



**Welcome**

# **Longwood to Lakeshore Project**

Virtual Community Open House #2



# Land acknowledgement

Hydro One acknowledges that the Longwood to Lakeshore Project is proposed on the ancestral lands of the Anishinaabe and is now home to many diverse First Nations, Inuit and Métis people.

Hydro One understands that Indigenous Nations have been here since time immemorial and are stewards of what many refer to as Turtle Island.

We are all Treaty People and with a commitment to friendship and our pursuit of reconciliation, we are thankful to be welcomed on these lands as partners in our shared future so we can improve on our past and energize our combined futures.



# Speakers and Panelists



**Maalika Kara**  
Community Relations



**Craig Prewett**  
Strategic Projects



**Paul Dalmazzi**  
Environmental Services



**Kyle Ellis**  
Real Estate



**Kelly Williams**  
Indigenous Relations



**Candida D'Costa**  
Transmission Planning, IESO



# Community Open House #2: Overview

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



# Key organizations

Building infrastructure to meet the energy needs of today and tomorrow involves a number of partners, including:



Builds, owns, operates and maintains electricity transmission and distribution facilities across Ontario.



Oversees planning to ensure electricity needs are met both now and in the future.



Ministry of the  
Environment,  
Conservation and Parks

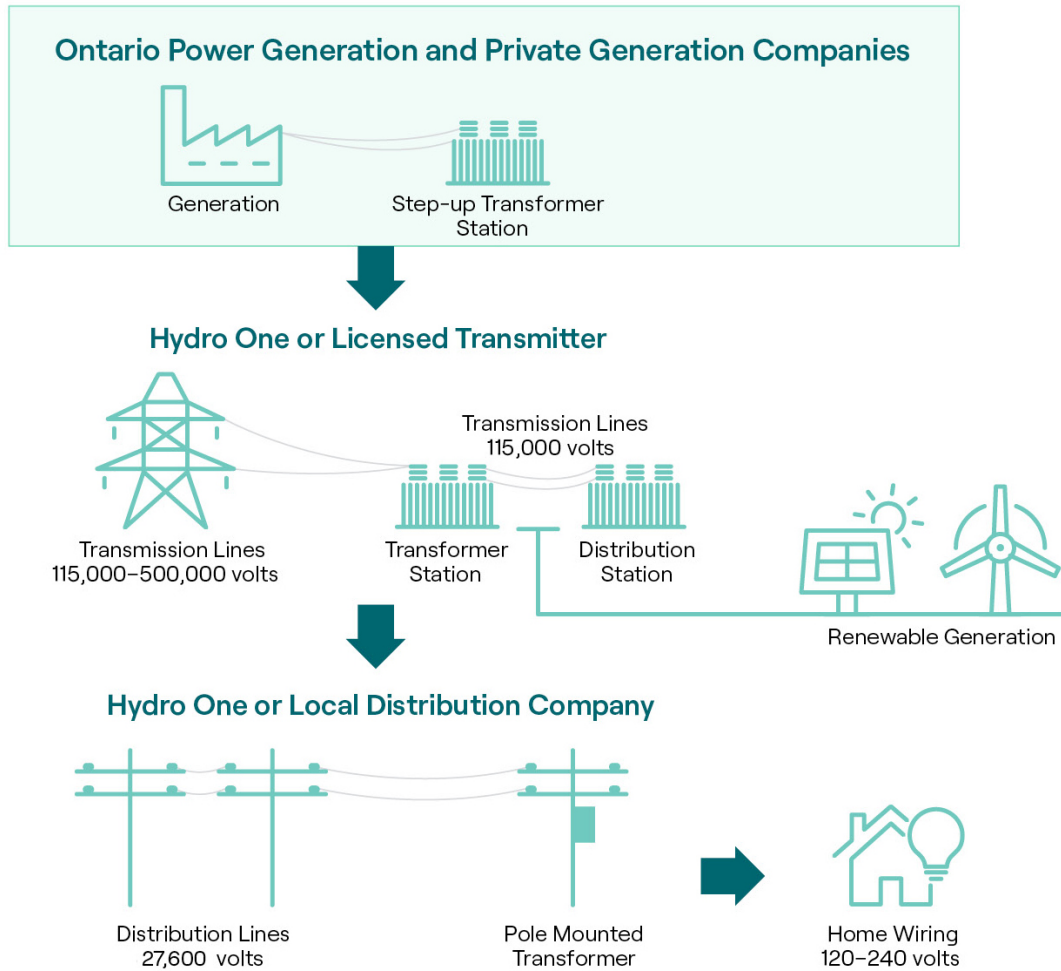
Legislative Authority for  
Environmental  
Assessments in  
Ontario.



