Revised
Environmental Impact Study
West Part Half Lot 22, Concession 1, Town of Caledon, Region of Peel

Prepared for:
Lexis-Bayview Developments

Prepared by:
Azimuth Environmental
Consulting, Inc.

October 2013
Revised July 2015
Revised November 2017

AEC 06-011

AZIMUTH ENVIRONMENTAL CONSULTING, INC.

Environmental Assessments & Approvals

November 2, 2017 AEC 06-011

Lexis-Bayview Developments
255 Duncan Mill Road
Suite 202
North York, ON
M3B 3H9

Attention: Warren Li, President

Re: **Revised Environmental Impact Study and Management Plan**
West Half of Lot 22, Concession 1 (geographic Township of Albion) in the Town of Caledon, Region of Peel

Dear Mr. Li:

As requested Azimuth has appended additional information to its October 2013 (Revised July 2015) Environmental Impact Study and Management Plan to include information related to review comments provided by the Town of Caledon and the Toronto and Region Conservation Authority. Please note that there have been no updates to the July 2015 report. All relevant updates including updated figures are provided within the additional appended information (Appendix F and G).

If you have questions or require additional information please do not hesitate to contact us.

Yours truly,
AZIMUTH ENVIRONMENTAL CONSULTING, INC.

L. Moran

Lisa Moran, B.Sc.Env.
Terrestrial Ecologist

Attach:

cc:

Table of Contents

List of Figures

List of Tables

List of Appendices

1.0 INTRODUCTION

Azimuth Environmental Consulting Inc. (Azimuth) was retained to complete an Environmental Impact Study (EIS) and prepare a Management Plan (MP) for development proposed for an approximately 19ha property located within part of the west half of Lot 22, Concession 1 (geographic Township of Albion) in the Town of Caledon, Region of Peel (Figure 1). Azimuth's October 2013 EIS & MP was reviewed by the planning and approval authorities as part of the Official Plan and Zoning By-law submissions filed as part of the development application. The following report is a revision of the October 2013 EIS & MP report made based on agency review comments. This revision also includes updates to "planning context" related to the 2014 Provincial Policy Statement (PPS) and 2014 Town of Caledon Official Plan (TCOP) that came into effect following Azimuth's original submission. The revised EIS & MP also considers additions to the list of Species at Risk (SAR) in Ontario made since October 2013.

The development plan proposes to create 21 single detached freehold condominium houses on the south central portion of the property plus a single-family dwelling in the northeastern corner of the property. There have been no updates to the proposed development within the northeastern corner of the property. Updates to the plan include a slight reconfiguration of the condominium development. The stormwater management pond is no longer proposed within the wetland and the proposed trail system has been revised (Figure 4).

As the property contains significant natural heritage features and is within the Environmental Protection Area (EPA) as designated by the Town of Caledon, an EIS & MP are required as part of the development application. The property is also located within the plan area of the Oak Ridges Moraine Conservation Plan (ORMCP) and as such, a Natural Heritage Evaluation (NHE) and a Hydrogeologic Evaluation (HE) are also required. These evaluations have been incorporated into the EIS & MP as per the Town of Caledon Official Plan (TCOP 2014).

2.0 STUDY APPROACH

Azimuth has completed the following activities in the preparation of the Environmental Impact Study and Management Plan (EIS & MP) for the property:

- Attended a pre-consultation meeting on November 12, 2010 with the Town of Caledon and Toronto Region Conservation Authority (TRCA) confirming that previously collected data is sufficient to complete the EIS & MP.
- Contacted the TRCA, Town of Caledon and Ministry of Natural Resources

(MNR) to obtain background information and discuss the nature of their concerns related to development of the property.

- Mapped vegetation communities of the property according to the methods of the Ecological Land Classification System (ELC) for southern Ontario (Lea *et al*. 1998).
- Completed surveys of vascular plants on the property.
- Completed a dawn breeding bird survey of the property.
- Recorded wildlife observations and assessed wildlife habitat function of the property.
- Conducted an assessment of Boyce's Creek and associated fish habitat.
- Assessed species lists generated for the property and adjacent lands by studies completed by Azimuth (2007), Tarandus (2003/04) and on file with TRCA, MNR and the Ontario Breeding Bird Atlas (OBBA) to identify Species at Risk (SAR) potentially utilizing the property as habitat. SAR were considered those species designated as Endangered, Threatened or Special Concern under Ontario's *Endangered Species Act, 2007* (ESA).
- Assessed species lists generated for the property and adjacent lands by studies completed by Azimuth, Tarandus and on file with TRCA, MNR and the Ontario Breeding Bird Atlas (OBBA) to identify Species of Conservation Concern potentially utilizing the property as habitat. Species of Conservation Concern include those considered provincially rare by the MNR (i.e., species assigned S-RANKS of S1, S2, or S3) and those identified as "regionally/locally rare" (i.e., rare on the ORM as designated under the ORMCP, rare within the TRCA watershed [i.e., L Ranks 1, 2 or 3], or regionally rare according to OBBA rankings).
- Completed a wetland boundary delineation with the MNR & TRCA (September 30, 2008 – see Appendix A).
- Identified areas of Significant Woodland on the property based on ORMCP criteria and considerations of patch size, connectivity, special features and significant functions.
- Identified the range of Key Natural Heritage Features/functions (i.e., KNHF) and Key Hydrological Features (KHF) occurring on and adjacent to the property based on site-specific and background data.
- Reviewed the results of the water balance assessment completed by Terraprobe (2013).
- Assessed the potential direct, indirect and cumulative impacts of the proposed development on KNHFs and KHFs.
- Developed a plan for managing the development during and following

construction incorporating strategies for avoidance, mitigation and restoration.

- Provided input to Weston Consulting to assist in their assessment of planning conformity from a natural heritage perspective.

3.0 PLANNING CONTEXT

3.1 Provincial Planning Policy

The *Planning Act* requires that planning decisions shall be consistent with the 2014 PPS.

3.1.1 Section 2.1 – Natural Heritage

Section 2.1 of the 2014 PPS specifies policy related to protection of natural heritage features and functions as follows:

Section 2.1.1 requires that natural features and areas shall be protected for the long term.

Section 2.1.2 requires that the diversity and connectivity of the 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.

Section 2.1.3 indicates that natural heritage systems shall be identified in Ecoregions 6E & 7E, recognizing that natural heritage systems will vary in size and form in settlement area, rural areas, and prime agricultural areas.

3.1.2 Wetlands

Section 2.1.4 of the PPS indicates that development and site alteration are not permitted in significant wetlands in "southern Ontario" (i.e., Ecoregions 5E [Georgian Bay Region], 6E and 7E) and significant coastal wetlands.

3.1.3 Significant - Woodlands, Valleylands, Wildlife Habitat, and Areas of Natural and Scientific Interest (ANSI)

Section 2.1.5 of the PPS indicates that development and site alteration shall not be permitted in:

- significant wetlands in the Canadian Shield north of Ecoregions 5E, 6E and 7E;

- significant woodlands in Ecoregions 6E and 7E (excluding islands in Lake Huron and the St. Marys River)
- significant valleylands in Ecoregions 6E and 7E (excluding islands in Lake Huron and the St. Marys River);
- significant wildlife habitat;
- significant areas of natural and scientific interest; and
- coastal wetlands in Ecoregions 5E, 6E and 7E that are not subject to policy 2.1.4 (b) unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions.

It is ultimately the responsibility of the Province and/or the Municipality to designate areas identified within Section 2.1.4 of the PPS as significant. Other features outlined within this Report are those with potential, as outlined within the Natural Heritage Resource Manual, to be considered as significant.

3.1.4 Fish Habitat

Development and site alteration are not permitted in fish habitat except in accordance with provincial and federal requirements.

3.1.5 Endangered and Threatened Species

Development and site alteration shall not be permitted in habitat of endangered species and threatened species, except in accordance with provincial and federal requirements.

3.1.6 Adjacent Lands

Section 2.1.8 of the PPS indicates that “development and site alteration shall not be permitted on adjacent lands to the natural heritage features and areas identified in policies 2.1.4, 2.1.5 and 2.1.6 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”. The PPS defines no negative impact as “degradation that threatens the health and integrity of the natural features or ecological functions for which the area is identified due to single, multiple or successive development or site alteration activities”. The Natural Heritage Reference Manual (MNR 2010) defines ecological integrity as “the condition of an ecosystem in which (a) the structure, composition and function are unimpaired by stresses from human activity, (b) natural ecological processes are intact and self-sustaining and (c) ecosystem evolution is occurring naturally and that ecological integrity includes hydrological integrity.

3.2 Region of Peel

The Ecosystem Framework described in Section 3.3 "incorporates and refines the components of the Regional Greenlands System, as defined by the Region of Peel Official Plan, in a manner which conforms with the environmental policy directions contained in the Region of Peel Official Plan" (TCOP Section 3.1.3.1).

3.3 Town of Caledon and Region of Peel

Schedule A of the TCOP (2014) indicates that the property is located within an Environmental Policy Area (EPA) that contains both Natural Core Areas and Natural Corridors. The Proposed development is located within Special Policy Area A, as per Schedule D of the TCOP (2008). Schedule P of the TCOP identifies the property as having "Natural Linkage Area", "Countryside" and "Settlement" designations under the ORMCP (Appendix B). The Proposed development is located within the Settlement and Countryside designation. This juxtaposition of natural areas adjacent to the proposed development requires that an EIS & MP be prepared as per Section 3.2.3.3 of the TCOP. The Ecosystem Planning Strategy adopted by the Town of Caledon organizes ecosystem components into a framework of four categories: Natural Core Area; Natural Corridors; Supportive Natural Systems and Natural Linkages (TCOP, Section 3.2.3.1). Table 3.1 of the TCOP summarizes how various ecosystem components are classified within the framework (Appendix C). As the property is designated EPA, it is subject to the detailed land use policies of TCOP Section 5.7 as per Section 3.2.3.1.1.

The property is contained within an area designated Rural Estate Residential Area to be Deleted, as per Schedule F of the TCOP (2014). In addition, the property is also within a Special Study Area of the Caledon East Secondary Plan and is subject to the policies under 7.7.6.1 of the TCOP (2014). An Official Plan Amendment and Zoning By-law Amendment will be required prior to development.

Section 3.2.3.3 of the TCOP indicates that an EIS & MP is to address policies contained in Sections 3.2.4 (General Policies), 3.2.5 (Performance Measures) and 5.7.3.7 (Environmental Impact Studies and Management Plans). Section 5.7.3.7.2 specifies the scope and content of EIS & MP reports. The spatial extent for consideration of environmental features and related functions located on adjacent land was derived from the Minimum Area of Influence values reported for specific features listed on Table 7.5 of the TCOP (Appendix C). These features are considered core and supportive components of the EPA. We used these guidelines as the basis for structuring this EIS & MP report and assessing potential environmental impacts.

3.4 Provincial Greenbelt Plan

The property falls within the area designated as "Oak Ridges Moraine Area" (Appendix B). As such, the policies of the Oak Ridges Moraine Conservation Plan (ORMCP 2002) apply. The Greenbelt Plan policies of the ORMCP apply to the property.

3.5 Oak Ridges Moraine Conservation Plan

The property is located within the plan area of the Oak Ridges Moraine ([ORM], ORMCP 2002) and has been designated Natural Linkage Area, Settlement and Countryside (Appendix B). Natural Linkage Areas maintain and improve the ecological integrity of the Plan Area by maintaining linkages and facilitating movement between and within a system of key heritage features and hydrologically sensitive features. The Countryside areas “provide an agricultural and rural transition and buffer between the Natural Core Areas, Natural Linkage Areas and the urbanized Settlement Areas” (ORMCP, 2002). Settlement areas “reflect a range of existing communities planned by municipalities to reflect community needs and values” and allow urban use and development (ORMCP, 2002).

The proposed development lies within the Settlement area and Countryside area and is adjacent to the Natural Linkage Area. Significant features present within the Natural Linkage Area on the property include fish habitat, significant woodlands and two hydrologically sensitive features including a stream (Boyce’s Creek) and wetland areas. A Minimum Vegetation Protection Zone (MVPZ) (Section 21 (1) b) is required and represents the amount of additional land in proximity of the identified feature that should be left in its natural state. Width of the MVPZ is dependent on the feature (Appendix C). The Minimum Area of Influence, (Section 21 (1) a) adjacent to the aforementioned Key Natural Heritage and Hydrologically Sensitive Features is 120m (Appendix C).

Section 22 (2) of the plan states that all development within a Key Natural Heritage or Hydrologically Sensitive Feature or the related MVPZ is prohibited with the exception of forest, fish, and wildlife management, conservation and flood or erosion control projects, transportation, infrastructure, utilities and low-intensity recreational uses.

Section 22 (4) 3 of the ORMCP (2002) states that an application for development or site alteration with respect to land within the minimum area of influence that relates to a Key Natural Heritage Feature (KNHF), but outside the KNHF itself and the related minimum vegetation protection zone, shall be accompanied by a Natural Heritage Evaluation (NHE) under Section 23. The NHE has been incorporated into the EIS & MP as per the Town of Caledon Official Plan (TCOP, 2008).

The property and proposed development are located within the Landform Conservation Area Category 2 designation (Appendix B). Subsection 30 (6) of the ORMCP (2002) states that an "application for development or site alteration with respect to land in a landform conservation area (Category 2) shall identify planning, design and construction practices that will keep disturbance to landform character to a minimum, including, (a) maintaining significant landform features such as steep slopes, kames, kettles, ravines and ridges in their natural undisturbed form; (b) limiting the portion of the net developable area of the site that is disturbed to not more than 50 per cent of the total area of the site; and (c) limiting the portion of the net developable area of the site that has impervious surfaces to not more than 20 per cent of the total area of the site.

The property lies within an Aquifer High Vulnerability Area (Appendix B). Under Section 29 of the ORMCP, a number of land uses are prohibited within these identified areas including generation and storage of hazardous waste or liquid industrial waste, waste disposal sites and facilities, organic soil conditioning sites, snow storage and disposal facilities, and underground and above-ground storage tanks that are not equipped with an approved secondary containment device and storage of a contaminant listed in Schedule 3 (Severely Toxic Contaminants) to Regulation 347 of the Revised Regulations of Ontario, 1990.

A portion of the property and proposed development lie within a 25 year wellhead protection zone as demonstrated in Schedule O of the TCOP (2014) and TRCA 2012 (Appendix B and D). The property in relation to the wellhead protection areas and Caledon East Municipal Well #2, 3 and 4 is depicted on TRCA's figure within Appendix D. Under Section 7.10.5.4.1, certain uses are prohibited including: the storage, except for ordinary or incidental use associated with the operation of a household, of petroleum fuels, petroleum solvents and chlorinated solvents, pesticides, herbicides and fungicides, construction equipment, inorganic fertilizers, road salt and severely toxic contaminants; generation and storage of hazardous or liquid industrial waste; and waste disposal sites and facilities, organic soil conditions sites and snow storage and disposal facilities.

3.6 Toronto Region Conservation Authority

A portion of the proposed development is located within the jurisdiction of the TRCA (Appendix D). The property includes lands subject to Ontario Regulation 166/06 – "Regulation of Development Interference with Wetlands and Alterations to Shorelines and Watercourses", associated with the presence of Boyce's Creek and its floodplain (Appendix D). Similarly, any identified wetlands greater than 0.5ha in size plus a 30m

setback are regulated. Under Regulation 166/06, the TRCA requires that approvals be obtained for any proposed development within areas regulated under their jurisdiction.

3.6.1 Caledon East Environmentally Significant Area (ESA)

The Caledon East ESA exists to the north of Caledon East on either side of Airport Road (Appendix A). The ESA is approximately 176ha in size and is composed of mature and immature mixed forests and wetland. Species within this ESA include Eastern White Cedar, Tamarack, Yellow Birch, Trembling Aspen, White Ash and Balsam Poplar (MTRCA 1982). A portion of the Caledon East ESA occurs within the property and adjacent to the proposed development (Figure 2). The wetland complex is associated with Boyce's Creek.

3.7 Endangered Species Act, 2007 (Ontario)

Ontario's *Endangered Species Act, 2007* (ESA) provides regulatory protection to endangered and threatened species prohibiting harassment, harm and/or killing of individuals and destruction of their habitats. Habitat is broadly characterized within the ESA as the area prescribed by a regulation as the habitat of the species or an area on which the species depends, directly or indirectly, to carry on its life processes including reproduction, rearing of young, hibernation, migration or feeding.

The various schedules of the ESA identify SAR in Ontario. These include species listed as extirpated, endangered, threatened and special concern. As noted above, only species listed as endangered and threatened receive protection from harm and destruction to habitat on which they depend.

4.0 EXISTING CONDITIONS

Azimuth conducted field investigations of the property during the 2007 field season (Azimuth, 2008). During the November 12, 2010 field meeting it was agreed by the Town and the TRCA that data collected in 2007, in conjunction with data collected in 2003/2004 by Tarandus Associates Limited Environmental Consultants (Tarandus 2006) was sufficient to complete the EIS & MP/NHE for the proposed development.

4.1 Land Use

4.1.1 On-site Land Use

The entire property is 18.6 hectares (ha) in size and located northeast of Airport Road, partially within the settlement area of Caledon East. The property was farmed historically and is composed of early successional old-field/meadow, thicket, woodland forest, swamp and meadow marsh communities (Figure 3). Boyce's Creek traverses the

northeastern portion of the property. There are several informal pathways that transect the property, utilized by the local residents. No formal trails exist on the property. Residential street access roads terminate at the boundaries of the property on the north (Huntsmill Dr., McKee Dr. N.) and south sides (McKee Dr.).

4.1.2 Adjacent Land Use

Residential homes exist to the east, north and south of the property. The settlement of Caledon East is present south of the property. Airport Road comprises the western boundary of the property. A forest community associated with the Boyce's Creek corridor exists to the north of the site.

4.2 Ecosystem Framework

The following information addresses the ecosystem components of the Town of Caledon's ecosystem framework as they relate to the proposed development, the property and adjacent lands.

4.2.1 Woodlands

Background and site specific data collected by Azimuth (2008) and Tarandus (2006) indicate the presence of forest communities on the property. The locations of these communities are shown on Figure 3 and Table 1 provides a description of their composition and structure. Table 2 reports plant species observed in each community.

All forest communities are located adjacent to the proposed development. Each has characteristics of Woodland Core Areas as defined in Section 6.7 of the TCOP. None of the forest communities are types considered rare provincially and all are relatively common in the municipality. One community has been established by planting (i.e. CUP3-3). All forest communities display ecosystem integrity as their compositions and structures have developed to the point where each has characteristics of natural vegetation communities. They are self-sustaining and hence require no external support or management for maintenance or succession/evolution.

4.2.2 Wetlands

Background and site-specific data indicate the presence of wetland communities on the property. The wetland communities are part of the Caledon East Wetland Complex, which has been evaluated by the Ministry of Natural Resources (MNR). The Caledon East Wetland Complex is classified as Locally Significant by the MNR (Appendix A). The boundary of the Caledon East Wetland Complex was delineated on the property with

the MNR and TRCA on September 30, 2008 as part of this development application. The resulting boundary was staked and surveyed and the boundary is depicted on Figure 2.

The location of wetland vegetation communities making up part of the Caledon East Wetland Complex are shown on Figure 3 and Table 1 provides a description of their composition and structure. Table 2 reports plant species observed in each community. None of the wetland communities are rare provincially and all are relatively common in the municipality. All wetland communities display ecosystem integrity as their compositions and structures have developed to the point where each has characteristics of natural vegetation communities. They are self-sustaining and hence require no external support or management for maintenance or succession/evolution.

4.2.3 Area of Natural and Scientific Interest

The property does not occur in or adjacent to lands identified as part of an Area of Natural and Scientific Interest (Appendix A & B).

4.2.4 Environmentally Significant Areas

The property does contain portions of an Environmentally Significant Area which encompasses Significant Woodlands, a wetland complex (Caledon Complex) and a hydrologically sensitive feature (Boyce Creek). The proposed development is adjacent to these features. The features within the Environmentally Significant Area display ecosystem integrity are self-sustaining and require no external support or management for maintenance or succession/evolution.

4.2.5 Niagara Escarpment Natural Areas and Protection Areas

The property does not occur in or adjacent to lands designated Niagara Escarpment Natural Area or Protected Area (Appendix B).

4.2.6 Species at Risk

Table 3 provides a list of SAR having potential to occur locally and an assessment of the potential of the property to provide habitat of value to the species.

4.3 Site-specific Species Observations

4.3.1 Vegetation

A total of 313 species of vascular plants was documented for the property based on work completed by Azimuth and Tarandus (Table 2). Species conservation rank information is provided on Table 2. Non-native/exotic species are identified under SRANK as “SE”.

Observations of SAR plants on the property were restricted to Butternut found growing in vegetation communities forest/swamp communities FOM 4-2 and SWC1-1 by Azimuth in 2007 and Tarandus in 2003/2004. The health of the Butternut trees was not assessed as they are located more than 25m from areas of proposed development and within forest and wetland habitat associated with Boyce's Creek that will be protected.

Aside from Butternut, none of the native plant species observed is considered provincially rare by the MNR (i.e., none assigned provincial/SRANK S1, S2 or S3).

As reported in Table 2, 37 plant species documented on the property are classified as rare in the TRCA watershed (i.e., L-ranks L1, L2 or L3 [TRCA 2009a]) and 15 species are classified as rare on the Oak Ridges Moraine (ORMCP 2004a). Figure 3 and Table 2 provide reference to the vegetation communities each TRCA and ORM rare species was found in. With the exception of Butternut, all TRCA and ORM rare plants (i.e., regionally/locally) are common in Ontario (i.e., SRANKs S4 and S5).

Four regionally/locally rare plant species occur in areas of the property proposed for development: Highbush Cranberry, Soft Groovebur, Eastern Red Cedar and Variegated Horsetail. These species are present in other communities on the property as well, and are common outside the jurisdiction of the TRCA and Oak Ridges Moraine. As such, development within the proposed development will not negatively affect the greater population of these species.

None of the regionally rare plants originally observed on the property are formally protected by any current legislation and are commonly observed throughout undeveloped areas of the Oak Ridges Moraine (ORM) and TRCA watershed within old fields and remnant woodlots.

There is one plant element of occurrence record on file with the MNR's Natural Heritage Information Centre for the general area of Caledon East - Woodland Pinedrops (*Pterospora andromedea* S2 – provincially rare). There is no indication in site-specific data that Woodland Pinedrops occur on the property.

4.3.2 Mammals

Wildlife species utilizing the property were identified from direct observation and through interpretation of sign (i.e. tracks, scats, vocalizations, etc.) as a matter of course while conducting site visits on the subject property and adjacent lands. Mammal species detected by Azimuth and Tarandus are listed in Table 4.

None of the mammals observed on-site are SAR or species of provincial conservation concern. The Snowshoe Hare and Ermine are both considered to be L3 species within the TRCA watershed (TRCA 2009b). The Snowshoe Hare is also considered to be rare within the Oak Ridges Moraine (ORM 2004).

4.3.3 Birds

Bird species were identified based on roving surveys conducted throughout the property during early morning. A list of species observed is documented in Table 5a. This table also includes species observed by Tarandus during the 2003/2004 field seasons.

Two bird species (Barn Swallow and Eastern Meadowlark) have been designated as Threatened provincially and were observed on the property during 2007 field surveys. A habitat assessment for these species can be found in Table 3.

Eleven bird species are considered to be rare within the TRCA watershed boundaries including: Ruffed Grouse; Wild Turkey; American Woodcock; Pileated Woodpecker; Least Flycatcher; Wood Thrush; Chestnut-sided Warbler; Magnolia Warbler; Nashville Warbler; and Eastern Towhee (TRCA 2009b). Three bird species observed on the property are considered to be rare within the Oak Ridges Moraine including the Cooper's Hawk, Blue-gray Gnatcatcher and the Magnolia Warbler. None of the birds observed are considered to be regionally rare by Bird Studies Canada (OBBA Square #17NJ95 ranking). An assessment of habitat impact for these species is presented in Table 5b. In addition to this, Table 5b also considers the habitat impact for area- sensitive species observed on the property. Area sensitive species observed included: Blue-grey Gnatcatcher; Cooper's Hawk; Hairy Wood Pecker; Pileated Woodpecker; Least Flycatcher; Magnolia Warbler; and Red-breasted Nuthatch.

According to the OBBA database there were 67 birds confirmed as breeding within the area (i.e., Square #17NJ95 [Appendix F]). Ten SAR have been reported for the area: Prothonotary Warbler; Chimney Swift; Golden-winged Warbler; Red-headed Woodpecker; Barn Swallow; Eastern Meadowlark; Bobolink; Bank Swallow; Wood Thrush and Eastern Wood-pewee. A habitat impact assessment for these SAR can be found in Table 3.

Four colonial breeders were confirmed as breeding within the area in the most recent atlas and include the Great Blue Heron, Green Heron, Bank Swallow and Cliff Swallow. The Great Blue Heron inhabits areas with tall trees in standing/open water, shores of ponds/lakes and other marsh areas (OMNR 2000). Bank and Cliff Swallow prefer sand,

clay or gravel riverbanks, steep cliffs and/or bluffs. Cliff Swallow will often nest on existing structures (i.e. bridge, buildings etc.) (OMNR, 2000). There is no suitable habitat for these species on or adjacent to the property.

4.3.4 Amphibians and Reptiles

There was no amphibian activity documented on the property during surveys completed by Azimuth. Spring Peepers were heard calling northwest of the property and Gray Treefrogs were heard calling to the north of the property. Neither species is of federal or provincial conservation concern.

During the 2003/2004 field studies conducted by Tarandus (2006) Gray Treefrogs were heard within the SWD4-3 and FOM7-2 units and Green Frogs were observed within Boyce's Creek. Western Chorus Frogs, Wood Frogs and Leopard Frogs were all heard calling within the general area of Caledon East but never heard or observed on the property (Tarandus 2006). The Grey Treefrog is considered to be an L2 species within the TRCA watershed (TRCA, 2009b).

Potential anuran amphibian habitat exists on site within Boyce's Creek and its associated riparian zone, forest community FOD7-2 (Figure 3) and within the SWD4-3 swamp unit (Figure 3). The Gray Treefrog was observed on site and is considered to be rare within the TRCA watershed. The Gray Treefrog migrates from forests to breeding areas (deep marshes, swamps, ponds) and will inhabit woodlands near shallow water (OMNR, 2000). These wetland vegetation communities and their associated MVPZs are protected from development. There will be no impacts to any potential anuran amphibian habitat present on site since all potential habitat will remain in their natural state post-development.

Habitat for Snapping Turtle (*Chelydra serpentine*) and Milksnake (*Lampropeltis triangulum*) is present on the property, and is protected within the Wetland and Significant Forest KNHF/Natural Core Area and the associated MPVZ.

4.3.5 Insects

There is one element of occurrence record on file with the MNR Natural Heritage Information Centre database on or adjacent (i.e., within 120m) to the property. Although on record, Clamp-tipped Emerald (*Somatochlora tenebrosa* S2S3) is not a provincial or federal SAR however, it is ranked as provincially significant. Habitat includes "shady forest streams with intermittent rapids and pools" (Jones et al. 2008). Therefore, if present this species would be restricted to Boyce's Creek and associated riparian forest. These habitats are protected within the valleylands/woodlands of the property and

adjacent lands. There are no additional rare species records not documented in the NHIC database (MNR correspondence 2011, [Appendix A]).

4.3.6 Significant Wildlife Habitat

Table 8 summarizes the potential for Significant Wildlife Habitat to be present on the property based on provincial criteria (MNR 2000).

4.3.7 Fish Habitat

The watercourse traversing the property is locally known as Boyce's Creek (Figure3). It merges with Centreville Creek (a tributary of the Humber River) approximately 1 km downstream of the property.

Mapping indicates that the drainage area upstream of the property boundary is approximately 3km^2. The topography of the area displays variable relief, with undulating hills and forested valleys. Land use in the catchment is a mixture of agricultural fields and forested hill slopes and valleys.

The watercourse passes through a well-established mixed-coniferous forest. The watercourse is moderate in size, having average channel widths between 3-4m. The watercourse displays a meandering profile with distinct riffle-pool sequences. Riffles are approximately 20cm in depth whereas pools are on average relatively shallow (40cm); however, the abundance of undercut banks and in-stream woody debris provide excellent cover for fish. Although discharge measurements were not taken, it was evident that the flows were relatively swift, owing to a diversity of flow patterns within the channel. Substrates within the riffles were predominantly large gravel and small cobbles, whereas pools displayed greater amounts of silt and fine sediments. Banks appeared stable, with few, localized areas of erosion induced by high flows.

It is believed that base flows are sustained by ongoing contributions of ground water from upstream sections, owing to the watercourses permanency. Water temperatures obtained from MNR records and the Humber River Fisheries Management Plan reveal that the watercourse can be considered cold water habitat as records obtained from MNR archives (2002, 2003) indicate summer water temperatures of 15-16ºC with ambient air temperatures of 24-26ºC. There is no reason to suspect that thermal regimes would have changed significantly in the years since.

According to the Humber River Fisheries Management Plan (TRCA/MNR 2005) Boyce's Creek is classified as coldwater habitat that is managed for Brook Trout and Brown

Trout. Boyce's Creek is known to support productive populations of Brook Trout, as well as a variety of other cold-cool water species (e.g., American Brook Lamprey, Mottled Sculpin). Historical data records for the stretch of Boyce's Creek located between Old Church Road and Airport Road indicate that the fish community is dominated by Brook Trout and other common minnow species. See Table 6 for information on fish species in Boyce's and Centreville Creek.

4.3.8 Valley and Stream Corridors

In general, the uplands of the ORM are regarded as the source area for many streams which drain the till plains on either side of the unit. The water drains vertically through the sand and gravel, moving laterally only when it reaches less pervious soils and reappearing as springs or seeps along the slopes of the moraine.

The local topography for the property contains smooth to steep slopes with surface elevations for the site ranging in the vicinity of 299 masl to 320 masl. In general, the site slope towards the two wetland features located within the southwestern and western portions of the subject property. These wetlands receive the majority of site's surface runoff and shallow ground water flow.

4.3.9 Ground Water

The ORM is widely recognized as an important aquifer system referred to as the Oak Ridges Aquifer Complex (ORAC). The ORAC is generally unconfined, except where the Halton Till drapes the moraine on the southern flanks. The primarily coarse-grained nature of the outwash gravels that form the complex is reflected by the high values of hydraulic conductivity (i.e. $8x10^{-5}$ m/s [Gerber and Howard, 2000]). Consequently, the regional aquifer system has become a major source of potable water for domestic wells and communities in south-central Ontario.

Water-bearing zones within the overburden that were identified in the MOE water well records are generally found just above the bedrock contact (between 21.3 – 32.0 mbgs). This zone has produced generally low yields, ranging between 1~5 imperial gallons per minute. The water-bearing zones within the bedrock are typically targeted by wells within the first 3 – 4 metres of the underlying shale. Low yields are also found within this bedrock aquifer zone. Higher yields may have been possible in some zones but were not required for the intended use (i.e., domestic wells) and therefore were not tested at higher rates.

The southern portion of the property does contain areas within the 25 year Wellhead Protection Zone, as well as an Area of High Aquifer Vulnerability as identified in

Schedule O and Schedule P respectively of the TCOP (2014). A portion of the proposed development is located within both of these zones.

4.3.10 Local Geology

The Quaternary Soil Map of Ontario (Barnett, *et. al.*, 1991) defines the surficial soils in the vicinity of the property as glaciofluvial ice-contact deposits consisting mainly of gravel and sand, with minor till consisting of a silty sand to sandy silt matrix. According to the water well records from the Ministry of the Environment (MOE), there are several wells within a 2 km radius of the subject property. The stratigraphic descriptions provided in these records confirm the local geological conditions stated above. The surficial deposit in the local area consists mainly of a brown sand to gravelly sand unit between 2.6 – 6.0 metres in thickness, underlain by alternating layers of gravelly clay and sand. Overburden thickness in the local area ranges between 25.3 – 40.0 metres.

4.4 Oak Ridges Moraine Key Natural Heritage Features and Hydrologically Sensitive Features

Section 22(1) of the ORMCP identifies eight KNHF. Table 7.1 of the TCOP lists twelve Key Natural Heritage Features (KNHF) and Hydrologically Sensitive Features (HSF) (Appendix C). According to guidelines for the preparation of NHE (ORMCP Technical Paper 8), steps one to three relate to identification of KNHF's and HSF's potentially affected by the proposed development. A KNHF/HSF may be affected if development is proposed within the features' Minimum Area of Influence (MAI). Table 7 identifies KNHF's that occur within the MAI of the proposed development and hence require consideration of potential negative impacts. Background data and field investigations revealed that five KNHF and three HSF are present on the property as identified by the MNR, the TRCA and Azimuth. These include:

KNHF

- Significant Woodlands – forest and swamp wetland communities .
- Fish Habitat – Boyce's Creek.
- Significant Habitat for Endangered Species (Butternut) – restricted to forest and swamp vegetation communities contained within valleylands.
- Significant Valleylands – associated with Boyce's Creek.
- Significant Wildlife Habitat – Habitat for area-sensitive forest breeding birds (limited potential) and Seeps & Springs associated with Boyce's Creek.

HSF

- Seepages and Springs - associated with Boyce's Creek
- Permanent and Intermittent Streams, and
- Wetlands.

5.0 ENVIRONMENTAL POLICY AREA COMPONENTS

5.1 Natural Core Areas/KNHF

Background and site-specific data indicate that several forest and wetland vegetation communities within the property and adjacent to the proposed development represent Natural Core Areas as defined by the Town of Caledon and as KNHF according to the criteria of the ORMCP. These features would comprise components of the EPA identified in the area (Figure 7.7.1 TCOP appended) and would together define the limits of the EPA on the property. Table 9 identifies the range of features identified as components of the recommended EPA and the setbacks applied to define their limits. Figure 2 displays the limits of the resulting EPA.

5.2 Natural Corridors

Natural Corridors include Core Fishery Resource Areas and valley and stream corridors (TCOP Table 3.1). Based on this definition we infer that there is a Natural Corridor associated with Boyce's Creek as shown on Figure 3. This Natural Corridor is fully defined and contained within lands identified as Core Woodland and Core Wetland, components of the EPA.

5.3 Supportive Natural Systems and Linkages

Supportive Natural Systems include woodlands and wetlands other than those included as part of Natural Core Areas as well as other fisheries resource areas, bedrock aquifers, surficial aquifers, recharge areas, discharge areas and productive soils (TCOP Section 6.7 – 137.). All woodlands, wetlands and areas of fish habitat have been considered as part of the Natural Core Areas components of the recommended EPA. Therefore, there are no supportive natural systems to consider in the context of the proposed development.

Natural Linkages include woodlands and wetlands other than those included as part of Natural Core Areas as well as other fisheries resource areas, bedrock aquifers, surficial aquifers, recharge areas, discharge areas erosion prone soils and natural slopes in excess of 15% (TCOP Section 6.7 – 92.). All woodlands, wetlands and areas of fish habitat have been considered as part of the Natural Core Areas components of the recommended EPA. Therefore, there are no natural systems linkages to consider in the context of the proposed development.

5.4 Refined EPA Limits

Figure 2 shows the limits of the EPA defined according to the location of the natural heritage components determined through an analysis of background and site-specific data.

6.0 PROPOSED DEVELOPMENT

Two areas of the property are being proposed for development as shown on Figure 4.

A single family residence is being proposed within the northeastern corner of the property (Figure 4). The residence will have access to McKee Dr. N. via a gravel driveway which currently exists in the form of a wide walking trail/property access lane. Minor tree removal will be required along this area to create a standard 6m wide driveway. The residence will be municipally serviced for water and will have a septic system for sewage services.

The second area being proposed for development is located in the south-central section of the property where a 21 single detached freehold condominium houses are proposed. This development will be accessed off of McKee Dr. from the south (Note: it is our understanding that the TRCA has deemed the access location acceptable owing to the alignment of the existing "stub" of McKee Dr. and topographic constraints to access that do not allow avoidance of direct impacts to wetland/EPA) (Figure 4). The condominium houses will be fully serviced with municipal drinking water and sewage.

7.0 IMPACT ASSESSMENT

Table 10 presents a detailed assessment of potential for direct, indirect and cumulative impacts arising from the proposed development. Table 10 also presents recommendations for impact mitigation, monitoring and management of development during and following construction.

Table 11 presents an assessment of potential direct and indirect impacts on ORM HSF. The potential for impact to these features and their functions was determined in large part through review of the water balance assessment completed by Terraprobe (2013).

7.1 Impact Assessment Summary

7.1.1 Condominium Development

The orientation of existing residential roadways providing access to the south-central section of the property (i.e., the "stub/terminus" of McKee Dr.) and slopes located along the southern section of the property do not allow avoidance of wetland habitat mapped as part of the locally significant Caledon East Wetland Complex which – as our report recommends would be considered part of the EPA lands of the property (Figure 5). It is our understanding that the TRCA, who regulates activities having the potential to interfere with wetlands – recognizes that the avoidance of wetland impacts is unavoidable. Therefore, minor encroachment into the proposed EPA is unavoidable. The area of wetland directly impact amounts to 0.14ha out of a total of 6.7ha of wetland habitat on the property (i.e., 98% wetland on property retained) and 16.22ha of the Caledon East Wetland Complex overall.

Wetland habitat to be impacted has been identified as a thicket swamp community (SWT2-5: Red-osier Dogwood Mineral Thicket Swamp Type). As documented within Table 1, this community formed in part as a result of past earth works which has resulted in irregular terrain containing a mix of both wetland and upland vegetation. Hence these are wetland vegetation communities that have become established on abandoned farmland owing to moist to wet soil conditions maintained through surface water contributions. Similar types of wetland communities exist on the property and within the Caledon East Wetland Complex overall.

Wildlife studies conducted on the property indicate that this unit provides no significant wildlife habitat functions and contains no unique features or functions. The SWT2-5 community does not function as amphibian breeding habitat as documented during the 2003/2004 studies conducted by Tarandus (2006) and Azimuth's surveys. The SWT2-5 habitat does not function as a wildlife movement corridor nor does it provide specialized habitat for breeding birds (i.e. not for area-sensitive birds) and would likely function to provide suitable habitat for wildlife habitat generalists. Based on the current site plan, a portion of the SWT2-5 unit will be isolated from the remainder of the wetland feature. The isolation of a portion of the feature will not impede the overall form or function of the wetland given the past disturbance of this area and the relatively low quality habitat it currently provides in context with the adjacent natural features (i.e., cultural communities) and anthropogenic (i.e., residential development) features. Accessibility to this feature post-development is not an issue since it does not provide amphibian breeding habitat (i.e., no amphibian movement through area) nor does it provide high quality habitat for a large number of species but rather general habitat for more urban

adept species. Habitat generalists will continue to access this area, in conjunction with the other upland early successional areas post-development.

Given the proposed placement of the access road and the current function of the SWT2-5 community, we do not foresee any indirect impacts to the natural heritage functions of this community. Direct impacts to wetland habitat are minor (i.e., 98% of wetland unaffected) and unavoidable given terrain and dispersion of KNHFs and KHFs on the property and adjacent lands. Potential cumulative impacts related to ongoing sedimentation of wetland is discussed in Table 10. These indirect sedimentation impacts can be completely mitigated through application of sediment and erosion control measures during construction.

Outside of the area of wetland/EPA to be impacted, the development limit is aligned fully outside of the 30m MVPZ applied to adjacent components of the recommended EPA (i.e., remainder of wetland and Significant Woodland) (Figure 5). This MVPZ is sufficiently wide to protect the health and integrity of forest trees growing along the edge of the Significant Woodland. Since the property is undergoing forest succession with outgrowths of trees from the forest and swamp habitat of the Significant Woodland, the MVPZ will become populated with trees naturally over time. The composition of adjacent tree cover is predominantly of native species so succession will restore the MVPZ and other open areas of the property with desirable forest species. Thus we recommend allowing woodland succession to continue on the property outside of development areas as an approach to habitat restoration leading to increase in forest cover.

Ash trees currently comprise a large proportion of the trees within the various KNHF and KHF of the property and adjacent lands. Emerald ash borer (EAB) is a non-native invasive insect that attacks and kills all North American species of ash trees (*Fraxinus* species) and was detected in the Greater Toronto Area in 2007. In some circumstances removal of ash trees in advance of infestation has been applied in attempt to control the dispersal of the insect. This has proved ineffective. The TRCA's document "*Recommended Approach for the Management of Emerald Ash Borer*" (issued July, 2012) does not identify the removal of Ash trees within a naturalized areas as a recommended action to control/manage the EAB. Rather, the TRCA recommends "*hazard tree removals of affected trees once infestation is confirmed*" as the primary action to be taken from a tree removal standpoint. In our opinion ash trees located within the various KNHF and KHF should not be considered "hazard trees", as they will not be located within falling distance of any proposed structure and hence removal of ash trees within KNHFs is not recommended (consistent with TRCA recommendations). Since ash trees are relatively abundant within the KNHFs/KHFs of the property, removal would

result in extensive damage and disruption to these natural features and would do nothing to impede the dispersal of EAB within the municipality. The natural (albeit by an insect pest) decline, death and falling of these trees into their respective vegetation communities mimics natural process. The periodic introduction of standing and fallen dead trees is of on-going importance to the overall ecological benefit to forested lands providing potential feeding, breeding, perching and/or nesting habitat for birds and other wildlife. Where standing and fallen dead trees are introduced into wetland or watercourses many wildlife species (basking turtles, amphibians, various bird species, etc.) would utilize both the standing snags and fallen trees for feeding, breeding and/or nesting. Based on this information, we do not recommend the removal of ash trees from any of the identified KNHF and HSF identified on site.

The decline, death and falling of these trees could take many years and not all individuals will die and fall simultaneously. As the Ash trees decline and die other tree and shrub species will establish. Native tree species will naturally replace the Ash trees as they die. Should a dying trees be located along a walking area (e.g. roads, sidewalks, walking trails, etc.) become a hazard tree, removal at that time would be appropriate.

7.1.2 Trails

As a part of the proposed condominium development plan, there will be two pathways that will connect with the current trail system within Boyce's Creek valley system. Currently, there are a number of existing trail routes through Boyce's Creek Valley and the associated woodland as per the Conceptual Trail Plan and as depicted on Figure 4 and 5. The proposed pathways will connect to the existing established trail system and will be utilized primarily for foot traffic. We recommend that within the woodlot, only the established trails be utilized as a part of the trail system and that no additional trails are created.

The proposed trail route is located outside of the regional floodline, although portions of the existing pathway are located within the floodplain where the path crosses over Boyce's Creek (via an existing foot bridge). Therefore, there is minimal risk to public safety from regional storm events. If flood waters do intercept the trail system, access to the flooded areas should be barricaded until the flood waters recede.

There is no site grading or fill placement for the development of the proposed trails. No alteration to flood plain function will occur as a result of the implementation of the trail system. No alteration to the existing natural features or fish habitat will occur as a result of the implementation of the trail system, as trails are proposed in upland areas outside of the Significant Woodland. Further, re-vegetation of the MVPZ will increase the overall tree cover within the general area.

Into the future, user safety should be the first and foremost concern for upkeep of the trail system. The trails should routinely assess the health of the trees in proximity to the trails to confirm that no hazard trees are present. Further, the trails should be regularly maintained in good condition.

Regarding the watercourse crossing, the integrity of the existing footbridge should be inspected to ensure the safe use. Any upgrades and/or replacement (if required) should not have a footprint below the high water level (i.e., clear span) and should follow the standard mitigation measures below:

- Construction timing window for the protection of fish spawning: Construction activities should only take place between June 1 and September 30 of any calendar year.
- Prohibit and/or limit access to waterbodies and banks to protect riparian vegetation and minimize bank erosion. Access by machinery should be delineated by construction/hoarding fencing.
- Any equipment, stockpiled material or construction material should be stored away from the Creek (30m recommended) and isolated using sediment and erosion controlsto prevent sediment or deleterious substances from entering the creek.
- Riparian vegetation removal should be minimized. If removal is necessary, the limits of vegetation removal should be clearly delineated such that the watercourse and retained vegetation will be protected from disturbance during construction.
- Any altered areas will be re planted with native plants to restore the site to pre-construction conditions.

The development of a trail system should formalize the current “informal/un-authorized” trail system that exists within the woodland. Providing a connected trail system follows some of the overall goals of the Town of Caledon’s Community Based Strategic Plan and Vision which aims to be responsible stewards of the environment, facilitate development of a connected and vibrant community and through the provision of a connected trail system to promote active, healthy living.

7.1.3 Single-family Dwelling

The site proposed for the single-family dwelling places development largely outside of the Significant Woodland/EPA plus its applied 30m MVPZ (Figure 5). Therefore, the development will have no direct or indirect on significant natural heritage features or functions.

The proponent wishes to construct a 6m wide gravel driveway from the existing road (McKee Drive) to the proposed residence. Provision of this access to the proposed single-family dwelling requires encroachment into forest habitat mapped as part of the Significant Woodland/EPA. Avoidance of this impact is unavoidable given the alignment of connecting residential roads (i.e., McKee Dr. N.). The proposed gravel driveway alignment follows an existing trail/property access lane (Note: not part of an approved trail system) and hence vegetation impacts required to upgrade the trail to provide a 6m wide gravel driveway occur in an area of disturbance within the Significant Woodland/EPA. Thus, cumulative impacts resulting from driveway construction on the Significant Woodland are negligible and do not negatively impact significant natural heritage features or their functions. The gravel driveway will continue to allow for the infiltration of water.

The Town of Caledon has requested that the driveway conform to fire route requirements under Ontario Building Code Section 3.2.5.6, which requires the large turning radius and a minimum 6.0m width. The proposed turnaround or 'hammerhead' will extend slightly into the 30m MVPZ adjacent to the significant woodland (Figure 5). Currently, this area is void of any tree cover and will not impact the Significant Woodland itself. The remainder of the MVPZ will be re-vegetated as per Management Plan below.

7.1.4 Habitat Connectivity/Linkage

Development proposed for the two areas of the property is aligned completely outside of the limits of the Significant Woodland/EPA associated with the valleylands of Boyce's Creek (plus applied 30m MVPZs). Therefore, the development maintains habitat connectivity/linkage through the property post-development.

8.0 MITIGATION MEASURES AND MANAGEMENT PLAN

8.1 Mitigation Measures

Diligent application of sediment and erosion controls is recommended surrounding the proposed development to alleviate the risk of sediment migration or erosion into adjacent natural features.

Tree protection measures should be implemented prior to commencement of construction activity to ensure tree resources designated for retention are not impacted by the development. Retainable trees should be protected through the installation of fencing or a comparable barrier along the drip line of the retainable trees.

Vegetation removal should occur when migratory birds are unlikely to be nesting. Vegetation clearing should be avoided between mid-May through to the end of July if possible.

A "best efforts" attempt should be made to relocate as many regionally rare plants that are located within the proposed development footprint and do not occur in any other vegetation community as possible. This would include attempts to transplant the following species: Tall Blue Lettuce (*Lactuca biennis*) [TRCA rare]; Meadow Horsetail (*Equisetem pratence*) [TRCA and ORM rare]; and Rough Bentgrass (*Agrostis scabra*) [TRCA rare]. This would also apply to Eastern Red Cedar (*Juniperus virginiana*) [ORM rare], Black Walnut (*Junglans nigra*) [OMR rare], and Balsam Fir (*Abies Balsamea*) [TRCA rare] however depending on the size of individuals and site-conditions surrounding their root zones, transplantation may not be possible.

Hazard trees located in proximity to roads, sidewalks, walking trails etc. should be removed.

The use of cut-off luminaries and a reduction in the use of flood lighting systems is recommended to minimize artificial lighting in the retained natural areas of the property.

The Low Impact Development (LID) methods recommended by Terraprobe (2013) should be enacted to mitigate the minor predicted impact to infiltration.

8.2 Management Plan

The construction crews should be made aware of the potential for sensitive species to be in the area, given the presence of the Caledon East Wetland Complex, Butternut as a SAR and Boyce's Creek as a sensitive cold water fish habitat.

Property managers responsible for outdoor maintenance of the condominium should be informed of the potential for sensitive species to be in the area, given the presence of the Caledon East Wetland Complex, Butternut as a SAR and Boyce's Creek as a sensitive cold water fish habitat landscape. It should be part of their property maintenance protocol that yard waste and other refuse is not deposited outside of the confines of the approved development limit.

Landscape plans developed for the condominium site should incorporate the use of native plant species ere possible.

The existing trail system should be maintained for use by future inhabitants of the proposed development to promote an active lifestyle and human connection with the natural environment. The trail system also presents an opportunity for interpretive stations which could highlight the natural features found within the protected area of the property, the benefits of protecting natural features in built up areas, and the ORMCP.

An Enhancement Planting Plan should be prepared that will include native plantings within the MVPZ and natural features. This will increase the overall tree cover on the property and within the Humber River Watershed.

9.0 POLICY CONFORMITY

Policy conformity has been assessed by Weston Consulting in their planning justification report (Weston 2013).

10.0 CONCLUSIONS

The results of our impact assessment indicate that the proposed development can be achieved with minor direct impact to natural heritage features (i.e., partial loss of vegetation communities) and no negative indirect or cumulative impact to significant natural heritage features or functions – including habitat connectivity/linkage. Direct impact to wetland and woodland habitat relates to provision of access to the two area of the property proposed for development. Opportunities do not exist to avoid these direct impacts owing to the alignment of existing residential road alignments on adjacent lands that provide access plus on-site constraints due to topography. The potential for indirect impacts to significant natural heritage features can be managed and mitigated during and following construction as per the recommendations of this report and the LID techniques recommended by Terraprobe.

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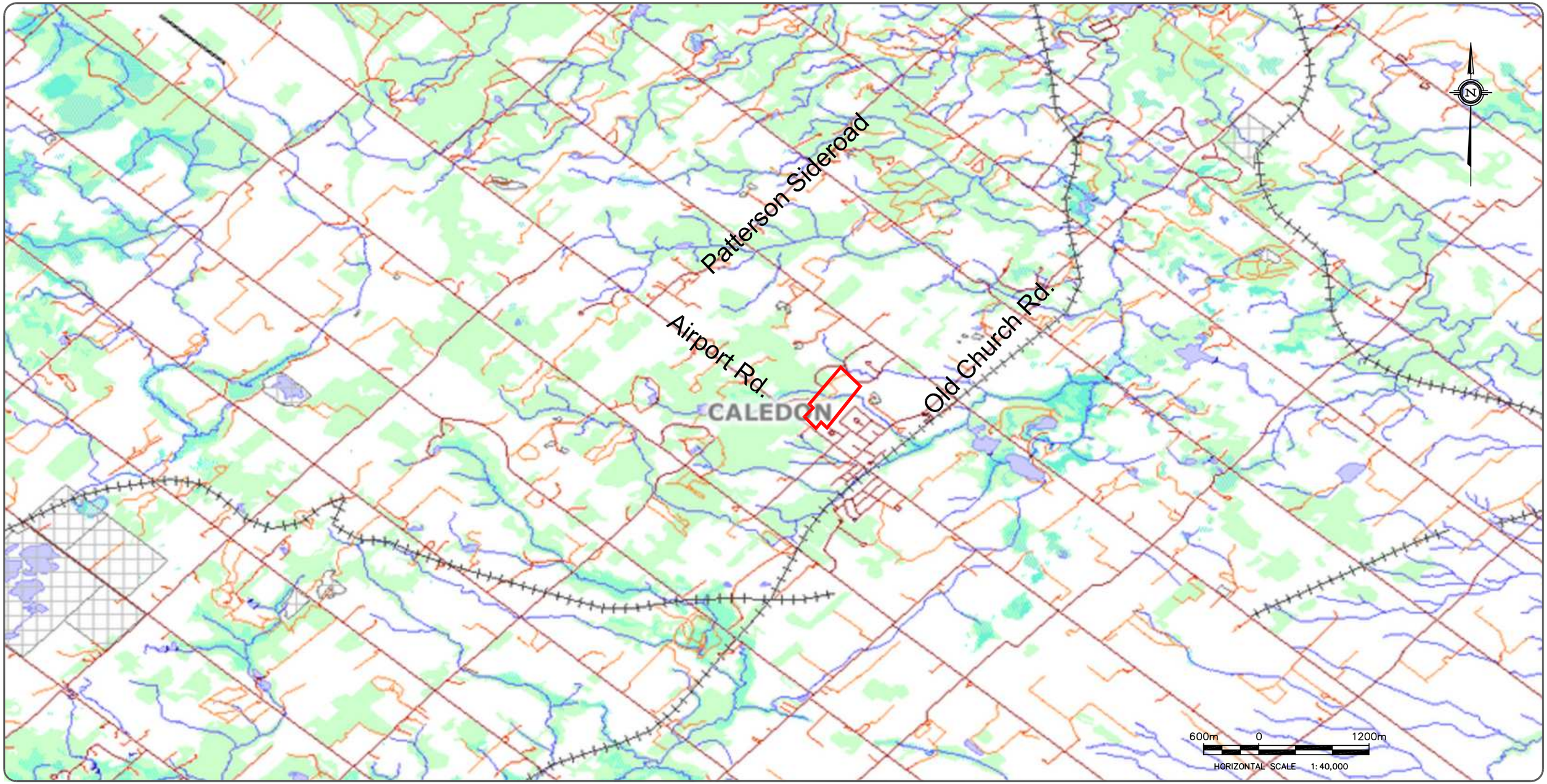

Legend:

Property Boundary

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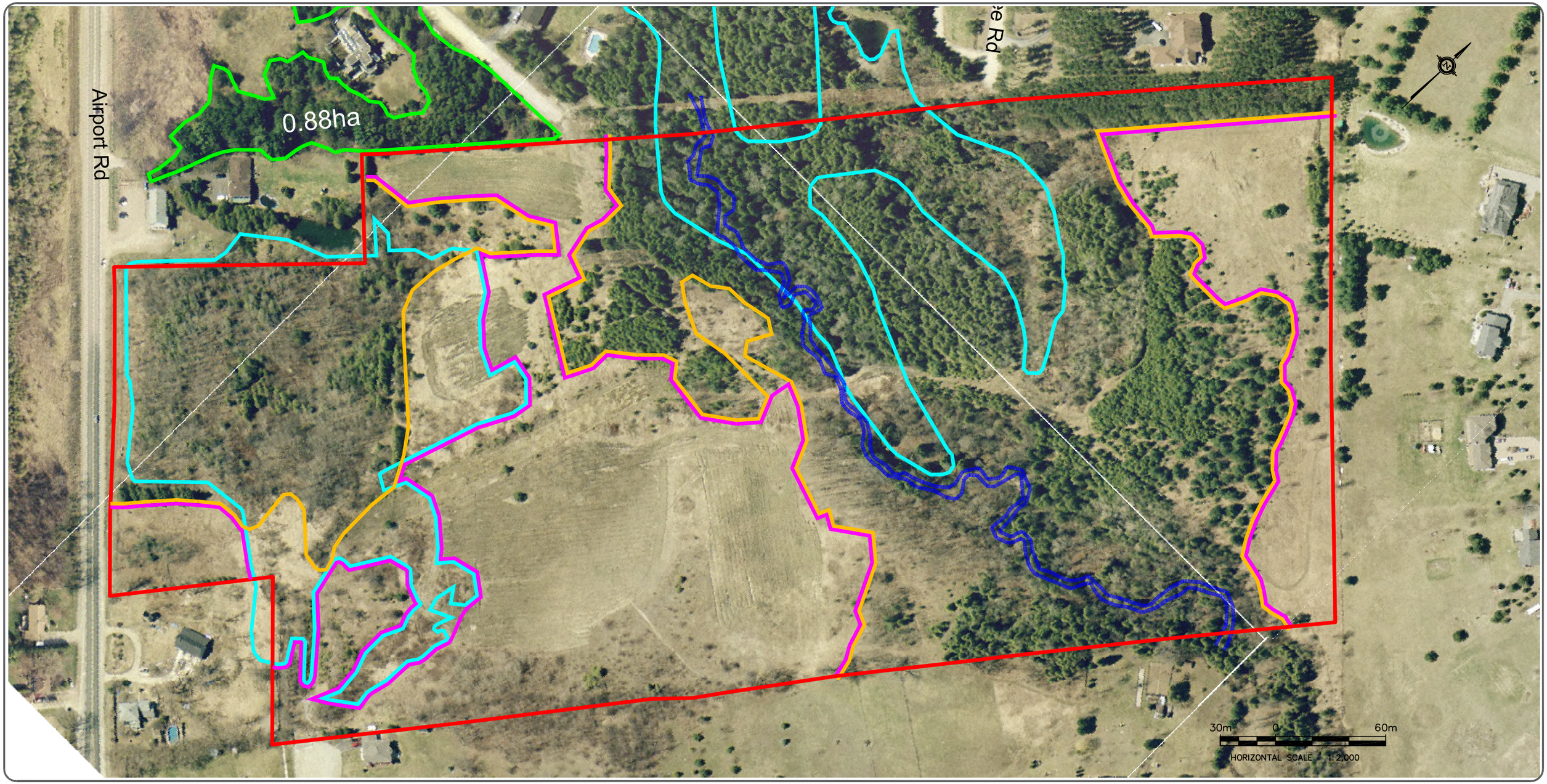
AZIMUTH ENVIRONMENTAL CONSULTING, INC.

