



Revised Environmental Impact Study

15450 Woodbine Ave., Town of Whitchurch-Stouffville, ON

Galatia Lane Estates Inc.

101 Bradwick Drive, Vaughan, Ontario L4K 1K5

Prepared by:

SLR Consulting (Canada) Ltd.

871 Equestrian Court, Unit 1, Oakville ON L6L 6L7

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Revision Record

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0-1	*Previous iterations submitted under Palmer	Jesse Snider	Rosalind Chaundy	Rosalind Chaundy
2	May 29, 2026	Jesse Snider	Rosalind Chaundy	Rosalind Chaundy



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Table of Contents

Statement of Limitations	ii
Table of Contents.....	iii
1.0 Introduction	1
2.0 Policy Framework.....	3
2.1 Provincial Planning Statement.....	3
2.2 Oak Ridges Moraine Conservation Plan	4
2.3 Greenbelt Plan	4
2.4 York Region Official Plan.....	6
2.5 Town of Whitchurch-Stouffville Official Plan	8
2.6 Lake Simcoe Protection Plan.....	10
2.7 Lake Simcoe Region Conservation Authority.....	11
2.8 Species Conservation Act	12
3.0 Study Approach.....	12
3.1 Background Review	12
3.2 Agency Consultation	13
3.3 Ecological Surveys	14
3.3.1 Vegetation and Flora	14
3.3.2 Wildlife	14
3.3.3 Species at Risk	15
3.3.4 Significant Wildlife Habitat	16
4.0 Existing Conditions.....	16
4.1 Aquatic Assessment and Fish Habitat	16
4.2 Vegetation and Flora	16
4.2.1 Vegetation Communities	16
4.2.2 Flora.....	23
4.2.3 Wetland Delineation	23
4.3 Wildlife	23
4.3.1 Breeding Birds.....	23
4.3.2 Breeding Amphibians	24
4.3.3 Roosting Bats.....	25
4.3.4 Incidental Wildlife	25
5.0 Significant Natural Heritage Features	26
5.1 Aquatic Features and Fish Habitat	26



5.2	Key Natural Heritage and Hydrological Features	26
5.3	Species at Risk	26
5.3.1	Birds	27
5.3.2	Mammals	27
5.4	Significant Wildlife Habitat	27
6.0	Proposed Development	28
7.0	Impact Assessment	30
7.1	Natural Heritage Features - Wetlands	30
7.2	Species at Risk - Roosting Bats	31
7.3	Significant Wildlife Habitat - Barn Swallow	31
7.4	Tree Protection Plan	31
7.5	LSRCA Regulated Lands	31
7.6	Other Vegetation Communities	32
8.0	Mitigation	32
8.1	Natural Heritage Features - Wetlands	32
8.2	Species at Risk	32
8.3	Significant Wildlife Habitat – Barn Swallow	32
8.4	Wildlife Disturbance	33
8.5	Other Items	33
9.0	Policy Conformity	33
10.0	Conclusion	35
11.0	Closure	36
12.0	References	37

Tables in Text

Table 1:	Summary of Ecological Surveys Completed in 2022 and 2023	14
Table 2:	Ecological Land Classification Vegetation Communities	17
Table 3:	Breeding Amphibian Survey Results (2023)	25
Table 4:	Policy Conformity	34

Figures in Text

Figure 1:	Site Location	2
Figure 2:	Existing Ecological Conditions	22



Figure 3: Proposed Development	29
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Appendices

Appendix A	Agency Correspondence
Appendix B	LSRCA Meadow Memo
Appendix C	Flora List
Appendix D	Breeding Bird Survey Results
Appendix E	Species at Risk Assessment
Appendix F	Significant Wildlife Habitat Assessment



1.0 Introduction

SLR Consulting (Canada) Ltd. (SLR) was retained by Galatia Lane Estates Inc. to complete this Environmental Impact Study (EIS) for the proposed development of a two-storey industrial building, with an accessory outdoor storage yard and associated parking, at 15450 Woodbine Avenue in the Town of Whitchurch-Stouffville, Region of York (the Subject Property – Figure 1). The completion of this EIS has been prepared per the Zoning By-law Amendment application requirements of the Town of Whitchurch-Stouffville and Lake Simcoe Region Conservation Authority (LSRCA). The design of the proposed development must consider and limit potential effects on onsite natural features and on natural features on adjacent lands, providing the most feasible development envelope possible.

The Subject Property is approximately 16.6 hectares (ha) and is comprised primarily of agricultural lands, but also semi-natural communities and a wetland. The Subject Property is almost completely within the Greenbelt Land Use designation; however, a very small portion does fall within the Oak Ridges Moraine (ORM) Countryside Area Land Use designation (approximately 8 m² in the southwest corner).

The southeastern portion of the Subject Property is part of the Bogart Creek Wetland Complex, which is classified as a Provincially Significant Wetland (PSW). A tributary of Weslie Creek, a watercourse within this wetland complex, was also mapped as transecting the southeast corner of the Subject Property. The lands associated with the PSW and the mapped watercourse in this portion of the Subject Property are regulated by the LSRCA.

The objective of this study is to complete a background review, field surveys, and desktop analysis to assess the Subject Property's natural heritage features and their functions, assess potential impacts from the proposed development, and provide mitigation measures where appropriate.

This EIS has been updated since its original submission, following comments from the reviewing agencies (dated July 14, 2023, April 12, 2024, July 31, 2024, and November 19, 2024). Further revisions have since been requested and are associated with changes to the proposed Site Plan (i.e., the Site Plan now contains industrial blocks slated for future development.). These updates are reflected in this May 2026 iteration of the EIS.





- LEGEND
- Watercourse ¹
 - Wetland ²
 - Unevaluated
 - Evaluated-Provincial (Bogart Creek Wetland Complex)
 - Subject Property (16.6 ha)

1 - Ontario Hydro Network (OHN)
2 - Land Information Ontario (LIO)

0 100 200 300 400 500
METRE SCALE

North American Datum 1983
Universal Transverse Mercator Projection Zone 17

Scale: 1:8,000
Page Size: Tabloid (11 x 17 inches)

Drawn: SM
Checked: ED
Date: Feb 23, 2026

Source Notes:
Base Imagery (2021) provided by York region open GIS services.

NORTH

CLIENT
Vistaview Mgmt (Treasure Hill)

PROJECT
15450 Woodbine Ave EIS

TITLE
Site Location



REF. NO. 2108402-1-1

Figure 1

2.0 Policy Framework

Relevant planning policies, legislation, and regulatory requirements pertinent to the assessment area are summarized in the following sections. The general relevance of these policies to the Subject Property is also noted. More detailed analysis of policy implications is provided in subsequent sections of this report, where relevant.

2.1 Provincial Planning Statement

The 2024 *Provincial Planning Statement* (PPS) provides direction to regional and local municipalities regarding planning policies for the protection and management of natural heritage features and resources (Ontario Ministry of Municipal Affairs and Housing, 2020). The PPS defines eight types of Natural Heritage Features (NHF) and adjacent areas and provides planning policies for each. Of these NHF, development is not permitted in:

- Significant Coastal Wetlands;
- Significant Wetlands in Ecoregions 5E, 6E and 7E;
- Fish Habitat, except in accordance with provincial and federal requirements; or
- Habitat of species designated as Endangered and Threatened, except in accordance with provincial and federal requirements.

Additionally, unless it can be demonstrated through an Environmental Impact Study (EIS or NHE) that there will be no negative impacts on the natural features or their ecological functions, development and site alteration are also not permitted in:

- Significant Wetlands in the Canadian Shield north of Ecoregions 5E, 6E and 7E;
- Significant Woodlands in Ecoregions 6E and 7E (excluding islands in Lake Huron and the St. Mary's River);
- Significant Valleylands in Ecoregions 6E and 7E (excluding islands in Lake Huron and the St. Mary's River);
- Significant Wildlife Habitat;
- Significant Areas of Natural and Scientific Interest (ANSI);
- Other Coastal Wetlands in Ecoregions 5E, 6E and 7E; and
- Lands defined as *Adjacent Lands* to all the above natural heritage features.

Each of these natural heritage features is afforded varying levels of protection subject to guidelines, and in some cases, regulations.

The Subject Property is located in Ecoregion 6E (Crins, Gray, Uhlig, & Wester, 2009). As depicted on the Ministry of Natural Resources and Forestry (MNRF) Natural Heritage Information Centre (NHIC) mapping (**Error! Reference source not found.**), there are unevaluated wetland features and a Provincially Significant Wetland (PSW) within and adjacent to the Subject Property (Ministry of Natural Resources and Forestry, 2023). This PSW is part of the Bogart Creek Wetland Complex and is thus afforded protection through the PPS.



Map A: NHIC mapping depicts unevaluated wetlands (transparent blue patterned layer), a PSW (solid blue patterned layer), and the Oak Ridges Moraine boundary (brown line in the southwest corner) within and adjacent to the Subject Property (boundaries in red).



2.2 Oak Ridges Moraine Conservation Plan

A small portion of Subject Property's southwest corner (approximately 8 m²) falls within the Oak Ridges Moraine (ORM) boundary (Map A). For the purposes of this report, SLR has considered the Subject Property outside of this plan area.

2.3 Greenbelt Plan

The Greenbelt Plan builds on the PPS to identify limits to urbanization and to provide permanent protection to the agricultural land base and the ecological and hydrological feature areas and their functions occurring on the landscape of the Greater Golden Horseshoe (Ontario Ministry of Municipal Affairs and Housing, 2017). Under the Greenbelt Plan, almost all of the Subject Property falls within the Protected Countryside. The Protected Countryside is mapped as light green on Map B.

Within the Protected Countryside a Natural Heritage System (NHS) is present; however, no NHS is mapped on the Subject Property. Proposed development within the Protected Countryside must demonstrate that there will be no negative impacts to key natural heritage features (KNHF) and key hydrological features (KHF) or their function, as well as no negative impacts on biodiversity or connectivity within of the NHS.

KNHFs include the habitat of endangered and threatened species, fish habitat, wetlands, life science areas of natural and scientific interest (ANSIs), significant valleylands, significant woodlands, significant wildlife habitat (including habitat of special concern species, sand barrens, savannahs, tallgrass prairies, and alvars). KHFs include permanent and intermittent streams, lakes (and their littoral zones), seepage areas and springs, and wetlands.

Under the Section 3.2.5 of the Greenbelt Plan:

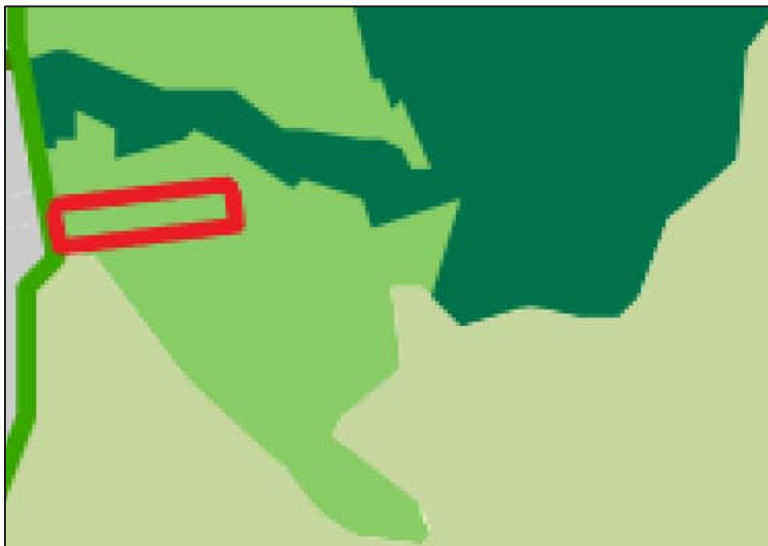
- 2 *Beyond the Natural Heritage System within the Protected Countryside, key hydrologic features are defined by and subject to the policies of section 3.2.5.*
- 3 *Beyond the Natural Heritage System within the Protected Countryside, key natural heritage features are not subject to the policies of section 3.2.5, but are to be defined pursuant to, and subject to the policies of the PPS.*



- 4 *In the case of wetlands, seepage areas and springs, fish habitat, permanent and intermittent streams, lakes and significant woodlands, the minimum vegetation protection zone shall be a minimum of 30 metres measured from the outside boundary of the key natural heritage feature or key hydrologic feature.*
- 5 *A proposal for new development or site alteration within 120 metres of a key natural heritage feature within the Natural Heritage System or a key hydrologic feature anywhere within the Protected Countryside requires a natural heritage evaluation or a hydrological evaluation which identifies a vegetation protection zone which:*
 - a) *Is of sufficient width to protect the key natural heritage feature or key hydrologic feature and its functions from the impacts of the proposed change and associated activities that may occur before, during and after construction and, where possible, restore or enhance the feature and/or its function; and*
 - b) *Is established to achieve and be maintained as natural self-sustaining vegetation.*

Natural Heritage System mapping can be found in Schedule 4 of the Greenbelt Plan (Map B).

Map B: Greenbelt Plan Schedule 4: Natural Heritage System - Subject Property (approximate boundaries in red) located within the Protected Countryside (light green layer) with the NHS (dark green layer) to the north and the Oak Ridges Moraine Area (pale green layer) immediately to the south.



Under the Greenbelt Plan the Subject Property is designated as “Protected Countryside” (Map B); however as mentioned previously, the Subject Property sits outside the identified NHS. As such, KNHFs within the Subject Property are not subject to policies in Section 3.2.5 of the Greenbelt Plan, but instead are subject to policies of the PPS. KHF, on the other hand, are subject to policies outlined in Section 3.2.5 of the Greenbelt Plan. The NHS to the north is also greater than 120 m away from the Subject Property and, as a result, KNHFs do not require a natural heritage evaluation to identify a vegetation protection zone. KHF within 120 m of the proposed development; however, do require a natural heritage of hydrological evaluation to determine a vegetation protection zone.

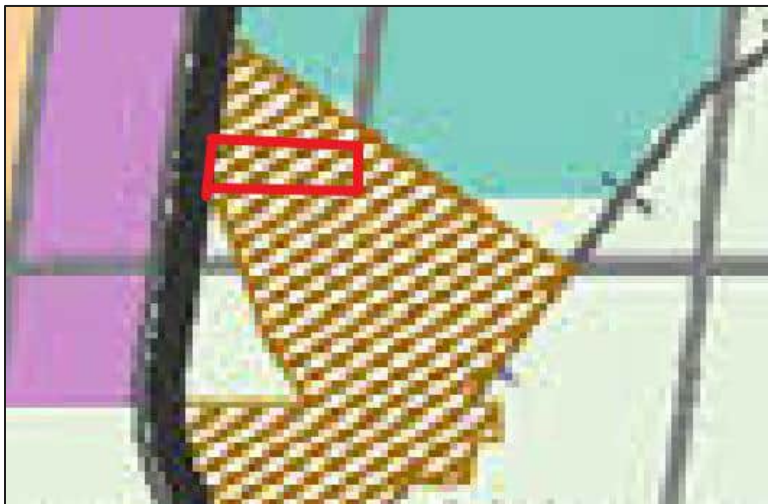


A wetland, specifically a PSW, was identified on and adjacent to the Subject Property. This feature, as per Section 3.2.5.4 of the Greenbelt Plan, require a minimum vegetation protection zone of 30 m.

2.4 York Region Official Plan

York Region Council adopted the current *2022 Regional Official Plan* (YROP) in June 2022 and the Minister of Municipal Affairs and Housing approved the Plan in November 2022 (Region of York, 2022). The policies of the Official Plan guide new planning and development in York Region. The *2022 Regional Official Plan* is not subject to appeal. As per Map 1A – Land Use Designation (Map C below), the Subject Property is within a Hamlet. Thus, rural settlement policies apply to the Subject Property.

Map C: York Region's OP Map 1A depicts the Subject Property (approximate boundaries in red) within the Hamlet land use designation (orange dashed layer).



The Region recognizes the value of its Natural Systems, which include the Regional Greenlands and water resource system. This system consists of cores, corridors, and linkages including: *Oak Ridges Moraine Conservation Plan's Natural Core Area and Natural Linkage Area designations, the Natural Heritage System within the Protected Countryside of the Greenbelt Plan, the Natural Heritage System for the Growth Plan, approved local natural heritage systems, key natural heritage features [KNHF], key hydrologic features [KHF] and functions, and associated lands.* The function of the Regional Greenlands and water resource system is to protect the features listed below, including their adjacent lands. Features considered as KNHFs/KHFs in the Region include the following, as defined in YROP Section 3.4.1:

- Habitat of endangered and threatened species;
- Fish habitat;
- Wetlands;
- Life Science Areas and Earth Science Areas of Natural and Scientific Interest (ANSI's);
- Significant valleylands;
- Significant woodlands;



- Significant wildlife habitat (including habitat of special concern species);
- Sand barrens, savannahs and tallgrass prairies;
- Lakes and their littoral zones;
- Permanent and intermittent streams;
- Kettle lakes;
- Seepage areas and springs; and
- Lake Simcoe Shoreline.

As per Section 3.4.5 of the YROP, development and site alteration are prohibited within key natural heritage features, key hydrologic features, vegetation protection zones, and adjacent lands unless:

- a) The use is permitted by the Plan, the applicable Provincial Plan and it is demonstrated through an environmental impact study that the development or site alteration will not result in a negative impact on the natural feature or its ecological functions.*

Additionally, Section 3.4.13 states:

The vegetation protection zone and adjacent land to key natural heritage features and key hydrologic features shall be determined through an environmental impact study and meet the minimum widths identified in Table 3.

Section 3.4.17 also states:

That within the Lake Simcoe watershed, an application for development or site alteration within settlement and rural settlement areas, as defined by the Lake Simcoe Protection Plan, where applicable, shall:

- a) Increase or improve fish habitat in streams, lakes and wetlands, and any adjacent riparian areas;*
- b) Include landscaping and habitat restoration that increases the ability of native plants and animals to use valleylands or riparian areas as wildlife habitat and movement corridors; and,*
- c) Seek to avoid, minimize and/or mitigate impacts associated with the quality and quantity of urban run-off into receiving streams, lakes, and wetlands.*

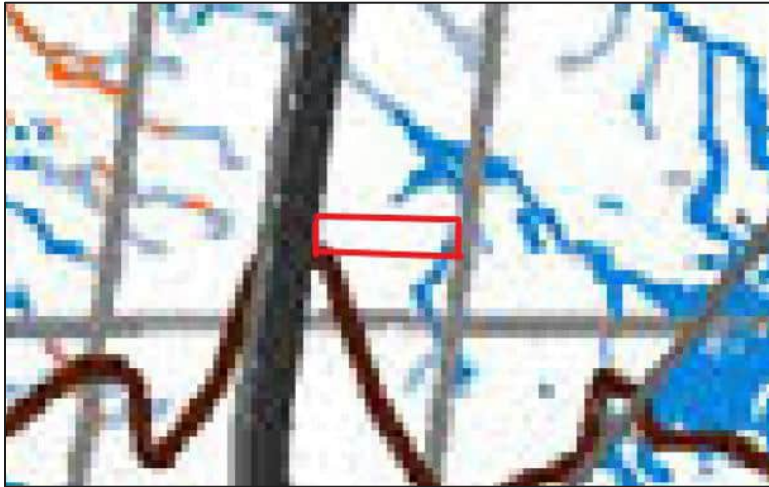
Lastly, in respect to wetlands, the YROP Section 3.4.20 notes that:

To permit development and site alteration within 120 metres of wetlands identified on Map 4, but not within the vegetation protection zone, subject to an approved environmental impact study that demonstrates no negative impacts to the wetland feature or its ecological functions. Notwithstanding the aforementioned, within the vegetation protection zone, development and site alteration may be permitted in accordance with policies 3.2.5.c and 3.2.5.d of the Plan.

According to Table 3 of the YROP (for Hamlets outside of the Oak Ridges Moraine Conservation Plan area), vegetation protection zones for PSWs are to be protected with a 30 m vegetation protection zone. As per Map 4 – Key Hydrological Features (Map D below) a PSW, the Bogart Creek Wetland Complex, is within the Subject Property boundaries and therefore requires a 30 m buffer.



Map D: York Region's OP Map 4 depicts a PSW (blue layer) in the southeast corner of the Subject Property (approximate boundaries in red).



2.5 Town of Whitchurch-Stouffville Official Plan

The *Town of Whitchurch-Stouffville Official Plan* (OP) was adopted by the Town on September 5, 2000, and approved by the Region on March 20, 2001 (Town of Whitchurch-Stouffville, 2020). Since then, it has undergone multiple consolidations, the latest being in September 2025.

According to the Town's Schedule A – Greenlands System, a portion of the Subject Property is within a Significant Environmental Area (Map E). This Significant Environmental Area is associated with both the Bogart Creek Wetland Complex PSW and the mapped tributary of Weslie Creek.

Map E: The Town's OP Schedule G depicts the Subject Property (boundaries in red) containing Greenlands System (light green layer) and a watercourse (blue line) on the east portion of the property.



As per Section 4.1.2.1.a of the Town's OP, if a site is located within the Greenbelt, but outside of the Oak Ridges Moraine, proposals/applications shall be evaluated with respect to the information submission requirements of the Greenbelt Plan and Section 3 of the Town's OP.

