



Appendix 2

Environmental Impact Study Terms of Reference Application Form

June 2024

Policy Planning Unit
Development Services Department
County of Brant
66 Grand River St. North
Paris, Ontario N3L 2M2

2024 ENVIRONMENTAL IMPACT STUDY TERMS OF REFERENCE APPLICATION FORM

County of Brant Policy Planning Unit, Development Services Department,
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BACKGROUND

Terms of Reference Guideline

The County of Brant developed an Environmental Impact Studies (EIS) and Environmental Implementation Plans (EIP) Terms of Reference Guideline, which is available at <https://www.brant.ca/en/planning-and-Development/development-toolbox.aspx>. The Guideline has information on topics such as:

- Engagement with interested Indigenous Communities to incorporate traditional knowledge on preserving Indigenous species and natural areas of significance to communities.
- An overview of legislation, policies, and guidelines.
- Adhering to a hierarchy of conservation whereby preservation of features must be considered a priority with development being designed around natural areas.
- Using a natural heritage and water resource systems approach whereby features are connected to one another as opposed to isolating individual features.
- Achieving minimum habitat stewardship objectives such as 30 m vegetated buffers adjacent to streams.
- Applying a climate change lens to protect natural areas including those that may not be significant but important due to their mitigating impacts on climate change.
- Incorporating greenspaces as part of development for the social and recreational values they provide.
- Information on EIS and EIP requirements including where an EIS may be scoped or waived.

EIS Terms of Reference Application Form

This EIS Terms of Reference Application Form must be completed by the applicant's environmental consultant with expertise in natural heritage and hydrologic evaluations. Early and on-going dialogue is encouraged with County Environmental Planning staff in addition to Six Nations Wildlife and Stewardship Office (SNWSO).

Comprehensive versus Scoped Environmental Impact Study

As per the Official Plan, the County must determine and approve the scope of an EIS. The scope of an EIS will depend on the scale and nature of the proposal, specific features and functions potentially impacted, and the sites land use planning context. The study requirements and contents of an EIS will be determined by the County on a site-specific basis.

A Comprehensive EIS in the form of a natural heritage and hydrologic evaluation that is the equivalent of a subwatershed study will typically be required for large-scale development in designated greenfield areas and/or proceeding by way of a secondary plan, block plan, plan of subdivision, vacant land plan of condominium, or site plan, settlement area boundary expansions, mineral aggregate operations, and/or where natural heritage, and/or hydrologic features are proposed for removal.

A Scoped EIS is typically required for site-specific development at a small geographic scale such as a single lot severance and/or where impacts are anticipated to be minor, or for large-scale development where a Comprehensive EIS has already been completed.

This EIS Terms of Reference Application Form will be used to determine study requirements for the submission of a Complete EIS. Scoping of an EIS may depend on matters including but not limited to:

- The size, nature, and intent of the proposed project and the site's land use planning context.
- The presence of potential and known natural heritage and hydrologic features, areas, and systems.
- Natural heritage and hydrologic features proposed for preservation versus removal.
- Vegetation protection zones (VPZs) and linkages proposed to be maintained as self-sustaining vegetation and/or enhanced with a diversity of native wildflowers, shrubs, and trees.

- Proposed mitigation measures such as sediment and erosion control.
- How the proposed preservation measures will be implemented and sustained in the long run such as through natural heritage zoning or dedication of environmental lands to the County.
- The overall anticipated impacts of a proposed project on the natural environment.

Indigenous Consultation

For an EIS to be deemed Complete, applicants must conduct meaningful engagement with SNWSO and MCFN, where interested. Simply reading comments does not constitute meaningful engagement. Engagement shall include meeting with interested communities in a format of their choice, providing reasonable resources for participation including capacity funding, maintaining a record of consultation, discussing concerns, and reaching a consensus on how to incorporate feedback.

Complete Application

Once this Form is approved by County staff, it will serve as the EIS Terms of Reference. For an application to be deemed complete, all items in the approved EIS Terms of Reference Application Form issued by the County must be included, unless otherwise approved in writing by the County.

STEP 1: SUMMARY OF PROPOSAL AND COUNTY DECISION ON EIS TERMS OF REFERENCE A Cover Letter may be Submitted with Supplementary Data
Final Terms of Reference Approved by County Environmental Planning Staff: Date of Final Approval:
Property Address:
Proposal Submitted by Environmental Consultant (name, consulting firm): Date:
Site Visit and/or Discussions held with County Environmental Planning staff or County representative: Date:
Proposed Terms of Reference circulated to SNSWO. Describe engagement that has occurred and how feedback has been addressed. Provide proof of engagement where available.
Summary of Proposal: The decision made on determining EIS requirements as part of a complete application through this Terms of Reference is based on information provided in this Form. Should the proposed project or constraints change, such as a woodland no longer being proposed for preservation, the applicant must consult with the County to determine if a new EIS Terms of Reference is required. Please provide a summary of:
a) The proposed development including buildings, structures, servicing, access, parking, outdoor storage, grading, drainage, and any other site alteration:
b) Trees, woodlands, wetlands, and other natural areas proposed for preservation and/or removal:
c) Proposed vegetation protections zones (VPZs) and linkages to be maintained as self-sustaining vegetation:

- d) Proposed compensation for any trees or other features proposed for removal** (For trees, compensation should be based on size and quality of trees removed with larger trees resulting in greater compensation, with a minimum 2:1 ratio. Please be advised that the County is in the process of developing detailed guidelines. Outline whether replanting is proposed on site, as cash-in-lieu or a combination of both. For plantings on site, a diversity of native seed mixes, shrubs and plants shall be used. Trees shall have a minimum height of 1 metre and a circumference of 3 inches unless otherwise approved by the County):
- e) Proposed mitigation measures (e.g. silt fencing, spill response plan):**
- f) Proposed enhancement measures through planting VPZs, linkages and other areas:**
- g) How the proposed measures will be implemented. There must be a method of ensuring such preservation measures are implemented and remain in place (e.g. zoning, dedication of environmental lands, conditions of approval, agreements, securities):**

To scope EIS requirements, an Environmental Implementation Plan (EIP) or similar plan must be submitted to illustrate the proposed development, preservation, enhancement, mitigation, and any compensation measures. Applicants may provide preliminary plans through this Application Form, with more detailed plans to be provided as part of an application (e.g. site plan, plan of subdivision). Optional requirements to be submitted should be based on the consultant's expertise, site conditions, and proposed development.

Required Information:

- Site Photographs.
- Site Plan for development including limits of construction and grading, buildings, structures, access, parking, outdoor storage, servicing, accessory structures, and any other pertinent information.
- Natural heritage and hydrologic features, linkages, VPZs and system proposed to be protected.
- Natural heritage and hydrologic features proposed to be removed.
- Natural hazard constraints (e.g. floodplain, erosion hazard) in which no development or site alteration is proposed.
- Enhancement, restoration, compensation, and mitigation measures such as silt fencing and planting a diversity of native plants.
- Other

Optional Information:

- Ecological Land Classification Mapping

Significant Wildlife Habitat (SWH) and Species at Risk (SAR) Screening Table based on the Significant Wildlife Habitat Criteria Schedules by MNR and other applicable data sources.

Please provide justification on why and how the EIS should be scoped. For example, if woodlands are proposed to be preserved with VPZs, detailed inventories and an evaluation of significance may not be necessary.

STEP 2 – NATURAL CHARACTERISTICS OF SUBJECT LANDS AND ADJACNET LANDS

This section is used to determine known and potential natural heritage and hydrologic features, areas, systems, VPZs and linkages that may be present on and/or adjacent to the proposed project.

