

TOWN OF CALEDON
PLANNING
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Environmental Impact Study - 13286 Nunnville Road, Town of Caledon, Regional Municipality of Peel, Ontario



December 15, 2025

Prepared for:
Adel George

Cambium Reference: 21647-001

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1.0 Introduction

Cambium Inc. (Cambium) was retained by Adel George (the Client) to conduct an Environmental Impact Study (EIS) at 13286 Nunnville Road, in the Town of Caledon, Regional Municipality of Peel, Ontario, Ontario. The proposed development consists of twenty-two semi-attached residential lots, with associated driveways and parking. Based on the location of the proposed development, the eastern half of the property will be considered the Site for this report (Figure 1).

The following EIS (the Study) serves to address potential impacts to natural heritage features identified during the preliminary development review process, as required by the Provincial Policy Statement, 2024 (PPS). The Site contains or is adjacent to (within 120 m of) the following mapped natural heritage features: woodlands. The Site is located within the settlement area of Bolton and within Ecoregion 6E of Ontario (Crins, Gray, Uhlig, & Wester, 2009).

The Site is within the jurisdiction of the Toronto Region Conservation Authority (TRCA) and their regulated area overlaps the Site. As such, the Study will consider regulations on development as imposed by Ontario Regulation 41/24 under the *Conservation Authorities Act, 1990*.

The *Endangered Species Act, 2007* (ESA) protects endangered and threatened species and their habitats from harm or destruction. Habitat for endangered and threatened species is also afforded protection under provincial natural heritage policy; however, it is ultimately the proponent's responsibility to ensure that no harm to these species or their habitats occurs during their planned activities. This Study includes a habitat-based screening for species of conservation concern to determine if the Site has suitable habitat for any provincially or federally listed species at risk (SAR).

This Study has been prepared to meet application submission standards for the proposed development of the Site, and includes: the results of the background review, a description of methods used to collect Site-specific natural heritage information, and a summary of field



investigations conducted on the Site. Information has been compiled to characterize the existing form and function of natural heritage features on and adjacent to the Site and provide an evaluation of the significance and sensitivity of those features. Furthermore, an assessment of potential for impacts to these features in relation to the proposed development is provided. Data was interpreted in accordance with provincial and municipal policies and regulations to determine potential constraints to development, to guide the decision-making process and address approval authority requirements.

1.1 Terms of Reference

The Terms of Reference (TOR) were circulated to Jason Elliot, Senior Environmental Planner at the Town of Caledon on January 28, 2025. A response was received on February 2, 2025 requesting a revised submission. A revised TOR was circulated on March 7, 2025 and approved by Jason Elliot on April 14, 2025.

Relevant correspondence and documentation are included in Appendix A.

1.2 Existing Conditions and Summary of Proposed Development

The Site is approximately 0.56 ha. It is currently occupied by a residential dwelling and an accessory structure, with manicured lawn occupying the remainder of the Site. The western limit of the Site and property is entirely wooded. Adjacent land uses include residential properties, naturalized areas (forest), and active construction (to the west).

The proposed development consists of twenty-two semi-attached residential lots, along with associated driveways and parking. The semi-attached buildings will be separated into four building blocks located on the eastern limits of the subject lot. A Site Plan is provided in Appendix B.



2.0 Natural Heritage Policy Context

The evaluation of the form and function of natural heritage features present on, and adjacent to, the Site was undertaken to meet the requirements of the following legislation, plans and policies:

- Provincial Planning Statement (PPS), 2024
- Region of Peel Official Plan, (2022)
- Future Caledon Official Plan (2025) and Town of Caledon Official Plan, 1978 (March 2024 Office Consolidation)
- Town of Caledon 2006-50 Zoning By-law, (2024)
- *Endangered Species Act* (ESA), 2007
- *Fisheries Act*, 2019
- *Species at Risk Act* (SARA), 2002
- *Migratory Birds Convention Act* (MBCA), 1994

This Study includes an assessment of conformity of the proposed development with relevant natural heritage policies. A summary of policy conformity is included in Section 6.2.

2.1 Provincial Planning Statement, 2024

The PPS provides direction on matters of provincial interest related to land use planning and development. Section 4.1 of the PPS (Ministry of Municipal Affairs and Housing, 2024) protects the form and function of eight types of significant natural heritage features, which include:

- significant wetlands in Ecoregions 5E, 6E, and 7E
- significant coastal wetlands
- significant woodlands in Ecoregions 6E and 7E
- significant valleylands in Ecoregions 6E and 7E



- significant wildlife habitat (SWH)
- significant areas of natural and scientific interest (ANSI)
- fish habitat
- habitat of endangered and threatened species
- coastal wetlands in Ecoregions 5E, 6E, and 7E

Given their significance, development and site alteration are prohibited within provincially significant wetlands (PSW) in Ecoregions 5E, 6E, and 7E and within significant coastal wetlands. Development and site alteration in fish habitat and the habitat of endangered and threatened species shall only be permitted in accordance with provincial and federal requirements. Development and site alteration within other natural heritage features and on lands adjacent to all natural heritage features may be permitted if it is demonstrated that there will be no negative impacts on the feature or its ecological function. The PPS defines “development” as the creation of a new lot, a change in land use, or the construction of buildings and structures requiring approval under the Planning Act. “Site alteration” means activities, such as grading, excavation and the placement of fill that would change the landform and natural vegetative characteristics of a site.

Section 4.2 of the PPS protects the quality and quantity of water, including the form and hydrologic function of sensitive surface water features and sensitive ground water features. Focus is given to maintaining hydrologic linkages and functions at the watershed scale to minimize potential negative impacts, including cross-jurisdictional and cross-watershed impacts of development. Mitigative measures and/or alternative development approaches should be considered for development near water features.

2.2 Endangered Species Act, 2007

Species listed as endangered or threatened on the Species at Risk in Ontario (SARO) list, and their habitats, are protected under the provincial *Endangered Species Act, 2007* (ESA) (Government of Ontario, 2007). Section 9(1) of the ESA prohibits a person from killing, harming, harassing, capturing or taking a member of a species listed as endangered,



threatened, or extirpated. Section 10(1) of the ESA prohibits the damage or destruction of habitat of species listed as endangered or threatened. Habitat for special concern species is afforded protection as significant wildlife habitat (SWH) in the PPS. Species at risk (SAR) are discussed throughout this report, as applicable.

It is acknowledged that *Bill 5: Protect Ontario by Unleashing Our Economy Act, 2025* received Royal Assent on June 5, 2025, which enacts amendments to the *Endangered Species Act, 2007* that are now in force, as well as the creation of the *Species Conservation Act, 2025* (not yet in effect). These changes are intended to streamline permit applications and approvals and help projects proceed faster while continuing to provide important protections for species at risk and their habitats. The subject Study has been prepared within the existing policy framework of the *Endangered Species Act, 2007*, therefore modifications may be required should the Act be amended and/or repealed before completion of the proposed development.

2.3 Municipal Official Plans and Zoning By-Law

The Town of Caledon's new Official Plan, Future Caledon, has been adopted and provides an updated policy framework to guide growth and development across the municipality to 2051. However, under Section 1.2.1 of Future Caledon, the 1978 Town of Caledon Official Plan, as amended and in force on the day before adoption, continues to apply to certain areas, including the Bolton settlement area and its associated secondary plan areas (e.g., Bolton Core, Bolton South Hill, West Bolton, North East Bolton, South Simpson Industrial, and Coleraine West) as identified on the 1978 Official Plan schedules. The subject Site is located within the Bolton settlement area, and as such, the 1978 Official Plan remains the applicable policy framework until such time that specific policy provisions are incorporated into the new Official Plan.

The land use designations and zoning of the Site are summarized in Table 1.

**Table 1 Summary of Municipal Official Plan Designations and Zoning**

Source	Designation / Zoning
Official Plan – Region of Peel (Schedule C-1)	Greenlands System
Official Plan – Town of Caledon (Schedule C-2 Bolton South Hill Land Use Plan)	Low Density Residential and Environmental Policy Area
Zoning By-law – Town of Caledon	Residential 1 (R1-56), Residential Townhouse (RT-131), Environmental Policy Area 1 (EPA1)

2.4 Conservation Authorities Act

Ontario's Conservation Authorities are "community-based watershed management agencies, whose mandate is to undertake watershed-based programs to protect people and property from flooding, and other natural hazards, and to conserve natural resources for economic, social and environmental benefits" (Conservation Ontario, 2022). Toronto Region Conservation Authority (TRCA) regulates these features under Ontario Regulation 41/24: Prohibited Activities, Exemptions and Permits under the Conservation Authorities Act.

2.5 Species at Risk Act

The federal *Species at Risk Act* (SARA) was adopted in 2002 to prevent endangered or threatened species from becoming extinct or extirpated, to help in the recovery of endangered, threatened, and extirpated species, and to manage species of special concern to help prevent them from becoming endangered or threatened. Habitat which is deemed necessary for the survival/recovery of a listed wildlife species, referred to as Critical Habitat, is protected under Section 56 of the SARA. The SARA applies to all federal lands in Canada; however, at-risk aquatic and migratory bird species located on private property in Ontario also receive protection under the Act.

Known aquatic SAR populations and associated critical habitats are mapped by DFO. Critical habitat for aquatic SAR may include areas used for spawning, rearing young, feeding, overwintering, and migration.



2.6 Migratory Birds Convention Act, 1994

The federal *Migratory Birds Convention Act, 1994* (MBCA) prohibits killing, capturing, injuring, taking or disturbing of the listed migratory birds. Including damaging, destroying, removing, or disturbing of nests of all migratory bird species that contain a live birds or viable eggs. In 2022, new Migratory Birds Regulations (MBR) were adopted that afford year-round protection to the nests of 18 migratory species, until the nest is deemed to be abandoned. Nest abandonment must be reported through the Abandoned Nest Registry, administered by Environment and Climate Change Canada (ECCC), if there is a need to damage, disturb, destroy, or remove a nest of a species listed in Schedule 1 of the MBR. The time period to confirm nest abandonment varies by species, and ranges from 12 to 36 months.



3.0 Technical Approach and Data Collection Methods

3.1 Background Information Review

Supporting background information pertaining to the Site and surrounding landscape was compiled and reviewed, as part of a comprehensive desktop exercise, to better understand local biophysical conditions. Data was obtained from provincial, municipal, and other online resources to provide context to the development proposal, and to guide development of the site-specific work program. Field studies were subsequently conducted to verify and/or add detail to the high-level contextual information derived from these publicly available resources.

The comprehensive desktop review for this Site included the following resources:

- Land Information Ontario (LIO) database via the online Natural Heritage Areas: Make-a-Map tool (Ministry of Natural Resources and Forestry, 2022)
- Natural Heritage Information Center (NHIC) database: species at risk (SAR) occurrence records
- Online Atlas Data:
 - Ontario Reptile and Amphibian Atlas (ORAA) (Ontario Nature, 2020)
 - Ontario Breeding Birds Atlas (OBBA) (2001-2005) (Bird Studies Canada, 2005)
- TRCA Regulated Area Search Tool (Toronto Region Conservation Authority, 2023)
- Region of Peel Official Plan (Region of Peel, 2022)
- Future Caledon Official Plan (Town of Caledon, 2025)
- Town of Caledon Official Plan (Town of Caledon, 1978)

Mapped natural heritage features present in the general area of the Site are shown on Figure 1. A summary of background review results is provided in Table 2.



Table 2 Background Review Summary

Source	Location Reference	Relevant Records
LIO Geographic Database	Site and 120 m adjacent lands	Woodlands
NHIC Database	17PJ0259	Bobolink (<i>Dolichonyx oryzivorus</i>) - THR Eastern Meadowlark (<i>Sturnella magna</i>)– THR Snapping Turtle (<i>Chelydra serpentina</i>)- SC Redside Dace (<i>Clinostomus elongatus</i>) – END Wood Thrush (<i>Hylocichla mustelina</i>) - SC
Ontario Breeding Bird Atlas (OBBA)	17TPJ05	Incorporated into list of species within Appendix C
Ontario Reptile and Amphibian Atlas (ORAA) (ORAA, 2023)	17PJ05	Incorporated into list of species within Appendix C
Aquatic SAR distribution maps	Site and 120 m adjacent lands	None

Note: THR = Threatened species on SARO list ; END = Endangered species on SARO list; SC = Special concern species on SARO list. The Species of Conservation Concern Screening provided in Appendix C includes a list of all species within the overlapping OBBA and ORAA squares with potential policy implications.

3.2 Consultation and Agency Correspondence

Regulatory agency consultation may involve input from Fisheries and Oceans Canada (DFO), the Ministry of Natural Resources and Forestry (MNRF), the Ministry of Environment, Conservation, and Parks (MECP), and/or the local Conservation Authority, as applicable. The MECP is responsible for administering the ESA and providing direction on potential compliance issues. MECP has prepared a guidance document titled *Client’s Guide to Preliminary Screening for Species at Risk* (Ministry of the Environment, Conservation and Parks, 2019). This document aims to “help clients better understand their obligation to gather information and complete a preliminary screening for SAR before contacting the Ministry”. This document was used to guide the SAR habitat-based screening for the Study.

For this Study, the following agencies were consulted directly regarding the development proposal:



- Town of Caledon: For Terms of Reference review and approval and on-site feature staking exercise on May 23, 2025.
- TRCA: Consultation specific to hazards/slopes, with technical information provided under separate cover, including feature staking exercise on May 23, 2025.

3.3 Field Investigations

Ecological investigations were completed on the Site by qualified ecologists to understand potential ecological constraints to development and opportunities for restoration/enhancement. Information gathered through the background review was used to guide the development of the fieldwork program and was supplemented with additional Site-specific information gathered through various standard methodologies. Survey methodologies for each of the field investigations completed on the Site are described in the following sections.

All surveys were conducted by appropriately trained Cambium staff. Survey stations were GPS marked in the field. Data were documented manually, reviewed upon return to the office, and transposed to digital format for secure data management.

A summary of the field investigations completed on the Site is presented in Table 3.

Table 3 Summary of Field Investigations

Date	Time On Site	Atmospheric Conditions	Observer	Activities
2025-05-15	13:15-16:00	Air Temp: 23-25°C Wind: 1 Noise: 0 Sky: 0	B. Hnatiw	<ul style="list-style-type: none"> • Ecological Land Classification and Vegetation Inventory
2025-05-23	8:45-10:20	Air Temp: 8-9°C Wind: 1 Noise: 0 Sky: 5	B. Hnatiw C. Jerney J. Elliot (Town) A. Terella (TRCA)	<ul style="list-style-type: none"> • Feature Staking with Town of Caledon and TRCA • Supplemental Vegetation Inventory



Notes: Wind = Beaufort Wind Scale value (0 = 0-2 kph, 1 = 3-5 kph, 2 = 6-11 kph, 3 = 12-19 kph, 4 = 20-30 kph, 5 = 31-39 kph, 6 = 40-50 kph). Noise is reported based on background noise levels: Index 0 – no appreciable effect, 1 – slightly affecting sampling, 2 – moderately affecting sampling, 3 – seriously affecting sampling, 4 – profoundly affecting sampling.

3.3.1 Plant Communities and Flora

3.3.1.1 Ecological Land Classification and Vegetation Surveys

The Ecological Land Classification (ELC) System for Southern Ontario (Lee H. , et al., 1998) was used to classify vegetation communities on the Site. Definitions of vegetation types are derived from the ELC for Southern Ontario First Approximation Field Guide (Lee H. , et al., 1998) and the revised 2008 tables. ELC units were initially delineated and classified by orthoimagery interpretation. Field investigations served to confirm the type and extent of ELC communities on the Site through vegetation surveys and soil assessments with a hand auger, where vegetation types could not be classified based on vegetation alone. Where vegetation communities extended off the Site, classification was completed through observation from property boundaries and publicly accessible lands.

Vegetation data reported herein includes the provincial status of plant species and vegetation communities, where such information exists. Sensitivity of individual vegetation species was evaluated based on the coefficient of conservatism (CC) which is a measure of the tolerance of a species to disturbance and fidelity to a specific habitat type; species with CC of 9-10 exhibit a high degree of fidelity to a narrow range of habitat parameters. The sensitivity of vegetation communities was evaluated through an assessment of various community attributes including age, habitat quality, degree of disturbance, presence of non-native/invasive species, and presence of sensitive plant species (plants with CC of 9-10). A description of CC values is provided in Table 4.



Table 4 Coefficient of Conservatism (Adapted from Oldham et al. 1995)

Coefficient of Conservatism	Rank	Description
0 to 3	Tolerant	Found in a wide variety of plant communities, including disturbed sites.
4 to 6	Moderately Conservative	Typically associated with a specific plant community but tolerate moderate disturbance.
7 to 8	Conservative	Typically associated with a plant community in an advanced successional stage that has undergone minor disturbance.
9 to 10	Highly Conservative	Typically displaying a high degree of fidelity to a specific plant community or a narrow range of synecological parameters.

3.3.1.2 Feature Staking Exercise

A feature staking exercise was completed by Cambium, the Town of Caledon, TRCA, Forward Engineering staff, and the Client, on May 23, 2025, to field verify the extents of natural heritage communities identified on the Site. Survey points were recorded and used to delineate the woodland dripline and top of bank, as provided in the topographical survey prepared by Wahba Surveying, dated May 23, 2025.

