

Lakeshore Sanitary Trunk Sewer and Pressure Zone 1 Sub-Transmission Main



Detailed Design and Construction

Public Information Centre #3

Clarke Memorial Hall, 161 Lakeshore Road West, Mississauga

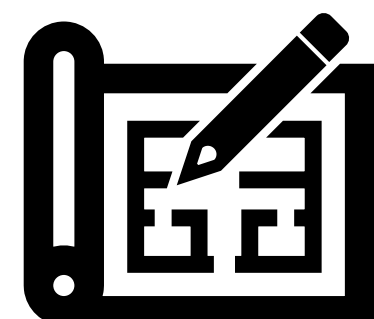
March 21, 2024 from 6:30pm – 8:00pm

Welcome!

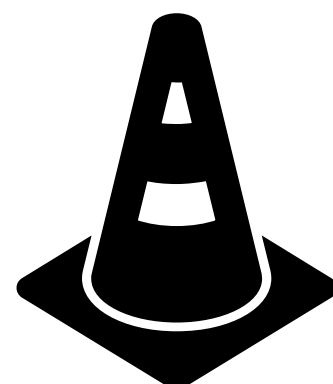
The goals of this Public Information Centre #3 are to update everyone on the project:



Introduce the project and why it is being undertaken



Provide information on the improvements this project provides



Identify the general project impacts



Answer any questions you may have and provide an opportunity to understand more about the project

This presentation is self guided. If you have any questions, please find a member of the project team.

Project Background

Background studies identify and recommend solutions to balance the water and wastewater system as the Region continues to grow.

➤ **Front Street Wastewater Pumping Station Wastewater Diversion, Schedule ‘B’ Municipal Class Environmental Assessment (EA) (2019), and EA Addendum (2023)**

In 2023, the Region completed the Addendum to the 2019 EA. The Addendum recommended the following.

- Elimination of the new pumping station at Richard’s Memorial Park
- Construction of a new pumping station at Jack Darling Memorial Park
- Extension of the Lakeshore Rd. sanitary trunk sewer across the Credit River from Jack Darling Memorial Park to east of the Credit River

➤ **Port Credit East Water and Wastewater Servicing Optimization Strategy, Schedule ‘C’ Municipal Class EA (2024)**

An EA was initiated in 2020 to develop an integrated and optimized servicing strategy to meet the needs of the existing community and provide for future growth in the general Port Credit East area. Existing sanitary pumping stations (Elmwood, Hiawatha, and Rosemere), and some of the sanitary sewer mains are expecting operational challenges. More information can be found on the Region’s website.



➤ **Lakeshore Road Zone 1 Sub-transmission Main**

The addition of a sub-transmission main along Lakeshore Rd. to provide system resiliency and additional capacity to support growth in the Port Credit area.

The purpose of this project is to improve the water distribution system and wastewater collection system to support growth within the Region.

Lakeshore Sanitary Trunk (LST) Sewer & Sub-transmission Main (Z1SM) Project Overview



Scope of Work

- 4 km of 2400mm sanitary trunk sewer installed by Tunnel Boring Machine (TBM) along Lakeshore Rd. from Jack Darling Memorial Park to Elmwood Ave.
- Future diversions of flow to the new trunk sewer from existing Sanitary Pump Stations at Richard's Memorial Park, Pine Ave. S., Wesley Ave., Front St., and Elmwood Ave.
- 750mm sub-transmission main installed by open cut within Jack Darling Memorial Park up to Lakeshore Rd., and along Lakeshore Rd., with three possible short trenchless tunnel sections at the existing creek culvert crossing locations
- 400mm watermain installed by open cut on Lakeshore Rd. with two short trenchless tunnel sections at the existing creek culvert crossing locations
- Valve chambers and appurtenances

Why are we doing this?

The Region is undertaking this work to meet future needs of the community, while providing a reliable wastewater collection system, and water supply system. This project will provide the following:

- Increase in water and wastewater system capacity to accommodate future growth in the Port Credit area
- Efficient water distribution and sewage conveyance
- High quality water supply services for end users
- Resiliency within the sewer and water systems
- Opportunity to decommission 6 existing sewage pumping stations (Jack Darling, Ben Machree, Indian Road, Front Street, Elmwood, Hiawatha), reducing long-term operational and maintenance costs to the Region



The Region provides reliable wastewater collection, treatment and management now and for the future. To learn more about the Region's wastewater treatment plants, please visit the Region of Peel website.



