



Welcome to our Second Community Open House

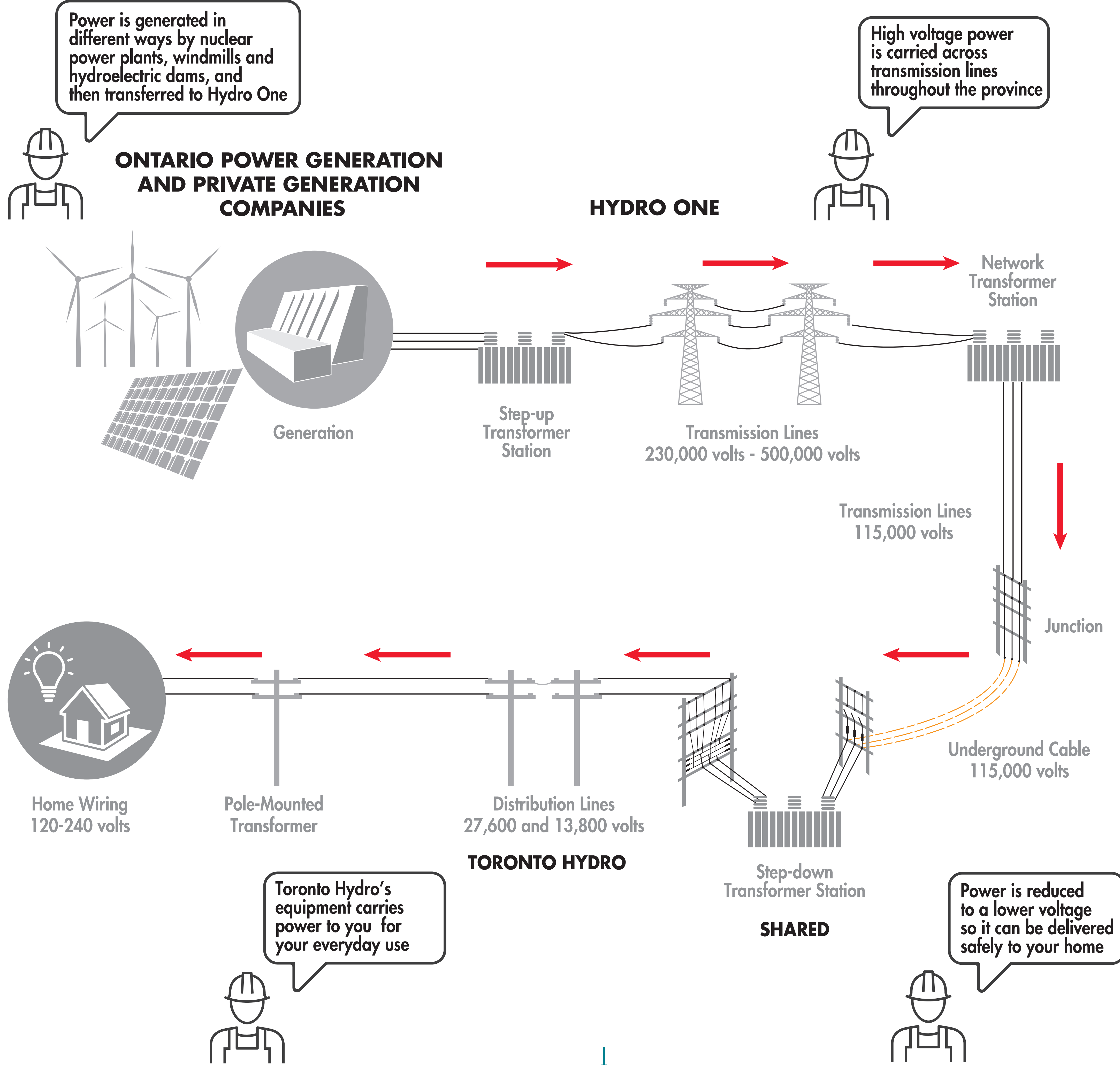
Power Downtown Toronto Underground Cable Replacement



Chat with our team and learn more about:

- Project need & approvals
- The route evaluation process
- Preferred route & proposed shaft locations
- Next steps

