



ENVIRONMENTAL IMPACT STUDY REPORT
348 Sunningdale Rd., London

Prepared for:
Westchester Homes

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1.0 INTRODUCTION

Westchester Homes (the proponent) has initiated the planning process for a proposed Zoning By-law Amendment for the lands at 348 Sunningdale Road East [Figure 1] to permit townhouse dwelling units in a condominium format. The legal parcel is referred to the Subject Lands for the purposes of this report [Figure 1]. There was a single residential home on the Subject Lands up until late 2016.

An Initial Proposal Summary prepared by Zelinka Priamo was completed in August 2017 and submitted to the City of London. An Issues Scoping Report (BioLogic, December 12 2017) was submitted to the City of London, followed by a scoping meeting on January 11, 2018 with the City of London and UTRCA. The City of London requested that the residential yard trees be evaluated using the City of London Guideline Document for the Evaluation of Ecologically Significant Woodlands (Woodland Guidelines) (2006). Despite not meeting the requirements for the application of the Woodland Guidelines, the guidelines were applied to the site to flag anything that might be considered important as a part of the site plan application, with the results compiled into a letter to the City of London April 3, 2018. The results are also discussed in this report. Further to this, a site meeting took place on May 2, 2018 to refine any additional life science requirements for this EIS [Appendix A].

The Site Plan has been updated since the submission of the Issues Scoping Report (BioLogic, December 12, 2017). The 2017 Site Plan had a condominium style development of 9 single detached units and 2 townhouse style buildings with 4 units each. The Site Plan is reduced now to 2 row townhouse style buildings and one internal road to accommodate a pipeline setback.

1.1 Report Objective

This EIS is submitted in support of a planning application for a condominium development of two townhouse style units: one 3-storey building with 8 units, and one 3-storey building with 9 units. The two buildings will have associated stormwater and sanitary servicing on the Subject Lands.

This report assesses the natural heritage features and functions, based on the life science data collected for this EIS.

The process and reporting is also designed to provide a support document to subsequent site alteration permit applications which may be submitted to the Upper Thames River Conservation Authority (UTRCA).

1.2 Format

Natural heritage features and functions identified in this EIS are evaluated through a review of the Natural Heritage Reference Manual (NHRM, 2010) for policy 2.1 of the Provincial Policy Statement (MAH, 2014); and Section 15 of the City of London Official Plan (Office Consolidation, January 2006). The EIS will also follow the City of London Environmental Management Guidelines (2007).

The EIS contains the following components, in accordance with the standards noted above:

Section 2.0	Land Use Setting
Section 3.0	Triggers for EIS
Section 4.0	Description of the Natural Environment
Section 5.0	Natural Heritage Policy Considerations
Section 6.0	Description of Development
Section 7.0	Potential Impacts and Mitigation Recommendations
Section 8.0	Summary and Conclusions

1.3 Background Documents

The following existing data and studies were used to review the current environment.

- Uplands North Area Plan (City of London, 2003)

1.4 Pre-Consultation

To date, pre-consultation has consisted of discussions with the City of London and UTRCA including:

- Pre-Application Consultation August 22, 2017
- A Scoping meeting January 11, 2018
- A site meeting May 2, 2018
- Scope of project (by email) May 25, 2018 [Appendix A].

2.0 LAND USE SETTINGS

The Subject Lands are 0.64 ha and located at 348 Sunningdale Rd, approximately 20m east of the intersection of Lindisfarme Road and Sunningdale Road East. The site is a vacant residential lot that was formerly occupied by a single detached house and outbuilding that were removed in 2016. The Subject Lands are currently accessed by a gravel driveway to Sunningdale Road East near the east boundary of the site. There is residential development on the south side of Sunningdale Road East, opposite the Subject Lands. There are agricultural lands approximately 90m to the north [Figure 1].

The descriptions in this section are based on a review of the records available. The descriptions of the site based on field investigations are found in Section 4.0 Description of the Natural Environment.

2.1 Environmental Designations

There are no natural heritage features identified on the Subject Lands on Schedule B1 (London Official Plan, September 2015) [Figure 2]. There is an unevaluated vegetation patch abutting the north property boundary, and a Provincially Significant Wetland (PSW) further north of the unevaluated vegetation patch [Figure 2]. The PSW is somewhat linear and loosely wraps around the west, north and east sides of the Subject Lands. This linear feature continues through to the south side of Sunningdale Road East on the west side of the Subject Lands [Figure 2] (City of London Official Plan September 2015). There are also flow paths and Maximum Hazard Lines associated with the PSW offsite to the north.

2.2 Land Use Designations

The Subject Lands are designated as Multi-family Medium Density Residential, and surrounded by Open Space which corresponds to the PSW boundary. North of the PSW, the lands are designated Low Density Residential (City of London Official Plan Schedule A, 2015) [Figure 3]. There is a flow path shown from the (mid) east property line to the Powell Drain, a flow path not shown on the Natural Heritage Features map.

2.3 Zoning Bylaws

The Subject Lands are zoned Urban Reserve (UR1) Zone (City of London Zoning). Urban Reserve zoning is applied to lands to protect large tracts of land from premature subdivision and development, to ensure comprehensive development [Figure 4]. The proposed re-zoning will bring the lands in conformity with the Official Plan.

2.4 Upper Thames River Conservation Authority (UTRCA) Regulation

There is a small portion of the northwest corner that is regulated by Upper Thames River Conservation Authority (UTRCA) under Ontario Regulation 157/06 [Figure 4] for Hazard Lands (Zelinka Priamo, August 2017). This graphic is from the City of London zoning map rather than the official regulation map provided by UTRCA. As agreed in the Scoping meeting of January 11, 2018, there were no regulatory issues for the Subject Lands.

3.0 TRIGGERS FOR EIS

When a development proposal requires a Planning Act application (ie. Draft Plan submission, or amendments to the Official Plan and/or zoning by-law), the City of London requires an EIS to be completed if the Subject Lands are entirely or partially within specified distances adjacent to the natural heritage components set out in Table 15-1 of the City of London Official Plan (2006).

The proponent is planning a medium density development within the Subject Lands which will require planning amendments.

Triggers for the Environment Impact Study are as follows:

- proposed development within 120m of a Provincially Significant Wetland

As well, application for a permit under the UTRCA Ontario Regulation 157/06 may require an EIS

- Subject Lands are within the UTRCA's regulation limits

In addition, the Endangered Species Act (2007) protects species and habitat that are not always identified on Official Plan Schedules. To be consistent with the Provincial Policy Statement (MMAH, 20005 & MMAH, 2014) the requirements for an additional study can be triggered without any adjacent features identified on the Official Plan.

The following section (Section 4) reviews the natural heritage setting of the legal property. Section 5 reviews the proposed land use change in conjunction with generic natural heritage issues which may require consideration in the application process.

4.0 DESCRIPTION OF THE NATURAL ENVIRONMENT

The following section reviews the abiotic and biotic features on and directly adjacent to the Subject Lands that contribute to the overall natural heritage features and functions. This review provides relevant background information for interpreting environmental features and functions on the Subject Lands for the evaluation in Section 5.

4.1 Physical Setting

4.1.1 Physiography

Quaternary structural features include sandy, silt, loam, till of the Arva Moraine (Sado and Vagners, 1971). The surficial physical landscape in the area is Till Moraine (Chapman and Putnam, 1984).

4.1.2 Soils

Soils on the Subject Lands are associated with an Eroded Channel; the eroded channel appears to be related to the wetland and flow path further north. Soils of the lands surrounding the Subject Lands are Bryanston association, comprised of well drained Bryanston, imperfectly drained Thorndale, and poorly drained Nissouri soils of silt loam and loam glacial till (Hagerty and Kingston, 1992).

The water well record for the domestic well on site indicate there is thin layer of gravel (~1m) beneath 42m of clay (with streaks of sand) (Ontario.ca) [Appendix B].

4.1.3 Topography

Regionally the area is very gently sloped to gently sloped (Hagerty and Kingston, 1992).

In general, the Subject Lands are gently sloped to the south, however there are some localized undulations within the property. The northwest corner of the site slopes (approximately 3:1) to the north, where the slopes start about 5m from the north boundary, with the majority of the slopes offsite. At the southeast quadrant, off property, the gradients rise slightly to the east. The northeast quadrant is flat with some evidence of sheet flow off site to the east. There is also a rise in grade from Sunningdale Rd to the south property line. There are no low areas of localized ponded water.

4.1.4 Hydrology

The Subject Lands are within the Stoney Creek Subwatershed in the City of London.

Water well records for dug well for the prior home on the Subject Lands indicate ground water was found 41m below ground surface, within a thin layer of gravel (Ontario.ca). There were no seeps or springs observed on the Subject Lands.

4.2 Biological Setting

Provincially Significant Areas

The Powell Drain wetland (a unit of the Arva Moraine PSW Complex) is identified to the north, west and east of the Subject Lands (City of London, 2003; LIO, December 2017). The wetland boundary is 32m away from the Subject Lands, at its closest location, at the northwest corner, and 95m from the west property line and 60m at the northeast corner.

Area Plan Data (i.e. Uplands North Area Plan)

The Uplands North Area Plan (City of London, 2003) completed an analysis of the Powell Drain wetland that surrounds the Subject Lands on the west, north and east sides. At the time of the Area Plan, the Powell Drain wetland was designated as Open Space on Schedule A of the City of London Official Plan (Consolidated January 2001) and protected as a Locally Significant Wetland (Wetlands Class 4-7) on Schedule B.

4.2.1 Vegetation

Investigations for Ecological Land Classification (ELC) [based on Lee *et al* (1998)] for the Subject Lands were conducted on October 18, 2017, June 5 and June 20, 2018 by Will Huys (MNR certified in ELC) [Appendix C]. The Subject Lands are former residential lands from which the buildings have been removed, however the residential yard trees remain. The most densely treed section of the former yard is concentrated in the southwest corner of the property and is best classified as a Mineral Cultural Woodland Ecosite (CUW1). This community is dominated by Sugar Maple (*Acer saccharum*), Norway Spruce (*Picea abies*), and Red Pine (*Pinus resinosa*). Within this community, near the south central edge of the Subject Lands, a mature Tulip Tree (*Liriodendron tulipifera*) is notable as a specimen tree in the City of London. Vegetation within the former residential lands outside of the Cultural Woodland community, includes a hedgerow of 10 Norway Spruce at the northeast corner and a few ornamental

shrubs (Honeysuckle and Lilac) mainly limited to the edges of the property. The groundlayer is dominated by grasses from the former residential lawn, however, Goldenrods (*Solidago* sp.), Asters (*Symphiotrichum* sp.) and Canada Thistle (*Cirsium arvense*) are beginning to colonize the area. [Figures 5a and 5b].

On the adjacent lands, there is a Cultural Thicket community to the north and abutting the east property line; and a Cultural Woodland community abutting the west property line [Figures 5a and 5b]. Between the north property line and the Cultural Thicket there are no trees, save and except where the Cultural Thicket abuts the Cultural Woodland towards the northwest corner of the Subject Lands.

A tree inventory was conducted for the Subject Lands to identify valuable trees for retention (RKLA, 2017). First and Second Priority trees for retention and hazard trees were identified [Appendix D].

4.2.2 Wildlife Habitat

MNRF Significant Wildlife Habitat (SWH) Criteria Schedules for Ecoregion 7E (January 2015) uses ELC Ecosite codes and habitat criteria (eg. size of ELC polygon, location of ELC polygon) to identify candidate significant wildlife habitat. The Residential lands/cultural woodland (A1/CUW1) on the Subject Lands did not meet the habitat criteria thresholds for candidate significant wildlife habitat according to the MNRF Criteria Schedules (2015) [Appendix E].

There were individual snag/wildlife trees on the Subject Lands, but not enough to meet the quantity and habitat area (>10/ha >25cm DBH) to be considered SWH (habitat for Bat Maternity Colonies). The snag trees as potential habitat for Species At Risk bats is discussed below under Section 4.2.5 Fauna.

Summary

There is no candidate significant wildlife habitat on the Subject Lands.

4.2.3 Aquatic

There are no aquatic Species At Risk or species of provincial interest listed by NHIC within 1 km of the legal parcel (NHIC website) [Appendix F].

At the east boundary of the Subject Lands, in the northern third of the property, there is some sheet flow that generates on site and flows to the east. However, there is no defined channel on or next to the site.

By air photo interpretation, there appears to be a small wetland pocket (less than 100m²) to the east of the Subject Lands. There are no channels, watercourses, or ponded water within the Subject Lands.

Summary

There is no aquatic habitat, nor aquatic species found on the Subject Lands.

4.2.4 Flora

Branching Burreed (*Sparganium androcladum*) (SH) was the only floral species of provincial interest that has the potential to be found within 1km of the Subject Lands (NHIC website) [Appendix F]. No floral Species At Risk (SAR) were listed by NHIC.

A three season floral inventory was conducted by Will Huys on October 18, 2017, May 22, June 5, June 20 and July 10, 2018 [Appendix G]. There was no habitat [bogs or shallow water (Britton and Brown, 1970)] suitable for Branching Burreed observed on the Subject Lands. While there was some Red-osier Dogwood observed on and adjacent (to the east) to the Subject Lands, this species is not indicative of groundwater (TRCA, 2017) but instead likely represent a small lowland pocket or possibly a hole (old well, foundation, tree uprooted) that has been subsequently been filled with loose material.

No floral Species At Risk, including Butternut (Endangered), Chestnut (Endangered) or Blue Ash (Threatened), were observed on the Subject Lands. No floral Species At Risk were observed on the adjacent lands, with observations from the property limits.

Summary

There is no habitat for Species At Risk (Endangered or Threatened) nor species of provincial interest (Special Concern, or S1-S3 Ranked) on or adjacent to the Subject Lands.

4.2.5 Fauna

Snapping Turtle (*Chelydra serpentina*) (Special Concern) was the only faunal species of provincial interest that has the potential to be found within 1km of the Subject Lands (NHIC website). There were no faunal Species At Risk listed by NHIC within 1km of the Subject Lands (NHIC website) [Appendix F].

Birds

A breeding bird study was conducted by Will Huys on June 5 and 20, 2018 for the Subject Lands. No Species At Risk, nor species of provincial interest were observed on the Subject Lands, nor on adjacent lands during the breeding bird study [Appendix H].

Summary

There is no significant habitat for breeding birds on the Subject Lands.

Amphibians

Amphibian monitoring was completed by Laura McLennan on April 23, May 22 and June 18, 2018 [using the Great Lakes Marsh Monitoring Protocols (Bird Studies Canada)]. In 2018, spring temperatures were not consistently over 5°C until latter half of April. During these investigations, there were no frogs heard on the Subject Lands [Appendix I]. On the adjacent lands to the north (Powell Drain Wetland) Spring Peepers were heard in early spring, while Green Frogs were heard in summer [Appendix I].

Summary

There is no significant habitat for amphibian species on the Subject Lands.

Reptiles

During site investigations in 2017 (October 18) and 2018 (April 25, May 22, June 5, June 20, July 10), investigators did not locate any open water features (including those shown on the City of London Official Plan Schedule A [Figure 3]) nor gravelly or sandy areas (Ontario.ca) that could be potential nesting habitat for Snapping Turtle (SC). There were no incidental observations of turtles including Snapping Turtle on the Subject Lands during any site investigations through 2018. There was also no incidental evidence of reptile hibernacula during any site investigations through 2018.

Summary

There is no significant habitat for reptiles on the Subject Lands.

Mammals

During site investigations in 2017 (October 18) and 2018 (April 25, May 22, June 5, June 20, July 10), investigators incidentally searched for large burrows that had the potential to be American Badger (Endangered) habitat, and none were observed. American Badgers require deep sandy soils with organic

matter to create dens for resting, rearing young and overwintering (Ontario American Badger Recovery Team, 2010). The underlying soils are mineral and not conducive for large burrows for American Badger.

A site investigation for potential bat maternity roost habitat was completed on April 25 2018, during leaf-off conditions. There were 10 trees identified as potential Species At Risk bat maternity roost habitat trees [Appendix J]. A Stage 1 Information Request was submitted to MNRF (August 1, 2018) that included the inventory and decay class of the potential SAR bat maternity roost habitat trees. A Letter to Proponent was issued by MNRF on October 30, 2018 stating that the project activities are not likely to contravene the Endangered Species Act (2007) if tree removal was limited to a timing window (outside of May - September) and bat boxes were installed at a rate of 2:1 [Appendix K]. Fewer trees are planned for removal with the updated application than what was presented to MNRF in their approval.

Summary

There is no significant habitat for American Badger (Endangered) or SAR bats on the Subject Lands, although replacement of suitable snag trees with bat boxes was requested by MNRF.

5.0 NATURAL HERITAGE POLICY CONSIDERATIONS

This section reviews the provincial, municipal and Conservation Authority regulatory policies within the project location with respect to Natural Heritage considerations.

The provincial and municipal natural heritage policies provide guidelines that determine appropriate land uses on and adjacent to natural heritage features and functions. Policies that pertain to this site include:

- the 2014 Provincial Policy Statement from MAH, Section 2.1
 - ▶ these have been reviewed with the Natural Heritage Reference Manual (NHRM) (MNR, 2010),
 - ▶ the City of London Official Plan, Section 15.2 and 15.4,
 - ▶ the City of London Environmental Management Guidelines (2007), and
 - ▶ the UTRCA Regulations.

The natural features and functions identified in Section 4 of this EIS, are applied to the above policies in order to determine which components of the natural heritage system will require additional consideration. Features which warrant further evaluation for significance or require guidance with respect to construction activity are discussed in more detail in Section 6.

5.1 Provincial Policy

The Provincial Policy considerations are based on Provincial Policy Statement from MAH, 2014, section 2.1 and reviewed using the Natural Heritage Reference Manual (Sections 5-11) (MNR, 2010).

2.1.4

a), b) Significant Wetlands/Coastal Wetlands

Section 6 - Significant Wetlands and Significant Coastal Wetlands

The adjacent Powell Drain wetland (a unit of the Arva Moraine PSW Complex) that surrounds (32m away at its closest location on the north side) the Subject Lands has been identified as provincially significant (NHIC website, December 2017; and City of London Official Plan Schedule B1, September 2015) [Figure 2].

While this PSW unit is approximately 32m to the north, the functions of the wetland will require further consideration.

2.1.5

b) Significant Woodlands

Section 7 - Significant Woodlands

The residential trees within the Subject Lands are not a provincially significant woodland as they did not form part of Official Plan updates. Woodlands are further evaluated for local significance with the City of London municipal policy (item 15.4.5 of the following Section 5.2).

c) Significant Valleylands

Section 8 - Significant Valleylands

The Subject Lands are relatively flat and there are no significant Valleylands on or adjacent to the Subject Lands.

d) Significant Wildlife Habitat

Section 9 - Significant Wildlife Habitat

Criteria to identify wildlife habitats that should be considered significant are taken from the Ecoregion Criteria Schedules (MNRF, 2015) [Appendix E]. There was no candidate significant wildlife habitat (based on ELC) as discussed in Section 4.2.2. There was no significant wildlife habitat confirmed with site investigations and evaluation of species use for the Subject Lands.

e) Areas of Natural and Scientific Interest

Section 10 - Significant Areas of Natural and Scientific Interest

There are no ANSIs identified on or adjacent to the Subject Lands.

2.1.6

Fish Habitat

Section 11 - Fish Habitat - Broad Scale

Broad scale fish habitat, for the purposes of this review, considers downstream fisheries. There is likely indirect fish habitat associated with the wetland 32m to the north of the Subject Lands. However there are no flow paths that directly connect the Subject Lands to this habitat. The flow path to the east is not a defined channel and is dominated by terrestrial grasses through this broad swale.

Section 11 - Fish Habitat - Detailed Scale

Detailed scale fish habitat, for the purposes of this review, considers fisheries habitat within the Subject Lands. There are no channels, watercourses or fish habitat within the Subject Lands.

2.1.7

Habitat of Endangered Species and Threatened Species

Section 5 - Significant Habitat of Endangered and Threatened Species

There were no Species At Risk (Endangered or Threatened species) or habitat of Species At Risk found within the Subject Lands [Appendix K].

Summary - Provincial Policy:

This EIS will need to consider adjacent features and functions including the Powell Drain Wetland to address provincial planning policy.

5.2 Municipal Policy

The Municipal Policy Natural Heritage considerations are based on the City of London Official Plan, 2006, section 15.4.

15.4.1 Environmentally Significant Areas

There are no ESAs on or adjacent to the Subject Lands.

15.4.2 Wetlands

The Powell Drain Wetland (a unit of the Arva Moraine PSW Complex) is on the adjacent lands to the north, west and east of the Subject Lands. Uplands North Area Plan (City of London, 2003) Environmental Management Recommendations include the consideration of buffers to the Powell Drain wetland to mitigate adjacent land impacts and that the buffers should consider slope, vegetation and soils. In this location, the Subject Lands are well set back (at least 32m) from the wetland boundary and no additional buffer is required to protect the wetland from physical disturbances and/or direct impacts.

The unevaluated pocket of wetland (less than 100m²) habitat appears to be approximately 35m to the east (off property) by air photo interpretation. This feature is too small to be considered under City of London

Official Plan policies (not on a map and much smaller than 0.5 ha).

15.4.3 Areas of Natural and Scientific Interest

There are no ESAs on or adjacent to the Subject Lands.

15.4.4 Habitat of Endangered, Threatened and Vulnerable Species

There were no Species At Risk (Endangered or Threatened species) or habitat of Species At Risk found within the Subject Lands, as discussed above.

15.4.5 Woodlands

The City of London requested that the Woodland Evaluation from the City of London Guidelines (2007) be applied to the residential yard trees [Appendix L]. The treed area on the Subject Lands does not meet any high standard for significance using the City guidelines [Appendix L].

15.4.6 Corridors

Any corridor function would be limited to the Powell Drain Wetland on the adjacent lands to the north.

15.4.7 Wildlife Habitat

There is no significant wildlife habitat on the Subject Lands.

- i) The review of significance of wildlife habitat is based on the following considerations that have had regard for and having regard for the Significant Wildlife Habitat Technical Guide (MNR, 2000)
 - a) 1) Habitats of seasonal concentrations of animals:
No seasonal concentration areas were identified.
 - 2) Rare vegetation communities
No rare vegetation communities were identified.
 - 3) Specialized habitat for wildlife
No specialized habitat for wildlife was identified.
 - 4) Habitat of species of conservation concern:

There are no species of conservation concern no habitat of species of conservation concern on the Subject Lands.

5) Animal movement corridors:

There are no distinct passageways for wildlife movement between habitats that are required to complete wildlife species life cycles. The Subject Lands are not linked to a significant animal movement corridor. Any corridor function would be limited to the Powell Drain Wetland on the adjacent lands to the north.