Subject Lands	Adjacent Lands (within 120 m)
May 2023 Simply Grand Official Plan See Final Documents at www.engagebrant.ca/officialplan or www.brant.ca/OPMaps	
Land Use Designation (as per Map A and applicable settlement map, e.g. A-1): <input type="checkbox"/> Settlement Area <input type="checkbox"/> Built Boundary <input type="checkbox"/> Natural Heritage System <input type="checkbox"/> Community Node or Corridor <input type="checkbox"/> Neighbourhoods <input type="checkbox"/> Employment <input type="checkbox"/> Parks and Open Space <input type="checkbox"/> Agriculture or Countryside <input type="checkbox"/> Rural Lands <input type="checkbox"/> Village Developed Area or Community Lands	Land Use Designation (as per Map A and applicable settlement map, e.g. A-1): <input type="checkbox"/> Settlement Area <input type="checkbox"/> Built Boundary <input type="checkbox"/> Natural Heritage System <input type="checkbox"/> Community Node or Corridor <input type="checkbox"/> Neighbourhoods <input type="checkbox"/> Employment <input type="checkbox"/> Parks and Open Space <input type="checkbox"/> Agriculture or Countryside <input type="checkbox"/> Rural Lands <input type="checkbox"/> Village Developed Area or Community Lands
Natural Heritage System (as per Schedule B and applicable settlement map, e.g. B-1): <input type="checkbox"/> NHS for the Growth Plan <input type="checkbox"/> Aquatic or Critical Habitat Species at Risk <input type="checkbox"/> Fish Habitat – Warm Water <input type="checkbox"/> Fish Habitat – Cool or Cold Water <input type="checkbox"/> Fish Habitat - Unknown <input type="checkbox"/> Significant Wildlife Habitat White-tailed Deer Wintering Area <input type="checkbox"/> Significant Wildlife Habitat Waterfowl Winter Concentration Area	Natural Heritage System (as per Schedule B and applicable settlement map, e.g. B-1): <input type="checkbox"/> NHS for the Growth Plan <input type="checkbox"/> Aquatic or Critical Habitat Species at Risk <input type="checkbox"/> Fish Habitat – Warm Water <input type="checkbox"/> Fish Habitat – Cool or Cold Water <input type="checkbox"/> Fish Habitat - Unknown <input type="checkbox"/> Significant Wildlife Habitat White-tailed Deer Wintering Area <input type="checkbox"/> Significant Wildlife Habitat Waterfowl Winter Concentration Area

<input type="checkbox"/> Significant Wildlife Habitat Great Blue Heron Nesting Colony <input type="checkbox"/> Wetlands – Evaluated Provincially Significant <input type="checkbox"/> Wetlands – Evaluated Non-Provincially Significant <input type="checkbox"/> Wetlands - Unevaluated <input type="checkbox"/> Life Science ANSI <input type="checkbox"/> Earth Science ANSI <input type="checkbox"/> Significant Woodlands <input type="checkbox"/> Enhancement Woodlands <input type="checkbox"/> Significant Valleylands <input type="checkbox"/> Watercourse <input type="checkbox"/> Waterbody	<input type="checkbox"/> Significant Wildlife Habitat Great Blue Heron Nesting Colony <input type="checkbox"/> Wetlands – Evaluated Provincially Significant <input type="checkbox"/> Wetlands – Evaluated Non-Provincially Significant <input type="checkbox"/> Wetlands - Unevaluated <input type="checkbox"/> Life Science ANSI <input type="checkbox"/> Earth Science ANSI <input type="checkbox"/> Significant Woodlands <input type="checkbox"/> Enhancement Woodlands <input type="checkbox"/> Significant Valleylands <input type="checkbox"/> Watercourse <input type="checkbox"/> <input type="checkbox"/> Waterbody
VPZs and Linkages as shown in Annex 4: <input type="checkbox"/> Enhancement Linkages <input type="checkbox"/> Minimum Protection Vegetation Protection Zone <input type="checkbox"/> Environmental Impact Study – Adjacent Lands Overlay	VPZs and Linkages as shown in Annex 4: <input type="checkbox"/> Enhancement Linkages <input type="checkbox"/> Minimum Protection Vegetation Protection Zone <input type="checkbox"/> Environmental Impact Study – Adjacent Lands Overlay
Zoning https://www.brant.ca/en/planning-and-Development/zoning.aspx	
What is the Existing Zoning: <input type="checkbox"/> Natural Heritage (NH) <input type="checkbox"/> Natural Heritage Vegetation Protection Zone (NH1) <input type="checkbox"/> Watercourse Setback <input type="checkbox"/> Other	What is the Existing Zoning: <input type="checkbox"/> Natural Heritage (NH) <input type="checkbox"/> Natural Heritage Vegetation Protection Zone (NH1) <input type="checkbox"/> Watercourse Setback <input type="checkbox"/> Other
If proposed in the NH, NH1, or watercourse setback is the proposed use permitted as per Section 14?	
Conservation Authority (CA) Mapping: https://www.grandriver.ca/en/Planning-Development/Map-Your-Property.aspx# https://www.lprca.on.ca/planning-permits/property-inquiry/	
Do lands contain any of the following regulated by a Conservation Authority: <input type="checkbox"/> Wetland <input type="checkbox"/> Watercourse or Waterbody <input type="checkbox"/> Floodplain <input type="checkbox"/> Erosion Hazards	Do lands contain any of the following regulated by a Conservation Authority: <input type="checkbox"/> Wetland <input type="checkbox"/> Watercourse or Waterbody <input type="checkbox"/> Floodplain <input type="checkbox"/> Erosion Hazards
Potential Natural Heritage Features, Areas, and Systems (include any date of site visits or inventories) While some known natural areas are identified by official sources, the presence of others may only be determined after a site-specific evaluation. Potential natural areas features shall be identified using sources such as aerial imagery, site visits and surveys, and a review of background information (e.g. Natural Heritage Information Centre).	

<p>Does the property contain any of the following features not previously identified based on a review of aerial imagery, site observations, ELC mapping, and/or background information:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Individual Trees <input type="checkbox"/> Hedgerows <input type="checkbox"/> Woodlands <input type="checkbox"/> Wildlife Habitat <input type="checkbox"/> Wetlands <input type="checkbox"/> Watercourses <input type="checkbox"/> Seeps and springs <input type="checkbox"/> Valleylands <input type="checkbox"/> Tallgrass Prairies <input type="checkbox"/> Species of value to Indigenous communities <input type="checkbox"/> Headwater drainage features <input type="checkbox"/> Opportunities to create a natural heritage system linkage to features within or adjacent to the subject lands <p>Notes/ Comments:</p>	<p>For adjacent lands that could be impacted by the proposal, do they contain any of the following features not previously identified based on a review of aerial imagery, site observations, ELC mapping, and/or background information:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Individual Trees <input type="checkbox"/> Hedgerows <input type="checkbox"/> Woodlands <input type="checkbox"/> Wildlife Habitat <input type="checkbox"/> Wetlands <input type="checkbox"/> Watercourses <input type="checkbox"/> Seeps and springs <input type="checkbox"/> Valleylands <input type="checkbox"/> Tallgrass Prairies <input type="checkbox"/> Species of value to Indigenous communities <input type="checkbox"/> Headwater drainage features <input type="checkbox"/> Opportunities to create a natural heritage system linkage to features within or adjacent to the subject lands <p>Notes/ Comments:</p>
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STEP 3 - PROPOSED AVOIDANCE, ENHANCEMENT AND MITIGATION MEASURES

Preliminary plans must be included to illustrate proposed building/ structures/ servicing/ parking/ storage etc., limits of grading and construction, features to be preserved or removed, VPZ, linkages, tree protection or silt control fencing, planting plan and any other mitigation measures.

In addition to using the above information to determine what components of an EIS may be scoped, proposed avoidance, enhancement and mitigation measures will be taken into consideration. Examples include preserving natural heritage features; implementing VPZs and linkages in which there is to be no development or site alteration; planting a diversity of native wildflowers/grasses, shrubs, and trees in the VPZ; and installing silt fencing.

As part of proposing avoidance, enhancement, and mitigation measures there must be a mechanism to ensure they are implemented and remain in place. For example, where natural heritage features, VPZs, and linkages are proposed to be preserved they must be zoned appropriately such as Natural Heritage (NH). To ensure plantings occur and are successful (not taken over by invasive species), plantings may need to be planted prior to development, monitored for a at least two years, and/or securities posted.

Scoping may be considered where it is determined that no useful purpose would be served by applicable EIS study requirements. For example, where an unevaluated wetland is proposed for preservation, an evaluation of significance may not be necessary, and instead the EIS should focus on protecting wildlife habitat, water quality and water quantity.

