



# **Scoped Environmental Impact Study**

**Jack Kenny Court  
Town of Caledon, ON**

July 2013

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## 1 INTRODUCTION

Savanta was retained by 1361605 Ontario Ltd. to prepare a scoped Environmental Impact Study (EIS) in support of an application to create 7 new residential lots for single detached dwellings. The Subject Site occupies an area of 0.37 ha, and comprises part of the east half of Lot 8, Concession 5, and also part of Block 307 Registered Plan 43M-1324, within the Town of Caledon, Regional Municipality of Peel. The site is located immediately east of Jack Kenny Court, with the proposed lots fronting onto that road. Lands adjoining to the north include: a large storm water management pond, Coleraine Drive, a wooded feature surrounding a watercourse, King Street West, and residential housing associated with the community of Bolton. Adjoining to the east are two residential homes fronting onto Coleraine Drive, and residential housing that continues beyond Station Road in the community of Bolton. Lands adjoining to the south include residential housing surrounding Grapevine Road, a large industrial area and agricultural lands that extend beyond Healey Road. Adjoining to the west are residential homes that front onto Jack Kenny Court, and a large storm water management pond. Further west are residential neighbourhoods that extend to King Street.

The majority of the Subject Site is presently comprised of manicured lawn, with a small, vegetated feature at the northwest end of the property consisting of cultural meadow and cultural woodland. The cultural woodland surrounds a disused building. A few mature trees are found within a hedgerow that runs parallel to Jack Kenny Court. The general location of the Subject Site is indicated on **Figure 1 (Appendix A)**.

### 1.1 Purpose of Report

This report presents the results of inventories and analyses of existing natural heritage conditions and provides an assessment of the significance and sensitivity of these resources in the context of the proposed residential use by 1361605 Ontario Ltd. Site observations and inventory findings were analyzed to assess potential constraints to development.

This EIS is based on a suite of inventories and analyses carried out in 2013. This report is “scoped” in that the full range of site surveys/inventories over multiple seasons have not been completed based on the generally limited natural heritage features on the Subject Site as well as the proposed land use for the site. Notwithstanding this, however, this scoped EIS does offer full commentary about potential direct and indirect impacts on various terrestrial and aquatic functions based upon appropriate site observations during the appropriate seasons.

## 2 NATURAL HERITAGE PLANNING CONSIDERATIONS

An assessment of the natural heritage features and functions of the site and adjacent area that could be affected by the proposed development was undertaken with reference to the requirements of the following regulatory agencies, local and regional municipalities, and/or legislation:

- The Province of Ontario's Provincial Policy Statement (PPS);
- Toronto and Region Conservation Authority (TRCA);
- The 2008 Town of Caledon Official Plan; and,
- The 2008 Region of Peel Official Plan.

### 2.1 The Province of Ontario's Provincial Policy Statement

The Provincial Policy Statement (PPS) (MMAH, 2014) provides direction on matters of provincial interest related to land use planning and development. It "...supports a comprehensive, integrated and long-term approach to planning..." The PPS is to be read in its entirety and land use planners and decision-makers need to consider all relevant policies and how they work together.

This report addresses those policies that are specific to Natural Heritage (section 2.1) with some reference to other policies with relevance to Natural Heritage and impact assessment considerations and areas of overlap (e.g., those related to Efficient and Resilient Development and Land Use Patterns, section 1.1; Sewage, Water and Stormwater, section 1.6.6; Water, section 2.2; Natural Hazards, section 3.1).

Eight types of significant natural heritage features are defined in the PPS, as follows:

- Significant wetlands
- Significant coastal wetlands;
- Significant woodlands;
- Significant valleylands;
- Significant wildlife habitat;
- Fish habitat;
- Habitat of endangered and threatened species; and,
- Significant areas of natural and scientific interest (ANSIs).

Development and site alteration shall not be permitted in significant wetlands in the Ecoregion where the Subject Site is found. Development and site alteration shall not be permitted in: significant woodlands, significant valleylands, significant wildlife habitat or significant ANSIs, unless it is demonstrated that there will be no negative impacts on the natural features or their ecological functions.

Development and site alteration shall not be permitted in the habitat of endangered and threatened species or in fish habitat, except in accordance with provincial and federal requirements. Development and site alteration may be permitted on lands adjacent to fish

habitat provided it has been demonstrated that there will be no negative impacts on the natural feature or their ecological functions.

A discussion of the above PPS policies occurs in this report in **Section 5**.

## **2.2 Toronto and Region Conservation Authority**

Hazardous lands, wetlands, shorelines and areas susceptible to flooding, and associated allowances are delineated by the Regulation Limit.

Pursuant to the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation (Ontario Regulation 166/06), any development in or on areas defined in the Regulation (e.g. river or stream valleys, hazardous land, wetlands) requires permission from TRCA. TRCA may grant permission for development in or on these areas if, in its opinion, the control of flooding, erosion, dynamic beaches, pollution or the conservation of land will not be affected by the development. The Regulation also states that it is prohibited to straighten, change, divert or interfere in any way with the existing channel of a river, creek, stream or watercourse or change or interfere in any way with a wetland without permission from the TRCA.

An email dated April 18, 2013 from Mary T. Nordstrom, Senior Planner at the Town of Caledon, summarized comments from the TRCA (**Appendix B**) and noted that a portion of the Subject Site is considered a TRCA Regulated Area of the Humber River Watershed.

## **2.3 Town of Caledon Official Plan 2008**

The Subject Site is subject to the policies and designations of the 2008 Town of Caledon Official Plan. Schedule C-3 West Bolton Secondary Plan Area depicts the extreme north-west corner of the Subject Site as Environmental Policy Area (apparently associated with the large storm water management pond), defined as all Natural Core Areas and Natural Corridors within the Town of Caledon, as outlined on Table 3.1 of the Official Plan. These areas can include features such as woodlands, wetlands, Environmentally Significant Areas, habitat of vulnerable, threatened, and endangered species, valley and stream corridors, and natural slopes. The remainder of the site is designated as Low Density Residential, which allows a maximum of 30 units per hectare.

### 3 DATA COLLECTION AND ANALYSIS

#### 3.1 Field Studies

Field studies and natural environment inventories were completed on, and adjacent to, the Subject Lands on the following dates:

Date (2013)	Survey Type	Surveyor(s)
June 3	Ecological Land Classification (“ELC”) and botanical surveys were completed along with incidental wildlife observations.	George Buckton
June 13 July 2	Calling amphibian surveys were conducted.	George Buckton
June 30	A breeding bird survey was conducted to assess the diversity of birds using the site. Incidental wildlife was also recorded.	Barb Charlton

#### 3.2 Supporting Documents and Resources

Savanta has relied on supporting background information and site surveys/investigations to provide additional insight into the overall character of the Subject Site. Examples of these are included below.

##### Natural Heritage Information Centre

The Natural Heritage Information Centre (NHIC) database, maintained by the MNR was accessed to search for records of provincially significant plants, vegetation communities and all forms of wildlife on, and in the vicinity of the Subject Site. The database provides occurrence data by 1km area blocks, which overlap with areas outside of the Subject Site. The search revealed two records, both of which had an element occurrence rank of ‘Historical’ and are not addressed as current occurrences in this reporting.

##### Ontario Ministry of Natural Resources Species at Risk Screening Request

The Ministry of Natural Resources provided a Species at Risk screening request letter on July 2, 2013 (**Appendix C**). The letter notes that there are no Species at Risk recorded, nor are there any natural features for the Subject Site.

##### Preliminary Functional Servicing Report for Jack Kenny Court, Bolton, Town of Caledon

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Calder Engineering Inc. prepared a July 2013 (updated April 2016) Preliminary Functional Servicing report that identifies proposed methods for site sanitary and water servicing, and the plan for drainage and stormwater management.

### **Sediment and Erosion Control Plan**

Calder Engineering Inc. prepared the erosion and sediment control plan, which is designed in conformance with the Town of Caledon Development Standards, Policies & Guidelines (2009) and the Erosion & Sediment Control Guideline for Urban Construction prepared by the Greater Golden Horseshoe Area Conservation Authorities (2006). Details of the erosion and sediment control measures are provided in **Section 7.1.2**.



## 4 SITE DESCRIPTION

### 4.1 Physical Environment

#### 4.1.1 Physiography

The Subject Site is flat to generally sloping to the centre of the property. Three vegetation types occur on the property: open manicured lawn found on the majority of the site, and cultural woodland and cultural meadow communities located within the northwest portion of the property.

### 4.2 Biological Environment

#### 4.2.1 Landscape Setting

**Figure 2 (Appendix A)** depicts the larger landscape setting around the Subject Site. As may be observed, these lands are located in a fully urbanized area. This development proposal includes the same type of residential land use that now exists immediately to the east, west, north and south. There is no evidence to suggest any established wildlife corridors exist here presently, likely a result of the significant artificial barriers created by the surrounding roads, as well as the extent of the residential development and related infrastructure.

#### 4.2.2 Vegetation Communities

A concise description of each vegetation unit recorded within the Subject Site is provided in **Table 4.1** below and depicted on **Figure 3 (Appendix A)**.

Both of the ELC vegetation units on the Subject Site are small and cultural. A dry-fresh old-field meadow occurs at the far northwest portion of the site, and a fresh-moist Manitoba maple cultural woodland occurs immediately south of the meadow. Further south of these vegetation communities is manicured lawn, which occurs on the majority of the site. Planted within the lawn, parallel to Jack Kenny Court are 7 young green ash trees (approximately 7 cm in diameter at breast height [DBH]) and two young Black Locust trees (approximately 10 cm DBH). A hedgerow (depicted as 'H' on **Figure 3, Appendix A**) exists parallel to Jack Kenny Court and is described in detail below.