- b) The Subject Lands do not have any habitat that is under represented in the City of London.
- c) There are no areas of habitat having a high diversity of species composition that are of value for research, conservation, education and passive recreation opportunities.

ii) There are no areas of Significant Wildlife Habitat identified on Schedule B1.

15.4.8 Fish Habitat

There is no direct fish habitat and no drainage features within the Subject Lands.

15.4.9 Groundwater Recharge Areas, Headwaters and Aquifers

There are no groundwater recharge areas, headwater and aquifers identified on the Subject Lands.

15.4.10 Water Quality and Quantity

Water quality and quantity to the adjacent Powell Drain Wetland needs to be considered in this EIS.

15.4.11 Potential Naturalization Areas

There are no potential naturalization areas identified on or adjacent to the Subject Lands.

15.4.12 Carolinian Canada Big Picture Concept

The Subject Lands are not identified as part of the local Big Picture Meta-Cores and Meta-Corridors.

15.4.13 Unevaluated Vegetation Patches

There is an unevaluated vegetation patch associated with the Powell Drain Wetland to the north of the Subject Lands.

15.4.14 Other Woodland Patches larger than 0.5 Hectares

The residential yard trees abut the cultural woodland habitat that is on the adjacent lands to the west. The residential trees however would not be considered a woodland patch due to managed lawn in groundlayer. There is one Tulip Tree within the frontage of the property that would be considered a specimen tree in the City of London.

15.4.15 Other Drainage Features

There are no drainage features within the Subject Lands.

Summary - Municipal Policy:

This EIS will need to consider adjacent features and functions including the Powell Drain Wetland, and water quality and quantity to address municipal planning policy.

5.3 UTRCA Policy Considerations and Regulated Lands

Wetland Interference

A portion of the northwest corner of the Subject Lands are within the Regulation Limit. This EIS will need to consider wetland interference to the Powell Drain Wetland on adjacent lands.

Conservation Authority Regulation Limit

Any development proposed within the areas regulated by UTRCA will require a permit.

Summary - Conservation Authority Regulations

An EIS that considers adjacent features and functions including the wetland, and wetland interference will provide the appropriate supporting information to be submitted with a Site Alteration Permit Application to the Upper Thames River Conservation Authority (UTRCA).

5.4 Summary of Identified Features and Functions

The features and functions in Table 1 have been identified through the policy review as requiring further consideration in this EIS. In the ISR, a 30m setback from wetland habitat was set as the Environmental Management Strategy [Figure 6 (Figure 7b in ISR)] to make sure wetland habitat features were protected.

Table 1: Environmental Considerations for the Subject Lands:

Policy Category	Environmental Consideration	Natural Heritage Feature
Provincial Policy Statement	Wetland	Powell Drain Wetland
City of London	Wetland	Powell Drain Wetland
	Water Quality and Quantity	On site water contribution
UTRCA Regulations	Wetland Interference area	Powell Drain Wetland

6.0 DESCRIPTION OF THE DEVELOPMENT

Westchester Homes is proposing a condominium development on the property located at 348 Sunningdale Rd in London. Access to the development will be from Sunningdale Rd at the south end of the property [Figure 7].

The proposed site plan consists of two townhouse style buildings: one 3 storey building with 9 units and one 3 storey building with 8 units, private amenity space at the rear of each building, and an internal road accessed from Sunningdale Rd [Figure 7]. The development proposal, which will require a zoning bylaw amendment, is limited to the central portion of the Subject Lands within an Urban Reserve zoning. The rear of the north building is setback 18m from the north property line; the rear of the south building is setback 25m from Sunningdale Rd.

Piped and cabled services will be placed within the municipal road allowances and under the pavement deck of internal roads. Sanitary services will be provided through connections to the municipal system, serviced from Sunningdale Rd. Water supply will be from the watermain on Sunningdale Rd. Service depths of between 2 to 4 metres will not interfere with groundwater on the property. Grades will be matched within the limits of the Subject Lands.

7.0 Impacts and Mitigation

Westchester Homes (the proponent) is proposing a 17 Unit condominium development on a property that is approximately 0.635ha in area, located at 348 Sunningdale Rd East in London [Figure 7]. This plan represents a smaller footprint than first circulated as a result of setbacks from a pipeline that were not previously considered.

The proposed Site Plan respects the environmental management strategy proposed in the Issues Scoping Report [Figure 6], whereby the plan is 30m or more from any wetland feature.

While the Subject Lands is void of significant natural heritage features, it does have a Tulip Trees within the frontage that would be considered a specimen tree in London. The Site Plan retains the majority of the residential yard trees (including the Tulip Tree) in the frontage of the property and is setback 18m from the north property line (at least 50m from the Powell Drain Wetland) [Figure 8]. Additionally, the development footprint will retain any sheet flow that is generated at or near the east boundary (in the northern third of the property) with a setback of 3.2m to the east property line.

This section identifies potential indirect impacts to the significant natural heritage features adjacent to the Subject Lands. Protection and mitigation measures for indirect impacts are presented. A net effects table is provided at the end of this section.

Water Balance and Wetland

Considering the lack of drainage features, clay soils and relatively steep slopes to the north at the northwest corner, there is likely minor surface flow contributions to the Powell Drain Wetland from the Subject Lands.

Recommendation 1: The development footprint is setback 18m from the north property line (50m from the wetland at its closest in the northwest corner). The development avoids impact to the northerly slopes localized to the northwest corner. Easterly from this location, the development footprint is up to 130m away from the wetland. The post-development runoff should be managed so that flows do not scour a flow channel down the slope at the northwest corner. If the development is modified or the private amenity space requires grading, it

should be reviewed for potential natural heritage impacts again.

Recommendation 2: No surface road runoff should be conveyed directly to the north. These flows should be directed to the stormwater sewers. Roof leaders should direct water to the vegetated areas to the rear of the buildings.

Recommendation 3: A landscape plan should be developed at detailed design.

Wildlife

Nesting migratory birds are protected under the *Migratory Birds Convention Act* (MBCA), 1994. No work is permitted to proceed that would result in the destruction of active nests (nests with eggs or young birds), or the wounding or killing of birds, of species protected under the *Migratory Birds Convention Act*, 1994 and/or Regulations under that Act.

Recommendation 4: Avoid vegetation clearing during migratory bird breeding season (May to July 31) to ensure that no active nests will be removed or disturbed, in accordance with the *Migratory Birds Convention Act* and/or Regulations under that Act. If works are proposed within the breeding season, prior to any vegetation removal, the area should be checked for nesting birds. If there are any nesting birds, works within the nesting area should not proceed until after July 31.

There are wildlife/snag trees found within the Subject Lands that are candidate SAR bat maternity roost habitat trees. MNRFP has issued a Letter to Proponent on October 30, 2018 stating that the project activities are not likely to contravene the Endangered Species Act (2007) with the following recommendations:

Recommendation 5: If candidate bat roosting trees require removal for construction works, removal should be limited to a timing window (outside May - September) to avoid critical habitat use times. If the private amenity space does not require grading, three candidate bat roosting trees will be removed for the buildings and roadway. Six bat boxes should be installed (2 bat boxes for every candidate tree removed) near the vegetated edges of the property [Figure 8]

as requested by MNRF and the City of London. If the private amenity space requires removal of additional candidate bat maternity trees, more bat boxes will need to be installed. Any changes to private amenity space will also need to be reviewed for a hazard tree assessment.

Recommendation 6: The locations of the bat boxes should be incorporated into the landscape plan.

Construction Related Impacts

There is general construction related impacts that require mitigation.

Recommendation 7: Prior to construction, sediment and erosion control fencing should be installed along the development limit. This fence will:

- ▶ act as a barrier to keep construction equipment and spoil away from the slope in the northwest corner, and surrounding vegetation to remain.
- ▶ prevent erosion and sedimentation

Recommendation 8: Sediment and erosion control fencing should be inspected prior construction to ensure it was installed correctly and during construction to ensure that the fencing is being maintained and functioning properly. Any issues that are identified are resolved in the same day.

Recommendation 9: Sediment and erosion control fencing will be installed according to the Guidelines for Erosion and Sediment Control for Urban Construction Sites (OMNR, 1987) and the applicable standards established in the Ontario Provincial Standard Specification/Ontario Provincial Standard Drawings (OPSS/OPSD) documents.

Recommendation 10: Sediment and erosion control fencing should not be removed until adequate re-vegetation and site stabilization has occurred. Additional re-vegetation plantings and/or more time for vegetation to establish may be required, however two growing seasons are typically sufficient to stabilize most sites.

Recommendation 11: A tree preservation report should be completed in conjunction with the grading plan for the trees to remain outside the development footprint.

Recommendation 12: All disturbed areas should be re-seeded as soon as possible to maximize erosion protection and to minimize volunteer populations of invasive species which may spread to the adjacent feature.

Recommendation 13: Once construction is complete, installation of a black chain link fence at the property boundary to prevent indiscriminate trails in the adjacent lands.

Recommendation 14: Roof runoff to bare ground can generate considerable sediment movement beyond the construction limits. Until rear yards have been vegetated and stable for housing backing onto vegetation, roof leaders should be directed to the streets or nearby stabilized vegetated areas. To facilitate surface flows to the north, roof leaders from the northerly townhouse building should be directed to the rear.

Recommendation 15: All stormwater should be temporarily directed away from the natural heritage feature through a system of swales, preferably adjacent to the road pattern.

Homeowner Education

Recommendation 16: Develop an information package to educate residents and the condominium corporation on appropriate ways to dispose of landscaping and lawn maintenance waste and protect the natural heritage components beyond the property boundaries. This is important for preservation of the vegetation and wetland features, and also to minimize encroachment issues which can occur from private lands if not properly managed.

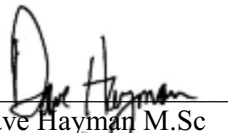
8.0 Summary and Conclusions

Westchester Homes (the proponent) is proposing a 17 Unit condominium development on the property located at 348 Sunningdale Rd East in London [Figure 6]. The proposed Site Plan reflects the environmental management strategy proposed in the Issues Scoping Report and also retains the majority of the residential yard trees (including the specimen Tulip Tree) in the frontage of the property. The development footprint is 50m from the Powell Drain Wetland at its closest location [Figure 8].

The Site Plan avoids impacts with natural heritage features and the EIS has set out recommendations to protect the adjacent significant natural heritage features. Provided these are met, the Zoning change can proceed as proposed. When there is confirmation on the development plan, the water balance and stormwater management requirements will come forward at the Site Plan approval stage.

BioLogic seeks comments from the City of London and the UTRCA with respect to the contents of this EIS. Formal comments can be submitted in writing to BioLogic on behalf of the client. Should you wish to clarify any questions or require additional information as part of the review of this EIS, do not hesitate to contact us.

BioLogic Incorporated



Dave Hayman M.Sc
WestchesterHome\$EIS_final.wpd
[Im]

9.0 REFERENCES

Britton N., and A. Brown. 1970. An Illustrated Flora of the Northern United States and Canada. In Three Volumes. General Publishing Company Ltd., Toronto.

Chapman, L.J. and D. F. Putnam. 1984. The Physiography of Southern Ontario, 3rd Edition. Ontario Geological Survey, Special Volume. Ontario Ministry of Natural Resources. 270pp.

City of London. 2007. Environmental Management Guidelines. Revised January 2007.

City of London. 2006. Official Plan for the City of London, Office Consolidation, January 1, 2006.

Hagerty, T.P. and M.S. Kingston 1992. The Soils of Middlesex County- Volumes 1 and 2. Report No. 56 of the Ontario Centre for Soil Resource Evaluation. Ontario Ministry of Agriculture and Food and Agriculture Canada.

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

Ontario American Badger Recovery Team, 2010.

<https://www.ontario.ca/environment-and-energy/map-well-records>.

Ministry of Natural Resources and Forestry. Natural Heritage Information Centre Website.

<http://www.mnr.gov.on.ca/MNR/nhic/nhic.cfm>

Ministry of Natural Resources and Forestry. 2010. Natural Heritage Reference Manual for Natural Heritage Policies the Provincial Policy Statement, 2005. April 2010 Toronto, Ontario.

Ontario Ministry of Municipal Affairs. 2014. Provincial Policy Statement. Ontario Ministry of Municipal

Affairs, Toronto, Ontario. 50 pp.

Ministry of Natural Resources and Forestry. 2015. Significant Wildlife Habitat Criteria Schedules for Ecoregion 7E. Ontario, Canada. 40 pp.

Sado, E.V. and U.J. Vagners. 1975. Quaternary Geology of the Lucan Area, Southern Ontario. Preliminary Geological Map P.1048, Ontario Division of Mines, Ministry of Natural Resources.

Toronto and Region Conservation. 2017. Wetland Water Balance Risk Evaluation. 48pp.

Table 7: Net Effects Table - Westchester Homes 348 Sunningdale Rd E

Source of Impact	Affected Feature, Function or Linkage	Predictions of physical impact and effect on features, functions and linkages	Mitigation Strategy	Net Effects Summary	Recommendations for Management and Monitoring
Artificial lighting	Adjacent Powell Drain wetland, residential/cultural woodland -common birds and plants	low impacts expected - 17 residential yard lights	Avoidance; development footprint is 50m from wetland, tree preservation for frontage	no net effect	none
Litter and garbage	Adjacent Powell Drain wetland, residential/cultural woodland -common birds and plants	low impacts expected - garbage litter from residents	Garbage bins available on condo grounds; grounds maintenance by condo corporation	no net effect	public garbage bins should be readily available and emptied regularly
Yard waste	Adjacent Powell Drain wetland, residential/cultural woodland -common birds and plants	low impacts expected - yard maintenance is managed by condo corporation	Educational brochure, web based resources	no net effects	monitoring and on-going education provided to condo board
Increased access to sensitive area	No sensitive areas within the subject lands, adjacent Powell Drain wetland	medium impacts expected - access to Powell Drain wetland, trampling	Fence, educational brochure, web based resources, guide residents to the existing open space at Heron Haven Park	no net effects	on-going education provided to condo board, monitor for fence openings
Creation of new trails	Adjacent Powell Drain wetland, residential/cultural woodland -common birds and plants	low impact expected - there are no formal trails planned	There are no planned trails; Fence and guide residents to the existing open space at Heron Haven Park	no net effects	on-going education provided to condo board, and residents
Increased trail use	No sensitive areas within the subject lands, adjacent Powell Drain wetland	low impact expected - residents of 17 units will not impact near-by trails	There are no planned trails; Fence and guide residents to the existing open space at Heron Haven Park	no net effects	on-going education provided to condo board, and residents

Tree damage	Adjacent Powell Drain wetland, residential/cultural woodland -common birds and plants	medium impacts expected - limb removal, tree forts	Educational brochure, web based resources	no net effects	condo board to monitor for tree forts, and dismantle
Increased noise	Adjacent Powell Drain wetland, residential/cultural woodland -common birds and plants	low impacts expected -common wildlife species found	Avoidance; development footprint is 50m from wetland	no net effects	Residential by-laws restrict excessive noise
Decreased infiltration and increased run-off	Adjacent Powell Drain wetland, residential/cultural woodland -common plants	low impacts expected	Avoidance; setback distance of 50m is large enough to support sufficient surface flows to the wetland, clay soils are not conducive to infiltration, stormwater management strategies to control flow during construction and post construction, sediment and erosion control fencing at edge development, fencing should remain until the area is serviced by storm sewers and disturbed areas are seeded; all issues with sediment and erosion control measures should be resolved the same day; roof leaders directed to vegetated areas	no net effects	monitor sediment and erosion control fence

Increased erosion	slopes at northwest corner	low impacts expected	sediment and erosion control fencing at edge development, fencing should remain until the area is serviced by storm sewers and disturbed areas are seeded; all issues with sediment and erosion control measures should be resolved the same day; roof leaders directed to vegetated areas	no net effects	monitor sediment and erosion control fence
Increased nutrient, pesticide and sediment	Adjacent Powell Drain wetland, residential/cultural woodland -common plants	low impacts expected - grounds are managed by condo corp.	stormwater management; sediment and erosion control during construction; ban on cosmetic pesticides	no net effects	on-going education provided to condo board, and residents
Visual intrusion	Adjacent Powell Drain wetland, residential/cultural woodland -common birds and plants	there are no adjacent houses or parkland	Avoidance; tree preservation plant, development footprint is 18m from the rear lot line and 25m from road ROW	no net effects	
Domestic animals	Adjacent Powell Drain wetland, residential/cultural woodland -common birds and plants	low impacts expected - cats that roam and catch small animals; off leash dogs can trample plants	educational brochure - including information on the impacts of cats on wildlife; dogs on leashes; signage; fence	no net effects	on-going education provided to condo board, and residents
Introduced invasive plants	Adjacent Powell Drain wetland, residential/cultural woodland -common plants	low impacts expected - residence do not manage or maintain grounds	educational brochure for condo corporation/grounds maintenance staff; ensure use of only native plants	no net effects	on-going education provided to condo board, and residents
Increase in urban wildlife species	Adjacent Powell Drain wetland, residential/cultural woodland -common birds and plants	medium impacts expected - limited garbage will be generated with this small development; garbage can attract nuisance wildlife	educational brochure, web based resources; including information on what attracts nuisance wildlife; ensure an accessible garbage disposal location	no net effects	on-going education provided to condo board, and residents

Air pollution	Adjacent Powell Drain wetland, residential/cultural woodland -common birds and plants	no impacts expected	residential homes and parkland will not generate substantial air pollution	no net effects	
Fire hazards	Adjacent Powell Drain wetland, residential/cultural woodland -common birds and plants	low impacts expected - potential for recreational gatherings in the adjacent lands	educational brochure, web based resources; including information on potential impacts of recreational bonfires in the woods	no net effects	
Use of heavy machinery - broken limbs	Adjacent Powell Drain wetland, residential/cultural woodland -common birds and plants	high impacts expected - machinery too close to trees on site can break off branches	install construction fence to restrict access to areas protected in the tree preservation report	no net effects	tree protection fencing/sediment and erosion control fencing should be inspected by a qualified ecological consultant
Use of heavy machinery - soil compaction	Adjacent Powell Drain wetland, residential/cultural woodland -common birds and plants	medium impacts expected - machinery too close to the trees can compact soils over vital tree roots	install construction fence to restrict access to the patch; tree protection fencing/sediment and erosion control fencing should be inspected by a qualified ecological consultant	no net effects	
Use of heavy machinery - oil, gasoline, grease spill	Adjacent Powell Drain wetland, residential/cultural woodland -common birds and plants	medium impacts expected - machinery can leak or refueling can generate spills	establish storage/refueling area away from property edges	no net effects	low infiltration soils on site; containment of spills should be included in plan
Changes in soil grade	Adjacent Powell Drain wetland, residential/cultural woodland -common birds and plants	medium impacts expected -lowering the grades may result in removal of tree roots -raising the grades may result in root suffocation - grade changes can alter water table or drainage patterns	setback are 3m on the west side adjacent to cultural woodland trees, tree preservation report will review tree species to be protected	subject to tree preservation report and grading plan	

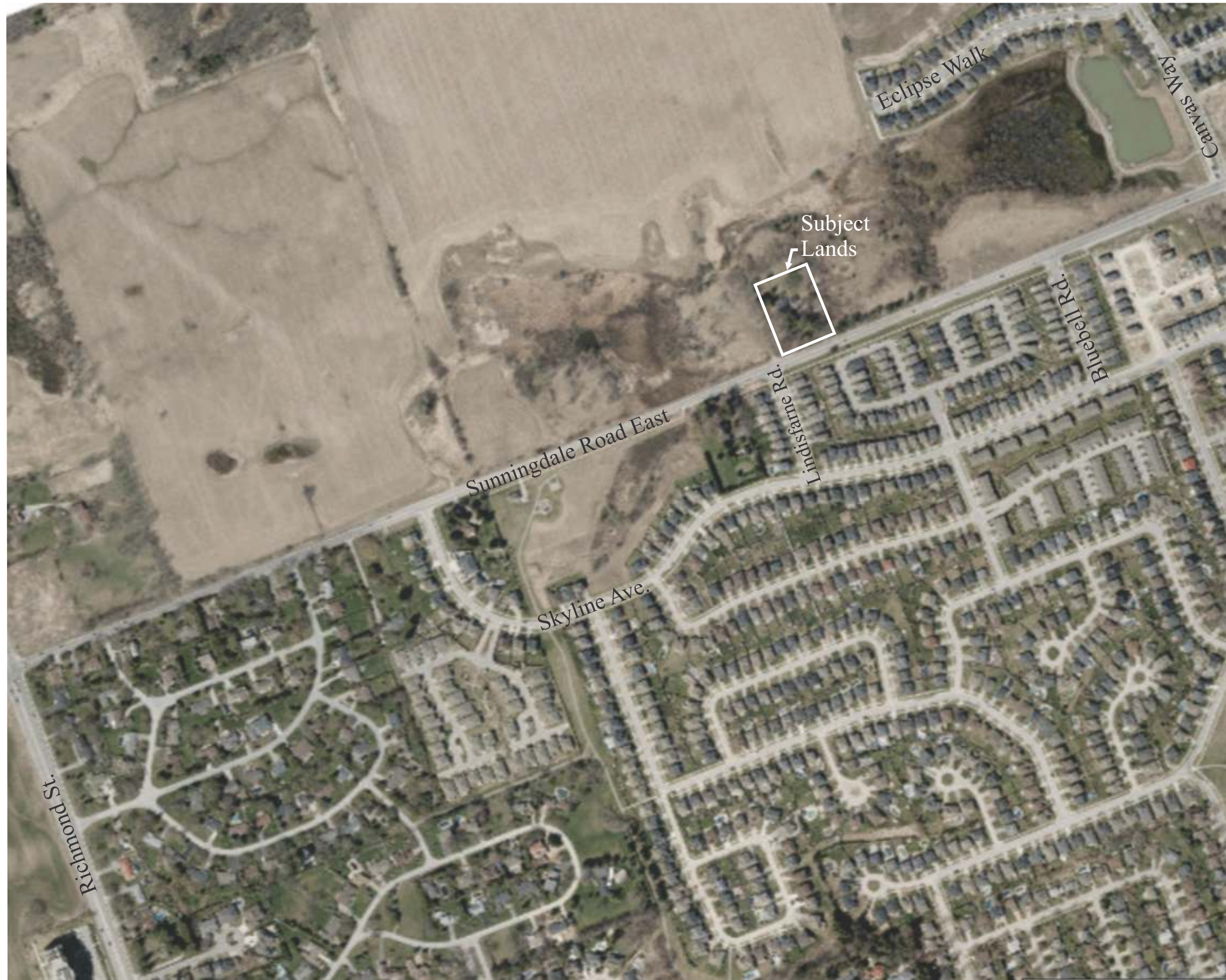
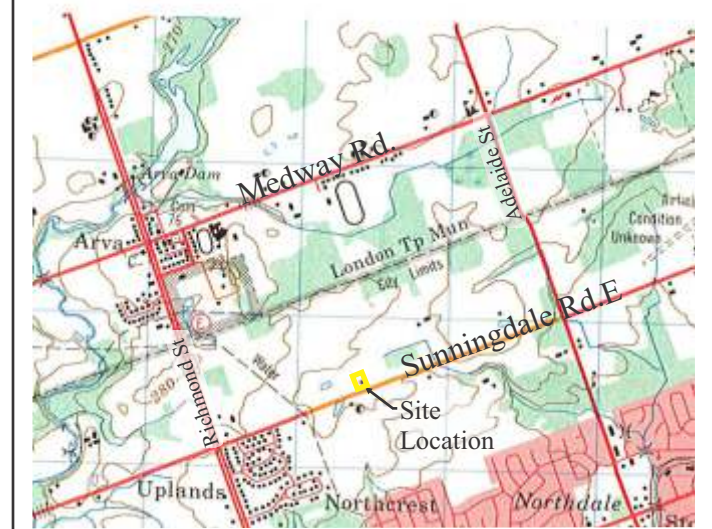