Furthermore, as per Sections 4.1.6 of the Town's OP if the site includes or directly abuts the lands designated on Schedule "A" as part of the Greenlands System, proposals shall be evaluated in accordance with the information submission requirements of Section 3 of this Official Plan.

Section 4.1.1, states that the Town will:

a. Implement the Provincial Planning Statement, the ORMCP, the Greenbelt Plan, the Lake Simcoe Protection Plan, and the York Region Official Plan as follows:

- i. Protect, restore, and enhance the Town's Natural Heritage System;
- ii. Apply minimum vegetation protection zones consistent with policy direction from the Province, and the Conservation Authorities;
- iii. Encourage, where appropriate, the creation of linkages between natural features that will create and/or restore natural linkages within the Town's Natural Heritage System;
- iv. Identify Natural Core Areas and Natural Linkage Areas and an appropriate policy framework to ensure the conservation of the Oak Ridges Moraine;
- v. Identify the Greenbelt Plan Natural Heritage System; and,
- vi. Integrate York Region's Regional Greenlands System.

Section 4.1.2.1 c. also states that:

Require that every application for development or site alteration identify planning, design and construction practices that ensure that no buildings or other site alterations impede any hydrological functions or the movement of plants and animals among key natural heritage features, key hydrologic features, and adjacent land, unless otherwise permitted. This exception can be permitted by the Town, in consultation with the LSRCA, provided that prior to approving the location/construction, that an Environmental Impact Study (EIS) be carried out by qualified consultants, which demonstrates the need for such a facility and that shows that there is no negative impact on the functions and features of the Significant Environmental Area during both the construction and post-development phases.

Lastly, as outlined in Section 4.1.7 of the Town's OP:

c. Prohibit development and site alteration within key natural heritage features, key hydrologic features, minimum vegetation protection zones and the minimum area of influence, unless:

- i. the use is permitted by this Plan, the York Region Official Plan, and the applicable Provincial Plan, and it is demonstrated through an environmental impact study that the development or site alteration will not result in a negative impact on the natural feature or its ecological functions;*
- ii. or, as authorized through an Environmental Assessment; or*
- iii. for agricultural uses, agriculture-related uses and on-farm diversified uses, subject to the applicable Provincial Plan.*

d. Require key natural heritage features and key hydrologic features to be precisely delineated on a site-by-site basis as part of an Environmental Impact Study completed as part of a development application or other similar study. The precise delineation of



features shall occur through the staking of the limits of the feature. Such staking will be undertaken in consultation with the Town, and the applicable Conservation Authority, where required. Vandorf-Preston Lake Secondary Plan.

The Vandorf-Preston Lake Secondary Plan (2025) is an extension of the Town's OP which establishes the principles, objectives, and general policies, as well as specific strategies with respect to community structure, community improvement, servicing, land use and transportation to guide the planning of the Vandorf and Preston Lake communities and their adjacent lands. The Plan provides a planning framework for all levels of government, as well as existing and future residents, landowners, and other interested groups.

Schedule G – "Vandorf Land Use Designations" of this Secondary Plan (Map F) illustrates land use designations on the Subject Property. Applicable policies associated with these land use designations are described below.

Map F: Schedule G - Vandorf Land Use Designation showing the Subject Property (red boundary), Industrial Area (purple layer), Greenlands System (light green layer), and watercourses (blue line).



According to Schedule G – Vandorf Land Use Designations, a majority of the Subject Property has a Potential Employment Area land use designation while a small portion of the Subject Property has Greenlands System and Industrial Area land use designation (Map F).

2.6 Lake Simcoe Protection Plan

The Lake Simcoe Protection Act, which was passed in December 2008, provides a legislative framework for protecting the Lake Simcoe watershed. Among other items, the Act includes the requirement for a Protection Plan with legally binding policies. The Subject Property is located within an existing settlement area.

The Lake Simcoe Protection Plan (LSPP) has separate requirements depending on whether the proposed development is located within or outside of an existing settlement area. Requirements for proposed developments within settlement areas are as follows:



6.32-DP Policies 6.32 - 6.34 apply to existing settlement areas and areas of Lake Simcoe adjacent to these lands, including the littoral zone, and these areas are not subject to policies 6.1 – 6.3, 6.5, 6.11 and policies 6.20 - 6.29.

6.33-DP An application for development or site alteration shall, where applicable:

- a) increase or improve fish habitat in streams, lakes and wetlands, and any adjacent riparian areas;*
- b) include landscaping and habitat restoration that increase the ability of native plants and animals to use valleylands or riparian areas as wildlife habitat and movement corridors;*
- c) seek to avoid, minimize and/or mitigate impacts associated with the quality and quantity of urban run-off into receiving streams, lakes and wetlands; and*
- d) establish or increase the extent and width of a vegetation protection zone adjacent to Lake Simcoe to a minimum of 30 metres where feasible.*

6.34-DP Where, through an application for development or site alteration, a buffer is required to be established as a result of the application of the PPS, the buffer shall be composed of and maintained as natural self-sustaining vegetation.

2.7 Lake Simcoe Region Conservation Authority

Lake Simcoe Region Conservation Authority (LSRCA) regulations and policies include the following:

- *Ontario Regulation 41/24 – Prohibited Activities, Exemptions and Permits* (filed February 2024). Through this regulation, the LSRCA regulates activities in natural and hazardous areas (e.g., areas in and near rivers, streams, floodplains, wetlands, and slopes and shorelines) (Government of Ontario, 2024).
- As of April 1, 2024, the LSRCA must review and make decisions on applications for permits in accordance with Part VI of the *Conservation Authorities Act* and *Ontario Regulation 41/24*. Amendments to the Implementation Guidelines (i.e., *Regulation of Development, Interference with Wetlands and Alterations to Shorelines and Watercourses*) will be forthcoming to reflect this new framework.
- Per section 12 of O. Reg. 41/24, the Authority will consult with stakeholders and the public during the review and update process as the authority considers advisable. Where discrepancies exist between the text of the legislation or regulation and the information provided within the Implementation Guidelines, the text of the legislation and regulation will prevail.
- Note that through O. Reg. 41/24, conservation authorities no longer have the ability to comment on certain natural heritage features.

Portions of the Subject Property fall within LSRCA regulated limit, primarily associated with the Bogart Creek Wetland Complex PSW and watercourse (Map G).



Map G: LSRCA Regulated Area Map depicts the Subject Property (boundaries in light blue) partially within regulated lands (yellow layer with red outline).



2.8 Species Conservation Act

The provincial Species Conservation Act (SCA 2025) came into effect on March 30, 2026; it replaced the Endangered Species Act. This Act is administered by the Ministry of Environment, Conservation and Parks (MECP), as was the previous ESA. The SCA protects Endangered and Threatened Species in Ontario that are listed in the O. Reg. 60/26: Protected Species in Ontario List. This list excludes formerly listed migratory birds and aquatic species (potentially protected through the federal Species at Risk Act) as well as all previously listed Special Concern species which are not protected through the SCA. For most listed species, where impacts to the protected species are anticipated, a registry and Conservation Plan approach is taken whereby mitigation measures are expected to be taken.

3.0 Study Approach

The approach to the study has been scoped in consideration of existing site conditions, applicable policy, and feedback received through ongoing agency liaison.

3.1 Background Review

SLR has reviewed relevant background material to provide a focus to field investigations and ensure compliance with applicable regulations and policy. Background information collection is guided by the Natural Heritage Information Request Guide (Ministry of Natural Resources and Forestry, 2022). Current direction from the Ministry of Natural Resources and Forestry (MNRF) and Ministry of Environment, Conservation and Parks (MECP) is to gather natural heritage information and species occurrence records from available sources; the NHIC Make-a-Map application being the main source of information and records from the Ministry itself (Ministry of Natural Resources and Forestry, 2023). Information gathered is recommended to be balanced and supplemented by professional ecological review of potential habitats and characteristics of a project site.

Background review for the Subject Property included the collection of relevant mapping and reports, including regulations and policies, Official Plans, and zoning by-laws; and the NHIC



Make-a-Map application for species occurrences and designated area mapping. In addition to these sources, the following data sources were reviewed for the project:

- Land Information Ontario (LIO) database (2023);
- Department of Fisheries and Oceans (DFO) Aquatic Habitat and Species at Risk mapping (2023);
- Ontario Breeding Bird Atlas (2023);
- Ontario Butterfly Atlas (2023);
- Ontario Reptile and Amphibian Atlas (2023); and,
- LSRCA mapping (2023).

Other sources of information, such as aerial photography and topographic maps, were also consulted prior to commencing field assessments. Following the Information Request Guide, MECP advice and direction should be solicited if Species at Risk (SAR) interactions or potential interactions are identified via field investigation and analysis.

3.2 Agency Consultation

As part of the natural environment review and assessment, agency consultation has included discussion regarding a site visit (Staking), the Terms of Reference (TOR), and a Meadow Memo.

On November 1, 2022, an SLR ecologist and a representative from the LSRCA (Jessica Chan, Natural Heritage Ecologist), conducted a preliminary staking of wetland features on the Subject Property. This included staking the west boundary of a PSW identified in the southeast corner of the Subject Property, and the staking of a small community in the southwest corner of the Subject Property that at the time was thought to be a wetland. As the initial staking occurred within the late fall season, wetland boundaries were refined during the spring growing season (2023). This second staking occurred on June 16, 2023.

Following the staking exercise, SLR's ecologist conducted soil analysis on soils within the southwest area. These soils were not representative of typical wetland soils and instead mirrored those found in upland communities. Thus, this area is not considered to be a wetland (see later discussion).

Following the November 2022 site visit a Terms of Reference (TOR) was submitted to the LSCRA (on January 13, 2023) and the Town of Whitchurch-Stouffville (on January 24, 2023). An additional memorandum document entitled *West Meadow Assessment Memo – 15450 Woodbine Ave – Palmer* (now SLR) was submitted to the LSRCA on January 13, 2023, outlining a detailed description of the ELC community believed to be in the southwest corner of the Subject Property (i.e., that it was thought to be an upland community and not a wetland). The TOR and associated agency correspondence can be found in Appendix A. The memorandum can be found in Appendix B.

SLR spoke with a representative from the LSRCA, Jessica Chan on the phone on February 7, 2023. During this call SLR was informed that the LSRCA can no longer comment on the TOR or the submitted ecological memo, and that TOR review responsibilities now belongs to the Municipality.

SLR followed up with the Municipality regarding the TOR on February 8, 2023, receiving a response on February 9, 2023, in which the representative from the Municipality, Hena Kabir, indicated that the TOR was accepted pending sign off from the LSRCA. As a result of Bill 23,



uncertainty remained around the new responsibilities of the municipalities versus the conservation authorities. Based on SLR's current understanding of the roles and responsibilities of the Town of Whitchurch-Stouffville and the LSRCA, SLR presumed that the TOR and ecological memo are acceptable.

3.3 Ecological Surveys

Field investigations were conducted to collect existing conditions data on flora, fauna, features, and ecological functions. SLR conducted field investigations in October and November of 2022, and April through July of 2023, as summarized in Table 1. During these site visits SLR also noted the conditions of the mapped Weslie Creek tributary.

Table 1: Summary of Ecological Surveys Completed in 2022 and 2023

SLR's Field Investigations	Dates
ELC & Botanical Surveys, SAR & SWH Habitat Screenings, Incidental Wildlife Observations	October 13, 2022
Soil Sampling, Feature Staking with the LSRCA, Incidental Wildlife Observations, ELC & Botanical Surveys	November 1, 2022
Aquatic/Headwater Drainage Feature Assessment & Amphibian Survey (Round 1)	April 13, 2023
Aquatic/Headwater Drainage Feature Assessment & Amphibian Survey (Round 2)	May 10, 2023
Breeding Bird Survey (Round 1)	June 4, 2023
Breeding Bird Survey (Round 2) & Wetland Staking with LSRCA	June 16, 2023
Amphibian Survey (Round 3) & ELC	June 19, 2023
Bat Exit Survey & Bat Guano Survey (Round 1)	July 19, 2023
Bat Exit Survey & Bat Guano Survey (Round 2)	July 27, 2023

3.3.1 Vegetation and Flora

Ecological field investigations were undertaken on October 13 and November 1 of 2022. Vegetation communities were mapped and described following the Ecological Land Classification (ELC) System for Southern Ontario (Lee, et al., 1998). Vegetation community boundaries were delineated through the interpretation of recent aerial imagery and refined in the field. Botanical surveys were completed by traversing the site and recording species observed in each vegetation community. Additional flora data was collected on June 19, 2023.

3.3.2 Wildlife

3.3.2.1 Breeding Bird Surveys

Breeding bird surveys were conducted using a roving survey method whereby the entirety of the site is covered. Thus, the site was walked such that the observer was within 50 m of all parts of the site. SLR conducted two breeding bird surveys for most bird species in southern Ontario, with more than one week between each site visit within the peak breeding season, on June 4 and June 16, 2023.

Surveys were conducted between 5:30 and 10:00 a.m. to coincide with the dawn chorus. Surveys were conducted under suitable weather conditions when wind speeds were less than



20 km/h and there was no precipitation. For this site, at the start of the first survey the weather conditions were noted to be 10 degrees Celsius, with a wind speed of 10 km/h, and 10% cloud cover and at the start of the second survey it was 15 degrees Celsius, with a wind speed of 10 km/h, and 100% cloud cover. The surveyor used a site map to record all bird species and individuals seen and heard in the approximate location observed on each site visit.

3.3.2.2 Breeding Amphibian Surveys

Amphibian breeding survey were completed in the Spring of 2023, following the Environment Canada's *Marsh Monitoring Program* protocol for surveying amphibians (Bird Studies Canada, 2009). The goal of the survey(s) is to help inform overall wetland quality. This survey method provides an indication of amphibian abundance during the breeding season. Species were identified by call and by visual observation. An abundance code for each species heard calling will be assessed by the following the Amphibian Monitoring protocol:

- Code 0: No calls heard.
- Code 1: Calls not overlapping or simultaneous, number of individual frogs can be counted.
- Code 2: Calls overlapping or simultaneous, number of individuals can still be distinguished, number of individual frogs cannot be counted, but a reliable estimate of numbers can be made based on location and call voices.
- Code 3: Full chorus calls simultaneous and overlapping, numbers of calling males cannot be reasonably counted or estimated.

3.3.2.3 Bat Exit Surveys

Two bat roosting surveys were conducted following the *Use of Buildings and Isolated Trees by Species at Risk Bats Survey Methodology* produced by the MNRF Guelph District (2014). Bat maternity roosting habitat was assessed for the man-made structures present at the site. These structures include an old barn and a vacant house. A *Wildlife Acoustics Echo Meter Touch* handheld bat detector (heterodyne) was used in conjunction with visual exit surveys to alert the observers to the presence of bat species. The structures were monitored from 30 minutes before dusk until 60 minutes after dusk for evidence of bats exiting on July 19 and July 27, 2023. The survey on July 19 was conducted between 8:22 pm and 9:52 pm where the temperature was 22°C, there was 50% cloud cover, and wind speeds were between 0-3 km/h. The survey on July 27 was conducted between 8:18 pm and 9:48 pm where the temperature was 23°C, there was 10% cloud cover, and wind speeds were between 0-3 km/h.

In addition to the bat exit surveys, bat guano surveys were also conducted within accessible portions of the structures. These bat guano surveys included a visual scan of the structure's floors for the presence of guano.

3.3.2.4 Incidental Wildlife Observations

Incidental observations of wildlife were recorded during 2022 and 2023 field investigations. Incidental observations included direct sightings and indirect evidence such as nests, tracks, scat, and browse.

3.3.3 Species at Risk

Prior to conducting field work, existing SAR records were queried with the NHIC database and other online resources. Habitat opportunities for SAR on the site were then assessed by



comparing habitat preferences of species deemed to have potential to occur against current site conditions. The species noted during the NHIC search and others known through professional experience to have potential to occur were considered in the assessment.

3.3.4 Significant Wildlife Habitat

SLR has developed a screening tool for Significant Wildlife Habitat (SWH) for Ecoregion 6E, following the relevant criteria established by the Province (Ontario Ministry of Natural Resources, 2015). Upon completion of surveys, the screening is reviewed based on observed site characteristics. This is supplemented by additional analysis, field observations, and mapping to determine if candidate SWH types exist and/or can be confirmed for the Subject Property.

4.0 Existing Conditions

4.1 Aquatic Assessment and Fish Habitat

No defined watercourse or observable water flow was noted on the Subject Property during the October and November 2022 field investigations. During the April 2023 site visit; however, observable water flow was noted in the approximate location of the mapped Weslie Creek tributary/watercourse (within the PSW). Thus, this feature was deemed as ephemeral/intermittent in nature. Due to the small catchment size of the feature (less than the 50 hectares benchmark that conservation authority's use for watercourses) and the lack of a defined channel, this feature could be classified as a Headwater Drainage Feature (HDF).

Additional information was gathered from historical air photos from York Region. This indicates that no watercourse was present in the 1950s, and that sometime within the 1980s a curving ditch was dug within the wetland. Thus, it seems likely that the current apparent lack of a defined watercourse/HDF is due to the ditch/drainage channel filling in since the 1980s.

This feature was approximately 1.0 m to 1.5 m in width and roughly 0.05 m deep. Substrate consisted of mud and silt and there was abundant Reed Canary Grass (*Phalaris arundinacea*) within and adjacent to the feature. A slow flow was noted northeastwards. No seepage or groundwater flora have been observed to date on the Subject Property. Although the HDF was not observed flowing off property, downstream data from Land Information Ontario (2023) indicate that this mapped watercourse may feed into an undefined cold-water system.

Conditions during May field investigations were similar to those observed in April. By June, only small areas of pooled water were noted in the area.

MNRF Aquatic Resource Area (ARA) point data were also examined and did not indicate fish species sampling results within the reach of the Weslie Creek tributary that is mapped on and adjacent to the Subject Property (Land Information Ontario, 2023). Based on this and our observations, it is likely that fish habitat is not present on or immediately adjacent to the Subject Property.

4.2 Vegetation and Flora

4.2.1 Vegetation Communities

Vegetation communities were mapped and described according to the Ecological Land Classification (ELC) system for southern Ontario (Lee, et al., 1998). Existing environmental



conditions are shown on Figure 2, with a general summary of communities provided below in Table 2.

Table 2: Ecological Land Classification Vegetation Communities

ELC Code	Description
Anthropogenic and Cultural	
Agricultural (AGR)	At the time of the October site visit the agricultural lands were not plowed and supported soybean (<i>Glycine max</i>) crops (Photo 1). During the November site visit the agricultural fields were plowed.
Anthropogenic (ANTH)	An anthropogenic area was found in the northeast portion of the Subject Property. This area consisted of a vacant residence, a barn structure, and a gravel driveway. Planted trees lined the driveway and consisted of Norway Maples (<i>Acer platanoides</i>), White Spruce (<i>Picea glauca</i>), and Eastern White Pine (<i>Pinus strobus</i>), with diameters at breast height (DBH) ranging from 25 to 40 cm (Photo 2).
Hedgerow (HR)	A hedgerow community was identified along the southwest boundary of the Subject Property. This hedgerow consisted of Staghorn Sumac (<i>Rhus typhina</i>), Black Locust (<i>Robinia pseudoacacia</i>), Riverbank Grape (<i>Vitis riparia</i>), and Manitoba Maple. These trees were young.
Dry-Moist Old Field Meadow (CUM1-1)	An old field meadow community was identified in the northeast corner of the Subject Property, surrounding the anthropogenic area (Photo 3). A small band of old field meadow was also delineated along the west boundary of the MAM wetland community. This community was comprised of a mixture of common meadow species including the following: • Wild Carrot (<i>Daucus carota</i>) • Tufted Vetch (<i>Vicia cracca</i>) • Oxeye Daisy (<i>Leucanthemum vulgare</i>) • Orchard Grass (<i>Dactylis glomerata</i>) • Red Clover (<i>Trifolium pratense</i>) • Common Lamb's-quarters (<i>Chenopodium album</i>) • Garden Bird's-foot Trefoil (<i>Lotus corniculatus</i>) • Tall Goldenrod (<i>Solidago altissima</i>) • Smooth Brome grass (<i>Bromus inermis</i>) • Reed Canary Grass • Common Tansy (<i>Tanacetum vulgare</i>) • Common Burdock (<i>Arctium minus</i>) • New England Aster (<i>Symphyotrichum novae-angliae</i>) • White Heath Aster (<i>Symphyotrichum ericoides</i>) • Scattered trees were present including Manitoba Maples (<i>Acer negundo</i>). A patch of highly invasive Japanese Knotweed (<i>Reynoutria japonica</i>) was also noted east of the old house.
Dry-Moist Old Field Meadow/Cultural Thicket (CUM1-1/CUT1)	Two old field meadow/cultural thicket communities were observed within the Subject Property. One of these communities was located on the north-central portion of the Subject Property (Photo 4) and was dominated by patches of Common Burdock, Manitoba Maple, Tall Goldenrod, willow (<i>Salix</i> sp.), Oxeye Daisy, Tufted Vetch, and Common Reed (<i>Phragmites australis</i>) were also observed.



