# Environmental Impact Study for 1867 Alta Vista Drive, Ottawa, Ontario

**October 9, 2026**

**Final Report**

**Submitted To**:

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Soul Alta Vista GP Inc.

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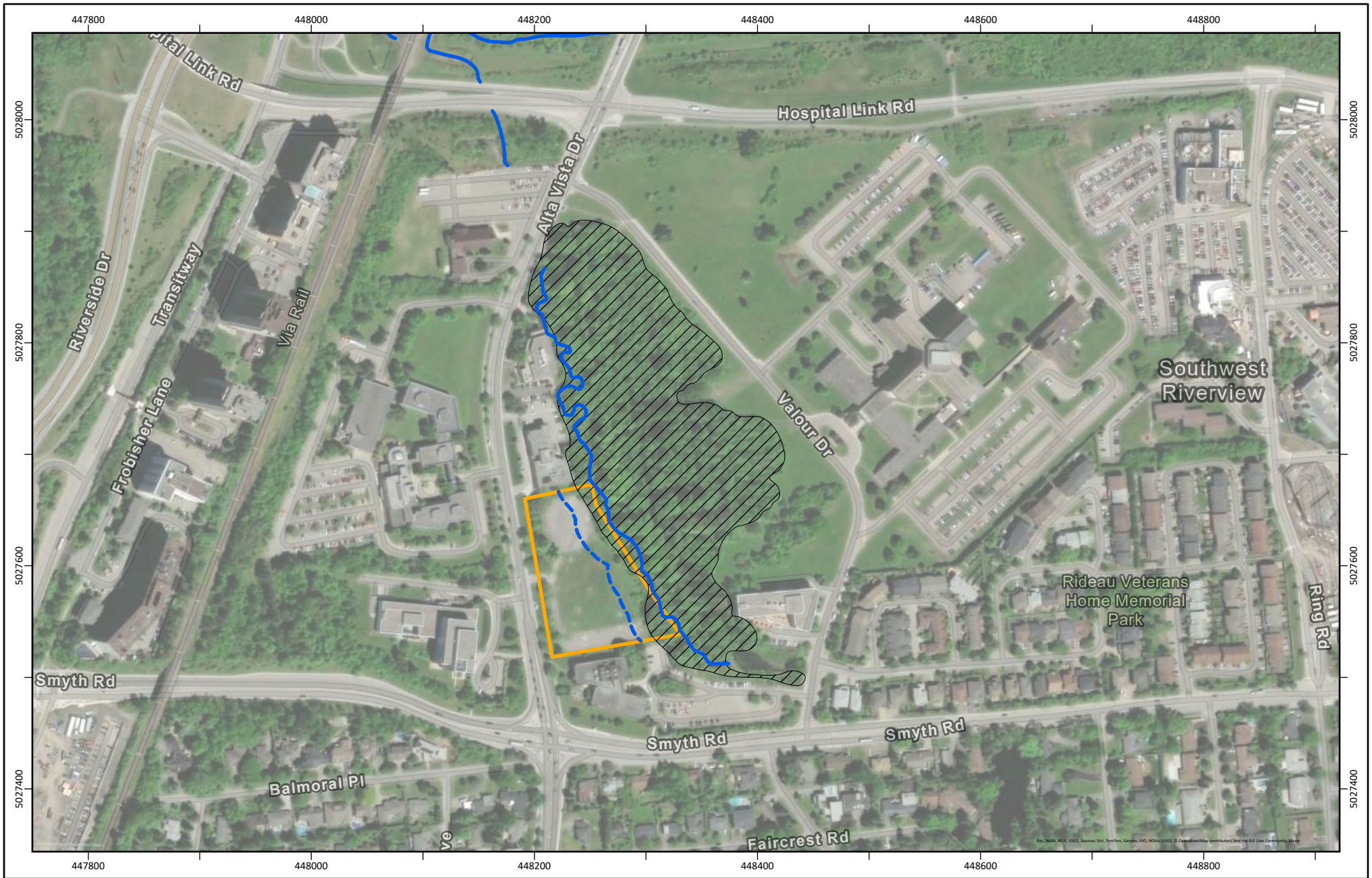
BHA – Butternut Health Assessment
COSSARO – Committee on the Status of Species at Risk in Ontario
CRZ – Critical Root Zone
DBH – Diameter at Breast Height
DFO – Fisheries and Oceans Canada (Department of Fisheries and Oceans)
ECCC – Environment and Climate Change Canada
EIS – Environmental Impact Study
ELC – Ecological Land Classification
ESA – *Endangered Species Act*
ESC – Erosion and Sediment Control
FWCA – *Fish and Wildlife Conservation Act*
KAL – Kilgour & Associates Ltd.
MBCA – *Migratory Birds Convention Act*
MECP – Ministry of Environment, Conservation and Parks
MMAH – Ministry of Municipal Affairs and Housing
MNR(F) – Ministry of Natural Resources (and Forestry)
NHIC – Natural Heritage Information Centre
NHRM – Natural Heritage Reference Manual
OMAFRA – Ontario Ministry of Agriculture, Food and Rural Affairs
PPS – Provincial Planning Statement
RVCA – Rideau Valley Conservation Authority
SARA – *Species at Risk Act*
SAR – Species at Risk
SCA – *Species Conservation Act*
SWH – Significant Wildlife Habitat
TCR – Tree Conservation Report
UNA – Urban Natural Area

# 1.0 INTRODUCTION

This report is an Environmental Impact Study (EIS) prepared by Kilgour & Associates Ltd. (KAL; Appendix A) on behalf of Soul Alta Vista GP Inc. in support of proposed Zoning Bylaw Amendment (ZBA) and Official Plan Amendment (OPA) applications for the property at 1867 Alta Vista Drive, Ottawa, Ontario ("the Site"; Figure 1). The proposed development comprises a multi-unit residential building.

In the City of Ottawa, an EIS is required when development or site alteration is proposed in or adjacent to natural heritage features, as outlined in Section 4.8 of the Official Plan (City of Ottawa, 2022a). The purposes of an EIS are to:

- Identify natural heritage features on or adjacent to the Site;
- Assess potential impacts of the proposed development to existing features; and
- Recommend mitigation measures to minimize or eliminate identified impacts.




## Legend

- Watercourse
- 30 m Watercourse Setback
- UNA #161
- Site Boundary

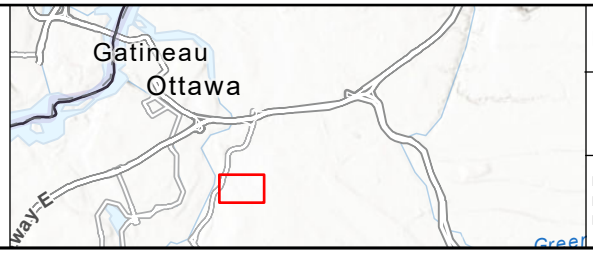



**Figure 1. Site context**

0 40 80 160 m

N W E S

Spatial Reference:
PCS: WGS 1984 UTM Zone 18N
Map Units: Meter

Project: TCU 1867
Map File Name: TCU 1867
Date Exported: 9/8/2025 9:09 AM

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# 2.0 ENVIRONMENTAL POLICY CONTEXT

Natural heritage policies and legislation relevant to this EIS are outlined below.

## 2.1 The Provincial Planning Statement, 2024

The Provincial *Policy* Statement, previously issued under Section 3 of the *Planning Act* (MMAH, 2020), was updated to become the Provincial *Planning* Statement (PPS) on August 20, 2024. The PPS came into effect on October 20, 2024 (MMAH, 2024). Under the PPS, natural features are afforded protection under Section 4. The included protections address the maintenance, restoration, and improved function of diversity, connectivity, ecological function, and biodiversity of natural heritage systems. These protections restrict development and site alteration in significant natural areas (e.g., woodlands, wetlands, wildlife habitat) except where it can be demonstrated that there will be no negative effects on the features and ecological functions of those natural areas. Technical guidance for implementing the natural heritage policies of the PPS is found within the second edition of the *Natural Heritage Reference Manual for Natural Heritage Policies of the Provincial Policy Statement, 2005* (NHRM;(MNR, 2010). This manual recommends the approach and technical criteria for protecting natural heritage features and areas in Ontario.

## 2.2 City of Ottawa Official Plan, 2022

The City of Ottawa Official Plan (2022a) provides direction for future growth in the City and is a policy framework to guide physical development to 2031 in accordance with the PPS. The Official Plan was first approved in 2003 and is typically updated every five years. The Official Plan includes a Natural Heritage Features map (Schedule C11-A), providing additional information on wetlands, watercourses, and wooded areas within the City boundaries (City of Ottawa, 2022a). The City of Ottawa Official Plan, as approved by the Minister of Municipal Affairs and Housing, came into effect on November 4, 2022.

## 2.3 *Species at Risk Act*, 2002

The federal *Species at Risk Act* (SARA; Government of Canada, 2002) is administered by Environment and Climate Change Canada (ECCC) and provides direction to protect and ensure the survival of wildlife species in Canada. The purpose of the SARA is to prevent populations of wildlife from becoming Extirpated, Endangered, or Threatened, provide recovery for Endangered or Threatened species, and manage other species to prevent them from becoming Endangered or Threatened.

All species listed on Schedule 1 of SARA are afforded protection on federal lands. Aquatic species and species of migratory birds protected by the *Migratory Birds Convention Act* (MBCA; (Government of Canada, 1994) and listed as Endangered, Threatened, or Extirpated under Schedule 1 of SARA are protected wherever they occur in Canada, regardless of land ownership. SARA protections do not typically apply for other species groups on non-federal properties. However, the Federal Minister of ECCC can impose SARA protections on private projects where habitat is deemed "…necessary for the survival or recovery of the species…" in the area of concern.

## 2.4 *Species Conservation Act*, 2025

The provincial *Species Conservation Act* (SCA; Government of Ontario, 2025) is administered by the Ministry of Environment, Conservation, and Parks (MECP) and provides protection for species at risk (SAR) and their habitat. It replaces the previous *Endangered Species Act* (ESA; Government of Ontario, 2007). As such, existing policies and guidance documents that remain in force and refer to the ESA for the management and/or protection of SAR may generally be interpreted as applicable to the SCA.

Under the SCA, it is illegal to kill, harm, possess, transport, buy, or sell Extirpated, Endangered, or Threatened species, whether living or dead. It is also illegal to harm the habitat of a species listed as Extirpated, Endangered, or Threatened. Under the SCA, habitat is defined as areas on which any member of the species directly depends in order to carry on its life processes. For animals, this includes areas essential for breeding, rearing, staging, wintering or hibernating; for vascular plant species, habitat is defined as the critical root zone surrounding the species.

The SCA includes provisions that may authorize development activities to proceed where the impacts of such development on protected species and/or their habitat would otherwise be prohibited. The SCA focuses on a “registration-first” approach. While some activities will still require a formal permitting process with the MECP, the registration-first approach effectively authorizes most land development projects upon the submission of a project-specific Conservation Plan. The Conservation Plan, which must be written by a qualified professional, must:

- Detail all potential impacts, required mitigation measures, and conservation measures to (such as creating new, suitable habitat).
- Include record-keeping provisions for tracking the implementation of indicated mitigations.
- Define monitoring programs to review the effectiveness of mitigation and compensation measures.
- Identify mechanisms to update the registration where necessary.
- Detail all potential impacts, required mitigation measures, and conservation measures to (such as creating new, suitable habitat).

## 2.5 *Fisheries Act*, 1985

The federal *Fisheries Act* (Government of Canada, 1985) is administered by Fisheries and Oceans Canada (DFO) and provides protections to fish, fish habitat, and fisheries. Specifically, the *Fisheries Act* in its current version provides: 1) protection for all fish and fish habitat; 2) prohibition against the "harmful alteration, disruption or destruction of fish habitat"; and 3) prohibition against causing "the death of fish by means other than fishing".

Projects with a scope that does not fall within DFO’s defined standards and codes of practice require submission of a request for review to DFO.

## 2.6 *Migratory Birds Convention Act*, 1994

Nesting migratory birds are protected under the MBCA (Government of Canada, 1994). No work is permitted that would result in the destruction of active nests or the wounding or killing of bird species

protected under the MBCA and/or associated regulations (e.g., SARA). The "incidental take" of migratory birds and the disturbance, destruction, or taking of the nest of a migratory bird is prohibited. "Incidental take" is the killing or harming of migratory birds due to actions that are not primarily focused on taking migratory birds (e.g., economic development) and no permits exist for the incidental take of migratory birds or their nest/eggs as a result of activities that are not focused on taking migratory birds. These prohibitions apply throughout the year. The Government of Canada has compiled nesting calendars that apply across Canada that can be used to greatly reduce the risk of harming/destroying active nests by ensuring works that may impact nests are performing outside of the nesting period.

### 2.7 *Fish and Wildlife Conservation Act*, 1997

The provincial *Fish and Wildlife Conservation Act* (Government of Ontario, 1997) governs the hunting and trapping of a variety of wildlife including mammals, birds, reptiles, amphibians, and fish in Ontario, thereby facilitating the protection of wildlife and their habitat. The FWCA outlines the prohibition of hunting or trapping specially protected species and the requirement for provincially issued licenses for the hunting or trapping of "furbearing" or "game" animals. Examples of specifically protected animals include, for example, Southern Flying Squirrel (*Glaucomys volans*), Northern Harrier (*Circus cyaneus*), American Kestrel (*Falco sparverius*), Blue Jay (*Cyanocitta cristata*), Midland Painted Turtle (*Chrysemus picta marginata*), Northern Watersnake (*Nerodia sipedon*), and Gray Treefrog (*Hyla versicolor*). In particular, raptors that are not protected under the MBCA (including Peregrine Falcon) are protected under the FWCA.

### 2.8 *Conservation Authorities Act*, 1990

Conservation Authorities were created to address erosion, flooding, and drought concerns regionally by managing at the watershed level. Conservation Authorities were given the ability to regulate under Section 28 of the *Conservation Authorities Act* (Government of Ontario, 1990). The Act obliges Conservation Authorities to implement Ontario Regulation (O.Reg.) 41/24, *Prohibited Activities, Exemptions and Permits* (formerly O.Reg. 174/06, *Regulation of Development, Interference with Wetlands and Alterations to Shorelines and Watercourses*) under Section 28.1 of the *Conservation Authorities Act* for relevant works. This project falls under the jurisdiction of the Rideau Valley Conservation Authority.

The *More Homes Built Faster Act*, which was passed on November 28, 2022, and received Royal Assent the same day, introduced a series of legislative and proposed regulatory changes affecting conservation authorities. Among the changes, the definition of "watercourse" was updated from an identifiable depression to a defined channel, having a bed, and banks or sides.

## 3.0 PROPERTY IDENTIFICATION

The Site is approximately 1.21 hectares (ha) in size and is located at 1867 Alta Vista Drive, Ottawa, Ontario (Lat: 45.399788°N and Long: -75.661239°W; Figure 1). The Site is currently a vacant urban lot that previously contained a commercial building. Based on aerial imagery, the building was removed between September 2016 and June 2017 (City of Ottawa, 2025). The Site is partly paved and supports regenerating vegetation where the previous building stood. Trees are situated along the Site boundaries, including planted trees along the north, west, and south sides of the Site and a natural woodland along the east side of the Site. Immediately east of the Site and extending onto the east portion of the Site is Urban

Natural Area (UNA) #161 (Hospital Woods West). The Site is located approximately 550 m east of the Rideau River. The zoning of the Site is IP12 (Subzone – Hospital Lands).

The Site is bordered by:

- Commercial buildings, Hospital Link Road, greenspace, and residential communities to the north;
- A watercourse, woodland and greenspace, and buildings associated with The Ottawa Hospital General Campus to the east;
- Commercial buildings and residential community to the south; and
- Alta Vista Drive, commercial buildings, and the Rideau River to the west.

# 4.0 METHODOLOGY

## 4.1 Desktop and Background Data Review

### 4.1.1 Agency Oversight

The Site is located within the jurisdictions of the City of Ottawa and Rideau Valley Conservation Authority (RVCA). The need for an EIS was triggered as the proposed development was deemed to have the potential to impact species at risk (SAR) and SAR habitat, and natural heritage features on and adjacent to the Site. Specifically, triggers for this EIS include 1) the City's initial concern for the potential for the presence of SAR and SAR habitat, including Butternut (*Juglans cinerea*) and Blanding's Turtle (*Emydoidea blandingii*); 2) the presence of a surface water feature immediately east of the Site.

### 4.1.2 Site Overview

Aerial imagery from Google Earth (*Google Earth*, n.d.) and the City of Ottawa's geoOttawa system (City of Ottawa, 2025) was used to develop preliminary mapping of existing site features and landcover and to inform how the Site may be divided into vegetation communities.

Existing data on soils in the vicinity of the Site were obtained from the Ontario Ministry of Agriculture, Food and Rural Affairs' AgMaps (Ontario Agriculture, Food and Agribusiness, 2025) and the Ontario Geotechnical Boreholes dataset (Ontario Ministry of Mines, 2012). These data were supplemented by soil cores taken in the field using a 120 cm soil auger at select locations within the Site.

### 4.1.3 Preliminary SAR Review

The review of existing information included a preliminary SAR screening for species listed under the federal SARA and provincial ESA. The screening functions to identify SAR having some potential to be in the broader vicinity of the Site. The screening was completed following the *Draft Client's Guide to Preliminary Screening for Species at Risk* (MECP, 2019; Appendix B). The Preliminary SAR screening was completed in 2025, while the ESA was still in force. Species rankings were subsequently updated following the implementation of the SCA in 2026.

The Preliminary Screening considered data sources including:

- Species at Risk in Ontario (SARO; Ministry of Environment, Conservation, and Parks (MECP, 2023);

- Species at Risk Public Registry (Government of Canada, 2026);
- Natural Heritage Information Centre (NHIC; Ministry of Natural Resources, and Forestry (MNRF, 2025b);
- Land Information Ontario (MNRF, 2025a);
- Aquatic Species at Risk Map (Fisheries and Oceans Canada (DFO), 2025);
- Ontario Reptile and Amphibian Atlas (Ontario Nature, 2019);
- Ontario Breeding Birds Atlas (Birds Canada et al., 2009);
- Ontario Butterfly Atlas (Toronto Entomologists' Association, 2025);
- eBird (The Cornell Lab of Ornithology, 2025);
- iNaturalist (California Academy of Sciences and National Geographic Society, 2025);
- Bumble Bee Watch (Wildlife Preservation Canada et al., 2025);
- Recovery Strategy for the Little Brown Myotis (*Myotis lucifugus*), Northern Myotis (*Myotis septentrionalis*), and Tri-colored Bat (*Perimyotis subflavus*) in Ontario (Humphrey & Fotherby, 2019);
- Recovery Strategy for the Eastern Small-footed Myotis (*Myotis leibii*) in Ontario (Humphrey, 2017); and
- Fish ON-Line (MNRF, 2024).

## 4.2 Field Studies

KAL previously completed field studies for the Site in December 2022 and August 2023. An updated Site investigation including an Ecological Land Classification (ELC) survey and a tree survey, was performed on August 7, 2025 (Table 1). The ELC focuses on areas of natural and naturalizing vegetation on the Site and includes the margins of the wooded area on the east side of the Site. The 2025 field surveys are detailed in the sections below.

**Table 1: Summary of 2025 field studies**

| Date | Purpose | Conditions | Personnel |
|---|---|---|---|
| August 7, 2025 | • Ecological Land Classification (ELC)<br>• Butternut Health Assessment (BHA)<br>• Tree Survey | • 30°C<br>• 0-25% Cloud Cover<br>• Winds 2 on the Beaufort Scale | • Kesia Miyashita |

### 4.2.1 Surface Water and Fish Habitat

Aerial imagery and public databases were reviewed to identify watercourses and waterbodies in the vicinity of the Site (City of Ottawa, 2025; MNRF, 2025b; Rideau Valley Conservation Authority, 2024). The presence of wetland communities, if present, would have been confirmed through the Ecological Land Classification exercise described below. A watercourse situated east of the Site was characterized during the Site visit in 2022, with updates to confirm characterization in 2025.

### 4.2.2 Vegetation

#### 4.2.2.1 Ecological Land Classification

Vegetation communities on the Site were based on standard ELC methods for Ontario (Lee et al., 1998). The ELC methodology provides a consistent approach to identify, describe, and map vegetation communities or physiographic features on the landscape based on dominant plant species and soil composition. This method results in a standardized description of each vegetation community to capture the natural diversity and variability of communities within a site and to provide insight into available habitat and the types of species that may be present. More specifically, the classifications from ELC provide a basis for determining whether potential habitat for a given SAR or other ecological value may be present.

The desktop review of available aerial imagery informed how the Site was divided into vegetation communities based on variation in land cover, topography, and vegetation structure. During the ELC survey conducted on August 7, 2025, the dominant plant species within each proposed ecosite were recorded in the field to further divide ecosites into vegetation types (the finest resolution in ELC), where possible. Representative photos of each ELC unit on the Site were taken and are included with the community descriptions in this report.

#### 4.2.2.2 Tree Survey

A tree survey was undertaken concurrent with the ELC on August 7, 2025, following TCR guidelines set forth by the City of Ottawa Forestry Staff (City of Ottawa, 2020b). Trees on the Site were specifically assessed, and the adjacent woodland community more generally characterized. Trees surveyed on the Site included those with diameter at breast height (DBH) measurements greater than 10 cm. Trees on adjacent lands included in the investigation were those with DBH>10 cm and a Critical Root Zone (CRZ; calculated as 10 x DBH) anticipated to extend onto the Site. Butternut (*Juglans cinerea*; Endangered under SARA and the SCA) and Black Ash (*Fraxinus nigra*; no status under SARA and Endangered under the SCA) trees were specifically searched for. Butternut trees were previously detected within the woodland community in the winter of 2022. Butternut trees previously identified were relocated during the August 7, 2025, investigation; Butternut Health Assessments (BHAs) were completed for all observed individuals.