A total of 55 species were recorded during the inventories, with 26 native species (47% of the flora) and 29 exotic species (53%). This high proportion of non-native species reflects the highly disturbed character of the site. All native species are ranked as S5 (Secure, common, widespread, and abundant in Ontario) or S4 (common and apparently secure in Ontario; usually with more than 100 occurrences in the province). A list of all observed plant species is found in **Appendix D**.

Common juniper is considered locally rare (R1) for Peel, however, it was likely either planted or is a backyard or garden escape. This species is not reasonably considered a conservation concern.

Both common juniper and trembling aspen are listed in Savanta's plant list, however these specimens were smaller than 10 cm diameter at breast height (DBH) and therefore do not appear in the tree inventory by Sunarts Design (Sunarts). For those trees with co-dominant stems included in Sunarts tree inventory, some measurements less than 10cm DBH are included.

The hedgerow consists of several mature trees including green ash, apple, American elm and black cherry. Scattered young Manitoba maple and green ash grow in the sub-canopy, and the shrub layer is dominated by buckthorn with fewer specimens of Virginia creeper, red-osier dogwood, and Tartarian honeysuckle. The herb layer consists of garlic mustard, teasel, Manitoba maple seedlings, and Canada thistle.

**Table 4.1: Ecological Land Classification (ELC) Vegetation Types**

ELC Type	Community Description
<b>CULTURAL</b>	
<b>Cultural Meadow</b>	
CUM1-1 Dry-Fresh Old Field Meadow	<ul style="list-style-type: none"> <li>This open meadow is located at the far northwest portion of the property, with the leading species being tall goldenrod, dame's rocket, and variable crown-vetch, with fewer numbers of common milkweed, stinging nettle, Canada thistle, creeping Charlie, and common burdock. Shrubs consist mostly of staghorn sumac and common juniper.</li> <li>Young trees, some of which have been planted, grow along the fence at the north and west edges of the property, as well as scattered along the slope leading south towards the cultural woodland. <ul style="list-style-type: none"> <li>They include: Austrian pine, white pine, Manitoba maple, Norway maple, black cherry, and trembling aspen.</li> </ul> </li> </ul>
<b>Cultural Woodland</b>	
CUW1-3* Fresh-Moist Manitoba Maple Cultural Woodland	<ul style="list-style-type: none"> <li>Located immediately south of the cultural meadow, this woodland community is associated with a disused building and is dominated by Manitoba maple, with minor presence of green ash, black cherry, and reddish willow.</li> <li>The shrub layer is dominated by common buckthorn, followed by Virginia creeper and red-osier dogwood. In the herb layer grow garlic mustard, enchanter's nightshade, common plantain, and common strawberry.</li> </ul>

#### **4.2.3 Birds**

A breeding bird survey was completed for the Subject Site on June 30, 2013. There were two-point count locations (**Figure 3, Appendix A**) used during the survey as well as area searches. Point count locations were placed in all represented habitats, and are shown on the map of the Subject Site. Each point count location was surveyed for birds within 100 m and outside 100 m (each counted separately). Birds were observed for signs of breeding behaviour. The survey was conducted between 9:30 am and 11:30 am on a sunny to partially cloudy day with winds of less than 15 km/hr.

Savanta recorded 16 species on the Subject Lands, with three confirmed as breeding; Downy Woodpecker, American Robin and House Finch. One additional species, Cedar Waxwing is considered a probable breeder. The seven species considered possible breeders are Mourning Dove, Red-eyed Vireo, European Starling, Red-winged Blackbird, Common Grackle, Brown-headed Cowbird and American Goldfinch. The Red-eyed Vireo, heard within Point Count 1, was singing from land adjacent to, and not on, the Subject Site. The remaining five, Turkey Vulture, Red-tailed Hawk, Ring-billed Gull, Belted Kingfisher and American Crow are believed to be non-breeding visitors. Belted Kingfisher and American Crow may feed or rest on the Subject Lands where the Turkey Vulture, Red-tailed Hawk and Ring-billed Gull were observed flying over. More detailed comments regarding the breeding status and general abundance and/or distribution of each species can be found in the comments section of the Bird Species List (**Appendix E**).

No Species at Risk were found on the Subject Site. The survey also did not find any regionally uncommon species or species of particular interest.

The habitat on the Subject Lands, being largely mowed grass, provides little opportunity for breeding birds. In the immediate vicinity of Point Count 1 there are a few large deciduous trees, some smaller trees as well as shrubs that provide some habitat for locally common breeding birds. This limited habitat is located around the dilapidated building in the northwest portion of the Subject Site. All of the species recorded are common and well represented throughout southern Ontario. The total numbers are small and the lack of rare species observed is expected, given the small size of the property, disturbance, and lack of natural heritage features.

#### **4.2.4 Incidental Mammals**

Incidental mammals were recorded during all of the field surveys. Table 4.2 indicates mammal species observed.

Some common residential mammals of Ontario use the Subject Site as habitat, however the total number of species is small and only the Eastern gray squirrel appears to be common on the site. One northern raccoon was observed as a roadkill on Coleraine Drive, immediately across from the Subject Site location. There is no evidence of rare mammals relying on or using the Subject Site.

**Table 4.2: Incidental Mammal Species**

Common Name	Scientific Name	G Rank	S Rank	Type of Evidence
Eastern gray squirrel	<i>Sciurus carolinensis</i>	S5	S5	<ul style="list-style-type: none"> <li>Visual</li> <li>- two (2) individuals</li> </ul>
Northern raccoon	<i>Procyon lotor</i>	S5	S5	<ul style="list-style-type: none"> <li>Visual</li> <li>- one (1) roadkill</li> </ul>

#### 4.2.5 Calling Amphibians

Amphibian call surveys were completed during the evenings of June 13 and July 2, 2013, utilizing the protocols Marsh Monitoring Program. Due to the cool/late spring of 2013, the above-mentioned dates were necessary in order to meet the required temperatures of the second and third amphibian surveys (>10 degrees Celsius and >17 degrees Celsius, respectively) as per the Marsh Monitoring Program protocols. An early spring survey (typically carried out in May) was not possible due to the late start of the project; however, that gap is not expected to affect results (i.e., habitat is limited).

One call station was established near the northeast corner of the property where a small pool of water, approximately 2 m x 5 m in area and approximately 5 cm in depth was observed on June 3, 2013, next to a culvert leading to the storm water management pond. This pool was observed to be only 1 cm to 2 cm deep by early July. No calling frogs were noted on any evening either on the Subject Site, or beyond these boundaries. Based upon the low quality amphibian habitat and close proximity to the busy Coleraine Drive, the lack of amphibian presence is expected.

#### 4.2.6 Aquatic Habitat

As noted above, a small pool of water, approximately 2 m x 5 m in area and approximately 5 cm in depth was observed within the northwest portion of the site on June 3, 2013, next to an offsite corrugated steel pipe (CSP) culvert leading to Coleraine Drive. This pool was almost dry by the July 2, 2013 visit. Savanta believes that this pooling occurs in a small lowland area likely as a result of pooled rainwater, potentially influenced by the culvert.

Figure 2 (**Appendix A**) depicts a MNR Land Information Ontario (LIO) layer watercourse running along the northeast boundary of the Subject Site. Savanta confirmed during the June 3, 2013 visit that the watercourse did not exist, as the surrounding residential development likely required this feature to be piped.

A historic water well occurs at the far southeast corner of the property. This well is not in use and Calder Engineering has noted it will be decommissioned per MOE standards.

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#### **4.2.7 Wildlife Habitat**

The Subject Site has little habitat of importance to wildlife. The vegetated area at the northwest end of the property is small in size, and the Subject Site is located within a densely built up residential area where it is subjected to degradation and isolation. There is a wooded feature surrounding a watercourse on the east side of Coleraine Drive, however the Subject Site is isolated from this feature by Coleraine Drive.

The Subject Site provides little habitat or cover for wildlife (e.g., small vegetated area at the northwest) and field surveys completed detected only common mammals and birds associated with suburban lands. No reptiles and amphibians were detected.

#### **4.2.8 Rare and Endangered Species**

Based upon the review of background information, and targeted and incidental surveys, there were no rare or unusual species located on the Subject Site during the various field surveys. No wildlife Species at Risk or regionally rare wildlife species were identified on site, and none are believed to use the site for breeding or during migration, based on the limited and degraded nature of the habitat present.

## **5 NATURAL HERITAGE FEATURES**

In order to help identify natural heritage features and associated function in accordance with the Provincial Planning Statement (PPS), the MNRF has prepared a technical guidance document, the Natural Heritage Reference Manual (“NHRM”) (MNR, 2010). This section of the report addresses those natural heritage features – none occur on the Subject Site.

### **5.1 Significant Wetlands**

Within Ontario, significant wetlands are identified by conservation authorities or the MNRF.

There are no provincially significant wetlands on, or within, 120 m of the Subject Site.

### **5.2 Endangered and Threatened Species**

Endangered and threatened species are identified by the MNR using procedures established by the Committee on the Status of Species at Risk in Ontario (“COSSARO”).

No endangered or threatened species have been identified to occur on, or within 50 m of the Subject Site, based on an NHIC search, nor from the results of Savanta’s field assessments.

### **5.3 Fish Habitat**

Fish habitat, as defined in the federal Fisheries Act, are those parts of the environment on which fish depend, directly or indirectly, in order to carry out their life processes.

This report, confirms that the MNR LIO watercourse depicted on Figure 2 (Appendix A) no longer exists, and as such there is no direct or indirect fish habitat on the property.