The Region prioritizes safe, clean, reliable drinking water. To learn more about the Region's drinking water systems, please visit the Region of Peel website.



Shaft Locations For Sanitary Trunk & Public Impacts

Construction compounds will be required at the following identified shaft locations to access the tunnel to complete the proposed sewage works.

Jack Darling at Lakeshore

- Site located south of Lakeshore Rd. within Jack Darling Memorial Park.
- Temporary, single lane closure on Lakeshore Rd.
- Pedestrians routed south around the site on temporary Multi-Use Path (MUP).
- Overnight work during portions of the project.

Richard's Memorial Park

- Site located south of Lakeshore Rd. within Richard's Memorial Park.
- No lane closures, pedestrians routed south around the site on temporary MUP.

Pine Ave. South

- Site located on Pine Ave. at Lakeshore Rd.
- Closure of Pine Ave. at Lakeshore Rd., routing of local traffic along Maple Ave.
- Lane reduction on Eastbound Lakeshore Rd.

Wesley Ave. / Park St. West

- Site located on Wesley Ave. at Lakeshore Rd.
- Closure of Wesley Ave. at Lakeshore Rd., routing of local traffic to Mississauga Rd.
- No long-term lane reductions on Lakeshore Rd.
- Exit shaft located at Park St W.



Additional detail
provided on next slide

Front St.

- Site located on N-E and S-E corners of Front St. and Lakeshore Rd. intersection
- No lane closures on Lakeshore Rd. or Front St.
- Temporary loss of municipal parking lot and park space north of Lakeshore Rd.

Elmwood Ave

- Site located in City parking lot adjacent to Elmwood Ave. and Lakeshore Rd.
- No long-term lane reductions on Lakeshore Rd.
- Loss of parking spaces in lot north of Lakeshore Rd.

Sanitary Sewer Road Closures

The following streets at Lakeshore Rd. intersections will have full closure requirements for construction:

Pine Ave. S for approximately 12 months



Wesley Ave. for approximately 18 months

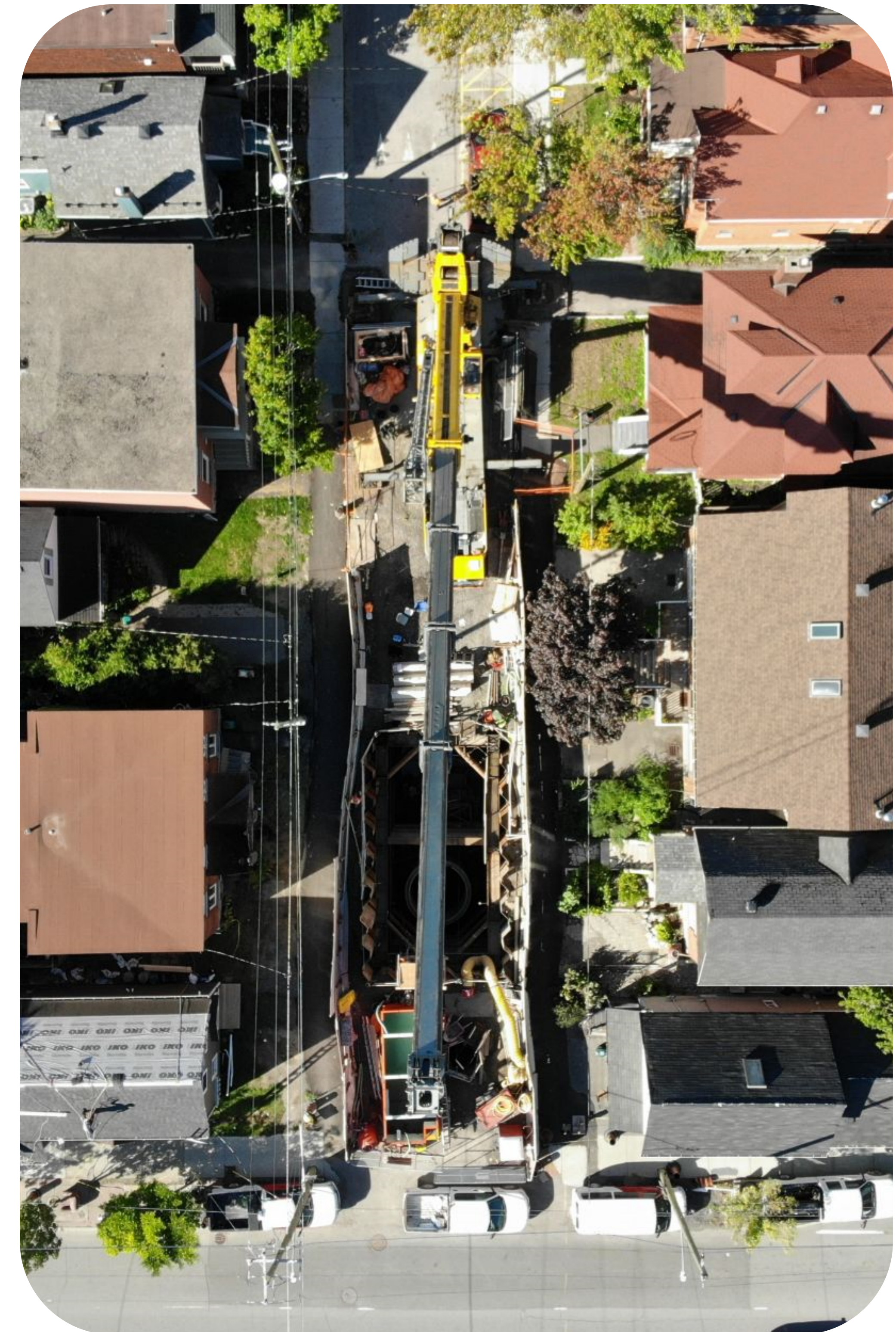


Dates of the closures are to be confirmed and those directly impacted will be provided advance notice. **These dates of closures are subject to change.** At each closure location, there are multiple alternate routes to access Lakeshore Rd. and other arterial roads. Additional road closures may be required on Wesley Ave. at Park St. W.

Additional construction compound areas are displayed on the roll plan at the Public Information Centre.

Example of Compound Infrastructure

The following displays examples of what the typical construction of a compound may look like:



Example of Compound Infrastructure with Murals

The following slide displays an example of what construction of a compound looks like, where the hoarding will host artwork developed by local artists (partnership with Region and the Mississauga Arts Council).



Lakeshore Hoarding Project



Conceptual Design of Fencing and Equipment at Elmwood Ave. and Lakeshore Rd.

Watermain Construction Methods - Open-Cut & Trenchless

The watermains will be installed generally along the north side of Lakeshore Rd. from Jack Darling Memorial Park to Elmwood Ave.