<p align="center">Subject Matter</p>	<p align="center">Existing and Proposed Measures (all maps must be legible with a scale, corresponding legend, date, and address)</p>
<p>Future Ownership of Natural Areas To ensure the permanent protection of natural areas and to provide a comprehensive open space system including active transportation connections, environmental lands are often dedicated to the County, particularly within settlement areas.</p>	<p>If the lands are in a settlement area, is the applicant interested and/or willing to dedicate lands proposed for preservation to the County?</p>
<p>Zoning Zoning is a planning tool used to help ensure natural areas remain protected from building, structures, and other uses. For example, the County Zoning By-Law zones natural features as Natural Heritage (NH) and VPZs and other restoration areas as Natural Heritage Vegetation Protection Zone (NH1). The County may update boundaries to the NH and NH1 without an amendment where new features are identified, or existing features are refined.</p>	<p>Describe the Existing Zoning of Natural Heritage Features & VPZs.</p> <p>Describe the Proposed Zoning of Natural Heritage Features & VPZs. Where applicable, provide proposed Zoning text and/or schedule.</p>
<p>Subdivision Where a development proposal includes a subdivision all natural areas, VPZs and linkages to be preserved should be identified as Natural Heritage System or Open Space Blocks.</p>	<p>If a subdivision is proposed, are all natural heritage areas proposed for preservation within Natural Heritage System or similar Blocks?</p>
<p>History of Natural Characteristics: Local knowledge and a review of aerial photography may be used to compare current to historical site conditions regarding the natural environment. Where unauthorized removal of features has occurred, the applicant will be required to restore the site to its original state.</p>	<p>Describe the history of removal of natural heritage features on the property in conjunction with all previous violations, permits, exemptions, planning approvals, regulations, and other removals in natural heritage features and areas.</p> <p>Where applicable, describe and illustrate proposed restoration for any natural areas previously removed.</p>

<p>Existing and Proposed Development: To assess the proposed project, it is important to have a clear understanding of existing and proposed buildings, structures, servicing, access, parking, outdoor storage, grading, drainage, site alteration, and demolition.</p>	<p>Describe and provide mapping of the proposed development including a site plan for development, limits of grading and construction, the nearest road and lot lines. At least one map must be overlaid with aerial imagery.</p>
<p>Preservation of Key Natural Heritage and Key Hydrologic Areas, and Directing Development Away from Natural Hazards As per the Hierarchy of Conservation, avoidance of natural areas is the preferred approach to conservation. One of the best tools to achieve preservation is designing projects around natural areas and/or choosing development sites with little to no natural areas.</p>	<p>Describe and provide a drawing illustrating natural heritage and hydrologic features (e.g. wetlands, woodlands, watercourses), and natural hazards regulated by Conservation Authorities (e.g. erosion, floodplain). Clearly indicate features proposed to be retained and those proposed for removal.</p>
<p>Tree Inventory and Preservation Plan Individual trees, groupings of trees and hedgerows where not determined to be significant may provide cultural, social, and recreational value to a community as well as mitigating the impacts of climate change. One of the best tools to achieve preservation is designing projects around natural areas and/or choosing development sites with little to no trees.</p>	<p>To justify scoping of an EIS, for trees that could be impacted, a tree inventory and preservation plan may be provided as per the County's Tree Protection Guide. https://www.brant.ca/en/planning-and-Development/development-toolbox.aspx#Tree-Protection</p>
<p>Environmental Offsetting With preservation as a priority and in consideration of the well-known effects of vegetation on mitigating climate change, removal of natural areas will generally not be supported. Minor removal of features may be considered in limited circumstances as per the EIS Guidelines and if applicable and enforce, A Simply Grand Official Plan 2023. Compensation may not be used to justify a conclusion of no negative impacts.</p>	<p>Where trees, vegetation and other habitats are proposed for removal, describe, and provide a drawing to demonstrate how a net environmental gain will be achieved. For trees, compensation should be based on size and quality of trees removed with larger trees resulting in greater compensation, with a minimum 2:1 ratio. Applicants are advised that the County is in the process of developing a Tree Technical Manual and Community Forest Strategy, which will provide more detailed direction on compensation related to individual trees and woodlands. Outline whether replanting is proposed on site, as cash-in-lieu or a combination of both. For plantings on site, a diversity of native seed mixes, shrubs and plants shall be used. Trees shall have a minimum height of 1 metre and a</p>

	<p>circumference of 3 inches unless otherwise approved by the County.</p>
<p>Location and Width of VPZs and Linkages to be Maintained as Self-Sustaining Vegetation</p> <p>VPZs are an essential tool to maintaining and enhancing the health of ecosystems as they naturally protect water quality of rivers by intercepting harmful pollutants, mitigating erosion, providing food and shelter for wildlife, contributing to the beauty and economic value of the County, mitigating impacts of climate change, and providing opportunities for recreational enjoyment such as through sustainable trail development. Linkages are important in providing a comprehensive connected natural heritage system as part of supporting biodiversity, as opposed to preserving features in isolation of one another.</p>	<p>Describe and provide a drawing illustrating proposed VPZs adjacent to each natural feature and linkages between features.</p>
<p>Enhancing VPZs and linkages with a diversity of native species.</p> <p>Planting a diversity of native wildflowers/grasses, shrubs and plants helps to mitigate impacts, prevent intrusion into natural areas, and enhance wildlife habitat.</p>	<p>Describe the existing vegetation adjacent to natural features in the VPZ. Describe if any, and to what extent the VPZ and linkages will be planted with a diversity of native wildflowers, shrubs and trees. A preliminary concept plan indicating the location should be provided.</p> <div data-bbox="1226 1436 1271 1488" data-label="Image"> </div>
<p>Additional Mitigation Measures</p> <p>Mitigation measures are often necessary to reduce short-term and long-term impacts to the natural environment.</p>	<p>Summarize additional mitigation measures anticipated to be implemented prior to, during and after construction, such as:</p> <ul style="list-style-type: none"> - Sediment and erosion control measures in keeping with best practices as provided for in the Ontario Provincial Standard Specification for Temporary Erosion and Sediment Control Measures OPSS.MUNI 805; and as detailed on drawing OPSD 219.130; and the Erosion and Sediment Control Guide for Urban Construction prepared by Sustainable Technologies Evaluation Program. - Permanent fencing adjacent to natural areas.

	<ul style="list-style-type: none"> - Lighting directed away from natural areas. - Bird friendly building, landscaping, and lighting. - Grading limits, stockpiles, staging of construction materials and equipment. - Spills management plan. - Timing windows and/or any other measures to ensure compliance with the Migratory Birds Act, active bats, fish habitat and any other applicable matters. - Monitoring measures such as related construction activities, water quality, tree protection, wildlife exclusionary fencing. - Having specialists on site to monitor and relocate wildlife.
Provincial or Federal Authorization	Describe any anticipated authorization required from the Conservation Authority, Province, or Federal Government (e.g. Endangered Species Act, Fisheries Act). If required provide written authorization.
Implementation	How will the above-noted measures be implemented and how will it be ensured they remain in place (e.g. zoning, dedicating lands to the County, conditions, agreement):
Other	Please include any other information that may be relevant:

STEP 4 – EIS TERMS OF REFERENCE CHECKLIST

Instructions:

Based on site characteristics and the proposed development including preservation of features, VPZs, creation of linkages, enhancement and mitigation outlined in this Application Form, the applicant's consultant shall fill out the 'Comments from Applicant's Consultant' and may use track changes under 'Description of

Elements to Include in an EIS. For example, based on site conditions such as ELC communities, wildlife screening, and features proposed for preservation, it may be determined that no useful purpose would be served by on-site inventories and evaluating features for significance. This information will then be reviewed by County Environmental Planning staff or the County's representative to scope and finalize EIS submission requirements.