3.3.2 Wildlife and Wildlife Habitat

3.3.2.1 Habitat-Based and Encounter Surveys

Given the scale of the proposed development, a habitat-based approach was used to assess potential impacts to wildlife, consistent with standard practice. General habitat information gathered through the field investigations was used to assess the connectivity of the Site with the surrounding landscape and evaluate the ecological significance of the local area. Cambium staff actively searched for features that may provide specialized habitat for wildlife. These searches included inspecting tree cavities, overturning logs, rocks and debris, and scanning for scat, browse, sheds, fur, etc. Any evidence of breeding, forage, shelter, or nesting was noted. Species habitat and nesting observations were documented and photographed.



Encounter surveys included track and sign surveys, area searches, and incidental observations, concurrent with other field surveys. Any wildlife (including mammals, reptiles, amphibians, birds, butterflies, native bumble bees and dragonflies) seen and identified were recorded. When encountered, tracks and other signs (e.g., stick or cavity nests, tracks, scats, hair, tree scrapes, etc.) were identified to a species, if possible, and recorded.

3.3.3 Approach to Assessment of Significance and Impact Assessment

An assessment was conducted to determine the significance of natural features as well as significant species observed or determined to have the potential to exist on the Site or on adjacent lands. The assessment was completed by analysing natural environment data collected through the background material described in Section 3.1 and field surveys, using the methods and criteria outlined in the following reference materials:

- Natural Heritage Reference Manual [NHRM; (MNRF, 2010)]
- Significant Wildlife Habitat Technical Guide [SWHTG; (MNRF, 2000)]
- Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E [SWHCS; (MNRF, 2015)]
- Habitat mapping for provincially endangered and threatened species through application of ESA regulated habitat or General Habitat Descriptions to the Site, where available.

An assessment was then conducted to determine how the proposed project may negatively impact significant natural features or SAR. Preventative, mitigative, and remedial measures were considered in assessing the net effects of the proposed project on the surrounding ecosystem. Where impacts to significant wildlife habitat were determined to be possible, mitigation was determined using the guidance provided in the Significant Wildlife Habitat Mitigation Support Tool [SWHMiST; (MNRF, 2014)].



4.0 Existing Conditions

Data acquired through the background information review and field investigations is summarized in the following sections.

4.1 Landscape Position and Topography

The Site is located within the Mixedwood Plains Ecozone: Lake Simcoe Rideau Ecoregion 6E, which extends southward from a line connecting Lake Huron in the west to the Ottawa River in the east, including Ottawa, Kingston, Peterborough, Barrie, Tobermory, Kitchener, and Toronto. This Ecoregion is characterized by a mixed geology that includes both shallow soil areas such as alvar and bedrock plains, as well as deep soil areas such as the Oak Ridges Moraine. It falls within the Great-Lakes St. Lawrence Forest Region, including deciduous and mixed forests; however, over 50% of the landscape in this Ecoregion is currently in use as agricultural land (Lee H. T., et al., 1998).

The majority of the Site was characterized as relatively flat land transitioning to descending grades at the southwestern Site boundary toward the forested lands to the west. The top of slope was staked and surveyed by TRCA and Forward Engineering staff and is shown on Figure 2.

4.2 Plant Communities and Flora

4.2.1 Ecological Land Classification and Vegetation Inventory

The plant communities on the Site are summarized in Table 5 and are mapped on Figure 2. A list of identified species and representative photos for each community are provided in Appendix D.



Table 5 Plant Communities

No	ELC Code	Community Description	S - Rank
Anthropogenic			
1	CVR	Constructed Residential	SNA
Upland Plant Communities			
2	FOD5-7	Dry – Fresh Sugar Maple – Black Cherry Deciduous Forest Type	S4/S5

No provincially rare plant communities were observed on the Site or on adjacent lands.

Community 1 consists of an occupied residential dwelling and accessory structure, with manicured lawn space and a driveway.

Community 2 was characterized as a deciduous forest. Canopy cover was dominated by European Buckthorn (*Rhamnus cathartica*), Black Cherry (*Prunus serotina*), and Sugar Maple (*Acer saccharum*) internal to the community, with European Buckthorn, Scots Pine (*Pinus sylvestris*) and Black Locust (*Robinia pseudoacacia*) dominant along the community edge. Ground cover was dominated by Virginia Waterleaf (*Hydrophyllum virginianum*) with European Lily of the Valley (*Convallaria majalis*), Garlic Mustard (*Alliaria petiolata*) and Common Periwinkle (*Littorina littorea*) associates. Canopy cover was the densest at the forest edge, with the internal forest, on adjacent lands, consisting of a much more open canopy. This change in canopy cover is likely a result of recent dieback of White Ash (*Fraxinus americana*), which appeared to previously be the dominate tree species. All mature White Ash were documented with signs of Emerald Ash Borer (*Agilus planipennis*), with 20-40% of the canopy remaining. As a result, European Buckthorn has succeeded in dominating the sub-canopy cover in areas where the Ash has died.

As outlined in Section 3.3.1.2, a feature staking exercise was completed with Town staff to delineate the woodland dripline. The staked dripline is shown on Figure 2.

No at-risk or provincially rare (S1, S2, S3) vegetation species were identified on the Site. A search for Butternut (*Juglans cinerea*) and Black Ash (*Fraxinus nigra*); both provincially



endangered was completed as part of the vegetation survey; No Butternut or Black Ash trees were identified on the Site.

4.3 Wildlife and Wildlife Habitat

The Site is urban and heavily anthropogenically influenced, providing limited opportunities for wildlife. Open habitat on the Site (Community 1) is anthropogenic and consists primarily of manicured law. No grassland bird breeding habitat is present due to regular maintenance of the area and specifically the lack of thatch to support nest construction. The forest community overlapping the Site has potential to support urban-tolerant wildlife species.



5.0 Assessment of Significance and Impact Assessment

This section assesses the significance of natural features and functions (as outlined in Section 3.3.3) observed on the Site or on adjacent lands, as well as the potential impacts to those features that may result from the proposed project, in consideration of the recommended mitigation measures.

5.1 Significant Woodlands

Significant woodlands are natural heritage features that are afforded protection under provincial policy within Ecoregions 6E and 7E (excluding islands in Lake Huron and the St. Marys River), which occur to the south and east of the Canadian Shield. Currently, according to their respective Official Plan Schedules, the planning authorities have not explicitly defined or designated significant woodlands within their jurisdiction.

The forested community (Community 2) overlapping the southwestern Site boundary, extending onto adjacent lands to the south and west meets the definition of a woodland as defined in the Town of Caledon's Official Plan.

A Woodland Core Area in the Town of Caledon is defined as woodlands meeting one or more of the criteria in Table 1 of the Region of Peel Official Plan. Based on the criteria in Table 1 of the Region's Official Plan, the subject woodland meets the size criteria to be considered Woodland Core Area, as it is greater than 4 ha in size. Town of Caledon includes Natural Core Areas into their Ecosystem Framework, which is intended to incorporate and refine the components of the Regional Greenland's System. As such, the subject woodland is considered a significant woodland.

As outlined in Section 4.2.1, the adjacent woodland is dominated by dense European Buckthorn and contains many non-native and invasive species, reducing the ecological function of the feature and its sensitivity to adjacent development.

A 'Proposed Dynamic Dripline Setback' has been identified, as shown on Figure 3, which encompasses the southwest boundary of the Site. The proposed setback provides a variable and site-specific buffer that accommodates the Site Plan and provides sufficient area to



effectively protect and enhance the adjacent significant woodland. This approach is consistent with numerous projects throughout the Province, including the approved developments immediately northwest and southeast of the subject Site.

The majority of the proposed development is located outside of the 'Conceptual 10 m Dripline Setback', aside from two small areas of encroachment (Figure 3). These areas total approximately 170 m². To offset, supplemental buffering (i.e., Offsetting Area) will serve to mitigate the buffer encroachment areas, totalling 30 m². The 'Proposed Dynamic Dripline Setback' provides a total area of 660 m², which is equivalent to 80% of the area that would be provided for a 10 m setback. In other words, an average buffer width of 8 m has been applied to the woodlands.

Given the sensitivity and extent of non-native and invasive species along the woodland edge, the proposed buffer is considered sufficient to protect the existing form and function of the feature, provided that the existing cover remain, or is enhanced, and allowed to naturally self-sustain. No direct impacts are proposed to the woodland and no permanent development activities are proposed within the setback. Cambium recommends a site-specific enhancement and invasive species management plan are developed for the buffer area during detailed design.

Provided that the 'Proposed Dynamic Dripline Setback' is implemented and the existing vegetation remains, or is enhanced, no negative impacts to the form or function of the adjacent significant woodland feature are anticipated.

5.2 Significant Wildlife Habitat

The NHRM includes high level guidance for identifying SWH, which is further refined in the Significant Wildlife Habitat Technical Guide (SWHTG) and the Significant Wildlife Habitat Criteria Schedules (SWHCS) (MNRF, 2015) (MNRF, 2000). These documents are the basis for identifying areas and features that are considered SWH by the province, and were used in this study to determine SWH at the Site and on adjacent lands.



The table provided in Appendix E outlines all the types of SWH that are to be considered in ecoregion 6E according to the SWHCS, and includes an assessment of whether or not the criteria for 'candidate' SWH is present at the Site for each type (i.e., presence/absence of listed ELC ecosite codes and/or habitat criteria). Where 'candidate' SWH is present at the Site, the table goes on to compare the habitats and results of field surveys at the Site to the defining criteria as listed in the SWHCS to determine presence/absence of 'confirmed' SWH. Where 'confirmed' SWH is identified through the analysis presented in Appendix E, those types of SWH are discussed below in the context of the proposed development. Where presence of 'confirmed' SWH can not be ruled out, a conservative approach has been implemented by identifying 'candidate' SWH.

The forested habitat present within Community 2, overlapping the Site boundary, may provide potential habitat for two Special Concern or Rare Wildlife including Wood Thrush (*Hylocichla mustelina*), and Eastern Wood-pewee (*Contopus virens*). The subject woodland will not be directly impacted through the proposed development. In addition, the Proposed Variable Dripline Buffer, as shown on Figure 3, will protect the form and function of the feature and minimize the potential for indirect impacts to the species' habitat. Provided the best management practices in Section 6.0 are implemented, potential impacts to this species or their habitat are not anticipated.

Yellow-banded Bumble Bee (*Bombus terricola*) are habitat generalists, typically nesting in woodlands or edge habitat, adjacent to meadows, grasslands, and farmlands to collect pollen and nectar from a variety of plant genera. As such, the Site could provide potential habitat for this species. However, the lack of suitable pollinator habitat in the vicinity and/or on adjacent lands limits the potential for foraging activities. As such, is therefore unlikely the Site supports the species. In addition, no Yellow-banded Bumble Bee were observed during field investigations.

The adjacent lands have the potential to provide habitat for a variety of SCC as outlined in Appendix C and Appendix E. None of the off-Site habitats are expected to be impacted as a result of the proposed development, therefore no impacts to any off-Site habitat for SCC are anticipated. Mitigation measures to protect individual wildlife, are discussed in Section 6.0.



5.3 Habitat of Endangered and Threatened Species

A list of SAR, with potential to occur in the general vicinity of the Site has been compiled based on known species' ranges, habitat requirements, and review of background information sources (as listed in Section 3.1). In addition, the list has been augmented with direct field observations from the Study, as detailed in the previous sections. Cambium has employed a habitat-based screening, supplemented with targeted field surveys, when necessary, in order to identify suitable habitat for species located on or adjacent to the Site. A detailed habitat suitability analysis is provided in Appendix C and a discussion of the results is provided below.

5.3.1 Bats

The forested areas adjacent to the Site (i.e., within 120 m) provides potential habitat for the following bat species: Tri-coloured Bat (*Perimyotis subflavus*), Eastern Small-footed Myotis (*Myotis leibii*), Northern Myotis (*Myotis septentrionalis*), Little Brown Myotis (*Myotis lucifugus*), Eastern Red Bat (*Lasiurus borealis*), Hoary Bat (*Lasiurus cinereus*) and Silver-haired Bat (*Lasionycteris noctivagans*).

Potential use of the Site by SAR bats is expected to be low, and if present, likely in the form of a general movement corridor/flight path or foraging activities. No candidate snags or maternity roost habitat was identified during the field investigations. Provided mitigation measures are implemented, we are of the opinion that impacts to the species can be avoided and/or adequately minimized.

To mitigate impacts from the project, it is recommended that vegetation removal on the Site occur outside of the active roosting season for bats, which extends from March 15 – November 30 of any given year (i.e., clearing recommended between December 1 and March 14). If any individuals are encountered, activities should cease until consultation MECP has occurred.



6.0 Mitigation, Best Practices, and Monitoring

The mitigation measures and best management practices outlined below should be implemented on the Site, to minimize the potential for adverse impacts to natural heritage features and functions on and adjacent to the Site.

6.1 Setbacks and Enhancements

As shown on Figure 3, a 'Proposed Dynamic Dripline Setback' has been recommended along the southwest Site boundary, to protect the form and function of the significant woodland. The proposed setback provides a variable and site-specific buffer that accommodates the Site Plan and provides sufficient area to effectively protect and enhance the adjacent significant woodland. Given the sensitivity and extent of non-native and invasive species along the woodland edge, the proposed buffer is considered sufficient to protect the existing form and function of the feature, provided that the existing cover remain, or is enhanced, and allowed to naturally self-sustain. Cambium recommends a site-specific enhancement and invasive species management plan is developed during detailed design for the buffer area.

6.2 Mitigation for Significant Natural Features

A significant woodland was identified on adjacent lands to the southwest of the Site. The lands within these features may also provide candidate SWH and potential habitat for endangered and threatened species. However, none of the off-Site habitats are expected to be impacted as a result of the proposed development, therefore no impacts to any off-Site SWH or potential species at risk habitat are anticipated. Provided that the recommended setbacks are implemented, and the existing vegetation remains intact, or is enhanced, no negative impacts to the form or function of these features are anticipated.



6.3 Best Management Practices

Table 6 Best Management Practice Recommendations

Potential Impact	Recommended Best Practice
Erosion and Sedimentation	<p>Prior to any construction activities taking place, it is essential that perimeter sediment fencing be installed around construction areas. Fencing should be properly keyed into the ground and securely fastened to vertical supports spaced ≤ 2 m apart. This key control measure will help prevent sediment from entering surface water features in the surrounding landscape. All sediment fencing should be regularly maintained and kept in good working condition, until the area has been stabilized and/or successfully revegetated. Any observed overland drainage channels originating from Site, that may or may not have arisen as a result of erosion, should be directed to a check dam structure, prior to discharging to off-site areas.</p> <p>Construction activities that require earthworks (e.g., grading, excavation, etc.) should be scheduled to avoid dates of heavy rainfall events and times of high runoff volumes.</p>
Increase in Runoff - Impervious Surfaces	<p>Runoff from the Site is expected to increase with the introduction of impermeable surfaces (i.e., building roofs, roadways, and walkways) and compacted surfaces with reduced infiltration capacity. Measures to increase infiltration of run-off from these surfaces should be encouraged and, where possible, included in the Site Plan for the development. Eavestrough downspouts should be directed to vegetated areas (such as lawn, or gardens) and not onto hardened surfaces, to encourage infiltration.</p>
Wildlife: Birds (Disturbance and Harm)	<p>Nesting birds and their nests, eggs, and young are protected under the <i>Migratory Birds Convention Act, 1994</i>. Vegetation clearing on the Site should occur outside the breeding bird season, which extends from April 1 to August 31 in the local area (as per Environment and Climate Change Canada Guidelines).</p> <p>If vegetation clearing or construction is to occur between April 1 to August 31, the vegetation should be investigated by a qualified biologist to confirm if any active nests are present, prior to site alteration. Vegetation clearing can proceed provided there are no active nests. If active nests are confirmed, the nests should be left undisturbed until young have fledged or the nest is determined to be inactive. Note that some birds nest on the ground and in low-lying vegetation and shrubs; therefore, all habitat types should be inspected prior to ground disturbance if removals are to occur during the breeding season.</p>



Potential Impact	Recommended Best Practice
Wildlife: Bats (Disturbance and Harm)	<p>Tree removal should be limited to the extent possible. Small scale tree removal will not result in impairing or eliminating the function of habitat to support bat life processes provided the tree removal avoids the active bat season (March 15 – November 30).</p> <p>If vegetation clearing or construction is to occur between March 15 and November 30, the vegetation should be investigated by a qualified biologist to confirm whether SAR bat habitat may be present. Presence or absence of habitat should be confirmed through acoustic monitoring following industry standard protocols prior to any tree removal during the active season for bats. Vegetation clearing can proceed provided absence is confirmed.</p>
Species at Risk (SAR; Threatened and Endangered)	<p>SAR observations, including most species of snakes and turtles, should be reported to the Natural Heritage Information Centre (NHIC). If any individuals are encountered, they should be photographed and allowed time to move out of harm’s way. SAR should not be handled by unauthorized individuals.</p>
Spread of Invasive Species	<p>Invasive species are becoming problematic throughout Ontario and can adversely impact our natural landscapes, including wetlands, woodlands, and watercourses. Best management practices to reduce the spread of invasive species include:</p> <ol style="list-style-type: none"> 1. Revegetate with species native to the local area. 2. Request fill and compost from reputable sources that are conscious of the potential for the spread of invasive species via these media. 3. Get to know the most common invasive species in the area. 4. Brush off or clean any shoes, boots and equipment that have encountered invasive species before returning to the property. Equipment and vehicles coming into the work area should be free of soil and seeds that could introduce non-native and invasive species following the Clean Equipment Protocol for Industry: Inspecting and Cleaning Equipment for the Purposes of Invasive Species Prevention (Halloran, 2013) 5. Immediately eradicate invasive species if they are observed on the property. 6. Do not compost invasive species; put them in plastic bags and dispose of them in the garbage. 7. Do not dispose of lawn or garden clippings in the forest or wetlands to avoid species introductions. <p>An excellent resource for identifying and controlling invasive species can be found through the Ontario Invasive Plant Council: Home -</p>



Potential Impact	Recommended Best Practice
	<p>Ontario Invasive Plant Council (ontarioinvasiveplants.ca) (OIPC, 2022)</p>
<p>Anthropogenic Impacts – Noise</p>	<p>Noise is not expected to increase significantly because of the proposed development as it is consistent with the land use on the surrounding properties. Maintaining and enhancing the wooded areas surrounding the natural features on the Site will serve to buffer wildlife within the natural areas from noise-related impacts.</p> <p>Temporary acute noise may occur during construction activities and should follow appropriate local noise by-laws. All equipment should be equipped with appropriate mufflers to mitigate noise levels during construction.</p>
<p>Anthropogenic Impacts – Lighting</p>	<p>Artificial lighting can have an impact on nocturnal movement of wildlife within natural areas. To minimize impacts to wildlife, it is recommended that outdoor lights be operated on timers, rather than by motion detection. Outdoor lighting associated with the development should be directed at the ground, rather than into the adjacent natural areas. Bulb wattage should be as low as practical while meeting the safety intent of the lighting. Lighting in common areas should be capped to direct light to the intended area of the ground to limit light pollution. We note no lighting is proposed for the recreation sports field and will be limited to the buildings and parking areas.</p>



7.0 Policy Conformity

7.1 Provincial Policies

Based on the natural heritage and/or hydrologic features identified on or adjacent to the Site and the findings of the field investigations detailed herein, the proposed development of the Site is in conformity with the PPS. Conformity with applicable natural heritage policy is summarized in Table 7. Note that natural heritage and hydrologic feature types not relevant to the development application have been intentionally omitted from the tables below.