SITE LAYOUT

Date Issued:	January 2013
Created By:	JLM
Project No.	06-011
Reference:	First Base Solutions

Caledon East EIS
Pt W1/2 Lot 22, Con. 1
Town of Caledon

Figure No. 1



Legend:

- Property Boundary
- Boyce's Creek
- MNR Evaluated Wetland (Locally Significant)
- Significant Woodland
- Other Woodland Features
- Recommended EPA Limits

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AZIMUTH ENVIRONMENTAL CONSULTING, INC.

Environmental Constraints

Date Issued:	October 2013
Created By:	JLM
Project No.	06-011
Reference:	First Base Solutions

Caledon East EIS
Pt W1/2 Lot 22, Con. 1
Town of Caledon

Figure No. 2

Legend:

- Property Boundary
- Boyce's Creek
- Regional Floodline

Vegetation Communities

CUM1-1	Dry-Moist Old Field Meadow Type
CUP3-3	Scotch Pine Coniferous Plantation Type
CUT1a	White Cedar Cultural Thicket Type
CUT1b	Mixed Cultural Thicket Type
CUW1	Mineral Cultural Woodland
FOC4-1	Fresh-Moist White Cedar Coniferous Forest Type
FOD3-1	Dry-Fresh Poplar Deciduous Forest Type
FOM4-2	Dry-Fresh White Cedar-Poplar Mixed Forest Type
FOM7-2	Fresh-Moist White Cedar-Hardwood Mixed Forest Type
MAM2-2	Reed Canary Grass Mineral Meadow Marsh Type
MAM2-7	Horsetail Mineral Meadow Marsh Type
MAM2-10	Forb Mineral Meadow Marsh Type
SWC1-1	White Cedar Mineral Coniferous Swamp Type
SWD4-3	Poplar Mineral Deciduous Forest Type
SWT2-2	Willow Mineral Thicket Swamp Type
SWT2-5	Red-oiser Dogwood Mineral Thicket Swamp Type

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AZIMUTH ENVIRONMENTAL CONSULTING, INC.

ENVIRONMENTAL FEATURES

Date Issued:	January 2013
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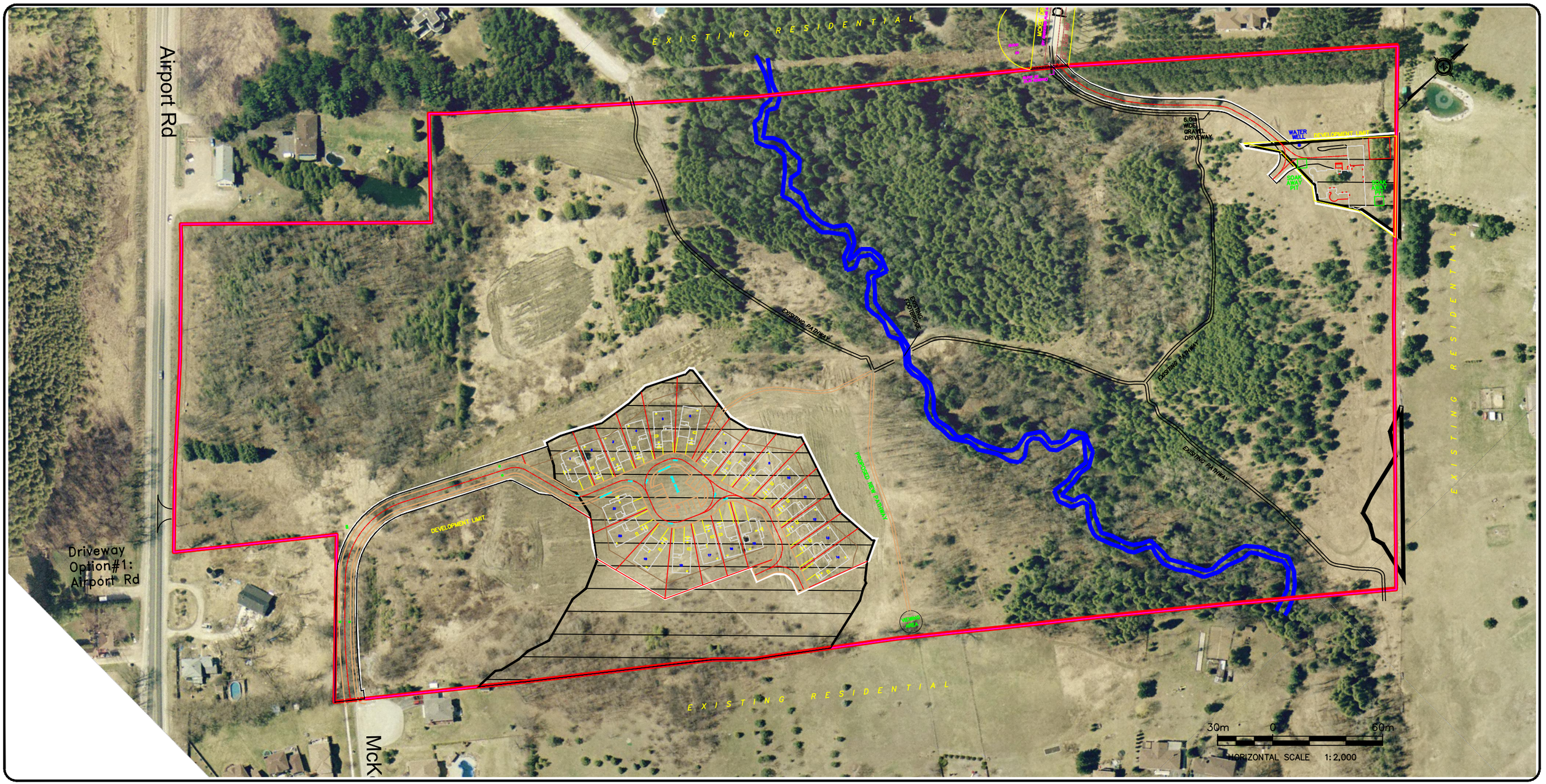
Project No.	06-011
Reference:	First Base Solutions

Caledon East EIS
Pt W1/2 Lot 22, Con. 1
Town of Caledon

Figure No. 3



Legend:

- Property Boundary
- Boyce's Creek
- Environmentally Developable Area
- Development Footprint (white)

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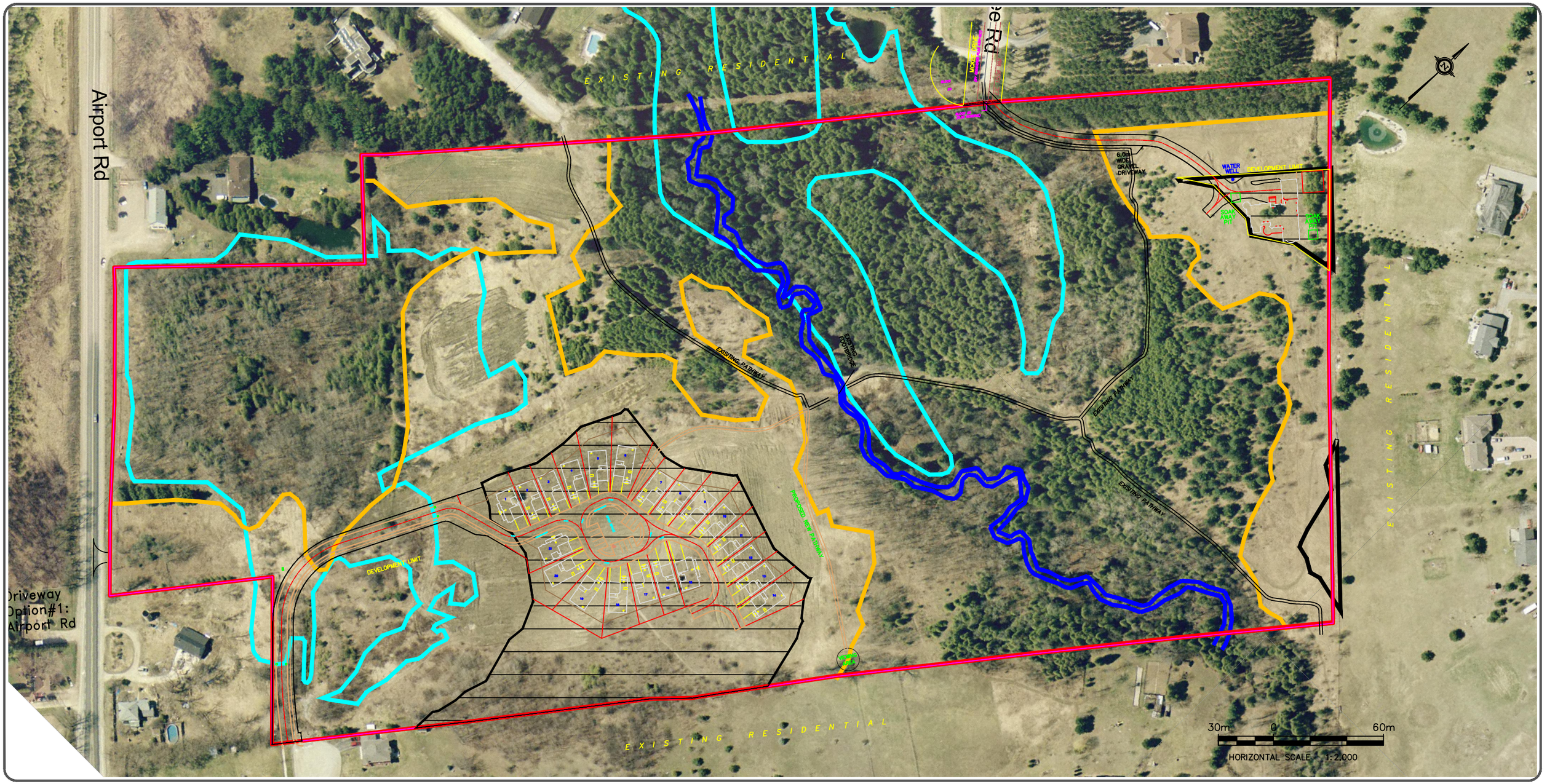
AZIMUTH ENVIRONMENTAL CONSULTING, INC.

Proposed Development

Date Issued:	November 2014
Created By:	JLM
Project No.	06-011
Reference:	First Base Solutions

Caledon East EIS
Pt W1/2 Lot 22, Con. 1
Town of Caledon

Figure No.
4



Legend:

- Property Boundary
- Boyce's Creek - Hydrologically Sensitive Feature
- MNR Evaluated Wetland (Locally Significant) - Hydrologically Sensitive Feature
- Significant Woodland - Key Natural Heritage Feature
- Environmentally Developable Area (Land Outside of Minimum Vegetation Protection Zone)

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AZIMUTH ENVIRONMENTAL CONSULTING, INC.

Consolidated Plan

Date Issued:	November 2014
Created By:	JLM
Project No.	06-011
Reference:	First Base Solutions

Caledon East EIS
Pt W1/2 Lot 22, Con. 1
Town of Caledon

Figure No. 5

Table 1: ELC Vegetation Communities, West Half, Lot 22, Concession 1, (geographic Township of Albion) Town of Caledon, Region of Peel.

Unit	Description
FOREST (FO)	**Tree Cover >60%**
Coniferous Forest(FOC)	**Coniferous tree species comprise >75% of canopy cover.**
FOC4-1: Fresh-Moist White Cedar Coniferous Forest Type	Community dominated by Eastern White Cedar with the occasional Trembling Aspen. Groundcover is limited within this community but is composed of species including Crested Woodfern, Canada Mayflower, Coltsfoot, Climbing Nightshade, Jack-in-the-pulpit and Bracken Fern.
Mixed Forest (FOM)	**Coniferous tree species comprise >25% and deciduous tree species comprise >25% of canopy cover.**
FOM4-2: Fresh –Moist White Cedar-Hemlock Coniferous Forest Type	Community composed largely of Eastern White Cedar with Yellow Birch, Paper Birch, Trembling Aspen and American Basswood. Shrub species found within this community include Choke Cherry and Alternate-leaf Dogwood. Herbaceous plants include Wild-lily-of-the-valley, Bracken Fern and a variety of Goldenrod and Aster species.
FOM7-2: Fresh-Moist White Cedar-Hardwood Mixed Forest Type	Community composed largely of Eastern White Cedar with Yellow Birch, Green Ash and White Birch found throughout the canopy. Species found within the sub-canopy/understory include Eastern Buckthorn, Black Cherry, Alternate-leaved Dogwood and Red-osier Dogwood. Groundcover species include Bristly Sarsaparillia, Self-heal, Rough Avens, Enchanter's Nightshade and a variety of fern species.
Deciduous Forest (FOD)	**Deciduous tree species comprise >75% of canopy cover.**
FOD3-1: Dry-Fresh Poplar Deciduous Forest Type	Community composed of predominately Large-toothed Aspen within the canopy with Trembling Aspen, Paper Birch and Eastern White Cedar occurring as associate species. The understory was composed of species such as Common Buckthorn, Alternate-leaf Dogwood and Wild Red Raspberry. Groundcover included species such as Riverbank Grape, Bracken Fern, Wild Carrot and Hawkweed.
CULTURAL (CU)	**Community resulting from or maintained by cultural or anthropogenic-based disturbances.**
Cultural Plantation (CUP)	**Cultural or anthropogenic-based forest**

	community where tree cover >60%.
Coniferous Plantation (CUP3)	**A community with coniferous tree species >75% of canopy cover.**
CUP3-3: Scotch Pine Coniferous Plantation Type	Dominated by Scotch Pine with Eastern White Cedar and the occasional Trembling Aspen. Groundcover composed of species found within Cultural Meadow/Cultural Thicket communities.
Cultural Meadow (CUM)	**A community where tree cover <25% and shrub cover <25%.**
CUM1-1: Dry-Moist Old Field Meadow Type	Community composed of a variety of early successional species including a number of non-native species. Wild Carrot, Sulphur Cinquefoil, Tall Goldenrod, Brome Grass and Kansas Milkweed are found throughout.
Cultural Thicket (CUT)	**A community where tree cover <25% and shrub cover >25%.**
CUT1a: Cedar-Ash Cultural Thicket Ecosite	This community represents an old field that is in early succession with young Eastern White Cedar and Green Ash throughout. According to Terandus (2006), this area contains an old road grade. The mix of upland and wetland species within this community is likely a result of past site alterations. Red-osier Dogwood, Buckthorn, Staghorn Sumac and Highbush Cranberry can also be found within this community. Common field species include Riverbank Grape, Virginia Creeper, St. John's-wort, Field Horsetail, Wild Carrot, a variety of Goldenrods with the occasional Boneset, Joe-pye Weed and White Snakeroot.
CUT1b: Mixed Cultural Thicket Ecosite	Community composed of a variety of early successional tree and shrub species including Apple, Buckthorn, Black Cherry, Staghorn Sumac, Balsam Poplar, Trembling Aspen and Scotch Pine. Groundcover composed of species including Red Raspberry, Kansas Milkweed, Oxeye Daisy, Viper's Bugloss, Sulphur Cinquefoil, Riverbank Grape and Virginia Creeper.
MARSH (MA)	**A community dominated by hydrophytic macrophytes and shrub and tree cover is >25%.**
Meadow Marsh (MAM)	**An area at the wetland-terrestrial interface, which is seasonally inundated with water and usually dominated by grasses or forbs.**
MAM2-2: Reed-canary Grass Mineral Meadow Marsh Type	Community dominated by Reed Canary Grass with scattered willow (Salix sp.) and Green Ash. Other forb species include Wild Carrot, Spotted Jewelweed, Self-heal, Colt's Foot, Ostrich Fern, Sensitive Fern

	and Swamp Milkweed.
MAM2-10: Forb Mineral Meadow Marsh Type	Grasses and sedges are dominant within this vegetation community. Red-osier dogwood is interspersed throughout.
SWAMP (SW)	**A community dominated by hydrophytic shrubs and trees and where their contribution to cover is >25%.**
Deciduous Swamp (SWD)	**A community with tree cover >25% and trees >5m in height. Deciduous trees are >75% of the canopy cover**
SWD4-3: Poplar Mineral Deciduous Swamp Type	This community is located in the western portion of the property, adjacent to Airport Rd. Species observed here include White Cedar, Trembling Aspen, Highbush Cranberry, Elderberry, Sensitive Fern, Field Horsetail, and Wild Black Currant
Coniferous Swamp (SWC)	**Tree cover>25% with trees >5m in height. Conferous tree species are >75% of the canopy.**
SWC1-1: White Cedar Mineral Coniferous Swamp Type	A vegetation community almost entirely dominated by white cedar with minimal understory.
Thicket Swamp (SWT)	**A community where tree cover <25% and shrub cover >25%.**
SWT2-2: Willow Mineral Thicket Swamp Type	Community composed largely of willows including Meadow Willow, Heart-leaved Willow, Pussy Willow and Peach-leaved Willow. Groundcover includes a variety of wetland species such as Catherinettes Berry, Reed Canary Grass, Sensitive Fern and a number of sedge (*Carex sp*.) and rush (*Juncus sp*.) species.
SWT2-5: Red-osier Dogwood Mineral Thicket Swamp Type	Community dominated by Red-osier Dogwood with a number of Willow (*Salix sp*.) shrubs and a scattering of trees including Paper Birch, Green Ash, White Ash, Trembling Aspen, and Choke Cherry. As indicated in Terandus (2006) this is topographically the lowest area in the southwestern portion of the property. The past land use (i.e. earth moving) has resulted in irregular terrain containing a variety of both wetland and upland vegetation. Groundcover composed of wetland species such as Reed Canary Grass, Dark-green Bulrush, Sensitive Fern and a variety of Horsetail (*Equisetum sp*.) species and a number of upland field species commonly found within the Cultural Meadow Communities.

None of the vegetation communities are types considered to be provincially rare (NHIC 2010).

Table 2: Plant Species Observations - West Half, Lot 22, Concession 1, (geographic Township of Albion) Town of Caledon, Region of Peel.

				Vegetation Communities[2]														Conservation Rankings[3]					Regional[4]	
FAMILY[1]	Scientific Name	Common Name	Tarandus (2006)	FOC4-1	FOM4-2	FOM7-2	FOD3-1	CUP3-3	CUM1-1	CUT1a	CUT1b	CUW1	SWC1-1	SWD4-3	SWT2-2	SWT2-5	MAM2-2	MAM2-10	GRANK	SRANK	COSEWIC	MNR	TRACK	TRCA Rare	ORM Rare
ACERACEAE	*Acer negundo*	Box Elder	X	X		X	X	X	X	X	X						X		G5	S5			N		
ACERACEAE	*Acer saccharum*	Sugar Maple	X	X		X													G5	S5			N		
ACERACEAE	*Acer spicatum*	Mountain Maple	X			X													G5	S5			N		
ANACARDIACEAE	*Rhus radicans*	Poison Ivy	X																G5	S5					
ANACARDIACEAE	*Rhus typhina*	Staghorn Sumac	X	X					X	X	X		X					X	G5	S5			N		
APIACEAE	*Daucus carota*	Wild Carrot	X	X	X	X	X		X	X	X			X	X	X	X	X	G?	SE5			N		
APOCYNACEAE	*Apocynum androsaemifolium*	Spreading Dogbane	X						X										G5	S5			N		
APOCYNACEAE	*Apocynum cannabinum*	Clasping-leaf Dogbane														X	X		G5	S5			N		
ARACEAE	*Arisaema triphyllum*	Jack-in-the-pulpit	X	X		X							X						G5	S5			N		
ARALIACEAE	*Aralia nudicaulis*	Wild Sarsaparilla	X	X	X	X													G5	S5			N		
ASCLEPIADACEAE	*Asclepias incarnata*	Swamp Milkweed															X		G5	S5					
ASCLEPIADACEAE	*Asclepias syriaca*	Kansas Milkweed	X				X		X	X	X			X		X	X	X	G5	S5			N		
ASTERACEAE	*Achillea millefolium*	Yarrow	X				X		X	X						X	X	X	G5	S5			N		
ASTERACEAE	*Ambrosia artemisiifolia*	Annual Ragweed	X						X	X							X	X	G5	S5			N		
ASTERACEAE	***Antennaria neglecta***	**Field Pussytoes**	**X**		**X**						**X**								**G5**	**S5**			**N**	**X**	
ASTERACEAE	*Arctium minus*	Lesser Burdock	X											X					G?	SE5					
ASTERACEAE	*Bidens cernua*	Nodding Beggar-ticks															X		G5	S5			N		
ASTERACEAE	*Bidens frondosa*	Devil's Beggar-ticks	X			X													G5	S5			N		
ASTERACEAE	*Carduus acanthoides*	Spiny Plumeless-thistle							X	X									G?	SE5					
ASTERACEAE	*Carduus crispus*	Curled Plumless-thistle	X																G?	SE			N		
ASTERACEAE	*Centaurea maculosa*	Spotted Starthistle					X												G?	SE5			N		
ASTERACEAE	*Centaurea nigra*	Black Starthistle					X				X								G?	SE?			N		
ASTERACEAE	*Chrysanthemum leucanthemum*	Oxeye Daisy	X				X		X	X	X					X	X	X	G?	SE5			N		
ASTERACEAE	*Cichorium intybus*	Chicory	X	X		X			X	X	X								G?	SE5			N		
ASTERACEAE	*Cirsium arvense*	Crepping Thistle	X			X			X	X	X			X	X	X	X	X	G?	SE5			N		
ASTERACEAE	*Cirsium vulgare*	Bull Thistle	X					X	X								X	X	G5	SE5			N		
ASTERACEAE	*Conyza canadensis*	Fleabane	X						X		X								G5	S5			N		
ASTERACEAE	*Echinacea purpurea*	Eastern Purple Coneflower							X										G4	SE1			N		
ASTERACEAE	*Erigeron annuus*	White-top Fleabane	X						X	X	X					X			G5	S5			N		
ASTERACEAE	*Erigeron hyssopifolius*	Daisy Fleabane							X	X						X	X		G5	S5			N		
ASTERACEAE	*Erigeron philadelphicus*	Philadelphia Fleabane	X			X			X					X				X	G5	S5					
ASTERACEAE	*Eupatorium maculatum*	Spotted Joe-pye Weed	X			X				X				X		X	X		G5	S5			N		
ASTERACEAE	*Eupatorium perfoliatum*	Common Boneset	X			X			X	X				X	X	X	X	X	G5	S5			N		
ASTERACEAE	*Eupatorium rugosum*	White Snakeroot	X			X	X												G5	S5			N		
ASTERACEAE	*Euthamia graminifolia*	Flat-top Fragrant-golden-rod					X		X	X	X				X	X	X	X	G5	S5			N		
ASTERACEAE	*Hieracium aurantiacum*	Orange Hawkweed	X																G?	SE5			N		
ASTERACEAE	*Hieracium canadense*	Canada Hawkweed	X																G5	SU			N		
ASTERACEAE	*Hieracium lachenalii*	Common Hawkweed				X	X			X	X								G?	SE2?			N		
ASTERACEAE	*Hieracium piloselloides*	Tall Hawkweed	X																G?	SE5			N		
ASTERACEAE	*Inula helenium*	Elecampane Flower	X	X					X	X			X	X	X	X	X		G?	SE5			N		
ASTERACEAE	***Lactuca biennis***	**Tall Blue Lettuce**					**X**												**G5**	**S5**			**N**	**X**	
ASTERACEAE	*Matricaria matricarioides*	Pineapple-weed Chamomile							X										G5	SE5			N		
ASTERACEAE	*Rudbeckia hirta*	Black-eyed Susan	X		X	X	X		X	X	X				X	X			G5	S5			N		
ASTERACEAE	*Solidago altissima*	Tall Goldenrod	X			X	X		X	X	X				X				G5T5	S5			Y		
ASTERACEAE	*Solidago caesia*	Bluestem Goldenrod					X												G5	S5			N		
ASTERACEAE	*Solidago canadensis*	Canada Goldenrod	X						X	X	X					X	X	X	G5	S5			N		
ASTERACEAE	*Solidago flexicaulis*	Broad-leaved Goldenrod	X	X		X													G5	S5			N		
ASTERACEAE	*Solidago gigantea*	Smooth Goldenrod	X						X	X							X		G5	S5			N		
ASTERACEAE	*Solidago juncea*	Early Goldenrod								X							X		G5	S5			N		
ASTERACEAE	*Solidago nemoralis*	Field Goldenrod	X		X		X		X	X	X					X	X		G5	S5			N		
ASTERACEAE	*Solidago rugosa*	Rough-leaf Goldenrod	X		X	X	X		X	X	X				X	X	X	X	G5	S5			N		
ASTERACEAE	*Sonchus arvensis*	Field Sowthistle							X	X							X		G?	SE5			N		
ASTERACEAE	*Sonchus asper*	Spiny-leaf Sowthistle	X						X						X				G?	SE5			N		
ASTERACEAE	*Sonchus oleraceus*	Common Sowthistle	X			X						X							G?	SE5			N		
ASTERACEAE	*Symphyotrichum cordifolium*	Heart-leaf Aster					X												G5	S5			N		
ASTERACEAE	*Symphyotrichum ericoides*	White Heath Aster	X		X		X		X	X	X								G5	S5			N		

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				Vegetation Communities[2]														Conservation Rankings[3]					Regional[4]	
FAMILY[1]	Scientific Name	Common Name	Tarandus (2006)	FOC4-1	FOM4-2	FOM7-2	FOD3-1	CUP3-3	CUM1-1	CUT1a	CUT1b	CUW1	SWC1-1	SWD4-3	SWT2-2	SWT2-5	MAM2-2	MAM2-10	GRANK	SRANK	COSEWIC	MNR	TRACK	TRCA Rare	ORM Rare
ASTERACEAE	*Symphyotrichum lanceolatum*	Panicled Aster	X			X			X	X		X		X	X	X	X		G5	S5			N		
ASTERACEAE	*Symphyotrichum lateriflorum*	Starved Aster	X		X	X			X	X				X	X	X	X		G5	S5			N		
ASTERACEAE	*Symphyotrichum novae-angliae*	New England Aster	X		X	X	X		X	X	X	X		X	X	X	X		G5	S5			N		
ASTERACEAE	***Symphyotrichum pilosum***	**White Heath Aster**	**X**				**X**		**X**	**X**						**X**			**G5**	**S5**			**N**	**X**	**X**
ASTERACEAE	*Symphyotrichum puniceum*	Swamp Aster				X				X					X	X	X		G5	S5			N		
ASTERACEAE	***Symphyotrichum urophyllum***	**Arrow-leaved Aster**			**X**		**X**								**X**				**G4**	**S4**			**N**	**X**	
ASTERACEAE	*Symphyotrichum x amethystinum*	Hybrid Aster	X																HYB	S3?			N		
ASTERACEAE	*Taraxacum officinale*	Brown-seed Dandelion	X	X		X			X	X	X					X	X	X	G5	SE5			N		
ASTERACEAE	*Tragopogon pratensis*	Meadow Goat's-beard	X						X		X								G?	SE5			N		
ASTERACEAE	*Tussilago farfara*	Colt's Foot	X	X		X			X	X			X			X	X		G?	SE5			N		
BALSAMINACEAE	*Impatiens capensis*	Spotted Jewel-weed	X	X		X								X		X	X		G5	S5			N		
BETULACEAE	*Betula alleghaniensis*	Yellow Birch	X	X	X	X							X	X					G5	S5			N		
BETULACEAE	*Betula papyrifera*	Paper Birch	X	X	X	X	X		X	X			X		X	X	X		G5	S5			N		
BETULACEAE	*Corylus cornuta*	Beaked Hazelnut														X			G5	S5					
BORAGINACEAE	*Echium vulgare*	Common Viper's-bugloss	X				X		X		X								G?	SE5			N		
BORAGINACEAE	*Lithospermum officinale*	European Gromwell	X	X									X	X					G?	SE5			N		
BORAGINACEAE	***Myosotis laxa***	**Small Forget-me-not**	**X**										**X**						**G5**	**S5**			**N**	**X**	
BORAGINACEAE	*Myosotis scorpioides*	True Forget-me-not	X											X		X			G5	SE5			N		
BRASSICACEAE	*Barbarea vulgaris*	Yellow Rocket	X																G?	SE5			N		
BRASSICACEAE	*Berteroa incana*	Hoary False-alyssum							X										G?	SE5			N		
BRASSICACEAE	*Capsella bursa-pastoris*	Common Shepherd's Purse	X																G?	SE5			N		
BRASSICACEAE	*Cardamine diphylla*	Two-leaf Toothwort	X																G5	S5			N		
BRASSICACEAE	*Cardamine pensylvanica*	Pennsylvania Bitter-cress									X								G5	S5			N		
BRASSICACEAE	*Lepidium campestre*	Field Pepper-grass	X																G?	SE5					
BRASSICACEAE	*Lepidium virginicum*	Poor-man's Pepper-grass	X						X								X		G5	S5			N		
BRASSICACEAE	*Nasturtium officinale*	True Watercress	X																G?	SE			N		
BRASSICACEAE	*Thlaspi arvense*	Field Penny-cress	X														X		G?	SE5			N		
CAMPANULACEAE	***Lobelia siphilitica***	**Great Blue Lobelia**	**X**												**X**				**G5**	**S5**			**N**	**X**	
CAPRIFOLIACEAE	***Linnaea borealis***	**Twinflower**		**X**															**G5**	**S5**			**N**	**X**	
CAPRIFOLIACEAE	*Lonicera tatarica*	Tartarian Honeysuckle	X							X				X		X	X		G?	SE5			N		
CAPRIFOLIACEAE	*Sambucus canadensis*	Common Elderberry	X			X		X						X			X		G5	S5			N		
CAPRIFOLIACEAE	*Sambucus racemosa*	European Red Elder	X	X		X	X						X						G5	S5			N		
CAPRIFOLIACEAE	*Symphoricarpos albus*	Snowberry	X																G5	S5			N		
CAPRIFOLIACEAE	*Viburnum lentago*	Nannyberry	X			X								X	X				G5	S5			N		
CAPRIFOLIACEAE	***Viburnum trilobum***	**Highbush Cranberry**	**X**			**X**	**X**		**X**	**X**				**X**			**X**		**G5T5**	**S5**			**N**	**X**	
CARYOPHYLLACEAE	*Cerastium fontanum*	Common Mouse-ear Chickweed	X													X			G?	SE5			N		
CARYOPHYLLACEAE	*Dianthus armeria*	Deptford-pink	X		X				X	X									G?	SE5			N		
CARYOPHYLLACEAE	*Silene latifolia*	A Catchfly	X																G?	SE5			N		
CARYOPHYLLACEAE	*Silene noctiflora*	Night-flowering Catchfly	X																G?	SE5			N		
CARYOPHYLLACEAE	*Silene vulgaris*	Maiden's Tears	X				X		X	X									G?	SE5			N		
CHENOPODIACEAE	*Chenopodium album*	White Goosefoot	X																G5	SE5					
CLUSIACEAE	*Hypericum perforatum*	A St. John's-wort	X	X	X		X		X	X	X	X				X	X	X	G?	SE5			N		
CONVOLVULACEAE	*Convolvulus arvensis*	Field Bindweed	X						X										G?	SE5			N		
CORNACEAE	*Cornus alternifolia*	Alternate-leaf Dogwood	X	X	X	X		X			X		X	X					G5	S5			N		
CORNACEAE	***Cornus amomum***	**Silky Dogwood**	**X**	**X**		**X**													**G5**	**S5**			**N**		**X**
CORNACEAE	*Cornus stolonifera*	Red-osier Dogwood	X	X		X	X		X	X	X	X		X	X	X	X	X	G5	S5			N		
CUCURBITACEAE	*Echinocystis lobata*	Wild Mock-cucumber	X														X		G5	S5			N		
CUPRESSACEAE	***Juniperus virginiana***	**Eastern Red Cedar**							**X**										**G5**	**S5**			**N**		**X**
CUPRESSACEAE	*Thuja occidentalis*	Eastern White Cedar	X	X	X	X	X		X	X	X	X	X	X		X	X	X	G5	S5			N		
CYPERACEAE	*Carex arctata*	Black Sedge		X	X	X	X						X	X					G5?	S5			N		
CYPERACEAE	*Carex bebbii*	Bebb's Sedge							X					X	X	X	X		G5	S5			N		
CYPERACEAE	*Carex communis*	Fibrous-root Sedge		X			X						X	X					G5	S5			N		
CYPERACEAE	*Carex deflexa*	Short-stemmed Sedge		X									X						G5	S5			N		
CYPERACEAE	***Carex disperma***	**Softleaf Sedge**	**X**	**X**	**X**	**X**													**G5**	**S5**			**N**	**X**	
CYPERACEAE	***Carex flava***	**Yellow Sedge**								**X**									**G5**	**S5**			**N**	**X**	
CYPERACEAE	***Carex plantaginea***	**Plantain-leaved Sedge**			**X**														**G5**	**S5**			**N**	**X**	

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FAMILY[1]	Scientific Name	Common Name	Tarandus (2006)	FOC4-1	FOM4-2	FOM7-2	FOD3-1	CUP3-3	CUM1-1	CUT1a	CUT1b	CUW1	SWC1-1	SWD4-3	SWT2-2	SWT2-5	MAM2-2	MAM2-10	GRANK	SRANK	COSEWIC	MNR	TRACK	TRCA Rare	ORM Rare
CYPERACEAE	*Carex pseudo-cyperus*	Cyperus-like Sedge													X				G5	S5			N		
CYPERACEAE	*Carex retrorsa*	Retrorse Sedge								X					X				G5	S5			N		
CYPERACEAE	*Carex spicata*	A Sedge	X														X		G?	SE5			N		
CYPERACEAE	*Carex stipata*	Stalk-grain Sedge	X			X			X							X	X		G5	S5			N		
CYPERACEAE	*Carex vulpinoidea*	Fox Sedge	X	X					X	X				X	X		X		G5	S5			N		
CYPERACEAE	*Schoenoplectus tabernaemontani*	Soft-stem Club-rush									X				X				G?	S5			N		
CYPERACEAE	*Scirpus atrovirens*	Dark-green Bulrush	X			X			X					X	X	X	X	X	G5?	S5			N		
CYPERACEAE	***Scirpus cyperinus***	**Cottongrass Bulrush**							**X**								**X**		**G5**	**S5**			**N**	**X**	
DENNSTAEDTIACEAE	*Pteridium aquilinum*	Bracken Fern	X	X		X	X			X			X		X				G5	S5			N		
DIPSACACEAE	*Dipsacus fullonum*	Fuller's Teasel							X										G?	SE5					
DRYOPTERIDACEAE	*Athyrium filix-femina*	Subarctic Lady Fern	X	X		X					X		X						G5	S5			N		
DRYOPTERIDACEAE	*Cystopteris bulbifera*	Bulblet Fern	X	X		X							X						G5	S5			N		
DRYOPTERIDACEAE	*Dryopteris carthusiana*	Spinulose Shield Fern	X	X	X	X							X						G5	S5			N		
DRYOPTERIDACEAE	***Dryopteris cristata***	**Crested Shield-fern**	**X**	**X**		**X**							**X**						**G5**	**S5**			**N**	**X**	
DRYOPTERIDACEAE	*Dryopteris intermedia*	Evergreen Woodfern	X			X													G5	S5			N		
DRYOPTERIDACEAE	*Dryopteris marginalis*	Marginal Wood-fern	X			X													G5	S5			N		
DRYOPTERIDACEAE	*Gymnocarpium dryopteris*	Oak Fern	X	X									X						G5	S5			N		
DRYOPTERIDACEAE	*Matteuccia struthiopteris*	Ostrich Fern	X	X		X							X				X		G5	S5			N		
DRYOPTERIDACEAE	*Onoclea sensibilis*	Sensitive Fern	X	X		X							X	X	X	X	X		G5	S5			N		
ELAEAGNACEAE	*Elaeagnus angustifolia*	Russian Olive					X												G?	SE3					
EQUISETACEAE	*Equisetum arvense*	Field Horsetail	X	X	X	X	X		X	X	X			X	X	X	X	X	G5	S5			N		
EQUISETACEAE	*Equisetum hyemale*	Rough Horsetail	X						X							X			G5	S5			N		
EQUISETACEAE	***Equisetum pratense***	**Meadow Horsetail**							**X**										**G5**	**S5**			**N**	**X**	**X**
EQUISETACEAE	***Equisetum scirpoides***	**Dwarf Scouring Rush**		**X**															**G5**	**S5**			**N**	**X**	
EQUISETACEAE	***Equisetum sylvaticum***	**Woodland Horsetail**		**X**	**X**	**X**							**X**						**G5**	**S5**			**N**	**X**	**X**
EQUISETACEAE	***Equisetum variegatum***	**Variegated Horsetail**	**X**						**X**	**X**							**X**		**G5**	**S5**			**N**		**X**
FABACEAE	*Lathyrus odoratus*	Sweetpea															X		G?	SE1			N		
FABACEAE	*Lotus corniculatus*	Birds-foot Trefoil									X						X		G?	SE5					
FABACEAE	*Medicago lupulina*	Black Medic	X						X		X					X		X	G?	SE5			N		
FABACEAE	*Medicago sativa*	Alfalfa	X						X	X									G?	SE5			N		
FABACEAE	*Melilotus alba*	White Sweet Clover	X	X	X		X		X	X	X					X	X		G5	SE5			N		
FABACEAE	*Melilotus officinalis*	Yellow Sweetclover							X										G?	SE5			N		
FABACEAE	*Robinia pseudo-acacia*	Black Locust	X														X		G5	SE5			N		
FABACEAE	*Trifolium hybridum*	Alsike Clover	X																G?	SE5			N		
FABACEAE	*Trifolium pratense*	Red Clover	X		X		X		X	X	X				X	X	X		G?	SE5			N		
FABACEAE	*Trifolium repens*	White Clover	X			X				X									G?	SE5			N		
FABACEAE	*Vicia cracca*	Tufted Vetch	X				X		X	X	X			X		X	X	X	G?	SE5			N		
FAGACEAE	*Fagus grandifolia*	American Beech	X			X													G5	S4			N		
GERANIACEAE	*Geranium robertianum*	Herb-robert	X	X		X		X					X			X	X		G5	SE5			N		
GROSSULARIACEAE	*Ribes americanum*	Wild Black Currant	X	X		X		X					X	X	X	X	X		G5	S5			N		
GROSSULARIACEAE	*Ribes cynosbati*	Prickly Gooseberry	X			X	X												G5	S5			N		
GROSSULARIACEAE	***Ribes lacustre***	**Bristly Black Currant**	**X**		**X**	**X**	**X**						**X**	**X**					**G5**	**S5**			**N**		**X**
GROSSULARIACEAE	***Ribes triste***	**Swamp Red Currant**	**X**	**X**					**X**					**X**					**G5**	**S5**			**N**	**X**	
HYDROPHYLLACEAE	*Hydrophyllum virginianum*	John's Cabbage												X					G5	S5					
IRIDACEAE	***Sisyrinchium montanum***	**Strict Blue-eyed-grass**	**X**							**X**									**G5**	**S5**			**N**	**X**	
JUGLANDACEAE	*Carya cordiformis*	Bitter-nut Hickory	X	X	X	X							X						G5	S5			N		
JUGLANDACEAE	***Juglans cinerea***	**Butternut**	**X**		**X**								**X**						**G3G4**	**S3?**	**END**	**END**	**Y**	**X**	
JUGLANDACEAE	***Juglans nigra***	**Black Walnut**							**X**										**G5**	**S4**			**N**		**X**
JUNCACEAE	*Juncus articulatus*	Jointed Rush	X						X	X					X		X		G5	S5			N		
JUNCACEAE	*Juncus balticus*	Baltic Rush													X				G5	S5			N		
JUNCACEAE	*Juncus dudleyi*	Dudley's Rush	X							X									G5	S5			N		
JUNCACEAE	*Juncus effusus*	Soft Rush				X											X		G5	S5			N		
JUNCACEAE	*Juncus nodosus*	Knotted Rush								X							X		G5	S5			N		
JUNCACEAE	*Juncus tenuis*	Path Rush	X	X					X	X			X				X		G5	S5			N		
JUNCACEAE	*Juncus torreyi*	Torrey's Rush													X				G5	S5			N		
LAMIACEAE	*Clinopodium vulgare*	Field Basil												X			X		G5	S5			N		

Table 2: Plant Species Observations - West Half, Lot 22, Concession 1, (geographic Township of Albion) Town of Caledon, Region of Peel.

				Vegetation Communities[2]														Conservation Rankings[3]					Regional[4]	
FAMILY[1]	Scientific Name	Common Name	Tarandus (2006)	FOC4-1	FOM4-2	FOM7-2	FOD3-1	CUP3-3	CUM1-1	CUT1a	CUT1b	CUW1	SWC1-1	SWD4-3	SWT2-2	SWT2-5	MAM2-2	MAM2-10	GRANK	SRANK	COSEWIC	MNR	TRACK	TRCA Rare	ORM Rare
LAMIACEAE	*Galeopsis tetrahit*	Brittle-stem Hempnettle	X																G?	SE5			N		
LAMIACEAE	*Glechoma hederacea*	Ground Ivy	X	X	X											X			G?	SE5			N		
LAMIACEAE	*Leonurus cardiaca*	Common Mother-wort	X							X							X		G?	SE5			N		
LAMIACEAE	*Lycopus americanus*	American Bugleweed	X	X		X				X					X	X	X		G5	S5			N		
LAMIACEAE	*Lycopus uniflorus*	Northern Bugleweed	X											X		X	X		G5	S5			N		
LAMIACEAE	*Mentha arvensis*	Corn Mint	X		X		X		X					X	X	X	X		G5	S5			N		
LAMIACEAE	*Nepeta cataria*	Catnip															X		G?	SE5			N		
LAMIACEAE	*Origanum vulgare*	Wild Marjoram	X																G?	SE5			N		
LAMIACEAE	*Prunella vulgaris*	Self-heal	X	X		X	X		X	X	X		X	X		X	X	X	G5T5	S5			N		
LILIACEAE	*Asparagus officinalis*	Garden Asparagus-fern							X										G5?	SE5			N		
LILIACEAE	*Convallaria majalis*	European Lily-of-the-valley	X			X								X					G5	SE5			N		
LILIACEAE	*Erythronium americanum*	Yellow Trout-lily	X																G5	S5					
LILIACEAE	*Hemerocallis fulva*	Orange Daylily							X										G?	SE5			N		
LILIACEAE	*Lilium lancifolium*	Tiger Lily												X					G?	SE1					
LILIACEAE	*Lilium michiganense*	Michigan Lily	X																G5	S5			N		
LILIACEAE	*Maianthemum canadense*	Wild-lily-of-the-valley	X	X		X							X						G5	S5			N		
LILIACEAE	*Maianthemum racemosum*	False Solomon's Seal	X																G5	S5			N		
LILIACEAE	***Polygonatum pubescens***	**Downy Solomon's-seal**				**X**													**G5**	**S5**			**N**	**X**	
LILIACEAE	*Trillium erectum*	Red Trillium	X																G5	S5			N		
LILIACEAE	***Trillium grandiflorum***	**White Trillium**											**X**						**G5**	**S5**				**X**	
LYTHRACEAE	*Lythrum salicaria*	Purple Loosestrife	X							X						X			G5	SE5			N		
OLEACEAE	*Fraxinus americana*	White Ash	X	X		X	X	X	X	X	X	X	X			X	X		G5	S5			N		
OLEACEAE	*Fraxinus pennsylvanica*	Green Ash	X	X		X	X		X	X			X	X	X	X	X	X	G5	S5			N		
OLEACEAE	*Syringa vulgaris*	Common Lilac	X																G?	SE5					
ONAGRACEAE	*Circaea lutetiana*	Southern Broadleaf Enchanter's Ni	X	X		X	X	X					X	X		X	X		G5	S5			N		
ONAGRACEAE	*Epilobium ciliatum*	Hairy Willow-herb	X											X		X			G5	S5			N		
ONAGRACEAE	*Epilobium hirsutum*	Great-hairy Willow-herb	X						X										G?	SE5			N		
ONAGRACEAE	***Epilobium leptophyllum***	**Linear-leaved Willow-herb**							**X**	**X**									**G5**	**S5**			**N**	**X**	
ONAGRACEAE	***Epilobium strictum***	**Downy Willow-herb**				**X**								**X**		**X**	**X**		**G5?**	**S5**			**N**	**X**	**X**
ONAGRACEAE	*Oenothera biennis*	Common Evening-primrose	X	X		X	X		X	X		X				X	X	X	G5	S5			N		
ORCHIDACEAE	***Cypripedium calceolus***	**Yellow Lady's-slipper**	**X**											**X**					**G5**	**S4S5**			**N**		**X**
ORCHIDACEAE	***Cypripedium reginae***	**Showy Lady's-slipper**	**X**						**X**	**X**			**X**	**X**	**X**		**X**		**G4**	**S4**			**N**	**X**	
ORCHIDACEAE	*Epipactis helleborine*	Eastern Helleborine	X	X		X							X						G?	SE5			N		
OXALIDACEAE	*Oxalis stricta*	Upright Yellow Wood-sorrel	X																G5	S5			N		
PAPAVERACEAE	*Sanguinaria canadensis*	Bloodroot	X																G5	S5			N		
PINACEAE	***Abies balsamea***	**Balsam Fir**	**X**						**X**										**G5**	**S5**			**N**	**X**	
PINACEAE	*Picea glauca*	White Spruce	X			X								X		X	X		G5	S5			N		
PINACEAE	*Pinus banksiana*	Jack Pine	X			X			X										G5	S5			N		
PINACEAE	***Pinus resinosa***	**Red Pine**	**X**			**X**		**X**	**X**										**G5**	**S5**			**N**	**X**	**X**
PINACEAE	*Pinus sylvestris*	Scotch Pine	X	X	X	X	X		X	X	X		X		X	X	X		G?	SE5			N		
PINACEAE	*Tsuga canadensis*	Eastern Hemlock	X			X													G5	S5			N		
PLANTAGINACEAE	*Plantago lanceolata*	English Plantain	X		X				X	X	X						X	X	G5	SE5			N		
PLANTAGINACEAE	*Plantago major*	Nipple-seed Plantain	X				X		X	X	X						X	X	G5	SE5			N		
POACEAE	*Agrostis gigantea*	Black Bentgrass	X							X									G4G5	SE5			N		
POACEAE	***Agrostis scabra***	**Rough Bentgrass**							**X**										**G5**	**S5**			**N**	**X**	
POACEAE	*Avena sativa*	Cultivated Oat				X		X	X	X	X	X				X	X		G?	SE3			N		
POACEAE	*Bromus inermis*	Awnless Brome	X						X	X	X					X	X	X	G5T	SE5			N		
POACEAE	***Cinna latifolia***	**Slender Wood Reedgrass**												**X**					**G5**	**S5**			**N**	**X**	
POACEAE	*Dactylis glomerata*	Orchard Grass	X	X	X	X	X		X	X	X	X				X			G?	SE5			N		
POACEAE	*Echinochloa crusgalli*	Barnyard Grass	X																G?	SE5			N		
POACEAE	*Elymus hystrix*	Bottlebrush Grass		X									X						G5	S5			N		
POACEAE	*Elymus repens*	Creeping Wild-rye	X						X	X							X		G5	SE5			N		
POACEAE	*Festuca arundinacea*	Tall Fescue	X														X		G?	SE5			N		
POACEAE	*Festuca rubra*	Red Fescue								X						X			G5	S5			N		
POACEAE	*Glyceria grandis*	American Mannagrass	X			X				X									G5	S4S5			N		
POACEAE	*Glyceria striata*	Fowl Manna-grass	X			X								X	X	X	X		G5	S5			N		

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				Vegetation Communities[2]														Conservation Rankings[3]					Regional[4]	
FAMILY[1]	Scientific Name	Common Name	Tarandus (2006)	FOC4-1	FOM4-2	FOM7-2	FOD3-1	CUP3-3	CUM1-1	CUT1a	CUT1b	CUW1	SWC1-1	SWD4-3	SWT2-2	SWT2-5	MAM2-2	MAM2-10	GRANK	SRANK	COSEWIC	MNR	TRACK	TRCA Rare	ORM Rare
POACEAE	*Leersia oryzoides*	Rice Cutgrass		X									X		X				G5	S5			N		
POACEAE	*Panicum acuminatum*	Panic Grass					X			X									G5	S5			N		
POACEAE	*Panicum capillare*	Old Witch Panic-grass	X																G5	S5			N		
POACEAE	*Phalaris arundinacea*	Reed Canary Grass	X	X		X			X	X				X	X	X	X	X	G5	S5			N		
POACEAE	*Phleum pratense*	Meadow Timothy	X		X		X		X	X	X					X	X		G?	SE5			N		
POACEAE	*Poa annua*	Annual Bluegrass				X													G?	SE5			N		
POACEAE	*Poa compressa*	Canada Bluegrass	X			X				X				X		X			G?	SE5			N		
POACEAE	*Poa pratensis*	Kentucky Bluegrass	X							X						X			G5T5?	S5			N		
POLYGONACEAE	***Polygonum amphibium***	**Water Smartweed**				**X**													**G5**	**S5**			**N**	**X**	
POLYGONACEAE	*Polygonum persicaria*	Lady's Thumb	X						X	X									G3G5	SE5			N		
POLYGONACEAE	*Rumex crispus*	Curly Dock	X						X	X						X	X		G?	SE5			N		
PRIMULACEAE	*Lysimachia ciliata*	Fringed Loosestrife	X	X		X			X				X	X		X	X		G5	S5			N		
PYROLACEAE	***Pyrola elliptica***	**Shinleaf**			**X**		**X**												**G5**	**S5**			**N**	**X**	
RANUNCULACEAE	*Actaea pachypoda*	White Baneberry	X			X													G5	S5			N		
RANUNCULACEAE	*Actaea rubra*	Red Baneberry	X			X													G5	S5			N		
RANUNCULACEAE	*Anemone canadensis*	Canada Anemone	X	X		X								X	X	X	X		G5	S5			N		
RANUNCULACEAE	*Anemone virginiana*	Virginia Anemone	X	X		X	X			X	X								G5	S5			N		
RANUNCULACEAE	***Aquilegia canadensis***	**Wild Columbine**	**X**		**X**								**X**						**G5**	**S5**			**N**	**X**	
RANUNCULACEAE	*Clematis virginiana*	Virginia Virgin-bower	X	X		X			X					X					G5	S5			N		
RANUNCULACEAE	*Ranunculus abortivus*	Kidney-leaved Buttercup	X			X													G5	S5			N		
RANUNCULACEAE	*Ranunculus acris*	Tall Butter-cup	X	X		X			X	X				X		X	X		G5	SE5			N		
RANUNCULACEAE	*Ranunculus recurvatus*	Hooked Crowfoot	X																G5	S5			N		
RANUNCULACEAE	*Ranunculus sceleratus*	Cursed Crowfoot	X																G5	S5			N		
RHAMNACEAE	*Rhamnus cathartica*	Buckthorn	X	X		X	X	X	X	X	X	X	X	X		X	X		G?	SE5			N		
ROSACEAE	*Agrimonia gryposepala*	Tall Hairy Groovebur	X					X	X			X				X	X		G5	S5			N		
ROSACEAE	***Agrimonia pubescens***	**Soft Groovebur**		**X**	**X**	**X**	**X**		**X**				**X**	**X**					**G5**	**S4**			**N**	**X**	**X**
ROSACEAE	*Amelanchier arborea*	Downy Serviceberry	X																G5	S5			N		
ROSACEAE	*Amelanchier laevis*	Allegheny Service-berry	X		X														G4G5Q	S5			N		
ROSACEAE	*Crataegus monogyna*	English Hawthorn	X								X								G5	SE5			N		
ROSACEAE	*Crataegus punctata*	Dotted Hawthorn				X			X	X	X								G5	S5			N		
ROSACEAE	*Crataegus spp.*	A Hawthorn		X		X										X	X								
ROSACEAE	***Crataegus succulenta***	**Fleshy Hawthorn**							**X**										**G5**	**S4S5**			**N**	**X**	
ROSACEAE	*Fragaria virginiana*	Virginia Strawberry	X	X	X	X	X		X	X				X		X	X	X	G5	S5			N		
ROSACEAE	*Geum aleppicum*	Yellow Avens	X			X						X		X					G5	S5			N		
ROSACEAE	*Geum canadense*	White Avens	X			X	X		X	X	X			X			X		G5	S5			N		
ROSACEAE	***Geum laciniatum***	**Rough Avens**				**X**								**X**					**G5**	**S4**				**X**	**X**
ROSACEAE	*Malus pumila*	Common Apple	X	X	X	X	X		X	X	X	X		X		X			G5	SE5			N		
ROSACEAE	*Potentilla argentea*	Silvery Cinquefoil	X																G?	SE5			N		
ROSACEAE	*Potentilla norvegica*	Norwegian Cinquefoil	X														X		G5	S5			N		
ROSACEAE	*Potentilla recta*	Sulphur Cinquefoil	X		X		X		X	X	X							X	G?	SE5			N		
ROSACEAE	*Prunus pensylvanica*	Pin Cherry	X	X		X	X	X	X		X								G5	S5			N		
ROSACEAE	*Prunus serotina*	Wild Black Cherry	X			X					X								G5	S5			N		
ROSACEAE	*Prunus virginiana*	Choke Cherry	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		G5	S5			N		
ROSACEAE	*Pyrus communis*	Common Pear	X																G5	SE4			N		
ROSACEAE	*Rosa rugosa*	Rugosa Rose														X			G?	SE1			N		
ROSACEAE	*Rubus allegheniensis*	Allegheny Blackberry	X	X		X	X	X	X		X					X			G5	S5			N		
ROSACEAE	*Rubus idaeus*	Common Red Raspberry	X	X	X	X	X			X	X								G5	S5			N		
ROSACEAE	*Rubus occidentalis*	Black Raspberry		X		X			X										G5	S5			N		
ROSACEAE	*Rubus pubescens*	Catherinettes Berry	X		X					X					X				G5	S5			N		
ROSACEAE	*Sorbus aucuparia*	European Mountain-ash	X		X		X		X		X					X	X		G5	SE4			N		
RUBIACEAE	*Galium triflorum*	Sweet-scent Bedstraw						X											G5	S5			N		
SALICACEAE	*Populus balsamifera*	Balsam Poplar	X	X		X	X		X	X	X		X	X	X		X		G5	S5			N		
SALICACEAE	*Populus grandidentata*	Large-tooth Aspen	X			X	X		X										G5	S5			N		
SALICACEAE	*Populus tremuloides*	Trembling Aspen	X	X	X	X	X		X	X			X	X		X	X		G5	S5			N		
SALICACEAE	*Salix alba*	White Willow	X																G5	SE4					
SALICACEAE	*Salix amygdaloides*	Peach-leaved Willow		X									X		X				G5	S5			N		

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FAMILY[1]	Scientific Name	Common Name	Tarandus (2006)	FOC4-1	FOM4-2	FOM7-2	FOD3-1	CUP3-3	CUM1-1	CUT1a	CUT1b	CUW1	SWC1-1	SWD4-3	SWT2-2	SWT2-5	MAM2-2	MAM2-10	GRANK	SRANK	COSEWIC	MNR	TRACK	TRCA Rare	ORM Rare
SALICACEAE	*Salix bebbiana*	Bebb's Willow	X						X	X				X		X	X	X	G5	S5			N		
SALICACEAE	*Salix discolor*	Pussy Willow	X			X				X				X	X	X	X		G5	S5			N		
SALICACEAE	*Salix eriocephala*	Heart-leaved Willow	X			X				X					X	X	X		G5	S5			N		
SALICACEAE	*Salix exigua*	Sandbar Willow																X	G5	S5					
SALICACEAE	***Salix nigra***	**Black Willow**	**X**	**X**		**X**			**X**										**G5**	**S4?**			**N**	**X**	**X**
SALICACEAE	***Salix petiolaris***	**Meadow Willow**	**X**	**X**		**X**			**X**	**X**				**X**			**X**		**G5**	**S5**			**N**	**X**	
SALICACEAE	*Salix purpurea*	Basket Willow	X							X						X			G5	SE4			N		
SAXIFRAGACEAE	*Tiarella cordifolia*	Heart-leaved Foam-flower	X																G5	S5			N		
SCROPHULARIACEAE	*Linaria vulgaris*	Butter-and-eggs	X						X	X	X					X	X		G?	SE5			N		
SCROPHULARIACEAE	***Penstemon digitalis***	**Foxglove Beardtongue**	**X**						**X**	**X**				**X**					**G5**	**S4S5**			**N**		**X**
SCROPHULARIACEAE	*Verbascum thapsus*	Great Mullein	X						X	X	X					X	X	X	G?	SE5			N		
SCROPHULARIACEAE	*Veronica beccabunga*	European Speedwell	X																G?	SE2					
SCROPHULARIACEAE	*Veronica officinalis*	Gypsy-weed		X	X	X	X						X	X	X				G5	SE5			N		
SOLANACEAE	*Physalis heterophylla*	Clammy Ground-cherry	X						X										G5	S4			N		
SOLANACEAE	*Solanum dulcamara*	Climbing Nightshade	X	X		X		X	X				X			X	X	X	G?	SE5			N		
THELYPTERIDACEAE	*Thelypteris palustris*	Marsh Fern	X			X													G5	S5			N		
TILIACEAE	*Tilia americana*	American Basswood	X	X	X	X	X		X				X						G5	S5			N		
TYPHACEAE	*Typha angustifolia*	Narrow-leaved Cattail	X											X	X				G5	SE5			N		
TYPHACEAE	*Typha latifolia*	Broad-leaf Cattail	X														X		G5	S5			N		
ULMACEAE	*Ulmus americana*	American Elm	X	X		X	X		X	X	X			X		X	X		G5?	S5			N		
URTICACEAE	*Boehmeria cylindrica*	False Nettle	X			X													G5	S5			N		
URTICACEAE	*Laportea canadensis*	Wood Nettle	X			X													G5	S5			N		
URTICACEAE	*Pilea pumila*	Canada Clearweed	X			X													G5	S5			N		
URTICACEAE	*Urtica dioica*	Stinging Nettle	X			X					X								G5	S5			N		
VERBENACEAE	*Verbena hastata*	Blue Vervain	X			X									X	X	X		G5	S5			N		
VERBENACEAE	***Verbena stricta***	**Hoary Vervain**							**X**		**X**								**G5**	**S4**			**N**	**X**	
VERBENACEAE	*Verbena urticifolia*	White Vervain	X			X													G5	S5			N		
VIOLACEAE	*Viola conspersa*	American Bog Violet	X																G5	S5			N		
VIOLACEAE	*Viola cucullata*	Marsh Blue Violet	X																G4G5	S5			N		
VIOLACEAE	*Viola pubescens*	Downy Yellow Violet	X																G5	S5			N		
VIOLACEAE	*Viola sororia*	Woolly Blue Violet	X																G5	S5			N		
VITACEAE	*Parthenocissus vitacea*	Virginia Creeper	X	X	X	X	X	X	X	X	X		X	X		X	X	X	G5	S5			N		
VITACEAE	*Vitis riparia*	Riverbank Grape	X	X	X	X	X		X	X	X	X	X	X		X	X	X	G5	S5			N		

1 Nomenclature based on Ontario Ministry of Natural Resources (OMNR), Natural Heritage Information Centre (NHIC) database - http://nhic.mnr.gov.on.ca/MNR/nhic/species.cfm

2 ELC Code - See Table 1 for community description & Figure 3 for location.

3 Conservation Rankings: From Ontario Ministry of Natural Resources, Natural Heritage Information Centre (http://nhic.mnr.gov.on.ca/nhic_.cfm)

4 Regional - **TRCA** Toronto and Region Conservation Authority (TRCA) - TRCA Flora Scores & Ranks (April 2003).

ORM Oak Riges Moraine (ORM) - Oak Ridges Moraine Technical Paper: Identification of Significant Portions of Habitat for Endagered, Rare and Threatened Species on the Oak Ridges Moraine (Feb. 2004)

*Observations by Tarandus (2006).