Description of Items to Include in EIS May use track changes to propose edits.	Required for EIS	Comments from Applicants Consultant
<i>If Species at Risk are present, precise mapping may need to be excluded from the EIS due to sensitivity; confirmation may be required from MECP.</i>	<input type="checkbox"/>	
1. Electronic Submission		
<ul style="list-style-type: none"> • PDF or USB. • Digital mapping of natural heritage and hydrologic features, areas, VPZs, linkages and systems in a form acceptable to the County. CAD drawings and GIS data to be in the format of CAD, Shapefile, Geodatabase (GDB), KML, or similar. Data to be referenced to NAD 1983 UTM Zone 17N (EPSG:26917). 	<input type="checkbox"/>	
2. Title Page		
<ul style="list-style-type: none"> • Name of applicant and address of property. • Principal author of EIS and consulting firm. • Date EIS completed, include revision dates. 	<input type="checkbox"/>	
3. Table of Contents		
<ul style="list-style-type: none"> • Contents, figures, tables, references, appendixes. 	<input type="checkbox"/>	
4. Minimum Qualifications		
<ul style="list-style-type: none"> • Principal author(s) with post-secondary degree and at least 10 years of applied experience conducting studies requiring knowledge of wildlife biology, fisheries biology, forestry, ecology, botany, hydrogeology. • Completion of relevant coursework and certifications necessary to prepare EIS: Ecological Land Classification (ELC) System for Southern Ontario; Ontario Wetland Evaluation System (OWES); Qualified Ontario Professional Foresters Association Member; Ontario Stream Assessment Protocol; Ontario Benthic Biomonitoring Network, and specific SAR expertise; backpack electro-fishing; hydrogeology etc. 	<input type="checkbox"/>	
5. Study Area		
<ul style="list-style-type: none"> • A broader study area that includes all potential and known natural heritage features and areas, and key natural heritage and hydrologic features that are contiguous with or connected ecologically or hydrologically to one another and where the project could have a negative impact. Woodlands within 20 m of one another and/or bisected by rivers, rural roads or utilities are considered part of the same feature. Wetlands in the same area may be considered part of the same wetland. Watercourses downstream of the project could be impacted and may need to be included in the broader study area. • A detailed study area that includes the subject lands and lands within 120 m. A greater distance may be required depending on candidate or confirmed SWH 	<input type="checkbox"/>	<p style="text-align: center;">Proposed Study Area Map to be Provided</p>

<p>and SAR. For example, where there is potential habitat for a Great Blue Heron colony, adjacent lands could be those within 1 km.</p>		
<h3>6. Subwatershed Study Equivalent</h3>		
<p>As per the Official Plan, a Comprehensive EIS that is the equivalent of a subwatershed study is required for large-scale development. It must include a natural heritage study that is informed by hydrological and hydrogeological evaluations. The equivalent of a Subwatershed Plan must:</p> <ul style="list-style-type: none"> • Reflect and refine the goals, objectives, targets, and assessments of watershed planning as available at the time of the subwatershed plan or equivalent; • Be based on pre-development monitoring and evaluation; • Be integrated with natural heritage protection; • Identify specific criteria, objectives, actions, thresholds, targets, and best management practices for development, for water and wastewater servicing, for stormwater management, for managing and minimizing impacts related to severe weather events, and to support ecological needs; • Consider existing development and evaluate impacts of any potential or proposed land uses and development; • Identify hydrologic features, areas, linkages, and functions; • Identify natural features, areas, and related hydrologic functions; • Provide for protecting, improving, or restoring the quality and quantity of water within a subwatershed. <p>Where the above requirements are not in the EIS, the EIS must make clear reference to where this information may be found in other studies and summarize the results.</p>	<input type="checkbox"/>	
<h3>7. Executive Summary and/or Introduction</h3>		
<ul style="list-style-type: none"> • Discuss the need for an EIS and that it has been completed in accordance with the agreed upon Terms of Reference. • Where applicable, demonstrate that it is the equivalent of a Subwatershed Study as defined in the Official Plan, • Location and map of property. • Include a map of broader and detailed study areas. • Current and historical aerial imagery overlaid with lot lines and development concept. • Provide a description and map of the proposed project; natural heritage and hydrologic features; species of significance to Indigenous communities; features of value due to climate change, social, cultural or heritage reasons; ecological linkages; VPZs; natural hazards; and an overall natural heritage and water resource systems. • Clearly identify and illustrate which areas are proposed to be protected, any proposed features to be removed, and areas of mitigation, restoration, and compensation. • Outline existing and historic land uses including man-made structures (e.g. buildings, septic systems, wells). Explain any changes that have occurred to natural heritage and hydrologic features, such as removal of trees. Where applicable, verify that any removal or alteration of features was in accordance with applicable law (e.g. Good Forestry Practices By-Law 70-21). • Describe surrounding land uses and ownership patterns. Whether any other development applications are known to be in progress could affect the proposal. 	<input type="checkbox"/>	

<ul style="list-style-type: none"> • Include photographs of natural heritage and hydrologic features to illustrate existing conditions on site. • Summarize information relevant to the EIS on matters such as grading, stormwater management, servicing, and hydrogeological conditions. Discuss how the plans address natural hazards and natural heritage and hydrologic features, areas, systems, and functions in an integrated manner. • Proof of Indigenous consultation must be provided an Appendix to the EIS. As part of demonstrating conformity with the PPS and ASGP, discuss consultation undertaken with SNWSO and Mississaugas of the Credit First Nation and how their comments have been addressed. For evaluation of woodlands and wetlands, consultation is essential with respect to criteria relating to Indigenous, historical, cultural, social, economic, and recreational values. Further, they must be consulted on inventories for substance species important to their community. 		
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8. Overview of Applicable Legislation, Policies, and Guidelines:

<p>Provide table on applicable policies, legislation and guidelines as may be amended or updated, and how they have been addressed, including but not limited to:</p> <ul style="list-style-type: none"> • County of Brant Terms of Reference Submission Guidelines for EIS and EIPs. • Planning Act, Section 2. • Provincial Policy Statement, Government of Ontario, 2024 (e.g. Chapter 1, Chapter 2 Section 2.9, Chapter 3 Section 3.9, Chapter 4 Sections 4.1, 4.2, Chapter 6). • A Simply Grand Plan 2023 (e.g., Part 2 – Indigenous Engagement and Honouring the Grand River, Part 5 Natural Heritage Systems, Minimum VPZs in Table 5.2.1, Glossary, Part 5 Water Resource Systems, Part 5 Watershed and Subwatershed Planning, Part 5 Section 4.3.3 Greenspaces and Green Infrastructure, Part 6 – Property Acquisition) • County of Brant Comprehensive Zoning By-Law 61-16 (e.g. Sections 4.34.3, 14). • County of Brant Tree Protection Guide, Tree Technical Manual, Community Forest Strategy • Natural Heritage Reference Manual, Second Edition, Ministry of Natural Resources, 2010. • Significant Wildlife Habitat Technical Guide, Ministry of Natural Resources, 2000. • Significant Wildlife Habitat Ecoregional Criteria Schedule 6E or 7E, Ministry of Natural Resources and Forestry, 2015. • Significant Wildlife Habitat Mitigation Support Tool, Ministry of Natural Resources and Forestry, 2014. • Ecological Land Classification System for Southern Ontario, Lee et al., 1998 using classification codes from Southern Ontario ELC Vegetation Type List, Harold Lee, May 2008. Use wetland indicator species from OWES. • Ontario Wetland Evaluation System 4th Edition, Province of Ontario, 2022. • <i>Conservation Authorities Act</i>. • Environmental Impact Study Guidelines and Submission Standards, GRCA, 2005. • <i>Endangered Species Act (ESA), Species at Risk Act (SARA)</i>. • <i>Migratory Birds Convention Act</i>. • How Much Habitat is Enough, Third Edition, Environment Canada, 2013. • Evaluation, Classification and Management of Headwater Drainage Features Guidelines, Toronto and Region Conservation Authority and Credit Valley Conservation, 2014. • Water Budget Overview, Conservation Ontario, 2010. 	□	
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<ul style="list-style-type: none"> • Wetland Water Balance Risk Evaluation, Toronto and Region Conservation Authority, 2017. • National Standards of Canada for bird-friendly design (CSA A460-19). 		
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9. Review of Applicable Desktop Information

