



Niagara Region

Niagara Escarpment Crossing
Comprehensive Environmental
Assessment
Proposed Terms of Reference

Appendix I
Land Use Work Plan

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1 Introduction

This document outlines the proposed work plan that will be carried out during the Niagara Escarpment Crossing Environmental Assessment (EA) to generate a more detailed description and understanding of the environment from a land use perspective. Further, this document describes how that information will be used to assess the effects of the alternatives and proposed project on the environment through evaluation criteria and indicators. This work plan forms **Appendix I** to the proposed Niagara Escarpment Crossing Comprehensive EA Terms of Reference (ToR) and should be read in conjunction with it.

The ToR presently provides a preliminary description of the environment to gain a general understanding of the potential effects that should be examined in the Niagara Escarpment Crossing EA based on the range of alternatives to the project currently anticipated. This description reflects all components included within the Ontario *Environmental Assessment Act* (EA Act) definition of the environment: natural, social, built, economic, and cultural.

Several investigative studies are proposed as part of the Niagara Escarpment Crossing EA to expand on this preliminary description, including, but not limited to the following:

- Air Quality
- Agricultural
- Archaeology
- Built Heritage and Cultural Heritage Landscapes
- Contaminated Property
- Groundwater
- Land Use
- Natural Heritage
- Noise and Vibration
- Surface Water
- Visual Impact

The details associated with the land use investigation are provided in this document while details of the other investigative studies are provided as separate work plans. In addition to the investigative studies, the proposed ToR includes three other work plans: Traffic, Operations and Safety, Transportation Planning and Engineering, and Financial all of which are included as separate appendices.

2 Establishment of Land Use Conditions

2.1 Confirmation of the Preliminary Study Area

The preliminary study area provided in the ToR will be utilized as a starting point for establishing existing and future environmental conditions (**Figure 2-1**). This preliminary study area will be finalized during preparation of the Niagara Escarpment Crossing EA when more detailed information has been obtained, the alternatives to the project have been confirmed, and the potential environmental effects are better understood.