Hydro One's Role in Delivering Power



Partners in Powerful Communities

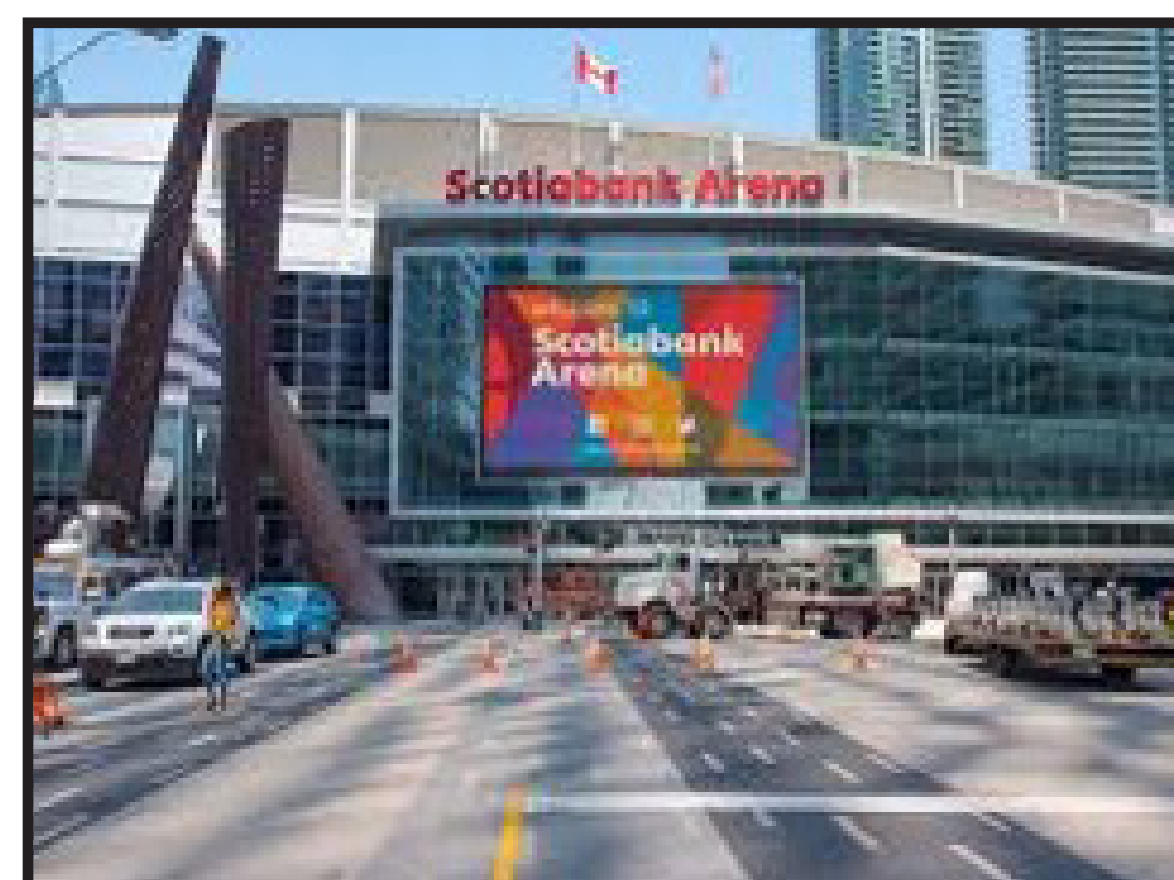
Project Need and Overview

Hydro One must undertake important work to replace critical underground transmission cables that serve Toronto's downtown core and were installed in the 1950s.