<ul style="list-style-type: none"> • Aerial photography. • Topographical map. • Provincial and CA request for information to determine the potential presence of SAR, SWH, other natural heritage and hydrologic features, natural hazards. May include background reports on wetland evaluations and ANSIs. • Indigenous requests for information to determine potential or known species of value to communities. • Land Information Ontario (e.g. SOLRIS, wooded areas, wetlands, wildlife areas, thermal regime, deer winter congregation areas, ANSIs). • Natural Heritage Information Centre, Species at Risk in Ontario Site. • The Natural Areas Inventory of Brant County 1994-1996, The Brant Field Naturalists, January 1996. • Local field naturalists' reports and journal articles (e.g., <i>The Canadian Field-Naturalist</i>, <i>Trail and Landscape</i>, etc.), local scientists, naturalists, birders and residents. • DFO Aquatic SAR Mapping, Status Reports, Recovery Plans. • COSEWIC Assessment and Status Reports. • Ontario Recovery Strategies, Management Plans, and Progress Reports for Species at Risk. • Watershed Studies, Subwatershed Studies, Master Environmental Servicing Plans, Area Studies, Source Water Protection, other previous field studies. • St. George Area Study Natural Heritage Study Report, NRSI Inc., 2013. • St. George Comprehensive Masterplan Study, County of Brant June 2023. • Grand River Information Network. • Grand River Regional Groundwater Study Technical Report, Holysh et al., 2001. • Integrated Water Budget Report, GRCA 2005. • Gilbert Creek Subwatershed Study, Planning and Engineering Initiatives, 1999. • Fairchild Creek Subwatershed Natural Heritage Characterization Report, GRCA 2017. • Lower Middle Grand River Subwatershed Natural Heritage Characterization Report, GRCA 2017. • McKenzie Creek Subwatershed Natural Heritage Characterization Report, GRCA 2017. • Whitemans Creek Subwatershed Natural Heritage Characterization Report, GRCA 2017. • Middle Grand River Subwatershed Natural Heritage Characterization Report, GRCA 2019. • iNaturalist Rare Species of Ontario, Herps of Ontario, Ontario Odonata. • Information sources noted in the SWH Ecoregional Criteria Schedule 6E or 7E specific to candidate SWH, must be consulted as may be updated (e.g. thermography, hydrological surveys, agricultural land classification maps, Ministry maps on mine shafts, MNRF Forest Resource Inventory Mapping, Bird Studies Canada NatureCounts, Ontario Mammal Atlas (Dobbyn, 1994), Bird Studies Canada Anuran Surveys (2009), Ontario Breeding Bird Atlas (Bird Studies Canada, 2006), Ontario Nest Records Scheme data, Rare Breeding Birds in Ontario, Ontario Heronry Inventory 1991 available from Bird Studies Canada or 	□	
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<p>NHIC, Canadian Wildlife Services, Ontario Reptile and Amphibian Atlas (Ontario Nature website), Ontario Vernal Pool Association, Ontario Soil Survey reports and maps to find suitable habitat for nesting turtles, Ontario Butterfly Atlas (Jones et al.), Ontario Odonata Atlas (MNR), Alvars of Ontario (2000), Conservation Status of Freshwater Crayfishes (Dr. Premek Hamr), University Biology Departments with bat experts, Sites documented through waterfowl planning processes, Element occurrence specification by Nature Serve, Environment Canada, Ducks Unlimited Canada)</p>		
<h3>10. Landforms, Soils, and Geology</h3>		
<ul style="list-style-type: none"> • Map, describe and assess soils, surficial geology, and bedrock geology. Indicate if there are poorly drained or shallow soils and local landforms. • Maps showing soils, surficial geology and bedrock geology are available from Natural Resources Canada and the Physiography of Southern Ontario (Chapman and Putnam 1984). Other sources of information include earth science studies, watershed and subwatershed studies, source water protection reports, well records, borehole data. • Reference findings from hydrogeological, geotechnical, slope stability and other assessments completed for the proposal. • Determine soils for each ELC unit based on Southern Ontario ELC Vegetation Type List, Harold Lee, May 2008. 	<input type="checkbox"/>	
<h3>11. Biophysical Inventories – Indigenous, Terrestrial, Wetland, Aquatic</h3>		
<p>Surveys may be scoped, depending on matters such as existing site conditions (e.g. disturbed vs undisturbed), areas to be preserved, proximity of proposed development to feature, and nature of the proposal (e.g. subdivision vs single lot severance).</p> <p>Where biophysical inventories are required, they must be completed within the last five years to be considered relevant, Include an explanation of methods and assumptions, and potential errors arising therefrom. For example, list the purpose of the inventory, date, time, field personnel, protocols used, and weather. Identify any property access limitations. All field data sheets and maps showing survey locations are to be included in the appendix. Provide a list of agencies and individuals contacted, date of contact, information supplied, contact information and copies of correspondence. New and emerging surveying techniques may be considered and/or may be required if they provide equal or better inventory results.</p>		
<p>11A -Vegetation Communities (include provincial ranks and legal status)</p> <ul style="list-style-type: none"> • Consultation with SNWSO on inventories to be completed, documented, and mapped on species that would be of significance to their community. • Completion of three-season inventories (spring, summer, fall). Multi-year studies are encouraged by SNWSO. • Include annotated checklist of vascular plants. • Classify and map vegetation communities based on dominant species of trees, shrubs and/or groundcover. • Classifications must be to 'vegetation type' based on the First Approximation of the ELC System for Southern Ontario (Lee et al. 1998). Use classification codes from Southern Ontario ELC Vegetation Type List, Harold Lee, May 2008. OWES to be used for wetland species indicators. • Provincially rare (S1 to S3) vegetation communities, SWH (e.g. sand barrens, alvars, savannahs and tallgrass prairies, other rare vegetation communities, old growth forests), mast producing species (e.g. oak, beech, flowering dogwood) to be discussed, illustrated on mapping. 	<input type="checkbox"/>	<p>Extent of surveys should be based on site characteristics and proposed development</p>

<ul style="list-style-type: none"> Note plants likely to cause nuisance and health problems (e.g. giant hogweed). Assessment of vegetation condition: successional state, disturbance, extent of invasive species. 		
<p>11B- Woodland Delineation and Tree Inventory</p> <ul style="list-style-type: none"> Required where there is a hedgerow, woodlot or woodland that is 0.2 ha or greater on the property and/or bordering the property. Detailed tree inventory for all other trees to include health, dbh, species, wildlife habitat. The Natural Heritage Reference Manual states that plantations are recognized as contributing to forest reforestation and providing ecological benefit. Accordingly, they are considered woodlands. Woodland delineation to be staked by applicant and verified by County. Woodland boundaries to mapped using a GPS unit to within 1 m accuracy. Must be surveyed unless otherwise approved by the County. Woodlands to be delineated in accordance with Natural Heritage Reference Manual and ASGP. A combined approach to be used based on percentage tree cover using sources such as aerial imagery, ELC and data layers from Land Use Ontario (e.g. SOLRIS, Wooded Areas) and ground-truthing based on definition of woodlands Forestry Act. While removal of woodlands determined to be significant as defined in ASGP is generally not supported and non-significant woodlands should be preserved for their mitigating effects on climate change, if any or all of woodland is proposed for removal, an area calculation must be provided to assess significance. The area calculation must consider accuracy of GPS by providing a potential range for area. Woodlands beyond the property that are considered part of the woodland must be included as part of overall area calculation. As per the Natural Heritage Reference Manual, the boundary of a woodland shall be defined by the canopy of the woodland and not by property boundaries. Woodland openings of 20 m or less between crown edges are not considered to divide a woodland into two separate woodlands. 	□	Extent of surveys should be based on site characteristics and proposed development
<p>11C- Wetland Delineation</p> <ul style="list-style-type: none"> Required where wetland(s) in or within 120 m of property. Pre-stake boundary of wetland and coordinate with CA to verify. Wetland delineations shall be based on soil and vegetation indicators and completed during the growing season (late April to mid-September). A conservative approach using the more restrictive of ELC or OWES shall be used in determining if an area constitutes a wetland. While removal of any wetland regardless of significance is not supported by ASGP, if proposed for removal the wetland must be evaluated for significance as per OWES. As part of the OWES evaluation criteria, Indigenous communities shall be consulted to determine if the wetland contains value of importance to the community and/or if the wetland is being used by the community. Wetland boundaries to be mapped with a GPS unit to within 1 m accuracy. Must be surveyed unless otherwise approved by the County or CA. An area calculation on the wetland must be provided, which considers accuracy of GPS, by providing a potential range for area. Include written acceptance by CA. 	□	Extent of surveys should be based on site characteristics and proposed development
<p>11D- Fishes and other aquatic organisms, especially those used as indicators of environmental quality (include provincial and federal ranks and legal status)</p>	□	Extent of surveys should be based on site characteristics and

