

SCOPED ENVIRONMENTAL IMPACT STUDY



October 9, 2024

529 Tiffin Street
City of Barrie

Prepared for: XCG Consulting Limited



65 Melrose Ave.
Barrie, ON L4M 2B1
705.718.6153
www.rootsevenvironmental.ca

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1 INTRODUCTION

Roots Environmental ('Roots') has been retained by XCG Consulting Limited to complete a Scoped Environmental Impact Study (SEIS) for the property located at 529 Tiffin Street in the City of Barrie as illustrated in *Figure 1 – Site Location*.

A SEIS is required in support of applications to permit development of a recycling transfer station for the recovery and recycling of materials from the construction and demolition industries.

The subject property is designated *Employment Area – Industrial* in Schedule A: Land Use to the City of Barrie Official Plan. Adjacent lands to the east and south of the property are designated Natural Heritage System with an Environmental Protection Area Level 1 overlay in Map 3 (Natural Heritage Protection Overlays) to the Official Plan.

Section 5.4.2.1 (c) of the City of Barrie Official Plan states:

“An environmental impact study will be required to be completed by a qualified professional for any proposed development or site alteration within 120.0 metres of an area identified as Level 1 on Map 3.”

The property is regulated by the Nottawasaga Valley Conservation Authority (NVCA) under Ontario Regulation 172/06 of the *Conservation Authorities Act*. A permit will be required for the proposed development.

The purpose of the SEIS is to identify the presence of any natural heritage features on the site or adjacent lands of 120 metres, assess any impacts resulting from the proposed development, and identify any preventative, mitigative or remedial measures to ensure no negative impacts.

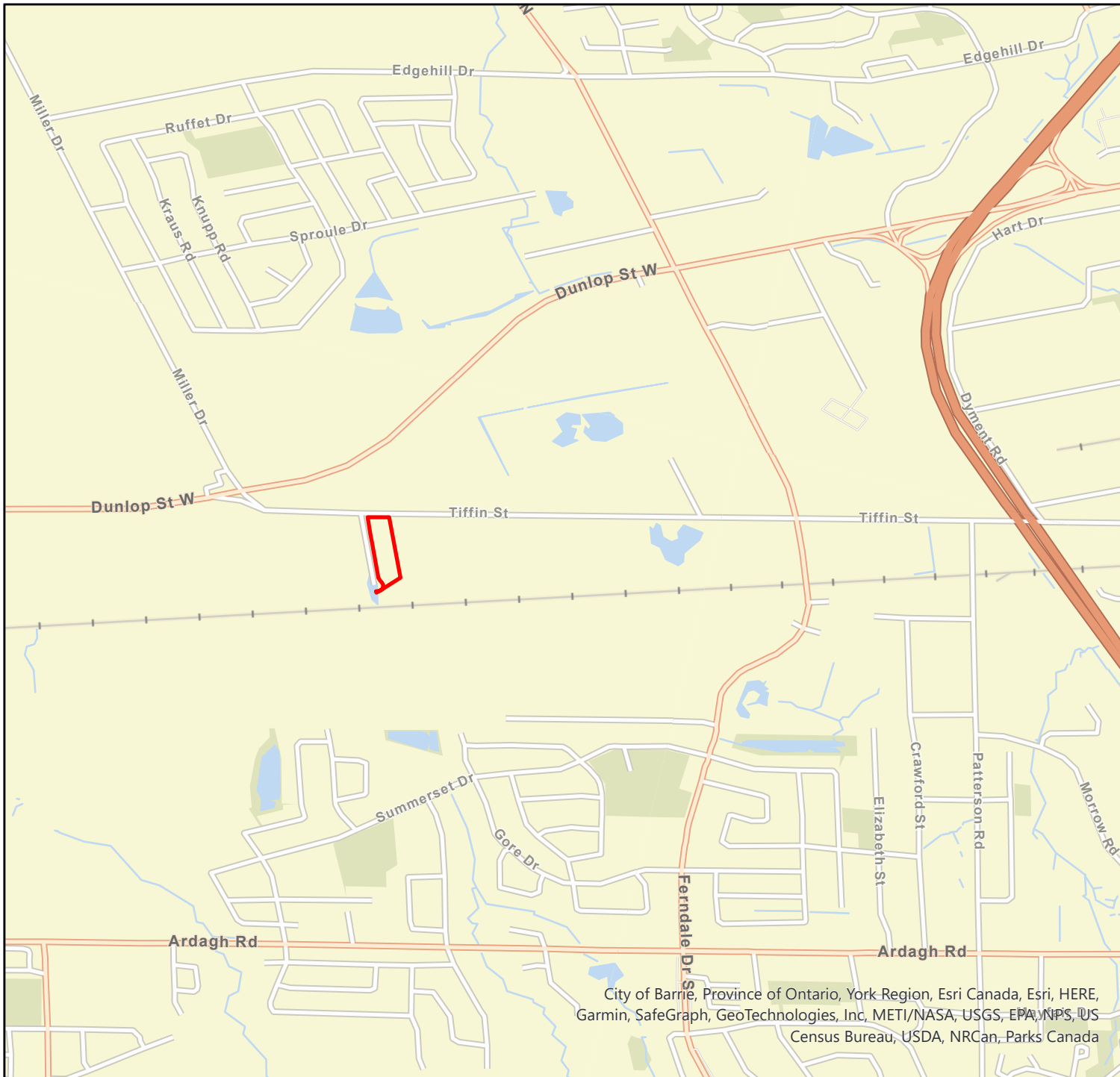
1.1 Site Location and Proposed Development

The site has a total area of 1.68 ha (4.15 acres). The property is cleared, filled and graded to the limits. Access to the property is from Boulton Court, found abutting to the west of the property.

The proposed development is for a recycling transfer station to facilitate the recovery and recycling of materials from the construction and demolition industries as shown on *Figure 2- Conceptual Site Plan*. Access to the property will be from Tiffin Street and Boulton Court.

2 RELEVANT ENVIRONMENTAL POLICIES

A review of relevant environmental legislation, plans, and policies will be included in Section 7 of this EIS. This review will include the Provincial Policy Statement, Growth Plan for the Greater Golden Horseshoe, and City of Barrie Official Plan.



Legend

 Subject Property

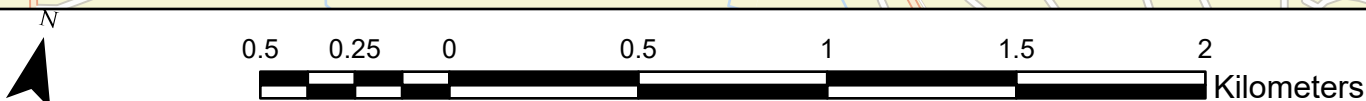
SCOPED ENVIRONMENTAL IMPACT STUDY

Figure 1
Site Location

XCG Consulting Limited
529 Tiffin Street
City of Barrie



City of Barrie, Province of Ontario, York Region, Esri Canada, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, NRCan, Parks Canada



LOT ANALYSIS

DEVELOPMENT SITE AREA	12883,62 SQ.M.	100,00 %
BUILDING AREA	1207,74 SQ.M.	9,38 %
BUILDING AREA (FUTURE BRITESPAN)	930,25 SQ.M.	7,22 %
LANDSCAPED AREA (INC. WALKS)	3981,40 SQ.M.	30,90 %
HARD SCAPE AREA (GRAVEL/CONC.)	6764,23 SQ.M.	62,50 %
TOTAL COVERAGE	2137,99 SQ.M.	16,60 %
TOTAL BUILDING GFA	2263,59 SQ.M.	