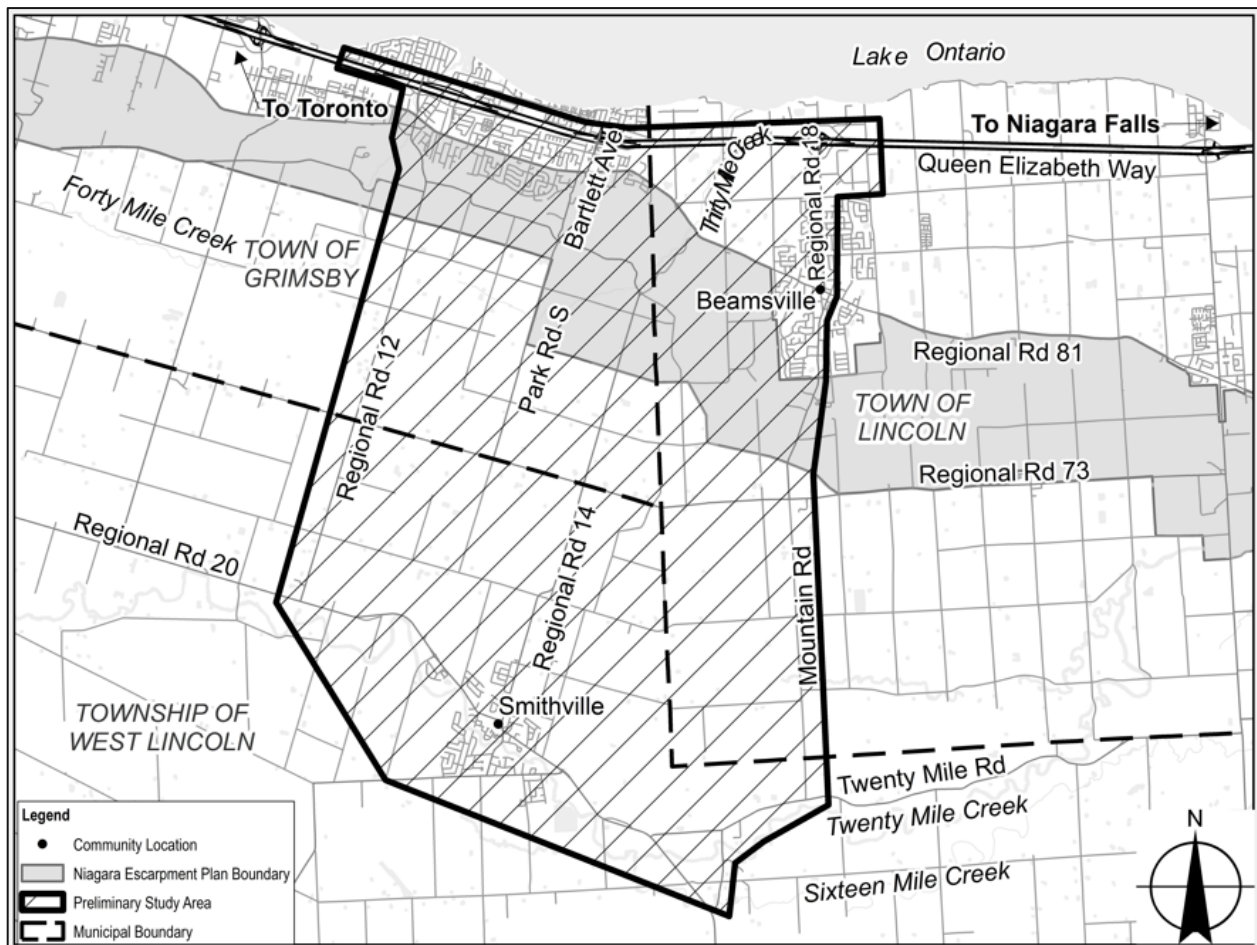


Figure 2-1: Preliminary Study Area

2.2 Review of Available Existing Information Sources

Available existing sources of information will be collected and reviewed to determine existing and future environmental conditions, including any data gaps that need to be addressed through subsequent work (e.g., field investigations, modeling, etc.).

Presently, the list of existing information sources that will be collected and reviewed as part to the proposed Land Use Work Plan includes, but may not be limited to, the following listed in **Table 2-1**:

Table 2-1: Proposed Information Sources to be Reviewed as part of the Land Use Work Plan

Category	Information Source
Provincial	Growth Plan for the Greater Golden Horseshoe, 2023
Provincial	Greenbelt Plan, 2017
Provincial	Niagara Escarpment Plan, 2017
Provincial	Provincial Policy Statement, 2020
Provincial	Relevant provincial land use plans, policies, strategies, and guidelines
Provincial	Relevant provincial proposed, planned, or approved projects (e.g., infrastructure, transportation, utility, etc.)
Provincial	Relevant provincial online mapping tools (e.g., pits and quarries, etc.)
Regional	Niagara Region Official Plan, 2022
Regional	Relevant regional land use plans, policies, strategies, and guidelines
Regional	Relevant regional proposed, planned, or approved projects (e.g., infrastructure, transportation, utility, etc.)
Regional	Relevant regional online mapping tools
Municipal	Regional Town of Grimsby Official Plan, 2012

Category	Information Source
Municipal	Town of Grimsby Zoning By-law 14-45
Municipal	Town of Lincoln Official Plan, 2014
Municipal	Town of Lincoln Zoning By-law No. 2022-50
Municipal	Township of West Lincoln Official Plan, 2021
Municipal	Township of West Lincoln Zoning By-law No. 2017-70
Municipal	Relevant municipal land use plans, policies, strategies, and guidelines
Municipal	Relevant municipal proposed, planned, or approved projects (e.g., infrastructure, transportation, utility, etc.)
Municipal	Relevant municipal online mapping tools
Other	Indigenous Communities' treaties and land claims
Other	Proposed, planned, or approved development applications (e.g., official plan amendments, plans of subdivision and condominium, site plans, zoning by-law amendments, etc.)
Other	Google Earth and Google Street View Imagery
Other	Property Maps and Assessment Data
Other	Relevant Information collected from other investigative studies (e.g., Agricultural, Property Contamination, etc.)
Other	Relevant Correspondence received during the Niagara Escarpment Crossing EA (e.g., review agencies, Indigenous Communities, utilities, the public, etc.)