# 5.0 EXISTING CONDITIONS

## 5.1 Landforms, Soils and Geology

The Site is located within the Ottawa Valley Clay Plains physiographic region (Ontario Agriculture, Food and Agribusiness, 2025; Schut & Wilson, 1987). Soils on the Site are mapped in Report No. 58 of the Ontario Institute of Pedology, *The Soils of the Regional Municipality of Ottawa-Carleton* (Schut & Wilson, 1987). Soils in the vicinity of the Site are characterized by clays or silty clays belonging to the Rideau soil association, which is comprised of heavy clay marine materials and is characterized by nearly level topography and generally poor drainage (Schut & Wilson, 1987). Available data from geotechnical boreholes in the vicinity of the Site indicate clay overlaying sand or gravel and limestone bedrock (Ontario Ministry of Mines, 2012). During the site visits in 2022 and 2025, soil samples were taken using a 120 cm hand-held soil auger. Both visits indicated a sandy substrate, with extensive areas of gravel fill and concrete substrates.

The Site overall is relatively flat but slopes eastward within the deciduous woodland toward the watercourse (Figure 1). The watercourse has partly vegetated banks of approximately two to three meters in height.

## 5.2 Surface Water, Groundwater, and Fish Habitat

A watercourse runs parallel to the east property line and slightly intersects the property boundary in the southeastern corner of the Site (Figure 1). Field investigations in 2022 and 2025 characterized the stream as approximately 2-4 m wide, flowing from south to north, with a soft bottom interspersed with rocks (Figure 2; Figure 3). The feature has a 2-3% grade along its length, providing steady “run” conditions. Although fish studies were not undertaken, the observed depth (approximately 10 cm at the time of survey in August 2025) and general stream conditions suggest that the watercourse could provide habitat for some fish species. However, it is important to note that the section of the watercourse adjacent to the Site is the only open section of the entire watercourse. The channel originates from a stormwater outlet located southeast of the Site and north of Smyth Road, where it is likely fed by stormwater runoff from surrounding developed lands. North of the Site, the watercourse enters approximately 185 m of culvert beneath Alta Vista Drive before re-emerging north of Hospital Link Road. This long, culverted section likely represents a significant fish barrier; only very small numbers of highly tolerant fish species could, on limited occasions, have any potential for access to the feature. As such, the potential for the feature to provide direct fish habitat is considered to be negligible.



**Figure 2 Watercourse east of the Site (August 7, 2025)**

As there is no sub watershed study or environmental management plan applicable to the area, setbacks to the feature should consider standards per Section 4.9.2 (2) of the OP to meet the greatest of the following:

a) Development limits as established by the conservation authority's hazard limit, which includes the regulatory flood line, geotechnical hazard limit, and meander belt;
b) Development limits as established by the geotechnical hazard limit in keeping with Council approved Slope Stability Guidelines for Development Applications;
c) 30 m from the top of bank, or the maximum point to which water can rise within the channel before spilling across the adjacent land; and
d) 15 m from the existing stable top of slope, where there is a defined valley slope or ravine.

For this watercourse, the greatest of these prospective setbacks is 30 m from top of bank.




**Legend**

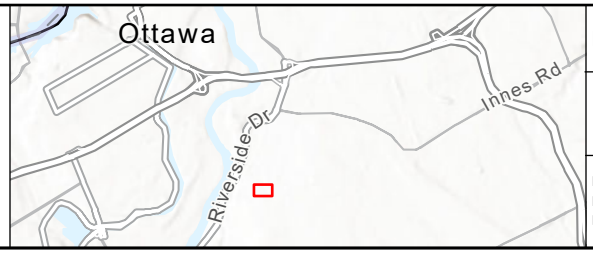
- Site Boundary
- Watercourse
- 30 m Watercourse Setback
- UNA #161

**Tree Fate**

- Existing Retained
- Existing Removed
- Butternut
- CRZ

**ELC**

- FODM11
- WODM5-3
- CUM1-1
- CVI_1




## Figure 3. Existing conditions

0 10 20 40 m

N W E S

Spatial Reference:
PCS: WGS 1984 UTM Zone 18N
Map Units: Meter

Project: TCU 1867
Map File Name: TCU 1867
Date Exported: 10/15/2026 3:37 PM

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## 5.3 Vegetation and Trees

### 5.3.1 Ecological Land Classification

Four distinct landcovers or ELC units were delineated on the Site (Figure 3). The majority of the Site is characterized by cultural meadow (CUM1-1) and deteriorating paved surfaces (Transportation; CVI_1). Based on aerial imagery, a building was located where the cultural meadow now occurs, and the paved portion of the Site served as a parking area and roadway access for the former building. The building was removed sometime between September 2016 and June 2017. Since then, the Site appears to have been abandoned and unmaintained and is now a naturalizing anthropogenic site. A narrow deciduous woodland strip (WODM5-3) is situated on the east side of the Site bordering the watercourse. A Naturalized Deciduous Hedgerow (FODM11) exists along Alta Vista Drive, where a planted hedgerow has been left unmaintained; it now supports a mix of planted trees and shrubs with establishing native and weedy species. A comprehensive list of plant species observed is provided in Appendix C.

#### 5.3.1.1 Dry – Moist Old Field Meadow Type (CUM1-1)

The central portion of the Site is characterized as a Dry – Moist Old Field Meadow Type (CUM1-1; Figure 3). The cultural meadow is regenerating after anthropogenic disturbances and is dominated by a mixture of forbs and grasses (Figure 4). Dominant groundcover species included Queen Anne's Lace (*Daucus carota*), Canada Goldenrod (*Solidago canadensis*), Perennial Ryegrass (*Lolium perenne*), White Sweet Clover (*Melilotus albus*), and Kentucky Bluegrass (*Poa pratensis*). Tree and shrub cover is sparse with occasional Black Locust (*Robinia pseudoacacia*) and Eastern Cottonwood (*Populus deltoides*) saplings and Staghorn Sumac (*Rhus typhina*) shrubs.



**Figure 4 Dry – Moist Old Field Meadow Type (CUM1-1; August 7, 2025)**

#### 5.3.1.2 Transportation (CVI_1)

Surrounding the central meadow on the Site is a non-vegetated paved area, which was formerly a driveway/parking area (Figure 3; Figure 5). The only vegetation in this unit includes opportunistic species occupying cracked pavement areas; widespread species included Eastern Cottonwood saplings, Canada Goldenrod, and Perennial Ryegrass.



**Figure 5 Paved area (CVI_1; August 7, 2025)**

#### 5.3.1.3 Fresh - Moist Manitoba Maple Deciduous Woodland Type (WODM5-3)

A Fresh - Moist Manitoba Maple Deciduous Woodland Type (WODM5-3; Figure 3) is located along the east side of the Site, along the west bank of the watercourse that runs adjacent to the property boundary (Figure 6). Three Butternuts were observed within this community (Appendix E). The canopy of the deciduous woodland is dominated by Manitoba Maple (*Acer negundo*), Basswood (*Tilia americana*), and Eastern Cottonwood (*Populus deltoides*). The shrub layer is dense and is dominated by Green Ash saplings (*Fraxinus pennsylvanica*), Common Buckthorn (*Rhamnus cathartica*), and occasional Apple trees (*Malus* spp.). Dominant groundcover species include Calico Aster (*Symphyotrichum lateriflorum*), White Avens (*Geum canadense*), Common Buckthorn saplings, Sweet Violet (*Viola odorata*), Virginia Creeper (*Parthenocissus quinquefolia*), and White Snakeroot (*Ageratina altissima*). The woodland transitions off-site to the east into a larger deciduous forest with scattered conifers and adjacent greenspace.



**Figure 6 Fresh - Moist Manitoba Maple Deciduous Woodland Type (WODM5-3; August 7, 2025)**

#### 5.3.1.4 Naturalized Deciduous Hedgerow (FODM11)

Along the west side of the Site, adjacent to Alta Vista Drive, are areas of naturalized deciduous hedgerow (Figure 3), dominated Honey Locust (*Gleditsia triacanthos*) and Sugar Maple (*Acer saccharum*). The shrub layer is comprised primarily of Manitoba Maple, Common Buckthorn, and Green Ash saplings. Groundcover is diverse and includes Kentucky Bluegrass, Perennial Sow-thistle (*Sonchus arvensis*), Riverbank Grape (*Vitis riparia*), Dog-Strangling Vine (*Vincetoxicum rossicum*), Canada Goldenrod, and Birdsfoot Trefoil (*Lotus corniculatus*).



**Figure 7 Naturalized Deciduous Hedgerow (FODM11; August 7, 2025)**

### 5.3.2 Tree Inventory

A tree inventory was performed for the Site following the TCR guidelines set forth by the City of Ottawa Forestry Staff (City of Ottawa, 2020; Appendix D). KAL undertook the tree survey concurrently with the ELC on August 7, 2025. For the majority of the Site, trees were assessed as individuals, encompassing all individual trees onsite as well as those immediately adjacent to the Site (e.g., boulevard trees or offsite trees near the property line). However, within the eastern WODM5-3 community (i.e., a contiguous treed area), trees were assessed as a grouping, with dominant species and average DBH measurements noted.

A total of 26 individual trees were identified on or immediately adjacent to the Site, with DBH measurements ranging from 12 cm to 63 cm. These trees represented eight distinct species: Little-leaf Linden (*Tilia cordata*), Honey Locust, Sugar Maple, Pin Oak (*Quercus palustris*), Manitoba Maple, Red Pine (*Pinus resinosa*), Blue Spruce (*Picea pungens*), and Butternut. Six notable trees (i.e., with DBH measurements greater than 50 cm) were observed, all of which were Sugar Maple or Honey Locust.

Within the WODM5-3 community, widespread tree species include Manitoba Maple, Basswood, Eastern Cottonwood, and American Elm, with occasional Green Ash and Apple trees. Average DBH measurements were approximately 25 cm.

Black Ash and Butternut trees were specifically searched for within the WODM5-3 community. No Black Ash were detected, and three Butternuts were observed (Appendix E). All three Butternuts were determined to be Category 1 (Appendix E).

## 5.4 Species at Risk

Species listed provincially as Extirpated, Endangered, and Threatened area afforded species and habitat protection under the SCA. Protections under SARA are in force for federally listed species of fish and migratory birds. For species of other species groups, SARA normally only applies on federal lands or on projects having some level of participation with or oversight by the federal government. However, SARA-based protections can be imposed by ministerial order on a case-by-case basis in situations where provincial-level protections are deemed inadequate to otherwise protect a species. Such additional SARA protections are not expected to apply to the Site.

The Preliminary SAR Screening identified a total of 49 SAR with some potential to occur within the broader vicinity of the Site (Appendix B). The initial SAR assessment considered whether:

- The existing Site conditions could provide suitable habitat;
- The presence of individuals was likely or feasible, given conditions in the broader area; and
- Individuals or habitat could interact with the project, considering the intrinsic project approach and/or timing (but not considering mitigations that may still need to be prescribed).

Of the 49 species screened for review in this EIS, 17 were initially assessed to have some potential to occur on the Site, have protected habitat on the Site, and/or to interact with the project (Table 2; Appendix B).

### Table 2 Listed species identified for assessment

| Common Name | Taxonomic Name | SCA Status (O.Reg. 60/26) | SARA Status (Schedule 1) | Observed Onsite | Assessed Potential to Interact with Project |
|---|---|---|---|---|---|
| **Birds** | | | | | |
| Eastern Wood-Pewee | *Contopus cooperi* | Not Listed | Special Concern | No observations on site (targeted surveys not undertaken) | Presence of these species is possible within adjacent forested area, but unlikely given its small size (narrow width) and urban context. Any (limited) bird presence there would already be constrained by existing neighbouring buildings. There is no suitable habitat on the Site outside of the creek corridor (i.e. in areas that would be subject to development).<br><br>The potential for interaction with site development – **Low.**<br><br>Could be further limited with appropriate mitigations. |
| Evening Grosbeak | *Coccothraustes vespertinus* | Special Concern | Special Concern | No observations on site (targeted surveys not undertaken) | |
| Wood Thrush | *Hylocichla mustelina* | Not Listed | Threatened | No observations on site (targeted surveys not undertaken) | |
| **Mammals** | | | | | |
| Eastern Red Myotis | *Lasiurus borealis* | Endangered | Not Listed | No observations on site (targeted surveys not undertaken) | The trees on the Site outside of the adjacent forested area are relatively few in number and are unlikely to provide suitable, let alone important, maternal roosting potential relative to trees within the adjacent forested area.<br>Occasional day roosting, however, is possible in any large tree on the Site.<br><br>The potential for interaction with site development – **Low.** |
| Eastern Small-footed Myotis | *Myotis leibii* | Endangered | Not Listed | No observations on site (targeted surveys not undertaken) | |
| Little Brown Myotis | *Myotis lucifugus* | Endangered | Endangered | No observations on site (targeted surveys not undertaken) | |
| Hoary Bat | *Lasiurus cinereus* | Endangered | Not Listed | No observations on site (targeted surveys not undertaken) | |

| Common Name | Taxonomic Name | SCA Status (O.Reg. 60/26) | SARA Status (Schedule 1) | Observed Onsite | Assessed Potential to Interact with Project |
|---|---|---|---|---|---|
| Northern Myotis | *Myotis septentrionalis* | Endangered | Endangered | No observations on site (targeted surveys not undertaken) | Could be further limited with appropriate mitigations. |
| Silver-haired Bat | *Lasionycteris noctivagans* | Endangered (January 2025) | Not Listed | No observations on site (targeted surveys not undertaken) | |
| Tri-colored Bat | *Perimyotis subflavus* | Endangered | Endangered | No observations on site (targeted surveys not undertaken) | |
| **Reptiles** | | | | | |
| Blanding's Turtle | *Emydoidea blandingii* | Threatened | Endangered | No observations on site (targeted surveys not undertaken) | The small, shallow watercourse adjacent to the east Site boundary, with its narrow channel and lack of pools, is not suitable as summer-, nesting- or overwintering-habitat. The feature does not provide a connection between any suitable turtle habitat areas and thus has negligible potential to serve as a travel corridor.<br><br>The potential for interaction with site development – **Negligible.**<br><br>Could be further limited with appropriate mitigations. |
| Midland Painted Turtle | *Chrysemys picta marginata* | Not Listed | Special Concern | No observations on site (targeted surveys not undertaken) | |
| Snapping Turtle | *Chelydra serpentina* | Not Listed | Special Concern | No observations on site (targeted surveys not undertaken) | |
| Eastern Milksnake | *Lapropeltis triangulum* | Not Listed | Special Concern | No observations on site (targeted surveys not required) | There are no suitable areas evident on the Site to support potential hibernacula, but transient presence is possible.<br><br>The potential for interaction with site development – **Low.** |
| **Arthopods** | | | | | |
| Monarch | *Danaus plexippus* | Not Listed | Endangered | No observations on site (targeted surveys not required) | No Milkweed plants present on the Site.<br><br>The potential for interaction with site development – **Negligible.** |
| Yellow-banded Bumble Bee | *Bombus terricola* | Not Listed | Special Concern | No observations on site (targeted surveys not required) | A habitat generalist. With no part of the Site more suitable than the remainder of the broader vicinity, the potential for occurrence directly on the site is low.<br><br>Potential for project interaction is **Low.** |
| **Vascular Plants** | | | | | |
| Butternut | *Juglans cinerea* | Endangered | Endangered | Observed on site with targeted studies in 2022 and 2025 | All individuals on/near proposed development were found the sufficiently poor health to warrant "Category 1" status, thereby removing SCA-related protections.<br><br>The potential for interaction of protected individuals with site development *currently* – **Negligible.** |

Of the protected SAR studied, nine were either observed on the Site or determined to have potential to interact wit the project (Eastern Red Bat, Eastern Small-footed Bat, Hoary Bat, Little Brown Myotis, Northern Myotis, Silver-haired Bat, and Tri-colored Bat, Blanding's Turtle, and Butternut). These species are discussed further below.

### 5.4.1 SAR Bats

Acoustic monitoring for bats was not undertaken for the Site; however, SAR bats have potential to roost in the treed areas on the Site (e.g., WODM5-3 and FODM11 units) and forage over the open meadow (CUM1-1) on the Site.

Roosting habitat for SAR bats includes buildings, rock crevices, exfoliating tree bark, foliage, and cavities and crevices in trees (Humphrey & Fotherby, 2019). These species generally forage over clearings adjacent to forests and over water. The Site mainly comprises an open (i.e. untreed) meadow area, with woodland and hedgerows along the Site margins. Trees were generally small to medium-sized, with some large-diameter trees. The large-diameter trees were generally observed to be in good condition. No snags, significant exfoliating bark, large cavities or trees with high potential for bat roosting were observed on the Site; therefore, the Site is unlikely to provide opportunity for bat maternity colonies but may provide non-maternal roosting and foraging habitat.

Bat hibernacula generally include subterranean openings, including caves, abandoned mines, wells, and tunnels (Environment Canada, 2015b; MNRF, 2017). Potential underground structures for bat hibernation were not observed on the Site.

### 5.4.2 Blanding's Turtle

Blanding's Turtle inhabit shallow water usually in large wetlands or shallow lakes. They can be found far from water bodies if searching for mates or nesting sites, which usually contain gravel, cobble, and/or sand. The review of data from the preliminary SAR screening includes a record for Blanding's Turtle within 5 km the Site (MNRF, 2023a).

The watercourse adjacent to the east Site boundary is unlikely to provide overwintering, nesting, or general summer habitat for Blanding's Turtles. Moreover, given its lack of connection to any suitable wetland or aquatic habitat areas it is highly unlikely to be used Blanding's Turtle as a travel corridor. The feature originates at a stormwater water outlet just above the site, and is interrupted by a long, culverted portion (approximately 185 m) beneath Alta Vista Drive and Hospital Link Road, which is likely to provide a barrier to turtle passage. Furthermore, the drain does not connect to the Rideau River, with its outlet located approximately 330 m away from the river. These barriers, combined with the lack of suitable habitat along the watercourse, substantially reduce the potential any occurrence of Blanding's Turtle on the Site. Transient occurrence along the adjacent watercourse is not impossible, although not anticipated.

### 5.4.3 Butternut

Butternuts, listed as Endangered under the SCA and SARA, are often found along stream banks as they prefer to grow in moist, well-drained loams; however, the species can tolerate a large range of soil types. Butternuts are intolerant of shade and competition, as they require ample sunlight to grow (Poisson & Ursic, 2013). Under the SCA, both individual trees directly, and their critical root zones (i.e., 10 x DBH), are

subject to legal protection. Accordingly, works that would harm individuals or their habitat cannot proceed without authorization from the MECP.

Three Butternut trees were observed on the Site, but all were found to be Category 1, and are thus no longer subject to protection as SAR under the SCA. Regardless, these trees would be capable of producing seeds and new offspring that may begin developing in their vicinity would be subject to the above protections.

## 5.5 Significant Wildlife Habitat

The Significant Wildlife Habitat Criteria Schedule for Ecoregion 6E (MNRF, 2015a) identifies four main types of SWH: seasonal concentration areas, rare vegetation communities, specialized habitat for wildlife, and habitats of Species of Conservation Concern.

### 5.5.1 Seasonal Concentration Areas

Seasonal concentration areas include stopover and staging areas for waterfowl, shorebirds, landbirds and butterflies, wintering areas for raptors, bat hibernacula, bat maternity colonies, wintering areas for turtles, reptile hibernacula, breeding habitats for colonially-nesting birds, and deer yarding and congregation areas.

The Site itself does not meet the criteria for candidate SWH. No obvious signs or evidence of use as a seasonal concentration area were observed on the Site during the field survey. While there is some potential for the woodland on the east side of the Site to support bat roosting habitat, the woodland does not meet the density criteria of wildlife trees to be considered SWH for bat maternity colonies.

### 5.5.2 Rare Vegetation Communities or Specialized Habitat for Wildlife

**Rare Vegetation Communities**

Rare vegetation communities typically include those that have developed on cliff and talus slopes, sand barrens, shallow soils over limestone bedrock (alvar), old growth forests, savannahs, and tallgrass prairies. No rare vegetation communities were observed on the Site or adjacent lands.

**Specialized Wildlife Habitat**

Specialized wildlife habitat includes waterfowl nesting areas, Bald Eagle and Osprey nesting, foraging and perching habitat, woodland raptor nesting habitat, turtle nesting areas, seeps and springs, woodland amphibian breeding habitat, amphibian wetland breeding habitat, and woodland area-sensitive bird breeding habitat. The Site itself does not meet the criteria for candidate SWH.

**Habitats of Species of Conservation Concern**

Habitats of species of conservation concern include marsh breeding bird habitat, open country bird habitat, shrub/early successional bird breeding habitat, terrestrial crayfish, and special concern and rare wildlife species. Habitats of species of conservation concern do not include habitats of Endangered or Threatened species, as identified by the SCA. Our background review did not identify the presence of

marsh bird breeding habitat, open country bird habitat, shrub/early successional bird breeding habitat, or terrestrial crayfish.

MNRF (MNRF, 2015a) defines candidate SWH for special concern and rare wildlife species as when an element occurrence is identified within a 1 or 10 km grid and suitable candidate habitat is found onsite based on ELC. As such, the woodland community has potential to meet the criteria for candidate SWH for two bird species (Eastern Wood-pewee and Evening Grosbeak), the watercourse has potential to meet the criteria for candidate SWH for two turtle species (Midland Painted Turtle and Snapping Turtle), and the whole Site has potential to meet the criteria for candidate SWH for two species (Eastern Milksnake and Yellow-banded Bumble Bee), based on existing species records identified through the SAR screening and the potential for suitable habitat to occur in the vicinity of the Site (Table 2;Appendix B).

## 5.6 Other Natural Heritage Features

The Site does not contain significant wetlands, significant coastal wetlands, ANSIs (life/earth science), or fish habitat.