SNOW STORAGE REQUIRED = 258 sm (2% OF LOT AREA)
SNOW STORAGE PROVIDED = 258 sm

PARKING FACILITIES (As per Parking Standards Table 4.6 of the Zoning By-law)

REQUIRED 1 PARKING SPACE PER 70 SM G.F.A.
TOTAL REQUIRED PARKING SPACES - 1,207,74/70 = 18 SPACES
TOTAL PROVIDED PARKING SPACES - 18 (INCLUDING 1 AODA - 1 TYPE A)

PARKING SPACE SIZES:

NORMAL - Min. 2,70m x 5,50m
TYPE A - 4,0m wide (3,4m space, 1,5m hatched aisle)
TYPE B - 4,0m wide (3,1m space, 1,5m hatched aisle)

BICYCLE PARKING PROVIDED - 2 SPACES

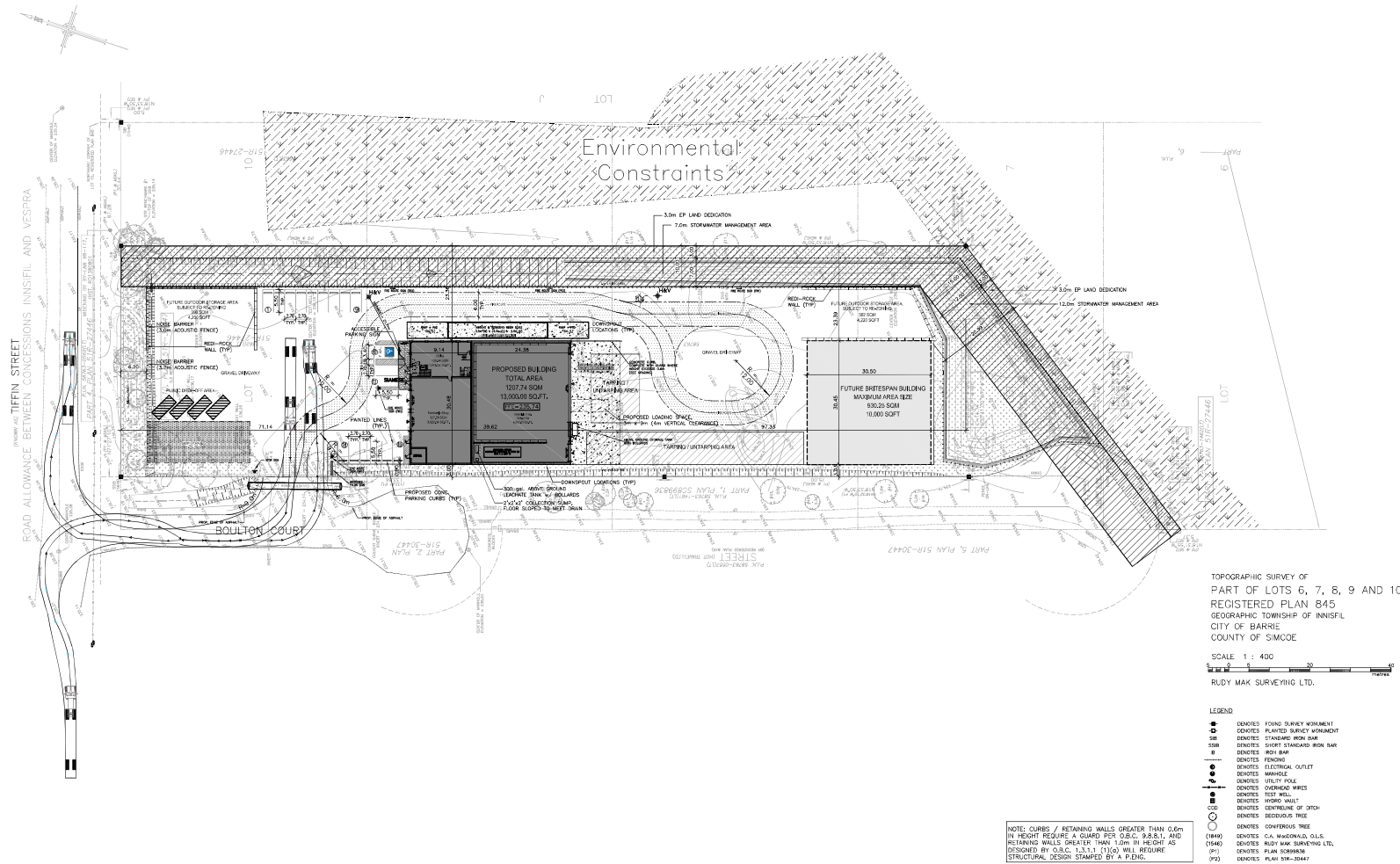
TOTAL REQUIRED LOADING SPACES - 1 SPACE
TOTAL PROVIDED LOADING SPACES - 1 SPACE (3m x 9m, 4m vertical clearance)

DRIVEWAY MIN. WIDTH 6,4m
FIRE ROUTE MIN. WIDTH 6,0m



KEY PLAN

N.T.S.



TOPOGRAPHIC SURVEY OF
PART OF LOTS 6, 7, 8, 9 AND 10
REGISTERED PLAN 845
GEOGRAPHIC TOWNSHIP OF INNISFIL
CITY OF BARRIE
COUNTY OF SIMCOE

SCALE 1 : 400
RUDY MAK SURVEYING LTD.

- LEGEND
- DENOTES FOUND SURVEY MONUMENT
 - DENOTES PLANTED SURVEY MONUMENT
 - SSB DENOTES STANDING SIGN BARR
 - SSB DENOTES SHORT STANDING SIGN BARR
 - W DENOTES WOOD BARR
 - DENOTES FENCING
 - DENOTES ELECTRICAL OUTLET
 - DENOTES MANHOLE
 - DENOTES UTILITY POLE
 - DENOTES OVERHEAD WIRES
 - DENOTES TIE-UP
 - DENOTES HYDRO VALVE
 - DENOTES CONTINUING OF DITCH
 - DENOTES DECIDUOUS TREE
 - DENOTES CONIFEROUS TREE
 - (1448) DENOTES C.A. MASONRY D.I.S.
 - (1546) DENOTES RUDY MAK SURVEYING LTD.
 - (193) DENOTES PLAN 5146-27446
 - (192) DENOTES PLAN 514-30447

NOTE: CURBS / RETAINING WALLS GREATER THAN 0.6m IN HEIGHT REQUIRE A GUARD FOR D.E.C. 96.8-11, AND RETAINING WALLS GREATER THAN 1.0m IN HEIGHT AS DESIGNED BY O.B.C. 13.1.1 (10.0) WILL REQUIRE STRUCTURAL DESIGN STAMPED BY A P.E.N.G.