2.3 Proposed Field Investigations

Field investigations are proposed to supplement and enhance available existing sources of information so that additional data is generated to assess each alternative (i.e., identifying potential environmental effects, developing appropriate impact management

measures for addressing potential adverse environmental effects, and describing net effects). The need for field investigations will be based on the level of detail associated with the existing information sources collected and reviewed, accessibility of the final study area, and comments received from review agencies, Indigenous communities, and the public.

The need for an increased level of detail and collection of field data is expected as the Niagara Escarpment Crossing EA progresses. While the assessment of alternative(s) to the project can be completed based on existing source data, the assessment of alternative methods of carrying out the project will be based on more site-specific information generated through subsequent work (e.g., field investigations, modeling, etc.).

The following field investigation is currently proposed as part of the Land Use Work Plan:

- A “windshield-level” survey for verifying the land uses determined through the review of available existing information sources within the final study area. A windshield survey is conducted from a vehicle and provides a visual overview of the land uses being investigated.

Documentation

The results of reviewing available existing information sources and the proposed “windshield-level” survey will be documented in a Land Use Baseline Conditions Report.

3 Assessment of the Alternatives

3.1 Alternatives To the Project

Following confirmation of the preliminary list of alternatives to the project, they will be assessed and comparatively evaluated leading to a recommended alternative(s) to the project. The recommended alternative(s) will be presented to review agencies, Indigenous Communities, and the public for a defined period to receive comments, following which a preferred alternative(s) will be identified. The assessment of the alternatives to the project (through the application of evaluation criteria) will be based on available existing information sources contained in the Baseline Conditions Reports.

3.1.1 Preliminary Criteria and Indicators

The preliminary evaluation criteria and indicators that will be used for assessing the alternatives to the project from a land use perspective include, but may not be limited to, those set out in **Table 3-1**. The preliminary evaluation criteria and indicators will be finalized based on comments received during the Niagara Escarpment Crossing EA and documented in the EA Report.

Table 3-1: Preliminary Criteria and Indicators for Assessing the Alternatives To the Project

Category	Criterion	Indicator(s)
Built Environment	- Effect on existing land uses (e.g., agricultural, residential, commercial, industrial, institutional, recreational, etc.)	- Approximate number and type of existing land uses potentially affected
Built Environment	- Effect on property	- Approximate number of properties affected
Built Environment	- Effect on existing infrastructure and facilities (e.g., pedestrian, cycling,	- Approximate number and type of existing infrastructure and facilities affected

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Category	Criterion	Indicator(s)
	transit, road, highway, rail, water/wastewater, utility, etc.)	
Social Environment	- Effect on First Nation Communities	- Approximate area of hunting and harvesting lands removed
Economic Environment	- Effect on provincial, regional, and municipal land use plans, policies, strategies, and guidelines	<ul style="list-style-type: none"> - Compatibility with provincial land use plans, policies, strategies, and guidelines - Compatibility with regional land use plans, policies, strategies, and guidelines - Compatibility with municipal land use plans, policies, strategies, and guidelines
Economic Environment	- Effect on proposed, planned, and approved development applications	- Approximate number and type, proposed/planned/ approved development applications affected
Economic Environment	- Effect on proposed, planned, and approved provincial, regional, and municipal projects	<ul style="list-style-type: none"> - Approximate number and type of proposed, planned, and approved provincial projects affected - Approximate number and type, of proposed, planned, and approved regional projects affected - Approximate number and type, of proposed, planned, and approved municipal projects affected

3.2 Alternative Methods of Carrying Out the Project

Following the identification of the preferred alternative(s) to the project, alternative methods of carrying out the project will be generated, possibly screened, assessed, and comparatively evaluated leading to a recommended method(s). The recommended method(s) will be presented to review agencies, Indigenous communities, and the public for a defined period to receive comments, following which a preferred method(s) will be identified.

