

June 24, 2025

Project/File: 160402149

Leitrim Landowners Group c/o Neil Malhotra, Claridge Homes

Dear Neil Malhotra,

Reference: Leitrim Landowners Group – Leitrim East Development – Natural Heritage Screening

# 1 Introduction

Stantec Consulting Ltd. (Stantec) was retained by the Leitrim Landowners Group to complete a Natural Heritage Screening (NHS) in support of the Leitrim Landowners Group proposed Official Plan Amendment (OPA) to have their Leitrim East Development lands included in the Settlement Area Expansion, in Ottawa, Ontario (the Site; Figure 1, Attachment A). The Site and lands within 120 metres (m) of the Site (Adjacent Lands) is herein referred to collectively as the Study Area.

The Site is bound to the east by Hawthorne Road and to the west by Bank Street and residential properties. Adjacent lands to the north and south of the Site are undeveloped.

The purpose of the NHS was to identify natural heritage features and areas (NHFA) that overlap the Study Area and to identify general site constraints and provide recommendations. The NHS consisted of a high-level desktop review and windshield survey within the Leitrim East Development lands to confirm natural heritage features identified during the desktop review.

Natural heritage features and areas (NHFA) includes species at risk (SAR) and their habitats, Areas of Natural Scientific Interest (ANSI), Provincially Significant Wetlands (PSWs), Significant Wildlife Habitat (SWH), unevaluated wetlands, watercourses, fish nurseries, linkages and wildlife corridors, significant woodlands, and significant valleylands.

# 2 Method

# 2.1 Desktop Review

The purpose of the desktop review was to identify NHFA that may overlap the Study Area. A variety of background documents and sources of information were consulted during the preparation of this report, to identify recent records (i.e., records from 2005 or later) of SAR and species of conservation concern (SOCC) within the Study Area, including the following information sources:

City of Ottawa Official Plan (City of Ottawa 2022)

- Fisheries and Oceans Canada (DFO) Aquatic Species at Risk Map (DFO 2025)
- Ontario's Natural Heritage Information Centre (NHIC) database (MNR 2025a)
- Ontario Ministry of Agriculture, Food and Rural Affairs' (OMAFRA) AgMaps (2025)
- Geospatial Ontario On-line Natural Heritage Mapping and Natural Heritage Information Database (MNR 2025b)
- Environment And Climate Change Canada's (ECCC) Species at Risk Public Registry (ECCC 2023a)
- iNaturalist Canada (iNaturalist 2025)
- eBird Canada (eBird 2025)
- Checklist of The Dragonflies and Damselflies of Ottawa-Gatineau (Bracken and Lewis 2008)
- Migratory Bird Sanctuaries (ECCC 2023b)
- Ontario Breeding Bird Atlas (Cadman et al. 2007)
- Ontario Butterfly Atlas (Macnaughton et al. 2023)
- Ontario Moth Atlas (Kaposi et al. 2023)
- Ontario Odonata Atlas (MNR 2025c)
- Ontario Reptile and Amphibian Atlas (Ontario Nature 2020)
- Atlas of the Mammals of Ontario (Dobbyn 1994)
- Ontario Ministry of Environment, Conservation and Parks (MECP) Species at Risk in Ontario (SARO) List (MECP 2025)
- Satellite imagery (Google Earth Pro 2025)
- South Nation Conservation (SNC) Public Geoportal (SNC 2025)
- geoOttawa (City of Ottawa 2025)

A list of SAR and SOCC with recent records (i.e., records from 2005 or later) in the Study Area was compiled based on the desktop review. Some of the background sources provide data at a scale of 10 x 10 kilometer (km), and a recent species record is not confirmation that the species may be present in the Study Area as suitable habitat may not occur.

# 2.2 Site Investigation

A windshield survey was completed by Stantec in the Study Area on May 15, 2025. A windshield investigation is limited to observing aquatic and terrestrial features in the Study Area from publicly accessible lands (i.e., parks, roadways) only and does not include accessing privately owned lands to further assess natural heritage features and areas in the Study Area.

The purpose of the site investigations was to supplement results of the desktop data review and identify NHFA within the Study Area. Preliminary vegetation classification was completed using Ecological Land Classification (ELC) (Lee et al., 1998, with 2008 updates) to identify significant habitat features that may have potential to support SAR, SOCC, SWH. Roadside searches for plant SAR documented in the background review were completed with incidental observations of wildlife.

## 2.3 Habitat Assessment

Natural environment features and areas (NHFA) identified during the desktop review and field investigation were assessed for habitat suitability using the definitions and criteria for NHFA, SAR or SOCC described below. The potential for SAR and SOCC to occur in the Study Area were assessed using the following criteria:

- Recent records of the species in the Study Area from background sources
- Range overlap in the Study Area
- Presence of suitable habitat in the Study Area

# 2.3.1 Species at Risk and Species of Conservation Concern

Based on Stantec's desktop review, a list of SAR and SOCC with the potential to occur at the Site was developed, along with the federal and provincial status for each species. The Study Area was screened for suitable habitat for each of the SAR and SOCC identified during the desktop review using satellite imagery and field investigation results.

For this report, SAR include the following:

- Species listed as threatened, endangered, or extirpated on the Species at Risk in Ontario (SARO) list as published in Ontario Regulation 230/08, under the Ontario Endangered Species Act, 2007 (ESA)
- Aquatic species and migratory birds listed as threatened, endangered, or extirpated on Schedule 1
  of the federal Species at Risk Act (SARA)

Species listed as threatened, endangered and/or extirpated on the SARO list receive both individual and habitat protection on public and private lands under the ESA. Aquatic species listed as threatened, endangered and/or extirpated on Schedule 1 of the SARA receive both individual and habitat protection under the SARA. Non-aquatic species and non-migratory birds listed on Schedule 1 of the SARA are excluded because protection under the SARA is generally not provided outside of federal lands.

Provincial ranks (S-Ranks) are status rankings assigned for the province by the MNR and are available in the NHIC database (MNR 2025a). S-Ranks are used by the NHIC to set protection priorities for rare species and vegetation communities. They are based on the number of occurrences in Ontario and are not legal designations. Provincially rare species are species with S-Ranks of S1, S2, or S3 (MNR 2025a. S-Ranks are defined as follows (MNR 2025a):

- S1 Critically Imperiled, very high risk of extinction or extirpation; usually fewer than 5 occurrences
- S2 Imperiled, high risk of extinction or extirpation; usually fewer than 20 occurrences
- S3 Vulnerable; usually fewer than 100 occurrences
- S4 Apparently secure; uncommon but not rare, usually more than 100 occurrences
- S5 Secure, common, widespread, and abundant

S? – An S-Rank followed by a "?" indicates the rank is still uncertain SNA – Introduced

The Natural Heritage Reference Manual (NHRM) was developed to provide technical guidance for implementing the natural heritage policies of the Provincial Policy Statement (PPS; MNR 2010). Significant Wildlife Habitat (SWH) includes the habitat of SOCC.

