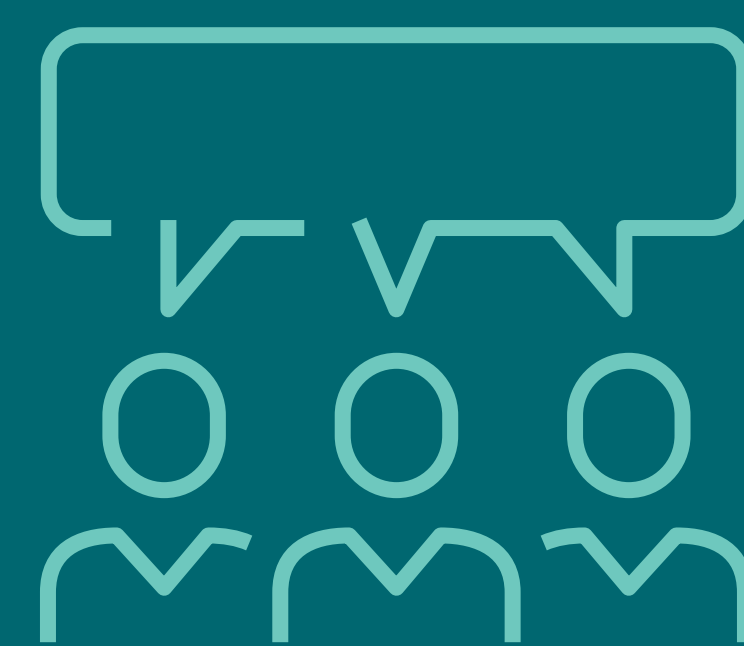
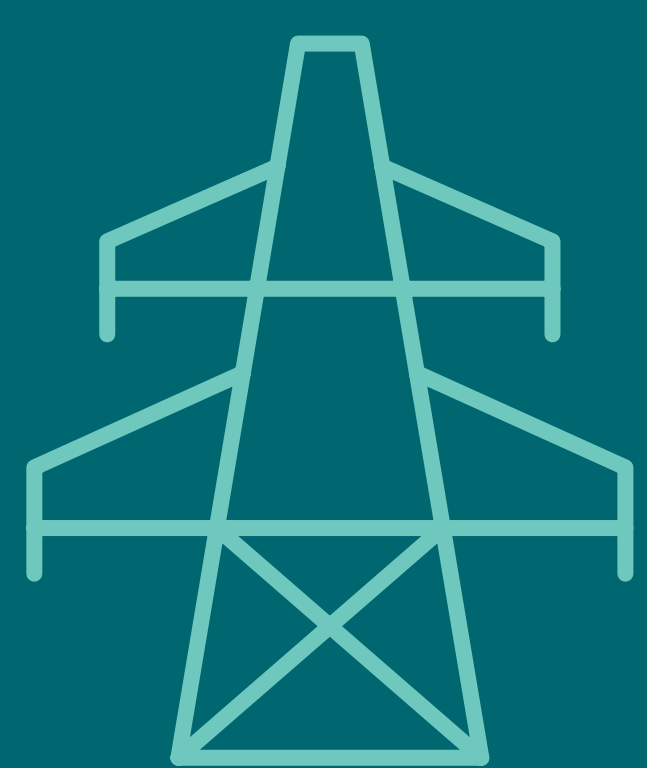