### **5.4 Significant Woodlands**

Significant woodlands should be defined and designated by the planning authority. General guidelines for determining significance of these features are presented in the NHRM for Policy 2.1 of the PPS. Criteria suggested by the NHRM for designating significant woodlands include woodland size, shape, proximity to other woodlands or natural features, linkages, species diversity, uncommon characteristics, and economic and social values. In the case of woodland size, the suggested criteria change depending on the amount of forest cover in the planning area. For instance, where there is less than 5% forest cover, it is suggested that woodlands 2 ha in area or larger should be evaluated for significance compared to 4 ha in areas with 5 to 15% forest cover, and 40 ha for areas with 15 to 30% forest cover.

There are no significant woodlots on the Subject Site.

### **5.5 Significant Valleylands**

Significant valleylands should be defined and designated by the planning authority. General guidelines for determining significance of these features are presented in the NHRM for Policy 2.1 of the PPS. Recommended criteria for designating significant valleylands include

prominence as a distinctive landform, degree of naturalness, and importance of its ecological functions, restoration potential, and historical and cultural values.

There are no significant valleylands on the Subject Site.

## **5.6 Areas of Natural and Scientific Interest**

An Area of Natural and Scientific Interest (ANSI) is an area identified by the MNR as having provincially or regionally significant representative geological or ecological features.

No ANSIs have been identified on, or within 50 m of the Subject Site.

## **5.7 Significant Wildlife Habitat**

Significant wildlife habitat is one of the more complicated natural heritage features to identify and evaluate. The NHRM includes criteria and guidelines for designating significant wildlife habitat. There are two other documents, the Significant Wildlife Habitat Technical Guide and the Significant Wildlife Habitat Decision Support System, that can be used to help decide what areas and features should be considered significant wildlife habitat. There are four general types of significant wildlife: seasonal concentration areas, migration corridors, rare or specialized habitat, and species of conservation concern. All types of significant wildlife habitat in relation to the Subject Site are discussed in more detail below.

### **5.7.1 Seasonal Concentration Areas**

Seasonal concentration areas are those sites where large numbers of a species gather together at one time of the year, or where several species congregate. The following is a partial list of numerous potential examples: deer yards, amphibian breeding ponds, snake and bat hibernacula, waterfowl staging and moulting areas, raptor roosts, bird nesting colonies, shorebird staging areas, and passerine migration concentrations. Only the best examples of these concentration areas are usually designated as significant wildlife habitat. Areas that support a species at risk, or if a large proportion of the population may be lost if the habitat is destroyed, are examples of seasonal concentration areas which should be designated as significant.

The Subject Site is located within an urban landscape, with residential subdivisions found on the east, west, and north sides, and an industrial area located to the south. Savanta acknowledges that the northwestern portion of the property contains a small cultural woodland and cultural meadow area, and there are a few mature trees located with the adjacent hedgerow. However, this habitat does not provide seasonal concentration areas for wildlife.

Based upon the field surveys of 2013, the Subject Site provides only limited habitat for common and ubiquitous urban wildlife such as squirrels, raccoons, and American robins. The Subject Site does not provide wildlife habitat for seasonal concentration areas.

### **5.7.2 Migration Corridors**

Migration corridors are areas that are traditionally used by wildlife to move from one habitat to another. This is usually in response to different seasonal habitat requirements. Some examples are trails used by deer to move to wintering areas, and areas used by amphibians between breeding and summering habitat.

No evidence of traditional mammal trails was found during the site visits. The lack of cover and resources for wildlife on site and in the surrounding neighbourhood, and the barriers presented by the surrounding roads, likely act as significant impediment for wildlife movement in the general area.

The Subject Site is therefore not considered to be part of a migration corridor.

### **5.7.3 Rare or Specialized Habitat**

Rare or specialized habitat, are two separate components. Rare habitats are those with vegetation communities that are considered rare in the province. SRANKS are rarity rankings applied to species at the 'state', or in Canada at the provincial level, and are part of a system developed under the auspices of the Nature Conservancy (Arlington, VA). Generally, community types with SRANKS of S1 to S3 (extremely rare to rare-uncommon in Ontario), as defined by the NHIC, could qualify. It is assumed that these habitats are at risk and that they are also likely to support additional wildlife species that are considered significant.

Specialized habitats are microhabitats that are critical to some wildlife species. Potential examples include moose aquatic feeding areas, salt licks for ungulates, and groundwater seeps for Wild Turkeys.

Based upon observations of the site and adjacent lands, there is no potential for rare or specialized habitat to exist on these lands.

### **5.7.4 Species of Conservation Concern**

Species of conservation concern represents the habitat type with the highest potential of occurring. This group includes four types of species: those that are rare, those whose populations are significantly declining, those that have been identified as being at risk to certain common activities, and those with relatively large populations in Ontario compared to the remainder of the globe.

Rare species are considered at five levels: globally rare, nationally rare (with designations by the COSEWIC), provincially rare, regionally rare; and locally rare (at the municipal level). This is also the order of priority that should be attached to the importance of maintaining species. Some species have been identified as being susceptible to certain practices, and their presence may result in an area being designated significant wildlife habitat. Examples include species vulnerable to forest fragmentation and species such as woodland raptors that may be vulnerable to forest management or human disturbance. The final group of species of



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conservation concern includes species that have a high proportion of their global population in Ontario. Although they may be common in Ontario, they are found in low numbers in other jurisdictions.

One regionally rare species for Peel Region was observed on the Subject Site. One stem of common juniper (S5; R1; less than 10 cm DBH) was found in the cultural meadow at the far northeast portion of the property, and is most likely a backyard/garden escape. This species is not reasonably considered a conservation concern. No other species of conservation concern have been identified on, or adjacent to, the Subject Lands based upon our assessment of flora and fauna on the site, and consideration of the habitat preferences of species that could be found on-site.

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## 6 DESCRIPTION OF PROPOSED DEVELOPMENT

Seven new residential lots are proposed for this small (i.e., 0.37 ha) parcel. 7 lots will be developed for single detached dwellings; each will front onto Jack Kenny Court. Section 7.2 of this report addresses engineering aspects of development in more detail.

Further details regarding the Site Plan are provided on **Figure 4 (Appendix A)**.

## **7 POTENTIAL ENVIRONMENTAL EFFECTS AND PROPOSED MITIGATION**

This EIS identifies and discusses the natural heritage features and environmental functions on, and adjacent to, the Subject Site, in relation to 7 proposed residential lots. None of the natural heritage features and associated functions defined in section 2.1 of the PPS was detected on the Subject Lands. This impact assessment section addresses the impacts on minor and localized natural features.

Potential effects on these natural heritage functions that could occur over the short-term and long-term following implementation of the site plan are discussed along with appropriate mitigation measures to avoid/minimize any negative impacts.

This impact assessment is presented according to potential direct impacts and potential indirect impacts. Direct impacts are normally associated with the physical removal or alteration of natural features that could occur based upon a land use application, and indirect impacts may be changes or impacts (these could be minor or major) to less visible functions or avenues that could cause negative impacts to natural heritage features over time.

### **7.1 Potential Direct Effects**

#### **7.1.1 *Removal of Significant or Sensitive Wildlife Habitat or Vegetation***

As described previously, the Subject Site is comprised of three vegetation types that include open manicured lawn throughout the majority of the property, a cultural meadow located at the far northwest portion of the property, and a Manitoba maple cultural woodland located immediately south of the cultural meadow. The proposed new building lots will remove the majority of this vegetation. No significance is attached to the vegetation removed. One regionally rare plant species, Common juniper (S5; R1; less than 10 cm DBH) is likely a backyard/garden escape. Its removal is not deemed to be significant.

Similarly, effects on wildlife and habitat observed are not expected to be significant. The species observed are common in suburban and urban settings in the GTA.

#### **7.1.2 *Other Direct Effects – Construction Impacts***

Calder Engineering has prepared a preliminary Erosion and Sediment Control Plan showing proposed erosion and sediment control measures to limit construction impacts to the stormwater management pond and adjacent residential/industrial areas. That Plan proposes the installation of temporary sediment control fencing prior to grading, and that mud mats be utilized at locations where construction vehicles exit the site. Topsoil and material stockpiles are to be enclosed with a *Terrafix* Terrafence (or approved equivalent) siltation fence. All temporary erosion and sediment control measures are to be routinely inspected and repaired during construction. Erosion and sediment control strategies are to be upgraded and/or amended as site conditions change to minimize sediment-laden runoff from leaving the work areas. Temporary controls are not to be removed until all disturbed areas are restored and stable.

## **7.2 Potential Indirect Effects**

A discussion of potential indirect impacts from “development” applications typically includes a wider range of issues than that for potential direct impacts. In this case, indirect effects are limited and are addressed in the following.

### **7.2.1 Changes to Surface Water Quantity and Quality**

As described in the Calder Engineering FSR report (July 2013, updated April 2016) stormwater management will consist of generally back to front drainage from the lots to Jack Kenny Court. Portions of the rear yards of Lots 1 and 2 are proposed to drain overland via an enhanced swale on Lot 1 directly to the existing stormwater management facility. Underground granular storage with a perforated pipe system and subdrain is proposed on Lot 7, and an enhanced swale with underground storage and subdrain is proposed on Lot 1.

No quantity control is required as the site is within the drainage area of a branch of the Humber River per TRCA SWM criteria. With respect to water quality, Calder Engineering is proposing to retain the first 5mm of rainfall on site within pervious natural areas. Lot level controls and Low Impact Development (LID) practices are recommended to reduce the volume of runoff, and to provide a natural hydrologic response, to the extent practical. These strategies include:

- Recharge of residential roof and driveway stormwater by direction to grassed areas to promote filtering and natural infiltration; and,
- Rear yard swales enhanced with granular storage and a perforated pipe system.