For this report, SOCC are defined as:

- Species designated under the SARO list as special concern
- Non-aquatic (fish and mussels) and non-migratory bird species designated under Schedule 1 of the federal SARA as threatened, endangered or extirpated
- Species assessed as special concern, threatened, or endangered by the Committee on the Status
  of Endangered Wildlife in Canada (COSEWIC) and not listed on the SARO list or Schedule 1 of the
  SARA
- Species with provincial ranks of S1 to S3

Although these SOCC do not receive legal protection under the ESA or SARA, their habitat is protected under the PPS (e.g., if it qualifies as SWH), and they may also be afforded protection under the federal *Migratory Birds Convention Act*, 1994 (MBCA) or the Ontario *Fish and Wildlife Conservation Act*, 1997 (FWCA).

# 2.3.2 Significant Wildlife Habitat

The Significant Wildlife Habitat Technical Guide (SWHTG) (MNR 2000) and Ecoregion Criteria Schedules for 6E (MNRF 2015) provide standard provincial guidance and were used to identify SWH and assess their significance and sensitivity.

Wildlife habitat is defined as an area where plants, animals and other organisms live, including areas where species concentrate at a vulnerable point in their life cycle and that are important to migratory and non-migratory species (MNR 2010). Wildlife habitat is considered significant if it is ecologically important in terms of features, functions, representation, or amount, and contributing to the quality and diversity of an identifiable geographic area or Natural Heritage System (MNR 2010).

Habitats in the Study Area were assessed for candidate SWH using the Ecoregion 6E Criterion Schedule (MNRF 2015). The presence of SWH was determined through desktop review (NHIC database) and, if present in the Study Area, were characterized during field investigations.

Targeted surveys, and in some cases, multi-year targeted species-use surveys are generally required to determine if candidate features qualify as confirmed SWH. Because multi-year targeted species-use surveys have not been conducted, SWH features identified during field investigations are considered candidate, unless they were confirmed through direct observations or background review.

The SWHTG defines four categories of SWH:

- Habitats of Seasonal Concentrations of Animals
- Rare Vegetation Communities or Specialized Habitats for Wildlife
- Habitats of Species of Conservation Concern
- Animal Movement Corridors

# 3 Results

The results of the desktop review and field investigations, as described in the Methods section are outlined below. The species described herein use provincial common names (MNR 2025a). All common names and associated scientific names and species status of SAR and SOCC are provided in Attachment B.

# 3.1 Desktop Review

Results of the desktop review identified the following designated NHFA in the Study Area (Figure 1, Attachment A):

- Seven (7) watercourses (MNR 2025b)
- Thirteen (13) unevaluated wetlands (MNR 2025a)
- Findlay Creek Swamp [Evaluated Non-Significant] (MNR 2025a)
- Woodlands (City of Ottawa 2021, MNR 2025a)
- South Nation Conservation Regulation Area (SNC 2025)

No ANSIs, PSWs, fish nurseries, linkages and wildlife corridors, significant woodlands, or significant valleylands were identified within the Study Area during the desktop review.

### 3.1.1 Watercourses

The desktop review identified five mapped watercourses in the Study Area (Figure 1, Attachment A; MNR 2025a, geoOttawa 2025):

- Smith-Gooding Municipal Drain
- Unnamed tributary to Smith-Gooding Municipal Drain
- Findlay Creek Municipal Drain
- Five (5) unnamed tributaries to Findlay Creek

The Smith-Gooding Municipal Drain, located in the northeast portion of the Site, is classified as a DFO Class C municipal drain. Class C drains are permanent watercourses with warmwater thermal regimes, support spring spawning species, and are absent of sensitive species.

The unnamed tributary to Smith-Gooding Municipal Drain is associated with a permanent drainage ditch that originates approximately 510 m north of the Study Area. The ditch flows east of the Site along the east side of Hawthorne Road and empties into the Smith-Gooding Municipal Drain within the Study Area.

The Findlay Creek Municipal Drain flows southeasterly through the Site from the east Site boundary to the southeast corner. This municipal drain is associated with Findlay Creek and classified as a DFO Class D municipal drain. Class D drains are permanent watercourses with coldwater thermal regimes, support fall spawning species, and support sensitive species.

There are seven unnamed tributaries to Findlay Creek within the Study Area. Five of the unnamed tributaries flow north in the south portion of the Study Area and the remaining unnamed tributary flows south along the west Site boundary. Six of the unnamed tributaries are permanent watercourses, the remaining unnamed tributary is intermittent. All seven unnamed tributaries empty into Findlay Creek Municipal Drain within the Study Area (Table 1).

Table 1 Aquatic Background Data within the Study Area

Watercourse Name <sup>1</sup>	Thermal Regime <sup>1</sup>	Flow Regime <sup>1,2</sup>	Fish Species Within the Study Area <sup>1</sup>
Smith-Gooding Municipal Drain	Warmwater	Permanent	Brook Stickleback ( <i>Culaea inconstans</i> ), Central Mudminnow ( <i>Umbra limi</i> ), Finescale Dace ( <i>Chrosomus neogaeus</i> )
Unnamed tributary to Smith-Gooding Municipal Drain (drainage ditch)	Unknown	Permanent	None Identified
Findlay Creek (Municipal Drain)	Cold	Permanent	Blacknose Dace (Rhinichthys atratulus), Bluntnose Minnow (Pimephales notatus), Brassy Minnow (Hybognathus hankinsoni), Brook Stickleback, Central Mudminnow, Creek Chub (Semotilus atromaculatus), Etheostoma sp., Longnose Dace (Rhinichthys cataractae), Northern Pearl Dace (Margariscus margarita), Northern Redbelly Dace (Chrosomus eos), White Sucker (Catostomus commersonii), Johnny Darter (Etheostoma nigrum), Northern Pike (Esox lucius), Brown Trout (Salmo trutta), Common Shiner (Luxilus cornutus), Fathead Minnow (Pimephales promelas), Golden Shiner (Notemigonus crysoleucas), Perches (Perca spp.), Brown Bullhead (Ameiurus nebulosus), Carp sp.
Unnamed tributary to Findlay Creek	Unknown	Permanent	None Identified

Watercourse Name <sup>1</sup>	Thermal Regime <sup>1</sup>	Flow Regime <sup>1,2</sup>	Fish Species Within the Study Area <sup>1</sup>
Unnamed tributary to Findlay Creek	Unknown	Permanent	None Identified
Unnamed tributary to Findlay Creek	Unknown	Permanent	None Identified
Unnamed tributary to Findlay Creek	Unknown	Permanent	None Identified
Unnamed tributary to Findlay Creek	Unknown	Permanent	None Identified
Unnamed tributary to Findlay Creek	Unknown	Permanent	None Identified
Unnamed tributary to Findlay Creek	Unknown	Intermittent	None Identified

#### NOTES:

- Geospatial Ontario On-line Natural Heritage Mapping and Natural Heritage Information Database (MNR 2025b)
- <sup>2</sup> Ontario's NHIC database (MNR 2025a)

### 3.1.2 Wetlands

The Ontario Wetland Evaluation System (OWES) is used to identify PSWs. An evaluated wetland may be one contiguous unit or may be a series of smaller wetlands functioning as a whole. Evaluated wetlands that do not qualify as provincially significant may be designated locally significant and may be protected through local planning and policy measures.

According to the Geospatial Ontario database, the Findlay Creek Swamp (evaluated wetland) and 13 unevaluated wetlands occur in the Study Area. There are no PSWs in the Study Area (MNR 2025b).