ELC Code	Description
	The second community was located in the southwest corner of the Subject Property (Photo 5). Documented tree/shrub species included Manitoba Maple, Basswood (<i>Tilia americana</i>), European Buckthorn (<i>Rhamnus cathartica</i>), willow, and Red-osier Dogwood (<i>Cornus sericea</i>). Meadow species included Smooth Brome grass, Wild Carrot, aster (<i>Aster</i> sp.), cattail (<i>Typha</i> sp.), and Reed Canary Grass. See further discussion below this table and Appendix B.
Wetland	
Mineral Meadow Marsh (MAM)	A mineral marsh community was identified in the southeast corner of the Subject Property (Photo 6). During SLR's November 1, 2022 site visit, the west boundary of this community was staked with the LRSCA. Reed Canary grass was noted as the dominant species, with scattered willow shrubs in the east edge. Two soil samples were dug in this wetland on November 1, 2022 at locations west of (i.e. outside of) the LIO mapped wetland and slightly east of the mapped watercourse location. Together the pore pattern was 4 or 5 (clay loam or clays), with distinct mottles at 25 to 30 cm. No water table was reached with soil samples dug to about 45 or 55 cm. All horizons were dark brown soils. The resulting moisture regimes were concluded to be either 5 or possibly 6 (i.e., wetland). Thus, in combination with vegetation observations, this information was used to extend the wetland boundary westward.

As noted earlier under Agency Correspondence (Section 3.2), a portion of the southwest CUM1/CUT1 was thought to be a wetland. However, after further study of the soils it was considered to be an upland meadow. Additionally, in April through July of 2023 there was no standing water in this area. Appendix B explains the reasoning and further details this area.

Photo 1: Agricultural field with soybean crop on the Subject Property (October 13, 2022).



Photo 2: Anthropogenic area in the northeast portion of the Subject Property (November 1, 2022).



Photo 3: Old Field Meadow community along the laneway in the east portion of the Subject Property (October 13, 2022).



Photo 4: Dry-Moist Old Field Meadow/Cultural Thicket community located on the north-central portion of the Subject Property (October 13, 2022).

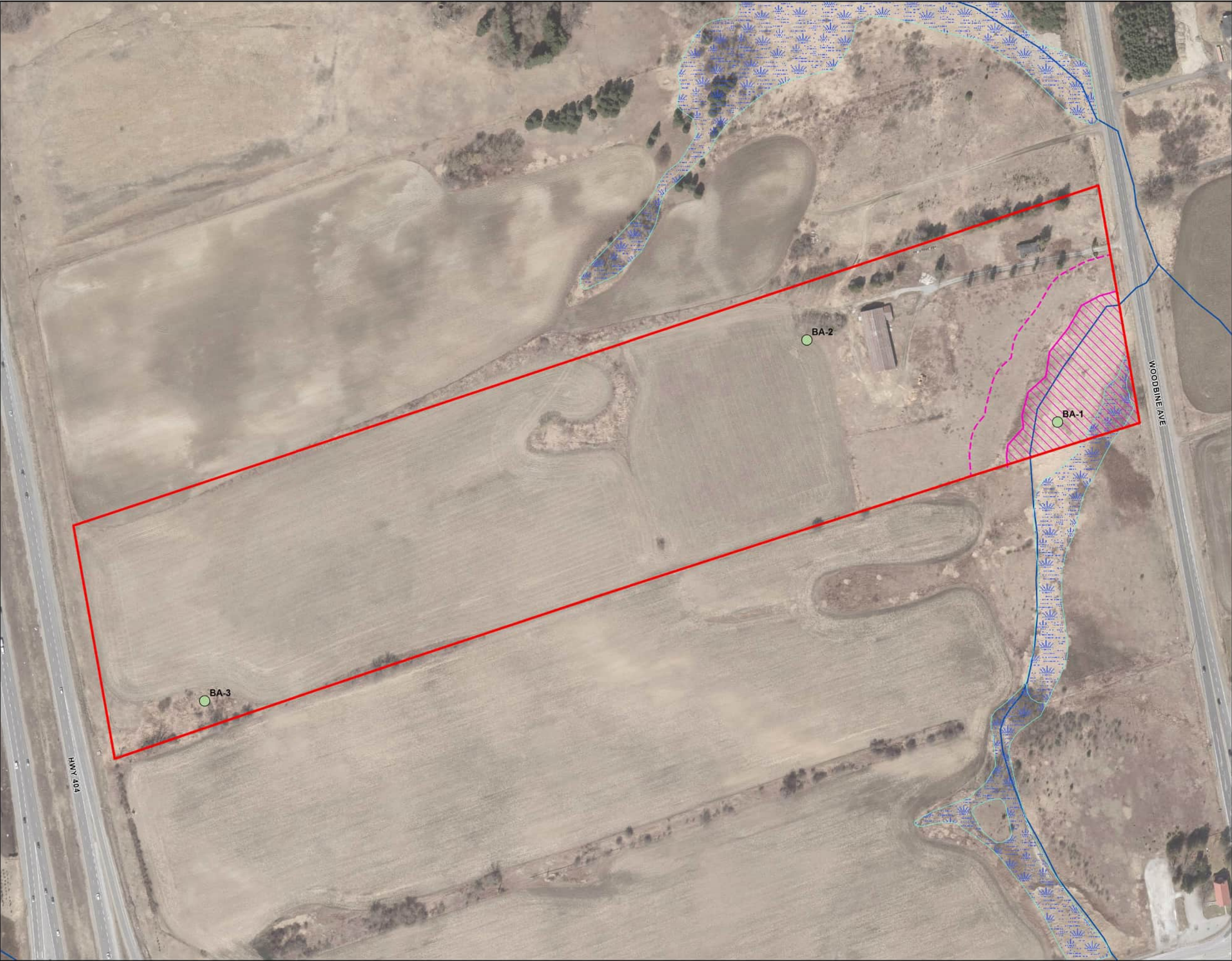


Photo 5: Dry-Moist Old Field Meadow/Cultural Thicket community located in the southwest corner of the Subject Property (October 13, 2022).



Photo 6: Mineral Meadow Marsh community located in the southeast corner of the Subject Property (October 13, 2022).





KEY MAP

LEGEND

- Breeding Amphibian Station
- Watercourse ¹
- Staked Wetland (R-PE Surveying Ltd, June 20th, 2023)
- Wetland Buffer/Development Limit (30 m)
- Wetland Evaluated-Provincial (Bogart Creek Wetland Complex) ²
- Ecological Land Classification (ELC)
- Subject Property (16.6 ha)

ELC LEGEND:

ANTH: Anthropogenic
AGR: Agricultural
HR: Hedgerow
CUM1-1: Dry-Moist Old Field Meadow Type
CUM1-1/CUT1: Dry-Moist Old Field Meadow Type /Cultural Thicket
MAM: Mineral Meadow Marsh

1 - Ontario Hydro Network (OHN)
2 - Land Information Ontario (LIO)

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Drawn: SM
Checked: ED
Date: Feb 23, 2026
Source Notes:
Base Imagery (2021) provided by York region open GIS services.

NORTH

CLIENT

Vistaview Mgmt (Treasure Hill)

PROJECT

15450 Woodbine Ave EIS

TITLE

Existing Environmental Conditions

REF. NO. 2108402-2-3

Figure 2

4.2.2 Flora

A total of 56 species of vascular plants were recorded within the Subject Property during the 2022 and 2023 field surveys, including 41 (73%) native species, ten (18%) species which are non-native to Ontario, and five species were identified to the genus only due to the limited representation of key characteristics (Appendix C). The high recorded presence of non-native species is indicative of past disturbance on the Subject Property, typical of developed areas (Morton and Venn 1984). Oldham *et al.* (1995) indicate that in southern Ontario plant communities, non-native flora presence averages between 20 and 30%. No listed plant SAR or locally rare vegetation species were observed (Ministry of Natural Resources and Forestry 2021, Oldham and Brinker 2009, Varga, et al. 2000).

All native plants identified as S4 or S5 ranking, indicating that they are common within Ontario (Ministry of Natural Resources and Forestry 2021). One species, White Spruce, was ranked as L3 by the TRCA. L3 ranked species indicate a plant “able to withstand minor disturbance; generally secure in natural matrix; considered to be of regional concern,” (Toronto and Region Conservation Authority 2019). This ranking; however, refers to naturally occurring individuals and not planted individuals as present here. No species were noted as locally significant to York Region. Additionally, no Species at Risk plants were observed during the 2022 and 2023 field investigations.

4.2.3 Wetland Delineation

Onsite wetland delineation was conducted on November 1, 2022, with an SLR ecologist and a representative of the LSRCA (Jessica Chan). Community boundaries were staked for identified wetlands on the Subject Property. These boundaries were refined during a second staking with the LSRCA that occurred on June 16, 2023. A narrow stretch of the mapped Bogart Creek Wetland Complex was also noted on the adjacent property to the north; however, as this portion of the PSW was offsite, SLR and LSRCA staff were unable to delineate the extent of the wetland.

4.3 Wildlife

4.3.1 Breeding Birds

A total of 14 bird species were documented at the site, as summarized in Appendix D. Most of the birds recorded on the Subject Property are considered common, widespread, and abundant in the province of Ontario. The most frequently observed species found included birds characteristic of agricultural areas, such as Song Sparrow (*Melospiza melodia*), Red-winged Blackbird (*Agelaius phoeniceus*), and American Goldfinch (*Carduelis tristis*).

One Species at Risk was recorded on the site: Barn Swallow (*Hirundo rustica*). Barn Swallow is listed as Special Concern both nationally and provincially. Over 20 Barn Swallow individuals were observed on both site visits in and around the barn on the site. Active nests were documented, and it was estimated that at least 25 young were produced in the barn based on later surveys (that were conducted for other purposes) (Photo 7).

One area-sensitive species was recorded at the site: Savannah Sparrow (*Passerculus sandwichensis*) - a grassland area-sensitive species. Area-sensitive species require large areas of continuous habitat for breeding and foraging or are more productive in larger patches. The specific habitat requirements vary by species. Three Savannah Sparrow territories were observed in the open fields of the property on both site visits. This species is very common in southern Ontario and is found in large areas of row crop and or old field.



Photo 7: Barn Swallow nests located within the barn on the Subject Property outside of the breeding season (November 1, 2022).



4.3.2 Breeding Amphibians

Breeding amphibian surveys were conducted on the evenings of April 13, May 10 and June 19, 2023. Three (3) potentially suitable areas on the Subject Property that were within or in close proximity to areas of proposed development were targeted. No amphibian calls were heard on the Subject Property at any of the stations throughout all three visits. Station 3 (BA-3) was dry during all visits. Two amphibians were conducted at this location; however, as this area was previously flagged as a wetland. During the second visit, station 2 (BA-2) was also found to be dry. BA-2 and BA-3 locations were checked again during the June survey and were found to still be dry. As such, amphibian surveys were not conducted on June 19, 2023 at these locations. A summary of the surveys and weather conditions is provided in Table 3 and monitoring station locations are shown on Figure 2.



Table 3: Breeding Amphibian Survey Results (2023)

Breeding Amphibian Monitoring Station	April 13	May 10	June 19
Weather conditions	23°C, Beaufort wind 2, 10% cloud cover	16°C, Beaufort wind 3, 20% cloud cover	20°C, Beaufort wind 2, 30% cloud cover
BA-1	No amphibian calls	No amphibian calls	No amphibian calls
BA-2	No amphibian calls	No amphibian calls	-
BA-3	No amphibian calls	No amphibian calls	-

*Note:

The calling codes are designated according to the Amphibian Road Call Counts (Gartshore et al. 2004).

They are as follows:

- 1 – Individuals of one species can be counted, calls are not overlapping; second number denotes number of individuals.
- 2 – Calls of one species are overlapping; second number denotes estimated number of individuals.
- 3 – Full chorus of one species, calls continuous and overlapping, individuals not distinguishable.

4.3.3 Roosting Bats

No bats were observed exiting the man-made structures (house or barn) on site during the two exit surveys completed on July 19 and June 27, 2023. Additionally, no guano was observed in accessible portions of the structures during either of the bat guano surveys. Five species of bats; however, were recorded foraging using the handheld bat detector in the vicinity of the structures. These species include Big brown bat (*Eptesicus fuscus*), Silver-haired bat (*Lasionycteris noctivagans*), Eastern red bat (*Lasiurus borealis*), Hoary bat (*Lasiurus cinereus*), and Little brown myotis (*Myotis lucifugus*).

Little brown myotis, which is a Species at Risk, was recorded in the area during the bat exit surveys targeting the barn and vacant house on site. Based on the field assessments, no suitable forested habitat is present on the Subject Property and neither the barn nor the vacant house were being utilized by this species for maternal roosting habitat. This species, as well as other Species at Risk bats, are discussed further in Section 5.3.

4.3.4 Incidental Wildlife

Wildlife expected to be present primarily consist of common, generalist and urban-adapted species such as Raccoon (*Procyon lotor*), Skunk (*Mephitis mephitis*), and Eastern Grey Squirrel (*Sciurus carolinensis*). 2022 and 2023 field investigations confirmed the following species:

- American Crow (*Corvus brachyrhynchos*) – observed entering and exiting the vacant barn structure during 2022 investigations.
- Coyote (*Canis latrans*) – scat documented on site.
- Mallard (*Anas platyrhynchos*) – two individuals observed within the area of pooled water west of the barn (BA-2) during the April 13, 2023 site visit.
- Spring Peeper – calls heard offsite to the east during the April 13, 2023 site visit.
- Skunk – observed on the existing driveway on site during the June 19, 2023 field visit.



5.0 Significant Natural Heritage Features

No ANSIs, valleylands, or Significant Woodlands are present on the Subject Property. Further discussion of aquatic features, SAR, and SWH is given below. The PSW in the southeast corner of the Subject Property is the feature driving the Significant Environmental Area designation and therefore the Significant Environmental Area boundaries should align with the PSWs and its associated protective buffer. In accordance with Section 7.3 (iv) of the Town's OP, and subsequently Section 3.2.5.4 of the Greenbelt Plan, this PSW requires a minimum vegetation protection zone of 30 m.

Note that to date, a floodplain for the site has not been shown in this EIS. Thus, it is possible that floodplain constraints could supersede natural heritage constraints. Based on our experience; however, in this location it is unlikely that this will be the case. SLR understands that LSRCA will supply floodplain delineation mapping to SCS Consulting.

5.1 Aquatic Features and Fish Habitat

As noted previously, no watercourse was observed in the fall of 2022. A feature was noted during the spring of 2023; however, this feature was deemed to be an HDF due to its small catchment size and lack of a defined channel. This feature is within the PSW and is protected the PSW's minimum vegetation protection zone of 30 m.

5.2 Key Natural Heritage and Hydrological Features

As identified in Section 2 above, the Greenbelt Plan identifies KNHFs and KHF's that are afforded protection. These are consistent with the KNHF/KHF's listed within York Region's and the Town of Whitchurch-Stouffville's Official Plan documents. Such features have been evaluated within the Subject Property, as follows:

- Wetlands:
 - A portion of the Bogart Creek Wetland Complex PSW, which is comprised of a Mineral Meadow Marsh (MAM) community, is located in the southeast corner of the Subject Property. Due to the wetland's provincial significance, it is considered both a KNHF and a KHF. Staking of this wetland was completed by the LSRCA and SLR on November 1, 2022. Refinement of the wetland boundary was completed by the LSRCA and SLR on June 16, 2023 and is reflected in Figure 2.
 - A narrow portion of the Bogart Creek Wetland Complex PSW is also noted on the adjacent property to the north. Based on existing mapping this offsite wetland is greater than 30 m from the Subject Property. Amy Knapp, a representative from the LSRCA, confirmed this stating that the proposed development area is not within an area governed by Ontario Regulation 41/24 under the Conservation Authorities Act (June 28, 2023).

5.3 Species at Risk

Prior to field investigations, a background review was completed for potential SAR habitat opportunities. The NHIC database, the Ontario Breeding Bird Atlas (OBBA), the Ontario Reptile and Amphibian Atlas (ORAA), and the Ontario Butterfly Atlas (OBA) were screened for SAR records.

Based on available background information and the 2022 and 2023 field investigations, the Subject Property was screened for potential SAR habitat opportunities.



The assessment was conducted by comparing habitat preferences of species deemed to have potential to occur against current site conditions. This SAR habitat assessment can be found in Appendix E and provides a detailed description of each species' habitat, as well as a discussion of habitat suitability within the Subject Property, potential impacts, and mitigation, where applicable. The following five SAR have been identified as having potential habitat within the Subject Property:

5.3.1 Birds

- Barn Swallow – Special Concern

5.3.2 Mammals

- Eastern Small-footed Myotis (*Myotis leibii*) – Endangered
- Little Brown Myotis – Endangered
- Northern Myotis (*Myotis septentrionalis*) – Endangered
- Tri-colored Bat (*Perimyotis subflavus*) – Endangered

Barn Swallow is further discussed under SWH.

Potential SAR bat roosting habitat (i.e., the barn and the vacant house) was identified on the Subject Property. These structures underwent two bat exit surveys and two bat guano surveys to determine if these structures were being used for roosting purposes. No evidence of SAR bats using these structures were noted during these surveys (i.e., no guano observed, and no bats observed going in and out of the buildings). A Little Brown Myotis was recorded in the area during the bat exit surveys. Based on SLR's professional experience and field assessments, this SAR was likely foraging over the open meadows on the Subject Property and were likely roosting in the large wetland / wooded complex to the north of the site. Thus, the Subject Property is not considered SAR bat habitat.

Discussions of these impacts and potential mitigation measures are discussed in Sections 7 and 8 of this report respectively.

5.4 Significant Wildlife Habitat

Significant Wildlife Habitat (SWH) can be difficult to appropriately determine at the site-specific level, as the assessment must incorporate information from a wide geographic area and consider other factors such as regional resource patterns and landscape effects. To help with site level assessments, the MNRF has developed the *Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E* (Ontario Ministry of Natural Resources 2015). With the exception of wintering deer yards, which could be, and often are, considered SWH, the detailed identification and designation of SWH has not been completed in York Region or the Town of Whitchurch-Stouffville.

SWH is defined by the MNRF in the Significant Wildlife Habitat Technical Guide (Ontario Ministry of Natural Resources 2000) and Natural Heritage Reference Manual (Ontario Ministry of Natural Resources 2010) and includes the following categories:

- Seasonal Concentration Areas of Animals;
- Rare Vegetation Communities or Specialized Habitats for Wildlife;
- Habitats of Species of Conservation Concern; and



- Animal Movement Corridors.

Criteria for the identification of these features are also provided in the *Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E*. These criteria were used to provide a screening for potential SWH within and immediately adjacent to the proposed development, as detailed in Appendix F.

One SWH, Habitat of Species of Conservation Concern (i.e., Special Concern Barn Swallow Habitat), was identified as having potential to occur on the Subject Property during 2022 investigations due to the presence of roughly 10 Barn Swallow nests in the north portion of the barn in the non-breeding season. Findings from the 2023 breeding bird surveys and subsequent nesting bird surveys indicated approximately 20 Barn Swallow using the barn, producing an estimated 25 offspring or more. As such, this barn was deemed to be SWH.

The proposed development plan would impact this confirmed SWH. The impacts and potential mitigation measures are discussed in Sections 7 and 8 of this report respectively. No other SWH was documented on or adjacent to the Subject Property.

6.0 Proposed Development

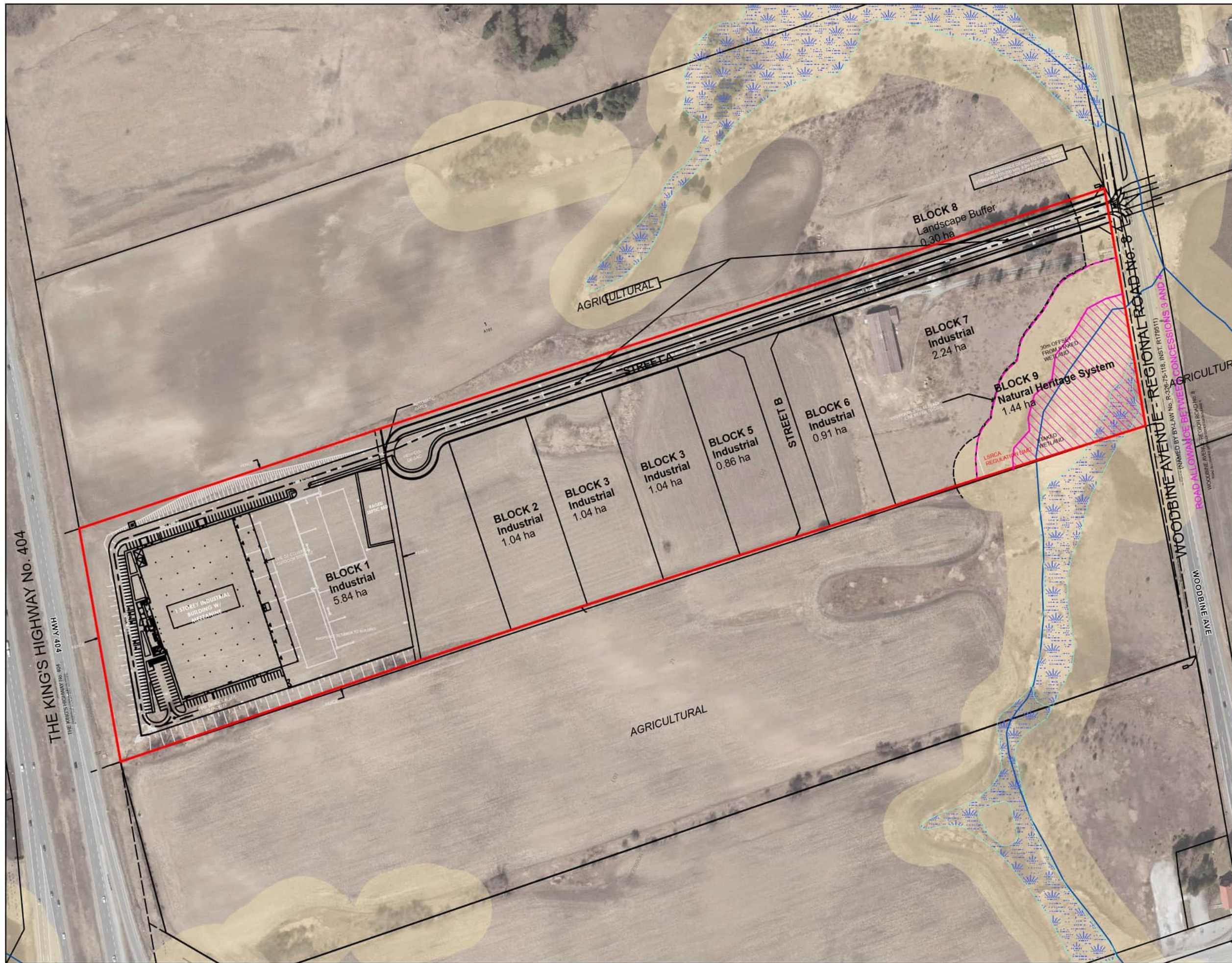
The proposed development is in part a one-storey industrial building with a mezzanine, that also contains an accessory outdoor storage yard, a raised septic bed, and parking (**Figure 3**). Generally, the industrial building is to be situated on the west side of the Subject Property, adjacent to Highway 404 right-of-way. There is a proposed access road along the north property boundary leading from Woodbine Avenue to the proposed development (**Figure 3**). The outdoor storage yard is located to the east of the industrial building and parking is located to the north, west, and south of the industrial building. The industrial building, the outdoor storage yard, and the associated parking occur within the existing Agricultural (AGR) community and Dry-Moist Old Field Meadow Type/Cultural Thicket (CUM1-1/CUT1) community. The vacant house and associated barn structure will be demolished as part of the development plan.