Table 7 PPS Policy Conformity Summary

Natural Heritage / Hydrologic Feature	On Site	On Adjacent Lands	Meets Associated Policy
Significant Woodlands in Ecoregions 6E and 7E (excluding islands in Lake Huron and the St. Marys River)	Yes	Yes	4.1.5 b); 4.1.8
	Explanation: A Significant Woodland was identified on and adjacent to the Site. The 'Proposed Dynamic Dripline Setback' was recommended which will protect the woodland feature. Provided that the setback is implemented, and the existing vegetation remains intact, or is enhanced, no negative impacts to the form or function of the feature are anticipated. Additional details are provided in Section 5.1.		
Significant Wildlife Habitat (including habitat of special concern species)	Potentially	Potentially	4.1.5 d); 4.1.8
	Explanation: Candidate SWH was documented for three special concern species. Details are provided in Section 5.2 outlining potential negative impacts and associated mitigation measures and recommendations. Provided the mitigation and recommendations outlined herein are implemented, Cambium is of the opinion that negative impacts to the ecological function of the identified natural heritage features can be avoided and/or adequately mitigated through site-specific avoidance and enhancement measures.		
	Potentially	Potentially	4.1.7



Natural Heritage / Hydrologic Feature	On Site	On Adjacent Lands	Meets Associated Policy
Habitat of Threatened and Endangered Species	Explanation: The forested lands overlapping the southwest Site boundary, extending onto adjacent lands, may provide suitable roosting habitat for SAR bats; however, no impacts are proposed to the forested community; therefore, we are of the opinion that impacts to the species can be minimized and/or avoided.		

7.2 Municipal Policies

7.2.1 Region of Peel

On July 1, 2024 the Town of Caledon became responsible for the interpretation and implementation of the Region of Peel Official Plan (RPOP) as it applies to Caledon.

The RPOP provides a high-level framework for protecting the Regional Greenlands System and guiding environmental planning across the Region. Relevant policies focus on maintaining, restoring, and enhancing natural heritage features and ecological functions. The RPOP supports municipal implementation of Environmental Impact Studies where development is proposed adjacent to natural features. The policies emphasize avoiding, minimizing, and mitigating negative impacts. The findings and recommendations of this EIS are consistent with the intent of the RPOP, and all proposed setbacks and mitigation measures align with the Region’s broader natural heritage direction. Because the Town of Caledon is the primary approval authority, a more detailed analysis is provided in the following section.

7.2.2 Town of Caledon

As outlined in Section 2.3, policies within Future Caledon state that the 1978 Town of Caledon Official Plan, as amended and in force on the day before adoption, continues to apply to certain areas, including the Bolton settlement area. As such the following policy conformity discussion is focused on policies within the 1978 Town of Caledon Official Plan.



Policies within Section 5.7 outline that all Natural Core Areas and Natural Corridors, including Woodland Core Areas are designated Environmental Policy Area (EPA), except for areas exempt through Sections 5.7.3.1.10 to 5.7.3.1.15, none of which apply here.

Minor refinements to the lands designated EPA are permitted, without amendment to the Official Plan, provided they are supported by site-specific studies and approved by the Town and relevant agencies, as per policy 5.7.3.1.4. Based on the above, the dripline of the woodland as staked with the Town is considered the EPA area on the Site.

Policy 5.7.3.1.1 outlines that new development is prohibited in areas designated EPA, except for permitted uses outlined in policy 5.7.3.1.2, none of which apply to the subject development.

Further policy 5.7.3.7.1 states that any new development adjacent to EPA needs to be supported through an EIS, to the satisfaction of the Town and other relevant agencies. This Study addresses the EIS requirements outlined in policy 5.7.3.7.2 of the Official Plan.

7.3 Conservation Authority Policies

Cambium understands that based on recent regulatory changes, TRCA will be commenting on this file only as it relates to natural hazards. Technical information regarding natural hazards have been addressed by Others in other technical studies and not therefore not discussed in herein.

7.4 Federal Policies

7.4.1 Species at Risk Act

The SARA applies to federal lands in Canada; however, at-risk aquatic and migratory bird species located on private property in Ontario also receive protection under the Act. No aquatic habitat was documented on the Site.

7.4.2 Migratory Birds Convention Act, 1994

Nesting birds and their nests, eggs, and young are protected under the *Migratory Birds Convention Act, 1994*. Vegetation clearing on the Site should occur outside the breeding bird



season, which extends from April 1 to August 31 in the local area (as per Environment and Climate Change Canada Guidelines). Provided this timing window is respected, no impacts to breeding birds are anticipated.



8.0 Summary of Recommendations

The following recommendations are provided for the proposed development:

1. All required approvals and permits should be obtained prior to the commencement of site alteration or construction activities.
2. All development setbacks identified herein should be included on future Site Plans.
3. Existing vegetation within the setback should be allowed to sustain as naturalized vegetation. Given the disturbed nature of the area, opportunity exists for meaningful enhancement to the buffer area through site-specific planting plans, focusing on native species. Cambium recommends a site-specific enhancement and invasive species management plan is developed during detailed design for the buffer area.
4. Vegetation removal or alteration should take place outside the breeding bird season (April 1 to August 31) and the active roosting period for bats (March 15 – November 30). Should any clearing be required during the breeding bird season, nest searches conducted by a qualified person must be completed within 48 hours prior to clearing activities. If nests are found, work within the area must cease until the nest has fledged, as per the federal *Migratory Birds Convention Act*. Should any clearing be required during the active roosting period for bats, please contact the Ministry of Environment, Conservation and Parks for further direction (e.g. acoustic monitoring, exit surveys) to ensure conformity with the *Endangered Species Act*.
5. An Erosion and Sediment Control (ESC) Plan that includes perimeter light duty sediment fencing should be implemented prior to the commencement of any Site alteration.
 - Fencing should be properly keyed into the ground and securely fastened to vertical supports spaced ≤ 2 m apart.
 - All sediment fencing should be regularly maintained and kept in good working condition, until the area has been stabilized and/or successfully revegetated.
 - All ESC fencing should be removed following construction once exposed soils have been revegetated.



- Machinery or construction materials should be stored within the construction area throughout the construction period.
6. To mitigate indirect erosional impacts, and reduce potential for establishment of invasive species, stabilization of the proposed grading footprint with an appropriate seed mix is recommended immediately following grading activities.
 7. Runoff from the Site is expected to increase with the introduction of impermeable surfaces (i.e., building roofs, roadways, and walkways) and compacted surfaces with reduced infiltration capacity. Measures to increase infiltration of run-off from these surfaces should be encouraged and, where possible, included in the Site Plan for the development. Eavestrough downspouts should be directed to vegetated areas (such as lawn, or gardens) and not onto hardened surfaces, to encourage infiltration.
 8. Invasive species are becoming problematic throughout Ontario and can adversely impact our natural landscapes, including woodlands. Best management practices to reduce the spread of invasive species include:
 - Revegetate with species native to the local area.
 - Request fill and compost from reputable sources that are conscious of the potential for the spread of invasive species via these media.
 - Get to know the most common invasive species in the area.
 - Brush off or clean any shoes, boots and equipment that have encountered invasive species before returning to the property. Equipment and vehicles coming into the work area should be free of soil and seeds that could introduce non-native and invasive species following the Clean Equipment Protocol for Industry: Inspecting and Cleaning Equipment for the Purposes of Invasive Species Prevention (Halloran, 2013)
 - Immediately eradicate invasive species if they are observed on the property.
 - Do not compost invasive species; put them in plastic bags and dispose of them in the garbage.



- Do not dispose of lawn or garden clippings in the forest or wetlands to avoid species introductions.
9. Noise is not expected to increase significantly because of the proposed development as it is consistent with the land use on the surrounding properties. Temporary acute noise may occur during construction activities and should follow appropriate local noise by-laws. All equipment should be equipped with appropriate mufflers to mitigate noise levels during construction.
10. Though not identified in the field inventories, any subsequently identified SAR discovered on the property must be left undisturbed as required by the Endangered Species Act, 2007. If any SAR individuals are encountered, they should be photographed and allowed time to move out of harms way. All SAR observations should be reported to the MNRF Natural Heritage Information Centre.
11. Artificial lighting should be avoided where possible to limit impacts to wildlife, including in the area of the outdoor recreational field. Where required, outdoor lights should be operated on timers, rather than by motion detection. Outdoor lighting associated with the development should be directed at the ground, rather than into the adjacent natural areas. Bulb wattage should be as low as practical while meeting the safety intent of the lighting.



9.0 Closing

In closing, potential negative impacts associated with the proposed development and site alteration can be appropriately minimized, provided that the recommendations outlined in Section 8.0 are followed. The information presented herein demonstrates that the proposed development can be carried out in a way that will not adversely impact natural heritage and hydrologic features and function identified on or adjacent to the subject Site. Furthermore, the proposed development complies with applicable provincial policy.

Respectfully submitted,

Cambium Inc.

DocuSigned by:

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Danielle Leal, B.Sc.
Project Manager / Ecologist

Signed by:

DDCE32943D5C412...

Camden Jerney, B.Sc., Can-CISEC
Project Manager / Senior Ecologist



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11.0 Glossary of Terms

ANSI: Area of Natural and Scientific Interest	GPGGH: Growth Plan for the Greater Golden Horseshoe, 2020
ARA: Aquatic Resources Area	GPS: Global Positioning System
ARA: Aggregate Resources Act	HSA: Habitat Suitability Analysis
AS: Agricultural System	HIS: Habitat Suitability Index
ATK: Aboriginal Traditional Knowledge	KHA: Key Hydrologic Area(s)
BMA: Bear Management Area	KHF: Key Hydrologic Feature(s)
BMP: Best Management Practice	KNHF: Key Natural Heritage Feature(s)
CA: Conservation Authority	LCFSP: Licence to Collect Fish for Scientific Purposes
CEAA: Canadian Environmental Assessment Act/Agency	LIO: Land Information Ontario
CFA: Canadian Forestry Association	LRIA: Lakes and Rivers Improvement Act
CFIP: Community Fisheries Involvement Program	LUP: Land Use Permit or Plan
CFS: Canadian Forestry Service	MA: Management Area
CHU: Critical Habitat Unit	MAFA: Moose Aquatic Feeding Area
CH: Cultural Heritage	MCEA: Municipal Class Environmental Assessment
CLI: Canada Land Inventory	MECP: Ontario Ministry of Environment, Conservation and Parks
CLU: Crown Land Use	MNRF: Ontario Ministry of Natural Resources and Forestry
COSSARO: Committee on the Status of Species at Risk in Ontario	NER: Natural Environment Report
CR: Conservation Reserve	NHIC: Natural Heritage Information Centre
CWIP: Community Wildlife Involvement Program	NHIS: Natural Heritage Information System
CWS: Canadian Wildlife Service	NHS: Natural Heritage System
DFO: Fisheries and Oceans Canada	OBM: Ontario Base Map
EA: Environmental Assessment	OFIS: Ontario Fisheries Information System
EAA: Environmental Assessment Act	OLI: Ontario Land Inventory
EAB: Emerald Ash Borer	OMAFRA: Ontario Ministry of Agriculture, Food and Rural Affairs
EBR: Environmental Bill of Rights	OWES: Ontario Wetland Evaluation System
EIA: Environmental Impact Assessment	PPS: Provincial Planning Statement, 2024
EIS: Environmental Impact Study/Statement	PSW: Provincially Significant Wetland
ELC: Ecological Land Classification	RLUP: Regional Land Use Plan
ELUP: Ecological Land Use Plan	RMP: Regional Management Plan
END: Endangered Species	RPF: Registered Professional Forester
EPA: Environmental Protection Act	SAR: Species at Risk
ER: Environmental Registry	SARO: Species at Risk in Ontario
ESA: Endangered Species Act, 2007	SC: Special Concern species
ESA: Environmentally Sensitive Area	SWH: Significant Wildlife Habitat
ESC: Erosion and Sediment Control	
F&W: Fish and Wildlife	
FA: Fisheries Act	



FEC: Forest Ecosystem Classification
FMP: Forest Management Plan
FRI: Forest Resources Inventory
FWCA: Fish and Wildlife Conservation Act
GGH: Greater Golden Horseshoe
GHP: General Habitat Protection
GIS: Geographic Information System
GLSL: Great Lakes – St. Lawrence

SWM: Stormwater Management
THR: Threatened species
TOR: Terms of Reference
TPP: Tree Preservation Plan
WIA: Woodlands Improvement Act
WMU: Wildlife Management Unit
WSCA: Wildlife Scientific Collector's
Authorization



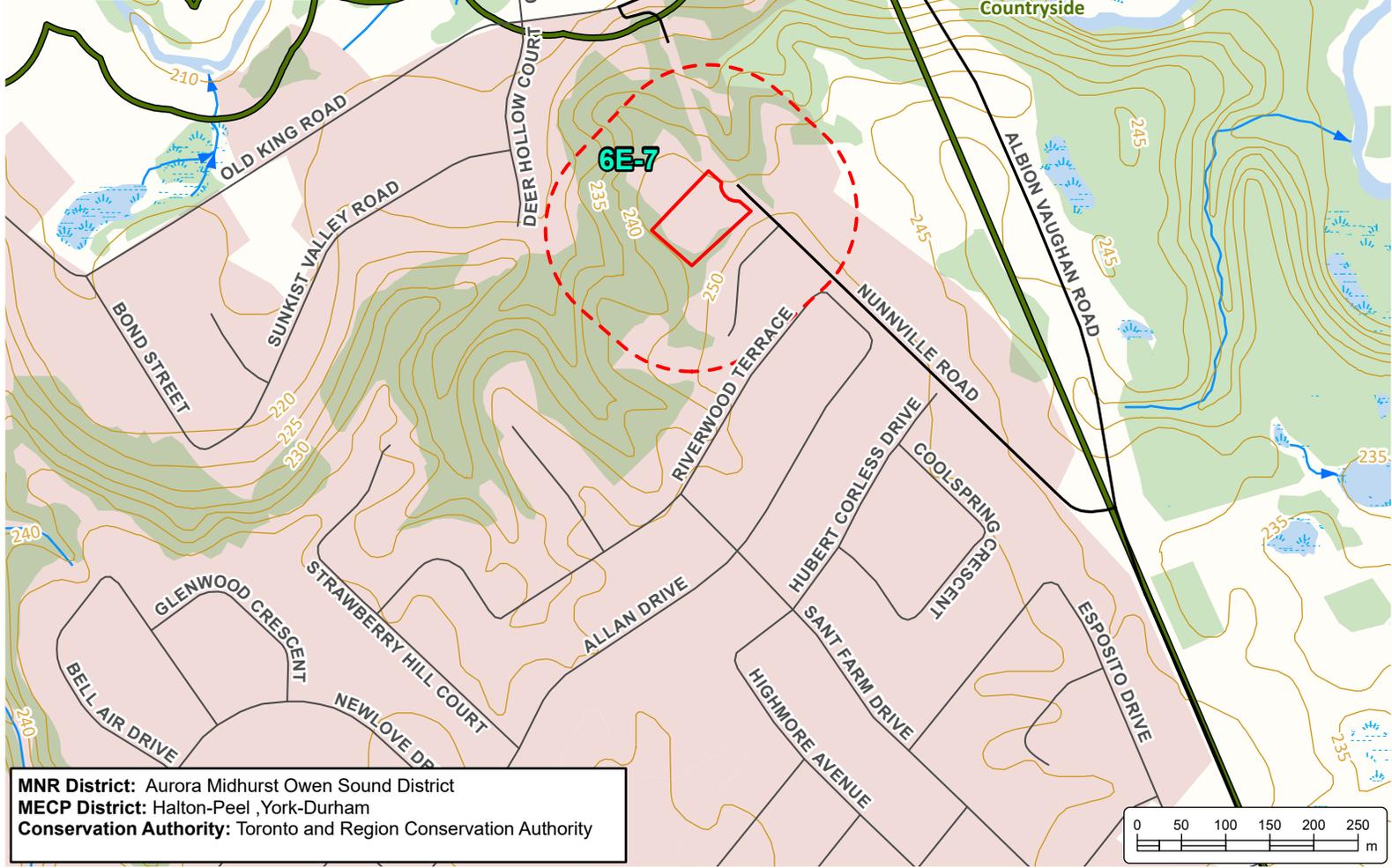
Environmental Impact Study - 13286 Nunnville Road, Town of Caledon, Regional Municipality of Peel, Ontario