The generation and possible screening of the alternative methods will be based on available existing information sources contained in the Baseline Conditions Reports. The assessment of the alternative methods of carrying out the project (through the application of evaluation criteria) will be based more on the information provided through subsequent work (e.g., field investigations, modelling, etc.) contained in the Baseline Conditions Reports, as appropriate.

3.2.1 Preliminary Criteria and Indicators

The preliminary evaluation criteria and indicators that will be used for assessing the alternative methods of carrying out the project from a land use perspective include, but may not be limited to, those set out in **Table 3-2**. The preliminary evaluation criteria and indicators will be finalized based on comments received during the Niagara Escarpment Crossing EA and documented in the EA Report.

Table 3-2: Preliminary Criteria and Indicators for Assessing the Alternative Methods of Carrying Out the Project

Category	Criterion	Indicator
Built Environment	- Effect on existing residences, businesses/industries, and/or community, institutional, and recreational facilities	- Number, type and extent of existing residences, businesses/industries, and/or community, institutional, and recreational facilities affected
Built Environment	- Effect on property	- Number, type, and extent of properties affected
Built Environment	- Effect on property	- Total area of property required (ha)
Built Environment	- Effect on existing infrastructure and facilities (e.g., pedestrian, cycling, transit, road, highway, rail, water/wastewater, utility, etc.)	- Number, type, and extent of existing infrastructure and facilities
Social Environment	- Effect on First Nation Communities	- Approximate area of hunting and harvesting lands removed
Economic Environment	- Effect on Provincial, Regional, and Municipal plans and policies	- Compatibility with approved Provincial plans and policies (e.g., Greenbelt Plan, Provincial Policy Statement, Niagara Escarpment Plan, etc.)
Economic Environment	- Effect on Provincial, Regional, and Municipal plans and policies	- Compatibility with approved Regional plans and policies affected (Regional Official Plan, etc.)

Category	Criterion	Indicator
Economic Environment	- Effect on Provincial, Regional, and Municipal plans and policies	- Compatibility with approved Municipal plans and policies affected (e.g., Official Plans, etc.)
Economic Environment	- Effect on approved/planned land uses	- Number, type, and extent of approved/planned land uses affected (e.g., registered and draft approved plans of subdivision)
Economic Environment	- Effect on approved/planned infrastructure and facilities	- Number, type, and extent of approved/planned infrastructure and facilities affected

4 Impact Assessment of the Proposed Project

Once selected, the preferred method(s) of carrying out the project (i.e., proposed project) will be further developed at a preliminary design level of detail so that the potential environmental effects can be identified with more certainty, more site-specific impact management measures (i.e., avoidance, mitigation, and compensation measures) can be developed for application, net environmental effects can be identified with more certainty, appropriate monitoring requirements can be clearly defined, and specific approval/permitting requirements for constructing the proposed project can be identified.

In concert with preparing the preliminary design level of detail, it may be necessary to undertake additional work (e.g., field investigations, modeling, etc.) at the impact assessment stage of the Niagara Escarpment Crossing EA. The additional work proposed as part of the Land Use Work Plan could include the following subject to preparation of the EA:

- An updated “windshield-level” survey augmented by a site walk where additional understanding is needed of the land uses potentially impacted by the proposed project. The extent of the site walk would be subject to property ownership and obtaining permission to enter approval for those properties privately held.

Documentation

The results of the impact assessment including any additional work will be documented in a Land Use Impact Assessment Report.

5 Documentation

The results of implementing this work plan will be documented in two reports during the Niagara Escarpment Crossing EA:

- **Land Use Baseline Conditions Report** – will document the results of collecting and reviewing available existing sources of information and the proposed field investigations.
- **Land Use Impact Assessment Report** – will document the results of the impact assessment of the proposed project including any additional field investigations.

Upon completion, each report will be made available during the Niagara Escarpment Crossing EA to review agencies, Indigenous Communities, and the public for their information via the project website and upon request and will become either a reference or supporting document to the submitted EA Report. The EA Report will be based on and reflect the information contained in the two reports.