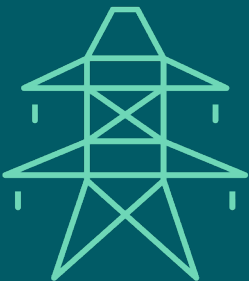
Regulates the electricity  
market in Ontario,  
including electricity  
rates.



# How the system works



# Electricity needs in Southwest Ontario



## Southwest Ontario Transmission Projects

### Under Construction

1 Between Chatham and Lakeshore

### Under Development

2 St. Clair

3 Between Longwood and Lakeshore

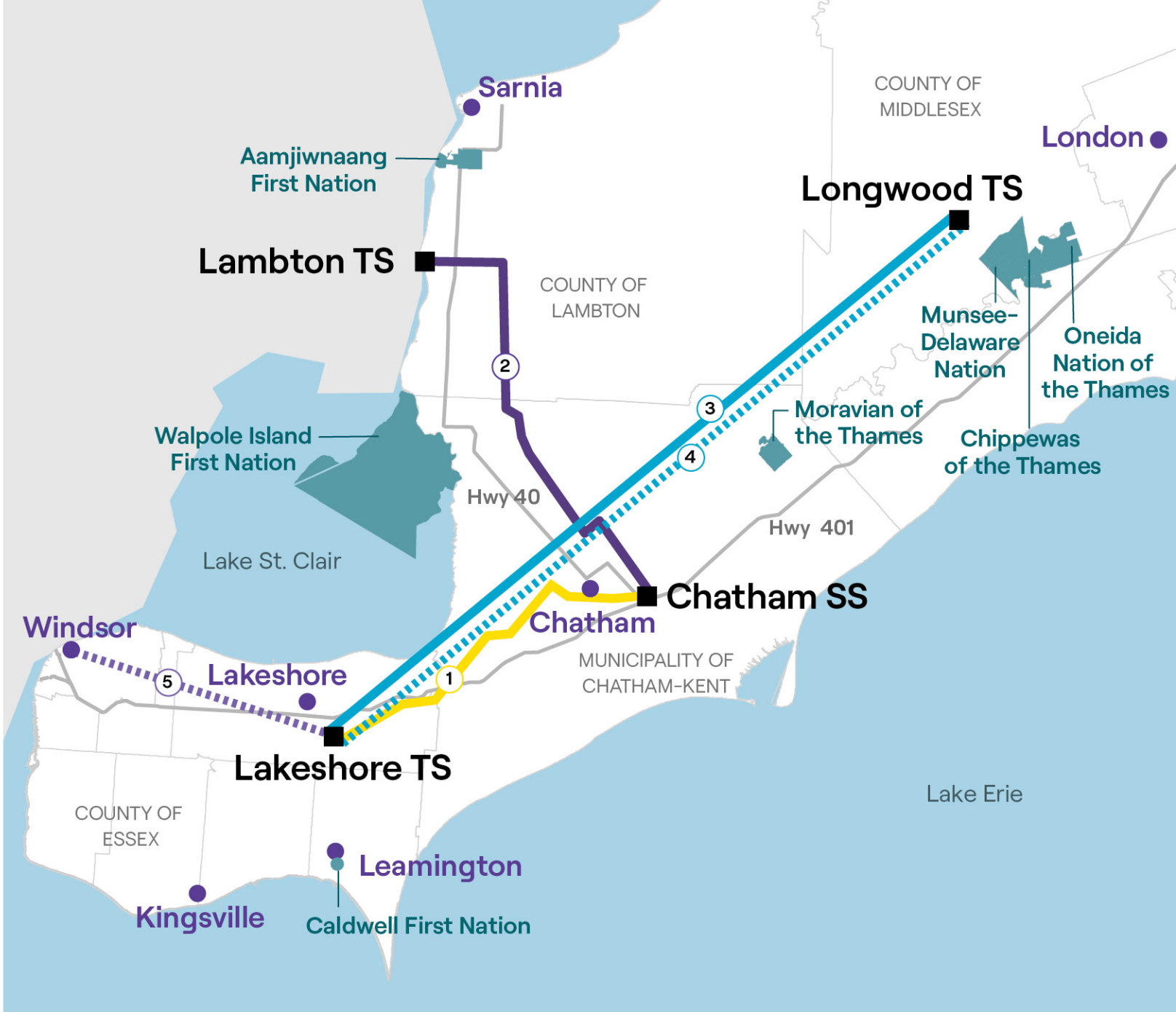
4 Between Longwood and Lakeshore

### To Be Developed

5 Between Windsor and Lakeshore

### Map Legend

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