Adel George

Cambium Reference: 21647-001

December 15, 2025

Appended Figures



**ENVIRONMENTAL
IMPACT STUDY**
ADEL GEORGE
13286 Nunnville Road
Caledon, Ontario

LEGEND

- Major Road
- Minor Road
- Contour (5m Interval)
- Watercourse, Permanent
- ▭ Ecodistrict
- ▭ Greenbelt Designation
- ▭ Unevaluated Wetland
- ▭ Water Area
- ▭ Wooded Area
- ▭ Built Up Area
- ▭ Site (approximate)
- ▭ Adjacent Lands (120m)

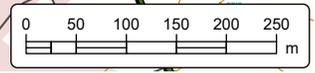
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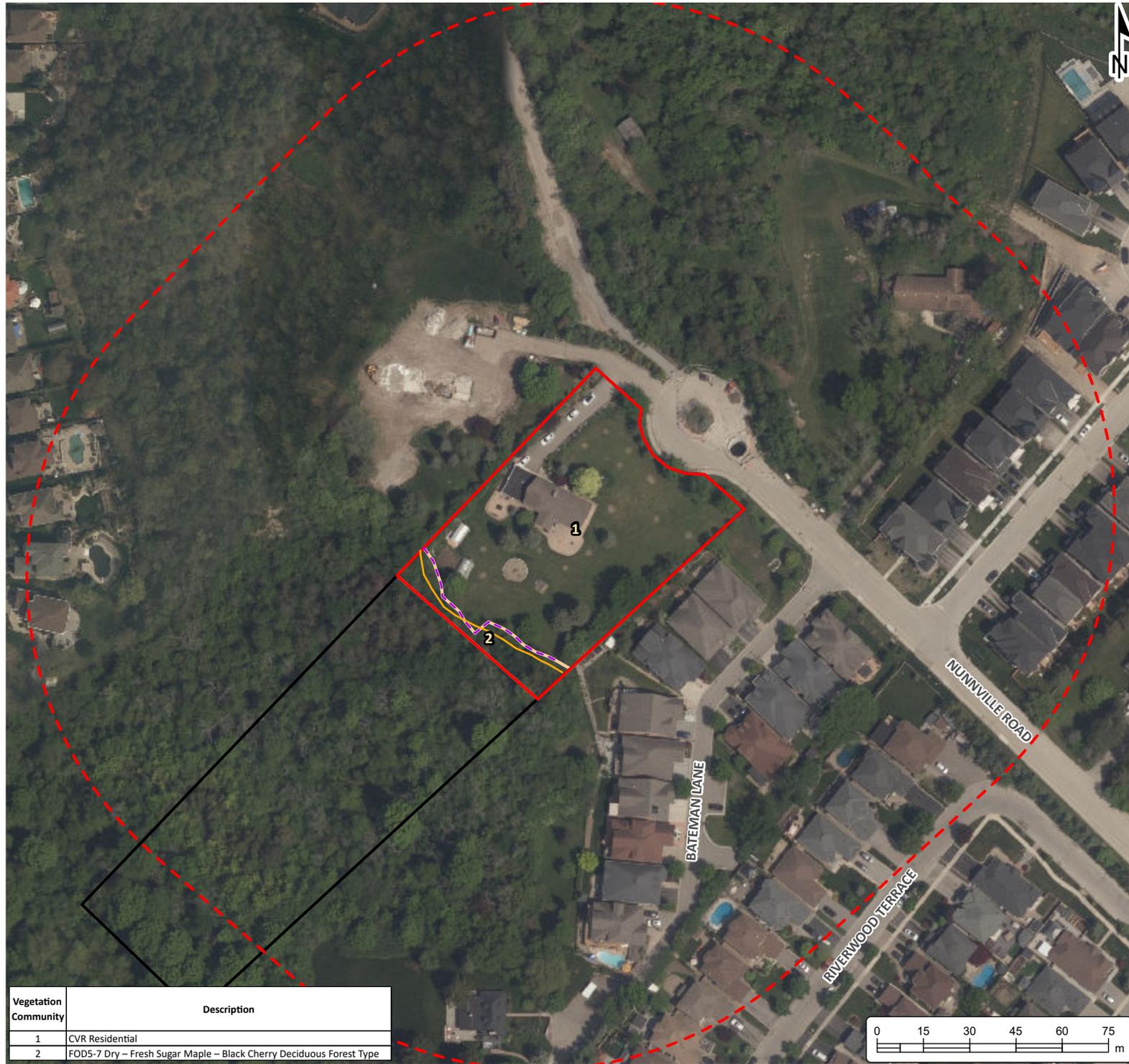
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**SITE LOCATION AND
POLICY AREAS**

MNR District: Aurora Midhurst Owen Sound District
MECP District: Halton-Peel, York-Durham
Conservation Authority: Toronto and Region Conservation Authority



Project No.:	21647-001	Date:	December 2025
Scale:	1:7,500	Projection:	NAD 1983 UTM Zone 17N
Created by:	DBC	Checked by:	CJ



**ENVIRONMENTAL
IMPACT STUDY**
ADEL GEORGE
13286 Nunnville Road
Caledon, Ontario

LEGEND

- Dripline as Staked by Town Dated May 23, 2025
- Top of Bank as Staked by TRCA dated May 23, 2025
- Vegetation Community
- Site (approximate)
- Adjacent Lands (120m)
- Subject Property

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**NATURAL HERITAGE FEATURES
AND ECOLOGICAL
SURVEY STATIONS**

Project No.:	21647-001	Date:	December 2025
Scale:	1:1,750	Projection:	NAD 1983 UTM Zone 17N
Created by:	DBC	Checked by:	CJ
			2

Vegetation Community	Description
1	CVR Residential
2	FOD5-7 Dry - Fresh Sugar Maple - Black Cherry Deciduous Forest Type



**ENVIRONMENTAL
IMPACT STUDY**
ADEL GEORGE
13286 Nunnville Road
Caledon, Ontario

LEGEND

- Site Plan
- - - Dripline as Staked by Town Dated May 23, 2025
- Top of Bank as Staked by TRCA Dated May 23, 2025
- - - 10 m Conceptual Dripline Setback
- - - Proposed Dynamic Dripline Setback
- [Blue Hatched Box] Offsetting Area (0.003 ha)
- [Yellow Hatched Box] Encroachment Area
- [Orange Box] Vegetation Community
- [Red Box] Site (approximate)
- [Dashed Red Box] Adjacent Lands (120m)
- [Black Box] Subject Property

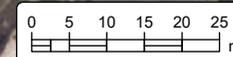
Notes:
 - This document contains information licensed under the Open Government License - Ontario.
 - Distances on this plan are in metres and can be converted to feet by dividing by 0.3048.
 - Cambium Inc. makes every effort to ensure this map is free from errors but cannot be held responsible for any damages due to error or omissions. This map should not be used for navigation or legal purposes. It is intended for general reference use only.



194 Sophia Street
 Peterborough, Ontario, K9H 1E5
 Tel: (705) 742.7900 Fax: (705) 742.7907
 www.cambium-inc.com

**NATURAL HERITAGE
CONSTRAINTS**

Project No.:	21647-001	Date:	December 2025
Scale:	1:1,000	Projection:	NAD 1983 UTM Zone 17N
Created by:	DBC	Checked by:	CJ
			3





Environmental Impact Study - 13286 Nunnville Road, Town of Caledon, Regional Municipality of Peel, Ontario

Adel George

Cambium Reference: 21647-001

December 15, 2025

Appendix A

Correspondence

Danielle Leal

From: Jason Elliott <Jason.Elliott@caledon.ca>
Sent: Monday, April 14, 2025 9:56 AM
To: Danielle Leal
Cc: File; Camden Jermey; adeljgeorge@gmail.com; mhalo@ipsconsultinginc.com; eaboujaoude@ipsconsultinginc.com; Muhammad Mughal; Andrea Terella
Subject: RE: Terms of Reference - Environmental Impact Study - Nunnville Rd (21647-001)

Follow Up Flag: Follow up
Flag Status: Completed

Hi Danielle,

I have reviewed the revised March 7, 2025 EIS ToR and confirm that all previous comments have been addressed. The ToR is accepted.

Jason

Jason Elliott (*he/him*)
Senior Planner, Environment - Parks and Natural Heritage
Planning Department
Office: 905.584.2272 x4420
Email: jason.elliott@caledon.ca

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From: Danielle Leal <Danielle.Leal@cambium-inc.com>
Sent: Friday, March 7, 2025 12:41 PM
To: Jason Elliott <Jason.Elliott@caledon.ca>
Cc: File <file@cambium-inc.com>; Camden Jermey <Camden.Jermey@cambium-inc.com>; adeljgeorge@gmail.com; mhalo@ipsconsultinginc.com; eaboujaoude@ipsconsultinginc.com; Alex Mior <Alex.Mior@caledon.ca>; Andrea Terella <andrea.terella@trca.ca>
Subject: RE: Terms of Reference - Environmental Impact Study - Nunnville Rd (21647-001)

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the contents to be safe.

Hi Jason,

Thanks for the opportunity to discuss this file and the proposed Terms of Reference (ToR) for the EIS.

Please find attached the revised ToR.

As discussed, could you please provide your availability with a few potential dates in early April to conduct the dripline staking exercise?

Thanks,

Danielle Leal, B.Sc.

Coordinator - Ecologist

t: 705.719.0700

m: 249.359.6112

e: Danielle.Leal@cambium-inc.com



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From: Jason Elliott <Jason.Elliott@caledon.ca>
Sent: Wednesday, February 5, 2025 8:55 AM
To: Danielle Leal <Danielle.Leal@cambium-inc.com>
Cc: File <file@cambium-inc.com>; Camden Jermey <Camden.Jermey@cambium-inc.com>; adeljgeorge@gmail.com; mhalo@ipsconsultinginc.com; eaboujaoude@ipsconsultinginc.com; Alex Mior <Alex.Mior@caledon.ca>; Andrea Terella <andrea.terella@trca.ca>
Subject: RE: Terms of Reference - Environmental Impact Study - Nunnville Rd (21647-001)

You don't often get email from jason.elliott@caledon.ca. [Learn why this is important](#)

Hi Danielle,

Thank you for submitting the draft EIS ToR dated Jan 28, 2025 for review. Please address the following comments in a revised submission:

- A single flora survey must be included to inform ELC, SAR screening, habitat assessment, and the proposed avoidance, mitigation and/or restoration strategy. To maximize benefit, it should occur in early June. As the proposed ELC visit should be conducted in an appropriate season, it may be combined with the flora survey, as is typical.
- In addition to the proposed SAR screening, a SWH screening must be included using existing habitat conditions and the EcoRegion Criteria Schedule categories. In the absence of the surveys needed to confirm potential SWH, any potential SWH must be carried forward into the impact assessment and recommended mitigation as if it were confirmed.
- TRCA regulated area is mapped on the property and they identified a top of bank on the adjacent property to the north as part of the development approval process for that site. As such, TRCA should be consulted on the EIS ToR and their requirements included. At minimum, the ToR should outline that TRCA regulatory requirements will be addressed. I have copied Andrea Terella from TRCA who may be able to assist you with this and attached your draft ToR for her use.
- While it forms part of demonstrating policy conformance and included in the proposed avoidance, mitigation and/or restoration strategy, the determination of appropriate buffers/setbacks from protected natural heritage and natural hazard features should be explicitly included in the ToR.
- It is indicated that one report will be completed. Note that all comments on the report must be addressed which may require multiple iterations.

The proposed ToR indicates that the EIS is required to support an OPA application. To ensure clarity in the EIS, note that it will also support the associated Zoning By-law Amendment application.

Regarding the woodlands staking, while doing so in the winter is generally acceptable, the existing snowpack and frozen ground will make placing stakes difficult or impossible. However, as the boundary is relatively short, if a surveyor is present and can record the survey points as we go along, that can work in this case. Next week I am currently available Wed the 12th or Friday the 14th in the morning. If either works on your end, please send an invite for my calendar and confirm that a surveyor will be present to record the boundary points. Of course, if there is inclement weather (e.g., snow storm) during the scheduled time, we will have to reschedule.

Regards,
Jason

Jason Elliott (he/him)
Senior Planner, Environment - Parks and Natural Heritage
Planning Department
Office: 905.584.2272 x4420
Email: jason.elliott@caledon.ca

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From: Danielle Leal <Danielle.Leal@cambium-inc.com>
Sent: Tuesday, January 28, 2025 12:17 PM
To: Jason Elliott <Jason.Elliott@caledon.ca>
Cc: File <file@cambium-inc.com>; Camden Jerney <Camden.Jerney@cambium-inc.com>; adeljgeorge@gmail.com; mhalo@ipsconsultinginc.com; eaboujaoude@ipsconsultinginc.com
Subject: Terms of Reference - Environmental Impact Study - Nunnville Rd (21647-001)

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the contents to be safe.

Hi Jason;

Cambium has been retained to conduct an Environmental Impact Study (EIS; the Study) at 13286 Nunnville Road, Caledon, Ontario . We understand the Client is pursuing development of 20 townhouse units by way of Official Plan Amendment application.

A proposed Terms of Reference (ToR) has been attached for the forthcoming EIS in order to meet the requirements of the Town.

We welcome any input or comments from your designated reviewer regarding the proposed work plan.

In addition, as outlined in the Pre-Application Review Committee Meeting form (File Number: PRE 2024-0038), a feature staking exercise with Town staff was requested to field-verify the boundary of the woodland feature. Can you please provide your availability with a few potential dates for a site visit to conduct this exercise?

Kind Regards,

Danielle Leal, B.Sc.
Coordinator - Ecologist

t: 705.719.0700
m: 249.359.6112

e: Danielle.Leal@cambium-inc.com



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“This message (and any associated files) is intended only for the use of the individual or entity to which it is addressed. The content of the message is the property of the Corporation of the Town of Caledon. The message may contain information that is privileged, confidential, subject to copyright and exempt from disclosure under applicable law. If the reader of this message is not the intended recipient, you are notified that any dissemination, distribution, copying, or modification of this message is strictly prohibited. If you have received this message in error, please notify the sender immediately, advising of the error and delete this message without making a copy. (Information related to this email is automatically monitored and recorded and the content may be required to be disclosed by the Town to a third party in certain circumstances). Thank you.”



Environmental

Geotechnical

Building Sciences

Construction Testing
& Inspection

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Mailing Address

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Peterborough, Ontario
Canada, K9J 6Z3

Locations

Peterborough
Kingston
Barrie
Whitby
Ottawa

Laboratory

Peterborough



March 7, 2025

Town of Caledon
6311 Old Church Road,
Caledon ON L7C 1J6

Attn: Jason Elliott
Senior Environmental Planner

**Re: Proposed Terms of Reference for the Environmental Impact Study at
13286 Nunnville Road, Caledon, Ontario
Cambium Reference No.: 21647-001**

Cambium has prepared a Terms of Reference (ToR) for an Environmental Impact Study (EIS; the Study) at 13286 Nunnville Road, Caledon, Ontario (the Site). We understand that the Study is required for the proposed Official Plan Amendment application and associated Zoning By-law Amendment application to facilitate the development of 20 townhouse units.

Based on our understanding of the regulatory and policy framework applicable to the Site, we propose the following ToR for the EIS.

- Consult with the with Town of Caledon to determine their interests/concerns regarding the proposed works and study requirements.
- Compile and review applicable background information and environmental mapping pertaining to the Site.
- Conduct a single season vegetation inventory to classify existing vegetation communities on the Site, according to the Ecological Land Classification System for Southern Ontario (Lee et. al., 1998), and evaluate them for sensitivity, rarity, and botanical quality. The subject inventory will be used to inform habitat-based assessments, and proposed avoidance, mitigation and/or restoration strategies. Timing of the single season vegetation survey to be confirmed through consultation with Town staff during the staking exercise.
- Undertake a Species at Risk (SAR) screening to assess the Site for potential SAR habitat. Analysis will be completed to evaluate potential impacts to candidate species in the context of the proposed work and the provincial



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 Barrie
 Whitby
 Ottawa

Laboratory
 Peterborough

 Professional Engineers
 Ontario



March 7, 2025

Endangered Species Act, 2007. This includes reviewing species occurrence records and range maps, and assessing potential occupancy based on the habitat present on and adjacent to the subject property. This preliminary screening will be carried out according to MECP Guide to Preliminary Screening for Species at Risk (May 2019). We acknowledge that additional surveys may be required if habitat to support certain endangered or threatened species is identified.