# Welcome

## Longwood to Lakeshore Project

### Community Open House #2



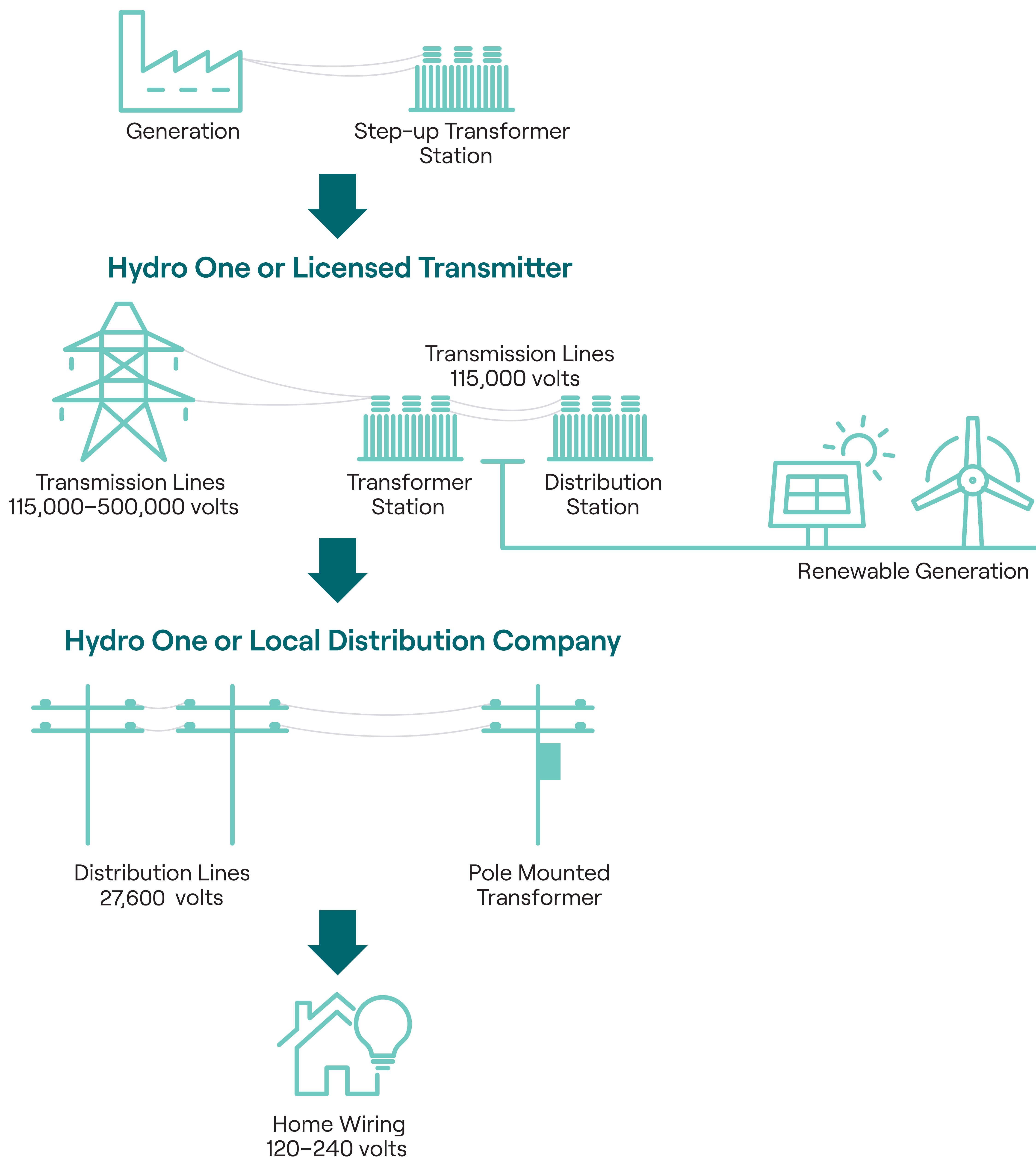
# Purpose of Today's Community Open House

- Explain the need for the project
- Provide an update on the Environmental Assessment (EA)
- Share the route alternative identification process
- Present the three route alternatives, including variations
- Provide information on the process to select a preferred route
- Share the anticipated project schedule
- Answer questions and gather your feedback

# Hydro One's role in the system

Across the province, Hydro One builds, owns, operates and maintains the electricity transmission and distribution network that brings power to homes and businesses.