<ul style="list-style-type: none"> • Required when indirect or direct fish habitat is on or within 120 m of the property, and/or where habitat is hydrologically connected to habitat on the subject lands and whereby the project could have an impact on habitat. • Assess location of culverts and weirs, presence of dams and barriers to fish passage. • Include inventory and assessment of any existing water control structures that enhance or provide a barrier to aquatic features. • Visual surveys and searching areas for visible habitat. • Terrestrial Crayfish: Field investigations to be conducted in April to August in temporary or permanent water. Determine presence of burrows or chimneys. Areas of follow-up <p>investigation shall be noted.</p> <ul style="list-style-type: none"> • Use common acceptable sampling methods including, but not limited to the Ontario Stream Assessment Protocol (MNR, 2017) for aquatic organisms and the Ontario Benthos Biomonitoring Network (OBBN). • Assess watercourse flow, thermal regime, channel and riparian characteristics. • Where project is proposed within and/or adjacent to headwater drainage features, the evaluation shall include: <ul style="list-style-type: none"> ◦ An evaluation and description of the project site, sensitivity of headwater drainage features and sampling methods; ◦ Assessment and classification of hydrological functions, riparian conditions, fish and fish habitat and terrestrial habitat; and ◦ Management recommendations regarding the need to protect, conserve, mitigate, recharge or maintain/replicate terrestrial features of the headwater drainage features. 		<p>proposed development</p>
<p>11E- Species of Substance to First Nations Surveys must be completed on substance species to First Nations (e.g. deer, wild turkey). Consultation is required with SNWSO and Mississaugas of the Credit First Nation to determine species of value and surveys.</p>	<input type="checkbox"/>	<p>Extent of surveys should be based on consultation, site characteristics and proposed development</p>
<p>11F- Species at Risk (SAR) and Significant Wildlife Habitat (SWH)</p> <ul style="list-style-type: none"> • EIS must include detailed assessment of candidate and confirmed species SAR and SWH to be surveyed and evaluated by cross referencing ecosites confirmed as part of an initial habitat inventory with habitat descriptions of candidate or known SAR or SWH to occur in the area. Applicable background sources including, but not limited to the following are to be used in the evaluation: The SWH Ecoregional Criteria Schedule 6E or 7E (MNR, 2015); the SAR in Ontario list, recovery strategies, management plans and progress reports; species-specific Committee on the Status of Endangered Wildlife in Canada (COSEWIC) status reports; and those listed above under Review of Applicable Desktop Information. • SWH surveys must be completed for seasonal concentration areas, rare vegetation communities, specialized habitats for wildlife, wildlife movement corridors, habitat of species of conservation concern based on ELC and the applicable SWH Criteria Schedule for Ecoregion 6E or 7E (MNR 2015a,b). Where applicable, additional details to be used from SWH Technical Guide (MNR, 2000) and/or the SWH Mitigation Support Tool (2014). • SAR surveys may be combined with surveys on SWH. 	<input type="checkbox"/>	<p>Extent of surveys should be based on site characteristics and proposed development</p>

<ul style="list-style-type: none"> Where habitat cannot be confirmed but may be present, either additional surveys shall be undertaken to confirm if the habitat is present or not, or a conservative approach shall be applied whereby recommendations of the EIS shall be based on as if the habitat is confirmed. Surveys must include areas that could be impacted by development. For example, where there is a Great Blue Heron colony, the habitat could be considered to extend from the edge of a colony to a minimum distance of 300 m. In addition, noise and vibration impacts of development on adjacent lands could extend as much as 1 km. For a bald eagle, the nest and a radius of 400-800 m around the nest could be considered SWH. 		
<p>11G - Seeps and Springs</p> <ul style="list-style-type: none"> Evaluation using topographic maps, thermography, site visits, hydrological surveys. 	<input type="checkbox"/>	<p>Extent of surveys should be based on site characteristics and proposed development</p>
<p>11H - Special Concern and Rare Wildlife Species</p> <ul style="list-style-type: none"> Inventories are to be conducted when species may be present or easily identifiable. 	<input type="checkbox"/>	<p>Extent of surveys should be based on site characteristics and proposed development</p>
<p>11I - Sand Barrens, Alvars, Savannahs, Tall Grass Prairies, Other Rare Vegetation Communities, Old Growth Forests</p> <ul style="list-style-type: none"> Vegetation communities and those which are SWH to be identified as part of ELC field work. 	<input type="checkbox"/>	<p>Extent of surveys should be based on site characteristics and proposed development</p>
<p>11J - Mammal Species (include provincial ranks and legal status)</p> <ul style="list-style-type: none"> Targeted surveys for listed mammal species in areas of potential habitat. E.g. American Badger in areas of sandy soils. 	<input type="checkbox"/>	<p>Extent of surveys should be based on site characteristics and proposed development</p>
<p>11K - Bat Habitat Surveys (include provincial ranks and legal status)</p> <ul style="list-style-type: none"> Where trees are proposed for removal, and/or where development and site alteration could have an impact on bat habitat, conduct detailed study area for trees and snags >10cm DBH that may support bat maternity habitat during the leaf off period, and a follow-up investigation during leaf on for Tri-coloured bat. Study to follow MNRF Guelph District's Survey Protocol for Species at Risk Bats Within Tree Habitats: Little Brown Myotis, Northern Myotis and Tri-Coloured Bat (MNRF 2017), and methods outlined in the Bats and Bat Habitats: Guidelines for Wind Power Projects. Must also complete acoustic monitoring as part of habitat assessment, even when habitat is not being classified as being high value for roosting. 	<input type="checkbox"/>	<p>Extent of surveys should be based on site characteristics and proposed development</p>
<p>11L - Winter Wildlife (include provincial ranks and legal status)</p> <ul style="list-style-type: none"> Conduct two visual encounter surveys between January 1 and February 28; 24 to 72 hours after a snowfall. Document all animals, calls, tracks, scat, browse, nests, etc. and over-wintering habitat use by waterfowl, raptors, wild turkeys. For deer, evaluations must be completed in winter (Jan/Feb) when > 20 cm of snow is on the ground using aerial survey techniques, ground or road surveys, or 	<input type="checkbox"/>	<p>Extent of surveys should be based on site characteristics and proposed development</p>

<p>a pellet count deer density survey. Consultation with MNRF required. In absence of direction from MNRF, mapped congregation areas are considered SWH.</p> <ul style="list-style-type: none"> • Survey on mast producing species (e.g. oak, beech, butternut, hickory, flowering dogwood). Consultation with First Nations required. 		
<p>11M - Bird Species (include provincial ranks and legal status)</p> <ul style="list-style-type: none"> • Time of day, weather conditions, survey protocols and field data collection consistent with applicable protocol for the species: Ontario Breeding Bird Atlas (OBBA 2001), MNRF's Protocol for Eastern Meadowlark in Ontario (August 2013), OBBA Standardized Owl Survey Protocol (OBBA 2002), Nightjar Survey Protocol (OBBA 2021), Wildlife Monitoring Programs and Inventory Techniques for Ontario (Konze and McLaren, 1997), Bird and Bird Habitats: Guidelines for Wind Power Projects, MNRF SWH guidelines etc. • At least one nest survey must be conducted during the leaf-off period. • Main breeding season: A minimum of two visits, at least a week apart; dates between May 21 and July 3 acceptable provided one visit is conducted in the June 1 to 21 period. Line transects, point counts or a combination of both are acceptable provided all areas receive coverage (See Bibby <i>et al.</i> 2000 for bird census techniques). Morning surveys must begin ½ hour before sunrise and not later than 10 am. <p>The following surveys to be completed for candidate or confirmed habitat:</p> <ul style="list-style-type: none"> • Waterfowl Stopover and Staging Areas Terrestrial and Aquatic • Shorebird Migratory Stopover Area • Raptor Wintering Area • Colonially Nesting Bird Breeding Habitat – Bank and Cliff: Field surveys to observe and count swallow nests to be completed during the breeding season. • Colonially Nesting Bird Breeding Habitat - trees/shrubs: Confirmation of active heronries to be achieved through site visits during nesting season (April to August) or by evidence such as the presence of fresh guano, dead young and/or eggshells. • Colonially Nesting Bird Breeding Habitat – Ground: Studies to be completed May/June when actively nesting. • Waterfowl Nesting Area: Nesting studies completed during the spring breeding season, April – June. • Bald Eagle and Osprey Nesting Foraging and Perching Habitat: Observational studies to determine nest site uses, perching sites and foraging areas – must be completed between March and mid-August. • Woodland Raptor Nesting Habitat: Field investigations conducted in March to end of May; the use of call broadcasts to be used in locating territorial (courting/nesting) raptors and facilitate discovery of nests by narrowing down the search area. • Woodland Area – Sensitive Bird Breeding Habitat: Field investigations to be completed in spring and early summer. • Marsh Breeding Bird Habitat: Breeding bird surveys to be conducted in May/June. • Open Country Bird Breeding Habitat: Field investigations to be conducted in spring and early summer. 	□	Extent of surveys should be based on site characteristics and proposed development
<p>11N- Amphibian and Reptile Species (include provincial ranks and legal status)</p> <ul style="list-style-type: none"> • Animal Care Protocol and <i>Fish and Wildlife Conservation Act</i> authorization may be required depending on the survey method. • Surveys required for candidate or confirmed habitat. 	□	Extent of surveys should be based on site characteristics and