- Undertake a Significant Wildlife Habitat (SWH) screening to assess the Site for potential SWH per the applicable Provincial Ecoregion Criteria Schedule for SWH. Analysis will be completed to evaluate potential impacts to candidate and confirmed SWH.
- Record observations of wildlife occurrences and assess wildlife habitat function, including significant wildlife habitat on the Site. Any evidence of wildlife breeding, forage, shelter, or nesting sites, and/or travel corridors will be noted.
- Identify, assess, and include detailed descriptions of the natural features and functions identified on the Site and adjacent lands.
- Conduct a feature staking exercise with Town staff to field-verify the boundary of the woodland feature.
- Map key natural heritage and hydrologic features, vegetation communities, and other environmental features (watercourses, wetlands, areas of groundwater discharge, wildlife habitat, etc.) and proposed development on current, high quality aerial imagery. Any environmental feature/area mapping generated through the EIS work will be made available in GIS shapefile format.
- Provide an assessment of the potential impacts of the proposed development on natural features and their related ecological and hydrologic functions.
- Demonstrate conformity with the applicable regulation, policies, and plans as appropriate, including TRCA regulatory requirements.



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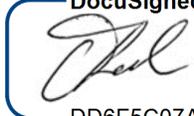
March 7, 2025

- Develop an appropriate avoidance, mitigation, and/or restoration strategy, to address the potential impacts, and opportunities for restoration and enhancement. This will include the determination of appropriate buffers/setbacks from protected natural heritage features
- Complete one final report with supporting figures for circulation to the Town, acknowledging that any comments received on the report may require additional iterations of the final report.

We trust that the proposed Terms of Reference meet your expectations. If you have any questions or require clarification of any aspect of this submission, please do not hesitate to contact the undersigned at (705) 719-0700.

Best regards,

CAMBIUM INC.

DocuSigned by:

 DD6F5C07A33A475...

Danielle Leal, B.Sc.
Coordinator / Ecologist

P:\21600 to 21699\21647-001 IPS Consulting - MSP - 13286 Nunnville Rd\Correspondence\ToR\2025-03-07 LTR - Terms of Reference (21647-001) - Revised.docx





Environmental Impact Study - 13286 Nunnville Road, Town of Caledon, Regional Municipality of Peel, Ontario

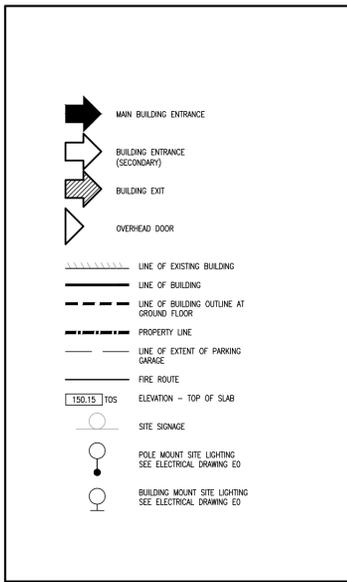
Adel George

Cambium Reference: 21647-001

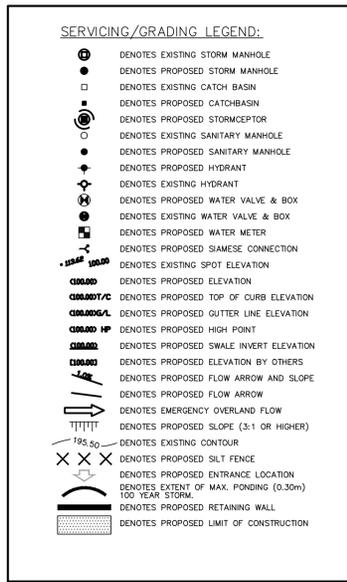
December 15, 2025

Appendix B

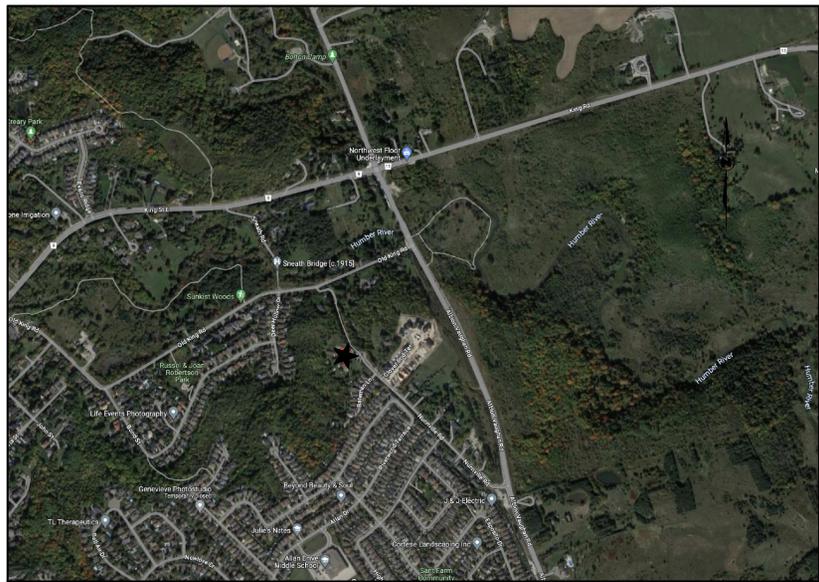
Conceptual Site Plans



5 Legend A101 SCALE: N.T.S.



4 Survey Information A101 SCALE: N.T.S.



3 Context Plan A101 SCALE: N.T.S.

Statistics

A101 SCALE: N.T.S.

BUILDING 1				
LOT NO.	LOT AREA (SQ. M)	BLDG G.F.A. (SQ. M)	LOT COVERAGE (SQ. M)	LOT COVERAGE (%)
1	245.45	158.76	77.76	31.68
2	173.00	158.76	77.76	44.95
3	173.00	158.76	77.76	44.95
4	173.00	158.76	77.76	44.95
5	173.00	158.76	77.76	44.95
6	173.00	158.76	77.76	44.95
7	206.16	158.76	77.76	37.90
TOTAL	1,318.61	1,111.32	544.32	41.37

BUILDING 2				
LOT NO.	LOT AREA (SQ. M)	BLDG G.F.A. (SQ. M)	LOT COVERAGE (SQ. M)	LOT COVERAGE (%)
8	228.86	159.00	78.00	34.08
9	200.00	159.00	78.00	39.00
10	208.34	159.00	78.00	37.44
11	208.05	159.00	78.00	37.50
12	233.21	159.00	78.00	33.45
TOTAL	1,276.46	795.00	390.00	30.23

BUILDING 3				
LOT NO.	LOT AREA (SQ. M)	BLDG G.F.A. (SQ. M)	LOT COVERAGE (SQ. M)	LOT COVERAGE (%)
13	216.91	159.00	78.00	35.96
14	172.07	159.00	78.00	45.33
15	173.90	166.00	81.50	46.87
16	218.38	166.00	81.50	37.32
TOTAL	781.26	650.00	319.00	40.83

BUILDING 4				
LOT NO.	LOT AREA (SQ. M)	BLDG G.F.A. (SQ. M)	LOT COVERAGE (SQ. M)	LOT COVERAGE (%)
17	205.62	171.84	84.55	41.14
18	178.83	171.84	84.55	47.33
19	181.86	171.84	84.55	46.48
20	185.16	171.84	84.55	45.66
21	188.42	171.84	84.55	44.87
22	191.69	171.84	84.55	44.11
TOTAL	1,131.32	1,031.04	507.30	44.84

2 Statistics A101 SCALE: N.T.S.

OVERALL SITE STATISTICS

SITE AREA	14,104.41 SQ. M (1.41 HA)
MIN. LOT AREA	172.07 SQ. M
TOTAL BUILDING AREA	3,887.36 SQ. M
MAX. LOT COVERAGE	48.87%
MIN. LOT WIDTH	8.00 M
MIN. LOT DEPTH	25.87 M
PARKING	44 RESIDENCE PARKING (1 INTERNAL & 1 EXTERNAL) VISITOR PARKING (ON-SITE)

REVISION RECORD

2025-11-18 ISSUED FOR REVIEW

ISSUE RECORD



Y ARCHITECTS
(t) 416 230 9130
(e) info@yarchitects.ca

PROPOSED RE-ZONING AT
13286 NUNNVILLE ROAD
BOLTON, ON

23004 As Noted OY
PROJECT SCALE DRAWN REVIEWED

SITE PLAN

A101

Note: This drawing is the property of the Architect and may not be reproduced or used without the expressed consent of the Architect. The Contractor is responsible for checking and verifying all levels and dimensions and shall report all discrepancies to the Architect and obtain clarification prior to commencing work.



1 Site Plan A101 SCALE: 1:400



Environmental Impact Study - 13286 Nunnville Road, Town of Caledon, Regional Municipality of Peel, Ontario

Adel George

Cambium Reference: 21647-001

December 15, 2025

Appendix C

Species at Risk Screening



Appendix: Species of Conservation Concern

Region of Peel							SPECIES DESCRIPTION AND HABITAT REQUIREMENTS	SUITABLE HABITAT	SPECIES OBSERVATIONS	ASSESSMENT
TYPE	COMMON NAME	SCIENTIFIC NAME	FEDERAL SARA	PROVINCIAL SARO	S-RANK					
Amphibian	Jefferson Salamander & Unisexual Ambystoma	<i>Ambystoma jeffersonianum</i>	END	END	S2	Jefferson salamanders have a grey or brown-coloured back, with lighter under-parts. Blue flecks may be present on the sides and limbs. It is notably difficult to distinguish between Jefferson salamander larvae and that of its close relatives, because adult colouration does not develop until the salamanders leave the breeding ponds. Adults live in moist, loose soil, under logs or in leaf litter of deciduous forests and travel to woodland ponds where they lay their eggs in clumps attached to underwater vegetation. In Ontario, Jefferson Salamander is found mainly along the Niagara Escarpment and parts of the shore of Lake Erie.	No	Known to occur in the general area	No further consideration required	
Amphibian	Western Chorus Frog (Great Lakes / St. Lawrence - Canadian Shield population)	<i>Pseudacris maculata pop. 1</i>	THR	No Status	S3	The Western Chorus Frog is small with a dark stripe running through its eye and a light stripe underneath (3). It is primarily a lowland terrestrial species that requires access to terrestrial and aquatic habitats in close proximity to one another. Relying on marshes and wooded wetlands adjacent to forested habitats, this species also requires isolated, predator free pools for breeding. Temporary pools, such as vernal pools in wooded areas, are preferred. This species hibernates terrestrially in a variety of environments, including leaf litter, wood debris, and vacant animal burrows (2).	No	Known to occur in the general area	No further consideration required	
Bird	Bank Swallow	<i>Riparia riparia</i>	THR	THR	S4B	The Bank Swallow is a small songbird of around 12 cm long with a distinctive dark breast band, that flies with quick and erratic wingbeats (1). It nests in burrows in natural and human-made settings where there are vertical faces in silt and sand deposits. This can include banks of rivers and lakes, bluffs, active sand and gravel pits, road cuts and stockpiles of soils. However, they prefer sand-silt substrates for excavating their nest burrows. They often use large wetlands as communal nocturnal roosts post-breeding or during wintering periods (2).	No	Known to occur in the general area	No further consideration required	
Bird	Barn Swallow	<i>Hirundo rustica</i>	THR	SC	S4B	The Barn Swallow is a mid-sized songbird with steel-blue backs and wings, glossy in males, and a line of white spots across its upper tail. It lives in a variety of open habitats for foraging, such as grassy fields, pastures, certain agricultural crops, shorelines, cottage areas, wetlands, or subarctic tundra (2). They prefer to nest within human made structures such as barns, bridges, and culverts. Barn Swallow nests are cup-shaped and made of mud, typically attached to horizontal beams or vertical walls underneath an overhang (1).	No	Known to occur in the general area	No further consideration required	
Bird	Bobolink	<i>Dolichonyx oryzivorus</i>	THR	THR	S4B	The Bobolink is a mid-sized songbird of tan colour with black stripes, except for males during summer breeding season who are black with a white back and yellow collar. It prefers tall, grassy meadows, hayfields and some croplands, and feeds (largely on insects) on the ground in dense grasses (1). It tends to nest in forage crops; hayfields and pastures dominated by species including clover, bluegrass, and broadleaf plants (2).	No	Known to occur in the general area	No further consideration required	
Bird	Canada Warbler	<i>Cardellina canadensis</i>	THR	SC	S5B	The Canada Warbler is a small songbird with bright yellow underparts and bluish-grey back and tail (1). It can be found in a variety of forest types, but is most abundant in moist, mixed forests with a well-developed, dense shrub layer, are on or near the ground and usually only on deciduous trees or on the ground and usually only on deciduous trees. They are well-concealed by dense, low vegetation (e.g., moss hummocks, upturned tree roots, small hillocks with deep leaf litter and dense saplings) (6).	Yes: adjacent lands only	Known to occur in the general area	Potential significant wildlife habitat on adjacent lands	
Bird	Cerulean Warbler	<i>Setophaga cerulea</i>	END	THR	S2B	The Cerulean Warbler, a small songbird, is blue-green with white eyebrows and two prominent white wing bars (1). It requires relatively large tracts of mature deciduous forest (>100 ha), and nests in old, second-growth deciduous forests. During breeding season, it is found in relatively large tracts of mature deciduous forests that feature large, tall trees and an open understory (5).	No	Known to occur in the general area	No further consideration required	
Bird	Chimney Swift	<i>Chaetura pelagica</i>	THR	THR	S3B	The Chimney Swift is a small bird, between 12 and 14 cm, with a brown, cigar-shaped body, slender wings, and an erratic flight pattern. Prior to settlement, the Chimney Swift would mainly nest in cave walls and hollow trees. Now, it is found mostly near urban and suburban areas where the presence of chimneys or other manmade structures provide nesting and roosting habitat. They also tend to stay in habitat close to the water (1).	No	Known to occur in the general area	No further consideration required	
Bird	Common Nighthawk	<i>Chordeiles minor</i>	SC	SC	S4B	The Common Nighthawk is a medium-sized bird with long, pointed wings, a long tail with a notch, and large eyes. Its plumage of dark brown with black and white specks blends with its roost site. It is typically found in open areas such as gravel beaches, rock outcrops and burned woodlands, that have little to no ground vegetation. This species can also be found in highly disturbed locations such as clear cuts, mine tailing areas, cultivated fields, urban parks, gravel roads, and orchards (1).	No	Known to occur in the general area	No further consideration required	
Bird	Eastern Wood-Pewee	<i>Contopus virens</i>	SC	SC	S4B	The Eastern Wood-pewee is a species of flycatcher, a bird that eats flying insects. It grows to approximately 15 cm, has greyish-olive upper parts and pale bars on its wings. This species lives in the mid-canopy layer of forest clearings and edges of deciduous and mixed forests. It prefers intermediate-age forest stands with little understory vegetation (1). It typically creates nests on tree branches 2-12 m in height (2).	Yes: on-site and adjacent lands	Known to occur in the general area	Potential significant wildlife habitat on-site	
Bird	Golden Winged Warbler	<i>Vermivora chrysoptera</i>	THR	SC	S3B	The Golden-winged Warbler is a small songbird with distinctive yellow wing patches and patches behind their eyes. It inhabits early successional habitat of old fields and favour areas where trees are spread out or forest edges to use for perching, singing, and searching for food. They seem to prefer regeneration zones with young shrub growth, surrounded by mature forest, locations that have recently been disturbed, such as field edges, hydro or utility right-of-ways, or logged areas for their breeding sites; often frequenting clusters of herbaceous plants and low bushes (1).	No	Known to occur in the general area	No further consideration required	
Bird	Grasshopper Sparrow	<i>Ammodramus savannarum</i>	SC	SC	S4B	The Grasshopper Sparrow is a small songbird with a streaked back, a white stripe down the center of its crown, a flatish head, and a conical beak. It inhabits open grasslands and prairies with well-drained soil, preferring areas that are sparsely vegetated. It will also nest in hayfields and pastures, as well as alvars and occasionally grain crops such as barley (1).	No	Known to occur in the general area	No further consideration required	
Bird	Least Bittern	<i>Ixobrychus exilis</i>	THR	THR	S4B	The Least Bittern is a small member of the heron family, reaching around 30 cm in length. It has brown and beige plumage with chestnut patches on its wings (1). The species nests in marshes (> 5 ha) and swamps dominated by emergent vegetation, preferably cattails, interspersed with patches of woody vegetation and open water. Although Least Bitterns usually nest in larger marshes territorial individuals have been found in marshes as small as 0.4 ha. They require dense vegetation and open water with stable levels within 10 m for nesting, and access to clear, open water for foraging (14).	No	Known to occur in the general area	No further consideration required	
Bird	Louisiana Waterthrush	<i>Parkesia motacilla</i>	THR	THR	S2B	The Louisiana Waterthrush is a large wood warbler with brown upper parts, cream-coloured breasts and flanks with dark streaks, and a long bill. It is typically found along fast moving streams and creeks, in deeply forested ravines. It nests along stream banks, in the roots of fallen trees, and under logs and other large woody debris. Although less frequently, the Louisiana Waterthrush has been known to inhabit heavily wooded, deciduous swamps and open water areas. In Ontario, its breeding ground is mostly found in woodlands along Lake Erie and along the Niagara Escarpment (1).	No	Known to occur in the general area	No further consideration required	
Bird	Peregrine Falcon	<i>Falco peregrinus</i>	SC	SC	S4	The Peregrine Falcon is a bird of prey with a slate blue back, cream-coloured chest with dark markings, and pointed wings spanning around 1 m. It also has bright yellow feet and legs. This species can be found nesting on tall, steep cliff ledges close to large bodies of water. They prefer open habitats such as wetlands, tundra, savanna, sea coasts and mountain meadows for hunting, but may also be found above open forests. This species has also adapted well to living and nesting in urban areas, and has been documented using the ledges of tall buildings and other tall man-made structures for perches and nest sites (1).	No	Known to occur in the general area	No further consideration required	
Bird	Wood Thrush	<i>Hylocichla mustelina</i>	THR	SC	S4B	The Wood Thrush is a medium-sized songbird of around 20 cm with rusty brown coloured upper parts and white underparts with large dark spots. It breeds in deciduous and mixed forests with moderate understoreys, shade and abundant leaf litter where it forages for food, including larval and adult insects as well as plant material. They prefer moist stands of trees with well-developed undergrowth and tall trees for perches (1).	Yes: on-site and adjacent lands	Known to occur in the general area	Potential significant wildlife habitat on-site	
Fish	American Eel	<i>Anguilla rostrata</i>	No Status	END	S1S2	The American Eel is a long, slender bodied fish, with one long fin extending down the back and around the tail, and two small pectoral fins. It has thick lips, and a protruding lower jaw that extends out above the upper jaw. At the juvenile stage, they swim up the St. Lawrence River to reach Lake Ontario and connected tributaries where they will remain for 8 to 23 years before migrating back to their spawning grounds. In Ontario, the American eel prefers mud, sand or gravel substrates during the juvenile stage when they reside primarily in the benthic zone of waterbodies. More mature eels are able to thrive in most environments provided there is available cover during daylight hours, and the habitat is accessible (1).	No	Known to occur in the general area	No further consideration required	
Fish	Lake Sturgeon (Great Lakes / St. Lawrence population)	<i>Acipenser fulvescens</i>	No status	END	S2	The Lake Sturgeon, a large freshwater fish, has an extended snout with four whisker-like organs hanging near the mouth and is dark to light brown or grey on its back and sides with a lighter belly. In Ontario, this fish is found in the rivers of the Hudson Bay Basin, the Great Lakes basin, and their connecting waterways. Lake Sturgeon's live almost exclusively in freshwater lakes and rivers with soft bottoms of mud, sand or gravel and are usually found at depths of 5 to 20 m. They spawn in relatively shallow, fast-flowing water or if available deeper water habitat as well (2).	No	Known to occur in the general area	No further consideration required	
Fish	Northern Sunfish (Great Lakes - Upper St. Lawrence population)	<i>Lepomis peltastes</i>	SC	SC	S3	The Northern Sunfish is a small (about 130 mm long), typical looking member of the sunfish family (Centrarchidae). It has a deep, laterally compressed and olive coloured body with bright blue and red markings. In Ontario, the Northern Sunfish lives in shallow vegetated areas of quiet, slow flowing rivers and streams, as well as warm lakes and ponds, with sandy banks or rocky bottoms. Northern Sunfish prefer to be near aquatic vegetation where they can avoid strong currents. The Great Lakes - Upper St. Lawrence Populations are found throughout southern Ontario including waters flowing into Lake Huron, Georgian Bay, Lake St. Clair, Lake Erie and Lake Ontario, as well as rivers and small lakes in eastern Ontario (1).	No	Known to occur in the general area	No further consideration required	
Fish	Redside Dace	<i>Clinostomus elongatus</i>	END	END	S1	The Redside Dace is a small-bodied fish that is a member of the Minnow family. It averages about 75 millimeters in length and has a flattened body shape. Adults are colourful, with a red stripe on the front half of the body and a yellow stripe that extends almost the full length of the fish. Redside Dace prefer small streams and headwater areas with a gravel bottom. Overhanging grasses and shrubs provide ideal habitat as this species is adapted to jumping up to 10 cm out of the water to feed on insects (2).	No	Known to occur in the general area	No further consideration required	
Fish	Shortnose Cisco	<i>Coregonus reighardi</i>	END	END	SH	The Shortnose Cisco is a member of the whitefish family. It has a short head and snout, small eyes, and a tiny mouth. All of the fins are small compared to its somewhat stocky body, which usually grows to a length of 25 centimetres. The Shortnose Cisco is found only in the Great Lakes of North America. It was last seen in Lake Ontario in 1964 and in Lake Huron in 1985. In Ontario, the Shortnose Cisco lives in the deep, cold water of the Great Lakes, usually at depths between 22 to 110 metres.	No	Known to occur in the general area	No further consideration required	
Fish	Silver Lamprey (Great Lakes - Upper St. Lawrence River population)	<i>Ichthyomyzon unicuspis</i>	SC	SC	S3	The Silver Lamprey is an eel-shaped fish growing from 9 to 39 cm long, with a sucking disc mouth and no jaws or paired fins. They can be different from other lamprey species based on fin shapes and teeth arrangements. Their habitat requirements include clear water, the availability of fish hosts, and relatively clean beds of sand or organic debris (1).	No	Known to occur in the general area	No further consideration required	
Fish	Upper Great Lakes Kiyi	<i>Coregonus kiyi kiyi</i>	SC	SC	S3	The Upper Great Lakes Kiyi, a member of the whitefish subfamily, grows up to 25 cm, has silvery sides with pink or purple iridescence, a dark back, and white underside. Its lower jaw has a distinct projection, extending beyond the upper jaw. It can be found in clear, cold water at depths of 35 to 200 m (1).	No	Known to occur in the general area	No further consideration required	
Insect	Monarch	<i>Danaus plexippus</i>	END	SC	S2N,S4B	The Monarch is an orange and black butterfly with small white spots and a wingspan of around 10 cm. It relies on milkweed plants as a food source for growing caterpillars, but the adult butterflies forage in diverse habitats for nectar from wildflowers (1).	No	Known to occur in the general area	No further consideration required	
Insect	Mottled Duskywing	<i>Erynnis martialis</i>	END	END	S2	The Mottled Duskywing is dark grey with yellow-brown spots on its hind wings that give the species its mottled appearance. It can be found in dry habitats with sparse vegetation, such as open barrens, sandy patches among woodlands and alvars. Scattered populations of this butterfly occur throughout southern Ontario, and have recently been documented in the Burlington and Oakville areas, and in Marmora (east of Peterborough). These butterflies require specific host plants in Ontario on which they lay their eggs: New Jersey Tea and Prairie Redroot (1).	No	Known to occur in the general area	No further consideration required	