Figure 1: Site Location

(City of London Air Photo 2016)



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Key Plan

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Scale 1:5000
November 2018



- | | | | | |
|-----------------------|--------------------------------|------------------------------|-------------------------|----------------------|
| ESAs | Woodlands | Unevaluated Corridors | Unevaluated Wetlands | Ground Water Rechg |
| Potential ESAs | Unevaluated Vegetation Patches | Prov Significant Wetlands | Pot Naturalization Area | Max Hazard Line |
| Significant Woodlands | Significant Corridors | Locally Significant Wetlands | Pot Upland Corridor | Cons. Authority Bdry |

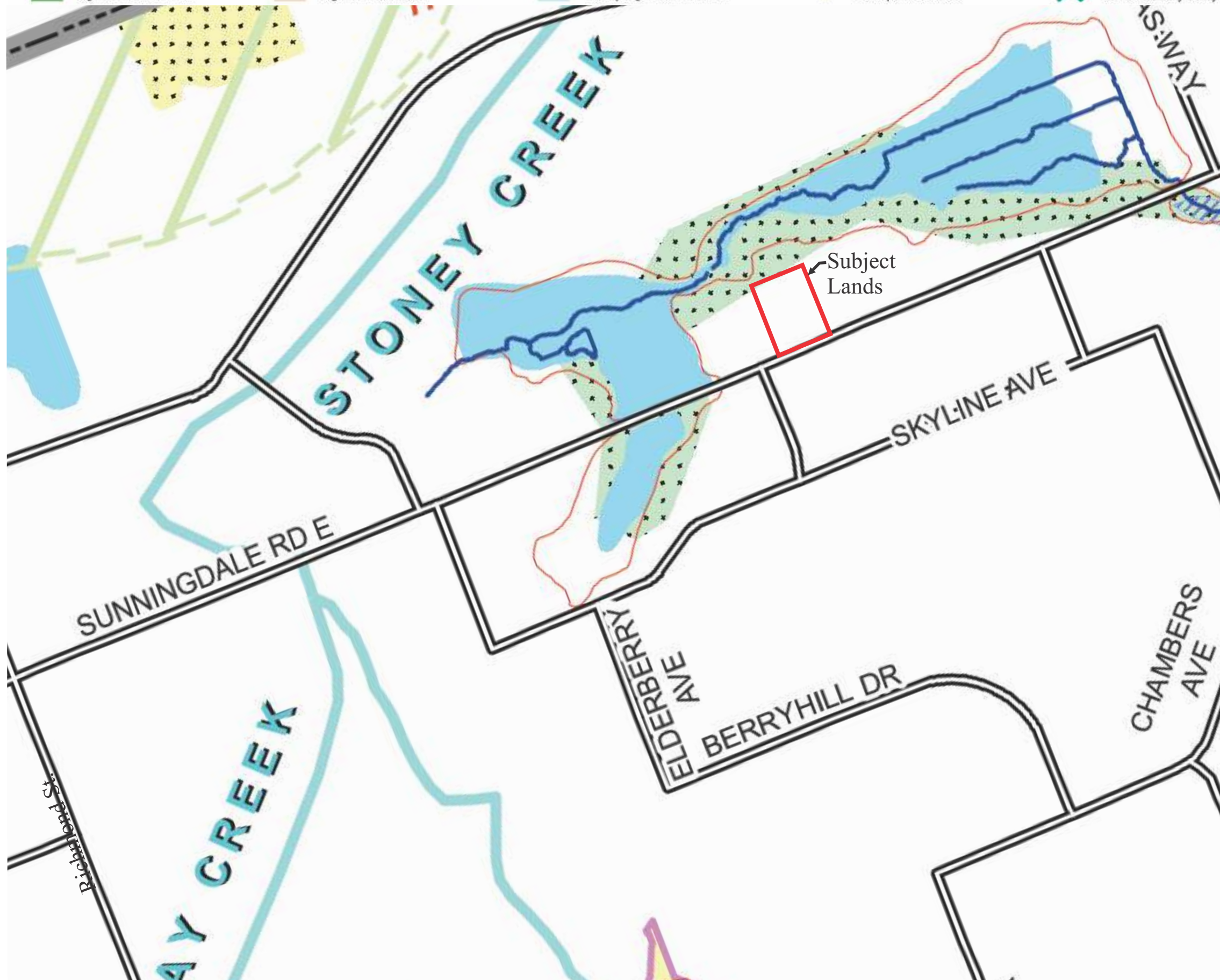
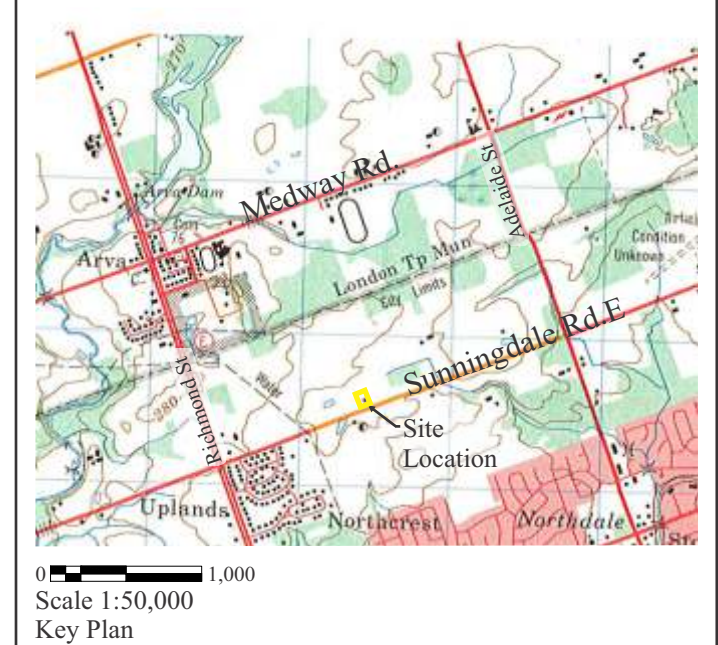


Figure 2: Natural Heritage Features
(City of London Official Plan Schedule B1, September 2015)



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|--|-------------------------|----------------------|--------------------|---------------------------------|-----------------------|
| Auto-Oriented Commercial Corridor | Low Density Residential | Office Business Park | Regional Facility | Urban Reserve Community Growth | Environmental Review |
| Multi-Family, High Density Residential | Office Area | General Industrial | Community Facility | Urban Reserve Industrial Growth | Agricultural |
| Multi-Family, Medium Density Residential | Office/Residential | Light Industrial | Open Space | Rural Settlement | Urban Growth Boundary |



Figure 3: Land Use
(City of London Official Plan Schedule A, September 2015)



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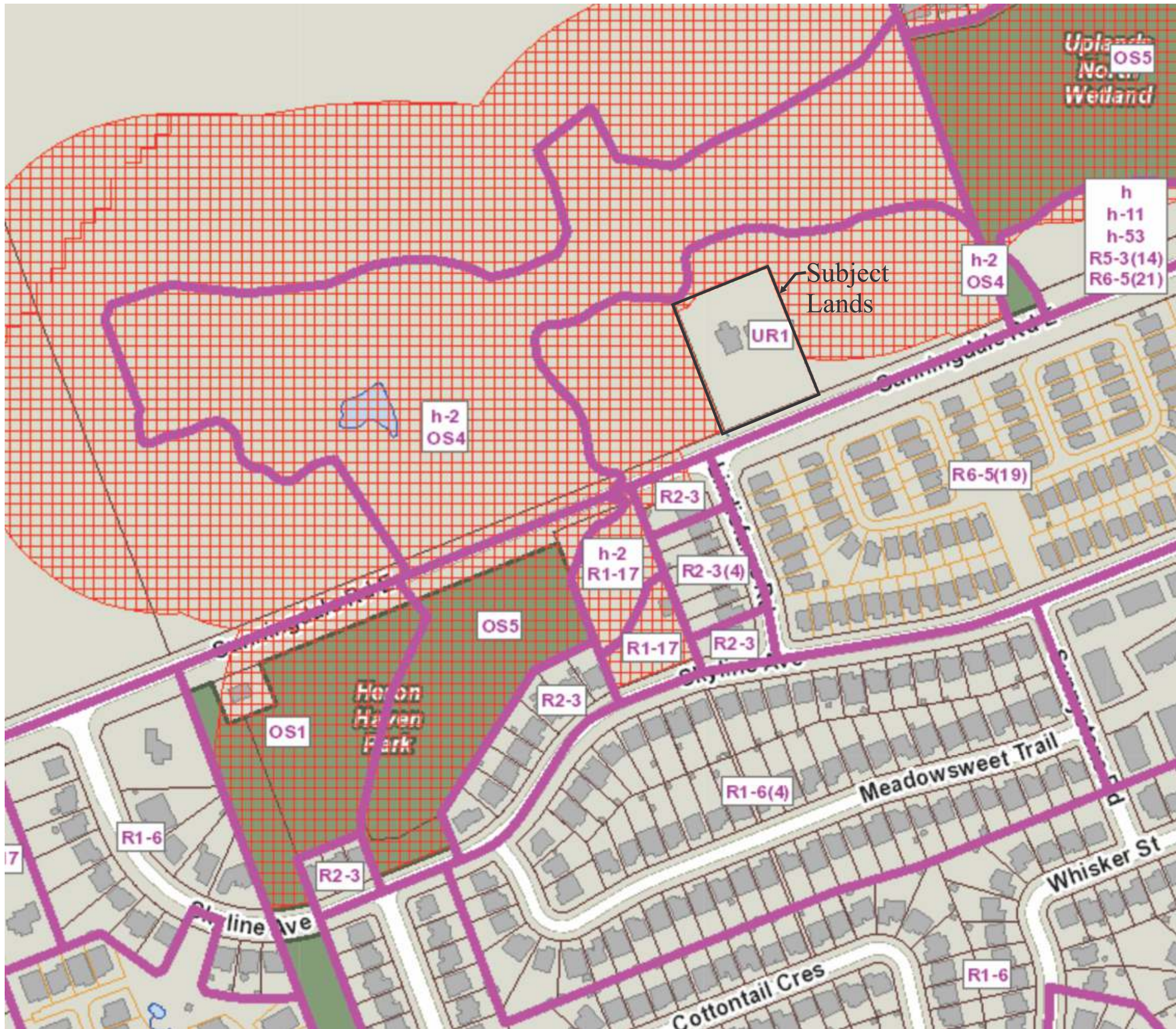
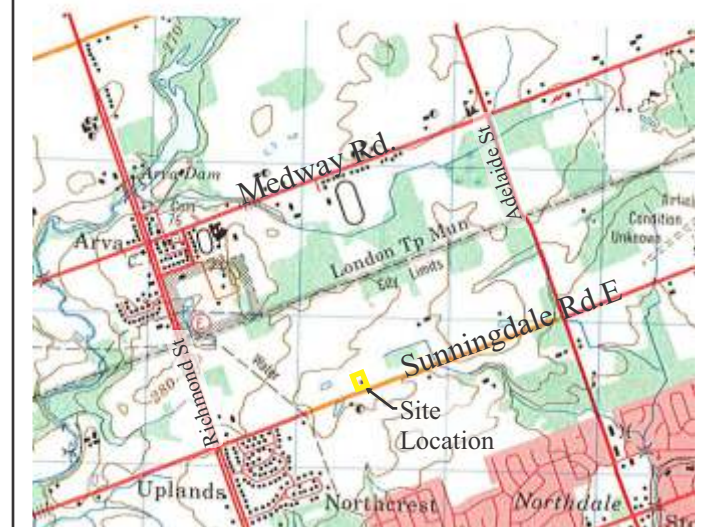


Figure 4: Zoning
(City of London Zoning Bylaw)



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 UTRCA Regulated

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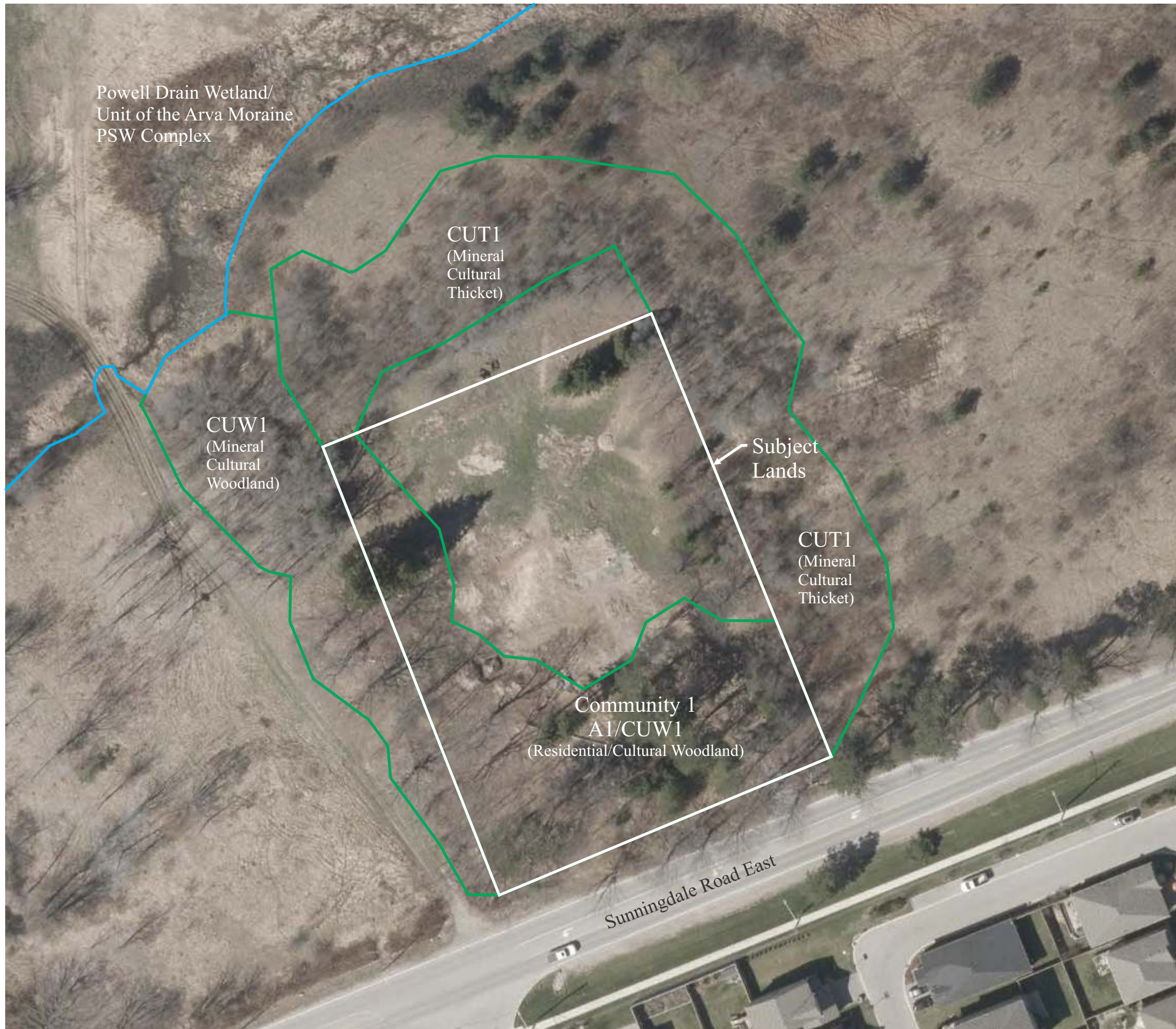
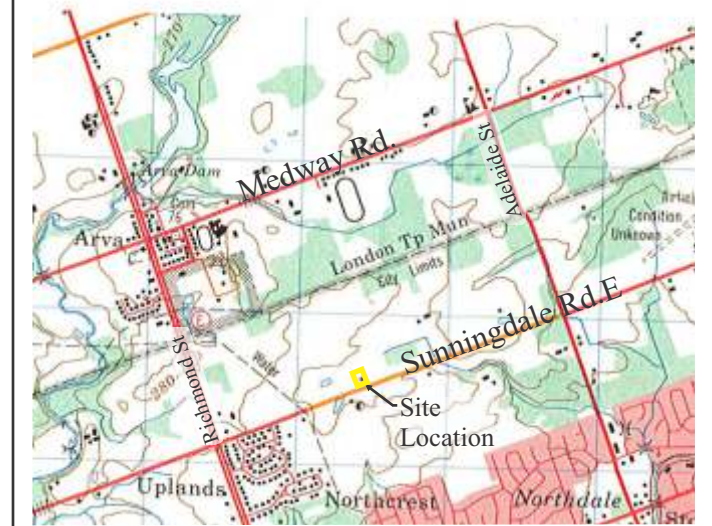


Figure 5a: Vegetation Communities
(City of London Air Photo 2017)



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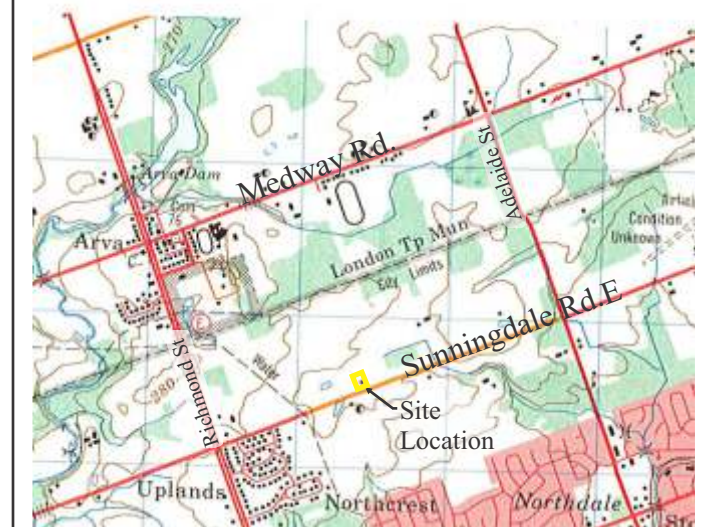
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Figure 5b: Vegetation communities with Site Photos

(City of London Air Photo 2017)



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Key Plan

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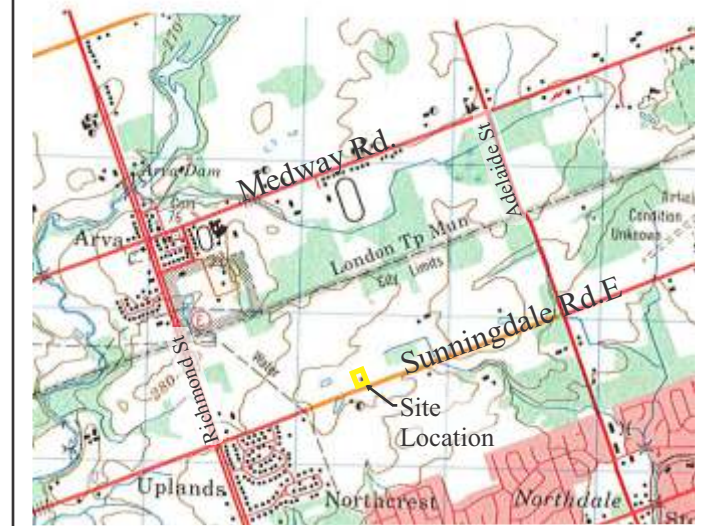
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Figure 6: Environmental Management Strategy

(City of London Air Photo 2017)