Azimuth observers - B. Clayton, S. Martin

Table 3. Species At Risk Habitat Assessment - West Half, Lot 22, Concession 1, (geographic Township of Albion) Town of Caledon, Region of Peel.

Species	Common Name	Designation[1]	Observation Details	Habitat Requirements	Assessment
Protonotaria citrea	Prothonotary Warbler	Endangered	OBBA in Atlas Square 17NJ95	Nests in suitable tree cavities located over open water in deciduous swamps and floodplains (McCracken In Cadman *et al* . 2007)	Not suitable habitat within or adjacent to study area. Not reported in area by MNR's NHIC.
Chaetura pelagica	Chimney Swift	Threatened	OBBA in Atlas Square 17NJ95	Nests primarily in chimneys though some populations (i.e. in rural areas) may nest in cavity trees (Cadman 2007). Recent changes in chimney design and covering of openings to prevent wildlife access may be a significant factor in recent declines in numbers (Adams and Lindsey 2010).	Not suitable habitat within study area, may occur in urban habitat of Caledon East.
Hirundo rustica	Barn Swallow	Threatened	Observed on the Property during field investigations in 2007 (Azimuth 2008) outside of breeding bird season	Farmlands or rural areas; cliffs, caves, rock niches; buildings or other man-made structures for nesting; open country near body of water (MNR 2000)	Marginal habitat sutiable for foraging occurs on the property within the wetland communities and will remain post development. No existing structures will be removed during the development.
Riparia riparia	Bank Swallow	Threatened	OBBA in Atlas Square 17NJ95	Bank swallows nest in burrows in natural and human-made settings where there are vertical faces in silt and sand deposits. Many nests are on banks of rivers and lakes, but they are also found in active sand and gravel pits or former ones where the banks remain suitable. The birds breed in colonies ranging from several to a few thousand pairs (MNRF 2014).	Not suitable habitat within study area, banks of Boyce's Creek do not display the characteristics required for Bank Swallow.
Sturnella magna	Eastern Meadowlark	Threatened	Observed on the Property during field investigations in 2007 (Azimuth 2008) during the breeding bird season	Open, grassy meadows, farmland, pastures, hayfields or grasslands with elevated singing perches; cultivated land and weedy areas with trees. Old orchards with adjacent, open grassy areas >10 ha in size (MNR 2000)	Meadow vegetation communities on the property are small and have a high propotion of exotic species. Therefore they are considered to be marginal habitat for the species. Eastern Meadowlark was observed by Azimuth in 2007. Tarandus did not note the presence of the species in 2003 or 2004.
Lampropeltis triangulum	Milksnake	Special Concern	Identified as occuring in the area by MNR (Appendix A)	Farmlands, meadows, hardwood or aspen stands; pine forest with brushy or woody cover; river bottoms or bog woods; hides under logs, stones, or boards or in outbuildings; often uses communal nest sites.	Habitat for the species will remain post development within the protected natural features of the property.

Species	Common Name	Designation[1]	Observation Details	Habitat Requirements	Assessment
Vermivora chrysoptera	Golden-winged Warbler	Special Concern	OBBA in Atlas Square 17NJ95	Nests in successional scrub habitats surrounded by forest habitats used for foraging (Vallender In Cadman *et al*. 2007)	Potential habitat is present within the cultural thicket communities. Habitat for this species is not protected udner the Ontario's *Endangered Species Act, 2007* (ESA) as the species is designated Special Concern. Impact to the species can be mitigated by utilizing appropriate timing windows for vegetation removal.
Melanerpes erythrocephalus	Red-headed Woodpecker	Special Concern	OBBA in Atlas Square 17NJ95	Nest in tree cavities in open woodlands and woodland edge habitats especially oak savannah and riperian forest also parks, golf courses, cemetaries, etc. (Woodliffe In Cadman *et al*. 2007)	Suitable habitat is present within the protected woodland features which will remain post development. This species was not observed during bird surveys conducted by Azimuth or Tarandus.
Colichonyx oryzivorus	Bobolink	Threatened	OBBA in Atlas Square 17NJ95	Large, open expansive grasslands with dense ground cover; hayfields, meadows or fallow fields; marshes; requires tracts of grassland >50ha (MNR 2000)	Meadow vegetation communities on the Property are not considered to be suitable habitat for the species given the small size and the proportion of exotic species present. No Bobolink were observed during field surveys conducted by Azimuth or Tarandus.
Hylocichla mustelina	Wood Thrush	Special Concern	OBBA in Atlas Square 17NJ95. Observed by Tarandus in 2003/2004.	The wood thrush lives in mature deciduous and mixed (conifer-deciduous) forests (MNRF 2014).	Suitable habitat is present within the protected woodland features which will remain post development.
Contopus virens	Eastern Wood-pewee	Special Concern	OBBA in Atlas Square 17NJ95. Observed by Azimuth in 2007 and Tarandus in 2003/2004.	The eastern wood-pewee lives in the mid-canopy layer of forest clearings and edges of deciduous and mixed forests (MNRF 2014).	Suitable habitat is present within the protected woodland features which will remain post development.
Juglans cinerea	Butternut	Endangered	Observed by Azimuth in forest communities in proximity to Boyce's Creek (FOM 4-2 and SWC1-1) and in these same forest communities by Tarandus in 2003/2004 (Tarandus 2006)	Occurs on a variety of sites, inc luding dry rocker soils (particularly those of limestone origin); grows best on well-drained fertile soils in shallow valleys and on gradual slopes; singly or in small groups mixed with other species. Intolerant of shade (Farrar 1995)	Health of Butternut trees not assessed as trees occur more than 25m from the limits of proposed development and within forest habitat associated with Boyce's Creek to be protected.
Somatochlora tenebrosa	Clamp-tipped Emerald	S2/S3	N/A	Shady forest streams with intermittent rapids and pools. (Jones *et al.* 2008)	Habitat is present on site, associated with Boyce's Creek. Habitat will remain post-development

Species	Common Name	Designation[1]	Observation Details	Habitat Requirements	Assessment
Chelydra serpentina	Snapping Turtle	Special Concern	Recently added to the MNR SARO List	Permanent, semi-permanent fresh water; marshes; swamps; bogs; rivers and streams with soft muddy banks or bottoms; often uses soft coil or clean dry sand. (MNR 2000)	Habitat is present on site, characterized by Boyce's Creek and the Caledon Wetland Complex. Habitat will remain post-development

1 Species at Risk in Ontario List (January 14, 2012)

Adams, C.E., and K.J. Lindsey. 2010. Urban wildife management: second edition. CRC Press, Taylor & Francis Group. New York, NY, USA.

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Farrar, J.L. 1995. Trees in Canada. Fitzhenry and Whiteside Limited Markham, ON, CAN

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Table 5a: Bird Species Observations - West Half, Lot 22, Concession 1, (geographic Township of Albion) Town of Caledon, Region of Peel.

			Conservation Rankings[1]									
FAMILY	**Scientific Name**	**Common Name**	G RANK	S RANK	COSEWIC	MNR	TRACK	June 30, 2007[2]	Observed by Azimuth (2007) outside of the breeding season.	2003/2004 Observations (Terandus Associates Limited 2006).	TRCA Rare[4]	ORM Rare[5]
ACCIPITRIDAE	***Accipiter cooperii***	**Cooper's Hawk**	**G5**	**S4B,SZN**	**NAR**	**NAR**	**N**			**X**		**X**
ACCIPITRIDAE	*Buteo jamaicensis*	Red-tailed Hawk	G5	S5B,SZN	NAR	NAR	N			X		
ANATIDAE	*Branta canadensis*	Canada Goose	G5	S5B,SZN			N			X		
BOMBYCILLIDAE	*Bombycilla cedrorum*	Cedar Waxwing	G5	S5B,SZN			N		X			
CARDINALIDAE	*Cardinalis cardinalis*	Northern Cardinal	G5	S5			N			X		
CARDINALIDAE	*Passerina cyanea*	Indigo Bunting	G5	S5B,SZN			N	S[3]		X		
CATHARTIDAE	*Cathartes aura*	Turkey Vulture	G5	S4B,SZN			N			X		
COLUMBIDAE	*Zenaida macroura*	Mourning Dove	G5	S5B,SZN			N	S		X		
CORVIDAE	*Corvus brachyrhynchos*	American Crow	G5	S5B,SZN			N	S	X	X		
CORVIDAE	*Cyanocitta cristata*	Blue Jay	G5	S5			N	S	X	X		
EMBERIZIDAE	*Melospiza melodia*	Song Sparrow	G5	S5B,SZN			N	S		X		
EMBERIZIDAE	***Pipilo erythrophthalmus***	**Eastern Towhee**	**G5**	**S4B,SZN**			**N**	**S**		**X**	**L3**	
EMBERIZIDAE	*Spizella passerina*	Chipping Sparrow	G5	S5B,SZN			N	S		X		
EMBERIZIDAE	*Spizella pusilla*	Field Sparrow	G5	S5B,SZN			N			X		
FRINGILLIDAE	*Carduelis tristis*	American Goldfinch	G5	S5B,SZN			N	S	X	X		
HIRUNDINIDAE	***Hirundo rustica***	**Barn Swallow**	**G5**	**S5B,SZN**	**THR**	**THR**	**N**		**X**			
HIRUNDINIDAE	*Petrochelidon pyrrhonota*	Cliff Swallow	G5	S5B,SZN			N		X			
HIRUNDINIDAE	*Tachycineta bicolor*	Tree Swallow	G5	S5B,SZN			N	X (flyover)		X		
ICTERIDAE	*Agelaius phoeniceus*	Red-winged Blackbird	G5	S5B,SZN			N			X		
ICTERIDAE	*Icterus galbula*	Baltimore Oriole	G5	S5B,SZN			N			X		
ICTERIDAE	*Molothrus ater*	Brown-headed Cowbird	G5	S5B,SZN			N	S		X		
ICTERIDAE	*Quiscalus quiscula*	Common Grackle	G5	S5B,SZN			N			X		
ICTERIDAE	***Sturnella magna***	**Eastern Meadowlark**	**G5**	**S5B,SZN**	**THR**	**THR**	**N**	**S**				
MIMIDAE	*Dumetella carolinensis*	Gray Catbird	G5	S5B,SZN			N			X		
PARIDAE	*Poecile atricapillus*	Black-capped Chickadee	G5	S5			N	S	X	X		
PARULIDAE	***Dendroica magnolia***	**Magnolia Warbler**	**G5**	**S5B,SZN**			**N**			**X**	**L3**	**X**
PARULIDAE	***Dendroica pensylvanica***	**Chestnut-sided Warbler**	**G5**	**S5B,SZN**			**N**			**X**	**L3**	
PARULIDAE	*Dendroica petechia*	Yellow Warbler	G5	S5B,SZN			N			X		
PARULIDAE	*Geothlypis trichas*	Common Yellowthroat	G5	S5B,SZN			N	S		X		
PARULIDAE	***Vermivora ruficapilla***	**Nashville Warbler**	**G5**	**S5B,SZN**			**N**			**X**	**L3**	
PHASIANIDAE	***Bonasa umbellus***	**Ruffed Grouse**	**G5**	**S5**			**N**			**X**	**L2**	
PHASIANIDAE	***Meleagris gallopavo***	**Wild Turkey**	**G5**	**S4**			**N**			**X**	**L3**	
PICIDAE	*Colaptes auratus*	Northern Flicker	G5	S5B,SZN			N	S		X		
PICIDAE	***Dryocopus pileatus***	**Pileated Woodpecker**	**G5**	**S4S5**			**N**		**X**	**X**	**L3**	
PICIDAE	*Picoides pubescens*	Downy Woodpecker	G5	S5			N	H	X	X		
PICIDAE	*Picoides villosus*	Hairy Woodpecker	G5	S5			N			X		
SCOLOPACIDAE	***Scolopax minor***	**American Woodcock**	**G5**	**S5B,SZN**			**N**			**X**	**L3**	
SITTIDAE	*Sitta canadensis*	Red-breasted Nuthatch	G5	S5B,SZN			N	S				
STURNIDAE	*Sturnus vulgaris*	European Starling	G5	SE			N			X		
SYLVIIDAE	***Polioptila caerulea***	**Blue-gray Gnatcatcher**	**G5**	**S4B,SZN**			**N**		**X**			**X**
TROCHILIDAE	*Archilochus colubris*	Ruby-throated Hummingbird	G5	S5B,SZN			N			X		
TROGLODYTIDAE	*Troglodytes aedon*	House Wren	G5	S5B,SZN			N		X	X		
TURDIDAE	***Hylocichla mustelina***	**Wood Thrush**	**G5**	**S5B,SZN**			**N**			**X**	**L3**	
TURDIDAE	*Turdus migratorius*	American Robin	G5	S5B,SZN			N		X	X		
TYRANNIDAE	*Contopus virens*	Eastern Wood-pewee	G5	S5B,SZN			N			X		
TYRANNIDAE	*Empidonax alnorum*	Alder Flycatcher	G5	S5B,SZN			N	S				
TYRANNIDAE	***Empidonax minimus***	**Least Flycatcher**	**G5**	**S5B,SZN**			**N**			**X**	**L3**	
TYRANNIDAE	*Myiarchus crinitus*	Great Crested Flycatcher	G5	S5B,SZN			N			X		

			Conservation Rankings[1]									
FAMILY	**Scientific Name**	**Common Name**	G RANK	S RANK	COSEWIC	MNR	TRACK	June 30, 2007[2]	Observed by Azimuth (2007) outside of the breeding season.	2003/2004 Observations (Terandus Associates Limited 2006).	TRCA Rare[4]	ORM Rare[5]
TYRANNIDAE	*Tyrannus tyrannus*	Eastern Kingbird	G5	S5B,SZN			N		X			
VIREONIDAE	*Vireo olivaceus*	Red-eyed Vireo	G5	S5B,SZN			N			X		
VIREONIDAE	*Vireo philadelphicus*	Philadelphia Vireo	G5	S5B,SZN			N			X		

1 Conservation Rankings: From Ontario Ministry of Natural Resources, Natural Heritage Information Centre (http://nhic.mnr.gov.on.ca/nhic_.cfm)

2 Weather: Temperature +15 C, Wind: Nil , Cloud Cover 0%, Precipitation NIL, Search Time 06:00hr to 07:15hr, Observers L. Moran, S. Martin

3 Breeding Bird Evidence Codes: X - Species observed; S - Singing male (Possible Breeding) , H - Species observed in suitable nesting habitat (Possible breeding)

4 Toronto and Region Conservation Authority (TRCA) - TRCA Flora Scores & Ranks (2009).

5 Oak Riges Moraine (ORM) - Oak Ridges Moraine Technical Paper: Identification of Significant Portions of Habitat for Endagered, Rare and Threatened Species on the Oak Ridges Moraine (Feb. 2004)

Table 5b: TRCA Rare, ORM Rare and Area Sensitive Bird Species Observed on Site: their Habitat Requirements and Presence of this Habitat Pre and Post-Development, West Half, Lot 22, Concession 1, (geographic Township of Albion) Town of Caledon, Region of Peel.

Species	TRCA Rare	ORM Rare	Area Sensitive	Habitat Requirements (OMNR 2000)	Habitat Present on Site	Habitat Present Post-development
American Woodcock	X			The Woodcock requires two territories – one that is dry and open and another that is moist and wooded. These areas may include moist, early succession woodland, open, grassy clearings; forest edges, swamps, streambanks.	Yes	Yes
Blue-grey Gnatcatcher		X	X	Inhabits deciduous or mixed woods, open, moist woodlands with brushy clearings, bottomland forests with closed canopies, wooded swamps, stream-side thickets. This is an area sensitive species that requires about 30 ha of forest.	Yes – extensive forest cover is found within the area that meets the area requirement.	Yes
Chestnut-sided Warbler	X			Inhabits shrubby, second growth deciduous woodland edges and fields next to stands of mature forest, hardwood regeneration stands, brushy watercourses, woodland clearings and brushy woodland margins.	Yes	Yes
Cooper's Hawk	X	X	X	Inhabits dense, extensive mixed or deciduous forests, preferably in Carolinian forest zone, near pools of water or streams, woodlots interspersed with open fields; floodplain forests and wooded swamps. This species will nest near human activity where habitat and food are available. Requires a large expanse of suitable habitat for nesting, hunting.	Yes – extensive forest and open fields within the area meets the area requirement.	Yes

Species	TRCA Rare	ORM Rare	Area Sensitive	Habitat Requirements (OMNR 2000)	Habitat Present on Site	Habitat Present Post-development
Eastern Towhee	X			Inhabits dense, brushy cover with leaf litter, abandoned fields or pastures with developing young trees or shrubs, woodland edges with dense undergrowth; streamside thickets and brushy hillsides.	Yes	Yes
Field Sparrow	X			Inhabits open areas with low shrubs or trees, abandoned pasture, farm fields, overgrown power line corridors, thickets, forest edges and young conifer plantations.	Yes	Yes
Hairy Woodpecker			X	Inhabits mixed or deciduous forests; prefer mature trees, but use wide range in size and canopy cover, forest edges, requires a number of tall trees and snags. Territories cover 4-8 ha.	Yes	Yes
Least Flycatcher	X		X	Inhabits open deciduous woodland or forest edges, orchards, open shrub land, clearings or overgrown pasture of >100 ha.	Yes – existing natural heritage features meet the species area requirements.	Yes
Magnolia Warbler	X	X	X	Inhabits mainly mixed and coniferous forests, may be mature trees but require dense shrubs, in mature forests, prefer open areas, edges, disturbed woodland, appears to require about 30 ha in the south.	Yes	Yes
Pileated Woodpecker	X		X	Requires extensive tracts of mature deciduous or mixed forest with water and large diameter (40+ cm) trees for cavity construction and 25cm (dbh) for nesting, both lowland, upland forests, sometimes found in more open agricultural areas and parks with large trees. Area sensitive species requiring 40-260 ha.	Possibly - mixed & deciduous forest communities are mid-age & don't contain trees with large dbh. The area of forest cover likely meets the species area requirements.	Yes

Species	TRCA Rare	ORM Rare	Area Sensitive	Habitat Requirements (OMNR 2000)	Habitat Present on Site	Habitat Present Post-development
Red-breasted Nuthatch			X	Inhabits coniferous and mixed wood forests, requires coniferous component to its habitat; most abundant in mature woods and relatively dense forests. This species nests in Interior habitat and requires at least 10 ha of forest.	Yes	Yes
Ruffed Grouse	X			Inhabits dry, deciduous forests with dense woody overhead cover, herbaceous ground cover, prefers second growth stands of poplar, requires sunny, open areas, uses fallen logs for drumming and cover for nesting.	Minimal – only limited dry deciduous forest cover composed of poplar on the Property.	Yes
Wild Turkey	X			Will utilize a large variety of successional stages, mix of trees and grasses, spring seeps, south facing slopes, timbered corridors; grassy areas.	Yes	Yes
Wood Thrush	X			Prefers undisturbed moist mature deciduous or mixed forest with deciduous sapling growth, near ponded water or swamp, hardwood forest edges.	Yes	Yes

Table 6: Categorical abundance of fish species collected from Boyce's Creek and the receiving waters of Centreville Creek.

Common Name	Scientific Name	Boyce's Creek*	Centreville Creek+
American Brook Lamprey	*Lampetra appendix*	Low	Low
Brook Trout	*Salvelinus fontinalis*	High	High
White Sucker	*Catostomus commersoni*	Moderate	-----
N. Hog Sucker	*Hypentelium nigricans*	Low	-----
N. Redbelly Dace	*Phoxinus eos*	Low	-----
Common Shiner	*Luxilus cornutus*	-----	Low
Fathead Minnow	*Pimephales promelas*	-----	Moderate
Blacknose Dace	*Rhinichthys atratulus*	High	High
Creek Chub	*Semotilus atromaculatus*	Moderate	Moderate
Mottled Sculpin	*Cottus bairdi*	-----	Moderate
Pumpkinseed	*Lepomis gibbosus*	-----	Low
Iowa Darter	*Etheostoma exile*	-----	Moderate
Fantail Darter	*Etheostoma flabellare*	Low	-----

*Based upon 4 sampling records –June 7, 1972, Aug. 29, 2002, June 11, 2003 and Sept. 9, 2003.
+ Based upon 3 sampling records – Historical species list (date unknown), June 27, 1984, June 10, 2003.

Table 7. Key Natural Heritage Feature (KNHF) and Key Hydrologic Feature (KHF) Minimum Area of Influence Assessment, West Half, Lot 22, Concession 1, (geographic Township of Albion) Town of Caledon, Region of Peel.

Feature	Minimum Area of Influence (MAI)	Study Area Within MAI?
Wetlands	All land within 120metres of any part of feature	Yes
Significant portions of habitat of endangered, rare or threatened species	All land within 120metres of any part of feature	Yes, specifically Butternut.
Fish habitat	All land within 120metres of any part of feature	Yes, Boyce's Creek
Areas of natural and scientific interest (life science)	All land within 120metres of any part of feature	No
Areas of natural and scientific interest (earth science)	All land within 50metres of any part of feature	No
Significant valleylands	All land within 120metres of any part of feature	Yes, associated with Boyce's Creek.
Significant woodlands	All land within 120metres of any part of feature	Yes, give the maturity, size and structure of the forest, the conditions within the Natural Heritage Reference Manual are met.
Significant wildlife habitat	All land within 120metres of any part of feature	Yes, marginal habitat for area-sensitive forest breeding birds contained within forest and swamp vegetation communities comprising Significant Woodlands.
Sand barrens, savannahs and tallgrass prairies	All land within 120metres of any part of feature	No
Kettle lakes	All land within 120metres of any part of feature	No
Permanent and intermittent streams	All land within 120metres of any part of feature	Yes, Boyce's Creek.
Seepage areas and springs	All land within 120metres of any part of feature	Yes, within riparian habitat zone/valleylands associated with Boyce's Creek

Table 8. Significant Wildlife Habitat (SWH) Function Assessment, West Half, Lot 22, Concession 1, (geographic Township of Albion) Town of Caledon, Region of Peel.

SWH Category	SWH Function	Assessment
Seasonal Concentration Areas	Winter deer yard	No evidence of browsing at levels indicating winter use of habitat of the study area or adjacent land.
	Moose late winter habitat	No. Not Moose range. No suitable habitat.
	Colonial bird nesting site	No colonial nest sites found (i.e. heron colony, swallow bank nests, etc.).
	Waterfowl stopover and staging area	No suitable habitat.
	Waterfowl nesting	No, no ponds or marshes with open water providing brood rearing habitat that would attract waterfowl to the property to nest.
	Shorebird migratory stopover area	No suitable habitat.
	Landbird migratory stopover area	Not suitable landscape setting.
	Raptor winter feeding and roosting area	No suitable foraging habitat.
	Wild turkey winter range	No suitable habitat.
	Turkey vulture summer roosting area	No suitable habitat.
	Reptile hibernacula	Not reported as hibernation site, no evidence of snake use of property.
	Bat hibernacula	Not reported as hibernation site, no abandoned structures or mines on site that might provide suitable hibernation habitat.
	Bullfrog concentration area	No suitable habitat.
	Migratory butterfly stopover area	Not reported as stopover area, no extensive meadow habitat to provide function.
Specialized Habitats for Wildlife	**Habitat for area-sensitive species**	**Yes (marginal). Continuous area of woodland cover associated with Boyce's Creek valley is large enough to provide habitat for some area-sensitive forest breeding bird species. However, juxtaposition of forest within urbanized area reduces effectiveness of habitat to function in a significant manner as per Environment Canada's conclusion (Environment Canada 2007) "that it is very unlikely that urban areas will provide viable breeding habitat for area-sensitive forest birds" as "study after study supports the notion that urban forest fragments are not friendly towards area-sensitive forest breeding birds" and that "species generally disappeared above 52% urban land cover". Existing and ongoing development in the Caledon East settlement area is thus likely to impact forest habitat function for area-sensitive forest breeding birds whether the property is developed or not.**
	Forests providing high diversity of habitat	No. Forests of adjacent lands established by planting and are not highly diverse in terms of composition, structure or age.
	Old-growth of mature forest stands	No. Forests relatively young, second growth on abandoned farmland.
	Foraging areas with abundant mast	No significant component of mast producing trees on or adjacent to property
	Amphibian woodland breeding ponds	No woodland amphibian ponds located within study area or evident on adjacent lands.
	Turtle nesting habitat	No suitable habitat.
	Specialized raptor nesting habitat	No raptor nests observed.
	Moose caving area	No. Not Moose range & no suitable habitat.
	Moose aquatic feeding area	No. Not Moose range & no suitable habitat.
	Mineral lick	No evidence of mineral licks on-site.
	Mink, Otter, Marten & Fisher denning sites	No denning sites observed in study area or on adjacent lands.
	Highly diverse areas	No. Study area does not contain a wide range of habitats or ecosystems and does not have a large variety of plants or associated wildlife. Adjacent lands not identified as ANSI or ESA indicative of highly diverse areas.
	Cliffs	No cliffs on or adjacent to study area.
	Seeps and springs	**Yes, seeps and springs associated with Boyce's Creek**
Animal Movement Corridor		No. Continuous forest growth ceases to occur south or east of the property. Property represents the dead-end of any corridor function.

Table 9. Environmental Policy Area components, West Half, Lot 22, Concession 1, (geographic Township of Albion) Town of Caledon, Region of Peel.

Component	Features Included	Setback Applied
Core Woodland Area/KNHF-Significant Woodland and Significant Portions of habitat for Endangered Species (Butternut)	ELC Communities: CUP3-3, FOC4-1, CUW1, FOM7-2, FOM4-2, FOD3-1, SWC1-1, SWD4-3, CUT1b and part of CUT1a. Butternut confined to communities FOM7-2 and SWC1-1 (within Significant Woodland).	30m as per ORMCP Minimum Vegetation Protection Zone (MVPZ).
Core Wetland Area/KNHF-Wetland	ELC Communities: SWD4-3, SWT2-2, SWT2-5, MAM2-2, MAM2-10, SWC1-1,	30m as per ORMCP MVPZ outside of areas of wetland directly impacted to provide property access from McKee Dr.
Valleyland	Includes the Boyce's Creek Stream and Valley Corridor.	30m from top of bank. The entirety of the Valleyland and its associated MPVZ is contained within the Core Woodland and the MPVZ of the woodland.
HSF-Permanent and intermittent streams, Fish habitat	Boyce's Creek (cold water/Core Fishery Resource Area), seeps and springs.	30m from meander belt. The creek, meander belt, MVPZ and fish habitat are all within the Core Wetland and Core Woodland, and 30m MVPZ protected areas.

Table 10. Comprehensive Impact Assessment Table, West Half, Lot 22, Concession 1, (geographic Township of Albion) Town of Caledon, Region of Peel.

		Potential Impact				
Environmental Feature	**Performance Measure/ORMCP Requirement**	**Direct**	**Indirect**	**Cumulative**	**Mitigation**	**Management/Monitoring**
Woodland	No new development in woodland core or other areas (Sections 3.1.5.3.1 & 3.1.5.3.2 TCOP). No development within 30m (i.e. MVPZ) of significant woodlands (ORMCP).	**Minimal**. Development of all residences will occur outside of the woodland and the MVPZ. An access route to the single-family dwelling in the northeastern corner of the property will affect some forest vegetation. Route selected will minimize loss of tree cover as it follows an existing trail/property access lane.	**Minimal**. An access route to the developments must be constructed. Compaction of soil may affect adjacent trees.	**None**.	Minimize extent of tree clearing employed to construct driveway access to proposed single-family residence.	None
Wetlands	Proposed development located in core wetland and wetland MVPZ (Section 3.1.5.4.1 TCOP) to permit access to the developable area. The quality and quantity of surface water entering wetland core areas shall be maintained or enhanced/restored (Section 3.1.5.4.5 TCOP). .	**0.14 ha loss** of wetland will result from the proposed condominium development. This loss is as a result of providing required access to the developable area of the property. No loss of wetland habitat associated with single-family residence.	**None**. As per recommended mitigation.	Continual erosion may lead to accumulation of sediment within wetland. Can be mitigated through slope restoration.	Prepare a sediment and erosion control plan identifying specific methods to control sediment during construction of the roadway from entering adjacent wetland habitat. Prepare a restoration plan for slopes and other non-travelled portions of the driveway with the objective of stabilizing areas of exposed soild to prevent erosion post-construction.	Monitor sediment and erosion control structures throughout construction phase to insure property function taking steps to repair damage to structures immediately. Monitor restoration to insure vegetation has developed to the point that the risk of driveway slope erosion is eliminated.
Fisheries	No new development in core fishery resource areas (Section 3.1.5.10.1 TCOP). No new development in other fishery resource areas or lands adjacent to core fishery resource areas unless it can be achieved with no harmful alteration, disruption or destruction of fish habitat or there will be no net loss of productive capacity of fish habitat (Section 3.1.5.10.3 TCOP). The quality and quantity of surface water entering core fishery resource areas shall be maintained or enhanced/restored (Section 3.1.5.10.4 TCOP). No development within 30m (i.e. MVPZ) of fish habitat (ORMCP).	**None**. No components of the proposed development require crossings or alterations of watercourses functioning as fish habitat according to federal definitions.	**None**. Water balance assessment (Terraprobe 2013) indicates that proposed development will not affect the quantity of surface or ground water contributions to fish habitat. No direct discharge of surface water to fish habitat. Therefore, no indirect impact to quality or quantity of water entering fish habitat.	**None**. No direct or indirect impacts.	None	None

Valley and Stream Corridors	New development is prohibited in valley and stream corridors (Section 3.1.5.11.1 TCOP). Valley and stream corridors identified through more detailed studies shall be placed in EPA designation (Section 3.1.5.11.3 TCOP). A riparian habitat zone shall be maintained or established adjacent to watercourses (Section 3.1.5.11.4 TCOP)	**None**. No components of the proposed development require encroachment into valley feature of Boyce's Creek.	**None.** The Corridor is within the wetlands and woodlands, and is protected by these features and their respective VPZ.	**None**. No direct or indirect impacts.	None	None
Ground water	New development must ensure that the quality and quantity of groundwater recharge and discharge and flow distribution of groundwater are protected, maintained or if possible enhanced (Section 3.1.5.12.1 TCOP). As per ORMCP requirements for development of a HE (ORMCP Technical Paper 12, Section 5.3) as detailed below.	**None** – no components of the proposed development should encroach into the ground water table	**Minor** as per Terraprobe (2013).	**None**.	Low Impact Development (LID) techniques recommended by Terraprobe (2013).	None
Natural Slopes	Slopes which form part of a valley and stream corridor are to be designated EPA (Section 3.1.5.14.2 TCOP).	**None**. No components of the proposed development require encroachment into valley feature associated with Boyce's Creek.	**None.** The corridor is within the wetlands and woodlands, and is protected by these features and their respective MVPZ.	**None**.	None	None
Oak Ridges Moraine KNHF	ORM KNHF and their related MVPZ are to be designated EPA (Section 3.1.5.15.1 TCOP). New development within KNHF and associated MVPZ (i.e. EPA area) is generally prohibited (Section 3.1.5.15.2 TCOP). As per ORMCP requirements for development of a NHE for all KNHF (ORMCP Technical Paper 8, Section 5.3) as detailed below.	See considerations of specific KNHFs & HSFs below	See Below	See Below	See Below	See Below
Wetland	No development within 30m (i.e. MVPZ) of wetlands (ORMCP)	**None**. Minor encroachment into wetland habitat required for access to proposed condominium site from existing stub/terminus of McKee Dr. – unavoidable.	**None**. See Wetlands above.	**None**. See Wetlands above.	See Wetlands above	See Wetlands above
Valleyland	No development within 30m (i.e. MVPZ) of significant valleylands (ORMCP)	**None**. No components of the proposed development require encroachment into valley feature associated with Boyce's Creek.	**None.** The Corridor is within the wetlands and woodlands, and is protected by these features and their respective MVPZ.	**None**.	None	None
Fish Habitat	No development within 30m (i.e. MVPZ) of fish habitat (ORMCP)	**None**. No components of the proposed development require crossings or alterations of watercourses functioning as fish habitat according to federal definitions.	**None**. See Fisheries above.	**None**. See Fisheries above.	See Fisheries above.	See Fisheries above.
Woodland	No development within 30m (i.e. MVPZ) of significant woodlands (ORMCP)	**Minimal**. See Woodland above.	**Minimal.** See Woodland above.	**None**. See Woodland above.	See Woodland above.	See Woodland above.

Permanent and intermittent streams	No development within feature or related MVPZ (ORMCP).	**None**. No impact to permanent stream (i.e. Boyce's Creek).	**None**. Water balance assessment (Terraprobe 2013) indicates that proposed development will not affect the quantity of surface or ground water contributions to fish habitat. No direct discharge of surface water to fish habitat. Therefore, no indirect impact to quality or quantity of water entering fish habitat.	**None**. No direct or indirect impacts.	None	None
ORM Hydrogeologically Sensitive Features						
Permanent and intermittent streams	No development within feature or related MVPZ (ORMCP). Development permitted on adjacent land outside MVPZ provided there will be no adverse effects on the HS feature or related hydrological functions (ORMCP).	**None**. No impact to permanent or intermittent stream (see above).	**None**. See Permanent and Intermittent streams above	**None**. No direct or indirect impacts.	See Permanent and Intermittent streams above	See Permanent and Intermittent streams above
Wetland	No development within feature (some infrastructure excepted) or related MVPZ (ORMCP). Development permitted on adjacent land outside MVPZ provided there will be no adverse effects on the HS feature or related hydrological functions (ORMCP).	**None**. See Wetlands above.	**None**. See Wetlands above.	**None**. See Wetlands above.	See Wetlands above.	See Wetlands above.

Table 11. Potential impacts on ORM Hydrogeolocically Sensitive features as per ORMCP Technical Paper 12 - West Half, Lot 22, Concession 1, (geographic Township of Albion) Town of Caledon, Region of Peel.

Type of Impact	Potential Impact	Assessment
Direct	Area replaced by impermeable surface	Proposed impervious area (i.e., buildings, driveways, etc.) cover 8,484m^2, or approximately 4.5% of the entire property (from Terraprobe 2013).
	Area where soil compaction will occur	All areas of soil compaction will become components of built features (i.e. building, driveway, etc.).
	Area where vegetation will be removed	Approximately 2.7ha of natural vegetation cover overall (14% of existing vegetation cover). 1.73ha of old-field/cultural meadow. 0.49ha of thicket habitat. 0.25ha of forest cover. 0.23ha of wetland habitat.
	Vegetation cover pre and post-development	Pre-development vegetation cover – cultural meadow, cultural plantation, marsh, swamp, forest covers all of the approximately 19ha property. Post-development natural vegetation cover equals approximately 16.3ha for a retention of approximately 86% of existing vegetation cover.
Indirect to water regime	Increase/decrease in runoff (amount and rate)	Without recommended mitigation, the proposed development (single-family dwelling plus condominium) will result in a net: increase in runoff from 23,557 to 30,996m^2; decrease in evapotranspiration from 103,649 to 98,105m^3/a; and decrease in infiltration from 35,429 to 33,534m^3/a (Terraprobe 2013). Low Impact Development (LID) mitigation measures are proposed by Terraprobe (2013) to balance infiltration.
	Redirection of runoff	As per LID recommendations by Terraprobe (2013).
	Increase/decrease in sedimentation	Silt fences should be installed surrounding the development to prevent sedimentation of adjacent features during construction and left in place until vegetation has become re-established – as per best management construction practices.
	Changes in water quality (surface and ground water)	As the adjacent lands are highly vegetated, surface water will filtrate through the vegetation and soils before joining the groundwater supply. As such, there should be no change to surface or groundwater quality.
	Changes in water temperature	The proposed development will not alter the ground water temperature.
	Changes in recharge capacity of site	Can be mitigated as per LID recommendations by Terraprobe (2013).
	Water uses that will be part of the proposed development and associated impacts on baseflow, surface storage and ground water table	As per LID recommendations by Terraprobe (2013).

APPENDICES

Appendix A: Agency Consultation
Appendix B: Town of Caledon Land Use Schedules
Appendix C: Town of Caledon Ecosystem Framework and Oak Ridges Moraine Conservation Plan Key Natural Heritage Features
Appendix D: Toronto Region Conservation Authority Regulation Mapping
Appendix E: Background Species Data
Appendix F: Agency Comments (2016) and Azimuth Response
Appendix G: Agency Comments (2017) and Azimuth Response

APPENDIX A

Agency Consultation

Ministry of
Natural Resources
Aurora District Office
50 Bloomington Road West
Aurora, Ontario L4G 3G8

Ministère des
Richesses naturelles

Telephone: (905) 713-7400
Facsimile: (905) 713-7360

Ontario

March 9, 2009

Ms. Bonnie Clayton
Azimuth Environmental Consulting
229 Mapleview Dr. East, Unit 1
Barrie, Ontario, Canada
L4N 0W5
bonnie@azimuthenvironmental.com

Re: Update to the Locally Significant Caledon East Wetland Complex

Dear Ms. Clayton:

An update has been done to the wetland boundaries for the eastern portion of the existing locally significant Caledon East Wetland Complex and an additional wetland unit (Wetland No. 4) has been added to the complex. The eastern boundary for Wetland No. 4 is based on a surveyed wetland staking carried out on Sept. 30, 2008 with Azimuth Environmental, professional surveyors, Toronto and Region Conservation Authority and MNR. The western boundary of Wetland No. 4, as was agreed to in the field, was mapped by MNR onto a 1:1 000 scale ortho-rectified digital photograph. The extension of Wetland No. 3 into the east side of the property was also mapped by MNR. Wetland No. 3 is now 6.70 ha in size and Wetland No. 4 is 3.20 ha in size.

An updated Wetland Data and Scoring Record and a locational map for the entire wetland complex are enclosed.

The updated ANSI and wetland boundaries and communities have been put into Province's web-accessible digital warehouse (LIO – Land Information Centre) and can be accessed at http://lioapp.lrc.gov.om.ca/lids/welcome.asp. The wetland information is stored under the "Wetland Unit" data class.

If you have any questions please do not hesitate to call me at 905-713-7370 or e-mail me at steve.varga@ontario.ca.

Sincerely,

Steve Varga

Steve Varga
Inventory Biologist
MNR Aurora District

cc. Peel Region
Town of Caledon
Toronto and Region Conservation Authority

Southern Region
Aurora District Office
50 Bloomington Road West
Aurora, ON L4G 0L8

Ontario

Ministry of Natural Resources | **Ministere des Richesses Naturelles**

January 11, 2011

Mellissa Fuller, Ecologist
Azimuth Environmental Consulting Inc.
85 Bayfield Street, Suite 400
Barrie, ON L4M 3A7
Phone (705) 721-8451
Fax (705) 721-8926

Re: Request for Background Environmental Information, Environmental Impact Study and Natural Heritage Evaluation, Part Lot 22 Concession 1 (ALB) Airport Rd, Town of Caledon Region of Peel

Dear Ms. Fuller,

In your email dated December 9, 2010 you requested information on natural heritage features and element occurrences occurring on or adjacent to the above mentioned location.

There are a number of Species at Risk recorded from your study area. We have records of Butternut and Bobolink. Some of these species may receive protection under the *Endangered Species Act 2007* and thus, a permit may be required if the work you are proposing could cause harm to these species or their habitat.

Natural heritage features recorded for your area include portions of the locally significant East Caledon Wetland Complex, as well an Environmental Significant Area.

This species at risk information is highly sensitive and is not intended for any person or project unrelated to this undertaking. Please do not include any specific information in reports that will be available for public record. As you complete your fieldwork in these areas, please report all information related to any species at risk to the NHIC and to our office. This will assist with updating our database.

If you have any questions or comments, please do not hesitate to contact me at 905-713-7425.

Sincerely,

Melinda Thompson-Black

Melinda Thompson-Black
Species at Risk Biologist
Ontario Ministry of Natural Resources, Aurora District

Southern Region
Aurora District Office
50 Bloomington Road West
Aurora, ON L4G 0L8

Ontario

Ministry of Natural Resources | **Ministere des Richesses Naturelles**

April 17, 2012

Melissa Fuller
Terrestrial Ecologist
Azimuth Environmental Consulting Inc.
mfuller@azimuthenvironmental.com

Re: Plan of Subdivision, Part Lot 22, Concession 1, Town of Caledon

Dear Ms. Fuller,

In your email dated April 11th, 2012 you requested information on element occurrences and natural heritage features occurring on or adjacent to the above mentioned location.

There are Species at Risk recorded from your study area. We have records of Butternut, Eastern Meadowlark, Bobolink and Chimney Swift, and historical records of Milksnake. Some of these species may receive protection under the *Endangered Species Act 2007* and thus, a permit may be required if the work you are proposing could cause harm to these species or their habitat. Please provide additional information on your proposal to our office, and we will assess it to determine whether a permit under the ESA 2007 is required for the works to proceed.

Natural heritage features recorded for your area include an Environmentally Significant Area, Locally Significant Caledon East Wetland Complex and identified wetlands.

This species at risk information is highly sensitive and is not intended for any person or project unrelated to this undertaking. Please do not include any specific information in reports that will be available for public record. As you complete your fieldwork in these areas, please report all information related to any species at risk to the NHIC and to our office. This will assist with updating our database.

If you have any questions or comments, please do not hesitate to contact me at 905-713-7425.

Sincerely,

Melinda Thompson

Melinda Thompson
Species at Risk Biologist
Ontario Ministry of Natural Resources, Aurora District

APPENDIX B

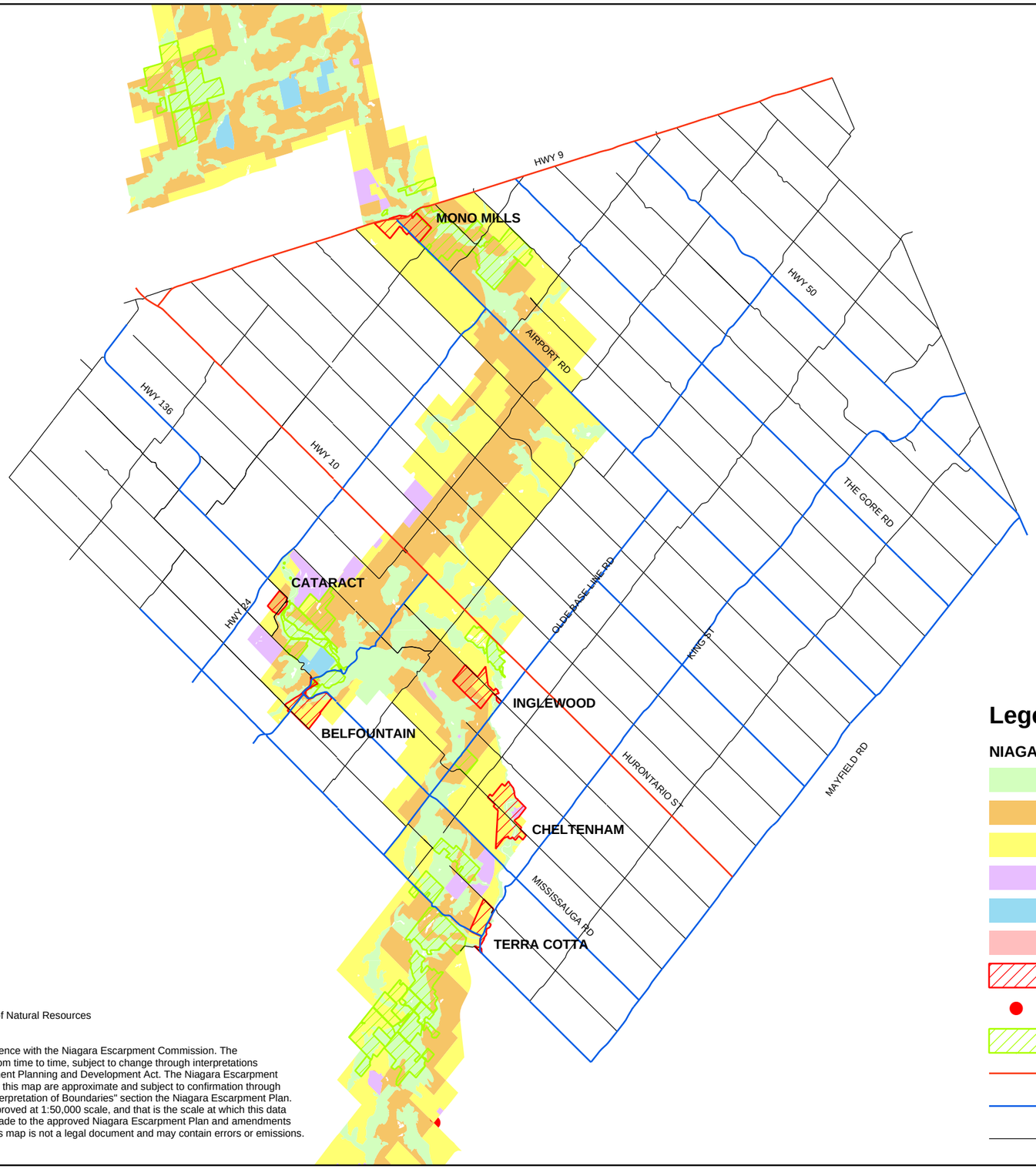
Town of Caledon Land Use Schedules

APPENDIX 1

TOWN OF CALEDON

Niagara Escarpment Plan

Regional Municipality of Peel
Town of Caledon



Legend

NIAGARA ESCARPMENT PLAN DESIGNATIONS

- ESCARPMENT NATURAL AREA
- ESCARPMENT PROTECTION AREA
- ESCARPMENT RURAL AREA
- MINERAL RESOURCE EXTRACTION AREA
- ESCARPMENT RECREATION AREA
- URBAN AREA
- MINOR URBAN CENTRE
- MINOR URBAN CENTRE (BOUNDARY UNDEFINED)
- PUBLIC LANDS (IN PARKS AND OPEN SPACE SYSTEM)
- PROVINCIAL ROAD
- REGIONAL ROAD
- LOCAL ROAD

N

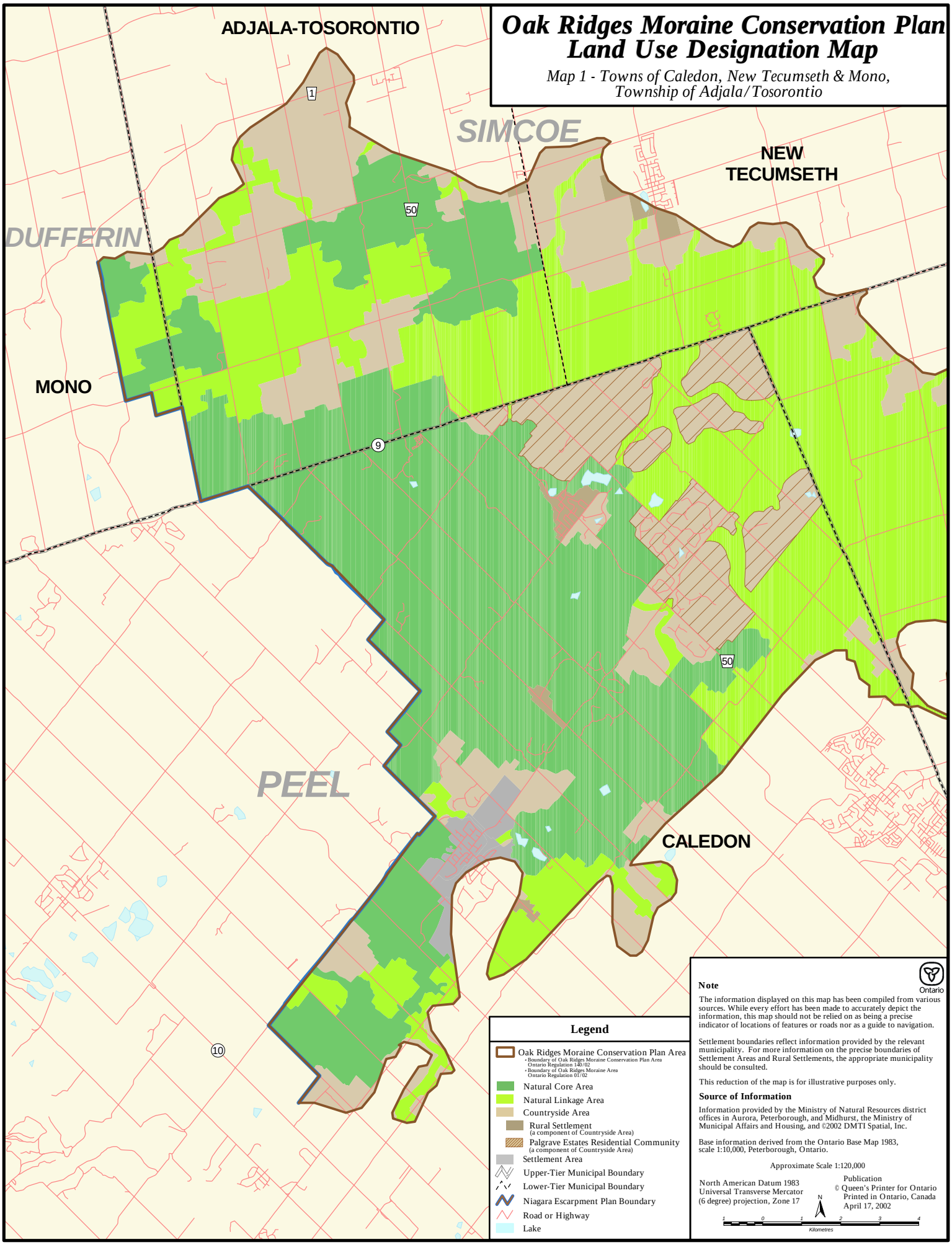
NEC map appendix 1.mxd

Data Sources:
Niagara Escarpment Commission, Ministry of Natural Resources

Notes:
Produced by the Town of Caledon under Licence with the Niagara Escarpment Commission. The Niagara Escarpment Commission Plan is, from time to time, subject to change through interpretations and amendment under the Niagara Escarpment Planning and Development Act. The Niagara Escarpment Plan designations and boundaries shown on this map are approximate and subject to confirmation through site inspection and the application of the "Interpretation of Boundaries" section the Niagara Escarpment Plan. The Niagara Escarpment Plan maps are approved at 1:50,000 scale, and that is the scale at which this data should be interpreted. Reference must be made to the approved Niagara Escarpment Plan and amendments for complete and up-to-date information. This map is not a legal document and may contain errors or emissions.

Oak Ridges Moraine Conservation Plan
Land Use Designation Map

Map 1 - Towns of Caledon, New Tecumseth & Mono, Township of Adjala/Tosorontio



Legend

- Oak Ridges Moraine Conservation Plan Area
  - Boundary of Oak Ridges Moraine Conservation Plan Area Ontario Regulation 140/02
  - Boundary of Oak Ridges Moraine Area Ontario Regulation 01/02
- Natural Core Area
- Natural Linkage Area
- Countryside Area
- Rural Settlement (a component of Countryside Area)
- Palgrave Estates Residential Community (a component of Countryside Area)
- Settlement Area
- Upper-Tier Municipal Boundary
- Lower-Tier Municipal Boundary
- Niagara Escarpment Plan Boundary
- Road or Highway
- Lake

Ontario

Note

The information displayed on this map has been compiled from various sources. While every effort has been made to accurately depict the information, this map should not be relied on as being a precise indicator of locations of features or roads nor as a guide to navigation.

Settlement boundaries reflect information provided by the relevant municipality. For more information on the precise boundaries of Settlement Areas and Rural Settlements, the appropriate municipality should be consulted.

This reduction of the map is for illustrative purposes only.

Source of Information

Information provided by the Ministry of Natural Resources district offices in Aurora, Peterborough, and Midhurst, the Ministry of Municipal Affairs and Housing, and ©2002 DMTI Spatial, Inc.

Base information derived from the Ontario Base Map 1983, scale 1:10,000, Peterborough, Ontario.