TYPE	COMMON NAME	SCIENTIFIC NAME	Federal			SPECIES DESCRIPTION AND HABITAT REQUIREMENTS	SUITABLE HABITAT	SPECIES OBSERVATIONS	ASSESSMENT
			SARA	SARO	S-RANK				
Insect	Rapids Clubtail	<i>Gomphus quadricolor</i>	END	THR	S2	The Rapids Clubtail is a relatively small (42 to 45 millimetre-long), brightly coloured dragonfly. Its eyes are bluish-green, with a light yellowish-green face that is striped with two dark lines, a brownish-black and yellowish-green striped body, and transparent wings. The Rapids Clubtail is typically found in clear, cool medium-to-large rivers with gravel shallows and muddy pools. Larvae occupy quiet muddy pools. Adult males perch on exposed rocks and other projections in the rapids. In Ontario, the Rapids Clubtail has only been found in seven rivers in southern and eastern Ontario: the Thames, Humber, Credit and Mississauga.	No	Known to occur in the general area	No further consideration required
Insect	Yellow-banded Bumble Bee	<i>Bombus terricola</i>	SC	SC	S3S5	The Yellow-banded Bumble Bee is a medium-sized bumble bee with a distinct yellow and black abdominal band pattern found on its queens, males, and workers. This species is a forage and habitat generalist, able to use a variety of nectaring plants and environmental conditions. It can be found in mixed and coniferous woodlands, particularly for nesting and overwintering, as well as a variety of open habitat such as native grasslands, farmlands and urban areas. The Yellow-banded Bumble Bee ranges from the Mixedwood Plains of southern Ontario to the Hudson Bay Lowlands in the north (1). Their nest sites are often found underground in abandoned burrows or decomposing logs.	Yes: on-site and adjacent lands	Known to occur in the general area	Potential significant wildlife habitat on-site
Mammal	Eastern Red Bat	<i>Lasiurus borealis</i>	No Status	END	S3	The Eastern Red Bat is distinguished by fur that is usually orange but varies from yellowish-red to yellowish-grey. White hairs or white-tipped hairs give a frosted appearance. Habitat preference for this species is highly generalized as they prefer either coniferous and deciduous forests of any age class. Roosting occurs among the foliage of trees and occasionally shrubs. Eastern Red Bat are long-distanced migrants, with some individuals living hundreds or thousands of kilometres between summer and winter months. Little is known with respect to migration and hibernation (9).	Yes: on-site and adjacent lands	Known to occur in the general area	Consideration required under the ESA
Mammal	Eastern Small-footed Myotis	<i>Myotis leibii</i>	No Status	END	S2S3	The Eastern Small-footed Myotis has fur with black roots and shiny brown tips as well as very small feet. In the spring and summer, the Eastern Small-footed Myotis will roost in a variety of habitats, including in or under rocks, in rock outcrops, in buildings, under bridges, or in caves, mines, or hollow trees (10). They change their roosting locations daily and hunt at night for insects. They hibernate in winter, often in caves and abandoned mines choosing colder and drier sites than other similar bats (2).	Yes: on-site and adjacent lands	Known to occur in the general area	Consideration required under the ESA
Mammal	Hoary Bat	<i>Lasiurus cinereus</i>	No Status	END	S3	The Hoary Bat is a large-bodied bat and is the largest bodied bat in Canada. It is identified by light fur around its face and neck and white-tipped hairs over most of its body. Hoary Bat is a migratory bat species that migrates long distances between summer breeding habitat and winter range. Typically, Hoary Bat roosts in cavities of trees, which can be found in a broad range of forested habitat types across Ontario (11).	Yes: on-site and adjacent lands	Known to occur in the general area	Consideration required under the ESA
Mammal	Little Brown Myotis	<i>Myotis lucifugus</i>	END	END	S3	The Little Brown Myotis has glossy brown fur and a fleshy projection covering the entrance to its ears. This species roosts in trees and buildings, often selecting attics, abandoned buildings and barns for summer colonies where they can raise their young. Little Brown Bats hibernate from October/November to March/April, most often in caves or abandoned mines that are humid and remain above freezing (12).	Yes: on-site and adjacent lands	Known to occur in the general area	Consideration required under the ESA
Mammal	Northern Myotis	<i>Myotis septentrionalis</i>	END	END	S3	The Northern Myotis has dull yellow-brown fur with pale bellies and long, rounded ears. This species is found in boreal forests, roosting under loose bark and in the cavities of trees. These bats hibernate from October/November to March/April, most often in caves or abandoned mines (2).	Yes: on-site and adjacent lands	Known to occur in the general area	Consideration required under the ESA
Mammal	Silver-haired Bat	<i>Lasionycteris noctivagans</i>	No Status	END	S3	The Silver-haired bat is a dark colored bat, with black skin membranes and black to dark brown fur. The fur often has grey or silver-frosted tips, giving it the silvery appearance for which it is named. This species primarily roosts under loose bark and in cavities of trees, making them reliant on habitat with large decaying trees available. Silver-haired Bats migrate south during the winter months and they may occasionally roost in buildings especially during migration when natural roosting sites are scarce (13).	Yes: on-site and adjacent lands	Known to occur in the general area	Consideration required under the ESA
Mammal	Tri-colored Bat	<i>Perimyotis subflavus</i>	END	END	S3?	The Tri-colored Bat is small, with pale brown with orange-red forearms, muzzle, and ears. It is named for the black, yellow, and brown hairs on its back. It is considered rare in this region of Ontario which is at the northernmost limit of the natural range (1). These bats prefer to nest in foliage, tree cavities and woodpecker holes, but are occasionally found in buildings; though this is not their preferred habitat. Winter hibernation takes place in caves, mines and deep crevices. Tri-colored Bats prefer an open forest habitat type in proximity to water (4).	Yes: on-site and adjacent lands	Known to occur in the general area	Consideration required under the ESA
Plant	American Ginseng	<i>Panax quinquefolius</i>	END	THR	S2	American Ginseng is a perennial plant which grows up to 60 centimetres in height. The leaves typically have five leaflets arranged in a whorl at the end of the leaf stem. The root looks like a gnarly parsnip. The flowers are an inconspicuous green-white in colour, but the berries are bright red and arranged in a cluster. In Ontario, the American Ginseng typically grows in rich, moist, and mature deciduous woods dominated by Sugar Maple, White Ash, and American Basswood. It typically grows in deep, nutrient rich soil over limestone or marble bedrock (1).	No	Known to occur in the general area	No further consideration required
Plant	American Hart's-tongue Fern	<i>Asplenium scolopendrium</i>	SC	SC	S3	American Hart's Tongue Fern is a perennial evergreen fern with fronds growing from a short underground stem. Its blades are strap-shaped with a heart-shaped base and pointed tip. The species grows on calcareous rocks on slopes in deciduous forests, preferring deep shade. In Ontario, most occurrences are in maple-beech forests (1).	No	Known to occur in the general area	No further consideration required
Plant	Black Ash	<i>Fraxinus nigra</i>	No Status	END	S4	The Black Ash is a smaller-sized tree with a narrow crown, light grey and scaly bark, and green, oval leaflets on a central stalk. It grows everywhere in Ontario except for the far north, preferring moist climates and soils such as swampy woodlands or bogs (1).	No	Known to occur in the general area	No further consideration required
Plant	Butternut	<i>Juglans cinerea</i>	END	END	S2?	The Butternut is a medium sized tree reaching 30 m in height. It has large compound leaves with 11 to 17 leaflets. The fruit is oval, fuzzy and sticky. In Ontario, the Butternut prefers moist, well-drained soil, often along streams, or occasionally well-drained gravel sites. It grows alone or in small groups in deciduous forests (1).	No	Known to occur in the general area	No further consideration required
Reptile	Blanding's Turtle	<i>Emydoidea blandingii</i>	END	THR	S3	Blanding's Turtles are identifiable by their bright yellow throat and chin and domed shell. They spend the majority of their life cycle in the aquatic environment, usually in large wetlands or shallow lakes with high densities of water plants (1). These turtles prefer shallow, nutrient rich water with organic sediment and dense vegetation. They use terrestrial sites for travel between habitat patches and to lay clutches of eggs, often going hundreds of meters from their nearest water body. Blanding's Turtles nest in dry coniferous and mixed forest habitats, as well as fields and roadsides (2). From late October until the end of April, they hibernate in the mud at the bottom of permanent water bodies (1).	No	Known to occur in the general area	No further consideration required
Reptile	Eastern Hog-nosed Snake	<i>Heterodon platirhinos</i>	THR	THR	S3	The Eastern Hog-nosed Snake can be a variety of colours and patterns so is most easily identified by its flattened, upturned nose. They prefer sandy well-drained habitats such as beaches and dry forests because they lay their eggs, hibernate and burrow in these areas. The main diet of this snake is toads and frogs, so they usually stay close to water including marshes and swamps, where they have an increased chance of finding their preferred prey (1).	No	Known to occur in the general area	No further consideration required
Reptile	Eastern Milksnake	<i>Lampropeltis triangulum</i>	SC	No Status	S4	The Eastern Milksnake's colouration is grey or tan with reddish alternating blotches often in black along its back and sides (3). It has recently been delisted from being a species at risk in Ontario (1). This species tends to use open habitats such as rocky outcrops, fields and forest edges. The preferred prey of milksnakes are mice, small rodents, and ground nesting birds which are amply found in and surrounding agricultural outbuildings. The milksnake is secretive and is not likely to be encountered during the day or at night while hunting (3).	No	Known to occur in the general area	No further consideration required
Reptile	Eastern Musk Turtle	<i>Sternotherus odoratus</i>	SC	SC	S3	The Eastern Musk Turtle is small with a narrow carapace, a dark brown body and two light stripes on each side of their head (3). It is a small freshwater turtle found primarily in slow moving water bodies with abundant emergent vegetation and mucky bottoms along the southern edge of the Canadian Shield within which they burrow into overwinter. Nesting sites vary, but must be close to the water and exposed to direct sunlight (1).	No	Known to occur in the general area	No further consideration required
Reptile	Eastern Ribbonsnake	<i>Thamnophis sauritus</i>	SC	SC	S4	The Eastern Ribbonsnake is slender with three bright yellow stripes running down its back and sides and a white crescent in front of each eye. This snake is usually found close to water as they are strong swimmers, often fleeing predators by diving into shallow water. It prefers wetland habitats where its prey species, frogs and small fish, are abundant. Over winter, they congregate in underground burrows or rock crevices to hibernate (1).	No	Known to occur in the general area	No further consideration required
Reptile	Midland Painted Turtle	<i>Chrysemys picta marginata</i>	SC	No Status	S4	The Midland Painted Turtle has a olive to black carapace with red or dark orange markings on the marginal scutes, as well as red and yellow stripes on the head and neck. The species uses a variety of waterbodies including, ponds, marshes, lakes and slow-moving creeks with a soft bottom and an abundance of basking sites and aquatic vegetation. This species usually hibernates on the bottom of wetlands with very low oxygen (7).	No	Known to occur in the general area	No further consideration required
Reptile	Northern Map Turtle	<i>Graptemys geographica</i>	SC	SC	S3	The Northern Map Turtle is a medium sized turtle identified by its carapace's map contour-like patterning. It lives in larger lakes and rivers, requiring high water quality to support their primary prey species: molluscs. This species can often be seen in large groups basking together on rocks and logs. In the winter, the Northern Map Turtle can be found hibernating on the bottom of slow-moving rivers (1).	No	Known to occur in the general area	No further consideration required
Reptile	Snapping Turtle	<i>Chelydra serpentina</i>	SC	SC	S4	The Snapping Turtle, with its large serrated carapace, small plastron, and spiked tail, is Canada's largest freshwater turtle (3). It spends the majority of its life in water, preferring shallow water with soft mud and leaf litter, and will travel upland to gravel or sandy embankments, roadsides, along railway lines or beaches to lay their eggs (1).	No	Known to occur in the general area	No further consideration required