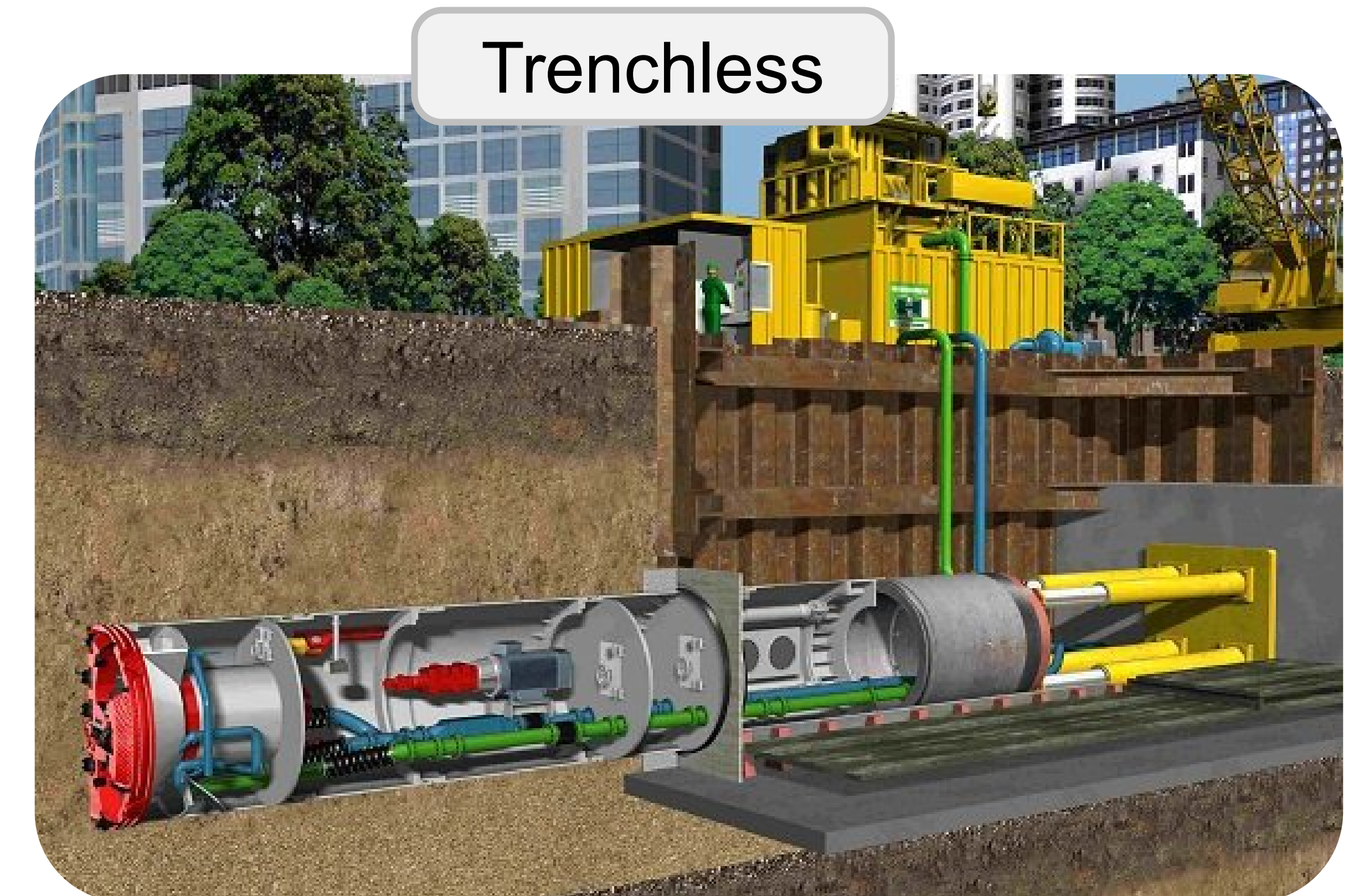
Open-cut construction involves the excavation of earth from a worksite at the beginning of construction. The watermain infrastructure is installed, and the area is backfilled. The impacted surface area is then restored.

Trenchless construction is a method of installing a watermain underground through tunneling, without having to dig an open-trench. This method is less invasive, with less disruptions to the surface and natural environment. It will be used where open-cut is undesirable (i.e., Credit River/creek crossings, traffic impacts, etc.). Trenchless watermain installation will require launch and retrieval shafts at each end of the watermain segment.

Trenchless watermain installations will be completed along Lakeshore Rd. from Shawnmarr Rd. to Front St., and from Front St. to Elmwood Ave.

Trenchless construction impacts include:

- Temporary lane closures for shafts at Jack Darling Memorial Park, Shawnmarr Rd., Pine St., and Front St.
- Construction noise during shaft excavation.
- Construction traffic.



[Microtunneling - Pure Water Technology LLC \(purewater-int.com\)](http://purewater-int.com)

Short Term Impacts – Jack Darling Memorial Park

A portion of the watermain will be installed within Jack Darling Memorial Park, and will cause short-term, temporary impacts to the function of the park.

The **temporary** anticipated impacts include the following:

- Reduced parking spaces.
- Reduced access to dog park – alternative entrance to remain open during construction.
- Sidewalk and Multi-use Path (MUP) detour.

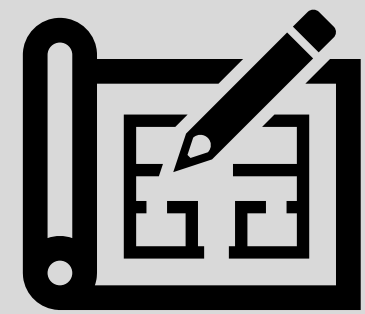
Signage will be placed within the area to indicate the temporary closures and provide an alternative route to access spaces within the park.



