Environmental Approvals

Fisheries & Aquatic Ecology

Terrestrial & Wetland Ecology

Environmental Engineering

Hydrogeology & Contaminant Hydrogeology

Arborist Services

Environmental Site Assessment

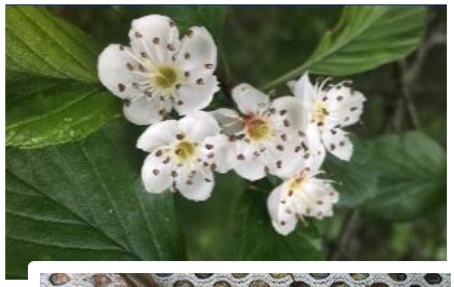
Species at Risk

Project Management

Environmental Impact Assessment

Water and Wastewater Engineering

Environmental Site Inspection / Construction Monitoring











Environmental Impact Study

Bridle Park (Stayner)

Part of Lot 26, Concession 3

Township of Clearview

Prepared for Bruno Nazzicone

AEC Project No. 25-250b | August 2026

AZIMUTH ENVIRONMENTAL CONSULTING, INC.

Environmental Assessments & Approvals

August 27, 2026 AEC 25-250b

1000983019 Ontario Ltd.
105B Winges Road
Woodbridge Ontario
L4L 6C2

Attention: Bruno Nazzicone, Vice-President, Land Development, Kingsmen Group

Re: **Environmental Impact Study for a Proposed Development on Part of Lot 26, Concession 3, Township of Clearview, County of Simcoe**

Bruno Nazzicone:

Azimuth Environmental Consulting, Inc. was retained to provide an Environmental Impact Study report for the proposed Bridle Park residential development on Part of Lot 26, Concession 3, Township of Clearview, County of Simcoe. The purpose of this report is to provide the Township of Clearview, Nottawasaga Valley Conservation Authority, and other review agencies with an understanding of natural environmental conditions and potential for impacts related to the proposed development on significant natural heritage features and functions of the subject lands and adjacent lands. This report also documents the natural environmental features present within the subject lands and adjacent lands with regard to Species at Risk and their habitats.

Should you have any questions or require additional information please do not hesitate to contact the undersigned.

Yours truly,
AZIMUTH ENVIRONMENTAL CONSULTING, INC.

Alexa Pompilio-Grant, H.B.Sc.
Terrestrial Ecologist

Roger Holmes, M.Sc.
Senior Fisheries Ecologist

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1.0 INTRODUCTION

Azimuth Environmental Consulting, Inc. (Azimuth) was retained by 1000983019 Ontario Ltd. (the "proponent") to undertake an Environmental Impact Study (EIS) for a proposed residential development on Part of Lot 26, Concession 3, Township of Clearview (the "Township"), County of Simcoe (the "County"), referred to as "Bridle Park'. A map illustrating the limits of the property in its regional context is shown on Figure 1. It is our understanding that an EIS is required due to presence of mapped natural heritage features including Unevaluated Wetlands and fish habitat within the study area.

The study area, including the proposed development footprint, is mapped within the jurisdiction of the Nottawasaga Valley Conservation Authority (NVCA), therefore a work permit under Ontario Regulation (O. Reg.) 41/24 may be required to proceed with the proposed development.

This purpose of this EIS is to identify the potential Key Natural Heritage Features (KNHFs) present within the study area and address potential impacts to potential KNHFs. Azimuth was retained in 2022 by a previous landowner to undertake a review of background information and complete a detailed suite of natural heritage studies relating to Species at Risk (SAR) and a fisheries assessment. The 2022 fieldwork was intended to supplement an existing EIS completed for the property by Dillon Consulting, Ltd. ("Dillon", Dillon Consulting Ltd., 2013). Following the change in land ownership after the 2022 field work, the current proponent retained Azimuth to complete the additional studies necessary to support a contemporary EIS report for the proposed development concept; as such, supplementary field studies were undertaken in summer 2025. In addition to KNHFs, this report examines potential for SAR protected under the *Species Conservation Act,* 2025 (SCA) to occur within the study area. The potential for negative impacts to natural heritage features resulting from the proposed development is considered, and recommendations for avoidance and mitigation are provided.

For the purposes of this EIS, the study area described in this report includes the property on Figures 1-3 and adjacent lands (within approximately 120 metres (m)) of the property limits. Natural features in the overall planning area beyond the defined study area limits are discussed where applicable throughout this report.

Note that Bridle Park and property to the north ("Clearview Garden Estates") were both owned by the previous landowner in 2022 and are now both owned by the current landowner. As such, Azimuth had access to both the Bridle Park and Clearview Garden Estates properties during the 2022 and 2025 field seasons. Consequently, Azimuth had permission to collect field information

on adjacent lands, and figures and assessments within this report reference conditions reported for the northern Clearview Garden Estates property where relevant.

2.0 PLANNING CONTEXT

2.1 Provincial Planning Statement (2024)

The Provincial Planning Statement (PPS) (MMAH, 2024) outlines policies related to natural heritage features (Section 4.1) and water resources (Section 4.2). Ontario's *Planning Act*, (1990) requires that planning decisions shall be consistent with the PPS. The study area for this assessment is located entirely within **Ecoregion 6E**. According to the PPS development and site alteration shall not be permitted in:

- *Significant wetlands* in Ecoregions 5E, 6E and 7E; and,
- *Significant coastal wetlands*.

Similarly, Section 4.1.5 of the PPS states that, unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions, development and site alteration shall not be permitted within:

a) *significant wetlands* in the Canadian Shield north of Ecoregions 5E, 6E; and 7E;
b) *significant woodlands* in Ecoregions 6E; and 7E;
c) *significant valleylands* in Ecoregions 6E; and 7E;
d) *significant wildlife habitat*;
e) *significant areas of natural and scientific interest*; and,
f) *coastal wetlands* in Ecoregions 5E, 6E; and 7E that are not subject to policy 4.1.4(b).

It is ultimately the responsibility of the Province and/or the Municipality to designate areas identified within Section 4.1.4 and 4.1.5 of the PPS as “significant”.

Section 4.1.6 of the PPS states that development and site alteration is not permitted in fish habitat except in accordance with federal and provincial requirements.

Section 4.1.7 of the PPS states that development and site alteration shall not be permitted in the habitat of Threatened and Endangered species, except in accordance with provincial and federal requirements.

Furthermore, under Section 4.1.8 of the PPS, no development or site alteration will be permitted on lands adjacent to natural heritage features and areas identified in policies 4.1.4, 4.1.5 and 4.1.6 unless the ecological function of the adjacent lands has been evaluated and it has been demonstrated there will be no negative impacts on the natural features and their ecological functions.

2.2 Species Conservation Act, 2025

Ontario's SCA provides regulatory protection to Endangered and Threatened species listed as Protected Species in Ontario, through regulation of harm and/or killing of individuals and destruction of their habitats. In the case that an activity may result in the killing and/or harming of Threatened or Endangered species and their habitats, the activity must remain in compliance with Section 16 of the SCA which outlines processes for demonstration of conformity with the SCA, such as filing of a Registration including a Conservation Plan and subsequent monitoring.

The SCA defines "habitat" to include:

2 (1) (a) in respect of an animal species,

(i) a dwelling-place, such as a den, nest or other similar place, that is occupied or habitually occupied by one or more members of a species for the purposes of breeding, rearing, staging, wintering or hibernating, and

(ii) the area immediately around a dwelling place described in subclause (i) that is essential for the purposes set out in that subclause.

(b) in respect of a vascular plant species, the critical root zone surrounding a member of the species, and

(c) in respect of all other species, an area on which any member of a species directly depends in order to carry on its life processes; ("habitat")".

The various schedules of the SCA included under O. Reg. 60/26 identify SAR in Ontario. These include species listed as Extirpated, Endangered and Threatened. As noted above, only species listed as Endangered or Threatened receive protection from harm and destruction to habitat on which they depend. Migratory birds protected under the *Migratory Birds Convention Act,* 1994 (MBCA) and aquatic species listed under the federal *Species at Risk Act* (SARA) are not afforded protection under the SCA, therefore species and habitat protections for these taxa are considered under the federal legislative framework.

2.3 Species at Risk Act

The federal *Species at Risk Act* (SARA; 2002) provides regulatory protection to species designated as Endangered or Threatened under the Act through prohibition of killing, harm, or harassment of individual listed wildlife species (Section 32) or their residence (Section 33). A species' residence is defined under SARA as "*a dwelling-place, such as a den, nest or similar area or place, that is occupied or habitually occupied by one or more individuals during all or part of their life cycles, including breeding, rearing, staging, wintering, feeding or hibernating*."

As outlined in Section 34 of SARA, the Act generally only applies to listed species on federal lands. Aquatic species and migratory bird species listed under the federal MBCA with a defined critical habitat area could be protected but would require a Section 61 "Safety Net" order and/or a Section 80 "Emergency" order signed by the federal Minister in order to receive SARA protection status. Species that do not meet these criteria are administered in accordance with protections enforced by provincial legislation (*e.g.* Ontario's SCA).

2.4 County of Simcoe

The County of Simcoe Official Plan ("Simcoe OP"; 2023) illustrates the property within the Settlements designation under Section 5.1 (Land Use Designations; Appendix A).

A mapped watercourse occurs within the study area in accordance with Schedule 5.2.2 (Streams and Evaluated Wetlands) of the Simcoe OP (Appendix A). Natural features including Provincially Significant Wetland (PSW), Locally Significant Wetland, or Areas of Natural and Scientific Interest (ANSIs) are not shown in the vicinity of the property in Schedule 5.2.2 (Streams and Evaluated Wetlands) and Schedule 5.2.3 (ANSI) of the Simcoe OP (Appendix A).

County of Simcoe Interactive Mapping (County of Simcoe, 2026) depicts Unevaluated Wetlands, Permanent Streams and Woodlands within the study area (Appendix A), consistent with the limits of Unevaluated Wetlands, Watercourses and Woodlands mapped through provincial resources through the Natural Heritage Information Centre (NHIC; MNR, 2026; Appendix A). No Evaluated Wetlands (*i.e.* PSWs) are mapped within the study area.

2.5 Township of Clearview

The Official Plan of the Township of Clearview ("Clearview OP"; 2024) maps the property as occurring within Settlement Areas (Stayner) according to Schedule B (Land Use Plan; Appendix A). Within Schedule B-12 (Land Use Plan – Stayner), the property is further mapped as predominantly Residential but includes a linear Greenland – Hazard Lands Area feature in the

northeast section of the property, as well as a section of Greenland – Natural Heritage Area mapped on the west side of the property (Appendix A).

As per Section 5.2.1 of the Clearview OP, *the following shall be considered natural heritage features and areas within the Township's natural heritage system:*

a) significant woodlands;
b) significant valleylands;
c) provincially significant wetlands, locally significant wetlands identified based on the criteria established in Policy No. 5.2.3.8 of this Plan, and all wetlands measuring 2 hectares or more in area, regardless of whether those wetlands have been evaluated or not;
d) significant wildlife habitat;
e) habitat of endangered species and threatened species;
f) fish habitat;
g) provincially significant areas of natural and scientific interest (ANSIs);
h) regionally significant ANSIs;
i) public lands, as defined in the Public Lands Act; and
j) linkage areas, as defined in No. 5.2.1.9 below, which themselves may not be inherently sensitive but which serve to provide connections and corridors between other elements of the natural heritage system.

Clearview OP Schedule C (Natural Heritage System) maps the presence of a watercourse in the northeast portion of the property, and designates the west end of the property as Natural Heritage (Clearview Township)(Appendix A). Schedule C-1 (Natural Heritage System – Wetlands) illustrates the presence of Unevaluated Wetland (NVCA & MNR), Unevaluated Wetland (NVCA) and Unevaluated Wetland (MNR) within the general location of the above-noted Natural Heritage block on the west end of the property (Appendix A). Schedule C-2 (Natural Heritage System – Woodlands) illustrates the presence of mapped Significant Woodland within the general location of the above-noted Natural Heritage block on the west end of the property, and Schedules C-1, C-2 and C-3 (Natural Heritage System – Steep Slopes) all depict the watercourse at the northeast end of the property (Appendix A). No ANSI, PSW, Locally Significant (Evaluated) Wetland, Other Woodland or Hedgerow, or Steep Slopes are mapped within the property on Schedules C, C-1, C-2 or C-3 (Appendix A).

2.6 Nottawasaga Valley Conservation Authority

The northeast and west portions of the study area are located within the mapped regulation limit of the NVCA (Appendix A). Regulated lands are subject to O. Reg. 41/24 – "Prohibited Activities, Exemptions and Permits" under the *Conservation Authorities Act*. Under O. Reg.

41/24, the NVCA may require that approvals be obtained for a proposed development or site alteration within areas regulated under the Conservation Authority's jurisdiction.

2.7 Federal *Fisheries Act*

The *Fisheries Act* includes protections for fish and fish habitat in the form of standards, codes of practice, and guidelines for projects near water. The *Fisheries Act* provides protection against the "death of fish, other than by fishing", (Section 34.4(1)) and the "harmful alteration, disruption or destruction of fish habitat", (Section 35(1)), otherwise known as HADD. In cases where impacts to fish and fish habitat cannot be avoided, and the project does not fall within waterbodies where Fisheries and Oceans Canada (DFO) review is not required, proponents are asked to submit a request for review to their Fish and Fish Habitat Protection Program regional office to determine approval requirements. All projects are encouraged to avoid causing the death of fish and a HADD of fish habitat, using measures to protect fish and fish habitat that include standards and codes of practice for common works, undertakings and activities.

3.0 STUDY APPROACH

A combination of background information and field data were used to fulfill the objectives of this EIS. As noted in Section 1.0, a significant proportion of field studies were completed in 2022 when Azimuth was initially retained to study the property, while supplementary field studies were undertaken in 2025 to provide a fulsome dataset independent of the Dillon EIS (2013). Given adjacent lands to the north were of the same owner, Azimuth had permission to enter onto these lands for the purpose of the EIS. Azimuth undertook the following activities for this study:

- Conducted "in-season" field surveys to document existing natural heritage features, functions, and species. Surveys included:
    - Assessed vegetation communities in accordance with Ecological Land Classification (ELC) for Southern Ontario methods (Lee *et al.*, 1998; Lee, 2008)(summer 2025);
    - One (1) vascular plant inventory (August 19, August 21, August 27, August 29, September 11 and September 12, 2025);
    - One (1) evaluation of candidate bat "snag" trees (*i.e.* dead standing trees) within property woodlands, during leaf-off conditions, that could provide high quality habitat for SAR bats (April 20, 2022);
    - Two (2) dawn breeding bird surveys (June 2 and June 27, 2022);
    - Two (2) evening breeding bird surveys (June 9 and July 7, 2022);

    - Three (3) headwater drainage feature assessment site visits, with focus on the tributary of Lamont Creek/intermittent drainage channel (April 8, April 12 and May 10, 2022);
    - One (1) supplementary review of drainage features within the study area with regard for fish habitat function (August 29, 2025);
    - Agency site staking with the NVCA to verify the limits of wetlands documented on the property (September 15 and October 9, 2025); and,
    - Recorded all incidental wildlife observations during site visits.
- Completed an assessment of potential SAR and their habitats that could be present within the study area, including a screening for Butternut (*Juglans cinerea*) and Black Ash (*Fraxinus nigra*) trees (Endangered);
- Identified/evaluated/mapped Key Natural Heritage Features and functions in the context of the study area and broader ecological landscape;
- Completed a Significant Wildlife Habitat (SWH) assessment based on the results of the field program; and,
- Identified potential wildlife linkages and movement corridors within the study area, in the context of applicable provincial and municipal policies.

The above were provided to the Township as a Terms of Reference for the field program and impact assessment on August 26, 2025, as presented in Appendix B. A response was received on June 3, 2026 confirming that the scope of the program undertaken was acceptable as provided (Appendix B).

In addition, Azimuth completed one (1) evening bat exit survey for existing farm structures (July 13, 2022).

3.1 Background Information

A review of the following background documents provided information on site characteristics, habitat, wildlife, rare species and communities and general cultural/historic aspects of the study area:

- Scoped Environmental Impact Statement (EIS) for the Bridle Park Sites, Stayner, ON - TSI International Group Inc. (Dillon, 2013)
- Ministry of Natural Resources (MNR) Ontario Geohub, Land Information Ontario: Wildlife Values Area (MNR, 2026a);
- MNR Natural Heritage Information Centre (NHIC; MNR, 2026b);
- MNR Fish On-Line (MNR, 2026c);

- MNR Ontario Geohub, Land Information Ontario: Aquatic resource area line segment (MNR, 2026d);
- MNR Ontario Geohub, Land Information Ontario: Aquatic resource area survey point (MNR, 2026e);
- Atlas of the Breeding Birds of Ontario (OBBA; Cadman *et al.*, 2007);
- Ontario Reptile and Amphibian Atlas (Ontario Nature, 2020);
- Ministry of the Environment, Conservation and Parks (MECP)'s Species at Risk Ontario list (MECP, 2026);
- iNaturalist (NHIC) Rare Species of Ontario (iNaturalist, 2026);
- Ontario Butterfly Atlas (Toronto Entomologists' Association, 2026);
- Air photos available for the Project Area (Google, VuMap);
- Government of Canada's Species at Risk Public Registry; and,
- Atlas of the Mammals of Ontario (Dobbyn, 1994).

3.2 Vegetation Community Mapping and Surveys

Prior to undertaking the field studies in 2025, an initial classification of vegetation communities was undertaken using recent air photo imagery for an area encompassing the study area in conjunction with a review of the 2013 EIS report (Dillon, 2013). Vegetation community boundaries were then investigated in the field on August 19, August 21, August 27, August 29, September 11 and September 12, 2025 during the growing season when emergent ground cover vegetation layer was present. Vegetation community types were classified using ELC protocols.

The site visit was undertaken by a qualified ecologist with existing knowledge related to rare, Special Concern, Threatened, and Endangered plant species with potential to occur in the area. The site assessment was focused during ELC work to ensure that appropriate effort was made to detect any federally or provincially designated species, notably SAR as identified under the SCA and former ESA.

A detailed survey including a screening for Butternut (Endangered) and Black Ash (Endangered) was conducted within the study area.

3.3 Wildlife Surveys

Wildlife species utilizing the study area were identified from direct observation, auditory signs, and through interpretation of other signs (tracks, scat, vocalizations, *etc.*) as a matter of course while conducting field surveys.

3.3.1 Species at Risk

The SAR screening undertaken for the scope of this assignment includes an assessment of SAR with potential to occur in the overall planning area, compared with potential habitat features identified within the study area. Habitat requirements and appropriate designations (Endangered, Threatened, or Special Concern) are outlined in Table 1.

3.3.2 Breeding Birds

Two (2) dawn breeding bird surveys were conducted within the study area on June 2 and June 27, 2022 guided by point count methodology presented in Appendix D of the OBBA Guide for Participants (2001) and Forest Monitoring Bird Protocol (TRCA, 2016). All surveys were conducted no earlier than one half hour before sunrise and were completed prior to 10:00a.m. Surveys were completed under suitable weather conditions (*i.e.* no precipitation and light winds (Beaufort wind scale ≤3)), with an observation period of 10 minutes carried out at the point count stations shown on Figure 2.

Evening breeding bird surveys were conducted based on a modified version of the Canadian Nightjar Survey Protocol (Bird Studies Canada *et al*., 2019) and the DRAFT Survey Protocol for Eastern Whip-poor-will (*Caprimulgus vociferus*) in Ontario (MNRF, 2014). Surveys for Eastern Whip-poor-will and Common Nighthawk were carried out in June and July 2022. Surveys were focused within 7 days of the full moons on June 14 and July 13, 2022. Surveys took place starting no earlier than 30 minutes after sunset and no more than 90 minutes after sunset to capture crepuscular conditions. Point counts took place with an observation period of 10 minutes at each survey station. All surveys were undertaken on calm clear nights with:

- At least 50% of the visible moon surface illuminated;
- Little or no cloud cover;
- Calm to light winds (Beaufort ≤3);
- No precipitation; and,
- Temperatures above 10^{o}C.

Azimuth attended the study area for a total of two evenings on June 9 and July 7, 2022, all of which demonstrated suitable weather conditions. Surveys were undertaken at the survey stations illustrated on Figure 2.

3.3.3 Bats and Bat Habitat

3.3.3.1 Detailed Snag Tree Mapping, Plot Mapping

Several bat species (including Endangered bats) may utilize large trees preferably 25 centimetres (cm) diameter at breast height (DBH)) in the early stages of decay, described as "snag" trees – those having cracks, splits, holes, *etc.* that could feasibly provide access for bats. Although larger trees are preferred, trees of any size with suitable access features have potential to be occupied by bats during the active period. Azimuth conducted a review of snags within the study area on April 20, 2022 (during the "leaf-off" period) to identify suitable snag trees that could potentially be used by bats to establish maternity and/or day roosts during the summer period. Evaluation within the study area was divided into two subcomponents:

- A plot-based evaluation of snag density within suitable treed ELC communities was completed based on Step 1 and Step 2 of the Treed Habitats – Maternity Roost Surveys document (MECP, 2022b). This method was used to broadly characterize bat roosting habitat potential within the overall woodland block and determine representative conditions within the block; and,

- Within the footprint of proposed site disturbance, and within 50m of the footprint of proposed site disturbance, detailed mapping of snag/cavity trees was completed within sections of suitable treed ELC communities based on Step 1 and Step 5 of the Treed Habitats – Maternity Roost Surveys document (MECP, 2022b). This was used to provide a fulsome characterization of bat roosting habitat potential specifically within proximity to site disturbance.

In completing investigations for suitable bat habitat features, Azimuth referred to the overall technical framework presented in the Technical Note Species at Risk Bats (MNRF, 2015a), as augmented and amended by the MECP via Bat Survey Standards Note (MECP, 2022a) and the Treed Habitats – Maternity Roost Surveys document (MECP, 2022b).

3.3.3.2 Exit Surveys

Several anthropogenic structures are located at the southeastern corner of the subject lands adjacent to Highway 26, including a well-maintained single detached dwelling (bungalow), two accessory sheds and two barn structures (Figure 2). Four (4) of these structures, including two barns, the southern shed and the house, were identified as marginal candidate bat maternity roosting habitat. A single bat exit survey including visual encounter stations and deployment of ultrasonic bat detection equipment occurred for a period of one (1) hour starting 30 minutes before sunset on July 13, 2022 (Temperature: 18°C, Cloud Cover: 50%, Wind: B2, Precipitation:

none). Staff were present and placed at complimentary viewing angles on opposite sides of the structures during this time period, with four (4) Song Meter SM3BAT Bioacoustics Recorders (Wildlife Acoustics, Inc.) deployed in proximity to structures to ensure exiting bats could be properly identified if observed. A Wildlife Acoustics Echo Meter Touch 2 Pro mobile phone attachment was also used to listen for potential ultrasonic bat vocal activity. Based on the limited results of incidental bat observations and further review of these structures during the course of this survey, a second survey was deemed not necessary and maternity roost habitat potential of these structures was determined to be negligible.

3.4 Fish and Fish Habitat

Azimuth completed initial field investigations in 2022 (April 8, April 12, and May 10) to document drainage and watercourse features in the study area to determine the extent and sensitivity of fish habitat. These previous field investigations were then reassessed and updated following an August 29, 2025 field investigation. Both spring (high flow) and summer (low flow) site conditions were observed during these field investigations. Documentation of channel characteristics included details such as wetted width, water depths, flow, bank slopes, aquatic vegetation, substrate, and general morphology.

Fish sampling was not completed as sufficient fish community data was available from online sources to assist with characterization of the thermal regimes and habitat sensitivities within/adjacent to the study area.

4.0 EXISTING CONDITIONS

4.1 Land Use

The property consists largely of active open agricultural lands, with fields of row crops dominating the middle of the property, divided by narrow, partially-treed hedgerows. The far eastern corner of the property, adjacent Highway 26, is occupied by maintained lands including an existing residential dwelling with two sheds and two barn features, surrounded by mowed lawn as well as scattered landscaping trees. A small drainage swale flows north from the northeast portion of the property, crossing between open farmland and ultimately connected to a larger drainage feature off-property. The western third of the property is occupied by a large complex of treed woodland and wetland, which is broadly contiguous with additional woodland and wetland off property to the west.

Lands beyond the northern and western property limits include a mixture of rural farmlands and woodland features, interspersed with successional meadow, thicket and woodland

features, wetland elements, as well as tributaries of Lamont Creek. The northeast edge of the property is bordered by the Clearview Train Trail, and the remainder of lands to the east and south are primarily composed of residential communities within the Stayner settlement area, dominated by residential lots and roads as well as scattered public parkland, school land, community and medical centre facilities, private businesses, and farmland.

4.2 Terrestrial Resources

4.2.1 Vegetation

The limits of all ELC communities identified on the property are illustrated in Figure 2. A complete list of vascular plant species identified within the property limits is presented in Table 2, and summary descriptions of vegetation communities on the property are presented in Table 3.

A total of 26 vegetation communities are described in detail in Table 3, and are categorized into the following broad ecotypes, as illustrated on Figure 2:

Cultural/Anthropogenic:

- CGL_4: Recreational;
- CVC: Commercial and Institutional;
- CVC_1: Business Sector;
- CVI_1: Transportation;
- CVR_4: Rural Property;
- CVS_1: Education;
- CVR_1: Low Density Residential;
- OAGM1: Annual Row Crops; and,
- OAGM2: Perennial Cover Crops.

Upland Woodlands:

- FOCM4-1: Fresh – Moist White Cedar Coniferous Forest;
- FOCM6-3: Dry - Fresh Scotch Pine Naturalized Coniferous Plantation;
- FODM3: Dry – Fresh Poplar – White Birch Deciduous Forest;
- FODM3-1: Dry – Fresh Poplar Deciduous Forest;
- FODM8-1: Fresh – Moist Poplar Deciduous Forest;
- FODM11: Naturalized Deciduous Hedgerow;
- FOMM5: Dry-Fresh White Birch-Poplar-Conifer Mixed Forest;
- FOMM7-2: Fresh – Moist White Cedar – Hardwood Mixed Forest; and,
- WOCM1-3 Dry-Fresh White Pine Coniferous Woodland;

Meadows:

- MEFM1: Dry - Fresh Forb Meadow; and,
- MEMM3: Dry - Fresh Mixed Meadow;

Thickets:

- THDM2: Dry - Fresh Deciduous Shrub Thicket; and,
- THDM4-1: Native Deciduous Regeneration Thicket;

Open Wetlands (Marshes):

- MAMM1-3: Reed-canary Grass Graminoid Mineral Meadow Marsh; and,
- MAMM3-1: Mixed Mineral Meadow Marsh;

Treed Swamps (Woodlands & Wetlands):

- SWDM4-5: Poplar Mineral Deciduous Swamp;

Shrub Swamps (Thicket Swamps):

- SWTM2-1: Red-osier Dogwood Mineral Deciduous Thicket Swamp.

A total of 134 vascular plant species and two (2) plant hybrids were identified within the property limits, 79 of which (59.0%) are considered native to Ontario.

None of the vegetation communities documented are of federal or provincial conservation concern (MNR, 2026b).

4.2.1.1 Provincially Rare and SAR Plants

There are two (2) of Elements of Occurrence (EO_ID) within 1 kilometre (km) of the study area for provincially Endangered or Threatened, or provincially rare vegetation species according to the NHIC database (MNR, 2026b):

- Butternut (Endangered under SCA); and,
- American Hart's-tongue Fern (*Asplenium scolopendrium;* S-Rank 3, Special Concern according to the Committee on the Status of Species at Risk in Ontario (COSSARO)).

Black Ash (*Fraxinus nigra*, Endangered under SCA) were documented in two (2) vegetation communities (FOMM7-2, SWDM4-5; see Table 2 and Figure 2). The precise location of the Black Ash individuals within these communities are unknown at this time. Black Ash within the

property have not been individually assessed or measured to determine how many may receive protections under the SCA (*i.e.* healthy individual ≥8 centimetres (cm) diameter at breast height (DBH) at a stem height of 1.37m; O. Reg. 61/26).

One (1) Butternut was identified within the study area during field investigations, within part of the FODM3 ELC community on adjacent lands to the northeast. This individual was located northeast of the Barrie-Collingwood Rail Trail, approximately 10m northeast of the trail surface. The tree was estimated to be less than 8cm DBH in size.

One (1) provincially rare (S1-S3) species was documented, Honey Locust (*Gleditsia triacanthos*, S2?). However, a horticultural cultivar of this species is commonly planted as a landscaping tree beyond its native range and this species is known to naturalize beyond its native range (Farrar, 1995). Honey Locust is not listed for Simcoe County by Riley (1989) and its native range is limited to southwestern Ontario (Farrar, 1995). Given the above, occurrences of this species within anthropogenic, largely maintained lands (as observed in this case) would not be expected to be natural, particularly in Simcoe County. Therefore, we do not consider the occurrence observed within the study area to represent a natural population, and hence do not identify this species as a significant natural heritage feature within this impact assessment.

4.2.2 Wildlife

4.2.2.1 Mammals

Evidence of four (4) mammalian species was observed throughout the course of the field program, including the following: Raccoon, White-tailed Deer, Big Brown Bat, and in one case a domestic Rabbit.

Given the proximity of the study area to large natural areas in the greater landscape, it is expected the following other mammals could conceivably be encountered within the study area: small mammal species (various mice, voles, and shrews), Eastern Gray Squirrel, Eastern Chipmunk, Red Squirrel, Northern Flying Squirrel, weasel species, Beaver, Muskrat, Groundhog, Porcupine, Striped Skunk, American Mink, Eastern Cottontail, Fisher, River Otter, Red Fox, Virginia Opossum, Coyote, and Black Bear.

<u>Bats</u>

Structures within the study area are not anticipated to provide maternity roost habitat for bats. No bats were recorded exiting the structures during the bat exit survey, and after further review, the structures were deemed not suitable for supporting maternity roost habitat. Incidental fly-by observations of *Myotis* bats (genus level identification) were made during bat exit surveys. Acoustic data was not sufficient to confirm which species were present, although

very likely acoustic data was associated with Little Brown Myotis (*Myotis lucifugus*); the most common species for this area.

During the detailed snag mapping assessment, 23 snag trees were mapped within the southeast corner of the western woodland as depicted Figure 2. A plot-based evaluation was conducted for the entire western woodland block (FODM8-1, FOCM4-1, FOMM7-2, SWDM4-5; Figure 2) to provide a more general representation of bat habitat within the woodland feature and surveys yielded a snag tree density of approximately 66 snag trees/hectare.

While bat snag assessments were not completed within the northern woodland communities, the FODM3 (Figure 2) also has potential to provide roosting habitat for SAR bats. The FOCM6-3b/c communities are anticipated to provide low quality habitat given that they are primarily composed of young Scotch Pine (Figure 2).

4.2.2.2 Reptiles and Amphibians (Herpetofauna)

One (1) amphibian species was documented incidentally within the subject property. A Wood Frog was observed visually within the property, and L2 to potentially L3 call levels for Wood Frog were heard northwest of the subject lands in wetland areas off-property during bat snag surveys. An L2 call levels indicates that calls of individual amphibians sometimes overlap, but numbers of individuals can still be estimated while an L3 call level indicates a continuous overlap among calls (full chorus), making a count estimate impossible.

One snake species, Eastern Gartersnake, was observed incidentally near the edge of the FOMM4 forest ELC community adjacent to the power transmission corridor, near the west edge of the property. This individual was observed on April 20, 2022.

No salamander or turtle species were observed within the study area throughout the course of the field program.

4.2.2.3 Birds

A total of 30 bird species were recorded during the dawn breeding bird survey program, plus one (1) additional species was observed throughout the remainder of the field program (31 species total). A summary of breeding birds observed within the study area limits is presented in Table 4.

Probable breeding evidence for Wood Thrush (Special Concern designation according to COSSARO) was documented during the dawn breeding bird survey program, associated with

point count Station 7 (see Table 4, Figure 2). This point count station is located within the SWDM4-5 vegetation community that is a part of the large woodland block at the west end of the property (see Figure 2). Nesting habitat for this species would be expected to be associated with this woodland.

No evidence of nocturnal bird species (including Eastern Whip-poor-will and Common Nighthawk) were documented during evening breeding bird surveys or observed incidentally throughout the remainder of the field program. Additionally, no nesting activity for species listed under Schedule 1 of the federal Migratory Birds Regulations (2022) under the *Migratory Birds Convention Act*, 1994 was identified during breeding bird studies, or incidentally throughout the course of the field program. These species include, but are not limited to, Pileated Woodpecker, Great Blue Heron, Great Egret, Green Heron, and Black-crowned Night Heron.

4.2.3 Terrestrial Crayfish

Approximately 12 crayfish chimneys were observed within the MAMM3-1 community near the northwest corner of the property and immediately north of the property boundary (Figure 3). Additionally, approximately five (5) crayfish chimneys were observed on adjacent lands, in the abutting MEFM1 community north of the northeast property boundary (approximately 35m from the property limits), in proximity to the drainage feature there.

4.3 Species at Risk

The SAR assessment fully considers SAR with potential to occur in the planning area. Based on this assessment in combination with vegetation communities and other environmental features observed during the site investigation, the following species are considered below in this report as presented in Table 1:

- **Threatened or Endangered**:
  - Black Ash;
  - Butternut;
  - Eastern Red Bat, Hoary Bat, Little Brown Myotis, Northern Myotis, Silver-haired Bat and Tri-colored Bat; and

- **Special Concern**:
  - Wood Thrush.

Only species designated Threatened or Endangered receive protections under the SCA. Provincially-designated Special Concern species are further discussed in the context of SWH (Habitat for Special Concern and Rare Wildlife Species) below.

4.4 Wetlands

Wetlands within the study area are not identified as provincially or locally Significant Wetland, or similar designation on municipal or provincial mapping resources (Appendix A). For the purposes of this assessment, wetlands within the study area will be considered as "Other Wetlands".

Wetlands occurring throughout the property limits include the following units and complexes as illustrated in Figure 2:

Treed Swamps (Woodlands & Wetlands):

- SWDM4-5: Poplar Mineral Deciduous Swamp;

Shrub Swamps (Thicket Swamps):

- SWTM2-1: Red-osier Dogwood Mineral Deciduous Thicket Swamp;

Open Wetlands (Marshes):

- MAMM1-3: Reed-canary Grass Graminoid Mineral Meadow Marsh; and,
- MAMM3-1: Mixed Mineral Meadow Marsh.

A formal staking exercise occurred with NVCA staff on September 15 and October 9, 2025 to confirm wetland boundaries onsite. Wetland limits were immediately thereafter surveyed by an Ontario Land Surveyor (OLS) following the delineation exercise.

Existing floodplain mapping from C.F. Crozier & Associates Inc. (Crozier) is depicted on Figure 2. Azimuth trusts that this satisfies the requirements to provide a Regulated Area Assessment (RAA) as requested by the NVCA.

4.5 Significant Woodland

The Clearview OP illustrates the west woodland block (including ELC communities FOMM5, SWDM4-5, FOMM7-2, FOCM4-1, FODM8-1; Figure 2) as Significant Woodland, and also maps a treed inclusion on adjacent lands to the southeast as significant (included within CVR_4 polygon) (Appendix A).

Woodland in the northeast corner of the property (FODM3, WOCM1-3 and FOCM6-3c; Figure 2) and adjacent lands are part of a larger contiguous woodland block approximately 30ha in size. This woodland is currently not mapped as Significant by the Clearview OP (Appendix A). The Natural Heritage Reference Manual (NHRM) (OMNR, 2010) indicates that in townships where woodland cover is between 15% and 30% of the landscape (woodland cover is estimated to be 27.1% (NVCA, 2023)), woodlands greater than 20ha in size are considered significant. As such, the northeast woodlands would meet the size criteria to be considered significant.

The isolated northern FOCM6-3b woodland (Figure 3) is approximately 0.5ha in size and is greater than 20m from the surrounding woodlands. This feature is not mapped as Significant Woodland (Appendix A) and does not meet the size threshold for significance. As such, it is not considered a Significant Woodland and is not considered further within the Impact Assessment.

4.6 Significant Valleyland

No portion of the study area is identified as Significant Valleyland, nor assigned a similar designation on municipal or provincial mapping resources (Appendix A).

There are no valleyland features located within the study area according to standards presented in the NHRM, and no portion of the study area fulfills the well-defined valley morphology and landform prominence required to be considered Significant Valleyland.

4.7 Significant Wildlife Habitat

An assessment of the potential for SWH within study area was conducted, using the criteria outlined within the Significant Wildlife Habitat Technical Guide (OMNR, 2000) and the accompanying the Ecoregion 6E Criteria Schedules (MNRF, 2015b). An assessment of potential SWH categories relative to documented vegetation communities and habitats within the study area limits is presented in Table 5. The following potential SWH types were determined or have potential to be present within the study area based on the results of the field program:

- Bat Maternity Colonies;
- Amphibian Breeding Habitat (Woodland);
- Terrestrial Crayfish; and,
- Special Concern and Rare Wildlife Species;
    - Wood Thrush.

4.8 Areas of Natural and Scientific Interest

There are no ANSI associated with the study area in accordance with municipal or provincial mapping resources (see Appendix A).

4.9 Fish and Fish Habitat

The property is located within the Lower Nottawasaga River Subwatershed (NVCA, 2023). A total of three (3) drainage features are mapped on background resource maps (MNR, 2026d), and all were confirmed as occurring within the study area, with one (1) drainage feature occurring on the property, and the remaining features occurring on adjacent lands or outside the study area. All of these features drain into Lamont Creek at the downstream (northeast) limits of the property. A summary of these features is provided below.