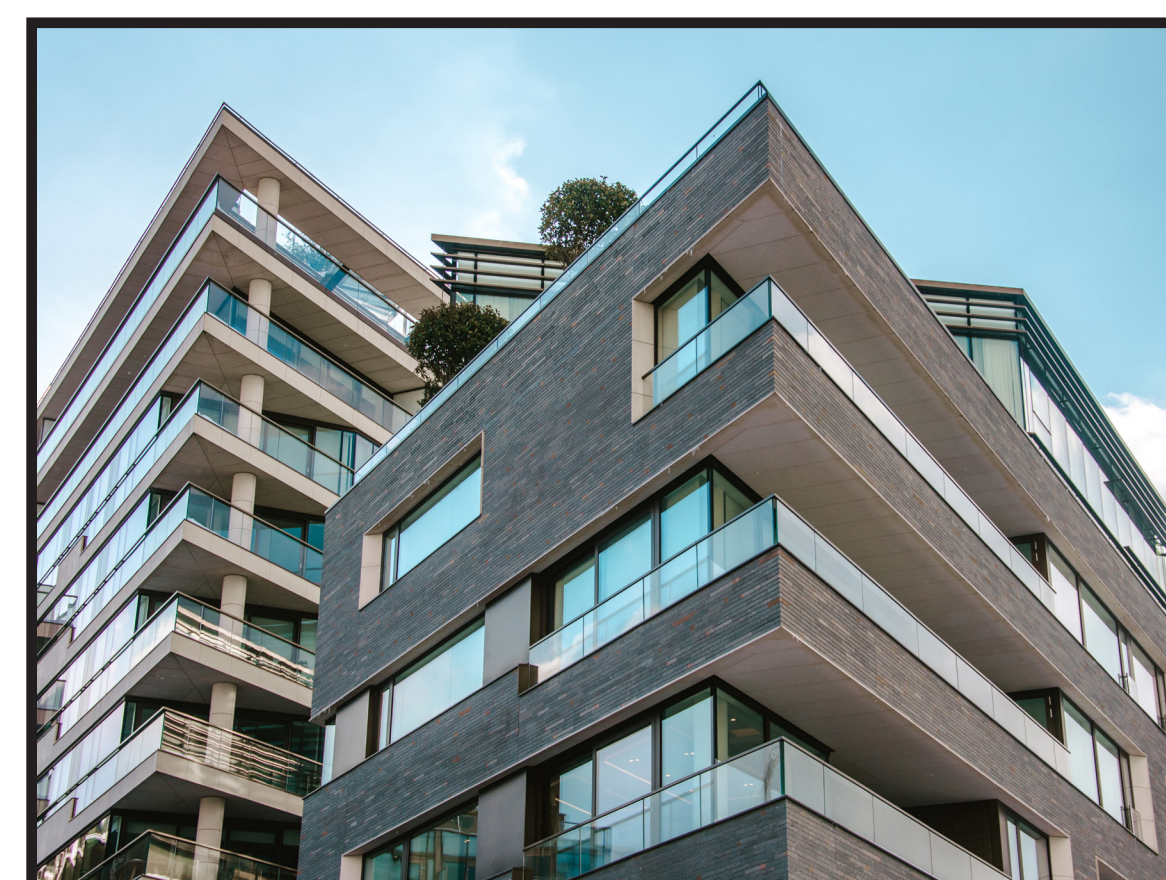
This replacement will help continue to provide reliable power to the city's residents and critical institutions such as:



Hospitals



Entertainment



Commercial/
residential buildings



Universities/colleges

Through the Class Environmental Assessment process, our team has assessed several alternative routes and two construction methods.

We have completed our analysis and have selected a preferred route.



Project Approvals

Class Environmental Assessment (EA)

This project is subject to the Class EA for Minor Transmission Facilities (Hydro One, 2016), in accordance with the *Ontario EA Act*. This process ensures that transmission projects that have a predictable range of effects are planned and carried out in an environmentally acceptable manner.

Ontario Energy Board (OEB)

The OEB approves the electricity rates in Ontario. This project will require Leave to Construct approval under Section 92 of the *Ontario Energy Board Act, 1998*. We plan to apply for this approval in May/June 2020. Further information from the OEB on the project will be made available in local papers and at www.oeb.ca.