# 3.2 Site Investigation

Ecological Land Classification (ELC) communities, as identified during desktop review were ground-truthed during the windshield survey. The Site consists predominantly of forests (FO) and thickets (TH) with a wetland community (WE) in the southeast corner, a recreational community (CGL\_4) north of the Findlay Creek SWM area, open water (OA) associated with Findlay Creek Stormwater Management Area (SWMA), and shallow water SA associated with the Smith-Gooding Municipal Drain and Findlay Creek (Municipal Drain). Adjacent lands consist predominantly of constructed communities (CV), with a golf course (CGL\_1) to the west and scattered pockets of agricultural (OAG) and forest (FO) communities (Figure 2, Attachment A).

Thirty-one (31) wildlife observations were recorded during the windshield survey including 1 insect, 3 amphibians, 25 birds, and 2 mammals. All wildlife species recorded within the Study Area have S-Ranks of S4 or S5 and are considered common and widespread in Ontario (Attachment C).

Pileated Woodpecker, a migratory bird species listed on Schedule 1 of the MBCA was observed in the wetland (WE) within the Site (Figure 2, Attachment A).

Barn Swallow, a migratory bird species listed under the ESA as special concern and under the SARA as threatened was among the 25 bird species recorded. This species was observed at the Site in the OA community associated with the Findlay Creek SWMA (Figure 2, Attachment A).

No additional SAR or SOCC were observed during the site investigation.

## 3.3 Habitat Assessment

# 3.3.1 Species at Risk Habitat

Based on the desktop review, a total of 17 SAR had the potential to occur in the Study Area, including 2 plant, 1 reptile, 7 bird, and 7 mammal species (Table B.1 Attachment B). Based on satellite imagery and field investigation results, the following 15 SAR were assessed as having suitable habitat in the Study Area:

- Plant SAR: Black Ash, Butternut
- Herptile SAR: Blanding's Turtle
- Bird SAR: Bank Swallow, Barn Swallow (confirmed), Chimney Swift, Least Bittern, Wood Thrush
- **Mammal SAR:** Eastern Red Bat, Eastern Small-footed Myotis, Hoary Bat, Little Brown Myotis, Northern Myotis, Silver-haired Bat, Tri-colored Bat

# 3.3.2 Significant Wildlife Habitat

### 3.3.2.1 Habitats of Seasonal Concentrations of Animals

Habitats of seasonal concentrations of animals are those sites where large numbers of a species gather together at one time of the year, or where several species congregate. These areas include deer yards, turtle overwintering areas, snake and bat hibernacula, bat maternity colonies, waterfowl staging areas, raptor roosts, bird nesting colonies, shorebird staging areas, and passerine migration concentrations. Only the best examples of these concentration areas are usually designated as SWH. Areas that support a SAR, or areas where a large proportion of the population may be lost if the habitat is destroyed, are examples of habitats of seasonal concentrations of animals which should be designated as significant (MNR 2000).

**Bat Maternity Colonies:** Forests and swamps in the Study Area are greater than 10 hectares (ha) in size and may consists of large diameter dead or dying trees (>25 cm diameter at breast height) with cavities. Therefore, the Study Area may provide candidate habitat for bat maternity colonies.

**Reptile Hibernacula:** Rock piles, fissured rocks or slopes, stone fences, and/or crumbling foundations if present, could qualify as candidate reptile hibernacula within the Study Area.

### 3.3.2.2 Rare Vegetation Communities or Specialized Habitats for Wildlife

Rare vegetation communities and specialized habitats for wildlife are two separate components. Rare vegetation communities are those with vegetation communities that are considered rare in the province (e.g., S1-S3). The SWHTG (MNR 2000) identifies many habitats that could be considered specialized habitats, such as habitat for area-sensitive species, forests providing a high diversity of habitats, amphibian woodland breeding ponds, turtle nesting habitat, highly diverse sites, as well as seeps and springs. High quality habitat features generally occur within interior landscapes where habitat is not influenced by edge effects and wildlife mortality that are associated with major roadways.

**Turtle Nesting Areas:** Exposed soil (sand and gravel in open sunny areas) may occur near wetlands and watercourses within the Study Area and could qualify as candidate turtle nesting areas.

Amphibian Breeding Habitat (Woodland and Wetland): Wetlands and treed areas with vernal pools in the Study Area could qualify as candidate woodland and wetland amphibian breeding habitat.

### 3.3.2.3 Habitat for Species of Conservation Concern

Habitat for SOCC includes four types of species: (a) those that are rare, (b) those whose populations are significantly declining, (c) those that have been identified as being at risk to certain common activities, and (d) those with relatively large populations in Ontario compared to the remainder of the globe. The Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E (MNRF 2015) identifies marsh, open country and shrub/early successional bird breeding habitat and special concern and rare wildlife species in this category.

Rare species are considered at five levels: globally rare, federally rare with designations by the COSEWIC, provincially rare by the Committee on the Status of Species at Risk in Ontario (COSSARO), regionally rare (at the site region level), and locally rare (at the municipality or site district level). This is also the order of priority that should be assigned to the importance of maintaining species.

Some species have been identified as being susceptible to certain practices, and their presence may result in an area being designated SWH.

**Shrub/Early Successional Bird Breeding Habitat:** Shrub and thicket habitats within the Study Area are greater than 10 hectares (ha) in size and could qualify as candidate shrub/early successional bird breeding habitat.

Marsh Bird Breeding Habitat: According to the SWHTG (MNR 2000), the criteria for marsh bird breeding habitat includes wetlands with shallow water, emergent aquatic vegetation, and marsh bird species such as American Bittern. American Bittern was observed at the Site in the wet thicket (TH) adjacent to the wetland (WE). The wetland (WE) community may qualify as candidate marsh bird breeding habitat.

**Special Concern and Rare Wildlife Species:** Based on the desktop review, records of the following 15 SOCC occur near the Study Area (Table B.2, Attachment B):

• Insect SOCC: Brotherly Potter Wasp, Brown-toed Forest Fly, Monarch, Tapered Mason Wasp, Walden's Potter Wasp, Widow Yellowjacket, Yellow-banded Bumble Bee

- Herptile SOCC: Midland Painted Turtle, Northern Map Turtle, Snapping Turtle
- **Bird SOCC:** Common Nighthawk, Eastern Wood-pewee, Grasshopper Sparrow, Peregrine Falcon, Rusty Blackbird

Areas with natural vegetation (e.g., forests, thickets, wetlands) may provide candidate SWH for all 7 insect SOCC. Open areas may provide candidate SWH for Common Nighthawk, and forests may provide candidate SWH for Eastern Wood-pewee and Rusty Blackbird.

Candidate SWH for SOCC turtles (Midland Painted Turtle, Northern Map Turtle, Snapping Turtle) is considered through Turtle Wintering Area and Turtle Nesting Areas. No Turtle Wintering Areas were identified within the Study Area. Turtle Nesting Areas are discussed above under Specialized Habitats for Wildlife.

No SOCC were observed during the windshield survey.

### 3.3.2.4 Animal Movement Corridors

Migration corridors are areas that are traditionally used by wildlife to move from one habitat to another, typically to access different seasonal habitat requirements. Corridors requiring consideration in Ecoregion 6E include Amphibian and Deer Movement Corridors and are identified once significant amphibian breeding or deer winter features are confirmed.