Drainage Feature 1 (DF1)

DF1 occurs outside the study area, but is relevant to drainage on the property and is therefore described. This feature is considered the main drainage feature within the study area, but does not drain within the property boundary. Desktop mapping and field investigations confirmed that DF1 conveys seasonal flow from an unevaluated wetland feature to the northwest of the property to Lamont's Creek at the downstream (northeast) limit of the property. Within the study area limits, DF1 is characterized as a poorly defined swale feature which traverses through a pine woodland. Upstream of the study area, DF1 consists of a poorly defined grass swale between two actively cropped farm fields. Downstream of the farm fields, DF1 drains into the pine woodland, but remains poorly defined with no defined channel banks. Throughout the feature limits, no substrate sorting was observed, and no surface water was present during the summer 2025 field investigation. However, visible flow was observed during the April 8, 2022 field visit, and standing water was present in sections during the May 10, 2022 field visit. Water depths ranged from 5-10cm on average when flow/standing water was observed, but flow remained diffuse through the upland grass swale and woodland segments.

At the downstream limits of the property, DF1 crosses a rail trail via an 800mm corrugated steel pipe (CSP), and then crosses an abandoned concrete culvert along the historic rail alignment. Concrete rubble was present in the concrete pipe, which creates a barrier to fish passage. Regardless, the lack of a defined channel, substrate, and pool features would limit direct fish use on the property. Therefore, DF1 with the study area limits is characterized as an ephemeral feature that functions as seasonal indirect fish habitat (*i.e.,* fish do not occupy this feature, but flow is conveyed to areas downstream where fish are present). Downstream of the property on the east side of the rail trial, the mapped watercourse feature is known as Lamont Creek (MNR, 2026c). Observation from the rail trail indicates that the channel is poorly defined with non-

continuous banks, along with substrate sorting and natural channel morphology consisting of riffles and runs with undercut banks. Minnows were also observed downstream of the old rail trail concrete culvert. It is expected that the rail trail crossing functions as the upstream limits of direct fish use within Lamont Creek. Lamont Creek downstream of the rail trail is characterized as an intermittent feature that functions as direct seasonal fish habitat (*i.e.,* fish occur directly when flow occurs on a seasonal basis only). MNR mapping indicates that this portion of Lamont Creek is considered a coolwater feature (MNR, 2026d). However, it is noted that no fish survey point data is located in proximity to the subject lands (MNR, 2026e).

A review of the Ontario Geohub indicates that all headwater DF's (DF1, DF2, and DF3) within the study area mapped as Aquatic Resource Area (ARA) polygon segments for Lamont Creek west of the Trail are identified as ARA MH-0053-LAM (MNR, 2026d) with a diverse fish community indicative of a coolwater fish community. Azimuth field findings confirms the absence of fish west of the rail trail, therefore the MNR data represents expectation of fish occurrence given surface water connectivity, however it should be considered inaccurate, and reflective of downstream conditions only, not of the property.

DF1 on the property would be afforded protections under the Federal *Fisheries Act* due to the indirect fish habitat functions that it provides to downstream fish habitat features at the property boundary (*i.e*., flow conveyance, nutrients, sediments, etc.). The overall fish habitat sensitivity on the property would be considered low.

Drainage Feature 2 (DF2)

DF2 is the main drainage feature on the property. It drains north within a poorly defined swale feature between two cropped farm fields. The feature collects overland runoff from the surrounding farm lands and conveys this runoff into DF1 downstream. Where DF2 is mapped on Figure 2, the feature is poorly defined with no substrate sorting, no defined banks, and no defined flow path. The flow path is straight and was likely historically manipulated to provide farm field drainage. Dense terrestrial grasses were present throughout the swale feature. Visible flow was evident during the early spring field instigation (April 8, 2022), and was also evident within actively cropped segments of the farm fields to the south of DF2. However, DF2 was entirely dry during the mid-spring (May 10, 2022) and summer 2026 field investigations. Overall, the poorly defined nature of DF2 and the minimal flow observed during the early spring visit minimizes the sensitivity of the feature from a fish habitat perspective. The feature would be characterized as an ephemeral feature that functions as poor quality seasonal indirect fish habitat. As outline above, the MNR ARA polygon segment for this feature indicates a diverse coolwater fish community is present, but Azimuth field findings confirms the absence of direct fish habitat west of the rail trail. DF2 would still be afforded protections under the Federal

Fisheries Act due to the indirect fish habitat functions that it contributes to downstream direct fish habitat (*i.e.,* conveyance of flow, nutrients, sediments, etc.), although contributions are considered minimal.

Drainage Feature 3 (DF3)

DF3 occurs on adjacent lands in the study area, and consists of poorly defined swale feature that conveys flow from an upland wetland feature to DF1 downstream. DF3 drains east along the northern edge of the property, bordering a farm field before draining through a meadow thicket and into DF1. The feature is poorly defined with no substrate sorting, no defined banks, and no defined flow path. The flow path may have been historically manipulated along the farm field. Visible flow was evident during the early spring field instigation (April 8, 2022), but only standing water with sections of minimal flow were noted by mid-spring (May 10, 2022). The entire feature was dry during the summer 2026 field investigation. Overall, the poorly defined nature of DF3 and the minimal flow observed during only the early spring visits minimizes the sensitivity of the feature from a fish habitat perspective. Similar to DF2, DF3 would be characterized as an ephemeral feature that functions as poor seasonal indirect fish habitat. As outline above, the MNR ARA polygon segment for this feature indicates a diverse coolwater fish community is present, but Azimuth field findings confirms the absence of direct fish habitat west of the rail trail. DF3 would still be afforded protections under the Federal *Fisheries Act* due to the indirect fish habitat functions that it contributes to downstream direct fish habitat (*i.e.,* conveyance of flow, nutrients, sediments, etc.), although these contributions are considered minimal.

Drainage Feature 4 (DF4)

DF4 conveys overland runoff to DF1, and occurs outside the study area. It is shown on Figure 2, however it is not considered a relevant feature for the purposes of the project, and is therefore not considered further in this EIS.

No aquatic SAR are known to occur in the study area, and no habitat is present that would be expected to host aquatic SAR (DFO, 2026).

5.0 NATURAL HERITAGE FEATURES AND FUNCTIONS

The results of Azimuth's field studies combined with review of background information indicate the potential for the following KNHFs within the study area:

- Habitat for Threatened or Endangered Species
    - Black Ash
    - Butternut

- Eastern Red Bat, Hoary Bat, Little Brown Myotis, Northern Myotis, Silver-haired Bat and Tri-colored Bat
- Wetlands
  - Other Wetlands
- Significant Woodland
- Significant Wildlife Habitat
  - Bat Maternity Colonies
  - Amphibian Breeding Habitat (Woodland)
  - Terrestrial Crayfish
  - Special Concern and Rare Wildlife Species:
    - Wood Thrush
- Fish Habitat
  - Indirect fish habitat in Drainage Features 1-3

6.0 PROPOSED DEVELOPMENT

The proposed development involves construction of a residential subdivision on a 68.63 acre property, comprised of 523 single detached residential units, 4 semi-detached residential units, 164 townhouse units, a school block, parkland, open space, a stormwater management (SWM) facility, two environmental protection areas (EP; Blocks 570 and 571), and right-of-way allowances with roads, sidewalk, and parking. The proposed Draft Plan as provided by Crozier is provided in Appendix C, and shown overlaid on the Environmental Features map, as provided on Figure 3. EP Area Block 570 is located in the western portion of the property (associated with large woodland) and EP Area Block 571 is located in the northeastern corner of the property (Figure 3; Appendix C).

Crozier has prepared a Functional Servicing and Stormwater Management Report (FSR) (2026a) that outlines various site grading, sanitary servicing, water servicing, and stormwater management details for the proposed development. As per the FSR, best efforts were utilized to minimize cut/fill volumes across the site and reduce the area of uncontrolled stormwater runoff to adjacent municipal roadways. Drainage will be directed away from adjacent lands using interceptor swales and drainage infrastructure. The proposed sanitary strategy would service the lands with a gravity sanitary sewer with flows discharging from north to south which would outlet at the future sanitary sewer at the Street ‘L’ and Highway 26 intersection. Potable water servicing will be provided through connections to the existing municipal watermain network.

As per the FSR (Crozier, 2026a), stormwater management on the property will be managed by three systems:

- The primary storm system discharges into a stormwater management wet pond (SWMF) and makes up the majority of the development. The SWMF would be located in Block 572 (Appendix C, Figure 3).
- A secondary storm system consisting of an oil-grit separator (OGS) will service a portion of the development and external drainage area that cannot be routed to the SWMF due to grading constraints.
- The third storm system consists of a series of swales/channels capturing external drainage to the west of the site, as well as rear yard drainage, and conveys flows safely between the Bridle Park and Clearview Garden Estates (Figures 7-10 in the FSR, Crozier, 2026a).

As per the FSR, all storm systems will ultimately discharge to Lamont Creek and are positioned on the site to avoid impacts to floodplain limits, environmental features, and other constraints (Crozier, 2026a).

Crozier have also prepared a Floodplain Assessment Report (2026b) that outlines the existing floodplain modelling, a sensitivity analysis, and floodplain regularization. The purpose of the Floodplain Assessment Report was to establish the Regulatory Floodline on the subject lands in support of identifying development constraints. Crozier has proposed alterations to the floodplain to accommodate the proposed development. The objective of these alterations is to relocate the floodplain limits while maintaining the overall hydraulic function, flood conveyance characteristics, and flood storage capacity of the tributary corridor (Crozier 2026b). As per the Floodplain Assessment Report, the proposed earthworks would relocate a portion of the existing floodplain from the SWM Block 572 into the adjacent (east) EP Area Block 571 (Appendix C, Figure 3), to consolidate the natural hazard lands within the natural feature system while maintaining the overall floodplain function (Crozier, 2026b).

7.0 IMPACT ASSESSMENT

This impact assessment is prepared with regards to the proposed development plan as illustrated in Figure 3, Appendix C, and as presented in the supporting reports/assessments from the project team. The impact assessment below is prepared based on conceptual plans and preliminary engineering studies and focuses on the feasibility of the proposed development (Figure 3, Appendix C) from a natural heritage perspective.

7.1 Habitat for Threatened or Endangered Species

Impacts with regards to Threatened or Endangered species are covered under the SCA, addressing direct killing or harming of living members of a species, and destruction or damage to habitat of Threatened or Endangered species. The following Threatened or Endangered species are treated as present or confirmed to occur within the limits of the study area:

- Black Ash
- Butternut
- Eastern Red Bat, Hoary Bat, Little Brown Myotis, Northern Myotis, Silver-haired Bat and Tri-colored Bat

7.1.1 Black Ash

As noted in Section 4.2.1 above, Black Ash trees were documented in two (2) vegetation communities during the site investigation, the White Cedar-Harwood Mixed Forest (FOMM7-2) and the Popular Mineral Deciduous Swamp (SWDM4-5). Black Ash is Endangered according to Ontario's SCA.

As per the SCA, the definition of "habitat" in respect to a vascular plant species is the critical root zone surrounding a member of the species. As per O. Reg. 61/26 under the SCA (2025) Section 17 (1) indicates the following:

"An activity that results or is likely to result in the killing or harming or taking of a member of the Black Ash species is prescribed for the purposes of paragraph 4 of subsection 16 (3) of the Act if the member affected by the activity is:

(a) A member not located in a municipality or territorial district set out in Schedule 1;
(b) An immature member located in a municipality or territorial district set out in Schedule 1; or
(c) A mature member that is,
    i. Located in a municipality or territorial district set out in Schedule 1, and
    ii. Identified as unhealthy by a qualified Black Ash professional in a report containing the information set out in Schedule 2."

Based on this information, the SCA affords protection of healthy Black Ash individuals with a height of 1.37 m and diameter at breast height (DBH) of 8cm or more. Furthermore, the area within the critical root zone of a protected Black Ash tree is considered habitat and therefore is also protected according to Ontario's SCA.

The Black Ash Assessment Guidelines: Assessment of Black Ash (*Fraxinus nigra*) for the purposes of the Endangered Species Act, 2007 (MECP, 2024) (now interpreted as applicable to the SCA) notes that "*Black Ash health assessments should be conducted as close as possible to the date of an activity that may impact the Black Ash tree or its habitat. This is because the extent to which the trees are affected by Emerald Ash Borer or other stressors may change between the date of the assessment and the activity date, and because Black Ash saplings may have increased in height or DBH since the date of the assessment*." At this time, a comprehensive Black Ash Assessment (BAA) has not yet been completed for Black Ash; therefore, Black Ash within the property have not been individually assessed or measured to determine how many may receive protections under the SCA. It is assumed that Black Ash within the FOMM7-2 and SWDM4-5 ELC communities are protected under the SCA at this time. It is advised that a Black Ash screening is completed prior to site alteration to ensure that there are no SCA protected trees located within proximity of the development envelop, as discussed further in Section 8.

7.1.2 Butternut

As noted in Section 4.2.1 above, one (1) Butternut tree was documented within the study area during the site investigation. However, this tree was located off-property, approximately 10m northeast of the Barrie-Collingwood Rail Trail surface on private lands within the FODM3, and therefore could not be evaluated through a Butternut Health Assessment (BHA). This stem was estimated to be less than 8cm DBH in size, and is assumed to be protected under the SCA at this time.

As noted above, as per the SCA, the definition of "habitat" in respect to a vascular plant species is the critical root zone surrounding a member of the species. Since the implementation of the SCA, MECP has advised a critical root zone (CRZ) protection calculation for vascular plants, including Butternut trees. As specified in the ISA Arborist Certification textbook, "*The Critical Root Zone is the area around a tree where the minimum amount of roots that are biologically essential to the structural stability and health of the tree are located… The Tree's age, size, condition, and species also include the extent of the Critical Root Zone*."

As advised by MECP, the calculation for CRZ for vascular plants is the DBH x 18, and rounded up to the nearest meter. Given that the Butternut tree in adjacent lands is estimated to have a DBH of up to 8cm, the protection zone of this tree is calculated to be 2m (8cm x 18 = 144cm or 1.4m; rounded up to 2m). As such, the adjacent Butternut tree is setback from enough from the property limits that development will not impact this species.

7.1.3 Eastern Red Bat, Hoary Bat, Little Brown Myotis, Northern Myotis, Silver-haired Bat, Tri-colored Bat

Eastern Red Bat, Hoary Bat, Little Brown Myotis, Northern Myotis, Silver-haired Bat and Tri-colored Bat (SAR bats) were not directly observed throughout the course of the field program, however these species are treated as present in lieu of conducting detailed ecological studies to verify presence/absence (Note: incidental fly-by observations of *Myotis* bats (genus level identification) were made during bat exit surveys; it is anticipated that this data is associated with Little Brown Myotis). Caves, karst topography, and/or abandoned mines are absent within the study area, therefore potential hibernacula for *Myotis* species and Tri-colored Bat are not located within the study area limits.

With regards for potential roosting habitat within woodlands, SAR bats may utilize treed habitats as maternity roost sites, preferring trees >25cm diameter at breast height with evidence of cracks, holes, splits, lifted bark, *etc.* (called "snags") to provide refuge for the rearing of young during the late spring and early summer months (approximately June). Although larger trees are preferred, trees of any size with suitable access features have potential to be occupied by bats during the active period.

As noted above, detailed snag mapping was completed within and adjacent to the proposed encroachment in the southeast corner of the woodland. As depicted on Figure 3, 23 snag trees were mapped within this area, seven (7) of each will be directly removed to accommodate the proposed development. Azimuth's plot-based evaluation was conducted for the entire western woodland block (FODM8-1, FOCM4-1, FOMM7-2, SWDM4-5; Figure 3) yielded a snag tree density of approximately 66 snag trees/hectare.

The proposed development would involve approximately 1.59ha of tree clearance within the western woodland to accommodate the proposed road connection to the existing subdivision to the south (Streets 'J' and 'K') and associated lots, as well as Lots 501-510, and the rear drainage swale extending across the western lots from Street 'J' to the northern Clearview Garden Estates (Figure 3). This woodland is part of a larger woodland complex extending throughout adjacent lands that is estimated to be over 65ha in size and is expected to provide habitat potential of similar quality to that within the subject lands. Additionally, minor clearing within the northeastern FODM3 woodland (<0.3ha) is required to support stormwater management plans for the property (Figure 3). Similarly, this woodland is part of a large woodland (approximately 30ha) that is also anticipated to provide similar habitat quality. Given that the majority of these features will be protected, removal of snag trees within woodland edge is not expected to undermine the potential for bat maternity and/or day roosting function

within the study area or regionally, and such habitat functions would persist in the post-development setting.

With regard for the assessment provided above, providing works occur in accordance with mitigation and other recommendations detailed in Section 8 below, there is no expectation that the proposed development would negatively impact Eastern Red Bat, Hoary Bat, Little Brown Myotis, Northern Myotis, Silver-haired Bat and Tri-colored Bat, or the habitat upon which the species depend.

7.2 Other Wetlands

As per Section 4.4 above, all wetlands identified within the property have been characterized as "Other Wetlands". The proposed development largely avoids wetlands within and adjacent to the property, except where required to provide a street connection (Street 'J') and to facilitate SWM plans. It is our understanding that the Township has requested several new street connections to the existing residential development to the south. As such, the site plan has been designed to provide a connection to the existing Red Oak Trail to the south of the property via Street 'J', as depicted on Figure 3. Further, it is our understanding that this connection would support a watermain connection that aligns with the Townships master servicing plans.

As shown on Figure 3, the proposed development would require the direct removals of two (2) wetland areas including:

- MAMM1-3: 889m^2 = 0.089ha
- SWTM2-1: 483m^2 = 0.048ha
- Total direct wetland removals: **1,372m^2** = **0.137ha**

Further, the following wetland buffer areas (30m within wetlands) are proposed to be removed:

- MAMM1-3: 3251m^2 = 0.325ha
- SWTM2-1: 3210m^2 = 0.321ha
- SWDM4-5: 500mm^2 = 0.05ha
- Total 30m wetland buffer removals: **6,961m^2** = **0.696ha**

The MAMM1-3 and SWM2-1 wetland units are of immature (herbaceous and shrubs) composition and are not characterized as specialized or uncommon wetland types (*e.g.* bogs, fens). The MAMM1-3 is comprised of a high proportion of invasive species, particularly Reed Canary Grass, which is dominant in the understorey and ground layers. While the MAMM1-3 wetland unit is narrowly connected to the large western woodland block, this elongated feature

stretches along the rear end of the adjacent residential development to the south and is subject to ongoing routine farming practices to the north. Given this feature's small size (0.089ha), it is not expected to contribute significantly to the ecological function of the adjacent features. The MAMM1-3 does not function as SWH, and no Threatened or Endangered species were identified within this community. Further, the community is not associated with fish habitat.

The SWTM2-1 wetland unit is almost entirely on the adjacent Clearview Garden Estates property to the north with the exception of the southern tip that extends onto the Bridle Park property (0.048ha). As such, almost the entire SWTM2-1 will be retained.

Onsite the wetland unit is subject to disturbance from the adjacent recreational trail to the east, and farming practices within proximity to the south. This wetland is associated with DF2 (Figures 2 and 3) which functions as indirect fish habitat. As per the FSR prepared by Crozier, there will be a 42,995 m^3/year deficient post-development onsite based on a comparison to pre-development conditions. To address this deficit, a series of Low Impact Development (LID) measures are proposed to be incorporated into the site design to promote infiltration, reduce runoff volumes, and enhance groundwater recharge. Therefore, it is anticipated that the function of DF2 and the SWTM2-1 wetland unit can be maintained post-development through a combination of the proposed SWM plan measures, as discussed in Section 7.5. A water balance assessment should be completed during detail design to ensure that no significant alterations to wetlands and existing downstream flows occurs post-development. Additionally, no amphibian activity was recorded within the SWTM2-1, and no Threatened or Endangered species were identified within this community during Azimuth's field investigations for Bridle Park and Clearview Garden Estates.

Based on the above, removal of 0.089ha of MAMM1-3 and 0.048ha of SWT2-1 is anticipated to represent a negligible ecological impact. To offset the loss of wetland onsite, ecological offsetting/restoration is proposed within EP Block 571 as discussed in Section 8. The offsetting area is approximately 1.13ha which will ensure no net loss of wetland and will actually result in a net gain of wetland habitat post-development (see Section 8.5 for detailed discussion). It is anticipated that through mitigation and composition, the proposed development would not be anticipated to have a negative impact on Other Wetlands and associated functions.

Lastly, the proposed development will also require encroachment into the identified 30m SWDM4-5. The proposed development is setback 18.4m from the eastern edge of the SWDM4-5 (Figure 3) with the remaining setback areas in excess of 30m all contained within the woodland EP block (Block 570). While clearing will occur beyond the 18m setback, the 10m wide drainage swale located along the rear edge of the proposed lots will be naturalized post-

development (Figure 4) and a native seed mix will be applied. Further, ecological offsetting/restoration is recommended, as discussed in Section 8, to offset for the loss of wetland buffer. As a result, anticipated potential indirect impacts associated with noise, light and inadvertent encroachment into the EP lands will be sufficiently mitigated with the 18.4m treed setback in conjunction with the proposed drainage swale that will act as a naturalized barrier between the development and the EP lands.

7.3 Significant Woodland

According to the PPS, development and site alteration are not permitted within Significant Woodlands located in Ecoregion 6E, unless it can be demonstrated there will be no negative impacts upon the feature and its ecological functions, which is the same standard used by the Simcoe OP. The Clearview OP designates the large western woodland on the property as Significant Woodland (Appendix A), and implements a similar standard (*i.e.* where development is contemplated within or (potentially) adjacent to Significant Woodland, an EIS is required to determine whether or not the feature is suitably protected, *i.e.* whether there is no negative impact to the feature).

The proposed development involves woodland removals within the western portion of the study area, totaling approximately 1.59ha (Figure 3). The removal of 1.59ha of woodland would represent a minor loss of the overall contiguous woodland feature to which property woodlands are connected, which measures over 65ha in size. No portions of the overall woodland feature would become fragmented/isolated as a result of the proposed redevelopment. Given that the proposed development avoids woodland fragmentation, the connectivity between various woodland elements within and adjacent to the property will be retained, and maintaining the overall linkages and corridors which permit species and ecological processes function within the greater woodland. Further, mitigation measures identified in Section 8, including lighting recommendations and the installation of rear yard fencing, will minimize indirect impacts associated with the proposed development and help protect the ecological integrity and function of the woodland.

Minor encroachment into the FOCM6-3c and FODM3 vegetation communities will also be required along the northern property limits to accommodate the proposed development (Figure 3). While the northern woodland has not been identified as Significant in the Clearview OP (Appendix A), it does meet the size threshold for significance as outlined in the NHRM. The proposed development will remove 0.32ha of woodland (Figure 3), but given the overall size of the woodland (approximately 30ha), this minor loss is not anticipated to negatively impact the overall form and function of the woodland.

Based on the above, there is no expectation that the proposed development would result in negative impacts to Significant Woodland provided mitigation measures outlined in Section 8 are adhered to.

7.4 Significant Wildlife Habitat

According to the PPS and the Clearview OP, development and site alteration are not permitted within SWH located in Ecoregion 6E, unless it can be demonstrated there will be no negative impacts upon the feature and its ecological functions. For the purposes of this assessment, SWH listed in Section 5 above are treated as significant.

7.4.1 Bat Maternity Colonies

Woodlands within the study area may provide suitable roosting habitat for Bat Maternity Colonies during the late spring period (approximately June). As described in Section 7.1.3 above in the context of SAR bats, potentially suitable snags were observed within woodlands onsite, which were determined to exhibit features such as cracks, splits, peeled bark, and cavities.

As described in Section 7.1.3 above, extensive, continuous/unbroken upland and wetland woodlands occur within and adjacent to the property, and within the greater region, and would therefore retain potential bat habitat function in the post-construction setting. As such, there is no expectation of negative impacts to Bat Maternity Colonies. A suitable mitigation approach that includes a no-cut window from **April 1 through November 30** would be anticipated to suitably avoid potential impacts to Bat Maternity Colonies. This is further discussed in Section 8 below.

7.4.2 Amphibian Breeding Habitat (Woodland)

While targeted evening amphibian surveys were not completed as part of the field program, incidental observations during the bat snag assessment documented a possible L3 Call Level Code for Wood Frog, associated with adjacent lands to the west of the property, which may or may not have originated from outside of the study area. Further, potentially suitable amphibian breeding wetland habitat is associated with the deciduous swamp, SWDM4-5, in the northwest corner of the property. The proposed development will not result in any direct impact to this potential SWH feature (SWDM4-5; Figure 3). The proposed development is setback 18.4m from the eastern edge of the SWDM4-5 (Figure 3) with the remaining setback areas in excess of 30m all contained within the woodland EP block (Block 570). While clearing will occur beyond the 18m setback, the 10m wide drainage swale located along the rear edge of the proposed lots will be naturalized post-development (Figure 4) and a native seed mix will be applied. As a

result, anticipated potential indirect impacts associated with noise, light and inadvertent encroachment into the EP lands will be sufficiently mitigated with the 18.4m treed setback in conjunction with the proposed drainage swale that will act as a naturalized barrier between the development and the EP lands. Mitigation measures such as lighting design (mandatory down lighting) recommendations and the installation of rear yard fencing will also help to reduce disturbance to wildlife habitat.

As such, provided that mitigation measures outlined in Section 8 are adhered to, the proposed setback (18m treed setback and 10m area of restoration) is anticipated to adequately protect the potential amphibian breeding function associated with the SWDM4-5.

7.4.3 Terrestrial Crayfish

The proposed development is setback more than 30m from the northwestern MAMM3-1 (Figure 3) therefore, terrestrial crayfish associated with this wetland are not expected to be impacted by the project. While construction will slightly encroach into the northeastern MEFM1 community where chimneys were identified in adjacent lands (Figure 3), the abutting EP block will be restored as wetland post-development (Figure 4; 1.13ha of wetland created), thereby providing suitable conditions for terrestrial crayfish. Further, as recommended in Section 8, a water balance should be completed during Detailed Design to ensure no impacts to the wetland and drainage features and hence to this SWH function. As such, there is no expectation that the proposed works will negatively impact terrestrial crayfish.

7.4.4 Habitat for Special Concern and Rare Wildlife Species

Wood Thrush

Habitat opportunities for Wood Thrush are characterized by intermediate-aged to mature woodland ecosystems.

One (1) probable nest centroid for Wood Thrush was identified within the western treed swamp (SWDM4-5; Figure 2) that is part of the large western woodland on the property.

While the proposed development involves removal of approximately 1.59ha of woodland, there is no expectation that such removals would undermine the potential available habitat or related functions for Wood Thrush onsite or in adjacent lands. Tree cutting for the proposed development is anticipated to be relatively minimal in the context of the greater landscape which comprises extensive, densely treed vegetation types that will be retained in the post-construction setting. Therefore, impacts to the species and its life processes are not anticipated as a result of the proposed development, provided tree clearing occurs outside of the breeding/nesting period for the species between **April 1 and August 31**. By restricting tree

cutting to outside of the active breeding period for the species, individuals will not be negatively impacted (as nestlings will not be present) and future nesting opportunities will be retained within the property and local landscape, given the local abundance of upland forest habitats suitable for the species.

7.5 Fish Habitat

No direct fish habitat features occur on the property or in the drainage features directly north within the assessed study area. Direct seasonal fish habitat is only present downstream (northeast) of the property within Lamont Creek on the east side of the rail trail crossing as shown on Figure 2. Both DF2 and a portion of DF3 will be permanently removed/relocated as a result of the proposed development.

Drainage Feature 2 (DF2)

DF2 will be largely removed from the landscape to accommodate the SWM facility in Block 572 as per Figure 3. These works would result in the permanent removal of 365m of poor indirect fish habitat from the landscape, with only a small portion of approximately 15m of the original feature remaining. DF2 only functions as seasonal indirect fish habitat with the main function being the contributions of flow, nutrients, sediment, etc. to downstream fish habitat. It is anticipated that this function can be maintained post-development through a combination of SWM plan measures:

- The primary storm system discharges into a stormwater management wet pond (SWMF) and makes up the majority of the development.
- A secondary storm system consisting of an oil-grit separator (OGS) will service a portion of the development and external drainage area that cannot be routed to the SWMF due to grading constraints.
- The third storm system consists of a series of swales/channels capturing external drainage to the west of the site, as well as rear yard drainage, and conveys flows safely between the Bridle Park and Clearview Garden Estates.

The SWMF will continue to discharge water to the general area of DF2 post-development via an outlet pipe and flow spreader. In addition, the proposed onsite creation of wetland floodplain as described previously should further offsetting impacts from the removal of DF2. As per Figure 4, a drainage swale is proposed to be installed in the EP block to the east of the SWMF to capture site runoff, and the entire block (1.13ha) will be restored as wetland habitat. During the detail design phase, naturalization of the wetland habitat and creation of a drainage swale to offset the DF2 removal should be explored. At this time, approximately 160m of new drainage channel could be constructed within the wetland habitat, which is to be designed at a later

planning stage. Conceptually, the proposed floodplain storage area can be restored to a functioning wetland feature that can provide indirect fish habitat benefits to the downstream receiving systems.

Lastly, in detail design, the SWM design and water balance assessment will need to be finalized to confirm both water quantity and quality are maintained post-development. At this time, a post-development annual infiltration deficit of approximately 42,995 m^3/year has been identified relative to pre-development conditions (Crozier, 2026). To mitigate this deficit and support water balance objectives, infiltration-based LID measures are proposed, which will be assessed during detail design. LIDs are designed to promote infiltration, reduce runoff volumes, and offset the identified deficit while maintaining a low-maintenance, passive operation. Furthermore, the proposed SWM facility will provide both quantity and quality control and will be shared with the Clearview Garden Estates development. According to Crozier (2026a), the proposed wet pond has been sized to achieve an "Enhanced Protection" level of treatment in accordance with MECP guidelines, while controlling post-development peak flows up to and including the 100-year storm event to pre-development levels.

Drainage Feature 3 (DF3)

Similar to DF2, DF3 will be removed and relocated from its current alignment on the landscape. To accommodate the proposed site plan, DF3 will be realigned into a drainage swale network that will continue to capture overland runoff from the proposed development and retained forest/wetlands areas to the west. The drainage network will continue onto the lands to the north as part of the adjacent development and will be seeded with a native seed mix to naturalize the drainage path. Segments of the drainage swale will have culverts and/or be piped to flow underneath the proposed road network and SWMF. A total of 460m of the overall 570m length of DF3 will be relocated. As mentioned previously, DF3 is considered poor, seasonal indirect fish habitat and provides minimal inputs to the downstream receiving watercourse. Therefore, realigning the feature should have minimal impacts on fish habitat downstream. The function of the feature (*i.e.,* flow conveyance) should be largely maintained post-development. Similar to DF2, additional assessments are to be completed in detail design to confirm that the SWM design and water balance assessment do not significantly alter water quantity and quality post-development.

Overall, impacts to DF2 and DF3 are considered minimal as both are indirect fish habitat features that provide poor/seasonal fish habitat function to the downstream watercourse. Both are considered low quality/low sensitive fish habitat features that have been historically altered and manipulated for agricultural purposes. Further alterations to these features are proposed which have the potential to impact water quantity and quality draining off site. However,

during the subsequent detail design process, it is anticipated that these impacts can be mitigated through refinement of the SWM design, water balance assessment, LID implementation, and recommendations outlined in Section 8 below.

DFO permitting may be required due to the proposed infilling and realignment of DF2 and DF3, both which function as indirect fish habitat and are protected under the Federal *Fisheries Act*. A qualified fisheries ecologist should review and provide input during detail design to confirm design features are incorporated into the SWM design and grading plan to mitigate impacts to fish habitat. Once design plans are finalized at detail design with respect to the water balance assessment, SWM design, and floodplain offsetting storage area, an updated fisheries 'screening' can conclude if a submission to DFO for permitting is required under a DFO Request for Review. It is anticipated that if the proposed recommendations and mitigation measures as outline in Section 8 below are implemented, and the water balance assessment can confirm there will be no significant impacts on water conveyance off-site, that fisheries impacts can be mitigated. In this case, alterations to DF2 and DF3 may be approvable under a Letter of Advice. Ultimately, the proposed development appears to be conceptually acceptable from a fisheries perspective. Further assessment will be required in detail design to confirm approval requirements from DFO.

8.0 RECOMMENDATIONS

8.1 Species at Risk

It should be noted that the absence of a protected species within the study area does not indicate that they will never occur within the area. Given the dynamic character of the natural environment, there is a constant variation in habitat use. Care should be taken in the interpretation of presence of species of concern including those listed under the SCA. Changes to policy, or the natural environment, could result in shifts, removal, or addition of new areas to the list of areas currently considered SAR habitat. This report is intended as a point in time assessment of the potential to impact SAR; not to provide long term "clearance" for SAR. A review of the assessment provided in this report by a qualified person is expected to be sufficient to provide appropriate advice at the time of the onset of future site works.

While there is no expectation that the assessment should change significantly, it is the responsibility of the proponent to ensure that they are not in contravention of the SCA at the time that site works are undertaken. Activities must occur in conformity with the SCA that afford individual and habitat protection, respectively, to species listed as Threatened or Endangered in Ontario. The MECP has provided Azimuth with specific direction (with respect to the former ESA, now considered applicable to the SCA) that the agency no longer issues Letters

of Advice (LOAs) nor does MECP "sign off" on every proposed development. The roles and responsibilities of the proponents are outlined in the Draft Client's Guide to Preliminary Screening for SAR (MECP, 2019), which advises that the proponent should consider whether a proposed activity is likely to contravene the SCA prior to initiating correspondence with MECP. Where an assessment determines a proposed activity is not expected to contravene the SCA, there is no requirement to contact MECP.

8.1.1 Black Ash

Prior to site alteration, Azimuth recommends the completion of a Black Ash Health Assessment, following the health evaluation guidance of the "Black Ash Assessment Guidelines: Assessment of Black Ash (*Fraxinus nigra*) for the purposes of the *Endangered Species Act,* 2007" (MECP, 2024). This would include, at minimum, the completion of a detailed screening within the FOMM7-2 of areas close enough to proposed development footprint (including disturbance and grading) to potentially encroach the defined habitat of Black Ash.

According to the SCA, habitat for vascular plant species is defined as the CRZsurrounding the individual. The International Society of Arboriculture (ISA) defines CRZ as the "area around a tree where the minimum amount of roots that are biologically essential to the structural stability and health of the tree are located" (ISA, 2022). This is an area defined by the current size of a given tree and is a point-in-time determination. The ISA notes that Tree Protection Zones, which are intended to protect the CRZ, are typically calculated at between 6 to 18 times the DBH of a given tree, with the 18 used for more sensitive tree individuals/species (ISA, 2022). Based on Azimuth's correspondence with the MECP, the MECP generally considers the CRZ for vascular plants to be equivalent to 18 times the DBH, rounded up to the nearest metre (MECP, Pers. Comm.), which aligns with the ISA's recommendation for more sensitive trees.

According to information available online through the Province of Ontario, Black Ash may reach a DBH of 50cm, or 0.5m (MECP, 2026), although the record for the largest Black Ash in Ontario suggests a DBH of 76.20cm, or 0.762m (Ontario's Old Growth Forests, 2026). Taking the most conservative numbers from each of these (CRZ equivalent to 18 times DBH, rounded up; largest Black Ash equivalent to 0.762m DBH), the CRZ for the largest Black Ash on record would be anticipated to extend up to 14m from the tree's trunk. Given the above, all Black Ash with CRZs large enough to be encroached by development would therefore be expected to occur within 14m of proposed development/site alteration. Therefore, a Black Ash screening and Black Ash Assessment for all living Black Ash ≥8cm DBH within 14m of the proposed development footprint is recommended to be completed to fully account for any Black Ash which may have their CRZ encroached by proposed redevelopment.

In compliance with O. Reg. 61/26, a Black Ash Assessment Report detailing the findings of the above assessment should be submitted to the MECP prior to disturbance or site alteration that may encroach living Black Ash ≥8cm DBH or encroach the habitat (*i.e.* CRZ) of living Black Ash ≥8cm DBH (*i.e.* areas up to 14m away from disturbance or site alteration). Living Black Ash ≥8cm DBH, whether healthy or unhealthy, are considered protected under the SCA until a Black Ash Assessment Report is submitted to the MECP. Following submission of the Black Ash Assessment Report, it is Azimuth's understanding that only healthy Black Ash ≥8cm DBH would remain protected under the SCA.

For any Black Ash determined by a Black Ash Assessment Report to be healthy, sized ≥8cm DBH, and which may either be removed or have CRZs that may be encroached by proposed site alteration/disturbance, the proponent is recommended to complete a registration under Schedule 1 of O. Reg. 75/26 under Ontario's SCA. This registration should be completed prior to the removal/harm of a healthy Black Ash individual or initiation of any site alteration/disturbance within the CRZ of any healthy Black Ash ≥8cm DBH that have been identified during the Black Ash Assessment.

