed Shaft
-  Proposed Alignment
-  Proposed Compound Easement
-  Proposed Permanent Easement
-  Proposed Temporary Easement

Other Features

-  Existing Wastewater Mains
-  Railway
-  Property Parcel

Preferred Design Overview

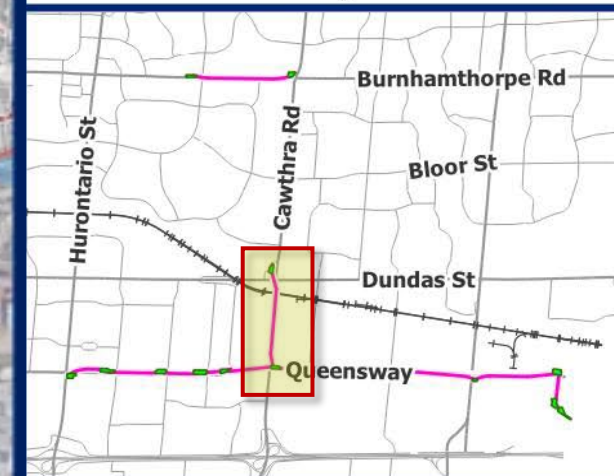
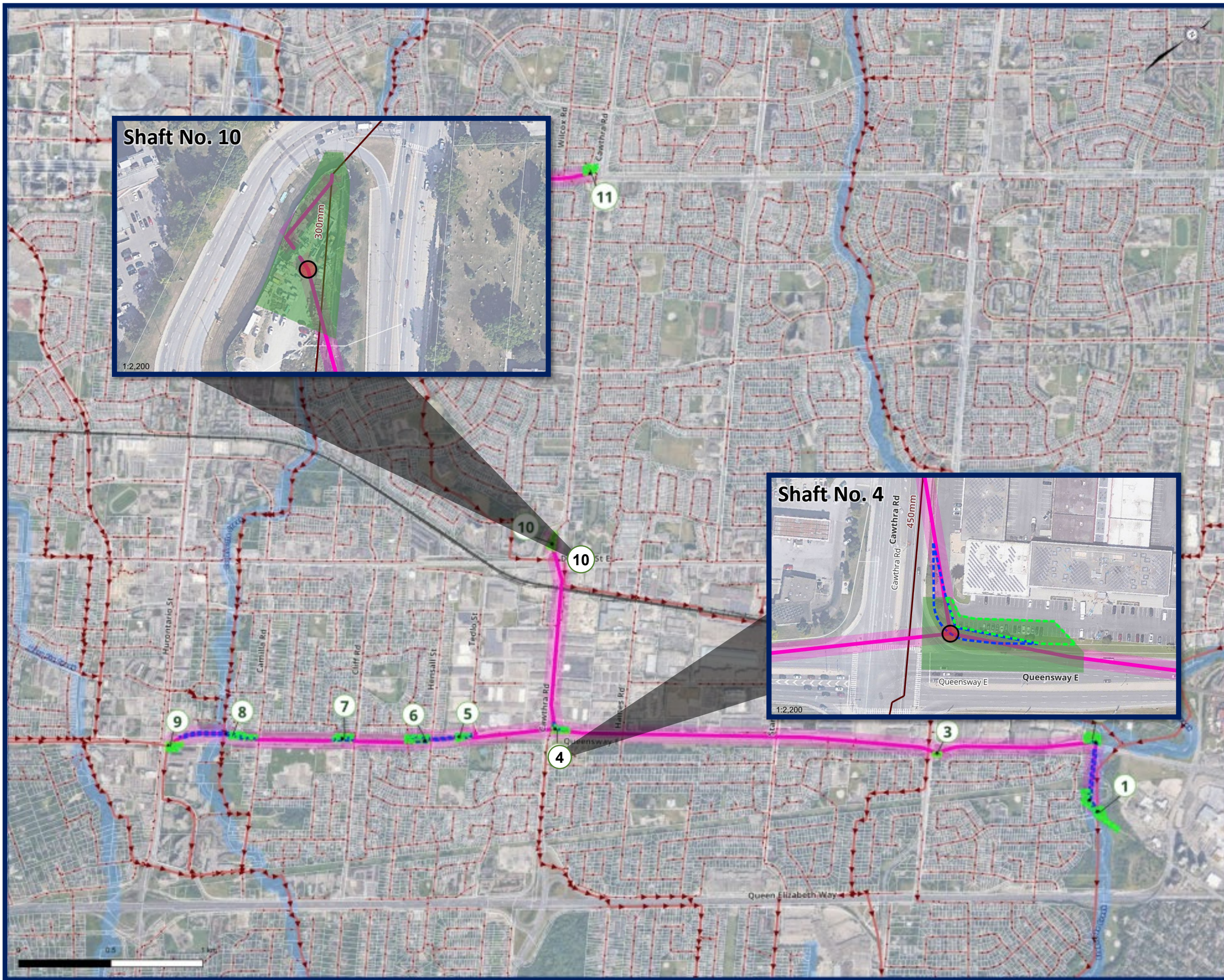
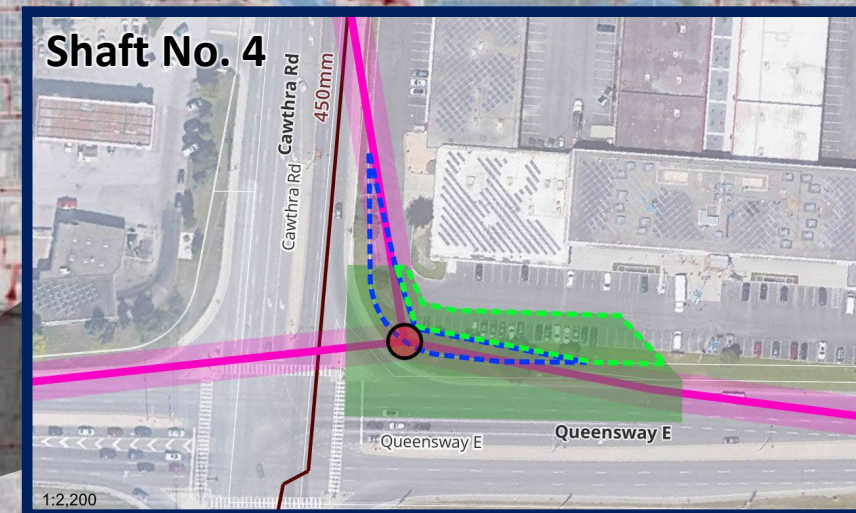
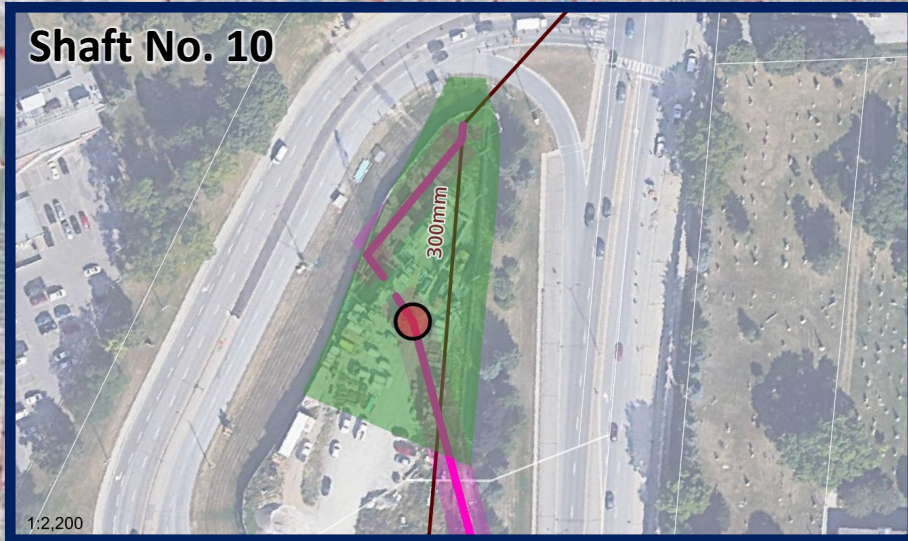