## Ontario Power Generation and Private Generation Companies



## Southwest Ontario Transmission Projects

### Under Construction

① Between Chatham and Lakeshore

### Under Development

② St. Clair

③ Between Longwood and Lakeshore

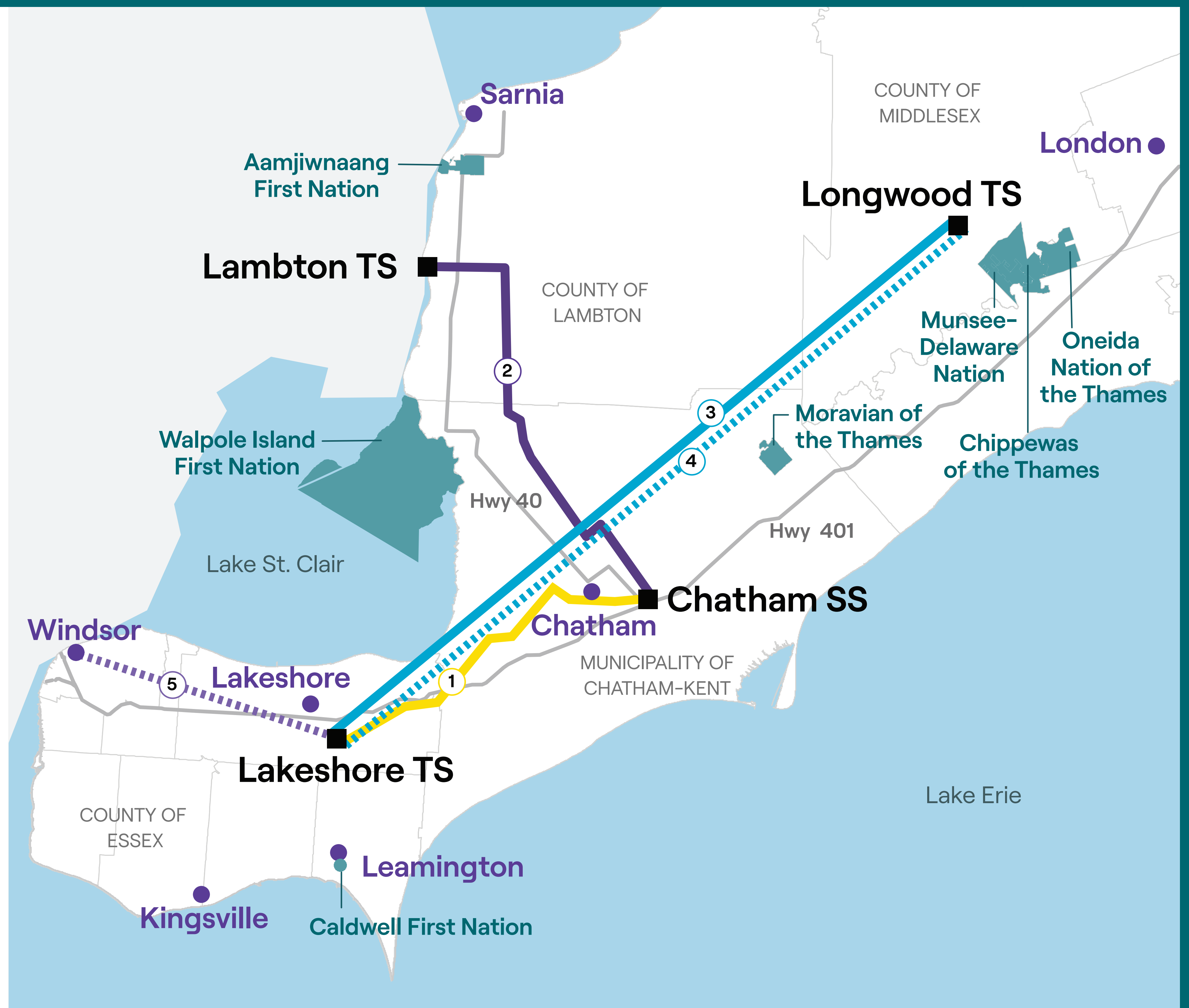
④ Between Longwood and Lakeshore

### To Be Developed

⑤ Between Windsor and Lakeshore

### Map Legend

- Transformer or Switching Station
- City/Town
- Highway
- First Nation



April 2024

For illustrative purposes only and not reflective of preferred routes.

# Electricity needs in southwest Ontario

In southwest Ontario, electricity demand is anticipated to quadruple by 2035 according to the Independent Electricity System Operator (IESO). To meet this demand, a network of electricity infrastructure projects have been identified. This includes three projects already underway:

- **Chatham to Lakeshore Line:** Under construction, expected to be in service by the end of 2024
- **St. Clair Transmission Line:** Environmental Assessment complete
- **Longwood to Lakeshore Project:** Environmental Assessment underway

This network of projects will provide many regional benefits including improved resiliency and reliability, economic growth and investments, and support for local food supply and security.



# Longwood to Lakeshore Project

## Late 2021

The IESO identified the need for one single-circuit 500 kilovolt transmission line between Longwood Transformer Station (TS) in the Municipality of Strathroy-Caradoc and Lakeshore TS in the Municipality of Lakeshore to be in-service by 2030 or sooner.

## Early 2022

With significant growth underway across the region, the Government of Ontario advised Hydro One to conduct early development work on a second Longwood-to-Lakeshore transmission line. This allows for more efficient planning, as well as more meaningful and transparent consultations with Indigenous Communities, residents, municipalities, and stakeholders, while the IESO further assesses the future energy needs of the region.

## Early 2023

Hydro One began planning activities for the Longwood to Lakeshore project, including issuing a Notice of Commencement of a Terms of Reference, information gathering and engagement.

## Early 2024

The Government of Ontario announced changes to modernize environmental assessments for certain types of projects, including transmission projects. As a result, the Longwood to Lakeshore project is moving forward as a Class Environmental Assessment (EA).

# What is a Class Environmental Assessment?



Ongoing Engagement

## Steps of a Class EA

- Engage with Indigenous communities, the public, municipalities, interest groups and government agencies
- Collect environmental information
- Identify and evaluate route alternatives
- Select a preferred route
- Identify potential environmental effects and mitigation measures
- Prepare a draft Environmental Study Report (ESR) that will be made available for a 30-day public review and comment period
- Submit the Final ESR