REVISIONS

#	DATE
1	ISSUED FOR SPA
2	ISSUED FOR COORDINATION
3	ISSUED FOR COORDINATION
4	ISSUED FOR COORDINATION
5	ISSUED FOR COORDINATION
6	RE-ISSUED FOR SPA
7	RE-ISSUED FOR SPA
8	RE-ISSUED FOR SPA
9	RE-ISSUED FOR SPA

YORK 1



ALL DRAWINGS & SPECIFICATIONS ARE THE PROPERTY OF THE ARCHITECT AND CANNOT BE USED OR REPRODUCED WITHOUT HIS PERMISSION.
THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS OF THE WORK AND REPORT ANY DISCREPANCY TO THE ARCHITECT.
ALL DRAWINGS MUST NOT BE SCALE.

ARCHITECTURAL
DESIGN INC.

56 PENNSYLVANIA AVE.
UNIT 1
CONCORD, ONT. L4K 3Y9
TEL 905 660-9393
FAX 905 660-9419

PROJECT
PROPOSED RECYCLABLE
MATERIALS TRANSFER STATION
FOR: YORK 1 DEVELOPMENT
AT: 529 TIFFIN ST.
BARRIE, ON

DRAWING
SITE PLAN

DATE	SEP '24	PROJECT NO.	23-0027
DRAWN	L.A.	DRAWING NO.	A-100
CHECKED			
SCALE	1:500		

3 METHODOLOGY

Preparation of the EIS involves a desktop review of available information, a field investigation, analysis and consultation with applicable agencies.

The following provides a summary of tasks completed for the EIS.

3.1 Consultation with Agencies

3.1.1 Nottawasaga Valley Conservation Authority

Pre-consultation comments were provided from the NVCA dated March 30, 2023. Per NVCA comments, an EIS is required due to the presence of provincially significant wetlands.

3.2 Desktop Review

A desktop review was completed to identify previously known natural features, environmental designations and occurrences of rare species or Species at Risk (SAR) in the Study Area. Sources included the following:

- The Ministry of Natural Resources and Forestry (MNRF) Natural Heritage Information Centre (NHIC) Make A Map: Natural Heritage Areas;
- Ontario Nature Reptile and Amphibian Atlas;
- Atlas of Breeding Birds of Ontario; and
- NVCA Regulation Mapping.

3.3 Site Investigation

A site investigation was completed on July 3, 2023, to document existing conditions in the proposed development area and adjacent lands, and to confirm the boundaries of mapped wetlands on and/or adjacent lands to the property.

Vegetation communities were identified using the Ecological Land Classification (ELC) for Southern Ontario, First Approximation (Lee et al., 1998). Polygons were delineated using aerial photography, field sampled and classified into the most appropriate vegetation type. The polygons were identified based on vegetative cover, soils and landscape features.

4 EXISTING CONDITIONS

4.1 Desktop Review

4.1.1 MNRF NHIC Make-A-Map: Natural Heritage Areas

A search was completed using the MNRF NHIC Make-A-Map: Natural Heritage Areas online geographic query tool for occurrence square 17PK0113. Occurrences may include those beyond the subject property and on habitats suitable to those species.

This review found occurrences of the following species at risk or rare species:

- Eastern Wood-pewee (*Contopus virens*) (S4B) (Special Concern) (SC)
- Snapping Turtle (*Chelydra serpentina*) (S4) (SC)
- Houghton's Flatsedge (*Cyperus houghtonii*) (S3)

A Provincially Significant Wetland (Bear Creek Wetland) is mapped along the southern boundary of the property as illustrated in *Figure 3- NHIC Mapping*. The results of this query are included in Appendix B.

4.1.2 Ontario Nature Reptile and Amphibian Atlas

A geographic query of occurrence square 17PK01 was completed using the Ontario Natural Reptile and Amphibian Atlas for observations of species collected from 1970-2019 within a 10-km square. Occurrences will include those beyond the subject property and on habitats suitable to those species. A summary of the search is included in Appendix B.

Four SAR were found in the search:

- Blanding's Turtle (*Emydoidea blandingii*) (Threatened) (THR);
- Northern Map Turtle (*Graptemys geographica*) (SC);
- Snapping Turtle (SC); and
- Five-lined Skink (*Plestiodon fasciatus*) (SC).

Other species noted in the search are common to Ontario. An analysis of habitat potential for these significant species is provided in Section 5.

4.1.3 Atlas of Breeding Birds of Ontario

A geographic query of occurrence square 17PK01 was completed using the Atlas Breeding Birds of Ontario for observations of species collected from 2001-2005. It is noted that these occurrence squares encompass a large area that includes the subject property. Occurrences will include those beyond the subject property and habitats suitable to those species.

A summary of the search is included in Appendix B. 10 species observed during the Breeding Atlas are listed as a SAR in the *Endangered Species Act*. These species are:

- Common Nighthawk (*Chordeiles minor*) (SC)
- Eastern Whip-poor-will (*Antrostomus vociferus*) (THR)
- Red-Headed Woodpecker (*Melanerpes erythrocephalus*) (Endangered) (END)
- Chimney Swift (*Chaetura pelagica*) (THR)
- Eastern Wood-Pewee (*Contopus virens*) (SC)
- Barn Swallow (*Hirundo rustica*) (SC)
- Bank Swallow (*Riparia riparia*) (THR)
- Wood Thrush (*Hylocichla mustelina*) (SC)
- Bobolink (*Dolichonyx oryzivorus*) (THR)
- Eastern Meadowlark (*Sturnella magna*) (THR)

Other species noted in the search are common to Ontario. An analysis of habitat potential for these significant species is provided in Section 5.



Figure 3: NHIC Mapping

(https://www.liaapplications.lrc.gov.on.ca/Natural_Heritage/index.html?viewer=Natural_Heritage.Natural_Heritage&locale=en-CA)

4.1.4 NVCA Regulation Mapping

The entire property is Regulated Area by the NVCA under O. Reg. 172/06 of the *Conservation Authorities Act*.

4.2 Field Investigations

4.2.1 Vegetation Communities/Flora

Vegetation communities were identified using Ecological Land Classification (ELC) to the most appropriate vegetation type or ecosite. Provided below are descriptions of communities, which are illustrated in *Figure 3 – Ecological Land Classification* and *Table 1 – Site Photos*.

The site is entirely cleared and has been filled and graded to the limits. A wire fence is present along the entire boundary of the property, with gated access to Boulton Court. No naturalized habitat is present. A small area of cultural meadow is present in the south part comprised of native and non-native species including Kentucky Bluegrass (*Poa pratensis*), Balsam Poplar (*Populus balsamifera*), Wild Carrot (*Daucus carota*), Oxeye Daisy (*Leucanthemum vulgare*), Smooth Brome (*Bromus arvensis*) and Viper's Bugloss (*Echium vulgare*). No rare species or Species at Risk (SAR) were observed.

Adjacent lands to the east and south of the property are best described as Silver Maple Mineral Deciduous Swamp Type (SWD3-2), with a canopy largely dominated by Silver Maple (*Acer saccharinum*) with associates of Balsam Poplar, Green Ash (*Fraxinus pennsylvanica*), White Elm (*Ulmus americana*), White Pine (*Pinus strobus*), White Spruce (*Picea glauca*) and Crack Willow (*Salix fragilis*). This community is relatively narrow to the east of the subject property and may be the result of road drainage from Tiffin Street. To the south and southeast, this wetland has been identified as Provincially Significant (Bear Creek Wetland).