Figure E-5
Cawthra Route
(Shaft 4 and 10)
Preferred Design



Preferred Design

-  Proposed Shaft
-  Proposed Alignment
-  Proposed Compound Easement
-  Proposed Permanent Easement
-  Proposed Temporary Easement

Other Features

-  Existing Wastewater Mains
-  Railway
-  Property Parcel

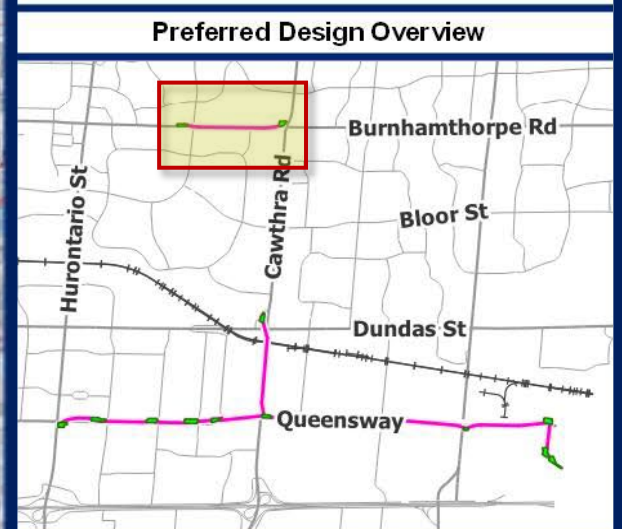
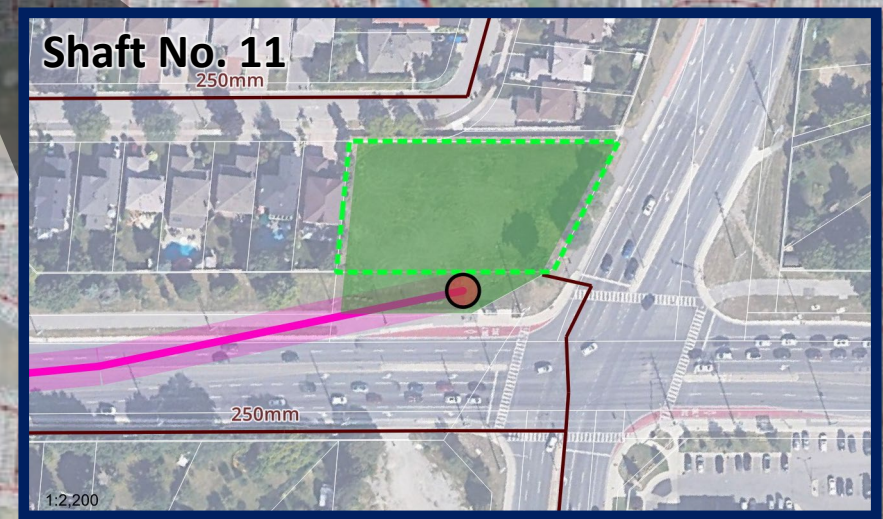
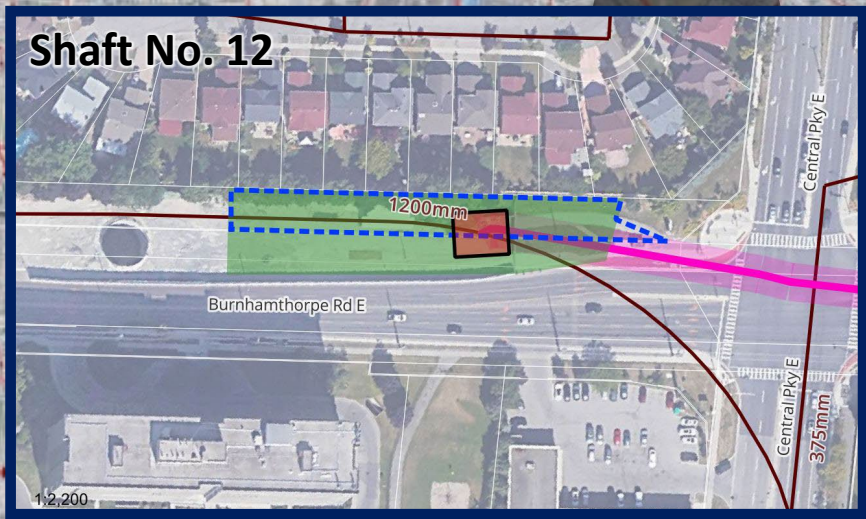


Figure E-6
Burnhamthorpe Route
(Shaft 11 - 12)
Preferred Design