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Key Plan

30m Setback Distance

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Scale 1:750

November 2018



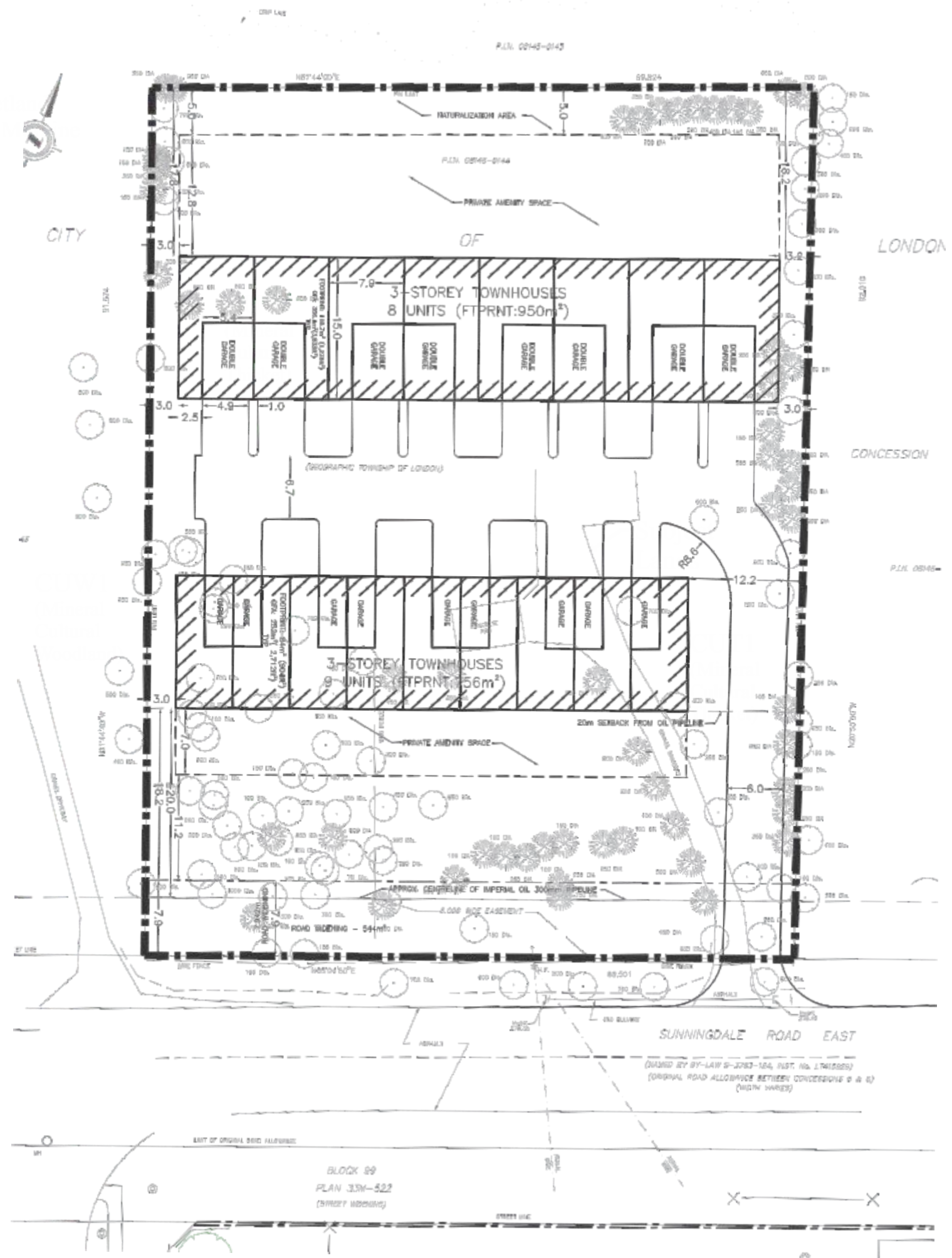
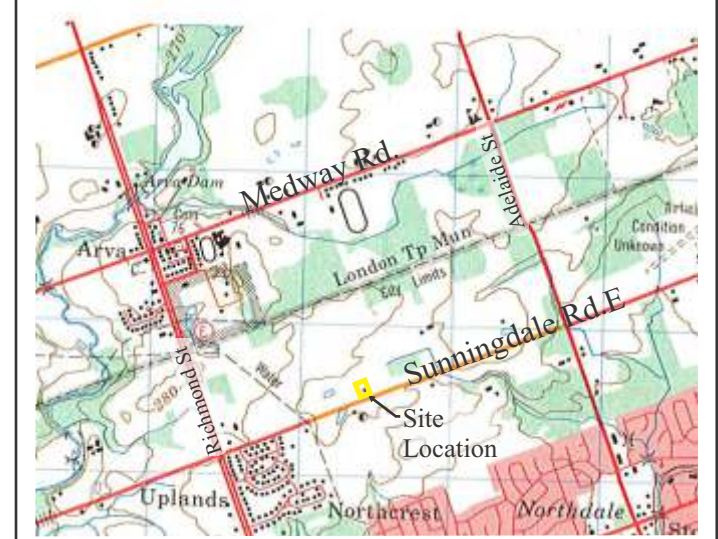


Figure 7: Development Proposal



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 Key Plan

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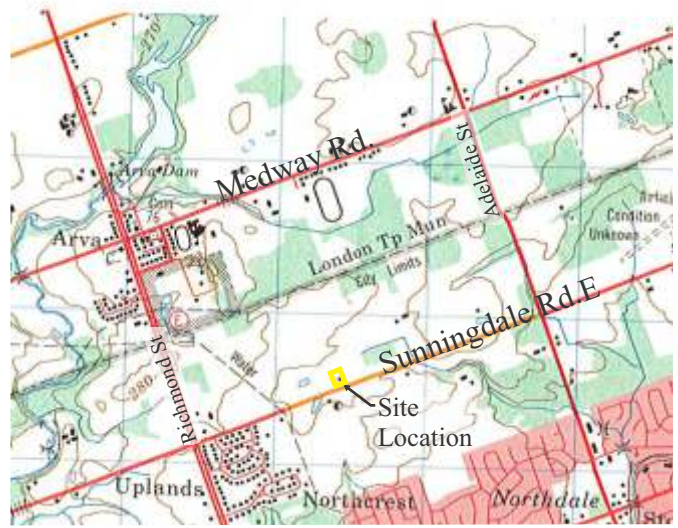
Photo A



Photo B

Figure 8: Development Proposal Overlay

(City of London Air Photo 2017)



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Key Plan

- 30m Setback Distance
- Conceptual Location of Bat Box

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Scale 1:750
November 2018



Appendix A
EIS Scoping notes

Laura McLennan

From: MacKay, James <jmackay@london.ca>
Sent: Wednesday, May 23, 2018 8:19 AM
To: Laura McLennan
Cc: mathew.c@zpplan.com; Dave Hayman; Tchir, Tara; Page, Bruce
Subject: RE: Westchester Homes Sunningdale Rd East

Hi Laura, I will try to follow-up with the UTRCA this week to confirm what they want to see as well. But based on our site visit and what we discussed in the field, doing the basic inventory work is still required – Birds, veg (2 season), etc. Please follow-up with the MNRF regarding bats. Based on the site visit, even if SAR bats are confirmed to be in the area and likely using the multiple cavities identified in the field, the MNRF may not identify the cultural woodland as SAR habitat based. Providing bat boxes in place of the cavity trees at the rear of the property may be sufficient and would not require acoustic monitoring surveys according to MNRF Aylmer district protocols. However, if the MNRF indicate that the woodland could still be designated as SAR habitat, studies according to the protocols would likely need to be carried out to confirm.

Regards,



James MacKay, M.Sc.

Ecologist

ISA Certified Arborist

City of London, Planning Services

Environmental and Parks Planning

London
CANADA

T: (519) 661-CITY (2489) ext. 4865 | F: (519) 963-1483 | E: jmackay@london.ca

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From: Laura McLennan [mailto:lmclennan@biologic.ca]
Sent: Tuesday, May 22, 2018 2:01 PM
To: MacKay, James <jmackay@london.ca>
Cc: mathew.c@zpplan.com; Dave Hayman <dhayman@biologic.ca>; Tchir, Tara <TchirT@thamesriver.on.ca>
Subject: FW: Westchester Homes Sunningdale Rd East

Hello James,

Following up again. I am looking for the scope of life science work for the Westchester Homes location at 348 Sunningdale Rd East.

Laura McLennan
BioLogic Incorporated
110 Riverside Dr, Suite 201
London, ON N6H 4S5

Tel: 519-434-1516
Fax: 519-434-0575

From: Laura McLennan
Sent: Thursday, May 17, 2018 2:56 PM
To: 'MacKay, James' <jmackay@london.ca>
Cc: 'mathew.c@zpplan.com' <mathew.c@zpplan.com>; Dave Hayman <dhayman@biologic.ca>; Tchir, Tara <TchirT@thamesriver.on.ca>
Subject: FW: Westchester Homes Sunningdale Rd East

Hello James,
Just following up again to see if you have some direction for us on the Westchester Homes location at 348 Sunningdale Rd East.

Thanks,

Laura McLennan
BioLogic Incorporated
110 Riverside Dr, Suite 201
London, ON N6H 4S5

Tel: 519-434-1516
Fax: 519-434-0575

From: Laura McLennan
Sent: Tuesday, May 15, 2018 12:18 PM
To: MacKay, James <jmackay@london.ca>
Cc: Dave Hayman <dhayman@biologic.ca>; Tchir, Tara <TchirT@thamesriver.on.ca>
Subject: Westchester Homes Sunningdale Rd East

Hello James
This email is to follow up on our site meeting of May 2, 2018 at the Westchester Homes location at 348 Sunningdale Rd East in London.
As discussed, you were going to get back to us with the scope of the life science inventory to complete the EIS for the proposed condominium development at this location.
Please provide this information so we can move forward with the data collection as necessary.

Thanks and regards,
Laura McLennan
BioLogic Incorporated
110 Riverside Dr, Suite 201
London, ON N6H 4S5

Tel: 519-434-1516
Fax: 519-434-0575

Appendix B
Water Well Records



GROUND WATER
 [REDACTED]
 OF 41 No 2112

UTM 17Z 477440E
 15W 4765320N
 Elev. 450930

The Ontario Water Resources Commission Act

WATER WELL RECORD

Basin 2 Middlesex Township, Village, Town or City London
 County or District 15 Date completed 5 apr. 63
 (day) (month) (year)
 Address London R.R. 5

Casing and Screen Record

Inside diameter of casing 5"
 Total length of casing 1410
 Type of screen —
 Length of screen —
 Depth to top of screen —
 Diameter of finished hole 5"

Pumping Test

Static level 7.0
 Test-pumping rate 10 G.P.M.
 Pumping level 90
 Duration of test pumping 15 hrs
 Water clear or cloudy at end of test clear
 Recommended pumping rate 10 G.P.M.
 with pump setting of 110 feet below ground surface

Well Log

Overburden and Bedrock Record

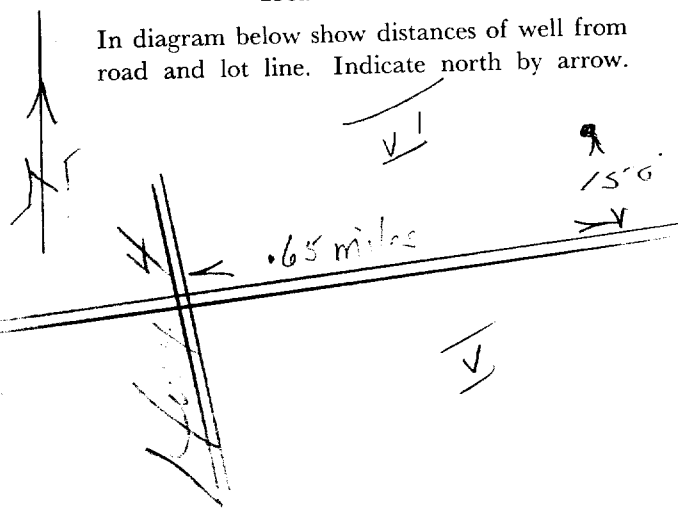
dig well
clay and
strata of sand
gravel

From ft.	To ft.	Depth(s) at which water(s) found	Kind of water (fresh, salty, sulphur)
0	25	176	fresh
25	138		
138	141		

For what purpose(s) is the water to be used? house
 Is well on upland, in valley or on hillside?
 Drilling or Boring Firm Ron Smith
 Address Edenfield
 Licence Number 934
 Name of Driller or Borer
 Address
 Date 5 Mar 63
Ron Smith
 (Signature of Licensed Drilling or Boring Contractor)

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



Appendix C
Ecological Land Classification Information Sheets

ELC COMMUNITY DESCRIPTION & CLASSIFICATION		SITE: <i>Autumn 348 Summingdale</i>	POLYGON: <i>1</i>
SURVEY(S): <i>WTH</i>		DATE: <i>Oct 13</i>	TIME: <i>start finish</i>
UTMZ: _____		UTME: _____	UTMN: _____

POLYGON DESCRIPTION	SYSTEM	SUBSTRATE	TOPOGRAPHIC FEATURE	HISTORY	PLANT FORM	COMMUNITY
<input checked="" type="checkbox"/> TERRESTRIAL <input type="checkbox"/> WETLAND <input type="checkbox"/> AQUATIC	<input checked="" type="checkbox"/> ORGANIC <input type="checkbox"/> MINERAL SOIL <input type="checkbox"/> PARENT MIN. <input type="checkbox"/> ACIDIC BEDRK <input type="checkbox"/> BASIC BEDRK <input type="checkbox"/> CARB. BEDRK	<input type="checkbox"/> LAQUSTRINE <input type="checkbox"/> RIVERINE <input type="checkbox"/> BOTTOMLAND <input type="checkbox"/> TERRACE <input type="checkbox"/> VALLEY/SLOPE <input type="checkbox"/> TABLELAND <input type="checkbox"/> ROLL UPLAND <input type="checkbox"/> TALLS <input type="checkbox"/> CREVICE / CAVE <input type="checkbox"/> ALVAR <input type="checkbox"/> ROCKLAND <input type="checkbox"/> BEACH / BAR <input type="checkbox"/> SAND DUNE <input type="checkbox"/> BLUFF	<input type="checkbox"/> NATURAL <input checked="" type="checkbox"/> CULTURAL	<input type="checkbox"/> PLANKTON <input type="checkbox"/> SUBMERGED <input type="checkbox"/> FLOATING/ALD. <input type="checkbox"/> STAGNOID <input type="checkbox"/> GRASSOID <input type="checkbox"/> SOBB <input type="checkbox"/> LOBB <input type="checkbox"/> BRYOPHYTE <input type="checkbox"/> ALGAE <input type="checkbox"/> DECIDUOUS <input type="checkbox"/> CONIFEROUS <input type="checkbox"/> MIXED	<input type="checkbox"/> LAKE <input type="checkbox"/> POND <input type="checkbox"/> RIVER <input type="checkbox"/> STREAM <input type="checkbox"/> MARSH <input type="checkbox"/> SWAMP <input type="checkbox"/> PEN <input type="checkbox"/> SOG <input type="checkbox"/> BARKEN <input type="checkbox"/> MEADOW <input type="checkbox"/> PRAIRIE <input type="checkbox"/> THicket <input type="checkbox"/> SWANNAH <input type="checkbox"/> WOODLAND <input type="checkbox"/> FOREST <input type="checkbox"/> PLANTATION	
SITE		COVER				
<input type="checkbox"/> OPEN WATER <input type="checkbox"/> SHALLOW WATER <input checked="" type="checkbox"/> SURFICIAL DEP. <input type="checkbox"/> BEDROCK		<input checked="" type="checkbox"/> OPEN <input type="checkbox"/> SHRUB <input type="checkbox"/> TREED				

STAND DESCRIPTION:		SPECIES IN ORDER OF DECREASING DOMINANCE (up to 4 sp) (> MUCH GREATER THAN; > GREATER THAN; = ABOUT EQUAL TO)	
LAYER	HT	CVR	
1 CANOPY	2	3	<i>ACsasa = P/Cabie > P/Nesi</i>
2 SUB-CANOPY			
3 UNDERSTOREY	3	2	<i>LOW fta = Sy Raulg > R/llthph</i>
4 GRD. LAYER	6	4	<i>Grasses > C/Rawe > S/Catana > S/Moilo</i>

HT CODES: 1 = <25 m 2 = 10<HT 25 m 3 = 2<HT 10 m 4 = 1<HT 2 m 5 = 0<HT 1 m 6 = 0<HT 0.5 m 7 = HT<0.2 m
CVR CODES: 0 = NONE 1 = 0% < CVR 10% 2 = 10 < CVR 25% 3 = 25 < CVR 50% 4 = CVR > 50%

STAND COMPOSITION: **BA:**

SIZE CLASS ANALYSIS:	< 10	10 - 24	25 - 50	> 50
STANDING SNAGS:	< 10	10 - 24	25 - 50	> 50
DEADFALL / LOGS:	< 10	10 - 24	25 - 50	> 50

ABUNDANCE CODES: N = NONE R = RARE O = OCCASIONAL A = ABUNDANT

COMM. AGE:	PIONEER	YOUNG	MID-AGE	MATURE	OLD GROWTH

SOIL ANALYSIS:

TEXTURE:	DEPTH TO MOTTLES / GLEY	g =	G =

MOISTURE: _____ DEPTH OF ORGANICS: _____ (cm)

HOMOGENEOUS / VARIABLE DEPTH TO BEDROCK: _____ (cm)

COMMUNITY CLASSIFICATION: **ELC CODE**

COMMUNITY CLASS:	COMMUNITY SERIES:	ECOSITE:	VEGETATION TYPE:	INCLUSION	COMPLEX
<i>CULTURAL</i>	<i>WOODLAND</i>	<i>MINERAL</i>			

Notes: *Formosa RSS IDENTICALSITY, POTENTIAL BAT TRACES ON SITE. ANTHROPOGENIC*

ELC MANAGEMENT / DISTURBANCE		SITE: <i>348 Summingdale</i>	POLYGON: <i>1</i>
DATE: <i>02/18/2017</i>		SURVEY(S): <i>WTH</i>	

DISTURBANCE	EXTENT	0	1	2	3	SCORE †
TIME SINCE LOGGING	> 30 YRS	15 - 30 YRS	5 - 15 YRS	0 - 5 YEARS		3
INTENSITY OF LOGGING	NONE	FUEL WOOD	SELECTIVE	DIAMETER LIMIT		1
EXTENT OF LOGGING	NONE	LOCAL	WIDESPREAD	EXTENSIVE		0
SUGAR BUSH OPERATIONS	NONE	LIGHT	MODERATE	HEAVY		0
EXTENT OF OPERATIONS	NONE	LOCAL	WIDESPREAD	EXTENSIVE		0
GAPS IN FOREST CANOPY	NONE	SMALL	INTERMEDIATE	LARGE		9
EXTENT OF GAPS	NONE	LOCAL	WIDESPREAD	EXTENSIVE		0
LIVESTOCK (GRAZING)	NONE	LIGHT	MODERATE	HEAVY		0
EXTENT OF LIVESTOCK	NONE	LOCAL	WIDESPREAD	EXTENSIVE		0
ALIEN SPECIES	NONE	OCCASIONAL	ABUNDANT	DOMINANT		6
EXTENT OF ALIEN SPECIES	NONE	LOCAL	WIDESPREAD	EXTENSIVE		6
PLANTING (PLANTATION)	NONE	OCCASIONAL	ABUNDANT	DOMINANT		6
EXTENT OF PLANTING	NONE	LOCAL	WIDESPREAD	EXTENSIVE		6
TRACKS AND TRAILS	NONE	FAINT TRAILS	WELL MARKED	TRACKS OR		6
EXTENT OF TRACKS/TRAILS	NONE	LOCAL	WIDESPREAD	EXTENSIVE		0
DUMPING (RUBBISH)	NONE	LIGHT	MODERATE	HEAVY		0
EXTENT OF DUMPING	NONE	LOCAL	WIDESPREAD	EXTENSIVE		0
EARTH DISPLACEMENT	NONE	LIGHT	MODERATE	HEAVY		0
EXTENT OF DISPLACEMENT	NONE	LOCAL	WIDESPREAD	EXTENSIVE		0
RECREATIONAL USE	NONE	LIGHT	MODERATE	HEAVY		0
EXTENT OF RECR. USE	NONE	LOCAL	WIDESPREAD	EXTENSIVE		4
NOISE	NONE	SLIGHT	MODERATE	INTENSE		0
EXTENT OF NOISE	NONE	LOCAL	WIDESPREAD	EXTENSIVE		0
DISEASE/DEATH OF TREES	NONE	LIGHT	MODERATE	HEAVY		0
EXTENT OF DISEASE / DEATH	NONE	LOCAL	WIDESPREAD	EXTENSIVE		0
WIND THROW (BLOW DOWN)	NONE	LIGHT	MODERATE	HEAVY		0
EXTENT OF WIND THROW	NONE	LOCAL	WIDESPREAD	EXTENSIVE		0
BROWSE (e.g. DEER)	NONE	LIGHT	MODERATE	HEAVY		0
EXTENT OF BROWSE	NONE	LOCAL	WIDESPREAD	EXTENSIVE		0
BEAVER ACTIVITY	NONE	LIGHT	MODERATE	HEAVY		0
EXTENT OF BEAVER	NONE	LOCAL	WIDESPREAD	EXTENSIVE		0
FLOODING (pools & puddling)	NONE	LIGHT	MODERATE	HEAVY		0
EXTENT OF FLOODING	NONE	LOCAL	WIDESPREAD	EXTENSIVE		0
FIRE	NONE	LIGHT	MODERATE	HEAVY		0
EXTENT OF FIRE	NONE	LOCAL	WIDESPREAD	EXTENSIVE		0
ICE DAMAGE	NONE	LIGHT	MODERATE	HEAVY		0
EXTENT OF ICE DAMAGE	NONE	LOCAL	WIDESPREAD	EXTENSIVE		0
OTHER	NONE	LIGHT	MODERATE	HEAVY		0
EXTENT	NONE	LOCAL	WIDESPREAD	EXTENSIVE		0

† INTENSITY x EXTENT = SCORE

ELC
WILDLIFE

SITE: 348 Sunningdale
POLYGON: 1
DATE: Jun 5, 2018
SURVEYOR(S): CB, WH
START TIME: 6:45
END TIME: 7:12

TEMP (°C): 11 CLOUD (10th): 0 WIND: 1 PRECIPITATION: none
CONDITIONS: clear, cool, still

POTENTIAL WILDLIFE HABITAT:

VERNAL POOLS
HIBERNACULA

SPECIES LIST:

TY	SP CODE	EV	NOTES	#	TY	SP CODE	EV	NOTES	#
B	DWD	P	11	2					
B	BACR	P	11	2					
B	ZWBL	P	11	2					
B	AMBL	VO	1	1					
B	YWAR	SM	1	1					
B	GCFL	VO	1	1					
B	NOCA	SM	1	1					
B	BMFO	P	11	2					
B	BWCO	P	11	2					

ELC
WILDLIFE

SITE: 348 Sunningdale
POLYGON: 1
DATE: June 26, 2018
SURVEYOR(S): WH
START TIME: 7:30
END TIME: 8:30

TEMP (°C): 18 CLOUD (10th): 100 WIND: 1 PRECIPITATION: very light
CONDITIONS: overcast, cool, still

POTENTIAL WILDLIFE HABITAT:

VERNAL POOLS
HIBERNACULA

SPECIES LIST:

TY	SP CODE	EV	NOTES	#	TY	SP CODE	EV	NOTES	#
B	AMPO	FY	44T	5					
B	KWBL	P	11	2					
B	BCH	P	11	2					
B	ZUST	FY	11	2					
B	NOCA	P	11	2					
B	BAOR	P	11	2					
B	LOSP	SM	11	2					
B	GRCA	P	11	3					
B	OSWA	P	11	3					
B	AUCR	FY	11	3					

FAUNAL TYPE CODES (TY):
B = BIRD M = MAMMAL H = HERPETOFAUNA L = LEPIDOPTERA F = FISH O = OTHER
EVIDENCE CODES (EV):
BREEDING BIRD - POSSIBLE:
SH = SUITABLE HABITAT

BREEDING BIRD - PROBABLE:
T = TERRITORY
A = ANXIETY BEHAVIOUR
SM = SINGING MALE

BREEDING BIRD - CONFIRMED:
DD = DISTRACTION
NE = EGGS
AE = NEST ENTRY
D = DISPLAY
N = NEST BUILDING
P = PAIR
V = VISITING NEST

OTHER WILDLIFE EVIDENCE:
OB = OBSERVED
DP = DISTINCTIVE PARTS
TK = TRACKS
SI = OTHER SIGNS (specify)

