

Environmental Impact Study 1148 & 1154 Mona Road Mississauga, ON

Prepared For:

Queenscorp (Mona II) Inc.

Prepared By:

Beacon Environmental Limited

Date:

2024-11-29

Project:

223229



BEACON
ENVIRONMENTAL

GUIDING SOLUTIONS IN THE NATURAL ENVIRONMENT

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Report Versions Issued

Version	Date	Revisions
1.	November 2024	First submission

1. Introduction

Beacon Environmental Limited (Beacon) has been retained by Queenscorp (Mona II) Inc. to complete an Environmental Impact Study (EIS) for two adjoining properties located at 1148 and 1154 Mona Road in the City of Mississauga (hereafter referred to as the subject property). The location of the subject property is illustrated in **Figure 1**.

The City of Mississauga's natural heritage system (NHS) consists of several components, including Significant Natural Areas, Natural Green Spaces, Residential Woodlands, Special Management Areas, and Linkages. The subject property consists of two existing residential lots. Based on Schedule 3 (Natural System) of the City's Official Plan, the subject property overlaps with areas identified as Residential Woodland and Significant Natural Area/Natural Green Space. An EIS is typically required for a development proposal located within or adjacent to the NHS.

The limits of the Significant Natural Area/Natural Green Space components of the NHS on and adjacent to the subject property were refined through an EIS prepared by Beacon (2018) and companion technical reports that were prepared for a recent redevelopment of the property formerly known as 1142 Mona Road (now 1130, 1136, and 1138 Mona Road), located directly adjacent to (south and west of) the subject property.

The EIS for 1142 Mona Road (Beacon 2018) established the limits of Significant Natural Area/Natural Green Space components of the NHS associated with Kenollie Creek and Mary Fix Creek (south and west of the subject property). While the subject property has trees within the existing residential yards, including those with canopies overhanging 1142 Mona Road, they were not previously included in the delineation of Significant Natural Area/Natural Green Space. The subject property is currently separated from Significant Natural Area/Natural Green Space by existing development on adjacent lands (1130, 1136, 1138, and 1160 Mona Road). No Significant Natural Area or Natural Green Space was identified on the subject property through prior studies; however, the EIS for 1142 Mona Road acknowledged the presence of Residential Woodland, which broadly applies to the Mineola neighbourhood.

The purpose of the EIS is to:

- Identify and characterize natural heritage and hydrological features associated with the subject property and adjacent lands based on background information and site-specific field investigations;
- Assess potential direct or indirect impacts of the proposed development on existing natural heritage and hydrological features and functions;
- Recommend appropriate mitigation measures to avoid, minimize, or offset/compensate for potential impacts; and
- Assess conformity of the proposed development plan with applicable provincial and municipal natural heritage policies and regulations.

The following EIS for the subject property relied primarily on the findings of the EIS for 1142 Mona Road (Beacon 2018) and supporting technical studies prepared by others for the subject property (e.g. Arborist Report, Hydrogeological Report, etc.). EIS terms of reference are included in **Attachment A**.

2. Policy and Regulatory Context

The following section provides a summary of key provincial and municipal natural heritage policies that may apply to the subject property and adjacent lands and that were considered in preparing this EIS.

2.1 Endangered Species Act (2007)

Ontario's *Endangered Species Act* (ESA) came into effect on June 30, 2008, and replaced the former 1971 *Act*. The ESA protects species listed as endangered and threatened by the Committee on the Status of Species at Risk in Ontario (COSSARO). The purposes of the ESA are:

- To identify species at risk based on the best available scientific information, including information obtained from community knowledge and aboriginal traditional knowledge;
- To protect species that are at risk and their habitats, and to promote the recovery of species that are at risk; and
- To promote stewardship activities to assist in the protection and recovery of species that is at risk.

Section 9 of the ESA prohibits the killing, harming, harassing, possession, collection, buying and selling of extirpated, endangered, and threatened species on the Species at Risk in Ontario (SARO) List; and Section 10 prohibits the damage or destruction of protected habitat of species listed as extirpated, endangered, or threatened on the SARO List.

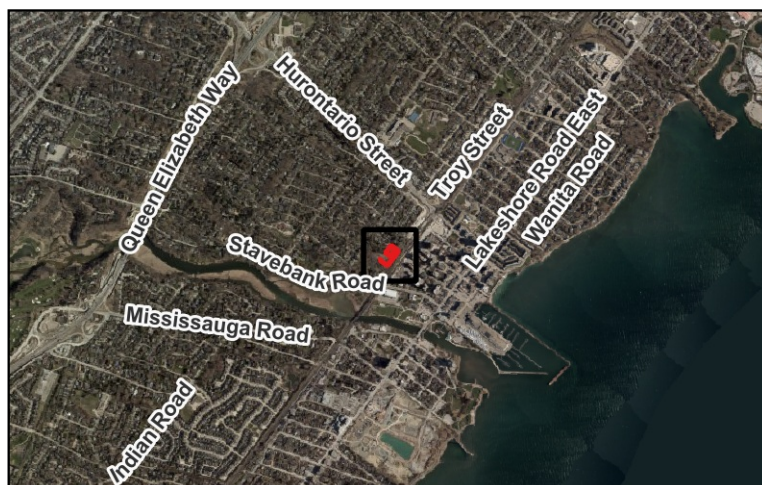
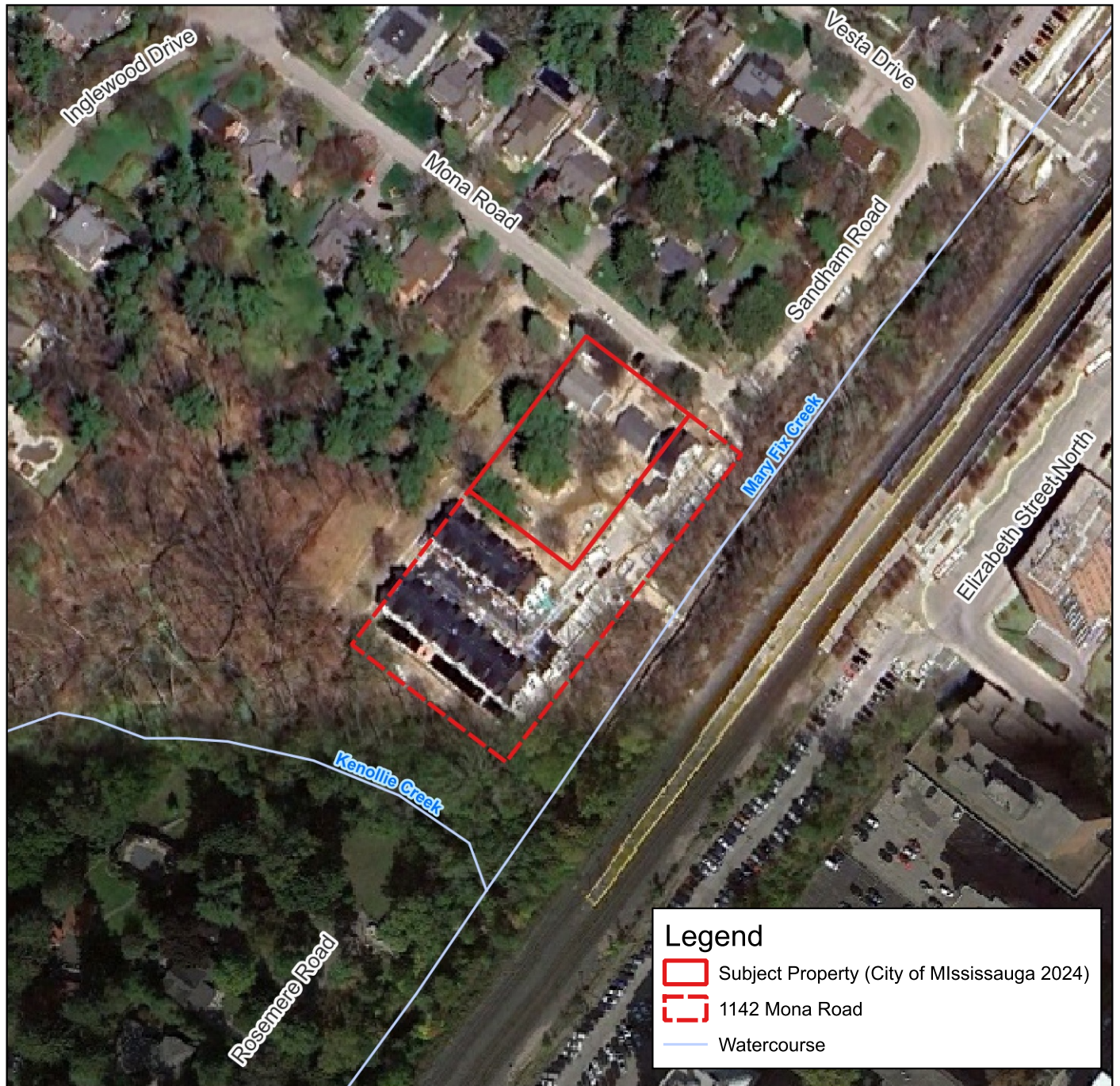
2.2 Provincial Planning Statement (2024)



The Provincial Planning Statement (PPS) (MMAH 2024) provides policy direction to municipalities on matters of provincial interest as they relate to land use planning and development. The PPS provides policy direction to municipalities on matters of provincial interest as they relate to land use planning and development. The intent of the PPS is to provide for appropriate land use planning and development while protecting Ontario's natural heritage. Development governed by the *Planning Act* must be consistent with the policy direction of the PPS. The PPS includes policies that speak to the identification and protection of natural heritage systems, as well as levels of protection for the various components that comprise such systems. Some of these features are present in the subject property and must be assessed in the context of these policies.

The policies specific to natural heritage are found in Section 4.1 of the PPS and are provided below:

4.1.1 Natural features and areas shall be protected for the long term.

4.1.2 The diversity and connectivity of natural features in an area, and the long-term ecological function and biodiversity of natural heritage systems, should be maintained, restored or, where possible, improved, recognizing linkages between and among natural heritage features and areas, surface water features and ground water features.