Approximate Scale 1:120,000

North American Datum 1983
Universal Transverse Mercator
(6 degree) projection, Zone 17

Publication
© Queen's Printer for Ontario
Printed in Ontario, Canada
April 17, 2002

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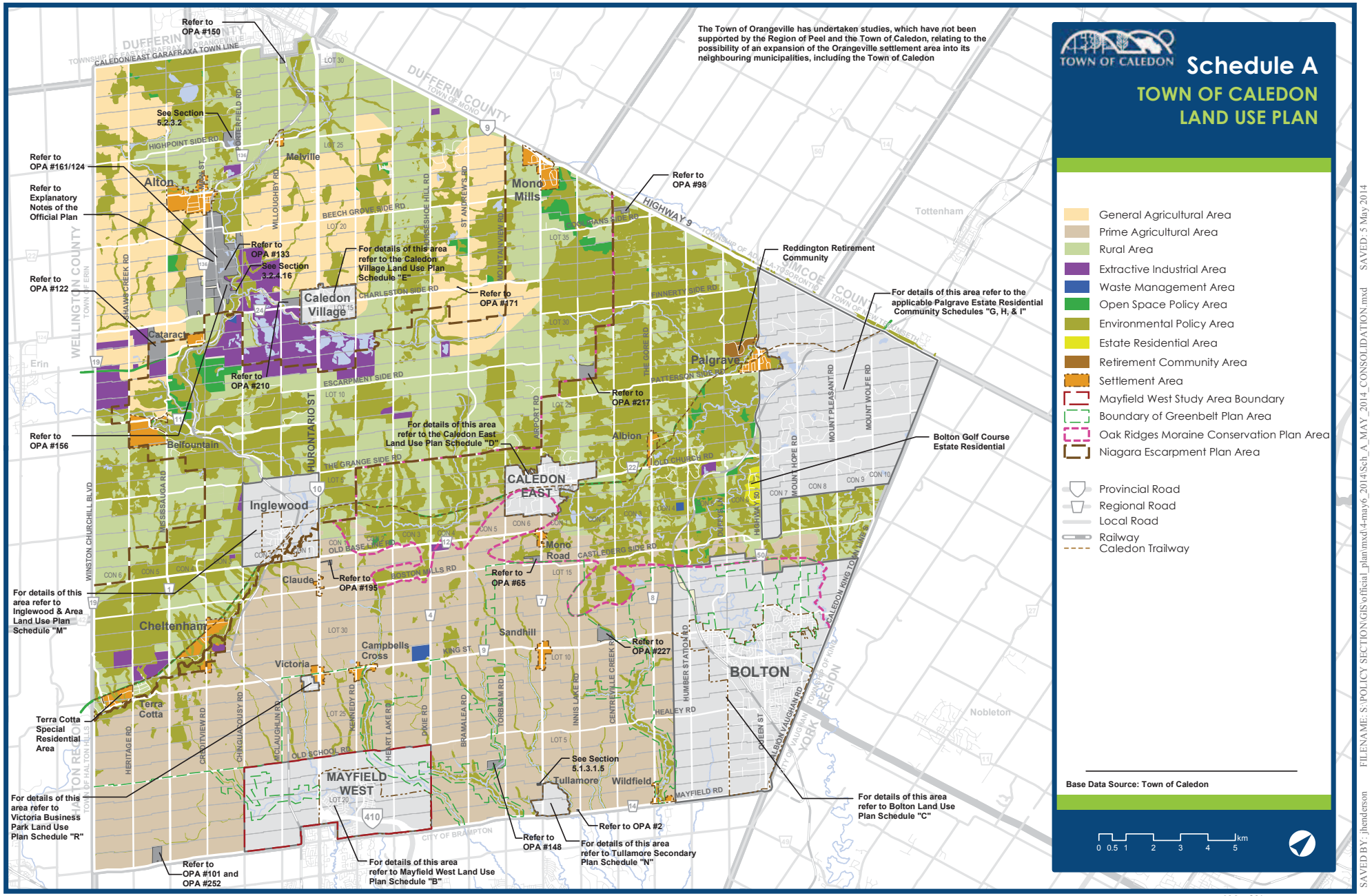
Schedule A
TOWN OF CALEDON
LAND USE PLAN
The Town of Orangeville has undertaken studies, which have not been supported by the Region of Peel and the Town of Caledon, relating to the possibility of an expansion of the Orangeville settlement area into its neighbouring municipalities, including the Town of Caledon
General Agricultural Area
Prime Agricultural Area
Rural Area
Extractive Industrial Area
Waste Management Area
Open Space Policy Area
Environmental Policy Area
Estate Residential Area
Retirement Community Area
Settlement Area
Mayfield West Study Area Boundary
Boundary of Greenbelt Plan Area
Oak Ridges Moraine Conservation Plan Area
Niagara Escarpment Plan Area
Provincial Road
Regional Road
Local Road
Railway
Caledon Trailway
Base Data Source: Town of Caledon
0 0.5 1 2 3 4 5 km
Refer to OPA #150
See Section 5.2.3.2
Refer to OPA #161/124
Refer to Explanatory Notes of the Official Plan
Refer to OPA #133
See Section 3.2.4.16
Refer to OPA #122
Refer to OPA #210
Refer to OPA #156
For details of this area refer to the Caledon Village Land Use Plan Schedule "E"
Refer to OPA #471
For details of this area refer to the Caledon East Land Use Plan Schedule "D"
Refer to OPA #98
Refer to OPA #217
Reddington Retirement Community
For details of this area refer to the applicable Palgrave Estate Residential Community Schedules "G, H, & I"
Bolton Golf Course Estate Residential
Refer to OPA #65
Refer to OPA #195
For details of this area refer to Inglewood & Area Land Use Plan Schedule "M"
Refer to OPA #227
Terra Cotta Special Residential Area
For details of this area refer to Victoria Business Park Land Use Plan Schedule "R"
See Section 5.1.3.1.5
Refer to OPA #2
Refer to OPA #148
For details of this area refer to Tullamore Secondary Plan Schedule "N"
For details of this area refer to Mayfield West Land Use Plan Schedule "B"
Refer to OPA #101 and OPA #252
For details of this area refer to Bolton Land Use Plan Schedule "C"
Alton
Melville
Mono Mills
Caledon Village
Cataract
Belfountain
Inglewood
CALEDON EAST
Palgrave
Albion
Mono Road
Claude
Cheltenham
Sandhill
Campbells Cross
Victoria
Terra Cotta
MAYFIELD WEST
Tullamore
Wildfield
BOLTON
Tottenham
Nobleton
HIGHWAY 9
DUFFERIN COUNTY
WELLINGTON COUNTY
SIMCOE COUNTY
REGION OF PEEL
REGION OF YORK
CITY OF BRAMPTON
TOWN OF ERIN
TOWN OF MONO
TOWN OF ORANGEVILLE
TOWNSHIP OF EAST GARAFRAXA
TOWNSHIP OF ADJALA-TOSORONTIO
CITY OF VAUGHAN
TOWNSHIP OF KING
CALEDON/EAST GARAFRAXA TOWN LINE
CALEDON/KING TOWN LINE
HIGHPOINT SIDE RD
BEECH GROVE SIDE RD
CHARLESTON SIDE RD
ESCARPMENT SIDE RD
THE GRANGE SIDE RD
OLD BASE LINE RD
BOSTON MILLS RD
CASTLEDERG SIDE RD
OLD SCHOOL RD
KING ST
HEALEY RD
MAYFIELD RD
FINNERTY SIDE RD
PATTERSON SIDE RD
OLD CHURCH RD
HANS SIDE RD
HURONTARIO ST
MOUNT PLEASANT RD
MOUNT WOLFE RD
MOUNT HOPE RD
HUMBER STATION RD
CENTREVILLE CREEK RD
INNIS LAKE RD
TORBRAM RD
BRAMALEA RD
HEART LAKE RD
KENNEDY RD
DIXIE RD
CHINGUACOUSY RD
MCLAUGHLIN RD
CREDITVIEW RD
HERITAGE RD
WINSTON CHURCHILL BLVD
MISSISSAUGA RD
HORSESHOE HILL RD
ST ANDREWS RD
MOUNTAINVIEW RD
WILLOUGHBY RD
PORTERFIELD RD
SHAWS CREEK RD
THE GORE RD
AIRPORT RD
QUEEN ST
ALBION-VAUGHAN RD
HIGHWAY 50
HIGHWAY 27
HIGHWAY 410
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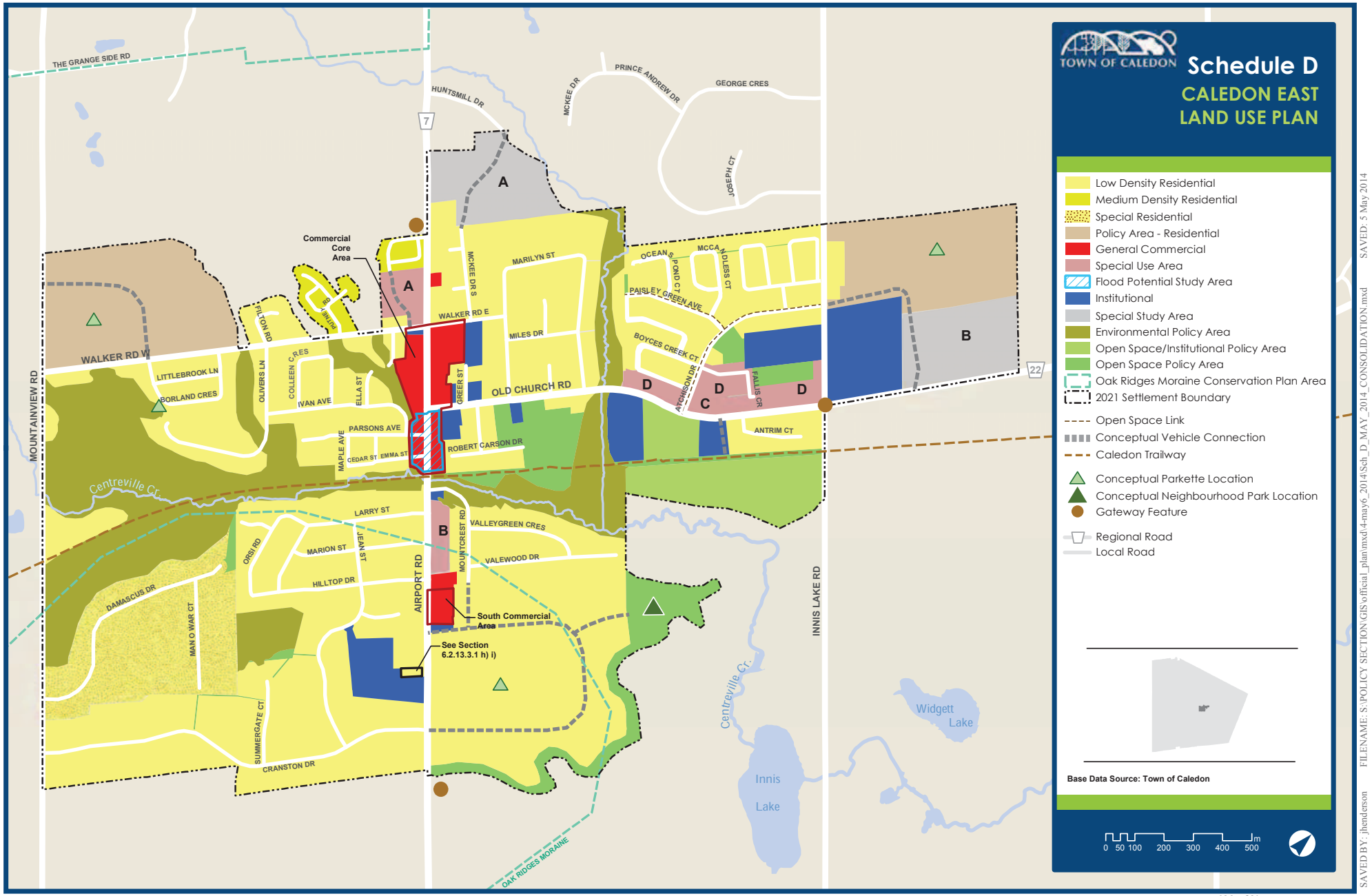
6 May 2014 Office Consolidation



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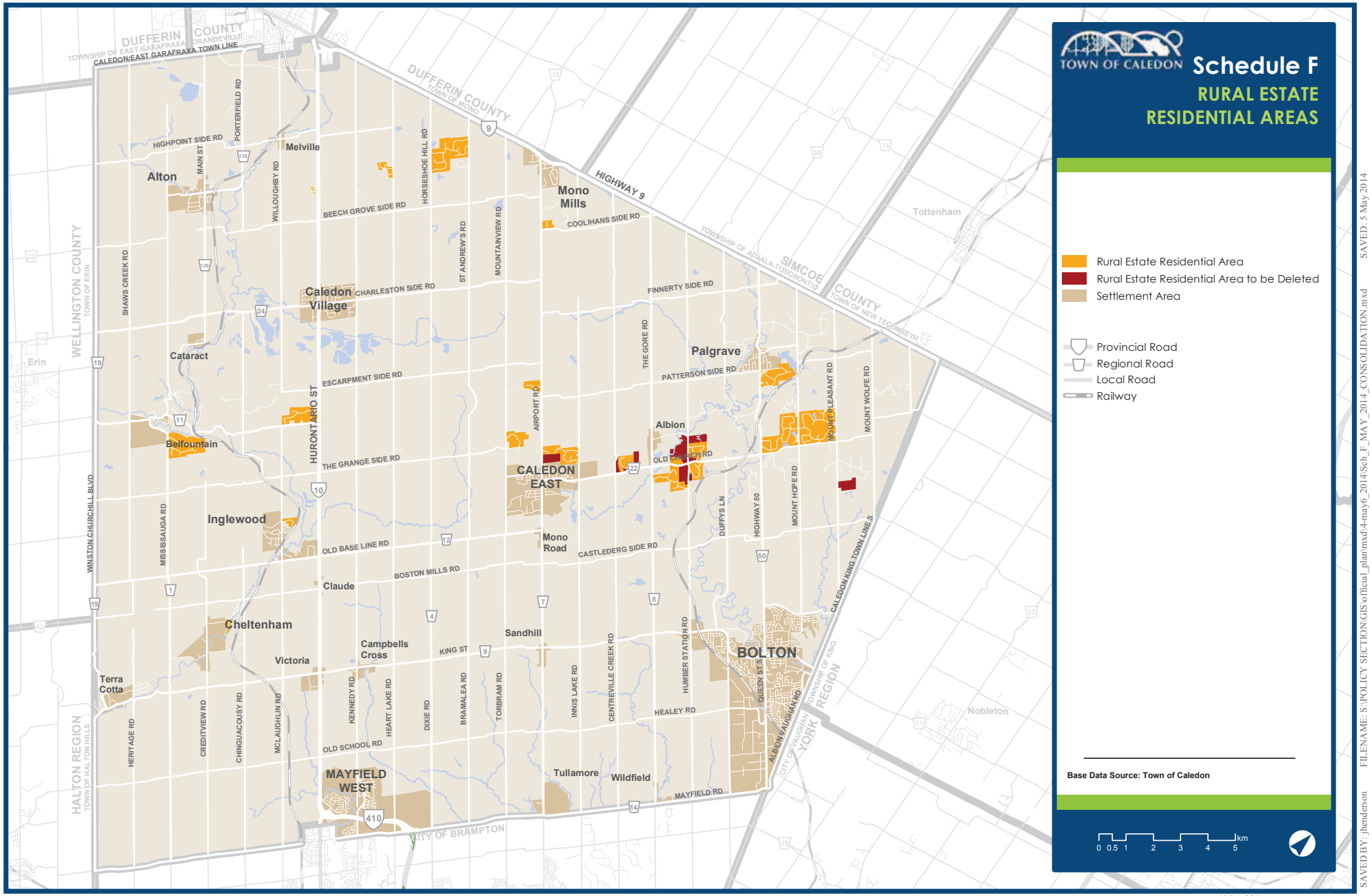
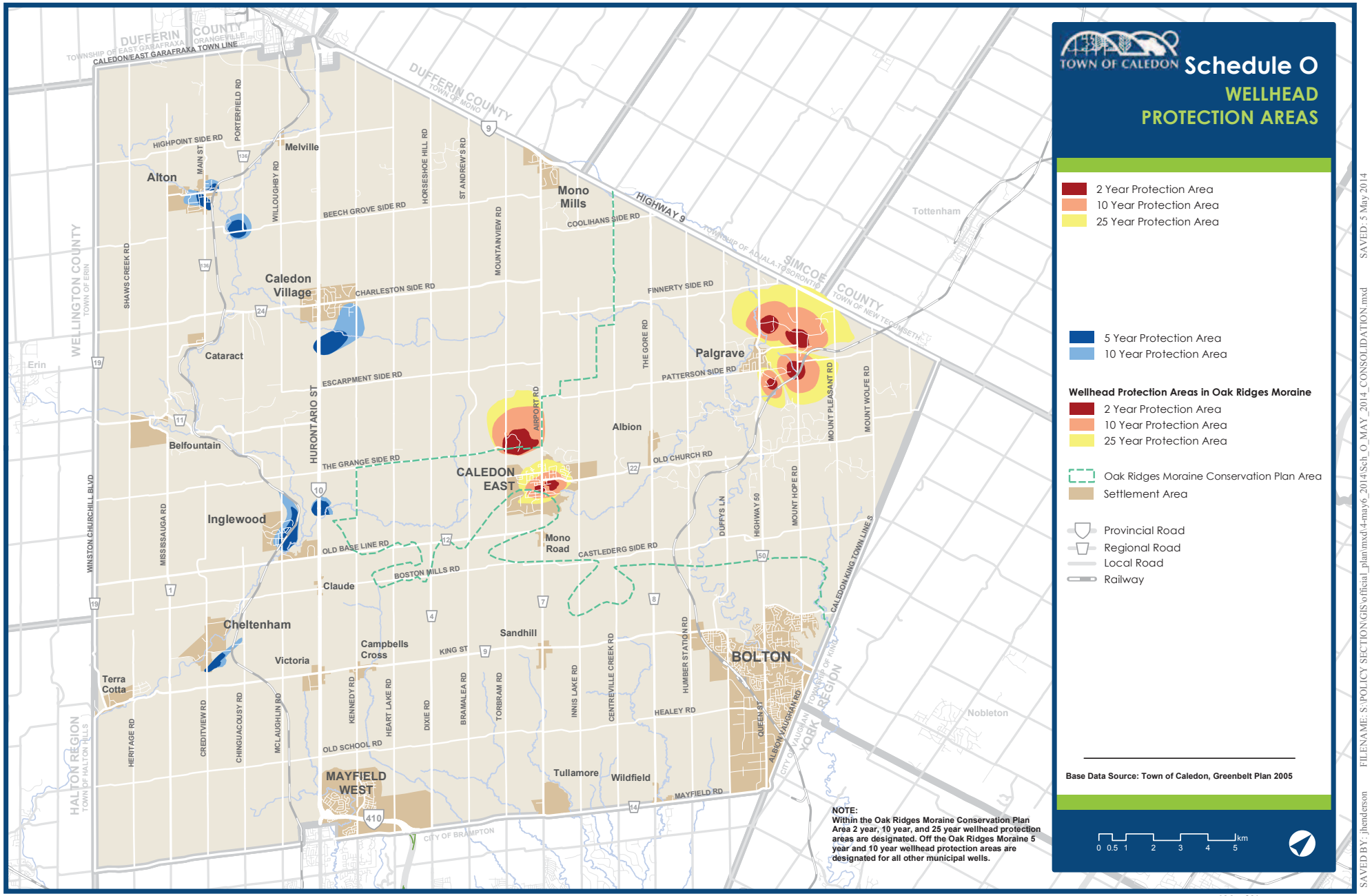
6 May 2014 Office Consolidation



6 May 2014 Office Consolidation


TOWN OF CALEDON
Schedule O
WELLHEAD PROTECTION AREAS
2 Year Protection Area
10 Year Protection Area
25 Year Protection Area
5 Year Protection Area
10 Year Protection Area
Wellhead Protection Areas in Oak Ridges Moraine
2 Year Protection Area
10 Year Protection Area
25 Year Protection Area
Oak Ridges Moraine Conservation Plan Area
Settlement Area
Provincial Road
Regional Road
Local Road
Railway
Base Data Source: Town of Caledon, Greenbelt Plan 2005
NOTE:
Within the Oak Ridges Moraine Conservation Plan Area 2 year, 10 year, and 25 year wellhead protection areas are designated. Off the Oak Ridges Moraine 5 year and 10 year wellhead protection areas are designated for all other municipal wells.
0 0.5 1 2 3 4 5 km
Alton
Melville
Caledon Village
Cataract
Belfountain
Inglewood
Cheltenham
Terra Cotta
Victoria
Campbells Cross
Claude
Mono Mills
Palgrave
Albion
CALEDON EAST
Mono Road
Sandhill
BOLTON
Tullamore
Wildfield
MAYFIELD WEST
Tottenham
Nobleton
DUFFERIN COUNTY
WELLINGTON COUNTY
SIMCOE COUNTY
HALTON REGION
YORK REGION
HIGHWAY 9
CALEDON/EAST GARAFRAXA TOWN LINE
HIGHPOINT SIDE RD
BEECH GROVE SIDE RD
CHARLESTON SIDE RD
ESCARPMENT SIDE RD
THE GRANGE SIDE RD
OLD BASE LINE RD
BOSTON MILLS RD
KING ST
OLD SCHOOL RD
COOLIHANS SIDE RD
FINNERTY SIDE RD
PATTERSON SIDE RD
OLD CHURCH RD
CASTLEDERG SIDE RD
HEALEY RD
MAYFIELD RD
CALEDON/KING TOWN LINE
HURONTARIO ST
MAIN ST
PORTERFIELD RD
WILLOUGHBY RD
HORSESHOE HILL RD
ST ANDREW'S RD
MOUNTAINVIEW RD
SHAWS CREEK RD
AIRPORT RD
THE GORE RD
MOUNT PLEASANT RD
MOUNT WOLFE RD
MOUNT HOPE RD
HIGHWAY 50
DUFFYS LN
WINSTON CHURCHILL BLVD
MISSISSAUGA RD
CREDITVIEW RD
CHINGUACOUSY RD
MCLAUGHLIN RD
HERITAGE RD
KENNEDY RD
HEART LAKE RD
DIXIE RD
BRAMALEA RD
TORBRAM RD
INNIS LAKE RD
CENTREVILLE CREEK RD
HUMBER STATION RD
QUEEN ST
ALBION VAUGHAN RD
CITY OF BRAMPTON
SAVED BY: jhenderson
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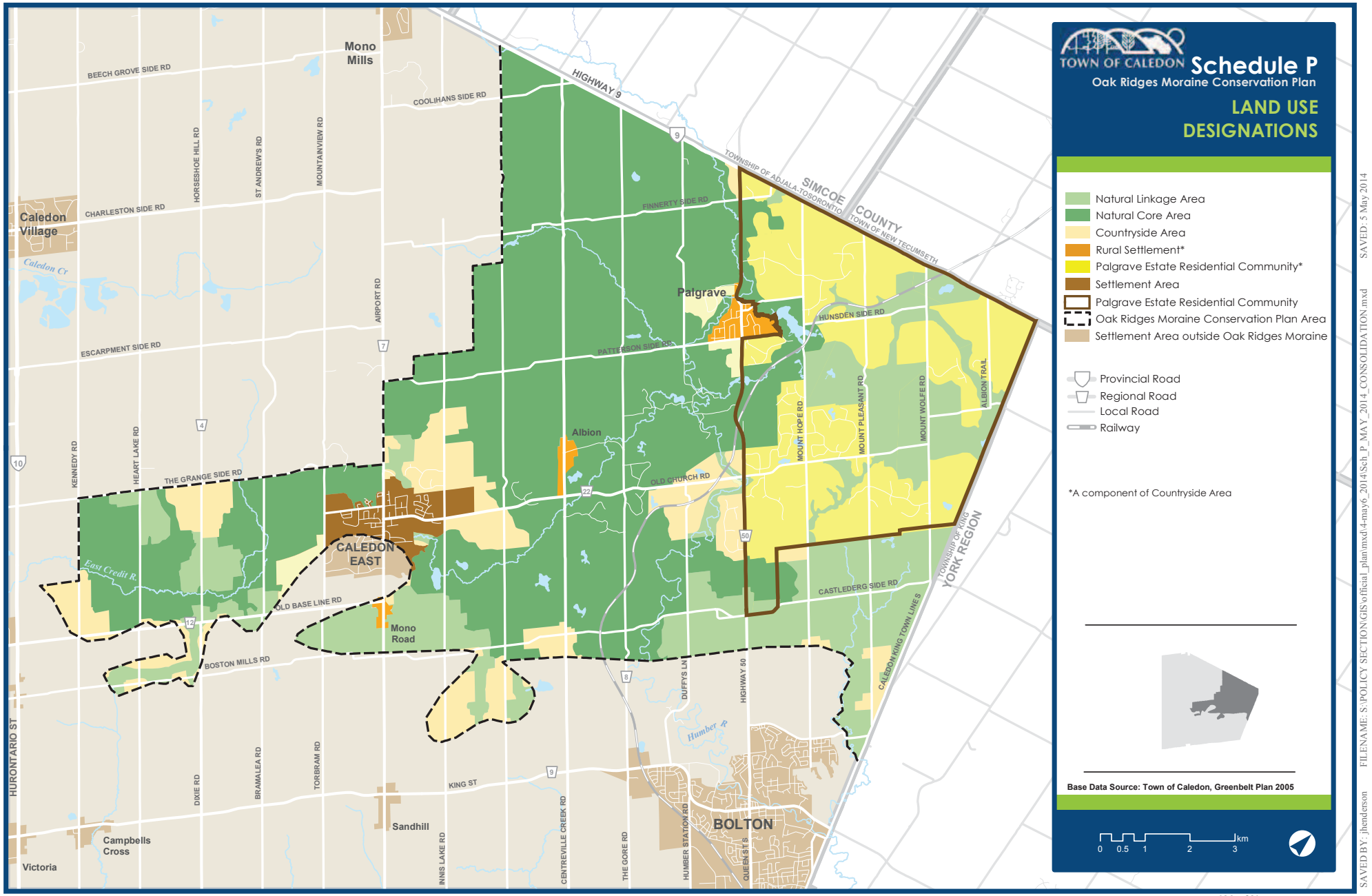
SAVED: 5 May 2014
6 May 2014 Office Consolidation



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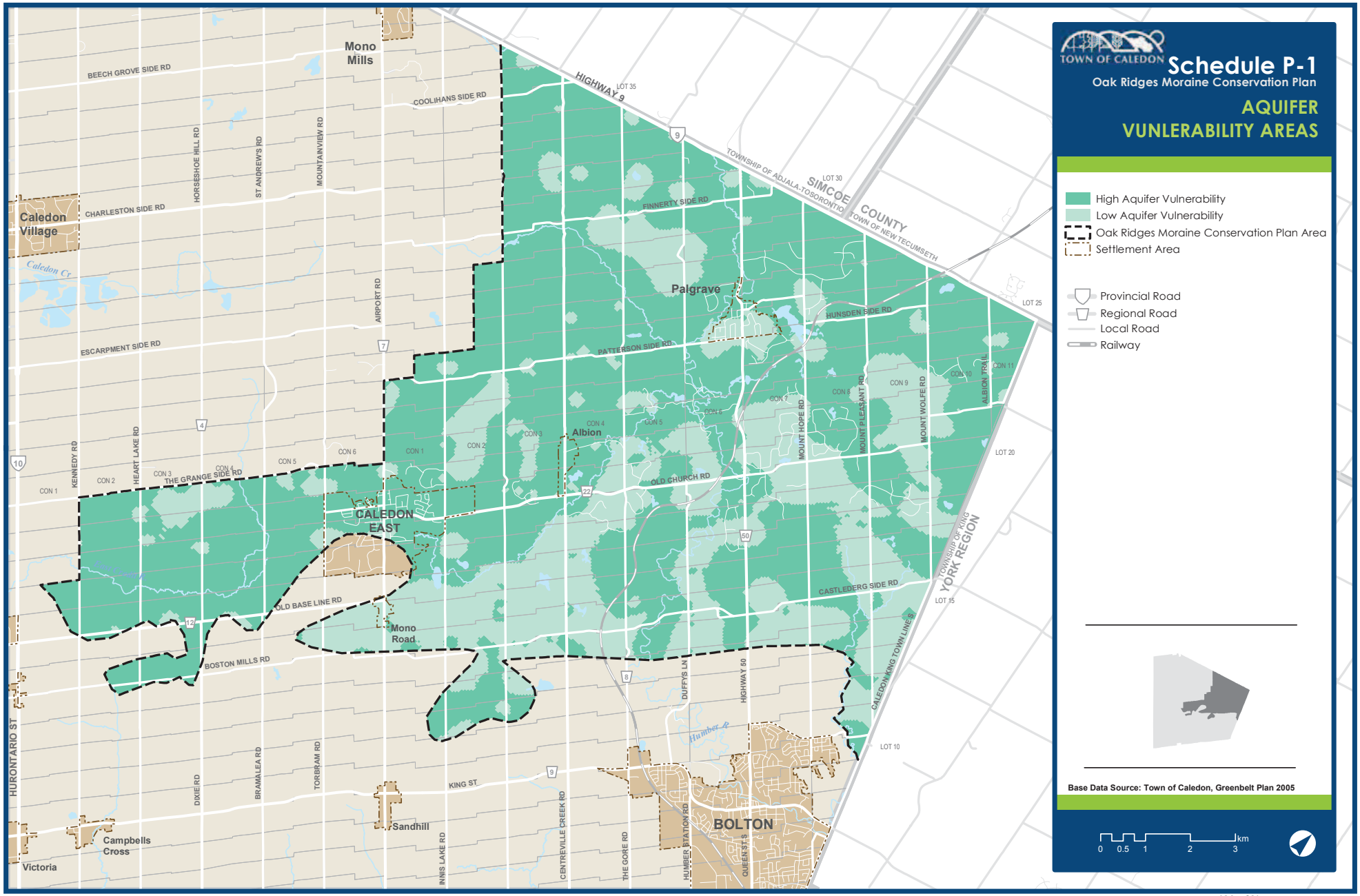

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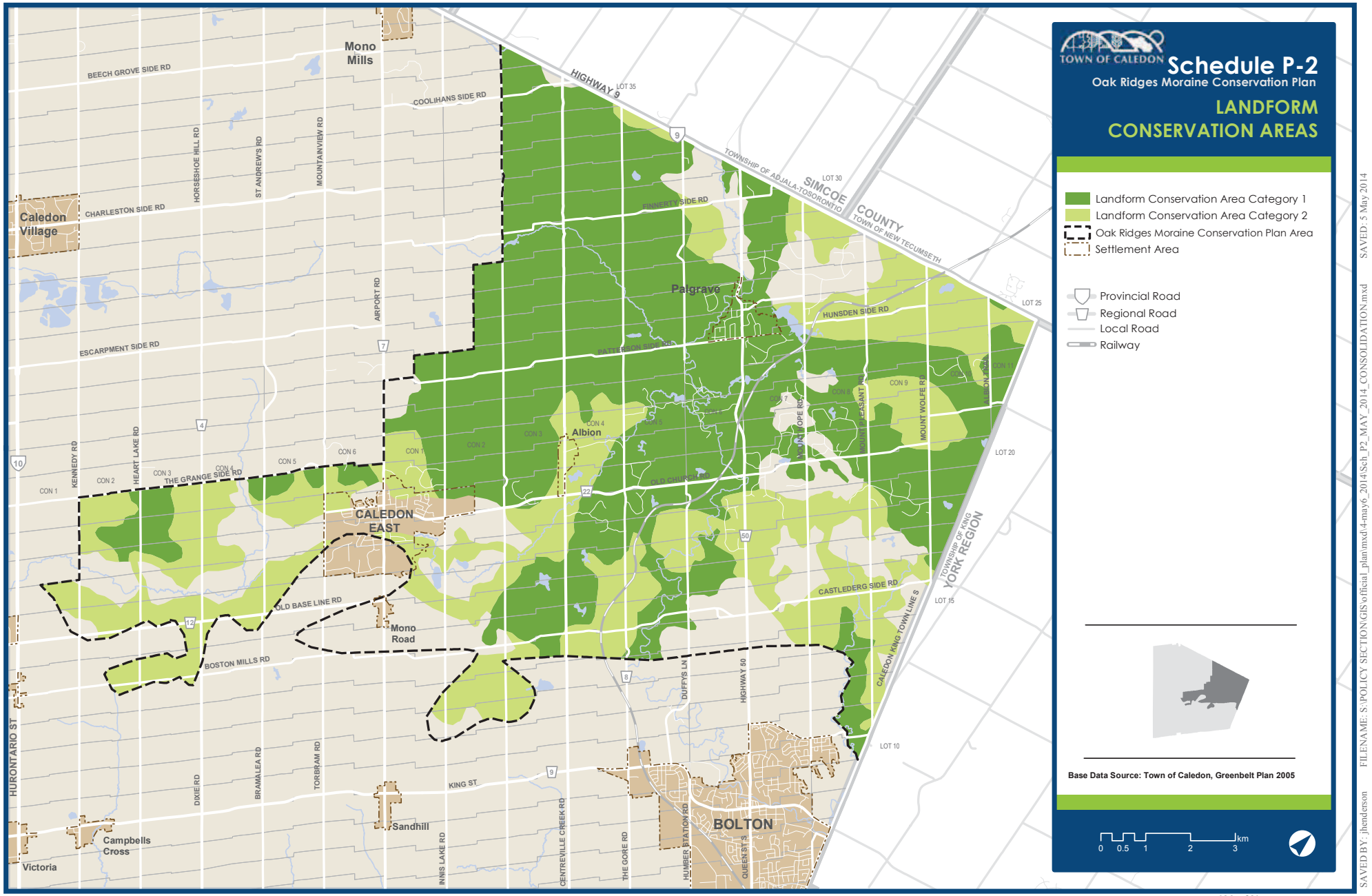

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APPENDIX C

Town of Caledon Ecosystem Framework and Oak Ridges Moraine Conservation Plan Key Natural Heritage Features

TABLE 3.1 TOWN OF CALEDON - Ecosystem Framework

ECOSYSTEM COMPONENT	NATURAL CORE AREAS	NATURAL CORRIDORS	SUPPORTIVE NATURAL SYSTEMS	NATURAL LINKAGES
Woodlands	All Woodland Core Areas		All Other Woodlands	All Other Woodlands
Wetlands	All Wetland Core Areas		All Other Wetlands and all Wetland Adjacent Lands	All Other Wetlands and all Wetland Adjacent Lands
Niagara Escarpment Natural Areas	All NEC Natural Areas			
Niagara Escarpment Protection Areas			All NEC Protection Areas	All NEC Protection Areas
Areas of Natural and Scientific Interest (ANSIs)	All Life Science ANSIs		All Earth Science ANSI's	All Earth Science ANSIs
Environmentally Significant Area's (ESAs)	All ESAs		Potential ESAs	Potential ESAs
OPA226 Threatened and Endangered Species	All Significant Habitats of Threatened and Endangered Species		All Other Habitats of Threatened and Endangered Species	
Wildlife Habitat	All Significant Wildlife Habitat		All Other Wildlife Habitat	
Fisheries		All Core Fishery Resource Areas	All Other Fishery Resource Areas	All Other Fishery Resource Areas
Valley and Stream Corridors		All Valley and Stream Corridors		
Groundwater Systems			Bedrock Aquifers Surficial Aquifers Recharge Areas Discharge Areas	Recharge Areas Discharge Areas
Native Soils			Productive Soils	Erosion Prone Soils
Natural Slopes				> 15%
Oak Ridges Moraine Key Natural Heritage Features*	All KNHFs and their related MVPZs**	All KNHFs and their related MVPZs**		
Oak Ridges Moraine Hydrologically Sensitive Features*	All HSFs and their related MVPZs**	All HSFs and their related MVPZs**		
Greenbelt Key Natural Heritage Features*	All KNHFs*** and their related VPZs****	All KNHFs*** and their related VPZs****		
Greenbelt Key Hydrologic Features*	All KHFs*** and their related VPZs****	All KHFs*** and their related VPZs****		

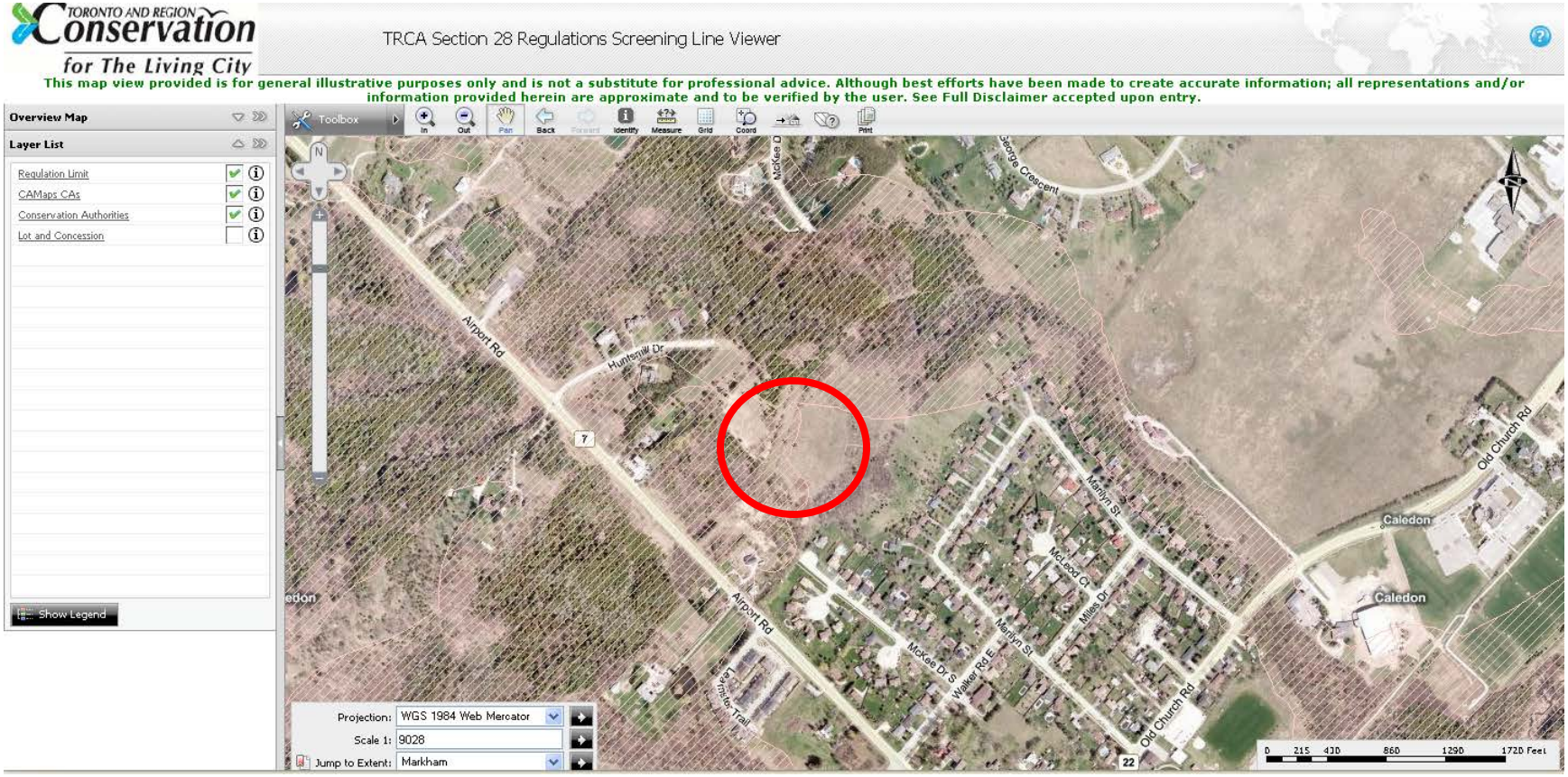
TABLE 7.5 Oak Ridges Moraine Key Natural Heritage Features, Hydrologically Sensitive Features and Areas of natural and Scientific Interests (Earth Science) Minimum Areas of Influence and Minimum Vegetation Protection Zones

Feature	Minimum Area of Influence	Minimum Vegetation Protection Zone
Wetlands	All land within 120 metres of any part of feature	All land within 30 metres of any part of feature, subject to clause 7.10.5.1.4 a) iv) if a natural heritage evaluation is required
Significant portions of habitat of endangered, rare and threatened species	All land within 120 metres of any part of feature	As determined by a natural heritage evaluation carried out under section 7.10.5.1.4
Fish habitat	All land within 120 metres of any part of feature	All land within 30 metres of any part of feature, subject to clause 7.10.5.1.4 a) iv) if a natural heritage evaluation is required
Areas of natural and scientific interest (life science)	All land within 120 metres of any part of feature	As determined by a natural heritage evaluation carried out under section 7.10.5.1.4
Areas of natural and scientific interest (earth science)	All land within 50 metres of any part of feature	As determined by an earth science heritage evaluation carried out under subsection 7.10.5.6.9
Significant valleylands	All land within 120 metres of stable top-of-bank	All land within 30 metres of stable top-of-bank, subject to clause 7.10.5.1.4 a) iv) if a natural heritage evaluation is required
Significant woodlands	All land within 120 metres of any part of feature	All land within 30 metres of the base of outermost tree trunks within the woodland, subject to clause 7.10.5.1.4 a) iv) if a natural heritage evaluation is required
Significant wildlife habitat	All land within 120 metres of any part of feature	As determined by a natural heritage evaluation carried out under section 7.10.5.1.
Sand barrens, savannahs and tallgrass prairies	All land within 120 metres of any part of feature	All land within 30 metres of any part of feature, subject to clause 7.10.5.1.4 a) iv) if a natural heritage evaluation is required
Kettle lakes	All land within 120 metres of the surface catchment area	All land within the surface catchment area or within 30 metres of any part of feature, whichever is greater, subject to clause 7.10.5.1.4 b) iii) if a hydrological evaluation is required
Permanent and intermittent streams	All land within 120 metres of meander belt	All land within 30 metres of meander belt , subject to clause 7.10.5.1.4 a) iv) if a hydrological evaluation is required
Seepage areas and springs	All land within 120 metres of any part of feature	All land within 30 metres of any part of feature, subject to clause 7.10.5.1.4 a) iv) if a hydrological evaluation is required

APPENDIX D

Toronto Region Conservation Authority Regulation Mapping

Appendix D: Toronto Region Conservation Authority Regulation mapping (December 2010). The Study Area is indicated by the Red Circle.
http://www.camaps.ca/Geocortex/Essentials/Web/Viewer.aspx?Site=TARPubBing



APPENDIX E

Background Species Data

Square Summary (17NJ95)

#species (1st atlas)				#species (2nd atlas)				#hours		#pc done	
poss	prob	conf	total	poss	prob	conf	total	1st	2nd	road	offrd
17	27	32	76	17	38	63	118	45	57	51	4

Region summary (#10: Halton-Peel-Dufferin)

#squares	#sq with data		#species		#pc done	target #pc
	1st	2nd	1st	2nd		
38	38	38	160	177	1681	950

Target number of point counts in this square: 23 road side, 2 off road (1 in deciduous forest, 1 in pasture/grassland). Please try to ensure that each off-road station is located such that the entire 100m radius circle is within the prescribed habitat.

SPECIES	BE 2nd	BE 1st	% 2nd	% 1st
Pied-billed Grebe			36	10
American Bittern	H		23	31
Least Bittern ?			15	7
Great Blue Heron §	NY	S	65	73
Green Heron §	NY	S	86	97
Yellow-crn N.-Heron ?			0	2
Turkey Vulture	H		89	73
Canada Goose	FY	FY	100	94
Wood Duck	FY	H	89	78
Gadwall ?			7	2
American Wigeon ?			7	2
American Black Duck			28	31
Mallard	FY	P	97	100
Blue-winged Teal		H	34	81
Northern Shoveler ?			5	2
Northern Pintail			2	7
Green-winged Teal			10	0
Hooded Merganser	FY		42	18
Common Merganser ?			5	5
Osprey ?			13	2
Northern Harrier	P		81	86
Sharp-shinned Hawk	P		76	44
Cooper's Hawk	H	T	68	21
Northern Goshawk	H	H	34	18
Red-should Hawk ?	S		23	15
Broad-winged Hawk	H		57	47
Red-tailed Hawk	AE	CF	100	100
American Kestrel	T	CF	92	100
Ring-necked Pheasant			21	28
Ruffed Grouse	FY	FY	78	89
Wild Turkey	FY		68	7
Northern Bobwhite ?			2	2
Virginia Rail	FY		71	52
Sora			57	57
Common Moorhen			23	7
American Coot			15	13
Coot/Moorhen			0	0
Killdeer	FY	FY	100	100
Spotted Sandpiper	T	H	84	97
Upland Sandpiper	FY		39	71
Common Snipe	D		65	55
American Woodcock	D	T	92	84
Wilson's Phalarope ?			2	5
Herring Gull §			2	15
Black Tern ? §			2	2
Rock Dove	T	D	100	100
Mourning Dove	D	NE	100	100
Black-billed Cuckoo	CF	H	86	71
Yellow-billed Cuckoo	NE		52	28
Black/Yell-billed Cuckoo			34	0
Eastern Screech-Owl	FY		97	60
Great Horned Owl	FY	S	76	92
Barred Owl ?	S		13	2
Long-eared Owl			10	13
North Saw-whet Owl			7	10
Common Nighthawk			31	42
Whip-poor-will			10	23
Chimney Swift	T	T	71	71
Ruby-thr Hummingbird	T	T	89	89
Belted Kingfisher	T	AE	100	100
Red-head Woodpecker ?	H	FY	26	76
Red-bell Woodpecker ?	H		36	5
Yellow-bellied Sapsucker			55	57
Downy Woodpecker	CF	FY	100	100
Hairy Woodpecker	AE	H	100	97
Northern Flicker	NY	FY	100	100
Pileated Woodpecker	T		97	81
Olive-sided Flycatcher ?			0	2
Eastern Wood-Pewee	T	T	100	100
Alder Flycatcher	T	A	86	65
Willow Flycatcher	S		86	68
Least Flycatcher	S	T	97	92
Eastern Phoebe	NY	T	97	94
Gr Crested Flycatcher	FY	T	100	100
Eastern Kingbird	NY	NY	100	100
Yellow-throated Vireo	S		31	23
Blue-headed Vireo ?			42	2
Warbling Vireo	T	A	100	100
Red-eyed Vireo	T	S	100	100
Blue Jay	FY	FY	100	100
American Crow	T	P	100	100
Common Raven ?	H		2	0
Horned Lark	T	S	92	97
Purple Martin			34	42
Tree Swallow	AE	T	100	94
North Rgh-wing Swallow	H	P	84	100
Bank Swallow §	AE	AE	76	97

next page >>

Ontario Breeding Bird Atlas - Summary Sheet for Square 17NJ95 (page 2 of 2)

SPECIES	BE 2nd	BE 1st	% 2nd	% 1st
Cliff Swallow §	AE		86	81
Barn Swallow	FY	FY	100	100
Black-capp Chickadee	FY	N	100	100
Red-breast Nuthatch	CF		78	60
White-breast Nuthatch	T	A	97	94
Brown Creeper	H		71	47
Carolina Wren ?			26	2
House Wren	CF	FY	100	100
Winter Wren	T		71	71
Sedge Wren	T		36	10
Marsh Wren			31	18
Golden-crown Kinglet			42	26
Blue-gr Gnatcatcher	T		36	23
Eastern Bluebird	AE		84	44
Veery	CF	T	89	81
Swainson's Thrush ?			0	2
Hermit Thrush ?			26	2
Wood Thrush	FY		100	89
American Robin	NY	NE	100	100
Gray Catbird	CF	FY	100	100
Northern Mockingbird	AE		47	7
Brown Thrasher	FY	A	97	100
European Starling	FY	NE	100	100
Cedar Waxwing	T	NU	100	100
Blue-winged Warbler	T		50	21
Golden-winged Warbler	NE		28	28
Blue/Gold-wing Warbler			18	0
Brewster's Warbler ?			7	2
Nashville Warbler	T	T	84	76

SPECIES	BE 2nd	BE 1st	% 2nd	% 1st
Northern Parula ?			5	2
Yellow Warbler	FY	CF	100	97
Chestn-sided Warbler	FY	S	84	71
Magnolia Warbler	FY		60	23
Black-thr Blue Warbler	P		39	2
Yellow-rumped Warbler			68	23
Black-thr Green Warbler	CF		73	42
Blackburnian Warbler	T		47	34
Pine Warbler	T	S	84	42
Black-white Warbler	T	T	84	76
American Redstart	T		92	60
Prothonotary Warbler ?	CF		2	0
Ovenbird	T	T	92	92
North Waterthrush	S	P	73	73
Louis Waterthrush ?			15	10
Mourning Warbler	FY	A	94	76
Common Yellowthroat	FY	CF	100	100
Canada Warbler			47	50
Yellow-breast Chat ?			0	5
Scarlet Tanager	T		84	76
Eastern Towhee	NB		86	65
Chipping Sparrow	FY	CF	100	100
Clay-colored Sparrow	NE		42	13
Field Sparrow	CF	CF	84	86
Vesper Sparrow	T	S	78	92
Savannah Sparrow	T	DD	100	100
Grasshopper Sparrow	T		65	76
Henslow's Sparrow ?			2	10
Song Sparrow	CF	CF	100	100

SPECIES	BE 2nd	BE 1st	% 2nd	% 1st
Lincoln's Sparrow ?			2	2
Swamp Sparrow	FY		92	89
White-throat Sparrow	T	S	76	81
Northern Cardinal	FY	P	92	92
Rose-breast Grosbeak	CF	CF	100	97
Indigo Bunting	FY	A	100	100
Bobolink	FY	FY	100	97
Red-wing Blackbird	FY	NY	100	100
Eastern Meadowlark	T	FY	97	100
Western Meadowlark ?			0	2
Common Grackle	FY	CF	100	100
Brown-head Cowbird	FY	FY	100	100
Orchard Oriole			28	23
Baltimore Oriole	FY	CF	100	100
Purple Finch	FY		68	39
House Finch	FY		86	18
Red Crossbill			0	7
Pine Siskin	H	H	10	13
American Goldfinch	P	T	100	100
House Sparrow	AE	H	100	100

This list includes all species found during the Ontario Breeding Bird Atlas (1st atlas: 1981-1985, 2nd atlas: 2001-2005) in the region #10 (Halton-Peel-Dufferin). Underlined species are those that you should try to add to this square. They have not yet been reported during the 2nd atlas, but were found during the 1st atlas in this square or have been reported in more than 50% of the squares in this region during the 2nd atlas so far. In the species table, "BE 2nd" and "BE 1st" are the codes for the highest breeding evidence for that species in square 17NJ95 during the 2nd and 1st atlas respectively. The % columns give the percentage of squares in that region where that species was reported during the 2nd and 1st atlas (this gives an idea of the expected chance of finding that species in region #10). Rare/Colonial Species Report Forms should be completed for species marked: § (Colonial), ? (regionally rare), or ? (provincially rare). Current as of 3/12/2007. An up-to-date version of this sheet is available from http://www.birdsontario.org/atlas/summaryform.jsp?squareID=17NJ95

<< previous page

APPENDIX F

Agency Comments (2016) and Azimuth Response

TOWN OF CALEDON

February 22, 2016

Weston Consulting
201 Millway Avenue, Suite 19
Vaughan, ON
L4K 5K8

Attention: Ryan Guetter, Vice President

Dear Mr. Guetter:

RE: Proposed Official Plan Amendment, Zoning By-law Amendment and Draft Plan of Subdivision
Weston Consulting (Ryan Guetter) on behalf of 2031818 Ontario Inc.
0 Airport Road (McKee Drive) - Part of Lot 22, Concession 1 (ALB)
File Numbers: POPA 12-04, RZ 06-18, 21T-06006C

Planning staff received revised submission material for the Official Plan and Zoning By-law Amendment Applications as well as a complete application for Draft Plan of Subdivision on September 11, 2015. The submission package received by the Town included the following:

- Cover Letters, prepared by Weston Consulting, dated September 3, 2015 and September 11, 2015;
- 1ST Submission Comment Response Table, prepared by Weston Consulting, updated September, 2015;
- Draft Official Plan and Zoning By-law Amendments, prepared by Weston Consulting, received on September 11, 2015;
- Draft Plan of Subdivision (Dwg. D1), prepared by Weston Consulting, dated October 23, 2014
- Planning Justification Report Addendum, prepared by Weston Consulting, dated September 2015;
- Functional Servicing and Stormwater Management Report, prepared by Masongsong Associates Engineering Limited, dated June 2015;
- Engineering Comment Response Letter, prepared by Masongsong Associates Engineering Limited, dated June 30, 2015;
- Revised Environmental Impact Study, prepared by Azimuth Environmental Consulting Inc. dated October 2013, Revised July 2015;
- Conceptual Trail Plan, prepared by Weston Consulting, dated August 8, 2015
- Landscape Master Plan, prepared by Strybos Barron King, dated October, 2014
- Design Brief – Architectural Guidelines, prepared by VA3 Design Inc., dated July 8, 2015;
- Overall Site Plan (Dwg. 1), prepared by VA3 Design Inc., dated September 2013 and last revised July 7, 2015;

- Site Plan – Estate Lot (Dwg. 2), prepared by VA3 Design Inc., dated September 2013, revised July 7, 2015;
- Site Plan – Single Detached Lots Dwg. 3), prepared by VA3 Design Inc., dated September 2013, revised July 7, 2015;
- (Colour) Overall Site Plan (Dwg. 4), prepared by VA3 Design Inc., dated July 2013, revised July 7, 2015;
- Floor Plans and Elevations(Dwg. 5), prepared by VA3 Design Inc., dated June 2015, revised July 7, 2015;
- Floor Plans – Estate Lot (Dwg. 6), prepared by VA3 Design Inc., dated June 2015, revised July 7, 2015;
- Elevations – Estate Lot (Dwg. 7), prepared by VA3 Design Inc., dated June 2015, revised July 7, 2015.

Proposal

The subject property is located at 0 Airport Road, east side of Airport Road, north of McKee Drive South and south of Huntsmill Drive. The Town of Caledon Official Plan ("TCOP") designates the front portion of the site Special Study Area A in the Caledon East Land Use Plan, Schedule "D" and the rear portion is Environmental Policy Area ("EPA") and Rural on the Town of Caledon Land Use Plan, Schedule "A". The Oak Ridges Moraine Conservation Plan ("ORMCP"), Schedule "P" identifies the front portion of the lands as Rural Settlement and the rear portion Natural Linkage Area and Countryside Area. Schedules "O", Wellhead Protection Area and "P-1", Aquifer Vulnerability further identify the lands within the 25 Year Protection Area and High Aquifer Vulnerability. The subject lands are currently zoned Estate Residential (RE) and Environmental Policy Area 2 – Oak Ridges Moraine (EPA2-ORM) by Zoning By-law 2006-50, as amended.

The applications are in support of a proposal for 21 single detached dwellings accessed via a private (future condominium) road from McKee Drive South and a single estate residential lot accessed from McKee Drive North.

Executive Summary of Comments

The following is a brief summary of the detailed comments outlined below. Please refer to and ensure that all detailed comments from staff and agencies are addressed.

- Staff are supportive of the revised housing form of single detached dwellings as it is more compatible with the existing land use pattern in the area (OP 5.10.3.10)
- Applications for Plan of Condominium and Site Plan Control (for the condominium element) remain outstanding and need to be submitted concurrently with the next submission and prior to scheduling the applications for a consolidated public meeting.
- As noted in the attached comments from TRCA, the viability of the subdivision has not been established and conformity with the ORMCP and Provincial Policy Statement ("PPS") has not yet been established. A number of technical studies are outstanding. The next submission must include a letter detailing how each of the TRCA's comments has been addressed.
- A resubmission is required to address technical updates to a number of reports and plans as well as revised Draft Plan of Subdivision, Official Plan Amendment and Draft Zoning By-law Amendment. Please ensure the resubmission package includes all outstanding reports (Edge Management and Enhancement Plan, Tree Inventory and Preservation Plan, MDS Calculation for estate dwelling lot), a cover letter explaining how each comment has been addressed and the resubmission fee of $5300, as per our current Fee By-law.

General Comments

1) The proposal currently consists of applications for Official Plan Amendment, Rezoning and Plan of Subdivision. The applications refer to a common element condominium for a portion of the subject lands and propose zoning standards that rely on a condominium tenure; however, Town staff have not received applications for the Plan of Condominium and Site Plan (Full Stream). Please submit the outstanding applications concurrently with the next submission. See refer to the current Fee By-law on the Town's website for applicable fees. *(Town of Caledon, Development, Planning)*
2) The timing of a Public Meeting will be determined upon receipt and review of the outstanding Planning Act applications noted above in an effort to consolidate the applications being considered at the Public Meeting. (*Town of Caledon, Development, Planning*)
3) The internal road design will need to meet the requirements of the Town and Region's Emergency Services (i.e. fire route, turnarounds). *(Town of Caledon, Development, Engineering)*
4) Architectural review and approval by the Town's Control Architect is required for Site Plan Approval and/or prior to building permit issuance. Please note that house elevations will be required showing materials, colours and details consistent with the requirements of the applicable urban design guidelines (i.e. approved Design Brief, Architectural Guidelines). It is the developer's responsibility to make satisfactory arrangements for the review and approval by the Town's Control Architect at the developer's cost. *(Town of Caledon, Development, Urban Design)*
5) There are conflicting statements in the reports regarding servicing of the proposed single estate dwelling (Block 2). The Environmental Impact Study (page 18) describes the proposed block as being serviced by municipal water and the Functional Servicing and Stormwater Management Report (Section 2.2) describes this Block as being serviced by private water to avoid extending the watermain system under the creek. Please confirm the proposed servicing arrangements for this block will be private servicing; if not, please provide a justification for partial servicing, including a review of the PPS (2014) servicing policies. *(Town of Caledon, Development, Planning)*
6) There is population allocation for the proposed development. *(Town of Caledon, Policy)*

The Following Comments Must be Addressed Prior to Draft Approval:

7) The Region of Peel has comments that need to be addressed prior to draft plan approval, specifically the plan needs to be revised to include more detail and dimensions with respect to the widening of Airport Road and clarification of proposed future access to Block 3, Future Development (see attached).
8) Block 3 on the Draft Plan is labelled as Future Development. Please identify the intended use, i.e. added to an existing lot? *(Town of Caledon, Development, Engineering, Landscape & Planning)*
9) Please comment on the process for creating the single detached condominium units:
   a) If the units will be created through a series of part lot control applications following registration of the subdivision, then please confirm in the application for Plan of Condominium (covering letter).
   b) Is it the intent to create the lots through the subdivision process? If so, the Plan of Subdivision needs to be revised to show each lot as well as the common areas in a separate block. (*Town of Caledon, Development, Planning*)
10) Generally, the snow storage area should accommodate 10% of the total private road and visitor parking areas. Based on this, please confirm if the centre island provides sufficient capacity for snow storage and

label the snow storage location on both the Landscape Masterplan and the Site Plans. Section 4.1 of the Planning Justification Report may need to be updated as well. (*Town of Caledon, Development, Planning*)

11) The hammerhead turnaround facility at the end of the development must be a minimum of 15 metres in length with a minimum width of 6 metres and the entire fire access route shall be maintained year round, including clear of snow. The hammerhead facility cannot be used for storage of snow or other items (garbage/recycling bins). *(Town of Caledon, Fire & Emergency Services)*
12) Please confirm whether existing residents outside the proposed development will be granted access to the proposed new and existing pathways via the private road, sidewalk and trail connection within the developable (condominium) area. If so, the private sidewalks and trail connection must be placed within a separate block for the purpose of a trail easement. (*Town of Caledon, Planning Law & Development, Planning*)
13) The Conceptual Trail layout includes a proposed path leading to a viewing area.
    a) It is recommended that path continue along the south limits of the development (eastwardly) to create a looped system connecting to the existing Town owned Open Space block and walkways connecting to Marilyn Street and Oceans Pond Court. *(Town of Caledon, Parks & Recreation)*
    b) Please comment on if and how this viewing area will impact existing residential properties directly to the south. (*Town of Caledon, Development, Planning*)
14) Please submit an environmental constraints map showing each and every distinct Key Natural Heritage Feature (KNHF), Hydrologically Sensitive Feature (HSF) and their associated Minimum Vegetative Protection Zones (MVPZs) and confirm these features will be dedicated to the TRCA.