Environmental Impact Study - 13286 Nunnville Road, Town of Caledon, Regional Municipality of Peel, Ontario

Adel George

Cambium Reference: 21647-001

December 15, 2025

Appendix D

Vegetation Species List



Appendix D - Plant Species List

Scientific Name	Common Name	Status/Rarity			CC	CW	Vegetation Community
		Federal	Provincial				1
		SARA	SARO	S-Rank			FOD5-7
<i>Acer negundo</i>	Manitoba Maple	-	-	S5	0	0	X
<i>Acer saccharum</i>	Sugar Maple	-	-	S5	4	3	X
<i>Alliaria petiolata</i>	Garlic Mustard	-	-	SNA	-	0	X
<i>Carpinus caroliniana</i>	Blue-beech	-	-	S5	6	0	X
<i>Convallaria majalis</i>	European Lily-of-the-valley	-	-	SNA	-	5	X
<i>Erythronium americanum</i>	Yellow Trout-lily	-	-	S5	5	5	X
<i>Eurybia macrophylla</i>	Large-leaved Aster	-	-	S5	5	5	X
<i>Fraxinus americana</i>	White Ash	-	-	S4	4	3	X
<i>Hydrophyllum virginianum</i>	Virginia Waterleaf	-	-	S5	6	0	X
<i>Juglans nigra</i>	Black Walnut	-	-	S4?	5	3	X
<i>Juniperus virginiana</i>	Eastern Red Cedar	-	-	S5	4	3	X
<i>Malus pumila</i>	Common Apple	-	-	SNA	-	5	X
<i>Parthenocissus quinquefolia</i>	Virginia Creeper	-	-	S4?	6	3	X
<i>Picea abies</i>	Norway Spruce	-	-	SNA	-	5	X
<i>Pinus strobus</i>	Eastern White Pine	-	-	S5	4	3	X
<i>Pinus sylvestris</i>	Scots Pine	-	-	SNA	-	3	X
<i>Podophyllum peltatum</i>	May-apple	-	-	S5	5	3	X
<i>Prunus serotina</i>	Black Cherry	-	-	S5	3	3	X
<i>Prunus virginiana</i>	Chokecherry	-	-	S5	2	3	X
<i>Rhamnus cathartica</i>	European Buckthorn	-	-	SNA	-	0	X
<i>Ribes rubrum</i>	European Red Currant	-	-	SNA	-	5	X
<i>Robinia pseudoacacia</i>	Black Locust	-	-	SNA	-	3	X
<i>Thuja occidentalis</i>	Eastern White Cedar	-	-	S5	4	-3	X
<i>Ulmus americana</i>	White Elm	-	-	S5	3	-3	X
<i>Viburnum lentago</i>	Nannyberry	-	-	S5	4	0	X
<i>Vinca minor</i>	Lesser Periwinkle	-	-	SNA	-	5	X
<i>Viola sororia</i>	Woolly Blue Violet	-	-	S5	4	0	X



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Appendix E
Significant Wildlife Habitat Assessment



APPENDIX: Significant Wildlife Habitat Screening - 5E

SWH Type	Habitat Descriptions & Criteria for Candidate SWH	Listed Species & Defining Criteria for Confirmed SWH	SITE			
			Candidate SWH Criteria Present: Yes/No	Species or Defining Criteria Observations	Candidate/Confirmed /Absent SWH: Area to be Defined & Relevant Notes	Candidate or Confirmed SWH Potentially Present Based on Habitats and Field Observations: Yes/No
Seasonal Concentration Areas of Animals						
Waterfowl Stopover and Staging Areas (Terrestrial)	Meadow, Thicket, or Agricultural Field WITH spring flooding/shed water (Mar-May) AND size potential to support 100+ individuals AND potential established/recurring annual use	American Black Duck, American Wigeon, Blue-winged Teal, Gadwall, Green-winged Teal, Mallard, Northern Pintail, Northern Shoveler, Wood Duck Defining Criteria: 100+ individuals SWH: ecosite + 100-300m radius, dependent on local site conditions and adjacent land use	No	N/A	Absent SWH	No
Waterfowl Stopover and Staging Area (Aquatic)	Marsh, Swamp, Shallow Aquatic, Open Aquatic, reservoirs managed as wetland/ lake/ pond, and agricultural fields AND size potential to support 100+ indiv. for 7+ days *Rare: typically only a few locations per EcoDistrict EXCLUDES SWM and sewage treatment ponds	American Black Duck, American Wigeon, Black Scoter, Blue-winged Teal, Brant, Bufflehead, Cackling Goose, Canada Goose, Canvasback, Common Goldeneye, Common Merganser, Gadwall, Greater Scaup, Green-winged Teal, Hooded Merganser, Lesser Scaup, Long-tailed Duck, Northern Pintail, Northern Shoveler, Red-breasted Merganser, Redhead, Ring-necked duck, Ruddy Duck, Snow Goose, Surf Scoter, White-winged Scoter Defining Criteria: 100+ individuals for 7+ days (>700 waterfowl use days) OR annual staging of Ruddy Ducks, Canvasbacks and Redheads OR wetlands and shorelines associated with sites identified in SWHTG Appendix K SWH: ecosite + 100m radius	No	N/A	Absent SWH	No
Shorebird Migratory Stopover Area	Beach/Bar, Sand Dune, Meadow Marsh, Shorelines of lakes, rivers and wetlands, including armour rock shorelines of Great Lakes WITH size potential to support 100+ Whimbrel OR 3+ species for 1000+ shorebird use days EXCLUDES SWM and sewage treatment ponds	American Golden Plover, Baird's Sandpiper, Black-bellied Plover, Dunlin, Greater Yellowlegs, Hudsonian Godwit, Least Sandpiper, Lesser Yellowlegs, Marbled Godwit, Pectoral Sandpiper, Purple Sandpiper, Red-necked Phalarope, Ruddy Turnstone, Sanderling, Semipalmated Plover, Semipalmated Sandpiper, Short-billed Dowitcher, Solitary Sandpiper, Spotted Sandpiper, Silt Sandpiper, Whimbrel, White-rumped Sandpiper Defining Criteria to Confirm: 3+ species and 1000+ shorebird use days (#birds x days) OR 100+ Whimbrel for at least 3 yrs (makes brief stops of <24 hrs during migration) SWH: ecosite + 100m radius	No	N/A	Absent SWH	No
Raptor Wintering Area	COMBINATION of Forest, Meadow, Thicket, Savannah, Woodland or lightly grazed pasture of combined 20+ha area WITH 15+ha of the area consisting of open habitat. Fields should be wind swept with limited snow accumulation / depth	Hawks: Rough-legged Hawk Owls: Boreal Owl, Long-eared Owl, Northern Saw-whet Owl, Short-eared Owl Defining Criteria: 1+ Short-eared Owl OR 10+ individuals of 2+ listed species AND used regularly (at least 20 days during each year for at least 3 in 5 years) SWH: not specified in Criteria Schedules	No	N/A	Absent SWH	No
Bat Hibernacula	Caves, Crevices, Karsts, Abandoned Mines *Calcareous bedrock is fairly rare in 5E EXCLUDES buildings and active mines	Big Brown Bat, Tri-coloured Bat Defining Criteria: all sites with confirmed hibernacula are SWH SWH: entrance + 1000m radius for wind farms OR + 200m radius for other projects	No	N/A	Absent SWH	No
Bat Maternity Colonies	Mature (dominant trees >80yrs old) Deciduous or Mixed Forests and Tread Swamps EXCLUDES Coniferous Forests and Tread Swamps and buildings	Big Brown Bat, Silver-haired Bat Defining Criteria: 10+ha cavity trees WITH 25+ cm dbh AND >10 Big Brown Bats OR >5 adult female Silver-haired Bats (trees in lesser decay categories (1-3) preferred) SWH: entire woodland, Ecosite, or Ecoelement containing the maternity colonies	Yes	Entire Site is covered in forest.	Candidate SWH	Yes
Turtle Wintering Area (Painted and Snapping Turtles)	Swamp, Marsh, Shallow Aquatic, Open Aquatic, Open Fen, Open Bog WITH soft mud substrates AND enough depth to maintain free water beneath ice AND adequate dissolved oxygen EXCLUDES man-made ponds such as SWM and sewage treatment ponds	Midland Painted Turtle, Snapping Turtle Defining Criteria: 5+ Painted Turtles OR 1+ Snapping Turtle SWH: ecosite	No	N/A	Absent SWH	No
Turtle Wintering Area (Northern Map Turtle)	Open Aquatic, including deeper rivers or streams and lakes WITH current AND soft mud substrates AND enough depth to maintain free water beneath ice AND adequate dissolved oxygen EXCLUDES man-made ponds such as SWM and sewage treatment ponds	Northern Map Turtle Defining Criteria: 1+ Northern Map Turtle SWH: ecosite OR the pool where overwintering occurs in a stream/river	No	N/A	Absent SWH	No
Reptile Hibernaculum (Snakes)	Talus, Rock Barren, Crevice, Cave, Alvar or certain Wetlands (conifer/shrub swamps/swales, poor fens, depressions in bedrock terrain with sparse trees/shrubs and sphagnum or sedge hummocks), broken/fissured bedrock, rock piles or slopes, old stone fences, or abandoned crumbling foundations WITH openings below frost line	Eastern Gartersnake, Eastern Ribbonsnake, Milksnake, Northern Brownsnake, Northern Red-bellied Snake, Northern Ring-necked, Northern Watersnake, Smooth Green Snake Defining Criteria: 5+ individuals of a species OR any number of snakes of 2+ species OR presence of a Special Concern species AND observed near a potential hibernacula on warm sunny days in spring and fall SWH: feature containing hibernacula + 30 m radius	No	N/A	Absent SWH	No
Reptile Hibernaculum (Five-lined Skink)	Mixed Forests, Deciduous Forest, or Coniferous Forest dominated by Pine/Hemlock WITH cover rocks overlying fissured granite bedrock	Five-lined Skink Defining Criteria: All sites with active Skink hibernacula SWH: feature containing hibernacula +30 m radius	No	N/A	Absent SWH	No
Colonially-nesting Bird Breeding Habitat (Bank and Cliff)	Eroding banks, sandy hills/piles, pits, steep slopes, cliff faces WITH size potential to support 8+ nests EXCLUDES all man-made structures (bridge abutments, silos, barns, etc.) AND recently (2 years) disturbed soil (berms, embankments, stock piles, aggregate operations)	Cliff Swallow, Northern Rough-winged Swallow (this species is not colonial but can be found in Cliff Swallow colonies) Defining Criteria: 1+ nesting site with 8+ pairs SWH: peripheral nests + 50m radius	No	N/A	Absent SWH	No
Colonially-nesting Bird Breeding Habitat (Tree/Shrubs)	Mixed Swamp (excluding those dominated by Cedar) or Tread Fen, lake shorelines/ islands/ peninsulas WITH size to support 5+ nests; Nests are typically 11-15 m above ground near top of live or dead standing trees / occasionally in shrubs and emergents	Black-crowned Night Heron, Great Blue Heron Defining Criteria: 10+ active nests of Great Blue Heron OR 1+ active nest of Black-crowned Night Heron SWH: edge of the colony + 300+m radius OR extent of the forest ecosite OR any island <15ha	No	N/A	Absent SWH	No
Colonially-nesting Bird Breeding Habitat (Ground; Terns and Gulls)	Rocky island or peninsula (natural or artificial) in lake or large river WITH Meadow Marsh, Shallow Marsh, Shallow Aquatic, or Open Aquatic	Caspian Tern, Common Tern, Great Black-backed Gull, Herring Gull, Little Gull, Ring-billed Gull Defining Criteria: 25+ active Herring Gull or Ring-billed Gull nests OR 5+ active Common Tern nests OR 2+ active Caspian Tern nests OR 1+ active Little Gull or Great Black-backed Gull nest SWH: edge of the colony + 150+m radius OR the ecosites containing the colony OR any island <3ha	No	N/A	Absent SWH	No
Colonially-nesting Bird Breeding Habitat (Ground; Brewer's Blackbird)	Close proximity to watercourses in pastures, Meadows, Thickets, Savannah, Meadow Marsh, Shallow Marsh AND scattered trees or shrubs	Brewer's Blackbird Defining Criteria: 5+ pairs SWH: edge of the colony + 150+m radius OR the ecosites containing the colony OR any island <3ha	No	N/A	Absent SWH	No
Deer Yarding Areas	Stratum I (Core): Coniferous Forest or Swamp WITH 60+% canopy cover by Pine, Hemlock, Cedar, or Spruce Stratum II (typically surrounds Stratum I): Mixed or Deciduous Forest or Swamp WITH plenty of browse (esp. those dominated by Poplar or Birch); can include agricultural fields EXCLUDES woodlots with high densities of deer due to artificial feeding	White-tailed Deer Presence is determined by MNRF If present, consider Movement Corridors	No	N/A	Absent SWH	No
Rare Vegetation Communities						



