

Welcome to our Information Centre

Overbrook to Riverview Transmission Line Upgrade

September 21 and 22, 2016



Purpose of the Information Centre

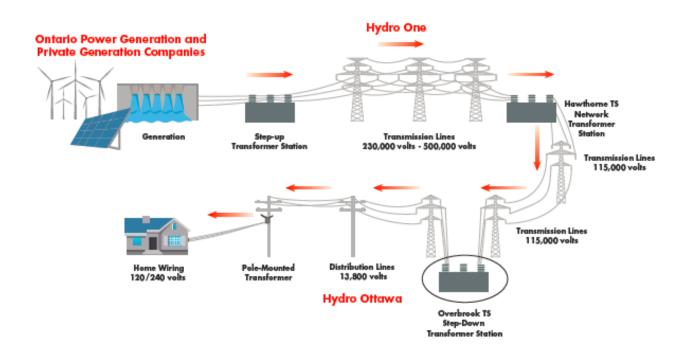
Meet our project team and learn more about:

- The proposed project in your community
- The study area for the project
- The planning and approvals process
- Construction methods
- Next steps and opportunities for your participation

We're here to listen to your comments or concerns, obtain your feedback and answer your questions.



Hydro One's Role in Delivering Electricity to Your Community





Key Organizations



Hydro One Networks Inc.

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



Hydro Ottawa

Distributes electricity supplied by Hydro One's transmission system to residential, commercial and industrial customers in parts of Ottawa.



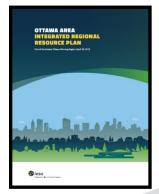
Independent Electricity System Operator

Develops plans to ensure electricity needs are met for the benefit of Ontario, both now and in the future.



Need for the Overbrook to Riverview Transmission Line Upgrade

- The project is identified in the Ottawa Area Integrated Regional Resource Plan, developed by IESO, Hydro Ottawa and Hydro One to address the growing electricity needs of central Ottawa.
- Power to this area is applied by Hydro Ottawa. This project will ensure that Hydro One's transmission system can deliver an adequate and reliable supply of electricity to meet Hydro Ottawa's forecast growth in electricity demand in central Ottawa.
- The project has been initiated at the request of Hydro Ottawa to increase the capacity of transmission system to meet the forecasted electricity needs in central Ottawa.





Area Electricity Demand

The proposed project will maintain a reliable supply of power to the following Transformer Stations (TS), areas and end-users.

Overbrook TS

- Vanier Community
- Montfort Hospital
- St. Laurent Mall

King Edward TS

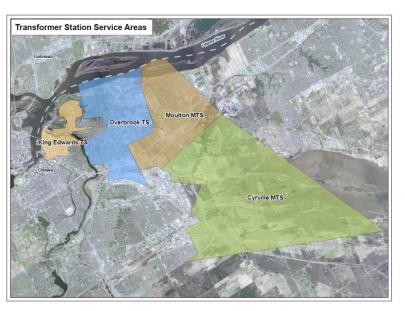
- Sandy Hill Community
- The Market
- University of Ottawa
- Rockcliffe Park

Moulton Municipal TS

- Community of Rothwell Heights
- Gloucester Centre
- Industrial and commercial area along Ogilvie Road

Cyrville Municipal TS

- Cyrville Community
- Ottawa-Carleton Detention Centre
- Industrial and commercial area along Innes Road



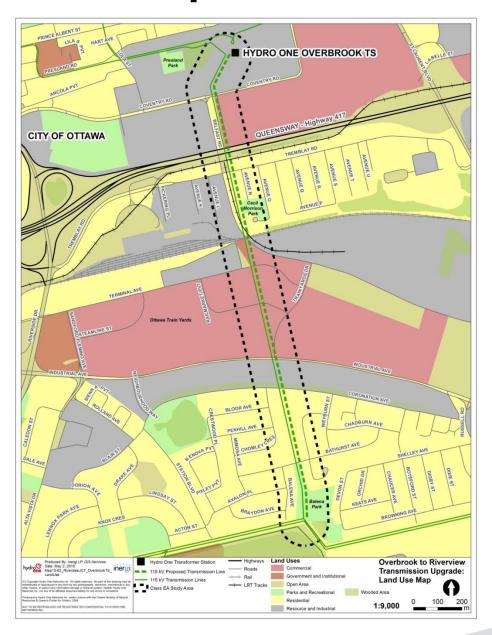


Project Description

- The existing 115 kilovolt (kV) transmission line was built in 1947.
- The existing right-of-way extends 1.8 km between Overbrook TS and Balena Park.
- The width of the existing right-of-way is approximately 30 metres.
- The additional 115 kV circuit proposed will require:
 - Seven of the nine existing lattice and H-frame transmission towers will be replaced with steel poles.
 - The 2-pole structure adjacent to Overbrook TS will be replaced with a set of tapping structures.



