



Region of Peel Submission

Region of Peel staff comments on the proposal to identify and protect a corridor of land for future electricity infrastructure in the Greater Toronto Area (ERO #19-1503)

Proposal to Identify a Transmission Corridor in Northwest GTA

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Regional staff appreciate the opportunity to comment on the Ministry of Energy, Northern Development and Mines (“the Ministry”) and the Independent Electricity Systems Operator’s (“IESO”) proposed guiding principles and narrowed area of interest (NAI) for the Northwest GTA Transmission Corridor Identification Study (Transmission Corridor Study).

The comments in this submission are from Regional staff and are subject to endorsement by Region of Peel Council. Regional staff will be reporting to Council on the Transmission Corridor Study in July 2020, and endorsement of staff’s comments as well as the provision of further comments to the Province may occur at that time.

Regional staff support early identification and protection of this corridor to meet the Region’s future electricity demands, which are anticipated to increase as a result of electrification (for heating, transportation and conventional uses) and future growth. Regional staff have reviewed the proposal in consultation with local municipal staff and offer the comments below for the Ministry and the IESO’s consideration. The comments are grouped into three broad categories:

1. Comments on Guiding Principles
2. Comments on the proposed narrowed study area
 - i. Current Region of Peel planning initiatives impacted by future transmission corridor
 - ii. Protection of Region’s agricultural lands, natural heritage system and water resources, and climate change mitigation and adaptation
 - iii. Region’s existing and planned infrastructure assets
3. Local municipal impacts, planning initiatives and opportunities for coordination

1. Comments on Guiding Principles

While Region of Peel staff are generally supportive of the guiding principles, we offer the following comments for the study team’s consideration:

Guiding Principle	Regional Comment
Principle #1: Co-locate with other linear infrastructure	Co-location of the transmission corridor and the GTA West Transportation Corridor is essential to the current and long-range planning exercises being undertaken in the Region of Peel. In addition to co-locating the transmission corridor with the GTA West Transportation Corridor, it is suggested that this principle be broadened to include strong consideration of co-locating commuter rail service and public transit, and active transportation infrastructure with the transmission corridor, while having regard to safety.

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Guiding Principle	Regional Comment
<p>Principle #2:</p> <p>Plan for the most cost-effective outcome</p>	<p>While cost-effectiveness is a necessary consideration, it should not outweigh aspects of good planning, including compatibility with future built-up areas. While one solution may offer the most cost-effective outcome, alternative solutions, such as underground routing, may provide more economic gain from a development and land use perspective and significantly benefit or minimize impacts to a surrounding planned or existing community. As such, it is suggested that this principle be reconsidered to ensure that cost alone is not the sole factor for dismissing an alternative or technology that could result in good planning outcomes.</p>
<p>Principle #3:</p> <p>Minimize impacts to natural heritage, agricultural and hydrological features consistent with provincial policies</p>	<p>It is recommended that the Transmission Corridor Study team align Principle 3 with policy 3.2.5.1 c) and d) of the Growth Plan, 2019, which gives priority to avoiding impacts, and if avoidance is not possible to minimize and mitigate impacts to the agricultural and natural heritage systems.</p> <p>The Region of Peel Official Plan, which implements the policies of the Greenbelt Plan, identifies and protects a Regional Greenlands System that is composed of core areas, natural areas and corridors, and potential natural areas and corridors. Policy 2.3.2.6 c) of the Regional Official Plan permits essential infrastructure, subject to it being demonstrated there are no reasonable alternative locations outside of the core areas of the Greenland System. If impacts to the Greenland System cannot be avoided, the impacts should be minimized and mitigated through restoration or enhancement to the greatest extent possible.</p> <p>To address these policy objectives, it is recommended that Principle 3 be expanded to specifically maintain, restore or enhance critical north-south corridors that link the Greenbelt to Lake Ontario. These include, at a minimum, the Credit River, Etobicoke Creek, the West Humber River and other valley and stream corridors of the Greenland System and associated headwater tributaries.</p>
<p>Principle #4:</p> <p>Minimize impacts on built up areas</p>	<p>In addition to minimizing impact on existing built up areas in or around the study area, it is recommended that this principle be expanded to also minimize impacts to future built up areas and consider municipal planning exercises and objectives that are currently underway. It is also suggested that this principle be broadened to minimize impacts on any planned</p>