An updated Site Plan was provided in February 2026 which included the expansion of Block 1 to 5.84 ha, plus the inclusion of Blocks 2-7 as additional industrial lots for future development. Block 8 is proposed as a landscape buffer along the north edge of the property and Block 9 contains natural heritage areas that are to be retained. There is also a new road segment between Blocks 5 and 6 to provide access to the adjacent lands to the south (**Figure 3**). No detailed Site Plans have been provided for Blocks 2-7.

As shown on **Figure 3**, the proposed development envelope is to be set back 30 m from the Bogart Creek Wetland Complex PSW and its associated vegetation protection zone.

Grading and stormwater management have been determined by SCS Consulting Group Ltd. (SCS), which has been outlined in the report entitled *Servicing and Stormwater Management Report, 15450 Woodbine Avenue, Town of Whitchurch-Stouffville* (2026). A hydrogeological investigation and water balance assessment has also been completed by EXP Services Inc. (EXP) for the proposed development on the Subject Property. Findings are outlined in the report entitled *15450 Woodbine Avenue, Stouffville, Ontario: Hydrogeological Investigation and Water Balance Assessment* (EXP, 2026). Furthermore, ecological enhancements (i.e., native species plantings) are proposed within the PSW's vegetation protection zone, increasing the ecological function of this feature. These enhancements are discussed further in Section 8.1 below.





KEY MAP

LEGEND

- Watercourse ¹
- Staked Wetland (R-PE Surveying Ltd, June 20th, 2023)
- Wetland Buffer/Development Limit (30 m)
- Wetland Evaluated-Provincial (Bogart Creek Wetland Complex) ²
- Ecological Land Classification (ELC)
- LSRCA Regulation Limit (1.6 ha)
- Grading Plan
- Development Plan (February 5th 2026, MGP)
- Subject Property (16.6 ha)

ELC LEGEND:

ANTH: Anthropogenic
AGR: Agricultural
HR: Hedgerow
CUM1-1: Dry-Moist Old Field Meadow Type
CUM1-1/CUT1: Dry-Moist Old Field Meadow Type /Cultural Thicket
MAM: Mineral Meadow Marsh

1 - Ontario Hydro Network (OHN)
2 - Land Information Ontario (LIO)

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Drawn: SM
Checked: ED
Date: Feb 18, 2026

Source Notes:
Base imagery (2021) provided by York region open GIS services. Contains information licensed under the Open Government Licence – Ontario.

NORTH

CLIENT	Vistaview Mgmt (Treasure Hill)
PROJECT	15450 Woodbine Ave EIS
TITLE	Proposed Development
SLR	REF. NO. 2108402-3-7
	Figure 3

7.0 Impact Assessment

Natural heritage features associated with the Subject Property are primarily linked to the Bogart Creek Wetland Complex PSW. This PSW provides significant ecological and hydrological functions. An assessment of the proposed development on the PSW is provided in Section 7.1 below, with additional mitigation measures outlined in Section 8.1.

Additionally, following an assessment of the vacant structures on the Subject Property, these buildings were determined to be potential habitat for avian and bat SAR. Thus, SLR conducted appropriate wildlife surveys. An assessment of the proposed development on these vacant structures is provided in Sections 7.2 and 7.3 below, with mitigation measures outlined in Sections 8.2 and 8.3. No other natural heritage/hydrological features (i.e., woodlands, lakes, etc.) were identified on or adjacent to the Subject Property.

During construction, there is a potential to affect natural features through the erosion of sediments or other materials into the wetland and/or the mapped watercourse or through disturbances to wildlife. Mitigations for this are discussed in Section 8.

7.1 Natural Heritage Features - Wetlands

The Bogart Creek Wetland Complex PSW is located in the southeast corner of the Subject Property and is associated with a mapped tributary of Weslie Creek. In determining the extent of the PSW, SLR conducted a staking exercise with the LSRCA on November 1, 2022, further refining this wetland boundary on June 16, 2023. Staked boundaries are documented within **Figure 2**, with the PSW being comprised of a Mineral Meadow Marsh (MAM) community. No groundwater inputs to the mapped watercourse were observed by SLR staff, nor were any groundwater-indicator plant species documented.

Development of the proposed industrial buildings and newly proposed industrial blocks is not expected to impact the PSW on the Subject Property. The design avoids the PSW and its 30 m buffer. The proposed access road is approximately 30 m from the PSW's 30 m minimum vegetation protection zone.

As per the *Stormwater Management and Functional Servicing Report (SWFSR)*, 15450 Woodbine Avenue, Town of Whitchurch-Stouffville (SCS, 2026) surface water inputs to the PSW, without mitigation measures, would be significantly reduced from the pre- to post-construction conditions. The A^*c , which is the catchment area multiplied by the runoff coefficient, gives an idea of runoff volume. In the pre-development condition, there is approximately 5.92 ha of catchment area that drains to the PSW with a runoff coefficient of 0.20, yielding an A^*c value of 1.18 ha. In the post-development condition, with the capturing and treatment of surface water from Block 7 which then outlets to the PSW as well as the uncontrolled drainage from overland flow, the A^*c yields a value of 1.95 ha. Thus, the post-development runoff volume is projected to exceed the pre-development runoff volume to the PSW, ensuring that the required runoff volume to the surface-fed wetland is maintained. Further details can be found in Section 6.7 and Table 6.23 of the SWFSR (2026).

Proposed grading for the Subject Property has been designed to provide flat blocks for future industrial uses, conveying drainage northbound to the municipal ROW and limiting uncontrolled drainage to the southern neighbour, while minimizing cut and fill differentials.

Additionally, as per the Hydrogeological Investigation and Water Balance Assessment prepared by EXP (2026), the reduced infiltration resulting from the proposed development will be accounted for through the implementation of Low Impact Development (LID) measures. The SWFSR indicates that the following LID measures will be used: manufactured treatment devices



(i.e. Oil-Grit Separators, Jellyfish filtration units), enhanced grassed swales, underground infiltration systems and underground detention systems. The LIDs have been designed to mimic the pre-development infiltration volumes and therefore there is not expected to be any change in groundwater inputs to the PSW, if this mitigation is implemented.

Potential effluent from the dewatering process during construction will also be released to the municipal sewer system, bypassing the PSW. Furthermore, the zone of influence area is small (5 to 22 m from excavation areas) and is not anticipated to impact the wetland. Thus, through implementation of the proposed mitigation measures described in the *15450 Woodbine Avenue, Stouffville, Ontario: Hydrogeological Investigation and Water Balance Assessment* (EXP, 2026) report, the hydrologic function of the PSW will not be impacted by the proposed development. (SCS, 2026).

7.2 Species at Risk - Roosting Bats

Little Brown Myotis often select attics, abandoned buildings, and barns for summer colonies where they can raise their young (MNRF SARO website). While a Little Brown Myotis was recorded foraging on the Subject Property it was not recorded entering or exiting the on-site structures. Based on field assessments, neither the barn nor the house provides maternal roosting habitat, and no suitable forested habitat is present on the Subject Property.

7.3 Significant Wildlife Habitat - Barn Swallow

Approximately 10 Barn Swallow nests were observed in the old barn, outside of the breeding bird season. 2023 breeding bird surveys results indicated approximately 20 breeding individuals and roughly 25 (or more) young. Consequently, due to the presence of several active nests, this barn was determined to be confirmed SWH.

As the proposed development will remove this confirmed SWH, mitigation measures have been proposed for these impacts and are discussed in Section 8.3.

7.4 Tree Protection Plan

The Arborist Report and Tree Protection Plan provided by Canopy Consulting dated May 11, 2023 (Canopy Consulting, 2023) details the trees identified on site and in the adjacent lands proposed to be retained or removed. A total of 28 trees were found to be in conflict with the initial design (Block 1 only) and were proposed to be removed. With the addition of industrial Blocks 2 through 7, additional trees are expected to be required for removal. No Town-owned trees were identified within the Subject Property.

7.5 LSRCA Regulated Lands

Although LSRCA regulated lands associated with the PSW and its 30 m setback are not to be impacted as part of the proposed development, regulated lands in the northeast corner of the Subject Property (associated with the mapped watercourse) are proposed for development. An access road has been proposed, and a permit has been attained from the LSRCA (Permit No. WSP.2023.026) to complete the associated earthworks. An additional permit may be required for a small area where the southeast corner of Block 7 intersects with the LSRCA regulated area (but does not intersect with the 30 m buffer from the wetland).



7.6 Other Vegetation Communities

Less than 1 ha of cultural meadow, cultural meadow/cultural thicket, and hedgerow habitat is to be removed as part of development. This may impact common species that forage, breed, and live within these communities.

8.0 Mitigation

Mitigation measures for the proposed development are outlined below.

8.1 Natural Heritage Features - Wetlands

Potential effects to the wetlands are largely avoided by the project design and overall placement of the proposed industrial building, storage area, and parking. It is recommended that an Erosion and Sediment Control (ESC) Plan be implemented throughout the phases of this project to avoid the addition of excess sediment into the PSW. The ESC Plan will be developed by SCS Consulting Group.

The 30 m vegetative buffer surrounding the PSW will also provide additional protection to this natural feature, ensuring that the ecological and hydrological functions are maintained. This wetland is not a complicated nor diverse in nature and it contains minimal wetland wildlife. Thus, these proposed protections are considered sufficient.

As per Section 3.4.17 of the YROP and Section 6.33 of the LSPP, development proposals should include landscaping and habitat restoration that increase the ability of native plants and animals to use riparian areas. Thus, to be in accordance with the YROP and LSPP, native species planting within the wetland buffer is recommended, to enhance the riparian area. Restoration of buffers must use native species that achieve natural, self-sustaining vegetation covers.

Woody species that might be suitable for the sloped buffer to the wetland include White Pine (*Pinus strobus*), Eastern White Cedar (*Thuja occidentalis*), Red or Silver Maple (*Acer rubrum* and *saccharinum*), Red Oak (*Quercus rubra*) Trembling Aspen (*Populus tremuloides*), Basswood (*Tilia americana*), Paper Birch (*Betula papyrifera*), regionally present Serviceberry (*Amelanchier spp.*), Red-osier or Gray Dogwood (*Cornus sericea* or *racemosa*), Canada Fly Honeysuckle (*Lonicera canadensis*), or Pin Cherry (*Prunus pensylvanica*), but numerous other species are possible.

8.2 Species at Risk

No mitigation is required for Species at Risk bats.

8.3 Significant Wildlife Habitat – Barn Swallow

Based on the number of breeding individuals, the number of active nests, and number of young documented during 2023 surveys, the barn was determined to be Confirmed SWH. As this structure is scheduled for demolition, habitat compensation in the form of a new nesting structure is recommended. This nesting structure has been proposed to be built north of the PSW and its vegetation buffer, south of the access laneway, and west of Woodbine Avenue.

It should be noted that nests cannot be removed when active. Thus, to avoid interaction with potentially breeding Barn Swallow, an approximate species-specific demolition timing window between late August and mid April is recommended for the barn (based upon professional experience). Development timing; however, may require the demolition of the barn



(and the vacant house) within the breeding bird window. Should demolition occur within this window, a qualified biologist should complete a nesting bird survey within the structures, to ensure that there are no conflicts with the *Migratory Birds Convention Act* (MBCA). These surveys should be completed no earlier than 48 hours prior to planned demolition activities. If activity is detected, demolition activities would be delayed until it can be established that the birds have fledged and left the nest.

8.4 Wildlife Disturbance

The anticipated removal of vegetation communities will only impact agricultural lands or 'cultural' vegetation communities (i.e., meadows, thickets, and hedgerows). No significant natural or hydrological features on the Subject Property are proposed to be altered or removed.

The *Migratory Birds Convention Act, 1994* (MBCA) and Migratory Birds regulations, 2022 (MBR), together with the provincial *Fish and Wildlife Conservation Act* (Government of Ontario, 1997), protect most species of migratory birds and their nests and eggs anywhere they are found in Canada (Government of Canada, 1994). General prohibitions under the MBCA and MBR protect migratory birds, their nests, and their eggs and prohibit the deposit of harmful substances in waters / areas frequented by them. The MBR includes an additional prohibition against incidental take, which is the inadvertent harming or destruction of birds, nests, or eggs. Compliance with the MBCA and MBR is best achieved through a due diligence approach, which identifies potential risk, based on a site-specific analysis in consideration of the Avoidance Guidelines and Best Management Practices information on the Environment Canada website (Government of Canada, 2018).

Due to the need for vegetation clearing and structure demolition, it is recommended that the required vegetation clearing (meadows, thickets, or trees) within these communities and the demolition of structures occur outside the breeding bird nesting window, which is from April 1 to August 31. This will prevent the potential destruction of active nests and their potential eggs, ultimately complying with the *Migratory Birds Convention Act* (1994). The winter season, during frozen ground conditions, is the ideal period for tree and vegetation removal and structure demolition. However, in the event that tree and vegetation removal or structure demolition must occur within the breeding bird window, a qualified biologist must screen the areas for active nests. Clearing or demolition in identified nesting areas would be prohibited until such time that it has been confirmed that the young have fledged.

8.5 Other Items

One patch of Japanese Knotweed was observed east of the old house. This was the only location of this highly invasive species observed on the Subject Property. It is recommended that this species is fully removed from the Subject Property, to stop its spread on-site or elsewhere, as it is potentially damaging to ecosystems and infrastructure. To do this, *Japanese Knotweed, Best Management Practice Technical Document for Land Managers* (2017) and other documents can be referred to. All roots and plant parts need to be removed from the Subject Property responsibly or possibly burned on site. Since the patch is close to the driveway and not close to other natural features, it may be possible to use an excavator to remove the plant and its roots as a first step.

9.0 Policy Conformity

A summary of applicable natural heritage policies and the manner in which the proposed development plan meets their requirements is provided in Table 4. With the implementation of



the abovementioned mitigation measures, there are no predicted negative impacts to the limited Key Natural Heritage Features observed adjacent to the Subject Property or their ecological functions.

Table 4: Policy Conformity

Policy Document	Policy Intent/Objective	Implications and Policy Conformity
Provincial Planning Statement	Direction to regional and local municipalities regarding planning policies for the protection and management of natural heritage features.	Development or site alteration is not to occur within a Significant Wetland in Ecoregion 6E. A portion of a PSW (i.e., the Bogart Creek Wetland Complex) is documented on and immediately adjacent to the Subject Property. The PSW will be protected. Mitigation for the removal of Barn Swallow SWH is proposed.
Greenbelt Plan (2017)	Provides permanent protection to the agricultural land base and the ecological and hydrological feature areas and their functions occurring on the landscape of the Greater Golden Horseshoe. Development or site alteration within the Protected Countryside land use designation must demonstrate that there will be no negative impacts to KNHFs and KHF.	The PSW on and adjacent to the Subject Property is classified as a KNHF and a KHF and is found outside the NHS. As such, a 30 m vegetated buffer is required for the PSW as per Section 3.2.5.4 of the Greenbelt Plan. Mitigation for the removal of Barn Swallow SWH is proposed.
York Region Official Plan (2022)	Provides policies guiding new planning and development in York Region. The Regional Greenlands and Water Resource System protects KNHFs and KHF within York Region.	Of the OP-recognized KNHFs and KHF, a wetland (i.e., The Bogart-Creek Wetland Complex) was identified. As per Table 3 of the YROP, this wetland requires a 30 m vegetated buffer. Mitigation for the removal of Barn Swallow SWH is proposed.
Town of Whitchurch-Stouffville Official Plan (2020)	Contains policies and implementation approaches to guide decision making by the Town with respect to the natural environment, land use, community services, social and cultural matters, and development review.	The east side of the Subject Property contains a Significant Environmental Area as per the Town's Greenlands System. In accordance with Sections 7.3 (iv) and 7.3 (v) of the Town's OP, natural and hydrological features are to adhere to environmental policies outlined in the Greenbelt Plan and Section 3 of the Town's OP. Consequently, to be in accordance with these policies, the PSW requires a 30 m vegetated buffer. Mitigation for the removal of Barn Swallow SWH is proposed.
Vandorf-Preston Lake Secondary Plan (2001)	Establishes the principles, objectives, and general policies to guide the planning of the Vandorf and Preston Lake communities and their adjacent lands.	The Subject Property contains both a Potential Employment Area and a Significant Environmental Area land use designation. The portion of the Subject Property designated as Potential Employment Area allows for the development of an industrial building. The portion of the Subject Property designated as a Significant Environmental Area is subject to the policies of Section 3.4.2 of the Town's OP



Policy Document	Policy Intent/Objective	Implications and Policy Conformity
		and to Section 3.2 of the Greenbelt Plan. Consequently, to be in accordance with these policies, the PSW requires a 30 m vegetated buffer.
Lake Simcoe Protection Plan (2008)	Provides a legislative framework for protecting the Lake Simcoe watershed.	The Subject Property is located within the boundaries of the LSPP and is also located within a rural settlement area. Per the LSPP, the submitted proposal application should contain plans to minimize urban run-off into the PSW, as well as landscaping/habitat restoration plans to improve riparian areas on the Subject Property.
Lake Simcoe Regional Conservation Authority (O. Reg. 41/24)	LSRCA regulates activities in wetlands, valleylands, and watercourses.	The Subject Property contains a Regulated Area on the east portion of the property (as identified by LSRCA mapping). A permit has been acquired from the LSRCA for the proposed access road (Permit No. WSP.2023.026), which will intersect the Regulated Area in the northeast corner of the Subject Property. This permit accounts for earthworks (topsoil stripping and cut-fill to pre-grade) associated with this roadway. A second permit may be required where the southeast corner of Block 7 overlaps the regulated area.
Species Conservation Act	Species and the habitat of species designated as Endangered or Threatened are afforded protection.	No Endangered or Threatened habitat recorded.
Migratory Birds Convention Act (1994)	Protect most species of migratory birds and their nests and eggs anywhere they are found in Canada.	Tree clearing and vegetation removal is anticipated as part of the proposed development. Currently vacant structures on the Subject Property, which may be utilized by avian species, will also be removed. It is recommended that vegetation clearing, and the demolition of structures should be conducted outside of April 1 – August 31 to ensure no nesting birds are present/impacted.

10.0 Conclusion

The findings of our study are the result of a background review, field investigations, and an analysis of data using the current scientific understanding of the ecology of the area, as well as the current natural heritage policy requirements. We have evaluated the environmental sensitivities and the natural heritage constraints of the Subject Property, which are described in this report and illustrated on **Figure 3**.

Based on the findings and recommendations of this EIS, it is our professional opinion that the proposed development of the Site Plan is environmentally feasible. It is our expert opinion that the proposed development would not result in negative impacts to the identified natural heritage



feature (i.e., the PSW), provided the recommended mitigation (including a Barn Swallow nesting structure) and enhancement measures set out in this report are implemented.

11.0 Closure

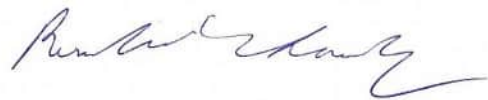
This report has been prepared, reviewed, and approved by the undersigned.

Regards,

SLR Consulting (Canada) Ltd.



