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Species at Risk Screening Assessment
Official Plan Amendment and Zoning Amendment
218 Orchard Road
Colbourne, Ontario

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Submitted to:

The Big Apple Inc.
555 Steeprock Drive
Toronto, Ontario
M3J 2Z6

Species at Risk Screening Assessment
Official Plan Amendment and Zoning Amendment
218 Orchard Road
Colbourne, Ontario

October 30, 2023
Project: 101335.009

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1.0 INTRODUCTION

GEMTEC Consulting Engineers and Scientists Limited (GEMTEC) was retained by The Big Apple Inc. to undertake a Species at Risk (SAR) Screening Assessment in support of a proposed official plan amendment and zoning amendment for a property located at 218 Orchard Road, Colborne.

1.1 Project Description

The proponent is seeking an Official Plan Amendment and Zoning Amendment for the property located at 218 Orchard Road. The study area is defined as the property boundary and the adjacent lands encompassing an area of 120 m beyond the property boundary. The general project area is illustrated on Figure A.1 in Appendix A, while a detailed site layout is provided on Figure A.2.

1.2 Objective and Scope of Work

The objective of the SAR Screening Assessment presented herein is twofold; 1) to identify the presence or potential presence of any SAR and their regulated habitat within the project area, 2) to recommend established and effective avoidance and mitigation measures to ensure that the project is completed in accordance with the provincial *Endangered Species Act, 2007*, the federal *Species at Risk Act*, and the *Conservation Authorities Act.*

To meet the objectives outlined above, the following scope of work was completed:

- Task 1 – Desktop Assessment
- Task 2 – Site Investigation
- Task 3 – Assessment and Reporting

2.0 METHODOLOGY

2.1 Desktop Review

A desktop information gathering exercise was completed to aid in the scoping of field investigations and to gather information relating to natural heritage features which may be present on the subject project or within 1 km of the subject property. An additional component of the desktop review was to assess the potential presence of SAR to occur on the subject site or within the study boundary based on a review of publicly accessible occurrence records and review of SAR habitat requirements and range maps.

Information regarding the potential presence of natural heritage features and SAR within the vicinity of the site was obtained from the following sources:

- Make a Map: Natural Heritage Areas (OMNRF, 2023);
- Land Information Ontario (OMNRF, 2011);

- Ontario Geological Survey (OGS, 2019);
- Department of Fisheries and Oceans Canada Aquatic SAR Maps (DFO, 2023);
- Fish ON-Line (ONMRF, 2023);
- Breeding Bird Atlas of Ontario (Cadman, et al., 2007);
- eBird Canada Hotspots (eBird Canada, 2023);
- Atlas of Mammals of Ontario (Dobbyn, 1994);
- iNaturalist Explore Observations Map (iNaturalist, 2023);
- Ontario Reptile and Amphibian Atlas (Ontario Nature, 2020).

2.2 Field Investigation

A single field investigation was completed on October 6, 2023, from approximately 11:00 to 12:15. Conditions during the site investigation were partly sunny (60% cloud cover), 17°C, Beaufort wind 3, with no precipitation.

The field investigation was undertaken to describe in general, the natural and physical setting of the subject property with a focus on natural heritage features and to identify any potential SAR or their habitat that may exist at the subject property.

Photographs of site features taken during the field investigation are provided in Appendix B.

3.0 RESULTS

3.1 Desktop Screening Results

Results of the desktop screening exercise are summarized in Table 3.1 below. The desktop screening exercise identified the potential for three avian and three mammalian SAR within the project area.