Guiding Principle	Regional Comment
	<p>transportation infrastructure that would be required to support future development.</p> <p>In addition to minimizing impacts to built up areas, cultural heritage, planned developments and airports, the study team should also consider minimizing impacts to current and future sensitive receptors and land uses while minimizing impacts to developable lands and ensuring community connectivity.</p>
<p>Principle #5:</p> <p>Provide flexibility for the future</p>	<p>This principle speaks to providing flexibility for the future anticipated infrastructure requirements and technology types. The Region is in the process of updating existing and developing new Regional Official Plan policies that supports the reduction of greenhouse gas emissions as well as the mitigation and adaptation to climate change. This includes Regional alignment with recent updates to the Provincial Policy Statement, 2020 [i.e. 1.1.3.2 c) & d), and 1.8] and the Growth Plan, 2019 [i.e. 2.2.1.4 f) and 4.2.9 b)], which integrates policies related to climate change mitigation and adaptation as well as policy direction on energy, including energy conservation, energy efficiency, and energy diversity using renewable and alternative energy systems, as well as district energy, to support the achievement of complete sustainable communities.</p> <p>As part of the Settlement Area Boundary Expansion (SABE) study, a policy framework will be developed to implement low-carbon energy alternatives and alternative and renewable energy systems, including district energy, into the future Secondary Plan process in the Town of Caledon.</p> <p>The Region of Peel is also a member of the City of Brampton’s Community Energy and Emissions Reduction Plan (CEERP) Task Force and supports the Task Force in their recognition that the Heritage Heights community represents the best opportunity to achieve a net-zero emissions community through implementation of the CEERP. The proposed Transmission Corridor Route and narrowed area of interest (NAI) overlaps lands in the southern part of the Town of Caledon and through the City of Brampton’s Heritage Heights community where planning for low-carbon communities are being considered.</p> <p>As such, opportunities exist to ensure that the future infrastructure and energy requirements for planned communities in this area facilitate, are</p>

Guiding Principle	Regional Comment
	<p>supportive of, and do not preclude and the integration of renewable and alternative energy systems, including district energy.</p> <p>While considering flexibility for the future, it should also be noted that future climate change projections for the Region of Peel indicate more frequent and severe extreme weather events. As such, it is recommended that this principle be broadened to include reference to incorporating climate change adaptation measures for transmissions infrastructure to be resilient to extreme weather – extreme heat, wind, flooding, and ice storms.</p>

2. Comments on the proposed narrowed study area

i. Current Region planning initiatives impacted by future transmission corridor

The Region of Peel has several planning initiatives underway that are impacted by the Transmission Corridor Study and future transmission corridor. These are outlined below.

a. Region of Peel Official Plan Review

The Region is in the midst of the Municipal Comprehensive Review (MCR), known as the Peel 2041 Official Plan Review. Considering that the outcome of the Transmission Corridor Study will be a recommendation on land to be preserved for future transmission infrastructure and protected from development, it is essential that the impacts on planned and future developments, agriculture, natural heritage, and water resources in Peel are understood.

b. Impacts on Planned Communities and Existing Built-up Areas

The proposed NAI impacts a number of planned and existing built up areas in the Region of Peel and local planning initiatives.

Ninth Line Lands

In the City of Mississauga, the proposed NAI extends beyond the GTA West Transportation Corridor Focused Analysis Area (FAA). This further impacts the future community and employment lands known as “Ninth Line.” Regional Council has approved Ninth Line to be included in the urban boundary through Regional Official Plan Amendment 33, which is now being reviewed by the Ministry of Municipal Affairs and Housing. The lands around the Lisgar GO station are within the NAI and are a planned Major Transit Station Area (MTSA) being

assessed through the Region's MTSA study. Further information on the [profile for the station](#), including its development potential, can be found on the Peel 2041 [MTSA webpage](#). It is recommended that the NAI, the eventual transmission corridor and transformer station minimize the amount of land needed in Ninth Line and around the Lisgar GO MTSA, in order to preserve the developability of the community and employment lands.