### **7.2.2 Changes to Ground Water Quantity and Quality**

The ground water conditions in this area are not predicted to be impacted by the introduction of these 7 new building lots. This residential area is in an “upland” setting and there are no natural heritage features that are supported by ground water. Site grading is to occur in accordance with the Town of Caledon grading criteria, and will provide overland flow conveyance for stormwater.

### **7.2.3 Tree Removals and Compensation Plantings**

It is recommended that the proposed vegetation removal to accommodate Lots 1 and 2 be compensated with off-site native shrub and tree plantings, as the Subject Site does not have suitable area for on-site compensation plantings. It is recommended that the SWM pond located immediately northeast of the Subject Site be considered as a planting location, which would enhance natural cover for wildlife, enhance the vegetation buffer between the pond and residential homes, increase native plant species diversity, provide shade and thermal cooling of the pond, and thereby help achieve ecological gains. Species selected for plantings are to adhere to TRCAs native plant list.

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This report recommends that tree removal occur outside of the breeding bird season (April 1 – August 1).

## 8 CONCLUSIONS AND RECOMMENDATIONS

This EIS discussed the limited natural heritage features located on, and adjacent to, the Subject Site and addressed the potential direct and indirect impacts of the proposed development of 7 new residential lots within an existing developed community.

Based on site observations and analyses presented in this report the following conclusions are presented:

- There are no wetlands, significant woodlands, significant valley lands, endangered or threatened species or their habitat, ANSI's, fish habitat, or significant wildlife habitat, as defined in the Natural Heritage Reference Manual for Policy 2.1 of the PPS, on the Subject Site;
- The redevelopment of the Subject Site to a total of 7 residential lots will result in the removal of a small cultural meadow and cultural woodland. None of the vegetation or associated wildlife was determined to be significant. This vegetation removal affects local and common species;
- Based upon the assessments completed on these lands the conversion of these lands to residential use will have negligible impacts on terrestrial functions associated with the cultural meadow and cultural woodland;
- Stormwater management will consist of generally back to front drainage from the lots to Jack Kenny Court. Portions of the rear yards of Lots 1 and 2 are proposed to drain overland via an enhanced swale directly to the existing stormwater management facility. Calder Engineering proposes to retain the first 5mm on site and has recommended Lot level controls and Low Impact Development (LID) practices to reduce the volume of runoff and provide a natural hydrologic response. Recommended strategies include:
  - Recharge of residential roof and driveway stormwater by direction to grassed areas, and where possible the rear-yard grassed areas and swale system, to promote filtering and natural infiltration; and,
  - Rear yard swales enhanced with granular storage and a perforated pipe system.

Based on the above, the proposed development is not predicted to have any impacts on either the quality or quantify of surface water.

- The potential impact to natural features is limited and could be effectively mitigated through native plantings (potentially associated with the SWM pond located immediately northeast of the Subject Site).

The aforementioned conclusions are based on the engineering recommendations being fully implemented (e.g., Erosion and Sediment Control).

---

REPORT PREPARED BY  
SAVANTA INC.



George Buckton  
Ecologist, Project Manager  
1-800-810-3281 Ext 107  
[georgebuckton@savanta.ca](mailto:georgebuckton@savanta.ca)



Rick Hubbard  
Project Director  
1-800-810-3281 Ext 102  
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## 9 REFERENCES

Ministry of Natural Resources and Forestry (MNR). 2015. Significant wildlife habitat criteria schedules for ecoregion 6E. Available at: <http://www.ontario.ca/document/significant-wildlife-habitat-ecoregional-criteria-schedules-ecoregion-6e/>.

Natural Heritage Information Centre – Biodiversity Explorer. 2012. Accessed on June 14, 2013. URL: <https://www.biodiversityexplorer.mnr.gov.on.ca/nhicWEB/main.jsp>

Ontario Ministry of Municipal Affairs and Housing (MMAH). 2014. Provincial Policy Statement. Available Online: <http://www.mah.gov.on.ca/Page215.aspx>

Ontario Ministry of Natural Resources. March 2010. Natural Heritage Reference Manual for Natural Heritage Policies of the Provincial Policy Statement, 2005. Second Edition. Toronto: Queen's Printer for Ontario. 248 pp.

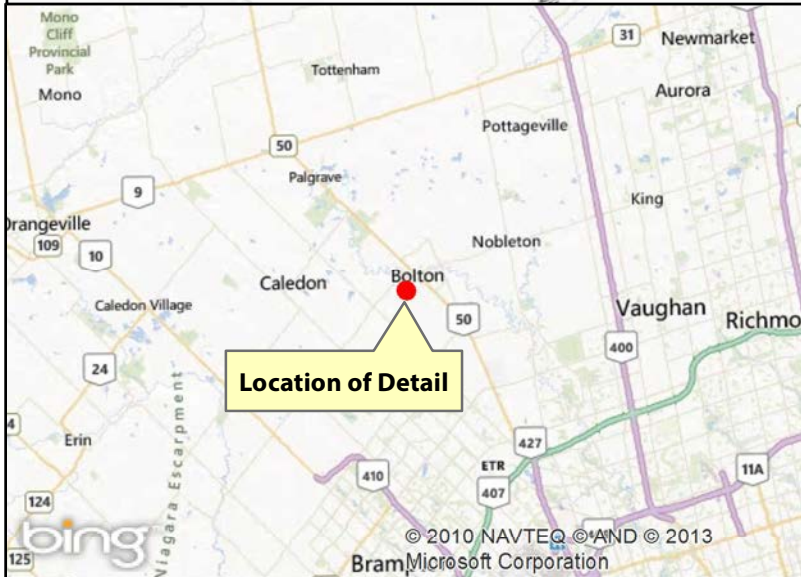
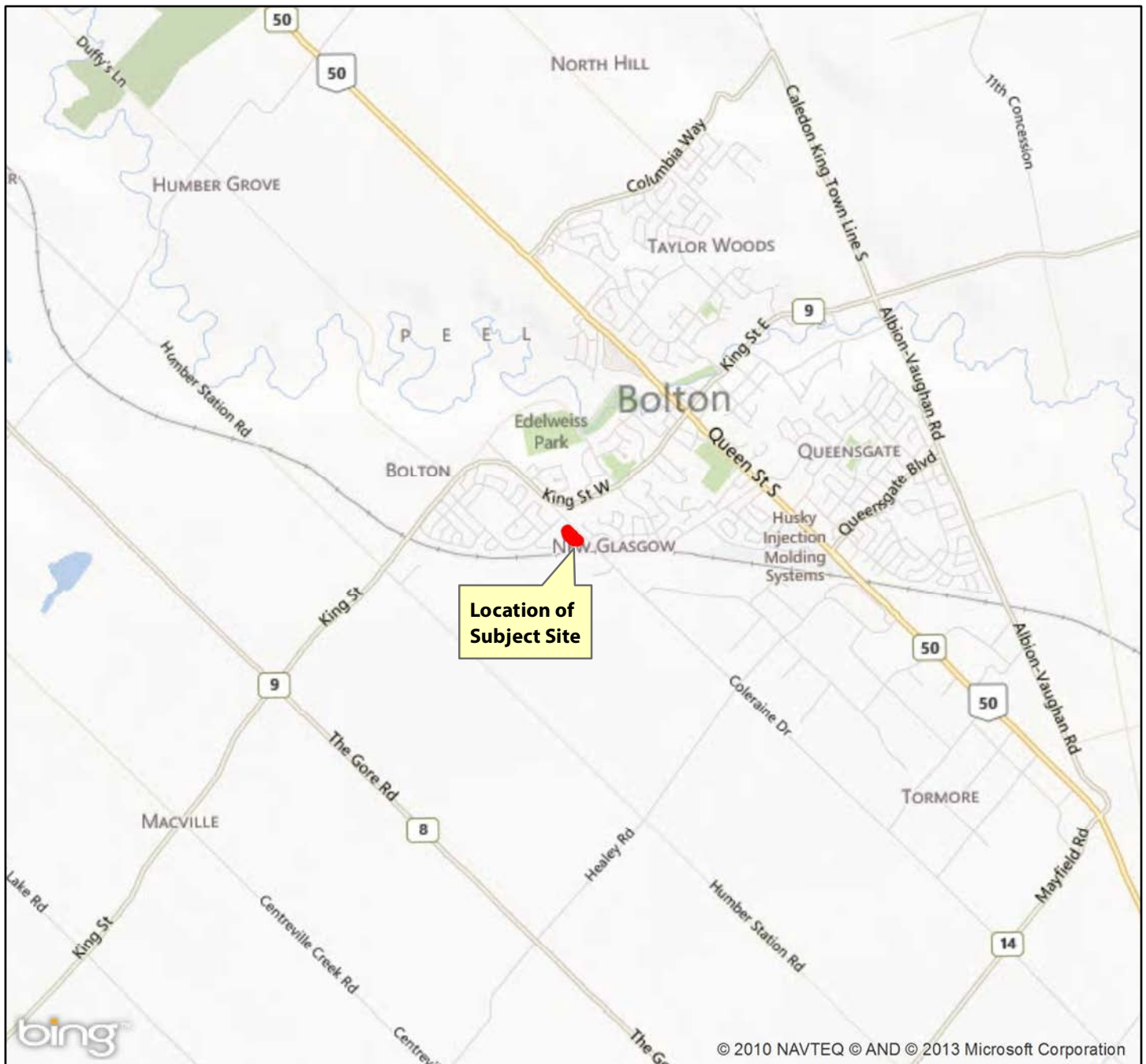
Region of Peel Official Plan. 2008. Accessed on June 14, 2013. URL: <http://www.peelregion.ca/planning/officialplan/download.htm>