Site Location		Figure 1	
1148 and 1154 Mona Road Mississauga			
		Project: 223229	
Client: Queenscorp (Mona II) Inc.		Last Revised: November 2024	
Prepared by: BD Checked by: DW		Inset Map: 1:50,000	
	1:1,886		
Contains information licensed under the Open Government License—Ontario Orthoimagery Baselayer: Google Earth (2024)			

- 4.1.3 *Natural heritage systems shall be identified in Ecoregions 6E & 7E, recognizing that natural heritage systems will vary in size and form in settlement areas, rural areas, and prime agricultural areas.*
- 4.1.4. *Development and site alteration shall not be permitted in:*
- a. *significant wetlands in Ecoregions 5E, 6E and 7E; and*
 - b. *significant coastal wetlands.*
- 4.1.5 *Development and site alteration shall not be permitted in:*
- a. *significant wetlands in the Canadian Shield north of Ecoregions 5E, 6E and 7E;*
 - b. *significant woodlands in Ecoregions 6E and 7E (excluding islands in Lake Huron and the St. Marys River);*
 - c. *significant valleylands in Ecoregions 6E and 7E (excluding islands in Lake Huron and the St. Marys River);*
 - d. *significant wildlife habitat;*
 - e. *significant areas of natural and scientific interest; and*
 - f. *coastal wetlands in Ecoregions 5E, 6E and 7E that are not subject to policy 4.1.4.b),*
unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions.
- 4.1.6 *Development and site alteration shall not be permitted in fish habitat except in accordance with provincial and federal requirements.*
- 4.1.7 *Development and site alteration shall not be permitted in habitat of endangered species and threatened species, except in accordance with provincial and federal requirements.*
- 4.1.8 *Development and site alteration shall not be permitted on adjacent lands to the natural heritage features and areas identified in policies 4.1.4, 4.1.5 and 4.1.6 unless the ecological function of the adjacent lands has been evaluated and it has been demonstrated that there will be no negative impacts on the natural features or on their ecological functions.*

2.3 Regional Municipality of Peel Official Plan (2022)

The Peel Region Official Plan (ROP) contains policies aimed at protecting, maintaining, and restoring a Greenlands System consisting of “Core Areas”, “Natural Areas and Corridors (NAC’s)”, and “Potential Natural Areas and Corridors (PNAC’s)”. Key elements of the Region’s Greenlands System include the following:

- Areas of Natural and Scientific Interest (ANSI);
- Environmentally Sensitive or Significant Area;
- Escarpment Natural Areas;
- Escarpment Protection Areas;
- Fish and wildlife habitat;

- Habitats of threatened and endangered species;
- Wetlands;
- Woodlands;
- Valley and stream corridors;
- Shorelines;
- Natural lakes;
- Natural corridors;
- Groundwater recharge and discharge areas;
- Open space portions of the Parkway Belt West Plan; and
- Other natural features and functional areas.

The above key elements are to be interpreted, identified, and protected in accordance with the policies of the Regional Official Plan.

2.3.1 Core Areas

Core Areas represent those features and areas that are considered to be significant at the provincial and regional levels. They generally correspond with significant features and areas listed in the PPS and include:

- Significant Wetlands;
- Significant Coastal Wetlands;
- Core Woodlands;
- Environmentally Sensitive or Significant Areas;
- Provincial Life Science ANSI;
- Significant Habitat of Threatened and Endangered Species;
- Escarpment Natural Areas of the Niagara Escarpment Plan; and
- Core Valley and Stream Corridors.

Core Areas of the Greenlands System are mapped on Schedule A of the ROP. Criteria for identifying additional core features of the Greenlands System are provided in the ROP.

Policy 2.3.2.6 prohibits development and site alteration within the Core Areas of the Greenlands System in Peel except for:

- Forest, fish, and wildlife management;
- Conservation and flood or erosion control projects, but only if they have been demonstrated to be necessary in the public interest and after all reasonable alternatives have been considered;
- Essential infrastructure exempted, pre-approved or authorized under an environmental assessment process;
- Passive recreation;
- Minor development and minor site alteration;
- Existing uses, buildings, or structures;
- Expansions to existing buildings or structures;
- Accessory uses, buildings, or structures; and

- A new single residential dwelling on an existing lot of record, provided that the dwelling would have been permitted by the applicable planning legislation or zoning by-law on May 23, 2014. A new dwelling built after May 23, 2014 in accordance with this policy shall be deemed to be an existing building or structure for the purposes of the exceptions permitted in clauses g) and h) above.

The above noted exceptions are permitted provided that:

- a) the exceptions are permitted in accordance with the policies in an approved local municipal official plan or the Niagara Escarpment Plan, where applicable;*
- b) any development and site alteration will not be permitted unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions and that:
 - i. there is no reasonable alternative location outside of the Core Area and the use, development or site alteration is directed away from the Core Area to the greatest extent possible;*
 - ii. if avoidance of the Core Area is not possible, the impact to the Core Area feature is minimized;*
 - iii. any impact to the Core Area or its functions is mitigated through restoration or enhancement to the greatest extent possible; and*
 - iv. where ecosystem compensation is determined to be appropriate and feasible, including for essential infrastructure, it may be considered in accordance with local municipal or conservation authority ecosystem compensation guidelines.; and**
- c) within significant wetlands and significant coastal wetlands the above exceptions may only be considered in accordance with federal and provincial legislation, regulations and policies (e.g. Conservation Authorities Act); and*
- d) when developing policies to allow the exceptions, the local municipalities may consider appropriate implementation tools including existing approval requirements and tools of other agencies.*

2.3.2 Natural Areas and Corridors (NAC) and Potential Natural Areas and Corridors (PNAC)

Natural Areas and Corridors (NAC) include:

- Evaluated non-provincially significant wetlands;
- Woodlands meeting one or more of the criteria in Table 1 of the ROP;
- Significant wildlife habitat meeting one or more of the criteria in the Ministry of Northern Development, Mines, Natural Resources and Forestry's Significant Wildlife Habitat Technical Guide and associated Criteria Schedules for Ecoregions 6E and 7E;
- Fish habitat;
- Regionally significant life science Areas of Natural and Scientific Interest;
- Provincially significant earth science Areas of Natural and Scientific Interest;
- Escarpment Protection Areas of the Niagara Escarpment Plan;
- The Lake Ontario shoreline and littoral zone and other natural lakes and their shorelines;
- any other valley and stream corridors that have not been defined as part of the Core Areas;
- sensitive headwater areas and sensitive ground water discharge areas; and

- any other natural features and functional areas interpreted as part of the Greenlands System Natural Areas and Corridors by the local municipalities, in consultation with the conservation authorities and the Ministry of Northern Development, Mines, Natural Resources and Forestry, including, as appropriate, elements of the Potential Natural Areas and Corridors.

Potential Natural Areas and Corridors (PNAC) include:

- Unevaluated wetlands and coastal wetlands;
- Cultural woodlands and cultural savannahs within the Urban System and Rural Service Centres meeting one or more of the criteria in Table 1 of the ROP;
- Any other woodlands greater than 0.5 hectares;
- Regionally significant earth science Areas of Natural and Scientific Interest;
- Sensitive groundwater recharge areas;
- Portions of Historic shorelines;
- Open space portions of the Parkway Belt West Plan Area;
- Potential ESAs identified as such by the conservation authorities; and
- Any other natural features and functional areas interpreted as part of the Greenlands System Potential Natural Areas and Corridors, by the individual area municipalities in consultation with the conservation authorities.

NAC's and PNAC's represent natural features and areas that are considered locally significant. NAC's and PNAC's are considered locally important. Regional policies pertaining to NAC's and PNAC's defer their interpretation, protection, restoration, enhancement, proper management, and stewardship to local municipalities.

2.4 City of Mississauga Official Plan (2016)

Section 6.3 of the City of Mississauga (the "City") Official Plan contains policies pertaining to the protection of the Green System. The Green System is composed of 1) the Natural Heritage System, 2) the Urban Forest, 3) Natural Hazard Lands; and 4) Parks and Open Spaces.

Components of the Green System that overlap with the subject property include the Natural Heritage System, Natural Hazard Lands, and the Urban Forest. Policies pertaining to each of these Green System components are discussed below.

2.4.1 Natural Heritage System

The Natural Heritage System consists of 1) Significant Natural Areas, 2) Natural Green Spaces, 3) Special Management Areas, 4) Residential Woodlands, and 5) Linkages.

Portions of the subject property have been mapped as "Significant Natural Areas and Natural Green Spaces" and "Residential Woodland" on Schedule 3 of the City's Official Plan.

The exact limit of components of the Natural Heritage System are to be determined through site specific studies such as an Environmental Impact Study. Minor refinements to the boundaries of the Natural Heritage System may occur through Environmental Impact Studies or other appropriate studies accepted by the City without an official plan amendment.

2.4.1.1 Significant Natural Areas

Significant Natural Areas include one or more of the following features:

- Provincially or regional significant life science areas of natural and scientific interest (ANSI);
- Environmentally sensitive or significant areas;
- Habitat of threatened species or endangered species;
- Fish habitat;
- Significant wildlife habitat;
- Significant woodlands;
- Significant wetlands, including Provincially Significant Wetlands (PSW), coastal wetlands, and other wetlands greater than 0.5 hectares; and
- Significant valleylands, including the main branches, major tributaries and other tributaries and watercourse corridors draining directly to Lake Ontario including the Credit River, Etobicoke Creek, Mimico Creek and Sixteen Mile Creek.

According to Section 6.3.26 of the MOP,

Lands identified as or meeting the criteria of a Significant Natural Area, as well as their associated buffers will be designated Greenlands and zoned to ensure their long term protection. Uses will be limited to conservation, flood and/or erosion control, essential infrastructure and passive recreation.

According to Policy 6.3.27, development and site alteration within or adjacent to a Significant Natural Area will not be permitted unless all reasonable alternatives have been considered and any negative impacts minimized through appropriate mitigation measures as determined by an Environmental Assessment or Environmental Impact Study. Negative impacts that cannot be avoided are to be mitigated through restoration and enhancement to the greatest extent possible.

2.4.1.2 Natural Green Spaces

Natural Green Spaces are areas that meet one or more of the following criteria:

- Woodlands greater than 0.5 hectares that do not qualify as significant woodland;
- Wetlands that do not qualify as significant wetland;
- Watercourses that do qualify as significant valleyland; and
- All natural areas greater than 0.5 hectares that have vegetation that is uncommon in the City.

Policy 6.3.32 states that development and site alteration will not be permitted within or adjacent to Natural Green Spaces unless it has been demonstrated through an Environmental Assessment or Environmental Impact Study that there will be no negative impact to the natural heritage features and their ecological functions and opportunities for their protection, restoration, enhancement, and expansion have been identified.

2.4.2 Natural Hazard Lands

Natural Hazard Lands are associated with valley and watercourse corridors and the Lake Ontario shoreline. These areas are prone to flooding and erosion and are generally unsuitable for development.

Development adjacent to valleylands and watercourse features must incorporate measures to ensure public health and safety; protection of life and property; as well as enhancements and restoration of the Natural Heritage System.