# Longwood to Lakeshore Project

## Fall 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.

## Spring 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 Comprehensive EA, 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?

## Steps of a Class EA

- Engage with Indigenous communities, the public, municipalities, interest groups and government agencies (continues throughout the process)
- Collect environmental information
- Identify potential environmental effects and mitigation measures
- Identify and evaluate route alternatives
- Select a preferred route
- 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



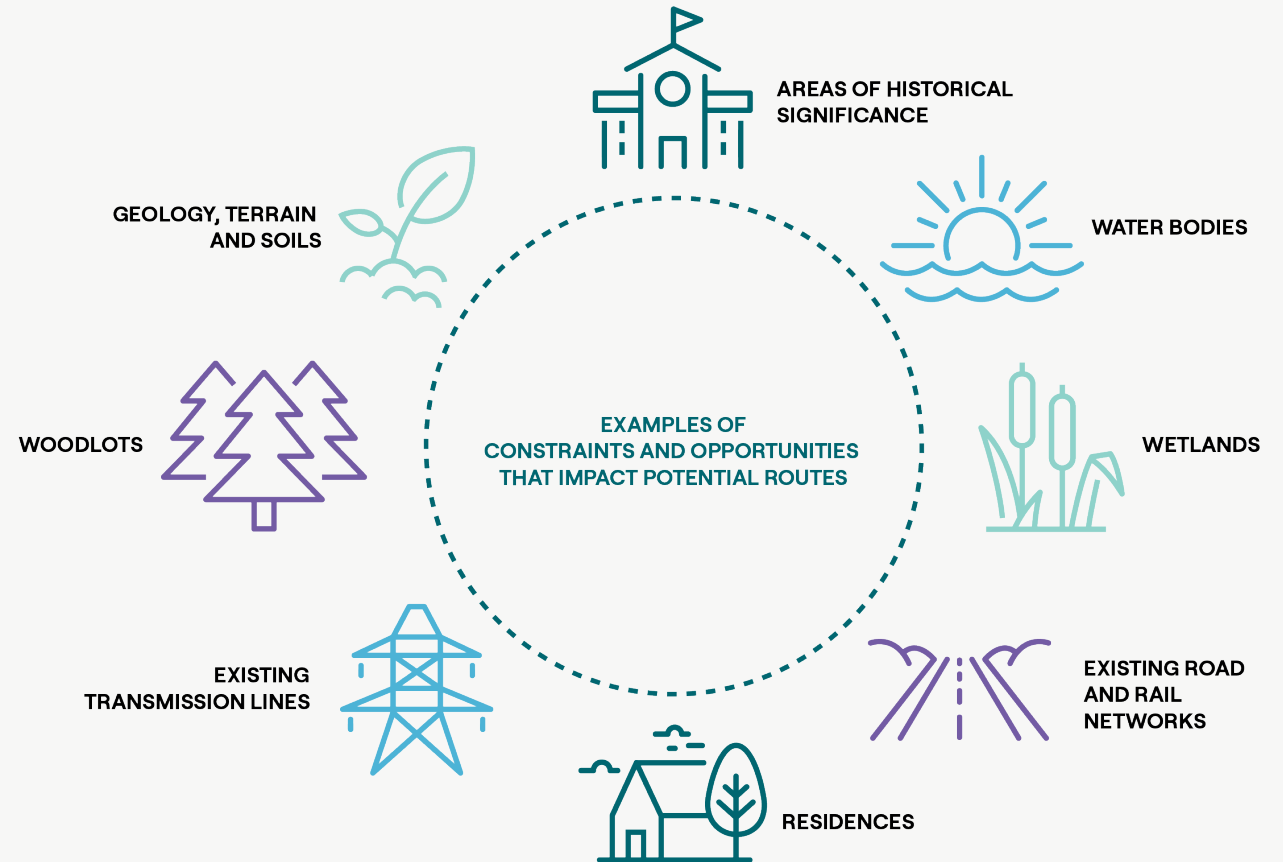
## How is a Class EA different from a Comprehensive EA?