Heritage Heights

In Brampton, the NAI extends north-south across a significant area, particularly through the future Heritage Heights Community (Secondary Plans 52 and 53). There is a plan for approximately 43,000 people and 20,000 jobs to be accommodated there as per the Brampton Official Plan policies for Northwest Brampton. The Region's municipal allocation and land needs assessment work includes 300 net hectares of employment lands to be accommodated in Heritage Heights to support the achievement of its growth forecasts to 2041; therefore, preserving as much developable land as possible in the area is very important. It will also be important that the corridor be configured in such a way as to maximize the potential of a fully urban, mixed use, dense and connected community on the surrounding lands in accordance with Provincial and Regional planning policy. This would apply to other future community lands that may be crossed by the corridor such as in Caledon.

City of Brampton Secondary Plan Area 47

At the northeast corner of Brampton, the Highway 427 Industrial Area (Secondary Plan 47) is also being planned to accommodate a significant amount of Peel's industrial employment land needs. It is recommended that the IESO consult with the City of Brampton on the developing vision and secondary plan for Heritage Heights and the Highway 427 Industrial Area to limit negative impacts on the community structure and developability.

c. Impacts on the Future Settlement Expansion to Accommodate Growth to 2041

As part of the Region's Peel 2041 municipal comprehensive review, a Settlement Area Boundary Expansion (SABE) Study is being undertaken to determine the appropriate location(s) for the additional community (residential) and employment lands in the Town of Caledon to accommodate growth to 2041. The study commenced in October 2019 and is being undertaken in four phases, with a draft SABE area to be presented by end-of 2020, and a final Regional Official Plan amendment scheduled for adoption by the end of 2021. Approximately 40,000 people and 20,000 jobs need to be accommodated on new designated greenfield area through the SABE.

Based on the land needs assessment and forecasting work undertaken to date, approximately 550 hectares (ha.) of land is required to accommodate future residential growth and between 550 and 750 ha. of land is required to accommodate future employment growth for a maximum total of approximately 1,300 ha. Staff have been advised that the Province is currently reviewing Schedule 3 of the Growth Plan which may result in a land need greater than 1,300 ha.

A focused study area (see attached map) has been established and technical studies are currently being prepared on the focused study area which will inform the selection of the SABE area. Further information on the study can be found the [Peel 2041 SABE Study webpage](#), and in [Appendix IV to a February 27, 2020 update report](#) to Regional Council (also attached). It is recommended that the study team maintain (or decrease) the current extent of the NAI. As the NAI is generally co-located with the GTA West FAA, the Region has planned the SABE study and other development activity to recognize that this area is protected from development. A significant amount of technical work has been completed in the study based on the current extent of the FAA and NAI, so any increase to the lands covered would require reconsideration in the study and further limit possible SABE areas.

The study team should pursue any possible means to avoid the transmission corridor bisecting the SABE area, as the substantial width required for overhead technologies would fragment the new community and possibly require additional lands to be designated to accommodate the balance of the growth. If it is necessary that the transmission corridor coincides with the SABE area, the study team should pursue technologies and solutions that minimize adverse impacts to the built form.

ii. Protection of Region's agricultural lands, natural heritage system and water resources, and climate change mitigation and adaptation

The policies of the Region's Official Plan are intended to protect the Region's agricultural lands, natural heritage system and water resources, and mitigate and adapt to the effects of climate change. As such Regional staff offer the following comments.

a. Agricultural Lands Protection

The Regional Official Plan identifies a Prime Agricultural Area on Schedule B. This area generally has a Canada Land Inventory (CLI) Soil Capability for Agriculture rating of Class 1, 2, or 3, meaning they have few constraints for agricultural production. The lands support a diversity of farm types and have specialized farm investments, such as greenhouses, grain storage, livestock facilities and wineries.

Currently, the majority of lands in the southern part of the Town of Caledon and on the east and west side of the City of Brampton have soils which are rated as CLI Class 1. The proposed NAI overlaps with these prime agricultural lands.

The policies in the Regional Official Plan protect the Prime Agricultural Area for long-term use of agriculture as a natural resource of importance to the economic viability of the Region and protect from incompatible activities and land uses that would limit agricultural productivity or efficiency.