Policy 6.3.47 states that development and site alteration will not be permitted within erosion hazards associated with valleyland and watercourse features. Where development or site alteration is proposed adjacent to erosion hazards, an appropriate buffer must be applied to the satisfaction of the City and conservation authority.

2.4.3 Urban Forest Policies

Official Plan polices pertaining to the urban forest are as follows:

6.3.44 Development and site alteration will demonstrate that there will be no negative impacts to the Urban Forest. An arborist report and tree inventory that demonstrates tree preservation and protection both pre and post construction, and where preservation of some trees is not feasible, identifies opportunities for replacement, will be prepared to the satisfaction of the City in compliance with the City's tree permit by-law.

6.3.45 Where tree replacement cannot be accommodated on-site, the City may require cash-in-lieu for replacement trees elsewhere or replacement plantings at a location approved by the City.

6.3.46 Mississauga may require ecologically based woodland management plans of a landowner prior to municipal acquisition.

3. Methodology

3.1 Background Review

Background information was gathered and reviewed at the outset of the project. This involved consideration of the following documents or information sources relevant to the subject property:

- Provincial Planning Statement;
- Peel Region Official Plan;
- Mississauga Official Plan;
- City of Mississauga Natural Areas Survey (NAS);
- Current and historic aerial imagery;
- Provincially Tracked Species Layer from Land Information Ontario (LIO);
- Ontario Breeding Bird Atlas;
- Ontario Reptile and Amphibian Atlas;
- Natural Heritage Information Centre (NHIC) Data via the Make-A-Map application;
- High Resolution aerial photography of the property;
- Natural and physical feature layers from LIO—these geospatial layers include wetlands (provincially significant and un-evaluated wetlands), and watercourses with thermal regime;
- Environmental Impact Study for 1142 Mona Road (Beacon 2018);
- Arborist Report (Amy Choi Consulting 2024);
- Site Servicing and Stormwater Management Report (SSSR, Crozier and Associates 2024); and
- Hydrogeological Report (Grounded Engineering 2024).

3.2 Field Investigations

Extensive field investigations were conducted as part of an EIS for the property located directly south and west of the subject property (Beacon 2018), which identified and characterized the natural heritage features in the area. As the subject property consists of two small residential lots, field investigations for the subject property were limited to a single site visit, conducted on August 2, 2024, to update and confirm existing conditions.

4. Existing Conditions

This section provides a description of the natural heritage and hydrological features and functions associated with the subject property and adjacent lands based on the background review and field investigation findings.

4.1 Drainage Features and Watercourses

There are no watercourses, waterbodies or drainage features on the subject property. There is a concrete stormwater channel, known as Mary Fix Creek, located approximately 35 m to the south of the subject property. Mary Fix Creek is tributary to the Credit River which is located approximately 400 m to the west of the subject property.

There is also a watercourse, known as Kenollie Creek located approximately 80 m to the west of the subject property. Kenollie Creek confluences with Mary Fix Creek approximately 100 m to the south of the subject property.

4.2 Soil and Groundwater Conditions

Soils on the subject property consist of earth fill underlain by layers of silts and sands and sandy silt till (Grounded Engineering 2024). Ground water levels ranged from 2.6 m to 1.5 m below ground level based on borehole monitoring (Grounded Engineering 2024). It is anticipated groundwater flow direction is to the south (Grounded Engineering 2024).

4.3 Vegetation Communities

The subject property is comprised of two existing residential lots surrounded by existing development. There are no ecological communities or natural features associated with the subject property. Vegetation is limited to a few trees and landscaping. The adjacent Kenollie Creek valleylands to the west support cultural woodland, deciduous forest and deciduous swamp habitats. The adjacent Mary Fix Creek corridor supports cultural woodland.

City of Mississauga Natural Areas Survey (NAS) (Mississauga 2017 Update) identifies portions of the subject property as overlapping with both Natural Area MI7 and MI4. Natural Area MI7 is classified as a Significant Natural Area and overlaps with the Kenollie Creek valleylands and portions of residential properties. Natural Area MI4 is a Residential Woodland. The NAS identifies Natural Area MI7 as being comprised of two ecological communities (FOD7-2 and FOM2-1). This Significant Natural Area is mapped as overlapping slightly with the subject property. The EIS for 1142 Mona Road (Beacon 2018) noted that the subject property does not support natural forested communities consistent with this classification under the ELC system, which was confirmed through the current EIS. A map illustrating vegetation communities is included in **Figure 2** and described below. The descriptions of vegetation communities associated with Mary Fix and Kenollie Creek are based on the EIS for 1142 Mona Road (Beacon 2018).

Unit 1. Anthropogenic

The entire subject property was classified as Anthropogenic as it consists of an existing residential lawn, buildings, and paved driveways with minimal vegetation cover. Vegetation is limited to sparse tree cover comprised of several mature White Pine (*Pinus strobus*), Norway Maple (*Acer platanoides*), Red Maple (*Acer rubrum*), and Little-leaf Linden (*Tilia cordata*). There is no natural understory or ground vegetation associated with the subject property.

Unit 2. Cultural Woodland (CUW1)

This community type is associated along the disturbed slopes adjacent to Mary Fix Creek and Kenollie Creek to the south and west of the subject property.

Unit 2a, situated along the Kenollie Creek valley slope consists of Manitoba Maple (*Acer negundo*), Norway Maple, and dead or dying Green Ash (*Fraxinus pennsylvanica*). Scattered shrubs include Choke Cherry (*Prunus virginiana*) and Morrow's and Tartarian Honeysuckle (*Lonicera morrowi*, *L. tatarica*).



1148 and 1154 Mona Road Mississauga

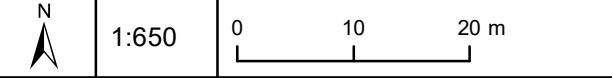
Legend

- Subject Property (City of Mississauga 2024)
- 1142 Mona Road
- Ecological Communities
- Contours
- Watercourse

ELC Unit	ELC Communities	ELC Code
1	Anthropogenic	ANT
2	Cultural Woodland	CUW1
3	Fresh-Moist Ash Lowland Deciduous Forest	FOD7-2
4	Green Ash Mineral Deciduous Swamp	SWD2-2

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 Ontario Orthoimagery Basemap: Google Earth (2024)

Ground covers are dominated by Garlic Mustard (*Alliaria petiolata*), with some Yellow Trout Lily (*Erythronium americanum*), Tall Goldenrod (*Solidago canadensis* var. *scabra*), Greater Celandine (*Chelidonium majus*), Herb Robert (*Geranium robertianum*), and Bloodroot (*Sanguinaria canadensis*).

Unit 2b is situated along the slope adjacent to Mary Fix Creek corridor. This community consists largely of Tree-of-Heaven (*Ailanthus altissima*), in association with Siberian Elm (*Ulmus pumila*), Norway Maple, Green Ash, Black Walnut (*Juglans nigra*), and Sassafras (*Sassafras albidum*). The understory is dense with Tartarian Honeysuckle, with some Choke Cherry and Wild Red Raspberry (*Rubus idaeus* ssp. *strigosus*). Dominant ground covers are Garlic Mustard and Tall Goldenrod, in association with Yellow Trout Lily, Woolly Blue Violet (*Viola sororia*), and grasses.

Unit 3. Fresh-Moist Lowland Ash Deciduous Forest (FOD7-2)

This community is situated on in the Kenollie Creek valleyland. The canopy is dominated by Green Ash, with lesser amounts of Reddish Willow (*Salix x rubens*), Manitoba Maple, and White Elm (*Ulmus americana*). Much of the ash appears to be dying off, likely due to Emerald Ash Borer (EAB). The understory is dense and dominated by Morrow's and Tartarian Honeysuckle, with occurrences of Choke Cherry, Multiflora Rose (*Rosa multiflora*), and Gray Dogwood (*Cornus racemosa*). Ground covers include Garlic Mustard, Yellow Trout Lily, Wild Leek (*Allium triocum*), Lesser Celandine (*Ficaria verna*), Bloodroot, and Wild Geranium (*Geranium maculatum*).

Unit 4: Green Ash Mineral Deciduous Swamp (SWD2-2)

This wetland community is associated with seasonally inundated or flooded areas within the floodplain of Kenollie Creek. The canopy of this community is completely open and comprised of dead or dying Green Ash that have been impacted by EAB. The understory is dense with Tartarian Honeysuckle. Dominant ground covers include Spotted Jewelweed (*Impatiens capensis*), Fowl Manna Grass (*Glyceria striata*), Moneywort (*Lysimachia nummularia*), and Garlic Mustard.

4.4 Flora

32 vascular plant species were identified on or immediately adjacent to the subject property. A list is provided in **Appendix B**. Of the 32 species identified, 11 are native to Ontario and 21 are non-native. Of the 11 native species, all are ranked S5 by NHIC, indicating they are common and secure (S5) or apparently secure (S4) in the province. The low diversity and high proportion of the non-native species is reflective of the disturbed quality and overall lack of natural features associated with the subject property.

4.5 Breeding Birds

During surveys conducted in 2016 in support of the EIS for 1142 Mona Road, ten bird species were noted as breeding on or adjacent to that property. A summary of the breeding bird survey observations is presented below in **Table 1**.

Table 1. List of Breeding Birds Observed Adjacent to Subject Property in 2016

Common Name	Scientific Name	Status			Number of Presumed Pairs/Territories
		COSEWIC ¹	COSSARO ²	SRANK ³	
Red-tailed Hawk	<i>Buteo jamaicensis</i>			S5	1
Downy Woodpecker	<i>Picoides pubescens</i>			S5	1
Barn Swallow	<i>Hirundo rustica</i>	SC	SC	S4	Fly over
Black-capped Chickadee	<i>Poecile atricapillus</i>			S5	1
House Wren	<i>Troglodytes aedon</i>			S5	1
American Robin	<i>Turdus migratorius</i>			S5	2
Cedar Waxwing	<i>Bombycilla cedrorum</i>			S5	1
Northern Cardinal	<i>Cardinalis cardinalis</i>			S5	1
Song Sparrow	<i>Melospiza melodia</i>			S5	2
Common Grackle	<i>Quiscalus quiscula</i>			S5	1
American Goldfinch	<i>Spinus tristis</i>			S5	1

¹Committee on the Status of Endangered Wildlife in Canada. SC = Special Concern

²Committee on the Status of Species at Risk in Ontario. SC = Special Concern

³Provincial Status. S4 = Apparently Secure; S5 = Secure

All of the observed bird species are considered common in the region and typical of urbanized residential environments. Species observed from the lawn and edge of the valleylands included Northern Cardinal (*Cardinalis cardinalis*), Cedar Waxwing (*Bombycilla cedrorum*), and Song Sparrow (*Melospiza melodia*). Species associated with the Kenollie Creek valleylands to the west included Downy Woodpecker (*Picoides pubescens*) and Black-capped Chickadee (*Poecile atricapillus*). Most of the observed species have territories associated with Kenollie Creek to the west.