## How is a Class EA different from a Comprehensive EA?

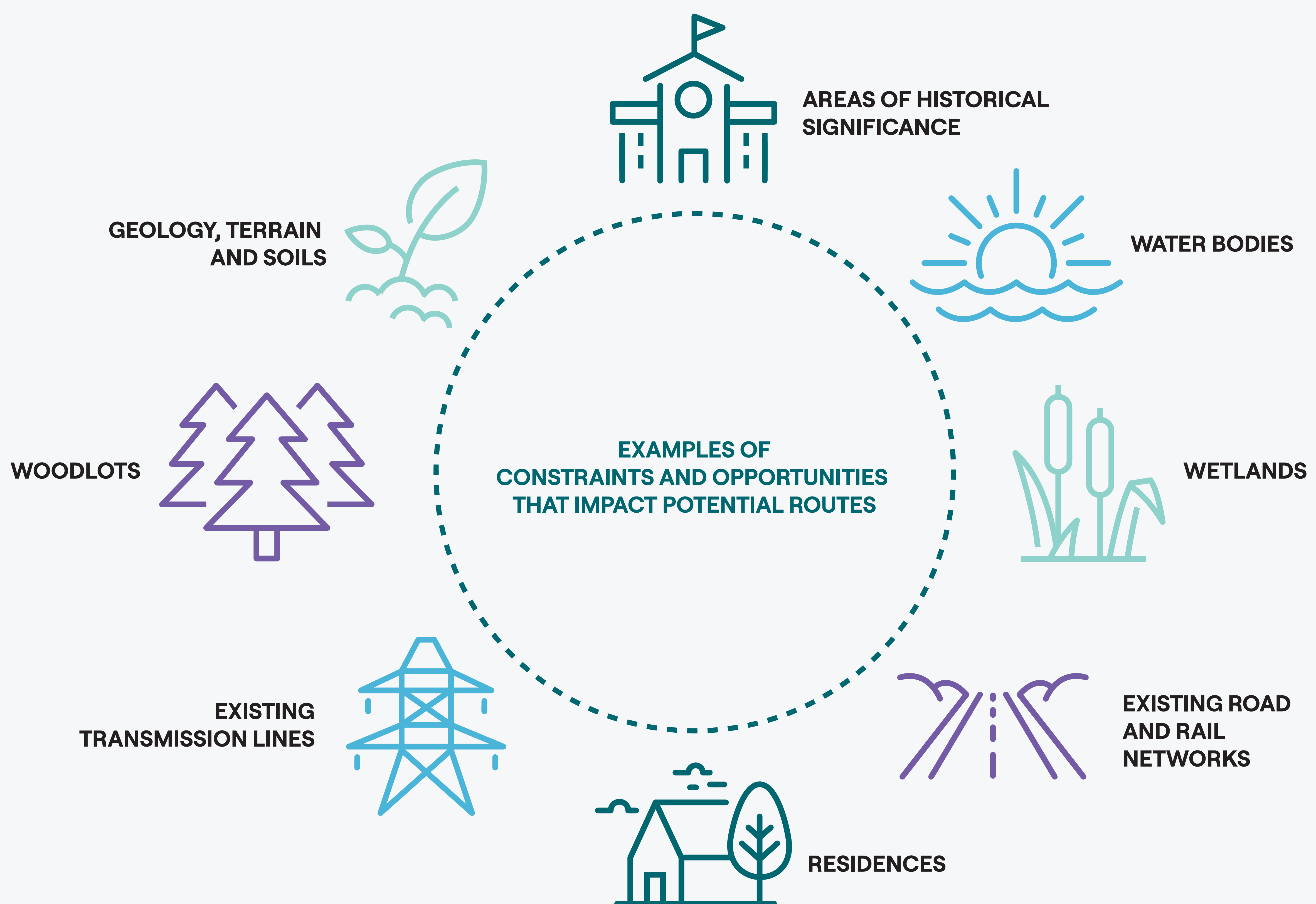
A Comprehensive EA requires an initial step: the development of a project-specific Terms of Reference (ToR). A ToR outlines how the EA would be completed. Class EA projects follow standard requirements and can proceed provided they successfully complete the approved process, as well as other necessary approvals.

Although a ToR will not be published for the Longwood to Lakeshore project, all of the insights and details shared through initial engagement in 2023 helped inform the route alternatives.

For more information, see [HydroOne.com/ClassEA](https://HydroOne.com/ClassEA)

# Developing the Route Alternatives

- Constraints and opportunities impacting potential routes were identified and prioritized with input from Indigenous communities, government agencies, and interest groups with local knowledge.
- A GIS/computer model of preliminary route alternatives was developed using the routing criteria.
- Preliminary route alternatives were refined based on technical information, stakeholder input and lessons learned from Hydro One's other projects in the area.