**Amphibian Movement Corridor:** Candidate SWH for amphibian breeding habitat may occur in the Study Area. Candidate amphibian movement corridors may also be present in the Study Area.

# 4 Summary of Natural Heritage Features and Areas

A summary of NHFA that were confirmed or have the potential to be present within the Study Area is provided in Table 2.

Table 2 Summary of Natural Heritage Features and Areas within the Study Area

Туре	Species/Feature	Description
Conservation Authority Designation	Regulated Areas	SNC regulation limits are present within the Study Area (see Section 3.1).
Wetlands	Unevaluated wetlands	Thirteen (13) wetland parcels occur within the Study Area (see Section 3.1.2)
	Evaluated wetlands	Findlay Creek Swamp (evaluated wetland) occurs within the Study Area (see Section 3.1.2)
Woodlands	Non-significant woodlands	Non-significant woodlands occur within the Study Area (see Section 3.1)

Туре	Species/Feature	Description
Breeding and Migratory Birds	Bird nests	Breeding birds and migratory bird species listed on Schedule 1 of the MBCA (Pileated Woodpecker) were confirmed within the Study Area (see Section 3.2 and Attachment C).
Suitable	Black Ash	See Attachment B, Table B.1 for SAR habitat assessment
habitat for	Butternut	
SAR	Blanding's Turtle	
	Bank Swallow	
	Barn Swallow (confirmed)	
	Chimney Swift	
	Least Bittern	
	Wood Thrush	
	Eastern Red Bat	
	Eastern Small-footed Myotis	
	Hoary Bat	
	Little Brown Myotis	
	Northern Myotis	
	Silver-haired Bat	
	Tri-colored Bat	
Significant Wildlife	Bat maternity colonies	Forests in the Study Area may provide candidate habitat for bat maternity colonies (see Section 3.3.2.1).
Habitat	Reptile hibernacula	Rock piles, fissured rocks or slopes, stone fences, and/or crumbling foundations if present, could qualify as candidate reptile hibernacula within the Study Area (see Section 3.3.2.1).
	Turtle nesting areas	Exposed soil (sand and gravel in open sunny areas), may occur near wetlands and watercourses within the Study Area and could qualify as candidate turtle nesting areas (see Section 3.3.2.2).
	Amphibian breeding habitat (woodland and wetland)	Wetlands and treed areas with vernal pools in the Study Area could qualify as candidate woodland and wetland amphibian breeding habitat (see Section 3.3.2.2).
	Shrub/early successional bird breeding habitat	Shrub and thicket habitats within the Study Area could qualify as candidate shrub/early successional bird breeding habitat (see Section 3.3.2.3).
	Marsh bird breeding habitat	The wetland (WE) community may qualify as candidate marsh bird breeding habitat (see Section 3.3.2.3).
	Habitat for SOCC	Areas with natural vegetation (e.g., forests, thickets, wetlands)
	Brotherly Potter Wasp	may provide candidate SWH for all 7 insect SOCC.
	Brown-toed Forest Fly	Open areas may provide candidate SWH for Common Nighthawk,
	Monarch	and forests may provide candidate SWH for Eastern Wood-pewee and Rusty Blackbird.
	Tapered Mason Wasp	Candidate SWH for SOCC turtles (Midland Painted Turtle,
	Walden's Potter Wasp	Northern Map Turtle, Snapping Turtle) is considered through

Туре	Species/Feature	Description
	Widow Yellowjacket Yellow-banded Bumble Bee Midland Painted Turtle Northern Map Turtle Snapping Turtle Common Nighthawk Eastern Wood-pewee	Turtle Wintering Area and Turtle Nesting Areas. No Turtle Wintering Areas were identified within the Study Area (see Section 3.3.2.3 and Attachment B, Table B.2).
Fish Habitat	Rusty Blackbird  Warmwater thermal regime	The Smith-Gooding Municipal Drain provides warmwater habitat for fish within the Study Area (see Section 3.1.1).
	Coldwater thermal regime	The Findlay Creek Municipal Drain provides coldwater habitat for fish within the Study Area (see Section 3.1.1).
	Unknown thermal regime	The unnamed tributary to Smith-Gooding Municipal Drain and seven unnamed tributaries to Findlay Creek provide habitat for fish (see Section 3.1.1)

# 5 Conclusion

The Study Area occurs within SNC's regulated areas and on lands designated as non-significant wetlands and woodlands. The Study Area provides habitat for breeding and migratory birds, including species listed on Schedule 1 of the MBCA (Pileated Woodpecker), and warmwater and coldwater fish communities. Additionally, candidate SWH (bat maternity colonies, reptile hibernacula, turtle nesting areas, amphibian breeding habitat, shrub/early successional bird breeding habitat, marsh bird breeding habitat, habitat for SOCC) was identified within the Study Area.

There are no ANSIs, PSWs, fish nurseries, linkages and wildlife corridors, significant woodlands, or significant valleylands within the Study Area. An impact assessment is required to determine potential impacts in or adjacent to wetlands, woodlands, SAR habitat, SWH, and watercourses, and provide appropriate mitigation measures prior to development. Proposed development may require authorization under the ESA if SAR and/or their habitat is present and will be impacted. Correspondence with the MECP's Species at Risk Branch (SARB) is recommended to determine additional surveys, if required, avoidance and mitigation measures, as well as potential permitting scenarios under the ESA. Mitigation measures should consider the general mitigation measures outlined in the City of Ottawa's *Protocol for Wildlife Protection during Construction* (2022).

This report documents work that was performed in accordance with generally accepted professional standards at the time and location in which the services were provided. No other representations, warranties or guarantees are made concerning the accuracy or completeness of the data or conclusions contained within this report, including no assurance that this work has uncovered all potential liabilities associated with the identified property. Conclusions made within this report consist of Stantec's professional

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opinion as of the time of the writing of this report and are based solely on the scope of work described in the report, the limited data available and the results of the work.

Sincerely,

Stantec Consulting Ltd.