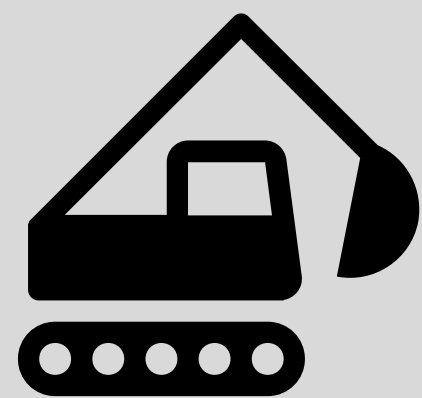
The dog park and parking spaces will be available and maintained throughout the duration of the construction period.

What work will take place?

The work on the sanitary trunk sewer and watermain will include the following steps:



1. Locate existing underground utilities and verify connections.



2. Excavate existing pipes, tunnels and shafts.

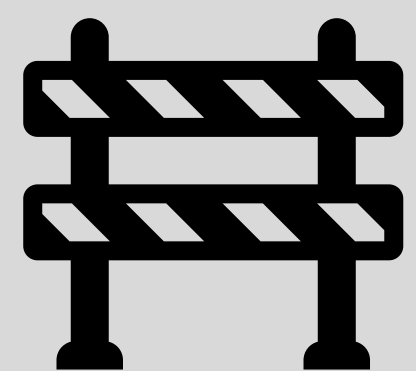


3. Install watermain and sewer pipes.



4. Connect new infrastructure to existing structures and watermains.

5. Perform pressure tests and other commissioning tasks.

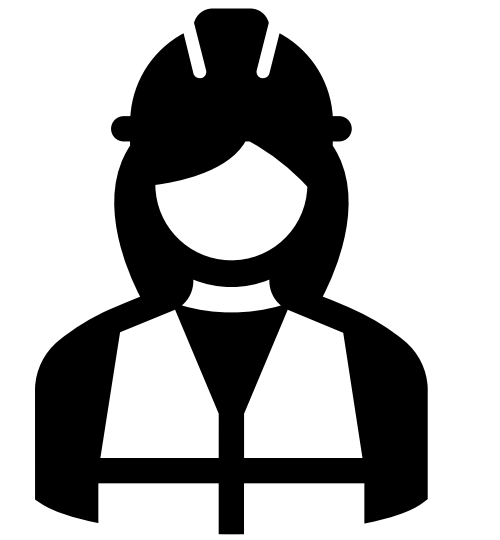


6. Site cleanup and restoration.

General Project Impacts

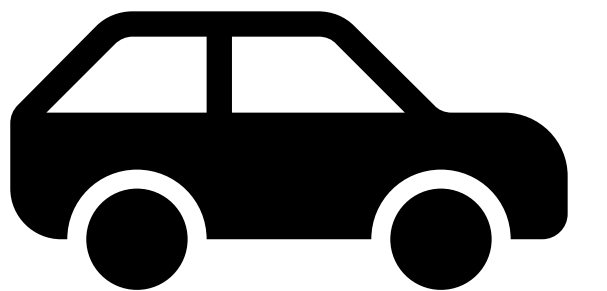
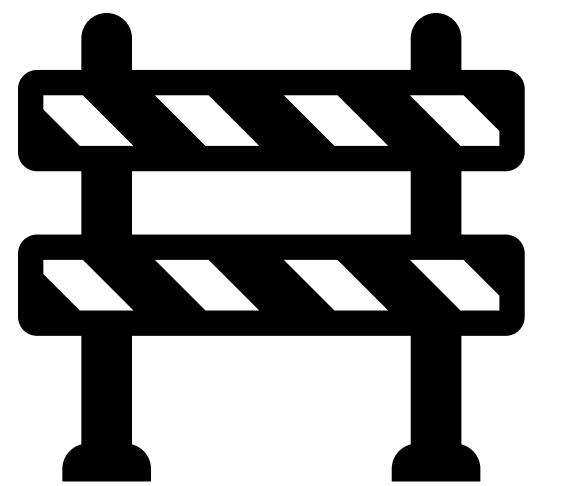
Working Hours

- Work will generally take place from 7:00 a.m. to 7:00 p.m., Monday to Friday.
- Tunnel and surface work may require Saturday and/or overnight work.