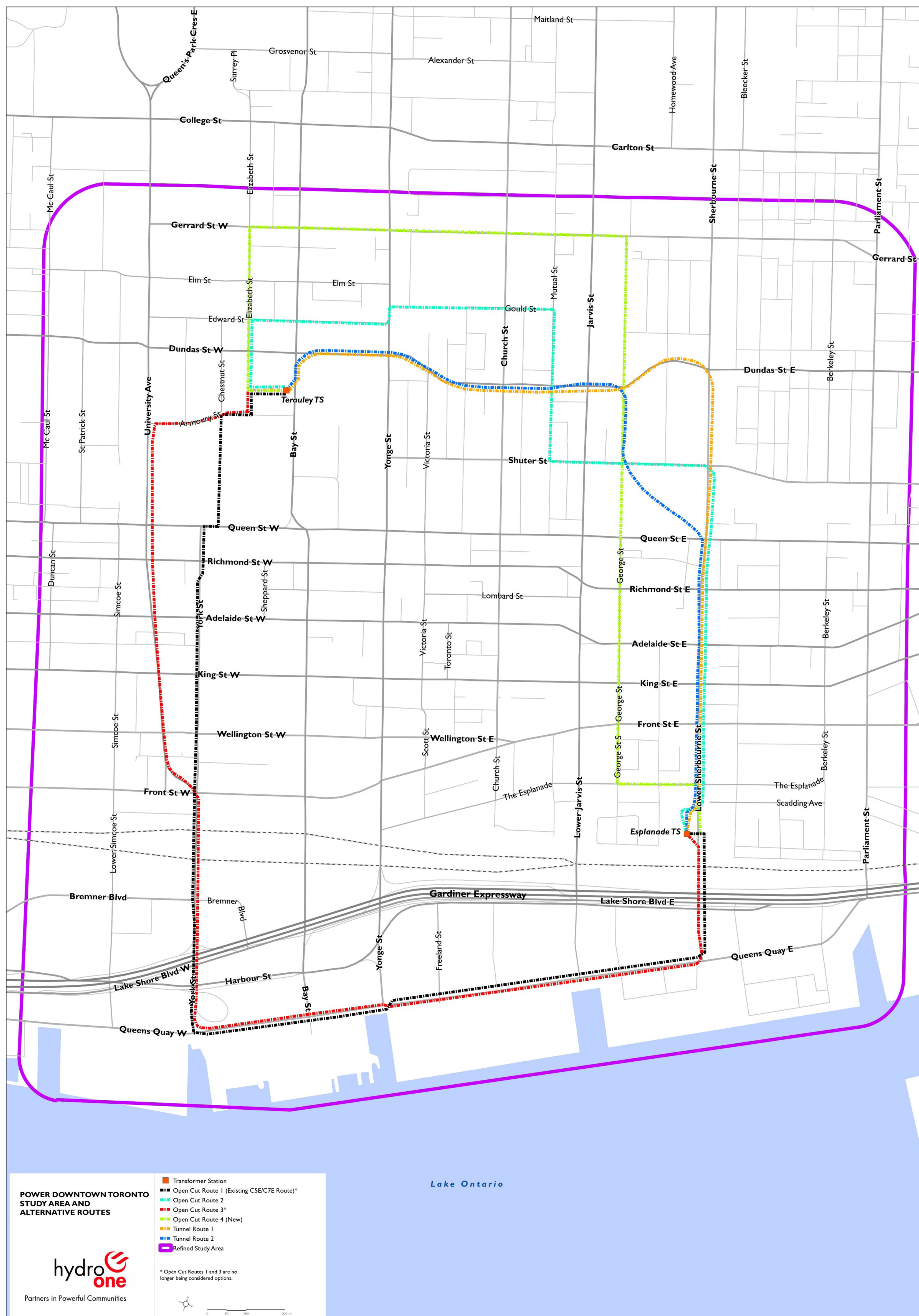


Class Environmental Assessment Process

- As part of the Class EA process, a draft Environmental Study Report (ESR) will be made available for public review and comment.
- Hydro One will make best efforts to resolve any concerns raised during the public review and comment period before filing the final ESR with the Ministry of the Environment, Conservation and Parks (MECP).
- If a concern cannot be resolved, the concerned party may submit a written request (called a “Part II Order Request”) to the MECP during the public review period to request for a higher level of assessment, known as an Individual Environmental Assessment.



Study Area & Alternative Routes Assessed





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Route Evaluation

Through extensive consultation with our stakeholders and conducting a thorough technical analysis, we have selected **Tunnel Route 1** as our preferred route.

Evaluation Criteria	Open Cut Route 2	Open Cut Route 4	Tunnel Route 1	Tunnel Route 2
Socioeconomic Environment	Least Preferred	Least Preferred	Preferred	Less Preferred
Natural Environment	Less Preferred	Less Preferred	Preferred	Preferred
Technical Considerations	Least Preferred	Least Preferred	Preferred	Less Preferred
Costs	Preferred	Less Preferred	Preferred	Preferred
OVERALL			Preferred (OVERALL)	

*Open Cut Routes 1 and 3 have been removed from consideration

Key advantages of tunnelling:

- Requires limited surface construction, resulting in less potential disruption to commuters, residents and businesses and less potential for removal of trees along the roadway.
- Minimizes possible conflicts with other underground utilities and infrastructure.

Key advantages of Tunnel Route 1 vs Tunnel Route 2:

- Minimizes surface construction near local public schools.
- Requires shorter duration for shaft construction, resulting in less roadway disruption.
- Minimizes potential to impact Moss Park.