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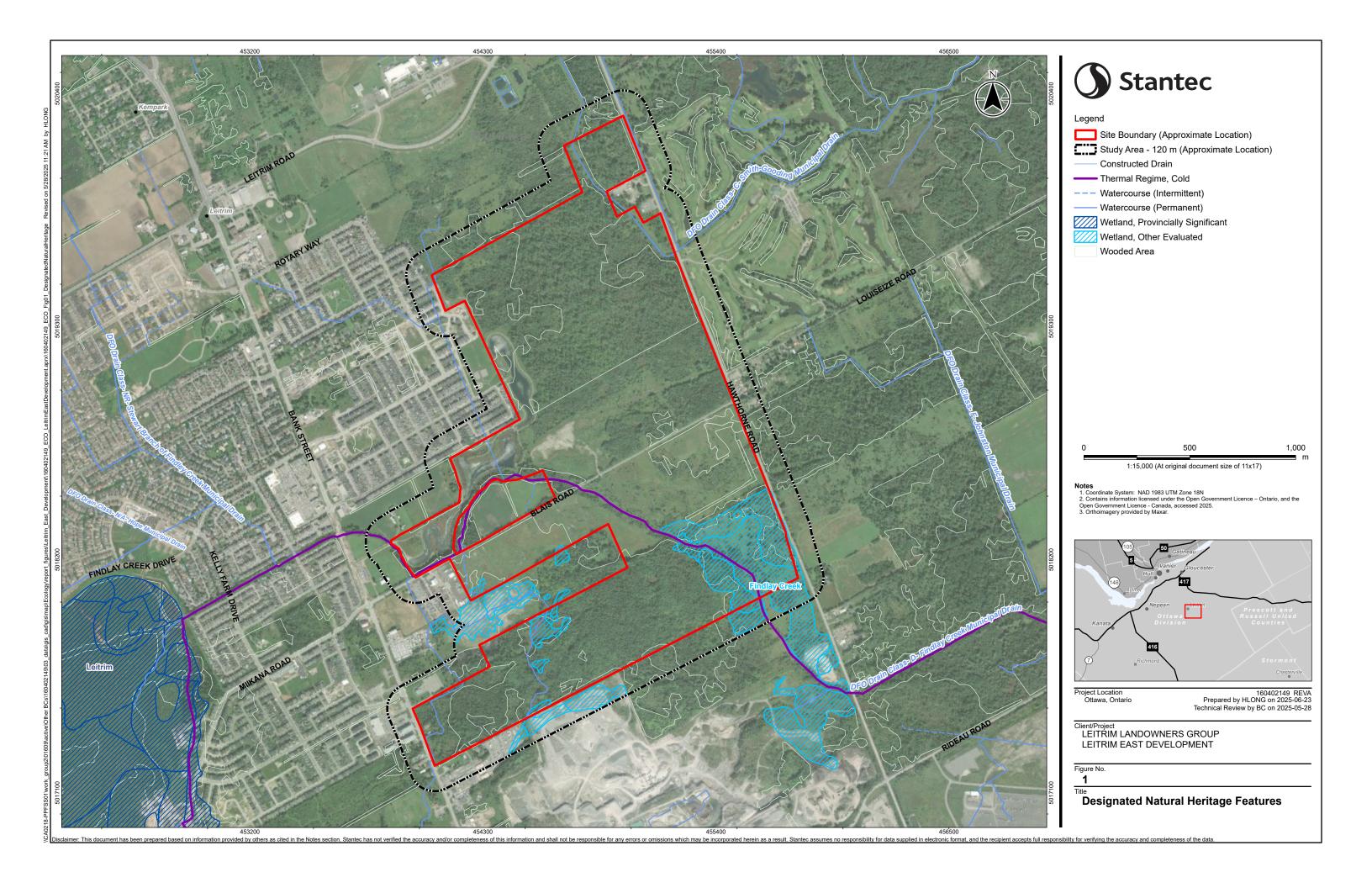
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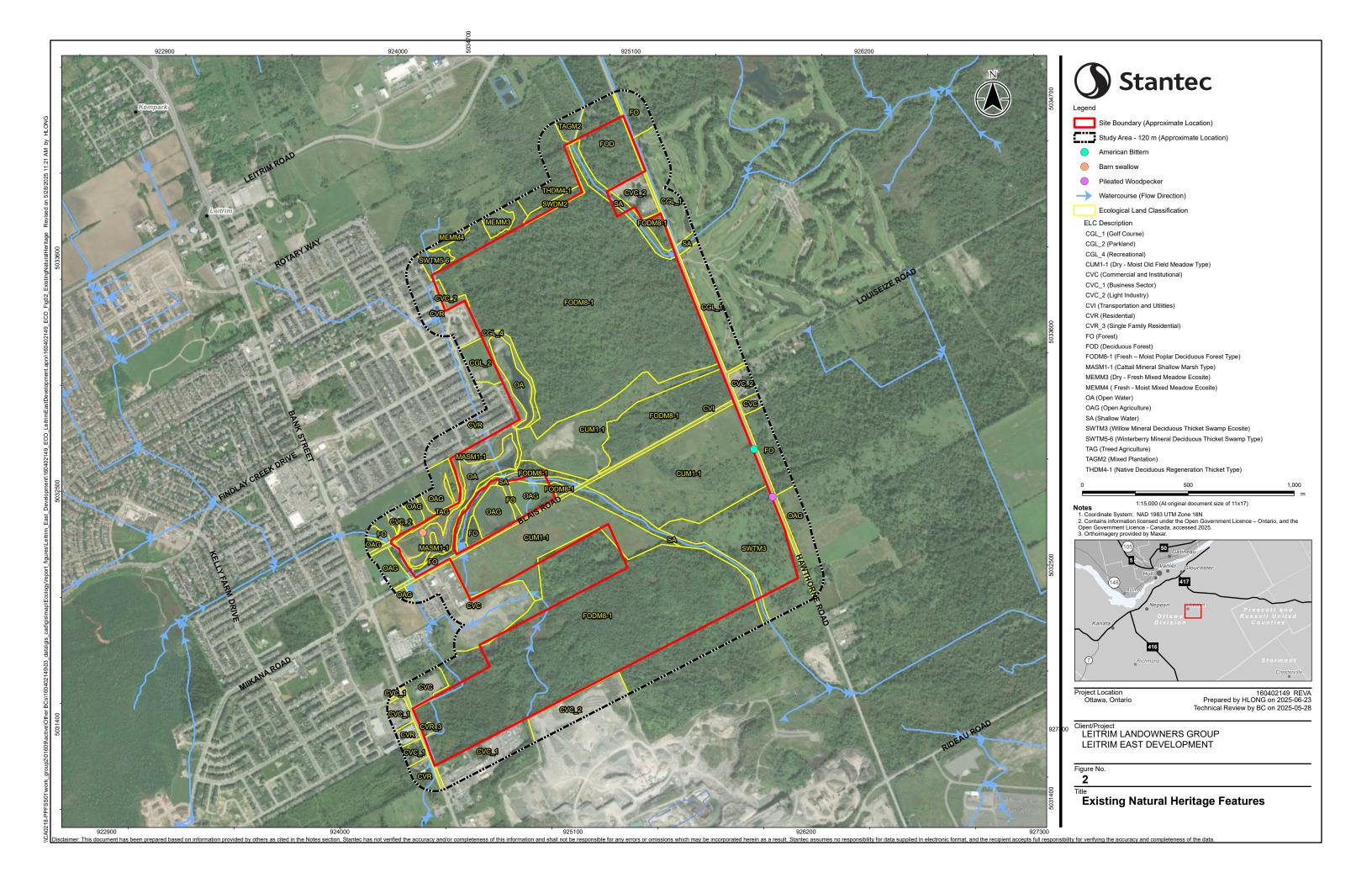
Attachment A Figures

Attachment B Species at Risk and Species of Conservation Concern with Potential Assessment Tables