**Significant Valleyland**

The Site overall is relativity flat but slopes eastward within the deciduous woodland toward the watercourse (Figure 3). The watercourse has partly vegetated banks of approximately 2-3 m in height. The City of Ottawa previously suggested that the small ravine may meet the criteria for significant valleyland; however, after inspection it does not meet the necessary criteria as shown below.

- Does not meet Criterion 1 – Surface water functions:
    - The channel within this valleyland is an isolated unit with no natural upstream catchment area or wetland to support it and therefore does not meet the criteria. The channel is directly fed by a stormwater outlet immediate upstream of the site.
- Does not meet Criterion 2 – Groundwater Functions:
    - The isolated channel is unlikely to contribute to groundwater infiltration nor contribute to groundwater release and therefore does not meet the criteria. The channel is directly fed by stormwater runoff from the surrounding area and promptly returns to culverted system downstream of the Site for the remainder of its length.
- Does not meet Criterion 3 – Landform prominence:
    - This valleyland feature does have a width greater than 25 m in some portions but is not large or essential to the characteristic of the area itself. This valleyland is simply a relatively small feature on the edge of a larger woodland and does not display as a prominent feature on the landscape.
- Does not meet Criterion 4 – Distinctive geomorphic landforms:

- No distinctive landforms have been developed within the landscape. The channel adjacent to the site is relatively straight, does not include distinct features such as oxbows or deltas and thus does not meet the criteria.

- Does not meet Criterion 5 – Degree of naturalness:

  - The valley and channel currently include limited riparian vegetation within 30 m. Existing properties adjacent to the west side of the valley, including the Site are well developed or disturbed consisting of manicured cultural meadow and impermeable surfaces generally within 7-12 m of the watercourse. The channel is also hydrated directly by surrounding street runoff thus decreasing its degree of naturalness.

- Does not meet Criterion 6 – Degree of community and species diversity:

  - This valleyland is made up of organic and mineral soil overlaying rock. There is no evidence suggesting that the subject soil present a unique species composition.

- Does not meet Criterion 7 – Unique communities and species:

  - Does not provide seasonally important habitats for wildlife passing through the area.

  - At one point in time this valleyland was suitable habitat for Butternut as evidence by the ones found on Site. However, it is now no longer suitable Butternut habitat and does not meet the criteria for unique communities.

- Does not meet Criterion 8 – Habitat value:

  - There is no evidence suggesting that the valley itself presents unique habitat composition. The immediate surrounding landscape is urbanized and considered disturbed.

- Does not meet Criterion 9 – Linkage function:

  - As the valleyland is fully separated from other natural heritage features from roads surrounding the area and the paved surfaces directly to the southwest of the site this valleyland does not provide linkage between habitats.

- Does not meet Criterion 10- Restoration and potential value:

  - Recreational trails are located within in the forest to the east of the valley, and do not rely pe se on the valleyland itself. The valleyland does not produce economically valuable products or high value in special services (such as air quality improvement or recreation), and does provide identified appreciation, education, cultural, or historical values to the broader community.

As the feature does not meet any of the above elements, it does not constitute as Significant Valleyland.

**Urban Natural Area (UNA) #161**

The woodland on the east edge of the Site is part of UNA #161 (Hospital Woods West). UNA #161 encompasses approximately 4.7 ha, covering lands primarily east of the Site (Figure 1). UNA #161 was originally characterized as a mature, low upland deciduous forest on the western half (on/near the Site) and a young deciduous swamp forest with dense, non-native shrubbery on the eastern half (Muncaster Environmental Planning Inc. & Brunton Consulting Services, 2005). Significant features noted include: 1) exceptional abundance of mature Butternut (identified as possibly the largest population of Butternut in the City of Ottawa urban area); 2) significant wildlife corridor function for migratory passerine birds; 3) and protection for the Rideau River tributary in steep-side clay ravine (Muncaster Environmental Planning Inc. & Brunton Consulting Services, 2005). The UNA is described as "moderate" and listed as Category 2: Unprotected UNA (Status Pending) (Muncaster Environmental Planning Inc. & Brunton Consulting Services, 2005).

The descriptions of and values attributed to the UNA, however, appear to be out of date. Only three Butternut were identified within the woodland area on the east side of the Site. Natural space connectivity between the north end of the UNA and the Rideau River corridor further west was removed by the construction of Hospital Link Road in 2017, which significantly reduced the corridor functionality of the UNA. Prior to the construction of Hospital Link Road, the watercourse was already interrupted by approximately 90 m of culvert under a parking area on the west side of Alta Vista Drive. The new roadway corridor added an additional 95 m of culvert. The creek is now highly disconnected from the Rideau River corridor and likely provides little to the broader river community beyond, serving as short open section of an otherwise very long pipe.

Historical imagery suggests that portions of UNA #161 have been wooded since at least 1958 (City of Ottawa, 2025); therefore, those areas that have remained treed meet the criteria for Significant Woodland, per the City of Ottawa *Significant Woodlands Policy* (City of Ottawa, 2022b). This feature, which extends offsite to the east, will be fully retained.

# 6.0 DESCRIPTION OF THE PROPOSED PROJECT

The proposed residential development would comprise a 9-storey residential building (Figure 8). The proposed development includes two levels of underground parking, accessed by a ramp on the north side of the building. The ground level includes amenity spaces and a courtyard on the east side of the building, toward the woodland and watercourse. The southwest corner of the Site, adjacent to Alta Vista Drive is designated as Parkland in the form of a Privately Owned Public Space (POPS). Road access will include entry points along Alta Vista Drive. The development incorporates a setback of 30 m from the watercourse east of the Site, providing a buffer for the watercourse and Significant Woodland areas. Stormwater management will couple into an existing pipe outletting to the watercourse, avoiding associated impacts to trees along the property line.

Construction fencing will be installed along the setback boundary, and construction activities will not take place within the setback; however, paved and disturbed areas within the setback will be renaturalized appropriately (e.g., removal of existing asphalt and vegetation planting). Trees will be planted surrounding the proposed building, particularly along its east side. Where possible, existing trees to the north, south, and west sides of the Site will be retained.




**Legend**

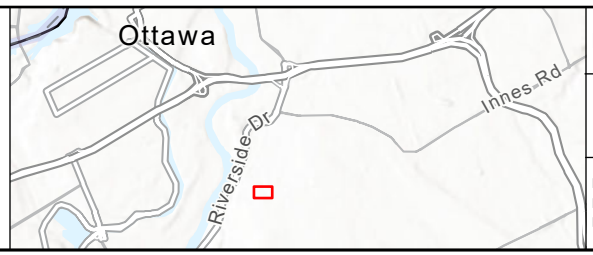
- Site Boundary
- Proposed Development

**Tree Fate**

- Existing Retained
- Existing Removed
- Tree Protection Fencing
- CRZ
- Watercourse
- 30 m Watercourse Setback
- UNA #161

**ELC**

- FODM11
- WODM5-3
- CUM1-1
- CVI_1




## Figure 4. Proposed development plan and tree fate

0 10 20 40 m

N W E S

Spatial Reference:
PCS: WGS 1984 UTM Zone 18N
Map Units: Meter

Project: TCU 1867
Map File Name: TCU 1867
Date Exported: 10/15/2026 3:30 PM

KILGOUR & Associates



**Figure Note:** All individual retained trees will have tree protection fencing installed corresponding to their critical root zones as shown.

# 7.0 IMPACT ASSESSMENT AND MITIGATION

The following assessment of impacts is based on the proposed development compared to existing Site conditions as observed in 2025.

## 7.1 Landforms, Soils and Geology

The land slopes eastward within the deciduous woodland toward the watercourse. The banks of the watercourse are partly vegetated and are approximately 2-3 m high. In discussions with the RVCA in 2022, it was noted that a slope stability study in accordance with the MNRF's technical guides for natural hazards is required to delineate the limit of hazard lands on the Site. The site must be developed in accordance with geotechnical limits of determined through that study. The proposed 30 m setback from the watercourse is anticipated to provide sufficient setback from potential hazard lands associated with the watercourse banks.

## 7.2 Surface Water, Groundwater, and Fish Habitat

The proposed development of the Site will adhere to a setback corresponding with 30 m from top of bank of the watercourse adjacent to the east edge of the Site. To further protect the surface water features on and adjacent to the Site, an erosion and sediment control (ESC) plan will be required. The ESC plan should include:

- A multi-faceted approach to provide ESC.
- Silt fence paired with sturdy construction fence along the project perimeter. This fencing can also act as a wildlife exclusion measure for smaller and less mobile animals that may occupy or traverse through the drain, such as amphibians, turtles, and snakes.
- Regularly inspecting and maintaining the ESC measures during all phases of the project.
- Retention of existing vegetation and stabilization of exposed soils with native vegetation where possible.
- Keeping the ESC measures in place until all disturbed ground has been permanently stabilized.
- Using biodegradable ESC materials where possible and removing all exposed non-biodegradable ESC materials once the Site is stabilized.
- Limiting the duration of soil exposure and phasing project works.
- Limiting the size of disturbed areas by minimizing nonessential clearing and grading.
- Minimizing the total slope length and the gradient of disturbed areas.
- Refueling of machinery should occur >30 m from surface water features and all machinery will remain on the project-side of silt and construction fence.

- Maintaining overland sheet flow and avoiding concentrated flows.
- Storing/stockpiling materials >30 m away from the wetland and other surface water features.
- Fencing or tarping stockpiled material (<150 millimetre gravel) during the turtle nesting period (late May to early July) (MNRF, 2015c).
- Regularly inspecting the Site for signs of sedimentation during all phases of work and taking corrective action if required.
- Developing a response plan to be implemented immediately in the event of a spill of a deleterious substance.
- Keeping an emergency spill kit on the Site.
- Stopping work and containing deleterious substances to prevent dispersal.
- Reporting any spills of sewage, oil, fuel, or other deleterious material whether near or directly into a surface water feature.
- Manage snow storage to prevent any runoff and potential contaminants from entering the watercourse.

## 7.3 Vegetation

All vegetation located outside of the 30 m watercourse setback will be removed to allow for site grading and development. This includes the entire FODM11 and CUM1-1 units. The WODM5-3 community associated with the watercourse will be fully retained as part of the setback, and no clearing within that unit is anticipated. No Black Ash trees were detected on the Site. Three Butternut trees were detected within the WODM5-3 community and as such, are not anticipated to be directly impacted by the proposed development. Additional Butternut considerations are provided in Section 7.4.3 below.

The following general protection measures are recommended during site preparation and construction to limit impacts to vegetation:

- Limit tree removal on-site to the highest extent possible and only remove trees necessary to accommodate construction and development. Trees within the FODM11 unit are anticipated to be removed to accommodate development. Tree removal onsite can only be completed under a tree removal permit to be obtained from the City.
- Ensure equipment is clean prior to vegetation removal to avoid introducing invasive species to the Site, and clean equipment prior to leaving Site to avoid spreading the aforementioned invasive species elsewhere.

The following mitigation measures are recommended to minimize impacts on trees being retained (e.g., on adjacent properties or within the WODM5-2 community):

- Erect a fence beyond the critical root zone (CRZ; i.e., 10x the diameter at breast height) of trees to be retained. The fence should be highly visible (orange construction fence) and paired with erosion control fencing. Pruning of branches is recommended in areas of potential conflict with construction equipment;

- Signage attached to the CRZ fence ever 6.0 m indicating:

    - The fencing is to protect the tree's CRZ; and

    - The fence must not be removed.

- Ensure swales along the edge of the forested area are shallow, with limited grading within the CRZ;

- Ensure that additional water inputs, if any, (e.g., runoff) that enter the forested areas are dissipated within 24 hours and will not remain impounded;

- Do not place any material or equipment within the CRZ of trees;

- Do not attach any signs, notices, or posters to any trees;

- Do not raise or lower the existing grade within the CRZ of trees without approval;

- Tunnel or bore when digging within the CRZ of a tree;

- Do not damage the root system, trunk, or branches of any remaining trees; and

- Ensure that exhaust fumes from all equipment are not directed toward any tree's canopy.

- Incorporate native plants into Site landscaping to the extent possible for the benefit of local wildlife and pollinators (e.g., milkweed for Monarch). It is recommended that plantings encompass a variety of native flowering species with different blooming periods to provide varied food sources for native pollinators. Further, the use of herbicides should be limited within and surrounding the planted habitat.

The proposed works will adhere to the landscape provide by the client. All planting and design elements will be implemented in accordance with the landscape plan.

## 7.4 Species at Risk

The SAR review in Section 5.4 considered nine SAR as having either some or very limited potential for transient presence (seven bats, Blanding's Turtle) or observed presence (Butternut) on or near the site. The locations for occurrence of these species (either potential or observed), however, is sufficiently removed from Site areas that would be subject to direct works of disturbance, such that standard best practices associated with site development and construction can be fully anticipated to mitigate potential impacts to either SAR individual directly and/or to their habitat. General wildlife mitigation measures provided in Section 7.6, while not species specific, must be in place during site development. Additional species-specific mitigation measures and/or considerations are discussed below.

### 7.4.1 SAR Bats

The small number trees on the Site requiring removal in support of site development do not provide suitable maternal roosting potential, although some (albeit limited) potential remains for occasional/transient day roosting. Potential impacts to individual at-risk bats can be mitigated by clearing trees outside of the roosting season (April 1 to November 30, inclusive; MNRF, 2015b). Following this tree-clearing window would also avoid potential interactions with birds and bird nests protected under the *Migratory Birds Convention Act* (Government of Canada, 1994). As such, SAR bat individuals would not be impacted by site development. With minor tree removal, and the preservation of the 30 m setback from the watercourse (encompassing the WODM5-3 community), the proposed development is not anticipated to substantially reduce the habitat of these species in the vicinity of the Site.

Additional general mitigation measures are included in Section 7.6 below.

### 7.4.2 Blanding's Turtle

The watercourse adjacent to the east Site boundary is considered as being highly unlikely to support Blanding's Turtles in any capacity. However, as the species can travel upwards of several kilometers from water bodies (e.g. the Rideau River), transient presence along the stream corridor is not impossible. However, the potential impacts to transient Blanding's Turtles will be further minimized or eliminated by implementing the exclusion fencing, which will effectively be provided by the silt fencing required per Section 7.2.

If a SAR turtle is encountered in or near the project area, the project proponent must contact the MECP for advice. If a turtle is in immediate harm's way, it should be safely and humanely relocated to appropriate habitat. Encounters with Threatened and Endangered species should be reported to the MECP within 24 hrs.

While the above mitigations are in place, there are not anticipated to be impacts to the individual turtles and no loss of functional turtle habitat as a result of development.

### 7.4.3 Butternut

Three Butternut trees were observed within the WODM5-8 unit along the east edge of the Site. DBH measurements ranged from 17 cm to 31 cm. The Butternut Expert's Report (Appendix E) indicates all three trees are classified as Category 1. As such, none of the three trees are subject to protection as SAR under the SCA (and none are currently proposed to be affected by development). It is important to recognise, however, that new Butternut saplings are possible and that these new individuals would be fully subject to such protections. As such, should site development be delayed by more than two years (i.e. site clearing and preparation begin or be planned to begin after July 2027), the Site must be re-examined for new Butternut presence.

## 7.5 Significant Natural Heritage Features

The Site does not contain significant wetlands, significant coastal wetlands, or ANSIs (life/earth science). The Site itself does not contain significant woodlands, significant valleylands or greenspace linkages. UNA #161 is located immediately east of the Site boundary encompassing the WODM5-3 community. No

impacts to that community or the UNA are anticipated. Construction fencing must be installed in association with silt fencing (per Section 7.2) along the edge of the 30 m setback to the creek, which will project critical root zone trees within the UNA during construction.

## 7.6 General Wildlife Mitigation

The following mitigation measures are recommended be implemented during future construction to generally protect wildlife and potential SWH areas:

- Areas shall not be altered or cleared during sensitive times of year for wildlife unless mitigation measures are implemented and/or the habitat has been inspected by a qualified Biologist;
    - Clearing of trees and/or vegetation should not take place April 1 to November 30 inclusive unless a qualified Biologist has determined that no birds are nesting or suitable bat roosting trees are present. The bird nest sweep would be valid for five days:
        - The MBCA protects the nests and young of migratory breeding birds in Canada. The timing of nesting for birds in the area spans April 1 to August 31 (Government of Canada, 1994);
        - The Site contains suitable foraging and roosting habitat for SAR bats. To eliminate and mitigate any possibility of impacts to at-risk bats directly, tree clearing is recommended to take place outside of the roosting season (April 1 to November 30 inclusive; MNRF, 2017). The breeding and roosting period for bats is recognized as April 1 to November 30 (MNRF, 2015b);
- Temporary exclusion fence should be installed prior to the turtle active season (April through October; MECP, 2021a) and should follow recommendations in Reptile and Amphibian Exclusion Fencing: Best Practices (MECP, 2021b). Temporary exclusion fence (e.g., silt fence) may be paired with ESC measures and should be installed along the perimeter of the project area. Temporary exclusion measures should be inspected and repaired weekly by a qualified biologist during the turtle active season;
- Develop an ESC plan. Install sediment control fence and inspect/maintain it periodically and after each rain event to ensure its integrity and continued function;
- Ensure that a qualified biologist develops a wildlife management plan for the construction process and delivers environmental compliance and biodiversity training to all site workers to implement the plan. The plan should include (but not be limited to) requirements to:
    - Utilize silt fence paired with sturdy construction fence along the project perimeter and around soil stockpiles to serve as a wildlife exclusion measure to prevent smaller animals from accessing/utilizing temporary habitats on the Site (e.g., prevent turtles from nesting in stockpiles on the Site);
    - Check the entire work site for wildlife prior to beginning work each day;

- Do not harm, feed, or unnecessarily harass wildlife;
- Manage waste to prevent attracting wildlife to the work site. Effective mitigation measures include litter prevention and keeping all trash secured in wildlife-proof containers and promptly removing it from the work site, especially during warm weather;
- Enforce a speed limit of 20 km/h during the active season (April 1 to November 30) to reduce wildlife mortality; and
- Manage stockpiles and equipment at the work site to prevent wildlife from being attracted to artificial habitat. Cover and contain any piles of soil, fill, brush, rocks, and other loose materials and cap ends of pipes where necessary to keep wildlife out. Ensure that trailers, bins, boxes, and vacant buildings are secured at the end of each workday to prevent access by wildlife.

Once construction is complete and the residences are occupied, KAL recommends that new residents are encouraged through signage and public education to keep pets on leash during the bird breeding season (April 1 to August 31) and reptile active season (April 1 to October 31). It is recommended that landowners be provided with educational resources about keeping cats on a leash or indoors, as cats are one of the largest threats to bird populations (Blancher, 2013).

### 7.6.1 Bird-Safe Design Guidelines

The proposed building and associated landscaping must be fully compliant with the City of Ottawa Bird-Safe Design Guidelines (City of Ottawa, 2020a). Specific bird-safe guidelines will be reviewed and addressed during subsequent stages of design.

# 8.0 CONCLUSION

This report provides a set of mitigation measures for employment in the design and construction of the proposed development. The assessment of the potential for impacts to the natural heritage system is based on the implementation of these mitigation measures. Based on our professional opinion, the proposed development is not expected to have negative impacts to existing natural features or ecological functions if the recommended mitigation measures provided in this report are implemented.

# 9.0 CLOSURE

This report was prepared for exclusive use by Soul Alta Vista GP Inc. and may be distributed only by Soul Alta Vista GP Inc. Questions relating to the data and interpretation can be addressed to the undersigned.

Respectfully submitted,

**KILGOUR & ASSOCIATES LTD.**

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# 10.0 LITERATURE CITED

Aadland, L., and A. Kuitunen. 2006. Habitat Suitability Criteria for Stream Fishes and Mussels of Minnesota. Technical manuscript. 107pp + appendices.

Birds Canada, Environmental Canada, and the U.S. Environmental Protection Agency. 2008. Marsh Monitoring Program Participant's Handbook for Surveying Amphibians (Revised 2008). Available online at: https://www.ohwetlands.org/uploads/5/0/6/9/50693061/handbook_mmp_amphibians_2009.pdf

Birds Canada, Canadian Wildlife Service (Environment and Climate Change Canada), Ministry of Natural Resources and Forestry – Government of Ontario, Ontario Field Ornithologists (OFO), and Ontario Nature. 2009. Atlas of the Breeding Birds of Ontario 2001-2005. Available online at: https://www.birdsontario.org/jsp/datasummaries.jsp

Birds Canada, Federation of Ontario Naturalists, Ontario Field Ornithologists (OFO), Canadian Wildlife Service (Environment and Climate Change Canada), and Ministry of Natural Resources and Forestry – Government of Ontario. 2001. Ontario Breeding Bird Atlas - Guide for Participants. Available online at: https://www.birdsontario.org/jsp/download/obba_guide_en.pdf

Birds Canada, Ontario Field Ornithologists (OFO), Ministry of Natural Resources and Forestry – Government of Ontario, Environment and Climate Change Canada, and Ontario Nature. 2021. Ontario Breeding Birds Atlas: Instructions for General Atlassing. Available online at: https://www.birdsontario.org/wp-content/uploads/Instructions-for-General-Atlassing-2021-04-07-download.pdf

Cadman, M.D., P.F.J. Eagles, and F.M. Helleiner. 1987. Atlas of Breeding Birds of Ontario. University of Waterloo Press, Waterloo, Ontario.

California Academy of Sciences and National Geographic Society. 2022. iNaturalist. Available online at: https://www.inaturalist.org/

City of Clarence-Rockland. 2021. Official Plan of the Urban Area of the City of Clarence-Rockland. Available online at: https://www.clarence-rockland.com/en/batir-et-investir/resources/OP-Consolidated-(OPA-16)_April-2021.pdf

City of Ottawa. 2015. Significant Woodlands: Guidelines for Identification, Evaluation, and Impact Assessment.