Preferred Route: Tunnel Route 1

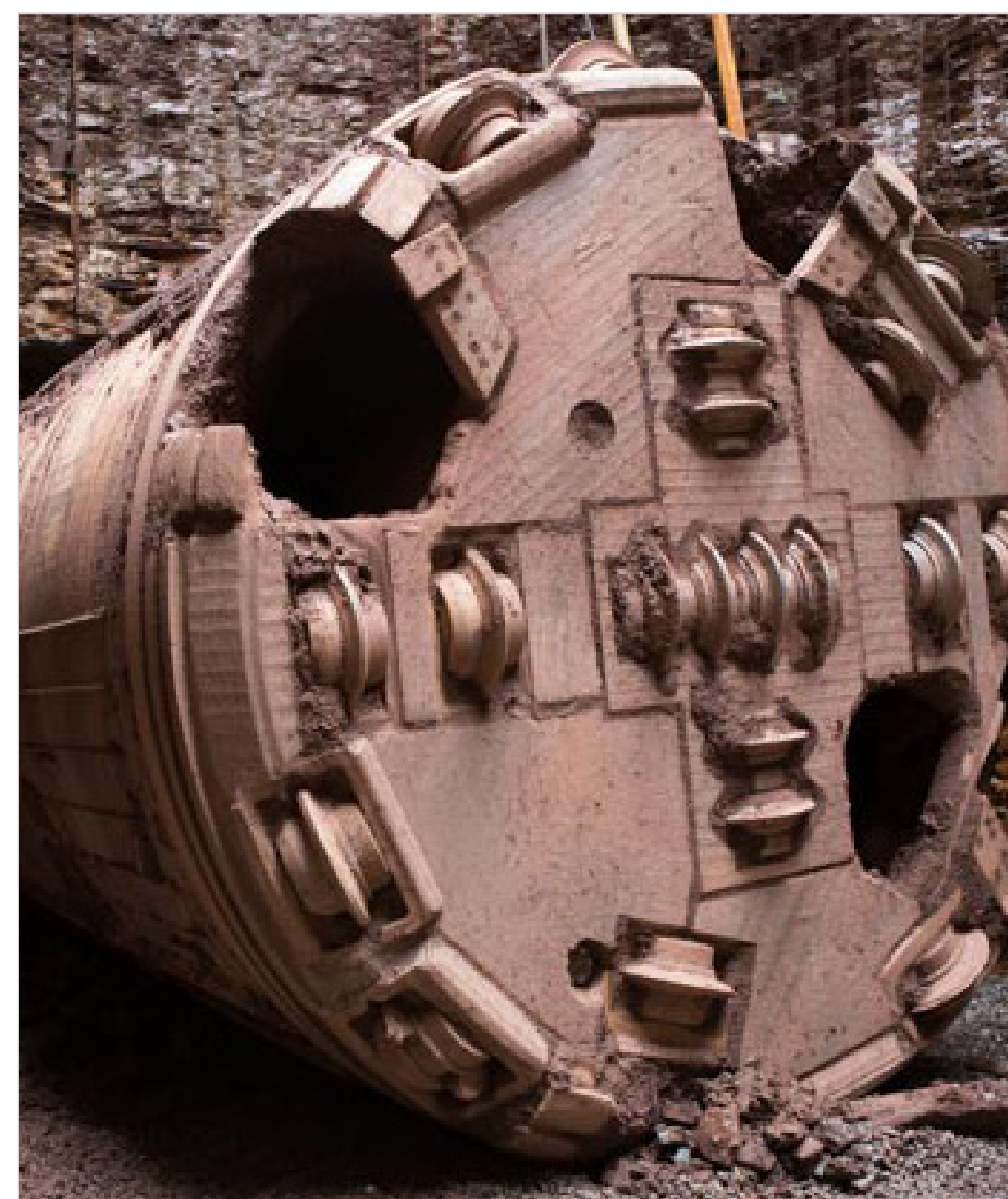


Underground Tunnelling

Construction would involve using a boring machine to create a deep rock tunnel beneath the ground that is:

- Within road allowance
- Approximately 3 m in diameter
- Approximately 25 m below grade
- Approximately 2.5 km long

Examples of tunnel boring machines:



Example of the inside of a completed tunnel:



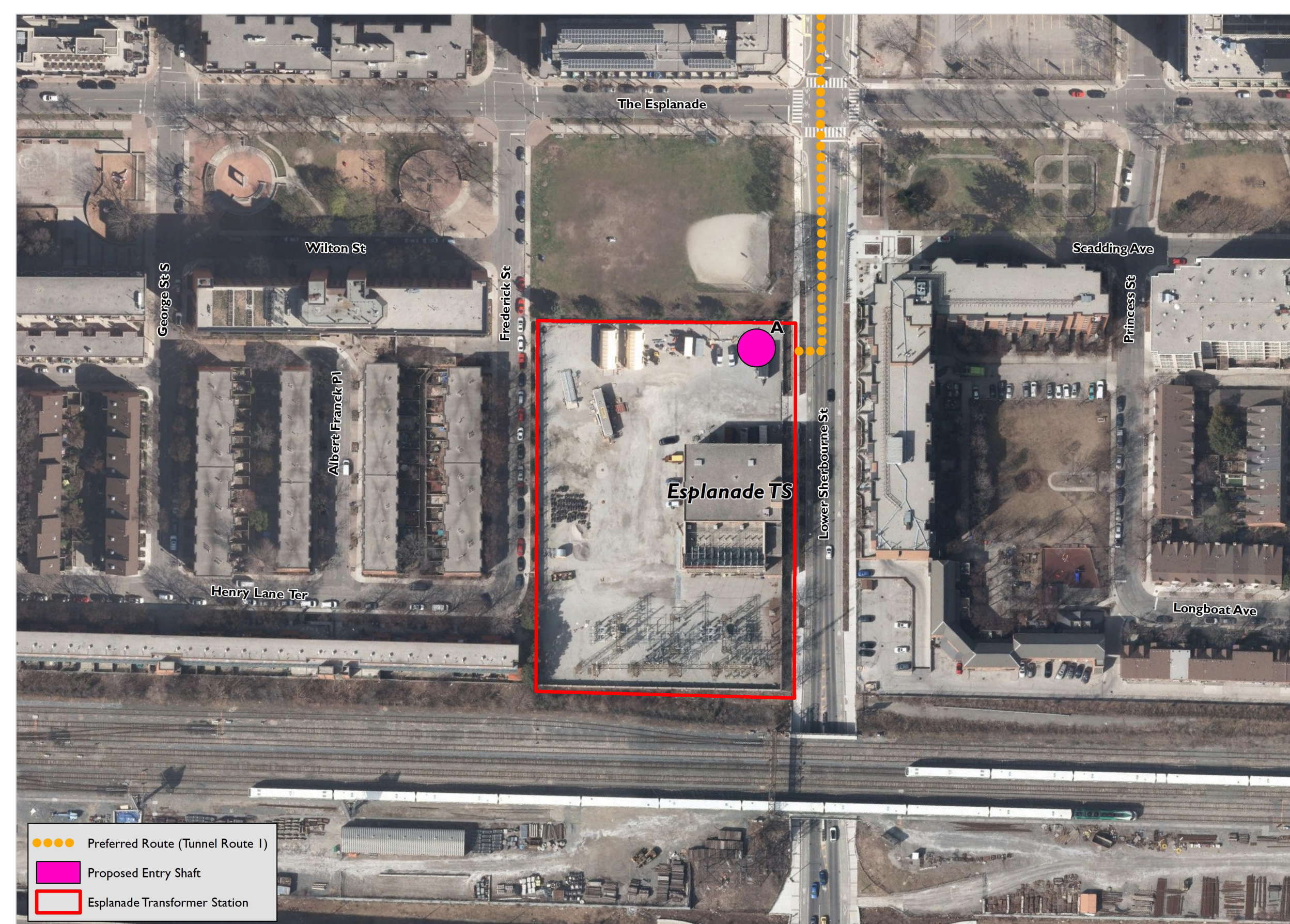
Shafts would be required along the tunnel route for access to and maintenance of the cables. To date, we have identified three proposed locations.



Proposed Entry Shaft

Location A

- The proposed entry shaft would be inside Hydro One's Esplanade TS property.
- The shaft would be approximately 12 m in diameter.
- This shaft would be the entry point for the tunnel boring machine. It would remain open for the duration of construction to allow for the removal of excavated materials and installation of the new cables.