Attachment C Wildlife Observations Table

# Attachment A Figures





# Attachment B Species at Risk and Species of Conservation Concern with Potential Assessment Tables

Appendix B.1 Species at Risk with Potential to Occur at the Site

Common Name <sup>1</sup>	Scientific Name <sup>1</sup>	SARO <sup>2</sup>	COSEWIC <sup>3</sup>	SARA <sup>4</sup>	S-Rank <sup>5</sup>	Source(s)	Habitat Suitability (Yes/No)		
							Site	Study Area	
PLANTS	•								
Black Ash	Fraxinus nigra	END	THR	UC	S4	NHIC, iNaturalist	Yes – suitable habitat for Black Ash may occur in treed areas within the Site.	Yes – suitable habitat for Black Ash may occur in treed areas within the Study Area.	
Butternut	Juglans cinerea	END	END	END	S2?	NHIC, iNaturalist	Yes – suitable habitat for Butternut may occur in treed areas within the Site.	Yes – suitable habitat for Butternut may occur in treed areas within the Study Area.	
HERPTILES					•				
Blanding's Turtle	Emydoidea blandingii	THR	END	END	S3	iNaturalist, ORRA	Yes –suitable nesting habitat for turtles may be present within the Site. Turtles may use watercourses within the Site for travel.	Yes –suitable nesting habitat for turtles may be present within the Study Area. Turtles may use watercourses within the Study Area for travel.	
BIRDS									
Bank Swallow	Riparia riparia	THR	THR	THR	S4B	iNaturalist, OBBA, eBird	Yes – suitable nesting habitat for this species may be present within the Site.	Yes – suitable nesting habitat for this species may be present within the Study Area.	
Barn Swallow	Hirundo rustica	sc	SC	THR	S4B	iNaturalist, OBBA, eBird	Yes – one individual was observed in the OA community associated with the Findlay Creek SWMA within the Site.	Yes – anthropogenic structures within the Study Area may provide suitable nesting habitat to support this species.	
Bobolink	Dolichonyx oryzivorus	THR	SC	THR	S4B	NHIC, OBBA, eBird	No – suitable nesting habitat for this species is absent from the Site.	No – suitable nesting habitat for this species is absent from the Study Area.	
Chimney Swift	Chaetura pelagica	THR	THR	THR	S3B	OBBA, eBird	Yes – open areas within the Site may provide suitable foraging habitat for this species.	Yes – anthropogenic structures within the Study Area may provide suitable nesting habitat to support this species.	
Eastern Meadowlark	Sturnella magna	THR	THR	THR	S4B,S3N	NHIC, OBBA, eBird	No – suitable nesting habitat for this species is absent from the Site.	No – suitable nesting habitat for this species is absent from the Study Area.	
Least Bittern	Botaurus exilis	THR	THR	THR	S4B	NHIC, iNaturalist, OBBA	Yes – wetlands within the Site may provide suitable nesting habitat for this species.  Yes – wetlands within the Study Ar provide suitable nesting habitat for		
Wood Thrush	Hylocichla mustelina	sc	THR	THR	S4B	NHIC, iNaturalist, OBBA, eBird	Yes – forests within the Site may provide suitable nesting habitat for this species.	Yes – forests within the Study Area may provide suitable nesting habitat for this species.	



Common Name <sup>1</sup>	Scientific Name <sup>1</sup>	SARO <sup>2</sup>	COSEWIC <sup>3</sup>	SARA <sup>4</sup>	S-Rank⁵	Source(s)	Habitat Suitability (Yes/No)		
							Site	Study Area	
MAMMALS									
Eastern Red Bat	Lasiurus borealis	END	END	Not Listed	S3	AMO	Yes – dense foliage within the Site may provide suitable summer/maternity roosting habitat for this species.	Yes – dense foliage within the Study Area may provide suitable summer/maternity roosting habitat for this species.	
Eastern Small- footed Myotis	Myotis leibii	END	No Status	UC	S2S3	AMO	Yes – mature trees with loose bark or cavities and/or rocks within the Site may provide suitable summer/maternity roosting habitat for this species.  Overwintering habitat (caves, abandoned	Yes – mature trees with loose bark or cavities, rocks, and/or anthropogenic structures within the Study Area may provide suitable summer/maternity roosting habitat for this species.  Overwintering habitat (caves, abandoned mines)	
							mines) is absent from the Site.	is absent from the Study Area.	
Hoary Bat	Lasiurus cinereus	END	END	UC	S3	iNaturalist, AMO	Yes – tree foliage within the Site may provide suitable summer/maternity roosting habitat for this species.	Yes – tree foliage within the Study Area may provide suitable summer/maternity roosting habitat for this species.	
Little Brown Myotis	Myotis lucifugus	END	END	END	S3	AMO	Yes – mature trees with loose bark or cavities within the Site may provide suitable summer/maternity roosting habitat for this species.	Yes – mature trees with loose bark or cavities and/or anthropogenic structures within the Study Area may provide suitable summer/maternity roosting habitat for this species.	
							Overwintering habitat (caves, abandoned mines) is absent from the Site.	Overwintering habitat (caves, abandoned mines) is absent from the Study Area.	
Northern Myotis	Myotis septentrionalis	END	END	END	S3	AMO	Yes – mature trees with loose bark or cavities within the Site may provide suitable summer/maternity roosting habitat for this species.	Yes – mature trees with loose bark or cavities within the Study Area may provide suitable summer/maternity roosting habitat for this species.	
							Overwintering habitat (caves, abandoned mines) is absent from the Site.	Overwintering habitat (caves, abandoned mines) is absent from the Study Area.	
Silver-haired Bat	Lasionycteris noctivagans	END	END	UC	S3	AMO	Yes – mature trees with loose bark or cavities within the Site may provide suitable summer/maternity roosting habitat for this species.	Yes – mature trees with loose bark or cavities within the Study Area may provide suitable summer/maternity roosting habitat for this species.	
Tri-colored Bat	Perimyotis subflavus	END	END	END	S3?	AMO	Yes – mature trees with loose bark or cavities within the Site may provide suitable summer/maternity roosting habitat for this species.	Yes – mature trees with loose bark or cavities within the Study Area may provide suitable summer/maternity roosting habitat for this species.	
							Overwintering habitat (caves, abandoned mines) is absent from the Site.	Overwintering habitat (caves, abandoned mines) is absent from the Study Area.	



### Notes:

<sup>1</sup>Common Name: The common English name of a species as published by the NHIC hosted by the MNR.

<sup>1</sup>Scientific Name: The scientific name of a species as published by the NHIC hosted by the MNR.

2S-Rank: Subnational Rank is the conservation status of a species within a particular province, territory, or state. In this scenario, it is the provincial level ranking system as published by the NHIC hosted by hosted by the MNR.

<sup>3</sup>SARO Status: Species at Risk in Ontario (Provincial Status as defined by the Endangered Species Act, 2007 as amended).

<sup>4</sup>COSEWIC Status: Status as defined by the Committee on the Status of Endangered Wildlife in Canada.

<sup>5</sup>SARA Status: Federal status as defined by the *Species at Risk Act*.