Project Area





Project Area

- The existing right-of-way is located within a mix of residential, commercial and industrial areas.
- The right-of-way crosses the Queensway (Highway 417), a rail line east of the VIA rail station, and the light rail transit (LRT) "Confederation Line" that is currently under construction.
- There are two City of Ottawa municipal parks located adjacent to the right-of-way; Cecil Morrison Park in Eastway Gardens, and Balena Park in Riverview.
- There are no watercourses within or adjacent to the right-of-way.



Coventry Road looking south



Ottawa Train Yards looking north

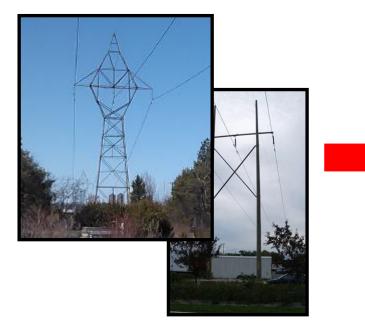


Balena Park looking north

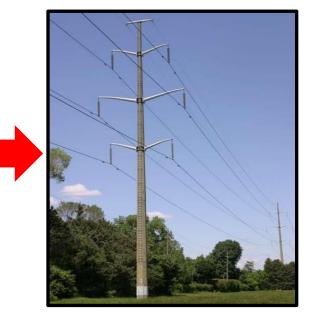


Transmission Structures

Existing Towers



Proposed New Poles



Existing towers are between 80ft and 130ft tall

New poles will range between 132ft and 162ft tall

The new steel poles will provide visual improvements due to their smaller footprint.



Class Environmental Assessment Process

- The transmission line upgrade is subject to the provincial Environmental Assessment Act, and is being planned in accordance with the approved Class Environmental Assessment (Class EA) for Minor Transmission Facilities process.
- The Class EA process is an effective way of ensuring that minor transmission projects that have a predictable range of effects are planned and carried out in an environmentally acceptable manner.
- As part of the Class EA consultation process, a draft Environmental Study Report (ESR) is planned to be available for public review and comment in the fall of 2016.
- 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 Ontario Ministry of the Environment and Climate Change (MOECC).
- If Hydro One cannot satisfy all of the concerns raised during the public review period, you can submit a written request (Part II Order) to the MOECC asking for a higher level of assessment (Individual Environmental Assessment).



Class EA Process Considerations

The Class EA process identifies potential project effects related to the following, when applicable:

- Business and residential property owners
- Planned land uses and existing infrastructure
- Terrestrial and aquatic resources
- Environmentally significant areas
- Archaeological and heritage resources
- Community recreational resources



Community and Stakeholder Consultation

Consultation is an important part of the Class EA process. Hydro One encourages participation in its projects and engages with First Nations and Métis Communities, government agencies, local officials, property owners, interest groups, and the public through:

- Correspondence and conversations
- Newspaper advertisements
- Meetings with individuals, groups and community leaders
- Public Information Centres
- Public review period for the draft Environmental Study Report
- Construction activity notification to affected property owners



What Local Residents and Businesses Can Expect

- Vegetation removal, as required on the right-of-way.
- Install temporary gravel access road and work areas on the right-of-way to enable heavy equipment access.
- A fenced work area located on the right-of-way in Balena Park for the duration of construction. Removal of the baseball backstop near the transmission tower in Balena Park for safety reasons.
- Construction work areas along the right-of-way will be temporarily fenced and taped off and not accessible for safety reasons.
- Entrances to businesses in the Ottawa Train Yards will remain accessible during construction.
- Temporary lane restrictions will be necessary on Highway 417 to string the new transmission lines.
- Residents will be notified with further construction details closer to the date as planning progresses.



Construction Process

- **Step 1** Remove vegetation and install temporary access roads and work areas on the right-of-way.
- **Step 2** Mobilize equipment and install foundations at the new pole locations.
- **Step 3** Install temporary wood poles at road crossings as a safety barrier when relocating and stringing new transmission lines.
- **Step 4** Construct and erect poles and move the existing transmission lines from the existing towers to the new poles.
- **Step 5** Dismantle the existing towers.
- **Step 6** String the new transmission lines on the new poles and replace the existing conductors with new ones.
- **Step 7** Remove the temporary wood poles, access roads and work areas and restore the right-of-way.