Proposed Mid Shaft

Location B

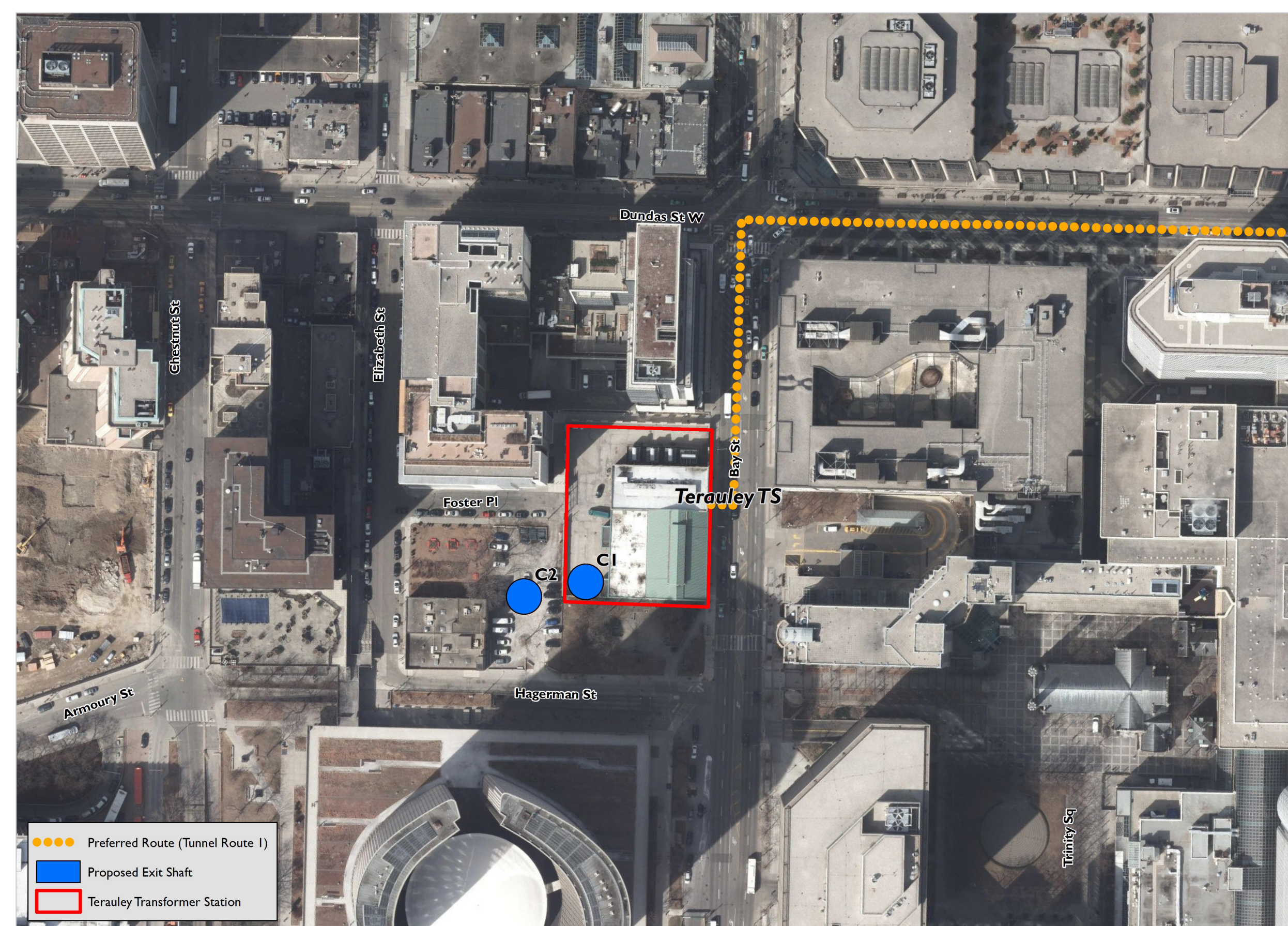
- The proposed mid shaft would be within road allowance near the intersection of Shuter St. and Sherbourne St.
- We currently anticipate that construction of this shaft would take approximately three months (plus utility relocation, if required).
- Temporary lane restrictions would be required. Following construction, the roadway would return to normal operation.
- This location is proposed as it would minimize conflicts with other underground utilities and infrastructure, and disruption to the public.



Proposed Exit Shaft

Location C1 or C2

- There are two potential locations being considered for the proposed exit shaft:
 - » C1 – inside Terauley TS property
 - » C2 – within an existing City of Toronto parking lot near Terauley TS
- The shaft would be approximately 8 m in diameter.
- This shaft would be the exit point for the tunnel boring machine. It would remain open for up to two years for construction and cable installation.