### **Endangered Species Act and Species at Risk Act Acronyms**

**END**: Endangered - a species facing imminent extinction or extirpation

**THR**: Threatened - a species that is at risk of becoming endangered

SC: Special Concern - a species with characteristics that make it sensitive to human activities or natural events

### Subnational Rankings (S RANK)

**SU**: Unrankable – Currently unrankable due to lack of information

SNA: Not applicable – A conservation status rank is not applicable because the species is not a suitable target for conservation activities

S#S#: Range Rank - A numeric range rank (e.g., S2S3) is used to indicate any range of uncertainty about the status of the species

?: Indicates uncertainty in the assigned rank

\$1: Critically Imperiled - Critically imperiled in the province (often 5 or fewer occurrences)

**S2**: Imperiled - Imperiled in the province, few populations (often 20 or fewer)

\$3: Vulnerable - Vulnerable in the province, relatively few populations (often 80 or fewer)

**S4**: Apparently Secure - Uncommon but not rare

S?: Rank Uncertain

B: Breeding: Conservation status refers to the breeding population of the species in the nation or state/province

N: Non-breeding: Conservation status refers to the non-breeding population of the species in the nation or state/province

M: Migrant: Migrant species occurring regularly on migration at particular staging areas or concentration spots where the species might warrant conservation attention. Conservation status refers to the aggregating transient population of the species in the nation or state/province

#### Sources

**AMO**: Atlas of the Mammals of Ontario (Dobbyn 1994)

eBird: eBird Canada (eBird 2025)

iNaturalist: iNaturalist Canada (iNaturalist 2025)
NHIC: Ontario's NHIC database (MNR 2025a)

**OBBA**: Ontario Breeding Bird Atlas (Cadman et al. 2007)

**ORAA**: Ontario Reptile and Amphibian Atlas (Ontario Nature 2020)



Appendix B.2 Species of Conservation Concern with Potential to Occur at the Site

Common Name <sup>1</sup>	Scientific Name <sup>1</sup>	SARO <sup>2</sup>	COSEWIC <sup>3</sup>	SARA4	S-	Source(s)	Habitat Suitability (Yes/No)		
					Rank <sup>5</sup>		Site	Study Area	
INSECTS									
Brotherly Potter Wasp	Eumenes fraternus	Not Listed	No Status	Not Listed	S3	iNaturalist	Yes – suitable habitat to support this species may be present in within the Site.	Yes – suitable habitat to support this species may be present within the Study Area.	
Brown-toed Forest Fly	Xylota segnis	Not Listed	No Status	Not Listed	S3	iNaturalist	Yes – suitable habitat to support this species may be present in within the Site.	Yes – suitable habitat to support this species may be present within the Study Area.	
Monarch	Danaus plexippus	SC	END	END	S2N,S 4B	iNaturalist	Yes – suitable habitat to support this species may be present in within the Site.	Yes – suitable habitat to support this species may be present within the Study Area.	
Tapered Mason Wasp	Parazumia symmorpha	Not Listed	No Status	Not Listed	S3	iNaturalist	Yes – suitable habitat to support this species may be present in within the Site.	Yes – suitable habitat to support this species may be present within the Study Area.	
Walden's Potter Wasp	Ancistrocerus waldenii	Not Listed	No Status	Not Listed	S3	iNaturalist	Yes – suitable habitat to support this species may be present in within the Site.	Yes – suitable habitat to support this species may be present within the Study Area.	
Widow Yellowjacket	Vespula vidua	Not Listed	No Status	Not Listed	S3	iNaturalist, OBA	Yes – suitable habitat to support this species may be present in within the Site.	Yes – suitable habitat to support this species may be present within the Study Area.	
Yellow-banded Bumble Bee	Bombus terricola	SC	SC	SC	S3S5	iNaturalist	Yes – suitable habitat to support this species may be present in within the Site.	Yes – suitable habitat to support this species may be present within the Study Area.	
HERPTILES									
Midland Painted Turtle	Chrysemys picta marginata	Not Listed	SC	SC	S4	NHIC, ORRA	Yes – suitable nesting habitat for turtles may be present within the Site. Turtles may use watercourses within the Site for travel.	Yes – suitable nesting habitat for turtles may be present within the Study Area. Turtles may use watercourses within the Study Area for travel.	
Northern Map Turtle	Graptemys geographica	SC	SC	SC	S3	iNaturalist	Yes – suitable nesting habitat for turtles may be present within the Site. Turtles may use watercourses within the Site for travel.	Yes – suitable nesting habitat for turtles may be present within the Study Area. Turtles may use watercourses within the Study Area for travel.	
Snapping Turtle	Chelydra serpentina	SC	SC	SC	S4	NHIC, iNaturalist, ORRA	Yes – suitable nesting habitat for turtles may be present within the Site. Turtles may use watercourses within the Site for travel.	Yes – suitable nesting habitat for turtles may be present within the Study Area. Turtles may use watercourses within the Study Area for travel.	
BIRDS	•		<b>.</b>	1	1		•		
Common Nighthawk	Chordeiles minor	SC	SC	SC	S4B	OBBA, eBird	Yes – open areas within the Site may provide suitable nesting habitat for this species.	Yes – open areas within the Study Area may provide suitable nesting habitat for this species.	



Common Name <sup>1</sup>	Scientific Name <sup>1</sup>	SARO <sup>2</sup>	COSEWIC <sup>3</sup>	SARA4	S-	Source(s)	Habitat Suitability (Yes/No)		
					Rank⁵	ank⁵ S	Site	Study Area	
Eastern Wood-pewee	Contopus virens	SC	SC	SC	S4B	NHIC, iNaturalist, OBBA, eBird	Yes – forests within the Site may provide suitable nesting habitat for this species.	Yes – forests within the Study Area may provide suitable nesting habitat for this species.	
Grasshopper Sparrow	Ammodramus savannarum	SC	SC	Not Listed	S4B	NHIC, OBBA	No – suitable nesting habitat for this species is absent from the Site.	No – suitable nesting habitat for this species is absent from the Study Area.	
Peregrine Falcon	Falco peregrinus	SC	NAR	Not Listed	S4	iNaturalist, eBird			
Rusty Blackbird	Euphagus carolinus	SC	SC	SC	S4B,S 3N	iNaturalist, eBird	Yes – forests within the Site may provide suitable nesting habitat for this species.	<b>Yes</b> – forests within the Study Area may provide suitable nesting habitat for this species.	

### Notes:

<sup>1</sup>Common Name: The common English name of a species as published by the NHIC hosted by the MNR.

<sup>1</sup>Scientific Name: The scientific name of a species as published by the NHIC hosted by the MNR.

2S-Rank: Subnational Rank is the conservation status of a species within a particular province, territory, or state. In this scenario, it is the provincial level ranking system as published by the NHIC hosted by hosted by the MNR.

<sup>3</sup>SARO Status: Species at Risk in Ontario (Provincial Status as defined by the Endangered Species Act, 2007 as amended).

<sup>4</sup>COSEWIC Status: Status as defined by the Committee on the Status of Endangered Wildlife in Canada.

<sup>5</sup>SARA Status: Federal status as defined by the *Species at Risk Act*.

### **Endangered Species Act and Species at Risk Act Acronyms**

**END**: Endangered - a species facing imminent extinction or extirpation

**THR**: Threatened - a species that is at risk of becoming endangered

SC: Special Concern - a species with characteristics that make it sensitive to human activities or natural events

### **Subnational Rankings (S RANK)**

**SU**: Unrankable – Currently unrankable due to lack of information

SNA: Not applicable – A conservation status rank is not applicable because the species is not a suitable target for conservation activities

S#S#: Range Rank - A numeric range rank (e.g., \$2\$3) is used to indicate any range of uncertainty about the status of the species

?: Indicates uncertainty in the assigned rank

**S1**: Critically Imperiled - Critically imperiled in the province (often 5 or fewer occurrences)

**S2**: Imperiled - Imperiled in the province, few populations (often 20 or fewer)

**S3**: Vulnerable - Vulnerable in the province, relatively few populations (often 80 or fewer)

**S4**: Apparently Secure - Uncommon but not rare

S?: Rank Uncertain

B: Breeding: Conservation status refers to the breeding population of the species in the nation or state/province

N: Non-breeding: Conservation status refers to the non-breeding population of the species in the nation or state/province