One of the observed species, Barn Swallow (*Hirundo rustica*) is designated Special Concern. This species nests on or in buildings, and forages widely around nest sites. Buildings on the property were inspected for nests on August 2, 2024, but none were found.

In their comments on the EIS Terms of Reference (**Appendix A**), the City requested breeding bird surveys for the subject property. However, given the existing vegetation on the subject property is limited to a small number of trees within a residential yard, a similar suite of common, urban-tolerant bird species would be expected for the subject property and adjacent lands as was previously documented.

4.6 Habitat for Threatened or Endangered Species

Based on background information sources, there are records for threatened and endangered species within the general area of the subject property as summarized in **Table 2**. The subject property was assessed to determine if it supports the species or habitats that were identified through the background review.

Based on the MECP protocol ‘*Maternity Roost Surveys*’ (undated), deciduous, coniferous, and mixed woodlands represent potential maternity roost habitat for Little Brown Myotis (*Myotis lucifugus*), Northern Myotis (*Myotis septentrionalis*), and Tri-Colored Bat (*Perimyotis subflavus*). The EIS for 1142 Mona Road identified the woodlands along Mary Fix Creek and Kenollie Creek as potentially suitable habitat. While the subject property supports several trees, there are no deciduous, coniferous, or mixed woodlands on the subject property as defined under the ELC System that would represent candidate habitat for endangered bats based on the MECP guidance.

There are two existing buildings on the subject property. Both buildings were investigated on August 2, 2024 to determine if there were any potential entry/exit points for bats (i.e., peak of roof, vents near roofline, under soffit or where fascia meets roofline, etc.) as per the MECP protocol (*Use of Buildings by Species at Risk Bats Survey Methodology*, 2018). During this survey, the exterior of both buildings were found to be in generally good condition and no potential entry/exit points for bats were observed; therefore, the buildings are not considered habitat.

There was an uncapped chimney associated with one of the existing buildings on the subject property, which was identified as potentially suitable habitat for Chimney Swift. It is Beacon’s understanding that in preparation for demolition, the owner investigated the chimney and it was confirmed to have a metal liner, based on the presence of a metal liner, the chimney would be considered unsuitable for roosting Chimney Swift.

Table 2. Records of Threatened or Endangered Species with Vicinity of Subject Property

Common Name	Species	Status		Assessment of Subject Property
		SARA	ESA	
Blanding's Turtle	<i>Emydoidea blandingii</i>	THR	END	No suitable habitat
Chimney Swift	<i>Chaetura pelagica</i>	THR	THR	No suitable habitat
Bank Swallow	<i>Riparia riparia</i>	THR	THR	No suitable habitat
Bobolink	<i>Dolichonyx oryzivorus</i>	THR	THR	No suitable habitat
Eastern Meadowlark	<i>Sturnella magna</i>	THR	THR	No suitable habitat
Little Brown Myotis	<i>Myotis lucifugus</i>	END	END	No suitable habitat
Northern Myotis	<i>Myotis septentrionalis</i>	END	END	No suitable habitat
Tricolored Bat	<i>Perimyotis subflavus</i>	END	END	No suitable habitat
Eastern Small-footed Myotis	<i>Myotis leibii</i>	END		No suitable habitat
Butternut	<i>Juglans cinerea</i>	END	END	Not identified during field investigations

5. Summary of Natural Heritage Features and Constraints

Based on the findings of the 1142 Mona Road EIS (Beacon 2018) there are Significant Natural Areas and Natural Green Space associated with Kenollie Creek and Mary Fix Creek on adjacent lands to the west and south of the subject property respectively as illustrated in **Figure 3**.

Significant Natural Areas include:

- Significant Woodland – lowland forest and swamp communities along Kenollie Creek to the south of the subject property (ELC units 3 and 4);
- Candidate Significant Wildlife Habitat – forest, treed, swamp, and cultural woodlands associated with Mary Fix Creek and Kenollie Creek for Migratory Bird Stopover Habitat, Habitat for Species of Conservation Concern, and Animal Movement Corridor;
- Significant Valleyland – as represented by the long-term stable top of slope of Kenollie Creek
- habitat of threatened species or endangered species – potential habitat for endangered bats associated with woodlands along Mary Fix Creek and Kenollie Creek; and
- fish habitat - Kenollie Creek and the lower reaches of Mary Fix creek, downstream of the confluence of the two.

Natural Green Space include:

- Wetlands that do not qualify as significant wetlands – ELC unit 4 along Kenollie Creek;
- Watercourses that do not qualify as significant valleylands – Mary Fix Creek; and
- Natural areas greater than 0.5 hectares that have vegetation that is uncommon in the City – cultural woodland along Mary Fix Creek which supports Sassafras (*Sassafras albidum*), a locally rare tree species.

There are no natural heritage features on the subject property. While the subject property has some tree cover within the existing residential yards, these trees are not part of an ecological community that would qualify as significant woodland or SWH, nor are the trees continuous with any features that would qualify as Significant Natural Areas or Natural Green Space.

The trees on the subject property would more appropriately be classified as Residential Woodland, a designation that broadly applies to the majority of the Mineola neighbourhood. City of Mississauga policies do not prohibit development within Residential Woodlands, however policy 6.3.19 requires that development has regard for how existing tree canopy and understory are protected, enhanced, restored and expanded.

1148 and 1154 Mona Road Mississauga

Legend

- Subject Property (City of Mississauga 2024)
- 1142 Mona Road
- Watercourse
- Top of Bank (Staked by CVC Oct. 15 2015)
- Long Term Stable Top of Slope (Terraprobe 2016)
- Wetland (Beacon 2018)
- Wetland + 10 m
- Significant Woodland (Beacon 2018)
- Woodland + 10 m
- Candidate Significant Wildlife Habitat (Beacon 2018)



BEACON ENVIRONMENTAL Project: 223229
 Last Revised: November 2024

Client: Queenscorp (Mona II) Inc. Prepared by: BD
 Checked by: DW

N 1:650 0 10 20 m

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 Ontario Orthoimagery Basemap: Google Earth (2024)

6. Proposed Development

The proposed redevelopment for the subject property consists of 6 row townhouse units and two semi-detached buildings, each containing two units (four total) fronting on Mona Road, all to be constructed without basements. The townhouse units will be accessed via a proposed drive aisle with connection to Mona Road and the semi-detached units will have direct driveway access to Mona Road. A copy of the Site Plan is included in **Appendix C**.

The redevelopment will be serviced by connecting to existing water supply and sanitary infrastructure along Mona Road (Crozier and Associates 2024).

According to the SSSR (Crozier and Associates 2024), the majority of stormwater runoff from the redevelopment will drain to the existing ditch on Mona Road via an internal stormwater system. Runoff will be captured by catchbasins located within the driveway and controlled to the allowable release rate by an underground storage tank. A small portion of the site remains uncontrolled and drains to the west. As the proposed development is made up of rooftop, landscaped areas, and permeable pavers, which all have a TSS removal credit of 80%, no stormwater quality treatment is required (Crozier and Associates 2024).

7. Impact Assessment and Proposed Mitigation

7.1.1 Significant Natural Areas/Natural Green Space

Significant Natural Areas and Natural Green Space are associated with Mary Fix Creek and Kenollie Creek to the south and west of the subject property. Feature limits and buffers/setbacks were established through the EIS for 1142 Mona Road. The proposed development is approximately 20 m from the woodland associated with Mary Fix Creek, and 50 m from the woodland along Kenollie Creek. The subject property is currently separated from Significant Natural Area/Natural Green Space by existing development on adjacent lands (1130, 1136, 1138 and 1160 Mona Road). Therefore, no negative impacts on Significant Natural Area/Natural Green Space are expected to result from the proposed re-development of the subject property.

7.1.2 Residential Woodlands

The subject property, as well as most of the Mineola Neighbourhood, is identified as Residential Woodland on Schedule 3 of the City's Official Plan. Residential Woodlands are generally located in older residential areas with large lots that have mature trees forming a fairly continuous canopy. These areas have minimal native forest understorey or ground vegetation due to the presence of maintained lawns and landscaping. This is consistent with the conditions of the subject property, which supports mature tree cover and little to no understorey or ground vegetation.

City policies do not prohibit development within Residential Woodlands, however policy 6.3.19 requires that development has regard for how existing tree canopy and understorey are protected, enhanced, restored and expanded.

There is no woodland understorey within the subject property. Based on the tree inventory and preservation plan prepared by Amy Choi Consulting (2024), 21 trees require removal to accommodate the proposed re-development, and 10 trees located on or adjacent to the subject property have been identified for preservation. Compensation for tree removals should be provided in accordance with City requirements.

7.1.3 Wildlife Habitat

The subject property supports tree cover which may provide nesting habitat for some common urban birds. The federal *Migratory Birds Convention Act* (1994) protects the nests, eggs and young of most bird species from harm or destruction. Environment Canada considers the general nesting period of breeding birds in southern Ontario to be between late March and the end of August. This includes times at the beginning and end of the season when only a few species might be nesting. The broad bird nesting season in southern Ontario is April 1 to August 31. Beacon recommends that during the peak period of bird nesting, no vegetation clearing or disturbance to nesting bird habitat occur – i.e., between May 16 and July 15. In the shoulder seasons of April 1 to May 15, and July 16 to August 31, Beacon suggests that vegetation clearing could occur, but only after an Ecologist with appropriate avian knowledge has surveyed the area to confirm lack of nesting. If nesting activity is detected, then vegetation clearing (in an area around the nest) must wait until nesting has concluded. Between September 1 and March 31, vegetation clearing can occur without nest surveys, but the requirement for nest protection under the Act still holds (i.e., if an active nest is known it should be protected).

8. Policy Conformity

Table 3 provides a summary of how the proposed development complies with applicable provincial, and municipal policies and regulations.