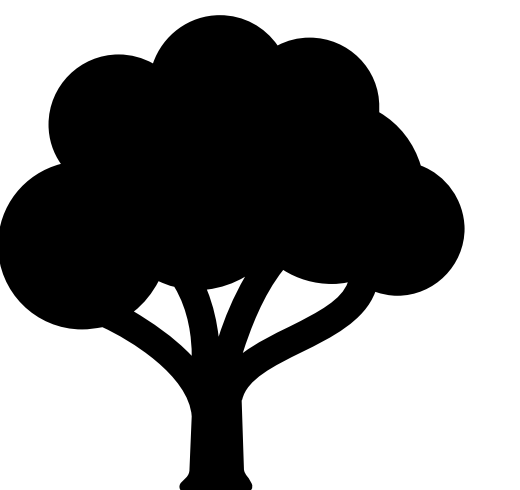
Traffic Management

- Lakeshore Rd.
 - Periodic lane closures required along Lakeshore Rd.
- Parking
 - Short-term temporary loss of parking at Jack Darling Memorial Park (approx. 1-2 weeks).
 - Long-term temporary loss of parking spaces at Wesley Ave., and Front St., Elmwood Ave. parking lot (approx. 1-2 years).
- Additional closures may be identified



Additional Impacts

- Tree removal.
- Noise & vibration monitoring.
- Restoration.



Open-Cut Construction Impacts

Potential open-cut construction impacts include:

- Short-term temporary lane closures along Lakeshore Rd.
- Temporary sidewalk closures with sidewalk diversions available.
- Construction noise and traffic.

Traffic Management

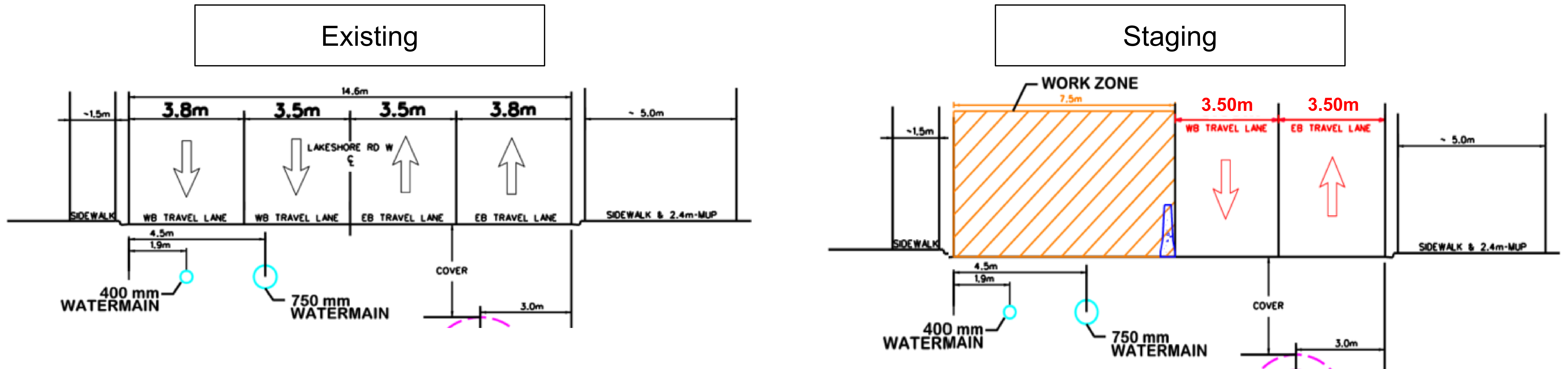
The following has been established to reduce impacts of construction:

1. Roads to be kept open to the extent possible.
2. Road closures in place only when required, and for the minimum possible duration.
3. A Project Ambassador will be established.
4. Maintain a minimum of one lane in each direction on Lakeshore Rd., with turning lanes where possible.



Significant delays and congestion due to the construction are anticipated. It is recommended that commuters use alternate routes.