VO = VOCALIZATION
HO = HOUSE/DEN
FE = FEEDING EVIDENCE
CA = CARCASS
FY = EGGS OR YOUNG
SC = SCAT

FAUNAL TYPE CODES (TY):
B = BIRD M = MAMMAL H = HERPETOFAUNA L = LEPIDOPTERA F = FISH O = OTHER
EVIDENCE CODES (EV):
BREEDING BIRD - POSSIBLE:
SH = SUITABLE HABITAT

BREEDING BIRD - PROBABLE:
T = TERRITORY
A = ANXIETY BEHAVIOUR
SM = SINGING MALE

BREEDING BIRD - CONFIRMED:
DD = DISTRACTION
NE = EGGS
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OTHER WILDLIFE EVIDENCE:
OB = OBSERVED
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TK = TRACKS
SI = OTHER SIGNS (specify)

VO = VOCALIZATION
HO = HOUSE/DEN
FE = FEEDING EVIDENCE
CA = CARCASS
FY = EGGS OR YOUNG
SC = SCAT

Appendix D
RKLA Tree Report

348 SUNNINGDALE ROAD, LONDON ONTARIO

DRAFT

GENERAL INFORMATION		SIZE			BIOLOGICAL HEALTH			PRELIMINARY RECOMMENDATIONS BASED ON TREE SPECIES VALUE AND VIGOUR	
TAG#	TREE SPECIES	DBH	CANOPY RADIUS	STRUCTURE MS=multistem	CROWN CONDITION	DEFECT CODE	COMMENTS	PROPOSED ACTION	RATIONALE
		(cm)	(m)		1=Dead			First Priority	
					5=Healthy			Second Priority	
								Remove - hazard	
737	<i>Acer saccharum</i>	55	8		5	S1	City ROW along east edge of existing driveway, wide trunk flare, basal scar, minor dieback, codominant stems		
738	<i>Acer saccharum</i>	55	5		5		along east edge of existing driveway, no trespassing sign nailed to tree, several nails in trunk, bulging due to damage from abutting fence, low branching	Second Priority Preservation	Valuable species, good health and condition
739	<i>Prunus spp.</i>	51	6		3		along east edge of existing driveway, recently pruned, no trespassing sign nailed to tree, crooked upper stem, large exposed/damaged roots, girdling roots, damage from abutting fence		
740	<i>Acer saccharum</i>	33	5		5		along east edge of existing driveway, recently pruned, limbed up, grade change at base, along edge of existing driveway	Second Priority Preservation	Valuable species, good health and condition
741	<i>Acer platanoides</i>	22	5		5		along east edge of existing driveway, sealing pruning cuts, suppressed, exposed/damaged roots, girdling roots		
742	<i>Acer platanoides</i>	32	5.5		5		along east edge of existing driveway, sealing pruning cuts, codominant stems, exposed/damaged roots, grade change at base		
743	<i>Acer saccharum</i>	79	7		5	S1	along east edge of existing driveway, loose bark, lateral branch larger than main stem, internal rot at base, burly main stem, insects at base	Remove	poor/weak branch structure, in decline
744	<i>Pinus nigra</i>	78	9		5		along west edge of existing driveway, unbalanced crown - heavy towards SW, insect holes in trunk, limbed up to approx. 50'		
745	<i>Picea abies</i>	78	4		4		along west edge of existing driveway, grade change at trunk due to driveway, codominant stems, included bark, buttressing from branches to base, limbed up to approx. 30'		
746	<i>Pinus nigra</i>	64	6		4	R3	along west edge of existing driveway, no root flare, codominant leaders, fused leaders, included bark, buttressing on west side of base, uneven crown - heavy to the W, limbed up to approx. 30'		
747	<i>Pinus sylvestris</i>	43	3		4	R3	along west edge of existing driveway, grade change at trunk due to driveway, insect holes in trunk, no root flare, limbed up to approx. 30'		
748	<i>Picea abies</i>	51	3		5	S1	along west edge of existing driveway, suppressed, droopy habit, grade change at base due to driveway		
749	<i>Pinus nigra</i>	46	7		3	R3, S1	along west edge of existing driveway, bowed trunk, thin crown, suppressed, no root flare		

348 SUNNINGDALE ROAD, LONDON ONTARIO

GENERAL INFORMATION		SIZE			BIOLOGICAL HEALTH			PRELIMINARY RECOMMENDATIONS BASED ON TREE SPECIES VALUE AND VIGOUR	
TAG#	TREE SPECIES	DBH	CANOPY RADIUS	STRUCTURE MS=multistem	CROWN CONDITION	DEFECT CODE	COMMENTS	PROPOSED ACTION	RATIONALE
750	<i>Acer saccharum</i>	58	7		5	R3, S1	along west edge of existing driveway, girdling/exposed/damaged roots along driveway edge, limbed up, no root flare on S side, damage from abutting fence		
751	<i>Thuja occidentalis</i>	42, 42	2.5	ms2	5		exposed roots, minor interior dieback, low branched		
752	<i>Thuja occidentalis</i>	18	3		5		suppressed, low branched, minor dieback, uneven crown		
753	<i>Prunus spp.</i>	15, 8	4	ms2	5	S1, C8	curling leaves, epicormic growth, scrubby habit, S1 in small stem		
754	<i>Picea pungens</i>	24	2		3		suppressed, dieback, limbed up to approx. 20'		
755	<i>Picea abies</i>	9	2		5		hedge row, thin crown, low branched		
756	<i>Picea abies</i>	16	2.5		5		hedge row, thin lower branches, low branched, Adelges abietis (pineapple spruce gall)		
757	<i>Picea abies</i>	16	2.5		5		hedge row, thin lower branches, low branched, Adelges abietis (pineapple spruce gall)		
758	<i>Picea abies</i>	13	2.5		4		hedge row, thin lower branches, low branched		
759	<i>Picea abies</i>	20	2.5		5		hedge row, thin lower branches, low branched		
760	<i>Picea abies</i>	13	2		5		hedge row, low branched		
761	<i>Picea abies</i>	8	2		5		hedge row, low branched		
762	<i>Liriodendron tulipifera</i>	55	8		5		uneven crown - heavy to SE due to a torn off scaffold branch in crown	First Priority Preservation	Carolinian species, good health and condition
763	<i>Acer saccharum</i>	19, 13	7	ms2	5		exposed roots, partial root rot, remnants of previous third stem, excellent condition	First Priority Preservation	Valuable species, excellent health and condition
764	<i>Acer saccharum</i>	38	7		5		codominant stems, included bark, buttressing, suppressed on NW side, dead branches	First Priority Preservation	Valuable species, good health and condition
765	<i>Acer saccharum</i>	34	7		5	S1	vertical S1, sealing wounds, discolouration at base, minor dead branches		
766	<i>Acer saccharum</i>	43	7		5		low branches on E side, minor dead branches, excellent condition	First Priority Preservation	Valuable species, excellent health and condition
767	<i>Acer saccharum</i>	19	6		5		open crown, suppressed, minor dead branches	Second Priority Preservation	Valuable species, good health and condition
768	<i>Picea abies</i>	45	3		4		large vertical wound on N side, basal scar, previously suppressed, limbed up to approx. 30'		
769	<i>Picea abies</i>	47	3		5		wide root flare		
770	<i>Acer saccharum</i>	17	3.5		5		minor dead wood, abutting large stump	Second Priority Preservation	Valuable species, good health and condition
771	<i>Acer saccharum</i>	15	4		5		excellent condition	First Priority Preservation	Valuable species, excellent health and condition
772	<i>Prunus serotina</i>	13	2		5		crooked at base - self corrected, high crown	Second Priority Preservation	Valuable species, good health and condition
773	<i>Acer saccharum</i>	10	2.5		5		high crown, suppressed on NW	Second Priority Preservation	Valuable species, good health and condition
774	<i>Acer saccharum</i>	13	3		5		suppressed	Second Priority Preservation	Valuable species, good health and condition
775	<i>Acer platanoides</i>	17	4.5		5		crook at base, clustered upper crown, suppressed		
776	<i>Acer saccharum</i>	10	2		5	C8	suppressed, high crown, epicormic along trunk		

348 SUNNINGDALE ROAD, LONDON ONTARIO

GENERAL INFORMATION		SIZE			BIOLOGICAL HEALTH			PRELIMINARY RECOMMENDATIONS BASED ON TREE SPECIES VALUE AND VIGOUR	
TAG#	TREE SPECIES	DBH	CANOPY RADIUS	STRUCTURE MS=multistem	CROWN CONDITION	DEFECT CODE	COMMENTS	PROPOSED ACTION	RATIONALE
777	<i>Pinus nigra</i>	71	5.5		4	L	lean E, dead branches, natural limb drop, codominant stems, included bark with dead stem, high/small crown, small fungal fruiting body at root flare		
778	<i>Acer saccharum</i>	10	3		5	C8	supressed, epicormic		
779	<i>Juglans nigra</i>	14	3.5		5		high crown, dead branches, supressed		
780	<i>Juglans nigra</i>	16	3.5		4	SI	SI at 7' from grade, several major wounds/burls, ants	Remove	Health and condition - may pose a hazard
781	<i>Tilia americana</i>	21	3		5		crook in upper stem, insect damage to leaves, 1 mature epicormic sprout from base, minor dieback, supressed on N, young virginia creeper on trunk		
782	<i>Juglans nigra</i>	29	6.5		5		supressed, uneven crown - heavy to the S, young virginia creeper on trunk		
783	<i>Acer saccharum</i>	10	2.5		5		low branched, vertical crack in bark, supressed		
784	<i>Acer saccharum</i>	11	2.5		5	C8	rodent protection present, minor dieback, supressed, epicormic growth		
785	<i>Pinus sylvestris</i>	40	3		4		insect holes, dead/drooping branches, thin crown, bulbous root flare		
786	<i>Acer saccharum</i>	95	10		4	SI	SI - MAJOR cavity, codominant stems, dieback in upper crown, thin crown, buckthorn understorey	Remove	Health and condition - may pose a hazard
787	no tag - no tree								
788	<i>Acer saccharum</i>	28	6		4	C8	large lower dead branches, supressed, dieback, epicormic growth		
789	<i>Pinus nigra</i>	75	5		4		elevated root plate, high crown, thin crown, 3 codominant stems, major dead branches		
790	<i>Acer saccharum</i>	12	3		4		supressed, abutting tree no. 789, leaf spot, dieback in lower branches		
791	<i>Prunus spp.</i>	14	4		3		supressed, dead lower branches		
792	<i>Acer saccharum</i>	10	4		5		supressed, minor die back		
793	<i>Prunus spp.</i>	18	4		4	SI	vertical wound below crown, dead lower branches, supressed, crooked - self corrected		
794	<i>Tilia americana</i>	14	5		5	L	insect damage to leaves, lean SW, supressed, included bark	Second Priority Preservation	Valuable species, good health and condition
795	<i>Tilia americana</i>	18	5		5		insect damage to leaves	Second Priority Preservation	Valuable species, good health and condition
796	<i>Tilia americana</i>	23	5		5		insect damage to leaves	Second Priority Preservation	Valuable species, good health and condition
797	<i>Tilia americana</i>	23, 22	7	ms2	5	SI	major wound on one stem, included bark, insect damage to leaves, buckthorn understorey		
798	<i>Prunus spp.</i>	12	3		5	SI, L	wound 2' from grade, supressed, lean SW		
799	<i>Prunus spp.</i>	10	3		5	L	supressed, minor die back, lean SW		
800	<i>Prunus spp.</i>	9	2		5		supressed, large epicormic sprout from base		
801	<i>Tilia americana</i>	85	6		5	SI	several large wounds at 5' from grade and at unions, wide spreading root flare, 3 codominant stems, large dead limbs, minor dieback, burls, basal wound/rot	Remove	Health and condition
802	<i>Prunus spp.</i>	12	2		5		dead lower branches, supressed		
803	<i>Acer saccharum</i>	74	9		5	SI	exposed/damaged roots, minor root girdling, one large low branch, uneven crown-heavy on SW, previously supressed	Second Priority Preservation	Valuable species, mature specimen, good health and condition

348 SUNNINGDALE ROAD, LONDON ONTARIO

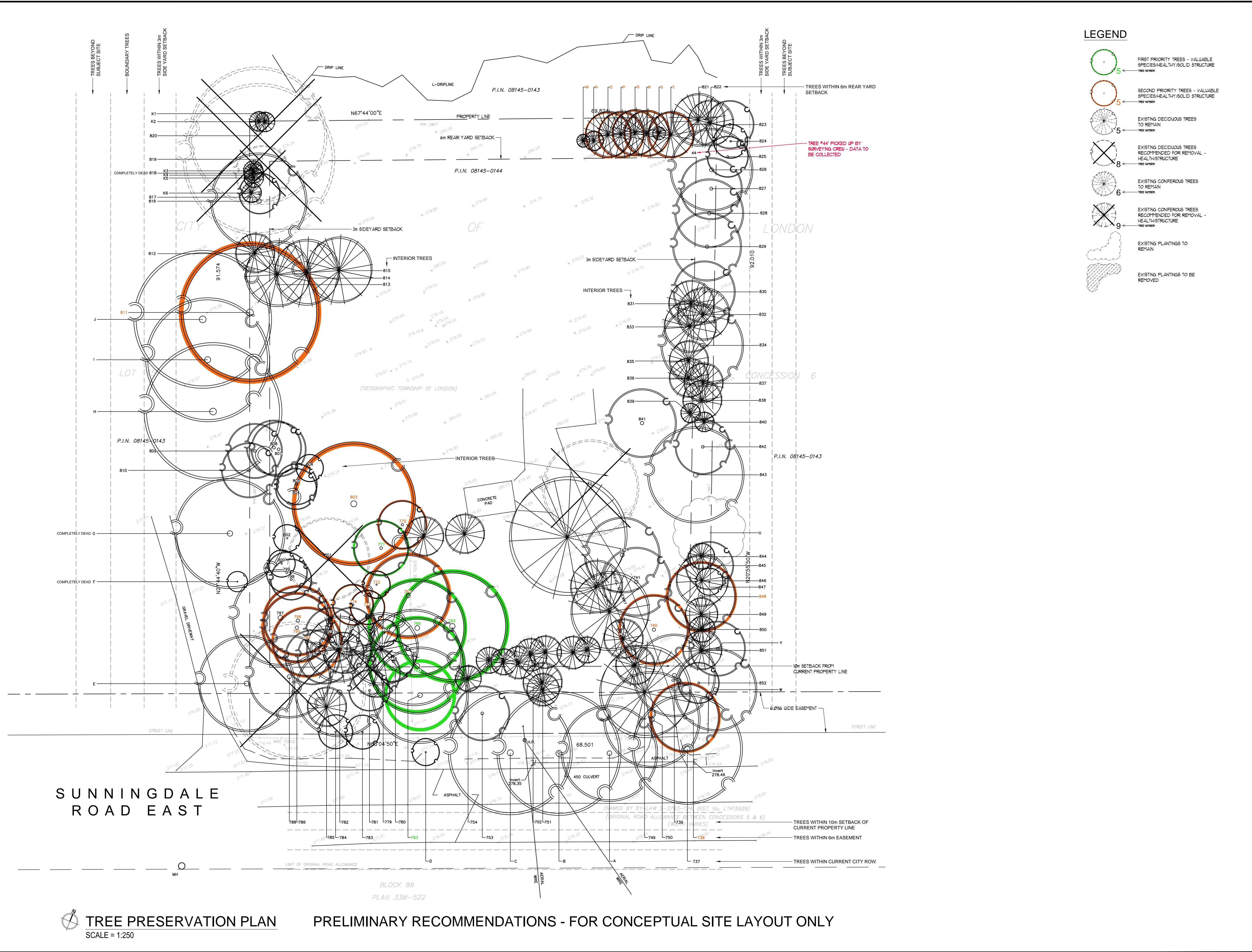
GENERAL INFORMATION		SIZE			BIOLOGICAL HEALTH			PRELIMINARY RECOMMENDATIONS BASED ON TREE SPECIES VALUE AND VIGOUR	
TAG#	TREE SPECIES	DBH	CANOPY RADIUS	STRUCTURE MS=multistem	CROWN CONDITION	DEFECT CODE	COMMENTS	PROPOSED ACTION	RATIONALE
804	<i>Prunus spp.</i>	18	3		5		supressed, canopy heavy to SW, dead lower branches		
805	<i>Prunus spp.</i>	18	3		5		supressed, canopy heavy to W, dead lower branches		
806	<i>Prunus spp.</i>	16	2		5		supressed, canopy heavy to N, dead lower branches		
807	<i>Prunus spp.</i>	40	4		4		burly growth at 20' from grade, dead lower branches, butressing		
808	<i>Prunus spp.</i>	33	4		4		large buttress root on N side, dead lower branches, supressed		
809	<i>Prunus spp.</i>	20	4		4	L	Lean to SE, lower canopy dieback		
810	<i>Prunus spp.</i>	22	4		5	L	Boundary tree between subject site and Lot 15, Lean to SW, lower canopy dieback		
811	<i>Acer saccharum</i>	77	10		5	SI	Boundary tree between subject site and Lot 15, weeping wound, minor interior dieback, low union, clothesline hardware attached to trunk	Second Priority Preservation	Valuable species, mature specimen, good health and condition
812	<i>Thuja occidentalis</i>	24	3		5	L	supressed, lean N, previous codominant stem removed at 1' from grade		
813	<i>Picea abies</i>	53	5		5		dead interior canopy, supressed, drooping habit, exposed/damaged roots, limbed up to approx.15'		
814	<i>Picea abies</i>	48	5		5		dead interior canopy, supressed, drooping habit, exposed/damaged roots, limbed up to approx.15', Adelges abietis (pineapple spruce gall), soil/debris piled against base		
815	<i>Picea abies</i>	51	5		5		dead interior canopy, supressed, drooping habit, exposed/damaged roots, limbed up to approx.15', Adelges abietis (pineapple spruce gall), soil/debris piled against base		
816	<i>Ulmus pumila</i>	70	7		3		on slope, codominant stems, dead wood		
817	<i>Ulmus pumila</i>	34	3		2		on slope, supressed, dieback		
818	<i>Ulmus pumila</i>	45	4		1		fully dead		Dead
819	<i>Ulmus pumila</i>	55, 35	11	ms2	4	L, SI, C7, C8	on slope, significant lean NE, significant cavity at base, codominant stem, major dead limbs, epicormic growth, one major limb to the W, virginia creeper on trunk		Health and condition - may pose a hazard
820	<i>Ulmus pumila</i>	65	10		3	SI, C7, L	Hazard, major dead limbs, major vertical scar at base, supressed, lean, codominant stems		Health and condition - may pose a hazard
821	<i>Thuja occidentalis</i>	18, 21, 18, 11	4	ms4	3		hedgerow, dead interior		
822	<i>Thuja occidentalis</i>	12, 28, 15,	3.5	ms4	4		hedgerow, dead interior, included bark		
823	<i>Ulmus pumila</i>	15	3.5		4	L	Property of Lot 15 dead lower branches, supressed, lean N		
824	<i>Ulmus pumila</i>	21	2.5		4	C8	Property of Lot 15 dead lower branches, supressed, girdling roots, epicormic growth		
825	<i>Ulmus pumila</i>	28, 19	3	ms2	4		Property of Lot 15 uneven crown - heavy to W, dieback of lower branches		
826	<i>Acer platanoides</i>	30	6		5		low scaffold branches, exposed roots, minor dieback		
827	<i>Acer saccharinum</i>	18, 13	4.5	ms2	5	SI	butressing at union, cavity halfway up smaller stem		

348 SUNNINGDALE ROAD, LONDON ONTARIO

GENERAL INFORMATION		SIZE			BIOLOGICAL HEALTH			PRELIMINARY RECOMMENDATIONS BASED ON TREE SPECIES VALUE AND VIGOUR	
TAG#	TREE SPECIES	DBH	CANOPY RADIUS	STRUCTURE MS=multistem	CROWN CONDITION	DEFECT CODE	COMMENTS	PROPOSED ACTION	RATIONALE
828	<i>Acer platanoides</i>	28	5		5		low branching, minor interior dieback		
829	<i>Acer platanoides</i>	46	5		5		multiple branch union cluster at 4' from grade, fused branches at union, minor interior dieback		
830	<i>Acer platanoides</i>	31	4.5		3		significant interior dieback, thin crown, low branches, low vigor		
831	<i>Picea abies</i>	22	3.5		3		supressed, thin crown, branched to grade		
832	<i>Acer saccharum</i>	18	4		2		highly supressed, low vigor		
833	<i>Picea abies</i>	16	4		4		supressed, thin crown, branched to grade		
834	<i>Acer platanoides</i>	38	6		4		included bark, exposed roots, low union, double codominant stems, low branched		
835	<i>Picea abies</i>	12	3		5		lower dead branches, minor Adelges abietis (pineapple spruce gall)		
836	<i>Picea abies</i>	22	3		5		lower dead branches		
837	<i>Pinus nigra</i>	25	3		3	L	lean NE, natural limb drop - remianint stubs up to approx. 10', codominant stems		
838	<i>Pinus nigra</i>	25	3		3		browning foliage, dead lower limbs, codominant stems, low union, included bark		
839	<i>Picea abies</i>	12	1.5		5		supressed, branched to grade, minor Adelges abietis (pineapple spruce gall)		
840	<i>Picea abies</i>	15	1.5		2		only upper 30' of canopy is living		
841	<i>Malus spp.</i>	62	5		4	SI	wood pecker damage, twisting trunk, bark splitting, thin crown, major dead limbs, cavity		
842	<i>Acer saccharum</i>	18	4		5		supressed, uneven crown - heavy to NE, low union, low branched		
843	<i>Acer saccharum nigru</i>	50	7		5	C1, C2	low scaffold branches, cupped/dicoloured leaves, woodpecker damage, exposed/girdling roots, buttressing		
844	<i>Pinus nigra</i>	10	2		4		twisted/crooked trunk, supressed, low branched, browning needles		
845	<i>Prunus spp.</i>	20	3.5		5		exposed roots, low branched, supressed		
846	<i>Pinus sylvestris</i>	25	4		4		dead lower branches, thin canopy		
847	<i>Prunus spp.</i>	11	2		5	L	lean NE, supressed		
848	<i>Acer x freemanii</i>	16, 11	5	ms2	5		uneven crown - heavy to W, root flare butressing	Second Priority Preservation	Valuable species, good health and condition
849	<i>Thuja occidentalis</i>	30, 12	2.5	ms2	5		hedgerow, dead lower branches		
850	<i>Thuja occidentalis</i>	13, 10	2	ms2	5		hedgerow, dead lower branches		
851	<i>Thuja occidentalis</i>	32, 15	3	ms2	5		hedgerow, dead lower branches		
852	<i>Prunus spp.</i>	9	3		5	L	crook in trunk, supressed, lean E, minor dieback		
Trees not tagged during tree inventory - beyond subject site or inaccessible									
A	<i>Acer saccharum</i>	70	7		5	SI	City ROW major root damage along road side, epicormic growth, large burl, large exposed/girdling root, on slope, pruned		
B	<i>Acer saccharum</i>	65	8		5	SI	City ROW severed roots on street side, pruned, major dead wood, adjacent to hydro line		