# Routes We Are Studying

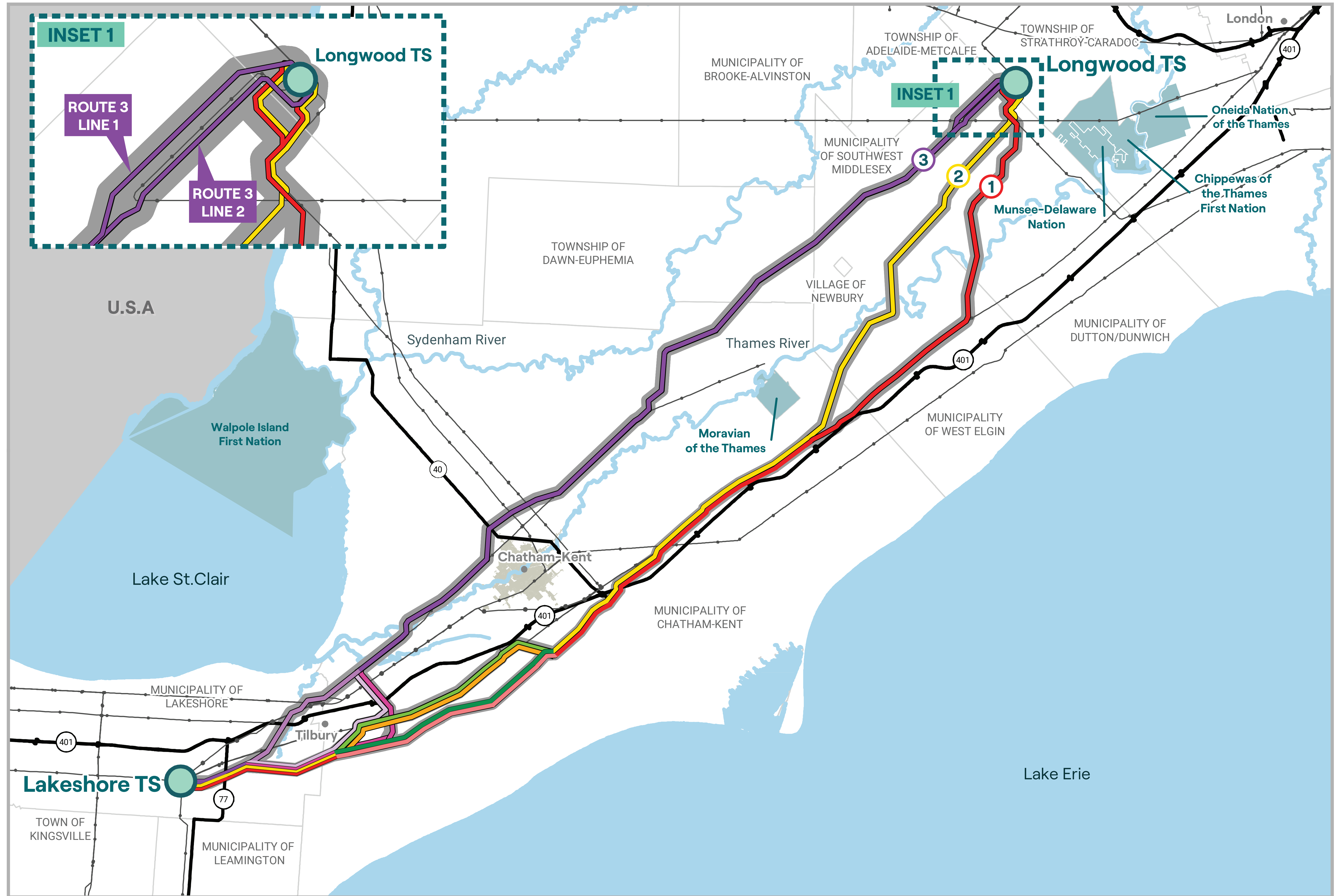
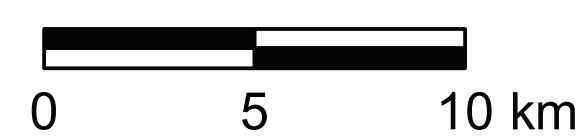


## Longwood to Lakeshore Project

### Map Legend

- Transformer Station (TS)
- Route 1 (A/B Core Alignment)
  - Route 1A
  - Route 1B
- Route 2 (A/B Core Alignment)
  - Route 2A
  - Route 2B
- Route 3 (A/B/C Core Alignment)
  - Route 3A
  - Route 3B
  - Route 3C
- All Routes (1A/1B/2A/2B/3A/3B/3C)
- Local Study Area (500 m buffer on either side of the route alternatives)
- Existing Transmission Line
- Highway
- Municipal Boundary
- Waterbody
- First Nation
- Built Up Area

Note: With the exception of the section of Route 3 shown in inset 1, each route represents two transmission lines with parallel alignments. Each line has an assumed 60m right of way, pending detailed engineering.



**Note:** Please visit our online interactive map for a more detailed view and to provide your feedback: [HydroOne.com/Longwood-to-Lakeshore](https://HydroOne.com/Longwood-to-Lakeshore).

Three viable route alternatives, each with variations labelled A, B or C, have been identified for the new transmission lines. Each route includes two transmission lines. Typical width of the right-of-way for a single circuit 500kV transmission line is approximately 60m.



# Evaluation of the Routes

Over the course of the EA, we will continue to learn more about the existing environment within the study area by gathering:



Information obtained through local community and Indigenous engagement



Data from existing reports, plans, maps, aerial photographs and other sources



Field data collected from environmental surveys such as breeding bird and vegetation surveys



Project specific research such as an archaeological assessment

Through this process, we will evaluate and compare the advantages and disadvantages of each of the route alternatives to select the preferred route for the new transmission lines.

# Examples of studies

Examples of field studies and data to be collected as input to the evaluation of the alternative routes include:



## Wildlife and wildlife habitat:

Completing field studies (examples: migratory birds, amphibians, vegetation).



## Cultural heritage areas:

Assessing existing data to determine any potential areas of archaeological significance.







## Groundwater and source water:

Identifying source water protection areas as well as mapped water wells and associated groundwater quality.