City of Ottawa. 2015. Protocol for Wildlife Protection during Construction. Available online at: https://documents.ottawa.ca/sites/documents/files/documents/construction_en.pdf

City of Ottawa. 2020. Bird-Safe Design Guidelines. Available online at: https://documents.ottawa.ca/sites/documents/files/birdsafedesign_guidelines_en.pdf

City of Ottawa. 2021. The New Official Plan. Available online at: https://ehq-production-canada.s3.ca-central-

1.amazonaws.com/559108490863e6ce9c3e31244ae48a4d27d5c119/original/1637858898/0138e612a15e0db56f65bd069274f425_Volume_1_-_Consolidated_Package_-_November_24__2021_%281%29.pdf?X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=AKIAIBJCUKKD4ZO4WUUA%2F20220914%2Fca-central-1%2Fs3%2Faws4_request&X-Amz-Date=20220914T125448Z&X-Amz-Expires=300&X-Amz-SignedHeaders=host&X-Amz-Signature=9174dbc4a5d2891c81ccf677748c8c2ee8bee3f59f4b3340a15560d3397d1c96

City of Ottawa. 2022a. geoOttawa. Available online at: https://maps.ottawa.ca/geoottawa/

The Cornell Lab of Ornithology. 2022a. eBird: An online database of bird distribution and abundance. Available online at: https://ebird.org/home

COSEWIC. 2012a. COSEWIC assessment and status report on the Eastern Wood-pewee *Contopus virens* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. x + 39 pp. Available online at: https://www.registrelep-sararegistry.gc.ca/virtual_sara/files/cosewic/sr_Eastern%20Wood-pewee_2013_e.pdf

COSEWIC. 2012b. COSEWIC assessment and status report on the Wood Thrush *Hylocichla mustelina* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. ix + 46 pp. Available at: https://www.registrelep-sararegistry.gc.ca/virtual_sara/files/cosewic/sr_Wood%20Thrush_2013_e.pdf

COSEWIC. 2018a. COSEWIC assessment and status report on the Chimney Swift *Chaetura pelagica* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. xii + 63 pp. Available at: https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry/cosewic-assessments-status-reports/chimney-swift-2018.html

COSEWIC. 2018b. COSEWIC assessment and status report on the Black Ash *Fraxinus nigra* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. xii + 95 pp. Available online at: https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry/cosewic-assessments-status-reports/black-ash-2018.html#toc6

COSEWIC. 2019. COSEWIC assessment and status report on the Suckley's Cuckoo Bumble Bee *Bombus suckleyi* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. xi + 70 pp. Available online at: https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry/cosewic-assessments-status-reports/suckley-cuckoo-bumble-bee-2019.html

Environment Canada. 2016. Recovery Strategy for the Common Nighthawk (*Chordeiles minor*) in Canada. Species at Risk Act Recovery Strategy Series. Environment Canada, Ottawa. vii + 49 pp. Available at: https://www.registrelep-sararegistry.gc.ca/virtual_sara/files/plans/rs_common%20nighthawk_e_final.pdf

Environment and Climate Change Canada (ECCC). 2016. Management Plan for the Snapping Turtle (*Chelydra serpentina*) in Canada [Proposed]. Species at Risk Act Management Plan Series. Ottawa, Environment and Climate Change Canada, Ottawa, iv + 39 p. Available at: https://www.registrelep-sararegistry.gc.ca/virtual_sara/files/plans/mp_snapping%20turtle_e_proposed.pdf

Environment and Climate Change Canada (ECCC). 2018. Recovery Strategy for the Blanding's Turtle (*Emydoidea blandingii*), Great Lakes / St. Lawrence population, in Canada. Species at Risk Act Recovery Strategy Series. Environment and Climate Change Canada, Ottawa. viii + 59 pp. Available online at: https://files.ontario.ca/mecp-rs-blandings-turtle-2019-12-05.pdf

Environment and Climate Change Canada (ECCC). 2019. Recovery Strategy for the Red-headed Woodpecker (*Melanerpes erythrocephalus*) in Canada [Proposed]. Species at Risk Act Recovery Strategy Series. Environment and Climate Change Canada, Ottawa. viii + 118 pp. Available online at: https://wildlife-species.canada.ca/species-risk-registry/virtual_sara/files/plans/rs_red_headed_woodpecker_e_proposed.pdf

Environment and Climate Change Canada (ECCC). 2022. Range Map Extents – Species at Risk – Canada. Available online at: http://data.ec.gc.ca/data/species/protectrestore/range-map-extents-species-at-risk-canada/

Environment and Climate Change Canada (ECCC). 2022. Management Plan for the Yellow banded Bumble Bee (*Bombus terricola*) in Canada [Proposed]. Species at Risk Act Management Plan Series. Environment and Climate Change Canada, Ottawa. iv + 46 pp. Available online at: https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry/management-plans/yellow-banded-bumble-bee-proposed-2022.html

Fisheries and Oceans Canada (previously Department of Fisheries and Oceans, "DFO"). 2022. Aquatic Species at Risk Map. Available online at: https://www.dfo-mpo.gc.ca/species-especes/sara-lep/map-carte/index-eng.html

Government of Canada. 1985. *Fisheries Act*, 1985 (R.S.C., 1985, c. F-14). Available online at: https://laws-lois.justics.gc.ca/eng/acts/f-14/

Government of Canada. 1994. *Migratory Birds Convention Act*, 1994 (S.C. 1994, c. 22). Available online at: https://laws-lois.justice.gc.ca/eng/acts/m-7.01/

Government of Canada. 2002. *Species at Risk Act*. 2002. S.C. 2002, c. 29. Available online at: https://laws.justice.gc.ca/eng/acts/S-15.3/

Government of Canada. 2018. Nesting periods for Ottawa region. URL: https://www.canada.ca/en/environment-climate-change/services/avoiding-harm-migratory-birds/general-nesting-periods/nesting-periods.html#ZoneC

Government of Canada. 2022. Species at Risk Public Registry. Available online at: http://www.registrelep-sararegistry.gc.ca/sar/index/default_e.cfm

Government of Ontario. 1990a. *Planning Act*, R.S.O. 1990, c. P.13. Available online at: https://www.ontario.ca/laws/statute/90p13

Government of Ontario. 1990b. *Conservation Authorities Act*, R.S.O. 1990, c. C.27. Available online at: https://www.ontario.ca/laws/statute/90c27

Government of Ontario. 1997. *Fish and Wildlife Conservation Act*, 1997, S.O. 1997, c. 41. Available online at: https://www.ontario.ca/laws/statute/97f41

Government of Ontario. 2007. *Endangered Species Act*. 2007. S.O. 2007, c.6. Available online at: https://www.ontario.ca/laws/statute/07e06

Government of Ontario. 2020. Provincial Policy Statement, 2020. Available online at: https://www.ontario.ca/page/provincial-policy-statement-2020

Government of Ontario. 2022. O. Reg. 830/21: Exemptions - Species Subject to Species Conservation Charges under *Endangered Species Act*, 2007, S.O. 2007, c.6. Available online at: https://www.ontario.ca/laws/regulation/210830#BK44

Heagy, A., D. Badzinski, D. Bradley, M. Falconer, J. McCracken, R.A. Reid and K. Richardson. 2014. Recovery Strategy for the Barn Swallow (*Hirundo rustica*) in Ontario. Ontario Recovery Strategy Series. Prepared for the Ontario Ministry of Natural Resources and Forestry, Peterborough, Ontario. vii + 64 pp. Available at: https://files.ontario.ca/environment-and-energy/species-at-risk/mnr_sar_rs_brn_swl_en.pdf

Humphrey, C. 2017. Recovery Strategy for the Eastern Small-footed Myotis (*Myotis leibii*) in Ontario. Ontario Recovery Strategy Series. Prepared for the Ontario Ministry of Natural Resources and Forestry, Peterborough, Ontario. vii + 76 pp. Available online at: https://files.ontario.ca/mnrf_sar_rs_esfm_final_accessible.pdf

Humphrey, C. and H. Fotherby. 2019. Recovery Strategy for the Little Brown Myotis (*Myotis lucifugus*), Northern Myotis (*Myotis septentrionalis*) and Tri-colored Bat (*Perimyotis subflavus*) in Ontario. Ontario Recovery Strategy Series. Prepared by the Ministry of the Environment, Conservation and Parks, Peterborough, Ontario. vii + 35 pp. + Appendix. Adoption of the Recovery Strategy for the Little Brown Myotis (*Myotis lucifugus*), the Northern Myotis (*Myotis septentrionalis*), and the Tri-colored Bat (*Perimyotis subflavus*) in Canada (Environment and Climate Change Canada 2018). Available online at: https://files.ontario.ca/mecp-rs-bats-2019-12-05.pdf

Lee, H.R., W. 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, North Bay. Available online at: https://www.researchgate.net/profile/Wasyl-Bakowsky/publication/248626765_Ecological_Land_Classification_for_Southern_Ontario_First_Approximation_and_Its_Application/links/560e7abd08ae48337515fd59/Ecological-Land-Classification-for-Southern-Ontario-First-Approximation-and-Its-Application.pdf

McCracken, J.D., R.A. Reid, R.B. Renfrew, B. Frei, J.V. Jalava, A. Cowie, and A.R. Couturier. 2013. Recovery Strategy for the Bobolink (*Dolichonyx oryzivorus*) and Eastern Meadowlark (*Sturnella magna*) in Ontario. Ontario Recovery Strategy Series. Prepared for the Ontario Ministry of Natural Resources, Peterborough, Ontario. viii + 88 pp. Available online at: https://files.ontario.ca/environment-and-energy/species-at-risk/mnr_sar_rs_est_mdwlrk_en.pdf

Ministry of Environment, Conservation and Parks (MECP). 2019a. Client's Guide to Preliminary Screening for Species at Risk. Draft – May 2019. Ministry of Environment, Conservation and Parks: Species at Risk Branch, Permission and Compliance. 9 pp.

Ministry of the Environment, Conservation, and Parks (MECP). 2019b. Recovery Strategy for the Eastern Whip-poor-will (*Antrostomus vociferus*) in Ontario. Ontario Recovery Strategy Series. Prepared by the Ministry of the Environment, Conservation and Parks, Peterborough, Ontario. iv + 6 pp. + Appendix. Adoption of the Recovery Strategy for Eastern Whip-poor-will (*Antrostomus vociferus*) in Canada (Environment and Climate Change Canada 2018). Available at: https://files.ontario.ca/mecp-rs-easternwhip-poor-will-2019-12-05.pdf

Ministry of the Environment, Conservation, and Parks (MECP). 2021. Butternut Assessment Guidelines: Assessment of Butternut Tree Health for the Purposes of the *Endangered Species Act*, 2007. Available online at: https://files.ontario.ca/mecp-butternut-assessment-guidelines-en-2022-03-02.pdf

Ministry of Environment, Conservation, and Parks (MECP). 2021e. Blanding's Turtle General Habitat Description. Published July 2013, updated March 2021. Available online at: https://www.ontario.ca/page/blandings-turtle-general-habitat-description

Ministry of Environment, Conservation, and Parks (MECP). 2022. Species at Risk in Ontario. Available online at: https://www.ontario.ca/page/species-risk-ontario

Ministry of Natural Resources (MNR). 2010. Natural Heritage Reference Manual for Natural Heritage Policies of the Provincial Policy Statement, 2005. Second Edition. Available online at: https://docs.ontario.ca/documents/3270/natural-heritage-reference-manual-for-natural.pdf

Ministry of Natural Resources and Forestry (MNRF). 2011. Survey Methodology under the Endangered Species Act, 2007: *Dolichonyx Oryzixorous* (Bobolink). Unpublished draft.

Ministry of Natural Resources and Forestry (MNRF). 2014a. Ontario Wetland Evaluation System: Southern Manual. 3rd Edition, Version 3.3. Available online at: https://files.ontario.ca/environment-and-energy/parks-and-protected-areas/ontario-wetland-evaluation-system-southen-manual-2014.pdf

Ministry of Natural Resources and Forestry (MNRF). 2014b. Draft Survey Protocol for Easter Whip-poor-will (*Caprimulgus vociferus*) in Ontario. OMNRF Species at Risk Branch, Peterborough, Ontario. iii + 10 pp.

Ministry of Natural Resources and Forestry (MNRF). 2015a. Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E. OMNRF Regional Operations Division: Southern Region Resources Section, Peterborough, Ontario. 39 pp. Available online at: https://dr6j45jk9xcmk.cloudfront.net/documents/4775/schedule-6e-jan-2015-access-ver-final-s.pdf

Ministry of Natural Resources and Forestry (MNRF). 2015b. Technical Note: Species at Risk (SAR) Bats. OMNRF Regional Operations Division. 37 pp.

Ministry of Natural Resources and Forestry (MNRF). 2015c. Survey Protocol for Blanding's Turtle (*Emydoidea blandingii*) in Ontario. MNRF, Species Conservation Policy Branch. Peterborough, Ontario. ii + 16 pp. Available online at: https://files.ontario.ca/mnrf_survey_protocol_for_blandings_turtle_in_ontario_2015_.pdf

Ministry of Natural Resources and Forestry (MNRF). 2016. Survey Protocol for Ontario's Species at Risk Snakes. Available online at: https://files.ontario.ca/mnrf_survey_protocol_for_ontarios_sar_snakes_2017_01_08_.pdf

Ministry of Natural Resources and Forestry (MNRF). 2017. Survey Protocol for Species at Risk Bats within Treed Habitats: Little Brown Myotis, Northern Myotis, and Tri-Coloured Bat. MNRF, Guelph District, Ontario. 13 pp.

Ministry of Natural Resources and Forestry (MNRF). 2018. Best Management Practices for Identifying, Managing, and Creating Habitat for Ontario's Species at Risk Snakes. Available online at: https://canadianherpetology.ca/conservation/doc/MNRF%20Snake%20Habitat%20BMP_final-1.pdf

Ministry of Natural Resources and Forestry (MNRF). 2022a. Natural Heritage Information Centre: Make Natural Heritage Map. Available online at: https://www.ontario.ca/page/make-natural-heritage-area-map

Ministry of Natural Resources and Forestry (MNRF). 2022b. Land Information Ontario. Available online at: https://www.ontario.ca/page/land-information-ontario

Ministry of Natural Resources and Forestry (MNRF). 2022c. Fish ON-Line. Available online at: https://www.lioapplications.lrc.gov.on.ca/fishonline/Index.html?viewer=FishONLine.FishONLine&locale=en-CA

Ministry of Natural Resources and Forestry (MNRF). 2022d. OGS Earth: Ontario Geotechnical Boreholes. Available online at: https://www.geologyontario.mndm.gov.on.ca/ogsearth.html

Ontario Ministry of Natural Resources (OMNR). 2000. Significant Wildlife Habitat Technical Guide. Fish and Wildlife Branch. Wildlife Section. Science Development and Transfer Branch. Southcentral Sciences Section. 151 pp. Available at: https://dr6j45jk9xcmk.cloudfront.net/documents/3620/significant-wildlife-habitat-technical-guide.pdf

Ontario Nature. 2019. Ontario Reptile and Amphibian Atlas. Available online at: https://www.ontarioinsects.org/herp/index.html?Sort=0&area2=squaresCounties&records=all&myZoom=5&Lat=47.5&Long=-83.5

Poisson, G., and M. Ursic. 2013. Recovery Strategy for the Butternut (*Juglans cinerea*) in Ontario. Ontario Recovery Strategy Series. Prepared for the Ontario Ministry of Natural Resources, Peterborough, Ontario. v + 12 pp. + Appendix vii + 24 pp. Adoption of the Recovery Strategy for the Butternut (Juglans cinerea) in Canada (Environment Canada 2010). Available online at: https://files.ontario.ca/environment-and-energy/species-at-risk/mnr_sar_rs_bttrnt_en.pdf

Rideau Valley Conservation Authority (RVCA). 2022. Public Geoportal. Available online at: https://gis.rvca.ca/html5/?viewer=rvcageoportal

Schut, L.W., and E.A. Wilson. 1987. The Soils of the Regional Municipality of Ottawa-Carleton (Excluding the Ottawa Urban Fringe) – Volume 1. Agriculture Canada, Ministry of Agriculture and Food. Map 1. Available online at: https://sis.agr.gc.ca/cansis/publications/surveys/on/on58/index.html

Toronto Entomologists' Association. 2022. Ontario Butterfly Atlas. Available online at: https://www.ontarioinsects.org/atlas/

Wildlife Preservation Canada, the Xerces Society, the University of Ottawa, BeeSpotter, The Natural History Museum, London, and the Montreal Insectarium. 2022. Bumble Bee Watch: Bumble Sightings Map. Available online at: https://www.bumblebeewatch.org/app/#/bees/map?filters=%7B%22sightingstatus_id%22:%5B%5D,%22species_id%22:%5B%2237%22%5D,%22province_id%22:%5B%5D%7D

# Appendix A  Qualifications of Report Authors

**Véronique Landriault, MSc (Biologist)**

Véronique is a biologist with three years of experience in aquatic sciences and ecological fieldwork, including recent work in environmental consulting across Ontario and Nunavut. Since joining Kilgour & Associates Ltd. in June 2024, she has contributed to Environmental Impact Studies (EIS) and Erosion and Sediment Control (ESC) monitoring projects. Véronique's expertise spans both aquatic and terrestrial ecosystems; her fieldwork experience includes breeding bird surveys, nest sweeps, amphibian call surveys, tree assessments, Species at Risk (SAR) surveys for flora and fauna, and assessments for Black Ash and Butternut. She has also conducted turbidity monitoring and water quality sampling in northern environments and has participated in fish community assessments. Véronique holds an undergraduate degree in Environmental Studies from the University of Ottawa and an MSc in Physical Geography from Queen's University, where her research focused on the landscape controls on High Arctic wetland water chemistry in Resolute Bay, Nunavut.

**Kesia Miyashita, MSc (Senior Biologist, Project Manager)**

Ms. Miyashita has over ten years of experience in environmental consulting and more than thirteen seasons of field experience in ecosystems in Ontario, Alberta, and British Columbia. During her career in environmental consulting, Ms. Miyashita has completed environmental assessments for a variety of major infrastructure projects and urban developments. Her expertise is in vascular and non-vascular plant ecology, with experience in both terrestrial and wetland ecosystems; she has performed vegetation community inventories, rare plant surveys, and invasive weed surveys in a variety of natural environments, including native forest, urban nature preserves, grasslands, and wetlands. Ms. Miyashita joined Kilgour & Associates Ltd. in May of 2021 and has since authored Environmental Impact Studies and Tree Conservation Reports and undertaken field surveys for flora and fauna, delineation of natural heritage features, and SAR surveys. Ms. Miyashita is a Professional Biologist with the Alberta Society of Professional Biologists and a Qualified Wetland Science Practitioner in the province of Alberta.