Town of Caledon Official Plan. 2008. Accessed on June 24, 2013. URL: <http://www.caledon.ca/en/townhall/officialplan.asp>



## **Appendix A – Figures**

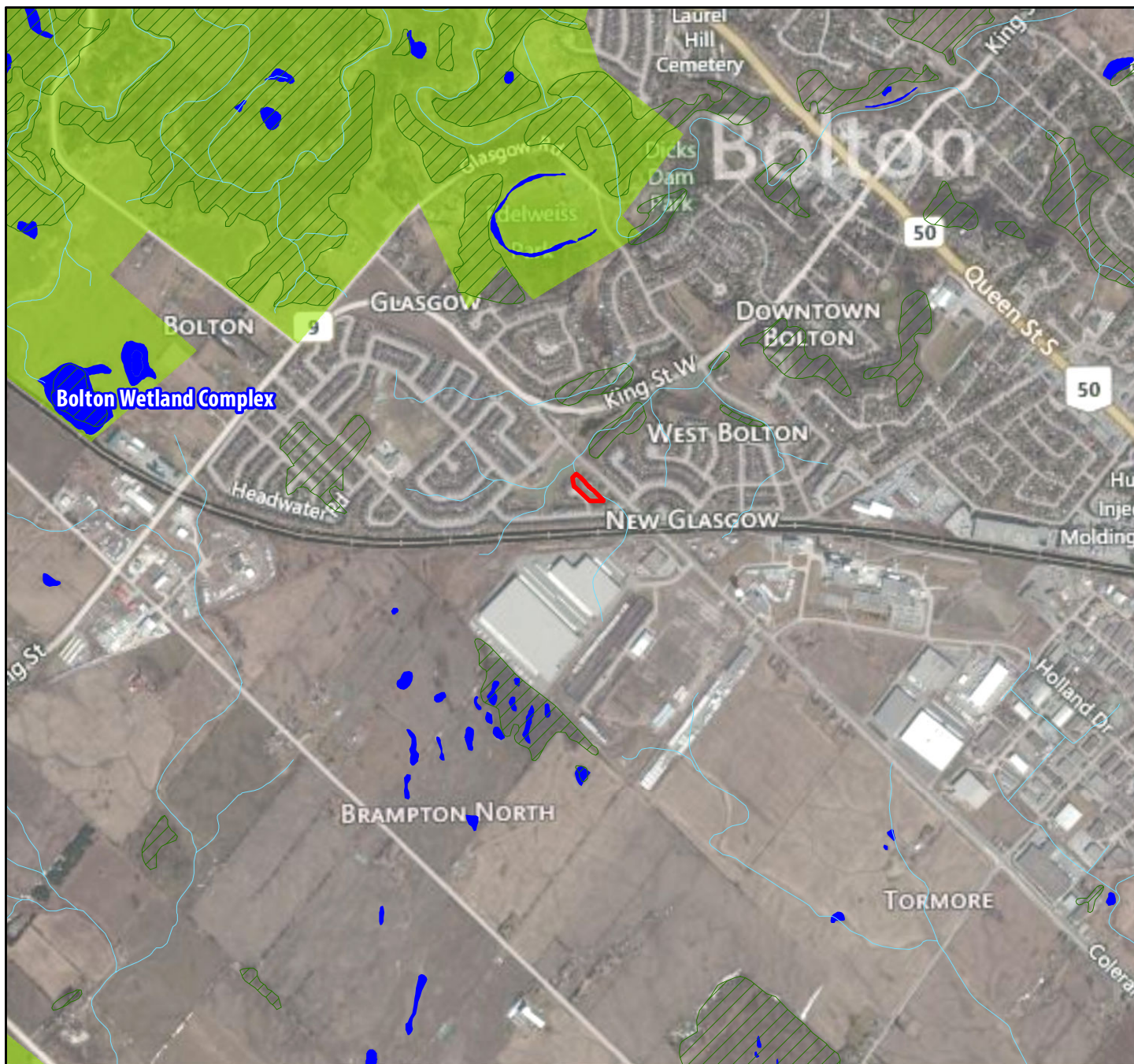
- Figure 1 General Location of Subject Site
- Figure 2 Landscape Setting
- Figure 3 Natural Heritage Features,  
Calling Amphibian Station, and  
Breeding Bird Point Count Stations
- Figure 4 Site Plan



Jack Kenny Court

**Figure 1  
General Location of  
Subject Site**





- Subject Site
- Greenbelt Natural Heritage System
- Woodland (MNR LIO)
- Wetland (MNR LIO)
- Watercourse (MNR LIO)

Jack Kenny Court

## Figure 2 Landscape Setting



0 500 M  
1:20,000







- Subject Site
- Calling Amphibian Station
- Breeding Bird Point Count Stations
- Ecological Land Classification

#### ELC Legend

<b>CUM1-1</b>	Dry-Fresh Old Field Meadow
<b>CUM1-3*</b>	Fresh-Moist Manitoba Maple Cultural Woodland
<b>DIST</b>	Disturbed
<b>LAWN</b>	Manicured Lawn
<b>H</b>	Hedgerow

\* Denotes a type not listed in Southern Ontario ELC Guide

Jack Kenny Court

## Figure 3 Natural Heritage Features, Calling Amphibian Station, and Breeding Bird Point Count Stations

0 20 M  
1:1,000







--- Subject Site

Jack Kenny Court

## Figure 4 Site Plan

From: Paul A. King Planning & Development Consultant  
File: Jack Kenney-DP; Revised Apr 23 13  
Lot Design; Revised April 6, 2016

0 20 M  
1:1,000



SAVANTA

## **Appendix B – TRCA Comments**

**From:** Mary Nordstrom [<mailto:Mary.Nordstrom@caledon.ca>]  
**Sent:** April 18, 2013 4:25 PM  
**To:** 'Paul King'  
**Subject:** RE: DART Mtg. Jack Kenny Court

Hi Paul,

Please find attached a copy of the DART form together with comments from the two area school boards. I have inserted below the comments from the TRCA.

**TRCA – April 18, 2013:**

1361605 Ontario Ltd/Peter Halmos:

- It is our understanding that the applicants have a current agreement with the Town of Caledon to purchase additional lands adjacent to the northern subject property and are proposing to redevelop a portion of the subject lands with an 8 (eight) lot residential subdivision.
- the Town's property is designated Environmental Policy Area.
- A portion of 13584 Coleraine Drive and the Town's property are within the TRCA Regulated Area of the Humber River Watershed.
- It appears that the feature at the north end of the site is what remains of the larger valley corridor that has since been filled in with a stormwater management pond and portions of the adjacent subdivision. The size and composition of the feature within the Town's lands does not warrant its retention. However, mitigation for the loss of natural cover in the area must be provided. On-site and off-site mitigation opportunities must be examined as part of a scoped EIS.
- The following studies are required by the TRCA:
  - Scoped EIS to examine the impacts on the loss of natural vegetation cover and mitigation measures.
  - SWM Report
  - FSR
  - Water Balance Report
  - Hydrogeology Report
  - Erosion and Sediment Control Plans
  - Grading Plans
  - Landscape and Restoration Plans
- Permits will be required from the TRCA.

If you have any questions, please do not hesitate to contact me. Thank you for your patience.

Mary T. Nordstrom, MCIP RPP  
Senior Development Planner  
Development Approval and Planning Policy Department

Town of Caledon  
6311 Old Church Road  
Caledon, ON L7C 1J6

905-584-2272 x 4223  
[www.caledon.ca](http://www.caledon.ca)

April 30, 2014

CFN 50267

**BY EMAIL and MAIL: ruth.conard@caledon.ca**

Ms. Ruth Conard, Community Development Planner  
Development Approval and Planning Policy Department  
Town of Caledon  
6311 Old Church Road  
Caledon, ON L7C 1J6

Dear Ms. Conard:

**Re: Draft Plan of Subdivision, Official Plan Amendment & Rezoning  
Town Files: 21T-13002, POPA 13-05, RZ 13-13  
13576 & 13584 Coleraine Drive  
Part of the East Half of Lot 8, Concession 5 (Albion)  
Part of Block 307 on Registered Plan 43M-1324  
Town of Caledon  
Halmos & 1361605 Ontario Limited (Agent: Paul A. King)**

This letter will acknowledge receipt of the recent circulation (received on January 8, 2014) in support of the above noted Site Plan Application. Toronto and Region Conservation Authority (TRCA) staff has reviewed the above noted application and 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, 2005*; TRCA's Regulatory Authority under Ontario Regulation 166/06, *Development, Interference with Wetlands and Alterations to Shorelines and Watercourses*; and our Memorandum 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 understanding that the purpose of the above noted application is to permit the applicant to develop a portion of the lands with eight (8) lot residential plan of subdivision fronting onto a widened Jack Kenny Court. The majority of the lots are proposed within the rear amenity area of the residential properties fronting onto Coleraine Drive (13576 and 13584 Coleraine Drive).

**Recommendation**

As currently submitted, the technical studies received to-date by TRCA do not satisfy TRCA's requirements. However, on the basis noted below, TRCA staff has **no objections** to the application subject to addressing TRCA's comments (Appendix I), and TRCA's condition of draft approval (Appendix II).



**Applicable TRCA Policies and Regulation**

A portion of the subject lands are regulated by the TRCA under Ontario Regulation 166/06, and are subject to the policies within TRCA's Valley and Stream Corridor Management Program (VSCMP). 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 process, the applicant should contact the undersign on the appropriate fee(s).