Table 3. Policy Conformity

Applicable Policy / Legislation	Relevant EIS Findings and Recommendations
<i>Endangered Species Act (2007)</i>	No habitat for threatened or endangered species was identified on the subject property.
Provincial Planning Statement (2024)	
1. Habitat for Threatened and Endangered Species	See above.
2. Significant Valleylands	The Kenollie Creek valley qualifies as a significant valleyland in the City of Mississauga. The proposed development is over 50 from the valleyland and separated from the valley by existing development. No impacts on this feature are anticipated.
3. Significant Wetlands	Not applicable. There are no significant wetlands associated with the subject property.
4. Significant Coastal Wetlands	Not applicable. There are no significant coastal wetlands associated with the subject property.
5. Significant Woodlands	Significant woodlands were identified in the 1142 Mona Road EIS using municipal criteria and are limited to ELC Units 3 & 4 which are associated with the Kenollie Creek valleylands. A 10 m buffer was applied to the significant woodland in the 1142 Mona Road EIS. The proposed development is approximately 50 m from the significant woodland and separated by existing development. No negative impacts to the significant woodland are anticipated.
6. Significant Wildlife Habitat	Candidate SWH identified through the 1142 Mona Road EIS includes Migratory Landbird Stopover Area (ELC Units 3 & 4), Habitat for Species of Conservation Concern (Sassafras tree stand), and Animal Movement Corridor (associated with the Kenollie Creek corridor). The proposed development is approximately 50 m from areas identified as candidate SWH and is separated by existing development. No negative impacts to the candidate SWH are anticipated as a result of this redevelopment.
7. Significant Areas of Natural and Scientific Interest	Not applicable. There are no ANSIs associated with the subject property.
Natural Hazards	Development of the subject property will be outside natural hazards (i.e. slopes, floodplains) and associated setbacks associated with Kenollie Creek and Mary Fix Creek.
Region of Peel OP	The Regional Greenlands System consists of “Core Areas”, “Natural Areas and Corridors (NAC)”, and “Potential Natural Areas and Corridors (PNAC)”. Core Areas of the Greenlands System are mapped on Schedule A of the Regional Official Plan. There are no Core Areas identified on the subject property on Schedule A.

Applicable Policy / Legislation	Relevant EIS Findings and Recommendations
	<p>ELC Units 3 & 4 associated with the Kenollie Creek floodplain qualify as an NAC woodland based on the criteria in Table 1 of the ROP. The proposed development is approximately 50 m from the Kenollie Creek valley and separated by existing development. No negative impacts are anticipated.</p> <p>There are no PNAC's within or adjacent to the subject property.</p>
Mississauga OP (2016)	
<p>1. Natural Heritage System</p>	<p>The City's natural heritage system consists of:</p> <ul style="list-style-type: none"> • Significant Natural Areas; • Natural Green Spaces; • Special Management Areas; • Residential Woodlands; and • Linkages. <p>Significant natural areas and natural green spaces were confirmed through a previous EIS for 1142 Mona Road (now 1130, 1136, and 1138 Mona Road) located directly adjacent to the subject property. There are no features on the subject property that meet the criteria for Significant Natural Area or Natural Green Space. The proposed redevelopment is approximately 20 m from the woodland associated with Mary Fix Creek, and 50 m from the woodland along Kenollie Creek and is separated from the Significant Natural Area/Natural Green Space features by existing development on adjacent lands (1130, 1136, 1138, and 1160 Mona Road). Therefore, no negative impacts on Significant Natural Area/Natural Green Space are expected to result from the proposed re-development of the subject property.</p> <p>The subject property, as well as most of the Mineola Neighbourhood, is identified as Residential Woodland on Schedule 3 of the City's Official Plan. City policies do not prohibit development within Residential Woodlands, however policy 6.3.19 requires that development has regard for how existing tree canopy and understorey are protected, enhanced, restored and expanded. There is no woodland understorey within the subject property. Based on the tree inventory and preservation plan prepared by Budrevics (2024), 21 trees will require removal. Compensation for tree removal should be provided in accordance with City requirements.</p>
<p>2. Natural Hazard Lands</p>	<p>Re-development of the subject property will be limited to areas outside natural hazards (i.e. slopes, floodplains) associated with Kenollie Creek and Mary Fix Creek.</p>
<p>3. Urban Forest</p>	<p>The Urban Forest includes all the trees within the City on both public and private lands, within the Natural Heritage System, as well as along streets, in parks, in yards, and on a wide range of open spaces and other land uses.</p> <p>A tree inventory and preservation plan was prepared for the subject property by Boudrevics (2024). The TIPP identifies trees for removal and protection based on the proposed redevelopment plan. Trees identified for preservation will be protected as per the recommendations in the arborist report (Amy Choi Consulting</p>

Applicable Policy / Legislation	Relevant EIS Findings and Recommendations
	<p>2024). Tree removals are required to accommodate the proposed development, which will result in reduction to the urban forest canopy. To ensure no negative impact on the urban forest canopy, replacement trees will be planted on the subject property (or cash in lieu provided) to restore the urban forest canopy in accordance with City tree replacement/compensation requirements.</p>

9. Conclusion

This EIS was prepared in support of a proposed redevelopment for two adjoining properties located at 1148 and 1154 Mona Road in the City of Mississauga.

The subject property consists of two existing residential lots, each supporting a detached dwelling. The proposed redevelopment for the subject property consists of six row townhouse units and two semi-detached buildings, each containing two units (four total), fronting on Mona Road.

An EIS was required based on the location of the subject property in relation to the City's NHS. The City's NHS consists of several components, including Significant Natural Area, Natural Green Space, Residential Woodlands, Special Management Areas, and Linkages. Based on Schedule 3 (Natural System) of the City's Official Plan, the subject property overlaps with areas identified as Residential Woodland and Significant Natural Area/Natural Green Space.

The limits of the Significant Natural Area/Natural Green Space components of the NHS on and adjacent to the subject property were refined through an EIS prepared by Beacon (2018) and companion technical reports that were prepared for a recent redevelopment of the property formerly known as 1142 Mona Road (now 1130, 1136, and 1138 Mona Road), located directly adjacent to (south and west of) the subject property. The EIS for 1142 Mona Road (Beacon 2018) established the limits of Significant Natural Area/Natural Green Space components of the NHS associated with Kenollie Creek and Mary Fix Creek (south and west of the subject property). The subject property is currently separated from Significant Natural Area/Natural Green Space by existing development on adjacent lands (1130, 1136, 1138, and 1160 Mona Road).

No Significant Natural Area or Natural Green Space was identified on the subject property through this EIS, nor prior studies. The proposed development is approximately 20 m from the woodland associated with Mary Fix Creek, and 50 m from the woodland along Kenollie Creek. No negative impacts on Significant Natural Area/Natural Green Space are expected to result from the proposed re-development of the subject property.

The subject property, as well as most of the Mineola Neighbourhood, is identified as Residential Woodland in the City's Official Plan. Based on the tree inventory and preservation plan (Amy Choi Consulting 2024), 21 trees require removal to accommodate the proposed re-development and 10 trees located on or adjacent to the subject property have been identified for preservation. Compensation for tree removals will be provided in accordance with City requirements.

Prepared by:
Beacon Environmental Ltd.



Dan Westerhof, B.Sc., M.E.S.
Senior Terrestrial Ecologist,
ISA Certified Arborist (ON-1536A)

Reviewed by:
Beacon Environmental Ltd.



Jamie Nairn, M.Sc., P.Ag.
Senior Ecologist

10. References

- Amy Choi Consulting. 2024.
Arborist Report and Tree Preservation Plan. 1148 and 1154 Mona Road, Mississauga.
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- Beacon Environmental Limited. 2018.
Environmental Impact Study, 1142 Mona Road, City of Mississauga. December 2018.
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Site Servicing and Stormwater Management Report. 1148-1154 Mona Road. City of
Mississauga, Region of Peel. November 2024.
- Grounded Engineering. 2024.
Hydrogeological Review Report. 1148 & 1154 Mona Road, Mississauga, ON. September 2024.
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Ontario Ministry of Natural Resources. SCSS Field Guide FG-02. 225 pp.
- Ontario Ministry of Natural Resources. 2000.
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- Ontario Ministry of Natural Resources. 2010.
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- Ontario Ministry of Municipal Affairs and Housing. 2024.
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- Province of Ontario. 2007.
Endangered Species Act (S.O. 2007).

Appendix A



July 31, 2024

BEL 223229

Paul Tripodo
Natural Heritage Specialist
City of Mississauga | Community Services
Parks, Forestry & Environment Division

via email: paul.tripodo@mississauga.ca

Re: Terms of Reference for Scoped Environmental Impact Study – 1148 & 1154 Mona Road, City of Mississauga

Dear Mr. Tripodo:

Beacon Environmental Limited (Beacon) has prepared the following Terms of Reference (TOR) for a Scoped Environmental Impact Study (EIS) for 1148 and 1154 Mona Road in City of Mississauga (hereafter referred to as the subject property). The location of the subject property is illustrated in **Figure 1**.

The City's natural heritage system (NHS) consists of several components, including Significant Natural Area, Natural Green Space, Residential Woodlands, Special Management Areas, and Linkages. The subject property consists of two existing residential lots. Based on Schedule 3 (Natural System) of the City's Official Plan, the subject property overlaps with areas identified as Residential Woodland and Significant Natural Area/Natural Green Space. An EIS is typically required for a development proposal located within or adjacent to the NHS.

The limits of the Significant Natural Area/Natural Green Space components of the NHS on and adjacent to the subject property were refined through an EIS prepared by Beacon (2018) and companion technical reports that were prepared for a recent redevelopment of the property formerly known as 1142 Mona Road (now 1130, 1136, and 1138 Mona Road), located directly adjacent to (south and west of) the subject property. The EIS for 1142 Mona Road established the limits of Significant Natural Area/Natural Green Space components of the NHS associated with Kennolie Creek and Mary Fix Creek (south and west of the subject property). While the subject property has trees within the existing residential yards, including those with canopies overhanging 1142 Mona Road, they were not included in the delineation of Significant Natural Area/Natural Green Space. The subject property is separated from Significant Natural Area/Natural Green Space by existing development on adjacent lands (1130, 1136, and 1138 Mona Road). No Significant Natural Area or Natural Green Space was identified on the subject property through prior studies; however, the EIS for 1142 Mona Road acknowledged the presence of Residential Woodland, which broadly applies to the Mineola neighbourhood.

The scoped EIS for the subject property will rely primarily on the findings of the EIS for 1142 Mona Road and supporting technical studies prepared by other for the subject property (e.g. Arborist Report, Hydrogeological Report, etc.). An EIS scoping checklist is provided in **Attachment A**.

Background Review

A review of background information sources relevant to the subject property will be completed, including but not limited to:

- Environmental Impact Study for 1142 Mona Road (Beacon 2018);
- Applicable site specific technical reports (Arborist Report/Tree Preservation Plan; Functional Servicing Report, Stormwater Management Report, Hydrogeological Report);
- Natural Heritage Information Centre (NHIC) data;
- City of Mississauga Natural Areas Survey;
- Wildlife atlases; and
- Natural and physical feature layers from LIO (e.g. wetlands and watercourses).