Site Plans (Town of Caledon, Development, Planning)

15) The legend does not match the drawing, for example the legend indicates a dashed line to represent a retaining wall whereas the drawing uses a hatched line to indicate the flood line. Please revise the legend to remove items not displayed on the overall site plan. *(Town of Caledon, Development, Planning)*
16) The Scales are incorrect (i.e. Overall Site Plan is not 1:500, Site Plan for Singles is 1:250, not 1:100).
17) Please clarify what is represented by the dashed line that loosely follows the property boundary on the Overall Site Plan (cuts through Viewing Area). *(Town of Caledon, Development, Planning)*
18) Please include and label the 30 metre setback requirements on the Overall Site Plan *(Town of Caledon, Development, Planning & Landscape)*
19) The open space amenity area is limited in size and further limited by parking spaces on most sides. Please identify the size of the amenity area and provide justification for its size and intended purpose (i.e. could it accommodate a play structure?) *(Town of Caledon, Development, Planning)*
20) What is the intended purpose/use of the open space area in the southern portion of the Developable Area for Single Detached Lots? *(Town of Caledon, Development, Planning)*
21) The entire driveway, including hammerhead for the single estate residential must be included within the developable area. *(Town of Caledon, Development, Planning & Landscape)*
22) Drawing No. 2 (Site Plan_Single Detached Units) needs to be revised as Lot 21 is missing from the table *(Town of Caledon, Development, Planning)*

Planning Justification Report ("PJR") (Town of Caledon, Development, Planning)

23) The PJR is unsigned. Please ensure a revised PJR is submitted that addresses the comments herein and provides a name, qualifications and signature of the author.
24) Section 5, Supporting Studies omits a number of completed studies, including urban design, archaeology, hydrogeology, and geotechnical. Notably, the urban design brief is referenced in Section 12 of the PJR. This should be moved to Section 5.
25) Section 6.1, Provincial Policy Statement, 2014 ("PPS") omits several sections, including 1.1.5, 1.4.3, 1.6.6.2, 2.1.7, 2.6. Please address.
26) The existing policy context encourages the restoration or improvement of natural features, where possible (PPS, ORMCP, TCOP). Staff believe there is an opportunity to enhance identified natural features on the property through new plantings in the buffer areas. Such enhancements are also encouraged to compensate for proposed encroachments into these features and their minimum buffers to accommodate access to the proposed developments (driveway to estate lot and private lane to cluster singles). This should be explored and discussed in both the PJR and Environmental Impact Study ("EIS").
27) Section 6.2, Growth Plan, does not provide a discussion with respect to Section 2.2.7 (designated greenfield areas) nor is the concept of complete communities addressed.
28) Section 6.4, Oak Ridges Moraine Conservation Plan, please note that Section 7.10 of the TCOP, the secondary plan for the ORMCP brought the TCOP into conformity with the ORMCP and provides the framework for ensuring municipal planning decisions conform to the ORMCP. The PJR should provide its review of the ORMCP within the context of Section 7.10 of the TCOP.
29) Section 6.4.1, 3rd paragraph (page 8) provides a discussion of the proposed access road. Please note the MNR evaluated the wetland as locally significant and references to this wetland should be "locally significant" instead of "MNR wetland". This section should be further revised as follows:
    a) References to stormwater management infrastructure should be removed to reflect the current proposal.
    b) Highlight findings of the EIS, including minor in scale (2%) and existing and future function of SWT2-5.
    c) Section 5.7.3.5.1 of the TCOP requires new essential infrastructure to demonstrate that all reasonable alternatives to locating outside the EPA have been explored and appropriate mitigation and restoration measures are provided. The EIS and the PJR should be revised provide this assessment, noting that restoration measures should include compensation plantings for the proposed encroachments.
    d) Further to the resident's meeting, please provide a discussion on whether access to Airport Road is a viable alternative.
30) Section 6.4.1:
    a) 4th paragraph (1st paragraph on page 9) describes the developable area as including the 30m buffer of the MVPZ – please clarify if the encroachment into the 30m MVPZ is limited to the private road.
    b) 5th and 6th paragraphs (page 9) discusses the reports undertaken as per the Major Development policies - Please include a conclusion as to the findings of the reports and whether these policies have been met.
    c) Last paragraph (page 10) – Please confirm calculation that both the net developable area and impervious cover comprise 3% of the total land area and if this includes the proposed single estate dwelling lot.
31) Section 6.4.2, last paragraph (page 11) – both the Draft Zoning By-law Amendment and Official Plan Amendment should propose an EPA zone/designation for the Natural Linkage Area.
32) Section 6.4.3:

a) 2nd paragraph (page 11) – the Site Plan for the proposed single estate dwelling indicates a ground floor area of 434.84 m^2, which is below the 500 m^2 threshold for considering a development to be major.
b) 3rd paragraph (page 11) – please expand on the relevant sections
c) 4th to 6th paragraphs (page 12) – appear to be providing justification for the findings in the EIS for woodlots to the south and southwest not being considered significant. If this is provided in the EIS, then a statement about which woodlots were found to be significant and which were not significant will suffice. These paragraphs do not discuss the woodlot to the north that will be traversed by the proposed driveway. The developable area for the single estate dwelling must include the driveway in its entirety (including hammerhead). The encroachment of the developable area (including driveway) into the woodlot should be compensated by additional new plantings elsewhere and discussed in this report.

33) Section 6.5 (TCOP)
a) 2nd paragraph omits the designation of the lands on Schedule P – ORMCP.
b) 3rd paragraph speaks to the draft Official Plan Amendment ("OPA"). Please see comments 76) to 88) herein and revise to incorporate all proposed changes to the OPA.

34) Section 6.5.1: Please enhance the discussion on whether there is a need to extend the road by:
a) Describing the features that would be impacted by a through road and how these features were identified (i.e. staking with TRCA, MNR)
b) Assessing whether the scale of the proposed development necessitates/warrants a municipal road? Has the need for a road been established in your submission?

35) Several sections of the TCOP were omitted from this review, including 7.7.4 (Community Design), 7.7.5 (Residential Policies), 7.7.12 (Open Space & Recreation), 7.7.15 (Transportation), 7.7.16 (Servicing) and 5.7 (Environmental Policy Area).

36) Section 7 (Proposed Zoning By-law Amendment) will need to be amended to reflect the zoning comments provided herein, see comments 58) to 75) below.

37) Sections 9 and 10 should be combined into one section.

38) Section 11 should be incorporated into the ORMCP review section and the following clarified:
a) There is reference to a Landform Conservation Plan being submitted; however, one cannot be located in the submission package.
b) There is reference to Azimuth providing an environmental analysis of the landform disruption; however, no analysis can be located within the EIS.

Landscape Master Plan Comments:

39) The Landscape Masterplan shall illustrate the planting within limits of developable area and private property. Planting within the Public Open Space blocks shall be addressed through the edge management and restoration/enhancement plan. *(Town of Caledon, Landscape)*

Tree Inventory and Preservation Plan and Report (Town of Caledon, Development, Landscape):

40) A Tree Inventory and Preservation Plan (and Report) remain outstanding. It should include an edge management plan illustrating areas of restoration and appropriate locations for transplanting of rare species as referenced in the updated EIS Report.

41) The EIS refers to TRCA's recommendations suggesting removal of hazard ash trees with confirmed infestation. The Tree Inventory and Preservation Plan should identify and inventory any trees, including Ash

with confirmed EAV, over 20cm DBH (Diameter at Breast Height) proposed to be impacted by the development, or those that present an imminent hazard for development of any new paths. Those trees should be noted for removal. Where agreed upon between the applicant and Town that three removal is acceptable , the applicant shall provide compensation for loss of native vegetation.

Design Brief Comments:

42) Section 1.2.2 describes access of the condominium development to both Airport Road and McKee Drive South. The Draft Plan of Subdivision does not propose any access to Airport Road and the Region's comments establish that no residential lots or blocks shall have direct access to Airport Road. Please revise. *(Town of Caledon, Development, Planning)*

43) The Design Brief does a good job describing the overall vision and principles for the proposed development. A final approved Design Brief, Architectural Design Guidelines document is required that satisfactorily addresses the following comments (*Town of Caledon, Development, Urban Design*):

a) Page 16, 3.2.1 Condominium Single Family Residences:

i) Introductory Paragraph: For clarity, change the second sentence of the introductory paragraph to say that the concept for this community relates to a good understanding of the market factors that will make this isolated development successful.

ii) Third Bullet: Show how the 90 degree garage orientation can be achieved on a corner lot in the subdivision.

iii) Sixth Bullet: Clarify by adding to the guideline how models will relate to grade. For instance, by utilizing a maximum of 3 steps leading from the existing grade in front of the porch onto the porch.

iv) Add a guideline addressing how the proposed 2 models with one alternative elevation each will be applied to ensure variety along the streetscape.

v) Add to the appropriate guideline a reference to Figure 3.2.1

b) Page 17, 3.2.2 Custom Estate Residential:

i) The design guidelines suggest that lower rooflines give a bungalow appearance to the house. Staff suggests based on the conceptual building drawings that a 1½ storey appearance at the front of the house is more accurate and recommend that the guideline be revised accordingly.

ii) Add design guidelines to address how it is intended that the building will fit into the existing landscape. What will you see from the surrounding properties? Confirm the number of storeys in the guidelines.

c) Page 20, Corner Lots/Lots Abutting Pedestrian Links and Open Space: Figures 3.3.1 and 3.3.2 do not appear to relate to the houses as proposed on the lots shown on the site plan. Please revise the figures to be consistent with the site plan and include the boulevard on the typical corner lot plan drawing for clarity.

d) Is it noted in the Design Brief has been submitted to demonstrate how the proposed development will meet the intent of the Caledon East Community Design and Architectural Guidelines (CDAGs); however the following clarification is needed:

i) The Design Brief does not address architectural control review and approval. The Design Brief needs to be revised to include a section on implementation or by referring to Section 6.0 (Review and Approval Procedures) of the CDAG's as applying to this development.

ii) The Design Brief does not provide the same detail of housing design as the CDAGs. The Design Brief needs to be revised to add further detail or by referring to Section 5.0 (Individual Home Architectural Guidelines) as applying to this development.

44) The Design Brief, Section 2.1.3.2 (Page 12) states that the proposed driveway to the single estate lot (Block 2) will be installed over the existing trail. The public use path shall be within Open Space Block 4 and the driveway within Residential Block 2 so that the public are not directed towards private property. *(Town of Caledon, Parks & Recreation)*

Revised Environmental Impact Study Comments (Town of Caledon, Development, Planning)

45) As per the TRCA comments attached, the EIS has not satisfactorily identified the full extent of all KNHFs/HSFs on the property. Figure 2, Environmental Constraints needs to be revised to clearly indicate the boundaries of each feature and their associate MVPZ. As well, an enhancement planting plan is required that clearly labels all areas of encroachment (i.e. hammerhead for single estate residence, loss of wetland for condominium access road) and areas of compensation for encroachments (i.e. additional reforestation). This planting plan will also show improvements within the MVPZs.
    a) An analysis of encroachments and appropriate compensation should be provided in the Impact Assessment (Section 7) of the EIS and revisions to Table 10, as needed.
46) Please confirm if environmental blocks 4, 5 and 6 will be dedicated to the TRCA. This should be discussed in the EIS. Presently, the only reference to public ownership appears to be in the response letter.
47) Section 3.5 speaks to the Landform Conservation policies of the ORMCP. Please see Section 7.10 of the TCOP, specifically 7.10.5.6.10. Please provide an analysis from an impact assessment perspective.
48) The EIS should address Section 7.7.6.1.2 of the TCOP by exploring the environmental implication of extending a road between McKee Drive South and McKee Drive North.
49) The EIS should address Section 5.7.3.5.1 of the TCOP, demonstrating that all reasonable alternatives to locating the access lane outside the EPA has been explored and appropriate mitigation and restoration measures (i.e. compensation plantings) are being recommended.

Functional Servicing & Stormwater Management Comments (Town of Caledon, Development, Engineering)

50) The size, slope, capacity, etc. of the existing Ditch Inlet Catch Basin (DCIB) needs to be investigated and confirmed as this infrastructure is not shown on the Town's record drawings.
51) The 100 year event is being captured; however, in the event of failure and/or a plugged DICB, the applicant needs to clearly identify in the FSR report all major overland flow routes and ensure that all proposed downstream receiving systems have the appropriate capacity to safely convey the noted major flows. All major overland flows must be accommodated within either a municipal right of way or a publicly owned block and demonstrate no impacts to existing homes.
52) Confirmation is needed that the proposed inlet system is capable of conveying the 100 year event into the superpipe.
53) Please confirm that all avenues to eliminate sump pumps have been explored, including whether it is possible to extend the superpipe further downstream to avoid the use of sump pumps or if the groundwater limits that option. Please confirm that groundwater infiltration will not affect any storage capacity within the superpipe.
54) Section 3.1 refers to Lots 20 to 26, please modify the lot numbers.
55) In Section 2.1.4 Quality Control, please clarify what is meant by 'equal to'.

56) It is noted the superpipe is proposed under the central open space area and conformation should be provided this will not conflict with any proposed landscaping/use of this space.

Grading Comments (Town of Caledon, Development, Engineering)

57) The proposed grading needs to meet the grading criteria established in the Development Standards. Specifically, we note concerns with respect to the following:
    a) Slope drainage crossing into the rear yard of Lot 14;
    b) Extreme grade change proposed within the rear yard of Lots 14 and 19;
    c) How will useable rear yard standard be met for Lots 7 – 14, 19 and 21 given location of proposed swale in close proximity to rear of home;
    d) Slopes of 3:1 are being proposed, which are not acceptable and does not meet the Town's minimum criteria for 4:1 slopes; and
    e) Slope drainage draining onto future road at hammerhead.

    To properly assess grading, Site Plan Drawing 3 should indicate all proposed/existing grades and retaining walls. Additional cross-sections perpendicular to new slope are required as well to determine the impact on the existing slope and proposed lots. See attached Drawing No. 3.

Detailed Comments to be Addressed Prior to Approval of the Zoning By-law

Town of Caledon, Development, Zoning comments:

58) Staff cannot confirm compliance with Section 3.43.3 (Minimum Distance Separation). An MDS calculation is required for the proposed lot outside of the settlement area (estate dwelling) and shall be submitted in accordance with the MDS Implementation Guidelines.
59) The zoning matrix illustrated on Drawing 1 Overall Site Plan is incomplete and should contain all zone standards.
60) The draft Zoning By-law has been submitted to amend Zoning By-law 87-250, as amended. This by-law is no longer in effect. All reference to Zoning By-law 87-250, as amended should be revised to reflect Zoning By-law 2006-50, as amended. The content and formatting of Zoning By-law 2006-50, as amended is significantly different than that of Zoning By-law 87-250. Please review the content and formatting of the draft by-law against Zoning By-law 2006-50, as amended and update the By-law accordingly. Staff has attached a template to be utilized for the submission of a revised draft Zoning By-law Amendment.
61) As the property is located within the Oak Ridges Moraine, all zones should have the "Oak Ridges Moraine (-ORM)" suffix.
62) The second paragraph of the recitals identifies "for residential and amenity purposes". Reference to "amenity purposes" should be removed and reference to other primary uses (i.e. open space) should be added.
63) Please remove reference to Number 3, 4 and 5 of the Zoning By-law.
64) Please update number 6 of the Zoning By-law to include reference to all zones.
65) Block 1 (Residential Condominium)
    a) Block 1 (Residential Condominium) is proposed to be zoned R-XX. The Zoning By-law does not contain a "R" zone. Staff are of the opinion that the lands should be zoned R1-XXX-ORM. A review has been completed based on this opinion, using the R1 zone standards.
    b) Block 1 (in its entirety) will meet the minimum lot area but will not meet the minimum lot frontage.

c) The draft Zoning By-law contains an amendment to Section 2 Definitions. Please review the definition of "Lot" within Zoning By-law 2006-50, as amended. Staff do not believe that a site specific definition is required. If one is determined to be required, an amendment to the Definitions Section of the By-law would not occur, but rather a site specific zone standard would be inserted in the R1-XXX-ORM zone.
d) A standard is required to identify that "For the purpose of this zone, a "Street" shall also include a *private road*".
e) Apartment Units, Secondary Suites and Senior Housing Units are not defined terms within the By-law. These terms should be deleted from the draft By-law or site specific definitions included in the By-law.
f) The clauses referencing that semi-detached dwellings and townhouse dwellings be subject to provisions of Section 6 of Zoning By-law 2006-50 is not necessary, provided that the draft By-law continues to identify that the proposed site specific clauses are for single detached dwellings only.
g) The By-law refers to a nil maximum lot coverage. The term used in the Zoning By-law is maximum building area. The R1 zone requires a maximum building area of 25%, which is being exceeded on the site plan. Staff are concerned with the unlimited building area proposed.
h) The By-law refers to a front yard setback of 2.5 m. The applicant is reminded that Section 4.24 of the Zoning By-law identifies circumstances for permitted encroachments. See comment 73) below.
i) Lots 15 and 21 on Drawing No. 3 Site Plan – Single Detached Lots, may not meet the minimum exterior side yard requirement contained within the Zoning By-law, being 6 m.
j) The applicant is reminded that two parking spaces (2.75 m x 6 m) are to be provided per lot. Staff request confirmation of the size of each parking space within the interior of the garage (clearance). In addition, the driveway should be a minimum length of 6 m to ensure that visitor parking is accommodated in the driveway. It appears that some lots may not be able to achieve this. Please dimension the width and length of each driveway. Current length dimensions are not between the closest point of the dwelling and the street.
k) Please review Section 5.2.15 of the Zoning By-law which discusses maximum driveway widths to ensure compliance with this provision.

66) Block 2 (Residential)
a) Block 2 (Residential) is proposed to be zoned RE.
b) Drawing No. 2 entitled Site Plan –Single Estate Lot is to be revised to clearly identify the limits of the block.
c) The drawing is not scalable.
d) The following deficiencies have been identified:
   i) Minimum Lot Area (0.8 ha required): 0.308 ha proposed
   ii) Minimum Lot Frontage (45 m required): 6 m proposed
   iii) Maximum Building Area (8% or 246.4 m2): 477.64 m2 proposed
   iv) Minimum Rear Yard Setback (15 m): 0.71 m proposed
   v) Minimum Driveway Setback (4.5 m): 0 m proposed
   vi) Minimum Parking Space Setback (10 m): Approximately 5 m proposed
   vii) Section 5.2.15 Driveway Width (Maximum 6 m at its widest point): More than 30 m proposed
e) The following potential deficiencies have been identified:
   i) Minimum Backyard Amenity Area
   ii) Minimum Landscape Area

67) Block 3 (Future Development)
    a) Block 3 (Future Development) is proposed to be zoned RE. This block will not meet the minimum lot area or minimum lot frontage of this zone.
    b) If the block is to remain as a separate conveyable parcel, staff are of the opinion that this block will be undevelopable/usable for residential development given the constraints of the orientation of the block and the zone standards which must be complied with.
    c) If the block is to be added to the adjacent lot to the north (3 Huntsmill Drive), it should be noted that building area is calculated as a percentage of the zone and not the lot. If an applicant were to construct within Block 3 (proposed RE zone), the maximum building area is 8% of the zoned area or 15.2 m2 (163.6 ft2).
68) Block 4, 5 and 6 (Open Space)
    a) Blocks 4, 5 and 6 (Open Space) are proposed to be zoned EPA-X, but there are no site specific provisions identified in the By-law.
    b) This zone should be revised to be EPA1-ORM. The "X" suffix should be removed as it will not be a site specific zone. Blocks dedicated to the Toronto and Region Conservation Authority are typically zoned EPA1-ORM. Please review the permitted uses identified within the Zoning By-law. The EPA1-ORM zone does not contain a minimum lot area or minimum lot frontage.
69) With your next submission please submit:
    a) A cover letter which explains how all comments have been addressed.
    b) A revised version of the draft Zoning By-law Amendment
    c) The draft plan of subdivision in both .dwg and .cad formats on a USB.

Town of Caledon, Legislative Services – Accessibility comments:

70) As per By-law 2015-058, accessible parking space #7 shall be 3.4 metres wide with a 1.5 metre wide access aisle on each side, including signage indicating "van accessible".
    a) It is preferred that the accessible parking space be in #6 so that the accessible parking space is not on a curve.
    b) Alternatively, space #7 shall have 1.5 metre access aisles on each side with a curb depression at the access point of the sidewalk.
    c) Hatched areas at the base of each parking area shall be included to clearly indicate the route of travel from/to each sidewalk.

Town of Caledon, Development – Planning comments:

71) All Key Natural Heritage Features and Hydrologically Sensitive Features and their Minimum Vegetative Protection Zones, to the satisfaction of the TRCA , are to be placed in an EPA1 Zone.
72) Please include standards pertaining to:
    Parking Requirements (minimum): Common visitor *parking area* (i.e. 0.25 per *dwelling unit*)
73) The Landscape Masterplan shows tree plantings along the private road. The following standards should be included in the Draft Zoning By-law Amendment:
    Yard, Front (minimum)
    i) From wall of attached *garage* 6m
    ii) From wall of *main building* 4.5m

Yard, Exterior Side (minimum)

i) From wall of attached *garage* 6m

ii) From all of *main building* 3m

Please note that permitted encroachments for decks and stairs is 2 metres, therefore a total depth of at least 2.5 metres will be available for tree plantings.

74) The Zoning By-law requires a minimum backyard amenity area of 56 m2 within the R1 Zone, please confirm whether this has been achieved.

75) Staff are concerned with the proposed zone standards. The development consists of single family dwellings (i.e. R1 Zone) but the proposed zone standards are more typical of recently constructed linked and semi-detached developments (i.e. R2-503). Staff encourage the applicant to review the zoning standards for recently constructed single detached dwellings in Caledon East (i.e. R1-502) and/or provide additional justification to support significantly reduced interior yard setbacks, frontage, landscaped area and building areas (coverage) for single detached dwellings in this location.

a) The proposed landscaping area minimum of 10% represents a significant departure from the R1 standards of the Zoning By-law that requires a minimum of 30%. Please revise to require additional landscaping area.

Detailed Comments to be Addressed Prior to Approval of the Official Plan Amendment:

The following comments are provided by: *Town of Caledon, Development – Planning*

76) The scope of the proposed OPA is currently limited to the proposed residential development area, which would result in the remainder of the site being designated Special Study Area A. The OPA (Details of the Amendment, Paragraph 2 and Schedule B) must apply to the entire Special Study Area A, including redesignating the remainder of the Special Study Area A to EPA. *(Planning & Policy)*

77) In addition, refinements to the Rural and EPA designations to accommodate the single estate dwelling developable area (including the entirety of the driveway) need to be incorporated into the text (Purpose of Amendment) and Schedule.

78) Relabel Schedule “B” to “Schedule A” and revise Legend to include EPA, and refinements to Rural and EPA.

79) Part A: The Purpose of the Amendment needs to be revised to reflect the updated proposal (single detached) as it still references cluster housing. As well, common element is misspelled.

80) Part A: Basis is missing a number of reports, including Planning Justification Report and the Design Brief.

81) Part B, 1a): Section 7.7.5.3.1 (Net Density) to permit a density of 35 units/hectare is not reflective of the proposal. Based on the site statistics provided on Drawing No. 3, Site Plan_Single Detached Lots, a site specific amendment to maximum density may not be required.

82) Part B, 1b): A site specific Section 7.7.5.3.2 is not required nor does it reflect the Overall Site Plan, which proposes single detached units only. Please note that apartments-in-house are permitted by Section 5.10.3.24.

83) Part B, 1d): A site specific amendment to Section 7.7.5.3.3 is not required as it does not apply to this proposal. This section applies to single detached units fronting onto a public road, whereas the single detached units proposed within the proposed designation front onto a private road.

84) Based on the comments above, no site specific sections should be required.

85) Part B, 2: Revise to include EPA designation

86) Add a new Part B, 3: Revise “Schedule A” to refine the Rural and EPA designations

87) Part B, 2: renumber to 4
88) For the By-law adopting the OPA, please revise the mayor signature line to “Allan Thompson, Mayor”
89) The compact form of the development does not warrant or support a road connection. *(Town of Caledon, Policy)*

Detailed Comments to be Addressed as a Condition of Draft Approval:

90) Cash in lieu of parking dedication will be required and is payable by the applicant prior to issuance of any building permits. In order to determine the amount of CIL payment, the applicant shall have a market value appraisal completed for the subject property. The appraisal must be prepared by an AACI certified appraiser. The Town will review the appraisal and if there is a concern about the value, then a peer review of the report may be required, at the cost of the applicant. An appraisal only valid for six months so the applicant should ensure the appraisal is done at an appropriate time in the development process so as not to delay the issuance of a building permit or cause an updated appraisal to be done. CIL payment shall be based on 5% of the approved appraised value of the developable area of the subject lands. *(Town of Caledon, Parks & Recreation & Landscape)*

91) Detailed Landscape Plans shall be submitted to the Town for review and approval.
    a) Detailed Plans shall be dominated by native species. Invasive species will not be accepted.
    b) Interpretative signage will be required. *(Town of Caledon, Landscape)*

92) The Owner will be required to design, secure and construct the trails, as well as any necessary bridges. *(Town of Caledon, Landscape)*

93) The Owner is required to fence the limits of property lines between public and private ownership. The fencing shall be located on private residential property. *(Town of Caledon, Landscape)*

94) The community mailbox area shall be well lit via a light standard and a curb depression from the sidewalk to the mail box landing area. *(Town of Caledon, Accessibility)*

95) Lighting on exterior routes of travel shall be:
    a) Evenly distributed over the accessible route.
    b) Positioned not to cause any obstruction, protrusions or tripping hazards.
    c) Illuminated to at least 100 lx. *(Town of Caledon, Accessibility)*

96) A hard surface sidewalk of 1.5 metres shall be installed. Curb depressions from sidewalk to asphalt for each sidewalk section shall be provided. Hatched markings shall be provided at all crossings. *(Town of Caledon, Accessibility)*

97) At least one of the models available for purchase should reflect universal flex design housing concepts. The Town will require as a condition of approval that, prior to offering units for sale and in a place readily available to the public, the owner will display information regarding universal design options that may be available for purchases within the development prior to offering units for sale. *(Town of Caledon, Accessibility)*

98) The single residential block (Block 2) has a proposed driveway from McKee Drive North. There is an existing 0.3 metre reserve at the end of McKee Drive North. This reserve will have to be lifted and named as a public highway to provide frontage. (*Town of Caledon, Public Works, Engineering Services*)

99) The proposed road access for the development will remain private and as a result the applicant or subsequent condominium corporation will be responsible for all future maintenance and reconstruction costs. The final design of the road access will be reviewed and approved at the detail design stage. *(Town of Caledon, Development, Engineering)*

100) All works within the McKee Drive right of way will require reinstatement to its original condition or better, all to the satisfaction of the Town. A road occupancy permit will be required from Public Works Department for any works required in the Town's right of ways. *(Town of Caledon, Development, Engineering)*

101) The Phase One Environmental Site Assessment conducted by Terraprobe on July 15, 2013 concludes that a Record of Site Condition can be filed based on the Phase One ESA alone. The report notes that the surficial debris should be removed from the property. This is will be required as a condition of draft approval and prior to any grading on the site. (*Town of Caledon, Public Works, Engineering Services*)

102) Prior to any grading or site disturbance, the Owner shall submit an Erosion and Sediment Control Plan including a topsoil drainage plan detailing the location, size, side slopes, stabilization methods and time period, for approval by the Town. Topsoil drainage shall be limited to the amount required for final grading, with excess remove from site. (*Town of Caledon, Public Works, Engineering Services*)

103) The report prepared by Terraprobe Inc. is dated October 24, 2014; however, boreholes were drilled in January, 2001. As a condition of draft approval, additional boreholes will need to be drilled to confirm water levels and update the report accordingly. The report will need to include the approved design. *(Town of Caledon, Development, Engineering)*

104) Planning Law requests the following conditions be included as part of the draft approved conditions. These conditions are to be cleared by Planning Law prior to final approval and registration of the M-Plan:

a) The Owner shall enter into a Town of Caledon Subdivision Agreement or any other necessary agreements executed by the Owner, the Town and the Region or any other appropriate authority prior to any development within the plan to satisfy all financial, legal and engineering matters including land dedications, grading, easements, fencing, landscaping, provision of roads, stormwater management facilities, installation of municipal services, securities, parkland and cash contributions, and other matters of the Town and the Region respecting the development of these lands in accordance with the latest standards, including the payment of Town and Regional development charges in accordance with their applicable Development Charges By-laws.

b) Prior to the preparation of any agreement, the Owner shall pay to the Town all fees set out in the Fees By-law for the preparation and registration of the agreement and all documents necessary to give effect to the approval of the Plan of Subdivision.

c) Prior to registration, the Owner shall provide evidence of compliance with all of the conditions of draft approval, at its sole cost and expense.
d) That a clause be included in the subdivision agreement stating that the subdivision agreement is made for business purposes and is a 'business agreement' as defined under the Limitations Act, 2002, as amended. Further, no limitation periods set out in the Limitations Act, 2002 other than the ultimate limitation period set out in section 15 of the Act shall apply to this subdivision agreement and the obligations imposed therein.
e) That a clause be included in the subdivision agreement stating that the Owner shall convey/dedicate, gratuitously and free and clear of all encumbrances, any required parks, open space, trails, road or highway widenings, 0.3m (1 ft.) reserves, walkways, daylight triangles, buffer blocks, stormwater management facilities, maintenance blocks and utility or drainage easements or any other easements as required to the satisfaction of the Town, the Region or other authority.
f) That a clause be included in the subdivision agreement stating that the Owner shall provide the Town with postponements of any outstanding encumbrances in favour of the Subdivision Agreement.
g) That a clause be included in the subdivision agreement stating that prior to assumption, the Owner shall provide evidence of compliance with all terms and conditions of the subdivision agreement and any other applicable agreement, at its sole cost and expense.

The following agencies have comments that are attached for your review:

- Region of Peel – February 3, 2016 (Comments to be Addressed and Conditions of Draft Approval)
- TRCA – January 13, 2016 (Comments to be Addressed)
- Canada Post – November 20, 2015 (Conditions of Draft Approval)
- Dufferin-Peel Catholic District School Board – October 28, 2015 (Conditions of Draft Approval)
- Peel District School Board – October 23, 2015 (Conditions of Draft Approval)
- Hydro One – October 22, 2015 (Information)

The following agencies have no comments or concerns:

- Ontario Provincial Police – November 23, 2015
- Town of Caledon, Policy and Sustainability, Heritage – January 7, 2016

Comments from the following remain outstanding and will be forwarded to you once received:

- Bell Canada

Conclusion

As per the comments provided herein, the Proposed Official Plan Amendment, Zoning By-law Amendment and Draft Plan of Subdivision applications cannot be supported as presently proposed and a resubmission is required to address the comments contained in this letter.

Staff would be happy to arrange a meeting with you and your team of consultants to discuss the comments and revisions required in the next submission. Staff would appreciate receiving an agenda to assist in the discussion at least 3 days prior to the meeting.

A Resubmission Checklist will be forwarded to you under separate cover. Please note that as the applicant it is your responsibility to sort the packages as outlined in the Resubmission Checklist. Staff will not accept or review incomplete submission or submissions received via email. The resubmission is to include a cover letter explaining how all comments have been addressed and the applicable fee (recirculation fee).

Once the next submission has been received, staff will work with you to schedule a Public Meeting.

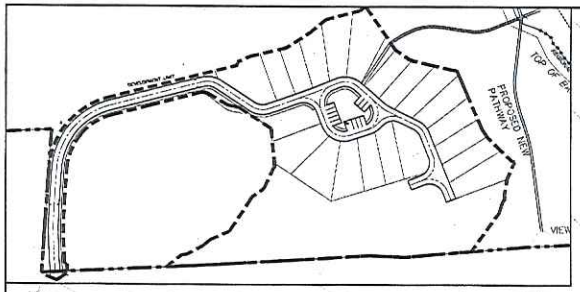
If you have any questions please do not hesitate to contact me anytime at 905-584-2272 ext. 4223 or mary.nordstrom@caledon.ca

Sincerely,

Mary Nordstrom, MCIP RPP
Senior Development Planner
Development Approval and Planning Policy
TOWN OF CALEDON

Enclosure

c: Casey Blakely, Manager of Development – East
Mark Atkinson, Senior Development Engineering Coordinator
Nick Pirzas, Landscape Architect
Lucius Maitre, Manager, Engineering Services
Sally Drummond, Heritage Resource Officer
Paula Strachan, Senior Planner/Urban Design
Dave Pelayo, Chief Fire Prevention Officer
Bill Klingenberg, Chief Building Official
Andrew Hordylan, Zoning Administrator
Brian Baird, Manager of Parks
Anant Patel & Quentin Hanchard, TRCA
Wayne Koethe, Region of Peel



OVERALL DEVELOPMENT AREA

SITE STATISTICS-Caledon	
Lot Area	188,453.14 m2 (18.85 ha) (46.58 acre)
Developable area	23,343.83 m2 (2.33 ha) (5.77 acre)
Paved sidewalk	454.02 m2
Road	3,586.09 m2 (485 Linear length)
Open Space	8,492.20 m2

LOT No.	LOT AREA (m2)	FRONTAGE (m)	Max GFA (m2)	Max Coverage (m2)
Block 11				
1	680.76	15.26	314.52	264.42
2	375.15	12.22	294.86	171.72
3	386.39	12.20	284.66	173.94
4	471.68	12.51	294.86	225.49
5	609.29	12.38	409.84	325.72
6	728.63	12.52	347.32	386.10
7	375.13	12.20	294.86	171.75
8	438.28	12.30	294.86	208.57
9	526.85	12.90	332.96	269.77
10	473.09	12.34	354.46	235.62
11	431.34	12.56	294.86	204.06
12	399.74	12.46	324.54	188.86
13	436.70	12.41	329.56	218.33
14	585.34	12.12	364.74	303.00
15	572.67	15.52	294.86	297.46
16	444.87	13.08	316.38	223.40
17	436.81	12.17	355.17	214.35
18	561.96	12.48	312.02	284.27
19	668.64	11.68	314.30	342.49
20	606.71	12.16	312.12	311.82

OPEN SPACE

OPEN SPACE

Proposed X-section locations

N38°32'40"E 104.58

22.31 N44°31'40"E 19.05 N36°20'00"E

N37°15'35"E 60.06

DEPOSITED PLAN 43R -- 123

RECEIVED
SEP 0 9 2019

VA3 DESIGN

2031818 ONT. INC.

PT. W1/2 LOT 22 CON. 1

CALEDON ONTARIO

SITE PLAN_SINGLE DETACHED LOT

3

Toronto and Region Conservation
for The Living City

January 13, 2016 CFN 48895.03, 55045, X-Ref CFN 50167

BY EMAIL AND MAIL: Brandon.ward@caledon.ca

Mr. Brandon Ward, Senior Development Planner
Development Approval and Planning Policy Department
Town of Caledon
6311 Old Church Road
Caledon, ON
L7C 1J6

Dear Mr. Ward:

Re: Draft Plan of Subdivision Application – 21T-06006C
Official Plan & Zoning By-law Amendment Applications - POPA 06-08, RZ 06-18
0 Airport Road, Caledon East
Part Lot 22, Concession 1 (Albion)
Town of Caledon
20312818 Ontario Limited (Agent: Weston Consulting Group Incorporated)

Further to our letter dated March 10, 2014, this letter will acknowledge receipt of the revised Official Plan and Zoning By-law Amendment applications and the complete submission for the above noted Draft Plan of Subdivision (received on October 14, 2015). Thank you for the opportunity to review and provide comments on the above noted circulation. As per the "Living City Policies for Planning and Development within the Watersheds of the Toronto and Region Conservation Authority" (LCP), staff provides the following comments as part of TRCA's commenting role under the *Planning Act*; the Authority's delegated responsibility of representing the provincial interest on natural hazards encompassed by Section 3.1 of the Provincial Policy Statement (PPS, 2014); TRCA's Regulatory Authority under the *Conservation Authorities Act* and Ontario Regulation 166/06, *Development, Interference with Wetlands, and Alterations to Shorelines and Watercourses* (as amended); and our Memoranda of Understanding (MOU) with the Region of Peel and Town of Caledon, wherein we provide technical environmental advice.

Purpose of the Application

It is our understand that the purpose of the above noted Draft Plan of Subdivision application is to develop a residential Draft Plan of Subdivision consisting of 21 single detached dwelling units within a 2.3 ha (5.7 acre) development area. The dwelling units will be developed through a future Condominium Plan which will include visitor parking and amenity areas and a private road connection to McKee Drive South. Also, the Draft Plan of Subdivision includes a Block for a proposed estate residential dwelling located on the northeast corner of the property, as well as various Blocks for the 14.1 ha (35 acre) of Open Space lands outside of the proposed development areas of the site.

It is our understanding that the purpose of the above noted Official Plan and Zoning By-law Amendment (OPA/ZBLA) applications is to re-designate a portion of the property from "Special Study Area A" to a

"site-specific Medium Density Residential" designation and rezone portions of the property from "Estate Residential" (RE) to "site-specific Residential Zone" (R-XX) and "Environmental Protection Area" (EPA-X) zones.

There are wetlands on the site that are part of the Locally Significant Caledon East Wetland Complex (LSW), as well as several other Key Natural Heritage Features (KNHFs) and Hydrologically Sensitive Features (HSFs). These include significant wetlands; significant portions of habitat of endangered species; fish habitat; significant valleylands; significant woodlands; significant wildlife; permanent and intermittent streams; and, seepage areas and springs.

Recommendation

With the recent submission, TRCA staff is of the opinion that a number of the previous issues identified in our previous correspondence have not been addressed. The applicant has not established the viability of this subdivision as of yet, and has not established that the proposed plan is consistent with the Oak Ridges Moraine Conservation Plan (ORMCP) and PPS. Fundamental feasibility questions remain with respect to the ability of the proposed subdivision, in its current configuration, to demonstrate conformity with Town of Caledon, TRCA and Provincial standards. Further, it has not been established that all KNHFs/HSFs, and associated MVPZ are being adequately protected, in accordance with the ORMCP. TRCA staff continues to be of the opinion that the technical studies, which have been requested by the Authority, and have not been completed to date, are necessary to determine whether the proposed subdivision is viable, as currently proposed. In order for TRCA staff to be in position to make a recommendation on the subject applications, staff's pcomments attached in Appendix I, need to be address to TRCA staff's satisfaction.

The following points summarize TRCA staff's key comments:

- KNHFs/HSFs and MVPZ have not been fully assessed and/or accurately delineated, including significant woodlands, significant valleylands and permanent and intermittent streams;
- An accurate consolidated constraints map is required;
- Revisions may be required to the draft plan to protect the KNHFs/HSFs and MVPZ portions of the subject lands;
- Revisions are required to the implementing OPA/ZBLA to place the KNHFs/HSFs and MVPZ portions of the subject lands in separate EPA blocks to be conveyed into public ownership;
- A flood study is required to ensure the residential block (Block 2) at the eastern portion of the site and its access road are located outside of the Regulatory Floodplain;
- More information is required to confirm habitat connectivity along with an analysis of the ecological impacts related to the disconnect in hydrology for both the road location and stormwater management strategy for the residential condominium block (Block 1);
- Additional hydrogeology and geotechnical investigations are required confirming the feasibility of stormwater infiltration;
- An enhancement planting strategy must be submitted to provide for improved ecological conditions within the MVPZ and compensation for the proposed road access encroachment;
- Written confirmation from Ministry of Natural Resources & Forestry (MNRF) staff is required to confirm the potential for Species at Risk (SAR) and permit and/or reforestation requirements under the *Endangered Species Act* (ESA).

To assist staff with reviewing the next submission, please ensure the applicant, including each technical discipline, provides a cover letter detailing how the entire previous and additional comments have been addressed. The previous submissions only provided a cover letter and response for certain technical disciplines. We are available to meet with the Town and the applicant in a collaborative effort to resolve our outstanding comments.

Applicable TRCA Policies and Regulations

Ontario Regulation 166/06

TRCA regulates development within and adjacent to watercourses and valley corridors, and wetlands. As such, a significant portion of the subject lands are located within the Regulated Area of the Humber River Watershed and are subject to Ontario Regulation 166/06 (as amended), and TRCA's LCP. The proposed development is located within the Regulated Area and a TRCA permit will be required prior to any works commencing within the Regulated Area of the Humber River Watershed. Should the project advance to the permitting stage, staff will advise on TRCA's permitting review and fee requirements.

Oak Ridges Moraine

The subject property is located on the Oak Ridges Moraine (ORM) and is subject to the provisions of the ORMCP. It appears that the site is partially located within the Settlement Area, Countryside Area and Natural Linkage Area land use designations of the ORMCP.

It is recognized that the Town of Caledon is the designated approval authority under the *Oak Ridges Moraine Conservation Act*, and the TRCA is the technical advisor to the Town of Caledon with respect to the ORMCP and assists the municipality to ensure that this development proposal conforms to the provisions of the ORMCP.

Fees

By copy of this letter, please advise the applicant that the TRCA has implemented a fee schedule for our planning and development review services. Please note that this application is subject to a $45,935.00 review fee (Draft Plan of Subdivision – Major – 5 ha to 25 ha) and a $15,040.00 clearance fee. Please advise the applicant to submit payment to TRCA as soon as possible.

Conclusion

We thank you for the opportunity to review the circulation and provide our comments as per our commenting and regulatory role. Further, we trust these comments are of assistance. TRCA will continue to work closely with Town staff, the applicant and their consultants to ensure that TRCA's expectations for meeting the attached comments are met.

I trust these comments are of assistance. Should you have any further questions or comments, do not hesitate to contact the undersigned.

Yours truly,

Anam Patel
Acting Planner II
Planning and Development
Ext. 5618

/ap

Encl.: APPENDIX I: TRCA Comments on the October 14, 2015 Submission

cc: Ryan Guetter, Weston Consulting: rguetter@westonconsulting.com
Brennan Paul, Senior Planning Ecologist, TRCA
Jairo Moreilli, Water Resources Analyst, TRCA
Don Ford, Senior Manager, Hydrogeology, TRCA

Appendix I – TRCA Comments on the October 14, 2015 Submission

The following materials were received by the TRCA:

- Cover Letters, prepared by Weston Consulting, dated September 3, 2015 and September 11, 2015;
- 1st Submission Comment Response Table, prepared by Weston Consulting, last updated September, 2015;
- Draft Official Plan and Zoning By-law Amendments, prepared by Weston Consulting, received September 11, 2015;
- Draft Plan of Subdivision (Dwg. D1), prepared by Weston Consulting, dated October 23, 2015;
- Planning Justification Report, prepared by Weston Consulting, dated September 2015;
- Revised Environmental Impact Study, prepared by Azimuth Environmental Consulting Inc., dated July 2015;
- Functional Servicing and Stormwater Management Report, prepared by Masongsong Associates Engineering Limited, dated June 2015;
- Engineering Comment Response Letter, prepared by Masongsong Associates Engineering Limited, dated June 30, 2015;
- Conceptual Trail Plan, prepared by Weston Consulting, dated August 6, 2015;
- Landscape Master Plan, prepared by Strybos Barron King, dated October 2014;
- Overall Site Plan (Dwg. 1), prepared by VA3 Design Inc., dated September 2013 and last revised July 7, 2015;
- Site Plan – Estate Lot (Dwg. 2), prepared by VA3 Design Inc., dated September 2013 and last revised July 7, 2015;
- Site Plan – Single Detached Lots (Dwg. 3), prepared by VA3 Design Inc., dated September 2013 and last revised July 7, 2015;
- (Colour) Overall Site Plan (Dwg. 4), prepared by VA3 Design Inc., dated September 2013 and last revised July 7, 2015;
- Floor Plans and Elevations (Dwg. 5), prepared by VA3 Design Inc., dated September 2013 and last revised July 7, 2015;
- Floor Plans – Estate Lot (Dwg. 6), prepared by VA3 Design Inc., dated September 2013 and last revised July 7, 2015;
- Elevations – Estate Lot (Dwg. 7), prepared by VA3 Design Inc., dated September 2013 and last revised July 7, 2015.

To assist staff with reviewing the next submission, please ensure the applicant provides a cover letter detailing how our previous and additional comments have been addressed. As noted, we are available to meet with the Town and the applicant in a collaborative effort to resolve our outstanding comments.

No.	TRCA Comments – dated March 10, 2014	Applicant's Response to TRCA Comments	TRCA Comments – October 15, 2015 Submission	TRCA Commenting Role
	Natural Heritage Evaluation (NHE) / Planning Ecology			
	Previous Comments			
1.	A plan illustrating the various Key Natural Heritage Features (KNHFs) and Hydrologically Sensitive Features (HSFs) and Minimum Vegetation Protection Zones (MVPZs) in relation to the proposed development has not been submitted. Although the Natural Heritage Evaluation (NHE)/Environmental Impact Study (EIS) appear to identify the features, MVPZs and development on separate plans, a consolidated plan should be submitted illustrating all layers. As noted below, the extent of the significant valleylands has not been verified.	This has been confirmed and is provided in the revised EIS dated July 2015.	A number of KNHFs and HSFs have been identified on the site, including significant wetlands; significant portions of habitat and endangered species; fish habitat; significant valleylands; significant woodlands; significant wildlife; permanent and intermittent streams; and seepage areas and springs. Based on our review of the revised EIS dated July 2015, it continues to remain unclear if all KNHFs/HSFs and associated MVPZs are being adequately protected, in accordance with the ORMCP. For assistance, we provide comments below on specific KNHFs and HSFs that remain an issue: Permanent and Intermittent Stream As noted in our previous letter, another tributary of the Humber River Watershed branches off of Boyce's Creek to the east. Figure 2 – Environmental Constraints, Figure 3 – Environmental Features, and Figure 5 – Consolidated Plan of the revised EIS dated July 2015 do not identify this watercourse feature. Based on ORMCP Technical Paper #12 – Hydrological Evaluations for HSFs, a permanent and/or intermittent stream is considered to be a HSF. Please identify this HSF on all applicable plans.	• Regulatory Authority • Delegated Provincial Interest • Public Commenting Body (Planning) • Service Provider

No.	TRCA Comments – dated March 10, 2014	Applicant's Response to TRCA Comments	TRCA Comments – October 15, 2015 Submission	TRCA Commenting Role
			Significant Valleylands In addition to the above, and as noted in our previous letter, significant valleylands are considered to be a KNHF. Based on Section 4.5: Significant Valleylands of the OMRCP Technical Paper #1 – Identification of KNHFs, a significant valleyland must consider the floodplain. The applicant's response notes that this has been confirmed and is provided in the revised EIS dated July 2015. Based on our review, the significant valleylands on this site have not been identified. To assist in identifying the significant valleylands on site, TRCA has estimated floodplain mapping and modeling for Boyce's Creek. As noted previously, given that TRCA's estimated floodplain mapping and modeling for this reach of Boyce's Creek is relatively conservative, TRCA staff has no concerns with the applicant utilizing the estimated floodline for Boyce's Creek. Please note that the Regulatory Floodplain is only illustrated on the draft plan and is not illustrated on the figures included in the EIS. Also, it is unclear how this floodline was delineated on the draft plan. Specifically, there are significant gaps in the floodline on the west side of Boyce's Creek. In order to obtain the applicable estimated HEC-RAS cross-sections and floodline elevations necessary to accurately delineate the Regulatory Floodline for Boyce's Creek, please contact Jairo Morelli, TRCA Water Resources Analyst, at jmorelli@trca.on.ca or 416-661-6600 ext. 5351. Also, another tributary of the Humber River Watershed braches off of Boyce's Creek to the east. This tributary conveys flows from 86.3 ha of upstream drainage areas. As such, we previously advised the applicant to submit a flood study to ensure the boundary of the significant valleyland is accurately identified, including the MVPZ. As part of this resubmission, the applicant has noted that a Floodplain Management Report has been submitted for review. As noted below, this report has not been submitted to TRCA. Please provide this report to TRCA for our review. This study is required in order to verify the boundary of the significant valleylands for the tributary that branches off of Boyce's Creek to the east. Once the boundary of the significant valleylands has been verified, please identify the KNHF and its MVPZ on revised plans (i.e., Figure 2, 3 and 5). Significant Woodlands Based on our review of the draft plan, Block 3 has been identified for future development. It is unclear if this is a viable development block once the KNHFs and MVPZ	

No.	TRCA Comments – dated March 10, 2014	Applicant's Response to TRCA Comments	TRCA Comments – October 15, 2015 Submission	TRCA Commenting Role
			have been accurately identified and delineated. Specifically, significant woodlands are identified in the nearby proximity of Block 3. The environmental constraint mapping included in the EIS has identified the KNHF but not the MVPZ. In addition, On Figure 2 – Environmental Constraints of the revised EIS, an "other Woodland Feature" has been identified off-site adjacent to the proposed future development block near Huntsmill Drive. It appears this feature was not assessed as part of the Ecological Land Classification (ELC) System as illustrated on Figure 3 – Environmental Feature. Also, the EIS does not appear to provide an analysis of the off-site woodland. The EIS should be revised to include an assessment of this off-site feature. It should be clear whether or not this feature qualifies as a Significant Woodland as per ORMCP Technical Paper #7 – Identification and Protection of Significant Woodlands and whether or not this would impact the proposed draft plan. Please clarify whether or not the off-site woodland qualifies as a KNHF and revise the draft plan accordingly. Consolidated Plan Based on the revised EIS dated July 2015, five (5) KNHFs are present on site, including significant woodlands; fish habitat; significant habitat for endangered species (butternut); significant valleylands; and significant wildlife habitat. Also, three (3) HSFs are present on site, including seepages and springs; permanent and intermittent streams; and wetlands. Based on our review of Figure 5 – Consolidated Plan, dated November 2014, prepared by Azimuth Environmental Consulting Incorporated, found in the updated EIS, a number of KNHFs/HSFs are illustrating including the significant woodlands; permanent and intermittent streams; and wetlands. As noted above, the boundary of the significant valleylands is not illustrated. Also, the full extent of significant woodlands and permanent and intermittent streams have not been verified and identified through this submission. On the additional technical analysis has been finalized, please submit a consolidated plan illustrating the full extent of the following KNHFs./HSFs: • Significant woodland; • Significant valleylands; • Permanent and intermittent streams;	

No.	TRCA Comments – dated March 10, 2014	Applicant's Response to TRCA Comments	TRCA Comments – October 15, 2015 Submission	TRCA Commenting Role
			• Wetlands; • Furthest inland KNHF/HSF limit; • MVPZ and recommended EPA boundary.	
2.	Based on Section 4.5: Significant Valleylands of the ORMCP Technical Paper #1 – Identification of KNHFs, a significant valleyland must also consider the floodplain. As noted in our letter dated January 10, 2014, it is unclear how the Regulatory Floodplain elevation was verified or plotted. Currently, TRCA has estimated floodplain mapping and modeling for this reach of Boyce's Creek. However, the floodplain mapping and modeling has not been fully engineered to meet TRCA's standards. Given that TRCA's estimated floodplain mapping and modeling is relatively conservative, and given the fact the edge of the vegetation dripline that is contiguous to the valley feature is significantly further inland than the estimated Regulatory Floodplain, TRCA staff has no concerns with the delineation of the floodplain for Boyce's Creek. However, another tributary of the Humber River Watershed branches off of Boyce's Creek to the east. This tributary conveys flows from 86.3 ha of upstream drainage areas. At present time, TRCA has not completed a flood study for this tributary. As such, please advise the applicant to submit a flood study to ensure the boundary of the significant valleylands is accurately identified, including the MVPZ. We also require the flood study to ensure the proposed development and access road for the proposed development is located outside of the Regulatory Floodplain. Please note that the estimated HEC-RAS model cross-sections and depths for Boyce's Creek were provided to the consultant on February 12, 2013 via email. Should the applicant have any questions or comments completing the flood study, please contact Dilnesaw Chekol, TRCA Water Resources Analyst, at dchekol@trca.on.ca or 416-661-6600 ext. 5746.	A Floodplain Management Report has been submitted for review.	As noted above, this report has not been submitted to TRCA. Please provide this report to TRCA for our review. As noted in Comment #1, this study is required in order to verify the boundary of the significant valleylands. In addition, we also require the flood study to ensure the proposed development and access road for the proposed single detached dwelling (Block 2) is located outside of the Regulatory Floodplain.	• Regulatory Authority • Delegated Authority • Public Commenting Body (Planning) • Service Provider

No.	TRCA Comments – dated March 10, 2014	Applicant's Response to TRCA Comments	TRCA Comments – October 15, 2015 Submission	TRCA Commenting Role
3.	The proposed road off McKee Drive and the stormwater management pond will require the removal of a portion of the SWT2-5 (Red-oiser Dogwood Mineral Thicket Swamp Type) Vegetation Community. The direct impacts are related not only to a road access but also to the creation of the stormwater management pond block. The portion of the wetland community that is not directly impacted will likely see a significant indirect impact as a result of the alteration. It is unlikely that the wetland will persist under post-development conditions. While it accounts for a 0.23 ha loss of wetland community, the NHE/EIS does not appear to account for the indirect impacts to the SWT2-5 community along with strategies to mitigate those impacts. The discussion should include an analysis of the possible benefits of relocating the stormwater management pond outside of the wetland community.	Given the proposed placement of the access road and the current function of the SWT2-5 community, we do not foresee any indirect impacts to the natural heritage functions of this community. Section 7.1.1 (Page 20) of the updated EIS (July 2015).	While the stormwater management pond block has been removed from the most recent submission, the access road continues to provide a barrier that isolates a portion of the wetland. While the existing function maybe limited, the road would seem to represent a further limitation when considering the future function of the wetland and possibility that the function of the wetland could improve in the future or be enhanced. A further concern is that the road could impair the hydrologic connection of the isolated parcel of the larger parcel to the north having a detrimental impact on the larger wetland community beyond the development limits. Please advise the applicant to provide further discussion related to opportunities to maintain habitat connectivity through road design techniques (such as ensuring road embankments are at an appropriate slope to accommodate potential wildlife movement), along with an analysis of the ecological impacts of the change and disconnect in hydrology related to both the road location and the stormwater management strategy. As noted previously, strategies to mitigate these impacts should be provided. For example, as compensation for encroachment, restoration could be provided in addition to the planting for the MVPZ.	• Regulatory Authority • Public Commenting Body (Planning) • Service Provider
4.	The discussion related to the impacts to the Ministry of Natural Resources & Forestry (MNRF) evaluated Locally Significant Wetland (LSW) area should also include an analysis of the habitat function of the specific area that will be isolated by the road and how that function will be maintained post-development. This should include an analysis of accessibility for species that may be using this portion of the feature.	Based on the current site plan, a portion of the SWT2-5 unit will be isolated from the remainder of the wetland feature. The isolation of a portion of the feature will not impede the overall form or function of the wetland. Accessibility to this feature post-development is not an issue since it does not provide amphibian breeding habitat (i.e., no amphibian movement through area) nor does it provide high quality habitat for a large number of species but rather general habitat for more urban adept species. Section 7.1.1 (Page 19 to 20) of updated EIS (July 2015).	See above.	• Regulatory Authority • Public Commenting Body (Planning) • Service Provider
5.	The NHE/EIS does not provide a discussion related to the impacts to the adjacent wetland communities as a result of the change in drainage patterns. While a bypass pipe has been proposed in the above noted Functional Servicing Report (FSR), it is unclear to what extent it will mimic pre-development conditions. Please provide an analysis of how drainage patterns and water quality will affect nearby wetland communities.	See submitted revised FSR.	Section 3.1 of the FSR indicates that 223.28 L/s will be directed to the wetland feature to maintain it. Please clarify what the appropriate quantity of water discharging to the wetland community should be based on existing conditions and how the stormwater management strategy will provide that. This should be done in consultation with the ecological consultant to ensure that the data can be used to establish thresholds which the ecological communities could tolerate and that the solutions are feasible for maintaining or improving ecological functions. A storm sewer bypass is proposed for maintaining flows to the isolated wetland. However, it does not appear to discharge directly to the wetland. Additionally, it is unclear how the storm sewer bypass maintains flows to the portion of the wetland north of the road. Please clarify how the	• Regulatory Authority • Public Commenting Body (Planning) • Service Provider