8.2 Migratory Breeding Birds and Bats

Activities involving the removal of vegetation should be restricted from occurring during the breeding season. Migratory birds, nests, and eggs are protected by the *Migratory Birds Convention Act*, 1994 (MBCA) and the *Fish and Wildlife Conservation Act,* 1997 (FWCA). Environment Canada outlines dates when activities in any region have potential to impact nests at the Environment Canada Website (https://www.canada.ca/en/environment-climate-change/services/avoiding-harm-migratory-birds/general-nesting-periods/nesting-periods.html). In Zone C2 vegetation clearing should be avoided between **April 1 through August 31** of any given year. If work requires that vegetation clearing is required between these dates screening by an ecologist with knowledge of bird species present in the area could be undertaken to ensure that the vegetation has been confirmed to be free of nests prior to clearing. It is advisable that migratory bird nest screenings during the breeding window are generally appropriate for "simple" habitats (*e.g.* hedgerows, disturbed areas) and less suitable for "complex" habitats (*e.g.* thickets, woodlands) given the increased risk for non-detection of active nesting sites in dense areas.

Activities involving tree removal should be avoided between **April 1 through November 30** of any given year, during the active period for bat species that may utilize trees for maternity and day roosting purposes. It is anticipated that adherence to this timing restriction will avoid impacts to individual SAR bats, therefore remaining in compliance with the SCA.

8.3 Site Preparation and Operations

Diligent application of sediment and erosion controls (ESCs) and adherence to Best Management Practices (BMPs) for the duration of site works is recommended for the mitigation of direct, indirect, and cumulative impacts upon retained natural heritage features and functions. Recommendations related to implementation of ESCs and BMPs are listed below, and should be adhered to throughout the duration of the site activities:

- Installation and maintenance of ESCs are recommended for all future construction activities to minimize the extent of accidental or unavoidable impacts to adjacent vegetation communities, wildlife habitat and fish habitat.
- Prior to the commencement of site works, silt fencing should be applied along the length of directly adjacent natural or naturalized features.
- Routine inspection/maintenance of the silt fencing should occur throughout construction.
- ESCs should be maintained until vegetation is re-established post-construction.
- Materials storage on the property (*i.e*. soil stockpiles) should be located over 30m from natural features where feasible. Material storage areas should be contained with ESCs to avoid potential indirect impacts to natural features onsite.
- All site disturbance should be minimized to the extent possible.
- All maintenance activities (including refueling) required during future construction should be conducted at least 30m away from natural features to prevent accidental spillage of deleterious substances that may harm natural environments.
- Snow fencing or equivalent should be installed at the limit of the work area to prevent the accidental intrusion of machinery operations into adjacent undisturbed natural areas.
- The contractor is recommended to have a Contaminant and Spill Management Plan in place prior to initiation of works. This should include keeping an emergency spill kit on site at all times. In the event of a spill, the contractor must report it immediately to the provincial Spills Action Centre (SAC).

8.4 Fish and Fish Habitat

As specified above, future development on the property should have regard for the adjacent natural environmental features, and utilize BMPs during construction as follows:

- All ESC measures are to be installed prior to any ground disturbance, and shall be maintained until all disturbed soils have been restored and stabilized following

construction. Along watercourses and wetland features that are to be retained post-development, it is recommended that heavy duty sediment fence be installed.

- Downstream water quantity and quality is to be maintained at all times during and after construction. A water balance assessment and SWM plan shall be completed during detail design to ensure that no significant alterations to wetlands and existing downstream flows occurs post-development.
- Realignment/alteration to DF2 and DF3 shall be reassessed as a fisheries 'screening' in detail design to confirm permitting requirements under the *Fisheries Act*. The project is expected to require review by DFO in detail design. Detail design for the SWM facility should consider the following recommendations where feasible to mitigate thermal/pollutant impacts during discharge to the receiving watercourse:
    - Bottom-draw outlet design to discharge cool water along the pond bottom prior to arm surface water;
    - Riparian plantings along the pond and outlet channel to shade water and reduce surface water temperatures;
    - Install cooling trenches and/or lengthen the outlet channel if possible to increase the shading potential, reduce flows during storm events, and allow sediment to settle; and,
    - Install an energy dissipation device at the pond outlet to reduce flows rates and potential scouring at the receiving channel outlet location.
- Fisheries timing restrictions should be considered in detail design and through consultation with DFO (if required). While drainage features on the property constitute indirect fish habitat, direct habitat does occur on lands immediately downstream of the property. Timing restrictions may be applicable to works within DF2 and DF3, and project timing should consider avoiding land grading/grubbing in proximity to DF2 and DF3 during the spring months when the potential for sediment mobilization is increased.
- Should dewatering be needed during construction, water should be discharged into a filter bag (*i.e.,* envirobag or equivalent). Filter bags should be placed a minimum of 30m from fish habitat and wetlands on stable, vegetated ground to allow fines to settle out of the water. Monitoring of dewatering operations should occur throughout the construction process to ensure water is free of fines before entering the watercourses or wetlands.
- Disposal of excess material should occur in a timely fashion to minimize risk of entry into the watercourse.

8.5 Ecological Offsetting

NVCA's Achieving Net Gains Through Ecological Offsetting policy ("Offsetting Guidelines"; September 2021) was used as a guideline to prepare a wetland compensation strategy for the proposed wetland loss for the proposed development.

Proposed Wetland and Buffer Removals

Based on the results of the wetland staking exercise conducted between Azimuth and NVCA, relative to the outer grading limit of the proposed development, direct removals of two (2) wetland areas are proposed including:

- MAMM1-3: 889m^2 = 0.089ha
- SWTM2-1: 483m^2 = 0.048ha
- Total direct wetland removals: **1,372m^2** = **0.137ha**

The wetland buffer area within 30m of the wetlands proposed for removal as a result of the proposed development are calculated as follows:

- MAMM1-3: 3251m^2 = 0.325ha
- SWTM2-1: 3210m^2 = 0.321ha
- SWDM4-5: 500mm^2 = 0.05ha
- Total 30m wetland buffer removals: **6,961m^2** = **0.696ha**

With regard for the 30m vegetated buffer area (6,961m^2), calculations include all upland vegetation within 30m of the wetland, except for areas under active agricultural management (OAG codes) and areas of existing development (CVR_1). Wetland buffer removal areas illustrated in Figure 3 illustrate portions of upland vegetation communities within 30m of wetland limits subject to removals under the proposed development plan.

Based on the above review, NVCA permitting is required for the direct removal of 1,372m^2 of MAMM1-3 and SWTM2-1 and associated 30m vegetated buffer measuring a cumulative 6,961m^2.

NVCA Mitigation Hierarchy

In accordance with NVCA's Offsetting Guidelines, proposed wetland removals must first satisfy a Mitigation Hierarchy which contemplates the following steps, prior to presenting a proposal for wetland compensation:

1. Avoidance of impacts
2. Minimization of impacts
3. Mitigation of impacts

4. Compensation for losses

In the case of the proposed development, through discussions with the proponent it is Azimuth's understanding that avoidance of impacts to the wetland units was reviewed and it was determined that no suitable alternative to wetland removals exists, in a manner that would allow the project to remain viable. The proposed development is located within a Settlement Area within the Town of Stayner and has been subject to substantial direct and indirect interference, including:

- Ongoing routine farming practices in proximity and adjacent to wetlands.
- Residential development abuts wetland on the southern boundary (since before 2012) (MAMM1-3).
- The Clearview Train Trail recreational trail and previously railway line along the eastern property boundary (since before 1978).

Based on the above, it is Azimuth's opinion that the proponent has sufficiently considered avoidance and minimization of impacts to the wetland feature, such that the proposed removals satisfy NVCA requirements for Step 1 (Avoidance) and Step 2 (Minimization) of the Mitigation Hierarchy.

With regard for Step 3 (Mitigation), the proposed works are to occur in manner that complies with ESCs, BMPs, timing windows for vegetation removals, and other considerations (such as those related to SAR), described in Section 8. A post-development wetland water balance assessment should be prepared at the detailed design stage, recommended to be carried forward as a condition of Draft Plan Approval. It is Azimuth's opinion that providing conformity is demonstrated for the above mitigation measures and the water balance deficit can be addressed at detail design, the proposed development would satisfy NVCA requirements for Step 3 (Mitigation) of the Mitigation Hierarchy.

Based on the above review, it is Azimuth's opinion that the proposed development would be considered eligible for wetland compensation (under Step 4) as outlined in the Offsetting Guidelines. As described above, the quantity of area loss is equal to 1,372m^2 and the quantity of wetland setback loss (*i.e.* upland areas within 30m of the wetland edge) is equal to 6,961m^2. Section 3.2 of the Offsetting Guidelines specifies that a wetland replacement ratio of 2:1 should be implemented for direct wetland losses, and a wetland replacement ratio of 1:1 should be implemented for loss of wetland setback, therefore based on the proposed wetland vegetation removals, the required wetland compensation to achieve ecological gains would be 9,705m^2 ((1,372m^2 *2) + 6,961m^2) (0.97ha).

To achieve net ecological gain for proposed wetland removals, direct onsite creation of wetland is proposed to occur in the northeastern EP block (Block 571; Figure 4). A drainage swale is proposed to

be installed in the EP block, and post-construction, the entire block (1.13ha) will be restored as wetland habitat. Creation of wetland in this location will expand the size of the existing northern SWTM2-1, creating a larger, consolidated wetland. Further, lands along the edge of the western woodland will be seeded with a native seed mix to provide a naturalized 10m setback from the retained woodland feature, allowing the majority of the SWDM4-5 wetland setback to be restored.

With regard for the above, it is Azimuth's opinion that removal of 1,372m^2 within the two (2) wetland units (MAMM1-3 and SWTM2-1) in addition to 6,961m^2 of the supporting upland 30m vegetated buffer (MAMM1-3, SWTM2-1 and SWDM4-5; Figure 3) is eligible for wetland compensation in accordance with NVCA's Offsetting Guidelines, and that onsite wetland creation would achieve a net gain for the proposed wetland losses.

A detailed Ecological Offsetting Plan should be prepared at the detailed design stage that illustrates a strategy to offset the loss of 1,372m^2 of wetland habitat and 6,961m^2 of wetland setback.

8.6 Outdoor Lighting

Outdoor lighting should be designed and directed away from the woodland and other natural features to minimize light spill into wildlife habitat. Full cut-off, downward-directed fixtures should be used, with lighting limited to the minimum intensity necessary for safety, to reduce disturbance to ecological functions while maintaining the integrity of the woodland edge.

8.7 Fencing

A continuous fence should be installed along the rear property line of all residential lots abutting the large western woodland to clearly delineate the development limit and discourage inadvertent encroachment into the natural feature. The fence will help to minimize disturbance to woodland and wildlife habitat, including vegetation removal, dumping of yard waste, informal trail creation, and other unauthorized activities.

8.8 Edge Management Plan

An Edge Management Plan should be prepared for the woodland edge adjacent to the proposed development to promote long-term edge stability and ecological function. The plan should include an assessment by a qualified arborist to identify hazard trees that should be removed and ensure that trees designated for retention are adequately protected during construction and throughout the development process.

9.0 CONCLUSIONS

Based upon our analysis, it is concluded that subject to the incorporation of the environmental protection measures and criteria described throughout this report, the proposed development is not anticipated to result in a negative impact upon KNHFs or their ecological functions.

At this time, Azimuth's findings are summarized as follows:

- The proposed development is consistent with the applicable natural heritage policies of the Provincial Planning Statement, *Species Conservation Act*, 2025, County of Simcoe Official Plan, Township of the Clearview Official Plan, and the federal *Fisheries Act*.

- Our impact assessment has given full consideration to the habitat requirements of all SAR assumed and documented to occur in the area. Prior to site works, further field work is required to confirm the presence/absence of 'healthy' Black Ash trees of sufficient size in proximity to the development limits. A Conservation Plan may be required as part of the registration as per Schedule 1 of O. Reg. 75/26 under Ontario's SCA, if SCA protected trees are identified. Other SAR with potential to occur within the study area are not expected to be negatively impacted directly or indirectly providing conformance is demonstrated to mitigation measures described in Section 8.

- The proposed development will result in the direct removal of 1,372m^2 within two (2) wetland units (MAMM1-3 and SWTM2-1) in addition to 6,961m^2 of the supporting upland 30m vegetated buffer (MAMM1-3, SWTM2-1 and SWDM4-5). This loss is eligible for wetland compensation in accordance with NVCA's Offsetting Guidelines and the onsite wetland creation is anticipated to achieve a net gain for the proposed wetland losses. With consideration for mitigation and compensation proposed, there is no expectation that the proposed works would negatively impact wetlands within the study area limits.

- The proposed works are not expected to negatively impact the ecological functions of the Significant Woodland and SWHA outlined in Section 5 if the appropriate mitigation measures outlined in Section 8 are followed.

- Drainage features function as indirect fish habitat and are not expected to be negatively impacted as a result of the proposed works if the appropriate mitigation measures described in Section 8 are followed during construction and further assessments are completed at detail design (water balance assessment, SWM design).

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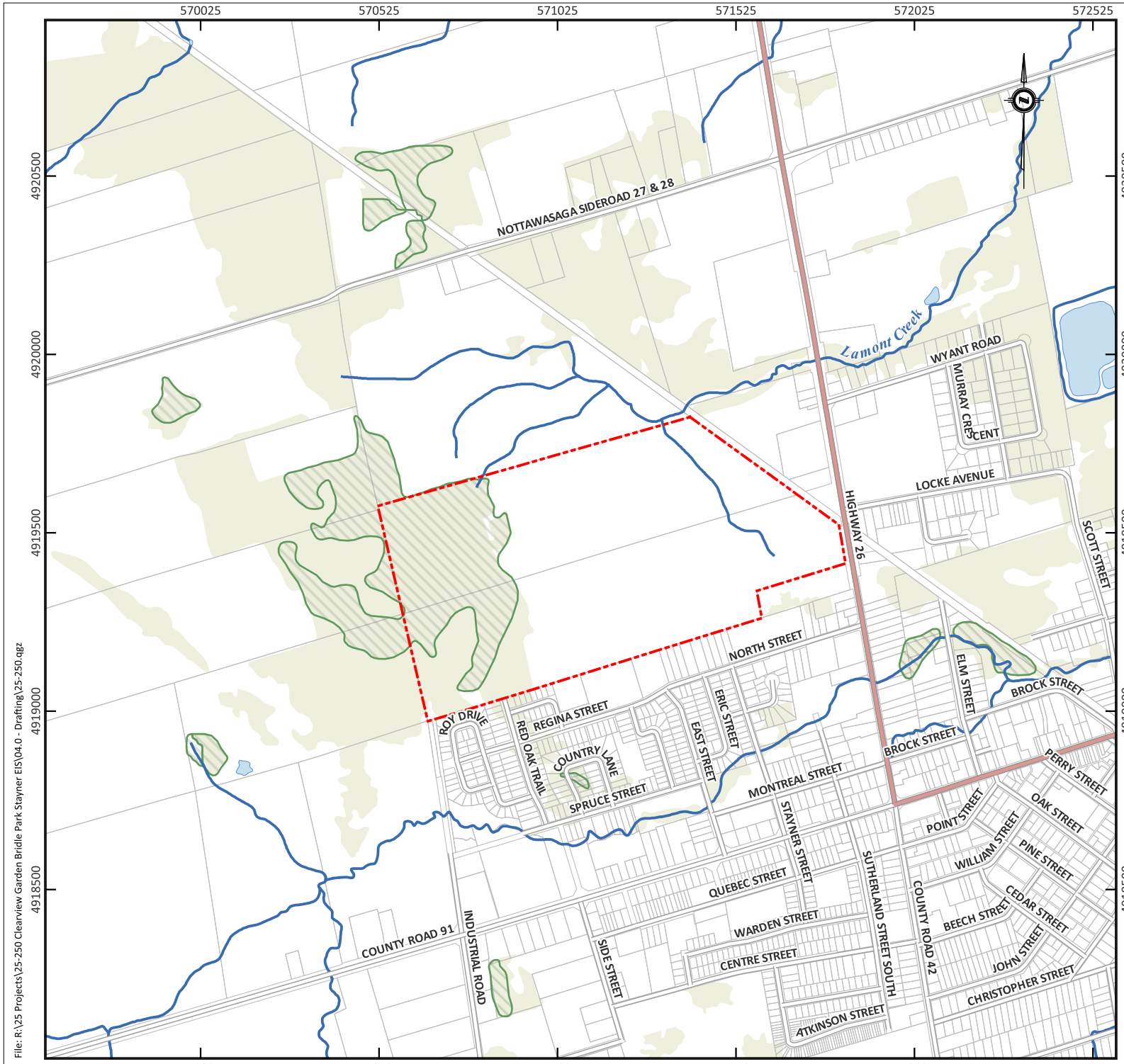
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LEGEND

- Approx. Property Boundary
- Waterbody
- Mapped Watercourse
- Unevaluated Wetland
- Wooded Area
- Road
- Highway

NOTES

1. Watercourse, Waterbody, Wetland, Woodland and ANSI layers are derived from MNRF GIS data, retrieved December 2022.
2. The metric grid displayed on the map corresponds to NAD83 / UTM zone 17N (EPSG:26917).

REGIONAL MAP

SCALE 1:500000



0 0.25 0.5 0.75

KILOMETERS

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ENVIRONMENTAL ASSESSMENTS & APPROVALS

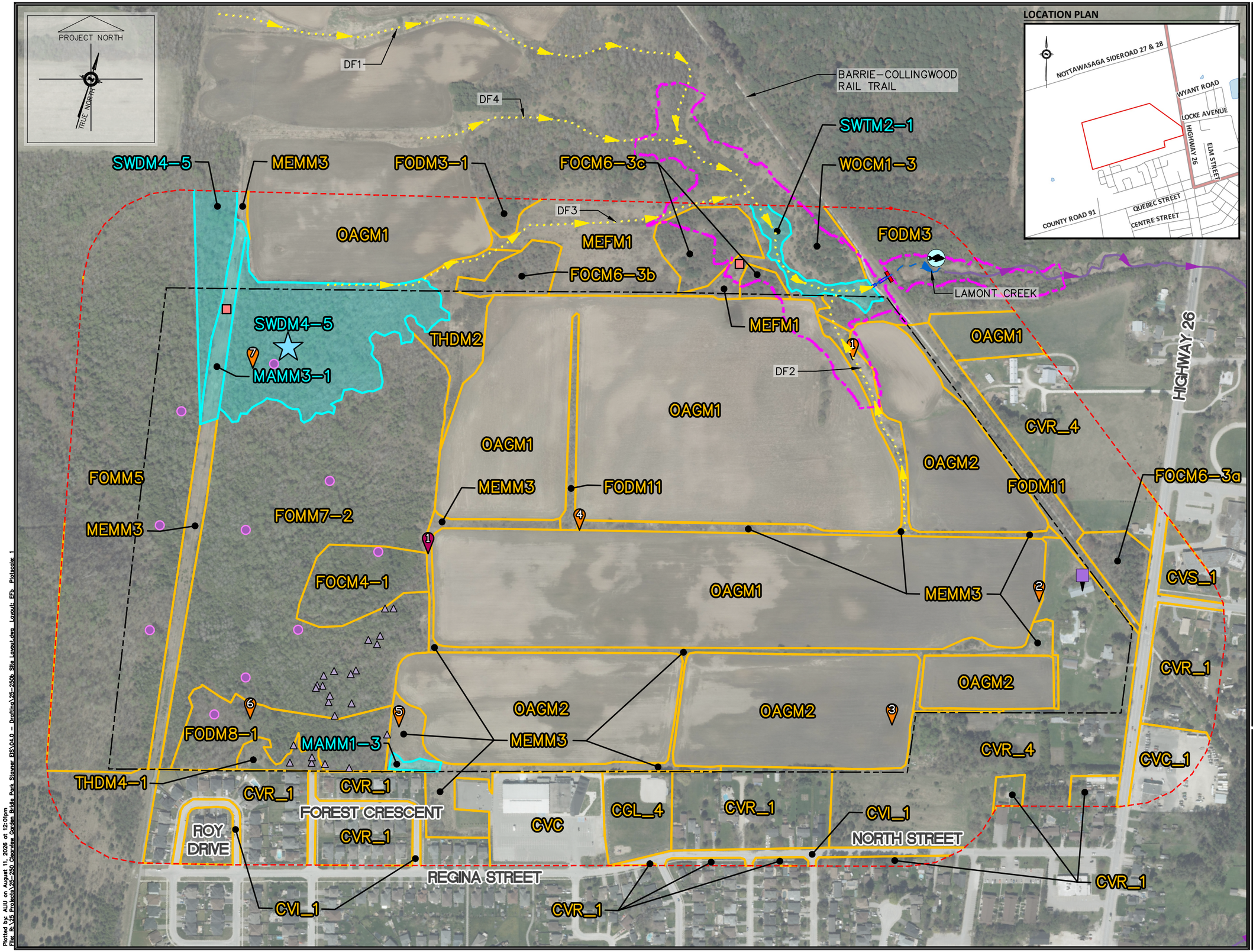
SITE LOCATION

BRIDLE PARK
STAYNER, ON

DATE ISSUED:	JULY 2026
CREATED BY:	A.L.
PROJECT NO.:	25-250b
BASE MAP:	MNRF

Figure No. 1

File: R:\25 Projects\25-250 Clearview Garden Bridle Park Stayner EIS\04.0 - Drafting\25-250.qgz



LEGEND:

- APPROX. PROPERTY BOUNDARY
- STUDY AREA
- CULVERT
- FISH BARRIER
- EXISTING FLOODPLAIN (CROZIER, 2026)

FISH HABITAT:

- INTERMITTENT DRAINAGE FEATURE/ DIRECT FISH HABITAT
- EPHEMERAL DRAINAGE FEATURE/ INDIRECT FISH HABITAT
- DRAINAGE FEATURE (NOT ASSESSED)
- COOLWATER THERMAL REGIME

ELC UPLAND COMMUNITIES:

CGL_4	RECREATIONAL
CVC	COMMERCIAL AND INSTITUTIONAL
CVC_1	BUSINESS SECTOR
CVI_1	TRANSPORTATION
CVR_4	RURAL PROPERTY
CVS_1	EDUCATION
CVR_1	LOW DENSITY RESIDENTIAL
OAGM1	ANNUAL ROW CROPS
OAGM2	PERENNIAL COVER CROPS
FOCM4–1	FRESH–MOIST WHITE CEDAR CONIFEROUS FOREST
FOCM6–3	DRY–FRESH SCOTCH PINE NATURALIZED CONIFEROUS PLANTATION
FODM3	DRY–FRESH POPLAR–WHITE BIRCH DECIDUOUS FOREST
FODM3–1	DRY–FRESH POPLAR DECIDUOUS FOREST
FODM8–1	FRESH–MOIST POPLAR DECIDUOUS FOREST
FODM11	NATURALIZED DECIDUOUS HEDGEROW
FOMM5	DRY–FRESH WHITE BIRCH–POPLAR–CONIFEROUS MIXED FOREST
FOMM7–2	FRESH–MOIST WHITE CEDAR–HARDWOOD MIXED FOREST
WOCM1–3	DRY–FRESH WHITE PINE CONIFEROUS WOODLAND
MEFM1	DRY–FRESH FORB MEADOW
MEMM3	DRY–FRESH MIXED MEADOW
THDM2	DRY–FRESH DECIDUOUS SHRUB THICKET
THDM4–1	NATIVE DECIDUOUS REGENERATION THICKET

ELC WETLAND COMMUNITIES:

MAMM1–3	REED–CANARY GRASS GRAMINOID MINERAL MEADOW MARSH
MAMM3–1	MIXED MINERAL MEADOW
SWDM4–5	POPLAR MINERAL DECIDUOUS SWAMP
SWTM2–1	RED–OSIER DOGWOOD MINERAL DECIDUOUS THICKET SWAMP

- DAWN BREEDING BIRD SURVEY STATION
- EVENING BREEDING BIRD SURVEY STATION
- BAT EXIT SURVEY LOCATION
- BAT SNAG TREES
- BAT SNAG PLOT LOCATIONS
- APPROXIMATE CRAYFISH CHIMNEY LOCATIONS
- APPROXIMATE WOOD THRUST NEST

0 112.50 225.0

HORIZONTAL SCALE 1:4500

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ENVIRONMENTAL FEATURES

BRIDLE PARK
STAYNER, ON

DATE ISSUED:	*AUGUST 2026*	Figure No. 2
CREATED BY:	*A.L.*	
PROJECT NO.:	*25-250b*	
REFERENCE:	*SIMCOE COUNTY*	

Plotted by: ALILI on August 11, 2026 at 12:01pm
File: R:\25 Projects\25-250 Clearview Gordon Bridle Park Stayner EIS\04.0 — Drafting\25-250b Site Layout.dwg Layout: EFP Plotscale: 1

PROJECT NORTH

TRUE NORTH

DF1

DF4

DF3

BARRIE–COLLINGWOOD RAIL TRAIL

SWTM2–1

WOCM1–3

SWDM4–5

MEMM3

FODM3–1

FOCM6–3c

OAGM1

MEFM1

WETLAND BUFFER REMOVAL = 0.0501ha

WETLAND BUFFER REMOVAL = 0.3210ha

FODM3

FOCM6–3b

LAMONT CREEK

18.4m

THDM2

SWDM4–5

MEFM1

WETLAND REMOVAL = 0.0483ha

OAGM1

MAMM3–1

DF2

WOODLAND REMOVAL = 0.3166ha

HIGHWAY 26

OAGM1

CVR_4

OAGM1

OAGM2

FOMM5

MEMM3

FODM11

FOCM6–3a

FOMM7–2

FODM11

MEMM3

FOCM4–1

WOODLAND REMOVAL = 1.586ha

OAGM1

CVS_1

MEMM3

CVR_1

WETLAND BUFFER REMOVAL = 0.3251ha

OAGM2

OAGM2

FODM8–1

MAMM1–3

MEMM3

OAGM2

CVR_4

CVC_1

THDM4–1

CVR_1

CVR_1

WETLAND REMOVAL = 0.0889ha

CGL_4

CVR_1

CVI_1

FOREST CRESCENT

CVC

NORTH STREET

ROY DRIVE

CVR_1

REGINA STREET

CVI_1

CVR_1

CVR_1

LOCATION PLAN

NOTTAWASAGA SIDEROAD 27 & 28

WYANT ROAD

LOCKE AVENUE

HIGHWAY 26

ELM STREET

QUEBEC STREET

CENTRE STREET

COUNTY ROAD 91

LEGEND:

- APPROX. PROPERTY BOUNDARY
- STUDY AREA
- CULVERT
- FISH BARRIER
- EXISTING FLOODPLAIN (CROZIER, 2026)

FISH HABITAT:

- INTERMITTENT DRAINAGE FEATURE/ DIRECT FISH HABITAT
- EPHEMERAL DRAINAGE FEATURE/ INDIRECT FISH HABITAT
- DRAINAGE FEATURE (NOT ASSESSED)
- COOLWATER THERMAL REGIME

ELC UPLAND COMMUNITIES:

CGL_4	RECREATIONAL
CVC	COMMERCIAL AND INSTITUTIONAL
CVC_1	BUSINESS SECTOR
CVI_1	TRANSPORTATION
CVR_4	RURAL PROPERTY
CVS_1	EDUCATION
CVR_1	LOW DENSITY RESIDENTIAL
OAGM1	ANNUAL ROW CROPS
OAGM2	PERENNIAL COVER CROPS
FOCM4–1	FRESH–MOIST WHITE CEDAR CONIFEROUS FOREST
FOCM6–3	DRY–FRESH SCOTCH PINE NATURALIZED CONIFEROUS PLANTATION
FODM3	DRY–FRESH POPLAR–WHITE BIRCH DECIDUOUS FOREST
FODM3–1	DRY–FRESH POPLAR DECIDUOUS FOREST
FODM8–1	FRESH–MOIST POPLAR DECIDUOUS FOREST
FODM11	NATURALIZED DECIDUOUS HEDGEROW
FOMM5	DRY–FRESH WHITE BIRCH–POPLAR–CONIFEROUS MIXED FOREST
FOMM7–2	FRESH–MOIST WHITE CEDAR–HARDWOOD MIXED FOREST
WOCM1–3	DRY–FRESH WHITE PINE CONIFEROUS WOODLAND
MEFM1	DRY–FRESH FORB MEADOW
MEMM3	DRY–FRESH MIXED MEADOW
THDM2	DRY–FRESH DECIDUOUS SHRUB THICKET
THDM4–1	NATIVE DECIDUOUS REGENERATION THICKET

ELC WETLAND COMMUNITIES:

MAMM1–3	REED–CANARY GRASS GRAMINOID MINERAL MEADOW MARSH
MAMM3–1	MIXED MINERAL MEADOW
SWDM4–5	POPLAR MINERAL DECIDUOUS SWAMP
SWTM2–1	RED–OSIER DOGWOOD MINERAL DECIDUOUS THICKET SWAMP

- 30m WETLAND SETBACK
- WETLAND REMOVAL
- WETLAND BUFFER REMOVAL
- SIGNIFICANT WOODLAND REMOVAL
- BAT EXIT SURVEY LOCATION
- BAT SNAG TREES
- BAT SNAG PLOT LOCATIONS

0 112.50 225.0

HORIZONTAL SCALE 1:4500

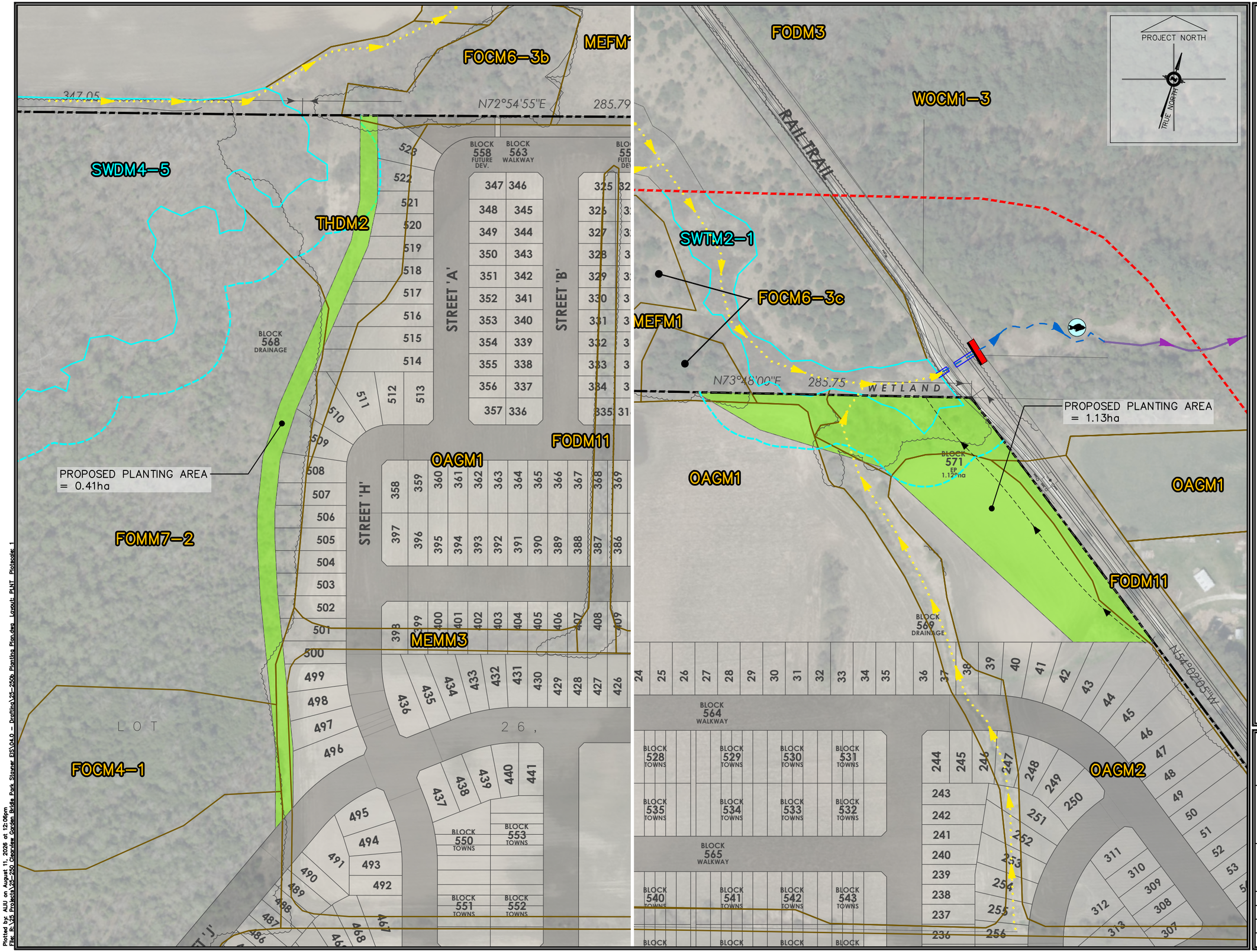
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ENVIRONMENTAL ASSESSMENTS & APPROVALS

PROPOSED DEVELOPMENT

BRIDLE PARK
STAYNER, ON

DATE ISSUED:	AUGUST 2026	Figure No. 3
CREATED BY:	A.L.	
PROJECT NO.:	25-250b	
REFERENCE:	SIMCOE COUNTY	

Plotted by: ALU on August 11, 2026 at 12:04pm
File: R:\25 Projects\25-250 Clearview Garden Bridle Park Stayner EIS\04.0 - Drafting\25-250b Site Layout.dwg Layout: PDb Plotscale: 1



LEGEND:

- APPROX. PROPERTY BOUNDARY
- STUDY AREA
- CULVERT
- FISH BARRIER

FISH HABITAT:

- INTERMITTENT DRAINAGE FEATURE/ DIRECT FISH HABITAT
- EPHEMERAL DRAINAGE FEATURE/ INDIRECT FISH HABITAT
- DRAINAGE FEATURE (NOT ASSESSED)
- COOLWATER THERMAL REGIME

ELC UPLAND COMMUNITIES:

CGL_4	RECREATIONAL
CVC	COMMERCIAL AND INSTITUTIONAL
CVC_1	BUSINESS SECTOR
CVI_1	TRANSPORTATION
CVR_4	RURAL PROPERTY
CVS_1	EDUCATION
CVR_1	LOW DENSITY RESIDENTIAL
OAGM1	ANNUAL ROW CROPS
OAGM2	PERENNIAL COVER CROPS
FOCM4–1	FRESH–MOIST WHITE CEDAR CONIFEROUS FOREST
FOCM6–3	DRY–FRESH SCOTCH PINE NATURALIZED CONIFEROUS PLANTATION
FODM3	DRY–FRESH POPLAR–WHITE BIRCH DECIDUOUS FOREST
FODM3–1	DRY–FRESH POPLAR DECIDUOUS FOREST
FODM8–1	FRESH–MOIST POPLAR DECIDUOUS FOREST
FODM11	NATURALIZED DECIDUOUS HEDGEROW
FOMM5	DRY–FRESH WHITE BIRCH–POPLAR–CONIFEROUS MIXED FOREST
FOMM7–2	FRESH–MOIST WHITE CEDAR–HARDWOOD MIXED FOREST
WOCM1–3	DRY–FRESH WHITE PINE CONIFEROUS WOODLAND
MEFM1	DRY–FRESH FORB MEADOW
MEMM3	DRY–FRESH MIXED MEADOW
THDM2	DRY–FRESH DECIDUOUS SHRUB THICKET
THDM4–1	NATIVE DECIDUOUS REGENERATION THICKET

ELC WETLAND COMMUNITIES:

MAMM1–3	REED–CANARY GRASS GRAMINOID MINERAL MEADOW MARSH
MAMM3–1	MIXED MINERAL MEADOW
SWDM4–5	POPLAR MINERAL DECIDUOUS SWAMP
SWTM2–1	RED–OSIER DOGWOOD MINERAL DECIDUOUS THICKET SWAMP

- WETLAND SETBACK
- PROPOSED RESTORATION AREA
- PROPOSED DRAINAGE SWALE

0 50.00 100.0

HORIZONTAL SCALE 1:2000

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ENVIRONMENTAL ASSESSMENTS & APPROVALS

PLANTING RESTORATION LOCATIONS

BRIDLE PARK STAYNER, ON

DATE ISSUED:	AUGUST 2026	Figure No. 4
CREATED BY:	A.L.	
PROJECT NO.:	25-250b	
REFERENCE:	SIMCOE COUNTY	

Plotted by: ALU on August 11, 2026 at 12:06pm
File: R:\25 Projects\25-250 Clearview Garden Bridle Park Stayner EIS\04.0 - Drafting\25-250b Planting Plan.dwg Layout: PLNT Plotscale: 1

Common Name	Species Name	SCA	COSSARO	SARA	Key Habitats Used By Species[1]	Initial Assessment
American Hart's-tongue Fern	*Asplenium scolopendrium* var. *americanum*	No Status	SC	SC	Grows on calcareous rocks in deep shade on slopes in deciduous forest. Most occurrences are in maple-beech forest (MECP, 2026).	No suitable calcareous rocky habitat features, no escarpment slope topography, and no maple-beech forest types present within study area. Species was not identified within the study area during the course of the vascular plant inventory.
Bank Swallow	*Riparia riparia*	No Status	THR	THR	Nests in burrows excavated in natural and human-made settings with vertical sand and silt faces. Commonly found in sand or gravel pits, road cuts, lakeshore bluffs, and along riverbanks (COSEWIC, 2013a).	No suitable exposed bank features observed within study area. Species was not identified within the study area during dawn breeding bird surveys. Species was not observed incidentally throughout the remainder of the field program.
Barn Swallow	*Hirundo rustica*	No Status	SC	THR	Ledges and walls of man-made structures such as buildings, barns, boathouses, garages, culverts and bridges. Also nest in caves, holes, crevices and cliff ledges (COSEWIC, 2021).	No Barn Swallow nests were identified on manmade structures throughout the study area limits. Species was not identified within the study area during dawn breeding bird surveys. Species was not observed incidentally throughout the remainder of the field program.
Black Ash	*Fraxinus nigra*	END	END	No Status	Facultative wetland tree species frequently found in floodplain forests, swamps, seepage areas, shoreline margins and fens. Occupied sites are generally seasonally-flooded (COSEWIC, 2018a).	**Species observed within the study area. See Section 7.1.1 of EIS.**
Black Tern	*Chlidonias niger*	END	END	No status	Colonial nesters typically found within marshes. Its preferred nesting habitat is a hemi-marsh (*i.e* . a wetland with 50:50 open water and emergent vegetation). Nests are usually built on an upturned cattail root, floating vegetation mat or patch of mud (Cadman *et al* ., 2007).	No suitable marsh or hemi-marsh features observed within study area. Species was not identified within the study area during dawn breeding bird surveys. Species was not observed incidentally throughout the remainder of the field program.
Bobolink	*Dolichonyx oryzivorus*	No Status	THR	THR	Nests primarily in forage crops (*e.g.* hayfields and pastures) dominated by a variety of species such as clover, Timothy, Kentucky Bluegrass, tall grass, and broadleaved plants. Also occurs in wet prairie, graminoid peatlands, and abandoned fields dominated by tall grasses. Does not generally occupy fields of row crops (*e.g* . corn, soybeans, wheat) or short-grass prairie. Sensitive to habitat size and has lower reproductive success in small habitat fragments (COSEWIC, 2022a).	No hayfields or pastures observed within study area. Meadows of varying size occur within the study area, however these are relatively small, fragmented and/or narrow and linear, and are frequently interrupted by tree and shrub features. Habitat suitability is considered very marginal for this species. Species was not identified within the study area during dawn breeding bird surveys. Species was not observed incidentally throughout the remainder of the field program.
Broad Beech Fern	*Phygopteris hexagonoptera*	No Status	SC	SC	Rich soils in deciduous forests, such as Maple-Beech forests (MECP, 2026).	Not identified during vascular plant inventory.
Butternut	*Juglans cinerea*	END	END	END	Commonly found in riparian habitats, but is also found in rich, moist, well-drained loams, and well-drained gravels. Butternut is intolerant of shade (COSEWIC, 2017).	**Species observed within the study area. See Section 7.1.2 of EIS.**
Canada Warbler	*Cardellina canadensis*	No Status	THR	THR	Wet, mixed deciduous-coniferous forests with a well developed shrub layer. Shrub marshes, Red-Maple stands, cedar stands, Black Spruce swamps, larch and riparian woodlands along rivers and lakes (COSEWIC, 2020).	Swamp and near-swamp woodland features with potentially suitable breeding habitat are present within study area. Species was not identified within the study area during dawn breeding bird surveys. Species was not observed incidentally throughout the remainder of the field program.
Cerulean Warbler	*Dendroica cerulea*	No Status	THR	END	Associated with large tracts of mature deciduous forest with tall trees and an open understory. Found in both wet bottomland forests and upland areas (COSEWIC, 2010).	Species was not identified within the study area during dawn breeding bird surveys. Species was not observed incidentally throughout the remainder of the field program.