In addition, the relevant environmental/natural heritage policies that may apply to the subject property including the Provincial Policy Statement, Peel Region Official Plan, City of Mississauga Official Plan, and the Conservation Authorities Act and applicable Credit Valley Conservation (CVC) Authority policies, will be reviewed and considered in relation to the proposed development.

Field Investigations

The subject property consists of two existing development residential lots, which are separated from Kenolie Creek and Mary Fix Creek by existing development on adjacent lands (lands formerly known as 1142 Mona Road). The NHS associated with these creek systems was studied and characterized through detailed field investigations conducted as part of the EIS for 1142 Mona Road; therefore, field investigations will be limited to a single site visit to verify existing conditions on the subject property.

Reporting

A Scoped EIS report will be prepared to include the following:

Introduction – Introductory remarks regarding the purpose and scope of the study, a general description of the site and the site location, and a brief description of the proposed development.

Policy Review – Summary of applicable provincial, municipal and Conservation Authority natural heritage policies and legislation, and their relevance to the subject property, including the Provincial Policy Statement, the Peel Region Official Plan, the City of Mississauga Official Plan, the Conservation Authorities Act and applicable CVC policies.

Methodology – Description of the methods used to characterize the natural heritage features and functions associated with the subject property and adjacent lands, including background review and field investigations.

Findings – Description of existing conditions based on the results of the background review and field investigations. Existing biophysical resources on the subject property will be characterized, including topography, soils, vegetation communities, and flora.

Constraints Assessment – Description of various natural heritage constraints associated with the property, including a Constraints figure.

Description of Proposed Development – Description of the proposed development and a figure of the proposed development with the natural heritage constraints

Impact Assessment – Discussion of potential direct and indirect impacts of the proposed development on the natural heritage and hydrological features and ecological functions on/adjacent to the subject property.

Mitigation Recommendations – Discussion of mitigation measures to avoid, minimize, or offset impacts to natural heritage features.

Policy Conformity - The proposed development will be evaluated to ensure conformity to applicable provincial, municipal and conservation authority policies and regulations.

Conclusion – The concluding section of the Scoped EIS will include a summary of key findings and recommendations as well as a concluding environmental impact statement related to the proposed development.

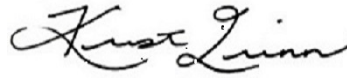
We trust that these TOR presented above are sufficiently comprehensive to address the requirements for a Scoped EIS for the subject properties. Should you have any questions or wish to discuss the study requirements further, please do not hesitate to contact me.

Prepared by:
Beacon Environmental Ltd.

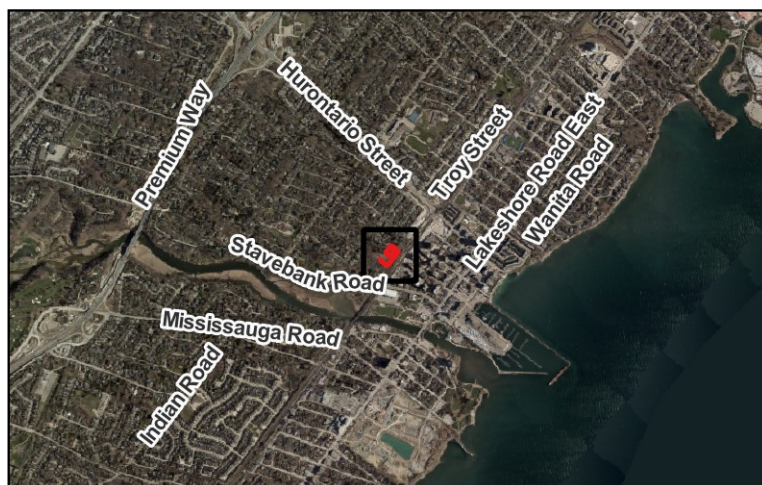
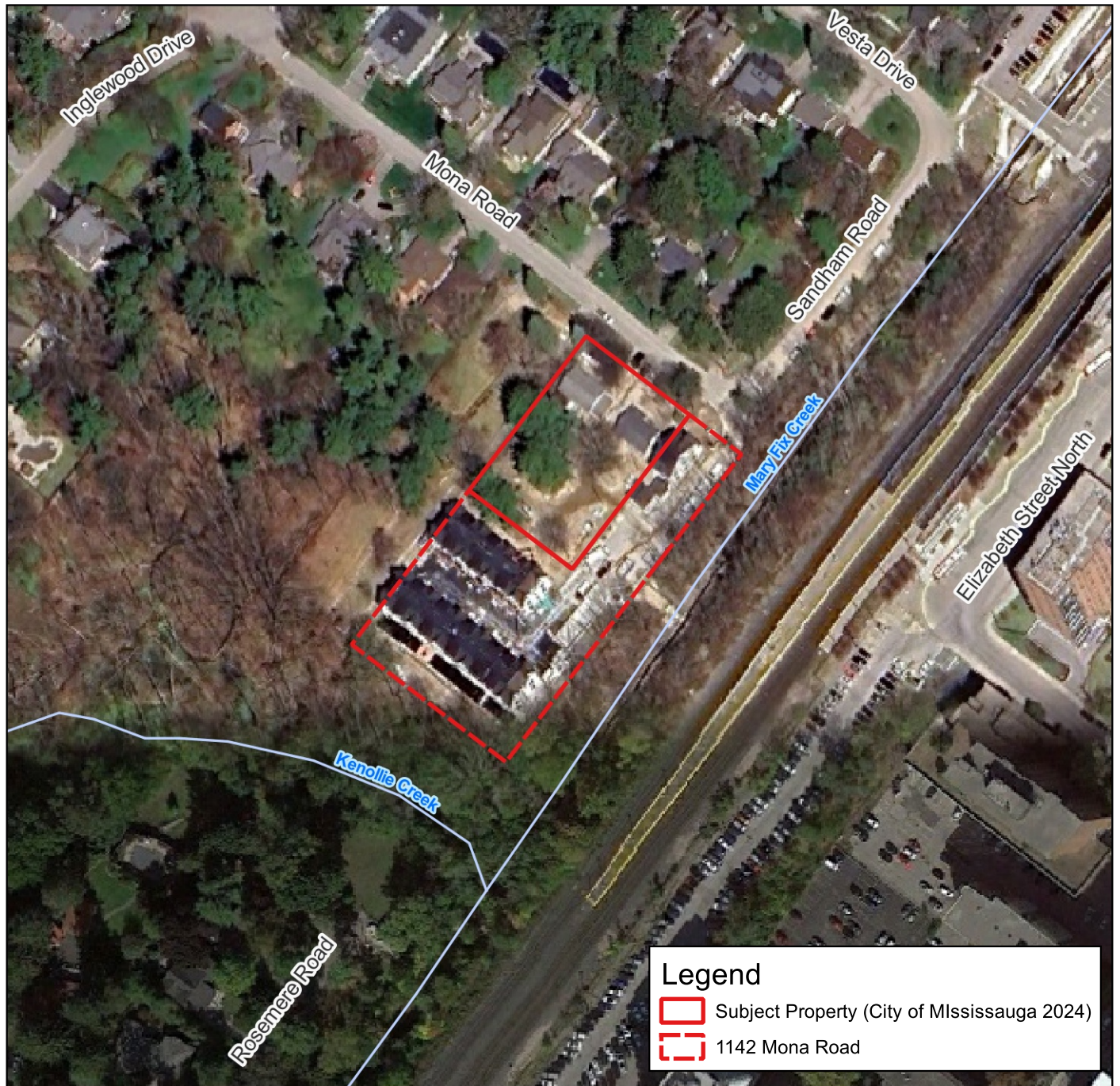




Dan Westerhof, B.Sc., M.E.S.
Senior Terrestrial Ecologist,
ISA Certified Arborist (ON-1536A)

Reviewed By:
Beacon Environmental Ltd.



Kristi Quinn, B.E.S., Cert. Env. Assessment
Senior Environmental Planner



Site Location		Figure 1
1148 and 1154 Mona Road Mississauga		
		Project: 223229 Last Revised: July 2024
Client: Queenscorp Group		Prepared by: BD Checked by: DW
	1:1,886	Inset Map: 1:50,000
Contains information licensed under the Open Government License—Ontario Orthoimagery Baselayer: Google Earth (2024)		



Attachment A

Environmental Impact Study Checklist

October 2017



Mark Bozzo (Formally, Tomi Slavic was an
Applicant: applicant who is no longer with the company **Env. Consultant:** Beacon Environmental
Phone: 416 253-4663 **Phone:** 519-362-8595
Email: mbozzo@queenscorp.com **Email:** dwesterhof@beaconenviro.com
PAM and/or DARC # and Date: DARC 23-106 W1 and on July 26, 2023

Development Application (check): Official Plan Amendment Zoning By-law Amendment
 Site Plan Application Subdivision Condominium Other

Site / Property Address: 1148 & 1154 Mona Road

Process

- Applicant requests site meeting prior to initial submission
- After site meeting, environmental consultant completes EIS Checklist based on on-site discussion and submits to City for confirmation
- EIS, with EIS Checklist included as an appendix, becomes part of complete application
- Depending on application type, an addendum may be required with subsequent applications (eg. level of detail required at OPA versus Site Plan)
- Natural heritage records generally require updates or field verification after 5 years
- If additional questions, please contact Dan Westerhof (dwesterhof@beaconenviro.com)

Content

The following is a checklist of all the potential sections that may need to be addressed as part of an EIS. However, depending on the scope and scale of the proposed development and/or site alteration, as well as the nature and extent of natural heritage features and areas to be considered, not all elements will necessarily be required. Components not included in the Terms of Reference, with a rationale for their exclusion, should be marked as "N/A".