No.	TRCA Comments – dated March 10, 2014	Applicant's Response to TRCA Comments	TRCA Comments – October 15, 2015 Submission	TRCA Commenting Role
			design and discharge location for the storm sewer bypass was determined while considering the ecological requirements. It is noted on Page 9 of the above noted Planning Justification Report that a Feature Based Water Balance Analysis is currently being prepared by Terraprobe Limited for the MNRF wetland feature that is planned to be traversed by the proposed access road for the proposed development. Please submit the Feature Based Water Balance Analysis for our review and comments.	
6.	A figure was provided outlining a trail alignment for the subject property. No supporting documentation has been provided for this trail. Please provide an analysis of the impacts of the trail along with a strategy for mitigating those impacts. Among other points to be discussed, the analysis should also include a discussion related to appropriate watercourse crossing and the need for the various trail sections when weighed against the ecological impacts of these sections. For example, two (2) trail heads occur approximately 100 m apart near the townhouse proposal, a public trail connection leads to the proposed private residence, and a trail head is proposed at Airport Road, which is not a pedestrian friendly road and does not appear to have a location for parking. A discussion should also be included outlining how this trail fits into the broader Town of Caledon trail strategy.	The proposed pathways will connect to the existing established trail system and will be utilized primarily for foot traffic. Impacts of proposed system are minimal. Regarding the watercourse crossing, the integrity of the existing footbridge should be inspected to ensure the safe use. Any upgrades and/or replacement (if required) should not have a footprint below the high water level (i.e., clear span) and should follow the standard mitigation measures outlined in the report. Section 7.1.2 (Page 21 to 22) of the updated EIS (July 2015).	A site visit was conducted on September 8, 2014 to refine the trail alignment. This comment has been addressed. However, Section 7.1.2 of the EIS indicates that the fisheries construction timing window is June 1 to September 30. The timing window should be July 1 to September 15, unless otherwise specified by MNRF.	• Regulatory Authority • Public Commenting Body (Planning) • Service Provider
7.	As part of satisfying TRCA's future conditions of draft approval, it is our expectation that an extensive enhancement planting plan is developed for the MVPZ and natural features to achieve an ecological net gain for this reach of the Humber River Watershed.	An Enhancement Planting Plan should be prepared that will include native plantings within the MVPZ and natural features. Section 8.2 (Page 24) of the updated EIS (July 2015).	Please note that the submitted Landscape Master Plan does not identify enhancement plantings within the MVPZ. It is expected that the recommendations to provide enhancement plantings outlined in Section 8.2 of the EIS will be implemented at the detailed design stage.	• Regulatory Authority • Public Commenting Body (Planning) • Service Provider
	Additional Comments			
8.	Written confirmation from MNRF staff is required to confirm the potential for Species at Risk (SAR) and permit and/or reforestation requirements under the Endangered Species Act (ESA)			• Public Commenting Body (Planning) • Service Provider

No.	TRCA Comments – dated March 10, 2014	Applicant's Response to TRCA Comments	TRCA Comments – October 15, 2015 Submission	TRCA Commenting Role
	Planning and Development			
	Previous Comments			
9.	The implementing Official Plan Amendment (OPA) must recognize the KNHFs, HSFs, and MVPZ in a suitable designation which has the effect of prohibiting development and structural encroachment, and ensuring the long-term preservation of the lands in perpetuity. Based on Schedule "B" of the draft OPA, it appears the lands to be designated are not reflective of the environmental and hazard constraints identified in the supporting technical studies. Specifically, the significant woodland; wetlands; significant valleylands; and permanent and intermittent streams including their recommended MVPZ as prescribed by the ORMCP have not been accurately reflected in the Schedule. Please ensure the environmental and hazard constraints are designated in an EPA designation and resubmit a revised Schedule "B".	A revised Schedule "B" has been submitted.	As noted previously, based on the Official Plan, the western portion of the subject property is currently designated "Special Study Area A" as illustrated on Schedule D, while the eastern portion of the site is designated "Environmental Policy Area" (EPA) on Schedule A and "Natural Linkage Area" and "Countryside Area" on Schedule P (ORMCP). We understand the intent of the amendment is to re-designate the area of the property designated "Special Study Area A" to a site specific "Medium Density Residential" designation. As noted previously, the implementing OPA must recognize the KNHFs/HSFs and their MVPZ in a suitable designation which has the effect of prohibiting development and structural encroachment, and ensure the long-term preservation of the lands in perpetuity. Based on Schedule "B" of the draft OPA, it appears that this comment has not been addressed. Although the response notes that the Schedule "B" has been revised, it does not appear that all environmental and hazard constraints are proposed to be designated EPA (i.e., areas will remain designated Special Study Area A). Please advise the applicant to submit a revised Schedule "B' to ensure that the KNHFs/HSFs and MVPZ are designated in an EPA designation.	• Public Commenting Body (Planning) • Service Provider
10.	The lands to be rezoned "Hazard Land" on Schedule "B" of the draft Zoning By-law Amendment (ZBLA), do not accurately reflect the environmental and hazard constraints identified in the supporting technical studies and/or additional work to be completed. Please revise Schedule "B" of the ZBLA to accurately reflect the environmental and hazard constraints as determined by the supporting technical studies.	A revised Schedule "B" has been submitted.	Based on the review of the revised draft ZBLA and Schedule "B", we understand the proposed amendment will rezone the subject property from Estate Residential (RE) to a site specific Residential Zone (R-XX). In addition, the proposed amendment will rezone the subject property from RE to the Environmental Protection Area (EPA-X). As noted previously, the implementing zoning by-law must recognize the KNHFs/HSFs and their MVPZ in an EPA1 zone, which has the effect of prohibiting development and structural encroachment. Although the response notes that the Schedule "B" has been revised, it does not appear that all natural features and their associated buffers are proposed to be zoned EPA1. Please advise the applicant to submit a revised Schedule "B" to ensure that the KNHFs/HSFs and MVPZ are zoned EPA1.	• Public Commenting Body (Planning) • Service Provider
11.	TRCA encourages the transfer of valley corridors and other natural features into public ownership to reduce and/or eliminate the risk to life and property and to foster local and regional environmental linkages. Once the boundaries of the KNHFs/HSFs and MVPZ have been	This is reflected in the Draft Plan of Subdivision.	It is unclear where this is reflected in the Draft Plan of Subdivision. Nevertheless, once the boundaries of the KNHFs/HSFs and MVPZ have been verified, as part of satisfying TRCA's future conditions of draft approval, it is our expectation that the valley lands will be placed into	• Public Commenting Body (Planning) • Resource Management Agency • Service Provider

No.	TRCA Comments – dated March 10, 2014	Applicant's Response to TRCA Comments	TRCA Comments – October 15, 2015 Submission	TRCA Commenting Role
	verified, as part of satisfying TRCA's future conditions of draft approval, it is our expectation that the valley lands will be placed into public ownership.		public ownership.	
	Additional Comments			
12.	As noted above, a flood study is required to determine the viability of Block 2, and an additional environmental assessment and accurate mapping is required to determine the viability of Block 3. Based on our review of the proposed implementing zoning by-law, these blocks are proposed to be zoned RE. Once the boundaries of the KNHFs and MVPZ have been verified, these blocks may require revisions and/or be zoned EPA1.			• Public Commenting Body (Planning) • Service Provider
	Stormwater Management			
	Previous Comments			
13.	Please note that TRCA staff defers the review of the quantity control requirements for the subject property to Town staff. Based on the proposed drainage plan, the site will tie into an existing municipal storm sewer along McKee Drive. As such, municipal requirements will dictate the quantity control criteria applicable to the site. It should be noted that in the event the current plan changes, the site is required to drain to the existing watercourse, then the Humber River Unit Release rates will be the quantity control requirements for the site. If required, please contact Nick Lorrain, TRCA Senior Project Manager, at nlorrain@trca.on.ca or 416-661-6600 x. 5278 to obtain the appropriate Unit Release Rates.	Acknowledged.	Addressed.	• Regulatory Authority • Delegated Authority • Public Commenting Body (Planning) • Resource Management Agency • Service Provider
14.	TRCA staff has concern with the water quality control measures proposed for the site. Specifically, the Ministry of Environment (MOE) 2003 Stormwater Management Planning and Design Manual notes that wet ponds need contributing drainage areas greater than 5 ha to support a permanent pool. The 5 ha limit is approximately double the drainage area contributing to the proposed stormwater management pond (2.5 ha identified in the report).	Review of Section 3.3 Water Balance/Erosion Control within the FSR for low impact design features and Section 3.4 Stormwater Quality for Stormceptor (Oil and Grit) details.	We understand the stormwater management pond originally proposed has now been removed. Please see Comment #15.	• Regulatory Authority • Public Commenting Body (Planning) • Resource Management Agency • Service Provider
15.	Given the concerns noted above, please examine the opportunity to implement additional water quality control measures, such as Low Impact Development (LID), oil-grit separators (OGS), etc. with the intentions of removing the permanent pool and implementing a dry pond to provide quantity control.	Review of Section 3.3 Water Balance/Erosion Control within the FSR for low impact design features.	A STC 1000 OGS unit is proposed to provide quality control for the 21 detached dwellings. TRCA staff note that this unit has been sized assuming the site is comprised of sand only (AK-11). However, the Hydrogeological Evaluation, dated October 24, 2013, prepared by Terraprobe Incorporated indicates soils for this property consist of silty sands. As the infiltration rate for sandy soils may be up to ten times greater than that of the underlying soils, the proposed OGS may be undersized. Please advise the applicant to confirm the existing soils characteristics or adjust the OGS calculations accordingly.	• Regulatory Authority • Public Commenting Body (Planning) • Resource Management Agency • Service Provider
16.	Please note that as per Section 4.2: Erosion Control Criteria (Page 18) of TRCA's Stormwater Management Criteria document, the applicable erosion control requirement for this site is to retain a rainfall depth of 5mm	Review of Section 3.3 Water Balance/Erosion Control within the FSR for low impact design features.	Staff note an initial abstraction of 1mm was deducted from the 5mm, which is the minimum retention target set out by the Authority. It should be noted, the 5mm retention requirement should be above the initial abstractions as	• Regulatory Authority • Delegated Authority • Public Commenting Body (Planning)

No.	TRCA Comments – dated March 10, 2014	Applicant's Response to TRCA Comments	TRCA Comments – October 15, 2015 Submission	TRCA Commenting Role
	on-site. The retention target can be achieved through infiltration, evapotranspiration, or rain water re-use. Please note the required level of erosion control in the FSR and provide measures to address the criteria. Please note that the 5mm retention target may be independent of the global water balance target, depending on the results from the hydrogeological assessments.		outlined in Section 4.3 of TRCA's Stormwater Management Criteria. Please adjust the calculations and provide details (cross-section) of the proposed infiltration trench. Please confirm the water table elevation to ensure the seasonably high water level is at least 1 m below the invert of the proposed infiltration facility.	• Resource Management Agency • Service Provider
17.	In addition to the above, the FSR needs to speak to the results from the Hydrogeological Evaluation, dated October 24, 2013, prepared by Terraprobe Incorporated and outline measures required to achieve the overall water balance criteria (i.e., the component of the water balance which addresses recharge). The report notes that the site will include provisions to achieve the 5mm retention target, but given the hydrogeological conditions, specific guidance is required to inform the design of LIDs to ensure that both the erosion control and overall water balance targets are achieved.	As requested, further details of the hydrogeological results are included in Section 3.1 Development Constraints of the FSR. Detailed calculations for low impact design measures have been provided in Section 3.3 Water Balance/Erosion Control. Please note that by the PSW there is a shallow groundwater table and therefore LID proposal for the driveway entrance is a surface porous paver system and up on the hillside where the townhouse buildings will be situated there is no groundwater table issue and therefore based on LID infiltration granular trench calculations for this feature can be used and easily constructed for the development.	The FSR addresses the 5mm retention target. However, results from the hydrogeological assessments and measures required to achieve the overall water balance criteria (i.e., the component which addresses recharge) have not been discussed. Please provide results from the hydrogeological assessment and a discussion on how the water recharge for the proposed development will be maintained under post-development conditions. Please note that the 5mm retention target may be independent of the global water balance target, depending on the hydrogeological characteristics of the site. Also, there is no discussion of the strong upward gradients found in this area. It does not appear that any monitoring wells were installed. TRCA staff is still concerned that infiltration measures will be ineffective in this hydrogeologic setting.	• Regulatory Authority • Delegated Authority • Public Commenting Body (Planning) • Resource Management Agency • Service Provider
18.	Please revise the FSR to include more detail related to the proposed LID strategy. Specifically, the FSR should provide enough detail to ensure that the recommended measures are appropriate for the intended use, are located in appropriate areas, and include preliminary sizes. Please consult TRCA's LID Stormwater Management Planning and Design Guide for more information related to the design requirements for LID measures.	Review of Section 3.3 Water Balance/Erosion Control within the Functional Servicing and Stormwater Management Report for low impact design features.	Addressed.	• Regulatory Authority • Public Commenting Body (Planning) • Service Provider
	Hydrogeology			
	Previous Comments			
19.	TRCA has been working in this area with staff and consultants from the Region of Peel regarding a long-standing issue with flowing wells. Based on this work, the groundwater discharge to Boyce's Creek noted by the consultants is believed to be from the confined aquifer system and not local recharge.	Acknowledged.	Addressed.	• Regulatory Authority • Public Commenting Body (Planning) • Service Provider
20.	There are known strong upward groundwater flow gradients in this area that were not considered in the assessment of aquifer vulnerability under the ORMCP. Based on these gradients, the municipal aquifer is not considered to be vulnerable in this location. Also, extreme caution is warranted for the construction of any new water	Acknowledged.	The TRCA concern about upward groundwater flow is "acknowledged" in the comment matrix, but is not considered in the supporting documentation.	• Regulatory Authority • Public Commenting Body (Planning) • Service Provider

No.	TRCA Comments – dated March 10, 2014	Applicant's Response to TRCA Comments	TRCA Comments – October 15, 2015 Submission	TRCA Commenting Role
	well in this area. The risk of flowing well conditions with positive heads in the order of 5 to 10 m above grade is high. TRCA staff is willing to meet with the consultants to discuss this issue if required.			
21.	Given the strong upward gradients, TRCA staff caution against most groundwater infiltration measures, with the exception of extra topsoil depth, and discharge of roof runoff to pervious areas. Other LID options such as rainwater harvesting should therefore be considered.	Please note that by the PSW there is a groundwater table and therefore LID proposal for the driveway entrance is a surface porous paver system and up on the hillside where the townhouse buildings will be situated there is no groundwater table issue and therefore based on LID infiltration granular trench calculations this feature can be used and easily constructed for the development.	As noted above, infiltration measures may not be effective on this property. As such, other LID strategies should be considered.	• Regulatory Authority • Public Commenting Body (Planning) • Service Provider
22.	The applicant should prepare mapping that illustrates the development in relation to the wellhead protection areas (scored for vulnerability) for Caledon East Municipal West #2, #3, and #4. TRCA and Region of Peel GIS staff has GIS layers with this information that can be provided to the consultants.	Revised mapping has been created and is provided as part of this resubmission for review.	Addressed.	• Regulatory Authority • Public Commenting Body (Planning) • Service Provider
	Erosion and Sediment Controls			
	Previous Comments			
23.	As part of satisfying TRCA's future conditions of draft approval, please ensure that the detailed design submission includes a detailed erosion and sediment control plan. The erosion and sediment control plan should be based on the design guidance and recommendations as provided in TRCA's Erosion and Sediment Control Guideline for Urban Construction (dated December 2006).	A detailed erosion and sediment control plan will be submitted as part of the Site Plan Approval application process.	Addressed. We look forward to reviewing the detailed erosion and sediment control plan as part of the detailed design submission.	• Regulatory Authority • Public Commenting Body (Planning) • Resource Management Agency Service Provider

AZIMUTH ENVIRONMENTAL CONSULTING, INC.
Environmental Assessments & Approvals

May 23, 2017 AEC 06-011

Lexis-bayview Developments
255 Duncan Mill Road
Suite 202
North York, ON
M3B 3H9

Attention: Warren Li, President

Re: **Response to Agency Comments**
West Part Half Lot 22, Concession 1
Town of Caledon, Region of Peel

Dear Mr. Li:

Azimuth Environmental Consulting Inc. (Azimuth) staff has received comments regarding the Revised Environmental Impact Study (EIS) (October 2013, Revised July 2015) that has been submitted in support of the proposed developments at the abovementioned location within the Town of Caledon. Comments were received from:

- The Town of Caledon (February 22, 2016); and
- Toronto and Region Conservation Authority (January 13, 2016).

The intention of this letter is to provide responses to the comments present in the abovementioned letter as it relates to the EIS.

For your convenience, the agency's original comments were included in this letter in *italics*, followed by Azimuth's response to each one of them.

TOWN OF CALEDON COMMENTS

Comment #5: There are conflicting statements in the reports regarding servicing of the proposed single estate dwelling (Block 2). The Environmental Impact Study (page 18) describes the proposed block as being serviced by municipal water and the Functional Servicing and Stormwater Management Report (Section 2.2) describes this Block as

being serviced by private water to avoid extending the watermain system under the creek. Please confirm the proposed servicing arrangements for this block will be private servicing; if not, please provide a justification for partial servicing, including a review of the PPS (2014) servicing policies. (Town of Caledon, Development, Planning).

The residence will be privately serviced – well and septic system.

Comment #13a: The Conceptual Trail layout includes a proposed path leading to a viewing area.
a) It is recommended that path continue along the south limits of the development (eastwardly) to create a looped system connecting to the existing Town owned Open Space block and walkways connecting to Marilyn Street and Oceans Pond Court. (Town of Caledon, Parks & Recreation).

It our understanding that the Town of Caledon recommends constructing a section of trail from the proposed viewing area along the southern property boundary to connect to existing trail/pathway located in the southeast corner of the property to form a looped trail system. Establishment of this trail linkage would require opening up of a linear corridor through woodland on the property identified as Significant and would require construction of a crossing over Boyce's Creek where none currently exists. This is contrary to our recommendation that "within the woodlot, only the established trails be utilized as a part of the trail system". Therefore, establishing a looping trail system as proposed is not desirable from an environmental perspective as it would involve creation of new trail within areas of the property deemed environmentally sensitive owing to presence of Significant Woodlands, Valleylands and a Hydologically Sensitive Feature (i.e., Boyce's Creek)." Furthermore, within the Significant Woodland, several Butternut trees have been identified (Azimuth Figure 5). Butternut is designated as Endangered according to Ontario's Endangered Species Act (ESA). Should the Town wish to pursue a connecting path within this area, assessment of the Butternuts may be required and the Ministry of Natural Resources and Forestry (MNRF) should be consulted during the design of the pathway to ensure that there is no harm to any of the identified Butternut individuals.

Comment #14: Please submit an environmental constraints map showing each and every distinct Key Natural Heritage Feature (KNHF), Hydrologically Sensitive Feature (HSF) and their associated Minimum Vegetative Protection Zones (MVPZs) and confirm these features will be dedicated to the TRCA.

The updated Figure 5: Consolidated Plan depicts the KNHF's and HSF's identified on site. All KNHF, HSF and MVPZ located outside of the proposed development will be dedicated to the TRCA.

Comment #26: The existing policy context encourages the restoration or improvement of natural features, where possible (PPS, ORMCP, TCOP). Staff believe there is an opportunity to enhance identified natural features on the property through new plantings in the buffer areas. Such enhancements are also encouraged to compensate for proposed encroachments into these features and their minimum buffers to accommodate access to the proposed developments (driveway to estate lot and private lane to cluster singles). This should be explored and discussed in both the PJR and Environmental Impact Study ("EIS").

In order to compensate for the proposed minor encroachments into identified KNHF/HSF and their associated MVPZ, compensation in the form of an Enhancement Planting Plan is required. The detailed Enhancement Planting Plan including details of planting techniques, timing, species composition and maintenance will be prepared at detail design stage. It is proposed that a compensation ratio of 2:1 for encroachment into the KNHF/HSF and that a compensation ratio of 1:1 is provided for encroachment into the MVPZ. Based on the current plan, there will be removal of approximately 0.04ha of Significant Woodland, 0.15ha of Significant Wetland and 0.21ha of MVPZ. Based on the recommended compensation ratio, it is proposed that 0.59 hectares (ha) is planted within areas of the property generally void of tree/shrub cover as depicted on Figure 6. Please note that the proposed compensation areas are for all of the proposed encroachments into the KNHF/HSF and their associated MVPZ related to the entire development proposal (not just for the wetland feature). The proposed enhancement plantings will increase the overall tree/shrub cover on the property while providing a connection between KNHF/HSF both on and off-site.

Comment #29c: c) Section 5.7.3.5.1 of the TCOP requires new essential infrastructure to demonstrate that all reasonable alternatives to locating outside the EPA have been explored and appropriate mitigation and restoration measures are provided. The EIS and the PJR should be revised provide this assessment, noting that restoration measures should include compensation plantings for the proposed encroachments.

A number of conceptual development plans have been prepared for the property. The plan included as a part of this submission represents a concept that minimizes impact to KNHFs and HSFs. Given the distribution of significant natural heritage features on and adjacent to the property it was not possible to avoid direct impact to all KNHF's/HSFs

and/or their MVPZs. It is our understanding that the TRCA, who regulates activities having the potential to interfere with wetlands – recognizes that the avoidance of wetland impacts is unavoidable. Therefore, the plan involves minor encroachment into the proposed EPA. The area of wetland directly impacted amounts to 0.15ha out of a total of 6.7ha of wetland habitat on the property (i.e., 98% wetland on property retained) and 16.22ha of the Caledon East Wetland Complex overall (<1% of total area of wetland complex impacted). Compensation planting as described above proposed to offset unavoidable impacts to KNHFs/HSFs.

Comment #32c: c) 4th to 6th paragraphs (page 12[Note: Of Planning Justification Report]) – appear to be providing justification for the findings in the EIS for woodlots to the south and southwest not being considered significant. If this is provided in the EIS, then a statement about which woodlots were found to be significant and which were not significant will suffice. These paragraphs do not discuss the woodlot to the north that will be traversed by the proposed driveway. The developable area for the single estate dwelling must include the driveway in its entirety (including hammerhead). The encroachment of the developable area (including driveway) into the woodlot should be compensated by additional new plantings elsewhere and discussed in this report.

Azimuth's Figure 5 identifies the Significant Woodland present on the property. The on-site woodland features were delineated with TRCA in 2008. The features were subsequently surveyed and have been incorporated into Azimuth's figures. Air photo interpretation was utilized to identify off-site Significant Woodland. Based on our assessment there are three Significant Woodland Features present on the property including the large woodlot associated with Boyce's Creek, the woodlot located in the southwest portion of the property that abuts Airport Road and the smaller third woodlot located, in part, within the southern portion of the property. This feature extends off-site to the south/south-east. The woodlot located off-site and to the east of the property adjacent to Huntsmill Drive would also be considered to be Significant.

The proponent wishes to construct a 6m wide gravel driveway from the existing Road (McKee Drive) to the proposed single family residence. Provision of this access to the proposed single-family dwelling requires encroachment into the Significant Woodland. Avoidance of this impact is unavoidable given the alignment of connecting residential roads. The creation of the driveway will result in the loss of approximately 0.04 hectares (ha) of woodland and encroach approximately 0.05ha into the MVPZ. Tree/shrub plantings are proposed as compensation for the loss and encroachment into these areas for a total of 0.13ha to compensate for the 0.04ha loss of woodland and 0.05ha loss of MVPZ. Proposed compensation areas are depicted on Figure 6.

Encroachment into the MVPZ of the southernmost woodlot is proposed as a part of the Condominium Development (Figure 5). Encroachment into the MVPZ of the southern woodland is approximately 0.04ha in size. A total of 0.04ha Tree/shrub plantings (1:1 ratio) are proposed as compensation for the encroachment into this area. Proposed compensation areas are depicted on Figure 6.

Comment #34a: Section 6.5.1: Please enhance the discussion on whether there is a need to extend the road by:

a) Describing the features that would be impacted by a through road and how these features were identified (i.e. staking with TRCA, MNR).

The proposed development concept does not propose to create a connecting road between McKee Drive at the south to Huntsmill Drive to the north. From an ecological perspective, there are a number of intervening KNHF / HSF that would be impacted from a through road including:

1. Significant Wetland : Caledon East Wetland Complex (Locally Significant) [KNHF/HSF] was delineated and staked on the property with the MNRF and the TRCA on September 30, 2008. The feature was subsequently surveyed and incorporated into Azimuth's Figure 2.
2. Significant Woodland (KNHF) was delineated and staked on the property with the TRCA on July 15, 2008. The feature was subsequently surveyed and incorporated into Azimuth's Figure 2.

Significant encroachment into these features and their associated MVPZ would be required in order to facilitate the development of a through road.

Comment 38b: b) There is reference to Azimuth providing an environmental analysis of the landform disruption; however, no analysis can be located within the EIS.

Section 3.5 of Azimuth's EIS report highlights the policy within the Oak Ridges Moraine Conservation Plan (ORMCP) as it relates to Landform Conservation Area 2 (Azimuth 2013 with 2015 updates). Terraprobe Inc. has provided an assessment of Landform Conservation Features within their 2013 Hydrogeologic Evaluation Update. Based on Terraprobe's assessment, there are no significant landform features such as kames, kettles or ridges situated on the site. Boyce's Creek and the associated Significant Valleyland traverses through the property and is depicted on Figure 5. Table 10 (appended) is a Comprehensive Impact Assessment that has been updated to include an impact assessment of all identified KNHF/HSF. From an ecological perspective, there will be no impacts to the Significant Valleyland feature since all development will be located at

least 30m away. Proposed development is located >30m away from Boyce's Creek. Based on the current development concept, approximately 1.94ha is proposed for development. The property is approximately 18.85ha in size. The proposed development area represents approximately 10.3% of the site. Therefore, the net developable area of the site that is disturbed is not more than 50% of the total area of the site. Based on the above information, the net developable area of the site that has impervious surfaces is less than the 20% threshold as set out within the ORMCP.

Comment # 45: As per the TRCA comments attached, the EIS has not satisfactorily identified the full extent of all KNHFs/HSFs on the property. Figure 2, Environmental Constraints needs to be revised to clearly indicate the boundaries of each feature and their associate MVPZ. As well, an enhancement planting plan is required that clearly labels all areas of encroachment (i.e. hammerhead for single estate residence, loss of wetland for condominium access road) and areas of compensation for encroachments (i.e. additional reforestation). This planting plan will also show improvements within the MVPZs.
An analysis of encroachments and appropriate compensation should be provided in the Impact Assessment (Section 7) of the EIS and revisions to Table 10, as needed.

Azimuth's Figures (2-5) have been updated to clearly identify all KNHFs/HSFs on the property. Proposed Enhancement Planting Areas have been proposed and are depicted on Figure 6. A detailed Enhancement Planting Plan can be prepared at detailed design stage.

Please refer to response to Comment #26 above for information relating to the proposed compensation enhancement areas.

An impact assessment as it relates to the encroachment into the Significant Wetland feature by the proposed Condominium Development is discussed within Section 7.1.1 of Azimuth's 2015 updated report. Encroachment into the MVPZ associated with the Significant Wetland will also be required in order to facilitate the construction of the proposed access road from McKee Drive into the Condominium Development. Similar to the wetland habitat at this location, the cultural community (CUM1-1) of the MVPZ does not provide a buffer to nor provide any significant wildlife habitat function.

In relation to this southern woodland, the current development concept is located entirely outside of the feature itself. Slight encroachment into the MVPZ is required based on this current concept. At its closest point, development is located approximately 22m from the Significant Woodland. The total area of encroachment into the MVPZ is approximately 0.03ha. On the property, a 30m MVPZ will remain around the majority of the southern

Significant Woodland feature with an excess of 30m around most of the feature. There were no Significant Wildlife Habitat functions associated with this feature nor were there any species of concern identified within the woodland (i.e. ORM or TRCA rare species). Therefore, a MVPZ of 22m will continue to protect the form and function of the Significant Woodland and the root zones of the trees within the feature itself will continue to be protected. As indicated above, mitigation in the form of planting is proposed for the proposed encroachment into the MVPZ. Additional mitigation, such as fencing could be a possible mitigation strategy to prevent access and residential encroachment into the MVPZ.

An impact assessment as it relates to the encroachment into the Significant Woodland Feature located in the northwest is discussed within Section 7.1.3 of Azimuth's 2015 updated report. Encroachment into the MVPZ associated with the Significant Woodland will also be required in order to facilitate the construction of the proposed access driveway off of McKee Drive North and to construct the proposed 'hammerhead'. The MVPZ at this location is void of tree cover as a result there are no anticipated impact to the Significant Woodland.

Table 10 has been updated and is appended to this response.

Comment #46: Please confirm if environmental blocks 4, 5 and 6 will be dedicated to the TRCA. This should be discussed in the EIS. Presently, the only reference to public ownership appears to be in the response letter.

These areas are referred to as “Open Space” on the Draft Plan and they will be officially designated as Environmental Protection Area through rezoning application.

Comment #47: Section 3.5 speaks to the Landform Conservation policies of the ORMCP. Please see Section 7.10 of the TCOP, specifically 7.10.5.6.10. Please provide an analysis from an impact assessment perspective.

Please refer to response above (38b).

Comment #48: The EIS should address Section 7.7.6.1.2 of the TCOP by exploring the environmental implication of extending a road between McKee Drive South and McKee Drive North.

The environmental implications should the option of a road be considered from McKee Drive South to McKee Drive North will be briefly described below. This assessment

does not represent a comprehensive Impact Assessment but a brief overview of potential impacts should McKee Drive be extended. The extension of McKee Drive would result in the removal of a portion of MNRF Evaluated Wetland (HSF) at several locations within the feature, removal of Significant Woodland (KNHF), Significant Valleyland (KNHF), would require crossing over Boyce's Creek (HSF) and would, in part, be constructed within floodplain. Butternut, an Endangered Species, was identified within the northern portion of the property in proximity to the tributary of Boyce's Creek. Depending on the precise alignment, a through road has the potential to impact Butternut (END). Appropriate assessments and approvals as per MNRF protocol would be required prior to any site alteration or development within 25m of the Butternut (END). It would also include encroachment into the associated MVPZ of the identified KNHFs and HSFs. The creation of a through road has the potential to reduce the overall size of the woodland should the gap created by the road be equal to or greater than 20m, create a forest edge and potentially reduce the amount of overall forest cover. In regards to construction of the proposed road crossing over Boyces Creek, mitigation measures and construction staging/dewatering plans will need to be developed and a Department of Fisheries and Oceans (DFO) Self Assessment and/or DFO Request for Review submission would be required. Any in-water works will need to follow the appropriate DFO in-water timing window.

Comment #49: The EIS should address Section 5.7.3.5.1 of the TCOP, demonstrating that all reasonable alternatives to locating the access lane outside the EPA has been explored and appropriate mitigation and restoration measures (i.e. compensation plantings) are being recommended.

Given the Environmental Constraints of the property, there is limited opportunity for development. Potential development areas are identified on Figure 5. Given the configuration of the property, in order to access these identified potentially developable areas, encroachment into a portion of the identified KNHF/HSF and their associated MVPZ is required (Figure 5). Compensation, in the form of planting is proposed and is recommended. Proposed Enhancement Areas have been identified within Figure 6.

TRCA COMMENTS

1a: A number of KNHFs and HSFs have been identified on the site, including significant wetlands; significant portions of habitat and endangered species; fish habitat; significant valleylands; significant woodlands; significant wildlife; permanent and intermittent streams; and seepage areas and springs. Based on our review of the revised EIS dated July 2015, it continues to remain unclear if all KNHFs/HSFs and associated MVPZs are

being adequately protected, in accordance with the ORMCP. For assistance, we provide comments below on specific KNHFs and HSFs that remain an issue:

Permanent and Intermittent Stream
As noted in our previous letter, another tributary of the Humber River Watershed branches off of Boyce's Creek to the east. Figure 2 - Environmental Constraints, Figure 3 - Environmental Features, and Figure 5 - Consolidated Plan of the revised EIS dated July 2015 do not identify this watercourse feature. Based on ORMCP Technical Paper #12 - Hydrological Evaluations for HSFs, a permanent and/or intermittent stream is considered to be a HSF. Please identify this HSF on all applicable plans.

Figures 2-5 have been updated to identify all KNHF/HSF and their MVPZ.

As per TRCA's request, Azimuth's mapping has been updated to include this tributary.

Comment 1b: Significant Vallevlands
In addition to the above, and as noted in our previous letter, significant valleylands are considered to be a KNHF. Based on Section 4.5: Significant Valleylands of the OMRCP Technical Paper #1 - Identification of KNHFs, a significant valleyland must consider the floodplain. The applicant's response notes that this has been confirmed and is provided in the revised EIS dated July 2015. Based on our review, the significant valleylands on this site have not been identified.

To assist in identifying the significant valleylands on site, TRCA has estimated floodplain mapping and modeling for Boyce's Creek. As noted previously, given that TRCA's estimated floodplain mapping and modeling for this reach of Boyce's Creek is relatively conservative, TRCA staff has no concerns with the applicant utilizing the estimated floodline for Boyce's Creek. Please note that the Regulatory Floodplain is only illustrated on the draft plan and is not illustrated on the figures included in the EIS. Also, it is unclear how this floodline was delineated on the draft plan. Specifically, there are significant gaps in the floodline on the west side of Boyce's Creek. In order to obtain the applicable estimated HEC-RAS cross-sections and floodline elevations necessary to accurately delineate the Regulatory Floodline for Boyce's Creek, please contact Jairo Morelli, TRCA Water Resources Analyst at jmorelli@trca.on.ca or 416-661-6600 ext. 5351.

Also, another tributary of the Humber River Watershed braches off of Boyce's Creek to the east. This tributary conveys flows from 86.3 ha of upstream drainage areas. As such,

we previously advised the applicant to submit a flood study to ensure the boundary of the significant valleyland is accurately identified, including the MVPZ. As part of this resubmission, the applicant has noted that a Floodplain Management Report has been submitted for review. As noted below, this report has not been submitted to TRCA. Please provide this report to TRCA for our review. This study is required in order to verify the boundary of the significant valleylands for the tributary that branches off of Boyce's Creek to the east.

Once the boundary of the significant valleylands has been verified, please identify the KNHF and its MVPZ on revised plans (i.e.. Figure 2, 3 and 5).

Significant valleylands consist of streams, valleys and associated stream derived features (i.e. floodplains, valley slopes, meander belts). The Significant Valleyland on the property includes Boyce's Creek, associated top-of-bank and the updated floodplain (Regional Floodplain Analysis completed by Masongsong Associates [Nov 2016]). Based on the above information in conjunction with the updated floodplain mapping, the Significant Valleyland is primarily contained within the identified floodplain and Significant Woodland and is depicted on Figure 2 and 5.

Comment #1c: Significant Woodlands
Based on our review of the draft plan, Block 3 has been identified for future development. It is unclear if this is a viable development block once the KNHFs and MVPZ have been accurately identified and delineated. Specifically, significant woodlands are identified in the nearby proximity of Block 3. The environmental constraint mapping included in the EIS has identified the KNHF but not the MVPZ.

In addition, On Figure 2 - Environmental Constraints of the revised EIS, an "other Woodland Feature" has been identified off-site adjacent to the proposed future development block near Huntsmill Drive. It appears this feature was not assessed as part of the Ecological Land Classification (ELC) System as illustrated on Figure 3 - Environmental Feature. Also, the EIS does not appear to provide an analysis of the off-site woodland. The EIS should be revised to include an assessment of this off-site feature. It should be clear whether or not this feature qualifies as a Significant Woodland as per ORMCP Technical Paper #7 — Identification and Protection of Significant Woodlands and whether or not this would impact the proposed draft plan. Please clarify whether or not the off-site woodland qualifies as a KNHF and revise the draft plan accordingly.

The ORMCP Technical Paper #7 has been used as a guideline to identify Significant Woodland on and immediately adjacent to the property. Three areas of Significant

Woodland have been identified on the property (Figure 2). 1. Large woodland associated with Boyce's Creek. 2. Woodland within the southwestern portion of the property located adjacent to Airport Road. 3. The southern woodland (i.e. FOD3-1, Figure 3). The southern Significant Woodland is approximately 0.58 ha in size within the ORM settlement area. However, since the MVPZ of the adjacent wetland community intersects with this woodland, it is considered to be Significant and is identified on Figure 2 and 5.

An off-site woodland abuts the property in proximity to Huntsmill Drive. This feature was not assessed as part of the ELC system. Through air-photo interpretation, it has been determined that this feature is approximately 0.88 ha in size. The MVPZ of the adjacent on-site Significant Woodland feature intersects this 0.88ha woodland; therefore, this feature would be considered to be Significant according to the ORMCP and is depicted on Figures 2 and 5. As a result, Block 3 has been removed from the proposed development concept and is now included as part of the greater Open Space block.

Comment #1d: Consolidated Plan
Based on the revised EIS dated July 2015, five (5) KNHFs are present on site, including significant woodlands; fish habitat; significant habitat for endangered species (butternut); significant valleylands; and significant wildlife habitat Also, three (3) HSFs are present on site, including seepages and springs; permanent and intermittent streams; and wetlands.

Based on our review of Figure 5 - Consolidated Plan, dated November 2014, prepared by Azimuth Environmental Consulting incorporated, found in the updated EIS, a number of KNHFs/HSFs are illustrating including the significant woodlands; permanent and intermittent streams; and wetlands. As noted above, the boundary of the significant valleylands is not illustrated. Also, the full extent of significant woodlands and permanent and intermittent streams have not been verified and identified through this submission. Once the additional technical analysis has been finalized, please submit a consolidated plan Illustrating the full extent of the following KNHFs ./HSFs:
- *Significant woodland;*
- *Significant valleylands;*
- *Permanent and intermittent streams;*
- *Wetlands;*
- *. Furthest inland KNHF/HSF limit;*
- *MVPZ and recommended EPA boundary.*

Azimuth Figures 2-5 have been updated to identify the full extent of KNHF and HSF present on the property, their associated MVPZ and the recommended EPA boundary.

Comment #3: While the stormwater management pond block has been removed from the most recent submission, the access road continues to provide a barrier that isolates a portion of the wetland. While the existing function maybe limited, the road would seem to represent a further limitation when considering the future function of the wetland and possibility that the function of the wetland could improve in the future or be enhanced. A further concern is that the road could impair the hydrologic connection of the isolated parcel of the larger parcel to the north having a detrimental impact on the larger wetland community beyond the development limits. Please advise the applicant to provide further discussion related to opportunities to maintain habitat connectivity through road design techniques (such as ensuring road embankments are at an appropriate slope to accommodate potential wildlife movement), along with an analysis of the ecological impacts of the change and disconnect in hydrology related to both the road location and the stormwater management strategy. As noted previously, strategies to mitigate these impacts should be provided. For example, as compensation for encroachment, restoration could be provided in addition to the planting for the MVPZ.

TRCA's concerns surrounding the proposed access road through the wetland feature are addressed within Azimuth's Addendum Letter (April 5, 2017). The proposed road will be on grade without the need to install curbs or boulevard, thus maximizing for potential wildlife crossing. Mitigation in the form of compensation plantings is proposed for the encroachment into the wetland and the associated MVPZ (Figure 6).

Comment #5: Section 3.1 of the FSR indicates that 223.28 L/s will be directed to the wetland feature to maintain it. Please clarify what the appropriate quantity of water discharging to the wetland community should be based on existing conditions and how the stormwater management strategy will provide that. This should be done in consultation with the ecological consultant to ensure that the data can be used to establish thresholds which the ecological communities could tolerate and that the solutions are feasible for maintaining or improving ecological functions.

A storm sewer bypass is proposed for maintaining flows to the isolated wetland. However, it does not appear to discharge directly to the wetland. Additionally, It is unclear how the storm sewer bypass maintains flows to the portion of the wetland north of the road. Please clarify how the design and discharge location for the storm sewer bypass was determined while considering the ecological requirements.

It is noted on Page 9 of the above noted Planning Justification Report that a Feature Based Water Balance Analysis is currently being prepared by Terraprobe Limited for the

MNRF wetland feature that is planned to be traversed by the proposed access road for the proposed development Please submit the Feature Based Water Balance Analysis for our review and comments.

TRCA's concerns surrounding the proposed access road through the wetland feature are addressed within Azimuth's Addendum Letter (April 5, 2017). Azimuth recommends that the wetland features be monitored post-development to ensure its hydrologic function is maintained. As indicated above, mitigation in the form of compensation plantings is proposed for the encroachment into the wetland and the associated MVPZ (Figure 6).

Comment #6: A site visit was conducted on September 8,2014 to refine the trail alignment This comment has been addressed. However, Section 7.1.2 of the EIS indicates that the fisheries construction timing window is June 1 to September 30. The timing window should be July 1 to September 15, unless otherwise specified by MNRF.

Noted. Construction timing window for the protection of fish spawning: Construction activities should only take place between July 1 and September 15 of any calendar year, unless otherwise specified by the MNRF.

Comment #8: Written confirmation from MNRF staff is required to confirm the potential for Species at Risk (SAR) and permit and/or reforestation requirements under the Endangered Species Act (ESA).

An Information Gathering Form (IGF) will be submitted to the MNRF for review. Appropriate approvals according to Ontario's ESA, if required, will be obtained from MNRF prior to any development or site alteration.

CLOSURE

We trust the information provided is sufficient to address the abovementioned comments outlined by the Town of Caledon and TRCA. We request that the information outlined herein be considered in conjunction with reports and background information submitted to date.

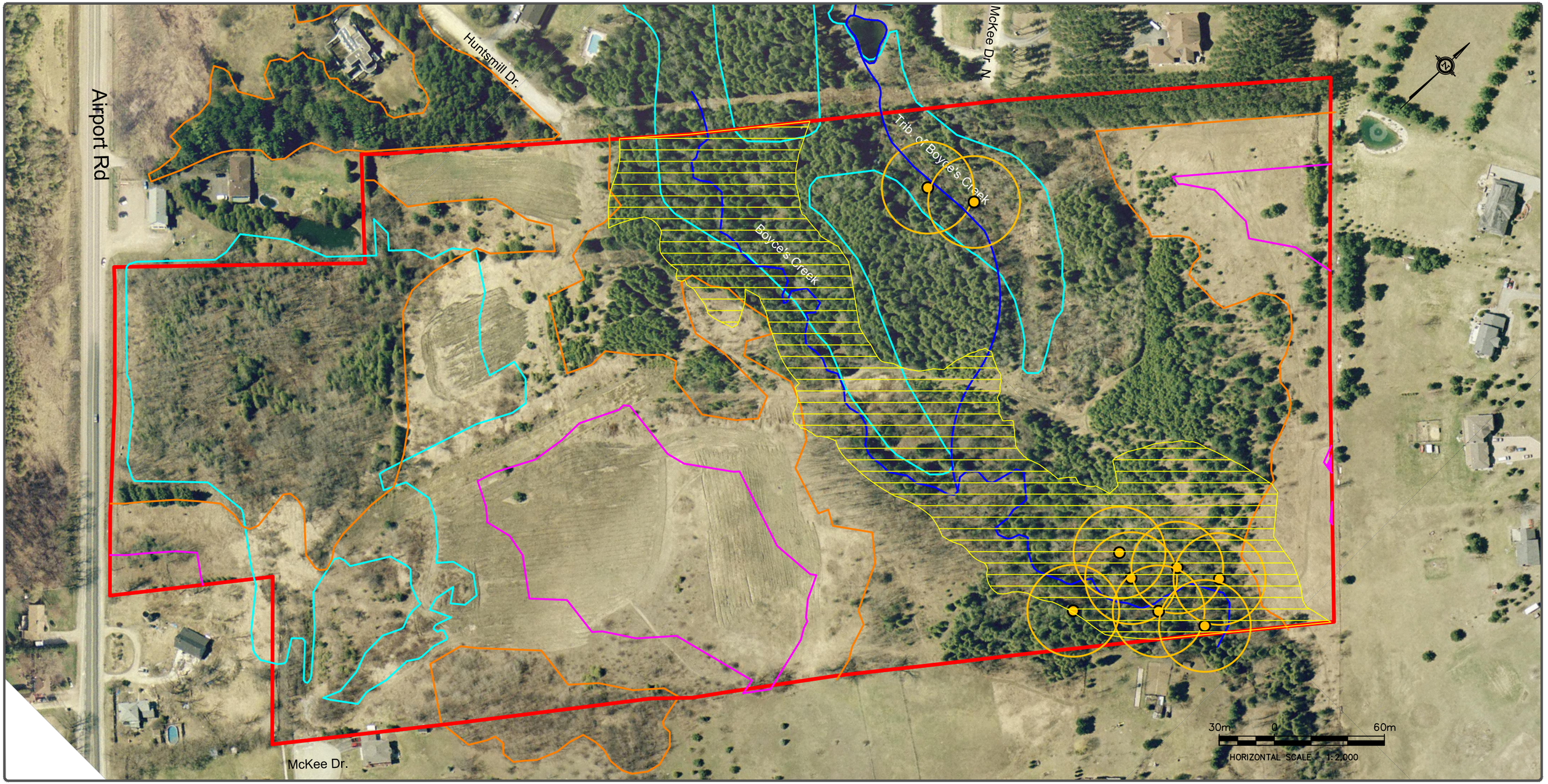
Should you have any questions or require additional details, please feel free to contact the undersigned.

Yours truly,
AZIMUTH ENVIRONMENTAL CONSULTING, INC.

Lisa Moran, B.Sc.Env.
Terrestrial Ecologist

Attach:

cc: Adam Lennie, Oskar Group



Legend:

- Property Boundary
- Watercourse - Hydrologically Sensitive Feature (HSF) and Key Natural Heritage Feature (KNHF)
- MNR Evaluated Wetland (Locally Significant) - HSF
- Significant Woodland - KNHF
- Significant Valley Land - KNHF
- Butternut with 25m Buffer (END)
- Recommended EPA1 Boundary

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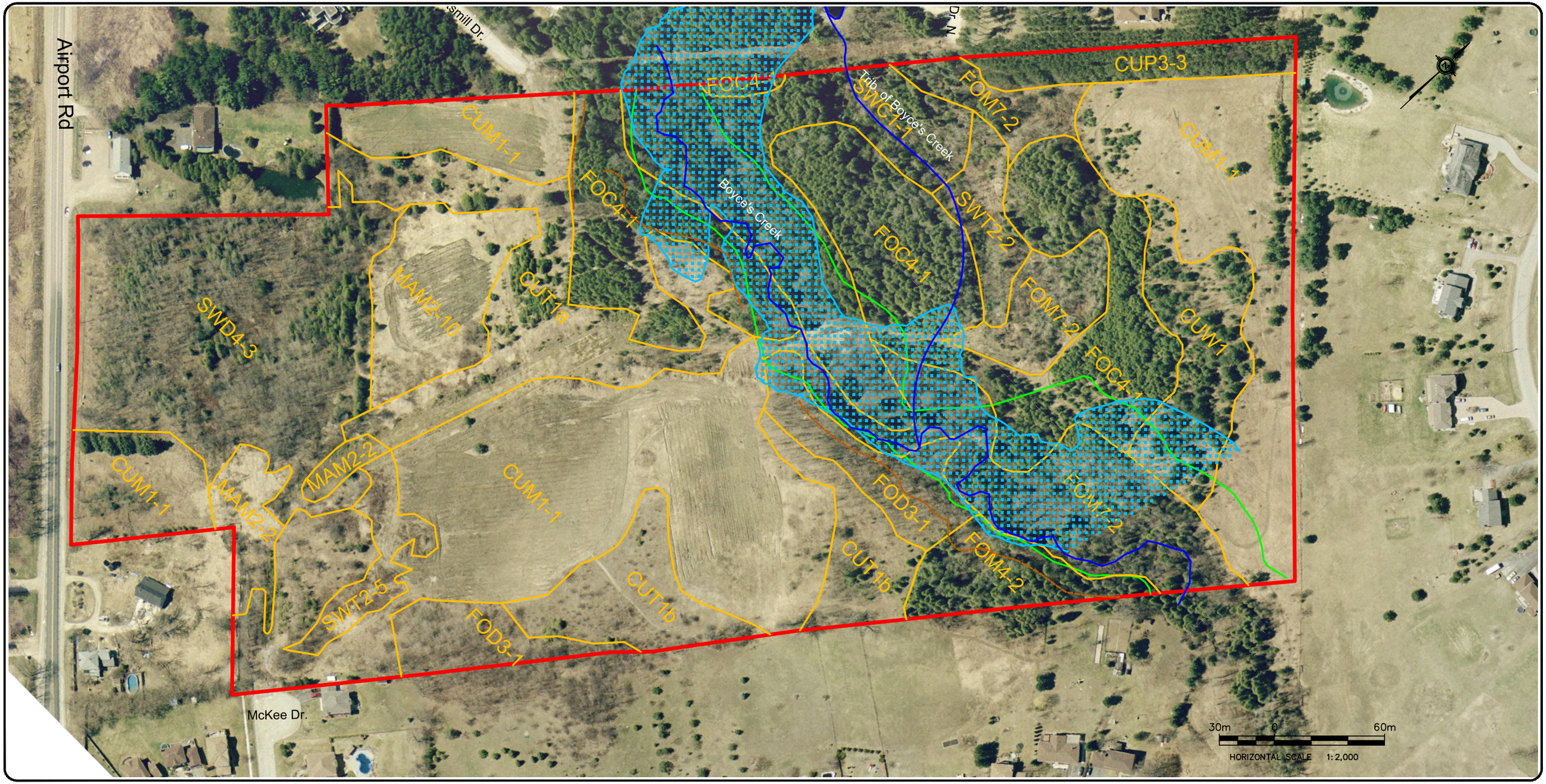
AZIMUTH ENVIRONMENTAL CONSULTING, INC.

Environmental Constraints

Date Issued:	February 2017
Created By:	JLM
Project No.	06-011
Reference:	First Base Solutions

Caledon East EIS
Pt W1/2 Lot 22, Con. 1
Town of Caledon

Figure No.
2



Legend:

- Property Boundary
- Watercourse
- TRCA Estimated Floodline Centreville Creek
- Updated Floodline (Masongsong, 2016)
- Top of Bank (Masongsong, 2016)

Vegetation Communities

CUM1-1	Dry-Moist Old Field Meadow Type	FOM7-2	Fresh-Moist White Cedar-Hardwood Mixed Forest Type
CUP3-3	Scotch Pine Coniferous Plantation Type	MAM2-2	Reed Canary Grass Mineral Meadow Marsh Type
CUT1a	White Cedar Cultural Thicket Type	MAM2-7	Horsetail Mineral Meadow Marsh Type
CUT1b	Mixed Cultural Thicket Type	MAM2-10	Forb Mineral Meadow Marsh Type
CUW1	Mineral Cultural Woodland	SWC1-1	White Cedar Mineral Coniferous Swamp Type
FOC4-1	Fresh-Moist White Cedar Coniferous Forest Type	SWD4-3	Poplar Mineral Deciduous Forest Type
FOD3-1	Dry-Fresh Poplar Deciduous Forest Type	SWT2-2	Willow Mineral Thicket Swamp Type
FOM4-2	Dry-Fresh White Cedar-Poplar Mixed Forest Type	SWT2-5	Red-oiser Dogwood Mineral Thicket Swamp Type

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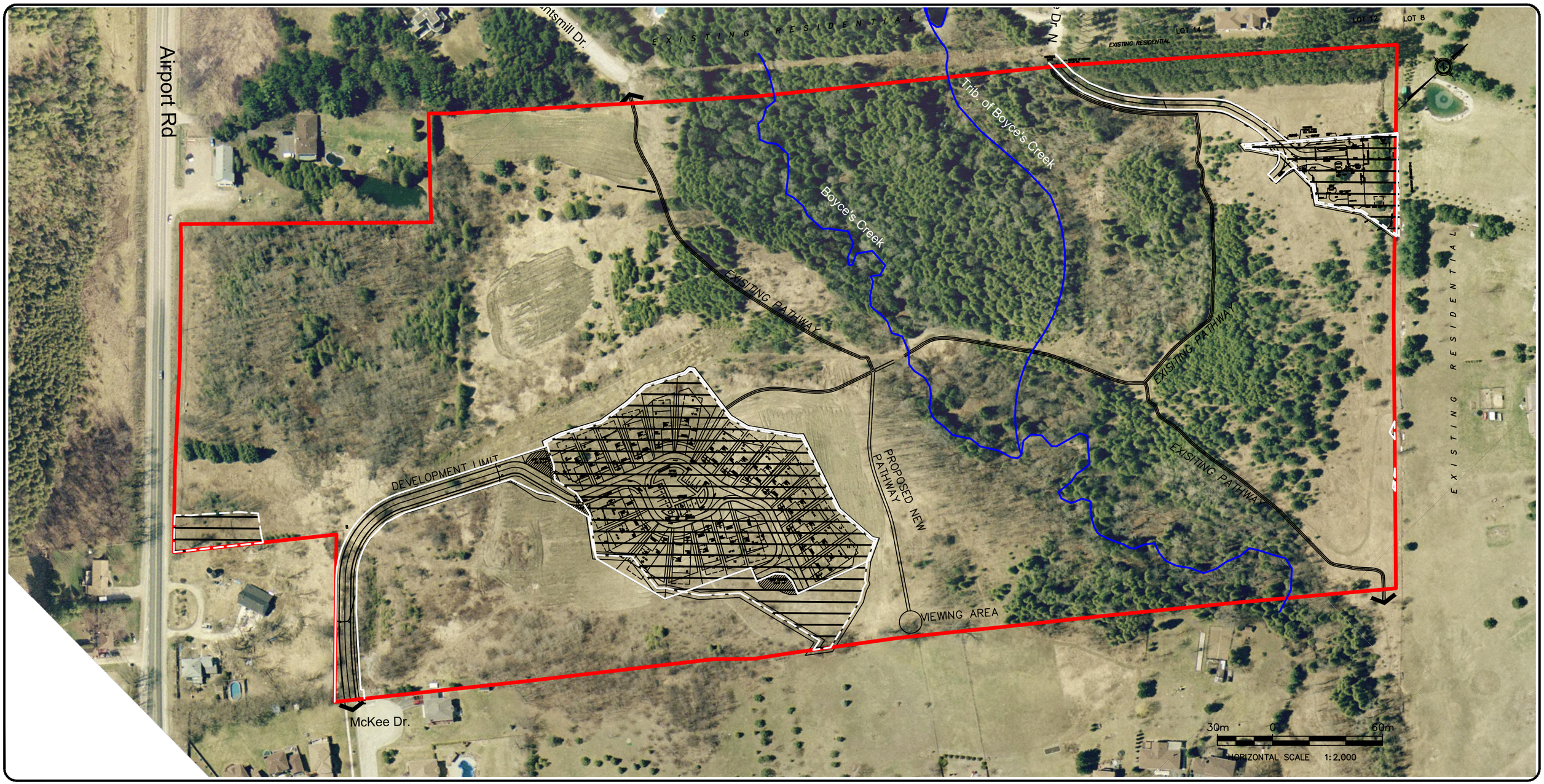
AZIMUTH ENVIRONMENTAL CONSULTING, INC.