**M**: Migrant: Migrant species occurring regularly on migration at particular staging areas or concentration spots where the species might warrant conservation attention. Conservation status refers to the aggregating transient population of the species in the nation or state/province

#### Sources



AMO: Atlas of the Mammals of Ontario (Dobbyn 1994)

eBird: eBird Canada (eBird 2025)

iNaturalist: iNaturalist Canada (iNaturalist 2025)
NHIC: Ontario's NHIC database (MNR 2025a)

**OBA:** Ontario Butterfly Atlas (Macnaughton et al. 2025)

OBBA: Ontario Breeding Bird Atlas (Cadman et al. 2007)

ORAA: Ontario Reptile and Amphibian Atlas (Ontario Nature 2020)

# **Attachment C** Wildlife Observations Table

# Attachment C Wildlife Observations Within the Study Area During 2025 Windshield Survey

NHIC Class	Family <sup>1</sup>	Common Name <sup>1</sup>	Scientific Name <sup>1</sup>	SARO Status <sup>2</sup>	COSEWIC Status <sup>3</sup>	SARA Status <sup>4</sup>	S-Rank⁵
Insects	Pieridae	Cabbage White	Pieris rapae	Not Listed	No Status	Not Listed	SNA
Amphibians	Bufonidae	American Toad	Anaxyrus americanus	Not Listed	No Status	Not Listed	S5
Amphibians	Ranidae	Green Frog	Lithobates clamitans	Not Listed	No Status	Not Listed	S5
Amphibians	Ranidae	Northern Leopard Frog	Lithobates pipiens	NAR	NAR	Not Listed	S5
Birds	Anatidae	Canada Goose	Branta canadensis	Not Listed	No Status	Not Listed	S5
Birds	Anatidae	Common Goldeneye	Bucephala clangula	Not Listed	No Status	Not Listed	S5
Birds	Anatidae	Mallard	Anas platyrhynchos	Not Listed	No Status	Not Listed	S5
Birds	Ardeidae	American Bittern	Botaurus lentiginosus	Not Listed	No Status	Not Listed	S5B
Birds	Columbidae	Mourning Dove	Zenaida macroura	Not Listed	No Status	Not Listed	S5
Birds	Fringillidae	American Goldfinch	Spinus tristis	Not Listed	No Status	Not Listed	S5
Birds	Hirundinidae	Barn Swallow	Hirundo rustica	SC	SC	THR	S4B
Birds	Hirundinidae	Tree Swallow	Tachycineta bicolor	Not Listed	No Status	Not Listed	S4S5B
Birds	Icteridae	Baltimore Oriole	Icterus galbula	Not Listed	No Status	Not Listed	S4B
Birds	Icteridae	Red-winged Blackbird	Agelaius phoeniceus	Not Listed	No Status	Not Listed	S5
Birds	Mimidae	Gray Catbird	Dumetella carolinensis	Not Listed	No Status	Not Listed	S5B,S3N
Birds	Parulidae	American Redstart	Setophaga ruticilla	Not Listed	No Status	Not Listed	S5B
Birds	Parulidae	Blackpoll Warbler	Setophaga striata	Not Listed	No Status	Not Listed	S5B
Birds	Parulidae	Common Yellowthroat	Geothlypis trichas	Not Listed	No Status	Not Listed	S5B,S3N
Birds	Parulidae	Tennessee Warbler	Leiothlypis peregrina	Not Listed	No Status	Not Listed	S5B
Birds	Parulidae	Yellow Warbler	Setophaga petechia	Not Listed	No Status	Not Listed	S5B
Birds	Parulidae	Yellow-rumped Warbler	Setophaga coronata	Not Listed	No Status	Not Listed	S5B,S4N
Birds	Passerellidae	Song Sparrow	Melospiza melodia	Not Listed	No Status	Not Listed	S5
Birds	Phasianidae	Ruffed Grouse	Bonasa umbellus	Not Listed	No Status	Not Listed	S5
Birds	Scolopacidae	Spotted Sandpiper	Actitis macularius	Not Listed	No Status	Not Listed	S5B
Birds	Sturnidae	European Starling	Sturnus vulgaris	Not Listed	No Status	Not Listed	SNA
Birds	Troglodytidae	House Wren	Troglodytes aedon	Not Listed	No Status	Not Listed	S5B



NHIC Class	Family <sup>1</sup>	Common Name <sup>1</sup>	Scientific Name <sup>1</sup>	SARO Status <sup>2</sup>	COSEWIC Status <sup>3</sup>	SARA Status <sup>4</sup>	S-Rank⁵
Birds	Turdidae	American Robin	Turdus migratorius	Not Listed	No Status	Not Listed	S5
Birds	Tyrannidae	Eastern Kingbird	Tyrannus tyrannus	Not Listed	No Status	Not Listed	S4B
Birds	Vireonidae	Warbling Vireo	Vireo gilvus	Not Listed	No Status	Not Listed	S5B
Mammals	Cricetidae	Muskrat	Ondatra zibethicus	Not Listed	No Status	Not Listed	S4
Mammals	Sciuridae	Eastern Chipmunk	Tamias striatus	Not Listed	No Status	Not Listed	S5

### Notes:

<sup>1</sup>Family, Scientific Name, and Common Name: The family, scientific name, and English common name of a species as published by the Natural Heritage Information Centre hosted by the Ministry of Natural Resources and Forestry / Land Information Ontario.

<sup>2</sup>SARO Status: Species at Risk in Ontario (Provincial Status as defined by the Endangered Species Act, 2007 as amended).

<sup>3</sup>COSEWIC Status: Status as defined by the Committee on the Status of Endangered Wildlife in Canada.

**4SARA Status:** Federal status as defined by the Species at Risk Act.

**5S-Rank:** Subnational Rank is the conservation status of a species within a particular province, territory, or state. In this scenario, it is the provincial level ranking system as published by the Natural Heritage Information Centre hosted by hosted by the Ministry of Natural Resources and Forestry / Land Information Ontario.

### **Endangered Species Act and Species at Risk Act Acronyms**

**END:** Endangered **THR:** Threatened **SC:** Special Concern

UC: Under consideration for addition and/or status change to Schedule 1 of SARA

NAR: Not at Risk

### **Ontario Subnational Rankings (S RANK)**

SNA: Not applicable – A conservation status rank is not applicable because the species is not a suitable target for conservation activities

S#S#: Range Rank – A numeric range rank (e.g., \$2\$3) is used to indicate any range of uncertainty about the status of the species

?: Indicates uncertainty in the assigned rank

**S1:** Critically Imperiled – Critically imperiled in the province (often 5 or fewer occurrences)

**S2:** Imperiled – Imperiled in the province, very few populations (often 20 or fewer),

**S3:** Vulnerable – Vulnerable in the province, relatively few populations (often 80 or fewer)

**S4:** Apparently Secure – Uncommon but not rare

**\$5:** Secure – Common, widespread, and abundant in the province

B: Breeding: Conservation status refers to the breeding population of the species in the nation or state/province

N: Non-breeding: Conservation status refers to the non-breeding population of the species in the nation or state/province

M: Migrant: Migrant species occurring regularly on migration at particular staging areas or concentration spots where the species might warrant conservation attention. Conservation status refers to the aggregating transient population of the species in the nation or state/province