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. Under the Class EA process, the requirements for the EA are standardized and documented in the applicable Class EA document.

# Developing the route alternatives

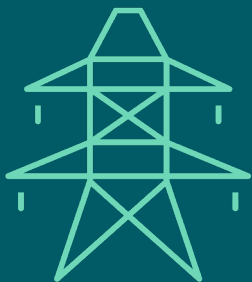


- Routing criteria were identified and prioritized with input from Indigenous communities, government agencies, and interest groups with local knowledge.
- A GIS/computer model of preliminary route alternatives was developed using the routing criteria.
- Preliminary route alternatives were refined based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





# Developing the route alternatives

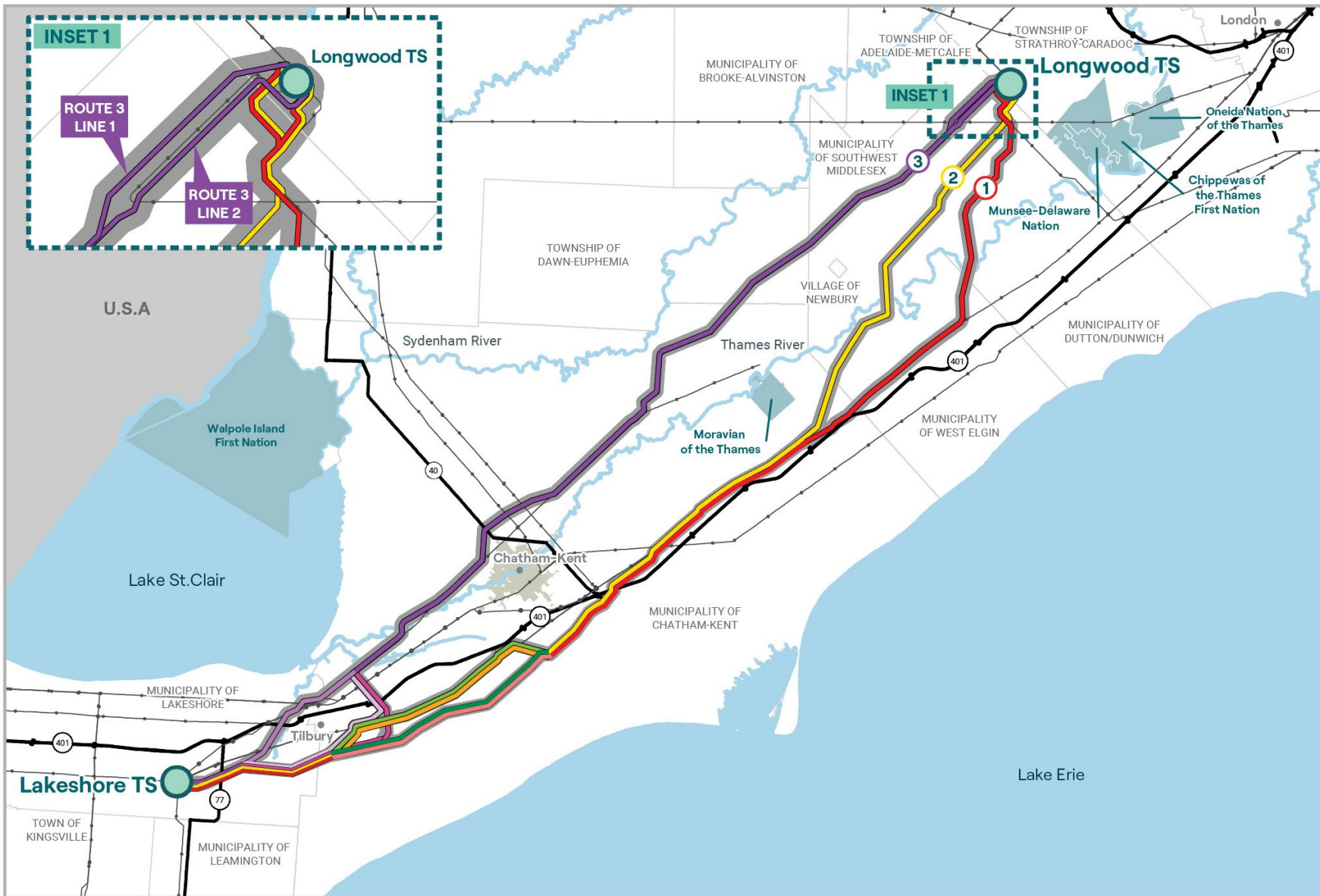


## Longwood to Lakeshore Project

### 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. Each transmission line requires a 60m right-of-way.

# 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.





# Example evaluation criteria

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



## Categories



### Socio-Economic Environment

- Agricultural resources and operations
- Residential properties
- Business, recreational and other land uses
- Impacts on areas of cultural heritage value



### Natural Environment

- Wildlife habitat
- Species at Risk
- Wetlands, vegetation, natural hazards and floodplain areas



### Indigenous Culture, Values and Land use

- Areas that support hunting, trapping and/or harvesting grounds
- Areas that support fish bearing waters with identified or inferred habitat of game species
- Effects to rare, undisturbed native habitats or ecosystems