To the north is a narrow band of trees, consisting of Norway Spruce (*Picea abies*), Balsam Poplar, Green Ash and Blue Spruce (*Picea pungens*), and Tiffin Street.

To the west is Boulton Court, which contains a drainage swale along the border of the subject property that drains south from Tiffin Street to the Bear Creek Wetland.



Legend

- Parcel Fabric
- Subject Property
- Tributary of Dymont's Creek
- Unevaluated Wetlands/Woodlands
- Bear Creek Wetland
- Revised Bear Creek Wetland Limit (2023)

SCOPED ENVIRONMENTAL IMPACT STUDY

Figure 4
Existing Conditions

XCG Consulting Limited
529 Tiffin Street
City of Barrie



Esri Community Maps, City of Barrie, Province of Ontario, York Region, Esri Canada, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, NRCan, Parks Canada

50 25 0 50 100 150 200 Meters

Table 1: Site Photos

	
East property limit. SWD3-2 visible on adjacent lands. Fill present to property limit.	South property limit looking southeast. SWD3-2 community on adjacent lands.
	
West property limit. Note fill to fence along property limit.	Subject property looking south.
	
Subject property looking south from NW corner.	Extension of Boulton Court with drainage swale along west side.

5 ANALYSIS OF NATURAL HERITAGE FEATURES

Identification of natural heritage features is based on the PPS, the MNRF “Natural Heritage Reference Manual” (2nd Edition) (MNRF 2010), City of Barrie Official Plan, “Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E” (MNRF January 2015), and listings and habitat descriptions for species listed in the ESA.

5.1 Significant Wetlands (and Coastal Wetlands)

A review of provincial NHIC Mapping found the presence of the Bear Creek Provincially Significant Wetland abutting the southern boundary of the property as illustrated in Figures 3 and 4.

As this PSW is within adjacent lands of 120 metres, an impact assessment is provided in Section 6.

5.2 Other Wetlands (Unevaluated, Non-Provincially Significant)

Based on aerial photography and site investigation, unevaluated wetlands are identified on adjacent lands abutting the east boundary of the property. These wetlands are identified as an ‘Environmental Protection Area Level 1’ overlay in the City Official Plan.

As this wetland on adjacent lands is identified as part of the Natural Heritage System and an EPA Level 1 overlay in the Official Plan, an impact assessment is provided in Section 6.

5.3 Significant Woodlands

The City of Barrie Official Plan identifies an Environmental Protection Area Level 1 feature on adjacent lands to the subject property. Map 3 of the Official Plan does not illustrate whether this overlay is related to the presence of wetlands (PSW and unevaluated) or woodlands.

An impact assessment will be completed for wetlands abutting the property in Section 6 of this report, which will cover any potential impacts to treed wetland communities on adjacent lands.

5.4 Significant Valleylands

No significant valley land features were identified during the desktop review or found during field surveys on the site.

5.5 Significant Wildlife Habitat

An analysis of candidate Significant Wildlife Habitat has been completed using the “*Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E*” (MNRF 2015) based on the results of the desktop review and field surveys. This assessment is included as Appendix D. The following features were identified as having potential to be found on adjacent lands to the north of the subject property:

- Amphibian Breeding Habitat (Woodlands); and
- Special Concern and Rare Wildlife Species.

An assessment of potential impacts is provided in Section 6 below.

5.6 Significant Areas of Natural and Scientific Interest

A desktop review of available information found no Provincially Significant ANSI in the study area.

5.7 Fish Habitat

County of Simcoe Mapping and LSRCA correspondence identify the presence of a section of Dymont's Creek north of Tiffin Street within adjacent lands to the subject property.

As this feature is within 120 metres of the subject property, an assessment of potential impacts is provided in Section 6 below.

5.8 Habitat of Endangered Species and Threatened Species

No habitat for threatened or endangered species were identified by field investigations on the subject property. It is anticipated that as there will be no removal of any potential habitat found on adjacent lands, there will be no contravention of the *Endangered Species Act* (ESA).

6 IMPACT ASSESSMENT

This section will assess potential impacts to these features and ecological functions resulting from the proposed development and provides mitigation measures to ensure no negative impacts. This report utilizes the definition of a "negative impact" in the PPS (Page 47) "*in regard to other natural heritage features and areas, degradation that threatens the health and integrity of the natural features or ecological functions for which an area is identified due to single, multiple or successive development or site alteration activities.*"

A summary of compliance with the PPS, Growth Plan and City of Barrie Official Plan as it relates to policies regarding the natural environment is provided in Section 7.

6.1 Wetlands (Provincially Significant and Unevaluated)

The Bear Creek Provincially Significant Wetland and unevaluated wetland are mapped within adjacent lands to the south and east, respectively, of the subject property as shown on Figure 4 and 5. A site investigation confirmed that wetland is not present within the property. Based on a review of aerial photography for the area, development has occurred on this property for more than 20 years.

A buffer of 10 metres is recommended from the east boundary of the property as illustrated in Figure 5 – *Development Setbacks*. This will include a stormwater facility per City of Barrie requirements and 3-metre setback to the wetland. The setback shall be restored with a native seed mix/planting (and annual nursery crop) to create a buffer for any incidental spills or sediments from the development area. No physical development shall occur in the setback area except for any required grading.

Within the south part of the property, an engineered wetland is proposed for SWM as illustrated in Figure 6 – *Proposed SWM Plan*. This SWM will include a forebay to collect flow from the swale along the east boundary, a low-flow channel, wetland area and outlet to the Bear Creek wetland to the south.



Legend

-  Parcel Fabric
-  Subject Property
-  Tributary of Dymont's Creek
-  Unevaluated Wetlands/Woodlands
-  Setback (10m)
-  Bear Creek Wetland
-  Revised Bear Creek Wetland Limit (2023)
-  Proposed Swale
-  Engineered Wetland SWM Facility

SCOPED ENVIRONMENTAL IMPACT STUDY

Figure 5
Development Setbacks

XCG Consulting Limited
529 Tiffin Street
City of Barrie

Esri Community Maps Contributors, City of Barrie, Province of Ontario, York Region, Esri Canada, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, NRCan, Parks Canada



50 25 0 50 100 150 200
Meters



This engineered wetland will be enhanced with native plantings. The wetland will provide the same function as a vegetated buffer by capturing any contaminants or flow from the developed areas of the property before it reaches the Bear Creek Wetland.

Based on the historic uses on site, enhancements to stormwater management on site, and restoration/enhancement of the setbacks abutting the wetland, we anticipate no negative impacts.

6.2 Significant Wildlife Habitat

Potential Significant Wildlife Habitat may be present to the east and south of the subject property, coinciding with woodland and wetland habitats. No removal of these potential habitats will occur as a result of the proposed development.

The subject property has been developed for over 20 years based on historic aerial photography. It is expected that any wildlife species currently utilizing these potential habitats are tolerant of present uses on site and those on adjacent properties. No change in use of the site is proposed.

Enhancement/restoration of the buffer to these potential features on adjacent lands will ensure those features remain and continue to provide any habitat.