Common Name	Species Name	SCA	COSSARO	SARA	Key Habitats Used By Species[1]	Initial Assessment
Chimney Swift	*Chaetura pelagica*	No Status	THR	THR	Nests primarily in chimneys though some populations (*i.e* . in rural northern areas) may nest in cavity trees (COSEWIC, 2018b). Recent changes in chimney design may be a significant factor in recent declines in numbers (Cadman *et al* ., 2007).	Manmade buildings within the study area did not feature suitable chimney features with potential to provide access to Chimney Swifts (*i.e.* chimneys were capped and/or undersized). Species was not identified within the study area during dawn breeding bird surveys. Species was not observed incidentally throughout the remainder of the field program.
Common Nighthawk	*Chordeiles minor*	No Status	SC	SC	Open habitats including sand dunes, beaches recently logged/burned over areas, forest clearings, short grass prairies, pastures, open forests, bogs, marshes, lakeshores, gravel roads, mine tailings, quarries, and other open relatively clear areas (COSEWIC, 2018c).	Potentially suitable semi-open treed habitats with marginal potential for use by Common Nighthawk are present within the study area. However, species was not identified within the study area during evening breeding bird surveys. Species was not observed incidentally throughout the remainder of the field program.
Eastern Meadowlark	*Sturnella magna*	No Status	THR	THR	Most common in grassland, pastures, savannahs, as well as anthropogenic grassland habitats, including hayfields, weedy meadows, young orchards, golf courses, restored surface mines, *etc* . Occasionally nest in row crop fields such as corn and soybean, but these are considered low-quality habitat. Large tracts of grassland are preferred over smaller fragments and the minimum area required is estimated at 5ha (COSEWIC, 2011).	No hayfields or pastures observed within study area. Meadows of varying size occur within the study area, however these are relatively small, fragmented and/or narrow and linear, and are frequently interrupted by tree and shrub features. Habitat suitability is considered very marginal for this species. Species was not identified within the study area during dawn breeding bird surveys. Species was not observed incidentally throughout the remainder of the field program.
Eastern Prairie Fringed-orchid	*Platanthera leucophaea*	END	END	END	It is a species primarily of mesic prairies, fens and old fields (COSEWIC, 2003).	Not identified during vascular plant inventory.
Eastern Red Bat	*Lasiurus borealis*	END	END	Not Listed	Roosting habitat include deciduous and coniferous forests of any age class. Maternity roost trees tend to be large diameter and tall, reaching or exceeding the height of the surrounding canopy with southern exposure and sheltered from the wind. (COSEWIC, 2023).	**Potentially suitable maternity roost habitat occurs within study area. See Section 7.1.3 of EIS.**
Eastern Ribbonsnake	*Thamnophis sauritus*	No Status	SC	THR	Found in wetland habitats with both flowing and standing water such as marshes, bogs, fens, ponds, lake shorelines and wet meadows. Most sightings occur near the water's edge (COSEWIC, 2012a).	No potentially suitable wetland habitat present within study area. No Eastern Ribbonsnakes were observed throughout the course of the field program.
Eastern Small-footed Myotis	*Myotis leibii*	END	END	Not Listed	Generally occurs in mountainous or rocky regions as well as in buildings, on the face of rock bluffs and beneath slabs of rock and stones. Hibernation is typically confined to caves and old mines (Best and Jennings, 1997; MECP, 2014).	No caves, karst topography, and/or abandoned mines are present within the study area, therefore potential hibernacula are not located within the study area limits. No rock bluff/rock face features are present within the study area, including no suitable rocky outcrops exhibiting rock slabs or internal crack or crevice features with deep internal gaps and no suitable cracked boulder/talus rock features. Exposed rock was absent from the study area. As such, the natural features within the study area were not considered suitable potential maternity roost habitat for this species. No evidence of exiting *Myotis* species from anthropogenic structures was observed during bat exit surveys within the property.
Eastern Whip-poor-will	*Antrostomus vociferus*	No Status	SC	THR	Semi-open forests or patchy forests with clearings, such as barrens or forests that are regenerating following major disturbances, are preferred nesting habitats (COSEWIC, 2022b).	Potentially suitable semi-open treed habitats with marginal potential for use by Eastern Whip-poor-will are present within the study area. However, species was not identified within the study area during evening breeding bird surveys. Species was not observed incidentally throughout the remainder of the field program.

Common Name	Species Name	SCA	COSSARO	SARA	Key Habitats Used By Species[1]	Initial Assessment
Eastern Wood-pewee	*Contopus virens*	No Status	SC	SC	Mostly in mature and intermediate-age deciduous and mixed forests having an open understory. It is often associated with forests dominated by Sugar Maple and oak. Usually associated with forest clearings and edges within the vicinity of its nest (COSEWIC, 2012b).	Possible breeding evidence for Eastern Wood-pewee was found associated with dawn breeding bird survey point count stations 5 and 7 (see Table 4, Figure 2). No further evidence of this species was documented, and as such no probable breeding evidence for this species was found within the study area. As such, there is insufficient evidence to suggest that the species is breeding within the study area limits, and is therefore not considered further in this assessment.
Golden-winged Warbler	*Vermivora chrysoptera*	No Status	SC	THR	Areas of early successional scrub surrounded by mature forests including dry uplands, swamp forests, and marshes (COSEWIC, 2006).	Early successional semi-open features with potentially suitable marginal breeding habitat present within study area. However, species was not identified within the study area during dawn breeding bird surveys. Species was not observed incidentally throughout the remainder of the field program.
Grasshopper Sparrow *pratensis* subspecies	*Ammodramus savannarum pratensis*	No Status	SC	SC	Typically breeds in large human-created grasslands (≥5 ha), such as pastures and hayfields, and natural prairies, such as alvars, characterized by well-drained, often poor soil dominated by low, sparse perennial herbaceous vegetation (COSEWIC, 2013b).	Suitable large grassland features ≥5 ha not present within study area. Meadows of varying size occur within the study area, however these are densely vegetated and relatively small, fragmented and/or narrow and linear, and are frequently interrupted by tree and shrub features. Habitat suitability is considered very marginal for this species. Species was not identified within the study area during dawn breeding bird surveys. Species was not observed incidentally throughout the remainder of the field program.
Hoary Bat	*Lasiurus cinereus*	END	END	Not Listed	Utilize mostly treed habitats (deciduous and coniferous of any age class) for roosting or foraging. Maternity roost trees tend to be large diameter and tall, reaching or exceeding the height of the surrounding canopy with southern exposure and sheltered from the wind. Hoary Bats typically roost among the foliage of trees and occasionally shrubs and are typically solitary roosters (COSEWIC, 2023).	**Potentially suitable maternity roost habitat occurs within study area. See Section 7.1.3 of EIS.**
Least Bittern	*Ixobrychus exilis*	No Status	SC	THR	Breed strictly in marshes of emergents (usually cattails) that have relatively stable water levels and interspersed areas of open water (COSEWIC, 2009).	No potentially suitable wetland habitat present within study area, and no large marsh areas present. Species was not identified within the study area during dawn breeding bird surveys. Species was not observed incidentally throughout the remainder of the field program.
Little Brown Myotis	*Myotis lucifugus*	END	END	END	Forests and regularly aging human structures as maternity roost sites. Regularly associated with attics of older buildings and barns for summer maternity roost colonies. Overwintering sites are characteristically mines or caves (COSEWIC, 2013c; MNRF, 2014a).	Exit survey found no evidence that anthropogenic structures within the property were used by *Myotis* species for maternity roosting or other roosting, including by Little Brown Myotis. However, *Myotis* (genus level) were detected as fly-bys during exit surveys. Further, potentially suitable woodland maternity roost habitat is present within the study area. As such, Little Brown Myotis may have potential to roost within the property. **Potentially suitable maternity roost habitat occurs within study area. See Section 7.1.3 of EIS.**
Monarch	*Danaus plexippus*	No Status	SC	END	Breeding habitat is confined to sites where milkweeds, the sole food of caterpillars, grow. Milkweeds grow in a variety of environments, including meadows in farmlands, along roadsides and in ditches, open wetlands, dry sandy areas, short and tall grass prairie, river banks, irrigation ditches, arid valleys, and south-facing hills (COSEWIC, 2016).	Marginal habitat for Monarch may be present within the study area. One species of milkweed (Common Milkweed) was observed; this species was occasionally observed within the subject lands and on adjacent lands, and is relatively common on the local landscape. While marginal habitat was present, Monarch was not observed during field investigations. Not considered further.

Common Name	Species Name	SCA	COSSARO	SARA	Key Habitats Used By Species[1]	Initial Assessment
Northern Myotis	*Myotis septentrionalis*	END	END	END	Maternity roost sites are generally located within deciduous and mixed forests and focused in snags including loose bark and cavities of trees. Overwintering sites are characteristically mines or caves (COSEWIC, 2013c).	Exit survey found no evidence that anthropogenic structures within the property were used by *Myotis* species for maternity roosting or other roosting, including by Northern Myotis. However, *Myotis* (genus level) were detected as fly-bys during exit surveys. Further, potentially suitable woodland maternity roost habitat is present within the study area. As such, Northern Myotis may have potential to roost within the property. **Potentially suitable maternity roost habitat occurs within study area. See Section 7.1.3 of EIS.**
Red-headed Woodpecker	*Melanerpes erythrocephalus*	No Status	END	END	Occurs in open deciduous forests, particularly those dominated by oak and beech, groves of dead trees, floodplain forests, orchards, cemeteries, savannahs and savannah-like grasslands. Although the species occupies a range of habitat types, key habitat is characteristically composed of woodlands where tall trees are of large circumference (i.e.mature cover) and are at a low density. A high density of snag trees is also an indicator of key habitat types (COSEWIC, 2018d).	No oak-dominant or beech-dominant open deciduous forests, no open or semi-open woodlands composed of large-circumference tall trees at low density; woodlands typically dense, and where not dense, typically not composed of large-circumference trees. No potentially suitable habitat present within study area. Species was not identified within the study area during dawn breeding bird surveys. Species was not observed incidentally throughout the remainder of the field program.
Silver-haired Bat	*asionycteris noctivagans*	END	END	Not Listed	Roosting by Silver-haired Bats occurs under bark and in the cavities of trees, therefore, they rely on large, decaying trees (deciduous and coniferous). Decidous species (Populus *spp.*) often have characteristics that make them ideal as roost sites, particularly in older forests. Can utilize old woodpecker cavities. May occasionally roost in buildings, especially during migration (COSEWIC, 2023)	**Potentially suitable maternity roost habitat occurs within study area. See Section 7.1.3 of EIS.**
Snapping Turtle	*Chelydra serpentina*	No Status	SC	SC	Habitat is characterized by slow-moving water with a soft mud bottom and dense aquatic vegetation. Often located in ponds, sloughs, shallow bays or river edges and slow streams, or areas combining several of these wetland habitats (COSEWIC, 2008).	No potentially suitable wetland or aquatic habitat for this species is present within the study area limits.
Tri-colored Bat	*Perimyotis subflavus*	END	END	END	Maternity roost sites include forests and modified landscapes (barns or human-made structures). Overwintering sites include mines and caves (COSEWIC, 2013c).	Exit survey found no evidence that anthropogenic structures within the property were used by Tri-colored Bat for maternity roosting or other roosting, including by Northern Myotis. However, potentially suitable woodland maternity roost habitat is present within the study area. As such, Northern Myotis may have potential to roost within the property. **Potentially suitable maternity roost habitat occurs within study area. See Section 7.1.3 of EIS.**
Wood Thrush	*Hylocichla mustelina*	No Status	SC	THR	Found in moist, deciduous hardwood or mixed stands, often previously disturbed, with a dense deciduous undergrowth and with tall trees for singing perches (COSEWIC, 2012c).	Possible breeding evidence for Wood Thrush was found associated with dawn breeding bird survey point count station 5 (see Table 4, Figure 2) while probable breeding evidence was documented at point count station 7. There is insufficient evidence to suggest breeding at point count station 5, thus, only the individual documented at station 7 is considered in this assessment. **Species observed within the study area. See Section 7.4.4 of EIS.**

[1] Habitat as outlined within the MECP's Species at Risk in Ontario website files (https://www.ontario.ca/environment-and-energy/species-risk-ontario-list)(MECP, 2026), or Species Specific COSEWIC Reports or other reports referenced in this table.

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COSEWIC. 2003. COSEWIC assessment and update status report on the Eastern Prairie Fringed-orchid *Platanthera leucophaea* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. vi + 27 pp.

COSEWIC. 2006. COSEWIC assessment and status report on the Golden-winged Warbler *Vermivora chrysoptera* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. vii + 30 pp.

COSEWIC. 2008. COSEWIC assessment and status report on the Snapping Turtle *Chelydra serpentina* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. vii + 47 pp.

Common Name	Species Name	SCA	COSSARO	SARA	Key Habitats Used By Species[1]	Initial Assessment

COSEWIC. 2009. COSEWIC assessment and update status report on the Least Bittern *Ixobrychus exilis* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. vi + 36 pp.
COSEWIC. 2010. COSEWIC assessment and update status report on the Cerulean Warbler *Dendroica cerulea* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. x + 40 pp.
COSEWIC. 2011. COSEWIC assessment and update status report on the Eastern Meadowlark *Sturnella magna* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. x + 40 pp.
COSEWIC. 2012a. COSEWIC assessment and status report on the Eastern Ribbonsnake *Thamnophis sauritus* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. xii + 39 pp.
COSEWIC. 2012b. COSEWIC assessment and status report on the Eastern Wood-pewee *Contopus virens* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. x + 39 pp.
COSEWIC. 2012c. COSEWIC assessment and status report on the Wood Thrush *Hylocichla mustelina* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. ix + 46 pp.
COSEWIC. 2013a. COSEWIC assessment and update status report on the Bank Swallow *Riparia riparia* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. ix + 48 pp.
COSEWIC. 2013b. COSEWIC assessment and status report on the Grasshopper Sparrow pratensis subspecies *Ammodramus savannarum pratensis* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. ix + 36 pp.
COSEWIC. 2013c. COSEWIC assessment and update status report on the Little Brown Myotis *Myotis lucifugus* , Northern Myotis *Myotis septentrionalis* and Tri-colored Bat *Perimyotis subfalvus* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. xxiv + 93 pp.
COSEWIC. 2016. COSEWIC assessment and status report on the Monarch *Danaus plexippus* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. xiii + 59 pp.
COSEWIC. 2017. COSEWIC assessment and status report on the Butternut *Juglans cinerea* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. xiii + 74 pp.
COSEWIC. 2018a. COSEWIC assessment and status report on the Black Ash *Fraxinus nigra* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. xii + 95 pp.
COSEWIC. 2018b. COSEWIC assessment and status report on the Chimney Swift *Chaetura pelagic* a in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. vii + 49 pp.
COSEWIC. 2018c. COSEWIC assessment and status report on the Common Nighthawk *Chordeiles minor* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. xi + 50 pp.
COSEWIC. 2018d. COSEWIC assessment and status report on the Red-headed Woodpecker *Melanerpes erythrocephalu* s in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. xii + 60 pp.
COSEWIC. 2020. COSEWIC assessment and status report on the Canada Warbler *Wilsonia Canadensis* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. xi + 54 pp.
COSEWIC. 2021. COSEWIC assessment and status report on the Barn Swallow *Hirundo rustica* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. xii + 60 pp.
COSEWIC. 2022a. COSEWIC assessment and status report on the Bobolink *Dolichonyx oryzivorus* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. xi + 60 pp.
COSEWIC. 2022b. COSEWIC assessment and status report on the Eastern Whip-poor-will *Antrostomus vociferus* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. xiii + 56 pp.
COSEWIC. 2023. COSEWIC assessment and status report on the Hoary Bat (*Lasiurus cinereus*), Eastern Red Bat (*Lasiurus borealis*) and Silver-haired Bat (*Lasionycteris noctivagans*) in Canada. Ottawa. xxi + 100 pp.
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Ministry of the Environment, Conservation and Parks (MECP). 2026. Species at Risk in Ontario (https://www.ontario.ca/page/species-risk-ontario)
Ministry of Natural Resources and Forestry (MNRF). 2014a. Little Brown Myotis. Queen's Printer for Ontario. https://www.ontario.ca/page/little-brown-myotis

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			Vegetation Communities[2]															Conservation Rankings[3]			Regional[4]
FAMILY[1]	SCIENTIFIC NAME[1]	COMMON NAME[1]	CGL_4	CVR_1	CVR_4	CVS_1	FOCM4-1	FODM3	FODM3-1b	FODM8-1	FOMM7-2	MAMM1-3	MAMM3-1	MEMM3	SWDM4-5	THDM2	THDM4-1	GRANK	SRANK	TRACK	Simcoe
Amaranthaceae	*Chenopodium album*	Common Lamb's-quarters							X					X				G5	SNA	N	
Anacardiaceae	*Rhus typhina*	Staghorn Sumac						X									X	G5	S5	N	
Anacardiaceae	*Toxicodendron radicans var. rydbergii*	Western Poison Ivy					X	X		X	X		X	X	X	X	X	G5	S5	N	
Apiaceae	*Daucus carota*	Wild Carrot			X			X	X			X	X	X		X	X	GNR	SNA	N	
Apocynaceae	*Apocynum androsaemifolium*	Spreading Dogbane								X								G5	S5	N	
Apocynaceae	*Asclepias syriaca*	Common Milkweed				X		X	X				X	X		X		G5	S5	N	
Asparagaceae	*Asparagus officinalis*	Garden Asparagus							X								X	G5?	SNA	N	
Asparagaceae	*Maianthemum canadense*	Wild Lily-of-the-valley					X								X			G5	S5	N	
Asteraceae	*Ambrosia artemisiifolia*	Common Ragweed							X					X			X	G5	S5	N	
Asteraceae	*Cichorium intybus*	Wild Chicory							X							X	X	GNR	SNA	N	
Asteraceae	*Cirsium vulgare*	Bull Thistle							X									GNR	SNA	N	
Asteraceae	*Erigeron annuus*	Annual Fleabane												X				G5	S5	N	
Asteraceae	*Erigeron canadensis*	Canada Horseweed												X				G5	S5	N	
Asteraceae	*Eupatorium perfoliatum*	Common Boneset											X					G5	S5	N	
Asteraceae	*Euthamia graminifolia*	Grass-leaved Goldenrod			X			X				X	X	X		X		G5	S5	N	
Asteraceae	*Eutrochium maculatum*	Spotted Joe Pye Weed			X						X	X	X					G5	S5	N	
Asteraceae	*Inula helenium*	Elecampane									X		X			X		GNR	SNA	N	
Asteraceae	*Lactuca serriola*	Prickly Lettuce												X				GNR	SNA	N	
Asteraceae	*Leucanthemum vulgare*	Oxeye Daisy												X		X		GNR	SNA	N	
Asteraceae	*Solidago altissima*	Tall Goldenrod			X			X	X		X	X	X	X	X	X		G5	S5	P	
Asteraceae	*Solidago canadensis*	Canada Goldenrod			X				X					X			X	G5	S5	N	
Asteraceae	*Sonchus arvensis*	Field Sow-thistle												X				GNR	SNA	N	
Asteraceae	*Symphyotrichum lanceolatum*	Panicled Aster										X	X	X				G5	S5	P	
Asteraceae	*Symphyotrichum lateriflorum*	Calico Aster								X	X		X		X		X	G5	S5	P	
Asteraceae	*Symphyotrichum novae-angliae*	New England Aster									X		X					G5	S5	N	
Asteraceae	*Symphyotrichum puniceum*	Purple-stemmed Aster													X			G5	S5	N	
Asteraceae	*Taraxacum officinale*	Common Dandelion	X		X	X		X		X	X					X	X	G5	SNA	N	
Balsaminaceae	*Impatiens capensis*	Spotted Jewelweed													X			G5	S5	N	
Berberidaceae	*Berberis thunbergii*	Japanese Barberry								X								GNR	SNA	N	
Betulaceae	*Betula papyrifera*	Paper Birch		X	X			X			X				X			G5	S5	N	
Bignoniaceae	*Catalpa speciosa*	Northern Catalpa		X														G4?	SNA	N	
Brassicaceae	*Alliaria petiolata*	Garlic Mustard												X				GNR	SNA	N	
Brassicaceae	*Hesperis matronalis*	Dame's Rocket											X					G4G5	SNA	N	
Caprifoliaceae	*Lonicera sp.*	a Honeysuckle							X									N/A	N/A	N/A	
Caprifoliaceae	*Lonicera tatarica*	Tatarian Honeysuckle								X				X			X	GNR	SNA	N	
Caprifoliaceae	*Lonicera x bella*	(Lonicera morrowii X Lonicera tatarica)											X					GNA	SNA	N	
Cornaceae	*Cornus alternifolia*	Alternate-leaved Dogwood													X	X	X	G5	S5	N	
Cornaceae	*Cornus racemosa*	Grey Dogwood							X									G5	S5	N	
Cornaceae	*Cornus sericea*	Red-osier Dogwood			X		X	X	X		X	X	X	X	X	X	X	G5	S5	N	
Crassulaceae	*Sedum sp.*	a Stonecrop												X				N/A	N/A	N/A	
Cucurbitaceae	*Echinocystis lobata*	Wild Cucumber												X				G5	S5	N	
Cupressaceae	*Juniperus virginiana*	Eastern Red Cedar								X							X	G5	S5	N	
Cupressaceae	*Thuja occidentalis*	Eastern White Cedar		X	X		X	X	X	X	X		X	X	X			G5	S5	N	
Cyperaceae	*Carex cristatella*	Crested Sedge										X						G5	S5	N	
Cyperaceae	*Carex gracillima*	Graceful Sedge													X			G5	S5	N	

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			Vegetation Communities[2]															Conservation Rankings[3]			Regional[4]
FAMILY[1]	SCIENTIFIC NAME[1]	COMMON NAME[1]	CGL_4	CVR_1	CVR_4	CVS_1	FOCM4-1	FODM3	FODM3-1b	FODM8-1	FOMM7-2	MAMM1-3	MAMM3-1	MEMM3	SWDM4-5	THDM2	THDM4-1	GRANK	SRANK	TRACK	Simcoe
Cyperaceae	*Carex intumescens*	Bladder Sedge											X					G5	S5	N	
Cyperaceae	*Carex scoparia*	Pointed Broom Sedge														X		G5	S5	N	
Cyperaceae	*Carex vulpinoidea*	Fox Sedge						X				X	X					G5	S5	N	
Cyperaceae	*Scirpus atrovirens*	Dark-green Bulrush										X						G5	S5	N	
Cyperaceae	*Scirpus cyperinus*	Common Woolly Bulrush											X		X			G5	S5	N	
Dennstaedtiaceae	*Pteridium aquilinum*	Bracken Fern					X			X							X	G5	S5	N	
Elaeagnaceae	*Shepherdia canadensis*	Soapberry								X							X	G5	S5	N	
Equisetaceae	*Equisetum arvense*	Field Horsetail			X						X			X	X			G5	S5	N	
Fabaceae	*Gleditsia triacanthos*	Honey Locust		X		X												G5	S2?	Y	
Fabaceae	*Lotus corniculatus*	Garden Bird's-foot Trefoil	X	X		X		X				X		X		X	X	GNR	SNA	N	
Fabaceae	*Medicago lupulina*	Black Medick								X								GNR	SNA	N	
Fabaceae	*Melilotus albus*	White Sweet-clover						X										G5	SNA	N	
Fabaceae	*Securigera varia*	Purple Crown-vetch						X										GNR	SNA	N	
Fabaceae	*Trifolium hybridum*	Alsike Clover						X						X				GNR	SNA	N	
Fabaceae	*Trifolium repens*	White Clover				X												GNR	SNA	N	
Fabaceae	*Vicia cracca*	Tufted Vetch						X				X		X		X	X	GNR	SNA	N	
Fagaceae	*Quercus rubra*	Northern Red Oak		X				X										G5	S5	N	
Geraniaceae	*Geranium robertianum*	Herb-Robert												X				G5	S5	N	
Grossulariaceae	*Ribes cynosbati*	Eastern Prickly Gooseberry								X								G5	S5	N	
Hydrangeaceae	*Philadelphus coronarius*	European Mock-orange		X														GNR	SNA	N	
Hypericaceae	*Hypericum perforatum*	Common St. John's-wort												X			X	GNR	SNA	N	
Juglandaceae	*Juglans cinerea*	Butternut						X										G3	S2?	Y	
Juglandaceae	*Juglans nigra*	Black Walnut												X				G5	S4?	N	R-1
Juncaceae	*Juncus articulatus ssp. articulatus*	Jointed Rush										X	X					G5TNR	S5	N	
Lamiaceae	*Glechoma hederacea*	Ground-ivy												X				GNR	SNA	N	
Lamiaceae	*Nepeta cataria*	Catnip												X				GNR	SNA	N	
Lamiaceae	*Prunella vulgaris*	Common Self-heal									X				X			G5	S5	N	
Lythraceae	*Lythrum salicaria*	Purple Loosestrife										X						G5	SNA	N	
Malvaceae	*Tilia cordata*	Little-leaved Linden		X														GNR	SNA	N	
Oleaceae	*Fraxinus nigra*	Black Ash									X				X			G5	S4	Y	
Oleaceae	*Fraxinus pennsylvanica*	Red Ash				X	X	X	X	X	X	X	X		X	X	X	G4	S4	N	
Oleaceae	*Syringa vulgaris*	Common Lilac			X													GNR	SNA	N	
Onagraceae	*Circaea canadensis*	Broad-leaved Enchanter's Nightshade													X			G5	S5	N	
Onagraceae	*Epilobium coloratum*	Purple-veined Willowherb													X			G5	S5	N	R-4
Onagraceae	*Oenothera biennis*	Common Evening-primrose												X			X	G5	S5	N	
Onocleaceae	*Onoclea sensibilis*	Sensitive Fern					X						X					G5	S5	N	
Oxalidaceae	*Oxalis stricta*	Upright Yellow Wood-sorrel												X			X	G5	SNA	N	R-5
Pinaceae	*Picea glauca*	White Spruce			X													G5	S5	N	
Pinaceae	*Picea pungens*	Blue Spruce		X														G5	SNA	N	
Pinaceae	*Pinus strobus*	Eastern White Pine			X			X										G5	S5	N	
Pinaceae	*Pinus sylvestris var. sylvestris*	Scots Pine			X			X										GNRTN	SNA	N	
Plantaginaceae	*Plantago lanceolata*	English Plantain															X	G5	SNA	N	
Plantaginaceae	*Plantago major*	Common Plantain												X				G5	SNA	N	
Poaceae	--	a Grass	X	X	X	X												N/A	N/A	N/A	
Poaceae	*Agrostis stolonifera*	Creeping Bentgrass										X		X		X		G5	SNA	N	

Surveyor: C. Pezik

			Vegetation Communities[2]															Conservation Rankings[3]			Regional[4]
FAMILY[1]	SCIENTIFIC NAME[1]	COMMON NAME[1]	CGL_4	CVR_1	CVR_4	CVS_1	FOCM4-1	FODM3	FODM3-1b	FODM8-1	FOMM7-2	MAMM1-3	MAMM3-1	MEMM3	SWDM4-5	THDM2	THDM4-1	GRANK	SRANK	TRACK	Simcoe
Poaceae	*Avena fatua*	Common Wild Oats												X				GNR	SNA	N	
Poaceae	*Bromus inermis*	Smooth Brome						X	X				X	X			X	G5T5	SNA	N	
Poaceae	*Dactylis glomerata*	Orchard Grass			X				X					X	X	X	X	GNR	SNA	N	
Poaceae	*Digitaria sanguinalis*	Hairy Crabgrass												X				G5	SNA	N	
Poaceae	*Elymus repens*	Quackgrass												X				GNR	SNA	N	
Poaceae	*Glyceria striata var. striata*	Fowl Mannagrass									X					X		G5T5	S5	N	
Poaceae	*Lolium arundinaceum*	Tall Ryegrass										X						GNR	SNA	N	
Poaceae	*Phalaris arundinacea*	Reed Canarygrass			X				X			X	X	X				G5	S5	N	
Poaceae	*Phleum pratense*	Common Timothy			X			X	X								X	GNR	SNA	N	
Poaceae	*Phragmites australis ssp. australis*	European Reed											X					G5T5	SNA	N	
Poaceae	*Poa pratensis*	Kentucky Bluegrass												X				G5	S5	P	
Poaceae	*Setaria pumila*	Yellow Foxtail												X				GNR	SNA	N	
Polygonaceae	*Rumex crispus*	Curled Dock			X				X			X	X	X				GNR	SNA	N	
Ranunculaceae	*Anemone virginiana*	Tall Anemone						X								X		G5	S5	N	
Rhamnaceae	*Rhamnus cathartica*	European Buckthorn					X		X	X					X	X	X	GNR	SNA	N	
Rosaceae	*Amelanchier sp.*	a Serviceberry								X								N/A	N/A	N/A	
Rosaceae	*Crataegus sp.*	a Hawthorn							X								X	N/A	N/A	N/A	
Rosaceae	*Fragaria virginiana*	Wild Strawberry						X		X	X				X		X	G5	S5	N	
Rosaceae	*Geum aleppicum*	Yellow Avens															X	G5	S5	N	
Rosaceae	*Malus pumila*	Common Apple							X					X				G5	SNA	N	
Rosaceae	*Potentilla recta*	Sulphur Cinquefoil												X			X	GNR	SNA	N	
Rosaceae	*Prunus pensylvanica*	Pin Cherry								X								G5	S5	N	
Rosaceae	*Prunus pumila*	Sand Cherry		X														G5	S4	P	
Rosaceae	*Prunus virginiana*	Chokecherry						X	X								X	G5	S5	N	
Rosaceae	*Rosa multiflora*	Multiflora Rose												X				GNR	SNA	N	
Rosaceae	*Rosa sp.*	a Rose		X														N/A	N/A	N/A	
Rosaceae	*Rubus allegheniensis*	Allegheny Blackberry														X		G5	S5	N	
Rosaceae	*Rubus idaeus*	Red Raspberry			X			X		X	X			X				G5	S5	N	
Rosaceae	*Rubus occidentalis*	Black Raspberry						X						X				G5	S5	N	
Rosaceae	*Rubus pubescens*	Dwarf Raspberry								X	X				X			G5	S5	N	
Rosaceae	*Sorbus aucuparia*	European Mountain-ash							X								X	G5	SNA	N	
Salicaceae	*Populus balsamifera*	Balsam Poplar						X			X		X	X			X	G5	S5	N	
Salicaceae	*Populus grandidentata*	Large-toothed Aspen						X										G5	S5	N	
Salicaceae	*Populus tremuloides*	Trembling Aspen			X		X	X	X	X	X		X		X	X	X	G5	S5	N	
Salicaceae	*Salix alba*	White Willow			X			X										G5	SNA	N	
Salicaceae	*Salix bebbiana*	Bebb's Willow						X	X		X	X	X		X	X		G5	S5	N	
Salicaceae	*Salix discolor*	Pussy Willow												X				G5	S5	N	
Salicaceae	*Salix petiolaris*	Meadow Willow						X				X	X	X				G5	S5	N	
Sapindaceae	*Acer negundo*	Manitoba Maple			X				X					X				G5	S5	N	
Sapindaceae	*Acer platanoides*	Norway Maple		X														GNR	SNA	N	
Sapindaceae	*Acer rubrum*	Red Maple	X								X				X			G5	S5	N	
Sapindaceae	*Acer saccharum*	Sugar Maple	X			X												G5	S5	N	
Sapindaceae	*Acer x freemanii*	(Acer rubrum X Acer saccharinum)		X														GNA	SNA	N	
Scrophulariaceae	*Verbascum thapsus*	Common Mullein						X	X									GNR	SNA	N	
Typhaceae	*Typha angustifolia*	Narrow-leaved Cattail										X						G5	SNA	N	

Surveyor: C. Pezik

			Vegetation Communities[2]															Conservation Rankings[3]			Regional[4]
FAMILY[1]	**SCIENTIFIC NAME[1]**	**COMMON NAME[1]**	**CGL_4**	**CVR_1**	**CVR_4**	**CVS_1**	**FOCM4-1**	**FODM3**	**FODM3-1b**	**FODM8-1**	**FOMM7-2**	**MAMM1-3**	**MAMM3-1**	**MEMM3**	**SWDM4-5**	**THDM2**	**THDM4-1**	**GRANK**	**SRANK**	**TRACK**	**Simcoe**
Typhaceae	*Typha latifolia*	Broad-leaved Cattail										X	X					G5	S5	N	
Ulmaceae	*Ulmus americana*	White Elm						X	X	X	X	X			X			G4	S5	N	
Viburnaceae	*Viburnum lantanoides*	Hobblebush														X		G5	S5	N	
Viburnaceae	*Viburnum lentago*	Nannyberry													X			G5	S5	N	
Viburnaceae	*Viburnum opulus*	Cranberry Viburnum							X						X			G5	S5	N	
Violaceae	*Viola sp.*	a Violet								X					X			N/A	N/A	N/A	
Vitaceae	*Parthenocissus quinquefolia*	Virginia Creeper			X		X	X				X		X	X			G5	S4?	N	R-1
Vitaceae	*Vitis riparia*	Riverbank Grape			X		X	X	X	X	X	X	X	X	X	X	X	G5	S5	N	

[1] Nomenclature based on Ministry of Natural Resources and Forestry (MNRF) Natural Heritage Information Centre (NHIC, 2022)

[2] ELC Codes based on Ecological Land Classification for Southern Ontario manual (Lee et al., 1998, 2008)

[3] Conservation Rankings: From Ontario Ministry of Natural Resources and Forestry, Natural Heritage Information Centre (https://www.ontario.ca/page/natural-heritage-information-centre)

[4]Riley, J.L. 1989. Distribution and Status of the Vascular Plants of Central Region, Ontario. Ministry of Natural Resources. Parks and Recreational Areas Section, OMNR, Open File Ecological Report SR8902, Central Region, Richmond Hill, Ontario. XiX + 110 pp.