# Appendix B Initial SAR Screening

| Species Name (*Taxonomic Name*) | COSSARO Status | SCA Status (O.Reg. 60/26) | COSEWIC Status | SARA Status (Schedule 1) | Closest Species Occurrence Record to the Site | General Habitat Requirements | Site Suitability | Potential for Protected Elements[1] | | Potential for Negative Interactions with Protected Elements[2] |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Habitat | Individuals | |
| **Birds** | | | | | | | | | | |
| American White Pelican (*Pelecanus erythrorhynchos*) | **Special Concern** | **Not Listed** | **Not Listed** | **Not Listed** | Cornell Lab of Ornithology (2025): 3.9 km from site | Nest in mature forests near open water. In large trees such as pine and poplar. | The Site does not contain suitable habitat. | Negligible | Negligible | Negligible |
| Bank Swallow (*Riparia riparia*) | **Threatened** | **Not Listed** | **Threatened** | **Threatened** | Cornell Lab of Ornithology (2025): 0.9 km from site | Colonial nester; burrows in eroding silt or sand banks, sand pit walls, and human-made sand piles. Often found on banks of rivers and lakes. | The Site does not contain suitable habitat. | Negligible | Negligible | Negligible |
| Barn Swallow (*Hirundo rustica*) | **Special Concern** | **Not Listed** | **Special Concern** | **Not Listed** | Cornell Lab of Ornithology (2025): 0.3 km from site | Nests on barns and other structures. Forages in open areas for flying insects. Lives in close association with humans and prefers to nest on structures such as open barns, under bridges, and in culverts. | Open area on-site may provide foraging habitat. | Low | Low | Low |
| Black Tern (*Chlidonias niger*) | **Endangered** | **Endangered** | **Not at Risk** | **Not Listed** | Cornell Lab of Ornithology (2025): 3.5 km from site | Build floating nests in loose colonies in shallow marshes with abundant emergent vegetation, especially in cattails (Burke, 2012). | The Site does not contain suitable habitat. | Negligible | Negligible | Negligible |
| Bobolink (*Dolichonyx oryzivorus*) | **Threatened** | **Not Listed** | **Special Concern** | **Threatened** | Cornell Lab of Ornithology (2025): 0.9 km from site | Breeds in hayfields, pastures, agricultural fields, and abandoned fields with tall grass that are ≥5 ha, and preferably >30 ha. | The Site does not contain suitable habitat. | Negligible | Negligible | Negligible |
| Canada Warbler (*Cardellina canadensis*) | **Special Concern** | **Not Listed** | **Special Concern** | **Threatened** | Cornell Lab of Ornithology (2025): 1.3 km from site | Prefers moist forests with dense shrub layers. Nests located on or near the ground on mossy logs or roots, along stream banks or on hummocks. Area-sensitive species that usually require a minimum of 30 ha of continuous forest for breeding habitat (OMNR, 2000) and (Environment Canada, 2016b). | The Site does not contain suitable habitat. | Negligible | Negligible | Negligible |
| Chimney Swift (*Chaetura pelagica*) | **Threatened** | **Not Listed** | **Threatened** | **Threatened** | Cornell Lab of Ornithology (2025): 0.1 km from site | Nests in traditional-style open brick chimneys (and rarely in hollow trees). Tends to stay close to water. | The Site does not contain suitable habitat | Negligible | Negligible | Negligible |
| Common Nighthawk (*Chordeiles minor*) | **Special Concern** | **Not Listed** | **Special Concern** | **Special Concern** | Cornell Lab of Ornithology (2025): 0.7 km from site | Nests in a wide variety of open sites, including beaches, fields, and gravel rooftops with little to no ground vegetation. They also nest in cultivated fields, orchards, urban parks, mine tailings and along gravel roads/railways but tend to occupy more natural sites (Environment Canada, 2016c). | Open area on-site may provide foraging habitat. | Low | Low | Low |

| Species Name (*Taxonomic Name*) | COSSARO Status | SCA Status (O.Reg. 60/26) | COSEWIC Status | SARA Status (Schedule 1) | Closest Species Occurrence Record to the Site | General Habitat Requirements | Site Suitability | Potential for Protected Elements[1] | | Potential for Negative Interactions with Protected Elements[2] |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Habitat | Individuals | |
| Eastern Meadowlark (*Sturnella magna*) | **Threatened** | **Not Listed** | **Threatened** | **Threatened** | Cornell Lab of Ornithology (2025): 1.3 km from site | Breeds in hayfields, pastures, agricultural fields, and abandoned fields with tall grass that are ≥5 ha, and preferably >30 ha. | The Site does not contain suitable habitat. | Negligible | Negligible | Negligible |
| Eastern Whip-poor-will (*Antrostomus vociferus*) | **Special Concern** | **Not Listed** | **Special Concern** | **Threatened** | Cornell Lab of Ornithology (2025): 0.5 km from site | Suitable breeding habitats generally include open and half treed areas and often exhibit a scattered distribution of treed and open space. Lays eggs directly on the forest floor. Roosts are typically located in forest habitat on a low branch or directly on the ground. Home range size varies from 20 to 500 ha (mean 136 ha) (Ministry of the Environment, Conservation and Parks, (2019b). | The Site does not contain suitable habitat. | Negligible | Negligible | Negligible |
| Eastern Wood-Pewee (*Contopus virens*) | **Special Concern** | **Not Listed** | **Special Concern** | **Special Concern** | Cornell Lab of Ornithology (2025): 0.7 km from site | Woodland species often found in the mid-canopy layer near clearings and edges of intermediate age and mature deciduous and mixed forests with little understory. | Deciduous woodland on the east edge of the Site could provide suitable habitat. | Moderate | Moderate | Moderate |
| Evening Grosbeak (*Coccothraustes vespertinus*) | **Special Concern** | **Not Listed** | **Special Concern** | **Special Concern** | Cornell Lab of Ornithology (2025): 1.3 km from site | Nests in trees or large shrubs. Prefers mature coniferous forests (fir and/or spruce dominated), but will also use deciduous forests, parklands, and orchards. Its abundance is strongly linked to the cycle of Spruce Budworm. | Deciduous woodland on the east edge of the Site could provide suitable habitat. | Moderate | Moderate | Moderate |
| Golden Eagle (*Aquila chrysaetos*) | **Endangered** | **Endangered** | **Not at Risk** | **Not Listed** | Cornell Lab of Ornithology (2025): 1.0 km from site | Nests in remote, undisturbed areas, usually building their nests on ledges on a steep cliff/riverbank or large trees if needed. Most hunting is done near open areas such as large bogs or tundra. Migration only; no reported nests in Ottawa. | The Site does not contain suitable habitat. | Negligible | Negligible | Negligible |
| Golden-winged Warbler (*Vermivora chrysoptera*) | **Special Concern** | **Not Listed** | **Threatened** | **Threatened** | Cornell Lab of Ornithology (2025): 3.5 km from site | Ground-nests in areas of young shrubs surrounded by mature forest. Often found in areas that have recently been disturbed such as field edges, hydro or utility right-of-ways, or logged areas. Requires >10 ha of habitat (OMNR, 2000). | The Site does not contain suitable habitat. | Negligible | Negligible | Negligible |
| Grasshopper Sparrow (*Ammodramus savannarum*) | **Special Concern** | **Not Listed** | **Special Concern** | **Not Listed** | Cornell Lab of Ornithology (2025): 3.2 km from site | Lives in open grassland areas with well-drained sandy soil. Will also nest in hayfields and pastures, as well as alvars, prairies, and occasionally grain crops such as barley. It prefers areas that are sparsely vegetated, and its nests are well hidden in the field, woven from grasses in a small cup-like shape. | The Site does not contain suitable habitat. | Negligible | Negligible | Negligible |
| Horned Grebe (*Podiceps auritus*) | **Special Concern** | **Not Listed** | **Special Concern** | **Special Concern** | Cornell Lab of Ornithology (2025): 0.9 km from site | Nest in small ponds, marshes, and shallow bays that contain areas of open water and emergent vegetation. Migrant only; no reported nests in Ottawa. | The Site does not contain suitable habitat. | Negligible | Negligible | Negligible |

| Species Name (*Taxonomic Name*) | COSSARO Status | SCA Status (O.Reg. 60/26) | COSEWIC Status | SARA Status (Schedule 1) | Closest Species Occurrence Record to the Site | General Habitat Requirements | Site Suitability | Potential for Protected Elements[1] | | Potential for Negative Interactions with Protected Elements[2] |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Habitat | Individuals | |
| Least Bittern (*Ixobrychus exilis*) | **Special Concern** | **Not Listed** | **Special Concern** | **Threatened** | MNRF (2025b): within 5 km of site | Found in a variety of wetland habitats, but strongly prefers cattail marshes with a mix of open pools and channels. They prefer larger marshes >5 ha in size and are intolerant of loss of habitat and human disturbance (OMNR, 2000). | The Site does not contain suitable habitat. | Negligible | Negligible | Negligible |
| Lesser Yellowlegs (*Tringa flavipes*) | **Threatened** | **Threatened** | **Threatened** | **Not Listed** | Cornell Lab of Ornithology (2025): 2.1 km from site | Breeds in boreal wetlands. Nests on dry ground or forest openings near peatlands, marshes, and ponds in the boreal forest and taiga (COSEWIC, 2020). Migrant only; nests in far north. | The Site does not contain suitable habitat. | Negligible | Negligible | Negligible |
| Olive-sided Flycatcher (*Contopus cooperi*) | **Special Concern** | **Not Listed** | **Special Concern** | **Special Concern** | Cornell Lab of Ornithology (2025): 1.3 km from site | Found along coniferous or mixed forest edges and openings. Will use forests that have been logged or burned if there are ample tall snags and trees to use for foraging perches. Migrant only. | The Site does not contain suitable habitat. | Negligible | Negligible | Negligible |
| Red-headed Woodpecker (*Melanerpes erythrocephalus*) | **Endangered** | **Not Listed** | **Endangered** | **Endangered** | Cornell Lab of Ornithology (2025): 4.7 km from site | Lives in open woodland and woodland edges and is often found in parks, golf courses, and cemeteries. These areas typically have many dead trees, which the birds use for nesting and perching. | The Site does not contain suitable habitat. | Negligible | Negligible | Negligible |
| Rusty Blackbird (*Euphagus carolinus*) | **Special Concern** | **Not Listed** | **Special Concern** | **Special Concern** | Cornell Lab of Ornithology (2025): 1.2 km from site | Prefers wet wooded or shrubby areas. Nests at edges of boreal wetlands and coniferous forests. These areas include bogs, marshes, and beaver ponds (Environment Canada, 2014b). | The Site does not contain suitable habitat. | Negligible | Negligible | Negligible |
| Short-eared Owl (*Asio flammeus*) | **Threatened** | **Threatened** | **Threatened** | **Special Concern** | Birds Canada et al. (2009): within 10 km of site | Prefer a mosaic of grasslands and wetlands. Lives in open areas such as grasslands, marshes, and tundra where it nests on the ground and hunts for small mammals (Environment Canada, 2016a). | The Site does not contain suitable habitat. | Negligible | Negligible | Negligible |
| Snowy Owl *(Bubo scandiacus)* | **Special Concern** | **Not Listed** | **Threatened** | **Threatened** | Cornell Lab of Ornithology (2025): 1.9 km from site | Nests in the tundra and winters in southern Canada and the US. It prefers open treeless places for hunting and uses elevated perches as vantage points for finding food (Cornell Lab of Ornithology, (2025). | The Site does not contain suitable habitat. | Negligible | Negligible | Negligible |
| Wood Thrush (*Hylocichla mustelina*) | **Special Concern** | **Not Listed** | **Special Concern** | **Special Concern** | Cornell Lab of Ornithology (2025): 0.2 km from site<br>MNRF (2023a): < 5 km | Lives in mature deciduous and mixed forests. They seek moist stands of trees with well-developed undergrowth and tall trees for singing and perching. Prefers nesting in large forest mosaics, but will also use fragmented forests. Usually build nests in Sugar Maple or American Beech. | Deciduous woodland on the east edge of the Site could provide suitable habitat. | Moderate | Moderate | Moderate |
| **Mammals** | | | | | | | | | | |
| Eastern Red Bat (*Lasiurus borealis*) | **Endangered** | **Endangered** | **Endangered** | **Not Listed** | COSEWIC (2023) – in region | During the day they roost in the foliage of trees and occasionally shrubs in deciduous and coniferous forests of any age class. | Deciduous woodland on the east edge of the Site and forest (offsite to the east) could provide suitable roosting habitat, and open areas onsite may provide foraging habitat. | Moderate | Moderate | Moderate |
| Eastern Small-footed Myotis (*Myotis leibii*) | **Endangered** | **Endangered** | **Not Listed** | **Not Listed** | Humphrey (2017) – in region | In the spring and summer, Eastern Small-footed Myotis will roost in a variety of habitats, including in or under rocks, in rock outcrops, in buildings, under bridges, or in caves, mines, or hollow | Deciduous woodland on the east edge of the Site and forest (offsite to the east) could provide suitable roosting habitat, | Moderate | Moderate | Moderate |

| Species Name (*Taxonomic Name*) | COSSARO Status | SCA Status (O.Reg. 60/26) | COSEWIC Status | SARA Status (Schedule 1) | Closest Species Occurrence Record to the Site | General Habitat Requirements | Site Suitability | Potential for Protected Elements[1] | | Potential for Negative Interactions with Protected Elements[2] |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Habitat | Individuals | |
| | | | | | | trees. Overwinters in caves and abandoned mines. | and open areas onsite may provide foraging habitat. | | | |
| Hoary Bat (*Lasiurus cinereus*) | **Endangered** | **Endangered** | **Endangered** | **Not Listed** | COSEWIC (2023) – in region | Typically roost among foliage, selecting areas that have overhead foliage for cover and open flight space below. Use both deciduous and coniferous forests of any age class. Maternity roosts tend to be in large diameter, tall trees | Deciduous woodland on the east edge of the Site and forest (offsite to the east) could provide suitable roosting habitat, and open areas onsite may provide foraging habitat. | Moderate | Moderate | Moderate |
| Little Brown Myotis (*Myotis lucifugus*) | **Endangered** | **Endangered** | **Endangered** | **Endangered** | Humphrey and Fotherby (2019) – in region | 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. They can squeeze through very tiny spaces (as small as six millimetres across) allowing them access to many different roosting areas. | Deciduous woodland on the east edge of the Site and forest (offsite to the east) could provide suitable roosting habitat, and open areas onsite may provide foraging habitat. | Moderate | Moderate | Moderate |
| Northern Myotis / Northern Long-eared Bat (*Myotis septentrionalis*) | **Endangered** | **Endangered** | **Endangered** | **Endangered** | Humphrey and Fotherby (2019) – in region | Associated with deciduous and mixed forests, choosing to roost under loose bark and in the cavities of trees. They forage along and within forests as well as in hayfields and pastures adjacent to mixed forests. | Deciduous woodland on the east edge of the Site and forest (offsite to the east) could provide suitable roosting habitat, and open areas onsite may provide foraging habitat. | Moderate | Moderate | Moderate |
| Silver-haired Bat (*Lasionycteris noctivagans*) | **Endangered** | **Endangered** | **Endangered** | **Not Listed** | COSEWIC (2023) – in region | Typically roost under bark and in tree cavities, typically in large, decaying coniferous and deciduous trees. May roost in or on buildings. | Deciduous woodland on the east edge of the Site and forest (offsite to the east) could provide suitable roosting habitat, and open areas onsite may provide foraging habitat. | Moderate | Moderate | Moderate |
| Tri-colored Bat / Eastern Pipistrelle (*Perimyotis subflavus*) | **Endangered** | **Endangered** | **Endangered** | **Endangered** | Humphrey and Fotherby (2019) – in region | Roosts mainly in trees during summer; overwinters in caves and mines along with other species, but often uses deeper parts of the hibernaculum. Foraging occurs in forested riparian areas, over water, and within gaps in forest canopies. | Deciduous woodland on the east edge of the Site and forest (offsite to the east) could provide suitable roosting habitat, and open areas onsite may provide foraging habitat. | Moderate | Moderate | Moderate |
| **Reptiles** | | | | | | | | | | |
| Blanding's Turtle (*Emydoidea blandingii*) | **Threatened** | **Threatened** | **Endangered** | **Endangered** | MNRF (2025b): within 5 km of site | Quiet lakes, streams, and wetlands with abundant emergent vegetation. Also frequently occurs in adjacent upland forests (MECP, (2019a) | The watercourse adjacent to the east edge of the Site may provide suitable general summer habitat and a travel corridor. It is unlikely to provide nesting or overwintering habitat. | Moderate | Moderate | Moderate |
| Eastern Milksnake (*Lampropeltis triangulum*) | **Not Listed** | **Not Listed** | **Special Concern** | **Special Concern** | Ontario Nature (2023): within 10 km of site | Found in a variety of open and edge habitats, including meadows, rocky outcrops, and forest edges. They can also inhabit forests. Further, they are often associated with human-made | The woodland edge community and rock piles along the watercourse could provide suitable habitat | Moderate | Moderate | Moderate |

| Species Name (*Taxonomic Name*) | COSSARO Status | SCA Status (O.Reg. 60/26) | COSEWIC Status | SARA Status (Schedule 1) | Closest Species Occurrence Record to the Site | General Habitat Requirements | Site Suitability | Potential for Protected Elements[1] | | Potential for Negative Interactions with Protected Elements[2] |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Habitat | Individuals | |
| | | | | | | structures such as barns (Environment Canada, 2015a). | | | | |
| Eastern Musk Turtle / Stinkpot (*Sternotherus odoratus*) | **Special Concern** | **Not Listed** | **Special Concern** | **Special Concern** | MNRF (2025b): within 5 km of site | Found in lakes, ponds, marshes, and rivers that are generally slow-moving, have abundant emergent vegetation, and muddy bottoms that they burrow into for winter hibernation. | The Site does not appear to contain suitable habitat | Negligible | Negligible | Negligible |
| Eastern Ribbonsnake *(Thamnophis sauritus)* | **Special Concern** | **Not Listed** | **Special Concern** | **Special Concern** | MNRF (2025b): within 5 km of site | The Eastern Ribbonsnake is semi-aquatic. It is most frequently found along the edges of shallow ponds, streams, marshes, swamps, or bogs bordered by dense vegetation that provides cover. Abundant exposure to sunlight is also required, and adjacent upland areas may be used for nesting (Environment Canada, 2014a) | The Site does not appear to contain suitable habitat | Negligible | Negligible | Negligible |
| Midland Painted Turtle (*Chrysemys picta marginata*) | **Not Listed** | **Not Listed** | **Special Concern** | **Special Concern** | California Academy of Sciences (2025): 0.4 km from site | Inhabits waterbodies, such as ponds, marshes, lakes, and slow-moving creeks that have a soft bottom and provide abundant basking sites and aquatic vegetation. Often bask on shorelines or on logs and rocks that protrude from the water. | The watercourse adjacent to the east edge of the Site may provide suitable general summer habitat and a travel corridor. It is unlikely to provide nesting or overwintering habitat. | Moderate | Moderate | Moderate |
| Northern Map Turtle (*Graptemys geographica*) | **Special Concern** | **Not Listed** | **Special Concern** | **Special Concern** | California Academy of Sciences (2025): 0.5 km from site | Lives in rivers and lakeshores where it basks on emergent rocks and fallen trees throughout the spring and summer. In winter, they hibernate on the bottom of deep, slow-moving sections of river. | The Site does not appear to contain suitable habitat | Negligible | Negligible | Negligible |
| Snapping Turtle (*Chelydra serpentina*) | **Special Concern** | **Not Listed** | **Special Concern** | **Special Concern** | California Academy of Sciences (2025): 0.6 km from site | Spend most of their lives in the water. Prefer shallow waters so they can hide under the soft mud and leaf litter with only their noses exposed to the surface to breathe. | The watercourse adjacent to the east edge of the Site may provide suitable general summer habitat and a travel corridor. It is unlikely to provide nesting or overwintering habitat. | Moderate | Moderate | Moderate |
| **Arthropods** | | | | | | | | | | |
| Monarch (*Danaus plexippus*) | **Special Concern** | **Not Listed** | **Endangered** | **Endangered** | California Academy of Sciences (2025): 0.5 km from site | Milkweeds are the sole food plant for Monarch caterpillars. These plants predominantly grow in open and periodically disturbed habitats such as roadsides, fields, wetlands, prairies, and open forests. | Open grassed area on-site may provide suitable habitat if Common Milkweed is present. | Moderate | Moderate | Moderate |
| Skillet Clubtail (Gomphurus ventricosus) | **Threatened** | **Threatened** | **Special Concern** | **Special Concern** | MNRF (2025b): within 5 km of site | Larvae develop in slow-running rivers. Adults inhabit forests and open habitats adjacent to the river where they hatched. | The Site does not contain suitable habitat. | Negligible | Negligible | Negligible |
| Yellow-banded Bumble Bee (*Bombus terricola*) | **Special Concern** | **Not Listed** | **Special Concern** | **Special Concern** | Wildlife Preservation Canada et al. (2025): 2.4 km from site | This species is a forage and habitat generalist, able to use a variety of nectaring plants and environmental conditions. Can be found in mixed woodlands, particularly for nesting and overwintering, as well as a variety of open habitat such as native grasslands, farmlands, and urban areas (ECCC, 2022). | The mosaic of open and woodland areas may provide suitable habitat. | Moderate | Moderate | Moderate |
| **Fish** | | | | | | | | | | |

| Species Name (*Taxonomic Name*) | COSSARO Status | SCA Status (O.Reg. 60/26) | COSEWIC Status | SARA Status (Schedule 1) | Closest Species Occurrence Record to the Site | General Habitat Requirements | Site Suitability | Potential for Protected Elements[1] | | Potential for Negative Interactions with Protected Elements[2] |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Habitat | Individuals | |
| Channel Darter (*Percina copelandi*) | **Special Concern** | **Not Listed** | **Special Concern** | **Special Concern** | DFO (2025): within 5km of site | Prefers clean streams and lakes with moderate current over sandy or rocky substrate. | The Site does not appear to contain suitable habitat. | Negligible | Negligible | Negligible |
| Cutlip Minnow (*Exoglossum maxillingua)* | **Threatened** | **Threatened** | **Special Concern** | **Special Concern** | DFO (2025): within 5km of site | Lives in warmer rivers and creeks with clear, slow-moving water, and a rocky or gravel bottom. | The Site does not appear to contain suitable habitat. | Negligible | Negligible | Negligible |
| Northern Brook Lamprey (*Ichthyomyzon fossor*) | **Special Concern** | **Not Listed** | **Special Concern** | **Special Concern** | DFO (2025): within 5km of site | Inhabits clear, coolwater streams. The larval stage requires soft substrates such as silt and sand for burrowing which are often found in the slow-moving portions of a stream. Adults are found in areas associated with spawning, including fast flowing riffles comprised of rock or gravel. | The Site does not appear to contain suitable habitat. | Negligible | Negligible | Negligible |
| Northern Sunfish (*Lepomis peltastes*) | **Special Concern** | **Not Listed** | **Special Concern** | **Special Concern** | DFO (2025): within 5km of site | Lives in shallow vegetated areas of quiet, slow flowing rivers and streams, as well as warm lakes and ponds with sandy banks or rocky bottoms. | The Site does not appear to contain suitable habitat. | Negligible | Negligible | Negligible |
| River Redhorse (*Moxostoma carinatum*) | **Special Concern** | **Not Listed** | **Special Concern** | **Special Concern** | DFO (2025): within 5km of site | Prefers fast-flowing, clear rivers over rocky substrate. | The Site does not appear to contain suitable habitat. | Negligible | Negligible | Negligible |
| Silver Lamprey (*Ichthyomyzon unicuspis*) | **Special Concern** | **Not Listed** | **Special Concern** | **Special Concern** | DFO (2025): within 5km of site | Requires clear water where they can find fish hosts, relatively clean stream beds of sand and organic debris for larvae to live in, and unrestricted migration routes for spawning. Larvae live 4-7 years in burrows (prefer soft substrates); filter-feed on plankton. | The Site does not appear to contain suitable habitat. | Negligible | Negligible | Negligible |
| **Molluscs** | | | | | | | | | | |
| Hickorynut (*Obovaria olivaria*) | **Endangered** | **Not Listed** | **Endangered** | **Endangered** | DFO (2025): within 5km of site | Live on the sandy beds in large, wide, deep rivers – usually more than two or three metres deep – with a moderate to strong current. Ottawa River. | The Site does not appear to contain suitable habitat. | Negligible | Negligible | Negligible |
| **Vascular Plants** | | | | | | | | | | |
| Butternut (*Juglans cinerea*) | **Endangered** | **Endangered** | **Endangered** | **Endangered** | MNRF (2023a): < 5 km<br><br>California Academy of Sciences (2025): 0.9 km from site | Commonly found in riparian habitats but is also found on rich, moist, well-drained loams and well-drained gravels, especially those of limestone origin. | Riparian woodland may provide suitable habitat | Moderate | Moderate | Moderate |
| **Lichens** | | | | | | | | | | |
| Black-foam Lichen (*Anzia colpodes*) | **Not Listed** | **Not Listed** | **Threatened** | **Threatened** | MNRF (2025b): within 5 km of site | Grows on the trunks of mature deciduous trees growing on level or sloped land where high humidity is supplied by nearby wetlands, lakes, or streams. The most common host is Red Maple but it also occurs on White Ash, Sugar Maple, Red Oak, and very occasionally on other species. | The Site does not appear to contain suitable habitat. | Negligible | Negligible | Negligible |