As no removal of habitat will occur, no change in use is proposed and enhancement/restoration of a vegetation protection zone will occur post development, no negative impacts are anticipated.

6.3 Fish Habitat

A tributary of Dyment's Creek has been identified to the north of Tiffin Street. This tributary is part of an open ditch system along Tiffin Street and contains no fish habitat (i.e., defined channel, structure).

No alteration to this drainage feature will occur. All site drainage will be conveyed through enhanced SWM to the wetlands to the south of the property, which is consistent with City drainage from Tiffin Street along Boulton Court.

As no works will occur in this watercourse/drainage feature and all site drainage will drain to the south, away from this ditch, we anticipate no negative impacts to this feature.

6.4 Additional Recommendations

To avoid potential direct impacts to bird species (i.e., destruction of nests) protected under the *Migratory Birds Convention Act*, it is recommended that no clearing of vegetation occur between April 5 – August 27th per Environment Canada's general nesting periods of migratory birds

(https://www.canada.ca/en/environment-climate-change/services/avoiding-harm-migratory-birds/general-nesting-periods/nesting-periods.html#_zoneC_calendar).

7 COMPLIANCE WITH PLANNING POLICIES

The following tables provide a summary of planning policies and rationale for compliance with the Provincial Policy Statement, Growth Plan, and City of Barrie Official Plan for the proposed development. This environmental policy conformity was undertaken by Charles F. Burgess, MCIP, RPP of Burgess Gleason Environmental Inc.

Table 2: Provincial Policy Statement

Section	Policy	Policy Consistency
2.1.3	Natural heritage systems shall be identified in Ecoregions 6E and 7E ¹ recognizing that they will vary in size and form in settlement areas, rural areas, and prime agricultural areas.	The Natural Heritage System (NHS) is illustrated on the Schedules to the City of Barrie's Official Plan. Given the presence of provincially significant wetland in the southern part of the lot, a small portion of the property is in the NHS.
2.1.4	Development and site alteration shall not be permitted in significant wetlands and coastal wetlands.	The field evaluation has demonstrated that there is no significant wetland on the property.
2.1.5	Development and site alteration shall not be permitted in valleylands, woodlands, wildlife habitat, and ANSI that are significant including coastal wetlands unless it has been demonstrated that there will be no negative impacts on the natural feature and their ecological functions.	There are no natural heritage features as identified in Policy 2.1.5 on the subject property.
2.1.6	Development and site alteration shall not be permitted in fish habitat except in accordance with provincial and federal requirements.	There are no watercourses or fish habitat on the subject property.
2.1.7	Development and site alteration shall not be permitted in habitat of endangered species and threatened species except in accordance with provincial and federal requirements.	The field inspection and evaluation has demonstrated that the proposed development will be located in an area that is devoid of any habitat of endangered or threatened species. As a result, the provisions of the Endangered Species Act will be met.
2.1.8	Development and site alteration shall not be permitted on adjacent lands to features identified in 2.1.4, 2.1.5, and	The proposed development will be located adjacent to a significant wetland. It has been demonstrated through the analysis of this EIS

	2.1.6 unless it has been demonstrated that there will be no negative impacts.	that there will be no negative impact on this natural heritage feature. Further, through the Site Plan Approval process, proper storm water management can be provided that will minimize any impacts on the wetland feature.
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Table 3: Growth Plan

Section	Policy	Policy Conformity
4.2.2, 4.2.3, 4.2.4	These policies refer to the identification of the provincial Natural Heritage System and the protection of key natural heritage features, key hydrologic features, and key hydrologic areas.	The subject property is in the City of Barrie which is a defined Settlement Area. Based on this Settlement Area designation, the NHS and associated policies do not apply to the subject lands and associated planning applications based on sections 4.2.2.1, 4.2.3.1, and 4.2.4.1 of the Growth Plan.
4.2.2.6	This policy identifies that the protection of natural heritage features will occur within settlement areas in accordance with the Provincial Policy Statement (PPS).	Please refer to the policy Table for the PPS. All new development will be located outside the provincially significant wetland.

Table 4: City of Barrie Official Plan (2023)

Schedule	Designation	Conformity
Map 2 Land Use Designations	The subject property is primarily designated Employment Area – Industrial. The southern part of the property is designated Natural Heritage System (NHS) according to Map 2.	All new development will be in the Employment Area – Industrial designation. No new development is proposed in the NHS which is in the southern part of the property.
Map 3 Natural Heritage Protection Overlays	Most of the property is outside any natural heritage overlay designation. The southern part however where the significant wetland exists contains an Environmental Protection Area (EPA) Level 1 designation. Also, a small part in the northern section along Tiffin Street contains an EPA – Level	All new development will be in the Employment Area – Industrial designation and EPA – Level 1 “existing development designation”. No new development is proposed in the EPA – Level 1 designation which is in the southern part of the property.

	1 with existing development designation.	
Map 6 Greenspace Network	This Map shows that the southern part of the property is in the Natural Heritage System designation.	No new development is proposed in the EPA – Level 1 designation or NHS designation which is in the southern part of the property.
Policy 2.3.1	This section defines the Natural Heritage System and Greenspace within the City.	The NHS exists in the southern part of the lot. No new development is proposed in the City's NHS.
Policy 2.5.2	This policy refers to Appendix 1 which depicts the jurisdiction of the applicable conservation authorities.	The subject property is within the jurisdiction of the NVCA. A permit from the NVCA under Ontario Regulation 172/06 is required prior to any development on the property. O. Reg. 172/06 was issued under the provisions of the <i>Conservation Authorities Act</i> .
Policy 2.6.6	This section provides a policy framework for development in association with the City's Natural Heritage System.	The NHS exists to the south of the lot which generally corresponds with the provincially significant wetland. Therefore, no new development is proposed in the wetland and City's NHS.
Policy 2.6.6.2	This policy identifies that development and incompatible land uses are prohibited in the City's NHS.	The NHS and wetland area exist to the south of the lot. Therefore, no new development is proposed in the City's NHS and provincially significant wetland.
Policy 2.6.7	This section provides a policy framework for the City's Greenspace.	The City's Greenspace exists in the southern part of the lot. No new development is proposed in the City's Greenspace.
Policy 2.7.4	Policy 2.7.4 refers to Natural Heritage Protection within the City.	The NHS exists in the southern part of the subject lands. No new development is proposed in the wetland and NHS on the property.
Policy 5.3.1	This section provides a comprehensive framework for the City's Natural Heritage System.	The NHS exists in the southern part of the lot. No new development is proposed in the City's NHS.
Policy 5.3.2	Policy 5.3.2 refers to development associated with natural hazard lands.	The subject property is within the jurisdiction of the NVCA. A permit from the NVCA under Ontario Regulation 172/06 is required prior to any development on the property. Through the permit process, the provisions of the <i>Conservation Authorities Act</i> and O. Reg. 172/06 can be met.