Lakeshore Road – Traffic Staging

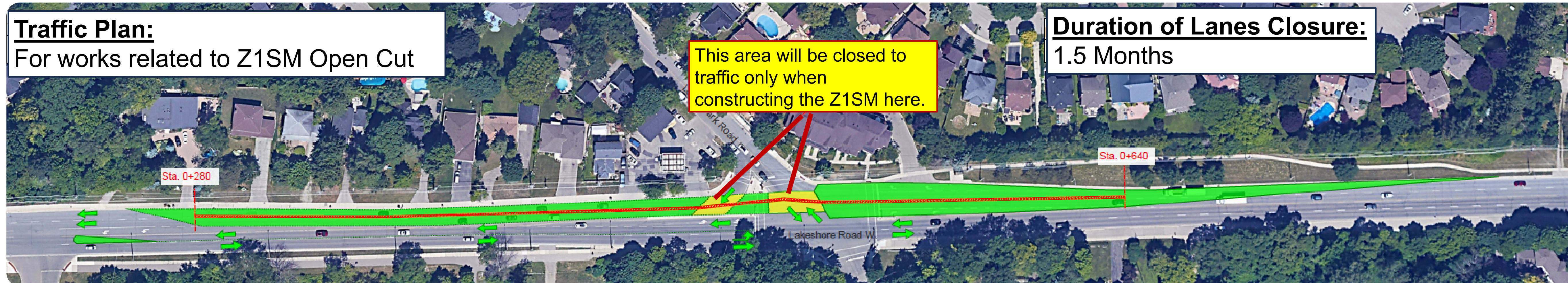


Lakeshore Rd. staging will use a consistent approach throughout the project limits:

- Construction will occur in segments, lane closures will be limited to the active construction zones.
- In active construction zones, the four existing 'through' lanes are reduced to two 'through' lanes and shifted to one side to accommodate a workzone within the road (as above).
- Left-turn lanes are not provided to help accommodate the workzone within the existing roadway.
- Active transportation (i.e., sidewalk, multi-use path etc.) to remain open.
- Only one transit stop will be impacted within each construction segment. Impacted transit stops will either be relocated or retained under a staging configuration.

Lakeshore Road – Traffic Staging Plan Examples

Traffic Staging Plan on Lakeshore Rd. between Jack Darling Memorial Park to approximately Lorne Park Rd.



Legend

- Areas restricted to Traffic
- Lane Available to Traffic
- Pipe Open Cut Construction

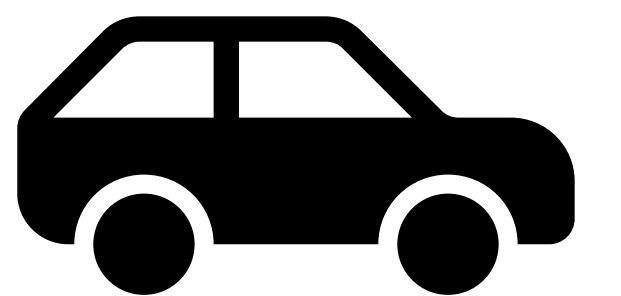
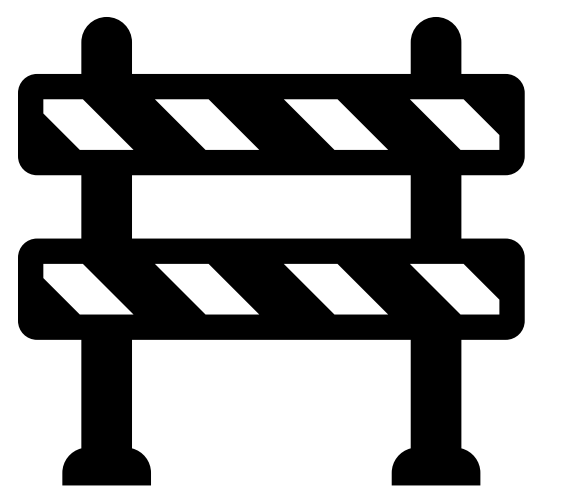
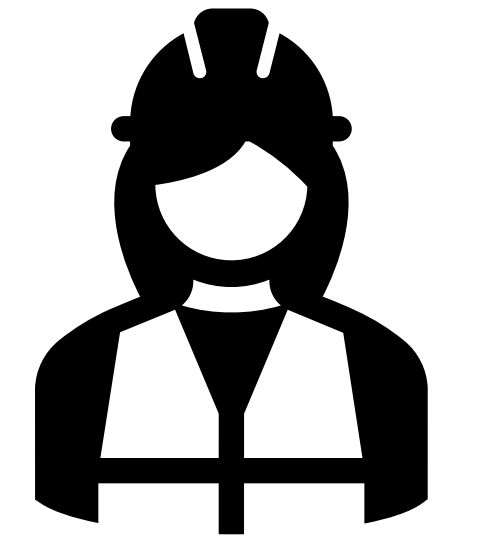
Traffic Staging Plan on Lakeshore Rd. between Whittier Cres. and Balboa Dr.