ENVIRONMENTAL FEATURES

Date Issued:	February 2017
Created By:	JLM
Project No.	06-011
Reference:	First Base Solutions

Caledon East EIS
Pt W1/2 Lot 22, Con. 1
Town of Caledon

Figure No. 3



Legend:

- Property Boundary
- Watercourse
- Potentially Developable Area (white)
- Development Footprint (white)

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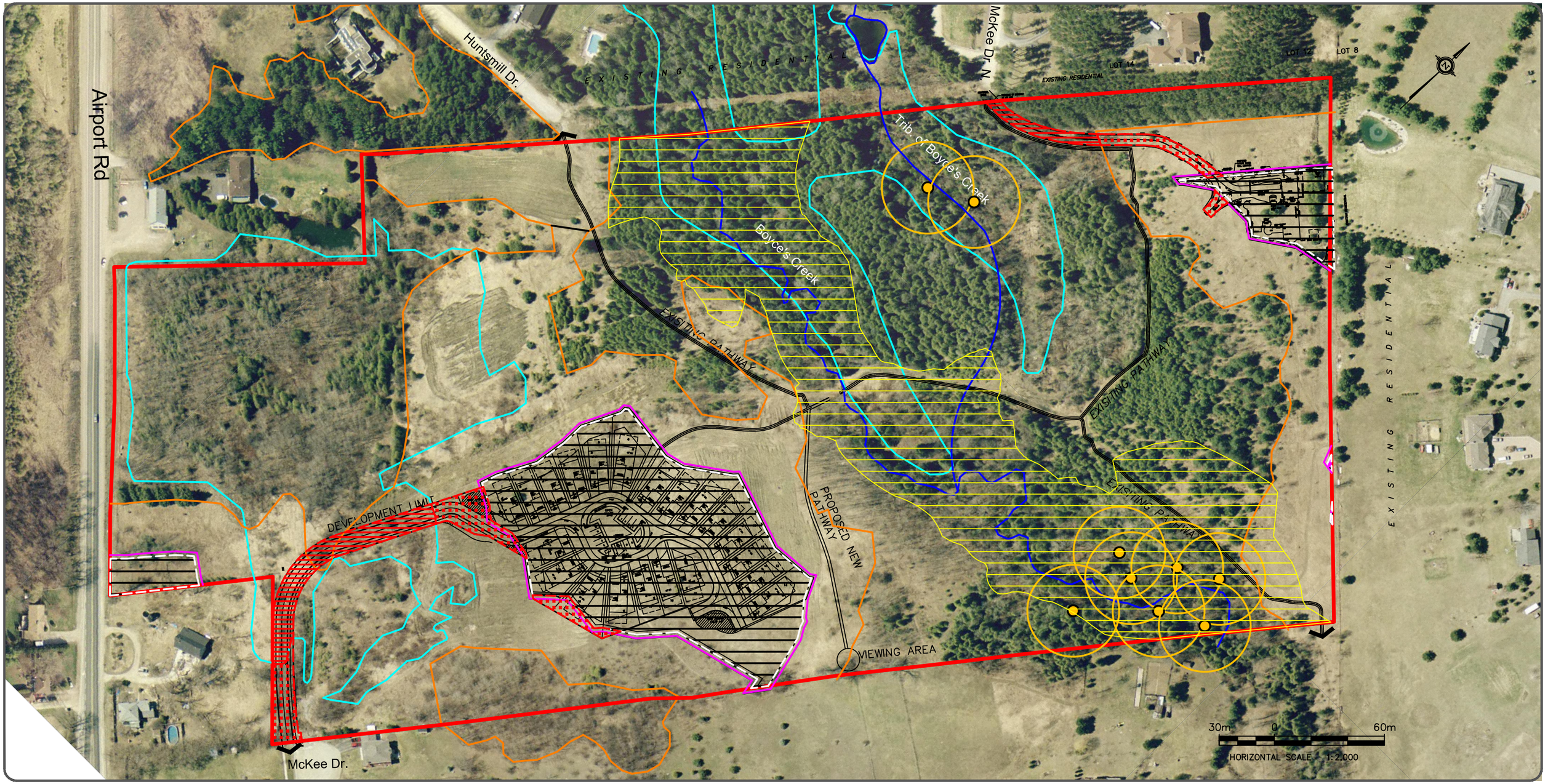
AZIMUTH ENVIRONMENTAL CONSULTING, INC.

Proposed Development

Date Issued:	May 2017
Created By:	JLM
Project No.	06-011
Reference:	First Base Solutions

Caledon East EIS
Pt W1/2 Lot 22, Con. 1
Town of Caledon

Figure No.
4



Legend:

- Property Boundary
- Watercourse - Hydrologically Sensitive Feature (HSF) & Key Natural Heritage Feature (KNHF) (Fish Habitat)
- MNR Evaluated Wetland (Locally Significant) - HSF
- Significant Woodland - KNHF
- Significant Valley Land - KNHF
- Butternut with 25m Buffer (END)
- Recommended EPA1 Boundary
- Minimum Vegetation Protection Zone (MVPZ) (white)
- Potentially Developable Area
- Proposed Encroachment into KNHF/HSF
- Proposed Encroachment into MVPZ

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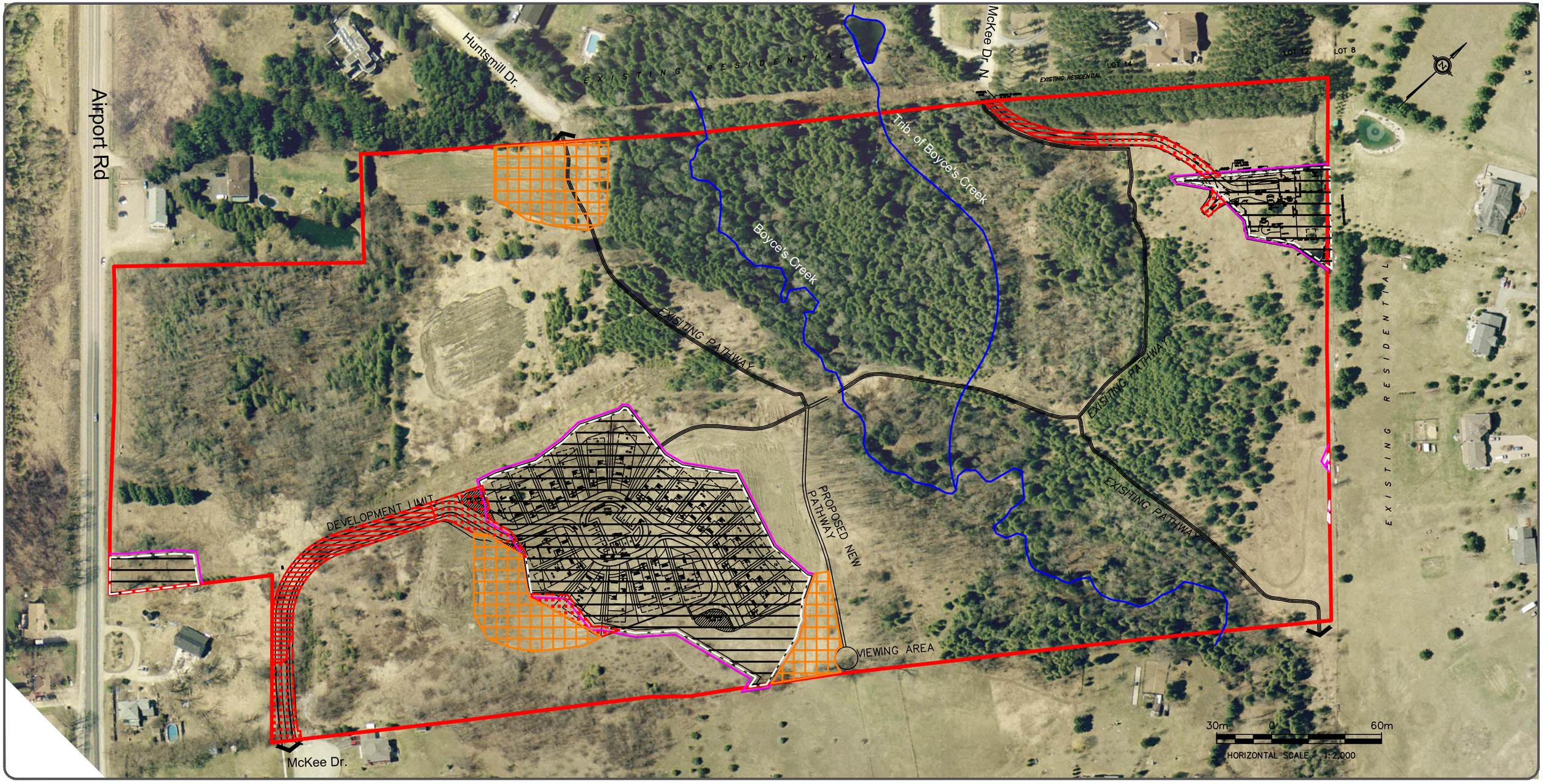
AZIMUTH ENVIRONMENTAL CONSULTING, INC.

Consolidated Plan

Date Issued:	May 2017
Created By:	JLM
Project No.	06-011
Reference:	First Base Solutions

Caledon East EIS
Pt W1/2 Lot 22, Con. 1
Town of Caledon

Figure No. 5



Legend:

- Property Boundary
- Watercourse - Hydrologically Sensitive Feature (HSF) & Key Natural Heritage Feature (KNHF) (Fish Habitat)
- Minimum Vegetation Protection Zone (MVPZ) (white)
- Potentially Developable Area
- Proposed Encroachment into KNHF/HSF
- Proposed Encroachment into MVPZ
- Proposed Compensation Planting Area
- Recommended EPA1 Boundary

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AZIMUTH ENVIRONMENTAL CONSULTING, INC.

Proposed Compensation Areas

Date Issued:	May 2017
Created By:	JLM
Project No.	06-011
Reference:	First Base Solutions

Caledon East EIS
Pt W1/2 Lot 22, Con. 1
Town of Caledon

Figure No. 6

Table 10. Comprehensive Impact Assessment Table, West Half, Lot 22, Concession 1, (geographic Township of Albion) Town of Caledon, Region of Peel (Updated March 2017).

		Potential Impact				
Environmental Feature	**Performance Measure/ORMCP Requirement**	**Direct**	**Indirect**	**Cumulative**	**Mitigation**	**Management/Monitoring**
Woodland	No new development in woodland core or other areas (Sections 3.1.5.3.1 & 3.1.5.3.2 TCOP). No development within 30m (i.e. MVPZ) of significant woodlands (ORMCP).	**Minimal**. The proposed condominium development will occur outside of the Significant Woodland. Encroachment into the Minimum Vegetation Protection Zone (MVPZ) is proposed. At its closest point, the proposed development will be approximately 22m from the Significant Woodland. The slight encroachment into the MVPZ at one location will not impede the form and function of this feature. An access route to the single-family dwelling in the northeastern corner of the property will result in a **0.04ha loss** of Significant Woodland. The route selected will minimize loss of tree cover as it follows an existing trail/property access lane. Encroachment into the MVPZ will be required to access the proposed development envelope. The driveway is positioned in a way so it is set further away from the natural forest community (FOM7-2) and is closer to the non-native Cultural Plantation (CUP3-3).	**Minimal**. An access route to the developments must be constructed. Compaction of soil may affect adjacent trees.	**None**.	Minimize extent of tree clearing employed to construct driveway access to proposed single-family residence.	None
Wetlands	Proposed development located in core wetland and wetland MVPZ (Section 3.1.5.4.1 TCOP) to permit access to the developable area. The quality and quantity of surface water entering wetland core areas shall be maintained or enhanced/restored (Section 3.1.5.4.5 TCOP). .	**0.15 ha loss** of wetland will result from the proposed condominium development in addition to encroachment into the MVPZ. This loss is as a result of providing required access to the developable area of the property. Encroachment into the MVPZ is required in order to access the proposed development area. No loss of wetland habitat	Hydrogeologic function of site can be maintained provided proper mitigation measures and Low Impact Development (LID) techniques are applied (Terraprobe, 2013). As per Terraprobe (2013), a feature based water balance will be completed to assess the impact of the development on the wetland and Boyce's Creek. This assessment is to be	Continual erosion may lead to accumulation of sediment within wetland. Can be mitigated through slope restoration.	Prepare a sediment and erosion control plan identifying specific methods to control sediment during construction of the roadway from entering adjacent wetland habitat. Prepare a restoration plan for slopes and other non-travelled portions of the driveway with the objective of stabilizing areas of exposed soild to prevent erosion post-	Monitor sediment and erosion control structures throughout construction phase to insure property function taking steps to repair damage to structures immediately. Monitor restoration to insure vegetation has developed to the point that the risk of driveway slope erosion is eliminated.

		Potential Impact				
Environmental Feature	**Performance Measure/ORMCP Requirement**	**Direct**	**Indirect**	**Cumulative**	**Mitigation**	**Management/Monitoring**
		associated with single-family dwelling.	completed at the detail design stage.		construction. The feature based water balance will determine if additional mitigation measures and LID measures are required in order to maintain the form and function of the wetland features.	
Fisheries	No new development in core fishery resource areas (Section 3.1.5.10.1 TCOP). No new development in other fishery resource areas or lands adjacent to core fishery resource areas unless it can be achieved with no harmful alteration, disruption or destruction of fish habitat or there will be no net loss of productive capacity of fish habitat (Section 3.1.5.10.3 TCOP). The quality and quantity of surface water entering core fishery resource areas shall be maintained or enhanced/restored (Section 3.1.5.10.4 TCOP). No development within 30m (i.e. MVPZ) of fish habitat (ORMCP).	**None**. No components of the proposed development require crossings or alterations of watercourses functioning as fish habitat according to federal definitions.	**None**. Water balance assessment (Terraprobe 2013) indicates that proposed development will not affect the quantity of surface or ground water contributions to fish habitat. No direct discharge of surface water to fish habitat. Therefore, no indirect impact to quality or quantity of water entering fish habitat.	**None**. No direct or indirect impacts.	None	None
Valley and Stream Corridors	New development is prohibited in valley and stream corridors (Section 3.1.5.11.1 TCOP). Valley and stream corridors identified through more detailed studies shall be placed in EPA designation (Section 3.1.5.11.3 TCOP). A riparian habitat zone shall be maintained or established adjacent to watercourses (Section 3.1.5.11.4 TCOP)	**None**. No components of the proposed development require encroachment into valley feature of Boyce's Creek.	**None.** The Corridor is within the wetlands and woodlands, and is protected by these features and their respective MVPZ.	**None**. No direct or indirect impacts.	None	None
Ground water	New development must ensure that the quality and quantity of groundwater recharge and discharge and flow distribution of groundwater are protected, maintained or if possible enhanced (Section 3.1.5.12.1 TCOP). As per ORMCP requirements for development of a HE (ORMCP Technical Paper 12, Section 5.3) as detailed below.	**None** – no components of the proposed development should encroach into the ground water table	**Minor** as per Terraprobe (2013).	**None**.	LID techniques recommended by Terraprobe (2013).	None
Natural Slopes	Slopes which form part of a valley and	**None**. No components of the	**None.** The corridor is within the	**None**.	None	None

		Potential Impact				
Environmental Feature	**Performance Measure/ORMCP Requirement**	**Direct**	**Indirect**	**Cumulative**	**Mitigation**	**Management/Monitoring**
	stream corridor are to be designated EPA (Section 3.1.5.14.2 TCOP).	proposed development require encroachment into valley feature associated with Boyce's Creek.	wetlands and woodlands, and is protected by these features and their respective MVPZ.			
Oak Ridges Moraine KNHF	ORM KNHF and their related MVPZ are to be designated EPA (Section 3.1.5.15.1 TCOP). New development within KNHF and associated MVPZ (i.e. EPA area) is generally prohibited (Section 3.1.5.15.2 TCOP). As per ORMCP requirements for development of a NHE for all KNHF (ORMCP Technical Paper 8, Section 5.3) as detailed below.	See considerations of specific KNHFs & HSFs below	See Below	See Below	See Below	See Below
Wetland	No development within 30m (i.e. MVPZ) of wetlands (ORMCP)	**Minimal**. Minor encroachment into wetland habitat required for access to proposed condominium site from existing stub/terminus of McKee Dr. – unavoidable. See Wetlands above.	**None**. See Wetlands above.	**None**. See Wetlands above.	See Wetlands above	See Wetlands above
Significant Portions of the Habitat of END, rare or THR species	No development within KNHF or within MVPZ as determined by a natural heritage evaluation.	**None.** Butternut are located within the Significant Woodland and are located >25m from any proposed development. No other confirmed SAR habitat present on the property.	**None.**	**None.**	An Information Gathering Form will be submitted to MNRF for review.	None
Valleyland	No development within 30m (i.e. MVPZ) of significant valleylands (ORMCP)	**None**. No components of the proposed development require encroachment into valley feature associated with Boyce's Creek.	**None.** The Corridor is within the wetlands and woodlands, and is protected by these features and their respective MVPZ.	**None**.	None	None
Fish Habitat	No development within 30m (i.e. MVPZ) of fish habitat (ORMCP)	**None**. No components of the proposed development require crossings or alterations of watercourses functioning as fish habitat according to federal definitions.	**None**. See Fisheries above.	**None**. See Fisheries above.	See Fisheries above.	See Fisheries above.
Woodland	No development within 30m (i.e. MVPZ) of significant woodlands (ORMCP)	**Minimal**. See Woodland above.	**Minimal.** See Woodland above.	**None**. See Woodland above.	See Woodland above.	See Woodland above.
Significant Wildlife Habitat	No development within feature or related MVPZ (ORMCP).	None. Encroachment into Significant Woodland (i.e. Habitat for Area Sensitive Species) is minor and will not impact the overall current form or function of the woodland. No impacts to seeps and springs associated with Boyce's Creek (see Seeps and Springs below).	None.	None.	None.	None.
ORM Hydrogeologically						

		Potential Impact				
Environmental Feature	**Performance Measure/ORMCP Requirement**	**Direct**	**Indirect**	**Cumulative**	**Mitigation**	**Management/Monitoring**
Sensitive Features						
Permanent and intermittent streams	No development within feature or related MVPZ (ORMCP). Development permitted on adjacent land outside MVPZ provided there will be no adverse effects on the HS feature or related hydrological functions (ORMCP).	**None**. No impact to permanent stream (i.e. Boyce's Creek).	**None**. Water balance assessment (Terraprobe 2013) indicates that proposed development will not affect the quantity of surface or ground water contributions to fish habitat. No direct discharge of surface water to fish habitat. Therefore, no indirect impact to quality or quantity of water entering fish habitat. As per Terraprobe (2013), a feature based water balance will be completed to assess the impact of the development on the wetland and Boyce's Creek. This assessment is to be completed at the detail design stage.	**None**. No direct or indirect impacts.	The feature based water balance will determine if additional mitigation measures and LID measures are required in order to maintain the form and function of Boyce's Creek.	None
Wetland	No development within feature (some infrastructure excepted) or related MVPZ (ORMCP). Development permitted on adjacent land outside MVPZ provided there will be no adverse effects on the HS feature or related hydrological functions (ORMCP).	**None**. See Wetlands above.	**None**. See Wetlands above.	**None**. See Wetlands above.	See Wetlands above.	See Wetlands above.
Seepage Area and Springs	No development within feature (some infrastructure excepted) or related MVPZ (ORMCP). Development permitted on adjacent land outside MVPZ provided there will be no adverse effects on the HS feature or related hydrological functions (ORMCP).	**None**. No impact to Seepage Areas and Springs (associated with Boyce's Creek).	Hydrogeologic function of site can be maintained provided proper mitigation measures and LID techniques are applied (Terraprobe, 2013). As per Terraprobe (2013), a feature based water balance will be completed to assess the impact of the development on the wetland and Boyce's Creek. This assessment is to be completed at the detail design stage.	**None**. No direct or indirect impacts.	The feature based water balance will determine if additional mitigation measures and LID measures are required in order to maintain the form and function of Boyce's Creek.	None

AZIMUTH ENVIRONMENTAL CONSULTING, INC.
Environmental Assessments & Approvals

April 5, 2017 AEC 06-011

Lexis-bayview Developments
255 Duncan Mill Road
Suite 202
North York, ON
M3B 3H9

Attention: Warren Li, President

Re: **Addendum Letter to Revised Environmental Impact Study (July 2015)**
West Part Half Lot 22, Concession 1
Town of Caledon, Region of Peel

Dear Mr. Li:

The property is located within the plan area of the Oak Ridges Moraine (ORM, ORMCP 2002). Azimuith's 2015 Revised Environmental Impact Study for the property defined above, identifies a number of Key Natural Heritage Features (KNHF) and Hydrologically Sensitive Features (HSF) on the property. In order to facilitate development on the subject lands, minor encroachment into a small portion of the identified KNHF/HSF and their associated Minimum Vegetation Protection Zone (MVPZ) is required (Figure 5). This includes minor encroachment through a Locally Significant Wetland (LSW) which is required for access to the proposed condominium site from existing stub/terminus of McKee Dr. Correspondence received from the Toronto and Region Conservation Authority (TRCA) dated January 13, 2016 indicated that they had concerns that the ecological and/or hydrologic connection could be impacted as a result of the proposed access road and suggested that compensation for encroachment as a possible mitigation strategy. TRCA also indicated that a Feature Based Water Balance (FBWBA) should be prepared to ensure that the wetland conditions and ecological function is maintained. The sections below will address these comments.

ECOLOGICAL FUNCTION

Azimuth's 2015 Environmental Impact Study (EIS) generally describes the ecological form and function of the portion of wetland that will be removed as a result of the

proposed development. Section 7.1.1 and Table 11 of Azimuth's 2015 report presents an assessment of potential direct and indirect impacts on the identified KNHF/HSF, including the abovementioned wetland feature that, in part, will need to be removed. Wildlife studies conducted on the property indicate that the wetland at this location does not provide any unique function, contain any unique features nor does it provide any significant wildlife habitat function. The potential for impact to this wetland feature from a hydrological perspective, as outlined in Table 11, was determined in largely through review of the water balance assessment completed by Terraprobe (2013).

FEATURE BASED WATER BALANCE

To date, a Scoped FBWBA has not been completed. The purpose of the FBWBA is to address potential impacts associated with the Stormwater Management (SWM) design and impact of the proposed road on the wetland feature and overall water balance. The flows from the developed site need to be assessed in order to ensure that the function of the wetland is maintained from an ecological perspective post-development. It is recognized that this is a requirement of the TRCA. Through consultation with TRCA, it has been determined that the Scoped FBWBA will be completed for this wetland during Detail Design.

EXISTING GROUNDWATER CONDITIONS

The Results of the Ground Water Monitoring Program produced by Terraprobe Inc.(November, 2016) report describes the ground water work program that has been completed to date, discusses ground water elevations, gradients and flow directions, and provides discussion and analysis of the seasonal variations in the ground water, surface water levels and flow conditions in the on-site water features. Within this report, it is concluded that the wetlands on the property are supported by surface drainage with only minor ground water input at the southeast portion of the property (Terraprobe, 2016). This information will be utilized during the completion of the Scoped FBWBA. The results of the FBWBA will validate any assumptions that were made within the reports completed during the Official Plan Amendment (OPA), Draft Plan of Subdivision and Zoning application stage of approvals.

STORM WATER MANAGEMENT AND DESIGN

The Functional Servicing and Stormwater Management Report produced by Masongsong Associates Engineering Limited dated January 2017 and the Storm Servicing Alternative Addendum dated January 2017 outlines the existing and proposed infrastructure for the property including a second alternative for the storm servicing of the proposed residential site plan development which includes a porous paver driveway entrance and re-introduction of surface water into the LSW through a controlled storm water system. The

results of the Scoped FBWBA will guide any necessary changes to the SWM and/or road design in order to maintain the current form and function of the wetland. The current SWM and road design currently have enough flexibility to adapt to any required changes at the detailed design stage.

MONITORING PROGRAM

It is recommended that a pre and post-monitoring program is developed in order to assess the current state of the wetland and to ensure that the wetland hydrological conditions are maintained post-development. TRCA has developed a Wetland Water Balance Monitoring Protocol (TRCA 2016), that can provide guidance in the development of a monitoring plan. As per Terraprobe's 2016 report, groundwater levels were measured in selected shallow and deep wells from 2007 to 2013. Details of the monitoring program completed to date can be found within Terraprobe's report (Terraprobe 2016). The purpose of the monitoring is to ensure that the function of the wetland is maintained post-development. Based on this information, we would recommend a monitoring program to include:

- Installation of a nested piezometer within wetland 'lobe' in proximity to location of proposed roadway (*i.e*. BH/MW3 refer to Figure 2 of Terraprobe's 2016 report);
- Pre and post-development monitoring of nested piezometer at this location;
- Attend the site during spring freshet to assess the wetland feature for standing water. This search should be restricted to the wetland feature located within the southern portion of the property;
- A staff gauge should be installed within the wetland where standing water is observed;
- Staff gauges should be monitored pre-development and throughout the duration of construction and post-construction; and
- Any notable changes of ground/surface water levels should result in a re-evaluation of existing LID techniques.

The specific details of the monitoring plan should be developed through consultation with TRCA.

COMPENSATION PLANTINGS

In order to compensate for the proposed minor encroachments into identified KNHF/HSF and their associated MVPZ, compensation in the form of an Enhancement Planting Plan is be required. The detailed Enhancement Planting Plan including details of planting

techniques, timing, species composition and maintenance will be prepared at detail design stage. It is proposed that a compensation ratio of 2:1 for encroachment into the KNHF/HSF and that a compensation ratio of 1:1 is provided for encroachment into the MVPZ. Based on this recommended compensation ratio, it is proposed that 0.59 hectares (ha) is planted within areas of the property generally void of tree/shrub cover as depicted on Figure 6. Please note that the proposed compensation areas are for all of the proposed encroachments into the KNHF/HSF and their associated MVPZ related to the entire development proposal (not just for the wetland feature). The proposed enhancement plantings will increase the overall tree/shrub cover on the property while providing a connection between KNHF/HSF both on and off-site.

CLOSURE

We trust the information provided is sufficient to address the abovementioned comments outlined by TRCA as discussed in their January 2016 review Comments. We request that the information outlined herein be considered in conjunction with reports and background information submitted to date.

Should you have any questions or require additional details, please feel free to contact the undersigned.

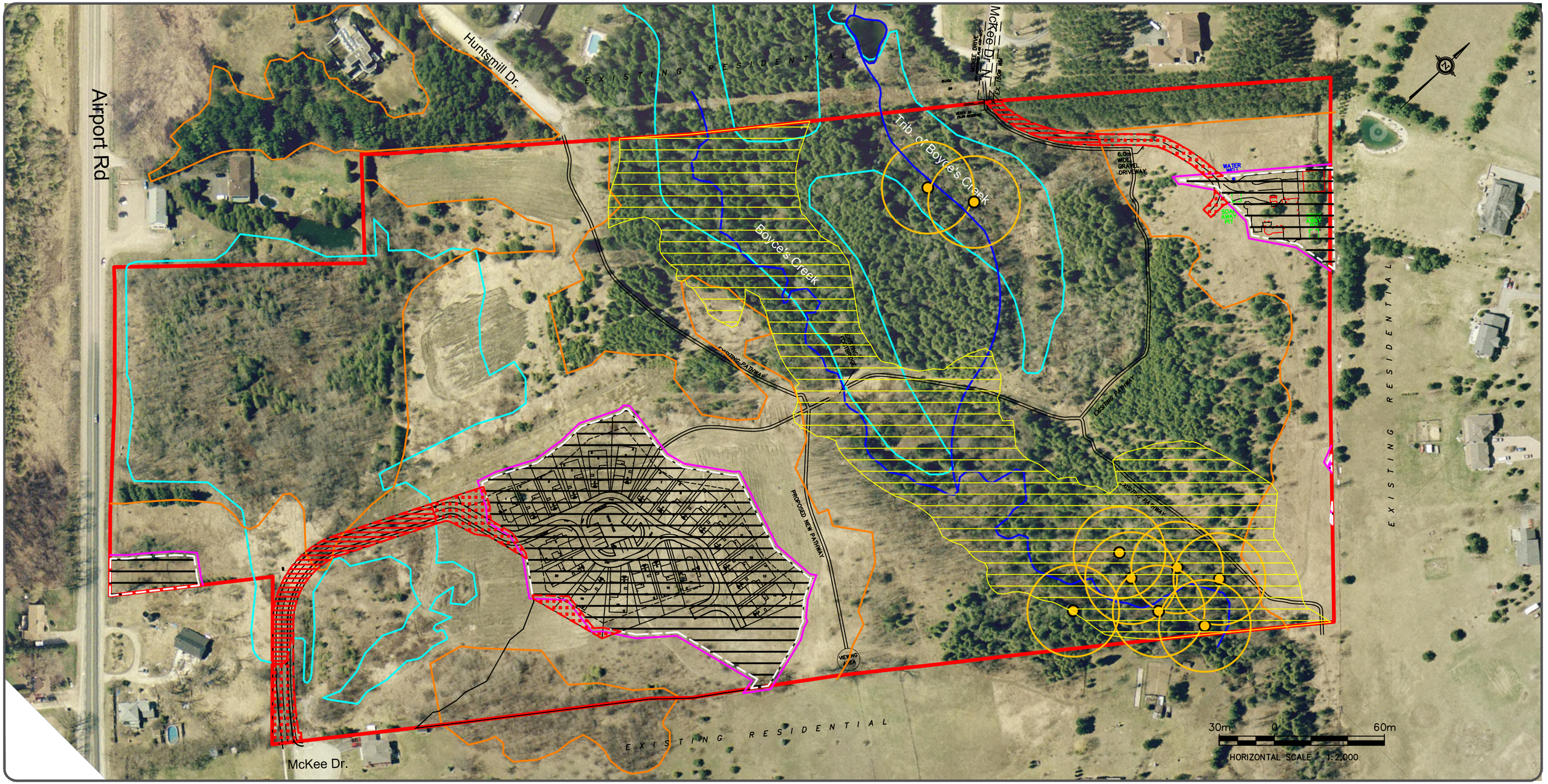
Yours truly,
AZIMUTH ENVIRONMENTAL CONSULTING, INC.

L. Moran

Lisa Moran, B.Sc.Env.
Terrestrial Ecologist

Attach:

cc: Adam Lennie, Oskar Group



Legend:

- Property Boundary
- Watercourse - Hydrologically Sensitive Feature (HSF) & Key Natural Heritage Feature (KNHF) (Fish Habitat)
- MNR Evaluated Wetland (Locally Significant) - HSF
- Significant Woodland - KNHF
- Significant Valley Land - KNHF
- Butternut with 25m Buffer (END)
- Recommended EPA1 Boundary
- Minimum Vegetation Protection Zone (MVPZ) (white)
- Potentially Developable Area
- Proposed Encroachment into KNHF/HSF
- Proposed Encroachment into MVPZ

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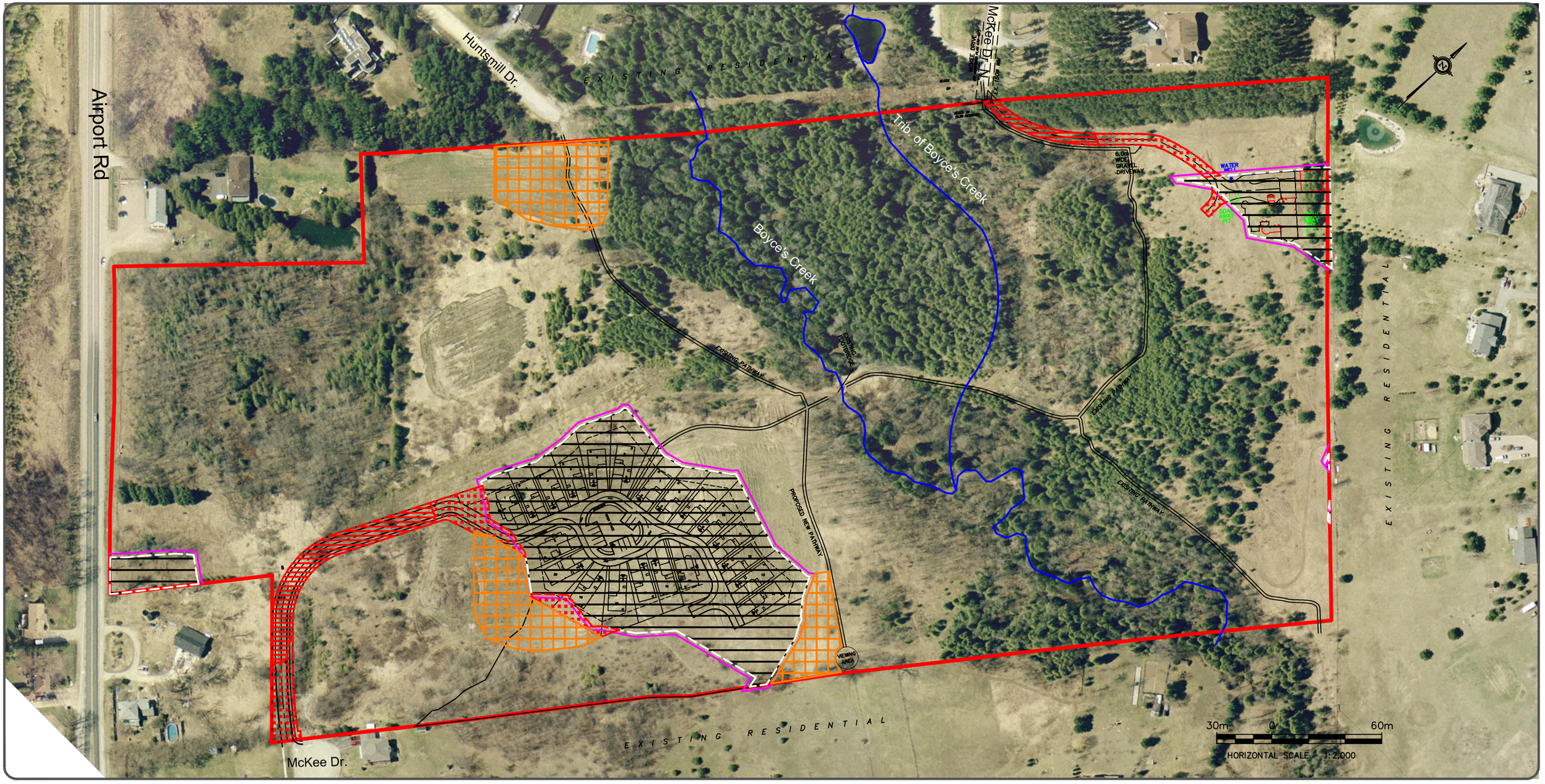
AZIMUTH ENVIRONMENTAL CONSULTING, INC.

Consolidated Plan

Date Issued:	February 2017
Created By:	JLM
Project No.	06-011
Reference:	First Base Solutions

Caledon East EIS
Pt W1/2 Lot 22, Con. 1
Town of Caledon

Figure No. 5



Legend:

- Property Boundary
- Watercourse - Hydrologically Sensitive Feature (HSF) & Key Natural Heritage Feature (KNHF) (Fish Habitat)
- Minimum Vegetation Protection Zone (MVPZ) (white)
- Potentially Developable Area
- Proposed Encroachment into KNHF/HSF
- Proposed Encroachment into MVPZ
- Proposed Compensation Planting Area
- Recommended EPA1 Boundary

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AZIMUTH ENVIRONMENTAL CONSULTING, INC.

Proposed Compensation Areas

Date Issued:	February 2017
Created By:	JLM
Project No.	06-011
Reference:	First Base Solutions

Caledon East EIS
Pt W1/2 Lot 22, Con. 1
Town of Caledon

Figure No. 6

APPENDIX G

Agency Comments (2017) and Azimuth Response

TOWN OF CALEDON

September 27, 2017

Weston Consulting
201 Millway Avenue, Suite 19
Vaughan, ON
L4K 5K8

Attention: Ryan Guetter, Vice President

Dear Mr. Guetter:

RE: Proposed Official Plan & Zoning By-law Amendment and Draft Plan of Subdivision – 3rd Submission
Weston Consulting (Ryan Guetter) on behalf of 2031818 Ontario Inc.
0 Airport Road (McKee Drive) - Part of Lot 22, Concession 1 (ALB)
File Numbers: POPA 06-08, RZ 06-18, 21T-06006C

Planning staff received revised submission material for the Official Plan and Zoning By-law Amendment and Draft Plan of Subdivision Applications on June 9, 2017 and revised materials on August 4, 2017. The submission package received by the Town included the following:

- Cover Letter prepared by Weston Consulting, dated June 8, 2017;
- Comment Response Matrix prepared by Weston Consulting, last updated June 2, 2017;
- Draft Official Plan Amendment date-stamped June 9, 2017;
- Draft Zoning By-law Amendment dated-stamped August 4, 2017;
- Draft Plan of Subdivision (Dwg. D1), prepared by Weston Consulting, revision date April 20, 2017 and date-stamped August 4, 2017;
- Planning Justification Report Addendum, prepared by Weston Consulting, dated June 2017 with covering letter dated May 26, 2017;
- Function Servicing and Stormwater Management Report prepared by Masongsong Associates Engineering Limited, dated January 2017 and Addendum Letter dated January 20, 2017;
- Response to Agency Comments (EIS) prepared by Azimuth Environmental Consulting Inc. dated May 23, 2017;
- Addendum Letter to Revised Environmental Impact Study prepared by Azimuth Environmental Consulting Inc. dated April 5, 2017;
- Landscape Master Plan prepared by Strybos Barron King, dated May 19, 2017;
- Design Brief Architectural Guidelines, prepared by VA3 Design Inc., dated July 8, 2015 and last revised May 23, 2017;
- Memorandum: Update of the existing Estimated Hydraulic Model prepared by Masongsong Associates Engineering Limited, dated February 27, 2017;
- Overall Site Plan (Dwg. 1), prepared by VA3 Design Inc., dated September 2013 and last revised Mar 3, 2016;

- Site Plan - Single Estate Lot (Dwg. 2), prepared by VA3 Design Inc., dated September 2013 and last revised Mar 3, 2016;
- Site Plan – Single Detached Lots (Dwg. 3), prepared by VA3 Design Inc., dated September 2013 and last revised Mar 3, 2016;
- Site Plan – Single Detached Lots (Dwg. 4), prepared by VA3 Design Inc., dated September 2013 and last revised Mar 3, 2016;
- Site – Cross Section (Dwg. 5), prepared by VA3 Design Inc., dated April, 2017;
- Floor Plans & Elevations (Dwg. 6), prepared by VA3 Design Inc., dated July 7, 2015;
- Floor Plans for Single Estate Dwelling (Dwg. 7), prepared by VA3 Design Inc., dated July 7, 2015; and
- Elevations (Dwg. 8), prepared by VA3 Design Inc., dated July 7, 2015.

Proposal

The subject property is located at 0 Airport Road, east side of Airport Road, north of McKee Drive South and south of Huntsmill Drive/McKee Drive North. The Town of Caledon Official Plan ("TCOP") designates the front portion of the site Special Study Area A in the Caledon East Land Use Plan, Schedule "D" and the rear portion is Environmental Policy Area ("EPA") and Rural on the Town of Caledon Land Use Plan, Schedule "A". The Oak Ridges Moraine Conservation Plan ("ORMCP"), Schedule "P" identifies the front portion of the lands as Rural Settlement and the rear portion Natural Linkage Area and Countryside Area. The subject lands are currently zoned Estate Residential (RE) and Environmental Policy Area 2 – Oak Ridges Moraine (EPA2-ORM) by Zoning By-law 2006-50, as amended.

The applications continue to proposed 21 single detached (condominium) dwellings on a private road accessed at the terminus of McKee Drive South and a single estate residential lot accessed from McKee Drive North. This submission proposed further refinements to the overall development area based on further environmental investigation.

Executive Summary of Comments

The resubmission has been reviewed by external agencies and internal commenting departments. While a number of the comments from the previous submission have been addressed or are progressing towards resolution, some outstanding matters remain to be resolved. A resubmission is required to address technical updates to a number of reports and plans including a revised Draft Plan of Subdivision, Official Plan Amendment and Draft Zoning By-law Amendment. Please ensure the resubmission package includes a cover letter explaining how each comment has been addressed and the resubmission fee of $5300, as per our current Fee By-law.

General Comments

1) The Town acknowledges the applicant's request to proceed with the Plan of Subdivision, Rezoning and Official Plan Amendment Applications in advance of the Site Plan and Plan of Condominium Applications. Staff caution the applicant that a minor variance from provisions of any approved by-law may not be permitted for two years following Council approval. Further, depending upon the type of condominium proposed, a subsequent public meeting may be required. *(Town of Caledon, CS, Planning)*
2) This property is currently assessed as residential ($691,250 CVA). The Town's share of taxes levied, based on the current value assessment is approximately $2,574. The property tax account as at August 16, 2017 is current. If the proposed applications were to proceed the taxable assessment value of the subject properties would change to reflect the change in usage and the development that occurs. *(Town of Caledon, FIS, Finance)*
3) Any future development would be subject to Town of Caledon development charges as per By-law No. 2014-054, currently $24,492.26/residential unit. Any development would also be subject to Region of Peel development charges, currently $50,741.59/unit, GO Transit development charges $521.56/unit and Education development charges, currently $4,567.00/unit as per the respective development charge by-laws. Effective February 1, 2016 the Region of Peel collect hard service development charges (i.e. water, wastewater and roads) directly for residential developments, except townhouses and apartments, at the time of subdivision

agreement execution. Development charges will be indexed next on February 1, 2018. All development charges are payable prior to issuance of a building permit with the exception of the change from the Region of Peel noted above. *(Town of Caledon, FIS, Finance)*

4) Any gateway features proposed for the condominium Block 1 shall be located within the block and maintained by the future Condo Board. *(Town of Caledon, CS, Landscape)*
5) All waste collection requirements have been satisfied; the Region of Peel will provide curbside collection of garbage, recyclable materials, household organics and yard waste. (*Region of Peel)*

The Following Comments Must be Addressed Prior to Draft Approval:

6) Comment No 7 from the February 22, 2016 Summary of Comments Letter ("Comments Letter") has not been adequately addressed. The Region of Peel requires more detail and dimensions with respect to the widening. The Plan must reference the centerline of the road allowance and include satisfactory dimensions at both the south and north limits of the property.
   a) The Region will require sufficient widenings along Airport Road be gratuitously dedicated as public right-of-way to the Region. Requirements include 18.0 metres from centerline of Airport Road ROW and 20.75 metres from centerline within 245 metres of the intersection of Airport Road and Huntsmill Drive. In addition, a 0.3m reserve behind the frontage of the property along Airport Road must be shown on the revised Draft Plan. (see attached) (*Region of Peel)*
7) Staff are satisfied with the removal of the Future Development Block, i.e. Block 3 on the previous Draft Plan. *(Town of Caledon, CS, Planning)*
8) Please remove the red line from the southern portion of Block 1. *(Town of Caledon, CS, Planning)*
9) As per the attached comments from TRCA, all drawings need to clearly identify the MVPZ. (*TRCA)*
10) Town staff acknowledge that all Key Natural Heritage Features (KNHFs), Hydrologically Sensitive Features (HSFs) and their associated Minimum Vegetative Protection Zones (MVPZs) will be dedicated to the TRCA. *(Town of Caledon, CS, Planning)*

11) The following **stormwater management** comments must be addressed prior to Draft Plan Approval:
    a) An Oil Grit Separator unit only provides 50% TSS removal; therefore, further measures to achieve the required 80% TSS removal should be investigated. *(TRCA)*
    b) Please note any private LID measures require adequate protection in the implementing Zoning By-law Amendment (i.e. restriction on location of accessory structures). *(Town of Caledon, CS, Planning)*
    c) The infiltration rate calculations on Page 12 and 13 are quite confusing. Please adjust the calculations and provide details (i.e. cross section) of the proposed infiltration trenches. The water table elevation should be confirmed to ensure the seasonally high groundwater level is at 1.0m below the invert of the proposed infiltration facility. *(TRCA)*
    d) Further discussion and details are required on the proposed pre-fabricated rain barrels, i.e. intended use, size, etc. *(TRCA)*
    e) Further technical detail is required to demonstrate the porous pavers to be installed along the driveway will mimic existing conditions without impairing the ecological functions of the wetland. *(TRCA)*
    f) The Town does not support the alternate proposal in the Storm Servicing Addendum to the Functional Servicing and Stormwater Management Report prepared by Masongsong Associates, dated January 20, 2017. The site's entrance is the only emergency access route for the 21 proposed lots and should remain free from any obstruction, including overland flow. *(Town of Caledon, CS, Engineering)*
    g) Please provide hydraulic and velocity calculations for the swale that traverses behind Lots 16 through 21. Additionally, as per the Town's Development Standards, the maximum swale length is three lots where the lot frontage is 12 meters or greater. Catchbasins are to be used where the maximum length is exceeded. *(Town of Caledon, CS, Engineering)*
    h) Please indicate how current overland drainage from 16219 Airport Road will be accommodated. *(Town of Caledon, CS, Engineering)*

12) The following **hydrogeological** comments must be addressed prior to Draft Plan Approval:
    a) A review of MOECC data base within 500 metres of the site is required. Up to date monitoring is required. A monitoring and contingency plan is to be included in the report. (*Region of Peel)*

13) The following comments on the **Planning Justification Report ("PJR")** must be addressed prior to Draft Plan Approval:
    a) As of July 1, 2017 all planning decisions must conform to the new Provincial Policies (Growth Plan, Greenbelt Plan, and Oak Ridges Moraine Conservation Plan). Please consolidate all PJR and addenda to date and address the current provincial policy context within one revised PJR. *(Town of Caledon, CS, Planning)*
    b) Site Description, Page 2: Revise legal description to "Part Lot 22, Concession 1 (Albion), being Part 1 on 43R-3575, Town of Caledon, Regional Municipality of Peel"
    c) Please note that a planting compensation ratio of 2:1 applies to all areas, including MVPZ areas. Please revise all references to a 1:1 compensation planting ratio. *(Town of Caledon, CS, Open Space Design)*
    d) Section 7.2, Growth Plan, Page 8: Please complete the sentence in the 2nd last paragraph. *(Town of Caledon, CS, Planning)*
    e) Section 7.4.1, Town of Caledon In-Force Policies, Page 13: Please revise this section to include a discussion of the applicable designation for the portion of the site outside the settlement boundary. *(Town of Caledon, CS, Planning)*
    f) Section 7.4, TCOP, Page 14: reference to Section 7.7.4.1.f. should be removed or clarified as it pertains to Low Density Residential neighbourhoods, whereas a Medium Density Residential designation is proposed for this site. *(Town of Caledon, CS, Planning)*
    g) Please update Section 8 as per a revised draft Zoning By-law Amendment that addresses the comments contained herein. *(Town of Caledon, CS, Planning)*
    h) Please expand Section 9 to include recent informal meeting on September 18, 2017 as well as the upcoming public meeting and provide a list/chart of key comments received from the public to date and how they have been addressed. *(Town of Caledon, CS, Planning)*

14) The following comments on the **Design Brief, Architectural Design Guidelines** must be addressed prior to Draft Plan Approval:
    a) Comment number 43 of the Comment Summary Letter has not been fully addressed as it relates to Page 16, 3.2.1 Condominium Single Family Residences:
        i) Please make the second sentence of the introductory paragraph a complete sentence;
        ii) Third Bullet: The 90 degree garage orientation as described in the third bullet does not fit on any of the corner lots in the proposed subdivision. It is misleading to include this guideline in the document. Please delete the third bullet along with Figure 3.3.2 on page 21 from the document. (*Town of Caledon, CS, Urban Design*)
    b) Please make the following revisions to the Design Brief:
        i) 2.1 Open Space Elements: Add 'Trail Opportunities" to the list;
        ii) 2.1.2 Lookout: Revise the word 'gazebo' in third sentence to 'potential look-out structure';
        iii) 2.2.2 Private Condominium Road Network: Add 'Street Tree Planting' to the list;
        iv) Figure 2.1.1.4: Show updated Landscape Masterplan drawing by SBK, if applicable. *(Town of Caledon, CS, Open Space Design)*

15) The following comments on the **Revised Environmental Impact Study Response to Agency Comments and Addendum Letters** must be addressed prior to Draft Plan Approval:
    a) Please note that a planting compensation ratio of 2:1 applies to all areas, including MVPZ areas. Please revise all references to a 1:1 compensation planting ratio. *(Town of Caledon, CS, Open Space Design)*
    b) The figures attached to both the agency response and addendum letters show a 'Potentially Developable Area' along Airport Road. Please remove. *(Town of Caledon, CS, Planning & Open Space Design)*
    c) As per the attached comments, TRCA are satisfied the single estate residential lot and associated driveway appear to be outside the Regulatory Floodplain. (*TRCA)*
    d) Please consolidate all EIS reports, responses and addenda to date into one final EIS report. *(Town of Caledon, CS, Planning)*

The following **servicing** comments must be addressed prior to Draft Plan Approval:

16) Regional staff are supportive of a water connection to the single lot with access to McKee Drive. Should the applicant wish to make a servicing application for this single lot, the Region would be open to this proposal. The revised FSR would need to include the plans for this lot. Please note, as this application is still open, should someone appeal the application to the OMB, and the Board orders partial water services be removed, all costs associated with the remove will be at the owner's expense, and returning the servicing to its original state. Further, the costs to install individual well and septic would also be at the owner's expense. (*Region of Peel)*
17) Staff acknowledge that private servicing is proposed for the proposed estate residential lot outside of the settlement area. (*Town of Caledon, CS, Planning & Engineering)*

The following **grading** comments must be addressed prior to Draft Plan Approval:

18) The current grading proposal indicates that Lot 19 and 20 will have a swale traversing the rear yard amenity area; however, the Town's Development Standards indicate that swales are to be located a maximum offset of 1 meter from the rear lot line. The swale traversing Lots 19 and 20 are to be adjusted accordingly. *(Town of Caledon, CS, Engineering)*

Detailed Comments to be Addressed Prior to Approval of the Zoning By-law:

19) The Draft By-law was reviewed at a By-law Review Committee and track-edit changes have been made, as attached. Please confirm and further revise as per the comments below. A revised By-law (text) in word format and schedules in a GIS or AutoCad format are required with the next submission. *(Town of Caledon, CS, Planning)*
20) Please note that Condo Lot/Unit 3 on Drawing No 3 does not appear to comply with the minimum 7.5m rear yard setback. Please confirm. *(Town of Caledon, CS, Zoning)*
21) Please ensure current length dimensions are provided between the closest point of the dwelling and the edge of the street/lane on Plan 40-2 Floor Plans and Elevations. *(Town of Caledon, CS, Zoning)*
22) The applicant is reminded that two parking spaces are to be provided per lot. Staff request confirmation if stairs are being proposed in the garage. *(Town of Caledon, CS, Zoning)*
23) The applicant is reminded that the garage must include a space for Peel Region waste bins. *(Town of Caledon, CS, Planning)*
24) Please ensure all schedules include the correct legal description (see attached track-edit By-law) *(Town of Caledon, CS, Planning)*
25) The FSR references soak away pits in the single estate residential lot. The Site Plan shows two Soak Away pits; one in the 'rear' yard and one under the driveway. Appropriate measures need to be placed in the Draft By-law to ensure protection of the soak away pits from future homeowner activities. Staff prefer soak away pits be located proximate to property lines to allow for existing or customized minimum setbacks for accessory structures to assist in their protection. *(Town of Caledon, CS, Planning)*
26) The FSR refers to private LID measures for the condominium development. Specifically, Figure S.2 illustrates infiltration trenches along the rear of Lots 5 to 14, inclusive. The Draft Zoning By-law should be revised to prohibit accessory structures within those

portions of the lot, noting Engineering comments above regarding maximum offset of 1 metre from property line for the trenches. *(Town of Caledon, CS, Planning)*

27) A final approved Design Brief, Architectural Guidelines is required. *(Town of Caledon, CS, Urban Design)*

Detailed Comments to be Addressed Prior to Approval of the Official Plan Amendment:

28) A final approved Design Brief, Architectural Guidelines is required. *(Town of Caledon, CS, Urban Design)*
29) Please amend the legal description in Part A (Location), Part B (Details of the Amendment, clauses 1 and 2) and Schedules A and B to: "Part Lot 22, Concession 1 (Albion), being Part 1 on 43R-3575, Town of Caledon, Regional Municipality of Peel" *(Town of Caledon, CS, Planning)*
30) Comment 77 from the Summary of Comments Letter has not been fully addressed. The OPA now references the refinements to the Rural and EPA designations; however, the portion of land outside the settlement boundary is also outside Schedule D – Caledon East Land Use Plan in the Official Plan. Please revise the OPA to include an amendment to Schedule A – Town of Caledon Land Use Plan, i.e.:
    a) Add a new Clause 2 that reads:
    Schedule "A" Town of Caledon Land Use Plan of the Town of Caledon Official Plan shall be amended for the lands described as Part Lot 22, Concession 1 (Albion), being Part 1 on 43R-3575, Town of Caledon, Regional Municipality of Peel, from Environmental Policy Area and Rural subject to the policies of 5.2, in accordance with Schedule "B" attached hereto.
    b) Renumber clauses accordingly *(Town of Caledon, CS, Planning)*
31) Revise Schedule B to add the settlement boundary and identify existing Environmental Policy Area lands that will remain Environmental Policy Area *(Town of Caledon, CS, Planning)*
32) Please correct all reference to "Environmental Protection Area" to "Environmental Policy Area". *(Town of Caledon, CS, Planning)*
33) Please revise Clause 1a) to read as follows: "The permitted uses in Medium Density Residential area shall be single-detached dwellings with a net density to a maximum of 30 units/hectare". *(Town of Caledon, CS, Planning)*
34) The draft OPA should propose to delete Section 7.7.6 (Special Study Area). *(Town of Caledon, CS, Planning)*
35) Please add the dates (if known) to the list of reports provided in Part A: Basis. *(Town of Caledon, CS, Planning)*
36) Please revise the draft OPA and submit in both word and pdf format for final review. *(Town of Caledon, CS, Planning)*

Detailed Comments to be Addressed as a Condition of Draft Approval:

37) Tree preservation drawings, arborist report and forest edge management requirements will be required at the detail design stage. *(Town of Caledon, CS, Landscape)*
38) The proposed trail layout will be determined at the detail design stage. Prior to construction, the final location of the trails will be staked with Town and TRCA staff. *(Town of Caledon, CS, Landscape)*
39) The owner will be required to design, secure and construct any required trails, necessary bridges and interpretive signage along the trails. *(Town of Caledon, CS, Landscape)*
40) Public access easements will be required for the connecting internal walkway system. *(Town of Caledon, CS, Landscape)*
41) All works within the McKee Drive right of way will require reinstatement to its original condition or better, all to the satisfaction of the Town. A road occupancy permit will be required from our Public Works Department for any works required in the Town's right of ways. Regarding the driveway access off McKee Drive (north), the applicant will be required to lift the existing 0.3m reserve and create a new reference plan for the remainder. *(Town of Caledon, CS, Engineering)*
42) Prior to the initiation of grading or stripping of topsoil, the Owner shall submit an Erosion and Sedimentation Control Plan including a topsoil storage plan detailing the location, size, side slopes, stabilization methods and time period, for approval by the Town. Topsoil storage shall be limited to the amount required for final grading, with excess removed from site. *(Town of Caledon, CS, Engineering)*

43) The Town will require as a condition of draft approval that, prior to offering units for sale and in a place readily available to the public, the owner will displace information regarding universal design options that may be available for purchase within the development. *(Town of Caledon, CORP, Accessibility)*

Detailed Comments to be addressed during Site Plan Application / Detailed Design

44) A detailed covering letter shall be included in the future Site Plan Application submission that identifies how the comments below have been satisfactorily addressed.

45) The Region of Peel has confirmed that waste collection services will be provided to the proposed development. Accordingly, the site plan submission (i.e. floor plans) must confirm adequate space in the garage for Peel Region waste collection bins. Please label. *(Town of Caledon, CS, Planning)*

46) As part of any future Site Plan Application, the location of pressure fire hydrants shall be indicated on the plan and spaced in accordance with the Ontario Building Code and Region of Peel fire hydrant standard. *(Town of Caledon, CS, Fire Prevention)*

47) If the estate home exceeds 600m2, adequate firefighting water supply shall be required in accordance with the Ontario Building Code. *(Town of Caledon, CS, Fire Prevention)*

48) The viewing area is located too close to existing rear property lines. The viewing area should be shifted 10m further from its current proposed location. Compensation and/or buffer planting will be required between the shifted viewing area and existing rear yard property lines. The Landscape Masterplan for Block 1 shall be updated accordingly. This will be determined at detail design stage. *(Town of Caledon, CS, Landscape)*

49) The proposed road access for the development will remain private and as a result the applicant or the subsequent condominium corporation will be responsible for all future maintenance and reconstruction costs. The final design of the road access will be reviewed and approved at the detail design stage. *(Town of Caledon, CS, Engineering)*

50) The community mailbox area shall be well lit via a light standard and a curb depression from the sidewalk to the mail box landing area. *(Town of Caledon, CORP, Accessibility)*

51) Exterior travel routes (sidewalks) shall be a minimum of 1.5m wide as per the Design of Public Spaces legislation of the AODA and lighting shall comply with the Town's lighting standard. *(Town of Caledon, Accessibility)*

52) All sidewalks shall be connected, when crossing over to another street, with accessible features such as tactile surfaces and curb ramps. *(Town of Caledon, CORP, Accessibility)*

53) Architectural review and approval by the Town's Control Architect is required for Site Plan Approval and/or prior to building permit issuance. House elevations will be required through the Site Plan process showing materials, colours and details consistent with the requirements of the applicable urban design guidelines. The review of the Site Plan by the Town's Control Architect will be at the developer's cost. *(Town of Caledon, CS, Urban Design)*

54) The landscape master plan shall include a note that the proposed private roads and sidewalks shall be subject to access easements to allow for and protect access to the general public to the trails. *(Town of Caledon, CS, Planning)*

55) The landscape masterplan should include plantings (beyond the compensation plantings) within the MVPZ to protect existing KNHFs from the impacts related to land use change, improve habitat and enhance connectivity between existing KNHFs. Please revise the landscape master plan to include planting locations that improve connectivity and enhance existing KNHFs. (*TRCA)*

56) A Feature Based Water Balance Analysis will be required at detailed design to ensure the proposed development and access road will not adversely impact the conditions and ecological functions of the wetland. *(TRCA)*

57) At detailed design, the applicant shall provide detailed calculations in regards to the proposed SWM control for the single estate residential lot to the east of Boyce Creek, along with how TRCA's SWM requirements will be provided for the associated driveway. *(TRCA)*
58) Further assessment is required at detailed design stage to demonstrate how the proposed infiltration measures will be effective in this hydrogeologic setting (i.e. monitoring data have demonstrated flowing artesian conditions in at least one well, even after the drought year of 2016). *(TRCA)*
59) Further hydrogeological assessment is required at the detailed design stage. *(TRCA)*
60) As the subject property is a known area of groundwater discharge, TRCA staff do not accept the finding that wetlands are only surface water fed, with minor groundwater contributions. Further assessment will be required at the detailed design stage. *(TRCA)*
61) The detailed design submission shall include a detailed erosion and sediment control plan that is based on the design guidance and recommendations as provided in TRCA's Erosion and Sediment Control Guideline for Urban Construction. *(TRCA)*

The following agencies have comments that are attached for your review:

- Region of Peel – September 5, 2017 Email and September 11, 2017 Letter (Comments to be Addressed)
- TRCA – August 17, 2017 (Conditions of Draft Approval and Comments to be Addressed)
- Peel District School Board – July 10, 2017 (Conditions of Draft Approval)
- Bell Canada – June 28, 2017 (Conditions of Draft Approval)

The following agencies have no comments or concerns:

- Town of Caledon, Corporate Services, Legal – July 6, 2017

Conclusion

As per the comments provided herein, the Proposed Official Plan Amendment, Zoning By-law Amendment and Draft Plan of Subdivision applications cannot be supported as presently proposed and a resubmission is required to address the comments contained in this letter.