Policy 5.4.2.1 a)	This section identifies the policies associated with the Environmental Protection Area – Level 1 designations. Subsection a) states that development is not permitted in the EPA – Level 1 feature.	All new development will be in the Employment Area – Industrial designation and EPA – Level 1 “existing development designation”. No new development is proposed in the EPA – Level 1 designation which is in the southern part of the property.
Policy 5.4.2.1 c)	This policy identifies that an Environmental Impact Study (EIS) is required for any development proposed within 120 metres of a Level 1 EPA feature.	This EIS/NHE has been prepared to satisfy this policy requirement.
Policy 5.4.2.1 d)	Policy 5.4.2.1 d) allows for development in an EPA - Level 1 feature with an “existing development designation” subject to the Level 2 policies.	All new development will be in the Employment Area – Industrial designation and EPA – Level 1 “existing development designation” which is in the northern part of the property.
Policy 5.4.2.2 b)	This policy states that development is not permitted in a Level 2 EPA features unless it has been demonstrated that there will be no negative impact on the natural heritage feature and its ecological function.	The results of this EIS have determined that there are no natural features on the property.
Policy 5.4.2.2 c)	This policy identifies that an Environmental Impact Study (EIS) is required for any development in or within 120 metres of a Level 2 EPA feature.	This EIS/NHE has been prepared to satisfy this policy requirement.
Schedule A to the Official Plan (OP)	The subject property is entirely designated Environmental Protection Area (EPA) according to the Land Use Schedule to the Official Plan.	Notwithstanding this environmental designation, the property consists of an existing driveway, compound, parking area, and building. As a result, there are no significant natural heritage features on the property that reflect the EPA designation. It should be noted that the new draft Official Plan (2021) designates the property as “Employment Area”.

8 CONCLUSIONS

Roots Environmental has been retained to complete a Scoped Environmental Impact Study for the property known as 529 Tiffin Street in the City of Barrie in support of applications to permit development of a recycling transfer station for the recovery and recycling of materials from the construction and demolition industries.

Provided development occurs as shown in Figure 2 and mitigation measures in this report are implemented, we anticipate no negative impacts to identified natural heritage features as a result of the proposed development.

Respectively submitted by Roots Environmental:

A handwritten signature in blue ink, appearing to read "Kyle Fleming", with a stylized flourish extending from the end.

Kyle Fleming, BSc. (Wildlife)
Senior Ecologist

REFERENCES

Government of Ontario. 2020. Provincial Policy Statement. Queen's Printer of Ontario.

Lee, H.T., W.D. Bakowsky, J. Riley, J. Bowles, M. Puddister, P.Uhlig and S. McMurray. 1998. Ecological Land Classification for Southern Ontario: First Approximation and its Application. Ontario Ministry of Natural Resources, Southcentral Science Section, Science Development and Transfer Branch. SCSS Field Guide FG-02.

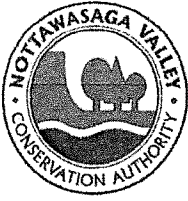
Natural Heritage Information Centre (NHIC) Database. 2021. Provincial Status of Plants, Wildlife and Vegetation Communities Database. Ministry of Natural Resources and Forestry, Peterborough.

Ontario Ministry of Natural Resources and Forestry. January 2015. Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E.

The City of Barrie. Office Consolidation 2023. The City of Barrie Official Plan.

APPENDIX A

Agency Correspondence



Nottawasaga Valley
Conservation Authority

March 30, 2023

SENT BY EMAIL

City of Barrie
70 Collier St,
Barrie, ON
L4M 4T5

Attn: Dana Suddaby
Planner
Dana.Suddaby@barrie.ca

**RE: Application for Pre-Consultation
Town File No. D28-012-2023
529 Tiffin Street, Barrie
NVCA ID # 50925**

Nottawasaga Valley Conservation Authority [NVCA] staff is in receipt of an application for a Pre-Consultation on the lands located at 529 Tiffin Street, City of Barrie.

The proposed application is to develop a recyclable transfer station for the recovery and recycling of materials from the construction and demolition industries. New buildings will consist of material storage and processing, a maintenance and office building and weigh scales.

In preparing these comments the following documents were received and reviewed:

1. NVCA Application for Development. February 16, 2023
2. Conceptual Site Plan Drawing. Recyclable Materials Transfer Station. 529 Tiffin Street. City of Barrie. February 13, 2023. XCG Environmental Engineers & Scientists.
3. Existing Services and Infrastructure Drawing – 529 Tiffin Street. City of Barrie. February 13, 2023. XCG Environmental Engineers & Scientists.
4. City of Barrie Permitted Use Letter. February 8, 2023.
5. Owner Authorization Letter. Kon Krete Ready Mix & York1. December 21, 2022.

Staff has reviewed this application as per our delegated responsibility from the Province to represent provincial interests regarding natural hazards identified in Section 3.1 of the Provincial Policy Statement (PPS, 2020) and as a regulatory authority under Ontario Regulation 172/06. The application has also been reviewed through our role as a public body under the Planning Act as per our CA Board approved policies. Finally, NVCA has provided comments as per our Municipal Partnership and Service Agreement with the City of Barrie and with advisory comments related to policy applicability.

Ontario Regulation 172/06

1. The NVCA mapping for the property illustrates wetland interference hazards and flood hazards on the property. Due to the presence of these hazards, the subject property

is entirely regulated pursuant to Ontario Regulation 172/06 the Authority's Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation.

2. Permits would be required from the NVCA prior to any construction or grading associated development on the property.
3. Should the applicant intend to make further changes to the property, staff recommend that the applicant(s) pre-consult with our Permits and Regulations Department to determine permit requirements.

Natural Hazards – Regulatory

4. A site-specific Flood Study will be required as mentioned under Section 4.3.4.5 12) of the NVCA's Planning Regulations. Specifically, "development associated with existing uses located within the Regulatory floodplain such as minor additions, non-habitable detached accessory buildings, pools, landscaping retaining walls, grading, decks, etc., may be permitted if it has been demonstrated to the satisfaction of the conservation authority that the control of flooding, erosion, pollution, or the conservation of land will not be affected." The submitted plans should address the following:
 - a) there is no feasible alternative site outside of the Regulatory floodplain for the proposed development or in the event that there is no feasible alternative site, that the proposed development is located in an area of least (and acceptable) risk;
 - b) the proposed works do not create new hazards or aggravate flooding on adjacent or other properties and there are no negative upstream and downstream hydraulic impacts;
 - c) the development is protected from the flood hazard in accordance with established flood proofing and protection techniques;
 - d) the proposed development will not prevent access for emergency works, maintenance, and evacuation;
 - e) the potential for surficial erosion has been addressed through the submission of proper drainage, erosion and sediment control and site stabilization/restoration plans;
 - f) natural features and/or ecological functions associated with conservation of land are protected, pollution is prevented and erosion hazards have been adequately addressed.
5. The associated wetland may require that the NVCA's Net Gains for Ecological Offsetting be applied as development shall not be permitted within 30 metres of a wetland.
6. An EIS is required due to the presence of the provincially significant wetlands.
7. A Hydrogeological report will be required with a feature-based water balance to understand the impacts of the surrounding wetlands and ground water.

Additional Advisory Comments

1. The property is located within WHPA-6 and may require an Environmental Compliance Assessment given the nature of the proposed use. The NVCA would defer any source water protection to the City of Barrie's Risk Management Office.

Conclusion

The Nottawasaga Valley Conservation Authority (NVCA) notes that these comments are related to this submission and the information provided within this submission. NVCA requires additional information in order to complete our review and additional comments may be provided in the future. Please feel free to contact the undersigned at extension 233 or tboswell@nvca.on.ca should you require any further information or clarification on any matters contained herein.