Traffic Staging Plan on Lakeshore Rd. between Lorne Park Rd. and Richard's Memorial Park.



- Staff available to answer questions during the design period.
- A Construction notice will be distributed prior to the construction work commencing.
- Construction signage will be placed at the project limits and will include relevant information including the start and end date.
- Additional Construction Updates and specific Notices for residents (i.e., temporary parking restrictions, flushing after new service, temporary event relocation) will be issued as required.

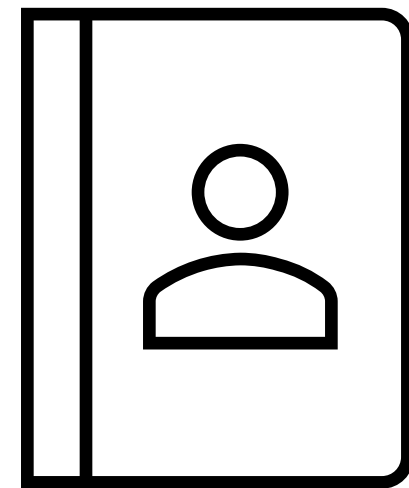
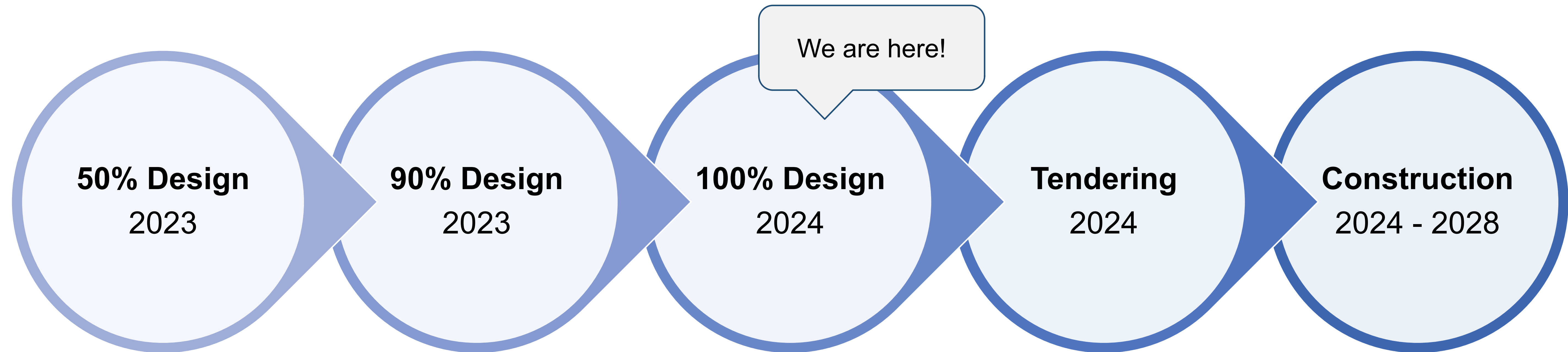


Project Ambassador

A Project Ambassador will be on site during working hours. Their duties will include monitoring traffic conditions daily throughout the construction period and answering questions/concerns raised by the public. The Project Ambassador will provide a direct connection between the project team, contractor and the public to effectively handle any inquiries and concerns.

The purpose of the Project Ambassador is to improve the overall construction process experience for the public. They will be able to provide the community with additional resources and assist with helping you safely and efficiently navigate around the construction sites.

Contact the Project Team



If you would like to provide comment, or discuss further, please contact the Region of Peel:

**Wastewater Collection and Conveyance
Engineering Services Division
Public Works, Region of Peel
905-791-7800, ext. 4409
construction@peelregion.ca**