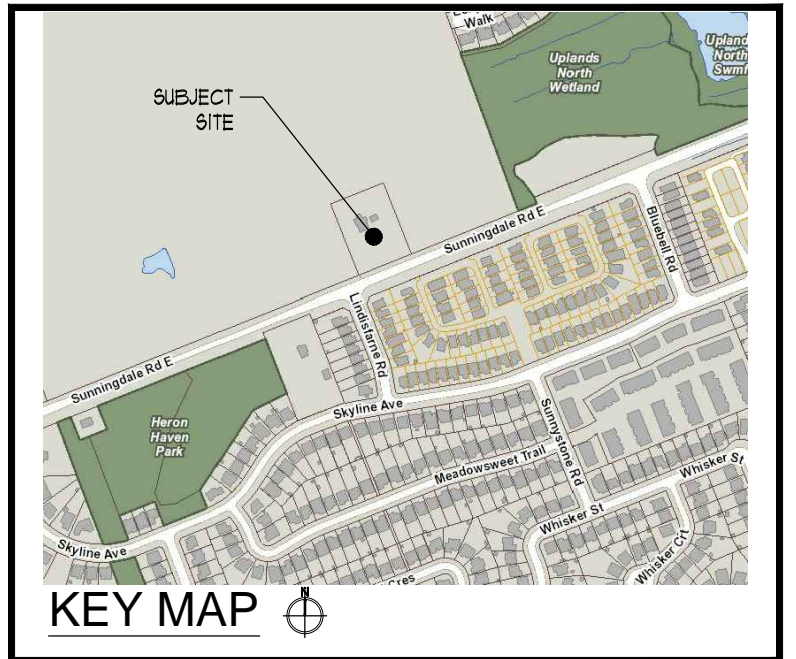
348 SUNNINGDALE ROAD, LONDON ONTARIO

GENERAL INFORMATION		SIZE			BIOLOGICAL HEALTH			PRELIMINARY RECOMMENDATIONS BASED ON TREE SPECIES VALUE AND VIGOUR	
TAG#	TREE SPECIES	DBH	CANOPY RADIUS	STRUCTURE MS=multistem	CROWN CONDITION	DEFECT CODE	COMMENTS	PROPOSED ACTION	RATIONALE
C	<i>Acer saccharum</i>	65	8		5	SI, L	City ROW slight lean N, lilac shrub growing from roots, girdling roots, large dead branches, minor dieback		
D	<i>Crataegus spp.</i>	12	2		4	L	City ROW insect damage to leaves, suppressed, uneven crown, scrubby habit, slight lean S		
E	<i>Acer saccharum</i>	85	7		3	SI	cavities in branches, weeping wound, crown dieback, major dead limbs, fused leaders, clustered branching, girdling roots		
F	<i>Tilia americana</i>	75	na		1		Property of Lot 15 completely dead		
G	<i>Acer saccharum</i>	85	8		1		Property of Lot 15 completely dead		
H	<i>Acer saccharum</i>	86	10		5	SI	Property of Lot 15 low crotch, cavity at base, minor dead branching, cavity in upper crown		
I	<i>Acer saccharum</i>	80	9		5	SI	Property of Lot 15 burls on roots, low crotch, ants present, buttressing, near existing pile of debris		
J	<i>Acer saccharum</i>	80	10		5		Property of Lot 15 girdling roots, low scaffold branches, dieback to main branches		
K	<i>Thuja occidentalis group</i>	+15	+2		4		Subject site property good condition, low area		
L	Vegetation unit - <i>Ulmus pumila</i>	+15			4		Property of Lot 15 stand of trees along entire north property line - beyond subject site boundary		
M	<i>Picea pungens</i>	7	1		5		Subject site property hedgerow, branched to ground	Second Priority Preservation	healthy hedgerow
N	<i>Picea pungens var. glauca</i>	8	1.5		5		Subject site property hedgerow, branched to ground	Second Priority Preservation	healthy hedgerow
O	<i>Picea abies</i>	25	4.5		5		Subject site property hedgerow, low branched	Second Priority Preservation	healthy hedgerow
P	<i>Picea abies</i>	21	4.5		5		Subject site property hedgerow, branched to ground	Second Priority Preservation	healthy hedgerow
Q	<i>Picea abies</i>	21	4.5		5		Subject site property hedgerow, branched to ground	Second Priority Preservation	healthy hedgerow
R	<i>Picea abies</i>	32	4.5		5		Subject site property hedgerow, branched to ground	Second Priority Preservation	healthy hedgerow
S	<i>Picea abies</i>	12	1		5		Subject site property hedgerow, branched to ground, suppressed	Second Priority Preservation	healthy hedgerow
T	<i>Picea abies</i>	25	4.5		5		Subject site property hedgerow, branched to ground	Second Priority Preservation	healthy hedgerow
U	<i>Lonicera spp.</i>	na	4		4		Subject site property large shrub		
V	<i>Prunus spp.</i>	23, 20, 15	4	ms3	4		Property of Lot 15 large cavity in 20cmDBH stem, gall, open crown, dieback		
W	<i>Prunus spp.</i>	52	6		5	L	Property of Lot 15 lower canopy dieback, suppressed, lean E		



LEGEND

- FIRST PRIORITY TREES - VALUABLE SPECIES-HEALTHY/SOLID STRUCTURE
- SECOND PRIORITY TREES - VALUABLE SPECIES-HEALTHY/SOLID STRUCTURE
- EXISTING DECIDUOUS TREES TO REMAIN
- EXISTING DECIDUOUS TREES RECOMMENDED FOR REMOVAL - HEALTHY STRUCTURE
- EXISTING CONIFEROUS TREES TO REMAIN
- EXISTING CONIFEROUS TREES RECOMMENDED FOR REMOVAL - HEALTHY STRUCTURE
- EXISTING PLANTINGS TO REMAIN
- EXISTING PLANTINGS TO BE REMOVED



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THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION OR TENDER PURPOSES UNLESS SIGNED AND DATED BY RONALD H. KOUDYS, O.A.L.A. C.S.L.A. LANDSCAPE ARCHITECT, LONDON, ONTARIO (519) 667-3322.

Ronald H. Koudys, O.A.L.A. C.S.L.A. DATE

DATE	DESCRIPTION	No.
2017.07.11	ISSUED FOR TREE COORDINATION	1

PLOTTING INFORMATION:
 PLOTTED DATE = JULY 11 2017
 PLOTTED SCALE = 1:1

PROJECT TITLE:
348 SUNNINGDALE ROAD EAST
 LONDON, ONTARIO

DRAWING TITLE:
TREE PRESERVATION PLAN

DATE: JULY 2017 SCALE: AS NOTED DRAWING No. T-1

DRAWN: RCLA Inc. CHECKED BY: RAK.

PROJECT No. 17-176Lb

SUNNINGDALE ROAD EAST

TREE PRESERVATION PLAN
 SCALE = 1:250

PRELIMINARY RECOMMENDATIONS - FOR CONCEPTUAL SITE LAYOUT ONLY

Appendix E
Candidate Significant Wildlife Habitat

Seasonal Concentration of Animals

Wildlife Habitat	ELC Codes Triggers	Additional Habitat Criteria	Candidate SWH
Waterfowl Stopover and Staging Areas (Terrestrial)	none present	- no fields with sheet water during spring present	No
Waterfowl Stopover and Staging Areas (Aquatic)	none present	- habitat - ponds, marshes, lakes, bays - not available	No
Shorebird Migratory Stopover Area	none present	- habitat - shorelines of lakes, rivers and wetlands - not available	No
Raptor Wintering Area	combination of forest and upland needed	- combination of forest and meadow is not large enough (need to be >20ha); nearby field is not idle/fallow, it is active agriculture, subject lands are small (0.6ha) with landscape trees	No
Bat Hibernacula	none present	- none present	No
Bat Maternity Colonies		- standing snags on the subject lands - not enough (>10/ha, >25cm DBH) to be SWH, but possible habitat for SAR	No
Turtle Wintering Areas	none present	- no water on the subject lands	No
Reptile Hibernaculum	all other than really wet	- no rock piles, stone fences, crumbling foundations, or rock crevices, no active animal burrows	No
Colonially-Nesting Bird Breeding Habitat (Bank / Cliff)	none present	- no steep slopes of exposed banks or cliff faces present	No
Colonially-Nesting Bird Breeding Habitat (Trees/Shrubs)	none present	- nests in live or dead standing trees	No
Colonially-Nesting Bird Breeding Habitat (Ground)	none present	- no rocky islands or peninsulas present or watercourses in open fields with scattered trees present	No
Migratory Butterfly Stopover Areas	combination of field and forest needed	- less than the required 10ha in size; not located with 5km of Lake Erie	No
Land Bird Migratory Stopover Areas	none present	- not within 5km of Lake shore	No
Deer Winter Congregation Areas	none present	- deer movement during winter in Ecoregion 7E is not constrained by snow depth	No

Rare Vegetation Communities

Wildlife Habitat	ELC Codes Triggers	Additional Habitat Criteria	Candidate SWH
Cliffs and Talus Slopes	not present		No
Sand Barren	not present		No
Alvar	not present		No
Old Growth Forest	not present		No
Savannah	not present		No
Tallgrass Prairie	not present		No
Other Rare Vegetation	not present		No

Specialized Habitats of Wildlife considered SWH

Wildlife Habitat	ELC Codes Triggers	Additional Habitat Criteria	Candidate SWH
Waterfowl Nesting Area	none present	- suitable upland communities are not present on site within 120m of adjacent wetlands	No
Bald Eagle and Osprey Nesting, Foraging, Perching	none present	- no lakes, ponds, rivers, wetlands along forest shorelines, islands or structures over water	No
Woodland Raptor Nesting Habitat	none present	-no forest communities >30ha, or with >4ha interior habitat	No
Turtle Nesting Areas	none present	- no exposed mineral soil adjacent to wetlands	No
Springs and Seeps	none present	- no headwater forested areas present	No
Amphibian Breeding Habitat (Woodland)	none present	- no forest, wetland, pond or woodland pool on site, wetland is within 120m on adjacent lands	No
Amphibian Breeding Habitat (Wetlands)	none present	- wetlands >120m from woodland ecosites; wetlands >500m ²	No
Woodland Area-Sensitive Bird Breeding Habitat	none present	-habitats where interior forest breeding birds are breeding; large mature (>60yrs old) forest stands or woodlots >30ha	No

Habitats of Species of Conservation Concern considered SWH

Wildlife Habitat	ELC Codes Triggers	Additional Habitat Criteria	Candidate SWH
Marsh Breeding Bird Habitat	none present	- all wetland habitat is to be considered as long as there is shallow water with emergent aquatic vegetation	No
Open Country Bird Breeding Habitat	none present	- natural and cultural fields >30ha are not present	No
Shrub/Early Successional Bird Breeding Habitat	CUW1	- no large fields succeeding to shrub and thicket habitats > 10ha in size	No
Terrestrial Crayfish	none present	- no wet meadow and edges of shallow marshes	no
Special Concern and Rare Wildlife Species (NHIC and MNR pre-consultation)		- Snapping Turtle (SC); Branching Burreed (SH) habitat for Snapping Turtle not found on the subject lands habitat for Branching Burreed not found on the subject lands October 18, 2017 site investigation	no

Wildlife Habitat	ELC Codes Triggers*	Additional Habitat Criteria	Candidate SWH
Amphibian Movement Corridors	based on identifying SWH	Movement corridors are determined when there is confirmed amphibian breeding habitat - wetland.	No

Wildlife Habitat	Ecosites	Habitat Criteria and Information	Candidate SWH
Bat Migratory Stopover Area	no triggers	- site is not near Long Point	No

Appendix F
NHIC List

Ministry of Natural Resources and Forestry

Make A Map: Natural Heritage Areas

Looking for a Park, Reserve or Wetland? Enter the name

About Bookmarks Map Layers Find Information Markup & Printing Measure

Search By Location Find ... Pan Zoom In Zoom Out Initial View Previous Extent Next Extent Help

About

Make a Map: Natural Heritage Areas

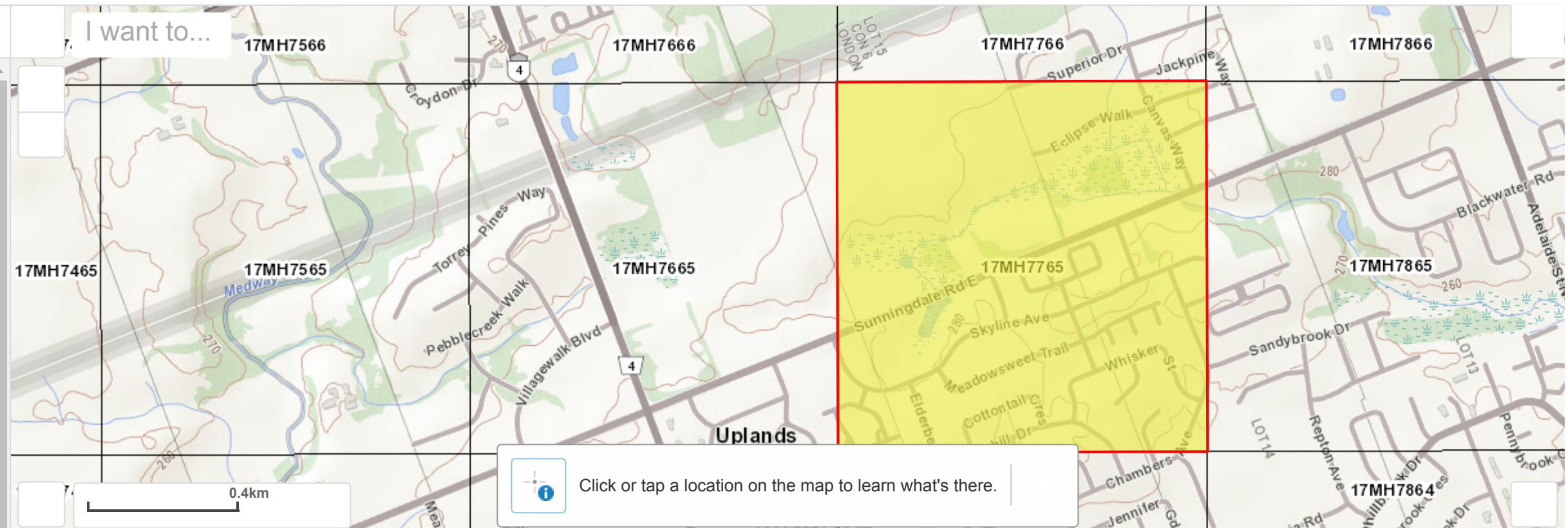
Please note: The NHIC functionality can be found in the "Find Information" tab, "Find" button. All attributes for a location can be retrieved using this tool. Once you have retrieved NHIC data, click on a row to view species, natural areas and plant communities.

The Make a Map: Natural Heritage Areas mapping application displays some of Ontario's natural heritage information, such as wetlands, woodlands, provincial parks, and Natural Heritage Information Centre data. The application can show planning areas and designations for provincial plans such as the Niagara Escarpment Plan. It also displays topographic base information such as roads, rivers and municipal boundaries. You can zoom in and out, turn information on and off, identify features, and print a map of the displayed information along with your own added text. For more information about this application and the data used to support it, please view the following link

<http://www.ontario.ca/environment-and-energy/make-natural-heritage-area-map>

If your question has not been covered by the information in this link, please send us an email at naturalheritage@ontario.ca

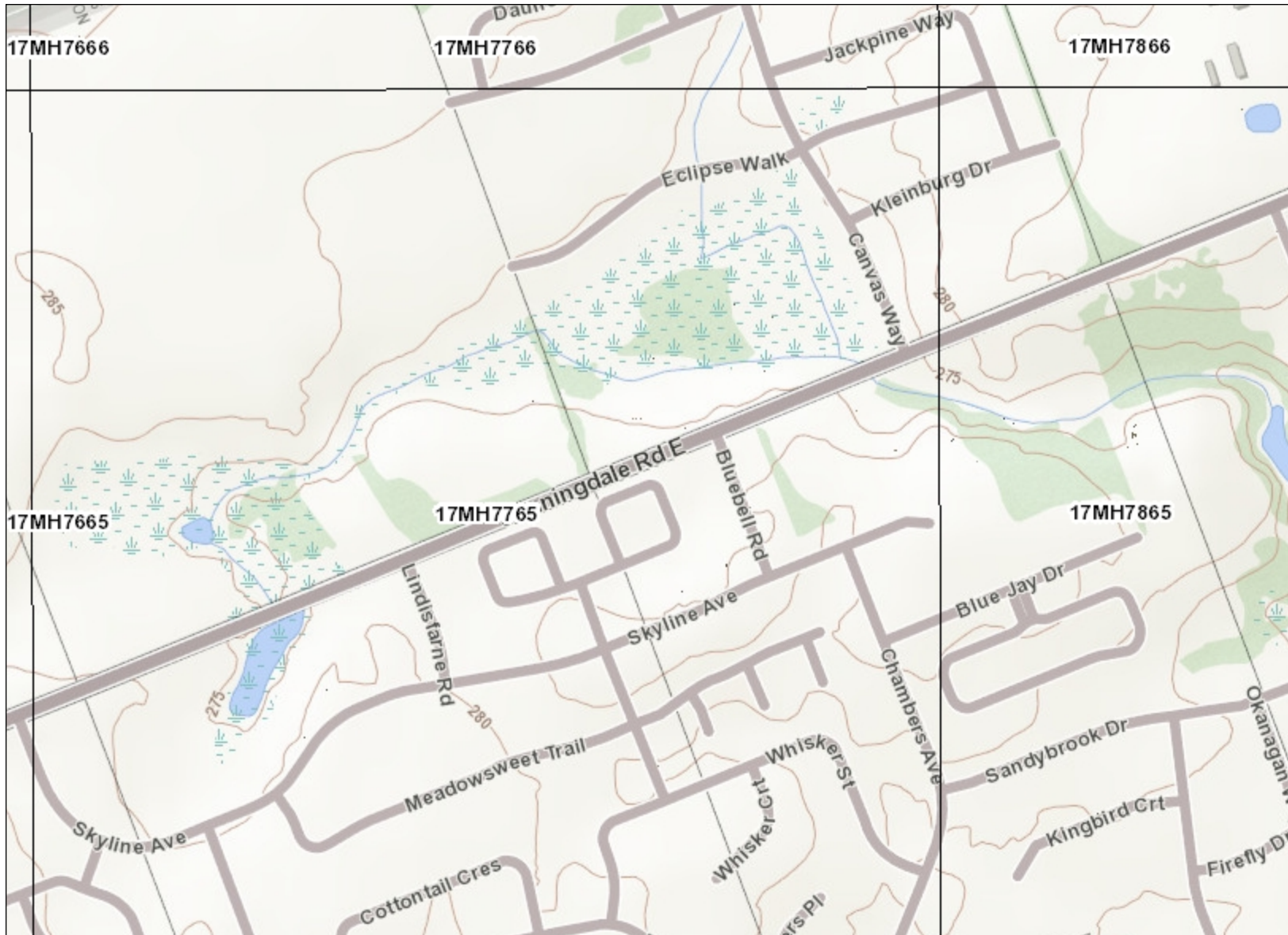
The information provided in the Make a Map: Natural Heritage Areas application is illustrative only. Users should not rely on its



NHIC Data -- Grid ID = 870309

Element Type	Common Name	Scientific Name	SRank	SARO Status	COSEWIC Status	Last Obs Date	EO ID	Details URL
SPECIES	Branching Burreed	Sparganium androcladum	SH			1882-09-23	3555	http://nhic.mnr.gov.on.ca/reports/public_de
SPECIES	Snapping Turtle	Chelydra serpentina	S3	SC	SC	1997-06-29	96013	http://nhic.mnr.gov.on.ca/reports/public_de





Legend

- Assessment Parcel
- Woodland
- Conservation Reserve
- Provincial Park
- Natural Heritage System
- Ecoregion
- Wetland**
 - Provincially Significant Wetland Evaluated
 - Non - Provincially Significant Wetland Evaluated
 - Unevaluated Wetland
- Area of Natural Heritage & Scientific Interest (ANSI)**
 - Provincially Significant Life Science ANSI
 - Provincially Significant Earth Science ANSI
- Greenbelt Plan**
 - Boundary
 - River Valley Connections
- Land Use Designations**
 - Protected Countryside
 - Towns and Villages
 - Hamlets
 - Urban River Valley
 - Specialty Crop Area
- Niagara Escarpment Plan (NEP)**
 - Boundary
 - Parks and Open Space System
- Land Use Designations**
 - Escarpment Natural Area
 - Escarpment Protection Area
 - Escarpment Rural Area
 - Mineral Resource Extraction Area
 - Escarpment Recreation Area
 - Urban Area
 - Minor Urban Centre
- Oak Ridges Moraine Conservation Plan (ORM)**
 - Boundary
 - Natural Core Area
 - Natural Linkage Area
 - Countryside Area
 - Rural Settlement
 - Paigrave Estates Residential Community
 - Settlement Area

0.5 0 0.23 0.5 Kilometers

Scale: 1 : 9,027



This map should not be relied on as a precise indicator of routes or locations, nor as a guide to navigation. The Ontario Ministry of Natural Resources and Forestry(OMNRF) shall not be liable in any way for the use of, or reliance upon, this map or any information on this map.