Sincerely,

Tyler Boswell

Tyler Boswell
Planner I

APPENDIX B

Desktop Review

NHIC Data

To work further with this data select the content and copy it into your own word or excel documents.

OGF ID	Element Type	Common Name	Scientific Name	SRank	SARO Status	COSEWIC Status	ATLAS NAD83 IDENT	COMMENTS
1008247	SPECIES	Eastern Wood-pewee	Contopus virens	S4B	SC	SC	17PK0113	
1008247	SPECIES	Snapping Turtle	Chelydra serpentina	S4	SC	SC	17PK0113	
1008247	SPECIES	Houghton's Flatsedge	Cyperus houghtonii	S3			17PK0113	



Species list in taxonomic order for square 17PK01

All species

Number of rows of data displayed below: 23.

Species #	Common Name	# of Records	Earliest Yr _____	Latest Yr
1	Blanding's Turtle	4	2016	2018
3	Midland Painted Turtle	23	1925	2019
4	Northern Map Turtle	1	2016	2016
5	Red-eared Slider	5	1992	2013
6	Snapping Turtle	23	1965	2019
12	Eastern Gartersnake	9	1926	2018
18	Milksnake	3	2009	2010
19	Northern Watersnake	1	2016	2016
21	Red-bellied Snake	4	1988	2018
23	Northern Ring-necked Snake	1	2017	2017
25	American Bullfrog	3	1979	2017
27	Gray Treefrog	19	1989	2018
28	Green Frog	25	1989	2018
29	Mink Frog	1	2016	2016
30	Northern Leopard Frog	9	1979	2016
31	Pickerel Frog	1	1929	1929
32	Spring Peeper	30	1990	2019
33	Western Chorus Frog	2	2007	2012
34	Wood Frog	5	2010	2018
35	American Toad	25	1969	2018
41	Eastern Red-backed Salamander	3	1929	2018
48	Spotted Salamander	1	1926	1926
49	Five-lined Skink	2	2016	2016

Species list for square 17PK01 (number of entries returned: 110)

Region	Square	Species	Breeding Evidence			Point Counts			
						#PC	%PC	Abun	#Sq
13	17PK01	Canada Goose	NY	CONF	1	Jeffsurvey Howard			
13	17PK01	Wood Duck	FY	CONF	1	Dave Fewster			
13	17PK01	American Black Duck	FY	CONF	1				
13	17PK01	Mallard	NY	CONF	1	Jeffsurvey Howard	2	9.09	0.4091
13	17PK01	Blue-winged Teal	H	POSS	1	Dave Fewster			
13	17PK01	Common Merganser	P	PROB	1				
13	17PK01	Ruffed Grouse	H	POSS	1	Dave Fewster			
13	17PK01	Wild Turkey	FY	CONF	1	Dave Fewster			
13	17PK01	American Bittern	H	POSS	1	Dave Fewster			
13	17PK01	Great Blue Heron	NY	CONF	1	Liz M. MacDonald	1	4.55	0.0455
13	17PK01	Green Heron	FY	CONF	1		1	4.55	0.0909
13	17PK01	Turkey Vulture	P	PROB	1	Christopher Mr. Christopher G. Harris Harris			
13	17PK01	Osprey	FY	CONF	1	Liz M. MacDonald			
13	17PK01	Cooper's Hawk	NY	CONF	1	Jeffsurvey Howard			
13	17PK01	Broad-winged Hawk	H	POSS	1				
13	17PK01	Red-tailed Hawk	H	POSS	1				
13	17PK01	Merlin	T	PROB	1				
13	17PK01	Peregrine Falcon	T	PROB	1	Ted Armstrong			
13	17PK01	Virginia Rail	A	PROB	1	Dave Fewster			
13	17PK01	Sora	T	PROB	1				
13	17PK01	Killdeer	D	PROB	1	Kenneth F Abraham	2	9.09	0.1818
13	17PK01	Rock Pigeon	AE	CONF	1		2	9.09	0.4091
13	17PK01	Spotted Sandpiper	FY	CONF	1				
13	17PK01	Common Snipe	D	PROB	1				
13	17PK01	American Woodcock	S	POSS	1				
13	17PK01	Ring-billed Gull	H	POSS	1	Christopher Mr. Christopher G. Harris Harris	9	40.91	2.5909
13	17PK01	Mourning Dove	NY	CONF	1		4	18.18	0.3182
13	17PK01	Black-billed Cuckoo	H	POSS	1				
13	17PK01	Eastern Screech-Owl	FY	CONF	1				
13	17PK01	Great Horned Owl	S	POSS	1				
13	17PK01	Barred Owl	H	POSS	1				
13	17PK01	Common Nighthawk	T	PROB	1				
13	17PK01	Whip-poor-will	T	PROB	1				
13	17PK01	Chimney Swift	T	PROB	1	Liz M. MacDonald	2	9.09	0.1818
13	17PK01	Ruby-throated Hummingbird	T	PROB	1				
13	17PK01	Belted Kingfisher	AE	CONF	1	Dave Fewster			
13	17PK01	Red-headed Woodpecker	CF	CONF	1				
13	17PK01	Yellow-bellied Sapsucker	FY	CONF	1	Christopher Mr. Christopher G. Harris Harris	1	4.55	0.0455
13	17PK01	Downy Woodpecker	FY	CONF	1	Dave Fewster	3	13.64	0.1818
13	17PK01	Hairy Woodpecker	FY	CONF	1				
13	17PK01	Northern Flicker	T	PROB	1	Liz M. MacDonald	4	18.18	0.1818
13	17PK01	Pileated Woodpecker	S	POSS	1				
13	17PK01	Eastern Wood-Pewee	T	PROB	1	Dave Fewster	3	13.64	0.1818
13	17PK01	Alder Flycatcher	T	PROB	1	Dave Fewster			
13	17PK01	Willow Flycatcher	T	PROB	1				
13	17PK01	Least Flycatcher	T	PROB	1				
13	17PK01	Eastern Phoebe	NY	CONF	1				
13	17PK01	Great Crested Flycatcher	T	PROB	1	Dave Fewster	2	9.09	0.1818
13	17PK01	Eastern Kingbird	NY	CONF	1		2	9.09	0.0909
13	17PK01	Blue-headed Vireo	S	POSS	1				
13	17PK01	Warbling Vireo	CF	CONF	1		3	13.64	0.1364
13	17PK01	Red-eyed Vireo	AE	CONF	1		9	40.91	1.0
13	17PK01	Blue Jay	CF	CONF	1		2	9.09	0.0909
13	17PK01	American Crow	CF	CONF	1		11	50.0	0.8182
13	17PK01	Common Raven	P	PROB	1				
13	17PK01	Horned Lark	D	PROB	1		1	4.55	0.0455
13	17PK01	Purple Martin	H	POSS	1				
13	17PK01	Tree Swallow	AE	CONF	1		1	4.55	0.0909
13	17PK01	Northern Rough-winged Swallow	H	POSS	1	Liz M. MacDonald			
13	17PK01	Bank Swallow	AE	CONF	1				
13	17PK01	Cliff Swallow	P	PROB	1	Liz M. MacDonald			
13	17PK01	Barn Swallow	FY	CONF	1	2 atlassers	3	13.64	0.3636
13	17PK01	Black-capped Chickadee	NY	CONF	1	Jeffsurvey Howard	12	54.55	1.0
13	17PK01	Red-breasted Nuthatch	P	PROB	1	Dave Fewster	1	4.55	0.0455
13	17PK01	White-breasted Nuthatch	NE	CONF	1		5	22.73	0.3182
13	17PK01	Brown Creeper	P	PROB	1		1	4.55	0.0455
13	17PK01	House Wren	CF	CONF	1	Christopher Mr. Christopher G. Harris Harris	3	13.64	0.1818
13	17PK01	Winter Wren	T	PROB	1				
13	17PK01	Veery	T	PROB	1	Dave Fewster	1	4.55	0.0455
13	17PK01	Wood Thrush	T	PROB	1				
13	17PK01	American Robin	CF	CONF	1	Dave Fewster	4	18.18	0.3636
13	17PK01	Gray Catbird	NY	CONF	1		2	9.09	0.0909
13	17PK01	Brown Thrasher	P	PROB	1				
13	17PK01	European Starling	NY	CONF	1		7	31.82	1.4545
13	17PK01	Cedar Waxwing	AE	CONF	1		4	18.18	0.3636
13	17PK01	Northern Parula	T	PROB	1	Dave Fewster			
13	17PK01	Yellow Warbler	CF	CONF	1		1	4.55	0.0455
13	17PK01	Chestnut-sided Warbler	T	PROB	1		1	4.55	0.0455
13	17PK01	Yellow-rumped Warbler	T	PROB	1	Dave Fewster			
13	17PK01	Black-throated Green Warbler	S	POSS	1				
13	17PK01	Blackburnian Warbler	S	POSS	1				
13	17PK01	Pine Warbler	NY	CONF	1	Jeffsurvey Howard	2	9.09	0.0909
13	17PK01	Black-and-white Warbler	T	PROB	1				
13	17PK01	American Redstart	AE	CONF	1	Liz M. MacDonald			
13	17PK01	Ovenbird	DD	CONF	1		2	9.09	0.0909
13	17PK01	Northern Waterthrush	T	PROB	1				
13	17PK01	Mourning Warbler	A	PROB	1				
13	17PK01	Common Yellowthroat	DD	CONF	1				
13	17PK01	Eastern Towhee	S	POSS	1				
13	17PK01	Chipping Sparrow	CF	CONF	1	Christopher Mr. Christopher G. Harris Harris	6	27.27	0.4091
13	17PK01	Field Sparrow	T	PROB	1				
13	17PK01	Vesper Sparrow	T	PROB	1	Dave Fewster	2	9.09	0.0909
13	17PK01	Savannah Sparrow	CF	CONF	1				
13	17PK01	Song Sparrow	CF	CONF	1	Dave Fewster	14	63.64	0.9545
13	17PK01	Swamp Sparrow	CF	CONF	1	Dave Fewster	1	4.55	0.1818
13	17PK01	White-throated Sparrow	FY	CONF	1				
13	17PK01	Scarlet Tanager	T	PROB	1				
13	17PK01	Northern Cardinal	NY	CONF	1	Jeffsurvey Howard	3	13.64	0.1818
13	17PK01	Rose-breasted Grosbeak	T	PROB	1		1	4.55	0.0455