Jesse Snider, B.Sc., EPt
Project Manager, Ecology & Biodiversity



Rosalind Chaundy, M.Sc.F.
Senior Ecologist, Ecology & Biodiversity



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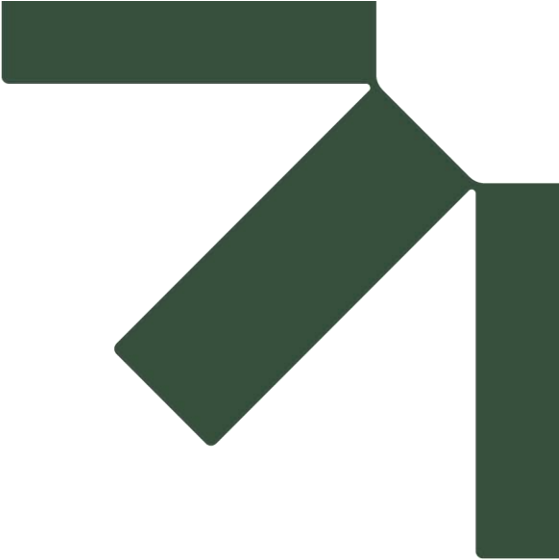
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Appendix A Agency Correspondence

Revised Environmental Impact Study

15450 Woodbine Ave., Town of Whitchurch-Stouffville, ON

Galatia Lane Estates Inc.

SLR Project No.: 244.V24304.00000

May 29, 2026

1. General Information:

Date: _____

Address: _____

Name of consulting firm: _____

Contact information: _____

2. Identify all potential natural heritage and hydrologic features in the study area (check all that apply):

**The LSRCA recognizes that this is a preliminary assessment to determine what studies may be suitable for the property. A site visit may be required to verify the presence/absence of features.*

- | | |
|---|---|
| ☐ Wetland | ☐ Drainage feature/watercourse |
| ☐ Woodland | ☐ Kettle lake |
| ☐ Valleyland | ☐ Seepage area or spring |
| ☐ Grassland or meadow | ☐ Lake or pond (and their littoral zone) |
| ☐ Wildlife habitat | ☐ Lake Simcoe shoreline |
| ☐ Area of natural and scientific interest (ANSI) | ☐ Natural areas abutting Lake Simcoe |
| ☐ Sand barren, savannah or tallgrass prairie | ☐ Habitat of endangered and threatened species |
| ☐ Alvar | ☐ Fish habitat |

3. Activities to be undertaken and studies required for a complete NHE/EIS submission**:

*** Some activities/studies are pre-selected (☑) as they are a minimum requirement for NHE/EIS submissions.*

- ☒ Consult with the appropriate Municipal and Conservation Authority staff, as required, to establish the required scope of study.
- ☒ Identify an appropriate study area - generally the area of anticipated disturbance plus 120 m.
- ☒ Collect and include applicable background information and current environmental mapping for natural heritage and hydrologic features, and the natural heritage system within and surrounding the study area.
- ☒ Identify and provide detailed descriptions of natural heritage and hydrologic features in the study area, their function, and the broader natural heritage system that they are within. Determine the significance of these natural heritage and hydrologic features under applicable policy.
- ☒ Evaluate existing vegetation communities using Ecological Land Classification (ELC) for Southern Ontario (Lee et al. 1998. Ecological Land Classification for Southern Ontario: first approximation and its applications. SCSS Field Guide FG-02). Provide a description of ELC communities in the study area and include completed ELC field sheets as an appendix.
- ☒ Conduct a _____-season vegetation inventory in the late spring/summer/fall. Include the inventory categorized by ELC community as an appendix and denote any Species at Risk and/or provincially/locally rare species.
- ☐ Conduct three (3) breeding amphibian surveys as per the Marsh Monitoring Program protocol (Bird Studies Canada). Observational salamander surveys may be required if potential habitat exists in the study area. Include completed field sheets as an appendix.

- ☐ Conduct two (2) dawn breeding bird surveys between May 24 and July 15, under appropriate conditions, with a minimum of 10 days between surveys, and record all occurrences and breeding behaviors. Point counts, wandering transects or a combination of the two must be used according to features present and site conditions. Include completed field sheets as an appendix. A third survey will be required if suitable grassland bird habitat is present.
- ☒ Record observations of all wildlife occurrences and behaviours and assess wildlife habitat function.
- ☒ Screen for Species at Risk (SAR), listed under the *Endangered Species Act, 2007*, based on existing or potential habitat. Additional species-specific surveys may be required if SAR habitat is present (e.g. butternut health assessments, snag surveys, bat acoustic monitoring surveys, evening whip-poor-will surveys, etc.), please contact the Ministry of Environment, Conservation and Parks (MECP) for further direction. Include any relevant correspondence with the MECP as an appendix
- ☒ Assess for Significant Wildlife Habitat (e.g. turtle nesting or wintering area, reptile hibernaculum, woodland raptor nesting habitat, seeps, springs, etc.) as per the Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E (MNR, January 2015).
- ☒ Identify any ecological linkages or movement corridors within the study area. Demonstrate how connectivity within and between natural heritage and hydrologic features will be maintained and, where possible, improved or restored to allow for the effective dispersal and movement of plants and animals.
- ☒ Provide a general description of the methodology, dates, timing, and locations of completed field surveys.
- ☐ Confirm the boundaries of any wetland and/or woodland features on the property through a staking exercise with the LSRCA. Boundary points must be surveyed with a high-accuracy GPS device (accurate to within 10 cm). A professional Ontario Land Surveyor (OLS) may be required to attend. Wetland staking exercises must be completed between June 15 and September 30 (exceptions may apply). Note that a site visit fee may apply.
- ☐ Complete an aquatic habitat assessment for all drainage features/watercourses in the study area, including characterization of hydrologic features (i.e. permanent, intermittent, ephemeral, headwater drainage feature) and suitability as fish habitat. Include a description of instream and riparian cover, bank stability, substrate composition, stream morphology, dimensions and gradient, thermal regime indicators, potential barriers, woody debris distribution, aquatic vegetation, groundwater seepage areas, etc.
- ☐ Complete a catchment-based water balance for the study area to assess how existing drainage conditions and moisture regimes that support sensitive hydrologic features (e.g. wetland, woodlands, watercourse) may be impacted by the proposed development. Demonstrate how current hydrologic inputs will be maintained post-development. Please note, the water balance assessment may also be a requirement under other provincial policies, therefore the NHE/EIS should coordinate with/summarize the water balance work undertaken by others.
- ☐ Recommend the dimensions of an appropriate vegetation protection zone (VPZ)/buffer to natural heritage and hydrologic features required to mitigate impacts from the proposed development. Recommendations for restoration/plantings should be provided for all buffers.
- ☒ Provide a detailed description of the proposed development.

- ☒ Map the following information separately on current high quality ortho-air photos:
 - 1) ELC vegetation communities, natural heritage and hydrologic features and their associated VPZs, and the proposed development and anticipated limit of disturbance (e.g. grading limits); and,
 - 2) ELC vegetation communities, survey locations, other environmental features (e.g. linkages, wildlife corridors, seeps, springs, stick nests, wildlife habitat, rare species, invasive species, etc.), and existing structures and/or trails.
- ☒ Assess the potential direct, indirect, and cumulative impacts of the proposed development on natural heritage and hydrologic features, the natural heritage system, and related ecological and hydrologic functions.
- ☒ Develop and provide an appropriate avoidance/mitigation/restoration strategy to address the potential impacts of the proposed development.
- ☒ Demonstrate how the proposed development is in conformity with all federal, provincial, regional, and municipal natural heritage policies applicable in the Lake Simcoe watershed.
- ☒ Complete one final report for circulation and approval, prepared by qualified professionals, in an electronic format as well as one (1) hard copy.

4. Additional studies or plans that may be required include:

- ☐ Landscape/Restoration/Planting Plan
- ☐ Edge Management Plan
- ☐ Tree Inventory/Arborist Report/Tree Preservation Plan
- ☐ Trails Impact Study
- ☐ Ecological Offsetting Strategy (please refer to [LSRCA's Ecological Offsetting Policy](#))
- ☐ Environmental Monitoring Plan/Report
- ☐ Fluvial Geomorphological Assessment
- ☐ Natural Channel Design

5. Additional notes and/or requirements:

Please note that changes to the study area, the proposed development, and/or policy changes may require additional information/studies.

Please provide current field survey data in the NHE/EIS submission. Field survey data will be considered valid for five (5) years from the date the survey was conducted, except for Species at Risk screenings, which are valid for one (1) year. If outdated field data is provided, additional surveys may be required.

Re: 2108402 - 15450 Woodbine Avenue Terms of Reference

Jesse Snider <jesse.snider@pecg.ca>
To: Hena Kabir <hena.kabir@townofws.ca>
Cc: Rosalind Chaundy <rosalind.chaundy@pecg.ca>

Thu, Feb 9, 2023 at 9:25 AM

Hi Hena,

I received a call from the LSRCA on February 7 and they told me that they can no longer officially comment on TORs. They said that this responsibility now falls to the Municipality.

Kind regards,
Jesse

On Thu, Feb 9, 2023, 9:21 a.m. Hena Kabir <hena.kabir@townofws.ca> wrote:

Hi Jesse,

I have no questions. Has LSRCA signed off? All I need is a sign off email from them on the TOR.

Thank you,
Hena Kabir

Respecting Your Right To Disconnect – If your normal working hours are not the same as mine, please feel free to wait until your core business hours to provide me with a response.

From: Jesse Snider <jesse.snider@pecg.ca>
Sent: Wednesday, February 8, 2023 11:46 AM
To: Hena Kabir <hena.kabir@townofws.ca>
Cc: Rosalind Chaundy <rosalind.chaundy@pecg.ca>
Subject: Re: 2108402 - 15450 Woodbine Avenue Terms of Reference

Hi Hena,

Following up on this TOR to ensure that you and your team have received it and don't have any questions pertaining to it.

Thank you,

Jesse Snider



| c (905) 806 3571 | e jesse.snider@pecg.ca

Learn More:

www.pecg.ca

On Tue, Jan 24, 2023 at 12:22 PM Jesse Snider <jesse.snider@pecg.ca> wrote:

Hi Hena,

Please find attached the Terms of Reference checklist for EIS work to be carried out at 15450 Woodbine Avenue in the Town of Whitchurch-Stouffville. This checklist was also submitted to the LSRCA on January 13, 2023. Please note that breeding bird survey results, amphibian breeding survey results, wetland staking results, and the spring/summer vegetation survey results will be incorporated as part of an EIS addendum, as Galatia Lane Estates Inc. c/o Treasure Hill plans to submit a zoning by-law amendment application prior to the completion of these surveys.

If you have any questions, please let me know.

Thank you,

Jesse Snider

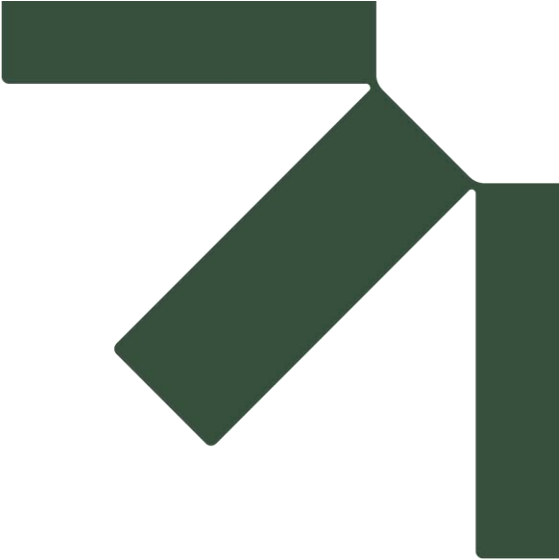
Ecology Project Coordinator



| c (905) 806 3571 | e jesse.snider@pecg.ca

Learn More:

www.pecg.ca



Appendix B LSRCA Meadow Memo

Revised Environmental Impact Study

15450 Woodbine Ave., Town of Whitchurch-Stouffville, ON

Galatia Lane Estates Inc.

SLR Project No.: 244.V24304.00000

May 29, 2026



Memorandum

Date: December 2, 2022

Project #: 2108402

To: Jessica Chan, Natural Heritage Ecologist, Lake Simcoe Region Conservation Authority

From: Rosalind Chaundy, Senior Ecologist, Palmer

cc: Hesham Mohamed, Project Manager, Treasure Hill

Re: Assessment of meadow situated on west side of 15450 Woodbine Ave, Gormley

1. Introduction

Palmer is preparing an Environmental Impact Study on behalf of Treasure Hill for a proposed panel plant at 15450 Woodbine Ave., Gormley, York Region. Treasure Hill having recently acquired the property would like to determine as early as possible, the natural feature constraints present. Lake Simcoe Region Conservation Authority (LSRCA) met Treasure Hill and Palmer on site on November 1 2022 to discuss the preliminarily staked wetland features on site. It was agreed by all that final confirmation of wetland limits would have to occur in the late spring/early summer of 2023 owing to the late time of the year and partial senescence of vegetation.

One of the features examined was a moist meadow with scattered shrubs and trees in the southwestern corner of the property (**Figure 1**).

A central part of this area was thought to be a wetland and was staked as such with LSRCA on Nov. 1, 2022 (**Figure 2**). The uncultivated area including both the staked area and an area around this is shown in **Photo 1**.



Photo 1. General area viewed from a field to the east.

At the time of the feature staking, Palmer had not conducted soil sampling, due to time constraints. After the staking Palmer augered two soil samples in the centre west and centre east of the meadow. Palmer also recorded observations of plant species present on November, 1 2022. After the soil sampling, Palmer concluded that the staked area was in fact a moist terrestrial cultural meadow and not a wetland meadow marsh as originally thought. This memo explains those conclusions.

2. Observations

2.1 Vegetation

The area staked and surveyed is primarily composed of meadow herbaceous vegetation. At the east end there are a few individual willow (*Salix sp.*) and Red-Osier Dogwood (*Cornus sericea*) shrubs. Plants recorded were: Reed Canary Grass (*Phalaris arundinacea*), Goldenrod species (*Solidago*, presumed to be *altissima*); unidentified Aster sp. (*Symphyotrichum sp.*), and a very small number of cattail sp. (*Typha sp.*) individuals. Photos taken from the east end and centre of the staked area are provided in **Photos 2** through **4**.

Memorandum

Page 3 | December 2, 2022

Assessment of meadow situated on west side of 15450 Woodbine Ave, Gormley



Photo 2. Staked meadow from approximate east edge looking west.



Photo 3. Meadow from centre-west looking east.



Photo 3. Meadow from centre-east looking northeast.

While cattail species are always considered a wetland species, and willow and Red-osier Dogwood are usually found in wetland situations, the latter two species will sometimes grow in moist conditions that are not wetlands. The consideration of the extent and abundance of wetland plant cover needs to be considered (e.g., using the OWES 50/50 rule). These three species were all found in very small numbers and none were dominant (i.e., greater than 50% representation of wetland plant cover does not occur). Wetlands under both the Ontario Wetland Evaluation System, Southern Manual (3rd edition, version 3.3, 2014) and Ecological Land Classification for Southern Ontario (Lee et al. 1998) state that the majority of the plants in a wetland shall be wetland plants (50% wetland vegetation). Thus, wetland plants can be found in uplands (or terrestrial systems) and vice-versa.

The dominant plants in the staked meadow were Reed Canary Grass and goldenrod. The Reed Canary Grass is more often found in wetland situations (such as along watercourses or low meadows) however it can fairly often be found in areas of uplands that have moist soil but are not wetlands. When this conclusion is made, it is generally based on a combination of and assessment of the accompanying plants and the soils. Soils are described in the next section.

A factor to consider is the Coefficient of Wetness (Floristic Assessment System for Southern Ontario Oldham et al, 1995). This is a number from 5 to -5 which indicates the moisture conditions that a species is found in. For example, at the dry end is 5 (almost always occurs in uplands), in the middle is 1 to -1

(found in uplands to wetland), and -5 (almost always found in wetlands). Some have described -3 as 'usually occurs in wetlands'. This scale does not show the range that a species can occur across. For instance, some species always require standing water and as such is likely to only be a -5, however some species occur across a range of conditions. An example is Eastern White Cedar which is given a -3 Coefficient of Wetness, however this species can be found in very dry conditions (perhaps in a dry field or alvar where species are usually a 4 or 5) through to wet organic swamps (perhaps -4), thus the single number does not show the breadth of moisture conditions a species is found within. Note that these Coefficient of Wetness numbers are a completely different system than the soil Moisture Regime system described below.

Reed Canary Grass has a Coefficient of Wetness number of -3, however as stated above, this species is fairly tolerant of a range of conditions and in our experience can be found in moist, but non-wetland conditions.

The most common plant in the meadow along with Reed Canary Grass was goldenrod. This was thought to be Tall Goldenrod (*S. altissima* or possibly the closely related *S. canadensis*). This species is usually an upland meadow species, although it can grow at the edges of meadow marshes. This species has a Coefficient of Wetness of 3 (i.e. is generally an upland plant). Asters were also present however they could not be identified to species. There are both upland and wetland species of aster, as well as species that can be found across the interface of wetlands and uplands.

2.2 Soils

The results of two soil samples (#3 and 4) that were taken with a standard auger are given in **Tables 1 and 2**. Soil samples #1 and #2 are from elsewhere on the property and were for a different community. Using *Soil Moisture Regime for Deep Soils (Chart B)* from Lee et.al 1998, both soil samples indicate that the soil moisture regime is that of an upland not wetland community.

Table 1. Soil Sample #3 (Nov 1, 2022)

Layer	Description and Comments
Litter Layer	Negligible
Depth of Organics (Of, Om, Oh)	None present
A Layer (top layer: depth, colour, texture, etc.)	Sandy/silt loam (Pore Pattern 3 or 4); 0 – 50 cm; mid brown,
B Layer (second layer: depth, colour, texture, etc.)	Similar pore pattern to A; 50 – 65 cm; paler grey-brown
Depth to Distinct Mottles	~65 cm
Depth to Gley (cm)	None observed
Maximum Depth of Soil Sample	~65 cm
Water Table Reached (cm depth)	Not reached
Resultant Moisture Region & Community*	3 very fresh or possibly 4 moderately moist. Non-hydric soils. Upland (= Terrestrial)

*Moisture Regime: Ø, 0-4 (Dry through Moderately Moist) considered upland;

5-9 (Moist through Very Wet considered wetland (ELC manual Lee et al. 1998).

Table 2. Soil Sample #4 (Nov 1, 2022)

Layer	Description and Comments
Litter Layer	Negligible
Depth of Organics (cm of Of, Om, Oh)	None present
A Layer (top layer: depth, colour, texture, etc.)	Loam (Pore Pattern 3, maybe 4); 0 – 75 cm; mid brown at 70 cm becoming much darker almost black at bottom of layer
B Layer (second layer: depth, colour, texture, etc.)	Pore Pattern slightly finer than above (4); 75-80 cm; pale beige
Depth to Distinct Mottles	75 cm (a few indistinct mottles above)
Depth to Gley (cm)	None observed
Maximum Depth of Soil Sample	~80 cm
Water Table Reached (cm depth)	Not reached
Resultant Moisture Region & Community*	3 very fresh. Non-hydric soils. Upland (= Terrestrial)

* Moisture Regime: Ø, 0-4 (Dry through Moderately Moist) considered upland

5-9 (Moist through Very Wet considered wetland (ELC manual Lee et al. 1998)

3. Conclusions

Thus, based on the soil information, which is key, and on the vegetation present, it is Palmer's opinion that the meadow should be described as a moist upland (terrestrial) meadow (i.e. Cultural Meadow CUM1) and not a Reed Canary Grass Mineral Meadow Marsh (MAM2-2), and thus in our opinion, the staked line in the west part of the property does not delineate a feature.

Prepared By:



Rosalind Chaundy, M.Sc.F
Senior Ecologist

Reviewed By:



Dirk Janas, B.Sc.
Principal, Ecologist

Memorandum

Page 7 | December 2, 2022

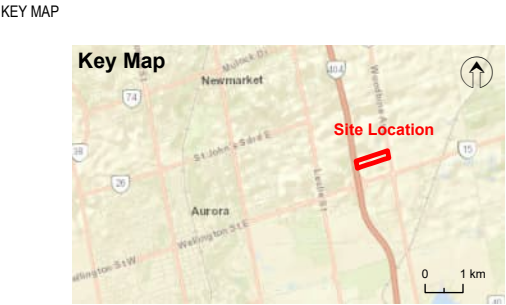
Assessment of meadow situated on west side of 15450 Woodbine Ave, Gormley



References

Lee, H.T., W.D. Bakowsky, J. Riley, J. Bowles, M. Puddister, P. Uhlig and S. McMurray. 1998. Ecological Land Classification for Southern Ontario: First Approximation and Its Application. Ontario Ministry of Natural Resources, Southcentral Science Section, Science Development and Transfer Branch. SCSS Field Guide FG-02.

Ontario Ministry of Natural Resources. 2014.
Ontario Wetland Evaluation System. Southern Manual. 3rd Edition, Version 3.3.