Ecological Land Classification					
System	**Community Class**	**Community Series**	**Ecosite/Vegetation Type**	**Composition**	**Ground Cover**
Cultural	Constructed	CGL, Green Lands	CGL_4, Recreational	This polygon represents a baseball diamond and playground on the adjacent property to the south, approximately 5m from the property boundary. This community lacks a true canopy. The subcanopy is very sparse and limited to ornamental Red Maple and Sugar Maple.	This community lacks an understorey. The ground layer is largely composed of manicured grass species, with occasional Dandelion and Birdsfoot Trefoil.
Cultural	Constructed	CVC, Commercial and Institutional	CVC, Commercial and Institutional	This polygon represents the community arena, skateboard park and parking facilities located on the adjacent property to the south, abutting the property boundary.	This polygon does not generally contain any vegetation and does not have a canopy, subcanopy, understorey, or ground layers.
Cultural	Constructed	CVC, Commercial and Institutional	CVC_1, Business Sector	This community represents a business located on adjacent land to the southeast of the subject property.	This polygon does not generally contain any vegetation and does not have a canopy, subcanopy, understorey, or ground layers.
Cultural	Constructed	CVI, Transportation and Utilities	CVI_1, Transportation	This polygon represents roads situated to the south, and east of the subject property.	This polygon does not generally contain any vegetation and does not have a canopy, subcanopy, understorey, or ground layers.
Cultural	Constructed	CVR, Residential	CVR_4, Rural Property	These polygons represent the residential homes, and associated features (lawns, driveways, etc.) in the eastern portion of the property and on adjacent lands to the south and east. The composition of vegetation varies slightly between polygons, and much of the canopy, subcanopy, and understorey are ornamentally landscaped. These communities generally have a sparse canopy consisting of Trembling Aspen and White Birch. The subcanopy is similarly sparse, often containing Manitoba Maple.	The understorey is sparse and generally confined to unmowed areas, generally consisting of Reed Canary Grass, Tall Goldenrod, and Queen Anne's Lace. The ground layer is dense and dominated by mowed grass species, and Dandelion.
Cultural	Constructed	CVS, Commercial and Institutional	CVS_1, Education	This community represents the public school on adjacent lands to the east of the property. This community lacks a true canopy. The subcanopy is very sparse and consists of ornamental Sugar Maple, Honey Locust, and Green Ash.	This community lacks an understorey layer. The ground layer is composed almost exclusively of manicured grasses, with occasional Dandelion and Birdsfoot Trefoil, and Common Milkweed.
Cultural	Constructed	CVR, Residential	CVR_1, Low Density Residential	These polygons represent the residential homes, and associated features (lawns, driveways, etc.) on adjacent lands to the south and east. The composition of vegetation varies slightly between polygons, and much of the canopy, subcanopy, and understorey are ornamentally landscaped. These communities generally have a sparse canopy consisting of Red Oak, White Cedar, and Blue Spruce. The subcanopy consisting of Littleleaf Linden, White Birch, and Norway Maple.	The understorey is sparse and confined to unmowed areas, generally consisting of Mock Orange and rose species. The ground layer is dense and dominated by mowed grass species, with occasional Dandelion and Birdsfoot Trefoil.
Cultural	Agriculture	Open Agriculture, OAG	OAGM1, Annual Row Crops	These polygons represent actively farmed agricultural fields. This community lacks a true canopy, subcanopy, and understorey.	The ground layer is composed almost exclusively of soy bean plants.
Cultural	Agriculture	Open Agriculture, OAG	OAGM2, Perennial Cover Crops	This polygon represents a hay field in the northeastern corner of the property. This community lacks a true canopy, subcanopy, and understorey.	The ground layer is largely composed of grass species.
Terrestrial	Forest	FOC, Coniferous Forest	FOCM4-1, Fresh-Moist White Cedar Coniferous Forest	This community is located in the western portion of the property, extending from the edge of an agricultural field into the forest to the west. The canopy of this community is dense and dominated by Eastern White Cedar, with occasional Trembling Aspen. The subcanopy is moderately dense and exclusively Eastern White Cedar.	The understorey is very sparse and composed of Red-osier Dogwood and Green Ash. The ground layer is very sparse and consists of Riverbank Grape, Poison Ivy, and Green Ash.

Ecological Land Classification					
System	**Community Class**	**Community Series**	**Ecosite/Vegetation Type**	**Composition**	**Ground Cover**
Terrestrial	Forest	FOC, Coniferous Forest	FOCM6-3, Dry-Fresh Scotch Pine Naturalized Coniferous Plantation	These polygons are contained to the north and east of the property, approximately 10m from the property boundary. The canopy of this community is very sparse, consisting of similar amounts of Trembling Aspen, Balsam Poplar, and White Pine. The subcanopy is dense and composed of Scotch Pine, White Pine and Pin Cherry.	The understorey is dense and composed of Red-osier Dogwood, Canada Goldenrod, and Common Blackberry. The ground layer is of moderate density and consists of Poison Ivy, Virginia Creeper, and Dandelion.
Terrestrial	Forest	FOD, Deciduous Forest	FODM3, Dry-Fresh Poplar-White Birch Deciduous Forest	This community is largely located to the east and north of the property. Details of density and relative species composition are lacking, as surveyor's did not have access to these properties. The canopy of this community is generally dominated by Poplar species. The subcanopy generally consists of White Birch and Poplar species.	The understorey contains Red-osier Dogwood, Staghorn Sumac, and American Elm. The ground layer contained grass species, Dandelion, Poison Ivy, and other species.
Terrestrial	Forest	FOD, Deciduous Forest	FODM3-1, Dry-Fresh Poplar Deciduous Forest	This community is located on the adjacent property to the north, approximately 70m from the property boundary. The canopy of this polygon is dense and composed of Trembling Aspen and White Birch. The subcanopy is moderately dense and composed of approximately equal proportions of Trembling Aspen and White Birch, with lesser occurrences of Scotch Pine and White Pine.	The understorey is of similar density and composed Red-osier Dogwood and Goldenrod species. The ground layer is of similar density and composed of Poison Ivy, Sensitive Fern, and Field Horsetail.
Terrestrial	Forest	FOD, Deciduous Forest	FODM8-1, Fresh-Moist Poplar Deciduous Forest	This community is located in the southern portion of the property. The canopy of this community is dense and composed of Trembling Aspen, Balsam Poplar, American Elm, and White Birch. The subcanopy is dominated by Red-osier Dogwood, with lesser occurrences of American Elm and Eastern White Cedar.	The understorey is moderately dense and dominated by Red-osier Dogwood, with lesser occurrences of Canada Goldenrod. The ground layer is moderately dense and composed of Poison Ivy and Green Ash.
Terrestrial	Forest	FOD, Deciduous Forest	FODM11, Naturalized Deciduous Hedgerow	This community is located in the northern portion of the property and represents a linear feature between two agricultural fields. It is also located along the eastern property boundary adjacent to the rail trail. The canopy of this polygon is moderately dense and consists exclusively of Trembling Aspen. The subcanopy is of similar density and is composed predominantly of Trembling Aspen with lesser, approximately equal proportions of Manitoba Maple, Green Ash, and American Elm.	The understorey is moderately dense and composed of Red-Osier Dogwood, Gray Dogwood, and Tall Goldenrod. The ground layer is of similar density and consists of grass species, Common Lambs Quarters, Common Milkweed, and Curled Dock.
Terrestrial	Forest	FOM, Mixed Forest	FOMM5, Dry-Fresh White Birch-Poplar-Conifer Mixed Forest	This community is located on the western extent of the property and continues on adjacent lands to the west. The canopy of this polygon is dense and consists of Trembling Aspen, White Pine, White Birch, and Red Maple. The subcanopy is sparse and composed of Green Ash, White Pine, and Eastern White Cedar.	The understorey is of similar density and composed of Trembling Aspen, Chokecherry, and Green Ash. The ground layer is dense and dominated by Poison Ivy.
Terrestrial	Forest	FOM, Mixed Forest	FOMM7-2, Fresh-Moist White Cedar-Hardwood Mixed Forest	This community is located in the western portion of the property. The canopy of this polygon is moderately dense and consists of poplar species, White Birch, and Eastern White Cedar. The subcanopy is of similar and is dominated by Eastern White Cedar with lesser occurrences of American Elm.	The understorey is very sparse and composed of Red-osier Dogwood and Red Raspberry. The ground layer is very sparse and consists of Poison Ivy and Field Horsetail.
Terrestrial	Woodland	WOC, Coniferous Woodland	WOCM1-3, Dry-Fresh White Cedar Coniferous Woodland	This community is located entirely on the adjacent property to the north, approximately 20m from the property boundary. The canopy of this community is very sparse and consists entirely of White Pine. The subcanopy is moderately dense and composed of White Pine, Scotch Pine, and poplar species.	The understorey is dense and composed almost entirely of Red-osier Dogwood, and willow species. The ground layer is moderately dense and composed of approximately equal proportions of Bracken Fern and grass species, with lesser occurrences of Riverbank Grape.

Ecological Land Classification					
System	**Community Class**	**Community Series**	**Ecosite/Vegetation Type**	**Composition**	**Ground Cover**
Terrestrial	Meadow	MEF, Forb Meadow	MEFM1, Dry-Fresh Forb Meadow	This community is largely located on the adjacent property to the north, with a small portion extending onto the northeastern portion of the subject property. This community generally lacks a true canopy. The subcanopy is sparse and composed of Heart-leaved Willow and Manitoba Maple, with lesser occurrences of Green Ash, and Scotch Pine.	The understorey is dense and composed of Gray Dogwood, Red-osier Dogwood, Tall Goldenrod, and Reed Canary Grass. The ground layer is of similar density and consists of Grass-leaved Goldenrod, Queen Anne's Lace, Timothy, and Fox Sedge.
Terrestrial	Meadow	MEM, Mixed Meadow	MEMM3, Dry-Fresh Mixed Meadow	These polygons represent linear meadows that exist between the agricultural fields of the property, on the field edges, and along a portion of the hydro corridor in the western portion of the property. This community generally lacks a true canopy. The subcanopy is sparse and composed of Manitoba Maple and Meadow Willow.	The understorey is moderately dense and composed of Reed Canary Grass, Smooth Brome and Tall Goldenrod. The ground layer is dense and dominated by grasses, with occurrences of Birdsfoot Trefoil, Common Milkweed, and Poison Ivy.
Terrestrial	Thicket	THD, Deciduous Thicket	THDM2, Dry-Fresh Deciduous Shrub Thicket	This community is located in the northern portion of the property, and continues onto the adjacent property to the north. This community generally lacks a true canopy. The subcanopy is moderately dense and composed of Red-osier Dogwood, Bebb's Willow, Green Ash, and Trembling Aspen.	The understorey is moderately dense and composed of Red-osier Dogwood, Bebb's Willow, and Tall Goldenrod. The ground layer is of similar density and consists of Poison Ivy, Birdfoot Trefoil, and grass species.
Terrestrial	Thicket	THD, Deciduous Thicket	THDM4-1, Native Deciduous Regeneration Thicket	This community is located in the southwestern portion of the property along the boundary shared with the adjacent residential development to the south. This community generally lacks a true canopy. The subcanopy is dense and composed of Balsam Poplar, Trembling Aspen, Common Buckthorn, and Red-osier Dogwood.	The understorey is moderately dense and composed of Balsam Poplar, Trembling Aspen, and Green Ash. The ground layer is moderately dense and composed of grasses, Poison Ivy, and Wild Strawberry.
Wetland	Marsh	MAM, Meadow Marsh	MAMM1-3, Reed Canary Grass Graminoid Meadow Marsh	This community is located in the southern portion of the property. This community generally lacks a true canopy. The subcanopy is sparse and composed of American Elm and Bebb's Willow.	The understorey is dense and composed of Reed Canary Grass, with lesser occurrences of Tall Goldenrod, Panicled Aster, and cattails. The ground layer is dense and composed of Jointed Rush, Creeping Bent Grass, and sedges.
Wetland	Marsh	MAM, Meadow Marsh	MAMM3-1, Mixed Mineral Meadow Marsh	This community is located in the northwestern portion of the property, which is maintained as a hydro corridor. This community generally lacks a true canopy. The subcanopy is moderately dense and dominated by Poplar species, with lesser occurrences of White Cedar, Common Buckthorn, and Reed Canary Grass.	The understorey is moderately dense and composed of Reed Canary Grass, Grass-leaved Goldenrod, and Tall Goldenrod. The ground layer is of similar density and consists of Reed Canary Grass, a variety of sedges, Spotted Joe-Pye Weed, and Poison Ivy.
Wetland	Swamp	SWD, Deciduous Swamp	SWDM4-5, Poplar Mineral Deciduous Swamp	This community is located in the northwestern corner of the property and continues onto the adjacent property to the west. The canopy of this polygon is moderately dense consisting of Trembling Aspen, Ash species, and White Birch. The subcanopy is of similar density and is composed largely of Ash species and American Elm.	The understorey is dense and composed primarily of dogwood species, with lesser occurrences of Tall Goldenrod and Canada Goldenrod. The ground layer is of moderate density and consists of Poison Ivy, Field Horsetail, and Dewberry.
Wetland	Swamp	SWT, Thicket Swamp	SWTM2-1, Red-osier Dogwood Mineral Deciduous Thicket Swamp	This community is located on the adjacent property to the north, and extends approximately 10m onto the subject property. This community generally lacks a true canopy. The subcanopy is dense and dominated by Red-osier Dogwood, with lesser occurrences of Manitoba Maple, and Willow species.	The understorey is dense and composed of Red-osier Dogwood, Red Raspberry, and Willow species. The ground layer is of moderate density and consists predominantly of Reed Canary Grass, Field Horsetail, Spotted Jewelweed, and Sensitive Fern.

			Location[1,2]																Conservation Rankings[3]				
			1		2		3		4		5		6		7		Adjacent Lands	Incidental					
FAMILY	SCIENTIFIC NAME	COMMON NAME	Visit 1	Visit 2	Visit 1	Visit 2	Visit 1	Visit 2	Visit 1	Visit 2	Visit 1	Visit 2	Visit 1	Visit 2	Visit 1	Visit 2			GRANK	SRANK	SCA	SARA	TRACK
Cardinalidae	*Cardinalis cardinalis*	Northern Cardinal			S						S	S		S		S	S		G5	S5			N
Cardinalidae	*Passerina cyanea*	Indigo Bunting		S						S					S				G5	S5B			N
Cardinalidae	*Pheucticus ludovicianus*	Rose-breasted Grosbeak														S			G5	S5B			N
Charadriidae	*Charadrius vociferus*	Killdeer			C					C, P									G5	S4B			N
Columbidae	*Zenaida macroura*	Mourning Dove			S	H	H	S											G5	S5			N
Corvidae	*Corvus brachyrhynchos*	American Crow			C							C		C	C				G5	S5			N
Corvidae	*Cyanocitta cristata*	Blue Jay				C	C					C	C		C				G5	S5			N
Fringillidae	*Spinus tristis*	American Goldfinch	H		C	C, H	C			C, H	H	C				C		✓	G5	S5			N
Icteridae	*Agelaius phoeniceus*	Red-winged Blackbird		C	C		H				H								G5	S5			N
Icteridae	*Molothrus ater*	Brown-headed Cowbird	C			C									S				G5	S5			N
Icteridae	*Quiscalus quiscula*	Common Grackle				H	H, C		H		H		C		C				G5	S5			N
Mimidae	*Dumetella carolinensis*	Gray Catbird	C	S		S							C						G5	S5B,S3N			N
Paridae	*Poecile atricapillus*	Black-capped Chickadee		C								C			C				G5	S5			N
Parulidae	*Geothlypis trichas*	Common Yellowthroat	S	S	S												S		G5	S5B,S3N			N
Parulidae	*Mniotilta varia*	Black-and-white Warbler												S					G5	S5B			N
Parulidae	*Parkesia noveboracensis*	Northern Waterthrush													S				G5	S5B			N
Passerellidae	*Melospiza melodia*	Song Sparrow	S	S	S	S	S	S	S	S	S	S				S	S		G5	S5			N
Passerellidae	*Zonotrichia albicollis*	White-throated Sparrow													S		S		G5	S5			N
Phasianidae	*Meleagris gallopavo*	Wild Turkey	C			H			H	H									G5	S5			N
Picidae	*Colaptes auratus*	Northern Flicker													C	S			G5	S5			N
Sturnidae	*Sturnus vulgaris*	European Starling			C		CF	C, H		H									G5	SNA			N
Troglodytidae	*Troglodytes aedon*	House Wren						S	S					C					G5	S5B			N
Turdidae	*Catharus fuscescens*	Veery													S				G5	S5B			N
Turdidae	*Hylocichla mustelina*	Wood Thrush									S				S	S			G4	S4B		THR	Y
Turdidae	*Turdus migratorius*	American Robin			S		P	S	S	H	S		S		S				G5	S5			N
Tyrannidae	*Contopus virens*	Eastern Wood-pewee										S			S				G5	S4B		SC	Y
Tyrannidae	*Empidonax minimus*	Least Flycatcher																✓	G5	S5B			N
Tyrannidae	*Myiarchus crinitus*	Great Crested Flycatcher										C			C	C			G5	S5B			N
Tyrannidae	*Sayornis phoebe*	Eastern Phoebe													S				G5	S5B			N
Vireonidae	*Vireo gilvus*	Warbling Vireo												S			S		G5	S5B			N
Vireonidae	*Vireo olivaceus*	Red-eyed Vireo	S			S							S		S	S			G5	S5B			N

[1] Visit 1: June 2, 2022, Observer: Jim Broadfoot, Temperature 10°C, Cloud Cover 25% , Wind: B0, Precipitation: Nil, Search Time 06:36 to 08:08; Visit 2: June 27, 2022, Observer: Jim Broadfoot, Temperature 15°C, Cloud Cover 10% , Wind: B0, Precipitation: Nil, Search Time 07:03 to 08:59

[2] Breeding Bird Evidence Codes: X - Species observed, C - Call heard, FO - Flyover (Species presence); H - Species observed in its breeding season in suitable nesting habitat, S - Singing male (Possible Breeding); P - Pair observed , T - Territorial behaviour, A - Agitated behaviour or anxiety calls of adult, V - Visiting a probably nest site, N - Nest building or excavation of nest hole (Probable Breeding); DD - Distraction display or injury feigning, NU - Used Nest or egg shells, FY - Recently fledged young, AE - Adult leaving or entering nest sites, FS - Adult carrying fecal sac, CF - Adult carrying food for

[3] Conservation Rankings: From Ontario Ministry of Natural Resources, Natural Heritage Information Centre (https://www.ontario.ca/page/natural-heritage-information-centre)

Table 5: Significant Wildlife Habitat Assessment

Significant Wildlife Habitat Criteria Schedule for Ecoregion 6E

Seasonal Concentration Areas of Animals

Wildlife Habitat	Wildlife Species	Candidate SWH		Confirmed SWH	Assessment
		ELC Ecosite Codes	Habitat Criteria and Information Sources	Defining Criteria	
Waterfowl Stopover and Staging Areas (Terrestrial) **Rationale:** Habitat important to migrating waterfowl.	American Black Duck Wood Duck Green-winged Teal Blue-winged Teal Mallard Northern Pintail Northern Shoveler American Wigeon Gadwall	CUM1 CUT1 Plus evidence of annual spring flooding from melt water or run-off within these Ecosites.	Fields with sheet water during Spring (mid-March to May). • Fields flooding during spring melt and run-off provide important invertebrate foraging habitat for migrating waterfowl. • Agricultural fields with waste grains are commonly used by waterfowl, these are not considered SWH unless they have spring sheet water available. Information Sources • Anecdotal information from the landowner, adjacent landowners or local naturalist clubs may be good information in determining occurrence. • Reports and other information available from Conservation Authorities • Sites documented through waterfowl planning processes (*e.g.* EHJV implementation plan) • Field Naturalist Clubs • Ducks Unlimited Canada • NHIC Waterfowl Concentration Area	Studies carried out and verified presence of an annual concentration of any listed species, evaluation methods to follow "Bird and Bird Habitats: Guidelines for Wind Power Projects" • Any mixed species aggregations of 100 or more individuals required. • The flooded field ecosite habitat plus a 100-300m radius area, dependant on local site conditions and adjacent land use is the significant wildlife habitat. • Annual use of habitat is documented from information sources or field studies (annual use can be based on studies or determined by past surveys with species numbers and dates). • SWHMiST Index #7 provides development effects and mitigation measures.	Fields with sheet water were not observed within the study area during the early spring months. No suitable habitat within study area.
Waterfowl Stopover and Staging Areas (Aquatic) **Rationale:** Important for local and migrant waterfowl populations during the spring or fall migration or both periods combined. Sites identified are usually only one of a few in the eco-district.	Canada Goose Cackling Goose Snow Goose American Black Duck Northern Pintail Northern Shoveler American Wigeon Gadwall Green-winged Teal Blue-winged Teal Hooded Merganser Common Merganser Lesser Scaup Greater Scaup Long-tailed Duck Surf Scoter White-winged Scoter Black Scoter Ring-necked duck Common Goldeneye Bufflehead Redhead Ruddy Duck Red-breasted Merganser Brant Canvasback Ruddy Duck	MAS1 MAS2 MAS3 SAS1 SAM1 SAF1 SWD1 SWD2 SWD3 SWD4 SWD5 SWD6 SWD7	• Ponds, marshes, lakes, bays, coastal inlets, and watercourses used during migration. Sewage treatment ponds and storm water ponds do not qualify as a SWH, however a reservoir managed as a large wetland or pond/lake does qualify. • These habitats have an abundant food supply (mostly aquatic invertebrates and vegetation in shallow water). Information Sources • Environment Canada • Naturalist clubs often are aware of staging/stopover areas • OMNRF Wetland Evaluations indicate presence of locally and regionally significant waterfowl staging. • Sites documented through waterfowl planning processes (*e.g.* EHJV implementation plan) • Ducks Unlimited projects • Element occurrence specification by Nature Serve: http://www.natureserve.org • NHIC Waterfowl Concentration Areas	Studies carried out and verified presence of: • Aggregations of 100 or more of listed species for 7 days, results in > 700 waterfowl use days. • Areas with annual staging of ruddy ducks, canvasbacks, and redheads are SWH. • The combined area of the ELC ecosites and a 100m radius area is the SWH. • Wetland area and shorelines associated with sites identified within the SWHTG Appendix K are significant wildlife habitat. • Evaluation methods to follow "Bird and Bird Habitats: Guidelines for Wind Power Projects". • Annual Use of Habitat is Documented from Information Sources or Field Studies (Annual can be based on completed studies or determined from past surveys with species numbers and dates recorded). • SWHMiST Index #7 provides development effects and mitigation measures.	Shoreline wetlands with potential for abundant food supply not observed. No suitable habitat within the study area.

Wildlife Habitat	Wildlife Species	Candidate SWH		Confirmed SWH	Assessment
		ELC Ecosite Codes	Habitat Criteria and Information Sources	Defining Criteria	
Shorebird Migratory Stopover Area **Rationale:** High quality shorebird stopover habitat is extremely rare and typically has a long history of use.	Greater Yellowlegs Lesser Yellowlegs Marbled Godwit Hudsonian Godwit Black-bellied Plover American Golden-Plover Semipalmated Plover Solitary Sandpiper Spotted Sandpiper Semipalmated Sandpiper Pectoral Sandpiper White-rumped Sandpiper Baird's Sandpiper Least Sandpiper Purple Sandpiper Stilt Sandpiper Short-billed Dowitcher Red-necked Phalarope Whimbrel Ruddy Turnstone Sanderling Dunlin	BBO1 BBO2 BBS1 BBS2 BBT1 BBT2 SDO1 SDS2 SDT1 MAM1 MAM2 MAM3 MAM4 MAM5	• Shorelines of lakes, rivers and wetlands, including beach areas, bars and seasonally flooded, muddy and un-vegetated shoreline habitats. • Great Lakes coastal shorelines, including groynes and other forms of armour rock lakeshores, are extremely important for migratory shorebirds in May to mid-June and early July to October. • Sewage treatment ponds and storm water ponds do not qualify as a SWH. Information Sources • Western hemisphere shorebird reserve network • Canadian Wildlife Service (CWS) Ontario Shorebird Survey • Bird Studies Canada • Ontario Nature • Local birders and naturalist clubs • NHIC Shorebird Migratory Concentration Area	Studies confirming: • Presence of 3 or more of listed species and > 1000 shorebird use days during spring or fall migration period. (shorebird use days are the accumulated number of shorebirds counted per day over the course of the fall or spring migration period) • Whimbrel stop briefly (<24hrs) during spring migration, any site with >100 Whimbrel used for 3 years or more is significant. • The area of significant shorebird habitat includes the mapped ELC shoreline ecosites plus a 100m radius area. • Evaluation methods to follow "Bird and Bird Habitats: Guidelines for Wind Power Projects". • SWHMiST Index #8 provides development effects and mitigation measures.	Beach areas, bars, and seasonally-flooded muddy shoreline habitat associated with shorebird migratory stopover areas not observed. No suitable habitat within the study area.
Raptor Wintering Area **Rationale:** Sites used by multiple species of individuals and used annually are most significant	Rough-legged Hawk Red-tailed Hawk Northern Harrier American Kestrel Snowy Owl **Special Concern:** Short-eared Owl Bald Eagle	Hawks/Owls: Combination of ELC Community Series; need to have present one Community Series from each land class; Forest: FOD, FOM, FOC. Upland: CUM; CUT; CUS; CUW. Bald Eagle: Forest community Series: FOD, FOM, FOC, SWD, SWM or SWC on shoreline areas adjacent to large rivers or adjacent to lakes with open water (hunting area).	• The habitat provides a combination of fields and woodlands that provide roosting, foraging and resting habitats for wintering raptors. • Raptor wintering sites (hawk/owl) need to be > 20 ha with a combination of forest and upland. • Least disturbed sites, idle/fallow or lightly grazed field/meadow (>15ha) with adjacent woodlands. • Field area of the habitat is to be windswept with limited snow depth or accumulation. • Eagle sites have open water, large trees and snags available for roosting. Information Sources: • OMNRF Ecologist or Biologist Field Naturalist Clubs • NHIC Raptor Winter Concentration Area • Data from Bird Studies Canada • Results of Christmas Bird Counts Reports and other information available from Conservation Authorities.	Studies confirm the use of these habitats by: • One or more Short-eared Owls or; One or more Bald Eagles or; At least 10 individuals and two of the listed hawk/owl species. • To be significant a site must be used regularly (3 in 5 years) for a minimum of 20 days by the above number of birds. • The habitat area for an Eagle winter site is the shoreline forest ecosites directly adjacent to the prime hunting area. • Evaluation methods to follow "Bird and Bird Habitats: Guidelines for Wind Power Projects". • SWHMiST Index #10 and #11 provides development effects and mitigation measures.	Idle/fallow meadow within the study area limits, significantly below the 15ha threshold required for consideration as Raptor Wintering Area. No suitable habitat within the study area.
Bat Hibernacula **Rationale:** Bat hibernacula are rare habitats in all Ontario landscapes.	Big Brown Bat Tri-coloured Bat	Bat Hibernacula may be found in these ecosites: CCR1 CCR2 CCA1 CCA2 (Note: buildings are not considered to be SWH)	• Hibernacula may be found in caves, mine shafts, underground foundations and Karsts. • Active mine sites should not be considered as SWH • The locations of bat hibernacula are relatively poorly known. Information Sources • OMNRF for possible locations and contact for local experts • NHIC Bat Hibernaculum Ministry of Northern • Development and Mines for location of mine shafts. • Clubs that explore caves (*e.g.* Sierra Club) • University Biology Departments with bat experts.	• All sites with confirmed hibernating bats are SWH. • The habitat area includes a 200m radius around the entrance of the hibernaculum, for most development types and 1000m for wind farms • Studies are to be conducted during the peak swarming period (Aug. – Sept.). Surveys should be conducted following methods outlined in the "Bats and Bat Habitats: Guidelines for Wind Power Projects. • SWHMiST Index #1 provides development effects and mitigation measures.	No caves, mine shafts, underground foundations and karsts. No suitable habitat within the study area.

Wildlife Habitat	Wildlife Species	Candidate SWH		Confirmed SWH	Assessment
		ELC Ecosite Codes	Habitat Criteria and Information Sources	Defining Criteria	
Bat Maternity Colonies **Rationale:** Known locations of forested bat maternity colonies are extremely rare in all Ontario landscapes.	Big Brown Bat Silver-haired Bat	Maternity colonies considered SWH are found in forested Ecosites. All ELC Ecosites in ELC Community Series: FOD FOM SWD SWM	• Maternity colonies can be found in tree cavities, vegetation and often in buildings (buildings are not considered to be SWH). • Maternity roosts are not found in caves and mines in Ontario. • Maternity colonies located in Mature deciduous or mixed forest stands with >10/ha large diameter (>25cm dbh) wildlife trees. • Female Bats prefer wildlife tree (snags) in early stages of decay, class 1-3 or class 1 or 2. • Silver-haired Bats prefer older mixed or deciduous forest and form maternity colonies in tree cavities and small hollows. Older forest areas with at least 21 snags/ha are preferred. Information Sources • OMNRF for possible locations and contact for local experts • University Biology Departments with bat experts.	• Maternity Colonies with confirmed use by; ○ >10 Big Brown Bats ○ >5 Adult Female Silver-haired Bats • The area of the habitat includes the entire woodland or a forest stand ELC Ecosite or an Ecoelement containing the maternity colonies. • Evaluation methods for maternity colonies should be conducted following methods outlined in the "Bats and Bat Habitats: Guidelines for Wind Power Projects". • SWHMiST Index #12 provides development effects and mitigation measures.	Presence of Big Brown Bat was confirmed during bat exit surveys. Deciduous and mixed forest/woodland communities (FOD, FOM, SWD codes; Figure 2), primarily within the west and northeast portions of the study area, have potential to provide habitat for Bat Maternity Colonies.
Turtle Wintering Areas **Rationale:** Generally sites are the only known sites in the area. Sites with the highest number of individuals are most significant.	Midland Painted Turtle **Special Concern:** Northern Map Turtle Snapping Turtle	Snapping and Midland Painted Turtles; ELC Community Classes; SW, MA, OA and SA, ELC Community Series; FEO and BOO Northern Map Turtle; Open Water areas such as deeper rivers or streams and lakes with current can also be used as over-wintering habitat.	• For most turtles, wintering areas are in the same general area as their core habitat. Water has to be deep enough not to freeze and have soft mud substrates. • Over-wintering sites are permanent water bodies, large wetlands, and bogs or fens with adequate Dissolved Oxygen. • Man-made ponds such as sewage lagoons or storm water ponds should not be considered SWH. Information Sources • EIS studies carried out by Conservation Authorities. • Local field naturalists and experts, as well as university herpetologists may also know where to find some of these sites. • OMNRF Ecologist or Biologist • Field Naturalist clubs • NHIC	• Presence of 5 over-wintering Midland Painted Turtles is significant. • One or more Northern Map Turtle or Snapping Turtle over-wintering within a wetland is significant. • The mapped ELC ecosite area with the over wintering turtles is the SWH. If the hibernation site is within a stream or river, the deep-water pool where the turtles are over wintering is the SWH. • Over wintering areas may be identified by searching for congregations (Basking Areas) of turtles on warm, sunny days during the fall (Sept. – Oct.) or spring (Mar. – May) • Congregation of turtles is more common where wintering areas are limited and therefore significant • SWHMiST Index #28 provides development effects and mitigation measures for turtle wintering habitat.	Suitable wetlands and open water features are not located within the study area limits. No suitable habitat.
Reptile Hibernaculum **Rationale:** Generally sites are the only known sites in the area. Sites with the highest number of individuals are most significant.	**Snakes:** Eastern Gartersnake Northern Watersnake Northern Red-bellied Snake Northern Brownsnake Smooth Green Snake Northern Ring-necked Snake **Special Concern:** Milksnake Eastern Ribbonsnake **Lizard:** **Special Concern** (Southern Shield population)**:** Five-lined Skink	For all snakes, habitat may be found in any ecosite other than very wet ones. Talus, Rock Barren, Crevice, Cave, and Alvar sites may be directly related to these habitats. Observations or congregations of snakes on sunny warm days in the spring or fall is a good indicator. For Five-lined Skink, ELC Community Series of FOD and FOM and Ecosites: FOC1 FOC3	• For snakes, hibernation takes place in sites located below frost lines in burrows, rock crevices and other natural or naturalized locations. The existence of features that go below frost line; such as rock piles or slopes, old stone fences, and abandoned crumbling foundations assist in identifying candidate SWH. • Areas of broken and fissured rock are particularly valuable since they provide access to subterranean sites below the frost line. • Wetlands can also be important over-wintering habitat in conifer or shrub swamps and swales, poor fens, or depressions in bedrock terrain with sparse trees or shrubs with sphagnum moss or sedge hummock ground cover. • Five-lined skink prefer mixed forests with rock outcrop openings providing cover rock overlaying granite bedrock with fissures. Information Sources	Studies confirming: • Presence of snake hibernacula used by a minimum of five individuals of a snake sp. or; individuals of two or more snake spp. • Congregations of a minimum of five individuals of a snake sp. or; individuals of two or more snake spp. near potential hibernacula (*e.g.* foundation or rocky slope) on sunny warm days in Spring (Apr/May) and Fall (Sept/Oct) • Note: If there are Special Concern Species present, then site is SWH • Note: Sites for hibernation possess specific habitat parameters (*e.g.* temperature, humidity, *etc.*) and consequently are used annually, often by many of the same individuals of a local population (i.e. strong hibernation site fidelity). Other critical life processes (*e.g.* mating) often take place in close proximity to	No features were identified within the study area that could provide suitable reptile hibernacula. No suitable habitat within the study area.

Wildlife Habitat	Wildlife Species	Candidate SWH		Confirmed SWH	Assessment
		ELC Ecosite Codes	Habitat Criteria and Information Sources	Defining Criteria	
			• In spring, local residents or landowners may have observed the emergence of snakes on their property (*e.g.* old dug wells). • Reports and other information available from Conservation Authorities. • Field Naturalists clubs • University herpetologists • NHIC • OMNRF ecologist or biologist may be aware of locations of wintering skinks.	hibernacula. The feature in which the hibernacula is located plus a 30 m radius area is the SWH. • SWHMiST Index #13 provides development effects and mitigation measures for snake hibernacula. • Presence of any active hibernaculum for skink is significant. • SWHMiST Index #37 provides development effects and mitigation measures for five-lined skink wintering habitat.	
Colonially -Nesting Bird Breeding Habitat (Bank and Cliff) **<u>Rationale:</u>** Historical use and number of nests in a colony make this habitat significant. An identified colony can be very important to local populations. All swallow population are declining in Ontario.	Cliff Swallow Northern Rough-winged Swallow (this species is not colonial but can be found in Cliff Swallow colonies)	Eroding banks, sandy hills, borrow pits, steep slopes, and sand piles. Cliff faces, bridge abutments, silos, barns. Habitat found in the following ecosites: CUM1 CUT1 CUS1 BLO1 BLS1 BLT1 CLO1 CLS1 CLT1	• Any site or areas with exposed soil banks, undisturbed or naturally eroding that is not a licensed/permitted aggregate area. • Does not include man-made structures (bridges or buildings) or recently (2 years) disturbed soil areas, such as berms, embankments, soil or aggregate stockpiles. • Does not include a licensed/permitted Mineral Aggregate Operation. <u>Information Sources</u> • Reports and other information available from Conservation Authorities. • Ontario Breeding Bird Atlas • Bird Studies Canada; *NatureCounts* http://www.birdscanada.org/birdmon/ • Field Naturalist Clubs.	Studies confirming: • Presence of 1 or more nesting sites with 8or more cliff swallow pairs and/or rough-winged swallow pairs during the breeding season. • A colony identified as SWH will include a 50m radius habitat area from the peripheral nests. • Field surveys to observe and count swallow nests are to be completed during the breeding season. Evaluation methods to follow “Bird and Bird Habitats: Guidelines for Wind Power Projects”. • SWHMiST Index #4 provides development effects and mitigation measures.	No exposed/eroding soil banks or suitable steep slopes are associated with the study area.
Colonially-Nesting Bird Breeding Habitat (Tree/Shrubs) **<u>Rationale:</u>** Large colonies are important to local bird population, typically sites are only known colony in area and are used annually.	Great Blue Heron Black-crowned Night-Heron Great Egret Green Heron	SWM2 SWM3 SWM5 SWM6 SWD1 SWD2 SWD3 SWD4 SWD5 SWD6 SWD7 FET1	• Nests in live or dead standing trees in wetlands, lakes, islands, and peninsulas. Shrubs and occasionally emergent vegetation may also be used. • Most nests in trees are 11 to 15 m from ground, near the top of the tree. <u>Information Sources</u> • Ontario Breeding Bird Atlas, colonial nest records. • Ontario Heronry Inventory 1991 available from Bird Studies Canada or NHIC (OMNRF). • NHIC Mixed Wader Nesting Colony • Aerial photographs can help identify large heronries. • Reports and other information available from CAs. • MNR District Offices • Local naturalist clubs	Studies confirming: • Presence of 5 or more active nests of Great Blue Heron or other listed species. • The habitat extends from the edge of the colony and a minimum 300m radius or extent of the Forest Ecosite containing the colony or any island <15.0ha with a colony is the SWH. • Confirmation of active heronries are to be achieved through site visits conducted during the nesting season (April to August) or by evidence such as the presence of fresh guano, dead young and/or eggshells. • SWHMiST Index #5 provides development effects and mitigation measures.	Wetland vegetation types within the listed wetland ELC Ecosites are present within the study area, including the following ELC polygons: • SWTM2-1 • SWDM4-5 However, nesting sites belonging to colonially nesting bird species (tree/shrubs) were not observed throughout the study area limits, and none of these polygons were observed to provide potential habitat function. None of the listed species were observed throughout the course of the field program.
Colonially-Nesting Bird Breeding Habitat (Ground) **<u>Rationale:</u>** Colonies are important to local bird population, typically sites are only known colony in area and are used annually.	Herring Gull Great Black-backed Gull Little Gull Ring-billed Gull Common Tern Caspian Tern Brewer’s Blackbird	Any rocky island or peninsula (natural or artificial) within a lake or large river (two-lined on a 1;50,000 NTS map). Close proximity to watercourses in open fields or pastures with scattered trees or shrubs (Brewer’s Blackbird) MAM1 – 6;	• Nesting colonies of gulls and terns are on islands or peninsulas associated with open water or in marshy areas. • Brewers Blackbird colonies are found loosely on the ground in low bushes in close proximity to streams and irrigation ditches within farmlands. <u>Information Sources</u> • Ontario Breeding Bird Atlas, rare/colonial species records. • Canadian Wildlife Service • Reports and other information available from CAs. • NHIC Colonial Waterbird Nesting Area • MNR District Offices	Studies confirming: • Presence of > 25 active nests for Herring Gulls or Ring-billed Gulls, >5 active nests for Common Tern or >2 active nests for Caspian Tern. • Presence of 5 or more pairs for Brewer’s Blackbird. • Any active nesting colony of one or more Little Gull, and Great Black-backed Gull is significant. • The edge of the colony and a minimum 150m radius area of habitat, or the extent of the ELC ecosites containing the colony or any island <3.0ha with a colony is the SWH.	NHIC background data indicate the potential presence of Colonial Waterbird Nesting Areas associated with three (3) NHIC 1km grid squares located within 1km of the property (17NK6919, 17NK6920, and 17NK7020). However, given the nature of this SWH type, and given that these grid squares are clustered to the northwest of the property, it is likely that this NHIC record represents a record that has been generalized to an area northwest of the property.

