

Hydro One Compatibility Review Checklist

This form must be completed and submitted to the appropriate Hydro One Real Estate Coordinator for all compatible land use proposals.

Each of the requirements below must be included in the submission (where applicable). If any of the items below is not checked the submitted plans will not be circulated for technical review, unless a valid reason is provided in the "Notes" column.

Compatible Land Use Proposal Details			
Applicant Name:			
Mailing Address:		Phone Number(s):	
		Email:	
Property Location (Address/Intersection):			
Description of Compatible Land Use:			
Plan/Drawings Number and Dates:			

Drawing/Plan Completeness Checklist

<i>Drawings, Plans and Maps Requirements</i>		Notes
	Cover letter providing detailed description of the proposed scope of work and how it is impacting the Hydro one corridor land.	
	A key map showing the Proponent's overall project area	
	Plan-view drawing(s) (see specific requirements below)	
	Profile/sectional-view drawing(s) (see specific requirements below)	

Plan-View Drawing Requirements		Notes
	All existing and proposed works/infrastructure on the transmission corridor shown and clearly labeled	
	Hydro One transmission corridor boundaries shown in colour	
	All transmission structures affected by the proposal shown and clearly labeled	
	6 m access route through the corridor shown in colour	
	15 m maintenance exclusion zones around each affected tower (measured from the face of the tower legs) shown in colour	
	10 m construction exclusion zones around each affected tower (measured from the face of the tower legs) shown in colour	
	Distances between the tower legs and any proposed works/infrastructure on the corridor shown and clearly labeled	
	Cross-sections clearly labeled	
	Legend(s)	
	Any proposed lighting must be submitted on a proper lighting plan with specification i.e. height of the light standard including the lamp head.	
	Any proposed planting must be submitted on proper landscape plan	
	List of Construction Equipment with specs and method of Construction	
	For resubmissions, any changes from previous submissions are clearly marked/labeled	

Profile/Sectional-view Drawing Requirements		Notes
	Existing and proposed elevations shown in different colours and clearly labeled	
	Any proposed works/infrastructure clearly labeled	
	All applicable heights clearly shown and clearly labeled	
	Hydro One transmission corridor boundaries shown in colour	
	All transmission structures affected by the proposal shown and clearly labeled	
	Distances between affected transmission structures and any proposed works/infrastructure shown and clearly labeled	
	10 m and 15 m exclusion zones from each transmission tower leg shown in colour	
	Legend(s)	

COMPATIBLE LAND USE PROPOSAL SUBMISSION REQUIREMENTS IN AND AROUND HYDRO ONE TRANSMISSION CORRIDORS

Hydro One strives to work with proponents to review compatible land use proposals on the ROWs to ensure they are compatible with the safety and maintenance requirements of its high-voltage equipment. The Hydro One transmission network can consist of steel lattice towers, monopoles, twin wood poles, overhead conductors and underground cable ducts. Our transmission lines conduct electricity at 115kV, 230kV or 500kV.

Compatibility reviews for each proposal must be completed by Hydro One. These reviews may require several weeks or months to complete depending on the complexity of the proposal. **For a typical proposal**, our turnaround time is about 8 to 10 weeks. Resubmissions may require the same timelines. **Hydro One compatibility reviews must be approved and occupation agreements in place prior to any construction work.** Detailed drawings that need to be submitted include: site plan, grading, drainage, lighting, landscaping, signage (including any other above grade structures) and profiles for underground works. Additional drawings may be requested but please do not send them to us unless we have asked for them. A non-refundable Compatibility Review Fee (CRF) is required prior to circulation of compatibility review. This fee is collected at the time of your official submission.

To effectively review and provide comments, your proposal must include the following information:

- **LAND/EASEMENT PROPERTY LINES:** On the site plans indicate and label property lines of the Hydro One right-of-way in RED. Label the ROW as Hydro One Transmission (not Open Space).
- **HYDRO ONE STRUCTURES:** Illustrate and label all Hydro One structures and the overhead centreline of the towers. The Real Estate Coordinator can provide Hydro One structure numbers.
- **GRADES and DRAINAGE:** Indicate existing and proposed grades. Grading changes must not result in standing water anywhere along the corridor, and especially not within 15 metre radial zone of transmission structures.
- **MAINTENANCE ACCESS ROUTE:** Indicate and label a 6 metre wide Hydro One maintenance access route to each Hydro One structure.
- **MAINTENANCE ZONE and CONSTRUCTION EXCLUSION ZONE:** Indicate and label a 15 metre radial maintenance work zone and a 10.0 metre radial construction exclusion zone around each Hydro One structure measured from the tower footings. If any proposed infrastructure is contemplated within this 15 metre zone, the distance from the edge of the proposed infrastructure to the edge of the nearest tower footing must be shown.
- **LIGHTING:** Keep lighting as far away from our circuits as possible, toward the outer edge of the corridor. The locations and the height of each light post must be clearly illustrated and described.
- **LANDSCAPING:** Plantings which grow to a maturity height over 3 metres are not permitted on the ROW. Hydro One has a *Compatible Species List* which can be provided.
- **RESUBMITTED DRAWINGS:** If a resubmission of drawings is required, the revised drawings must include “bubbles” over the areas where changes were made to help us identify the areas that need to be reviewed.