APPENDIX: Significant Wildlife Habitat Screening - 5E

SWH Type	Habitat Descriptions & Criteria for Candidate SWH	Listed Species & Defining Criteria for Confirmed SWH	SITE			
			Candidate SWH Criteria Present: Yes/No	Species or Defining Criteria Observations	Candidate/Confirmed /Absent SWH: Area to be Defined & Relevant Notes	Candidate or Confirmed SWH Potentially Present Based on Habitats and Field Observations: Yes/No
Beach/Beach Ridge/Bar/Sand Dunes	Beach/Bar, Sand Dune, Shoreline WITH <60% tree cover; characterized by unstable sand	Indicator Species: American Beachgrass, Beach Pea Defining Criteria: 1+ indicator sp SWH: ecosite	No	N/A	Absent SWH	No
Shallow Atlantic Coastal Marsh	Meadow Marsh, Shallow Marsh, Floating-leaved Shallow Aquatic on inland lakes AND associated with low wave action, sand and sandy peat substrates in areas with seasonally fluctuating water levels (i.e., some years with exposed shorelines in summer/fall) such as inland lakes and beaver ponds	Indicator Species: Virginia Meadow Beauty Other Associated Species: Bayonet Rush, Bog Yellow-eyed-grass, Carey's Smartweed, Sand Panicgrass, Small-headed Beakrush, Virginia St. John's-wort Defining Criteria: Virginia Meadow Beauty AND 4+ other associated sp SWH: ecosite	No	N/A	Absent SWH	No
Cliffs and Talus Slopes	Cliff (near vertical bedrock 3+m tall) OR Talus slope (coarse rock rubble at base of cliff) WITH <60% tree cover (patchy to barren)	Rock Tripe Lichen (Umbilicaria spp.), Alpine Woodsia, Fragile Fern, Fragrant Cliff Fern, Laurentian Woodsia, Rock Polypody, Rusty Woodsia, Steller's Rockbrake, White Mountain Saxifrage Defining Criteria: Any population of Fragrant Cliff Fern or Laurentian Woods OR Umbilicaria spp AND 3+ other listed sp SWH: ecosite	No	N/A	Absent SWH	No
Rock Barren (Precambrian Rock)	Rock Barren WITH size of 1+ha AND relatively undisturbed AND tree cover <60%	Reindeer lichens (Cladonia spp.), Haircap mosses (Polytrichum spp.), Poverty Oatgrass, Wavy Hairgrass, Common Juniper, Early Lowbush Blueberry, Sweet-fern, White Oak, Red Oak, Eastern White Pine, Bracken Fern, Bristly Sarsaparilla, Case's Ladies'-tresses, Early Saxifrage, Black Huckleberry, Pale Corydalis, Pin Cherry, Bastard Toadflax Defining Criteria: >4 listed sp AND a relatively undisturbed site SWH: ecosite	No	N/A	Absent SWH	No
Sand Barren	Sand Barren AND <60% tree cover; usually located within forest or savannah, caused by lack of moisture, periodic fires and erosion	Reindeer Lichens (Cladonia spp.), Houghton's Sedge, Fernald's Sedge, Labrador Violet, Northern Dewberry, Northern Jointweed, Plains Porcupine Grass, Rock Spikemoss, Sweet-fern Defining Criteria: 1+ listed sp AND <50% cover by exotic/invasive species SWH: ecosite	No	N/A	Absent SWH	No
Alvar	Alvar, Coniferous Forest dominated by Pine or Cedar, Bedrock Cultural Meadow, Juniper Bedrock Alvar Cultural Thicket, Bedrock Cultural Savannah (CUS2), Bedrock Cultural Woodland (CUW2) WITH size 0.5+ha AND <60% tree cover; typically level mosaic of rock pavements and bedrock overlain by thin veneer of soil	Indicator Species: Balsam Groundsel, Fragrant Sumac, Hairy Beardtongue, Philadelphia Panicgrass, Small Skullcap, Wild Bergamot Defining Criteria: 1+ indicator sp AND <50% cover by exotic/invasive species AND its surrounding landscape with few conflicting land uses SWH: ecosite	No	N/A	Absent SWH	No
Old Growth Forest	Forest, Treed Swamp WITH size of 30+ha WITH 10+ha interior habitat (measured 100 m from forest edge)	No listed species Defining Criteria: 140+ year old trees of dominant tree species AND no cut stumps or other signs of logging SWH: ecosites OR ecoelement containing old growth characteristics	No	N/A	Absent SWH	No
Bog	Bog of any size	Sphagnum moss, ericaceous shrubs, sedges Defining Criteria: no additional criteria SWH: ecosite	No	N/A	Absent SWH	No
Tallgrass Prairie	Tallgrass Prairie of any size WITH <25 tree cover; may be natural or restored; primarily along shorelines in 5E EXCLUDES remnant sites such as railway right of ways	Indicator Species: Big Bluestem, Prairie Cordgrass Characteristic Species: Black-eyed Susan, Hairy Beardtongue, Kalm's Brome, Large-pod Pinweed, Narrow-leaved New Jersey Tea, Ovate-leaved Violet, Racemed Milkwort, Wild Bergamot, Yellow Indiangrass Defining Criteria: 1+ indicator sp AND 2+ characteristic species AND <50% cover by exotic/invasive species SWH: ecosite	No	N/A	Absent SWH	No
Savannah	Tallgrass Savannah, Tallgrass Woodland, Cultural Savannah of any size WITH tree cover 25-60%; may be natural or restored	Indicator Species (SHWTG Appendix N - use 6E): Dwarf Hackberry, Early-branching Panicgrass, Illinois Tick-trefoil, Redtop Panicgrass, Side-oats Gramma, Small-leaved Tick-trefoil, White Prairie Gentian Defining Criteria: 1+ of the listed species AND <50% cover by exotic/invasive species SWH: ecosite	No	N/A	Absent SWH	No
Rare Forest Type - Red Spruce Forest	Coniferous Forest and Coniferous Swamps/Bottomlands of any size WITH Red Spruce, often on shallow till soils, organic soils over rock, or steeper slopes	Red Spruce (similar to and hybridizes with Black Spruce) Defining Criteria: >10% cover by Red Spruce SWH: ecosite	No	N/A	Absent SWH	No
Rare Forest Type - White Oak Forest	Deciduous or Mixed Forest of any size WITH White Oak	White Oak Defining Criteria: >10% cover by White Oak SWH: ecosite	No	N/A	Absent SWH	No
Specialized Habitat for Wildlife						
Waterfowl Nesting Area	Upland habitats 120+m wide AND adjacent shallow aquatic, shallow marsh, meadow marsh, thicket swamp, or deciduous treed swamp (i.e., all wetlands excluding coniferous and mixed treed swamps). Wetlands must be >0.5 ha or a cluster of three or more <0.5 ha wetlands within 120 m of each other where waterfowl nesting is known to occur *Wood Ducks Bufflehead, Common Goldeneye, and Hooded Mergansers utilize large diameter trees (>40cm dbh) in woodlands for cavity nest sites	American Black Duck, American Widgeon, Blue-winged Teal, Bufflehead, Canada Goose, Common Goldeneye, Common Merganser, Gadwall, Green-winged Teal, Hooded Merganser, Mallard, Northern Pintail, Northern Shoveler, Red-breasted Merganser, Wood Duck Defining Criteria: 1+ nesting site of American Black Duck OR 10+ nesting pairs (including Mallards) OR 3+ nesting pairs (excluding Mallards) SWH: 120 m radius (+/- as determined by site-specific study) of upland habitat adjacent to a wetland	No	N/A	Absent SWH	No
Bald Eagle and Osprey Nesting, Foraging, and Perching Habitat	Forest, Swamp AND directly adjacent to shoreline/riparian areas of rivers, lakes, ponds, wetlands EXCLUDES nests on man-made objects (e.g., telephone poles, constructed platforms)	Osprey, Bald Eagle Defining Criteria: 1+ active nest AND known to be used annually; to be excluded nests must be known to be inactive for 3+ yrs or suspected to be inactive for 5+ yrs SWH: Osprey: active nest +300m radius OR contiguous woodland; Bald Eagle: active nest +400-800m radius	No	N/A	Absent SWH	No
Woodland Raptor Nesting Habitat	Forest, Treed Swamp, Coniferous Plantations WITH size 30+ha AND 4+ha of interior habitat (measured 200m from the forest edge)	Broad-winged Hawk, Cooper's Hawk, Merlin, Northern Goshawk, Red-shouldered Hawk, Red-tailed Hawk, Sharp-shinned Hawk, Barred Owl, Great-horned Owl Defining Criteria: 1+ active nest SWH: Red-shouldered Hawk, Northern Goshawk: active nest +400m radius OR 28ha suitable habitat; Barred Owl: active nest +200m radius; Broad-winged Hawk, Coopers Hawk, Great-horned Owl, Red-tailed Hawk: active nest +100m radius; Merlin, Sharp-shinned Hawk: active nest +50m radius	No	N/A	Absent SWH	No
Turtle Nesting Areas	Open sand and gravel WITH adjacent Bog, Fen, Meadow Marsh, Floating Marsh, or undisturbed shallow weedy areas of marshes, lakes, and rivers EXCLUDES habitat along municipal or provincial roads	Midland Painted Turtle, Snapping Turtle, Northern Map Turtle Defining Criteria: 5+ nesting Midland Painted OR 1+ nesting Northern Map or Snapping Turtle SWH: nesting area + 30-100m radius, depending on slope, riparian vegetation, adjacent land use, and consideration of travel routes to/from nest sites	No	N/A	Absent SWH	No



APPENDIX: Significant Wildlife Habitat Screening - 5E

SWH Type	Habitat Descriptions & Criteria for Candidate SWH	Listed Species & Defining Criteria for Confirmed SWH	SITE		ADJACENT LANDS	
			Candidate SWH Criteria Present: Yes/No	Species or Defining Criteria Observations	Candidate/Confirmed /Absent SWH: Area to be Defined & Relevant Notes	Candidate or Confirmed SWH Potentially Present Based on Habitats and Field Observations: Yes/No
Lizard Nesting Areas	Deciduous and Mixed Forest; skink nests in logs, in stumps or under loose rock in partially wooded areas	Five-lined Skink Defining Criteria: 1+ nesting skink SWH: active nest +30m radius	No	N/A	Absent SWH	No
Seeps and Springs	Forest in headwaters area of a stream/river system; important wildlife feeding/drinking areas, especially in the winter	Wild Turkey, Ruffed Grouse, Spruce Grouse, Moose, White-tailed Deer, Salamander spp. Defining Criteria: 2+ seeps/springs SWH: ecotone/edge; may include adjacent habitats pending consideration of: slope, vegetation, height of trees and groundwater condition	No	N/A	Absent SWH	No
Aquatic Feeding Habitat	Wetlands or isolated embayments that provide an abundance of submerged aquatic vegetation (Pondweeds, Water Milfoil, and Yellow Water Lily preferred) WITH adjacent Conifer/Mixed Forest	Moose, White-tailed Deer *Mapped by MNRFP on Crown Land Defining Criteria: observed or demonstrated (tracks, scat) moose use SWH: wetland +120m adjacent mixed or conifer forest, particularly those that provide thermal cover and/or travel corridors to other habitat features If present, consider travel corridor SWH	No	N/A	Absent SWH	No
Mineral Licks	Forest WITH upwelling groundwater	Moose, White-tailed Deer Survey: Observational survey in early spring prior to leaf out Defining Criteria: confirmed habitat SWH: wetland ecotone, seep or spring +100-200m radius of contiguous forest habitat, depending on level of disturbance	No	N/A	Absent SWH	No
Denning Sites for Mink, Otter, Marten, Fisher and Eastern Wolf	All species: Forest ecotones Mink: Shorelines dominated by Coniferous or Mixed forest; occasionally old muskrat lodges for denning Otters: Undisturbed Shorelines with productive fish populations, abundant shrubby vegetation and downed woody debris; often use beaver lodges, log jams or rock piles for denning Marten and Fisher: Large tracts of Coniferous or Mixed Forest of mature or older age classes, often use cavities in large trees or under large downed woody debris	Mink, Otter, Marten, Fisher, Grey Wolf, Eastern Wolf Defining Criteria: confirmed active den SWH: known Wolf den +200m radius OR known den of any other listed species +100m radius	No	N/A	Absent SWH	No
Amphibian Breeding Habitat (Woodland)	Wetland, pond or breeding pool, including vernal pools WITH size of 500+m ² (~25m diameter) AND located in or within 120m of Forest or Treed Swamp *Permanent ponds or those containing water until at least mid-July are preferred	Blue-spotted Salamander, Eastern Newt, Spotted Salamander, Four-toed Salamander, Northern Two-lined Salamander, Spring Peeper, Wood Frog, American toad Defining Criteria: 1+ breeding salamander sp OR 2+ breeding frog sp WITH 20+ individuals (adults or eggs masses) / Call Level Code 3 SWH: breeding pond/wetland +230m radius of woodland habitat If present adjacent to woodland, travel corridor SWH is to be included	Yes	Community 1 and 2 are swamp communities > 500 m ² and are part of a larger woodland.	Candidate SWH	Yes
Amphibian Breeding Habitat (Wetlands)	Swamp, Fen, Bog, Meadow Marsh, Shallow Marsh, Shallow Aquatic, Open Aquatic WITH size of 500+m ² (~25 m diameter) AND typically >120 m from Forest except in the case of larger habitats containing predominantly aquatic species (e.g., Bullfrog) which may have riparian Forest *Shrubs and logs increase significance for some species because of structure for calling, foraging, escape, and concealment from predators	Blue-spotted Salamander, Eastern Newt, Four-toed Salamander, Spotted Salamander, American Toad, Bullfrog, Gray Treefrog, Green Frog, Mink Frog, Northern Leopard Frog, Pickerel Frog, Western Chorus Frog Defining Criteria: 1+ breeding salamander sp OR 3+ breeding frog/toad sp WITH 20+ individuals (adults or eggs masses) / Call Level Code 3 OR any number of breeding Bullfrogs SWH: wetland ecotone + adjacent shoreline If present, travel corridor SWH is to be considered	No	All wetlands are within 120m of a forest.	Absent SWH	No
Mast Producing Areas	Deciduous and Mixed Forests >0.5ha WITH >50% cover by mast producing tree species of >40-65cm dbh OR opening within Forest with >50% cover by mast producing shrub species Temporary clearings such as burns or clear-cuts are less significant	Tree Species: Beech, Red Oak, Basswood, Black Cherry, Butternut, Hickory, Ironwood, Mountain Ash, Pin Cherry Sprub Species: Beaked Hazel, Blackberry, Blueberry, Choke Cherry, Hawthorn, Raspberry, Serviceberry Associated wildlife: Black Bear, Ruffed Grouse, White-tailed Deer, Wild Turkey Defining Criteria: Forest with >50% cover by mature (>40-65cm dbh) mast producing tree species OR opening within Forest with >50% cover by mast producing shrub species SWH: ecotone or ecotone with suitable habitat	No	N/A	Absent SWH	No



APPENDIX: Significant Wildlife Habitat Screening - 5E

SWH Type	Habitat Descriptions & Criteria for Candidate SWH	Listed Species & Defining Criteria for Confirmed SWH	SITE		ADJACENT LANDS
			Candidate SWH Criteria Present: Yes/No	Species or Defining Criteria Observations	Candidate/Confirmed /Absent SWH: Area to be Defined & Relevant Notes
Habitat of Species of Conservation Concern					
Marsh Bird Breeding Habitat	Wetland WITH shallow water AND emergent vegetation *Green Heron prefers edge of water (sluggish streams, ponds, marshes sheltered by shrubs and trees), but can also be found in upland shrubs or forest a considerable distance from water	American Bittern, American Coot, Black Tern, Common Loon, Common Moorhen, Green Heron, Lesser Scaup, Sora, Marsh Wren, Pie-billed Grebe, Redhead, Red-necked Grebe, Ring-necked Duck, Ruddy Duck, Sandhill Crane, Sedge Wren, Trumpeter Swan, Wilson's Phalarope, Yellow Rail Defining Criteria: 1+ breeding Black Tern, Trumpeter Swan, Green Heron, Yellow Rail or Sandhill Crane OR 5+ nesting pairs of Sedge Wren or Marsh Wren OR breeding by 5+ other listed species SWH: ecostite	No	N/A	Absent SWH No
Open Country Bird Breeding Habitat	Natural and Cultural Meadows WITH size 30+ha AND history of longevity; present for at least 5 years EXCLUDES Class 1 or 2 agricultural lands AND lands being actively used for row crops, intensive hay or pasture in the last 5 years	Grasshopper Sparrow, Northern Harrier, Savannah Sparrow, Short-eared Owl, Upland Sandpiper, Vesper Sparrow Defining Criteria: nesting/breeding of 2+ listed species OR 1+ breeding Short-eared Owl SWH: contiguous ecostite field habitats	No	N/A	Absent SWH No
Shrub/Early Successional Bird Breeding Habitat	Field habitats succeeding to Cultural Woodland, Cultural Savannah or Cultural Thicket WITH size of 30+ha AND history of longevity; abandoned fields or lightly grazed pastures EXCLUDES Class 1 or 2 agricultural lands AND lands being actively used for row crops, hay or intensive pasture in the last 5 years	Black-billed Cuckoo, Blue-winged Warbler, Brown Thrasher, Clay-coloured Sparrow, Eastern Towhee, Field Sparrow, Golden-winged Warbler, Prairie Warbler, Tennessee Warbler, Willow Flycatcher Defining Criteria: nesting/breeding of 2+ listed species OR 1+ breeding Golden-winged Warbler SWH: contiguous ecostite field/thicket habitats	No	N/A	Absent SWH No
Special Concern and Rare Wildlife Species	Any - varies by species; habitat needs to cover an important life stage component (e.g., nesting, foraging, or wintering habitat)	Species that are ranked S1-S3 by the NHIC and/or are provincially tracked Species with populations that are significantly declining or have a high percentage of their global population in Ontario Species listed as special concern under the ESA Species listed as threatened or endangered under SARA only Regionally or locally rare species, where lists are available Defining Criteria: no additional criteria SWH: finest scale that protects the habitat form and function	Yes	See Species at Risk Screening Table	Candidate SWH No
Animal Movement Corridors					
Amphibian Movement Corridors	Any habitat associated with water; shorter corridors are more significant than longer corridors *potential determined based on identification of Amphibian Breeding SWH	Blue-spotted Salamander, Eastern Newt, Spotted Salamander, Gray Treefrog, Spring Peeper, Western Chorus Frog, Wood Frog Defining Criteria: allowing amphibians to travel between summer and breeding habitat; several layers of native vegetation; ideally unbroken by roads, waterways, waterbodies, and development; gaps <20 m SWH: 15-m on both sides of a waterway/ecostite OR up to 200m wide in woodland habitats with gaps <20 m	No	N/A	Absent SWH No
Cervid Movement Corridors	Any forested habitat; shorter corridors are more significant than longer corridors; typically follow riparian areas, woodlots, areas of physical geography (ravines or ridges) *potential determined based on identification of Deer Wintering SWH, Moose Aquatic Feeding Area SWH or Mineral Lick SWH	White-tailed Deer, Moose Defining Criteria: allowing cervids to move to and from yard, mineral lick or aquatic feeding area; should be unbroken by roads and residential areas SWH: 15-m on both sides of a waterway/ecostite OR up to 200m wide with gaps <20m	No	N/A	Absent SWH No



APPENDIX: Significant Wildlife Habitat Screening - 5E

SWH Type	Habitat Descriptions & Criteria for Candidate SWH	Listed Species & Defining Criteria for Confirmed SWH	SITE			ADJACENT LANDS
			Candidate SWH Criteria Present: Yes/No	Species or Defining Criteria Observations	Candidate/Confirmed /Absent SWH: Area to be Defined & Relevant Notes	Candidate or Confirmed SWH Potentially Present Based on Habitats and Field Observations: Yes/No
Furbearer Movement Corridor	Any Forest habitat within/adjacent to shoreline *potential determined based on identification of Denning Site SWH for <u>Mink or Otter</u>	Mink, Otter Defining Criteria: no additional criteria SWH: not identified in Criteria Schedules	No	N/A	Absent SWH	No
Ecoregion 5E-11 Only:						
Rare Forest Type - Jack Pine	ELC Ecosites: G012 G023 G034-G035 G049 G065 G068 G082-G083 G098-G099 G114 Forest Ecosystems of Central Ontario: ES13.1 ES13.2 ES15.1 ES.15.2	Jack Pine Defining Criteria: Any Forest ecosite of any size <u>WITH</u> 40% or more Jack Pine SWH: ecosite	No	N/A	Absent SWH	No