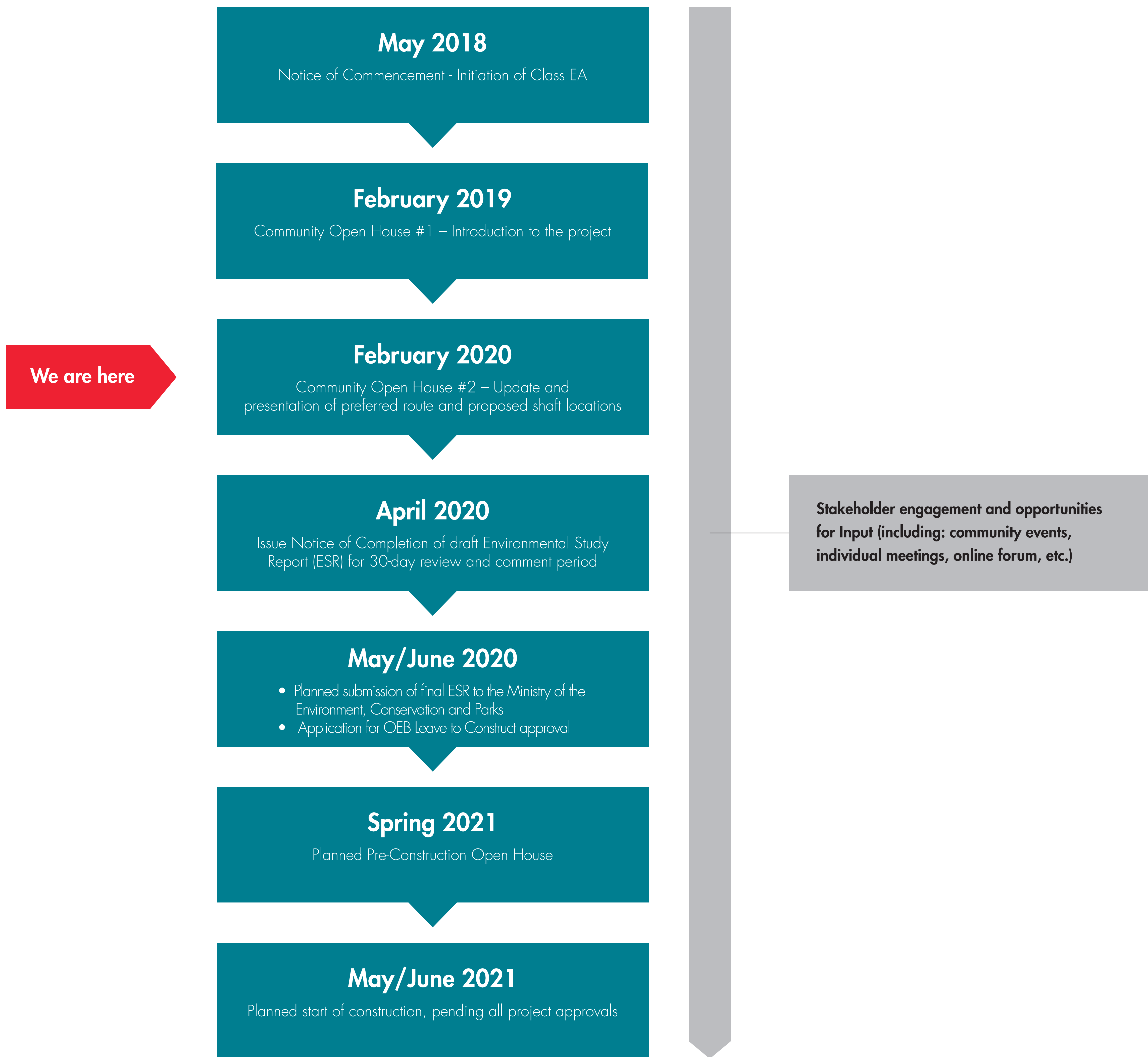


Construction Effects & Mitigation

Environmental Consideration	Proposed Mitigation
Noise	Hydro One will comply with the City of Toronto's Noise Bylaw, which permits for construction between 7 a.m. and 7 p.m. on weekdays. Should exceptions be required, Hydro One will acquire the appropriate permits and approvals.
Dust	Hydro One will implement best management practices to control and minimize dust. Measures could include watering down the area during dry periods.
Traffic	Where temporary lane restrictions are required, Hydro One will coordinate the timing of construction with the City of Toronto and other projects that may be scheduled in the area. All necessary permits will be obtained. Hydro One plans for excavated tunnel material to be removed from Esplanade TS.
Vibration	The tunnel boring machine will operate approximately 25 m below ground; therefore, vibration at the surface is not expected.
Soil and rock	Excavated materials will be collected and tested as necessary prior to disposal at an approved site.
Groundwater and source water protection	Refueling best management practices will be used to mitigate for potential effects to groundwater. Water discharge will be planned and managed in compliance with applicable legislation.
Cultural heritage resources	A Heritage Impact Assessment will be completed for the Terauley TS property, and appropriate mitigation measures will be implemented as necessary. A detailed background archaeological assessment (Stage 1) has been completed. Upon confirmation of shaft locations, additional site-specific considerations for archaeological assessment will be made.



Next Steps



Thank You For Coming!

Your feedback plays an important role in our process and we want to continue to hear from you. You can provide your feedback by:

- Signing up for our online community feedback forum (TalkPowerDowntownTO.ca)
- Filling out a comment form
- Talking with project team members



If you have any questions about the project, please contact Hydro One Community Relations:

- Tel: 416 - 345 - 6799
- Email: Community.Relations@HydroOne.com
- Website: www.HydroOne.com/PowerDowntownToronto