Contact Hydro One Real Estate Services at **Real.Estate@HydroOne.com** or **1-888-231-6657** for the Real Estate Coordinator for your municipality. The Real Estate Coordinator arranges for Hydro One review of your proposal, advises of documentation and prepares the Agreements.

TECHNICAL CONSIDERATIONS FOR COMPATIBLE LAND USE PROPOSALS ON HYDRO ONE TRANSMISSION CORRIDORS

Your project may involve proposed works on Hydro One electrical transmission corridors or rights-of-way (ROW). Hydro One will work with proponents to review compatible land use proposals on the ROWs to ensure that they are compatible with the safety and maintenance requirements of its high-voltage equipment. The Hydro One transmission network can consist of steel lattice towers, monopoles, twin wood poles, overhead and underground conductors, etc.

When preparing a proposal, there are a number of technical considerations that should be kept in mind. A number of these are outlined below. Please note that this is not intended to be a comprehensive list of requirements, but aims to serve as a guideline to prepare a proposal. Reviews for each proposal are conducted individually by Hydro One and may require several weeks or months to complete depending on the complexity of the proposal.

Technical Considerations:

Grading, Drainage and Stormwater Management

- Grading changes must not impact vertical clearance requirements or result in standing water anywhere along the corridor, and especially not within the 15 metre radial zone of transmission structures.
- No fill material may be placed on the ROW without written approval from Hydro One.
- Catch basins that are not positioned within a paved roadway are not permitted.
- Stormwater management (SWM) ponds placed under 115 and 230 kV transmission lines cannot exceed two-thirds of the corridor width.
- SWM ponds under 500 kV transmission lines cannot exceed one-third of the corridor width.
- SWM ponds must be designed to withstand the effects of 100-year storm conditions.

Roads and Parking

- Roads crossing the ROW shall/must be perpendicular to the hydro corridor.
- Roads off ROW should stay 15 metre clear of transmission structures.
- Curb cuts or access gates should be provided for Hydro One maintenance vehicles.
- Parking facilities on ROWs must be restricted to passenger vehicles only. Large truck and trailer parking is generally not permitted.
- Transmission towers near roads and parking areas must be protected by standard highway barriers.
- Large construction vehicle and equipment parking under conductors may not be permitted.

Vertical Clearances

- Transmission conductors (wires) are dynamic in nature. They can sag lower to the ground depending on parameters such as ambient temperature and operating conditions.
- Minimum vertical clearances must be maintained from the maximum design sag levels of the conductors (worst-case scenario). Hydro One will review these clearances as they are case-specific and not immediately apparent by observation alone.

Access to Structures

- An unhindered, minimum 6-metre wide access path to facilities on the corridor must be provided for maintenance vehicles.
- A 15 metre clear working radius around transmission structures is required in order to maintain access for vehicles carrying out routine maintenance.
- A 3 metre radius around each tower footing must be left unpaved for access to the footing.

Pipelines & Underground Facilities

- All underground facilities must be designed to withstand the loading conditions created by heavy maintenance vehicles that may be used by Hydro One.
- The ROW must be restored to pre-construction condition once the project is completed.
- Excavation using heavy machinery is prohibited within 10 metres of tower footings to protect foundations.
- Within 10 metres, excavation must be carried out by hand or by use of a VAC system.
- Pipelines on ROWs must adhere to the provisions of CSA Standard C22.3 No. 6.

Landscape Plantings

- Plantings which grow to a maturity height over 3 metres are not permitted on the ROW. Hydro One has a 'Compatible Species List' which will be provided as applicable.
- Compatible landscape species must be planted in such a way as to not impede access to the transmission towers.
- Any landscape planning within the ROW must be submitted to Hydro One for compatibility review as approvals of species depends on the height / sag or topography of the transmission lines within the subject area.
- An area of 15 metres around transmission towers should be kept clear of shrubs to permit Hydro One access to towers.

Other Requirements

- Permanent structures (i.e. buildings) and temporary structures (i.e. tents) are not permitted on ROWs.
- Flammable or hazardous materials is not permitted to be stored on ROWs.
- Consideration must be given to minimizing the use of conductive (metallic) material where alternatives exist (e.g. fences).
- The proponent is responsible for all costs of modifying, relocating, or monitoring Hydro One assets as a result of the proposal.
- Grounding studies, induction studies, spark discharge and / or step touch potential studies may be required to confirm that the proposal will not conflict with the Hydro One electrical infrastructure.

Property Rights: Who is the landowner?

- Transmission corridor lands can be owned by private landowners, Municipalities, Province of Ontario (Infrastructure Ontario), railway companies, and First Nations and Métis communities.
- Hydro One Networks Inc. owns the transmission components/network.
- Hydro One Networks Inc. has rights either registered on land title or by legislation to operate the transmission network.

Property Rights: What Agreements do you require?

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