Staff would be happy to arrange a meeting with you and your team of consultants to discuss the comments and revisions required in the next submission. Staff would appreciate receiving an agenda to assist in the discussion at least 3 days prior to the meeting.

A Resubmission Checklist has been attached. Please note that as the applicant it is your responsibility to sort the packages as outlined in the Resubmission Checklist. Staff will not accept or review incomplete submission or submissions received via email. The resubmission is to include a cover letter explaining how all comments have been addressed and the recirculation fee of $5300.

If you have any questions please do not hesitate to contact me anytime at 905-584-2272 ext. 4223 or mary.nordstrom@caledon.ca

Sincerely,

Mary T. Nordstrom, MCIP RPP
Senior Development Planner, Planning & Development
Community Services
TOWN OF CALEDON

TOWN OF CALEDON

c: Casey Blakely, Manager of Development – East
Konstantine Stavrakos, Solicitor/Manager of Legal
Mark Atkinson, Senior Development Engineering Coordinator
Nick Pirzas, Landscape Architect
Ryan Grodecki, Manager, Engineering Services
Sally Drummond, Heritage Resource Officer
Paula Strachan, Senior Planner/Urban Design
Dave Pelayo, Chief Fire Prevention Officer
Cindy Pillsworth, Zoning Administrator
Daniela Busca, Law Clerk
Brian Baird, Manager of Parks
Anant Patel & Quentin Hanchard, TRCA
Wayne Koethe & Ryan Vandenburg, Region of Peel

The Region of Peel is the proud recipient of the National Quality Institute Order of Excellence, Quality; the National Quality Institute Canada Award of Excellence Gold Award, Healthy Workplace; and a 2008 IPAC/Deloitte Public Sector Leadership Gold Award.

Sept. 11 2017

Mary Nordstrom
Development Approval & Planning Policy Department
Town of Caledon - Town Hall
6311 Old Church Road
Caledon ON L7C 1J6

Re: Revised Submission: Official Plan and Zoning By-law Amendment Applications and 1st Submission: Draft Plan of Subdivision
Weston Consulting Group Inc. on behalf of 2031818 Ontario Ltd.
Part Lot 22, Concession 1 (Albion)
0 Airport Road, Caledon East
Town of Caledon
Town Files: POPA 06-08, RZ 06-18, 21T-06006C
Region Files: OZ-06-008C, 21T-06006C

Plan comments:
Prior to draft approval the following must be shown:
• With respect to the proposed Airport Road widening and reserve, the plan needs to be revised to include more detail and dimensions with respect to the widening. The plan must reference the centreline of the road allowance, and must include satisfactory dimensions at both the south and north limit of the property.

Sufficient widenings along Airport Road are to be gratuitously dedicated as public right-of-way to the Region. The Region's road widening requirements are 18.0 metres from the centreline of Airport Road R.O.W. Additional property over and above the Official Plan requirement (20.75 metres from the centreline of Airport Road right-of-way) will be required within 245 metres from the intersection of Airport Road and Huntsmill Drive. A 0.3m reserve behind the frontage of the property along Airport Road must be shown as well on the revised plan.

Hydrogeological Comments:
A review of MOECC data base within 500 meters of the site is required. Up to date monitoring data is required. Monitoring and Contingency Plan are missing from the report. This is to be revised prior to draft approval.

FSR Comments:
Have been provided under separate cover.

Waste Management
With regards to waste collection:
All the waste collection requirements have been satisfied in accordance with the Waste Collection Design Standards Manual. Therefore, the Region of Peel will provide curbside collection of garbage, recyclable materials, household organics and yard waste.

The North-East estate lot would put their garbage curbside at the end of McKee Dr N.

For more information, please consult the Waste Collection Design Standards Manual available at:

http://peelregion.ca/pw/standards/design/waste-collection-design-manual-2016.pdf

Conclusion Remarks
If you require any further information feel free to contact me at any time.

Best Regards,

W. Koethe

Wayne Koethe
Development Services

From:	Koethe, Wayne
To:	Adam Lennie
Cc:	Developments@OskarGroup.com; Ryan Guetter (rguetter@westonconsulting.com); Sabrina Sgotto (ssgotto@westonconsulting.com); Mary Nordstrom; Vandenburg, Ryan
Subject:	RE: 0 Airport Road 21T-06-006C - Region"s Comments - FSR comment
Date:	Tuesday, September 05, 2017 1:08:16 PM
Attachments:	image001.jpg

Hi Adam:

Regional staff have reviewed the request for partial water services for the single lot with access to McKee Drive. Regional engineering staff are in support of the connection to McKee Drive, and, should the applicant wish to make a servicing application for this single lot, the Region would be open to this proposal. The revised FSR would need to include the plans for this lot. Please note, as this application is still open, should someone appeal the application to the OMB, and the board orders the partial water services to be removed, all costs associated with the removal will be at the owners expense, and returning the servicing to its original state. Further, the costs to install individual well and septic would also be at the owners expense.

If you have any further questions, please let me know.

Please be advised that Regional staff are still reviewing your HydroG inquiry and will respond in a separate email.

Regards,
Wayne

Wayne Koethe
Planner
Development Services Division, Public Works
Region of Peel

6th Floor, Suite A, 10 Peel Centre Drive
Brampton, ON, L6T 4B9
☎: (905) 791-7800 ext. 4710 | ✉: wayne.koethe@peelregion.ca

From: Adam Lennie [mailto:alennie@oskargroup.com]
Sent: August 21, 2017 12:34 PM
To: Koethe, Wayne
Cc: Developments@OskarGroup.com; Ryan Guetter (rguetter@westonconsulting.com); Sabrina Sgotto (ssgotto@westonconsulting.com)
Subject: RE: 0 Airport Road - Region's Comments - FSR comment

Hi Wayne,

I look forward to receiving your feedback on the diuscussion we had on Friday regarding servicing and the Hydro-G studies.

As requested, I have attached the Site plan with the revised turning radii to meet the requirements of the waste management guidelines.
Please review let me know if this meets your requirements.

Thanks,

Adam Lennie Project Manager

cid:image001.jpg@01D2AD2A.B00ADFA0

3660 Midland Avenue, Suite 200, Toronto, ON M1V 0B8
Tel: 416.293.9588 x 504 Fax: 416.298.8800 oskargroup.com

From: Koethe, Wayne [mailto:wayne.koethe@peelregion.ca]
Sent: Friday, August 18, 2017 1:40 PM
To: Adam Lennie <alennie@oskargroup.com>; Ryan Guetter (rguetter@westonconsulting.com) <rguetter@westonconsulting.com>; Sabrina Sgotto (ssgotto@westonconsulting.com) <ssgotto@westonconsulting.com>
Subject: RE: 0 Airport Road - Region's Comments - FSR comment

Hi Adam:

There is one other point I would like to discuss during the call. I received the below additional comments on your FSR:

The water servicing plan (Figure S 1) must be revised to show the revised watermain servicing to the single estate lot east of Boyce's Creek.

-Wayne

-----Original Appointment-----
From: Adam Lennie [mailto:alennie@oskargroup.com]
Sent: August 17, 2017 9:59 AM
To: Adam Lennie; Koethe, Wayne; Ryan Guetter (rguetter@westonconsulting.com); Sabrina Sgotto (ssgotto@westonconsulting.com)
Subject: 0 Airport Road - Region's Comments
When: August 18, 2017 2:00 PM-2:30 PM (UTC-05:00) Eastern Time (US & Canada).
Where: 416-293-9588 - Press 8 - Code: 501-1111

Toronto and Region Conservation
for The Living City

August 17, 2017 CFN 48895.03, 55045, X-Ref CFN 50167

BY EMAIL AND MAIL: mary.nordstorm@caledon.ca

Ms. Mary T. Nordstorm, Senior Planner
Development Approval and Planning Policy Department
Town of Caledon
6311 Old Church Road
Caledon, ON L7C 1J6

Dear Ms. Nordstorm:

Re: Draft Plan of Subdivision Application – 21T-06006C
Official Plan & Zoning By-law Amendment Applications - POPA 06-08, RZ 06-18
0 Airport Road, Caledon East
Part Lot 22, Concession 1 (Albion)
Town of Caledon
20312818 Ontario Limited (Agent: Weston Consulting)

Further to our letter dated January 13, 2016, this letter will acknowledge receipt of the revised Official Plan and Zoning By-law Amendment applications and the complete submission for the above noted Draft Plan of Subdivision (received on June 27, 2017). Thank you for the opportunity to review and provide comments on the above noted circulation. As per the "Living City Policies for Planning and Development within the Watersheds of the Toronto and Region Conservation Authority" (LCP), staff provides the following comments as part of TRCA's commenting role under the *Planning Act*; the Authority's delegated responsibility of representing the provincial interest on natural hazards encompassed by Section 3.1 of the Provincial Policy Statement (PPS, 2014); TRCA's Regulatory Authority under the *Conservation Authorities Act* and Ontario Regulation 166/06, *Development, Interference with Wetlands, and Alterations to Shorelines and Watercourses* (as amended); and our Memoranda of Understanding (MOU) with the Region of Peel and Town of Caledon, wherein we provide technical environmental advice.

Purpose of the Application
It is our understand that the purpose of the above noted Draft Plan of Subdivision application is to develop a residential Draft Plan of Subdivision consisting of 21 single detached dwelling units within a 2.3 ha (5.7 acre) development area. The dwelling units will be developed through a future Condominium Plan which will include visitor parking and amenity areas and a private road connection to McKee Drive South. Also, the Draft Plan of Subdivision includes a Block for a proposed estate residential dwelling located on the northeast corner of the property, as well as various Blocks for the 14.1 ha (35 acre) of Open Space lands outside of the proposed development areas of the site.

It is our understanding that the purpose of the above noted Official Plan and Zoning By-law Amendment (OPA/ZBLA) applications is to re-designate a portion of the property from "Special Study Area A" to a "site-specific Medium Density Residential" designation and rezone portions of the property from "Estate Residential" (RE) to "site-specific Residential Zone" (R-XX) and "Environmental Protection Area" (EPA-X) zones.

There are wetlands on the site that are part of the Locally Significant Caledon East Wetland Complex (LSW), as well as several other Key Natural Heritage Features (KNHFs) and Hydrologically Sensitive Features (HSFs). These include significant wetlands; significant portions of habitat of endangered species; fish habitat; significant valleylands; significant woodlands; significant wildlife; permanent and intermittent streams; and, seepage areas and springs.

Recommendation

Given the supplementary updated plans, technical memos and constructive discussions to date, the key priority issues that were identified in our letter dated January 13, 2016, have in-principle been adequately addressed. As such, TRCA staff are in a position to provide Condition of Draft Plan Approval that are attached as Appendix II. Our comments on the recent resubmission are identified in Appendix I.

To assist staff with reviewing the next submission, please ensure the applicant, including each technical discipline, provides a cover letter detailing how the entire previous and additional comments have been addressed. We are available to meet with the Town and the applicant in a collaborative effort to resolve our outstanding comments.

Applicable TRCA Policies and Regulations

Ontario Regulation 166/06

TRCA regulates development within and adjacent to watercourses and valley corridors, and wetlands. As such, a significant portion of the subject lands are located within the Regulated Area of the Humber River Watershed and are subject to Ontario Regulation 166/06 (as amended), and TRCA's LCP. The proposed development is located within the Regulated Area and a TRCA permit will be required prior to any works commencing within the Regulated Area of the Humber River Watershed. Should the project advance to the permitting stage, staff will advise on TRCA's permitting review and fee requirements.

Oak Ridges Moraine

The subject property is located on the Oak Ridges Moraine (ORM) and is subject to the provisions of the ORMCP. It appears that the site is partially located within the Settlement Area, Countryside Area and Natural Linkage Area land use designations of the ORMCP.

It is recognized that the Town of Caledon is the designated approval authority under the *Oak Ridges Moraine Conservation Act,* and the TRCA is the technical advisor to the Town of Caledon with respect to the ORMCP and assists the municipality to ensure that this development proposal conforms to the provisions of the ORMCP.

Fees

By copy of this letter, please advise the applicant that the TRCA has implemented a fee schedule for our planning and development review services. TRCA staff thanks the applicant for submitting the $49,800 review (Draft Plan of Subdivision - Major – 10ha to 25ha). Please note the Clearance Fee under the 2016 TRCA Planning Services Fee Schedule is $15,800, and is due at the time when the applicant requests clearance from the TRCA.

Conclusion

TRCA staff has reviewed the materials included within your circulation and provide comments, which are identified in Appendix I. TRCA staff will continue to work closely with Town of Caledon staff, the proponent and their team of consultants to ensure that TRCA's expectations for meeting our comments. To assist staff with reviewing the next submission, please ensure that consulting team provides a cover letter detailing how each of the concerns have been addressed. TRCA staff are available to meet with the Town, consulting team and applicant in a collaborative effort to advance the project.

Yours truly,

Anant Patel
Planner II
Planning and Development
Ext. 5618
/ap

Encl.: APPENDIX I: TRCA Comments on the June 27, 2017 Submission
APPENDIX II: TRCA Staff Conditions of Draft Approval (City File #21T-06006C)

cc: Ryan Guetter, Weston Consulting: rguetter@westonconsulting.com
Adam Lennie, Oskar Group: alennie@oskargroup.com
Brennan Paul, Senior Planning Ecologist, TRCA
Jairo Moreilli, Water Resources Analyst, TRCA
Don Ford, Senior Manager, Hydrogeology, TRCA

APPENDIX I: TRCA Comments

The following materials were received and reviewed by the TRCA:

- Draft Plan of Subdivision, prepared by Weston Consulting, revision no. 3 dated March 2017;
- Draft Official Plan and Zoning By-law Amendment, prepared by Weston Consulting, received June 27, 2017;
- Comments Response Table, prepared Weston Consulting, updated June 2, 2017;
- Design Brief Architectural Guidelines, prepared by VA3 Design Inc., revision no. 3 dated May 23, 2017;
- Result of Groundwater Monitoring Program, prepared by Terraprobe, dated November 2, 2016;
- Addendum Letter to Revised Environmental Impact Study, prepared by Azimuth Environmental Consulting, Inc., dated April 5, 2017;
- Response to Agency Comments, prepared by Azimuth Environmental Consulting, Inc., dated May 23, 2017;
- Storm Servicing Alternative Addendum to the Functional Servicing and Stormwater Management Report, prepared by Masongsong Associates Engineering Limited, dated January 20, 2017;
- Functional Servicing and Stormwater Management Report, prepared by Masongsong Associates Engineering Limited, dated January 2017;
- Update to the existing Estimated Hydraulic Model, prepared by Masongsong Associates Engineering Limited, dated February 27, 2017;
- Planning Justification Report Addendum, prepared by Weston Consulting, dated June 2017;
- Landscape Masterplan, prepared by Strybos Barron King Landscape Architect, dated May 19, 2017;
- Drawing No. 1, Overall Site Plan, prepared by VA3 Design, revision no. 6 dated March 3, 2016;
- Drawing No. 2 Site Plan_Single Estate Lot, prepared by VA3 Design, revision no. 6 dated March 3, 2016;
- Drawing No. 3, Site Plan_Single Detached Lots, prepared by VA3 Design, revision no. 6 dated March 3, 2016;
- Drawing No. 4, Site Plan_Single Detached Lots, prepared by VA3 Design, revision no. 6 dated March 3, 2016;
- Drawing No. 5, Site_Cross Section, prepared by VA3 Design, revision no. 1 dated April 2017
- Drawing No. 6, Floor Plans & Elevations, prepared by VA3 Design, revision no. 1 dated July 7, 2015;
- Drawing No. 7, Floor Plans, prepared by VA3 Design, revision no.1 dated July 7, 2015;
- Drawing No. 8, Elevations, prepared by VA3 Design, revision no.1 dated July 7, 2015

Please advise the applicant to address the following comments and resubmit revisions/additional information for additional technical review. To expedite the review of the resubmission, please advise the applicant to include a cover letter detailing how each of the concerned listed below have been addressed:

Natural Heritage Evaluation/Planning Ecology

1. **New Comment:** The MVPZ is not clearly identified on the drawings. It can be inferred based on the other limits depicted. Please advise the applicant to clearly identify the MVPZ on all relevant plans.

2. **Previous TRCA comment #2:** The HEC-RAS model completed by Masongsong Ltd. has been reviewed by TRCA staff. The proposed single estate residential lot and associated driveway appears to be located outside of the Regulatory Floodplain.

3. **Previous TRCA comment #7:** The landscape master plan does not appear to propose any planting within the MVPZs beyond the compensation plantings. Plantings within the MVPZ should be designed to protect the adjacent KNHF's from the impacts related to the changes in land use. Compensation plantings should be focused on habitat improvement and should not occur within the MVPZ.

   As an added noted, the planting locations should consider connectivity along with enhancement of the existing KNHFs. The planting area to the southeast of the development does not appear to maximize the opportunity to enhance the existing features or provide connectivity. Please advise the applicant to ensure that planting locations are chosen to provide greater connectivity and enhance the existing features or provide connectivity. Please advise the applicant to ensure that planting locations are chosen to provide greater connectivity and enhance the existing KNHFs.

4. **Previous TRCA comment #5:** In addition to our comments dated January 13, 2016, TRCA staff concerns is the potential impacts the proposed development and access road through the existing wetland may have in the long term. A Feature Based Water Balance Analysis is required to demonstrate that the wetland conditions and ecological functions will be maintained. The Feature Based Water Balance Analysis will be required at detailed designs stage.

Stormwater Management

5. **Previous TRCA comment #15:** An Oil Grit Separator is proposed to treat runoff from the site (1.98 ha) prior to out letting to the wetland. TRCA recognizes certified OGS units to only provide 50% TSS removal. Therefore, further measure to achieve the required 80% TSS removal should be investigated. Please advise the applicant refer to TRCA's LID SWM planning Design Manual.

6. **Previous TRCA comment #16:** Page 12 of the Functional Servicing Report (FSR), prepared by Masongsong Ltd., states that the total length of the granular trenches proposed along the yard is 130 m while the calculations used are 155 m. Further calculations and infiltration rate presented on page 13 of the same report are quite confusing (refer to MOECC manual equation 4.3). Please advise the applicant to adjust the calculations and provide details (i.e., cross section) of the proposed infiltration trenches. The water table elevation should be confirmed to ensure the seasonally high groundwater level is at 1.0 m below the invert of the proposed infiltration facility.

7. **New comment:** At detailed design stage, please advise the applicant to provide detailed calculations in regards of the proposed SWM control for the single estate residential lot to the east of Boyce Creek, along with how TRCA's SWM requirement will be provided for the associated driveway.

8. **New comment:** Please advise the applicant to provide a discussion and further details on the proposed pre-fabricated rain barrels (i.e., intended use, size, etc.)

9. **New comment:** Please advise the applicant to provide further technical detail to demonstrate the porous pavers to be installed along the driveway will mimic existing conditions without impairing the ecological functions of the wetland.

10. **Previous TRCA comment #17:** TRCA staff is still concerned that infiltration measures will be ineffective in this hydrogeologic setting. Monitoring data have demonstrated flowing artesian conditions in at least one well, even after the drought year of 2016. TRCA staff accepts further assessment at the detailed design stage.

Hydrogeology

11. **Previous TRCA comment #20:** Water level monitoring is provided. TRCA staff accepts further assessment at the detailed design stage.

12. **New comment:** Given that the subject property is located in a known area of groundwater discharge, TRCA staff do not accept the Terraprobe finding that the wetlands are only surface water fed, with minor groundwater contributions. Please advise the applicant further assessment is warranted at the detailed design stage.

Erosion and Sediment Controls

13. **Previous TRCA comment #23:** Further to our previous comments, as part of satisfying TRCA's conditions of draft approval, please advise the applicant to ensure that the detailed design submission includes a detailed erosions and sediment control (ESC) plan. The ESC plan should be based on the design guidance and recommendations as provided in TRCA's Erosion and Sediment Control Guideline for Urban Construction (dated December 2006).

APPENDIX II: TRCA Staff Conditions of Draft Approval (City File #21T-06006C)

TRCA Conditions of Draft Approval

On this basis, pursuant to the review of the above noted draft plan of subdivision, the following are conditions of draft approval as recommended by the TRCA. Please note that a copy of the most current Condition of Draft Approval and draft plan of subdivision, the Executive Subdivision Agreement, the implementing Official Plan Amendment, the implementing Zoning By-Law, and TRCA's clearance fees must be provided to the TRCA with any request for clearance of conditions that identifies how the conditions have been fulfill, when available, in order to assist the clearance of conditions of draft approval. Based on the 2016 TRCA Planning Services Fee Schedule, a clearance of $15,800 must be provided to the TRCA at the time of requesting clearance of conditions.

Red-line Revisions

1. The final Plan of Subdivision shall be in general conformity with the Draft Plan of Subdivision prepared by Weston Consulting, and will be red-line revised, prior to a request for clearance for registration of any phase of this plan, to:

    a. Meet the requirements of TRCA's conditions, including the adjustment of block lot lines to the satisfaction of the Town of Caledon and TRCA.

    b. Confirm the delineation of Block 3 (Open Space (i.e. watercourse, significant woodland, valleyland, and associated environmental buffers)), Block 4 (Open Space (i.e. significant woodland, locally significant wetland and associated environmental buffers)), Block 5 (Open Space (i.e. significant woodland and associated environmental buffer)) and any other adjacent blocks (i.e. Reserve and Road widening block).

2. Prior to the registration of the Plan of Subdivision, provide an M-Plan showing the adjusted lot/block lines, additional lots/blocks and any other required revisions to the satisfaction of the Town of Caledon and the TRCA.

Prior to Works Commencing

3. That prior to any development, pre-servicing or site alteration, or registration of this Plan or any phase thereof, the applicant shall submit and attain the approve of the TRCA for:

    a. A detailed engineering report (e.g. Stormwater Management and Functional Servicing Report) that describes the storm drainage system (quantity and quality) for the proposed development of the subject lands, and how it will comply with all related TRCA requirements. This report shall include, but is not limited to:

        i. Plans illustrating how this drainage system will tie into surrounding drainage systems and storm water management techniques which may be required to control minor and major flows. Confirmation must be provided with respect to how target flows as per the hydrologic studies will be achieved during and post-development.

        ii. Appropriate stormwater management practices to be used to treat stormwater, to mitigate the impacts of development on the quality and quantity of groundwater and surface water resources, including how it relates to terrestrial and aquatic species and their habitat, in addition to natural features and systems.

        iii. Proposed methods for controlling or minimizing erosion and siltation on-site and/or in downstream areas during and after construction, in accordance with the current erosion control criteria, and Erosion and Sediment Control (ESC) guidelines utilized

by the TRCA. ESC plans and a report addressing phasing and staging, consistent with TRCA's guidelines must be included.

iv. Location and description of all outlets and other facilities, grading, site alterations, development, infrastructure and watercourse alterations, which are required to service or facilitate the development of the subject lands, which may require a permit pursuant to Ontario Regulation 166/06, the Authority 's Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation.

v. Mapping of proposed stormwater management measure, with consideration for existing vegetation to be disturbed, grade differentials and grading required.

vi. The integration of Low Impact Development (LID) measures and the employment of source and conveyance controls to mimic, to the extent feasible, pre-development hydrology to the satisfaction of the TRCA. The design of LID measures shall be in conformance with the design guidance provided in TRCA's LID SWM planning Design Manual.

vii. Stormwater Management facility and outlet design details.

b. Plans illustrating that all works, including all grading, site alterations, or materials associated with these activities, will not encroach or be placed on lands outside of the development areas. These plans must be also identify no grading works and fill placement within the environmental buffer areas, or proposed environmental protection area land, beyond those approved by the TRCA and the Town of Caledon.

c. A hydrogeologic assessment that will examine existing and proposed ground water levels in relation to the proposed development, underground construction and servicing and stormwater management infrastructure. No permanent dewatering of groundwater or interflow associated with any component of this development shall be permitted. The need for liners associated with the stormwater management system shall be assessed, and suitable liners shall be provided where necessary. All underground construction and infrastructure must be designed to not require permanent dewatering, and any potential impacts to the groundwater system that may result from the development must be assessed and mitigated.

d. Information detailing all anticipated temporary dewatering that may be required during the construction phase, including anticipated volumes, duration, discharge locations, and filtration media - as required, to the satisfaction of the TRCA, for the purposes of determining whether a TRCA permit is required.

e. Overall site-level Water Balance Report that will identify measures that will be implemented during pre and post development that:

i. mimic the pre-development surface and groundwater water balance for the overall site to the greatest extent achievable;
ii. demonstrate how post-development conditions will retain a minimum of the first 5 mm of rainfall over the entire site to the satisfaction of the TRCA;
iii. mitigate against any potential on-site or downstream erosion associated with the stormwater management system;
iv. maintain baseflow contributions at pre-development levels, duration and frequency, in all areas of affected watercourses to the satisfaction of TRCA staff.

f. An overall monitoring plan:

   i. For the LID measures that identifies the monitoring activities and responsibilities for 3 years once the facilities are operational;
   ii. For the Restoration/Planting Plan areas within Blocks 3, 4 and 5 (i.e. Open Space) that identifies the monitoring activities and responsibilities for 3 years once the area is planted.

g. A detailed Pedestrian Trail Plan that conforms to the TRCA and Town of Caledon trail and planting guidelines and standards. The Plan must include limits of grading and mitigation measures for any encroachments into the environmental buffer. Any encroachments into in the environmental buffer must be approved by the TRCA and the Town of Caledon.

h. Evidence from the Ministry of Natural Resources and Forestry, and from Fisheries and Oceans Canada, which identifies any permits and/or other authorizations required under Ontario's Endangered Species Act, 2007 ("ESA") and its prescribed regulations; and,

i. Evidence of the proposed measures both on-site and off-site, or any combination thereof, to meet all requirements under the ESA and its prescribed regulations, if required.

j. That the applicant attain all Ontario Regulation 166/06 permits from the TRCA for all works proposed on the subject property for which permits would be required.

k. That the size and location of all LID measures associated with this development be confirmed to the satisfaction of the TRCA. And, if required to meet TRCA requirements, red-line revisions are made to the plan to provide for necessary blocks within the Plan, or modify their size or configuration into surrounding lands within this subdivision which are currently proposed for development.

l. That a Restoration/Planting Plan be provided to the satisfaction of the TRCA for Blocks 3, 4 and 5, or other associated lots and blocks within the Plan.

Subdivision Agreement

4. That the owner agree in the subdivision agreement, in wording acceptable to the TRCA:

   a. To carry out, or cause to be carried out, to the satisfaction of the TRCA, the recommendations of the technical reports and plans referenced in TRCA's conditions.

   b. To implement the requirements of the TRCA's conditions in wording acceptable to the TRCA.

   c. To design and implement on-site erosion and sediment control in accordance with current TRCA guidelines and standards.

   d. To maintain all stormwater management and erosion and sedimentation control structures operating and in good repair during the construction period, in a manner satisfactory to the TRCA.

   e. To design and implement a Restoration/Planting Plan for Blocks 3, 4 and 5, in accordance with current TRCA guidelines and standards.

f. To obtain all necessary permits pursuant to Ontario Regulation 166/06 from the TRCA, in addition to all permits and approvals from Fisheries and Oceans Canada, and the Ministry of Natural Resources and Forestry.

g. To erect a permanent fence to the satisfaction of the TRCA for Blocks 3 and 4; or, to provide for other measures to achieve a similar objective, to the satisfaction of the TRCA.

h. To implement all water balance/infiltration measures identified in the water balance study that is to be completed for the subject property;

i. To design a monitoring protocol and provide the requisite funding, obtain approval, monitor and maintain the site level water balance measures on the site (including LIDs) for the long-term monitoring of this system for 3 years once the facilities are operational, to the satisfaction of the Town of Caledon and TRCA.

j. To design a monitoring protocol and provide the requisite funding, obtain approval, monitor and maintain the proposed Restoration/Planting Plan areas within Open Space Blocks 3, 4, and 5 for the long-term monitoring of the areas for 3 years once the area is planted, to the satisfaction of the Town of Caledon and TRCA.

k. To provide for the warning clauses and information identified in TRCA's conditions.

l. That, where required to satisfy TRCA's conditions, development shall be phased within this plan.

m. That prior to a request for renewal of Draft Approval of any phase of this subdivision, that the owner consult with the TRCA with respect to whether the technical studies submitted in support of this development remain to meet current day requirements, and that the owner update any studies and plans, as required, to reflect current day requirements.

n. To carry out, or cause to be carried out the cleaning-out and maintenance of all stormwater management infrastructure (including best management practices, and LID measures) prior to assumption of the subdivision by the Town of Caledon. And, to include appropriate clauses in all subdivision agreements of purchase and agreements, for lots and blocks on which stormwater management measure are being constructions to identify the presence of such measures and to clearly identify the owners responsibilities for long-term maintenance, and any restrictions to uses on any portion of their property that these may require.

o. To gratuitously dedicate Block 3, 4 and 5 to the TRCA, in a condition that is satisfactory to the TRCA.

p. To provide an access easement in favour to the TRCA over part of Blocks 1 and 2 to access Blocks 3, 4 and 5.

q. That all community information maps and promotional sales materials for lots or blocks adjacent to Open Space Blocks 3, 4, and 5 (i.e. environmental protection area and associated buffers, and on which existing vegetation or restored areas will be present) clearly identify the presence of these features, identify limitations to permitted uses within these areas and restrictions to access.

r. That all community information maps and promotional sales materials clearly identify the presence of LID features (e.g. bioswales) within the rear and side years of each lot, and identify limitations to permitted uses within these areas.

Purchase and Sale Agreements

5. That a warning clause be included in all agreements of purchase and sale, and information be provided on all community information maps and promotional sales materials for blocks adjacent to Open Space Blocks 3, 4 and 5 (i.e. environmental protection area and associated buffer, and on which existing vegetation and restoration will be present), which identifies the following:

   a. That a natural environmental protection block is being provided adjacent to the subject property. These blocks are considered to be part of publically owned environmental protection area and will remain in naturalized state. Private uses are not permitted on these lands. Uses such as private picnic, barbeque or garden areas; storage of materials and/or dumping of reuse or ploughed snow are not permitted on these lands. In addition, access to the environmental protection lands such as private rear yard gates is prohibited.

6. That a warning clause be included in all agreement of purchase and sale, and information be provided on all community information maps and promotional sales materials that identifies the location of LIDs on private lots (e.g. bioswales in rear or side years) and identifies prohibited uses on and around these LID measures. Wording for the warning clauses is to be to the satisfaction of TRCA and the Town of Caledon.

Implementing Official Plan Amendment

7. That the implementing Official Plan Amendment recognize all natural heritage features and areas and their associated buffers in a suitable environmental protection zoning category which has the effect of prohibiting development and structural encroachment, and ensuring the long-term preservation of the land in perpetuity, to the satisfaction of the TRCA.

Implementing Zoning By-Law

8. That the implementing Zoning By-Law recognize all natural heritage features and areas and their associated buffers in a suitable environmental protection zoning category which has the effect of prohibiting development and structural encroachment, and ensuring the long-term preservation of the land in perpetuity, to the satisfaction of the TRCA.

peel District School Board

5650 Hurontario Street
Mississauga, ON, Canada L5R 1C6
t 905.890.1010 1.800.668.1146
f 905.890.6747
www.peelschools.org

July 10th, 2017

Mr. Mary Nordstorm
Senior Development Planner
Town of Caledon
6311 Old Church Road
Caledon, ON L7C 1J6

Dear Mr. Nordstrom:

RE: **Pre-Consultation Application PRE 2012-0160**
Related Applications: RZ 06-18, OPA 06-08, 21T-06006C (revised comments)
Weston Consulting on behalf of 2031818 Ontario Ltd.
0 Airport Road, Caledon East
East side of Airport Road, north of Old Church Road
Town of Caledon (Ward 3)

The Peel District School Board has reviewed the above noted-application (22 detached residential units) based on its School Accommodation Criteria and has the following comments:

The anticipated yield from this plan is as follows:

6	K-8
3	9-12

The students generated are presently within the following attendance areas:

	Enrolment	Capacity	# of Portables
Caledon East P.S.	261	254	1
Humberview S.S.	1,181	1,437	2

The Board requires the inclusion of the following conditions in the Development Agreement as well as the Engineering Agreement:

1. The Board requires that the following clause be placed in any agreement of purchase and sale entered into with respect to any lots on this plan, within a period of five years from the date of registration of the subdivision agreement:

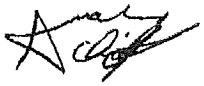
   "Whereas, despite the efforts of the Peel District School Board, sufficient accommodation may not be available for all anticipated students in the neighbourhood schools, you are hereby notified that some students may be accommodated in temporary facilities or bused to schools outside of the area, according to the Board's Transportation Policy. You are advised to contact the School Accommodation department of the Peel District School Board to determine the exact schools."

2. The Board requires that the following clause be placed in any agreement of purchase and sale entered into with respect to any units in this plan, within a period of five years from the date of registration of the development agreement:

   "The purchaser agrees that for the purposes of transportation to school the residents of the development shall agree that the children will meet the school bus on roads presently in existence or at another designated place convenient to the Board."

If you require any further information please contact me at 905-890-1010, ext. 2217.

Yours truly,



Amar Singh, BURPl
Planner
Planning and Accommodation Dept.

c. B. Bielski, Peel District School Board
K. Hamilton, Dufferin-Peel Catholic District School Board (email only)

From:	prime@mmm.ca
To:	Mary Nordstrom
Subject:	OPA (POPA 06-08), ZBLA (RZ 06-18), Draft Plan of Subdivision (21T-06006C) - 0 Airport Rd.
Date:	Wednesday, June 28, 2017 8:44:13 AM

6/28/2017

Mary Nordstrom

Caledon

, ,

Attention: Mary Nordstrom

Re: OPA (POPA 06-08), ZBLA (RZ 06-18), Draft Plan of Subdivision (21T-06006C) - 0 Airport Rd.; Your File No. POPA 06-08,RZ 06-18,21T-06006C

Our File No. 78593

Dear Sir/Madam,

We have reviewed the circulation regarding the above noted application.

The following paragraph is to be included as a condition of approval:

"The Owner shall indicate in the Agreement, in words satisfactory to Bell Canada, that it will grant to Bell Canada any easements that may be required, which may include a blanket easement, for communication/telecommunication infrastructure. In the event of any conflict with existing Bell Canada facilities or easements, the Owner shall be responsible for the relocation of such facilities or easements".

We hereby advise the Developer to contact Bell Canada during detailed design to confirm the provision of communication/telecommunication infrastructure needed to service the development.

As you may be aware, Bell Canada is Ontario's principal telecommunications infrastructure provider, developing and maintaining an essential public service. It is incumbent upon the Municipality and the Developer to ensure that the development is serviced with communication/telecommunication infrastructure. In fact, the 2014 Provincial Policy Statement (PPS) requires the development of coordinated, efficient and cost-effective infrastructure, including telecommunications systems (Section 1.6.1).

The Developer is hereby advised that prior to commencing any work, the Developer must confirm that sufficient wire-line communication/telecommunication infrastructure is available. In the event that such infrastructure is unavailable, the Developer shall be required to pay for the connection to and/or extension of the existing communication/telecommunication infrastructure.

If the Developer elects not to pay for the above noted connection, then the Developer will be

required to demonstrate to the satisfaction of the Municipality that sufficient alternative communication/telecommunication will be provided to enable, at a minimum, the effective delivery of communication/telecommunication services for emergency management services (i.e., 911 Emergency Services).

MMM (a WSP company) operates Bell Canada's development tracking system, which includes the intake and processing of municipal circulations. Please note, however, that **all responses to circulations and other requests, such as requests for clearance, come directly from Bell Canada, and not from MMM.** MMM is not responsible for the provision of comments or other responses.

Should you have any questions, please contact the undersigned.

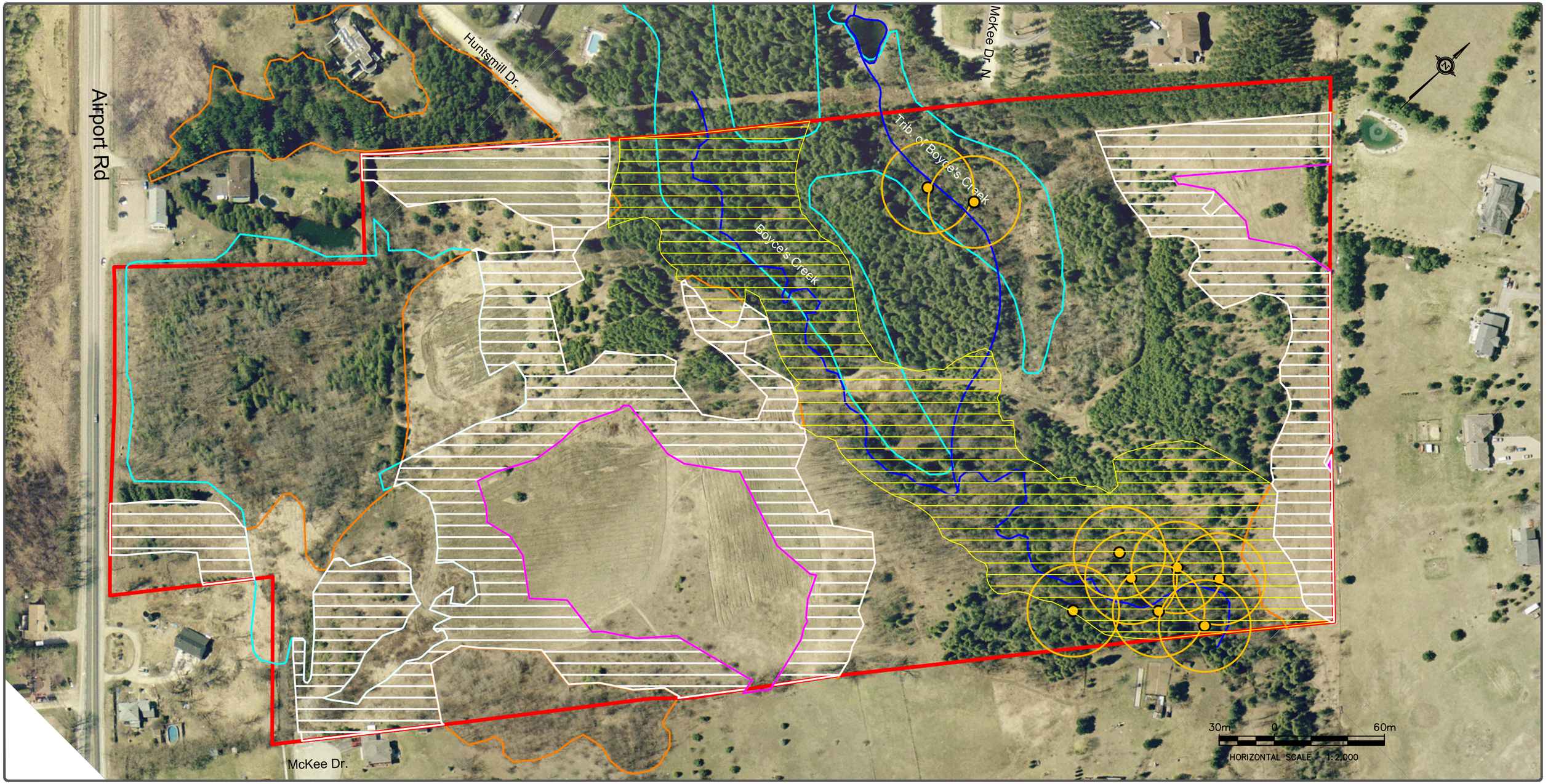
Yours truly,

Meaghan Palynchuk
Manager, Municipal Relations
Access Network Provisioning, Ontario
Phone: 905-540-7254
Mobile: 289-527-3953
Email: Meaghan.Palynchuk@bell.ca

4th Submission Material Distribution Chart
POPA 06-08, RZ 06-18 SPA 10-40 - 0 Airport Road

September 2017

Item	Engineering	Fire	Landscape	Planning Law	Open Space Design	Infrastructure - Eng	Urban Design	Lead Planner	Region of Peel	TRCA	TOTAL
Cover Letter + Response Matrix	1	1	1	1	1	1	1	2	1	1	11
Draft Plan of Subdivision	1		1	1	1	1		2	8	4	19
Environmental Impact Study and Management Plan			1					2		4	7
Functional Servicing Report	1		1			1		2	4	4	13
Planning Justification Report	1		1			1	1	2	3	4	13
Draft OPA and ZBA	1		1				1	2	1	4	10
Site Plan	1	1	1	1	1	1	1	2	8	4	21
Storm Water Management Report	1					1		2	4	4	12
Landscape Master Plan								2	2	4	8
Urban Design Brief			1				1	2			4
Fee ($5300)								1			1
Electronic Copy (USB Stick)*								1	1		2



Legend:

- Property Boundary
- Watercourse - Hydrologically Sensitive Feature (HSF) and Key Natural Heritage Feature (KNHF)
- MNR Evaluated Wetland (Locally Significant) - HSF
- Significant Woodland - KNHF
- Significant Valley Land - KNHF
- Butternut with 25m Buffer (END)
- Recommended EPA1 Boundary
- Minimum Vegetation Protection Zone (MVPZ) (white)

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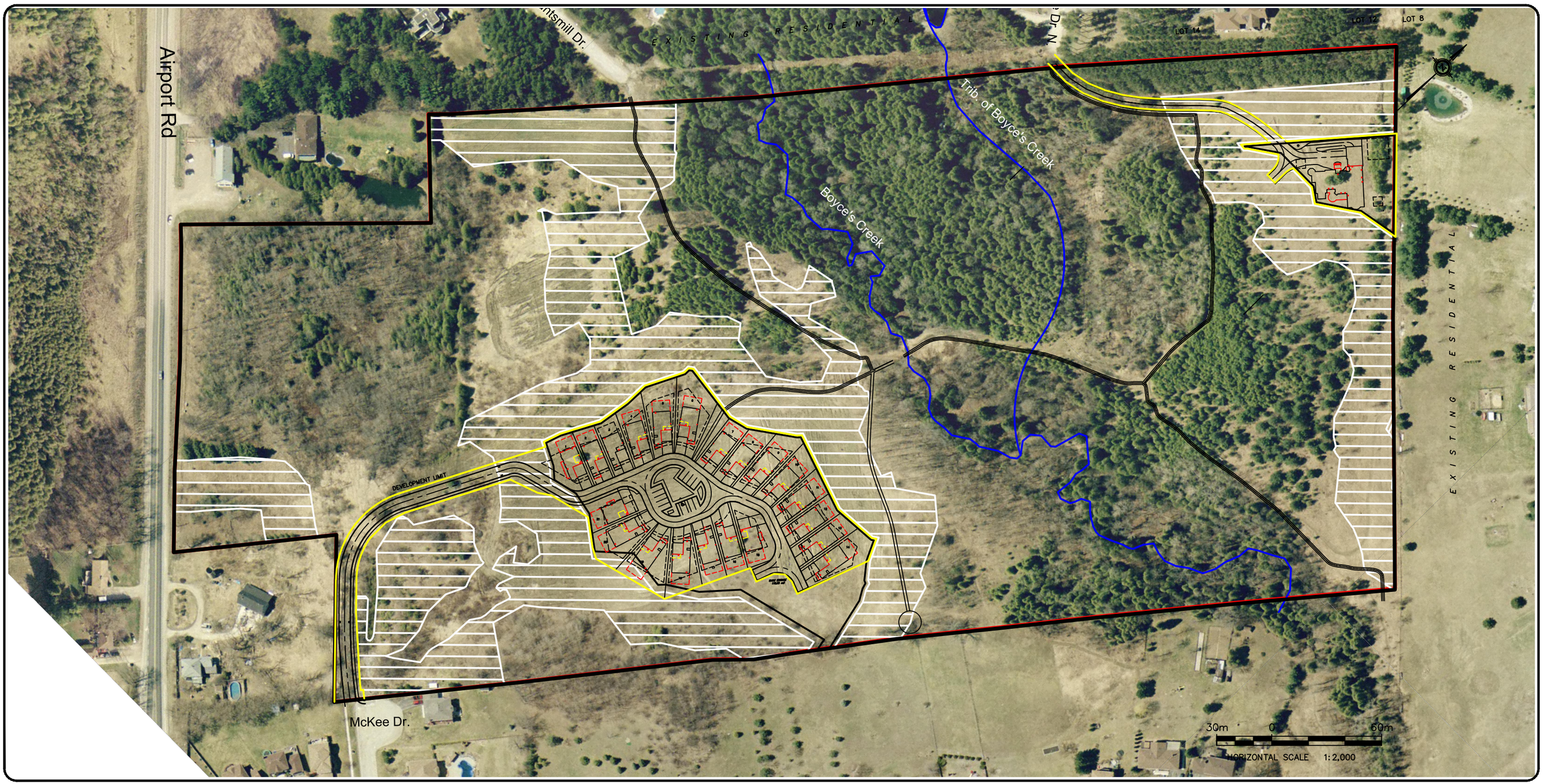
AZIMUTH ENVIRONMENTAL CONSULTING, INC.

Environmental Constraints

Date Issued:	February 2017
Created By:	JLM
Project No.	06-011
Reference:	First Base Solutions

Caledon East EIS
Pt W1/2 Lot 22, Con. 1
Town of Caledon

Figure No.
2



Legend:

- Property Boundary
- Watercourse
- Potentially Developable Area
- Minimum Vegetation Protection Zone (MVPZ) (white)
- Development Footprint

L:\06 Projects\06-011 Caledon East EIS\Drafting\dwg\06-011 2010.dwg

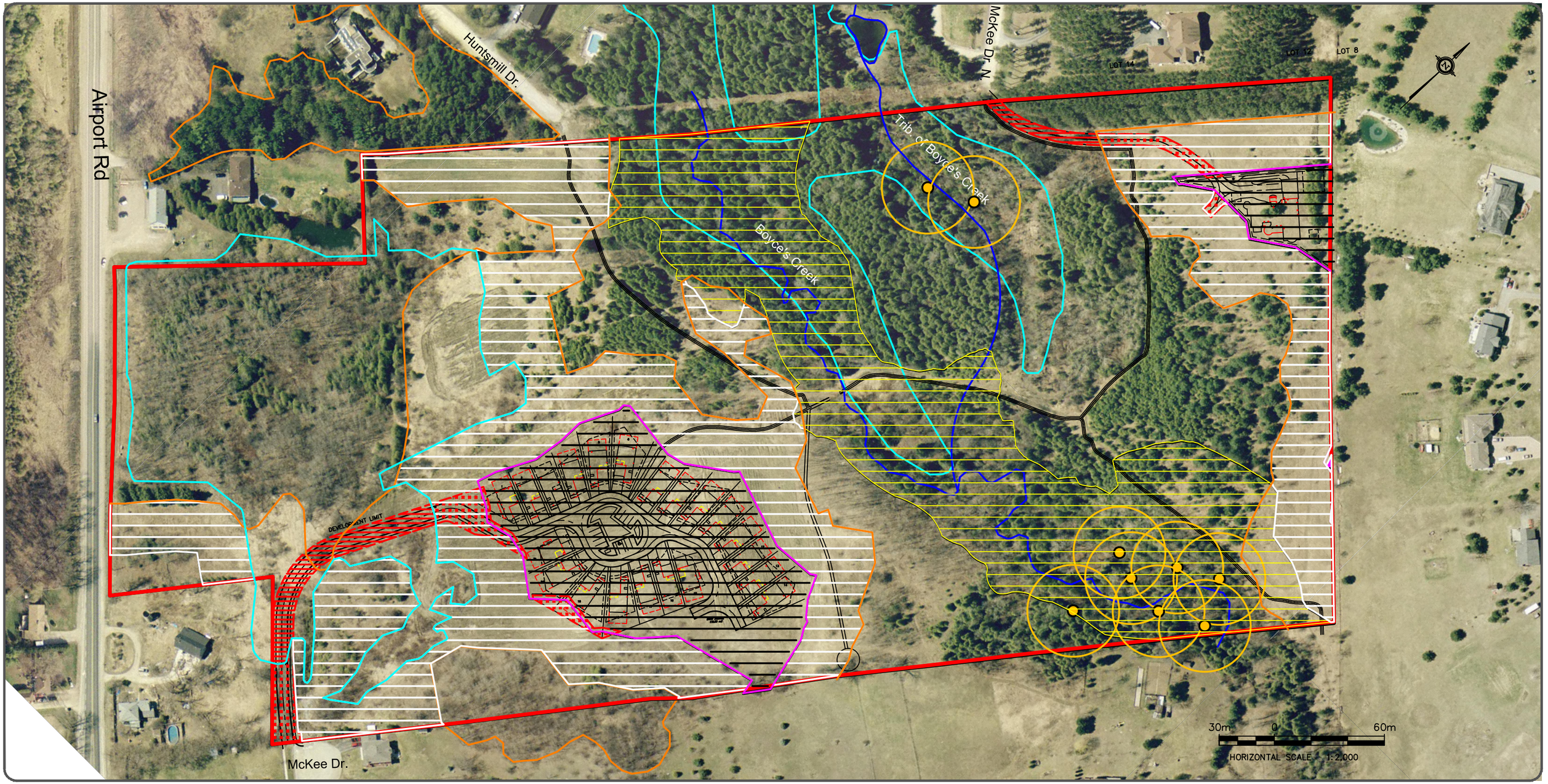
AZIMUTH ENVIRONMENTAL CONSULTING, INC.

Proposed Development

Date Issued:	November 2017
Created By:	JLM
Project No.	06-011
Reference:	First Base Solutions

Caledon East EIS
Pt W1/2 Lot 22, Con. 1
Town of Caledon

Figure No.
4



Legend:

- Property Boundary
- Watercourse - Hydrologically Sensitive Feature (HSF) & Key Natural Heritage Feature (KNHF) (Fish Habitat)
- MNR Evaluated Wetland (Locally Significant) - HSF
- Significant Woodland - KNHF
- Significant Valley Land - KNHF
- Butternut with 25m Buffer (END)
- Recommended EPA1 Boundary
- Minimum Vegetation Protection Zone (MVPZ) (white)
- Potentially Developable Area
- Proposed Encroachment into KNHF/HSF
- Proposed Encroachment into MVPZ

W:\06-011 Caledon East EIS\Drafting\dwg\06-011 2012.dwg

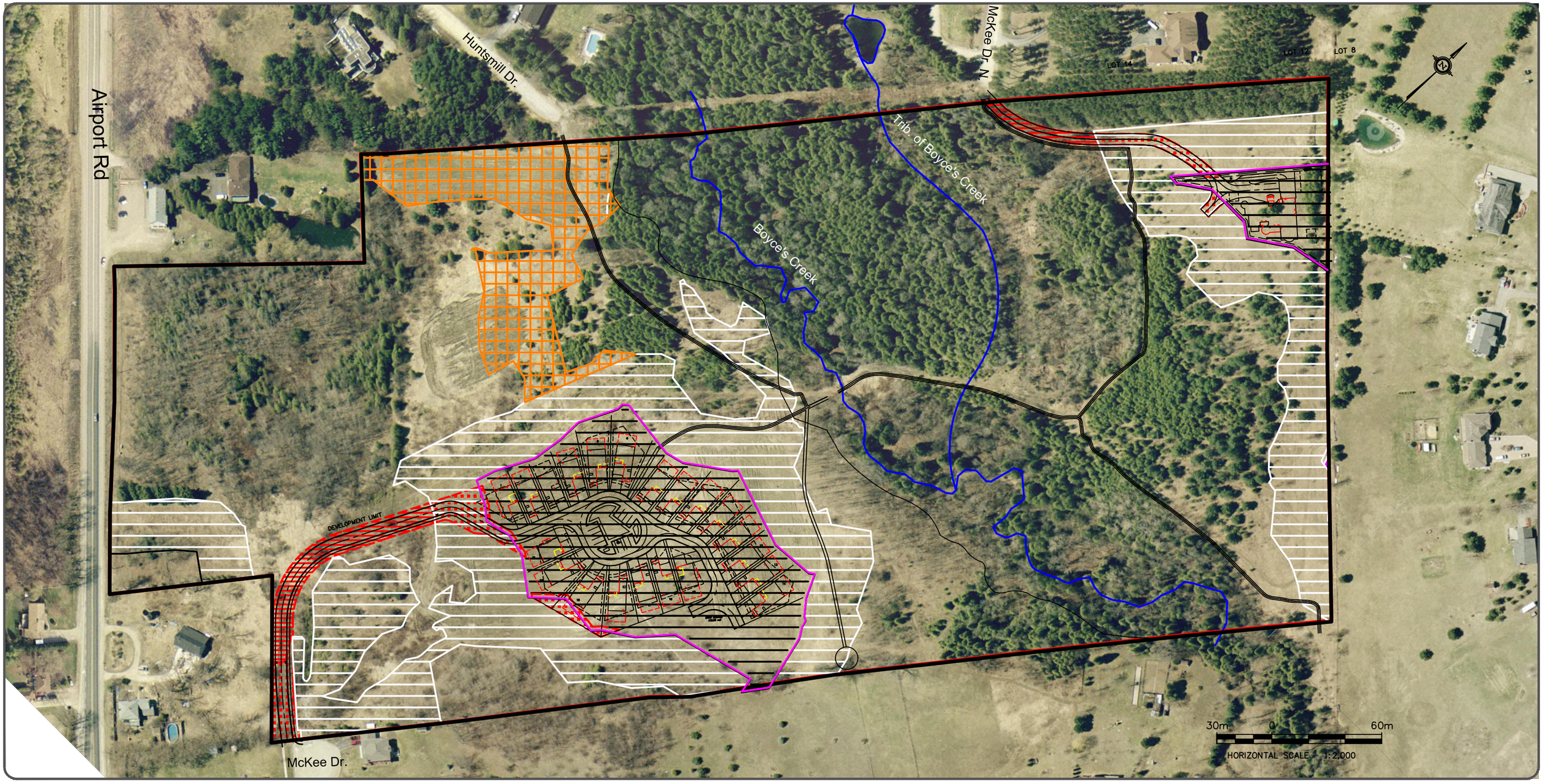
AZIMUTH ENVIRONMENTAL CONSULTING, INC.

Consolidated Plan

Date Issued:	November 2017
Created By:	JLM
Project No.	06-011
Reference:	First Base Solutions

Caledon East EIS
Pt W1/2 Lot 22, Con. 1
Town of Caledon

Figure No. 5



Legend:

- Property Boundary
- Watercourse - Hydrologically Sensitive Feature (HSF) & Key Natural Heritage Feature (KNHF) (Fish Habitat)
- Minimum Vegetation Protection Zone (MVPZ) (white)
- Potentially Developable Area
- Proposed Encroachment into KNHF/HSF (0.19ha)
- Proposed Encroachment into MVPZ (0.21ha)
- Proposed Compensation Planting Area (2:1 compensation ratio 0.8ha)
- Recommended EPA1 Boundary

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AZIMUTH ENVIRONMENTAL CONSULTING, INC.

Proposed Compensation Areas

Date Issued:	November 2017
Created By:	JLM
Project No.	06-011
Reference:	First Base Solutions

Caledon East EIS
Pt W1/2 Lot 22, Con. 1
Town of Caledon

Figure No. 6