Typical Construction Equipment



Cranes To dismantle existing towers and erect new poles



Bulldozers To install temporary gravel road and working pads



Grinders For vegetation removal



Backhoe/Excavators To install foundations for new poles



Examples of Construction Activities



Temporary access road



Pouring concrete for tower foundation



Set up laydown area



Pulling new conductor into position



Encroachments and Vegetation along the right-of-way

- Hydro One defines encroachments to be any private property that extends beyond the owner's property line onto Hydro One's right-of-way.
- An initial survey of the corridor showed that there are many encroachments on the right-of-way that could prevent crews from safely accessing the corridor, and inhibit our ability to transport the necessary equipment and machinery required to construct the project.
- Some of the residential encroachments on this right-of-way include hedges, fences, shed, patio furniture, gardens and other common backyard amenities.
- The purpose of Hydro One's transmission corridors is to provide safe and clear access for equipment during construction and emergency situations as well as to ensure the safe and reliable operation of the electricity system.



Encroachments and Vegetation along the right-of-way continued...

- Hydro One is also mindful to strike a fair balance between the need for system safety and reliability while respecting community access and the safe enjoyment of this important green space.
- In August, Hydro One representatives met with majority of the residents adjacent the transmission corridor and local elected officials as a part of our engagement and consultation process.
- Hydro One is able to modify its approach to minimize the change for those who live adjacent to the corridor. We will do our best to only remove vegetation encroachments in the way of the current project.
- Vegetation left on the corridor will be assessed for compatibility during future right-of-way maintenance cycles to ensure that it will not interfere with the safe and reliable operation of these power lines.



Minimizing Construction and Project Effects

- Hydro One will work with landowners and communities along the transmission right-of-way to minimize disruption due to construction activities (noise, dust, soil compaction, traffic restrictions, etc.).
- Construction will be intermittent and it is expected that all work can be carried out within the existing right-of-way.
- Appropriate signage and traffic control will be used to ensure public safety.
- There are no power interruptions anticipated as a result of this project.



Restoration Plan

- Vegetation within the construction access and work areas will be removed from the right-of-way during the site preparation stage of construction.
- Grassed areas disturbed by construction will be re-seeded after construction activities are complete.
- Forestry crews will continue to maintain the right-of-way as per Hydro One practices.



Remove temporary access road



Remove remaining crushed stone



Electric and Magnetic Fields (EMFs)

- EMFs are invisible forces that surround electrical equipment, power cords and power lines. You cannot see or feel EMFs.
- Every time you use electricity and electrical appliances, you are exposed to EMFs at extremely low frequencies.
 EMFs produced by both power lines and use of electrical appliances, belong to this category.
- EMFs are strongest when close to the source. As you
 move away from the source, the strength of the fields fade
 rapidly.



Health Canada's Position on EMFs

- There is no compelling scientific evidence that EMF in living and school environments, regardless of locations from power transmission lines, cause ill health such as cancer. This position is consistent with the other opinions from most national and international scientific bodies.¹
- You do not need to take action regarding daily exposures to electric and magnetic fields at extremely low frequencies. Health Canada does not consider guidelines for the Canadian public necessary because the scientific evidence is not strong enough to conclude that exposure cause health problems for the public.²

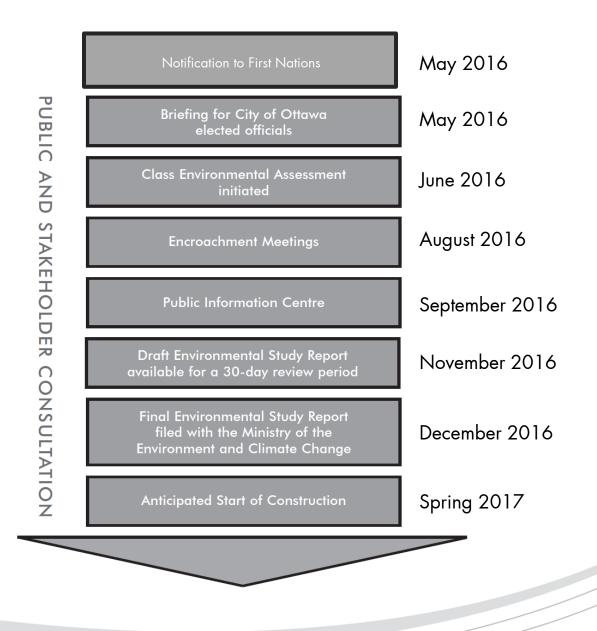
Sources:

^{1)Health} Canada submission to the British Columbia Environmental Assessment Office on the Vancouver Island Transmission Reinforcement Project; 2006

2)Health Canada Fact sheet – Electronic and Magnetic Fields At Extremely Low Frequencies (January 2010)



Proposed Project Schedule





Your Input is Important to Us

Thank you for attending our Information Centre. Please fill out a comment form before you leave, or send us your comments afterward.

To share concerns or request information, please contact us at:

Information Line: 1-877-345-6799

Email: Community.Relations@HydroOne.com

www.HydroOne.com/Projects/OverbrooktoRiverview