# Example Evaluation Criteria

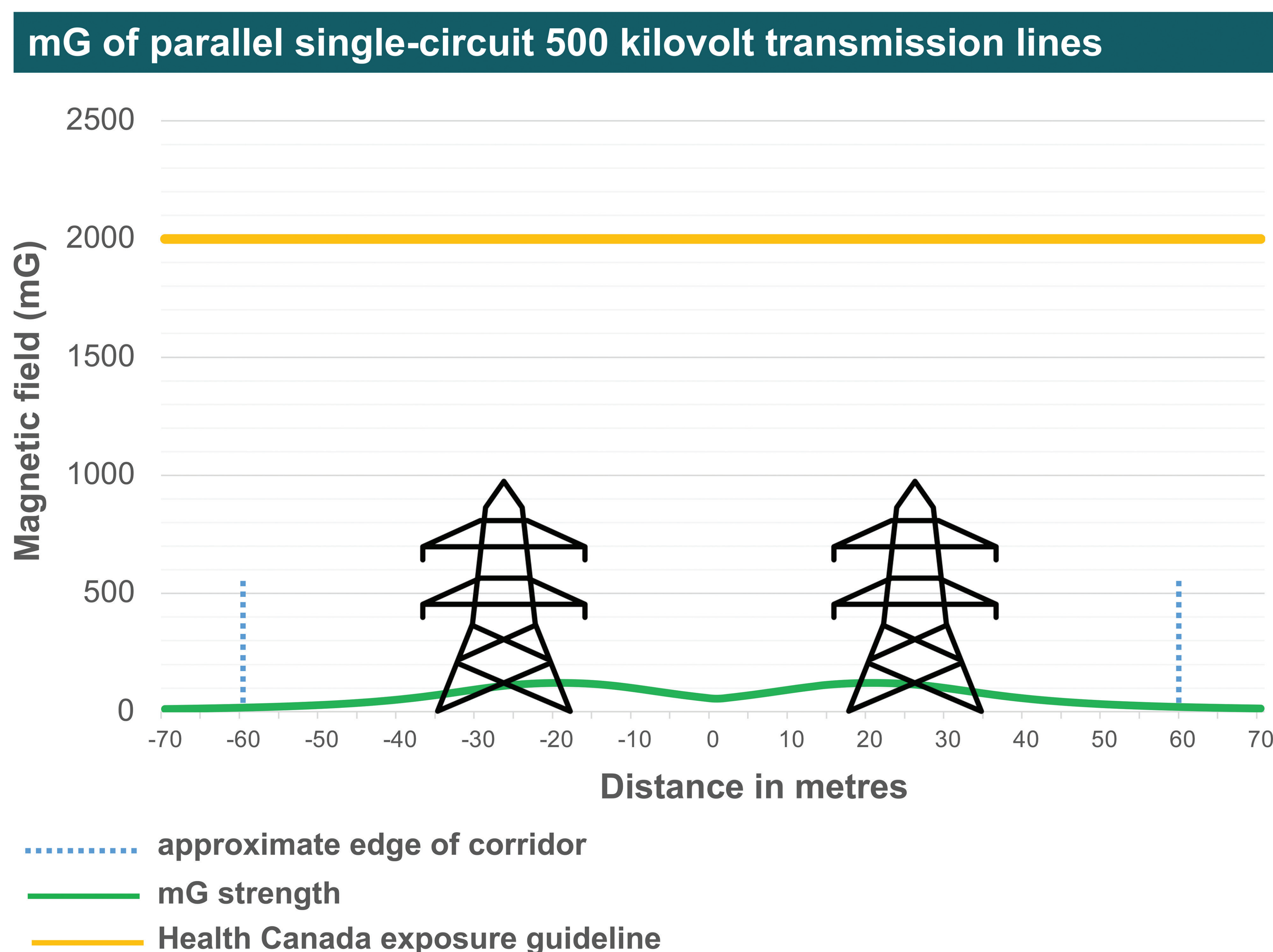
The preferred route will be selected based on an evaluation process that balances project specific criteria in four categories.

Category	Examples
  Socio-Economic Environment	<ul style="list-style-type: none"> <li>• Agricultural resources and operations</li> <li>• Residential properties</li> <li>• Business, recreational and other land uses</li> <li>• Impacts on areas of cultural heritage value</li> </ul>
 Natural Environment	<ul style="list-style-type: none"> <li>• Wildlife habitat</li> <li>• Species at Risk</li> <li>• Wetlands, vegetation, natural hazards and floodplain areas</li> </ul>
 Technical and Cost	<ul style="list-style-type: none"> <li>• Line length and angles</li> <li>• Crossing of existing infrastructure</li> <li>• Real estate and land rights considerations</li> <li>• Construction complexity</li> </ul>
 Indigenous Culture, Values and Land use	<ul style="list-style-type: none"> <li>• Areas that support hunting, trapping and/or harvesting grounds</li> <li>• Areas that support fish bearing waters with identified or inferred habitat of game species</li> <li>• Effects to rare, undisturbed native habitats or ecosystems</li> </ul>

# Electric and magnetic fields (EMF)

Hydro One looks to scientific experts, like Health Canada, for guidance on safe EMF exposure levels. EMF levels under a typical 500 kilovolt high voltage transmission line are 95% below the strictest guideline established.