- LEGEND
- Watercourse ¹
 - Wetland ²
 - Unevaluated
 - Evaluated-Provincial (Bogart Creek Wetland Complex)
 - Subject Property (16.6 ha)

1 - Ontario Hydro Network (OHN)
2 - Land Information Ontario (LIO)

0 100 200 300 400 500
METRE SCALE

North American Datum 1983
Universal Transverse Mercator Projection Zone 17

Scale: 1:8,000
Page Size: Tabloid (11 x 17 inches)

Drawn: SM
Checked: ED
Date: Dec 1, 2022

Source Notes:
Base Imagery (2021) provided by York region open GIS services.

DRAFT

NORTH

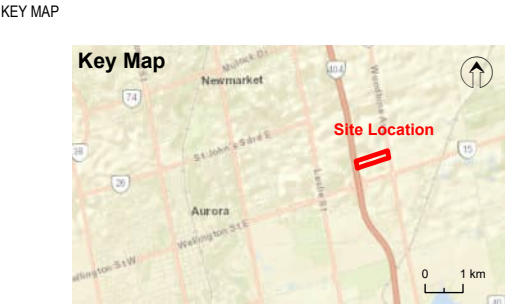
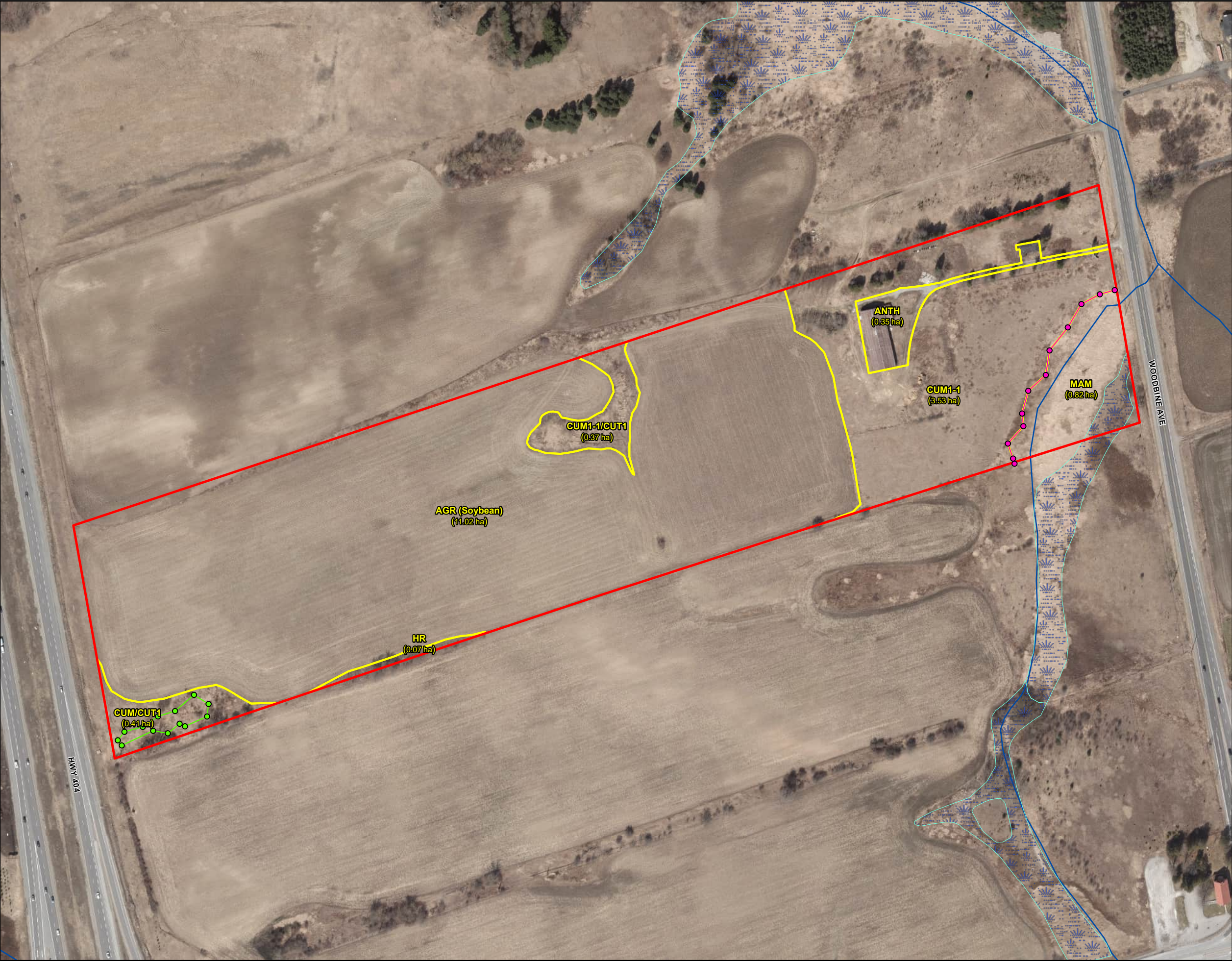
CLIENT
Vistaview Mgmt (Treasure Hill)

PROJECT
15450 Woodbine Ave EIS

TITLE
Site Location

Palmer™

REF. NO. 2108402-1-1
Figure 1



LEGEND

- Watercourse ¹
- Preliminary Staked Feature (Nov 1 2022 LSRCA/Palmer)
- Staked Line - See memo for discussion (Nov 1 2022 LSRCA/Palmer)
- Wetland Evaluated-Provincial (Bogart Creek Wetland Complex) ²
- Ecological Land Classification (ELC)
- Subject Property (16.6 ha)

ELC LEGEND:

ANTH: Anthropogenic
AGR: Agricultural
CUM1-1: Dry-Moist Old Field Meadow Type
CUM1-1/CUT1: Dry-Moist Old Field Meadow Type /Cultural Thicket
MAM: Mineral Meadow Marsh

1 - Ontario Hydro Network (OHN)
2 - Land Information Ontario (LIO)

0 50 100 150 200
METRE SCALE

North American Datum 1983
Universal Transverse Mercator Projection Zone 17

Scale: 1:3,000
Page Size: Tabloid (11 x 17 inches)

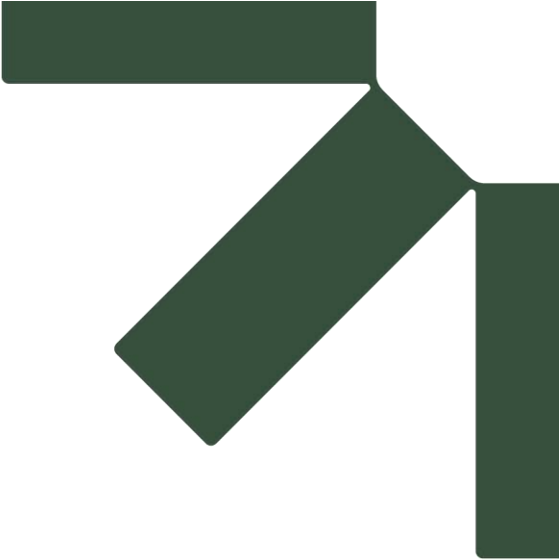
Drawn: SM
Checked: ED
Date: Dec 2, 2022

Source Notes:
Base Imagery (2021) provided by York region open GIS services.

DRAFT

NORTH

CLIENT	Vistaview Mgmt (Treasure Hill)	
PROJECT	5450 Woodbine Ave EIS	
TITLE	Existing Environmental Conditions	
Palmer™	REF. NO.	2108402-2-1
	Figure 2	



Appendix C Flora List

Revised Environmental Impact Study

15450 Woodbine Ave., Town of Whitchurch-Stouffville, ON

Galatia Lane Estates Inc.

SLR Project No.: 244.V24304.00000

May 29, 2026

Flora List

Scientific Name	Common Name	Native/Exotic Unranked	S Rank	COSEWIC Status	SARO Status	Coefficient of Conservatism	Coefficient of Wetness
<i>Abies balsamea</i>	Balsam Fir	N	S5			5	-3
<i>Anemone</i> sp.	Anemone Species						
<i>Betula papyrifera</i>	Paper Birch	N	S5			2	3
<i>Bidens frondosa</i>	Devil's Beggarticks	N	S5			3	-3
<i>Carex cristatella</i>	Crested Sedge	N	S5			3	-3
<i>Carex lupulina</i>	Hop Sedge	N	S5			6	-5
<i>Carex</i> sp.	Sedge Species						
<i>Chamaenerion angustifolium</i>	Fireweed	N	S5			3	0
<i>Chenopodium album</i>	Common Lamb's-quarters	E	SNA				3
<i>Circaea canadensis</i>	Broad-leaved Enchanter's Nightshade	N	S5			2	3
<i>Clinopodium vulgare</i>	Wild Basil	N	S5			4	5
<i>Cornus sericea</i>	Red-osier Dogwood	N	S5			2	-3
<i>Dactylis glomerata</i>	Orchard Grass	E	SNA				3
<i>Equisetum arvense</i>	Field Horsetail	N	S5			0	0
<i>Eupatorium perfoliatum</i>	Common Boneset	N	S5			2	-3
<i>Euthamia graminifolia</i>	Grass-leaved Goldenrod	N	S5			2	0
<i>Fragaria vesca</i>	Woodland Strawberry	N	S5			4	3
<i>Fraxinus americana</i>	White Ash	N	S4			4	3
<i>Galium palustre</i>	Common Marsh Bedstraw	N	S5			5	-5
<i>Glyceria grandis</i>	Tall Mannagrass	N	S5			5	-5
<i>Impatiens capensis</i>	Spotted Jewelweed	N	S5			4	-3
<i>Juncus canadensis</i>	Canada Rush	N	S5			6	-5
<i>Leucanthemum vulgare</i>	Oxeye Daisy	E	SNA				5
<i>Lotus corniculatus</i>	Garden Bird's-foot Trefoil	E	SNA				3
<i>Lycopus americanus</i>	American Water-horehound	N	S5			4	-5
<i>Lythrum salicaria</i>	Purple Loosestrife	E	SNA				-5
<i>Nabalus albus</i>	White Rattlesnakeroot	N	S5			6	3
<i>Nasturtium officinale</i>	Watercress	E	SNA				-5
<i>Onoclea sensibilis</i>	Sensitive Fern	N	S5			4	-3
<i>Phalaris arundinacea</i>	Reed Canarygrass	N	S5			0	-3
<i>Picea glauca</i>	White Spruce	N	S5			6	3
<i>Poa</i> sp.	Bluegrass Species						
<i>Populus balsamifera</i>	Balsam Poplar	N	S5			4	-3
<i>Populus tremuloides</i>	Trembling Aspen	N	S5			2	0
<i>Prenanthes</i> sp.	Rattlesnake-root Species						
<i>Prunella vulgaris</i>	Common Self-heal	N	S5			0	0
<i>Rhamnus cathartica</i>	European Buckthorn	E	SNA				0
<i>Rumex</i> sp.	Dock Species						
<i>Salix bebbiana</i>	Bebb's Willow	N	S5			4	-3
<i>Salix discolor</i>	Pussy Willow	N	S5			3	-3
<i>Salix eriocephala</i>	Cottony Willow	N	S5			4	-3
<i>Schoenoplectus acutus</i>	Hard-stemmed Bulrush	N	S5			5	-5
<i>Scirpus atrovirens</i>	Black-girdled Bulrush	N	S5			5	-5
<i>Solidago altissima</i>	Tall Goldenrod	N	S5			1	3
<i>Solidago gigantea</i>	Giant Goldenrod	N	S5			4	-3
<i>Symphyotrichum cordifolium</i>	Heart-leaved Aster	N	S5			5	5
<i>Symphyotrichum ericoides</i>	White Heath Aster	N	S5			4	3
<i>Tarenaya hassleriana</i>	Pink-queen	E	SNA				5
<i>Thuja occidentalis</i>	Eastern White Cedar	N	S5			4	-3
<i>Toxicodendron radicans</i>	Poison Ivy	N	S5			2	0
<i>Trifolium pratense</i>	Red Clover	E	SNA				3
<i>Typha angustifolia</i>	Narrow-leaved Cattail	E	SNA				-5
<i>Typha latifolia</i>	Broad-leaved Cattail	N	S5			1	-5
<i>Ulmus rubra</i>	Slippery Elm	N	S5			6	0
<i>Viburnum opulus</i>	Cranberry Viburnum	N	S5			5	-3
<i>Vicia americana</i>	American Vetch	N	S5			5	3



LEGEND	
SRANK	Provincial Status: Provincial ranks are used by the NHIC to set protection priorities for rare species and natural communities. These ranks are not legal generally uncommon to common in the province. Species ranked S1-S3 are considered to be rare in Ontario. designations. S4 and S5 species are generally uncommon to common in the province. Species ranked S1-S3 are considered to be rare in Ontario.
S1 Critically Imperiled	Critically imperiled in the nation or state/province because of extreme rarity (often 5 or fewer occurrences) or because of some factor(s) such as very steep declines making it especially vulnerable to extirpation from the state/province.
S2 Imperiled	Imperiled in the nation or state/province because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the nation or state/province.
S3 Vulnerable	Vulnerable in the nation or state/province due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation.
S4 Apparently Secure	Uncommon but not rare; some cause for long-term concern due to declines or other factors.
S5 Secure	Common, widespread, and abundant in the nation or state/province.
SU Unrankable	Currently unrankable due to lack of information or due to substantially conflicting information about status or trends.
SNA Unranked	A conservation status rank is not applicable because the species is not a suitable target for conservation activities.
SX Presumed Extirpated	Species or community is believed to be extirpated from the nation or state/province. Not located despite intensive searches of historical sites and other appropriate habitat, and virtually no likelihood that it will be rediscovered.
SH Possibly Extirpated (Historical)	Species or community occurred historically in the nation or state/province, and there is some possibility that it may be rediscovered.
SE# Exotic Status	
S#? Rank Uncertain	

Ontario Ministry of Natural Resources (OMNR). 2018. Natural Heritage Information Centre Species Lists. Last updated January 30, 2018. <https://www.ontario.ca/page/get-natural-heritage-information>

COSSARO	
END Endangered	A species facing imminent extinction or extirpation in Ontario which is a candidate for regulation under Ontario's ESA.
THR Threatened	A species that is at risk of becoming endangered in Ontario if limiting factors are not reversed.
SC Special Concern	A species with characteristics that make it sensitive to human activities or natural events.
DD Data Deficient	
EXP Extirpated	A species that no longer exists in the wild in Ontario but still occurs elsewhere.

Ontario Ministry of Natural Resources and Forestry (2018). Species Risk in Ontario. Last updated UNE 28, 2018. <https://www.ontario.ca/environment-and-energy/species-risk-type>

COSEWIC	
END Endangered	A wildlife species facing imminent extirpation or extinction.
THR Threatened	A wildlife species that is likely to become endangered if nothing is done to reverse the factors leading to its extirpation or extinction.
SC Special Concern	A wildlife species that may become threatened or endangered because of a combination of biological characteristics and identified threats.
VUL Vulnerable	
NAR Not at Risk	A wildlife species that has been evaluated and found to be not at risk of extinction given the current circumstances.
DD Data Deficient	A category that applies when the available information is insufficient (a) to resolve a wildlife species' eligibility for assessment or (b) to permit an assessment of the wildlife species' risk of extinction.
NA Non-active	
XT Extirpated	A wildlife species that no longer exists in the wild in Canada, but exists elsewhere.

Committee for the Status on Endangered Wildlife in Canada (COSEWIC). 2018. Canadian Wildlife Species at Risk. Last updated February 22, 2018. http://www.sararegistry.gc.ca/sar/index/default_e.cfm

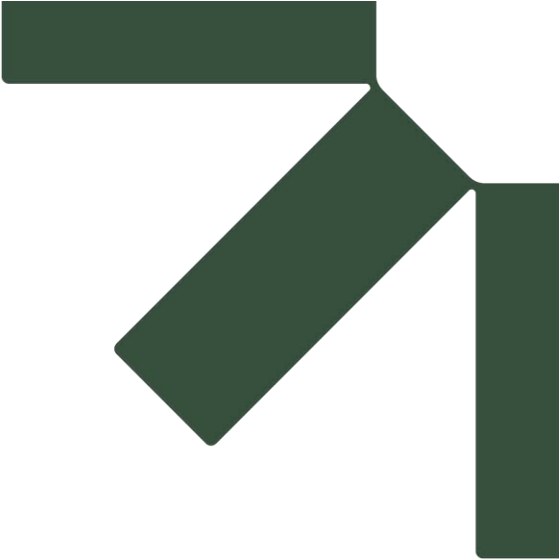
Coefficient of Conservation

'Higher values of the coefficients of conservatism, on the scale of 1–10, indicate species that are more "conservative" (or ecologically sensitive), including those least associated with anthropogenic disturbance, least aggressive, least able to spread, and most confined to particular natural habitat' (Catling Catling, Paul M. 2013. Using Coefficients of Conservatism and the Floristic Quality Index to assess the potential for serious and irreversible damage to plant communities. Canadian Field-Naturalist 127(3): 285–288.

Coefficient of Wetness

5 - Almost always occur on upland; 3 - Usually occur on uplands; 0 - Found on uplands and in wetlands; -3 Usually occur in wetlands; -5 Almost always occur in wetlands

Floristic Assessment System for Southern Ontario (Oldham et al, 1995).



Appendix D Breeding Bird Survey Results

Revised Environmental Impact Study

15450 Woodbine Ave., Town of Whitchurch-Stouffville, ON

Galatia Lane Estates Inc.

SLR Project No.: 244.V24304.00000

May 29, 2026

Breeding Birds of 2108402 - 15450 Woodbine Avenue EIS

Common Name	Scientific Name	Status				Number of Pairs/Territories	Notes
		National Species at Risk COSEWIC ^a	Species at Risk in Ontario Listing ^a	Provincial breeding season SRANK ^b	Area-sensitive (OMNR) ^c		
Killdeer	<i>Charadrius vociferus</i>			S5		1	
Mourning Dove	<i>Zenaida macroura</i>			S5		1	
Eastern Phoebe	<i>Sayornis phoebe</i>			S5		1	
Horned Lark	<i>Eremophila alpestris</i>			S5		3	
Barn Swallow	<i>Hirundo rustica</i>	SC	SC	S4		22	
Blue Jay	<i>Cyanocitta cristata</i>			S5		1	
American Robin	<i>Turdus migratorius</i>			S5		1	
Cedar Waxwing	<i>Bombycilla cedrorum</i>			S5		2	
European Starling	<i>Sturnus vulgaris</i>			SE		1	
Savannah Sparrow	<i>Passerculus sandwichensis</i>			S4	A	3	
Song Sparrow	<i>Melospiza melodia</i>			S5		10	
Red-winged Blackbird	<i>Agelaius phoeniceus</i>			S4		7	
Brown-headed Cowbird	<i>Molothrus ater</i>			S5		1	
American Goldfinch	<i>Carduelis tristis</i>			S5		8	

Field Work Conducted On:	Date	Temp (C)	Wind speed (km/h)	Cloud cover (%)	Start time	End time	Level of effort (h:min)
Site visit 1	4-Jun-23	10	10	10	5:50	7:00	1:10
Site visit 2	16-Jun-23	15	10	100	7:50	9:00	1:10

Number of Species:	14
Number of (provincial and national) Species at Risk:	1
Number of S1 to S3 (provincially rare) Species:	0
Number of Area-sensitive Species:	1

KEY

^a COSEWIC = Committee on the Status of Endangered Wildlife in Canada

^a Species at Risk in Ontario List (as applies to ESA) as designated by COSSARO (Committee on the Status of Species at Risk in Ontario)
END = Endangered, THR = Threatened, SC = Special Concern

^b SRANK (from Natural Heritage Information Centre) for breeding status if:

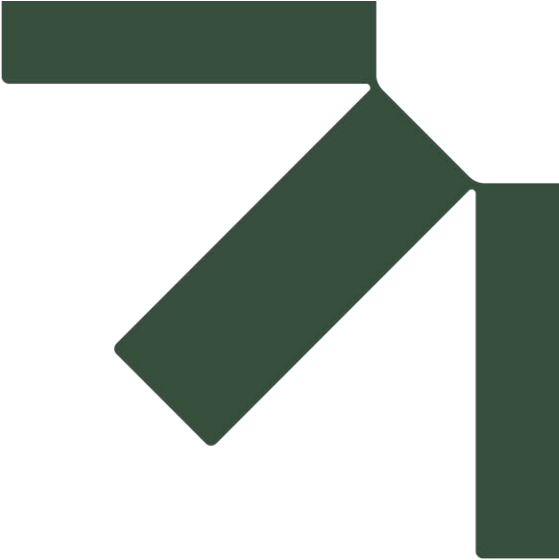
S1 (Critically imperiled), S2 (Imperiled), S3 (Vulnerable), S4 (Apparently Secure), S5 (Secure)

SZB (breeding migrants or vagrants) and SR (reported as breeding, but no persuasive documentation) .

SE (exotic, i.e. non-native)

^c Ontario Ministry of Natural Resources (OMNR). 2000. Significant Wildlife Habitat Technical Guide (Appendix G). 151 p plus appendic





Appendix E Species at Risk Assessment

Revised Environmental Impact Study

15450 Woodbine Ave., Town of Whitchurch-Stouffville, ON

Galatia Lane Estates Inc.