Wildlife Habitat	Wildlife Species	Candidate SWH		Confirmed SWH	Assessment
		ELC Ecosite Codes	Habitat Criteria and Information Sources	Defining Criteria	
		MAS1 – 3; CUM CUT CUS	• Field Naturalist clubs	• Studies would be done during May/June when actively nesting. Evaluation methods to follow "Bird and Bird Habitats: Guidelines for Wind Power Projects". • SWHMiST Index #6 provides development effects and mitigation measures.	There is no expectation that the above-noted NHIC data suggest that this SWH type would be specifically associated with the property. No rocky island/peninsula was observed to be associated with the study area. No suitable habitat is present within the study area.
Migratory Butterfly Stopover Areas **<u>Rationale:</u>** Butterfly stopover areas are extremely rare habitats and are biologically important for butterfly species that migrate south for the winter.	Painted Lady Red Admiral <u>Special Concern</u> Monarch	Combination of ELC Community Series; need to have present one Community Series from each land class: <u>Field:</u> CUM CUT CUS <u>Forest:</u> FOC FOD FOM CUP Anecdotally, a candidate site for butterfly stopover will have a history of butterflies being observed.	A butterfly stopover area will be a minimum of 10 ha in size with a combination of field and forest habitat present, and will be located within 5 km of Lake Ontario. • The habitat is typically a combination of field and forest, and provides the butterflies with a location to rest prior to their long migration south. • The habitat should not be disturbed, fields/meadows with an abundance of preferred nectar plants and woodland edge providing shelter are requirements for this habitat. • Staging areas usually provide protection from the elements and are often spits of land or areas with the shortest distance to cross the Great Lakes. <u>Information Sources</u> • OMNRF (NHIC) • Agriculture Canada in Ottawa may have list of butterfly experts. • Field Naturalist Clubs • Toronto Entomologists Association • Conservation Authorities	Studies confirm: • The presence of Monarch Use Days (MUD) during fall migration (Aug/Oct). MUD is based on the number of days a site is used by Monarchs, multiplied by the number of individuals using the site. Numbers of butterflies can range from 100-500/day, significant variation can occur between years and multiple years of sampling should occur. • Observational studies are to be completed and need to be done frequently during the migration period to estimate MUD. • MUD of >5000 **or** >3000 with the presence of Painted Ladies or Red Admiral's is to be considered significant. • SWHMiST Index #16 provides development effects and mitigation measures.	Not located within 5km of Lake Ontario.
Landbird Migratory Stopover Areas **<u>Rationale:</u>** Sites with a high diversity of species as well as high numbers are most significant.	All migratory songbirds. Canadian Wildlife Service Ontario website. All migratory songbirds. Canadian Wildlife Service Ontario website:	All Ecosites associated with these ELC Community Series; FOC FOM FOD SWC SWM SWD	Woodlots need to be >10 ha in size and within 5 km of Lake Ontario. • If multiple woodlands are located along the shoreline those Woodlands <2km from Lake Ontario are more significant. • Sites have a variety of habitats; forest, grassland and wetland complexes. • The largest sites are more significant. • Woodlots and forest fragments are important habitats to migrating birds, these features located along the shore and located within 5km of Lake Ontario are Candidate SWH. <u>Information Sources</u> • Bird Studies Canada • Ontario Nature • Local birders and naturalist club • Ontario Important Bird Areas (IBA) Program	Studies confirm: • Use of the habitat by >200 birds/day and with >35 spp with at least 10 bird spp. recorded on at least 5 different survey dates. This abundance and diversity of migrant bird species is considered above average and significant. • Studies should be completed during spring (Apr./May) and fall (Aug/Oct) migration using standardized assessment techniques. Evaluation methods to follow "Bird and Bird Habitats: Guidelines for Wind Power Projects". • SWHMiST Index #9 provides development effects.	Not located within 5km of Lake Ontario.
Deer Yarding Areas **<u>Rationale:</u>** Winter habitat for deer is considered to be the main limiting factor for northern deer populations. In winter, deer congregate in	White-tailed Deer	Note: OMNRF to determine this habitat. ELC Community Series providing a thermal cover component for a deer yard would include; FOM, FOC, SWM and SWC. Or these ELC Ecosites;	• Deer yarding areas or winter concentration areas (yards) are areas deer move to in response to the onset of winter snow and cold. This is a behavioural response and deer will establish traditional use areas. The yard is composed of two areas referred to as Stratum I and Stratum II. Stratum II covers the entire winter yard area and is usually a mixed or deciduous forest with plenty of browse available for food. Agricultural lands can also be included in this area. Deer move to these areas in early winter and generally,	No Studies Required: • Snow depth and temperature are the greatest influence on deer use of winter yards. Snow depths > 40cm for more than 60 days in a typically winter are minimum criteria for a deer yard to be considered as SWH. • Deer Yards are mapped by OMNRF District offices. Locations of Core or Stratum 1 and Stratum 2 Deer yards considered significant by OMNRF will be available at local MNRF offices or via Land Information Ontario (LIO).	Deer Wintering Area (Stratum I) or Deer Wintering Area (Stratum II) not mapped by municipal and provincial resources. The nearest mapped deer wintering area is a complex of Stratum I and Stratum II Deer Wintering Areas located more than 3km to the north. No indications suggest that traditional deer yarding function is occurring within the study area limits. The property would not be expected to provide the habitat function.

Wildlife Habitat	Wildlife Species	Candidate SWH		Confirmed SWH	Assessment
		ELC Ecosite Codes	Habitat Criteria and Information Sources	Defining Criteria	
"yards" to survive severe winter conditions. Deer yards typically have a long history of annual use by deer, yards typically represent 10-15% of an areas summer range.		CUP2 CUP3 FOD3 CUT	when snow depths reach 20 cm, most of the deer will have moved here. If the snow is light and fluffy, deer may continue to use this area until 30 cm snow depth. In mild winters, deer may remain in the Stratum II area the entire winter. • The Core of a deer yard (Stratum I) is located within the Stratum II area and is critical for deer survival in areas where winters become severe. It is primarily composed of coniferous trees (pine, hemlock, cedar, spruce) with a canopy cover of more than 60%. • OMNR determines deer yards following methods outlined in "Selected Wildlife and Habitat Features: Inventory Manual". • Woodlots with high densities of deer due to artificial feeding are not significant.	• Field investigations that record deer tracks in winter are done to confirm use (best done from an aircraft). Preferably, this is done over a series of winters to establish the boundary of the Stratum I and Stratum II yard in an "average" winter. MNRF will complete these field investigations. • If a SWH is determined for Deer Wintering Area or if a proposed development is within Stratum II yarding area then Movement Corridors are to be considered as outlined in Table 1.4.1 of this Schedule. • SWHMiST Index #2 provides development effects and mitigation measures.	
Deer Winter Congregation Areas **<u>Rationale:</u>** Deer movement during winter in the southern areas of Ecoregion 6E are not constrained by snow depth, however deer will annually congregate in large numbers in suitable woodlands to reduce or avoid the impacts of winter conditions.	White-tailed Deer	All Forested Ecosites with these ELC Community Series; FOC FOM FOD SWC SWM SWD Conifer plantations much smaller than 50 ha may also be used.	• Woodlots will typically be >100 ha in size. Woodlots <100ha may be considered as significant based on MNRF studies or assessment. • Deer movement during winter in the southern areas of Ecoregion 6E are not constrained by snow depth, however deer will annually congregate in large numbers in suitable woodlands. • If deer are constrained by snow depth refer to the Deer Yarding Area habitat within Table 1.1 of this Schedule. • Large woodlots > 100ha and up to 1500 ha are known to be used annually by densities of deer that range from 0.1-1.5 deer/ha. • Woodlots with high densities of deer due to artificial feeding are not significant. <u>Information Sources</u> • MNR District Offices • LIO/NRVIS	Studies confirm: • Deer management is an MNRF responsibility, deer winter congregation areas considered significant will be mapped by MNRF. • Use of the woodlot by white-tailed deer will be determined by MNRF, all woodlots exceeding the area criteria are significant, unless determined not to be significant by MNRF. • Studies should be completed during winter (Jan/Feb) when >20cm of snow is on the ground using aerial survey techniques, ground or road surveys. or a pellet count deer density survey. • If a SWH is determined for Deer Wintering Area or if a proposed development is within Stratum II yarding area then Movement Corridors are to be considered as outlined in Table 1.4.1 of this Schedule. • SWHMiST Index #2 provides development effects and mitigation measures.	Not located within the southern area of Ecoregion 6E. Not applicable. Assessed as Deer Yarding Areas (see above).

<u>Rare Vegetation Communities</u>

Rare Vegetation Community	Candidate SWH			Confirmed SWH	Assessment
	ELC Ecosite Code	Habitat Description	Detailed Information and Sources	Defining Criteria	
Cliffs and Talus Slopes **<u>Rationale:</u>** Cliffs and Talus Slopes are extremely rare habitats in Ontario.	Any ELC Ecosite within Community Series: TAO TAS TAT CLO CLS CLT	A Cliff is vertical to near vertical bedrock >3m in height. A Talus Slope is rock rubble at the base of a cliff made up of coarse rocky debris.	Most cliff and talus slopes occur along the Niagara Escarpment. <u>Information Sources</u> • The Niagara Escarpment Commission has detailed information on location of these habitats. • OMNR District • NHIC has location information available on their website • Field Naturalist clubs • Conservation Authorities	• Confirm any ELC Vegetation Type for Cliffs or Talus Slopes • SWHMiST Index #21 provides development effects and mitigation measures.	No cliffs or talus slopes identified during the field program.
Sand Barren **<u>Rationale;</u>** Sand barrens are rare in	ELC Ecosites: SBO1 SBS1 SBT1	Sand Barrens typically are exposed sand, generally sparsely vegetated and caused by lack of moisture, periodic fires and erosion. Usually	A sand barren area >0.5ha in size. <u>Information Sources</u> • MNR Districts • NHIC has location information available on their website.	• Confirm any ELC Vegetation Type for Sand Barrens • Site must not be dominated by exotic or introduced species (<50% vegetative cover are exotic sp.)	No sand barrens identified during the field program.

Rare Vegetation Community	Candidate SWH			Confirmed SWH	Assessment
	ELC Ecosite Code	Habitat Description	Detailed Information and Sources	Defining Criteria	
Ontario and support rare species. Most Sand Barrens have been lost due to cottage development and forestry	Vegetation cover varies from patchy and barren to continuous meadow (SBO1), thicket-like (SBS1), or more closed and treed (SBT1). Tree cover always ≤ 60%.	located within other types of natural habitat such as forest or savannah. Vegetation can vary from patchy and barren to tree covered, but less than 60%.	• Field Naturalist clubs • Conservation Authorities	• SWHMiST Index #20 provides development effects and mitigation measures.	
Alvar **<u>Rationale;</u>** Alvars are extremely rare habitats in Ecoregion 6E. Most alvars in Ontario are in Ecoregions 6E and 7E. Alvars in 6E are small and highly localized just north of the Palaeozoic-Precambrian contact.	ALO1 ALS1 ALT1 FOC1 FOC2 CUM2 CUS2 CUT2-1 CUW2 **Five Alvar Species:** 1) *Carex crawei* 2) *Panicum philadelphicum* 3) *Eleocharis compressa* 4) *Scutellaria parvula* 5) *Trichostema brachiatum* These indicator species are very specific to Alvars within Ecoregion 6E.	An alvar is typically a level, mostly unfractured calcareous bedrock feature with a mosaic of rock pavements and bedrock overlain by a thin veneer of soil. The hydrology of alvars is complex, with alternating periods of inundation and drought. Vegetation cover varies from sparse lichen-moss associations to grasslands and shrublands and comprising a number of characteristic or indicator plants. Undisturbed alvars can be phyto- and zoogeographically diverse, supporting many uncommon or are relict plant and animal species. Vegetation cover varies from patchy to barren with a less than 60% tree cover.	An Alvar site > 0.5 ha in size. <u>Information Sources</u> • Alvars of Ontario (2000), Federation of Ontario Naturalists. • Ontario Nature – Conserving Great Lakes Alvars. • NHIC has location information available on their website • OMNR Districts • Field Naturalist clubs • Conservation Authorities	• Field studies that identify four of the five **Alvar Indicator Species** at a Candidate Alvar site is Significant. • Site must not be dominated by exotic or introduced species (<50% vegetative cover are exotic sp.). • The alvar must be in excellent condition and fit in with surrounding landscape with few conflicting land uses. • SWHMiST Index #17 provides development effects and mitigation measures.	No alvar identified during the field program
Old Growth Forest **<u>Rationale;</u>** Due to historic logging practices, extensive old growth forest is rare in the Ecoregion. Interior habitat provided by old growth forests is required by many wildlife species.	Forest Community Series: FOD FOC FOM SWD SWC SWM	Old Growth forests are characterized by heavy mortality or turnover of over-storey trees resulting in a mosaic of gaps that encourage development of a multi-layered canopy and an abundance of snags and downed woody debris.	Woodland areas 30 ha or greater in size or with at least 10 ha interior habitat assuming 100 m buffer at edge of forest. <u>Information Sources</u> • OMNR Forest Resource Inventory mapping • OMNR Districts. • Field Naturalist clubs • Conservation Authorities • Sustainable Forestry Licence (SFL) companies will possibly know locations through field operations. • Municipal forestry departments	Field Studies will determine: • If dominant trees species are >140 years old, then the area containing these trees is Significant Wildlife Habitat. • The forested area containing the old growth characteristics will have experienced no recognizable forestry activities (cut stumps will not be present). • The area of forest ecosites combined or an eco-element within an ecosite that contains the old growth characteristics is the SWH. • Determine ELC vegetation types for the forest area containing the old growth characteristics. • SWHMiST Index #23 provides development effects and mitigation measures.	Woodlands within the study area vary from immature to moderately mature and not of sufficient age to be considered old growth forest. No old growth forest identified within the study area.
Savannah **<u>Rationale:</u>** Savannahs are extremely rare habitats in Ontario.	TPS1 TPS2 TPW1 TPW2 CUS2	A Savannah is a tallgrass prairie habitat that has tree cover between 25 – 60%.	No minimum size to site. Site must be restored or a natural site. Remnant sites such as railway right of ways are not considered to be SWH. <u>Information Sources</u> • NHIC has location information available on their website • OMNR Districts • Field Naturalist clubs • Conservation Authorities	Field studies confirm one or more of the Savannah indicator species listed in Appendix N should be present. Note: Savannah plant spp. list from Ecoregion 6E should be used. • Area of the ELC Ecosite is the SWH. • Site must not be dominated by exotic or introduced species (<50% vegetative cover are exotic sp.). • SWHMiST Index #18 provides development effects and mitigation measures.	No savannah identified during the field program.

Rare Vegetation Community	Candidate SWH			Confirmed SWH	Assessment
	ELC Ecosite Code	Habitat Description	Detailed Information and Sources	Defining Criteria	
Tallgrass Prairie **Rationale:** Tallgrass Prairies are extremely rare habitats in Ontario.	TPO1 TPO2	A Tallgrass Prairie has ground cover dominated by prairie grasses. An open Tallgrass Prairie habitat has < 25% tree cover.	No minimum size to site. Site must be restored or a natural site. Remnant sites such as railway right of ways are not considered to be SWH. Information Sources • NHIC has location information available on their website • OMNR Districts • Field Naturalist clubs • Conservation Authorities	Field studies confirm one or more of the Prairie indicator species listed in Appendix N should be present. Note: Prairie plant spp. list from Ecoregion 6E should be used. • Area of the ELC Ecosite is the SWH. • Site must not be dominated by exotic or introduced species (<50% vegetative cover are exotic sp.). • SWHMiST Index #19 provides development effects and mitigation measures.	No tallgrass prairie identified during the field program
Other Rare Vegetation Communities **Rationale:** Plant communities that often contain rare species which depend on the habitat for survival.	Provincially Rare S1, S2 and S3 vegetation communities are listed in Appendix M of the SWHTG. Any ELC Ecosite Code that has a possible ELC Vegetation Type that is Provincially Rare is Candidate SWH.	Rare Vegetation Communities may include beaches, fens, forest, marsh, barrens, dunes and swamps.	ELC Ecosite codes that have the potential to be a rare ELC Vegetation Type as outlined in appendix M The OMNR/NHIC will have up to date listing for rare vegetation communities. Information Sources • NHIC has location information available on their website • OMNRF Districts • Field Naturalist clubs • Conservation Authorities	Field studies should confirm if an ELC Vegetation Type is a rare vegetation community based on listing within Appendix M of SWHTG. • Area of the ELC Vegetation Type polygon is the SWH. • SWHMiST Index #37 provides development effects and mitigation measures.	No rare vegetation communities identified during the field program.

Specialized Habitat for Wildlife

Wildlife Habitat	Wildlife Species	Candidate SHW		Confirmed SWH	Assessment
		ELC Ecosite Codes	Habitat Criteria and Information Sources	Defining Criteria	
Waterfowl Nesting Area **Rationale;** Important to local waterfowl populations, sites with greatest number of species and highest number of individuals are significant.	American Black Duck Northern Pintail Northern Shoveler Gadwall Blue-winged Teal Green-winged Teal Wood Duck Hooded Merganser Mallard	All upland habitats located adjacent to these wetland ELC Ecosites are Candidate SWH: MAS1 MAS2 MAS3 SAS1 SAM1 SAF1 MAM1 MAM2 MAM3 MAM4 MAM5 MAM6 SWT1 SWT2 SWD1 SWD2 SWD3 SWD4 **Note: includes adjacency to Provincially Significant Wetlands**	A waterfowl nesting area extends 120 m from a wetland (> 0.5 ha) or a wetland (>0.5ha) and any small wetlands (0.5ha) within 120m or a cluster of 3 or more small (<0.5 ha) wetlands within 120 m of each individual wetland where waterfowl nesting is known to occur. • Upland areas should be at least 120 m wide so that predators such as racoons, skunks, and foxes have difficulty finding nests. • Wood Ducks and Hooded Mergansers utilize large diameter trees (>40cm dbh) in woodlands for cavity nest sites. Information Sources • Ducks Unlimited staff may know the locations of particularly productive nesting sites. • OMNRF Wetland Evaluations for indication of significant waterfowl nesting habitat. • Reports and other information available from Conservation Authorities.	Studies confirmed: • Presence of 3 or more nesting pairs for listed species excluding Mallards, or; • Presence of 10 or more nesting pairs for listed species including Mallards. • Any active nesting site of an American Black Duck is considered significant. • Nesting studies should be completed during the spring breeding season (April - June). Evaluation methods to follow “Bird and Bird Habitats: Guidelines for Wind Power Projects”. • A field study confirming waterfowl nesting habitat will determine the boundary of the waterfowl nesting habitat for the SWH, this may be greater or less than 120 m from the wetland and will provide enough habitat for waterfowl to successfully nest. • SWHMiST Index #25 provides development effects and mitigation measures.	Wetland habitat is present within the study area, including MAMM1, MAMM3 and SWTM2 ecosites, although the wetland does not provide suitable aquatic conditions for waterfowl (*i.e.* not suitable feeding (dabbling/short dives) or brood rearing habitat). None of the listed species were observed during Dawn Breeding Bird Surveys or throughout the remainder of the field program, and therefore no breeding evidence was observed for these species. Based on this information, there is no suitable SWH function associated with Waterfowl Nesting Area.

Wildlife Habitat	Wildlife Species	Candidate SHW		Confirmed SWH	Assessment
		ELC Ecosite Codes	Habitat Criteria and Information Sources	Defining Criteria	
Bald Eagle and Osprey Nesting, Foraging and Perching Habitat **<u>Rationale;</u>** Nest sites are fairly uncommon in Eco-region 6E and are used annually by these species. Many suitable nesting locations may be lost due to increasing shoreline development pressures and scarcity of habitat.	Osprey **Special Concern** Bald Eagle	ELC Forest Community Series: FOD, FOM, FOC, SWD, SWM and SWC directly adjacent to riparian areas – rivers, lakes, ponds and wetlands	Nests are associated with lakes, ponds, rivers or wetlands along forested shorelines, islands, or on structures over water. • Osprey nests are usually at the top a tree whereas Bald Eagle nests are typically in super canopy trees in a notch within the tree's canopy. • Nests located on man-made objects are not to be included as SWH (*e.g.* telephone poles and constructed nesting platforms). <u>Information Sources</u> • NHIC compiles all known nesting sites for Bald Eagles in Ontario. • MNRF values information (LIO/NRVIS) will list known nesting locations. Note: data from NRVIS is provided as a point and does not represent all the habitat. • Nature Counts, Ontario Nest Records Scheme data. • OMNRF Districts • Check the Ontario Breeding Bird Atlas or Rare Breeding Birds in Ontario for species documented • Reports and other information available from Conservation Authorities. • Field Naturalists clubs	Studies confirm the use of these nests by: • One or more active Osprey or Bald Eagle nests in an area. • Some species have more than one nest in a given area and priority is given to the primary nest with alternate nests included within the area of the SWH. • For an Osprey, the active nest and a 300 m radius around the nest or the contiguous woodland stand is the SWH, maintaining undisturbed shorelines with large trees within this area is important. • For a Bald Eagle the active nest and a 400-800 m radius around the nest is the SWH. Area of the habitat from 400-800m is dependent on site lines from the nest to the development and inclusion of perching and foraging habitat. • To be significant a site must be used annually. When found inactive, the site must be known to be inactive for > 3 years or suspected of not being used for >5 years before being considered not significant. • Observational studies to determine nest site use, perching sites and foraging areas need to be done from mid March to mid August. • Evaluation methods to follow "Bird and Bird Habitats: Guidelines for Wind Power Projects". • SWHMiST Index #26 provides development effects and mitigation measures.	No suitable large wetlands, large rivers, or open water features are located within the study area limits. No Bald Eagles, Ospreys, or nesting sites for either species observed throughout the course of the field program.
Woodland Raptor Nesting Habitat **<u>Rationale:</u>** Nests sites for these species are rarely identified; these area sensitive habitats and are often used annually by these species.	Northern Goshawk Cooper's Hawk Sharp-shinned Hawk Red-shouldered Hawk Barred Owl Broad-winged Hawk	May be found in all forested ELC Ecosites. May also be found in SWC, SWM, SWD and CUP3	All natural or conifer plantation woodland/forest stands >30ha with >10ha of interior habitat. Interior habitat determined with a 200m buffer • Stick nests found in a variety of intermediate-aged to mature conifer, deciduous or mixed forests within tops or crotches of trees. Species such as Coopers Hawk nest along forest edges sometimes on peninsulas or small off-shore islands. • In disturbed sites, nests may be used again, or a new nest will be in close proximity to old nest. <u>Information Sources</u> • OMNRF Districts. • Check the Ontario Breeding Bird Atlas or Rare Breeding Birds in Ontario for species documented. • Check data from Bird Studies Canada. • Reports and other information available from Conservation Authorities.	Studies confirm: • Presence of 1 or more active nests from species list is considered significant. • Red-shouldered Hawk and Northern Goshawk – A 400m radius around the nest or 28 ha area of habitat is the SWH . (The 28 ha habitat area would be applied where optimal habitat is irregularly shaped around the nest). • Barred Owl – A 200m radius around the nest is the SWH. • Broad-winged Hawk and Coopers Hawk– A 100m radius around the nest is the SWH. • Sharp-Shinned Hawk – A 50m radius around the nest is the SWH. • Conduct field investigations from mid-March to end of May. The use of call broadcasts can help in locating territorial. (courting/nesting) raptors and facilitate the discovery of nests by narrowing down the search area. • SWHMiST Index #27 provides development effects and mitigation measures.	The largest woodland complex in the study area is associated with the west end of the study area. This woodland block is large (>60ha) but contains <6ha of interior habitat >200m from a woodland edge. The next largest woodland block is associated with the northeast corner of the study area, but this block does not exceed 20ha and contains no woodland interior habitat. All other woodland blocks within the study area are much smaller than the above two features. As such, woodland features within the study area are not considered generally suitable for this habitat category. Dedicated stick nest surveys were not completed as a component of the field program, however woodland tree canopy areas were generally screened during bat snag cluster surveys during leaf-off conditions. None of the listed raptor species were observed during dawn breeding bird surveys or incidentally during the remainder of the field program, and no evidence of raptor nesting was observed in the study area. Woodlands within the study area are not expected to support this habitat function. Not considered further in the assessment.

Wildlife Habitat	Wildlife Species	Candidate SHW		Confirmed SWH	Assessment
		ELC Ecosite Codes	Habitat Criteria and Information Sources	Defining Criteria	
Turtle Nesting Areas **<u>Rationale;</u>** These habitats are rare and when identified will often be the only breeding site for local populations of turtles.	Midland Painted Turtle <u>Special Concern Species</u> Northern Map Turtle Snapping Turtle	Exposed mineral soil (sand or gravel) areas adjacent (<100m) or within the following ELC Ecosites: MAS1 MAS2 MAS3 SAS1 SAM1 SAF1 BOO1 FEO1	• Best nesting habitat for turtles are close to water and away from roads and sites less prone to loss of eggs by predation from skunks, raccoons or other animals. • For an area to function as a turtle-nesting area, it must provide sand and gravel that turtles are able to dig in and are located in open, sunny areas. Nesting areas on the sides of municipal or provincial road embankments and shoulders are not SWH. • Sand and gravel beaches adjacent to undisturbed shallow weedy areas of marshes, lakes, and rivers are most frequently used. <u>Information Sources</u> • Use Ontario Soil Survey reports and maps to help find suitable substrate for nesting turtles (well-drained sands and fine gravels). • Check the Ontario Herpetofaunal Summary Atlas records or other similar atlases for uncommon turtles; location information may help to find potential nesting habitat for them. • NHIC • Field Naturalist clubs	Studies confirm: • Presence of 5 or more nesting Midland Painted Turtles. • One or more Northern Map Turtle or Snapping Turtle nesting is a SWH. • The area or collection of sites within an area of exposed mineral soils where the turtles nest, plus a radius of 30-100m around the nesting area dependant on slope, riparian vegetation and adjacent land use is the SWH. • Travel routes from wetland to nesting area are to be considered within the SWH as part of the 30-100m area of habitat. • Field investigations should be conducted in prime nesting season typically late spring to early summer. Observational studies observing the turtles nesting is a recommended method. • SWHMiST Index #28 provides development effects and mitigation measures for turtle nesting habitat.	No exposed mineral soils within 100m of permanent or semi-permanent standing water that could be utilized for turtle nesting. No suitable habitat.
Seeps and Springs **<u>Rationale;</u>** Seeps/Springs are typical of headwater areas and are often at the source of coldwater streams.	Wild Turkey Ruffed Grouse Spruce Grouse White-tailed Deer Salamander spp.	Seeps/Springs are areas where ground water comes to the surface. Often they are found within headwater areas within forested habitats. Any forested Ecosite within the headwater areas of a stream could have seeps/springs.	Any forested area (with <25% meadow/field/pasture) within the headwaters of a stream or river system. • Seeps and springs are important feeding and drinking areas especially in the winter will typically support a variety of plant and animal species. <u>Information Sources</u> • Topographical Map • Thermography • Hydrological surveys conducted by Conservation Authorities and MOE. • Field Naturalists clubs and landowners. • Municipalities and Conservation Authorities may have drainage maps and headwater areas mapped.	Field Studies confirm: • Presence of a site with 2 or more seeps/springs should be considered SWH. • The area of a ELC forest ecosite or an ecoelement within ecosite containing the seeps/springs is the SWH. The protection of the recharge area considering the slope, vegetation, height of trees and groundwater condition need to be considered in delineation the habitat. • SWHMiST Index #30 provides development effects and mitigation measures.	No seeps and springs documented within forests (or upland woodlands) during Azimuth's field investigations.
Amphibian Breeding Habitat (Woodland). **<u>Rationale:</u>** These habitats are extremely important to amphibian biodiversity within a landscape and often represent the only breeding habitat for local amphibian populations.	Eastern Newt Blue-spotted Salamander Spotted Salamander Gray Treefrog Spring Peeper Western Chorus Frog Wood Frog	All Ecosites associated with these ELC Community Series; FOC FOM FOD SWC SWM SWD Breeding pools within the woodland or the shortest distance from forest habitat are more significant because they are more likely to be used due to reduced risk to migrating amphibians.	• Presence of a wetland, pond or woodland pool (including vernal pools) >500m^2 (about 25m diameter) within or adjacent (within 120m) to a woodland (no minimum size). Some small wetlands may not be mapped and may be important breeding pools for amphibians. • Woodlands with permanent ponds or those containing water in most years until mid-July are more likely to be used as breeding habitat. <u>Information Sources</u> • Ontario Herpetofaunal Summary Atlas (or other similar atlases) for records. • Local landowners may also provide assistance as they may hear spring-time choruses of amphibians on their property. • OMNRF District • OMNRF wetland evaluations • Field Naturalist clubs	Studies confirm; • Presence of breeding population of 1 or more of the listed newt/salamander species or 2 or more of the listed frog species with at least 20 individuals (adults or eggs masses) or 2 or more of the listed frog species with Call Level Codes of 3. • A combination of observational study and call count surveys will be required during the spring (March-June) when amphibians are concentrated around suitable breeding habitat within or near the woodland/wetlands. • The habitat is the wetland area plus a 230m radius of woodland area. If a wetland area is adjacent to a woodland, a travel corridor connecting the wetland to the woodland is to be included in the habitat. • SWHMiST Index #14 provides development effects and mitigation measures.	Targeted evening amphibian surveys were not completed as part of the field program. Incidental observations during bat snag assessment documented a possible L3 Call Level Code for one (1) listed species, Wood Frog, associated with adjacent lands to the west of the property, which may or may not have originated from outside of the study area. No other listed species were documented during the course of the field program. Potentially suitable wetland habitat is associated with the SWDM4-5 ELC community on-property, and may be associated with this or other wetlands extending off-property on adjacent lands to the west. Candidate SWH for Amphibian Breeding Habitat (Woodland) is

Wildlife Habitat	Wildlife Species	Candidate SHW		Confirmed SWH	Assessment
		ELC Ecosite Codes	Habitat Criteria and Information Sources	Defining Criteria	
			• Canadian Wildlife Service • Amphibian Road Call Survey • Ontario Vernal Pool Association: http://www.ontariovernalpools.org		treated as present in lieu of completing detailed evening amphibian breeding surveys.
Amphibian Breeding Habitat (Wetlands) **<u>Rationale;</u>** Wetlands supporting breeding for these amphibian species are extremely important and fairly rare within Central Ontario landscapes.	Eastern Newt American Toad Spotted Salamander Four-toed Salamander Blue-spotted Salamander Gray Treefrog Western Chorus Frog Northern Leopard Frog Pickerel Frog Green Frog Mink Frog Bullfrog	ELC Community Classes SW, MA, FE, BO, OA and SA. Typically these wetland ecosites will be isolated (>120m) from woodland ecosites, however larger wetlands containing predominantly aquatic species (*e.g.* Bull Frog) may be adjacent to woodlands.	• Wetlands>500m^2 (about 25m diameter), supporting high species diversity are significant; some small or ephemeral habitats may not be identified on MNRF mapping and could be important amphibian breeding habitats. • Presence of shrubs and logs increase significance of pond for some amphibian species because of available structure for calling, foraging, escape and concealment from predators. • Bullfrogs require permanent water bodies with abundant emergent vegetation. <u>Information Sources</u> • Ontario Herpetofaunal Summary Atlas (or other similar atlases) • Canadian Wildlife Service Amphibian Road Surveys and Backyard Amphibian Call Count. • OMNRF Districts and wetland evaluations • Reports and other information available from Conservation Authorities	Studies confirm: • Presence of breeding population of 1 or more of the listed newt/salamander species or 2 or more of the listed frog/toad species with at least 20 individuals (adults or eggs masses) or 2 or more of the listed frog/toad species with Call Level Codes of 3. **or;** Wetland with confirmed breeding Bullfrogs are significant. • The ELC ecosite wetland area and the shoreline are the SWH. • A combination of observational study and call count surveys will be required during the spring (March-June) when amphibians are concentrated around suitable breeding habitat within or near the wetlands. • If a SWH is determined for Amphibian Breeding Habitat (Wetlands) then Movement Corridors are to be considered as outlined in Table 1.4.1 of this Schedule. • SWHMiST Index #15 provides development effects and mitigation measures.	No wetlands within the study area are located >120m from woodland ecosites. None of the listed amphibian species were documented throughout the course of field surveys, although targeted evening amphibian surveys were not completed as part of the field program. Not applicable. Amphibian breeding habitat considerations assessed under Amphibian Breeding Habitat (Woodland)(see above).
Woodland Area-Sensitive Bird Breeding Habitat **<u>Rationale:</u>** Large, natural blocks of mature woodland habitat within the settled areas of Southern Ontario are important habitats for area sensitive interior forest song birds.	Yellow-bellied Sapsucker Red-breasted Nuthatch Veery Blue-headed Vireo Northern Parula Black-throated Green Warbler Blackburnian Warbler Black-throated Blue Warbler Ovenbird Scarlet Tanager Winter Wren **Special Concern:** Cerulean Warbler Canada Warbler	All Ecosites associated with these ELC Community Series; FOC FOM FOD SWC SWM SWD	Habitats where interior forest breeding birds are breeding, typically large mature (>60 yrs old) forest stands or woodlots >30 ha. • Interior forest habitat is at least 200 m from forest edge habitat. <u>Information Sources</u> • Local bird clubs. • Canadian Wildlife Service (CWS) for the location of forest bird monitoring. • Bird Studies Canada conducted a 3-year study of 287 woodlands to determine the effects of forest fragmentation on forest birds and to determine what forests were of greatest value to interior species. • Reports and other information available from Conservation Authorities.	Studies confirm: • Presence of nesting or breeding pairs of 3 or more of the listed wildlife species. • Note: any site with breeding Cerulean Warblers or Canada Warblers is to be considered SWH. • Conduct field investigations in spring and early summer when birds are singing and defending their territories. • Evaluation methods to follow “Bird and Bird Habitats: Guidelines for Wind Power Projects”. • SWHMiST Index #34 provides development effects and mitigation measures.	The only woodland complex in the study area >30ha in size is associated with the west end of the study area. This woodland block is large (>60ha) and contains <6ha of interior habitat >200m from a woodland edge. This woodland is comprised of potentially suitable FOC, FOM, FOD and SWD ecosites. However, only one (1) of the listed species was documented during the course of field studies (Veery), and further, only possible breeding evidence for this species was documented. No probable or confirmed breeding evidence for any listed species was documented during the course of field studies. As such, the habitat function would not be expected to occur within the study area.