# Appendix C Vascular Plant Species List

| Common Name | Scientific Name | ELC Unit | Notes |
|---|---|---|---|
| **Trees** | | | |
| American Elm | *Ulmus americana* | WODM5-3 | |
| Amur Maple | *Acer tataricum* | FODM11 | |
| Apple | *Malus* sp. | WODM5-3 | |
| Basswood | *Tilia americana* | WODM5-3 | |
| Bitternut Hickory | *Carya cordiformis* | FODM11 | |
| Black Locust | *Robinia pseudoacacia* | CUM1-1, FODM11 | Listed “Invasive” by the Ontario Invasive Plants Council |
| Blue Spruce | *Picea pungens* | FODM11 | |
| Butternut | *Juglans cinerea* | WODM5-3 | Listed Endangered under the Endangered Species Act and the Species at Risk Act |
| Eastern Cottonwood | *Populus deltoides* | CUM1-1, WODM5-3 | |
| Green Ash | *Fraxinus pennsylvanica* | FODM11, WODM5-3 | |
| Honey Locust | *Gleditsia triacanthos* | FODM11 | |
| Little-leaf Linden | *Tilia cordata* | FODM11 | |
| Manitoba Maple | *Acer negundo* | FODM11, WODM5-3 | Listed “Invasive” by the Ontario Invasive Plants Council |
| Red Oak | *Quercus rubrum* | FODM11 | |
| Red Pine | *Pinus resinosa* | FODM11 | |
| Sugar Maple | *Acer saccharum* | FODM11 | |
| **Shrubs** | | | |
| American Cranberry | *Viburnum trilobum* | WODM5-3 | |
| Common Buckthorn | *Rhamnus cathartica* | FODM11, WODM5-3 | Listed “Invasive” by the Ontario Invasive Plants Council |
| Common Lilac | *Syrina vulgaris* | WODM5-3 | |
| Pagoda Dogwood | *Cornus alternifolia* | WODM5-3 | |
| Staghorn Sumac | *Rhus typhina* | CUM1-1, WODM5-3 | |

| Common Name | Scientific Name | ELC Unit | Notes |
|---|---|---|---|
| **Groundcover** | | | |
| Annual Fleabane | *Erigeron annuus* | CUM1-1 | |
| Birds'-foot Trefoil | *Lotus corniculatus* | CUM1-1, FODM11 | |
| Calico Aster | *Symphyotrichum lateriflorum* | WODM5-3 | |
| Canada Goldenrod | *Solidago canadensis* | CUM1-1, FODM11 | |
| Chicory | *Cichorium intybus* | CUM1-1 | |
| Common Dandelion | *Taraxacum officinale* | CUM1-1 | |
| Common St. John's-wort | *Hypericumperforatum* | CUM1-1 | |
| Common Tansy | *Tanacetum vulgare* | CUM1-1 | |
| Dog-Strangling Vine | *Cynanchum rossicum* | CUM1-1, FODM11 | Listed "Restricted" under the Invasive Species Act, and listed "Invasive" by the Ontario Invasive Plants Council |
| Kentucky Bluegrass | *Poa pratensis* | CUM1-1, FODM11 | |
| Lesser Burdock | *Arctium minus* | FODM11 | Listed "Invasive" by the Ontario Invasive Plants Council |
| Perennial Sow-thistle | *Sonchus arvensis* | FODM11 | |
| Purple Loosestrife | *Lythrum salicaria* | CUM1-1 | Listed "Invasive" by the Ontario Invasive Plants Council |
| Queen Anne's Lace | *Daucus carota* | CUM1-1, FODM11 | |
| Red Clover | *Trifolium pratense* | CUM1-1 | |
| Riverbank Grape | *Vitis riparia* | WODM5-3 | |
| Silver Cinquefoil | *Potentilla argentea* | FODM11 | |
| Sweet Violet | *Viola odorata* | WODM5-3 | |
| Tall Ryegrass | *Lolium arundinaceum* | FODM11 | |
| Virginia Creeper | *Parthenocissus quinquefolia* | WODM5-3 | |
| White Avens | *Geum canadense* | WODM5-3 | |
| White Snakeroot | *Ageratina altissima* | WODM5-3 | |

| Common Name | Scientific Name | ELC Unit | Notes |
|---|---|---|---|
| White Sweet-clover | *Melilotus albus* | CUM1-1 | Listed “Invasive” by the Ontario Invasive Plants Council |
| Wild Strawberry | *Fragaria virginiana* | CUM1-1 | |

# Appendix D Tree Conservation Report

# Tree Conservation Report
# for 1867 Alta Vista Dive, Ottawa, Ontario

**October 9, 2026**

**Final Report**

**Submitted To**:

Mr. Evan Johnson
Soul Alta Vista GP Inc.

**KILGOUR & ASSOCIATES LTD.**
www.kilgourassociates.com

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## List of Acronyms and Abbreviations

CRZ – critical root zone
DBH – diameter at breast height
EIS – Environmental Impact Study
ELC – Ecological Land Classification
KAL – Kilgour & Associates Ltd.
MNRF – Ministry of Natural Resources and Forestry
NHIC – Natural Heritage Information Centre
OPA – Official Plan Amendment
SAR – species at risk
SARA – *Species at Risk Act*
SCA – *Species Conservation Act*
TCR – Tree Conservation Report
UNA – Urban Natural Area
ZBA – Zoning Bylaw Amendment

# 1.0 INTRODUCTION

This Tree Conservation Report (TCR) has been prepared following guidelines(City of Ottawa, 2020) set forth by the City of Ottawa ("the City",) on behalf of Soul Alta Vista GP Inc. in support of Zoning Bylaw Amendment (ZBA) and Official Plan Amendment (OPA) applications for the property at 1867 Alta Vista Drive in Ottawa, Ontario (the "Site"; Figure 1). The proposed development comprises a multi-unit residential building.

A TCR is required for all Plans of Subdivision, Site Plan Control Applications, Common Elements Condominium Applications, and Vacant Land Condominium Applications where there is a tree of 10 cm in diameter at breast height (DBH) or greater on a site and/or if there is a tree on an adjacent site that has a critical root zone (CRZ) extending onto a development site. A "tree" is defined as any species of woody perennial plant, including its root system, which has reached or can reach a minimum height of at least 450 cm at physiological maturity. The CRZ is calculated as DBH x 10 cm.

The removal of trees on the Site cannot occur until written approval has been granted through a tree permit as per the City's Tree Protection By-law (City of Ottawa, 2020), the application for which will be supported by this TCR. The tree permit will come in the form of a letter from the General Manager[1] with conditions specific to the Site, tree retention (if applicable), and associated tree protection and tree removal. The approved TCR itself is a requirement for the approval of the development applications listed above. A copy of the report must be available on the Site during tree removal, grading, construction, or any other site alteration activities, and for the duration of construction on the Site.

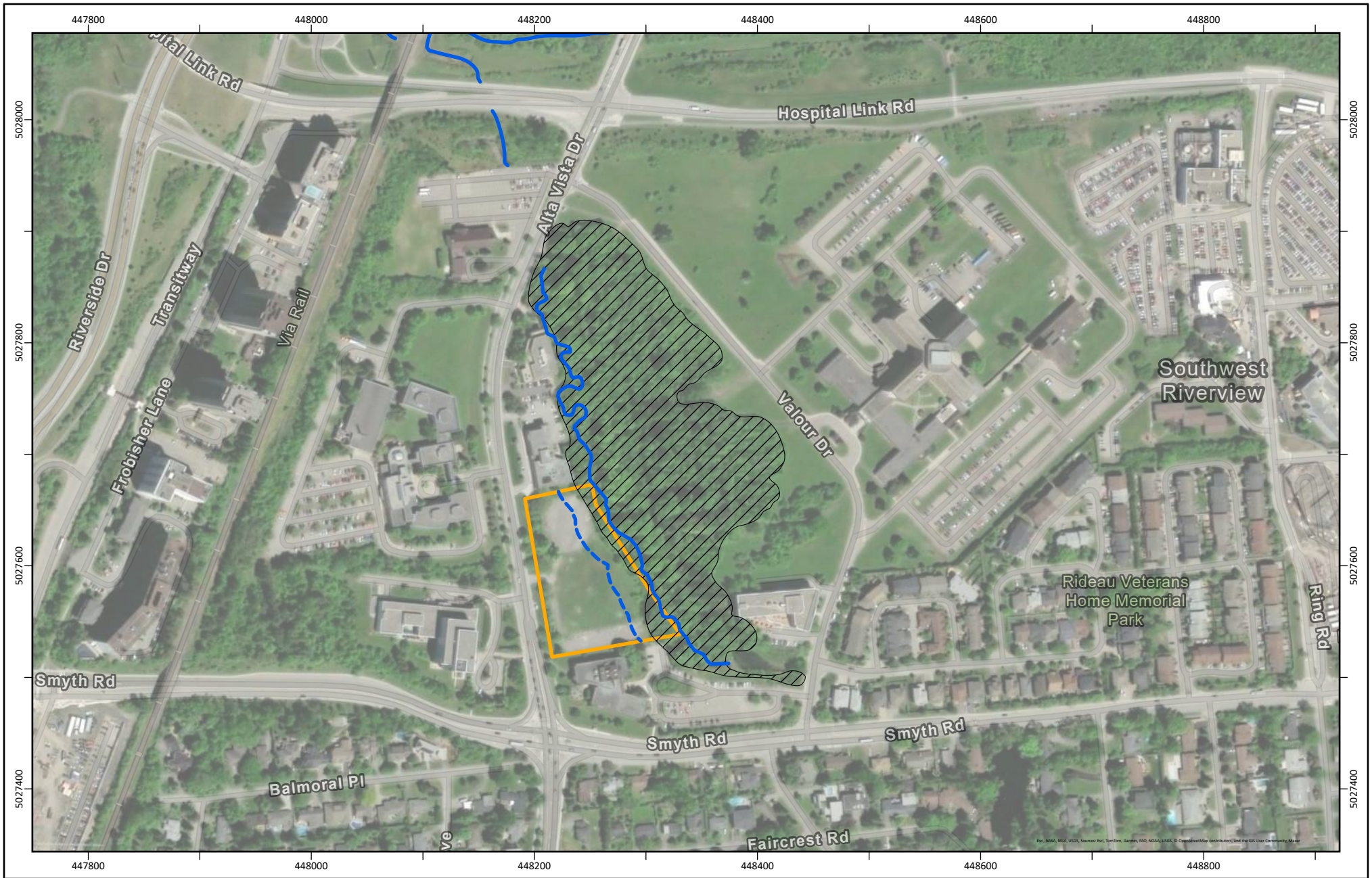
# 2.0 PROPERTY INFORMATION

The Site is approximately 1.21 hectares (ha) in size and is located at 1867 Alta Vista Drive, Ottawa, Ontario (Lat: 45.399788°N and Long: -75.661239°W; Figure 1). The Site is currently a vacant urban lot that previously contained a commercial building. Based on aerial imagery, the building was removed between September 2016 and June 2017 (City of Ottawa, 2025). The Site is partly paved and supports regenerating vegetation where the previous building stood. Trees are situated along the Site boundaries, including planted trees along the north, west, and south sides of the Site and natural woodland along the east side of the Site. Immediately east of the Site and extending onto the east portion of the Site is Urban Natural Area (UNA) #161 (Hospital Woods West). The Site is located approximately 550 m east of the Rideau River. The zoning of the Site is IP12 (Subzone – Hospital Lands).

The Site is bordered by:

- Commercial buildings, Hospital Link Road, greenspace, and residential communities to the north;
- A watercourse, woodland and greenspace, and buildings associated with The Ottawa Hospital General Campus to the east;
- Commercial buildings and residential community to the south; and
- Alta Vista Drive, commercial buildings, and the Rideau River to the west.

[1] General Manager of the Public Works & Environmental Services Department or the General Manager of the Planning, Infrastructure and Economic Development Department of the City of Ottawa, or their designate.




## Legend

- Watercourse
- 30 m Watercourse Setback
- UNA #161
- Site Boundary

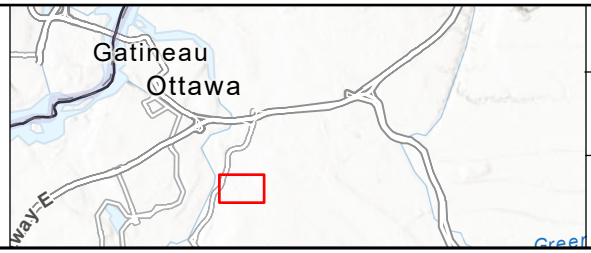



**Figure 1. Site context**

0 40 80 160 m

N W E S

Spatial Reference:
PCS: WGS 1984 UTM Zone 18N
Map Units: Meter

Project: TCU 1867
Map File Name: TCU 1867
Date Exported: 9/8/2025 9:09 AM

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## 2.1 Property Owner and Applicant and Arborist Contact Information

**Table 1 Organization, role, contact person, phone number, and email address for property owner / applicant and arborist**

| Organization | Role | Contact Person | Phone Number | Email Address |
|---|---|---|---|---|
| Soul Alta Vista GP Inc<br><br>1207-150 Isabella Street, Ottawa, ON K1S 5H3 | Proponent | Evan Johnson, Senior Manager, Development | 613-680-5582 | e.johnson@tcudevcorp.com |
| Kilgour & Associates Ltd.<br><br>2285 St. Laurent Blvd, Unit 16C, Ottawa, ON K1 4Z6 | Senior Biologist | Kesia Miyashita | 613-367-5546 | kmiyashita@kilgourassociates.com |

## 2.2 Qualifications of Arborist

**Kesia Miyashita** (MSc., P.Biol.) has ten years of experience in environmental consulting, with field experience in ecosystems in Ontario, Alberta and British Columbia. During her career in environmental consulting, Kesia has completed environmental assessments for a variety of major infrastructure projects and urban developments. Her expertise is in vascular and non-vascular plant ecology, with experience in both terrestrial and wetland ecosystems; she has performed vegetation community inventories, rare plant surveys and invasive plant surveys in a variety of natural environments, including native forest, urban nature preserves, grasslands, and wetlands. Prior to joining Kilgour & Associates Ltd. in May 2021, Kesia worked with the Canadian Wildlife Service, where she contributed to policies and guidance documents related to the interface between the *Species at Risk Act* and the *Impact Assessment Act* and developed a strong working understanding of those key pieces of federal legislation. Kesia is a Professional Biologist with the Alberta Society of Professional Biologists and a Qualified Wetland Science Practitioner in the province of Alberta.

## 2.3 Additional Applications

Not applicable

# 3.0 EXISTING CONDITIONS

## 3.1 Tree Inventory

An inventory of trees on/near the Site was undertaken concurrently with the Ecological Land Classification (ELC) exercise on August 7, 2025, following TCR guidelines set forth by the City of Ottawa Forestry Staff (City of Ottawa, 2020). All trees within the open areas of the Site and adjacent to the north, west, and south Site

boundaries (i.e., on adjacent privately-owned or City-owned lands but with potential for their critical root zones to extend onto the Site) were identified, and trees with DBH ≥10 cm were mapped and further characterized (e.g., species, size distribution, general health conditions). Trees within the woodland community on the east side of the Site were more generally characterized as a grouping, with dominant species and average DBH measurements documented. Notable trees (e.g., species uncommon to the Site or considerably larger than the Site average) were documented and characterized individually.

No trees with DBH measurements of 10 cm or greater were identified within the central meadow area onsite (CUM1-1). Within or adjacent to the FODM11 (regenerating hedgerow) onsite, 19 individual trees were identified, with DBH measurements ranging from 12 cm to 63 cm. These trees represented three distinct species: Honey Locust (*Gleditsia triacathos*), Sugar Maple (*Acer saccharum*), and Manitoba Maple (*Acer negundo*). Five notable trees (i.e., with DBH measurements greater than 50 cm), all of which were Sugar Maple or Honey Locust, were observed on the Site.

City-owned boulevard trees were observed immediately west of the Site along Alta Vista Drive, and four trees were observed adjacent to the south property boundary. The trees to the south included Blue Spruce (*Picea pungens*) and Sugar Maple and had DBH measurements ranging from 16 cm to 50 cm. Two trees were observed adjacent to the north property boundary, both of which were Red Pine (*Pinus resinosa*) and had DBH measurements of 14 and 34 cm

Within the WODM5-3 community, widespread tree species include Manitoba Maple, Basswood (*Tilia americana*), Eastern Cottonwood (*Populus deltoides*), and American Elm (*Ulmus americana*), with occasional Green Ash (*Fraxinus pennsylvanica*) and Apple (*Malus* sp.) trees. Average DBH measurements for trees within the woodland were approximately 25 cm.

Average tree parameters with the ELC units onsite that contained trees are summarized in Table 2 below. Individual tree observations are summarized in Appendix A.




**Legend**

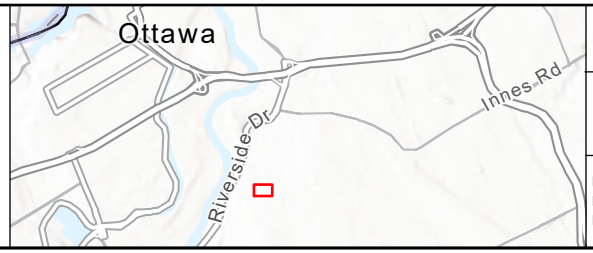
- Site Boundary
- Watercourse
- 30 m Watercourse Setback
- UNA #161

**Tree Fate**

- Existing Retained
- Existing Removed
- Butternut
- CRZ

**ELC**

- FODM11
- WODM5-3
- CUM1-1
- CVI_1




## Figure 2. Existing conditions

0 10 20 40 m

N W E S

Spatial Reference:
PCS: WGS 1984 UTM Zone 18N
Map Units: Meter

Project: TCU 1867
Map File Name: TCU 1867
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**Table 2 Summary tree data for ELC Units* on the Site****

| Community Type (ELC Unit) | Dominant Tree Species | Average DBH (cm) |
|---|---|---|
| FODM11 (Naturalized Deciduous Hedgerow) | Honey Locust, Sugar Maple, Manitoba Maple | 45 (largest DBH: 63) |
| WODM5-3 (Fresh – Moist Manitoba Maple Deciduous Woodland) | Manitoba Maple, Basswood, Eastern Cottonwood, and American Elm | 25 cm |

* Only ELC units supporting trees are included in this table
** excludes trees identified as off-site / adjacent to the Site

## 3.2 Ecological Significance of Trees on Site

Three Butternut trees (*Juglans cinerea*; Endangered under the SCA and SARA) were observed in the woodland (WODM5-3) on the east side of the Site. BN1 (DBH 31 cm) and BN2 (DBH 17 cm) are situated within the Site boundaries, with BN3 (DBH 23 cm) is situated offsite but with its CRZ extending onto the Site. All three trees were assessed as Category 1 based on the Butternut Health Assessment undertaken concurrently with this tree inventory (Appendix B). One additional Butternut had been observed approximately 16 m north of the Site during previous field studies in 2022. That tree was noted as dead in 2022 and it was confirmed to have fallen as of August 2025 and is not considered further in this report.

No other federally or provincially significant or at-risk tree species (i.e., those listed under the *Species at Risk Act* (SARA), the *Species Conservation Act* (SCA), or those tracked on the Natural Heritage Information Centre (NHIC; MNRF, 2023a) are present on or adjacent to the Site.

Given their urban context, the trees on the Site likely play a role in the regulation of relative humidity, sequestration of carbon, and removal of pollutants, wind-shielding, shading and reduction of urban heat island effects, and filtration of dust, noise, and light pollution. They also provide some habitat structure in the surrounding urban landscape. However, due to the urban nature of the surrounding lands, the trees on the Site likely only provide habitat for common bird and small mammal species in the Ottawa area and not species of significance (i.e., species that are at-risk, rare, or provincially or federally significant).

## 3.3 Other Natural Environment Elements

### 3.3.1 Surface Water Features

A watercourse runs parallel to the east property line and slightly intersects the property boundary in the southeastern corner of the Site (Figure 2). Field investigations in 2022 and 2025 characterized the stream as approximately 2-4 m wide, flowing from south to north, with a soft bottom interspersed with rocks (Figure 3). The feature has a 2-3% grade along its length, providing steady “run” conditions. Although fish studies were not undertaken, the observed depth (approximately 10 cm at the time of survey in August 2025) and general stream conditions suggest that the watercourse could provide habitat for some fish species. However, it is important to note that the section of the watercourse adjacent to the Site is the only open

section of the entire watercourse. The channel originates from a stormwater outlet located southeast of the Site and north of Smyth Road, where it is likely fed by stormwater runoff from surrounding developed lands. North of the Site, the watercourse enters approximately 185 m of culvert beneath Alta Vista Drive before re-emerging north of Hospital Link Road. This long, culverted section likely represents a significant fish barrier; only very small numbers of highly tolerant fish species could, on limited occasions, have any potential for access to the feature. As such, the potential for the feature to provide direct fish habitat is considered to be negligible.



**Figure 3 Watercourse east of the Site (August 7, 2025)**

### 3.3.2 Steep Slopes

The Site overall is relativity flat but slopes eastward within the deciduous woodland toward the watercourse (Figure 2). The watercourse has partly vegetated banks of approximately 2-3 m in height. The City of Ottawa previously suggested that the small ravine may meet the criteria for significant valleyland; however, after inspection it does not meet the necessary criteria; a thorough review of criteria is provided in the supporting Environmental Impact Study (Kilgour & Associates Ltd., 2025). As such, the Site does not contain any significant steep slopes or large banks.