**Clearance of TRCA Conditions**

Please note that a copy of the most current Condition of Draft Approval and draft plan of subdivision, the Executed Subdivision Agreement, the implementing Zoning By-law, and TRCA's Clearance Fee (\$5,200.00) must be provided to the TRCA with a request for clearance of conditions that identifies how the conditions have been fulfilled, when available, in order to expedite the clearance of the conditions of draft approval.

**Conclusion**

TRCA staff has reviewed the technical studies included with your circulation and provide comments, which are identified in Appendix I. The resolution of the issues identified in Appendix I and II may affect the final design of the proposed development. Therefore, TRCA will continue to work closely with Town of Caledon, the proponent and their consultants to ensure that TRCA's expectations for meeting the attached comments are met. We look forward to reviewing the updated/revised submissions for our review.

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  
Planner I  
Planning and Development  
Extension 5618

AP/ly 

cc: Peter Halmos: phalmos@hotmail.com  
Paul A. King, Paul A. King Planning & Development Consultant: paking@pathcom.com  
Jennifer Maestre, Region of Peel: Jennifer.Maestre@peelregion.ca  
Dilnesaw Chekol, TRCA: dchekol@trca.on.ca  
Rebecca MacDonald, TRCA: rmacdonald@trca.on.ca  
Jehan Zeb, TRCA: jzeb@trca.on.ca  
Leilani Lee-Yates, TRCA: llee-yates@trca.on.ca

**Appendix I: TRCA Comments**

The following materials were received by the TRCA:

- Draft Plan of Subdivision, prepare by Young & Young Surveying Inc., dated April 23, 2013;
- Planning Justification Report, prepared by Paul A. King, dated October 16, 2013;
- A Soil Investigation for Proposed Residential Development, prepared by Soil Engineers Ltd., dated May 2013;
- Scoped Environmental Impact Study For Jack Kenny Court, Town of Caledon, Ontario, prepared by Savanta Inc., dated July 2013;
- Scoped Hydrogeology Report for Jack Kenny Court, prepared by Calder Engineering Ltd., dated December 2013;
- Functioning Service and Stormwater Management Report for Jack Kenny Court, prepared by Calder Engineering Ltd., dated October 2013;
- Site Servicing Plan, prepared by Calder Engineering Ltd., dated October 23, 2013;
- Site Grading Plan, prepared by Calder Engineering Ltd., dated October 23, 2013;
- Restoration/Erosion and Sediment Control Plan, prepared by Calder Engineering Ltd., dated October 23, 2013;
- Engineered Fill Plan, prepared by Calder Engineering Ltd., dated October 23, 2013;
- Details, prepared by Calder Engineering Ltd., dated October 23, 2013

We understand the applicant is proposing to develop a portion of lands with an eight (8) lot residential plan of subdivision fronting onto a widened Jack Kenny Court. We understand that this development applies only to the east side of Jack Kenny Court. 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 concerns listed below have been addressed:

**Water Resource Engineering**

1. It is noted that the groundwater table is located 4.5 m below the surface, but the distance between the LID facility and the groundwater table is not shown on the plan. Please advise the applicant to revise the plan during detail design to ensure that a minimum of 1 m distance is provided between the bottom of the LID facility and the groundwater table.
2. During detail design, please ensure that the proposed swale has 3:1 side slopes, and the bottoms are essentially flat to distribute runoff to the largest possible ground surface and maximize infiltration.
3. Please provide a plan showing the longitudinal profile of the swale.

**Planning Ecology**

4. It is noted that the submitted Scoped Environmental Impact Study (EIS) was sufficient in describing the current ecological site conditions. However, the EIS has not demonstrated a net ecological gain. Please advise the applicant to provide for mitigation for the loss of natural cover in the area. On-site and off-site mitigation opportunities must be examined as part of the EIS.
5. Any tree removal should be done outside of the breeding bird season (1 April – 1 August), and this should be stated on the construction drawings.

**Appendix II: 13576 & 13584 Coleraine Drive, 21T-13002, POPA 13-05, RZ 13-13 (TRCA  
Conditions of Draft Approval)**

**TRCA Condition of Draft Approval**

**Prior to Works Commencing**

1. 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 approval of the TRCA for:
  - a. A detailed engineering 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 Master Environmental Servicing Plans, and TRCA standards and requirements. This report shall include:
    - 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 or 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 (SWMPs) to be used to treat stormwater, to mitigate the impacts of development on the quality and quantity of ground 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 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 (including water and wastewater sewer mains) 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, with all supporting technical information.
    - v. 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. Design of LID measures must ensure that a minimum of 1 m distance is provided between the bottom of the LID facility and the groundwater table.
    - vi. overall site-level Water Balance Report that will identify measures that will be implemented during pre and post development that:
      - 1) mimic the pre-development surface and groundwater water balance for the overall site to the greatest possible extent;
      - 2) maintain pre-development flow regimes and hydroperiods (e.g. quality, volume, rate, duration, timing, frequency and spatial distribution of water) to significant natural features;

- 3) demonstrate how post-development conditions will retain the first 5 mm of rainfall over the entire site, including best efforts for infiltration measures (or demonstrated best efforts to achieve the greatest amount technically feasible) to the satisfaction of the TRCA;
  - 4) mitigate against any potential on-site or downstream erosion associated with the stormwater management system;
  - 5) maintain baseflow contributions at pre-development levels, duration and frequency, to the extent possible to downstream watercourses to the satisfaction of TRCA staff; and
  - 6) this study must provide detailed design of the system(s), and implementation information and measures.
- vii. Preliminary plans illustrating Erosion and Sediment Control measures including construction staging and phasing.
- viii. An overall monitoring plan for the LID measures that outlines short, medium and long term monitoring activities and responsibilities
- 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 also identify no grading works and fill placement within environmental buffer areas, beyond those approved by the TRCA, and which shall be minimized to the extent feasible.
- c. The applicant shall submit and received approval for an Environmental Impact Study (EIS) that demonstrates ecological net gain, and on and off-site mitigation opportunities..
- d. Confirmation be provided with respect to whether permits and/or permissions are required from the Ministry of Natural Resources (MNR) under the Endangered Species Act. And, that the applicant commit to attaining all necessary approvals and permissions from MNR, and from Fisheries and Oceans Canada that may be required for this development, its servicing, or component thereof.
- e. 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, and those related to any associated infrastructure or stormwater management works required to support this development that may be located off of the subject property, prior to request for registration of this Plan or any phase thereof.
- f. That the size and location of all Low Impact Development (LID) measures associated with this development be confirmed to the satisfaction of the TRCA. And, if required to meet TRCA requirements, red-line revision be 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.

**Subdivision Agreement**

2. That the owner agrees 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 acceptance to TRCA's;
  - c. to design and implement on-site erosion and sediment control in accordance with current TRCA standards;
  - d. to maintain all stormwater management and erosion and sedimentation control structure operating and in good repair during the construction period, in a manner satisfactory to the TRCA;
  - e. 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;
  - f. to erect a permanent fence to the satisfaction of the TRCA on all lots and blocks abutting natural areas and their buffers;
  - g. to implement all water balance/infiltration measures identified in the water balance study that is to be completed for the subject property;
  - h. to design a monitoring protocol and provide the requisite funding and permissions for the construction and long-term monitoring and maintenance of the site level water balance and infiltration measure on this site (including LIDs), and to provide the requisite funding for the long-term monitoring of this system (3 years once the facility is operational) to the satisfaction of the TRCA;
  - i. design a monitoring protocol and provide the requisite funding for the planning and maintenance of the landscape plantings for a minimum period of three (3) years (once the landscape planting works are completed) or until such time that the TRCA and the Town are satisfied with the performance of the landscape plantings;
  - j. to provide for the warning clauses and information identified in TRCA's conditions;
  - k. that, where required to satisfy TRCA's conditions, development shall be phased within this Plan;
  - l. that prior to a request for renewal of Draft Approval of any phases 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;
  - m. to carry out, or cause to be carried out the cleaning-out and maintenance of all stormwater management infrastructure (including best management practice measures) prior to assumption of the subdivision by the Town of Caledon. And, to include appropriate clauses in all agreements, for lots or blocks on which stormwater management measures are being constructed 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.

### **Purchase and Sale Agreement**

3. That a warning clause be included in all agreements of purchase and sale for (Draft Plan of Subdivision Part of the East Half of Lot 8 Concession 5, Also Part of Block 307 Registered Plan 43M-1324, Lot/Block No. 1, prepared by Paul A. King Planning & Development Consultant, dated October 1, 2013 adjacent to the valley corridor of the Humber River tributary and the associated buffers, 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 the publically owned environmental protection area and will remain in a naturalized state. Private uses are not permitted on these lands. Uses such as private picnic, barbeque or garden areas; storage of materials and/or the dumping of refuse 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.

## **Appendix C – MNR Species at Risk Screening Letter**

July 2, 2013

George Buckton  
Ecologist  
Savanta Inc.  
416.816.2246  
georgebuckton@savanta.ca

Dear Mr. Buckton,

**Re: MNR Preliminary Species at Risk Screening Letter  
Robert Whyte  
Jack Kenny Court  
Town of Caledon, Regional Municipality of Peel**

In your email dated June 7, 2013 you requested information on natural heritage features and element occurrences occurring on or adjacent to the above mentioned location.

There are no species at risk recorded for your study area.

There are no natural heritage features recorded for your study area.

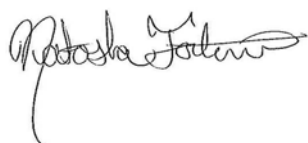
Absence of information provided by MNR for a given geographic area, or lack of current information for a given area or element, does not categorically mean the absence of sensitive species or features. Many areas in Ontario have never been surveyed and new plant and animal species records are still being discovered for many localities. For these reasons, the NHIC/MNR cannot provide a definitive statement on the presence, absence or condition of biological elements in any part of Ontario.