1. Introduction

- Description of subject property (natural features and areas, land cover, existing hard surfaces or buildings)
- Description of the type and scale of the development proposal (including, but not limited to, servicing, above and below ground structures, proposed grading)
- Describe the historical and present uses of the subject property:
 - grading/filling activities
 - brownfield contamination
- Description of the site context/study area and the subject property's relationship to the surrounding landscape
- Include map(s) of the development location, subject property and study area
 - Orthographic map with known natural heritage features/areas overlaid

2. Planning Context

- Current land uses designation and zoning for the subject property and for the adjacent lands, including Upper and Lower Tier designations
- Identify the type of required development applications
- Include map(s) of the development location and extent of the area to be studied including current Land Use / Zoning
- Identify environmental legislative, regulatory and policy requirements that may affect the development proposal, including clauses relevant to the proposal (Federal, Provincial, Municipal – Upper and Lower Tier, and Conservation Authority)

3. Background Review

- Identify relevant information from existing studies, plans, databases and other sources to be analyzed as part of the EIS including, but not limited to, Natural Heritage and Urban Forest Strategy, Natural Areas Survey, Region of Peel data, Conservation Authority data, Natural Heritage Information Centre

4. Characterizing the Natural Environment: Approach and Methodology

- Detailed study methods for studying natural heritage features and areas, wildlife habitat and Species at Risk (including time of year, level of searcher effort, etc.)
- Identify and describe the approach and methods to be used to assess natural environment of the subject property and the adjacent lands for:
 - Geology and Soils Background sources
 - Hydrology and Hydrogeology Background sources
 - Aquatic and Fish Habitat Background sources, include 1142 Mona Road EIS
 - Terrestrial Vegetation (including wetlands) Site visit; Background sources, including 1142 Mona Road EIS
 - Vegetation Communities (Ecological Land Classification) Site visit; Background sources, including 1142 Mona Road EIS
 - Wildlife Background sources, including 1142 Mona Road EIS
 - Natural Hazards Background sources, including 1142 Mona Road EIS
 - Connectivity and Ecological Linkages Background sources, including 1142 Mona Road EIS
- Identify whether there are potential natural heritage features and areas that do not need to be assessed, and provide a rationale for their exclusion
- Complete a screening for Significant Wildlife Habitat
- Include map(s) showing locations for field studies (i.e. points, plots, transects)
- Tree inventory and preservation plan for trees outside of the NHS completed by others - findings will be included in the EIS

5. Data Analysis: Approach and Methodology

- Evaluation of Significance and Natural Hazards—identify that the following assessments are in scope and any known analysis that will need to be included based on 1142 Mona Road EIS
 - Natural heritage features and areas against the appropriate policies and guidelines to determine significance:
 - Natural heritage features and areas against the appropriate policies and guidelines related to natural hazards:
 - Appropriate buffers and/or setbacks to the natural heritage features
- Natural Heritage Opportunities and Constraints— identify that it is in scope
- Environmental Policy Analysis (confirmation of policies and legislation to be addressed)
- Impact Assessment—identify that the scope includes direct, indirect, and cumulative impacts
- Evaluation of Alternative Options/Measures—establish key analysis points to be addressed in the EIS
- Recommended Mitigation Measures (including, but not limited to avoidance, enhancement, restoration, education and stewardship)

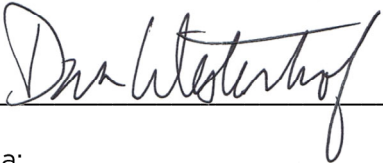
6. Monitoring

- Monitoring Plan (outline of the types of monitoring to be included in the EIS)

7. Recommendations and Conclusion

- Recommendations Concluding Statement (confirm they are to be provided in the EIS)

Signatures

Env. Consultant:  Date: July 30, 2024

City Of Mississauga: _____ Date: _____

1148 & 1154 Mona Rd Project
Community Services Review – Forestry

September 3rd, 2024

Hi Lucas Petricca,

Thank you for including us in the review of environmental impact study (EIS) terms of reference (TOR) relating to the 1148 & 1154 Mona Rd Project (filed under: DARC 23-106).

The following documents were reviewed by Forestry:

Received by Forestry	Document
August 1 st , 2024	Terms of Reference for Scoped Environmental Impact Study – 1148 & 154 Mona Rd, Beacon Environmental, July 31, 2024
n.d.	Environmental Impact Study – 1142 Mona Rd, Beacon Environmental Ltd., March 2018

I trust that this information aids in the plan review process from a natural heritage perspective and the next steps forward. If you have any questions, please do not hesitate to contact me.

Sincerely,



Jeffrey Driscoll, MSc., MEnv.Sc.

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[City of Mississauga](#) | Community Services Department,
Parks, Forestry & Environment Division

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1.0 Forestry Comments

Comment 1: Background Review

While we appreciate that the environmental impact study (EIS) for 1148 and 1154 Mona Road will rely on information collected as part of a previous EIS for the neighbouring property at 1142 Mona Road (Beacon, 2018), the report must present current and independent findings for the existing conditions found at and adjacent to 1148 and 1154 Mona Road. The previous EIS (Beacon, 2018) provided an opinion that the FOM2-1 (White Pine-Oak Mixed Forest) woodland within the MI7 Significant Natural Area did not occur in this area; however, it did not provide any documentation for review that was specific to the 1148 and 1154 Mona Road properties. The currently proposed EIS must satisfy this concern and provide the detailed ecological and tree inventory results to substantiate any claims regarding the limits of the Significant Natural Area.

Comment 2: Natural Areas Survey (NAS) Data

Given that the project area overlaps directly with features of the City's Natural Heritage System, specifically MI4 Residential Woodland and MI7 Significant Natural Area, the background data review should also include reference to the City of Mississauga's Natural Areas Survey (NAS). For detailed species lists of what has been previously found in natural area sites within/adjacent to this site please contact Jeffrey Driscoll (Natural Heritage Specialist, jeffrey.driscoll@mississauga.ca) to coordinate data sharing with the City's NAS Data Steward.

Comment 3: Field Investigations

The field investigation component of the EIS is lacking. In order to address this the following is required:

- a. An updated Ecological land classification (ELC) for the subject property and adjacent lands given that the original work for the neighbouring property is now 8 years old (Beacon 2018 indicates vegetation communities and flora surveys were completed in May and June 2016 and that feature staking occurred in October 2015).
- b. Given that there is the potential for both significant natural area and residential woodlands (which considers impacts to urban wildlife) a breeding bird survey is required.
- c. Given that there is potential for significant impacts to treed areas on the property a bat habitat assessment must be undertaken. Trees, including isolated trees, that have the potential to be used as roosts should be monitored for evidence of roosting.
- d. A detailed tree inventory and preservation plan is required.
- e. A species at risk screening is required. The EIS should contain any required correspondence from provincial and federal agencies as required.

Comment 4: General Field Data Collection Requirements

Please ensure the following information relating to data collected during field investigations are included within the EIS report:

- The data cards completed during ecological land classification (ELC) fieldwork for the classification of vegetation communities must be provided both digitally and in an appendix to the EIS report.
- All rare and at-risk flora and fauna species must be geolocated and their locations provided on a map in the EIS report. Any rare and at-risk species that were identified through the background review but not confirmed during field investigations must be addressed within the report.
- Geolocation information for fieldwork survey stations should be provided in a map in the EIS.

Comment 5: Significant Wildlife Habitat

Please ensure that the assessment of Significant Wildlife Habitat (SWH) will be completed according to both the criteria and thresholds of the *Significant Wildlife Habitat Schedules for Ecoregion 7E* (MNRF, 2015), and the *Peel-Caledon Significant Woodland and Significant Wildlife Habitat Study* (2009).

Comment 6: Policy Conformity

The city's residential woodland policies dictate that development proposals and site alteration for lands within a Residential Woodland will have regard for how existing tree canopy and understory are *protected, enhanced, restored and expanded*. Removals and losses of residential woodland features should not be presumed. These are site-specific features that contribute to the character and ecological functions of a specific area and therefore cannot be addressed by off-site work. Considerations for protection and compensation may exceed requirements under City tree preservation bylaws.

Comment 7: Monitoring Plan

Depending on the nature of the proposed impacts and opportunities a monitoring plan may be required. If this is the case high level direction on the components of a monitoring plan will be required to be contained within the EIS for review.