To address these policy objectives, the Region recommends a thorough investigation and evaluation of the impacts of the proposed NAI on the Prime Agricultural Area be conducted as a component of the study. Relevant agricultural evaluation criteria could include:

- minimizing fragmentation of individual farm operations,
- considering opportunities to route the transmission corridor on lower priority agricultural soils, and
- avoiding removal of farm infrastructure and individual farm buildings.

Where avoidance of Prime Agricultural Area is not feasible, mitigation measures should be determined in order to minimize the impacts to adjacent farm operations. Mitigation of impacts should include, but not be limited to, sale of surplus land to consolidate viable farm parcels, maintaining access and movement for farm equipment, maintaining surface drainage away from fields and addressing stormwater management. As identified in Provincial policy, an agricultural impact assessment will be required for any future environmental assessments.

b. Natural Heritage and Water Resources

It is recommended that impacts to areas with the greatest concentration of natural heritage, particularly the areas within the Greenbelt Plan, be avoided. Careful consideration should be given to protecting, maintaining and enhancing the quantity and quality of water resources during the study.

c. Climate Change

The Region's Climate Change Master Plan includes actions that support transformation to low carbon and resilient communities. Electrification (for heating, transportation and conventional uses) could be a strategy to reduce greenhouse gas emissions, thus ensuring appropriate and reliable sources, transmission and distribution is critical. A similar, broader regional transition towards electrification to meet community GHG emissions reduction targets has the potential to significantly increase the peak electricity demand; it is unclear if the study will account for this potential driver of increased electricity demand and implications to transmission corridor size. Considering future displacement of fossil fuels may result in needing electrical transmission corridors twice as wide as present design rules suggest, the challenge of acquiring sufficiently wide transmissions corridors in urban areas is significant.

However, the future of the electrical sector is evolving, and planning should appropriately reflect the growing diversity in generation, transmission and distribution. As such, the Climate Change Master Plan aligns with Community Energy Planning initiatives of local municipalities, which prioritize the transition toward diversified and decentralized energy systems. This can include low carbon, local electrical and thermal energy options that have the added benefit of fewer power losses and increase resiliency in the systems due to limited energy transmission infrastructure exposure to extreme weather events. With this context, how is the study considering a future with higher electricity demand but also increased access to micro-grids

(e.g. local renewable electricity generation) and district heating that would not necessarily require extensive transmission infrastructure?

iii. Region's existing and planned infrastructure assets

The proposed NAI impacts a substantial number of the Region's existing and planned infrastructure assets including water and wastewater, transportation, and Public Sector Network (PSN) infrastructure. The study team is encouraged to work with Regional staff to minimize impacts to Regional infrastructure and throwaway costs to the Region through coordination.

a. Water and Wastewater Infrastructure

Detailed maps of existing and proposed water and wastewater infrastructure have been provided to the study team for early consideration in the study process and throughout the study. The location and type of routing (underground or above ground) of the transmission corridor will directly impact the Region's infrastructure in this area. Regional staff request the project team engage the Region in discussions early in the study process to minimize impacts and throw away costs through coordination.

b. Transportation Infrastructure

The Region of Peel has a number of active and planned transportation capital projects impacted by the study area and proposed narrowed area of interest. Detailed design drawings have been provided to the study team for early consideration in the study process and throughout the study. Regional staff request that the project team engage with the Region in discussions early in the study process to minimize any potential impacts and throwaway costs through coordination. The following capital projects are either impacted by or in close proximity to the proposed NAI:

- Mississauga Road – Widening from Bovaird Drive to Mayfield Road
- Mississauga Road – Widening from Mississauga Road to Winston Churchill Blvd
- Highway 50 – Widening from Castlemore Road to Mayfield Road
- Mayfield Road – Widening from Highway 50 to Coleraine Drive
- Mayfield Road – Widening from Airport Road to west of The Gore Road
- Dixie Road – Widening from Countryside Drive to North of Mayfield Road
- Airport Road – Widening from north of Mayfield Road to North of King Street
- Bovaird Drive – Widening from Mississauga Road to west of Heritage