<u>1.3 Habitat for Species of Conservation Concern (Not including Endangered or Threatened Species)</u>

Wildlife Habitat	Wildlife Species	Candidate SHW		Confirmed SWH	Assessment
		ELC Ecosite Codes	Habitat Criteria and Information Sources	Defining Criteria	
Marsh Breeding Bird Habitat **<u>Rationale;</u>**	American Bittern Virginia Rail Sora Common Moorhen American Coot	MAM1 MAM2 MAM3 MAM4 MAM5	• Nesting occurs in wetlands. • All wetland habitat is to be considered as long as there is shallow water with emergent aquatic vegetation present. • For Green Heron, habitat is at the edge of water such as sluggish streams, ponds and marshes sheltered by shrubs and trees. Less	Studies confirm: • Presence of 5 or more nesting pairs of Sedge Wren or Marsh Wren or 1 pair of Sandhill Cranes; **or** breeding by any combination of 5 or more of the listed species.	Wetland habitat within the study area does not provide suitable habitat for marsh birds. None of the listed bird species were documented during the dawn breeding bird surveys or throughout the remainder of the

Wildlife Habitat	Wildlife Species	Candidate SHW		Confirmed SWH	Assessment
		ELC Ecosite Codes	Habitat Criteria and Information Sources	Defining Criteria	
Wetlands for these bird species are typically productive and fairly rare in Southern Ontario landscapes.	Pied-billed Grebe Marsh Wren Sedge Wren Common Loon Sandhill Crane Green Heron Trumpeter Swan **Special Concern:** Black Tern Yellow Rail	MAM6 SAS1 SAM1 SAF1 FEO1 BOO1 For Green Heron: All SW, MA and CUM1 sites.	frequently, it may be found in upland shrubs or forest a considerable distance from water. <u>Information Sources</u> • OMNRF District and wetland evaluations. • Field Naturalist clubs • NHIC Records. • Reports and other information available from Conservation Authorities. • Ontario Breeding Bird Atlas	• Note: any wetland with breeding of 1 or more Black Terns, Trumpeter Swan, Green Heron or Yellow Rail is SWH. • Area of the ELC ecosite is the SWH. • Breeding surveys should be done in May/June when these species are actively nesting in wetland habitats. • Evaluation methods to follow "Bird and Bird Habitats: Guidelines for Wind Power Projects". • SWHMiST Index #35 provides development effects and mitigation measures.	field program. As such, the habitat function would not be expected to occur within the study area.
Open Country Bird Breeding Habitat Sources Defining Criteria **<u>Rationale;</u>** This wildlife habitat is declining throughout Ontario and North America. Species such as the Upland Sandpiper have declined significantly the past 40 years based on CWS (2004) trend records.	Upland Sandpiper Grasshopper Sparrow Vesper Sparrow Northern Harrier Savannah Sparrow **Special Concern** Short-eared Owl	CUM1 CUM2	Large grassland areas (includes natural and cultural fields and meadows) >30 ha. • Grasslands not Class 1 or 2 agricultural lands, and not being actively used for farming (i.e. no row cropping or intensive hay or livestock pasturing in the last 5 years). • Grassland sites considered significant should have a history of longevity, either abandoned fields, mature hayfields and pasturelands that are at least 5 years or older. • The Indicator bird species are area sensitive requiring larger grassland areas than the common grassland species. <u>Information Sources</u> • Agricultural land classification maps, Ministry of Agriculture. • Local bird clubs. • Ontario Breeding Bird Atlas • Reports and other information available from Conservation Authorities.	Field Studies confirm: • Presence of nesting or breeding of 2 or more of the listed species. • A field with 1 or more breeding Short-eared Owls is to be considered SWH. • The area of SWH is the contiguous ELC ecosite field areas. • Conduct field investigations of the most likely areas in spring and early summer when birds are singing and defending their territories. • Evaluation methods to follow "Bird and Bird Habitats: Guidelines for Wind Power Projects". • SWHMiST Index #32 provides development effects and mitigation measures.	No large grassland areas >30ha present within the study area. None of the listed bird species were documented during the dawn breeding bird surveys or throughout the remainder of the field program. As such, the habitat function would not be expected to occur within the study area.
Shrub/Early Successional Bird Breeding Habitat **<u>Rationale;</u>** This wildlife habitat is declining throughout Ontario and North America. The Brown Thrasher has declined significantly over the past 40 years based on CWS (2004) trend records.	Indicator Spp: Brown Thrasher Clay-coloured Sparrow Common Spp. Field Sparrow Black-billed Cuckoo Eastern Towhee Willow Flycatcher **Special Concern:** Yellow-breasted Chat Golden-winged Warbler	CUT1 CUT2 CUS1 CUS2 CUW1 CUW2 Patches of shrub ecosites can be complexed into a larger habitat for some bird species	Large field areas succeeding to shrub and thicket habitats>10ha in size. • Shrub land or early successional fields, not class 1 or 2 agricultural lands, not being actively used for farming (*i.e*. no row-cropping, haying or live-stock pasturing in the last 5 years). • Shrub thicket habitats (>10 ha) are most likely to support and sustain a diversity of these species. • Shrub and thicket habitat sites considered significant should have a history of longevity, either abandoned fields or pasturelands. <u>Information Sources</u> • Agricultural land classification maps, Ministry of Agriculture. • Local bird clubs • Ontario Breeding Bird Atlas • Reports and other information available from Conservation Authorities.	Field Studies confirm: • Presence of nesting or breeding of 1 of the indicator species and at least 2 of the common species. • A habitat with breeding Yellow-breasted Chat or Golden-winged Warbler is to be considered as Significant Wildlife Habitat. • The area of the SWH is the contiguous ELC ecosite field/thicket area. • Conduct field investigations of the most likely areas in spring and early summer when birds are singing and defending their territories. • Evaluation methods to follow "Bird and Bird Habitats: Guidelines for Wind Power Projects". • SWHMiST Index #33 provides development effects and mitigation measures.	No large thicket, savannah or woodland ELC ecosites >10ha are mapped within or abutting the study area. Some generally semi-open successional habitat areas are present along the north and northeast boundary of the property, however the size of these features combined is <10ha, and most successional features within the study area are fragmented by other features. As such, successional features within the study area are considered to have a generally low suitability for Shrub/Early Successional Bird Breeding Habitat. None of the listed bird species were documented during the dawn breeding bird surveys or throughout the remainder of the field program. As such, the habitat function would not be expected to occur within the study area.
Terrestrial Crayfish **<u>Rationale:</u>** Terrestrial Crayfish are only found within SW	Chimney or Digger Crayfish; (*Fallicambarus fodiens*)	MAM1 MAM2 MAM3 MAM4 MAM5	Wet meadow and edges of shallow marshes (no minimum size) should be surveyed for terrestrial crayfish. • Constructs burrows in marshes, mudflats, meadows, the ground can't be too moist. Can often be found far from water.	Studies Confirm: • Presence of 1 or more individuals of species listed or their chimneys (burrows) in suitable meadow marsh, swamp or moist terrestrial sites.	Crayfish chimneys were observed within the study area. Approximately 12 crayfish chimneys were observed within the MAMM3-1 ELC community near the northwest corner of the property and

Wildlife Habitat	Wildlife Species	Candidate SHW		Confirmed SWH	Assessment
		ELC Ecosite Codes	Habitat Criteria and Information Sources	Defining Criteria	
Ontario in Canada and their habitats are very rare.	Devil Crayfish or Meadow Crayfish; (*Cambarus Diogenes*)	MAM6 MAS1 MAS2 MAS3 SWD SWT SWM CUM1 with inclusions of above meadow marsh or swamp ecosites can be used by terrestrial crayfish.	• Both species are a semi-terrestrial burrower which spends most of its life within burrows consisting of a network of tunnels. Usually the soil is not too moist so that the tunnel is well formed. <u>Information Sources</u> • Information sources from "Conservation Status of Freshwater Crayfishes" by Dr. Premek Hamr for the WWF and CNF March 1998.	• Area of ELC ecosite or an ecoelement area of meadow marsh or swamp within the larger ecosite area is the SWH. • Surveys should be done April to August in temporary or permanent water. Note the presence of burrows or chimneys are often the only indicator of presence, observance or collection of individuals is very difficult. • SWHMiST Index #36 provides development effects and mitigation measures.	immediately north of the property boundary, while approximately 5 crayfish chimneys were observed on adjacent lands, in the abutting MEFM1 ELC community north of the northeast property boundary, in proximity to the drainage feature there. As such, Terrestrial Crayfish habitat is present within the study area.
Special Concern and Rare Wildlife Species **<u>Rationale:</u>** These species are quite rare or have experienced significant population declines in Ontario.	All Special Concern and Provincially Rare (S1-S3, SH) plant and animal species. Lists of these species are tracked by the NHIC.	All plant and animal element occurrences (EO) within a 1 or 10km grid. Older element occurrences were recorded prior to GPS being available, therefore location information may lack accuracy.	When an element occurrence is identified within a 1 or 10 km grid for a Special Concern or provincially Rare species; linking candidate habitat on the site needs to be completed to ELC Ecosites <u>Information Sources</u> • NHIC will have Special Concern and Provincially Rare (S1-S3, SH) species lists with element occurrences data. • NHIC Website "Get Information" : http://nhic.mnr.gov.on.ca • Ontario Breeding Bird Atlas • Expert advice should be sought as many of the rare spp. have little information available about their requirements.	Studies Confirm: • Assessment/inventory of the site for the identified special concern or rare species needs to be completed during the time of year when the species is present or easily identifiable. • The area of the habitat to the finest ELC scale that protects the habitat form and function is the SWH, this must be delineated through detailed field studies. The habitat needs be easily mapped and cover an important life stage component for a species *e.g.* specific nesting habitat or foraging habitat. • SWHMiST Index #37 provides development effects and mitigation measures.	Special Concern species were detected throughout the course of the site investigation. With regard for potential habitat for Special Concern species assessed in Table 1, the following are afforded further consideration in this assessment: • Wood Thrush

<u>Animal Movement Corridors</u>

Wildlife Habitat	Wildlife Species	Candidate SHW		Confirmed SWH	Assessment
		ELC Ecosite	Habitat Criteria and Information Sources	Defining Criteria	
Amphibian Movement Corridors **<u>Rationale;</u>** Movement corridors for amphibians moving from their terrestrial habitat to breeding habitat can be extremely important for local populations.	Eastern Newt American Toad Spotted Salamander Four-toed Salamander Blue-spotted Salamander Gray Treefrog Western Chorus Frog Northern Leopard Frog Pickerel Frog Green Frog Mink Frog Bullfrog	Corridors may be found in all ecosites associated with water. • Corridors will be determined based on identifying the significant breeding habitat for these species in Table 1.1	Movement corridors between breeding habitat and summer habitat. • Movement corridors must be determined when Amphibian breeding habitat is confirmed as SWH from Table 1.2.2 (**Amphibian Breeding Habitat –Wetland)** of this Schedule. <u>Information Sources</u> • MNRF District Office • NHIC • Reports and other information available from Conservation Authorities. • Field Naturalist Clubs	• Field Studies must be conducted at the time of year when species are expected to be migrating or entering breeding sites. • Corridors should consist of native vegetation, with several layers of vegetation. • Corridors unbroken by roads, waterways or bodies, and undeveloped areas are most significant. • Corridors should have at least 15m of vegetation on both sides of waterway or be up to 200m wide of woodland habitat and with gaps <20m. • Shorter corridors are more significant than longer corridors, however amphibians must be able to get to and from their summer and breeding habitat. • SWHMiST Index #40 provides development effects and mitigation measures.	No Amphibian Breeding Habitat - Wetland function, therefore no potential Amphibian Movement Corridor function within study area.
Deer Movement Corridors **<u>Rationale:</u>**	White-tailed Deer	Corridors may be found in all forested ecosites. A Project Proposal in Stratum II Deer	Movement corridor must be determined when **Deer Wintering Habitat** is confirmed as SWH from Table 1.1 of this schedule. • A deer wintering habitat identified by the OMNRF as SWH in Table 1.1 of this Schedule will have corridors that the deer use during fall migration and spring dispersion.	• Studies must be conducted at the time of year when deer are migrating or moving to and from winter concentration areas. • Corridors that lead to a deer wintering habitat should be unbroken by roads and residential areas.	No Deer Wintering Habitat present, therefore no potential Deer Movement Corridor function within study area.

Wildlife Habitat	Wildlife Species	Candidate SHW		Confirmed SWH	Assessment
		ELC Ecosite	Habitat Criteria and Information Sources	Defining Criteria	
Corridors important for all species to be able to access seasonally important life-cycle habitats or to access new habitat for dispersing individuals by minimizing their vulnerability while travelling.		Wintering Area has potential to contain corridors.	• Corridors typically follow riparian areas, woodlots, areas of physical geography (ravines, or ridges). <u>Information Sources</u> • MNRF District Office • NHIC. • Reports and other information available from Conservation Authorities. • Field Naturalist Clubs	• Corridors should be at least 200m wide with gaps <20m and if following riparian area with at least 15m of vegetation on both sides of waterway. • Shorter corridors are more significant than longer corridors. • SWHMiST Index #39 provides development effects and mitigation measures.	

Exceptions for Ecoregion 6E

EcoDistrict	Wildlife Habitat and Species	Candidate			Confirmed SWH	Assessment
		Ecosites	Habitat Description	Habitat Criteria and Information	Defining Criteria	
6E-14 **Rationale:** The Bruce Peninsula has an isolated and distinct population of black bears. Maintenance of large woodland tracts with mast-producing tree species is important for bears.	**Mast Producing Areas** Black Bear	All Forested habitat represented by ELC Community Series: FOM FOD	• Black bears require forested habitat that provides cover, winter hibernation sites, and mast-producing tree species. • Forested habitats need to be large enough to provide cover and protection for black bears.	Woodland ecosites >30ha with mast-producing tree species, either soft (cherry) or hard (oak and beech). Information Sources Important forest habitat for black bears may be identified by OMNRF.	All woodlands > 30ha with a 50%composition of these ELC Vegetation Types are considered significant: FOM1-1 FOM2-1 FOM3-1 FOD1-1 FOD1-2 FOD2-1 FOD2-2 FOD2-3 FOD2-4 FOD4-1 FOD5-2 FOD5-3 FOD5-7 FOD6-5 SWHMiST Index #3 provides development effects and mitigation measures.	Not on Bruce Peninsula.
6E- 17 **Rationale:** Sharp-tailed grouse only occur on Manitoulin Island in Eco-region 6E, Leks are an important habitat to maintain their population	Lek Sharp-tailed Grouse	CUM CUS CUT	• The lek or dancing ground consists of bare, grassy or sparse shrubland. There is often a hill or rise in topography. • Leks are typically a grassy field/meadow >15ha with adjacent shrublands and >30ha with adjacent deciduous woodland. Conifer trees within 500m are not tolerated.	Grasslands (field/meadow) are to be >15ha when adjacent to shrubland and >30ha when adjacent to deciduous woodland. • Grasslands are to be undisturbed with low intensities of agriculture (light grazing or late haying) • Leks will be used annually if not destroyed by cultivation or invasion by woody plants or tree planting Information Sources • OMNRF district office • Bird watching clubs • Local landowners • Ontario Breeding Bird Atlas	Studies confirming lek habitat are to be completed from late March to June. • Any site confirmed with sharp-tailed grouse courtship activities is considered significant • The field/meadow ELC ecosites plus a 200 m radius area with shrub or deciduous woodland is the lek habitat • SWHMiST Index #32 provides development effects and mitigation measures	Not on Manitoulin Island.

APPENDICES

Appendix A: Municipal and Provincial Background Information
Appendix B: Agency Correspondence
Appendix C: Proposed Development Concept

APPENDIX A

Municipal and Provincial Background Information

COUNTY OF SIMCOE

For the Greater Good

SCHEDULE 5.1

To the County of Simcoe Official Plan

LAND USE DESIGNATIONS

Designations

- Settlements
- Greenlands
- Agricultural
- Rural
- Strategic Settlement Employment Areas and Economic Employment Districts
- Lands not subject to this plan
- Settlement Area Boundary Under Appeal
- 1 General Location of Site-Specific Appeals
- Lands Subject to Non-Decision

Reference Data

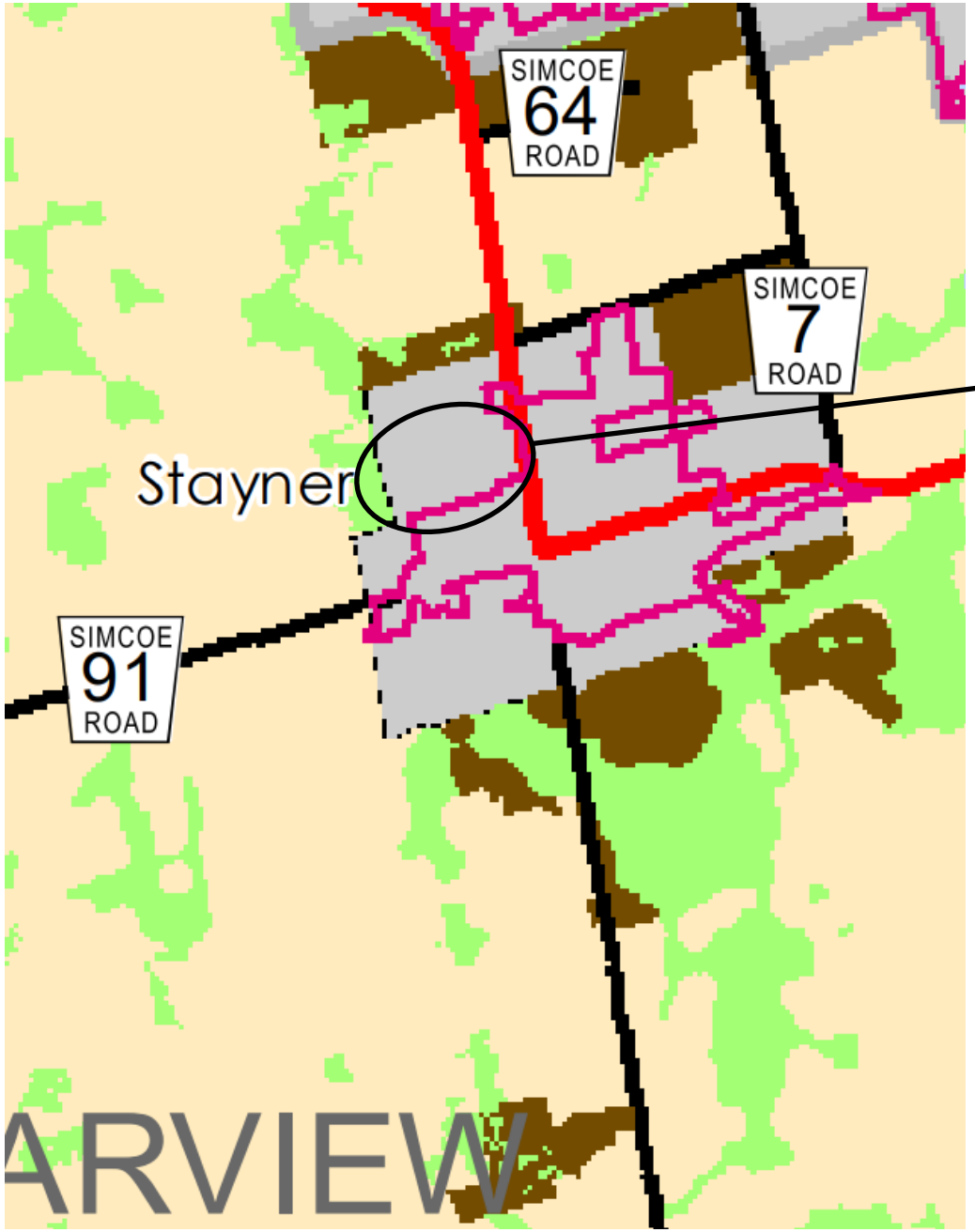
- Settlement Area Boundary
- Built Boundaries
- Special Development Area: Friday Harbour Resort
- Greenbelt Plan - Protected Countryside (Refer to Schedule 5.3.3 For Details)
- Niagara Escarpment Plan Area (Refer to Schedule 5.3.1 For Details)
- Oak Ridges Moraine Conservation Plan Area (Refer to Schedule 5.3.2 For Details)
- Provincial Highway
- County Road
- Trans Canada Pipeline
- Lake Simcoe Protection Plan - Watershed Boundary

** Greenbelt Plan – Protected Countryside, Oak Ridges Moraine Conservation Plan Area and Niagara Escarpment Plan Area are included within the Greenbelt Plan Area*

This schedule must be referred to in conjunction with the text of the County of Simcoe Official Plan

Office Consolidation February 2023

Printed: 2023/02/14



Approx. Study Area Location

COUNTY OF SIMCOE

For the Greater Good

SCHEDULE 5.2.2

To the County of Simcoe Official Plan

STREAMS AND EVALUATED WETLANDS

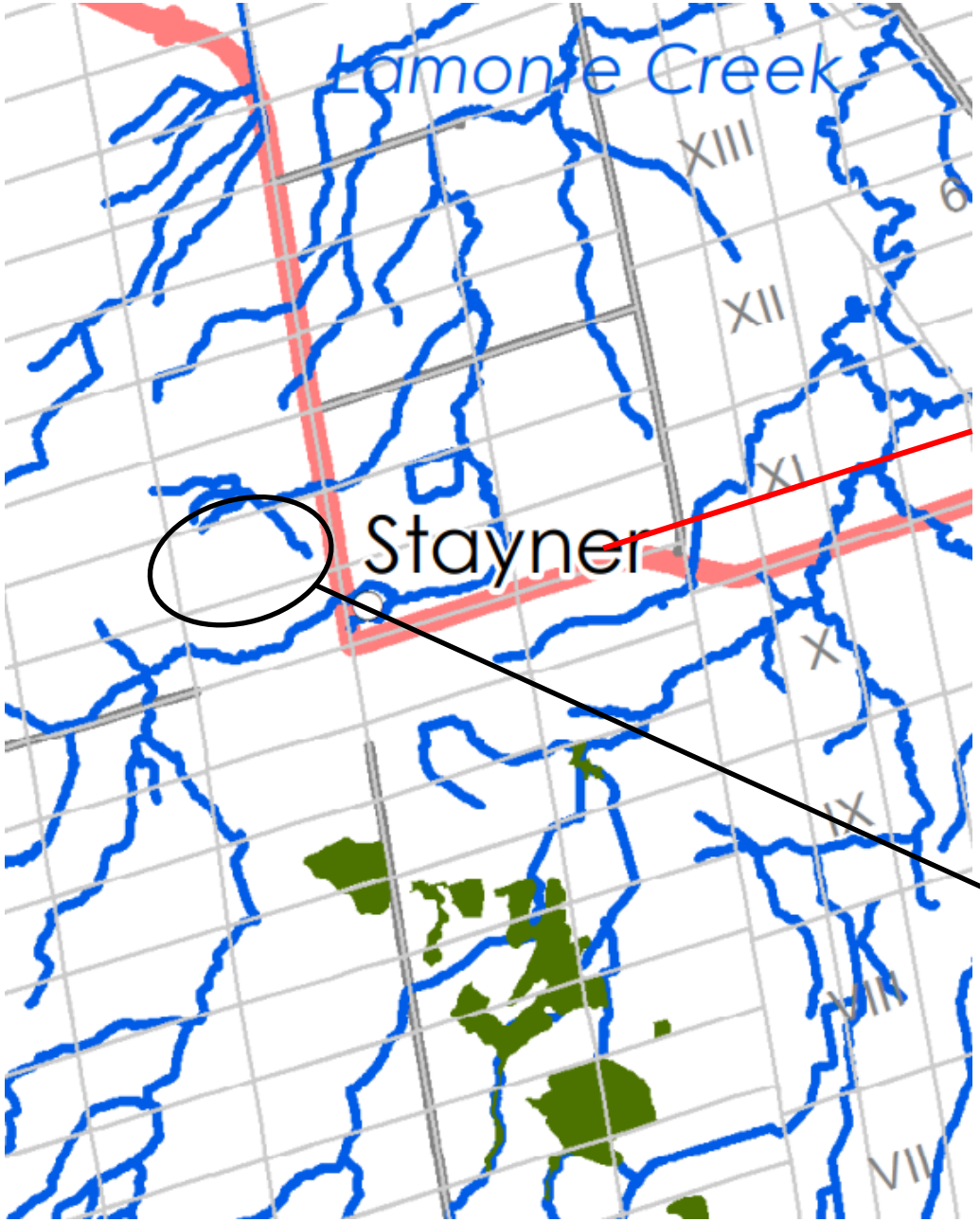
- Provincially Significant Wetland
- Locally Significant Wetland
- Watercourse
- Lands not subject to this plan

This schedule must be referred to in conjunction with the text of the County of Simcoe Official Plan - November 25, 2008

Source: Midhurst District MNR

Approved by OMB on May 9, 2016

Printed: 2016/05/19



Approx. Study Area Location

COUNTY OF SIMCOE

For the Greater Good

SCHEDULE 5.2.3

To the County of Simcoe Official Plan

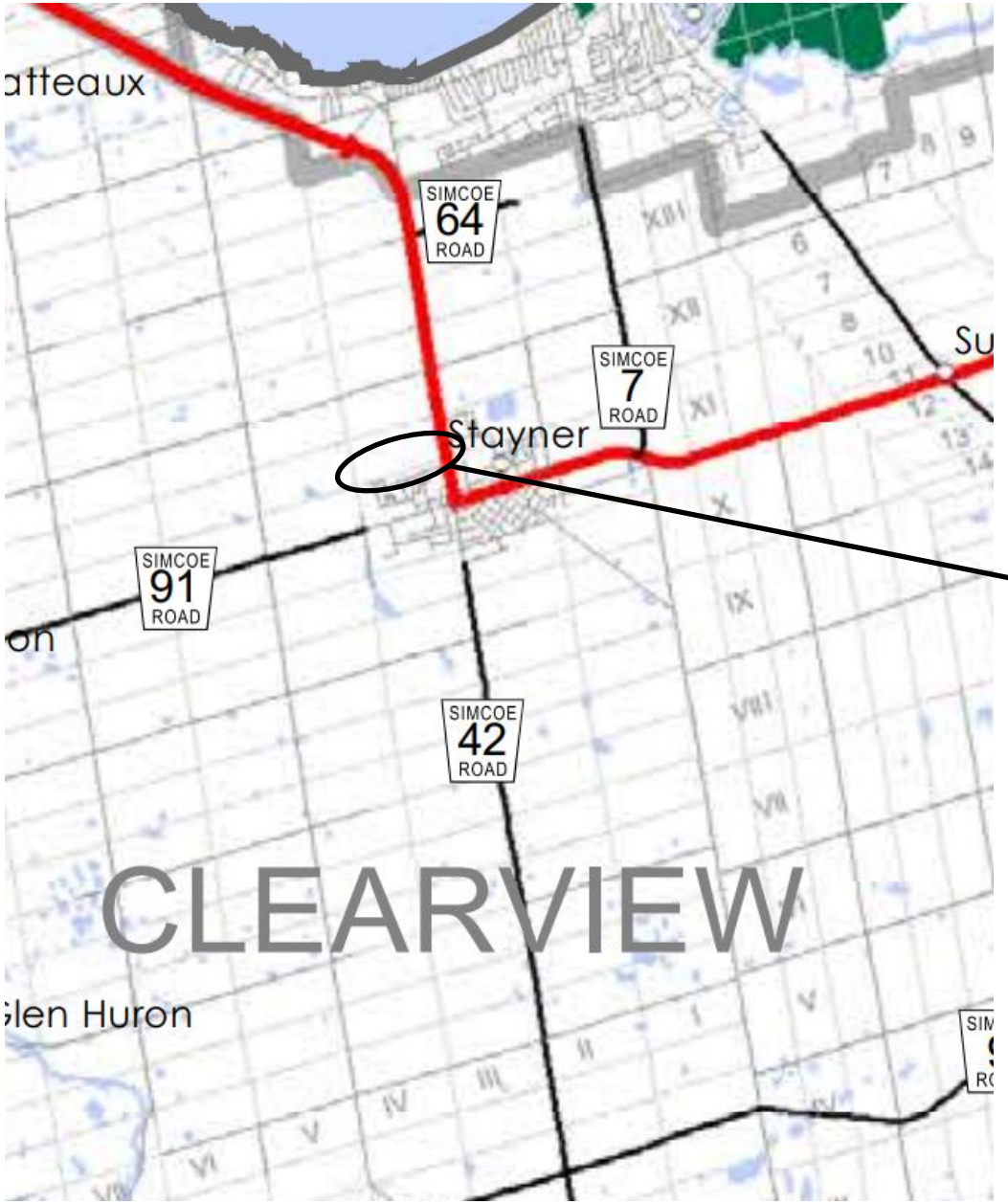
AREAS OF NATURAL AND SCIENTIFIC INTEREST

- Oak Ridges Moraine ANSI
- ANSI - Provincial
- ANSI - Regional
- Lands not subject to this plan

This schedule must be referred to in conjunction with the text of the County of Simcoe Official Plan - November 25, 2008
Source: Ministry of Natural Resources

Approved by the OMB on April 19, 2013

Printed: 5/17/2013



Approx. Study Area Location

County of Simcoe - Web Map

Legend

Evaluated Wetland

Unevaluated Wetland

Stream

Intermittent

Permanent

Woodlands

Waterbody



Property Location

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0 100 200 300m

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Jan 30, 2026

The OFFICIAL PLAN *of the* TOWNSHIP *of* CLEARVIEW

SCHEDULE B
LAND USE PLAN

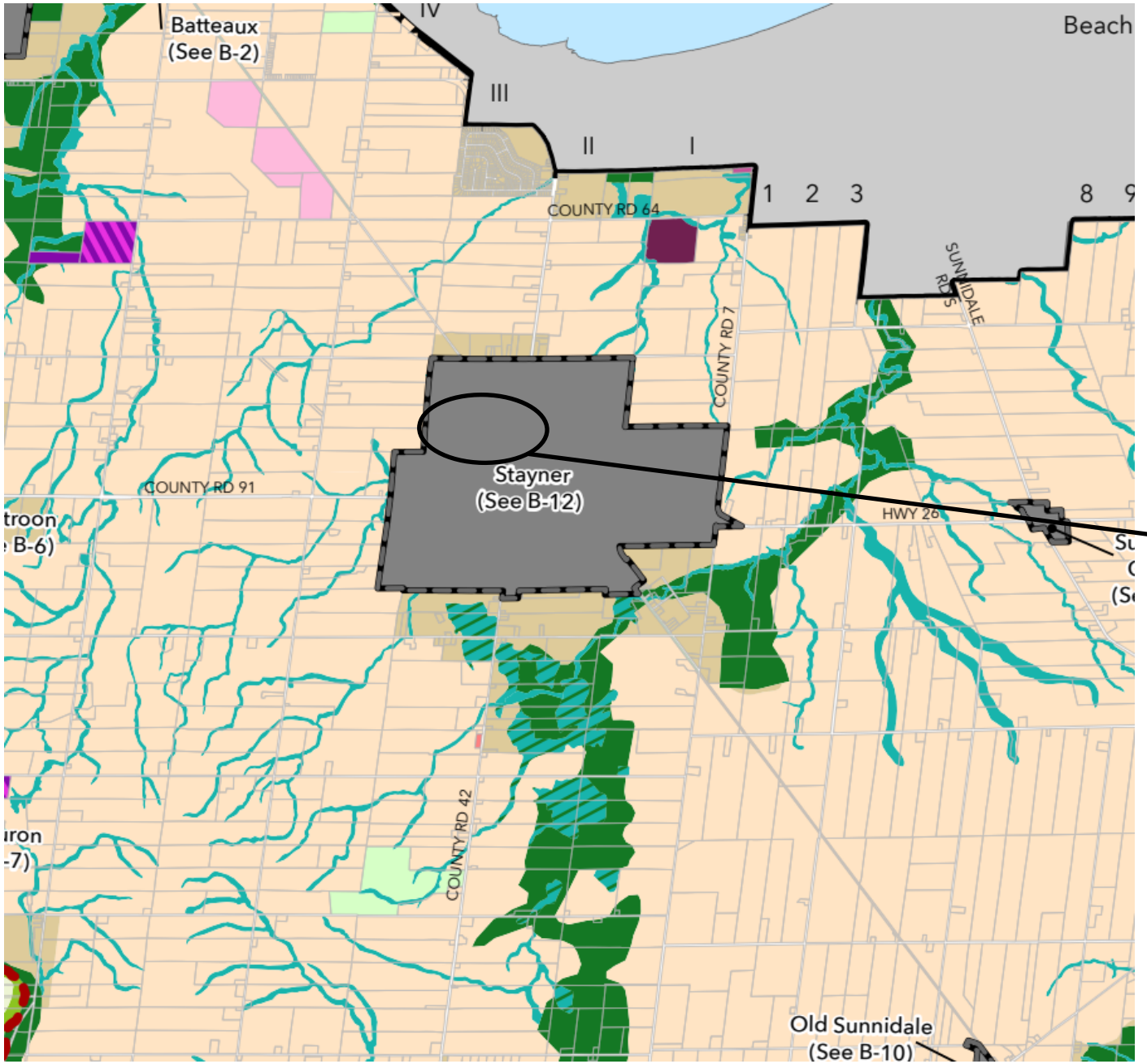
- Settlement Area Boundaries
- Settlement Areas (See Schedules B1-B13)
- Niagara Escarpment Plan (NEP Area)
- Municipal Boundary

Land Use

- Residential
- Estate Residential
- Future Development
- Commercial
- Transition Corridor
- Institutional
- Industrial
- Waste Management Industrial
- Extractive Industrial
- Mineral Aggregate Resource
- Airport-Related Employment
- Open Space
- Rural
- Agricultural
- Greenland - Hazard Lands Area
- Greenland - Natural Heritage Area
- Greenland - Wetlands Area

NEP Land Use

- Escarpment Natural Area
- Escarpment Protected Area
- Escarpment Recreational Area
- Escarpment Rural Area
- Mineral Resource Extraction Area



Approx. Study Area Location

The OFFICIAL PLAN
of the TOWNSHIP
of CLEARVIEW

Schedule B-12

LAND USE PLAN
STAYNER

- Delineated Built-Up Area

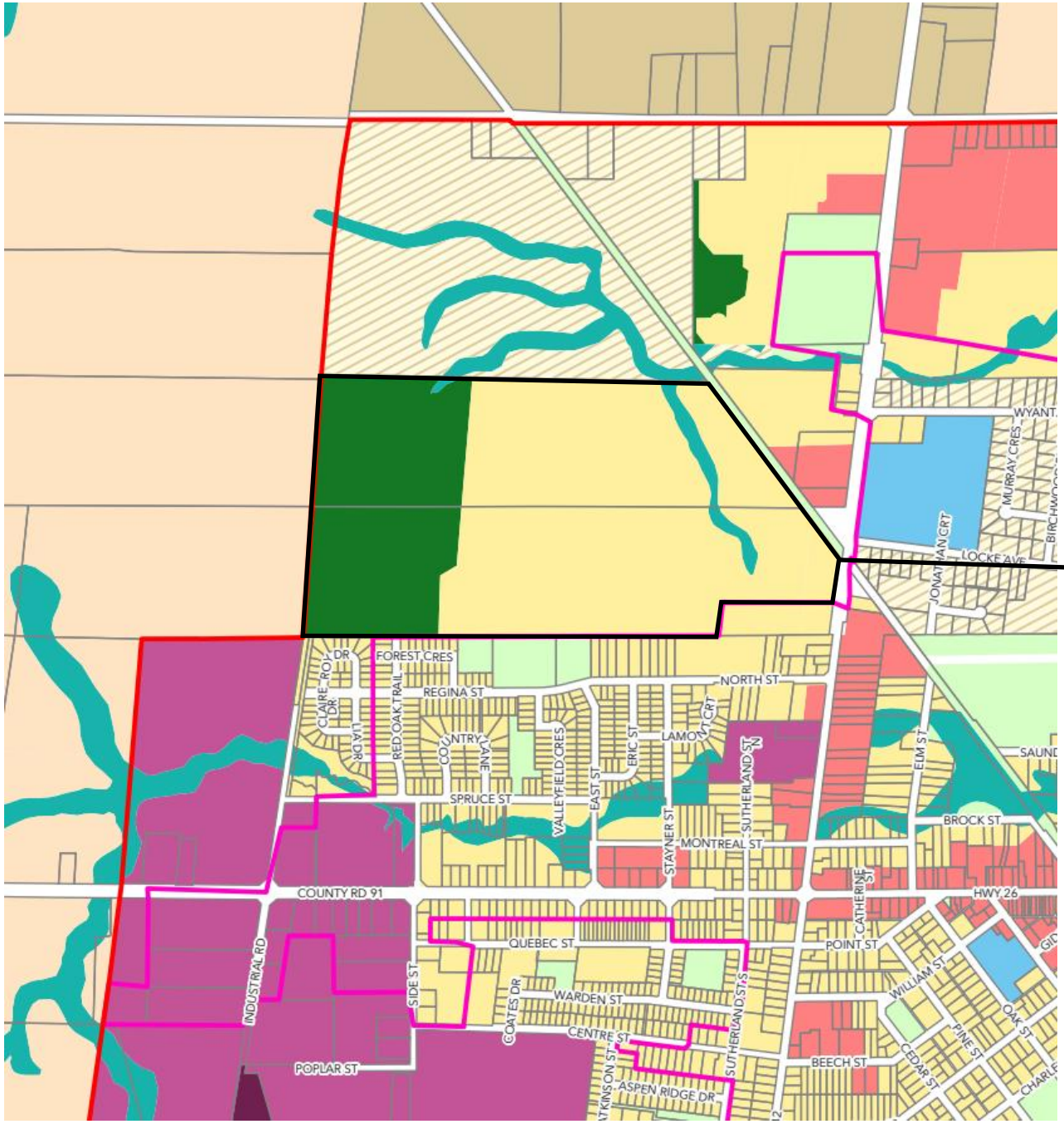
Land Use

- Residential
- Future Development
- Commercial
- Transition Corridor
- Institutional
- Industrial
- Waste Management Industrial
- Open Space
- Rural
- Agricultural
- Greenland - Hazard Lands Area
- Greenland - Natural Heritage Area
- Greenland - Wetlands Area