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 905.713.6483 or [natosha.fortini@ontario.ca](mailto:natosha.fortini@ontario.ca).



Sincerely,

A handwritten signature in black ink, appearing to read 'Natosha Fortini'. The signature is fluid and cursive, with a long, sweeping underline that extends to the right.

Natosha Fortini  
Assistant Species at Risk Biologist  
Ontario Ministry of Natural Resources, Aurora District

## **Appendix D – Plant Species List**

**SAVANTA INC.**  
**APPENDIX D: Vascular Plant List**

Species Latin Name	Synonyms	Species Common Name	Coefficient of Conservation	Wetness Index	Weediness Index	Provincial Status S-Rank	OMNR Status	COSEWIC Status	Global Status G-Rank	Local Status Peel	Local Status CVC/Peel	Local Status Peel	Authority
Reference										Varga 2000	CVC 2002		
<b>GYMNOSPERMS</b>			<b>CONIFERS</b>										
<b>Cupressaceae</b>			<b>Cedar Family</b>										
<i>Juniperus communis</i>		Common Juniper		3		S5			G5	R1		RL	L.
<b>Pinaceae</b>			<b>Pine Family</b>										
<i>Pinus nigra</i>		Austrian Pine		-5	-1	SE2			G?				Arnold
<i>Pinus strobus</i>		Eastern White Pine	4	3		S5			G5	X	X	X	L.
<b>DICOTYLEDONS</b>			<b>DICOTS</b>										
<b>Aceraceae</b>			<b>Maple Family</b>										
<i>Acer negundo</i>		Manitoba Maple	0	-2		S5			G5	X	X	X	L.
<i>Acer platanoides</i>		Norway Maple		5	-3	SE5			G?	X	I	I	L.
<b>Anacardiaceae</b>			<b>Sumac or Cashew Family</b>										
<i>Rhus radicans</i> ssp. <i>negundo</i>	<i>Toxicodendron radicans</i> ssp. <i>negundo</i>	Climbing Poison-ivy	5	-1		S5			G5?	X	X	X	L.
<i>Rhus typhina</i>		Staghorn Sumac	1	5		S5			G5	X	X	X	L.
<b>Apiaceae</b>			<b>Carrot or Parsley Family</b>										
<i>Daucus carota</i>		Wild Carrot		5	-2	SE5			G?	X	X	I	L.
<b>Asclepiadaceae</b>			<b>Milkweed Family</b>										
<i>Asclepias syriaca</i>		Common Milkweed	0	5		S5			G5	X	X	X	L.
<b>Asteraceae</b>			<b>Composite or Aster Family</b>										
<i>Arctium minus</i> ssp. <i>minus</i>		Common Burdock		5	-2	SE5			G?	X	X	I	(Hill) Bernh.
<i>Aster lateriflorus</i> var. <i>lateriflorus</i>	<i>Symphyotrichum lateriflorum</i>	Calico Aster	3	-2		S5			G5?	X	X	X	(L.) Britton
<i>Bidens frondosa</i>		Devil's Beggar-ticks	3	-3		S5			G5	X	X	X	L.
<i>Centaurea maculosa</i>		Spotted Knapweed		5	-3	SE5			G?	X	X	I	Lam.
<i>Chrysanthemum leucanthemum</i>	<i>Leucanthemum vulgare</i>	Ox-eye Daisy		5	-1	SE5			G?	X	X	I	L.
<i>Cirsium arvense</i>		Canada Thistle		3	-1	SE5			G?	X	X	I	(L.) Scop.
<i>Cirsium vulgare</i>		Bull Thistle		4	-1	SE5			G5	X	X	I	(Savi) Ten.
<i>Erigeron philadelphicus</i> ssp. <i>philadelphicus</i>		Philadelphia Fleabane	1	-3		S5			G5?	X	X	X	L.
<i>Rudbeckia hirta</i>		Black-eyed Susan	0	3		S5			G5	X	X	X	L.
<i>Solidago altissima</i> var. <i>altissima</i>		Tall Goldenrod	1	3		S5				X	X	X	L.
<i>Solidago canadensis</i>		Canada Goldenrod	1	3		S5			G5	X	X	X	L.
<i>Taraxacum officinale</i>		Common Dandelion		3	-2	SE5			G5	X	I	I	G. Weber
<i>Tussilago farfara</i>		Coltsfoot		3	-2	SE5			G?	X	I	I	L.
<b>Brassicaceae</b>			<b>Mustard Family</b>										
<i>Alliaria petiolata</i>		Garlic Mustard		0	-3	SE5			G5	X	X	I	(M. Bieb.) Cavara & Grande
<i>Hesperis matronalis</i>		Dame's Rocket		5	-3	SE5			G4G5	X	I	I	L.
<b>Caprifoliaceae</b>			<b>Honeysuckle Family</b>										
<i>Lonicera tatarica</i>		Tartarian Honeysuckle		3	-3	SE5			G?	X	I	I	L.
<b>Cornaceae</b>			<b>Dogwood Family</b>										
<i>Cornus stolonifera</i>	<i>Cornus sericea</i> ssp. <i>Sericea</i>	Red-osier Dogwood	2	-3		S5			G5	X	X	X	Michx.
<b>Dipsacaceae</b>			<b>Teasel Family</b>										
<i>Dipsacus fullonum</i> ssp. <i>sylvestris</i>	<i>Dipsacus sylvestris</i>	Wild Teasel		5	-1	SE5			G?	X	X	I	L.
<b>Fabaceae</b>			<b>Pea Family</b>										
<i>Coronilla varia</i>	<i>Securigera varia</i>	Variable Crown-vetch		5	-2	SE5			G?	X	X	I	L.
<i>Medicago alba</i>		White Sweet-clover		3	-3	SE5			G?	X	I	I	Medik.
<i>Robinia pseudo-acacia</i>		Black Locust		4	-3	SE5			G5	X	I	I	L.
<i>Trifolium pratense</i>		Red Clover		2	-2	SE5			G?	X	I	I	L.
<b>Grossulariaceae</b>			<b>Currant Family</b>										
<i>Ribes cynosbati</i>		Prickly Gooseberry	4	5		S5			G5	X	X	X	L.
<b>Juglandaceae</b>			<b>Walnut Family</b>										
<i>Juglans nigra</i>		Black Walnut	5	3		S4			G5	X	X	X	L.
<b>Lamiaceae</b>			<b>Mint Family</b>										
<i>Glechoma hederacea</i>		Creeping Charlie		5	-2	SE5			G?	X	I	I	L.
<i>Prunella vulgaris</i> ssp. <i>lanceolata</i>		Heal-all	5	5		S5			G5?	X	X	X	L.
<b>Oleaceae</b>			<b>Olive Family</b>										
<i>Fraxinus pennsylvanica</i>		Red Ash	3	-3		S5			G5	X	X	X	Marshall
<b>Plantaginaceae</b>			<b>Plantain Family</b>										
<i>Plantago major</i>		Common Plantain		-1	-1	SE5			G5	X	I	I	L.
<b>Polygonaceae</b>			<b>Smartweed Family</b>										
<i>Rumex crispus</i>		Curly-leaf Dock		-1	-2	SE5			G?	X	I	I	L.
<b>Ranunculaceae</b>			<b>Buttercup Family</b>										
<i>Ranunculus acris</i>		Tall Buttercup			-2	SE5			G5	X	I	I	L.
<b>Rhamnaceae</b>			<b>Buckthorn Family</b>										

**SAVANTA INC.**  
**APPENDIX D: Vascular Plant List**

Species Latin Name	Synonyms	Species Common Name	Coefficient of Conservation	Wetness Index	Weediness Index	Provincial Status S-Rank	OMNR Status	COSEWIC Status	Global Status G-Rank	Local Status Peel	Local Status CVC/Peel	Local Status Peel	Authority
Reference										Varga 2000	CVC 2002		
<i>Rhamnus cathartica</i>		Common Buckthorn		3	-3	SE5			G?	X	I	I	L.
<b>Rosaceae</b>			<b>Rose Family</b>										
<i>Fragaria virginiana</i> ssp. <i>virginiana</i>		Scarlet Strawberry	2	1		SU			G5?	X	X	X	Miller
<i>Malus pumila</i>		Common Crabapple		5	-1	SE5			G5	X	I	I	Miller
<i>Prunus serotina</i>		Black Cherry	3	3		S5			G5	X	X	X	Ehrh.
<i>Rubus idaeus</i> ssp. <i>idaeus</i>		Red Raspberry				SE1			G5T5				L.
<b>Rubiaceae</b>			<b>Madder Family</b>										
<i>Galium mollugo</i>		White Bedstraw		5	-2	SE5			G?	XSR		I	L.
<b>Salicaceae</b>			<b>Willow Family</b>										
<i>Populus tremuloides</i>		Trembling Aspen		0		S5			G5	X	X	X	Michx.
<i>Salix x rubens</i>		Reddish Willow		-4	-3	SE4			HYB	XSR			Schrank
<i>Ulmus americana</i>		White Elm	3	-2		S5			G5?	X	X	X	L.
<b>Urticaceae</b>			<b>Nettle Family</b>										
<i>Urtica dioica</i> ssp. <i>gracilis</i>	<i>Urtica gracilis</i>	American Stinging Nettle	2	-1		S5			G5?	X	X	X	L.
<b>Vitaceae</b>			<b>Grape Family</b>										
<i>Parthenocissus inserta</i>		Inserted Virginia-creeper	3	3		S5			G5	X	X	X	(A. Kern.) Fritsch
<i>Vitis riparia</i>		Riverbank Grape	0	-2		S5			G5	X	X	X	Michx.
<b>Poaceae</b>			<b>Grass Family</b>										
<i>Agrostis gigantea</i>		Red-top		0	-2	SE5			G4G5	X	I	I	Roth
<i>Bromus inermis</i> ssp. <i>inermis</i>		Awnless Brome		5	-3	SE5			G4G5?	X	I	I	Leyss.
<i>Phalaris arundinacea</i>		Reed Canary Grass	0	-4		S5			G5	X	X	X	L.
<i>Poa pratensis</i> ssp. <i>pratensis</i>		Kentucky Bluegrass	0	1		S5			G5T	X	X	X	L.
STATISTICS													
Species Richness													
Total Number of Species:		55											
Native Species:		26		47%									
Exotic Species		29		53%									
S1-S3 Species													
S4 Species		1		4%									
S5 Species		24		96%									
Floristic Quality Indices													
Mean Co-efficient of Conservation (CC)		2.2											
CC 0 - 3 lowest sensitivity		18		78%									
CC 4 - 6 moderate sensitivity		5		22%									
CC 7 - 8 high sensitivity		0		0%									
CC 9 - 10 highest sensitivity		0		0%									
Floristic Quality Index (FQI)		11											
Weedy and Invasive Species													
Mean Weediness Index		-2.1											
-1 low potential invasiveness		7		25%									
-2 moderate potential invasiveness		11		39%									
-3 high potential invasiveness		10		36%									
Wetland Species													
Mean Wetness Index		1.8											
upland		16		31%									
facultative upland		17		33%									
facultative		8		15%									
facultative wetland		10		19%									
obligate wetland		1		2%									