13	17PK01	Indigo Bunting	A	PROB	1	Christopher Mr. Christopher G. Harris Harris	4	18.18	0.1818	1
13	17PK01	Bobolink	T	PROB	1					
13	17PK01	Red-winged Blackbird	CF	CONF	1	Dave Fewster	8	36.36	1.0455	1
13	17PK01	Eastern Meadowlark	T	PROB	1					
13	17PK01	Common Grackle	CF	CONF	1		6	27.27	0.5909	1
13	17PK01	Brown-headed Cowbird	NE	CONF	1		2	9.09	0.0909	1
13	17PK01	Baltimore Oriole	NY	CONF	1		2	9.09	0.1364	1
13	17PK01	Purple Finch	S	POSS	1	Christopher Mr. Christopher G. Harris Harris	1	4.55	0.0455	1
13	17PK01	House Finch	AE	CONF	1		2	9.09	0.0909	1
13	17PK01	American Goldfinch	NY	CONF	1	2 atlassers	14	63.64	1.3182	1
13	17PK01	House Sparrow	FY	CONF	1	Liz M. MacDonald	6	27.27	0.7273	1

New data summaryDownload results

APPENDIX C

CV for Kyle Fleming



Kyle Fleming, BSc. (Wildlife)

Senior Ecologist/President

Qualifications

Kyle has over 20 years experience as an ecologist where he has been responsible completing over 350 Environmental Impact Studies, Species at Risk Assessments, environmental monitoring, and related projects throughout Central, Southern and Eastern Ontario. He is a Qualified Wetland Evaluator & Certified Butternut Assessor by the MNRF, is trained and experienced in the use of Ecological Land Classification (ELC) and has been qualified as an expert at the Ontario Municipal Board/LPAT. His work is readily accepted by municipalities, conservation authorities and government agencies, and he is very familiar with provincial and federal policies and legislation.

Professional Experience

MAY 2019 - PRESENT

Senior Ecologist/President / Roots Environmental Inc., Barrie, ON

As the Senior Ecologist with Roots Environmental, Kyle is responsible the managing and implementation of environmental impact assessments, species at risk assessments and related studies for private and public sector clients throughout Ontario.

MAY 2004- MAY 2019

Senior Terrestrial Ecologist / Skelton, Brumwell & Associates, Barrie, ON

Responsible for completing Natural Environmental Reports, Environmental Impact Studies, Species at Risk Assessments for private and public sector clients throughout Ontario.

APRIL – AUGUST 2003

Project Supervisor/Field Biologist / Hamer Environmental L.P., Mt. Vernon, WA, USA

Responsible for supervising and managing a threatened seabird monitoring project on state lands.

NOVEMBER 2002 – JANUARY 2003

Environmental Technician / Aqua-Terre Solutions Inc., Toronto, ON

Responsible for data management of water and soil sampling for sites across the GTA.

APRIL – AUGUST 2002

Field Biologist / Hamer Environmental L.P., Mt. Vernon, WA, USA

Conducted threatened seabird surveys on state lands to determine presence/absence relative to forestry activities.

MAY – AUGUST 2001

Field Technician/ University of Washington, Forks, WA, USA

June-August 2001, Field Technician

Research project on nest predation of threatened seabirds and impacts of forestry practices on nesting sites.

Education

2002

Bachelor of Science in Wildlife Biology / University of Northern British Columbia, Prince George, BC

1998

Diploma in Fish and Wildlife Technology / Sir Sandford Fleming College, Lindsay, ON

Certifications/Courses

- Ontario Wetland Evaluation Training Course, 2004.
- Ecological Land Classification for Southern Ontario Training Course, 2005.
- Certificate of Participation: Wildlife Acoustics Bat Detector & Analysis Course, 2015.
- Ministry of Natural Resources (MNR) Butternut Assessment Course, 2009, 2014 & 2019.
- OPPI- The Planner at the Ontario Municipal Board Seminar, 2006.