End of Comments

Jeffrey Driscoll
Natural Heritage Specialist, Forestry

Appendix B



Vascular Plant Species List

Appendix B

Vascular Plant Species List

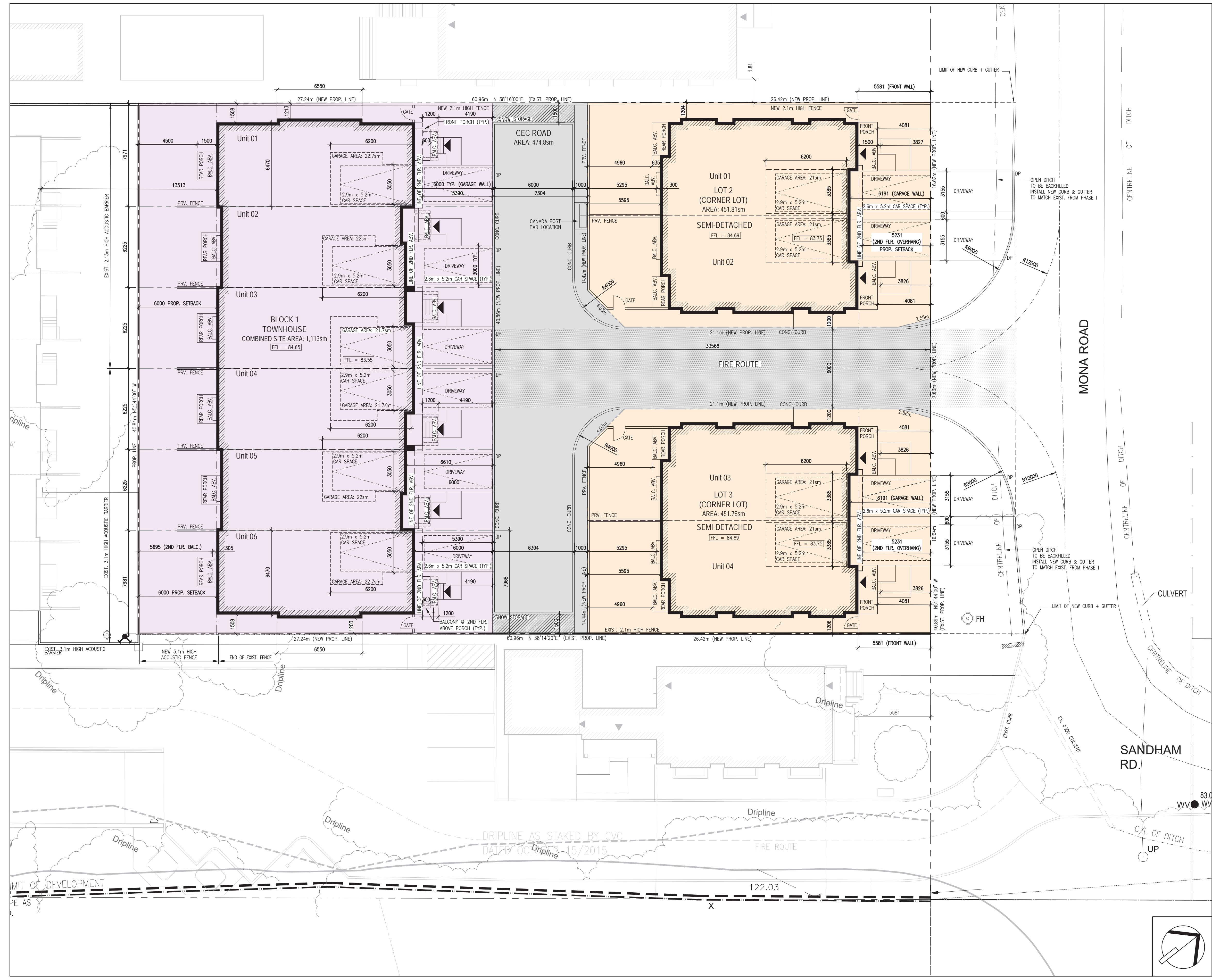
Scientific Name	Common Name	Family	SRank
<i>Acalypha rhomboidea</i>	Common Three-seeded Mercury	Euphorbiaceae	S5
<i>Acer platanoides</i>	Norway Maple	Aceraceae	SE5
<i>Acer x freemanii</i>	(<i>Acer rubrum</i> X <i>Acer saccharinum</i>)	Aceraceae	SNA
<i>Achillea millefolium</i>	Common Yarrow	Asteraceae	SE5?
<i>Ambrosia artemisiifolia</i>	Common Ragweed	Asteraceae	S5
<i>Campanula medium</i>	Canterbury Bellflower	Campanulaceae	SE1
<i>Convallaria majalis</i>	European Lily-of-the-valley	Liliaceae	SE5
<i>Dactylis glomerata</i>	Orchard Grass	Poaceae	SE5
<i>Daucus carota</i>	Wild Carrot	Apiaceae	SE5
<i>Dryopteris carthusiana</i>	Spinulose Wood Fern	Dryopteridaceae	S5
<i>Elymus repens</i>	Quackgrass	Poaceae	SE5
<i>Erigeron annuus</i>	Annual Fleabane	Asteraceae	S5
<i>Glechoma hederacea</i>	Ground-ivy	Lamiaceae	SE5
<i>Hesperis matronalis</i>	Dame's Rocket	Brassicaceae	SE5
<i>Juniperus virginiana</i>	Eastern Red Cedar	Cupressaceae	S5
<i>Lonicera tatarica</i>	Tatarian Honeysuckle	Caprifoliaceae	SE5
<i>Melilotus albus</i>	White Sweet-clover	Fabaceae	SE5
<i>Morus alba</i>	White Mulberry	Moraceae	SE5
<i>Picea pungens</i>	Blue Spruce	Pinaceae	SE1
<i>Pinus strobus</i>	Eastern White Pine	Pinaceae	S5
<i>Poa compressa</i>	Canada Bluegrass	Poaceae	SE5
<i>Pyrus communis</i>	Common Pear	Rosaceae	SE4
<i>Rhus typhina</i>	Staghorn Sumac	Anacardiaceae	S5
<i>Solidago altissima</i>	Tall Goldenrod	Asteraceae	S5
<i>Sonchus arvensis</i>	Field Sow-thistle	Asteraceae	SE5
<i>Symphotrichum lanceolatum</i>	Panicked Aster	Asteraceae	S5
<i>Syringa vulgaris</i>	Common Lilac	Oleaceae	SE5
<i>Taraxacum officinale</i>	Common Dandelion	Asteraceae	SE5
<i>Tilia cordata</i>	Little-leaved Linden	Tiliaceae	SE1
<i>Trifolium hybridum</i>	Alsike Clover	Fabaceae	SE5
<i>Vincetoxicum rossicum</i>	European Swallowwort	Apocynaceae	SE5
<i>Viola sororia</i>	Woolly Blue Violet	Violaceae	S5

Appendix C



LEGEND

- PROPERTY LINE
- ZONING ENVELOPE
- PROPOSED BUILDING
- FIRE DEPARTMENT ACCESS ROUTE
- CURB DEPRESSION
- RM2 ZONE LOT
- RM6 ZONE LOT
- CEC ACCESS ROAD



SITE STATISTICS - SEMI-DETACHED RESIDENCE

ZONING	ZONING BY-LAW	LOT 2 - CORNER LOT	LOT 3 - CORNER LOT
1. ZONING	RM2 SEMI-DETACHED HOUSE	SEMI-DETACHED RESIDENCE	SEMI-DETACHED RESIDENCE
2. LOT FRONTAGE	CORNER LOT - MIN. 9.8m	16.62m	16.64m
3. SITE AREA	CORNER LOT - MIN. 280m ²	451.81m ²	451.78m ²
4. COVERAGE	MAX. 45%	49.97%	49.98%
5. SETBACKS	FRONT YARD = MIN. 4.5m GARAGE FACE = MIN. 6.0m INTERIOR SIDE YARD = MIN. 1.2m EXTERIOR SIDE YARD = MIN. 4.5m REAR YARD = MIN. 7.5m	FRONT YARD: TO GRND. FLR. WALL = 5.59m TO GARAGE WALL = 6.19m TO 2ND FLR. PROJECT. = 5.23m REAR YARD PORCH + STARS = 1.0m REAR 2ND FLR. BALCONY = 1.0m	FRONT YARD: TO GARAGE WALL = 5.59m TO 2ND FLR. PROJECT. = 5.23m INTERIOR SIDE YARD = 1.20m EXTERIOR SIDE YARD = 1.20m REAR YARD = 5.59m
6. PERMITTED PROJECTIONS	FRONT YARD PORCH + STARS = 1.6m FRONT 2ND FLR. BALCONY = 1.5m REAR YARD PORCH + STARS = 5.0m REAR 2ND FLR. BALCONY = 1.0m	FRONT PORCH (EXCL. STARS) = 1.5m FRONT 2ND FLR. BALCONY = 1.5m REAR PORCH = 0.6m REAR 2ND FLR. BALCONY = 0.6m	FRONT PORCH (EXCL. STARS) = 1.5m FRONT 2ND FLR. BALCONY = 1.5m REAR PORCH = 0.6m REAR 2ND FLR. BALCONY = 0.6m
7. BUILDING HEIGHT	MAX. 10.7m FROM AVERAGE GRADE TO MID POINT OF ROOF	9.28m	9.48m
8. ATTACHED GARAGE & DRIVEWAY	GARAGE INTER. AREA = MAX. 75m ² MIN. UNOBSTRUCT. SPACE: 2.6m x 5.2m x 2.0m MAX. DRIVEWAY WIDTH = 5.2m	GARAGE INTER. AREA = 21m ² UNOBSTRUCTED SPACE: 2.9m x 5.2m DRIVEWAY WIDTH = 3.15m	GARAGE INTER. AREA = 21m ² UNOBSTRUCTED SPACE: 2.9m x 5.2m DRIVEWAY WIDTH = 3.15m
9. PARKING	2 SPACES / UNIT	2 SPACES / UNIT	2 SPACES / UNIT

SITE STATISTICS - CEC TOWNHOUSES

ZONING	ZONING BY-LAW	BLOCK 1 TOWNHOUSES ON A CEC-ROAD
1. ZONING	RM6	TOWNHOUSES
2. LOT FRONTAGE	MIN. 5.0m	16.62m
3. SITE AREA	MIN. 115m ²	END UNIT LOT (UNIT 6) = 217.2m ² (UNIT 1 - 217.5m ²)
4. DWELLING UNIT WIDTH	MIN. 5.0m	INTERIOR UNIT LOT = 169.6m ² INTERIOR UNIT WIDTH = 6.22m END UNIT WIDTH = 6.47m
5. SETBACKS	FRONT YARD = MIN. 4.5m GARAGE FACE = MIN. 6.0m INTERIOR SIDE YARD = MIN. 1.5m REAR YARD = MIN. 7.5m	FRONT YARD: TO GRND. FLR. WALL = MIN. 6.0m TO GARAGE WALL = MIN. 6.0m TO 2ND FLR. PROJECT. = MIN. 5.39m REAR PORCH = 1.2m REAR 2ND FLR. BALCONY = 1.5m REAR YARD = 6.0m
6. PERMITTED PROJECTIONS	FRONT YARD PORCH + STARS = 1.5m FRONT 2ND FLR. BALCONY = 0.6m REAR YARD PORCH + STARS = 5.0m REAR 2ND FLR. BALCONY = 1.0m	FRONT PORCH (EXCL. STARS) = 1.5m FRONT 2ND FLR. BALCONY = 1.2m REAR PORCH = 1.5m REAR 2ND FLR. BALCONY = 5.59m (ABOVE PORCH)
7. BUILDING HEIGHT	MAX. 10.7m AND 3 STOREY FROM ESTABLISHED GRADE TO MID POINT OF ROOF	9.07m
8. ATTACHED GARAGE & DRIVEWAY	GARAGE INTER. AREA = MAX. 75m ² MIN. UNOBSTRUCT. SPACE: 2.6m x 5.2m x 2.0m MAX. DRIVEWAY WIDTH = 3.0m	GARAGE INTER. AREA = 21.7m ² / 22m ² / 22.7m ² UNOBSTRUCTED SPACE = 2.9m x 5.2m DRIVEWAY WIDTH = 3.0m
9. PARKING	PRIVATE = 2 SPACES / UNIT VISITOR = 0.25 SPACE / UNIT	PRIVATE = 2 SPACES / UNIT VISITOR = NONE
10. CEC ROAD	MIN. WIDTH OF CEC ROAD = 7.0m	WIDTH OF CEC ROAD = 6.0m
11. LANDSCAPED AREA	END UNITS 1 & 6 = 42.5% (92.4m ²) INTERIOR UNITS 2 & 5 = 32.2% (54.6m ²) INTERIOR UNITS 3 & 4 = 30.6% (51.9m ²)	NOTE: LANDSCAPE CALC. EXCL. DRIVEWAYS + PORCHES

AREA STATISTICS

GROSS FLOOR AREA	TOWNHOUSES - BLOCK 1		SEMI-DETACHED - BLOCKS 2 & 3	
	GROUND FLR. AREA:	2ND FLOOR AREA:	GROUND FLR. AREA:	2ND FLOOR AREA:
	419.4m ²	592.8m ²	172.6m ²	225.8m ²
	498.4m ²	498.4m ²	171.2m ²	171.2m ²
TOTAL GFA:	1,510.6m ²		569.6m ²	
GARAGE AREAS (NOT INCL.):	145.6m ²		46.2m ²	
GFA PER UNIT:			GFA PER UNIT: 284.8m ²	
UNITS 1 & 6:	268.0m ²			
UNITS 2 & 5:	237.9m ²			
UNITS 3 & 4:	249.4m ²			

LANDSCAPE NOTE

FOR LANDSCAPE DETAILS AND INFORMATION ON TREES AND VEGETATION REFER TO ARBORIST REPORT.