<ul style="list-style-type: none"> • Time of day, weather conditions, survey protocols and field data collection consistent with applicable protocol for the species: Bird Studies Canada's Marsh Monitoring Program Participant's Handbook for Surveying Amphibians (BSC 2009), Provincial protocol for Blanding's Turtle (MNR 2015b), Milksnake Survey Protocol for Guelph District (MNR 2013a), MNRF SWH guidelines • Amphibian Breeding Habitat – Woodlands and Wetlands: A combination of active hand searches, observational study, and call count surveys is required during spring (March-June). Timing and survey techniques may vary based on species. • Amphibian Movement Corridors: Field studies must be completed at the time of year when species are expected to be migrating or entering breeding sites. • Turtle Wintering Areas: Identified by searching for congregations (basking areas) of turtles on warm, sunny days during the fall (Sept. – Oct.) or spring (Mar. – May). • Turtle Nesting Areas: Nesting and visual encounter surveys to detect basking turtles and habitats used by turtles following Provincial protocol for Blanding's Turtle (MNRF 2013). A minimum of three site visits are required during in prime nesting season, late spring to early summer • Reptile Hibernaculum: Active hand searches and visual encounter surveys to detect basking snakes near candidate habitat (e.g. foundation or rocky slope) on sunny warm days in spring (Apr./May) or fall (Sept./Oct.). Cover board surveys may be conducted where appropriate in consultation with the MNRF and/or MECP. 		proposed development
<p>110- Lepidoptera, Odonata, and Provincially significant Bumblebees (include provincial ranks and legal status)</p> <ul style="list-style-type: none"> • When habitats are potentially suitable for provincially ranked S1 to S3 species, at least two dedicated surveys in appropriate seasons and weather conditions. Catching and releasing adults is the most reliable way to confirm identification. • Important host species for insects that are not commonly found in the area are to be identified and prioritized with protection. Where they are not protected it must be demonstrated that they can be replanted. 	□	Extent of surveys should be based on site characteristics and proposed development
<p>12. Biophysical Inventory - Water Resource Systems</p> <p>The CA must be contacted for inventory protocols on water resource systems.</p> <p>Where detailed information on water resource systems is part of a separate study, such as a hydrogeological study reference must be made to such studies, with a summary provided in the EIS. Studies to be completed by a qualified professional engineers, hydrologists, and/or hydrogeologists.</p>		
<p>Base inventory of features:</p> <ul style="list-style-type: none"> • Inventory of surface water features and functions including drainage features (e.g. intermittent and permanent streams, swales, municipal drains), headwater features, lakes, reservoirs, ponds, seepages, springs, culverts and weirs, dams. • Inventory of hydrogeological areas including groundwater recharge and discharge areas and areas vulnerable to groundwater contamination, and the collection of baseline data using appropriate instrumentation (e.g. staff gauges, data loggers, mini piezometers, etc.). • Inventory of geomorphic features such as erosion and deposition areas, abandoned river and stream channels, oxbows, meander belt, bankful channel widths, etc. • Classification of rivers to assist in identifying restoration activities (e.g. Rosgen). 	□	
<p>Detailed descriptions of surface and groundwater conditions:</p>	□	

<ul style="list-style-type: none"> • Detailed description of soils and geology to inform assessment of potential impacts from erosion, sedimentation and changes in local hydrogeology. • Identify hydrological catchment boundary or drainage basin for the site, overland flow contribution points and outlets, and hydrological processes. • Hydrological assessment to determine infiltration capabilities of the site, water balance, surface drainage, water table location and potential for stormwater management performance. Quantitative and qualitative aspects of the hydrogeological regimes sustaining the environmental systems in and adjacent to the subject lands must be maintained. • At least one year of monthly site-based and feature-based water balance is required to demonstrate no negative impacts to water quality and quantity. Include data on at least one year of baseline surface water quality and groundwater monitoring. Water balance and monitoring also required post-construction as a condition of approval. • Hydrogeological assessment including at least 1 year of continuous groundwater level monitoring to determine baseline conditions; identify groundwater contours, flow directions, and vertical gradients; the spatial and temporal variability of groundwater levels and flows; aquitard and aquifer conditions; the locations and elevations of monitoring wells, piezometers and test pits; a record of the dates and duration of observations; and an assessment of the adequacy of the groundwater observations and mapping and a quantitative analysis and summary of the spatial and temporal variability of groundwater levels and flows. • Analysis of surface water quantity and quality which determines the interaction between groundwater and surface water features such as wetlands, watercourses, ponds, discharge areas, and existing stormwater management facilities in terms of contributing drainage area, source of water, drainage patterns, hydroperiod, depth to groundwater within or contiguous to wetland, seasonal high-water marks, and other relevant hydrological data. • Studies shall be based on technical guiding documents such as Wetland Water Balance Risk Evaluation, Toronto and Region Conservation Authority, 2017 		
<h3>13. Biophysical Inventory - Natural Hazards</h3>		
<p>The CA must be contacted for inventory protocols related to natural hazards.</p>		
<ul style="list-style-type: none"> • Include description and mapping of natural hazards regulated by CAs including, but not limited to watercourses, wetlands, floodplains, riverine erosion hazards including stable slope allowance and access allowance, and poorly drained soils. Information may be available from the applicable CA. Make note of any recommendations from applicable slope stability and floodplain studies. 	<input type="checkbox"/>	
<h3>14. Evaluation of Significance</h3>		
<p>Where applicable, applicants must consult ASGP to determine what features are part of the NHS and accordingly what must be protected. The glossary must also be referenced to interpret key terms such as 'significance'.</p> <p>Where features such as woodlands and wetlands are proposed to be preserved, an evaluation of significance may not be necessary. In such instances, the EIS must still include a detailed and thoroughly researched review on matters such as water balance, protection of trees, critical function zones, SWH and SAR species habitat requirements, and scientific literature to determine VPZs and</p>	<input type="checkbox"/>	<p>Extent of evaluation to be based on features proposed for preservation.</p>