## **Appendix E – Bird Species List**

Master Bird Species Table: breeding bird survey, specialized surveys, and incidental observations (TEMPLATE)													
Common Name	Species Code	Scientific Name	Status <sup>1</sup>	Breeding Evidence <sup>2</sup>	#PC <sup>3</sup>	SS <sup>4</sup>	Inc <sup>5</sup>	National Status (Grank)	Provincial Status (Srank)	COSSARO (MNR)	COSEWIC	Comments / Summary (e.g. area-sensitivity, habitat use on-site, other comments)	SWH Indicator Species and applicable criteria/ Notes: (1) All migratory songbirds and migratory raptors are eligible for SWH 7E and 6E; (2) All Special Concern and provincially rare S3 species are eligible for SWH 7E and 6E; (3) "Special Concern and Rare Wildlife Species"
<b>Accipitriformes</b>													
<b>Cathartidae</b>													
Turkey Vulture	TUVU	<i>Cathartes aura</i>	SV	X	1			G5	S5B				
<b>Accipitridae</b>													
Red-tailed Hawk	RTHA	<i>Buteo jamaicensis</i>	SV	X			X	G5	S5	NAR	NAR		1.1 Raptor wintering area 7E, 6E
<b>Charadriiformes</b>													
<b>Laridae</b>													
<b>Laridae</b>													
Ring-billed Gull	RBGU	<i>Larus delawarensis</i>	SV	X	1			G5	S5B, S4N				1.1 Colonial nesting breeding habitat (ground) 6E
<b>Columbiformes</b>													
<b>Columbidae</b>													
Mourning Dove	MODO	<i>Zenaidura macroura</i>	SR	S	2		X	G5	S5				
<b>Coraciiformes</b>													
<b>Alcedinidae</b>													
<b>Cerylinae</b>													
Belted Kingfisher	BEKI	<i>Megasceryle alcyon</i>	SR	X	1			G5	S4B		Candidate (high priority)		
<b>Piciformes</b>													
<b>Picidae</b>													
<b>Picidae</b>													
Downy Woodpecker	DOWO	<i>Picoides pubescens</i>	PR	CF	2		X	G5	S5				
<b>Passeriformes</b>													
<b>Vireonidae</b>													
Red-eyed Vireo	REVI	<i>Vireo olivaceus</i>	SR	S	1			G5	S5B				
<b>Corvidae</b>													
American Crow	AMCR	<i>Corvus brachyrhynchos</i>	SR	X	1			G5	S5B				
<b>Turdidae</b>													
American Robin	AMRO	<i>Turdus migratorius</i>	SR	CF	2		X	G5	S5B				
<b>Sturnidae</b>													
European Starling	EUST	<i>Sturnus vulgaris</i>	SR	H	1			G5	SNA				
<b>Bombycillidae</b>													
Cedar Waxwing	CEDW	<i>Bombycilla cedrorum</i>	SR	P			X	G5	S5B				
<b>Icteridae</b>													
Red-winged Blackbird	RWBL	<i>Agelaius phoeniceus</i>	SR	S	1			G5	S4				
Common Grackle	COGR	<i>Quiscalus quiscula</i>	SR	H	2			G5	S5B				
Brown-headed Cowbird	BHCO	<i>Molothrus ater</i>	SR	H	1			G5	S4B				
<b>Carduelinae</b>													
House Finch	HOFI	<i>Carpodacus mexicanus</i>	SR	FY	1		X	G5	SNA				
American Goldfinch	AMGO	<i>Spinus tristis</i>	SR	S	2			G5	S5B				
<p><b>Species Common Name and Scientific Name:</b> consistent with the American Ornithologists' Union. 2012. Check-list of North American Birds. Accessed May 25, 2012. Available online: <a href="http://www.aou.org/checklist/north/full.php/">www.aou.org/checklist/north/full.php/</a></p> <p><b>Species Code:</b> consistent with the American Ornithologists' Union. 2012. Species 4-Letter-Codes. Accessed May 25, 2012. Available online: <a href="http://www.birdsontario.org/atlas/codes.jsp?lang=en&amp;pg=species/">www.birdsontario.org/atlas/codes.jsp?lang=en&amp;pg=species/</a></p> <p><b>Status<sup>1</sup>:</b> PR - Permanent Resident; MI - Migrant; WV - Winter Visitor; SR - Summer Resident; SV - Summer Visitor (non-breeding)</p> <p><b>Breeding Evidence<sup>2</sup>:</b> Codes assigned for breeding evidence are consistent with the Ontario Breeding Bird Atlas (OBBA). 2012. Breeding Evidence Codes. Accessed May 25, 2012. Available online: <a href="http://www.birdsontario.org/dataentry/codes.jsp?page=breeding/">http://www.birdsontario.org/dataentry/codes.jsp?page=breeding/</a>. Several different types of breeding evidence are often recorded for any given species over the course of surveys and incidental observations - this table reports only the highest level of breeding evidence</p> <p><b>#PC<sup>3</sup>:</b> total number of point count (PC) stations on the Subject Lands where each bird species was observed. Detailed point count data is provided in the Breeding Bird Survey Point Count Table</p> <p><b>SS<sup>4</sup>:</b> an "x" in this column means the species was observed during a specialized survey (e.g. targeted survey for Species at Risk survey, waterfowl, raptors, or marsh birds); the Specialized Survey Table provides data from these surveys (if applicable)</p> <p><b>Inc<sup>5</sup>:</b> an "x" in this column means an incidental observation(s) was made of this species; the "Breeding Bird Point Count Data and Incidental Bird Observations Table" provides the date and number of individuals observed.</p> <p><b>S ranks:</b> Provincial ranks are from the Natural Heritage Information Centre; S1 (critically imperiled), S2 (imperiled), S3 (vulnerable), S4 (apparently secure), S5 (secure); ranks were updated using NHIC species list Feb 17, 2012</p> <p><b>G ranks:</b> National ranks are from the Natural Heritage Information Centre; G1 (extremely rare), G2 (very rare), G3 (rare to uncommon), G4 (common), G5 (very common); ranks were updated using NHIC species list Feb 17, 2012</p> <p><b>COSSARO (MNR):</b> Ontario Species at Risk as listed by the Committee on the Status of Species at Risk in Ontario (from NHIC Table Feb 17, 2012); END - Endangered, THR - Threatened, SC - Special Concern, NAR - Not at Risk; Candidate Species at Risk to be assessed by COSSARO are listed online: <a href="http://www.mnr.gov.on.ca/en/Business/Species/2ColumnSubPage/STDP/PROD_068707.html/">www.mnr.gov.on.ca/en/Business/Species/2ColumnSubPage/STDP/PROD_068707.html/</a>.</p> <p><b>COSEWIC:</b> Canada Species at Risk as listed by the Committee on the Status of Endangered Wildlife in Canada (from NHIC Table Feb 17, 2012); END - Endangered, THR - Threatened, SC - Special Concern, NAR - Not at Risk; Candidate Species at Risk to be assessed by COSEWIC are listed online: <a href="http://www.cosewic.gc.ca/eng/sc3/index_e.cfm/">www.cosewic.gc.ca/eng/sc3/index_e.cfm/</a>.</p> <p><b>Comments / Summary:</b> Comments from lead surveyor regarding each species use of the site and significance, if applicable</p> <p><b>SWH Indicator Species:</b> SWH refers to Significant Wildlife Habitat as defined by the OMNR Draft Significant Wildlife Habitat Criteria Tables for Ecoregions 7E and 6E (as appropriate for the Subject Lands). SWH indicator species and associated criteria are identified in this table and any potential SWH is discussed in the text of this report.</p> <p><b>Please note:</b> Detailed point count results and incidental bird observations are provided in the "Breeding Bird Survey Point Count Data and Incidental Bird Observations Table". Subsequent tables provide weather information, timing of surveys, surveyors, and location of point count stations</p>													