### 3.3.3 Valued Woodlots

The woodland on the east edge of the Site is part of UNA #161 (Hospital Woods West). UNA #161 encompasses approximately 4.7 ha, covering lands primarily east of the Site (Figure 2). UNA #161 was originally characterized as a mature, low upland deciduous forest on the western half (on/near the Site) and a young deciduous swamp forest with dense, non-native shrubbery on the eastern half (Muncaster Environmental Planning Inc. & Brunton Consulting Services, 2005). Significant features noted include: 1) exceptional abundance of mature Butternut (identified as possibly the largest population of Butternut in the City of Ottawa urban area); 2) significant wildlife corridor function for migratory passerine birds; 3) and

protection for the Rideau River tributary within the steep-sided clay ravine (Muncaster Environmental Planning Inc. & Brunton Consulting Services, 2005). The UNA is described as "moderate" and listed as Category 2: Unprotected UNA (Status Pending).

The descriptions of and values attributed to the UNA, however, appear to be out of date. Only three Butternut were identified within the woodland area on the east side of the Site. Natural space connectivity between the north end of the UNA and the Rideau River corridor further west was removed by the construction of Hospital Link Road in 2017, which significantly reduced the corridor functionality of the UNA. Prior to the construction of Hospital Link Road, the watercourse was already interrupted by approximately 90 m of culvert under a parking area on the west side of Alta Vista Drive. The new roadway corridor added an additional 95 m of culvert. The creek is now highly disconnected from the Rideau River corridor and likely provides little to the broader river community beyond, serving as short open section of an otherwise very long pipe.

Historical imagery suggests that portions of UNA #161 have been wooded since at least 1958 (City of Ottawa, 2025); therefore, those areas that have remained treed meet the criteria for Significant Woodland, per the City of Ottawa *Significant Woodlands Policy* (City of Ottawa, 2022).

### 3.3.4 Significant Woodlands

Historical imagery suggests that portions of UNA #161 have been wooded since at least 1958 (City of Ottawa, 2025); therefore, those areas that have remained treed meet the criteria for Significant Woodland, per the City of Ottawa *Significant Woodlands Policy* (City of Ottawa, 2022). That feature, which extends offsite to the east, will be fully retained.

### 3.3.5 High-Quality Specimen Trees

No high-quality specimen trees were noted on the Site.

### 3.3.6 Hazardous trees

No hazardous trees were noted on the Site.

### 3.3.7 Unique Ecological Features

The Site does not contain any riparian woodlots, rare communities, or other unique ecological features not already addressed in this document.

### 3.3.8 Species at Risk

The SAR review completed as part of the EIS considered nine SAR as having either some or very limited potential for transient presence (seven at-risk bat species, Blanding's Turtle (*Emydoidea blandingii*) or observed presence (Butternut) on or near the site. The locations for occurrence of these species (either potential or observed), however, is sufficiently removed from Site areas that would be subject to direct works of disturbance, such that standard best practices associated with site development and construction can be fully anticipated to mitigate potential impacts to either SAR individual directly and/or to their habitat.

# 4.0 PROPOSED DEVELOPMENT

The proposed residential development would comprise a 9-storey residential building (Figure 4). The proposed development includes two level of underground parking, accessed by a ramp on the north side of the building. The ground level includes amenity spaces and a courtyard on the east side of the building, toward the woodland and watercourse. The southwest corner of the Site, adjacent to Alta Vista Drive is designated as Parkland in the form of a Privately Owned Public Space (POPS). Road access will include entry points along Alta Vista Drive. The development incorporates a setback of 30 m from the watercourse east of the Site, providing a buffer for the watercourse and Significant Woodland areas. Stormwater management will couple into an existing pipe outletting to the watercourse, avoiding associated impacts to trees along the property line.

Construction fencing will be installed along the setback boundary, and construction activities will not take place within the setback; however, paved and disturbed areas within the setback will be renaturalized appropriately (e.g., removal of existing asphalt and vegetation planting). Trees will be planted along the east side of the proposed building. Where possible, existing onsite trees to the north, south, and west sides of the Site will be retained.

The list of individual trees on and adjacent to the Site boundaries and their anticipated fates, are listed in Appendix A.




**Legend**

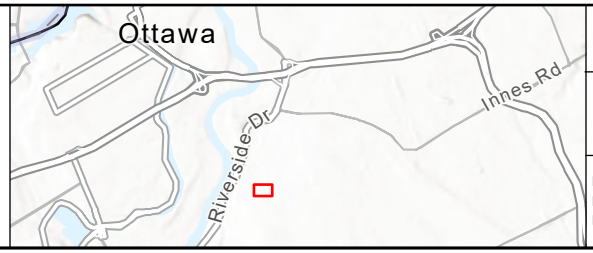
- Site Boundary
- Proposed Development

**Tree Fate**

- Existing Retained
- Existing Removed
- Tree Protection Fencing
- CRZ
- Watercourse
- 30 m Watercourse Setback
- UNA #161

**ELC**

- FODM11
- WODM5-3
- CUM1-1
- CVI_1




## Figure 4. Proposed development plan and tree fate

0 10 20 40 m

N W E S

Spatial Reference:
PCS: WGS 1984 UTM Zone 18N
Map Units: Meter

Project: TCU 1867
Map File Name: TCU 1867
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**Figure Note:** All individual retained trees will have tree protection fencing installed corresponding to their critical root zones as shown.

# 5.0 MITIGATION MEASURES

## 5.1 Site Preparation and Construction

The following mitigation measures should be applied during Site preparation and construction:

- Tree and vegetation clearing should not take place during sensitive times of the year for wildlife (breeding season; early spring throughout summer) unless mitigation measures are implemented and/or the habitat has been inspected by a qualified biologist.
    - The *Migratory Birds Convention Act* protects the nests and young of migratory breeding birds in Canada. The timing of nesting for birds in the area spans April 1 to August 31 (Government of Canada, 1994);
    - Combining the breeding bird window with the bat roosting season (April to November; MNRF, 2015), no clearing of vegetation shall occur between April 1 and November 30 inclusive to prevent impacts to both birds and bats.
- Butternut trees and their associated critical root zones (CRA; 10x DBH) are regulated under the SCA. A total of three Butternut trees were observed on the Site in August 2025. The Butternut Expert's Report (Appendix C) indicates that all three are Category 1, and are thus no longer subject to protection as SAR under the SCA. All three trees and their entire CRZs are situated within the 30 m setback along the watercourse and are not anticipated to be directly impacted by the proposed development. The Butternut Expert's Report is provided in Appendix B.
    - The Butternut Expert's Report is valid for two years. If the proposed development requires removal after August 7, 2028 (i.e., two years after the Butternut Health Assessment was completed), the trees must be reassessed.

It is expected that all trees within the development footprint will need to be cleared for the proposed project. Vegetation removal on the Site should be limited to that which is necessary to accommodate construction. All retainable trees on the Site and outside of the development footprint, including those off-site but adjacent to the property boundary and development footprint, should follow the general protection measures recommended during site preparation and construction (City of Ottawa, 2015):

- Erect a fence beyond the critical root zone (CRZ; i.e., 10x the diameter at breast height) of trees to be retained. The fence should be highly visible (orange construction fence) and paired with erosion control fencing. Pruning of branches is recommended in areas of potential conflict with construction equipment;
- Do not place any material or equipment within the CRZ of trees.
- Do not attach any signs, notices, or posters to any trees.
- Do not raise or lower the existing grade within the CRZ of trees without approval.
- Tunnel or bore when digging within the CRZ of a tree.
- Do not damage the root system, trunk, or branches of any remaining trees.

- Ensure that exhaust fumes from all equipment are not directed toward any tree's canopy.
- Do not extend any hard surface or significantly change landscaping within the CRZ of trees.

# 6.0 CLOSURE

This report was prepared for exclusive use by Soul Alta Vista GP Inc. and may be distributed only by Soul Alta Vista GP Inc. Questions relating to the data and interpretation can be addressed to the undersigned.

Respectfully submitted,

**KILGOUR & ASSOCIATES LTD.**

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# LITERATURE CITED

City of Ottawa. (2015, October). *Environmental Impact Statement Guidelines*.

City of Ottawa. (2020). *Tree Protection (By-law No. 2020-340)*. https://ottawa.ca/en/living-ottawa/laws-licences-and-permits/laws/laws-z/tree-protection-law-no-2020-340

City of Ottawa. (2022). *Significant Woodlands: Guidelines for Identification, Evaluation, and Impact Assessment*. https://documents.ottawa.ca/sites/documents/files/significant_woodlands_en.pdf

City of Ottawa. (2025). *geoOttawa*. https://maps.ottawa.ca/geoottawa/

Government of Canada. (1994). Migratory Birds Convention Act*, 1994 (S.C. 1994, c. 22)*. https://laws-lois.justice.gc.ca/eng/acts/m-7.01/

Kilgour & Associates Ltd. (2025). *Environmental Impact Study for 1867 Alta Vista Drive, Ottawa, Ontario*.

MNRF. (2015). *Technical Note: Species at Risk (SAR) Bats* (OMNRF Regional Operations Division, p. 37). Ministry of Natural Resources and Forestry.

MNRF. (2023). *Natural Heritage Information Centre*. Ontario.Ca. http://www.ontario.ca/page/natural-heritage-information-centre

Muncaster Environmental Planning Inc. & Brunton Consulting Services. (2005). *City of Ottawa Urban Natural Areas Environmental Evaluation Study* (Final Report). https://app06.ottawa.ca/calendar/ottawa/citycouncil/pdc/2005/05-24/Final%20Report_UNAEES.htm

# Appendix A  Tree Data

| Tree ID | Location | Species Name | Number of Stems | DBH (cm) | Trunk Health | Canopy Health | Decay Class | Tree Ownership | Fate |
|---|---|---|---|---|---|---|---|---|---|
| BN001 | 18N, 448281.31 m E 5027603.08 m N | Butternut | 1 | 31 | Poor | Poor | 2 | Private – onsite (in WODM5-3 community) | Retained |
| BN002 | 18N, 448260.653 m E 5027639.697 m N | Butternut | 1 | 17 | Poor | Poor | 2 | Private – onsite (in WODM5-3 community) | Retained |
| BN003 | 18N, 448264.162 m E 5027644.377 m N | Butternut | 1 | 23 | Poor | Poor | 2 | City-owned (in WODM5-3 community) | Retained |
| T1 | 18N, 448213.348 m E 5027516.633 m N | Little-leaf Linden | 1 | 33 | Good | Good | 1 | City-owned | Retained |
| T2 | 18N, 448212.811 m E 5027527.514 m N | Honey Locust | 1 | 37 | Good | Good | 1 | City-owned | Retained |
| T3 | 18N, 448210.211 m E 5027537.803 m N | Honey Locust | 1 | 35 | Good | Fair | 1 | City-owned | Retained |
| T4 | 18N, 448218.739 m E 5027532.87 m N | Sugar Maple | 1 | 40 | Good | Good | 1 | Private - onsite | Retained |
| T5 | 18N, 448207.559 m E 5027576.487 m N | Honey Locust | 1 | 34 | Good | Good | 1 | Private - onsite | Removed |
| T6 | 18N, 448208.857 m E 5027581.315 m N | Honey Locust | 1 | 46 | Good | Good | 1 | Private - onsite | Removed |
| T7 | 18N, 448215.288 m E 5027572.055 m N | Honey Locust | 1 | 40 | Good | Fair | 1 | Private - onsite | Removed |
| T8 | 18N, 448211.307 m E 5027597.477 m N | Honey Locust | 1 | 44 | Good | Fair | 1 | Private - onsite | Removed |
| T9 | 18N, 448209.376 m E 5027600.457 m N | Honey Locust | 1 | 62 | Good | Fair | 1 | Private - onsite | Removed |
| T10 | 18N, 448214.253 m E 5027611.038 m N | Sugar Maple | 1 | 59 | Good | Good | 1 | Private - onsite | Removed |
| T11 | 18N,448202.151 m E 5027617.754 m N | Sugar Maple | 1 | 63 | 1: Good | Good | 1 | Private - onsite | Removed |
| T12 | 18N,448195.161 m E 5027626.102 m N | Pin Oak | 1 | 38 | Good | Fair | 1 | City-owned | Retained |
| T13 | 18N,448200.189 m E 5027633.13 m N | Manitoba Maple | 2 | 12 | Good | Good | 1 | Private - onsite | Removed |

| Tree ID | Location | Species Name | Number of Stems | DBH (cm) | Trunk Health | Canopy Health | Decay Class | Tree Ownership | Fate |
|---|---|---|---|---|---|---|---|---|---|
| T14 | 18N,448205.289 m E 5027660.838 m N | Honey Locust | 1 | 40 | Good | Good | 1 | Private - onsite | Retained |
| T15 | 18N,448210.175 m E 5027660.727 m N | Honey Locust | 1 | 45 | Good | Good | 1 | Private - onsite | Removed |
| T16 | 18N,448207.168 m E 5027655.678 m N | Honey Locust | 1 | 52 | Good | Fair | 1 | Private - onsite | Removed |
| T17 | 18N,448193.41 m E 5027657.288 m N | Red Pine | 1 | 14 | Good | Good | 1 | Private – adjacent site | Retained |
| T18 | 18N,448193.41 m E 5027657.288 m N | Sugar Maple | 1 | 50 | Good | Good | 1 | Private – adjacent Site | Retained |
| T19 | 18N,448285.453 m E 5027527.804 m N | Sugar Maple | 1 | 34 | Good | Good | 1 | Private – adjacent Site | Retained |
| T20 | 18N,448287.501 m E 5027529.546 m N | Blue Spruce | 1 | 16 | Good | Good | 1 | Private – adjacent Site | Retained |
| T21 | 18N,448287.659 m E 5027531.078 m N | Blue Spruce | 1 | 20 | Good | Good | 1 | Private – adjacent Site | Retained |
| T22 | 18N, 448224.011 m E 5027525.18 m N | Sugar Maple | 1 | 50 | Good | Good | 1 | Private - onsite | Retained |
| T23 | 18 N, 448202.84 m E 5027601.90 m N | Honey Locust | 1 | 30 | Good | Good | 1 | Private – onsite | Removed |
| T24 | 18 N, 448195.007 m E 5027609.720 m N | Honey Locust | 1 | 36 | Good | Good | 1 | City-owned | Retained |
| T25 | 18 N, 448197.750 m E 5027595.380 m N | Honey Locust | 1 | 29 | Good | Good | 1 | City-owned | Retained |

**Table Notes:**

Trunk and Canopy Health are scored from 1 to 3 based on the following descriptions: 1- Good: Tree displays less than 15% deficiency; 2 – Fair: Tree displays 15-40% deficiency; 3 – Poor: Tree displays greater than 40% deficiency.

Decay Class is scored on from 1 to 6 based on the following descriptions: 1 – Healthy live tree; 2 – Declining live tree, part of canopy lost; 3 – Very recently dead, no live canopy, bark and branches intact; 4 – Recently dead, bark peeling, only large branches intact; 5 – Older dead tree, 90% of bark lost, few branch stubs, broken top; 6 – Very old dead tree, advanced decay, no branches, part of the stem has rotted away

# Appendix B Butternut Expert's Report

Ontario

Ministry of the Environment, Conservation and Parks

# Butternut Data Collection Form

Butternut (*Juglans cinerea*) is listed as an endangered species in Schedule 2 of Ontario Regulation 230/08 "the Species at Risk in Ontario List". As an endangered species, the *Endangered Species Act, 2007* (ESA) prohibits adversely impacting Butternut and its habitat. A permit or agreement under the ESA is required before engaging in an activity that is otherwise prohibited under the ESA. The activity may be eligible for the Butternut conditional exemption in Part V of Ontario Regulation 830/21, provided the requirements of the regulation are met. For more information please refer to the following links:

*Endangered Species Act, 2007*
Ontario Regulation 830/21 (Exemptions – Species Subject to Species Conservation Charges)
Ontario Regulation 230/08 (Species at Risk in Ontario List)
Ontario Regulation 242/08 (General Regulation)
Information about ESA permits and authorizations
*Butternut Assessment Guidelines: Assessment of Butternut Tree Health for the Purposes of the Endangered Species Act, 2007*

A Butternut Health Expert's Report (BHE Report) completed by a "Butternut Health Expert" (BHE) as defined in section 21 of Ontario Regulation 830/21 is typically required as part of an application to the Ministry of the Environment, Conservation and Parks (MECP) for a permit or agreement under the ESA and is required in respect of the conditions of the Butternut conditional exemption in Part V of O. Reg. 830/21. **This Butternut Data Collection Form must be completed by the BHE and included in their BHE Report.**

This form should not be relied upon to determine your legal obligations. To determine your legal obligations, consult the *Endangered Species Act, 2007* and the relevant regulations made thereunder. These may be found at www.ontario.ca/laws. If legal advice is required, consult a legal professional. In the event of an error on this form or a conflict between this form and any applicable law, the law prevails.

### Notice of Collection and Use

Personal information on this form is collected under the authority of Section 53 of the ESA and section 38 of the *Freedom of Information and Protection of Privacy Act*. Forms that have been submitted to MECP may be used by MECP staff to contact the property owner (or person acting on their behalf) to request permission to access the assessed trees for the purpose of examining the trees or to contact the BHE who prepared the BHE Report. Questions about the use of your personal information should be directed to the Species at Risk Branch, Ministry of the Environment, Conservation and Parks, 300 Water Street, Peterborough Ontario, K9J 3C7 at speciesatriskregistry@ontario.ca.

Fields marked with an asterisk (*) are mandatory.

| Butternut Health Expert's Report Number* | Start Date of Butternut Health Assessment (yyyy/mm/dd)* | End Date of Butternut Health Assessment (yyyy/mm/dd)* |
|---|---|---|
| | 2025/08/07 | 2025/08/07 |

## Butternut Health Expert (BHE) Contact Information

| Last Name* | | First Name* |
|---|---|---|
| MIYASHITA | | KESIA |
| **Telephone Number*** | **Alternate Telephone Number** | **Email Address*** |
| 613-367-5546 | | KMIYASHITA@KILGOURASSOCIATES.COM |

Summary of Qualifications as a Butternut Health Expert*

Ms. Miyashita has over ten years of experience in environmental consulting and more than thirteen seasons of field experience in ecosystems in Ontario, Alberta, and British Columbia. During her career in environmental consulting, Ms. Miyashita has completed environmental assessments for a variety of major infrastructure projects and urban developments. Her expertise is in vascular and non-vascular plant ecology, with experience in both terrestrial and wetland ecosystems; she has performed vegetation community inventories, rare plant surveys, and invasive weed surveys in a variety of natural environments, including native forest, urban nature preserves, grasslands, and wetlands.

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## Property Owner Contact Information

| Last Name* | First Name* |
|---|---|
| JOHNSON | EVAN |

Company Name
SOUL ALTA VISTA GP INC.

**Mailing Address***

| Unit Number | Street Number | Street Name | PO Box |
|---|---|---|---|
| 1207 | 150 | ISABELLA ST | |

| Lot Number | Concession | Township | Rural Route |
|---|---|---|---|
| | | | |

| City/Town | Province | Postal Code |
|---|---|---|
| OTTAWA | ON | K1S 5H3 |

| Telephone Number * | Alternate Telephone Number | Email Address |
|---|---|---|
| | | E.JOHNSON@TCUDEVCORP.COM |

## Butternut Tree(s) Location Information

**Address*** ☐ Select if location of Butternut is the same as the property owner's mailing address

| Unit Number | Street Number | Street Name | PO Box |
|---|---|---|---|
| | 1867 | ALTA VISTA DR | |

| Lot Number | Concession | Township | Rural Route |
|---|---|---|---|
| | | | |

| City/Town | Province | Postal Code |
|---|---|---|
| OTTAWA | ON | K1G 5W8 |

General description of area containing Butternut (select one)

☐ Natural ☐ Rural ☑ Urban - Suburban ☐ Industry / Resource Extraction Area

Soil drainage (select one)

☑ Well Drained ☐ Moderately Drained ☐ Poorly Drained ☐ Unknown

Have any of the Butternut at this site produced seeds?

☐ Yes ☐ No ☑ Unknown

General Comments

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## Butternut Tree Data 1

Tree Identification Number* 1 Date of Assessment (yyyy/mm/dd)* 2025/08/07

UTM Zone* 18 N Northing* 5027603 Easting* 448281

Is this tree a Butternut tree or a putative hybrid? * ☑ Butternut ☐ Putative Hybrid

Is the stem of this tree shorter than 1.37 m? * ☐ Yes ☑ No

Is this a single or multi-stemmed tree? * ☑ Single Stem ☐ Multiple Stems

Live Crown %* 30 Tree Stem Diameter (cm)* 31

Number of sooty cankers* At or below 2m (the lower stem) 26 Above 2m 4 At the root (root flares) 24

Number of open cankers* At or below 2m (the lower stem) 19 Above 2m 8 At the root (root flares) 5

Metres from badly cankered tree* ☐ 40 metres or less ☐ Greater than 40 metres ☑ None found

Crown Class ☐ Dominant, full sun ☑ Co-dominant, two sides in the sun ☐ Intermediate, sun only from above ☐ Suppressed, shaded crown

Signs of Stress ☑ Twig dieback ☑ Branch dieback ☐ Defoliation ☐ Discolouration

Seed Signs ☐ Mature stamens or pollen ☐ Receptive pistils ☐ Seed set ☑ None ☐ Unknown

Below Crown Number of stems 1 Main stem length (m) below crown 4

Number of epic-live 0 Number of epic-dead 0 Number of callused wounds 2

Bark type: ☐ Deep furrows/Narrow ridges ☑ Shallow furrows/Wide ridges

Tree Origin ☐ Naturally-occurring ☐ Planted (cultivated) ☑ Unknown

Is this tree located in an area that is upland, wetland, or riparian? ☑ Upland ☐ Wetland ☐ Riparian

Vegetation Community ☐ Open ☐ Shrub thicket ☐ Savannah - Woodland ☑ Forest

If Savannah-Woodland or Forest selected, select one option from both groups:

☑ Deciduous ☐ Coniferous ☐ Mixed

☐ Climax ☐ Regenerating

Does this tree occupy edge habitat? ☑ Yes ☐ No

If "Yes", select which edge habitat:

☐ Road ☐ Trail ☐ Utility corridor

☐ Fencerow ☑ Forest/woodlot edge ☐ Watercourse/waterbody

Competing Species 1. 2. 3.