Many common household items emit EMF, including a vacuum cleaner (300 mG at six inches) and an electric oven (9 mG at six inches). As you move away from the source of EMF, the strength of their fields fades rapidly.



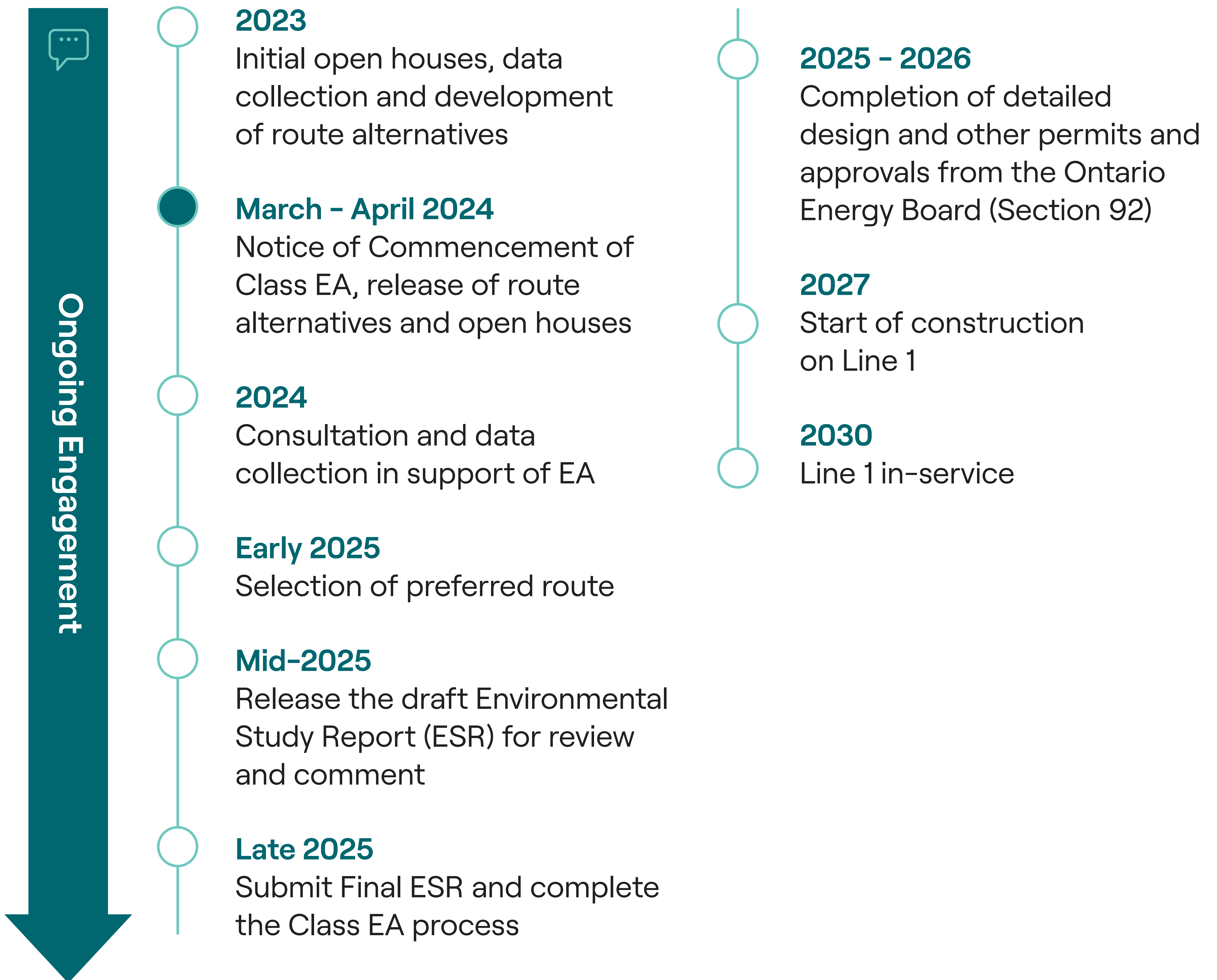


# Working with property owners

- Hydro One will work closely with property owners throughout the project.
- Starting this month, we are hand delivering personalized letters to property owners on each of the route alternatives with a map showing where a proposed route crosses their property.
- Over the next few months, we will be contacting some property owners to request property access so our teams can complete non-intrusive field studies on properties with environmental areas of interest identified along all route alternatives.
- In early 2025, upon the selection of the preferred route, our dedicated real estate representatives will work one-on-one with property owners along the route to discuss next steps.