SLR Project No.: 244.V24304.00000

May 29, 2026

Species at Risk Assessment

NAME	SARA STATUS	SARO	COSEWIC	S-RANK	HABITAT REQUIREMENTS	SOURCE OF RECORD	HABITAT PRESENT (Y/P/N)	RATIONALE	POTENTIAL IMPACTS AND MITIGATION
AVIFAUNA									
Acadian Fly Catcher (<i>Empidonax virescens</i>)	END	END	END	S2S3B	The Acadian Flycatcher is typically found in mature, shady forests with ravines, or in forested swamps with lots of maple and beech trees. In Canada, the Acadian Flycatcher nests only in southwestern Ontario, near the shore of Lake Erie, in large forests and forested ravines. This species is found primarily southern Ontario's Carolinian forests, and requires large, undisturbed forests, often more than 40 hectares in size. This species is relatively rare in Ontario, with 25 to 75 breeding pairs recorded in 2010 (Ministry of Natural Resources and Forestry, 2017). The main threat to the Acadian flycatcher is habitat loss due to urban and agricultural development.	OBBA	N	No forested communities noted on or adjacent to the Subject Property.	NA
Bald Eagle (<i>Haliaeetus leucocephalus</i>)	No Status	SC	Not at Risk	S2N,S4B	The Bald Eagle is a species of special concern, is found throughout North America, and nest in throughout northern Ontario, with a large numbers found near Lake of the Woods. Bald eagles nest in a variety of habitats and forest types, almost always near a major lake or river where they do most of their hunting. While fish are their main source of food, Bald eagles can easily catch prey up to the size of ducks, and frequently feed on dead animals, including White-tailed Deer. They usually nest in large trees such as pine and poplar. During the winter, bald eagles sometimes congregate near open water such as the St. Lawrence River, or in places with a high deer population where carcasses might be found. The Bald eagle was relatively common in Southern Ontario near Lake Erie, but the population was wiped out in the 1960's related to increased development of the shoreline and introduction of DDT. An intensive re-introduction program and environmental clean-up efforts have caused a rebound in population and may be frequently seen throughout southern Ontario (Ministry of Natural Resources and Forestry, 2015).	OBBA	N	No forested communities or large open waterbodies are noted on or adjacent to the Subject Property.	NA
Bank Swallow (<i>Riparia riparia</i>)	THR	THR	THR	S4B	The Bank Swallow is threatened by loss of breeding and foraging habitat, destruction of nesting habitat and widespread pesticide use. Bank swallows are small songbirds with brown upperparts, white underparts and a distinctive dark breast band. It averages 12 cm long and weighs between 10 and 18 grams. The swallow can be distinguished in flight from other swallows by its quick, erratic wing beats and its almost constant buzzy, chattering vocalizations. They nest in burrows in natural and human-made settings where there are vertical faces in silt and sand deposit, including banks of rivers and lakes, active sand and gravel pits or former ones where the banks remain suitable. The birds breed in colonies ranging from several to a few thousand pairs (Ministry of Natural Resources and Forestry, 2014).	OBBA	N	No large, vertical faces (i.e., cliffs or steep riverbanks) are noted on or adjacent to the Subject Property.	NA
Barn Swallow (<i>Hirundo rustica</i>)	THR	SC	SC	S4B	The Barn Swallow is a threatened species, is found throughout southern Ontario, and can range into the north as long as suitable nesting locations can be found. These birds prefer to nest within human made structures such as barns, bridges, and culverts. Barn Swallow nests are cup-shaped and made of mud; they are typically attached to horizontal beams or vertical walls underneath an overhang. A significant decline in populations of this species has been documented since the mid-1980s, which is thought to be related to a decline in prey. Since the Barn Swallow is an aerial insectivore, this species relies on the presence of flying insects at specific times during the year. Changes in building practices and materials may also be having an impact on this species (Ministry of Natural Resources and Forestry, 2015).	OBBA, NHIC	Y	Barn swallow nests were observed within the barn structure during the November field investigation.	Removal of structures to occur outside the mid-April to early August breeding bird survey window. If the structures are to be demolished within this window, a qualified biologist must screen the area to ensure no breeding individuals are present. See also SWH analysis.
Black Tern (<i>Chlidonias niger</i>)	No Status	SC	Not at Risk	S3B	The Black Tern is a small shorebird that builds floating nests in loose colonies in shallow marshes, with a preference for cattails. The Black Tern is a species of special concern in Ontario due to population decline that is thought to be directly related to the loss of wetland habitat and anthropogenic influences in near shore areas of wetlands and shallow water bodies (i.e. fluctuations in water level, boat traffic, and wakes) (Ministry of Natural Resources and Forestry, 2015).	OBBA	N	No cattail marshes or shoreline habitat are noted on or adjacent to the Subject Property.	NA
Bobolink (<i>Dolichonyx oryzivorus</i>)	THR	THR	SC	S4B	The Bobolink is found in grasslands and hayfields, and feeds and nests on the ground. This species is widely distributed across most of Ontario; however, are designated at risk because of rapid population decline over the last 50 years (Ministry of Natural Resources and Forestry, 2014). The historical habitat of the bobolink was tallgrass prairie and other natural open meadow communities; however, as a result of the clearing of native prairies and the post-colonial increase in agriculture, bobolinks are now widely found in hayfields. Due to their reproductive cycle, nesting habits, and use of agricultural areas, bobolink nests and young are particularly vulnerable to loss as a result of common agricultural practices (i.e. first cut hay).	OBBA, NHIC	N	Although suitable habitat is present on the Subject Property, this habitat is small in size and is therefore insufficient.	NA
Canada Warbler (<i>Cardellina canadensis</i>)	THR	SC	THR	S4B	The Canada Warbler is found in a variety of forest types, but is most abundant in moist, mixed forests with a well-developed, dense shrub layer. This species can also be locally abundant in regenerating forests following natural or anthropogenic disturbances. Nests are usually located on or near the ground on mossy logs, and along stream banks. In Canada, habitat loss due to conversion of swamp forests, agricultural activities and road development have contributed to the species' significant long-term decline, and its special concern designation. A reduction in forests with a well-developed shrub-layer has also likely impacted Canada warblers throughout their breeding range in Ontario (Committee on the Status of Endangered Wildlife in Canada, 2008).	OBBA	N	No forested communities noted on or adjacent to the Subject Property.	NA



NAME	SARA STATUS	SARO	COSEWIC	S-RANK	HABITAT REQUIREMENTS	SOURCE OF RECORD	HABITAT PRESENT (Y/P/N)	RATIONALE	POTENTIAL IMPACTS AND MITIGATION
Cerulean Warbler (<i>Setophaga cerulea</i>)	END	THR	END	S3B	The Cerulean Warbler is a small wood-warbler that breeds in a few areas in southern Ontario. A general continental decline of this species has been observed, possibly greater than that of any other wood-warbler. The cerulean warbler requires relatively large tracts of forest, and as such, the main threat to this species is habitat loss due to forest degradation and fragmentation. In Ontario, the Cerulean Warbler nests in older, second-growth deciduous forests. During breeding season, it is found in relatively large tracts of mature deciduous forests that feature large, tall trees and an open understorey. The species is considered area-sensitive and have demonstrated edge effects up to 340 metres in the forest, with abundance positively correlated to the distance from the edge. Trees that leaf late (Bitternut Hickory; oaks) provide singing posts in its Ontario range (Environment Canada, 2011).	OBBA	N	No forested communities noted on or adjacent to the Subject Property.	NA
Chimney Swift (<i>Chaetura pelagica</i>)	THR	THR	THR	S4B,S4N	The Chimney Swift is a threatened species which breeds in Ontario and winters in northwestern South America. It is found mostly near urban areas where the presence of chimneys or other manmade structures provide nesting and roosting habitat. Prior to settlement, the Chimney Swift would mainly nest in cave walls and hollow tress. The Chimney Swift initially benefitted from human settlement; however, recent declines in flying insects and the modernization of chimneys are factors attributed to their current population declines. As a threatened species, the Chimney Swift receives protection for both species and habitat under the ESA (Ministry of Natural Resources and Forestry, 2014).	OBBA	N	Suitable structures are not present on or adjacent to the Subject Property.	NA
Common Nighthawk (<i>Chordeiles minor</i>)	THR	SC	THR	S4B	The Common Nighthawk is an extremely well camouflaged bird that inhabits gravel beaches, rock outcrops and burned woodlands, that have little to no ground vegetation. This species can also be found in highly disturbed locations such as clear cuts, mine tailings areas, cultivated fields, urban parks, gravel roads, and orchards. As an insectivore, the primary threat to this species is the widespread application of pesticides (Ministry of Natural Resources and Forestry, 2015). Special concern species do not receive habitat protection under the ESA.	OBBA	N	Suitable gravel beach, rock outcrops, and burned woodland communities were not noted on or adjacent to the Subject Property.	NA
Eastern Meadowlark (<i>Sturnella magna</i>)	THR	THR	THR	S4B	The Eastern Meadowlark is a bird that prefers pastures and hayfields, but is also found to breed in orchards, shrubby fields and human use areas such as airports and roadsides. Eastern meadowlarks can nest from early May to mid-August, in nests that are built on the ground and well-camouflaged with a roof woven from grasses. The decline in population of these species is thought to be at least partially related to habitat destruction and agricultural practices (Ministry of Natural Resources and Forestry, 2014).	OBBA, NHIC	N	Although suitable habitat is present on the Subject Property, this habitat is small in size and is therefore insufficient.	NA
Eastern Whip-poor-will (<i>Antrostomus vociferus</i>)	THR	THR	THR	S4B	Once widespread throughout the central Great Lakes region, distribution of the Eastern Whip-poor-will in this area is now fragmented. Although there is uncertainty about the causes of the population decline, the main threat is likely habitat loss and fragmentation. Additional threats may include car mortality and food supply changes related to pesticides and climate change. The Eastern Whip-poor-will is usually found in areas with a mix of open and forested areas, such as patchy forests with clearings, forests that are regenerating after major disturbances, savannahs, open woodlands or openings in more mature forests. Breeding habitat is dependent on forest structure rather than composition, although common tree associations are pine and oak, and it nests directly on the forest floor. Its distinctive call can be heard at dusk or dawn during the breeding season, and whip-poor-wills heard singing between mid-May and mid-July are likely local breeders (Committee on the Status of Endangered Wildlife in Canada, 2009).	OBBA	N	No forested communities noted on or adjacent to the Subject Property.	NA
Eastern Wood-Pewee (<i>Contopus virens</i>)	SC	SC	SC	S4B	The Eastern Wood-pewee is classified as a species of special concern by COSSARO. Their population has been gradually declining since the mid-1960's (The Cornell Lab of Ornithology, 2015). The Eastern Wood-pewee is a "flycatcher", a bird that eats flying insects, that lives in the mid-canopy layer of forest clearings and edges of deciduous and mixed forests. It prefers intermediate-age forest stands with little understory vegetation. Threats to the population are largely unknown; however, causes may include loss of habitat due to urban development and decreases in the availability of flying insect prey (Ministry of Natural Resources and Forestry, 2014).	OBBA	N	No forested communities noted on or adjacent to the Subject Property.	NA
Golden-winged Warbler (<i>Vermivora chrysoptera</i>)	THR	SC	THR	S4B	The Golden-winged Warbler is classified as a species of special concern by COSSARO. It is a small grey songbird, with yellow patches on its wings and forehead. Nests are built on the gound, in areas with young shrubs surrounded by mature forest. Threats to the species include habitat loss, hybridization with blue-winged warblers, and nest parasitism by brown-headed cowbirds (Ministry of Natural Resources and Forestry, 2014).	OBBA	N	No shrubland communities noted on or adjacent to the Subject Property.	NA
Grasshopper Sparrow (<i>Ammodramus savannarum</i>)	No Status	No Status	SC	S4B	Grasshopper Sparrow are specialized to open relatively short grassland habitat, preferably grasslands with relatively sparse cover such as those in areas of poor soils, including alvars, moraines, and sand plains and generally does not favour tall grass moist meadows. It will also breed in manmade hayfields and occasionally in cereals such as Rye (<i>Secale cereale</i>).	OBBA	N	Suitable habitats (alvar, moraines, and sandy plains) are not present on or adjacent to the Subject Property.	NA
Least Bittern (<i>Ixobrychus exilis</i>)	THR	THR	THR	S4B	The Least Bittern prefers marshes and swamps dominated by emergent vegetation, preferably cattails, interspersed with patches of woody vegetation and open water. The smallest member of the heron family, least bitterns nest in marshes south of the Precambrian Shield in Ontario. Due to the location of the nests close to the water surface, least bittern nests are susceptible to damage as a result of wakes cast by recreational boats (Government of Canada, 2015).	OBBA	N	No cattail marshes or open water habitats with trees are noted on or adjacent to the Subject Property.	NA



NAME	SARA STATUS	SARO	COSEWIC	S-RANK	HABITAT REQUIREMENTS	SOURCE OF RECORD	HABITAT PRESENT (Y/P/N)	RATIONALE	POTENTIAL IMPACTS AND MITIGATION
Peregrine Falcon (<i>Falco peregrinus</i>)	SC	SC	Not at Risk	S3B	The Peregrine Falcon is a species of Special Concern in Ontario because of habitat loss and destruction, disturbance and persecution by people, and environmental contaminants. Peregrine falcons are medium sized birds of prey, with a blue back, cream-coloured chest covered in dark markings and bright yellow legs and feet. It can be found nesting on tall, steep cliff ledges close to large bodies of water. The majority of Ontario's breeding population is found around Lake Superior in northwestern Ontario (Ministry of Natural Resources and Forestry, 2014).	OBBA	N	No steep cliff ledges or similar structures are noted on the Subject Property. Areas of open water are also not documented on or adjacent to the Subject Property.	NA
Red-headed Woodpecker (<i>Melanerpes erythrocephalus</i>)	THR	SC	THR	S4B	The Red-headed Woodpecker is a medium-sized bird, with black and white colouring and a bright red head, neck, and breast. Adults often return to the same nesting site year after year. Between May and June, adults often return to the same nesting site and females lay from three to seven eggs. Habitat for the birds includes open woodland and woodland edges, often near man-made landscapes such as parks, golf courses and cemeteries. The red-headed woodpecker is widespread across southern Ontario but rare (Ministry of Natural Resource and Forestry, 2014).	OBBA	N	No forested communities noted on or adjacent to the Subject Property.	NA
Short-eared Owl (<i>Asio flammeus</i>)	SC	THR	THR	S2N,S4B	The Short-eared Owl is a medium-sized owl with a brown back, light coloured chest, and visible feather tufts on the round head that can be mistaken for small ears. This well-camouflaged bird is mostly seen during flight when the long wings and short tail are readily apparent. The short-eared owl is found in scattered pockets across the province where suitable open habitat, including grassland, tundra and marsh, can be found in sufficient quantities. Adults build nests on the ground in grassy areas and feed primarily at dawn and dusk on rodents and other small mammals in the surrounding area. Habitat loss is currently the greatest threat to the recovery of this species as prairie, savannah, and marsh ecosystems are modified or developed. Intensive grazing and early harvesting on farmlands can also affect this species by exposing or destroying nests during breeding season (Ontario Ministry of Natural Resources and Forestry, 2015).	OBBA	N	Although suitable habitat is present on the Subject Property, this habitat is small in size and is therefore insufficient.	NA
Wood Thrush (<i>Hylocichla mustelina</i>)	THR	SC	THR	S4B	The Wood Thrush is a species of Special Concern because of habitat degradation or destruction by anthropogenic development. The Wood Thrush is a medium-sized songbird, generally rusty-brown on the upper parts with white under parts and large blackish spots on the breast and sides, and about 20 cm long. The Wood Thrush forages for food in leaf litter or on semi-bare ground, including larval and adult insects as well as plant material. They seek moist stands of trees with well-developed undergrowth in large mature deciduous and mixed (conifer-deciduous) forests. The Wood Thrush flies south to Mexico and Central America for the winter (Ministry of Natural Resources and Forestry, 2014).	OBBA	N	No forested communities noted on or adjacent to the Subject Property.	NA
HERPTILES									
Blanding's Turtle (<i>Emydoidea blandingii</i>)	THR	THR	END	S3	Blanding's turtles are threatened in Ontario primarily as a result of habitat loss and fragmentation. Blanding's turtles spend the majority of their life cycle in the aquatic environment, using terrestrial sites for travel between habitat patches and to lay clutches of eggs. These turtles prefer shallow nutrient rich water with organic sediment and dense vegetation. Blanding's turtles nest in dry coniferous and mixed forest habitats, as well as fields and roadsides (Government of Canada, 2015).	ORAA	N	Not suitable habitat. The PSW on the Subject Property contains minimal standing water	NA
Northern Map Turtle (<i>Graptemys geographica</i>)	SC	SC	SC	S3	The northern map turtle is a medium sized turtle with a carapace marked by concentric rings that resemble contour lines on a map. The range of this turtle includes larger lakes and rivers that contain an abundance of their primary prey species; molluscs. Shoreline development, water pollution and the spread of the zebra mussel are notable reasons for the decline in populations of this species (Ministry of Natural Resources and Forestry, 2014).	ORAA	N	Lake/River habitats are not noted on or adjacent to the Subject Property.	NA
Snapping Turtle (<i>Chelydra serpentina</i>)	SC	SC	SC	S3	The snapping turtle is a species of special concern in Ontario due to the potential for the species to become threatened or endangered as a result of biological factors or other identified threats. While not presently protected by law, the snapping turtle has been recognized as a species of special concern by COSSARO. Snapping turtles spend the majority of their lives in water and travel slightly upland to gravel or sandy embankments or beaches to lay their eggs (Ontario Ministry of Natural Resources and Forestry, 2014).	ORAA	N	The PSW on the Subject Property contains minimal standing water. No gravel or sandy embankments were documented on or adjacent to the Subject Property.	NA
VASCULAR PLANTS									
Butternut (<i>Juglans cinerea</i>)	END	END	END	S2?	The butternut is designated as endangered by COSSARO and is tracked by the NHIC as a species at risk. The tree is federally regulated by the Species at Risk Act (2002). Butternut belongs to the walnut family and produces edible nuts which are a preferred food source for wildlife. The range of butternut trees is south of the Canadian Shield on soils derived from calcium rich limestone bedrock. Butternut trees, which at one time were much more common to the south extending to the northern aspect of zone 6E, have been declining due to factors including forest loss and disease. Butternut trees suffer from a highly transmissible fungal disease called butternut canker. Butternut canker is causing very rapid decline in this tree species across its native range. The fungal disease is easily transmitted by wind and is very difficult to prevent. Trees often die within a few years of infection by butternut canker (Ministry of Natural Resource and Forestry, 2014).	Professional Experience	N	No Butternut trees were observed during 2022 and 2023 field investigations.	NA



NAME	SARA STATUS	SARO	COSEWIC	S-RANK	HABITAT REQUIREMENTS	SOURCE OF RECORD	HABITAT PRESENT (Y/P/N)	RATIONALE	POTENTIAL IMPACTS AND MITIGATION
MAMMALS									
Tri-colored Bat (Eastern Pipistrelle) (<i>Perimyotis subflavus</i>)	END	END	END	S3?	The eastern pipistrelle is a small bat that is widely distributed in eastern North America and whose range extends north to southern Ontario. The eastern pipistrelle is rare in this region of Ontario which is at the northernmost limit of the natural range for the species. These bats prefer to nest in foliage, tree cavities and woodpecker holes, and are occasionally found in buildings; though this is not their preferred habitat. Winter hibernation takes place in caves, mines and deep crevices. Eastern pipistrelles feed primarily on small insects and prefer an open forest habitat type in proximity to water (University of Michigan Museum of Zoology, 2004).	Professional Experience	N	No suitable forested habitat on site. No bats were observed entering or exiting the structures during the bat exit surveys and no guano was observed in the accessible parts of the buildings.	NA
Eastern Small-footed Myotis (<i>Myotis leibii</i>)	No Status	END	No Status	S2S3	The eastern small-footed myotis, a bat, are an endangered species threatened by a disease known as white nose syndrome, caused by a fungus from Europe. Eastern small-footed bat's fur has black roots and shiny light brown tips, giving it a yellowish-brown appearance. Its face mask, ears and wings are black, and its underside is grayish-brown, about 8 cm long in size and weighs 4-5 grams. In the spring and summer, eastern small-footed bats will roost in a variety of habitats, including in or under rocks, in rock outcrops, in buildings, under bridges, or in caves, mines, or hollow trees. They change their roosting locations daily and hunt at night for insects to eat, including beetles, mosquitos, moths, and flies. They hibernate in winter, often in caves and abandoned mines. They can be found from south of Georgian Bay to Lake Erie and east to the Pembroke area, and choose colder and drier sites (Ministry of Natural Resources and Forestry, 2014).	Professional Experience	N	No suitable forested habitat on site. No bats were observed entering or exiting the structures during the bat exit surveys and no guano was observed in the accessible parts of the buildings.	NA
Little Brown Myotis (<i>Myotis lucifugus</i>)	END	END	END	S4	Little brown myotis, a bat, are an endangered species threatened by a disease known as white nose syndrome, caused by a fungus from Europe. Little brown bats have glossy brown fur and usually weigh between four and 11 grams. Bats are nocturnal. During the day they roost in trees and buildings. They often select attics, abandoned buildings and barns for summer colonies where they can raise their young. Little brown bats hibernate from October or November to March or April, most often in caves or abandoned mines that are humid and remain above freezing – an ideal environment for the fungus to grow and flourish. The syndrome affects bats by disrupting their hibernation cycle, so that they use up body fat supplies before the spring when they can once again find food sources (Ministry of Natural Resources and Forestry, 2014).	Professional Experience	N	No suitable forested habitat on site. No bats were observed entering or exiting the structures during the bat exit surveys and no guano was observed in the accessible parts of the buildings.Records of Little Brown Myotis were recorded during each bat exit survey; however, this was considered to be passive use of the site (i.e., foraging) and therefore not Little Brown Myotis habitat.	NA
Northern Myotis (<i>Myotis septentrionalis</i>)	END	END	END	S3	The northern long-eared myotis, a bat, are an endangered species threatened by a disease known as white nose syndrome, caused by a fungus from Europe. Northern long-eared bats have dull yellow-brown fur with pale grey bellies. They are approximately eight cm long, with a wingspan of about 25 cm, and usually weigh six to nine grams. Northern long-eared bats can be found in boreal forests, roosting under loose bark and in the cavities of trees. These bats hibernate from October or November to March or April, most often in caves or abandoned mines (Ministry of Natural Resources and Forestry, 2014).	Professional Experience	N	No suitable forested habitat on site. No bats were observed entering or exiting the structures during the bat exit surveys and no guano was observed in the accessible parts of the buildings.	NA
OTHER									
Monarch Butterfly (<i>Danaus plexippus</i>)	SC	SC	END	S2N,S4B	The monarch is an orange and black butterfly with small white spots and is classified as a species of special concern by COSSARO. The monarch relies on milkweed plants as a food source for growing caterpillars, but the adult butterflies forage in diverse habitats for nectar from wildflowers. The greatest threat to the monarch is loss of overwintering habitat in Mexico. Other threats include use of pesticides and herbicides throughout its range (Ministry of Natural Resources and Forestry, 2014).	OBA	N	No milkweed was observed on the Subject Property. Additionally, the Subject Property is not located within close proximity to a large waterbody and contains a small meadow community.	NA

Notes:

SC - Special Concern

THR - Threatened

END - Endangered

S1 - Extremely rare in Ontario

S2 - Very rare in Ontario

S3 - Rare to uncommon in Ontario

S4 - Considered to be common in Ontario

S5 - Species is widespread in Ontario

SH - Possibly extirpated

S#S# - Indicates insufficient information exists to assign a single rank.