In addition to the Region's transportation capital projects, the Region and the City of Brampton are conducting two coordinated Municipal Class EA Studies for new and improved arterial roads within the Highway 427 Industrial Secondary Plan Area #47 (SP47) which should be considered by the Transmission Corridor Study team in order to avoid or minimize potential negative impacts to the proposed transportation improvements within the SP47 EA Study Area. The

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Study Area is generally bounded by Castlemore Road to the south, Mayfield Road to the north, The Gore Road to the west and Regional Road 50 to the east. The two coordinated Class EA Studies are identified as Part A and Part B:

- **Part A** is considering a new north-south Regional arterial road (Arterial A2) from Mayfield Road to Major Mackenzie Drive/Regional Road 50 and widening Coleraine Drive to 4 lanes from Mayfield Road to Arterial A2 (including a realignment at the south end to align with the intersection of Arterial A2, west of Regional Road 50). A portion of the proposed NAI encompass portions of the SP47 EA Study Area that include the proposed alignment of A2 and improvements to Coleraine Drive. The proposed A2 alignment and Coleraine Drive improvements are subject to completion of the Class EA Study (tentatively Fall 2020). It should also be noted that the Ministry of Transportation are currently considering alternative options for the Coleraine interchange depicted in the Technically Preferred Route for the GTA West Transportation Corridor. The Transmission Corridor Study team is encouraged to work with the Ministry of Transportation on the alignment of the two corridors in this area.
- **Part B** of the Class EA Study is considering a new East-West arterial from The Gore Road to Arterial A2; and improvements to Clarkway Drive from Castlemore Road to Mayfield Road, and Countryside Drive from west of Clarkway Drive to Regional Road 50 (including possible realignment at Regional Road 50). Sections of the proposed NAI encompass portions of the SP47 EA Study Area that include the proposed improvements to Countryside Drive. The proposed East-West alignment and Part B road improvements, including potential configuration of Regional Roads, are subject to completion of the Class EA Study tentatively scheduled for Fall 2020 / Winter 2021.

Additional information on the above studies can be found on the [City of Brampton's webpage](#).

3. Local municipal impacts, planning initiatives and opportunities for coordination

In addition to the above comments, the Transmission Corridor Study team is also encouraged to consider the following local municipal impacts, planning initiatives and opportunities for coordination.

Local Municipality	Impact, planning initiative or opportunity for coordination
Town of Caledon	<ul style="list-style-type: none"> • Consider the co-location of other necessary utilities along the corridor, including high speed fibre for internet connection. • The Proposed NAI travels through Provincially Significant Employment Zone 15 in Bolton and Town staff are awaiting further direction and policy from the Province to guide the future development of this land. • The proposed NAI is near the Brampton-Caledon Flying Club and may impact the airport’s existing and future operations. The airport is significant to the Town of Caledon’s future plans for economic development and land use and the study team is encouraged to engage the airport throughout the study process to mitigate and reduce any potential impacts to their existing or future operations.
City of Brampton	<ul style="list-style-type: none"> • Consider the co-location of active transportation infrastructure along the corridor • Naturalize the transmission corridor area as much as possible • Work with City staff to minimize impacts to existing and future built up areas including Heritage Heights and Secondary Plan Area 47
City of Mississauga	<ul style="list-style-type: none"> • Work with City staff to minimize impacts to existing and future built up areas including the Ninth Line lands and the Lisgar GO Station MTSA • The proposed NAI impacts the future extension of Argentia Road identified in the City’s Official Plan

4. Next Steps

Regional staff look forward to working with the Ministry and the IESO to advance this study and are pleased to note that the study will be proceeding in parallel with the GTA West Transportation Corridor EA Study, particularly as it relates to the timing. A significant amount of developable land in the Region of Peel has been on hold due to the GTA West Transportation Corridor EA Study for several years. Consequently, Regional staff look forward to the further narrowing of the area of interest as the study team moves forward with identifying the route for the transmission corridor and the required width.

Regional staff expect to provide an update on this study to Regional Council in July 2020 and additional comments may be provided following this meeting. Should you like to discuss any of the above comments or have any comments or questions regarding them, please do not hesitate to contact us.

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