NEP

NEP Land Use

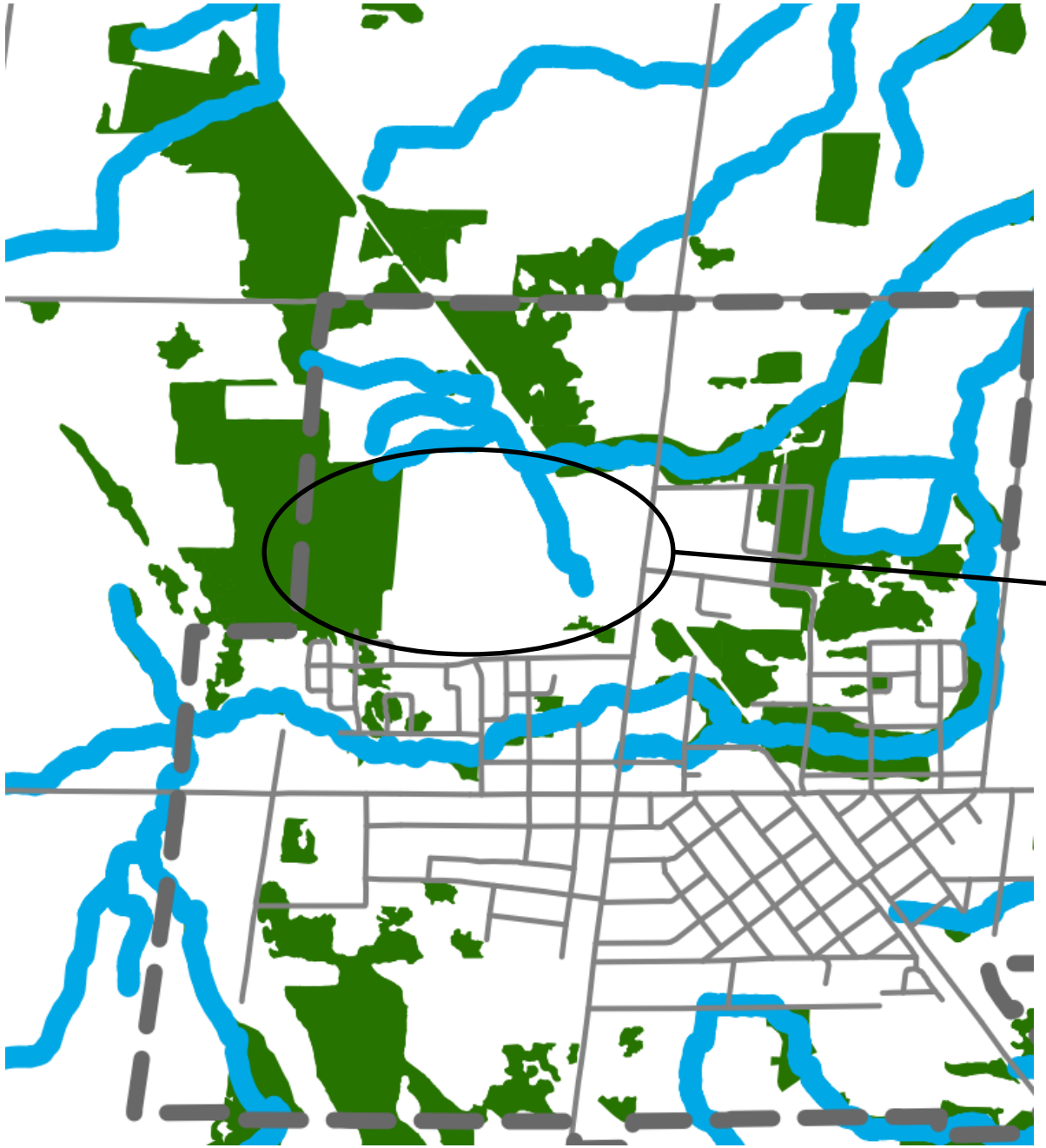
- Escarpment Natural Area
- Escarpment Protected Area
- Escarpment Recreational Area
- Escarpment Rural Area
- Mineral Resource Extraction Area



The OFFICIAL PLAN
of the TOWNSHIP
of CLEARVIEW

SCHEDULE C
NATURAL HERITAGE SYSTEM

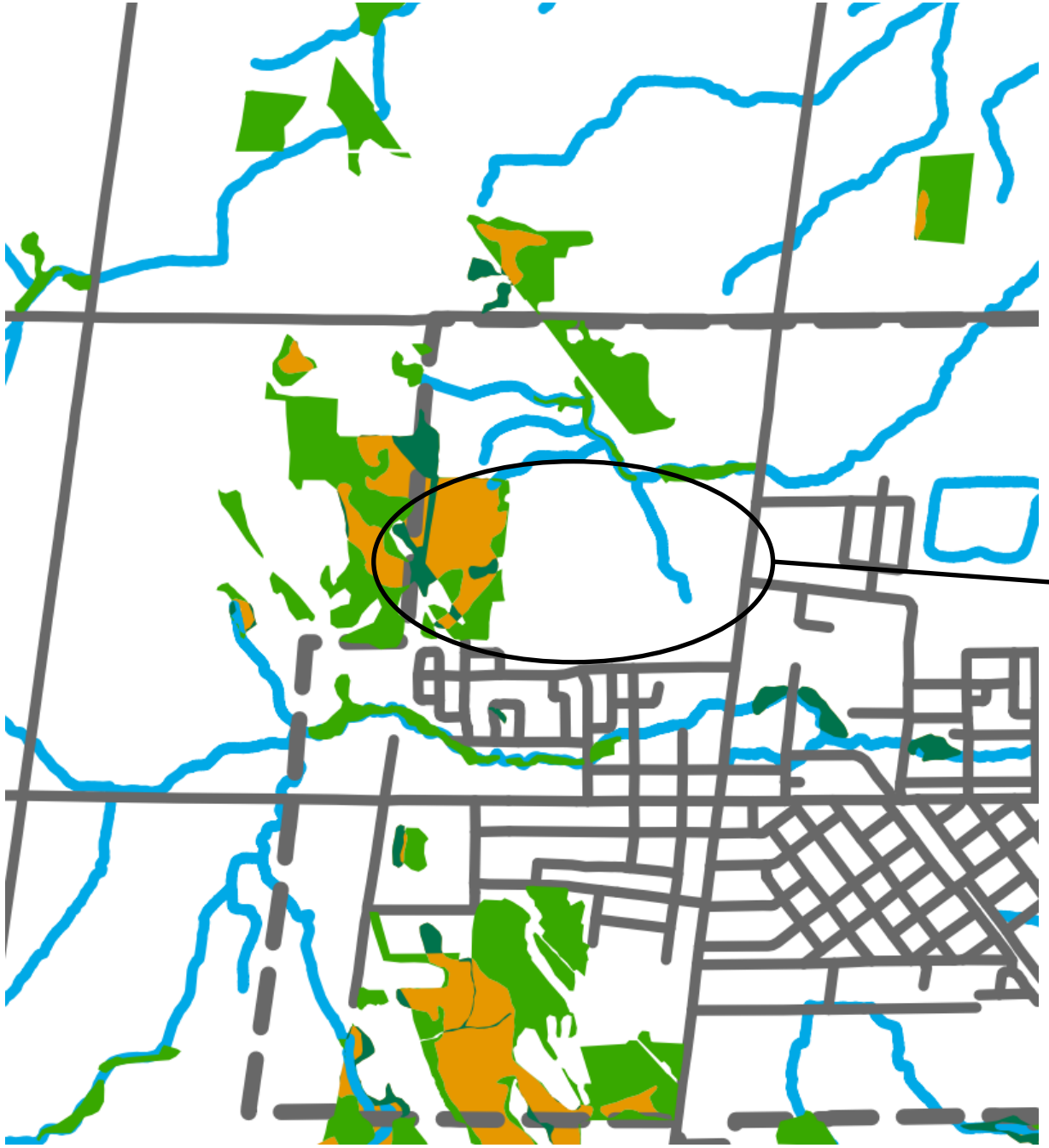
- Natural Heritage (Clearview Township)
- Areas of Natural & Scientific Interest (ANSI)
- Watercourse
- Municipal Boundary
- Settlement Area Boundaries
- NEP Area Boundary
- Roads



Approx. Study Area Location

The OFFICIAL PLAN
of the TOWNSHIP
of CLEARVIEW

SCHEDULE C-1
NATURAL HERITAGE SYSTEM WETLANDS



Wetland Features
- Provincially Significant
- Locally Significant (Evaluated)

Unevaluated Wetlands
- Unevaluated (NVCA & MNR)

NVCA Unevalutated Wetlands
- Unevaluated (NVCA)
- Unevaluated (MNR)
- Roads
- Watercourse
- Municipal Boundary
- Settlement Area Boundaries
- NEP Boundary

References to MNR shall be interpreted in accordance with Policy No. 12.3.2.5 of this Official Plan

Approx. Study Area Location

The OFFICIAL PLAN
of the TOWNSHIP
of CLEARVIEW

SCHEDULE C-2
NATURAL HERITAGE SYSTEM
WOODLANDS

Woodland Features

- Significant Woodland
- Other Woodland or Hedgerow
- Watercourse
- Roads
- Municipal Boundary
- Settlement Area Boundaries
- NEP Area Boundary



Approx. Study Area Location

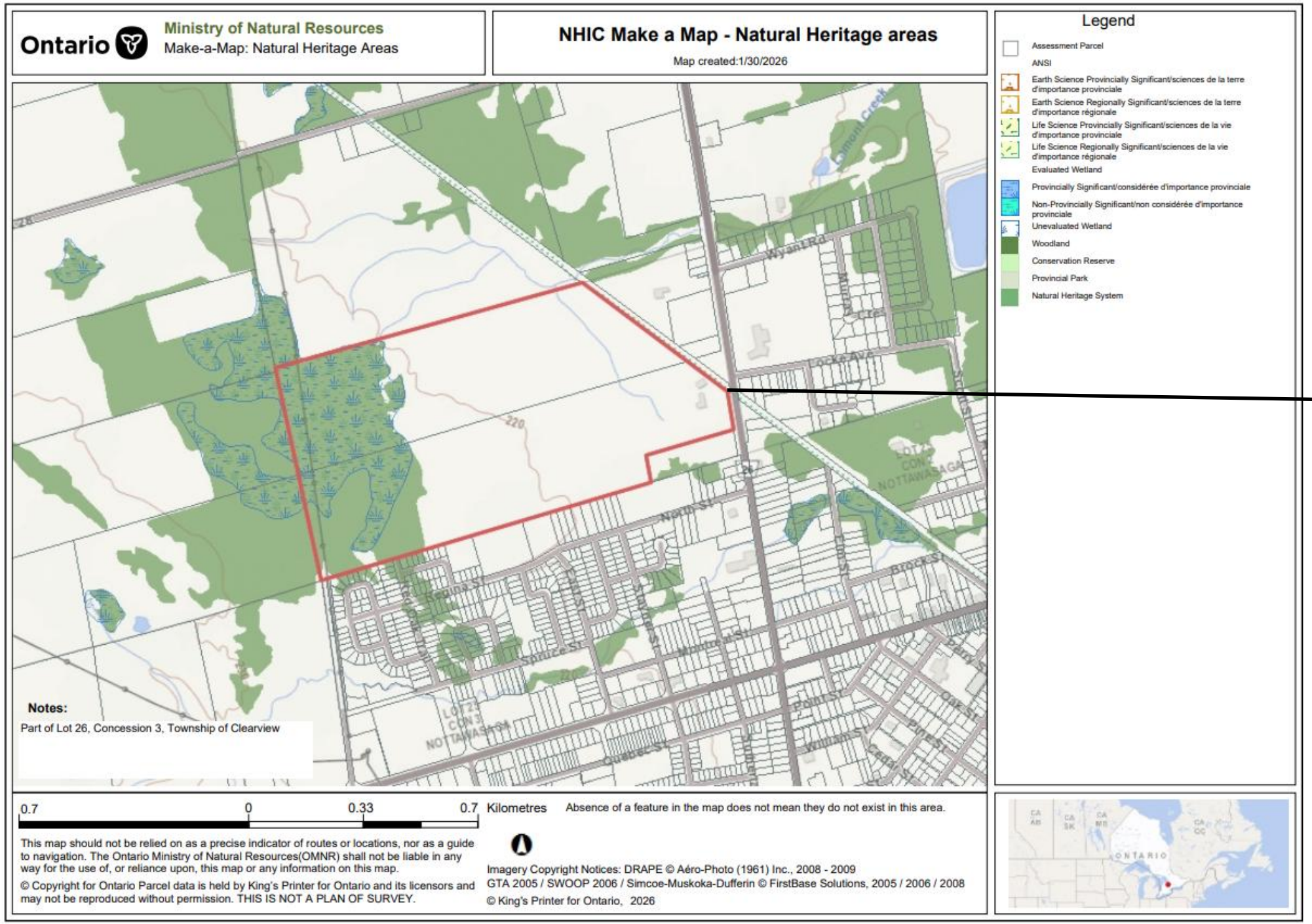
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of the TOWNSHIP
of CLEARVIEW

SCHEDULE C-3
NATURAL HERITAGE SYSTEM
STEEP SLOPES

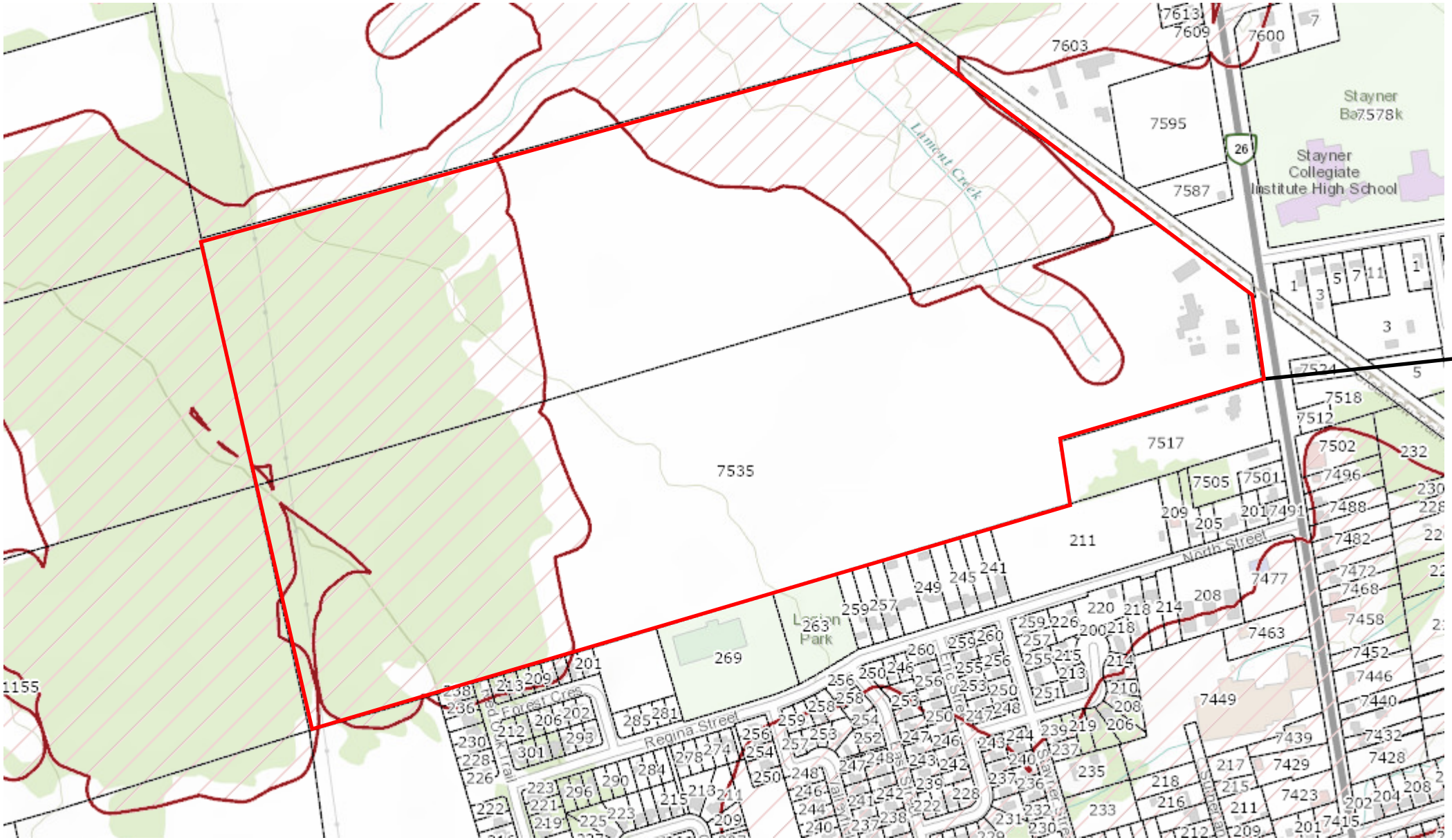
- Steep Slopes
- Watercourse
- Roads
- Municipal Boundary
- Settlement Area Boundaries
- NEP Area Boundary



Approx. Study Area Location



Property Location



NVCA Regulation Mapping Online

APPENDIX B

Agency Correspondence

From:	Kevin Butt
To:	Rossalyn Workman; Emma Perry
Cc:	Derek Abbotts; Danielle Waters; Davin Metheral; "Dan Stuart"; Michelle Schaefle
Subject:	RE: Clearview Gardens-Bridle Park (Stayner) - Terms of Reference for an Environmental Impact Study
Date:	June 3, 2026 12:06:39 PM
Attachments:	image001.png image002.png image003.png image005.png

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All,

Apologies for the late response. Burnside, on behalf of the Township is in agreement with the scope of the EIS TOR as well. We are satisfied with the scope of the EIS TOR and look forward with assisting with the review of the EIS. We concur that the 2022 investigations with the 2025 revisits are satisfactory for characterizing the site. We acknowledge that the Species Conservation Act has come into effect since the preparation of these TOR and expect the EIS to address the constraints associated with this new legislation.

Kevin

Kevin Butt, B.Sc. (Env.) Rest Cert, TRAQ
Ecology Lead

R.J. Burnside & Associates Limited www.rjburnside.com
Office: +1 800-265-9662 Direct: +1 226-486-1552

From: Rossalyn Workman <rworkman@clearview.ca>
Sent: Friday, May 15, 2026 2:29 PM
To: Emma Perry <eperry@nvca.on.ca>
Cc: Derek Abbotts <dabbotts@clearview.ca>; Danielle Waters <dwaters@clearview.ca>; Kevin Butt <Kevin.Butt@rjburnside.com>; Davin Metheral <dmetheral@nvca.on.ca>; 'Dan Stuart' <dstuart@azimuthenvironmental.com>; Michelle Schaefle <mschaefle@nvca.on.ca>
Subject: RE: Clearview Gardens-Bridle Park (Stayner) - Terms of Reference for an Environmental Impact Study

Thank you Emma, very helpful.
Have a great long weekend.
Thanks Rossalyn

Rossalyn Workman MURP, Dipl.MM, MCIP, RPP (she/her)
Manager of Planning
Township of Clearview
705-428-6230 ext. 248
rworkman@clearview.ca

My office hours are 8:30am to 4:30pm Monday to Friday.

Clearview has released a new Draft Zoning By-law. Learn more, find the Open House

dates, and submit your comments on the Zoning By-law Review webpage.



From: Emma Perry <eperry@nvca.on.ca>
Sent: May 15, 2026 1:45 PM
To: Rossalyn Workman <rworkman@clearview.ca>
Cc: Derek Abbotts <dabbotts@clearview.ca>; Danielle Waters <dwaters@clearview.ca>; Kevin Butt <kevin.butt@rjburnside.com>; Davin Metheral <dmetheral@nvca.on.ca>; 'Dan Stuart' <dstuart@azimuthenvironmental.com>; Michelle Schaefle <mschaefle@nvca.on.ca>
Subject: RE: Clearview Gardens-Bridle Park (Stayner) - Terms of Reference for an Environmental Impact Study

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Hi Rossalyn,
During two site visits with Azimuth staff, NVCA ecology staff staked wetlands within the subject site in-season in 2025 – see mapping of verified wetlands attached. Based on the concept plan submitted, wetlands appear to be contained within the EP blocks, which NVCA supports. A small wetland identified during the site visit measuring 0.09ha appears to necessitate removal, which can be considered through the NVCA offsetting guidelines. NVCA will look to further confirm the regulation limits through submission of constraints mapping within the EIS and review impacts associated with the proposed SWM infrastructure.
The scope of the EIS in the thread below has been reviewed and NVCA staff are in agreement with the planned field program and general contents of the report. The applicant must ensure the report characterizes the various drainage features within the site and provides recommendation for management – two appear to be HDFs and two were not observed in the field and flagged for revision.
Pleased to discuss further if necessary,
Emma

Emma Perry, B. Sc., GCER (she/her/hers)
Planning Ecology Specialist

Nottawasaga Valley Conservation Authority
8195 8th Line, Utopia, ON L0M 1T0
T 705-424-1479 ext. 244
eperry@nvca.on.ca | nvca.on.ca

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prohibited. If you are not the intended recipient, please contact the sender and destroy all copies of the original message.

From: Rossalyn Workman <rworkman@clearview.ca>
Sent: Thursday, May 7, 2026 4:48 PM
To: Kevin Butt <kevin.butt@rjburnside.com>; Davin Metheral <dmetheral@nvca.on.ca>
Cc: Derek Abbotts <dabbotts@clearview.ca>; Danielle Waters <dwaters@clearview.ca>
Subject: FW: Clearview Gardens-Bridle Park (Stayner) - Terms of Reference for an Environmental Impact Study

Hi Kevin and Davin
I'm forwarding a Terms of Reference for the and EIS for a development in Stayner.
Can you please review and provide any comments on whether these TOR are completed.
I'm attaching the concept plans for the lands that are located in Stayner.
Let me know if you need any additional information to review the TOR, below in the email from Dan Stuart.
Thanks Rossalyn

Rossalyn Workman MURP, Dipl.MM, MCIP, RPP (she/her)
Manager of Planning
Township of Clearview
705-428-6230 ext. 248
rworkman@clearview.ca

My office hours are 8:30am to 4:30pm Monday to Friday.

Clearview has released a new Draft Zoning By-law. Learn more, find the Open House dates, and submit your comments on the Zoning By-law Review webpage.

CLEARVIEW TOWNSHIP
Zoning By-law Review

From: Danielle Waters
Sent: August 28, 2025 11:47 AM
To: Dan Stuart
Cc: Nick Ainley ; Rossalyn Workman ; Lori Kennedy
Subject: RE: Clearview Gardens-Bridle Park (Stayner) - Terms of Reference for an Environmental Impact Study

Hi Dan,

Thank you for the ToR for Clearview Gardens and Bridle Park. I'm not sure if you will be submitting 2 separate reports, or a combined one for the two subdivisions. We require a fee of $500/ peer review of the ToR. Once received we will forward your email to our peer reviewer and the NVCA for comment.

Best,

Danielle Waters, MSc., MCIP, RPP
Community Planner
Township of Clearview
(705) 428-6230 ext. 243
dwaters@clearview.ca

My workday may look different from your workday. Please do not feel obligated to respond outside of your typical working hours. I am in the office Monday to Friday (7:30-4:30) and off every other Monday.

From: Dan Stuart <dstuart@azimuthenvironmental.com>
Sent: August 26, 2025 9:16 AM
To: Derek Abbotts <dabbotts@clearview.ca>
Subject: Clearview Gardens (Stayner) - Terms of Reference for an Environmental Impact Study

You don't often get email from dstuart@azimuthenvironmental.com. Learn why this is important

CAUTION: This email originated from outside of the Clearview email system. DO NOT open attachments or click links you were not specifically expecting, even from known senders.

Hi Derek,

Azimuth has been retained to complete an Environmental Impact Study (EIS) for Part of Lot 27, Concession 3 located in the northwest portion of Stayner (Clearview Gardens), west of Highway 26 and south of Nottawasaga Sideroad 27 & 28 (see attached property map), a component of which includes clearing of a Terms of Reference for our study. Note that Azimuth has also been engaged to complete a separate EIS for the properties located directly south (Bridle Park) located on Part of Lot 26, Concession 3, for which we have issued a separate Terms of Reference. It is our understanding that an EIS is required due to presence of woodland, Unevaluated Wetland, and drainage features on the property. Portions of the property associated with drainage features are located within the Greenland – Hazard Lands Area designation (Official Plan Map B-12). Further, mapped wetlands and drainage features on the property occur within NVCA's Regulation Limit per O. Reg. 41/24 under the *Conservation Authorities Act*.

Azimuth previously completed environmental data collection on the property in

spring/summer 2022, which included the following studies:

- 2x dawn breeding bird surveys (June 2022);
- 2x evening breeding bird surveys (June-early July 2022);
- 1x evening amphibian breeding study (April 2022; none heard calling on-property);
- 2x aquatic/fish habitat investigations (April & May 2022); and,
- Ecological Land Classification mapping & 1x vegetation inventory (summer 2022).

Given that natural heritage data were collected recently (*i.e.* within the past 5 years), it is proposed that the above surveys should be considered current and acceptable for the purposes of this EIS submission.

The following Terms of Reference for additional studies/review is proposed toward completion of the EIS:

- Search the Township, County, Ministry of Natural Resources (MNR), Ministry of the Environment, Conservation and Parks (MECP), and Fisheries and Oceans Canada (DFO) records to obtain available background information and current data related to natural heritage features and functions in the area;
- Conduct a field study to document existing natural heritage features, functions, and species. Surveys include:
    - Confirm/re-evaluate vegetation community types based on Ecological Land Classification methods;
    - One (1) vascular plant inventory (summer 2025);
    - One (1) supplementary review of drainage features within the study area with regard for fish habitat function (summer 2025); and,
    - Record all incidental wildlife observations during the field program.
- Conduct one (1) agency site staking with the Township/County and/or NVCA to verify the limits of wetlands documented on the properties (note: NVCA has been contacted and the site staking is scheduled for September 15, 2025);
- Complete a detailed assessment of potential SAR and their habitats that could be present within the study area, including a screening for Butternut (Endangered) and Black Ash (Endangered) trees;
- Assess the potential direct and indirect impacts of the proposed works on the natural heritage features and functions identified on or adjacent to the property; and,
- Review conformity of the proposed development within the applicable municipal, provincial, and federal natural heritage policy framework.

Azimuth's field program will focus on the property and adjacent lands (within 120m of the development limit; i.e. the "study area") in accordance with provincial standards. **At this time Azimuth requests that the Township indicate concurrence with the above proposed Terms of Reference toward completion of the EIS.** We would also like to take this opportunity to request any natural heritage background information from the Township that may be helpful in completing the EIS.

Please feel free to contact me if you would like to discuss any aspects of the project.

Kind regards,

Dan Stuart, M.Env.Sc.

Ecology Lead/Partner
Azimuth Environmental Consulting, Inc.
642 Welham Road Barrie, ON L4N 9A1
Office: 705-721-8451 x208
Cell: 705-794-0975
www.azimuthenvironmental.com

Providing services in hydrogeology, terrestrial and aquatic ecology, environmental engineering, and arborist assessments.

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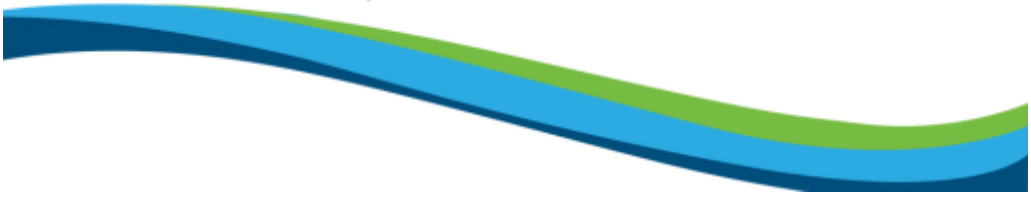


CLEARVIEW TOWNSHIP

www.clearview.ca

705-428-6230

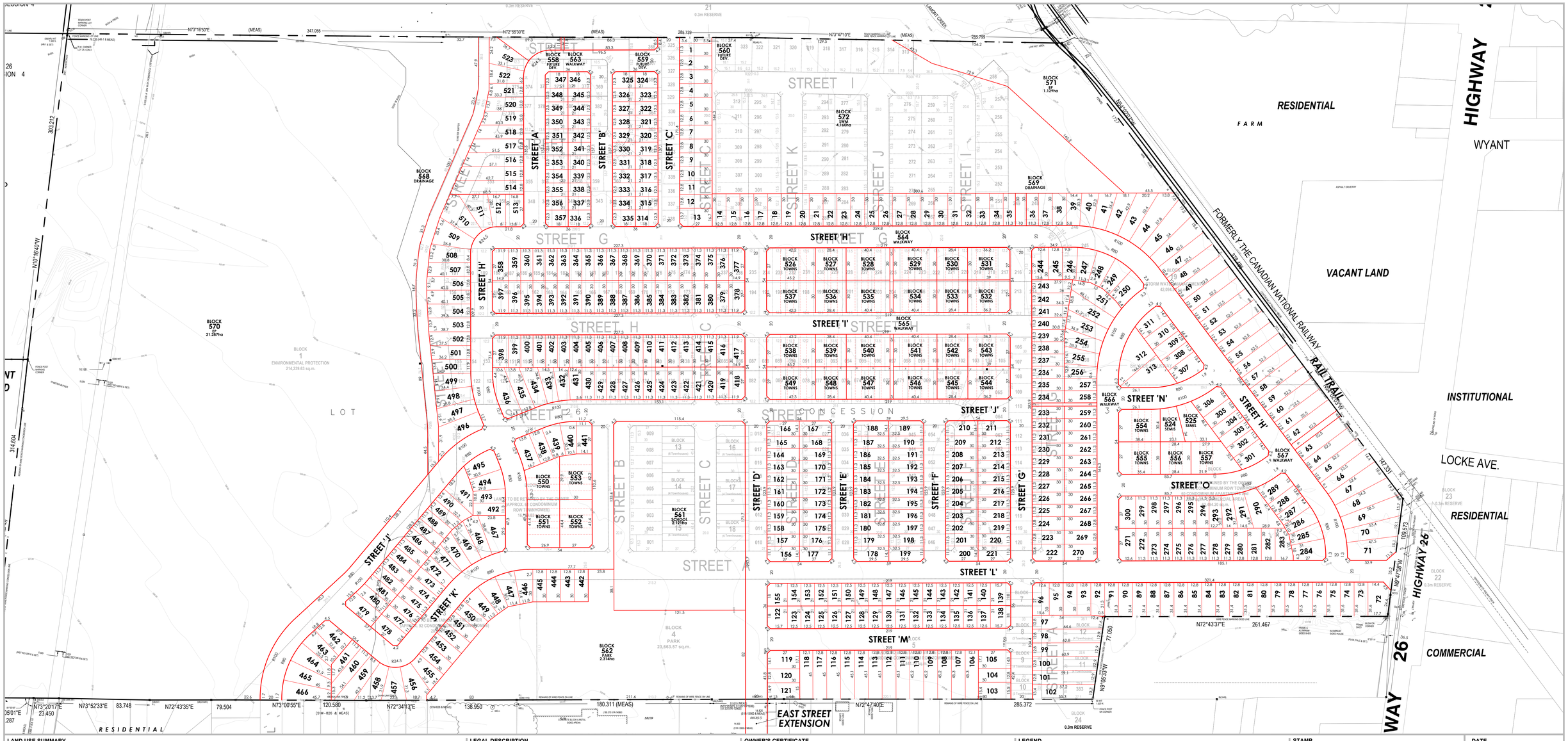
217 Gideon Street, Stayner ON
L0M 1S0



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APPENDIX C

Proposed Development Concept



LAND USE SUMMARY

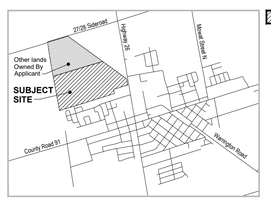
Land Use	Lot / Block	Units	Area
Single Detached - 11.3m	1, 35, 36, 106, 118, 156-221, 225-243, 256-267, 272-279, 285-287, 291-299, 302-304, 308, 358-433, 440, 441, 458-461, 468-477, 480-490, 492, 493	231	8.325
Single Detached - 12.8m	2-34, 37-105, 107-117, 119-121, 222-224, 244-255, 268-271, 280-284, 288-290, 300, 301, 305-307, 309-313, 434-439, 442-457, 462-467, 478, 479, 491, 494-523	214	11.044
Single Detached - 12.5m Shallow	122-155, 314-357	78	2.141
Semi Detached - 7.5m	524, 525	4	0.146
Townhouse - 6m	526-557	164	3.583
Future Development	558-560		0.190
School	561		2.121
Park	562		2.314
Walkway	563-567		0.089
Drainage	568-569		0.439
Environmental Protection	570, 571		22.346
Stormwater Management Area	572		4.160
Right of Way	A, B, C, D, E, F, G, H, I, J, K, L, M, N, O		11.727
Totals		691	68.625

LAND USE	LOT / BLOCK #	UNITS	AREA
SINGLE DETACHED - 12.2m (40ft) LOTS	1-71, 74-91, 100-106, 113-125, 133-161, 166-181, 184-197, 203, 209-220, 226, 232-237, 259-261, 265-270, 274-280, 285-286, 292-305, 312, 325-340, 344-347, 350-352, 369-370, 373-377, 381-382	247	9.82ha
SINGLE DETACHED - 13.5m (44.3ft) LOTS	72-73, 92-99, 107-112, 126-132, 162-165, 182-183, 198-202, 204-208, 221-225, 227-231, 238-239, 250, 262-264, 271-273, 281-284, 287-291, 296-301, 306-311, 313-314, 341-343, 348-349, 360-363, 371-372, 378-380	95	4.09ha
SINGLE DETACHED - 15.2m (50ft) LOTS	240-249, 251-258, 315-324, 353-359, 364-368	41	2.05ha
FREEHOLD TOWNHOMES	7-18	54	1.26ha
CONDOMINIUM • TOWNHOMES • APARTMENTS	• 2, 3, 5, 6 • 6	• 361 • 60	• 6.91ha • 6.05ha
COMMERCIAL	6		0.20ha
ENVIRONMENTAL PROTECTION	1		21.42ha
STORMWATER MANAGEMENT	19		4.21ha
PARK	4		2.37ha
0.3m RESERVE	20-24		>0.01ha
RIGHT OF WAY			10.29ha
TOTALS		858	68.68ha

LEGAL DESCRIPTION

PART OF LOT 26, CONCESSION 3
GEOGRAPHIC TOWNSHIP OF NOTTAWASAGA
TOWN OF CLEARVIEW
COUNTY OF SIMCOE

KEY PLAN



ADDITIONAL INFORMATION REQUIRED UNDER SECTION 51(17) OF THE PLANNING ACT R.S.O. 1990 C.P.13 AS AMENDED

A. AS SHOWN
B. AS SHOWN
C. AS SHOWN
D. AS SHOWN
E. AS SHOWN
F. AS SHOWN
G. AS SHOWN
H. MUNICIPAL WATER & SANITARY SUPPLY
I. SILTY SAND/SAND & GLACIAL TILL
J. AS SHOWN
K. ALL SERVICES AS REQUIRED (WATER, SANITARY, STORM, HYDRO, CABLE)
L. AS SHOWN

OWNER'S CERTIFICATE

I HEREBY AUTHORIZE MACNAUGHTON HERMSEN BRITTON CLARKSON PLANNING LIMITED TO SUBMIT THIS PLAN FOR APPROVAL.

DATE: _____ _____

SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT THE BOUNDARIES OF THE LAND TO BE SUBDIVIDED ON THIS PLAN AND THEIR RELATIONSHIP TO THE ADJACENT LANDS ARE ACCURATELY AND CORRECTLY SHOWN.

DATE: _____ _____

REVISION No.	DATE	ISSUED / REVISION	BY

LEGEND

- SUBDIVISION BOUNDARY
- ORIGINAL ROW LINE
- ORIGINAL BLOCK LINE
- ORIGINAL LOT LINE
- ORIGINAL UNIT LINE
- PARCEL FABRIC
- REVISED ROW LINE
- REVISED BLOCK LINE
- REVISED LOT LINE
- REVISED UNIT LINE
- REMOVED ROW LINE
- REMOVED BLOCK LINE
- REMOVED LOT LINE / UNIT LINE

113 COLLIER STREET
BARRIE, ON, L4M 1H2
P: 705 728 0045 F: 705 728 2010
WWW.MHBCPLAN.COM
PLANNING
URBAN DESIGN
& LANDSCAPE
ARCHITECTURE
MHBC PLANNING

STAMP

DATE	JUL. 20, 2026
FILE No.	15226AH
SCALE	1:1,650 (ARCH D)
DRAWN BY	M.A.M.
CHECKED BY	K.C.
OTHER	

PROJECT

Bridle Park

1000983019 Ontario Limited
111 Mildenhall Road
Toronto, Ontario
M4N 3H4

NORTH

FILE NAME REDLINE DRAFT PLAN OF SUBDIVISION

DWG No. 1 of 1

SCALE BAR

0 8 16 24 32 40 60 80 120 160m

MEASUREMENTS SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048

B:\Clearview\15226AH\Drawings\Draft Plan\CAD