# Anticipated Project Schedule



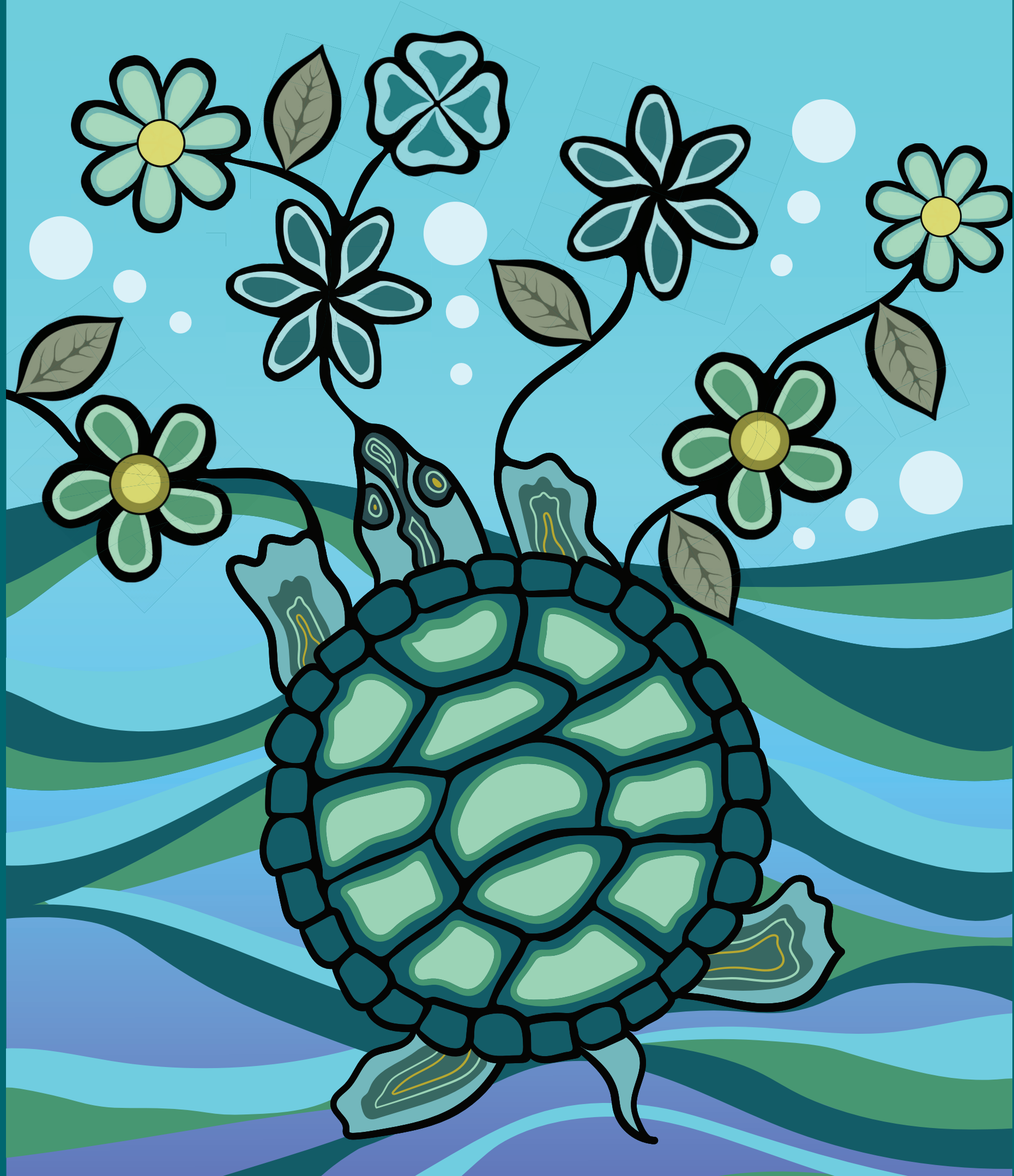
Line 2 construction and in-service date will be determined upon further planning by the IESO

\*Timelines are subject to change

\*\*Leave to Construct under Section 92 of the Ontario Energy Board Act is a regulatory process to obtain approval from the Ontario Energy Board to build and operate a transmission line.

# Our commitment to you

- Hydro One is proud to have been trusted with energizing communities across the region for more than 100 years.
- We rely on early, meaningful and open engagement to help shape project planning and are committed to listening as we expand our electrical infrastructure.
- We will host a wide range of engagement opportunities to gather input and feedback, which is critical as we plan the project.
- We will continue to keep communities, residents and members of the public involved in our planning and project activities.
- We encourage you to sign up for our project contact list at [HydroOne.com/Longwood-to-Lakeshore](https://HydroOne.com/Longwood-to-Lakeshore)



# Working with Indigenous communities

We consult in a meaningful way that is **guided by Indigenous communities**.

We look to include Indigenous perspectives in the Environmental Assessment through:

- Natural Environment Surveys
- Archaeological Surveys
- Land Use Studies
- Open Houses
- Recurring meetings with Hydro One project teams
- Field Program participation





# Thank You!

Your input is important to us. Please share your comments with our team so that we can incorporate them as part of the route evaluation. You can contact us at anytime:



**1.877.345.6799**



**Community.Relations@HydroOne.com**

For the most up-to-date project information, visit our project website:



**HydroOne.com/Longwood-to-Lakeshore**