<p>other mitigation measures necessary to ensure a net positive gain in features and functions.</p> <p>Where an evaluation of significance is deemed necessary, such as in the case of determining SWH and where features are proposed for removal, evaluation of significance shall be in accordance with applicable Federal, Provincial, CA and Municipal reference manuals, technical guidelines, and policies, as may be updated including, but not limited to:</p> <ul style="list-style-type: none"> • <i>Provincial Policy Statement, Government of Ontario, 2024.</i> • <i>A Simply Grand Official Plan 2023.</i> • <i>Natural Heritage Reference Manual, Second Edition, MNR 2010.</i> • <i>Significant Wildlife Habitat Technical Guide, MNR 2000.</i> • <i>Significant Wildlife Habitat Ecoregional Criteria Schedule 6E or 7E, MNRF 2015.</i> • <i>Significant Wildlife Habitat Mitigation Support Tool, MNRF 2014.</i> All applicable scientific literature cited shall be researched and described in the EIS. • <i>Ecological Land Classification System for Southern Ontario (Lee at al., 1998) to Vegetation Type.</i> • <i>Ontario Wetland Evaluation System 4th Edition, Province of Ontario, 2022.</i> <p>Evaluations require consultation with Indigenous Communities including SNWSO and MCFN where interested, to determine environmental, cultural, historical, social, recreational and/or economic values of significance to communities. Provincial technical guidelines require consultation as part of the evaluation. For example, Section 4 of Table 7-2 in the Natural Heritage Reference Manual states that woodlands should be considered significant if they have important identified appreciation, education, cultural or, historical value and meet minimum area thresholds (e.g. 0.2-10 ha, depending on circumstances). The OWES lists Indigenous Communities as an important source of information. These criteria are added under the definition of significance in ASGP.</p> <p>In terms of evaluating social and recreational values, the land use context must also be considered. For example, where a woodland is within a proposed mixed-use development in a settlement area, it may be significant due to social and recreational enjoyment it could provide to future residents such as through nature viewing, aesthetics, recreation, and providing shade during hot summer months.</p> <p>With respect to SWH and SAR, the body of the EIS must describe, and map habitat based on background information, site conditions, habitat characteristics, and any other relevant information (e.g. status reports, recovery strategies, management plans and assessment). Where habitat cannot be confirmed but may be present, either additional surveys shall be undertaken to confirm if the habitat is present or not, or a conservative approach must be applied whereby recommendations of the EIS shall be based on as if the habitat is confirmed. The body of the EIS shall describe in detail habitat requirements and implications for the project.</p>		
15. Determine Environmental Constraints to Development		
<ul style="list-style-type: none"> • Conduct a detailed analysis to determine environmental constraints to development and/or site alteration. It must be demonstrated that the proposal conforms/is consistent with applicable legislation, policies and plans which may include, but not be limited to: <ul style="list-style-type: none"> ○ <i>Fisheries Act, SARA, ESA, Migratory Birds Convention Act, Conservation Authorities Act.</i> ○ <i>Planning Act (e.g. Section 2).</i> 	<input type="checkbox"/>	

<ul style="list-style-type: none"> ○ PPS (e.g. Chapter 1, Chapter 2 Sections 2.9, Chapter 3 Section 3.9, Chapter 4 Sections 4.1, 4.2, Chapter 6). ○ A Simply Grand Official Plan 2023 (e.g. Part 2, Part 5 -Sections 2.10, 2.11, 2.12, 2.15, 4.3.3). ○ County of Brant Zoning By-Law (e.g. Section 4.34.3, 14). ● Evaluate the project including alternative site design concepts and engineering techniques (e.g. building envelopes, access, parking, grading, servicing, and drainage options) to recommend solutions that preserve, conserve, and enhance the natural environment to the maximum extent possible. ● Describe Indigenous engagement that occurred and how feedback was used to inform environmental constraints. ● Include a review of applicable recommendations from the County of Brant's Terms of Reference Submission Guidelines for EIS and EIPs and how each one has been addressed (e.g. applying NHS and WRS approach, habitat stewardship objectives, applying a climate change lens, hierarchy of conservation). ● As per Provincial guidelines such as the SWH Mitigation Support Tool, the cumulative impacts of development must be considered. ● The assessment must be supported by a detailed review of applicable Provincial guidelines such as the Natural Heritage Reference Manual and those on SWH including all applicable scientific references cited in those documents. ● Provide detailed rationale on environmental constraint mapping based on municipal, provincial, and federal legislation, policies, and guidelines. Scientific literature must be cited to justify recommendations of the EIS such as those on critical function zones, species habitat requirements, VPZs and linkages. ● The EIS must include a review of applicable habitat requirements and recommendations from: Watershed and Subwatershed Studies; DFO Status Reports and Recovery Plans; COSEWIC Assessment and Status Reports; Ontario Recovery Strategies, Management Plans, and Progress Reports for Species at Risk; and How Much Habitat is Enough by Environment Canada. ● Include comprehensive mapping on environmental constraints, which clearly illustrates areas proposed for preservation and areas proposed for development and site alteration: <ul style="list-style-type: none"> ○ Natural heritage systems and water resource systems. ○ Significant woodlands; threatened and endangered species habitat; SWH; significant valleylands; indirect and direct fish habitat including thermal regime; wetlands; ANSIs; provincially rare communities. ○ Intermittent and permanent streams, lakes, ponds, headwater drainage features, springs and seepage areas, recharge and discharge areas. ○ Species of significance to Indigenous communities. ○ Green infrastructure that mitigates impacts of a changing climate as per the definition in provincial or municipal policies and plans. ○ Non-significant natural features and areas (e.g. trees, hedgerows, non-significant woodlands and valleylands). ○ Natural areas that contribute or could contribute to social, recreational, culture and economic functions such as hunting, outdoor recreation, education and research, and contributing to aesthetics. ○ VPZs. ○ Linkage opportunities at the local, regional, and provincial scales, and across study area boundaries. ○ Land that has been restored or has the potential to be restored to a natural state such as floodplain riparian areas. ○ Natural hazards and areas regulated by CA. 		
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16. Mitigation, Restoration, Enhancement and Environmental Offsetting

- Demonstrate that a net gain in ecological and hydrogeological features and functions will be maintained and achieved in the long run, while preventing negative impacts from short-term construction activities.
- Complete an assessment of direct, indirect and induced impacts on natural heritage and hydrologic features, areas, systems and functions that are reasonably expected to occur. Outline how and when impacts will be conservatively addressed through the planning process.
- Provide recommendations on matters such as mitigation measures, opportunities for ecological restoration and enhancement through planting a diversity of native wildflowers, shrubs and trees, environmental offsetting, opportunities for environmental education on public lands including those related to Indigenous teachings, monitoring and relocating aquatic and wildlife species prior to and during construction, and pre-development/baseline, during construction and post-construction monitoring.
- With respect to compensation for trees, compensation should be based on size and quality of trees removed with larger trees resulting in greater compensation, with a minimum 2:1 ratio. Applicants are advised that the County is in the process of developing a Tree Technical Manual and Community Forest Strategy, which will provide more detailed direction on compensation related to individual trees and woodlands. Outline whether replanting is proposed on site, as cash-in-lieu or a combination of both.
- In impacted areas, opportunities shall be provided for seed/plant harvesting and rescue prior to impacts, with notification provided to Six Nations and Kayanase, prior to harvesting.
- Where lands are anticipated to be dedicated to the County for public open space purposes, include recommendations on if and where active transportation trails could be considered.
- Illustrate each recommendation on mapping in the EIS.
- An Environmental Implementation Plan (EIP) is to be submitted as part of the EIS to demonstrate how recommendations in the EIS will be implemented at the detailed design stage. For larger projects a preliminary plan may be submitted with a detailed plan required as a condition of approval.



17. Conclusions

- The EIS and associated Planning Justification Report must demonstrate how recommendations in the EIS will be implemented through the planning process.
- Include a summary list of each recommendation and how and when each will be implemented through the planning process.
- Based on the applicable application, include the implementing site plan, draft plan of subdivision, zoning schedule/text and/or official plan designations. It must be demonstrated that features and areas recommended for preservation in the EIS will be properly protected through planning instruments.
- Where applicable, include specific recommendations on conditions of approval including development agreements specific to the development type (e.g. plan of subdivision, consent, site plan).
- The EIS and Planning Justification Report shall include recommendations to address updates that may be necessary and how the proposal will be revised, for example:



<ul style="list-style-type: none"> • As a result of changes to legislation after draft approval and prior to final registration of a subdivision; • As result of changes to legislation should draft approval lapse or a subdivision is not deemed to be registered as per Sections Section 51(32) and 50(4) of the <i>Planning Act</i>; • As a result of a new feature discovered after approval; and/or • Where a decision has been made, but a significant amount of time has passed prior to development of the property and completion of the EIS. If a feature has changed over-time or a new natural heritage or hydrologic features has been identified, how changes to the boundaries of the feature will be addressed. 		
18. Bibliography		
<ul style="list-style-type: none"> • List of references. 	<input type="checkbox"/>	
19. Curriculum Vitae		
<ul style="list-style-type: none"> • Include for principal author(s) and technical staff who contributed to EIS. 	<input type="checkbox"/>	
20. Other		
<ul style="list-style-type: none"> • The deviation from the study area, survey methods or other requirements in this Terms of Reference must be submitted by the applicant and approved by the County and where applicable the CA, prior to submission of the EIS. • Prior to submission of the EIS, a site visit should be arranged with staff preferably in the growing season, to view the features and discuss the proposal. • A Draft EIS should be submitted for review and discussion. Additional site visits may be required to confirm delineation of features and discuss the proposed development. • Please be advised that the results of the EIS may be peer reviewed at the expense of the applicant. 	<input type="checkbox"/>	