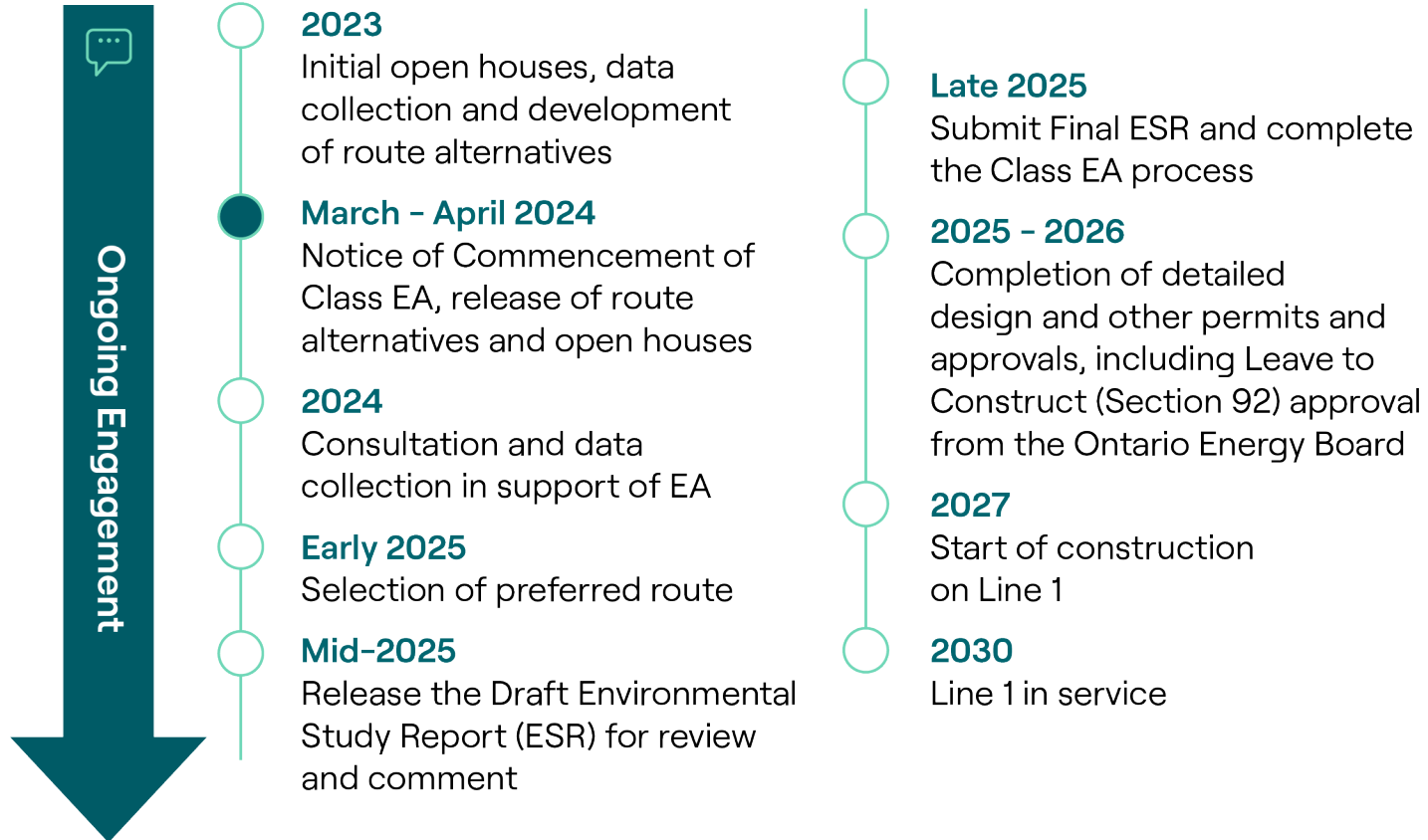


### Technical and Cost

- Line length and angles
- Crossing of existing infrastructure
- Real estate and land rights considerations
- Construction complexity

## Examples

# Project development timeline\*



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.





# Your questions and comments



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Real Estate



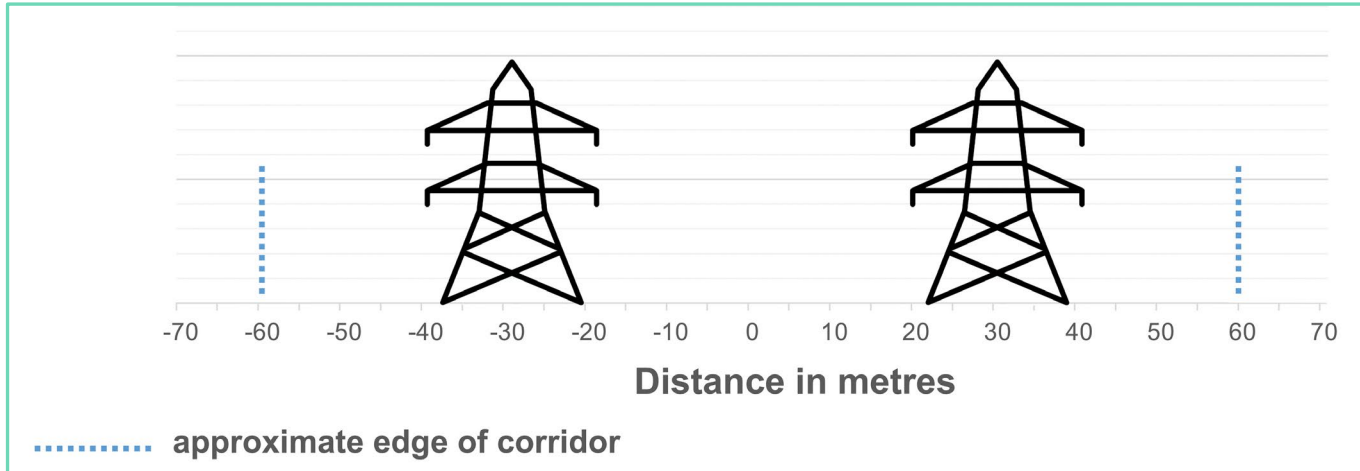
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Indigenous Relations



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Transmission Planning, IESO



# Transmission corridors



The right-of-way for a 500 kV transmission line is 60 metres.

While design work is still in early stages, we expect that the transmission towers will be:

- 35 to 45 metres tall
- approximately seven to nine metres square at the base
- between 275 to 335 metres apart.



Sample image for  
reference only



# Your questions and comments



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Transmission Planning, IESO



# Thank you

Your input is important to us and will be considered in the evaluation of the route alternatives. To provide comments or to be added to the project contact list, please call or email:



1.877.345.6799



Community.Relations@HydroOne.com



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

[HydroOne.com/LongwoodtoLakeshore](https://HydroOne.com/LongwoodtoLakeshore)