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Appendix G
Floral Inventory

Survey Information (Please fill in all information)						
Surveyor(s) Contact Information		Date(s) of Survey(s):				
Observer Name:	William Huys		Survey 1	Survey 2	Survey 3	Survey 4
Title:		Date (YYYY-MM-DD):	2017/10/18	2018/05/22	2018/06/05	2018/06/20
Company:	BiLogic					
Street Address 1:	201-110 Riverside Drive					
Street Address 2:						
City/Town:	London					
Province:	Ontario					
Postal Code:	N6H 4S5					
Phone:	519-434-1516					
Fax:	51-434-0575					
E-mail:	whuys@biologic.ca					
Other Observers:	Erin Boynton					
Natural Feature Information						
Natural Feature ID (Name/Location):	Cultural Woodland					
Upper Tier Municipality:	City of London					
Lower Tier Municipality:						
Property Ownership/Owner:	Westchester Homes					
Detailed Directions to the Site:						
ARN:						
PIN:						
Lat/Long:		<i>decimal degrees separated by a comma (eg. 42.0415, -82.5137)</i>				
UTM x:						
UTM y:						

Floral Inventory							
Scientific Name	Common Name	CW	OSEW	SARO	MD	Type	Invasive
<i>Acer platanoides</i>	Norway Maple	5.0			IU	TR	Y
<i>Acer rubrum</i>	Red Maple	0.0			C	TR	
<i>Acer saccharinum</i>	Silver Maple	-3.0			C	TR	
<i>Acer saccharum</i>	Sugar Maple	3.0			C	TR	
<i>Achillea millefolium</i>	Common Yarrow	3.0				FO	
<i>Agrostis gigantea</i>	Redtop	-3.0			IC	GR	Y
<i>Alliaria petiolata</i>	Garlic Mustard	0.0			IC	FO	Y
<i>Arctium minus</i>	Common Burdock	3.0			IC	FO	
<i>Asclepias syriaca</i>	Common Milkweed	5.0			C	FO	
<i>Barbarea vulgaris</i>	Bitter Wintercress	0.0			IC	FO	
<i>Carex blanda</i>	Woodland Sedge	0.0			C	SE	
<i>Carex sparganioides</i>	Burreed Sedge	3.0			U	SE	
<i>Cichorium intybus</i>	Chicory	3.0			IC	FO	
<i>Cirsium arvense</i>	Canada Thistle	3.0			IC	FO	Y
<i>Clinopodium vulgare</i>	Field Basil	5.0			X	FO	
<i>Convallaria majalis</i>	European Lily-of-the-valley	5.0			IR	FO	Y
<i>Cornus racemosa</i>	Gray Dogwood	0.0			X	SH	
<i>Cornus sericea</i>	Red-osier Dogwood	-3.0			C	SH	
<i>Dactylis glomerata</i>	Orchard Grass	3.0			IC	GR	
<i>Daucus carota</i>	Wild Carrot	5.0			IC	FO	
<i>Dianthus armeria</i>	Deptford Pink	5.0			IX	FO	
<i>Echinochloa crus-galli</i>	Large Barnyard Grass	-3.0			IC	GR	
<i>Elymus repens</i>	Creeping Wildrye	3.0			IC	GR	
<i>Erigeron annuus</i>	Annual Fleabane	3.0			C	FO	
<i>Erigeron canadensis</i>	Canada Horseweed	3.0			C	FO	
<i>Frangula alnus</i>	Glossy Buckthorn	0.0			IU	SH	Y
<i>Galium odoratum</i>	Sweet Bedstraw	5.0			IR	FO	
<i>Geranium robertianum</i>	Herb-Robert	3.0			C	FO	
<i>Glechoma hederacea</i>	Ground Ivy	3.0			IX	FO	
<i>Hemerocallis fulva</i>	Orange Daylily	5.0			IX	FO	Y
<i>Hypericum punctatum</i>	Spotted St. John's-wort	0.0			X	FO	
<i>Iris x germanica</i>	(<i>Iris pallida</i> X <i>Iris variegata</i>)	5.0			hyb	FO	
<i>Juglans nigra</i>	Black Walnut	3.0			X	TR	
<i>Juncus tenuis</i>	Path Rush	0.0			X	RU	
<i>Lapsana communis</i>	Common Nipplewort	3.0			IR	FO	
<i>Leucanthemum vulgare</i>	Oxeye Daisy	5.0			IC	FO	
<i>Liriodendron tulipifera</i>	Tulip Tree	3.0			U	TR	
<i>Lolium arundinaceum</i>	Tall Fescue	3.0			IC	GR	
<i>Lonicera tatarica</i>	Tartarian Honeysuckle	3.0			IX	SH	Y
<i>Lotus corniculatus</i>	Garden Bird's-foot Trefoil	3.0			IX	FO	Y
<i>Mollugo verticillata</i>	Green Carpet-weed	0.0			IR	FO	
<i>Muhlenbergia mexicana</i>	Mexican Muhly	-3.0			C	GR	
<i>Nepeta cataria</i>	Catnip	3.0			IC	FO	
<i>Oxalis stricta</i>	Upright Yellow Wood-sorrel	3.0			X	FO	
<i>Penstemon digitalis</i>	Foxglove Beardtongue	0.0			X	FO	



GENERAL SITE INFORMATION FIELD SHEET

Project: Auburn - 348 Sunningdale
 Date: Oct. 18, 2017 Project Manager: _____
 Collector(s): WJH Visit #: _____
 Time started: 11:30 Time finished: 12:13 Combined collectors' hours: 0.75
 NHIC List MNR EO's none not provided to collector

WEATHER CONDITIONS					WIND SCALE			
Temp:	Wind:	3	Cloud Cover (%):	Precipitation	0	Calm		
18	Direction:	SW	0	Today: no Yesterday: no	1	Smoke Drifts		
DATA FOCUS					2	Wind Felt on Face		
<input type="checkbox"/>	Birds 1_2_Mig_	<input type="checkbox"/>	ELC's	<input type="checkbox"/>	3	Leaves in constant motion		
<input type="checkbox"/>	Mammals	<input checked="" type="checkbox"/>	Floral V__S__Ax	<input type="checkbox"/>	4	Wind raises dust and paper		
<input type="checkbox"/>	Amphibians 1_2_3_	<input type="checkbox"/>	Wetland	<input type="checkbox"/>	5	Small trees sway		
<input type="checkbox"/>	Reptiles	<input type="checkbox"/>	Butternut (BHA)	<input type="checkbox"/>	6	Large branches sway		
<input type="checkbox"/>	Invertebrates	<input type="checkbox"/>	other SAR	<input type="checkbox"/>	7	Lots of resistance when walking into		
					8	Limbs breaking off trees		
FEATURES (with GPS co-ordinates where applicable)					Mapped		Follow-up Req'd	
Man-made Structures: <input type="checkbox"/> None observed					UTM	Yes	No	Who
Yes No								
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Barns/Footings/Wells/other(list)						
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Rock Piles						
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Garbage						
Natural Vegetation: <input type="checkbox"/> None observed								
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Fallen Logs outside woods (#s)						
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Brush Piles						
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Snags (raptor perch)						
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Tree Cavities (nesting) <i>potential bat</i>						
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Sentinel Trees						
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Butternut Identified						
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Mast Trees (6E)	<input type="checkbox"/>	Berry Shrubs (6E)				
Wildlife Features: <input type="checkbox"/> None observed								
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Waterfowl nesting (large #'s, # of species)						
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Exposed Banks (nesting swallows)						
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Stick Nests						
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Animal Burrows (>10cm)						
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Heronry						
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Crayfish mounds						
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Sand/gravel on site						
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Marsh/open country/shrub						
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Winter Deer yards						
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Corridor from pond to woods (ampibian movement)						
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Bat corridor (shorelines, escarpments)						
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Bat hibernacula (caves, mines, crevices, etc.)						
Aquatic Features:								
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Perm. pond in woodland	<input type="checkbox"/>	emergents/submergents/logs	<input type="checkbox"/>	temp.		
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Perm. pond in open	<input type="checkbox"/>	emergents/submergents/logs	<input type="checkbox"/>	temp.		
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Water in woodland	<input type="checkbox"/>	pools	<input type="checkbox"/>	flowing	<input type="checkbox"/>	dry
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Waterways	flowing	dry	pools			
<input type="checkbox"/>	<input type="checkbox"/>	natural stream	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
<input type="checkbox"/>	<input type="checkbox"/>	swale	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	None observed		
<input type="checkbox"/>	<input type="checkbox"/>	open drain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
<input type="checkbox"/>	<input type="checkbox"/>	Seeps/Springs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Incidental Observations/Notes:								
<i>Stage 1 data</i>								



GENERAL SITE INFORMATION FIELD SHEET

Project: Westchester - Sunningdale
 Date: May 23, 2018 Project Manager: LM
 Collector(s): WJH Visit #: 2
 Time started: 3:30 Time finished: 4:15 Combined collectors' hours: _____
 NHIC List MNR EO's none not provided to collector

WEATHER CONDITIONS				WIND SCALE					
Temp:	Wind:	2	Cloud Cover (%)	Precipitation	0	Calm			
18	Direction:	SE	95%	Today: no	1	Smoke Drifts			
				Yesterday: no	2	Wind Felt on Face			
DATA FOCUS									
<input checked="" type="checkbox"/>	Birds 1_2_Mig	<input type="checkbox"/>	ELC's	<input type="checkbox"/>	Dripline/Tree Survey	3	Leaves in constant motion		
<input type="checkbox"/>	Mammals	<input checked="" type="checkbox"/>	Floral Vx_S__A_	<input type="checkbox"/>	Aquatic - Physical	4	Wind raises dust and paper		
<input type="checkbox"/>	Amphibians 1_2_3_	<input type="checkbox"/>	Wetland	<input type="checkbox"/>	Aquatic - Biological	5	Small trees sway		
<input type="checkbox"/>	Reptiles	<input type="checkbox"/>	Butternut (BHA)	<input type="checkbox"/>	Faunal Habitat	6	Large branches sway		
<input type="checkbox"/>	Invertebrates	<input type="checkbox"/>	other SAR	<input type="checkbox"/>	Other - see notes	7	Lots of resistance when walking into		
						8	Limbs breaking off trees		
FEATURES (with GPS co-ordinates where applicable)						Mapped	Follow-up Req'd		
Man-made Structures:						UTM	Yes	No	Who
<input type="checkbox"/> None observed									
Yes No									
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Barns/Footings/Wells/other(list)	<u>Well and footings removed</u>						
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Rock Piles							
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Garbage							
Natural Vegetation:									
<input type="checkbox"/> None observed									
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Fallen Logs outside woods (#'s)							
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Brush Piles							
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Snags (raptor perch)							
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Tree Cavities (nesting)							
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Sentinel Trees							
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Butternut Identified							
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Mast Trees (6E)	<input type="checkbox"/>	Berry Shrubs (6E)					
Wildlife Features:									
<input type="checkbox"/> None observed									
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Waterfowl nesting (large #'s, # of species)							
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Exposed Banks (nesting swallows)							
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Stick Nests							
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Animal Burrows (>10cm)							
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Heronry							
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Crayfish mounds							
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Sand/gravel on site							
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Marsh/open country/shrub							
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Winter Deer yards							
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Corridor from pond to woods (ampibian movement)							
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Bat corridor (shorelines, escarpments)							
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Bat hibernacula (caves, mines, crevices, etc.)							
Aquatic Features:									
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Perm. pond in woodland	<input type="checkbox"/>	emergents/submergents/logs	<input type="checkbox"/>	temp.			
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Perm. pond in open	<input type="checkbox"/>	emergents/submergents/logs	<input type="checkbox"/>	temp.			
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Water in woodland	<input type="checkbox"/>	pools	<input type="checkbox"/>	flowing	<input type="checkbox"/>	dry	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Waterways	<input type="checkbox"/>	flowing	<input type="checkbox"/>	dry	<input type="checkbox"/>	pools	
		natural stream	<input type="checkbox"/>		<input type="checkbox"/>				
		swale	<input type="checkbox"/>		<input type="checkbox"/>				<input type="checkbox"/> None observed
		open drain	<input type="checkbox"/>		<input type="checkbox"/>				
		Seeps/Springs	<input type="checkbox"/>		<input type="checkbox"/>				
Incidental Observations/Notes:									



GENERAL SITE INFORMATION FIELD SHEET

Project: Westchester Homes

Date: Jan 5 2018

Project Manager: LM

Collector(s): WJ, EB

Visit #: 3

Time started: 6:43 Time finished: 7:15 Combined collectors' hours: 0:5

NHIC List MNR EO's none not provided to collector

WEATHER CONDITIONS					WIND SCALE	
Temp.	Wind:	<u>1</u>	Cloud Cover (%)	Precipitation	0	Calm
<u>11</u>	Direction:	<u>—</u>	<u>10</u>	Today: <u>no</u>	1	Smoke Drifts
				Yesterday: <u>no</u>	2	Wind Felt on Face
DATA FOCUS					3	Leaves in constant motion
<input checked="" type="checkbox"/>	Birds 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> Mig <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	ELC's	<input type="checkbox"/>	4	Wind raises dust and paper
<input type="checkbox"/>	Mammals	<input checked="" type="checkbox"/>	Floral V_ <input checked="" type="checkbox"/> S_ <input type="checkbox"/> A_	<input type="checkbox"/>	5	Small trees sway
<input type="checkbox"/>	Amphibians 1_ 2_ 3_	<input type="checkbox"/>	Wetland	<input type="checkbox"/>	6	Large branches sway
<input type="checkbox"/>	Reptiles	<input type="checkbox"/>	Butternut (BHA)	<input type="checkbox"/>	7	Lots of resistance when walking into
<input type="checkbox"/>	Invertebrates	<input type="checkbox"/>	other SAR	<input type="checkbox"/>	8	Limbs breaking off trees
FEATURES (with GPS co-ordinates where applicable)					Mapped	Follow-up Req'd
Man-made Structures: <input type="checkbox"/> None observed					UTM	Yes No Who
<input type="checkbox"/>	Yes	No				
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Barns/Footings/Wells/other(list)				
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Rock Piles				
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Garbage				
Natural Vegetation: <input type="checkbox"/> None observed						
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Fallen Logs outside woods (#s)				
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Brush Piles				
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Snags (raptor perch)				
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Tree Cavities (nesting)				
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Sentinel Trees				
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Butternut Identified				
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Mast Trees (6E)	<input type="checkbox"/>	Berry Shrubs (6E)		
Wildlife Features: <input type="checkbox"/> None observed						
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Waterfowl nesting (large #s, # of species)				
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Exposed Banks (nesting swallows)				
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Stick Nests				
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Animal Burrows (>10cm)				
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Heronry				
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Crayfish mounds				
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Sand/gravel on site				
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Marsh/open country/shrub				
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Winter Deer yards				
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Corridor from pond to woods (ampibian movement)				
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Bat corridor (shorelines, escarpments)				
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Bat hibernacula (caves, mines, crevices, etc.)				
Aquatic Features:						
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Perm. pond in woodland	<input type="checkbox"/>	emergents/submergents/logs	<input type="checkbox"/>	temp.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Perm. pond in open	<input type="checkbox"/>	emergents/submergents/logs	<input type="checkbox"/>	temp.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Water in woodland	<input type="checkbox"/>	pools	<input type="checkbox"/>	flowing
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Waterways	flowing	dry	pools	
<input type="checkbox"/>	<input type="checkbox"/>	natural stream	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	swale	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	None observed
<input type="checkbox"/>	<input type="checkbox"/>	open drain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	Seeps/Springs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Incidental Observations/Notes:						



GENERAL SITE INFORMATION FIELD SHEET

Project: Westchester Homes
 Date: June 20, 2018 Project Manager: LM
 Collector(s): WH Visit #: 4, 5
 Time started: 7:30 Time finished: 8:30 Combined collectors' hours: 1
 NHIC List MNR EO's none not provided to collector

WEATHER CONDITIONS				WIND SCALE				
Temp:	Wind:		Cloud Cover (%)	Precipitation	0	Calm		
16	Direction:	E	100	Today: <u>very light</u> Yesterday: <u>mo</u>	1	Smoke Drifts		
					2	Wind Felt on Face		
					3	Leaves in constant motion		
DATA FOCUS					4	Wind raises dust and paper		
<input checked="" type="checkbox"/>	Birds 1_2_X Mig_	<input type="checkbox"/>	ELC's	<input type="checkbox"/>	5	Small trees sway		
<input type="checkbox"/>	Mammals	<input type="checkbox"/>	Floral V__S__A_	<input type="checkbox"/>	6	Large branches sway		
<input type="checkbox"/>	Amphibians 1_2_3_	<input type="checkbox"/>	Wetland	<input type="checkbox"/>	7	Lots of resistance when walking into		
<input type="checkbox"/>	Reptiles	<input type="checkbox"/>	Butternut (BHA)	<input type="checkbox"/>	8	Limbs breaking off trees		
<input type="checkbox"/>	Invertebrates	<input type="checkbox"/>	other SAR	<input type="checkbox"/>				
FEATURES (with GPS co-ordinates where applicable)					Mapped	Follow-up Req'd		
Man-made Structures: <input type="checkbox"/> None observed					UTM	Yes	No	Who
Yes No								
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Barns/Footings/Wells/other(list)						
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Rock Piles						
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Garbage						
Natural Vegetation: <input type="checkbox"/> None observed								
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Fallen Logs outside woods (#s)						
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Brush Piles						
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Snags (raptor perch)						
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Tree Cavities (nesting)						
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Sentinel Trees						
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Butternut Identified						
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Mast Trees (6E)	<input type="checkbox"/>	Berry Shrubs (6E)				
Wildlife Features: <input type="checkbox"/> None observed								
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Waterfowl nesting (large #s, # of species)						
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Exposed Banks (nesting swallows)						
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Stick Nests						
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Animal Burrows (>10cm)						
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Heronry						
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Crayfish mounds						
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Sand/gravel on site						
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Marsh/open country/shrub						
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Winter Deer yards						
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Corridor from pond to woods (amphibian movement)						
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Bat corridor (shorelines, escarpments)						
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Bat hibernacula (caves, mines, crevices, etc.)						
Aquatic Features:								
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Perm. pond in woodland	<input type="checkbox"/>	emergents/submergents/logs	<input type="checkbox"/>	temp.		
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Perm. pond in open	<input type="checkbox"/>	emergents/submergents/logs	<input type="checkbox"/>	temp.		
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Water in woodland	<input type="checkbox"/>	pools	<input type="checkbox"/>	flowing	<input type="checkbox"/>	dry
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Waterways	flowing	dry	pools			
<input type="checkbox"/>	<input type="checkbox"/>	natural stream	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
<input type="checkbox"/>	<input type="checkbox"/>	swale	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	None observed		
<input type="checkbox"/>	<input type="checkbox"/>	open drain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
<input type="checkbox"/>	<input type="checkbox"/>	Seeps/Springs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Incidental Observations/Notes:								



GENERAL SITE INFORMATION FIELD SHEET

Project: Westchester

Date: July 10, 2018

Project Manager: _____

Collector(s): wjt

Visit #: 5

Time started: 11:15 Time finished: 11:45 Combined collectors' hours: 0.5

NHIC List MNR EO's none not provided to collector

WEATHER CONDITIONS				WIND SCALE					
Temp.	Wind:	<u>2</u>	Cloud Cover (%)	Precipitation	0	Calm			
<u>27</u>	Direction:	<u>w</u>	<u>0</u>	Today: <u>no</u>	1	Smoke Drifts			
				Yesterday: <u>no</u>	2	Wind Felt on Face			
DATA FOCUS					3	Leaves in constant motion			
<input type="checkbox"/>	Birds 1__2__ Mig__	<input type="checkbox"/>	ELC's	<input type="checkbox"/>	4	Wind raises dust and paper			
<input type="checkbox"/>	Mammals	<input checked="" type="checkbox"/>	Floral V__S__X__A__	<input type="checkbox"/>	5	Small trees sway			
<input type="checkbox"/>	Amphibians 1__2__3__	<input type="checkbox"/>	Wetland	<input type="checkbox"/>	6	Large branches sway			
<input type="checkbox"/>	Reptiles	<input type="checkbox"/>	Butternut (BHA)	<input type="checkbox"/>	7	Lots of resistance when walking into			
<input type="checkbox"/>	Invertebrates	<input type="checkbox"/>	other SAR	<input type="checkbox"/>	8	Limbs breaking off trees			
FEATURES (with GPS co-ordinates where applicable)					Mapped	Follow-up Req'd			
Man-made Structures: _____					<input type="checkbox"/> None observed	UTM	Yes	No	Who
Yes No									
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Barns/Footings/Wells/other(list)							
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Rock Piles							
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Garbage							
Natural Vegetation: _____					<input type="checkbox"/> None observed				
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Fallen Logs outside woods (#s)							
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Brush Piles							
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Snags (raptor perch)							
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Tree Cavities (nesting)							
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Sentinel Trees							
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Butternut Identified							
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Mast Trees (6E) <input type="checkbox"/> Berry Shrubs (6E)							
Wildlife Features: _____					<input type="checkbox"/> None observed				
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Waterfowl nesting (large #'s, # of species)							
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Exposed Banks (nesting swallows)							
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Stick Nests							
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Animal Burrows (>10cm) <u>groundhog</u>							
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Heronry							
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Crayfish mounds							
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Sand/gravel on site							
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Marsh/open country/shrub							
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Winter Deer yards							
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Corridor from pond to woods (amphibian movement)							
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Bat corridor (shorelines, escarpments)							
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Bat hibernacula (caves, mines, crevices, etc.)							
Aquatic Features:									
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Perm. pond in woodland	<input type="checkbox"/> emergents/submergents/logs	<input type="checkbox"/> temp.					
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Perm. pond in open	<input type="checkbox"/> emergents/submergents/logs	<input type="checkbox"/> temp.					
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Water in woodland	<input type="checkbox"/> pools <input type="checkbox"/> flowing <input type="checkbox"/> dry						
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Waterways	flowing dry pools						
<input type="checkbox"/>	<input type="checkbox"/>	natural stream	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>						
<input type="checkbox"/>	<input type="checkbox"/>	swale	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> None observed					
<input type="checkbox"/>	<input type="checkbox"/>	open drain	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>						
<input type="checkbox"/>	<input type="checkbox"/>	Seeps/Springs	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>						
Incidental Observations/Notes:									

Appendix H
Breeding Bird List



AVIFAUNAL SURVEY INFORMATION SUMMARY SHEET

Project: 348 Sunningdale Collector(s): WH
 Visit 1: 5-Jun-18 Visit 2: 20-Jun-18
 Start: 6:45 End: 7:12 Start: 7:30 End: 8:30
 Weather: 11°C clear, cool, still Weather: 18°C overcast, light precipitation, cool, still

Species Code	Species Name	Evidence Code		No.		S Rank	ESA Status	PIF Status	Community	Notes	
		vis 1	vis 2	vis 1	vis 2						
DOWO	Downy Woodpecker	P		2		S5					108
GCFL	Great Crested Flycatcher	VO		1		S4					118
AMCR	American Crow	VO	FY	1	3	S5					126
BCCH	Black-capped Chickadee		P		2	S5					134
AMRO	American Robin		FY		5	S5					152
GRCA	Gray Catbird		P		3	S4					153
EUST	European Starling		FY		2	SNA					156
CEDW	Cedar Waxwing		P		3	S5					157
YWAR	Yellow Warbler	SM		1		S5					163
SOSP	Song Sparrow		SM		2	S5					198
NOCA	Northern Cardinal	SM	P	1	2	S5					203
RWBL	Red-winged Blackbird	P	P	2	2	S4					207
BHCO	Brown-headed Cowbird	P		2		S4					211
BAOR	Baltimore Oriole	P	P	2	2	S4					213
AMGO	American Goldfinch	P		2		S5					215

Evidence Codes:

Breeding Bird - Possible

SH=Suitable Habitat SM=Singing Male S7=Singing Male present >7days

Breeding Bird - Probable

T=Territory A=Anxiety Behaviour D=Display N=Nest Building P=Pair V=Visiting Nest P7=Pair present >7days

Breeding Bird - Confirmed

DD=Distraction NE=Eggs AE=Nest Entry NU=Nest Used NY=Nest Young FY=Fledged Young FS=Food/Faecal Sack

Other Wildlife Evidence

OB=Observed DP=Distinctive Parts TK=Tracks VO=Vocalization HO=House/Den FE=Feeding Evidence CA=Carcass

Fy=Eggs or Young SC=Scat SI=Other Signs (specify) FO=Flyover

Appendix I
Frog Monitoring Field Sheets



AMPHIBIAN BREEDING SURVEY INFORMATION FIELD SHEET

Project: Westchester Homes Page of
 Station Name: Cummingsdale Watercourse Name: Powell Drain
 Drainage Sys.: GPS Coordinates:

Visit 1 Date: April 23/18 Start: 9:30 End: 9:45
 Weather: clear
 Water °C: Wind: 0 Noise: 3 Today- Rain: 0 Max °C: 23°C
 Air °C: 13.5°C Cloud%: 20% Yesterday- Rain: 0 Max °C:
 Control Site: Y/N Were Frogs Calling: Y/N Where: Drain wetland + Swamp forest Collector(s): LM
 Amphibian Data: No frogs on site
 Field Note Community: Uplands n Powell on-
 ELC Community: wetland/swamp Prairie wetland site

Species	Season	CC	#	CC	#	CC	#	CC	#	CC	#	CC	#	CC	#	CC	#
Wood Frog	e. spring																
Spring Peeper	e. spring	2		2													
Western Chorus Frog	e. spring																
Boreal Chorus Frog	e. spring																
American Toad	spring																
Northern Leopard Frog	spring																
Pickrel Frog	spring																
Gray Treefrog	spring																
Fowler's Toad	spring																
Mink Frog	summer																
Green Frog	summer																
Bullfrog	summer																

Visit 2 Date: May 22, 2018 Start: 11:30 End: 11:45 pm
 Weather: cloudy
 Water °C: Wind: 2 Noise: 2 Today- Rain: 22mm Max °C: 18°C
 Air °C: 12 Cloud%: 100 Yesterday- Rain: 0 Max °C: 21°C
 Control Site: Y/N Were Frogs Calling: Y/N Where: Collector(s): LM
 Amphibian Data:

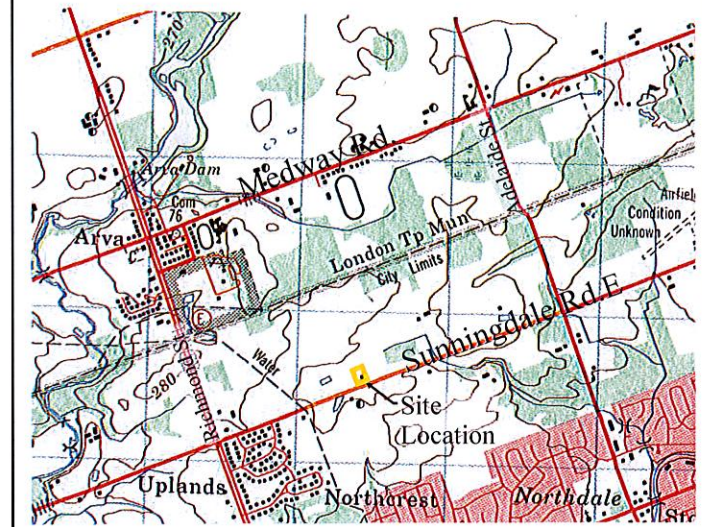
Species	Season	CC	#	CC	#	CC	#	CC	#	CC	#	CC	#	CC	#	CC	#
Wood Frog	e. spring																
Spring Peeper	e. spring	1		1													
Western Chorus Frog	e. spring																
Boreal Chorus Frog	e. spring																
American Toad	spring																
Northern Leopard Frog	spring																
Pickrel Frog	spring																
Gray Treefrog	spring	1															
Fowler's Toad	spring																
Mink Frog	summer																
Green Frog	summer																
Bullfrog	summer																

Visit 3 Date: June 18 Start: 9:40 End: 9:50
 Weather: humid cloudy
 Water °C: Wind: 1 Noise: 2 Today- Rain: 3mm Max °C: 35
 Air °C: 24°C Cloud%: 90% Yesterday- Rain: 0 Max °C: 35
 Control Site: Y/N Were Frogs Calling: Y/N Where: Missouri rd wetland Uplands n wetland SWM Collector(s): LM
 Amphibian Data:

Species	Season	CC	#	CC	#	CC	#	CC	#	CC	#	CC	#	CC	#	CC	#
Wood Frog	e. spring																
Spring Peeper	e. spring																
Western Chorus Frog	e. spring																
Boreal Chorus Frog	e. spring																
American Toad	spring																
Northern Leopard Frog	spring																
Pickrel Frog	spring																
Gray Treefrog	spring																
Fowler's Toad	spring																
Mink Frog	summer																
Green Frog	summer	1		1													
Bullfrog	summer																



Figure 1: Site Location
(City of London Air Photo 2016)



0 1,000
Scale 1:50,000
Key Plan

Print on 11X17, Landscape Orientation

0 90

Scale 1:4500
February 2018



Appendix J

Candidate SAR Bat Maternity Roosting Habitat Field Sheets



GENERAL SITE INFORMATION FIELD SHEET

Project: Westchester Homes

Date: April 25, 2018

Project Manager: LM

Collector(s): LM

Visit #: _____

Time started: 3:00pm Time finished: 4:15pm Combined collectors' hours: _____

NHIC List MNR EO's none not provided to collector

WEATHER CONDITIONS					WIND SCALE			
Temp: <u>25</u>	Wind: <u>2</u>	Cloud Cover (%): <u>100%</u>	Precipitation Today: <u>~2mm</u>	Precipitation Yesterday: <u>~1mm</u>	0	Calm		
Direction: <u>NW</u>					1	Smoke Drifts		
DATA FOCUS					2	Wind Felt on Face		
<input type="checkbox"/> Birds 1__2__ Mig__	<input type="checkbox"/> ELC's	<input type="checkbox"/> Dripline/Tree Survey			3	Leaves in constant motion		
<input type="checkbox"/> Mammals	<input type="checkbox"/> Floral V__S__A__	<input type="checkbox"/> Aquatic - Physical			4	Wind raises dust and paper		
<input type="checkbox"/> Amphibians 1__2__3__	<input type="checkbox"/> Wetland	<input type="checkbox"/> Aquatic - Biological			5	Small trees sway		
<input type="checkbox"/> Reptiles	<input type="checkbox"/> Butternut (BHA)	<input checked="" type="checkbox"/> Faunal Habitat			6	Large branches sway		
<input type="checkbox"/> Invertebrates	<input checked="" type="checkbox"/> other SAR <u>butternut trees</u>	<input type="checkbox"/> Other - see notes			7	Lots of resistance when walking into		
FEATURES (with GPS co-ordinates where applicable)					8	Limbs breaking off trees		
Man-made Structures:					Mapped	Follow-up Req'd		
<input type="checkbox"/> None observed					UTM	Yes	No	Who
Yes No								
<input type="checkbox"/>	<input type="checkbox"/>	Barns/Footings/Wells/other(list)						
<input type="checkbox"/>	<input type="checkbox"/>	Rock Piles						
<input type="checkbox"/>	<input type="checkbox"/>	Garbage						
Natural Vegetation:								
<input type="checkbox"/> None observed								
<input type="checkbox"/>	<input type="checkbox"/>	Fallen Logs outside woods (#'s)						
<input type="checkbox"/>	<input type="checkbox"/>	Brush Piles						
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Snags (raptor perch)						
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Tree Cavities (nesting)						
<input type="checkbox"/>	<input type="checkbox"/>	Sentinel Trees						
<input type="checkbox"/>	<input type="checkbox"/>	Butternut Identified						
<input type="checkbox"/>	<input type="checkbox"/>	Mast Trees (6E)	<input type="checkbox"/>	Berry Shrubs (6E)				
Wildlife Features:								
<input type="checkbox"/> None observed								
<input type="checkbox"/>	<input type="checkbox"/>	Waterfowl nesting (large #'s, # of species)						
<input type="checkbox"/>	<input type="checkbox"/>	Exposed Banks (nesting swallows)						
<input type="checkbox"/>	<input type="checkbox"/>	Stick Nests						
<input type="checkbox"/>	<input type="checkbox"/>	Animal Burrows (>10cm)						
<input type="checkbox"/>	<input type="checkbox"/>	Heronry						
<input type="checkbox"/>	<input type="checkbox"/>	Crayfish mounds						
<input type="checkbox"/>	<input type="checkbox"/>	Sand/gravel on site						
<input type="checkbox"/>	<input type="checkbox"/>	Marsh/open country/shrub						
<input type="checkbox"/>	<input type="checkbox"/>	Winter Deer yards						
<input type="checkbox"/>	<input type="checkbox"/>	Corridor from pond to woods (ampibian movement)						
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Bat corridor (shorelines, escarpments)						
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Bat hibernacula (caves, mines, crevices, etc.)						
Aquatic Features:								
<input type="checkbox"/>	<input type="checkbox"/>	Perm. pond in woodland	<input type="checkbox"/>	emergents/submergents/logs	<input type="checkbox"/>	temp.		
<input type="checkbox"/>	<input type="checkbox"/>	Perm. pond in open	<input type="checkbox"/>	emergents/submergents/logs	<input type="checkbox"/>	temp.		
<input type="checkbox"/>	<input type="checkbox"/>	Water in woodland	<input type="checkbox"/>	pools	<input type="checkbox"/>	flowing	<input type="checkbox"/>	dry
<input type="checkbox"/>	<input type="checkbox"/>	Waterways	<input type="checkbox"/>	flowing	<input type="checkbox"/>	dry	<input type="checkbox"/>	pools
<input type="checkbox"/>	<input type="checkbox"/>	natural stream	<input type="checkbox"/>		<input type="checkbox"/>			
<input type="checkbox"/>	<input type="checkbox"/>	swale	<input type="checkbox"/>		<input type="checkbox"/>			None observed
<input type="checkbox"/>	<input type="checkbox"/>	open drain	<input type="checkbox"/>		<input type="checkbox"/>			
<input type="checkbox"/>	<input type="checkbox"/>	Seeps/Springs	<input type="checkbox"/>		<input type="checkbox"/>			
Incidental Observations/Notes:								
<u>Site investigation to look for potential bat maternity roosting trees</u>								

Appendix B – Suitable Maternity Roost Trees for Little Brown Myotis/Northern Myotis

Include all live and dead standing trees $\geq 10\text{cm}$ dbh with loose or naturally exfoliating bark, cavities, hollows or cracks.

Project Name: *Western*

Survey Date(s): *April 25, 2018*

Site Name: *Sunningdale Rd.*

Observers(s): *UM*

ELC Ecosite:

Snag Density (snags/ha):

Tree #	Tree Species ID	dbh (cm)	Height Class ²	Snag attributes (check all that apply)	Easting	Northing	Notes
1	<i>Purple or Black locust</i>	60	2	<input type="checkbox"/> cavity ³ <input checked="" type="checkbox"/> loose bark <input type="checkbox"/> crack <input checked="" type="checkbox"/> knot hole <input type="checkbox"/> other snag within 10m? <input checked="" type="checkbox"/> Decay Class 1-3? ⁴			<i>Out side South Boundary @ road</i>
2	<i>Calliwood</i>	61	3	<input type="checkbox"/> cavity <input checked="" type="checkbox"/> loose bark <input checked="" type="checkbox"/> crack <input type="checkbox"/> knot hole <input type="checkbox"/> other snag within 10m? <input checked="" type="checkbox"/> Decay Class 1-3?			
3	<i>Sugar maple</i>	75	3	<input checked="" type="checkbox"/> cavity <input checked="" type="checkbox"/> loose bark <input type="checkbox"/> crack <input type="checkbox"/> knot hole <input type="checkbox"/> other snag within 10m? <input checked="" type="checkbox"/> Decay Class 1-3?			<i>SW corner</i>
4	<i>Oak?</i>	60	3	<input checked="" type="checkbox"/> cavity <input type="checkbox"/> loose bark <input type="checkbox"/> crack <input type="checkbox"/> knot hole <input type="checkbox"/> other snag within 10m? <input checked="" type="checkbox"/> Decay Class 1-3?			<i>Broken tip</i>
5	<i>Cottonwood</i>	60	3	<input type="checkbox"/> cavity <input checked="" type="checkbox"/> loose bark <input type="checkbox"/> crack <input type="checkbox"/> knot hole <input type="checkbox"/> other snag within 10m? <input checked="" type="checkbox"/> Decay Class 1-3?			
6	<i>Sugar maple</i>	60	2	<input type="checkbox"/> cavity <input checked="" type="checkbox"/> loose bark <input type="checkbox"/> crack <input checked="" type="checkbox"/> knot hole <input type="checkbox"/> other snag within 10m? <input checked="" type="checkbox"/> Decay Class 1-3?			
7	<i>elm</i>	60	3	<input type="checkbox"/> cavity <input type="checkbox"/> loose bark <input type="checkbox"/> crack <input type="checkbox"/> knot hole <input checked="" type="checkbox"/> other snag within 10m? <input type="checkbox"/> Decay Class 1-3?	<i>juv 10m</i>		
8	<i>elm</i>	50	3	<input type="checkbox"/> cavity <input type="checkbox"/> loose bark <input type="checkbox"/> crack <input type="checkbox"/> knot hole <input checked="" type="checkbox"/> other snag within 10m? <input type="checkbox"/> Decay Class 1-3?	<i>juv 10m</i>		<i>dead</i>
9	<i>elm</i>	48	2	<input type="checkbox"/> cavity <input type="checkbox"/> loose bark <input type="checkbox"/> crack <input type="checkbox"/> knot hole <input type="checkbox"/> other snag within 10m? <input type="checkbox"/> Decay Class 1-3?	<i>juv 10m</i>		<i>dead limbs</i>
10	<i>elm</i>	65	3	<input type="checkbox"/> cavity <input type="checkbox"/> loose bark <input type="checkbox"/> crack <input type="checkbox"/> knot hole <input type="checkbox"/> other snag within 10m? <input type="checkbox"/> Decay Class 1-3?			<i>dead limbs</i>

² **Height Class:** 1 = Dominant (above canopy); 2 = Co-dominant (canopy height); 3 = Intermediate (just below canopy); 4 = suppressed (well below canopy)

³ The approx. height of the cavity should be noted. Note that cavities with an entrance near the ground may also be used by bats if they are "chimney-like".

Decay Class: 1 = Healthy, live tree; 2 = Declining live tree, part of canopy lost; 3 = Very recently dead, bark intact, branches intact



10 8 9 7

6

5 4

3

2 - offsite

1 - offsite

Sunningdale Rd E

Google Earth

Image © 2018 DigitalGlobe



400 ft

Appendix K
MNRF Letter to Proponent

Ministry of Natural
Resources and Forestry
615 John Street North
Aylmer ON N5H 2S8
Tel: 519-773-9241
Fax: 519-773-9014

Ministère des Richesses
naturelles et des Forêts
615, rue John Nord
Aylmer ON N5H 2S8
Tél: 519-773-9241
Télééc: 519-773-9014



October 30, 2018

AYL-L-183-18

Westchester Homes
416 Ridout St
London ON
N6C 4A1

Dear Westchester Homes:

RE: Westchester Homes - 348 Sunningdale and the *Endangered Species Act, 2007*

The Ministry of Natural Resources and Forestry (MNRF) has reviewed the information that was provided on the proposed [project name] project to assess the potential impacts of the proposal on endangered or threatened species and their habitats. From the information provided, it is our understanding that the proposed project falls within these parameters:

- a) The project is located at 348 Sunningdale Road, London, Ontario
- b) The proposed project involves the construct cluster single-detached and townhouse dwelling units in a condominium format.
- c) The proposed project will begin on October, 2018.
- d) MNRF has reviewed species at risk (SAR) occurrence information on file and determined that there are known occurrences of Little Brown Myotis - Endangered in the general area of the project location with potential to occur in the project location.

Based on a review of the above information, MNRF has determined that the activities associated with the project, as currently proposed, **will likely not contravene** section 9 (species protection) and/or section 10 (habitat protection) of the *Endangered Species Act, 2007* (ESA 2007) for SAR **provided the following recommendations are implemented:**

- 1) To protect bat species and their habitat, please follow the attached documents outlining MNRF's approved survey methodology for SAR bats, as well as a guidance document from MNRF Guelph District that we accept being used within Aylmer District.
- 2) If suitable maternity roost trees are identified and are planned for removal, MNRF (contact information below) should be contacted immediately for further advice

OR

- 3) Tree removal activities should avoid the bat active season, i.e. the time period when bats are likely to be using treed habitat to support foraging and roosting (generally corresponds to May 1 to September 1 in a given year).
- 4) If maternity roost sites are found within the proposed project site and are planned for removal, MNRF recommends the installation of bat boxes at a 2:1 ratio (i.e. 8 bat boxes installed for the 4 cavity trees removed) in suitable habitat.

If the above recommendations are implemented, the activity will likely not contravene section 9 (species protection) and/or section 10 (habitat protection) of the ESA 2007.

This Letter to Proponent (AYL-L-183-18) is valid until December 31st, 2019. MNRF should be contacted for a new review if the project activities have not been completed by this date, or if land ownership has changed.

Should any of the project parameters change, or if it is not possible to comply with all the above recommendations, please notify the MNRF Aylmer District office (ESA.Aylmer@ontario.ca) immediately to obtain guidance on whether additional actions will need to be taken to remain in compliance with the ESA 2007. Also, if any SAR species and/or habitats are observed on the property, please contact the MNRF Aylmer District office as soon as possible to report the observation.

It is important to note that changes may occur in both species and habitat protection which could affect whether proposed projects may have adverse effects on SAR. The ESA 2007 applies to endangered and threatened species listed on the Species at Risk in Ontario (SARO) List (<http://www.ontario.ca/environment-and-energy/species-risk-ontario-list>). The Committee on the Status of Species at Risk in Ontario (COSSARO) meets regularly to evaluate new species for listing and/or re-evaluate species already on the SARO List. As a result, species designations may change, which could in turn change the level of protection they receive under the ESA 2007. Also, habitat protection provisions for a species may change if a species-specific habitat regulation comes into effect.

Please be advised that it is your responsibility to be aware of and comply with all other relevant provincial or federal legislation, municipal by-laws or required approvals from other agencies.

If you have any concerns or questions regarding this letter, please contact me by email at ESA.Aylmer@ontario.ca.

Sincerely,



Jason Webb
Management Biologist, Aylmer District
Ministry of Natural Resources and Forestry

Appendix L
City of London Woodland Guidelines

**Table 1: Woodland Evaluation –
Westerchester Homes 348 Sunningdale
Rd**

Vegetation Communities: unevaluated patch not mapped on Schedules

Criterion	Evaluation	Factors for Evaluation	Patch Attributes	Patch Standard	Standard	Highest Standard
15.4.5 -i Important Features	1.1 Site Protection	Presence of Hydrological Features within or contiguous with the patch	ephemeral water at east edge connecting to a pocket of reed canary grass 0.02ha in area; no swale or watercourse on the Subject Lands; water may sheet flow to the east	The patch is not cat1/groundwater recharge or in a large wetland; the patch does not contain a wetland, although there is one to the east. There is a small swale within the patch but it is often dry and should not be considered important to the integrity of the Natural Heritage system	Low	Low
		Erosion and Slope Protection	slopes nearly level	slopes <10%	Low	
	1.2 Landscape Integrity	Landscape Richness	96 ha within 2 km ²	7-10% local vegetation cover	Medium	Medium
		Landscape Connectivity	separated by cultural meadow; the patch is connected to the Powell Drain Wetland by contiguous cultural meadow that surrounds the property (between the wetland and Sunningdale Rd). The trees on site were not considered part of the patch when evaluated in SWStudies or Area Plan	woodland habitat gaps <40m	Medium	
Patch Distribution	patch cluster north of Sunningdale is 15ha	patch cluster <20ha	Low			
15.4.5 -ii important functions	2.1 Age and Site Quality	Community Successional Stage	Trees on the subject lands are generally mature trees - mix of Sugar Maple, White Spruce, Red Pine Adjacent lands - thicket is pioneer to young and woodland is young to midage	mature trees, but not a mature community; there are no woodland or forest layers present; maintained grounds on the property save and except for 10m at the road.	medium	Medium
		Mean Coefficient of Conservatism of Communities	MCC = 2.95 with a Fall plant list	all communities with MCC<4.2 and patch <4	Low	
		Disturbances related to human activity	The Subject Lands are a former residential lot with maintained grounds	poor	Low	
	2.2 Size and Shape	Patch Size - Air photo interpretation used	City requested patch to evaluate is 0.9ha; trees on Subject Lands are contiguous with vegetation connected to the Powell Drain wetland	patch is >9ha	High	HIGH
		Patch Shape/Interior	patch has no interior	no interior with P:A>3m/100m ²	Low	
		Conservative Bird Species	this system has been replaced	not included in evaluation *** don't use PIF birds to replace CP birds		
	2.3 Diversity of Natural Communities and Associated Species	ELC Community Diversity	2 community series	Patch contains 1-2 Community Series	Low	
		ELC Vegetation Type and Topographic Diversity	patch is two ecotype - CUW1 and CUT1 - NO vegetation types	patch relatively homogenous; 1 Ecosite OR one to two Vegetation Types on one topographic feature - this patch is two ecosites on tableland	Low	
		Diversity & Critical Habitat Components for Amphibians	no data collected		unknown	
		Presence of Conifer Cover	Planted conifers in front yard of former residence	No coniferous communities	Low	
Fish Habitat Quality		no defined channels	not applicable	Low		
15.4.5-iv	3.0 Endangered or Threatened Species Present		Not Applicable			MNRF process to be followed
15.4.5 -v distinctive or unusual	4.1 Distinctive, Unusual or High Quality Natural Communities	ELC Community SRANK	CUW	Rank is S5	Low	Medium
		Specialized or Rare Species Presence/Absence	No rare plants	no rare plants	Low	
		Size and Distribution of Large Trees	in the front yard of the former residence there are large trees	trees with >50cm dbh are occasional	Medium	
		Basal Area	some large trees in the front yard of the former residence	the average basal area is <12m ² /ha for trees >10cm DBH	Low	
	4.2 Distinctive, Unusual, or High Quality Landforms	Distinctive Landforms	Eroded Channel - Till Moraine	Till Plain or Till Moraine	Medium	Medium