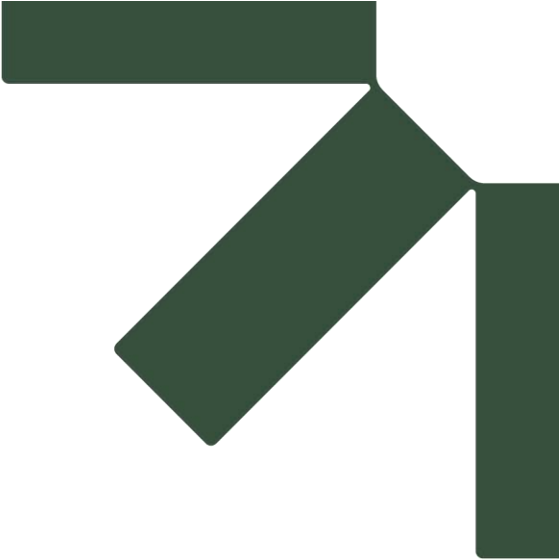
S#? - Indicates some uncertainty with the classification due to insufficient data.

S#N - Nonbreeding

S#B - Breeding

Y = Yes, P= Potential, N = No





Appendix F Significant Wildlife Habitat Assessment

Revised Environmental Impact Study

15450 Woodbine Ave., Town of Whitchurch-Stouffville, ON

Galatia Lane Estates Inc.

SLR Project No.: 244.V24304.00000

May 29, 2026



Significant Wildlife Habitat Assessment - Ecoregion 6E

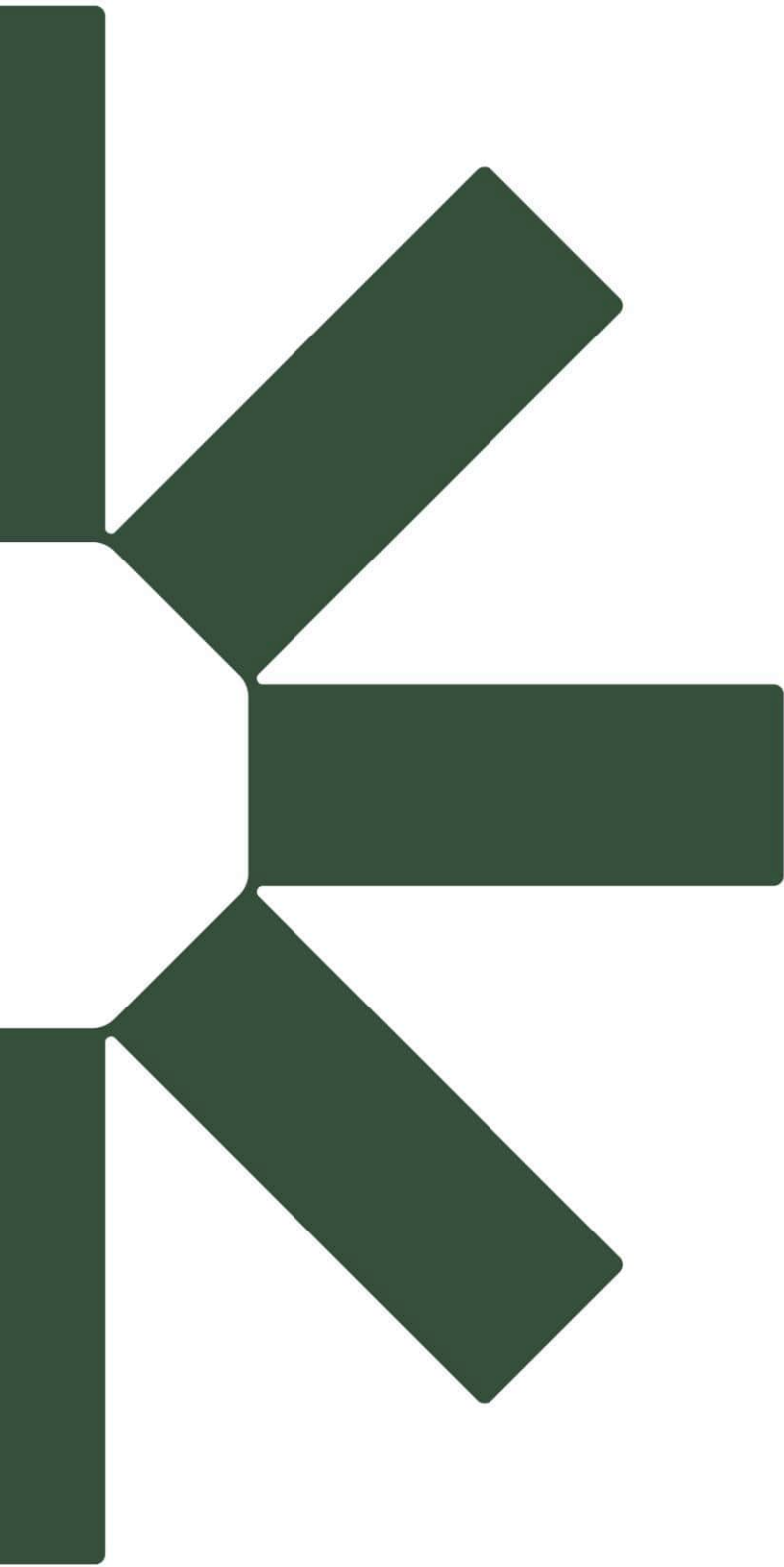
SWH Type	Associated Species	Associated ELC Ecosites	Habitat Criteria	Presence (Y/P/N)	Comments
Seasonal Concentration Areas of Animals					
Waterfowl Stopover and Staging Areas (Terrestrial)	Ducks	CUM + CUT ecosites	Fields with sheet-water flooding mid-March to May	N	Not present on the site.
Waterfowl Stopover and Staging Area (Aquatic)	Ducks, Geese	Ponds, Lakes, Inlets, Marshes, Swamps, Shallow Water Ecosites	Sewage & SWM ponds not SWH. Reservoir managed as a large wetland or pond/lake qualifies.	N	No open wetland or waterbody observed on or adjacent to the Subject Property.
Shorebird Migratory Stopover Area	Shorebirds	Beaches, Dunes, Meadow Marshes	Shorelines. Sewage treatment ponds and storm water ponds not SWH.	N	River shorelines are not present on the Subject Property.
Raptor Wintering Area	Eagles, Hawks, Owls	Hawks/Owls: Combination of both Forest and Cultural Ecosites Bald Eagle: Forest or swamp near open water (hunting ground)	Raptors: >20ha, with a combo of forest and upland. Meadow (>15ha) with adjacent woodlands. Eagles: open water, large trees & snags for roosting.	N	Associated ecosites are not present on or adjacent to the Subject Property.
Bat Hibernacula	Big Brown Bat, Tri-coloured Bat	Caves, Crevices, mines, karsts	Buildings and active mine sites not SWH.	N	Associated ecosites are not present on or adjacent to the Subject Property.
Bat Maternity Colonies	Big Brown Bat, Silver-haired Bat	Decidious or mixed forests and swamps.	Mature deciduous and mixed forests with >10/ha cavity trees >25 cm DBH.	N	Associated ecosites are not present on or adjacent to the Subject Property.
Turtle Wintering Area	Turtles (Midland, N. Map, Snapping)	SW, MA, OA, SA, FEO, BOO (requires open waters)	Free water beneath ice. Soft mud substrate. Permanent water bodies, large wetlands, bogs, fens with adequate DO.	N	Open waters were not observed within the PSW on or adjacent to the Subject Property.
Reptile Hibernaculum	Snakes	Snakes: Any ecosite (esp. w/ rocky areas), other than very wet ones. Five-lined Skink: FOD and FOM, FOC1, FOC3 - with rock outcrops	Access below frost line: burrows; rock crevices, piles or slopes, stone fences or foundations. Conifer/shrubby swamps/swales, poor fens, depressions in bedrock w/ accumulations of sphagnum moss or sedge hummock ground cover.	N	Associated ecosites are not present on or adjacent to the Subject Property. No rocky outcrops documented.
Colonially-nesting Bird Breeding Habitat (Bank and Cliff)	Cliff Swallow, N. Rough-winged Swallow	Banks, sandy hills/piles, pits, slopes, cliff faces, bridge abutments, silos, barns.	Exposed soil banks, not a licensed/permitted aggregate area or new man-made features (2 yrs).	N	No soil banks or cliffs were noted on or adjacent to the Subject Property.
Colonially-nesting Bird Breeding Habitat (Tree/Shrubs)	Great Blue Heron, Black-crowned NightHeron, Great Egret, Green Heron	SWM2, SWM3, SWM5, SWM6, SWD1 to SWD7, FET1	Nests in live or dead standing trees in wetlands, lakes, islands and peninsulas. Shrubs and emergents may be used. Nests in trees are 11 - 15 m from ground, near tree tops.	N	Associated ecosites are not present on or adjacent to the Subject Property. No large trees present within the PSW.
Colonially-nesting Bird Breeding Habitat (Ground)	Herring Gull, Great Black-backed Gull, Little Gull, Ring-billed Gull, Common Tern, Caspian Tern, Brewer's Blackbird	Gulls/Terns: Rocky island or peninsula in lake or river. Brewer's Blackbird: close to watercourses in open fields or pastures with scattered trees or shrubs.	Gulls/Terns: islands or peninsulas with open water or marshy areas. Brewers Blackbird colonies: on the ground in low bushes close to streams and irrigation ditches.	N	The Subject Property is not located on an island or peninsula near open water or marshy areas. A defined watercourse was not noted on the Subject Property and minimal shrubs were documented in or adjacent to the PSW.
Migratory Butterfly Stopover Area	Painted Lady, Red Admiral, Special Concern: Monarch	Combination of open (CU) and forested (FO) ecosites (need one from each).	≥10 ha, located within 5 km of Lake Ontario. Undisturbed sites, with preferred nectar species.	N	The Subject Property is not within 5 km of Lake Ontario.
Landbird Migratory Stopover Areas	All migratory songbirds. All migrant raptor species.	Forest (FO) and Swamp (SW) ecosites	Woodlots >10 ha within 5 km of Lake Ontario. If multiple woodlands are along the shoreline, those <2 km from L. Ontario are more significant.	N	The Subject Property is not within 5 km of Lake Ontario.
Deer Yarding Areas	White-tailed Deer	Mixed or Conifer ecosites	Determined by MNRF - no studies	N	No forested ecosites were documented on or adjacent to the Subject Property.
Deer Winter Congregation Areas	White-tailed Deer	Mixed or Conifer ecosites	Determined by MNRF - no studies	N	No forested ecosites were documented on or adjacent to the Subject Property.



SWH Type	Associated Species	Associated ELC Ecosites	Habitat Criteria	Presence (Y/P/N)	Comments
Rare Vegetation Communities					
Cliffs and Talus Slopes		TAO, TAS, CLO, CLS, TAT, CLT e.g., Niagara Escarpment (contact NEC)	Cliff: near vertical bedrock >3m Talus Slope: coarse rock rubble at the base of a cliff	N	No soil banks or cliffs were noted on or adjacent to the Subject Property.
Sand Barren		SBO1, SBS1, SBT1	Sand Barrens >0.5 ha. Vegetation can vary from patchy and barren to tree covered, but <60%. <50% vegetation cover are exotic species.	N	Associated ecosites are not present on or adjacent to the Subject Property.
Alvar	<i>Carex crawei</i> , <i>Panicum philadelphicum</i> , <i>Eleocharis compressa</i> , <i>Scutellaria parvula</i> , <i>Trichostema brachiatum</i> , Loggerhead Shrike	ALO1, ALS1, ALT1, FOC1, FOC2, CUM2, CUS2, CUT2-1, CUW2	Alvar >0.5 ha. Need 4 of the 5 Alvar Indicator Spp. <50% vegetation cover are exotic species.	N	Associated ecosites are not present on or adjacent to the Subject Property. Required alvar indicator species were not documented.
Old Growth Forest	Trees >140 yrs; heavy mortality = gaps. Multi-layer canopy, lots of snags and downed logs	FOD, FOC, FOM, SWD, SWC, SWM	Woodland areas ≥30 ha with a≥10 ha interior habitat, assuming a 100 m buffer at edge of forest.	N	Forested areas were not documented on or adjacent to the Subject Property.
Savannah	Prairie Grasses w/ trees	TPS1, TPS2, TPW1, TPW2, CUS2	A Savannah is a <u>tallgrass prairie</u> habitat that has tree cover of 25 – 60%. <50% cover of exotic species.	N	Associated ecosites are not present on or adjacent to the Subject Property.
Tallgrass Prairie	Prairies Grasses dominate	TPO1, TPO2	An open Tallgrass Prairie habitat has < 25% tree cover. Less than 50% cover of exotic species.	N	Associated ecosites are not present on or adjacent to the Subject Property.
Other Rare Vegetation Communities		Provincially Rare S1 - S3 veg. comm. are listed in Appendix M of SWHTG.	Rare Vegetation Communities may include beaches, fens, forest, marsh, barrens, dunes and swamps.	N	Provincially significant vegetation communities were not documented on the Subject Property.
Specialized Habitat for Wildlife					
Waterfowl Nesting Area	Ducks	Upland habitats adjacent to: MAS1 to MAS3, SAS1, SAM1, SAF1, MAM1 to MAM6, SWT1, SWT2, SWD1 to SWD4 (>0.5 ha open water wetlands, alone or collectively).	Extends 120 m from a wetland or wetland complex. Upland areas should be at least 120 m wide. Wood Ducks and Hooded Mergansers use cavity trees (>40 cm dbh).	N	No open wetland observed on or adjacent to the Subject Property.
Bald Eagle & Osprey Nesting, Foraging and Perching Habitat	Osprey, Bald Eagle	FOD, FOM, FOC, SWD, SWM, SWC directly adjacent to riparian areas	Nesting areas are associated with waterbodies along forested shorelines, islands, or on structures over water.	N	Forested areas were not documented on or adjacent to the Subject Property.
Woodland Raptor Nesting Habitat	Barred Owl. Hawks: N. Goshawk, Cooper's, Sharp-shinned, Red-shouldered, Broad-winged.	Forests (FO), swamps (SW), and conifer plantations	>30 ha with > 10 ha interior habitat.	N	Forested areas were not documented on or adjacent to the Subject Property.
Turtle Nesting Areas	Midland Painted Turtle Special Concern: Snapping Turtle, Northern Map Turtle	Exposed mineral soil (sand or gravel) areas adjacent (<100m) or within: MAS1 to MAS3, SAS1, SAM1, SAF1, BOO1	Nest sites within open sunny areas with soil suitable for digging. Sand and gravel beaches.	N	Exposed mineral soils were not documented adjacent to the PSW. Additionally, no open areas were noted within the PSW.
Seeps and Springs	Wild Turkey, Ruffed Grouse, Spruce Grouse, White-tailed Deer, Salamander spp.	Seeps/Springs are areas where ground water comes to the surface.	Any forested area within the headwaters of a stream/river system. (2 or more confirms SWH type).	N	Forested areas were not documented on or adjacent to the Subject Property. No seeps or springs were observed during field investigations.
Amphibian Breeding Habitat (Woodland)	Woodland Frogs and Salamanders	FOC, FOM, FOD, SWC, SWM, SWD	Open water wetlands, pond or woodland pool of >500 m ² within or adjacent to wooded areas. Permanent ponds or holding water until mid-July preferred.	N	Forested communities and open water areas were not documented on or adjacent to the Subject Property.
Amphibian Breeding Habitat (Wetlands)	Toads, Frogs, and Salamanders	SW, MA, FE, BO, OA and SA. Typically isolated (>120m) from woodland ecosites, however larger wetlands may be adjacent to woodlands.	Open water wetland ecosites >500m ² isolated from woodland ecosites with high species diversity. Permanent water with abundant vegetation for bullfrogs.	N	No breeding amphibians on or immediately adjacent to the site.
Woodland Area-Sensitive Bird Breeding Habitat	Birds (area-sensitive species)	FOC, FOM, FOD, SWC, SWM, SWD	Large mature (>60 years) forest stands/woodlots >30 ha. Interior forest habitat >200m from forest edge.	N	Forested areas were not documented on or adjacent to the Subject Property.

SWH Type	Associated Species	Associated ELC Ecosites	Habitat Criteria	Presence (Y/P/N)	Comments
Habitat of Species of Conservation Concern					
Marsh Bird Breeding Habitat	Wetland Birds	MAM1 to MAM6, SAS1, SAM1, SAF1, FEO1, BOO1 Green Heron: SW, MA and CUM1	Wetlands with shallow water and emergent vegetation. Gr. Heron @ edges of these types w/ woody cover.	N	Area of suitable habitat is too small to contain SWH for marsh birds.
Open Country Bird Breeding Habitat	Upland Sandpiper, Grasshopper Sparrow, Vesper Sparrow, N. Harrier, Savannah Sparrow, Short-eared Owl (SC)	CUM1, CUM2	Grassland/meadow >30 ha. Not being actively used for farming. Habitat established for 5 years or more.	N	The CUM community documented on the Subject Property does not meet the size criteria.
Shrub/Early Successional Bird Breeding Habitat	Brown Thrasher + Clay-coloured Sparrow (indicators) , Field Sparrow, Black-billed Cuckoo, E. Towhee, Willow Flycatcher, Yellow-breasted Chat, Golden-winged Warbler	CUT1, CUT2, CUS1, CUS2, CUW1, CUW2	Large field areas succeeding to shrub and thicket habitats > 10 ha. Areas not actively used for farming in the last 5 years.	N	The CUT communities documented on the Subject Property do not meet the size criteria.
Terrestrial Crayfish	Chimney or Digger Crayfish; Devil Crayfish or Meadow Crayfish	MAM1 to MAM6, MAS1 to MAS3, SWD, SWT, SWM. CUM1 sites with inclusions of the aforementioned.	Wet meadow and edges of shallow marshes (no minimum size) should be surveyed for terrestrial crayfish (typc. protected by wetland setbacks).	N	No crayfish species were observed during October and November 2022 field investigations.
Special Concern and Rare Wildlife Species	Any species of concern or rare wildlife species	Any ELC code.	Presence of species of concern or rare wildlife species.	Y	Large numbers of nesting Barn Swallow in the barn means Barn is SWH. Removal of barn to occur outside the breeding bird window of April 1 - August 31. Replacement structure installation is recommended.
Animal Movement Corridors					
Amphibians	Amphibians	all ecosites assoc. w/ water	When Breeding Habitat - wetland confirmed	N	No amphibian movement corridors have been documented by MNRF or the municipality.
Deer Movement	White-tailed Deer	all forested ecosites	When Deer Wintering Habitat confirmed	N	No deer movement corridors have been documented by MNRF or the municipality.
Exceptions for Ecoregion 6E					
Mast Producing: 6E-14	Black Bear	Forested Ecosites	>30 ha w/ mast producing species: Cherry (berries), Oak, Beech (nuts).	N	Not in 6E-14.
Leks: 6E-17	Sharp-tailed Grouse	CUM, CUS, CUT	Grassland/meadow >15 ha adjacent to shrublands, >30 ha adjacent to woodlands. Low agricultural intensity.	N	Out of range.





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