Comments about this tree

Root flare and lower trunk badly cankered

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## Butternut Tree Data 2

Tree Identification Number* 2 Date of Assessment (yyyy/mm/dd)* 2025/08/07 ☑ Select if Date is same as tree above

UTM Zone* 18 N Northing* 5027639 Easting* 448260

Is this tree a Butternut tree or a putative hybrid? * ☑ Butternut ☐ Putative Hybrid

Is the stem of this tree shorter than 1.37 m? * ☐ Yes ☑ No

Is this a single or multi-stemmed tree? * ☑ Single Stem ☐ Multiple Stems

Live Crown %* 30 Tree Stem Diameter (cm)* 17

Number of sooty cankers* At or below 2m (the lower stem) 12 Above 2m 1 At the root (root flares) 7

Number of open cankers* At or below 2m (the lower stem) 6 Above 2m 3 At the root (root flares) 3

Metres from badly cankered tree* ☐ 40 metres or less ☐ Greater than 40 metres ☑ None found

Crown Class ☐ Dominant, full sun ☑ Co-dominant, two sides in the sun ☐ Intermediate, sun only from above ☐ Suppressed, shaded crown

Signs of Stress ☑ Twig dieback ☑ Branch dieback ☐ Defoliation ☐ Discolouration

Seed Signs ☐ Mature stamens or pollen ☐ Receptive pistils ☐ Seed set ☑ None ☐ Unknown

Below Crown Number of stems 1 Main stem length (m) below crown 5

Number of epic-live 0 Number of epic-dead 0 Number of callused wounds 0

Bark type: ☐ Deep furrows/Narrow ridges ☑ Shallow furrows/Wide ridges

Tree Origin ☐ Naturally-occurring ☐ Planted (cultivated) ☑ Unknown

Is this tree located in an area that is upland, wetland, or riparian? ☑ Upland ☐ Wetland ☐ Riparian

Vegetation Community ☐ Open ☐ Shrub thicket ☐ Savannah - Woodland ☑ Forest

If Savannah-Woodland or Forest selected, select one option from both groups:

☑ Deciduous ☐ Coniferous ☐ Mixed

☐ Climax ☐ Regenerating

Does this tree occupy edge habitat? ☑ Yes ☐ No

If "Yes", select which edge habitat:

☐ Road ☐ Trail ☐ Utility corridor

☐ Fencerow ☑ Forest/woodlot edge ☐ Watercourse/waterbody

Competing Species 1. 2. 3.

Comments about this tree

Large open cankers at root

 © King's Printer for Ontario, 2023 

## Butternut Tree Data 3

Tree Identification Number* 3 Date of Assessment (yyyy/mm/dd)* 2025/08/07 ☑ Select if Date is same as tree above

UTM Zone* 18 N Northing* 5027644 Easting* 448264

Is this tree a Butternut tree or a putative hybrid? * ☑ Butternut ☐ Putative Hybrid

Is the stem of this tree shorter than 1.37 m? * ☐ Yes ☑ No

Is this a single or multi-stemmed tree? * ☑ Single Stem ☐ Multiple Stems

Live Crown %* 20 Tree Stem Diameter (cm)* 23

Number of sooty cankers* At or below 2m (the lower stem) 2 Above 2m 1 At the root (root flares) 7

Number of open cankers* At or below 2m (the lower stem) 6 Above 2m 3 At the root (root flares) 3

Metres from badly cankered tree* ☐ 40 metres or less ☐ Greater than 40 metres ☑ None found

Crown Class ☐ Dominant, full sun ☑ Co-dominant, two sides in the sun ☐ Intermediate, sun only from above ☐ Suppressed, shaded crown

Signs of Stress ☑ Twig dieback ☑ Branch dieback ☐ Defoliation ☐ Discolouration

Seed Signs ☐ Mature stamens or pollen ☐ Receptive pistils ☐ Seed set ☑ None ☐ Unknown

Below Crown Number of stems 1 Main stem length (m) below crown 8

Number of epic-live 0 Number of epic-dead 0 Number of callused wounds 1

Bark type: ☐ Deep furrows/Narrow ridges ☑ Shallow furrows/Wide ridges

Tree Origin ☐ Naturally-occurring ☐ Planted (cultivated) ☑ Unknown

Is this tree located in an area that is upland, wetland, or riparian? ☑ Upland ☐ Wetland ☐ Riparian

Vegetation Community ☐ Open ☐ Shrub thicket ☑ Savannah - Woodland ☑ Forest

If Savannah-Woodland or Forest selected, select one option from both groups:

☑ Deciduous ☐ Coniferous ☐ Mixed

☐ Climax ☐ Regenerating

Does this tree occupy edge habitat? ☐ Yes ☑ No

If "Yes", select which edge habitat:

☐ Road ☐ Trail ☐ Utility corridor

☐ Fencerow ☐ Forest/woodlot edge ☐ Watercourse/waterbody

Competing Species 1. 2. 3.

Comments about this tree

Root flare mostly open

 © King's Printer for Ontario, 2023 

| BHE Report Number | Start Date of Butternut Health Assessment (yyyy/mm/dd) | End Date of Butternut Health Assessment (yyyy/mm/dd) |
|---|---|---|
| | 2025/08/07 | 2025/08/07 |
| **Total Number Butternut Trees in BHE Report** | **Butternut Health Expert's Name** | |
| 3 | MIYASHITA, KESIA | |
| **Property Owner/Client Name** | **Property Address** | |
| JOHNSON, EVAN | 1867 ALTA VISTA DR<br>OTTAWA ON K1G 5W8 | |

| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tree # | Live Crown % | Tree stem diameter (cm) | # bole cankers (BC)<br>Sooty (S) (will be assigned 2.5 cm per canker)<br>Open (O) (will be assigned 5 cm per canker) | | | | # root flare cankers (RF) | | 40 m or less from cankered tree? (Y or N) | Circ. (cm) = Pi * tree stem diameter | Total BC Width (cm) = (D * 2.5) + (E * 2.5) + (F * 5) + (G * 5) | Total RF Width (cm) = (H * 2.5) + (I * 5) | Total BC Width % of Circ. = L / K * 100 | Total RF Width % of Circ. = M / K * 100 | Total BC + RF Width % of 2 * Circ. = (N + O) / 2 | Tree Categories: 1, 2, or 3 | | | | |
| | | | S <= 2m | S > 2m | O <= 2m | O > 2m | S | O | | | | | | | | = Cat 2 if B >= 50 and N=0 else = Cat 1 | = Cat 2 if B > 70 and P < 20 else = Cat 1 | = Cat 2 if B > 70 and N < 20 else = Cat 1 | **Preliminary tree call** = Cat 2 if Q= Cat 2 or R= Cat 2 or S= Cat 2 else = Cat 1 | **Final tree call** = Cat 3 if T= Cat 2 and C > 19 and J='Y' else T |
| 1 | 30 | 31 | 26 | 4 | 19 | 8 | 24 | 5 | N | 97.34 | 210.0 | 85.0 | 215.74 | 87.32 | 151.53 | 1 | 1 | 1 | 1 | 1 |
| 2 | 30 | 17 | 12 | 1 | 6 | 3 | 7 | 3 | N | 53.38 | 77.5 | 32.5 | 145.19 | 60.88 | 103.04 | 1 | 1 | 1 | 1 | 1 |
| 3 | 20 | 23 | 2 | 1 | 6 | 3 | 7 | 3 | N | 72.22 | 52.5 | 32.5 | 72.69 | 45 | 58.85 | 1 | 1 | 1 | 1 | 1 |

# Appendix E  Butternut Expert's Report

Ontario

Ministry of the Environment, Conservation and Parks

# Butternut Data Collection Form

Butternut (*Juglans cinerea*) is listed as an endangered species in Schedule 2 of Ontario Regulation 230/08 "the Species at Risk in Ontario List". As an endangered species, the *Endangered Species Act, 2007* (ESA) prohibits adversely impacting Butternut and its habitat. A permit or agreement under the ESA is required before engaging in an activity that is otherwise prohibited under the ESA. The activity may be eligible for the Butternut conditional exemption in Part V of Ontario Regulation 830/21, provided the requirements of the regulation are met. For more information please refer to the following links:

*Endangered Species Act, 2007*
Ontario Regulation 830/21 (Exemptions – Species Subject to Species Conservation Charges)
Ontario Regulation 230/08 (Species at Risk in Ontario List)
Ontario Regulation 242/08 (General Regulation)
Information about ESA permits and authorizations
*Butternut Assessment Guidelines: Assessment of Butternut Tree Health for the Purposes of the Endangered Species Act, 2007*

A Butternut Health Expert's Report (BHE Report) completed by a "Butternut Health Expert" (BHE) as defined in section 21 of Ontario Regulation 830/21 is typically required as part of an application to the Ministry of the Environment, Conservation and Parks (MECP) for a permit or agreement under the ESA and is required in respect of the conditions of the Butternut conditional exemption in Part V of O. Reg. 830/21. **This Butternut Data Collection Form must be completed by the BHE and included in their BHE Report.**

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Fields marked with an asterisk (*) are mandatory.

| Butternut Health Expert's Report Number* | Start Date of Butternut Health Assessment (yyyy/mm/dd)* | End Date of Butternut Health Assessment (yyyy/mm/dd)* |
|---|---|---|
| | 2025/08/07 | 2025/08/07 |

## Butternut Health Expert (BHE) Contact Information

| Last Name* | | First Name* |
|---|---|---|
| MIYASHITA | | KESIA |
| **Telephone Number*** | **Alternate Telephone Number** | **Email Address*** |
| 613-367-5546 | | KMIYASHITA@KILGOURASSOCIATES.COM |

Summary of Qualifications as a Butternut Health Expert*

Ms. Miyashita has over ten years of experience in environmental consulting and more than thirteen seasons of field experience in ecosystems in Ontario, Alberta, and British Columbia. During her career in environmental consulting, Ms. Miyashita has completed environmental assessments for a variety of major infrastructure projects and urban developments. Her expertise is in vascular and non-vascular plant ecology, with experience in both terrestrial and wetland ecosystems; she has performed vegetation community inventories, rare plant surveys, and invasive weed surveys in a variety of natural environments, including native forest, urban nature preserves, grasslands, and wetlands.

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## Property Owner Contact Information

| Last Name* | First Name* |
|---|---|
| JOHNSON | EVAN |

Company Name
SOUL ALTA VISTA GP INC.

**Mailing Address***

| Unit Number | Street Number | Street Name | PO Box |
|---|---|---|---|
| 1207 | 150 | ISABELLA ST | |

| Lot Number | Concession | Township | Rural Route |
|---|---|---|---|
| | | | |

| City/Town | Province | Postal Code |
|---|---|---|
| OTTAWA | ON | K1S 5H3 |

| Telephone Number * | Alternate Telephone Number | Email Address |
|---|---|---|
| | | E.JOHNSON@TCUDEVCORP.COM |

## Butternut Tree(s) Location Information

**Address*** ☐ Select if location of Butternut is the same as the property owner's mailing address

| Unit Number | Street Number | Street Name | PO Box |
|---|---|---|---|
| | 1867 | ALTA VISTA DR | |

| Lot Number | Concession | Township | Rural Route |
|---|---|---|---|
| | | | |

| City/Town | Province | Postal Code |
|---|---|---|
| OTTAWA | ON | K1G 5W8 |

General description of area containing Butternut (select one)

☐ Natural ☐ Rural ☑ Urban - Suburban ☐ Industry / Resource Extraction Area

Soil drainage (select one)

☑ Well Drained ☐ Moderately Drained ☐ Poorly Drained ☐ Unknown

Have any of the Butternut at this site produced seeds?

☐ Yes ☐ No ☑ Unknown

General Comments

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## Butternut Tree Data 1

Tree Identification Number* 1 Date of Assessment (yyyy/mm/dd)* 2025/08/07

UTM Zone* 18 N Northing* 5027603 Easting* 448281

Is this tree a Butternut tree or a putative hybrid? * ☑ Butternut ☐ Putative Hybrid

Is the stem of this tree shorter than 1.37 m? * ☐ Yes ☑ No

Is this a single or multi-stemmed tree? * ☑ Single Stem ☐ Multiple Stems

Live Crown %* 30 Tree Stem Diameter (cm)* 31

Number of sooty cankers* At or below 2m (the lower stem) 26 Above 2m 4 At the root (root flares) 24

Number of open cankers* At or below 2m (the lower stem) 19 Above 2m 8 At the root (root flares) 5

Metres from badly cankered tree* ☐ 40 metres or less ☐ Greater than 40 metres ☑ None found

Crown Class ☐ Dominant, full sun ☑ Co-dominant, two sides in the sun ☐ Intermediate, sun only from above ☐ Suppressed, shaded crown

Signs of Stress ☑ Twig dieback ☑ Branch dieback ☐ Defoliation ☐ Discolouration

Seed Signs ☐ Mature stamens or pollen ☐ Receptive pistils ☐ Seed set ☑ None ☐ Unknown

Below Crown Number of stems 1 Main stem length (m) below crown 4

Number of epic-live 0 Number of epic-dead 0 Number of callused wounds 2

Bark type: ☐ Deep furrows/Narrow ridges ☑ Shallow furrows/Wide ridges

Tree Origin ☐ Naturally-occurring ☐ Planted (cultivated) ☑ Unknown

Is this tree located in an area that is upland, wetland, or riparian? ☑ Upland ☐ Wetland ☐ Riparian

Vegetation Community ☐ Open ☐ Shrub thicket ☐ Savannah - Woodland ☑ Forest

If Savannah-Woodland or Forest selected, select one option from both groups:

☑ Deciduous ☐ Coniferous ☐ Mixed

☐ Climax ☐ Regenerating

Does this tree occupy edge habitat? ☑ Yes ☐ No

If "Yes", select which edge habitat:

☐ Road ☐ Trail ☐ Utility corridor

☐ Fencerow ☑ Forest/woodlot edge ☐ Watercourse/waterbody

Competing Species 1. 2. 3.

Comments about this tree

Root flare and lower trunk badly cankered

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## Butternut Tree Data 2

Tree Identification Number* 2 Date of Assessment (yyyy/mm/dd)* 2025/08/07 ☑ Select if Date is same as tree above

UTM Zone* 18 N Northing* 5027639 Easting* 448260

Is this tree a Butternut tree or a putative hybrid? * ☑ Butternut ☐ Putative Hybrid

Is the stem of this tree shorter than 1.37 m? * ☐ Yes ☑ No

Is this a single or multi-stemmed tree? * ☑ Single Stem ☐ Multiple Stems

Live Crown %* 30 Tree Stem Diameter (cm)* 17

Number of sooty cankers* At or below 2m (the lower stem) 12 Above 2m 1 At the root (root flares) 7

Number of open cankers* At or below 2m (the lower stem) 6 Above 2m 3 At the root (root flares) 3

Metres from badly cankered tree* ☐ 40 metres or less ☐ Greater than 40 metres ☑ None found

Crown Class ☐ Dominant, full sun ☑ Co-dominant, two sides in the sun ☐ Intermediate, sun only from above ☐ Suppressed, shaded crown

Signs of Stress ☑ Twig dieback ☑ Branch dieback ☐ Defoliation ☐ Discolouration

Seed Signs ☐ Mature stamens or pollen ☐ Receptive pistils ☐ Seed set ☑ None ☐ Unknown

Below Crown Number of stems 1 Main stem length (m) below crown 5

Number of epic-live 0 Number of epic-dead 0 Number of callused wounds 0

Bark type: ☐ Deep furrows/Narrow ridges ☑ Shallow furrows/Wide ridges

Tree Origin ☐ Naturally-occurring ☐ Planted (cultivated) ☑ Unknown

Is this tree located in an area that is upland, wetland, or riparian? ☑ Upland ☐ Wetland ☐ Riparian

Vegetation Community ☐ Open ☐ Shrub thicket ☐ Savannah - Woodland ☑ Forest

If Savannah-Woodland or Forest selected, select one option from both groups:

☑ Deciduous ☐ Coniferous ☐ Mixed

☐ Climax ☐ Regenerating

Does this tree occupy edge habitat? ☑ Yes ☐ No

If "Yes", select which edge habitat:

☐ Road ☐ Trail ☐ Utility corridor

☐ Fencerow ☑ Forest/woodlot edge ☐ Watercourse/waterbody

Competing Species 1. 2. 3.

Comments about this tree

Large open cankers at root

 © King's Printer for Ontario, 2023 

## Butternut Tree Data 3

Tree Identification Number* 3 Date of Assessment (yyyy/mm/dd)* 2025/08/07 ☑ Select if Date is same as tree above

UTM Zone* 18 N Northing* 5027644 Easting* 448264

Is this tree a Butternut tree or a putative hybrid? * ☑ Butternut ☐ Putative Hybrid

Is the stem of this tree shorter than 1.37 m? * ☐ Yes ☑ No

Is this a single or multi-stemmed tree? * ☑ Single Stem ☐ Multiple Stems

Live Crown %* 20 Tree Stem Diameter (cm)* 23

Number of sooty cankers* At or below 2m (the lower stem) 2 Above 2m 1 At the root (root flares) 7

Number of open cankers* At or below 2m (the lower stem) 6 Above 2m 3 At the root (root flares) 3

Metres from badly cankered tree* ☐ 40 metres or less ☐ Greater than 40 metres ☑ None found

Crown Class ☐ Dominant, full sun ☑ Co-dominant, two sides in the sun ☐ Intermediate, sun only from above ☐ Suppressed, shaded crown

Signs of Stress ☑ Twig dieback ☑ Branch dieback ☐ Defoliation ☐ Discolouration

Seed Signs ☐ Mature stamens or pollen ☐ Receptive pistils ☐ Seed set ☑ None ☐ Unknown

Below Crown Number of stems 1 Main stem length (m) below crown 8

Number of epic-live 0 Number of epic-dead 0 Number of callused wounds 1

Bark type: ☐ Deep furrows/Narrow ridges ☑ Shallow furrows/Wide ridges

Tree Origin ☐ Naturally-occurring ☐ Planted (cultivated) ☑ Unknown

Is this tree located in an area that is upland, wetland, or riparian? ☑ Upland ☐ Wetland ☐ Riparian

Vegetation Community ☐ Open ☐ Shrub thicket ☑ Savannah - Woodland ☑ Forest

If Savannah-Woodland or Forest selected, select one option from both groups:

☑ Deciduous ☐ Coniferous ☐ Mixed

☐ Climax ☐ Regenerating

Does this tree occupy edge habitat? ☐ Yes ☑ No

If "Yes", select which edge habitat:

☐ Road ☐ Trail ☐ Utility corridor

☐ Fencerow ☐ Forest/woodlot edge ☐ Watercourse/waterbody

Competing Species 1. 2. 3.

Comments about this tree

Root flare mostly open

 © King's Printer for Ontario, 2023 

| BHE Report Number | Start Date of Butternut Health Assessment (yyyy/mm/dd) | End Date of Butternut Health Assessment (yyyy/mm/dd) |
|---|---|---|
| | 2025/08/07 | 2025/08/07 |
| **Total Number Butternut Trees in BHE Report** | **Butternut Health Expert's Name** | |
| 3 | MIYASHITA, KESIA | |
| **Property Owner/Client Name** | **Property Address** | |
| JOHNSON, EVAN | 1867 ALTA VISTA DR<br>OTTAWA ON K1G 5W8 | |

| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tree # | Live Crown % | Tree stem diameter (cm) | # bole cankers (BC)<br>Sooty (S) (will be assigned 2.5 cm per canker)<br>Open (O) (will be assigned 5 cm per canker) | | | | # root flare cankers (RF) | | 40 m or less from cankered tree? (Y or N) | Circ. (cm) = Pi * tree stem diameter | Total BC Width (cm) = (D * 2.5) + (E * 2.5) + (F * 5) + (G * 5) | Total RF Width (cm) = (H * 2.5) + (I * 5) | Total BC Width % of Circ. = L / K * 100 | Total RF Width % of Circ. = M / K * 100 | Total BC + RF Width % of 2 * Circ. = (N + O) / 2 | Tree Categories: 1, 2, or 3 | | | | |
| | | | S <= 2m | S > 2m | O <= 2m | O > 2m | S | O | | | | | | | | = Cat 2 if B >= 50 and N=0 else = Cat 1 | = Cat 2 if B > 70 and P < 20 else = Cat 1 | = Cat 2 if B > 70 and N < 20 else = Cat 1 | **Preliminary tree call** = Cat 2 if Q= Cat 2 or R= Cat 2 or S= Cat 2 else = Cat 1 | **Final tree call** = Cat 3 if T= Cat 2 and C > 19 and J='Y' else T |
| 1 | 30 | 31 | 26 | 4 | 19 | 8 | 24 | 5 | N | 97.34 | 210.0 | 85.0 | 215.74 | 87.32 | 151.53 | 1 | 1 | 1 | 1 | 1 |
| 2 | 30 | 17 | 12 | 1 | 6 | 3 | 7 | 3 | N | 53.38 | 77.5 | 32.5 | 145.19 | 60.88 | 103.04 | 1 | 1 | 1 | 1 | 1 |
| 3 | 20 | 23 | 2 | 1 | 6 | 3 | 7 | 3 | N | 72.22 | 52.5 | 32.5 | 72.69 | 45 | 58.85 | 1 | 1 | 1 | 1 | 1 |