TABLE C.1
SCREENING RATIONALE FOR POTENTIAL SPECIES AT RISK ON-SITE OR WITHIN STUDY AREA

Species	ESA Status	Habitat Use	Probability of Occurrence On-Site or Within Study	Rationale
Avian				
Bank Swallow	Threatened	Colonial nester, burrows in eroding silt or sand banks, sand pit walls, etc.	Low	Site lacks suitable habitat for nesting.
Barn Swallow	Special Concern	Nests in barns and other semi-open structures. Forages over open fields and meadows.	Low	Site lacks suitable structures and habitat to support species nesting.
Bobolink	Threatened	Nests in dense tall grass fields and meadows, low tolerance for woody vegetation.	Low	Suitable grassland habitat not present on-site.
Canada Warbler	Special Concern	Prefers wet forests with dense shrub layers	Low	Forest on-site is unlikely to provide preferred habitat.
Cerulean Warbler	Threatened	Prefers mature deciduous forest habitat.	Low	Forest on-site is unlikely to provide preferred habitat.
Chimney Swift	Threatened	Nests in traditional-style open brick chimneys.	Low	No anthropogenic structures on-site to provide preferred habitat; however, may occur within the study area.
Common Nighthawk	Special Concern	Nests in a variety of open sites: beaches, fields and grave rooftops.	Low	Suitable habitat does not occur on-site.
Eastern Meadowlark	Threatened	Nests and forages in dense tall grass fields and meadows, higher tolerance to woody vegetation.	Moderate	NHIC data indicates eastern meadowlark to have occurred within 1km of site. Species not observed during investigations. Suitable habitat not present on-site.
Eastern Whip-poor-will	Threatened	Nests on the ground in open deciduous or mixed woodlands with little underbrush, and bedrock outcrops.	Low	No suitable habitat may be present on-site or within the study area.
Eastern Wood-Pewee	Special Concern	Woodland species, often found near clearings and edge habitat.	Low	Forest on-site is unlikely to support nesting habitat, however, it may be suitable for foraging. No historical occurrences have been reported, nor was the species observed during the site investigations.
Evening Grosbeak	Special Concern	Nests in trees or large shrubs, preference to large coniferous forests, will use deciduous. Overwinters in Ottawa.	Low	Forest on-site is unlikely to support nesting habitat, however, it may be suitable for foraging. No historical occurrences have been reported, nor was the species observed during the site investigations.
Golden Eagle	Endangered	Nests on remote, bedrock cliffs, overlooking large burns, lakes or tundras	Low	Suitable nesting habitat does not occur on-site.
Golden-winged Warbler	Special Concern	Ground nesting, edge species. Breeds in successional scrub habitats surrounded by forests.	Low	Site is unlikely to provide suitable habitat for golden-winged warblers due to the lack of successional scrub habitat.
Grasshopper Sparrow	Special Concern	Ground-nesting grassland species. Prefers fields with low sparse vegetation on sand, alvars or poor soils.	Moderate	NHIC data indicates grasshopper sparrow to have occurred within 1km of site. Species not observed during investigations. Suitable habitat not present on-site.
Henslow's Sparrow	Endangered	Prefers open, moist, tallgrass fields.	Low	Suitable grassland habitat not present on-site.
Least Bittern	Threatened	Prefers marshes, shrub swamps, usually near cattails	Low	No suitable habitat on-site or within the study area to support preferred habitat.
Loggerhead Shrike	Endangered	Prefers grazed pastures with short grass and scattered shrubs, especially hawthorn.	Low	Preferred pasture habitat and shrub vegetation does not occur on-site.
Olive-sided Flycatcher	Special Concern	Forest edge species, forages in open areas from high vantage points in trees.	Low	Suitable habitat with clearings does not occur on-site.
Peregrine Falcon	Special Concern	Nests on cliffs near water and on more anthropogenic structures such as tall buildings, bridges, and smokestacks.	Low	Suitable nesting habitat does not occur on-site.
Red-headed Woodpecker	Endangered	Prefers open deciduous woodlands, particularly those dominated by oak and beech.	Low	No suitable forest on-site to provide suitable habitat.
Rusty Blackbird	Special Concern	Wet wooded or shrubby areas (nests at edges of Boreal wetlands)	Low	Suitable habitat does not occur on-site.
Short-eared Owl	Threatened	Ground nester, prefers open habitats, fields and marshes.	Low	No suitable field or marsh on-site to support nesting habitat.
Wood Thrush	Special Concern	Prefers deciduous or mixed woodlands.	Moderate	NHIC data indicates wood thrush to have occurred within 1km of site. Forest on-site may provide foraging habitat. Species not observed during investigations.
Mammalian				
Eastern small-footed Myotis	Endangered	Roosts in rock crevices, barns and sheds. Overwinters in abandoned mines. Summer habitats are poorly understood in Ontario, elsewhere prefers to roost in open, sunny rocky habitat and occasionally in buildings (Humphrey, 2017).	Moderate	Available habitat on-site unlikely to meet bat maternity colony requirements however the site and surrounding area may provide foraging and non-maternal roost habitat.
Little Brown Myotis	Endangered	Maternal colonies known to use buildings, may also roost in trees during summer. Affinity towards anthropogenic structures for summer roosting habitat and exhibit high site fidelity (Environment Canada, 2015).	Moderate	Available habitat on-site unlikely to meet bat maternity colony requirements however the site and surrounding area may provide foraging and non-maternal roost habitat.

Northern myotis (Northern Long-eared Bat)	Endangered	Occurs throughout eastern North America in associated with Boreal forests. Roosts mainly in trees, occasionally anthropogenic structures during summer (Environment Canada, 2015). Overwinters in caves and abandoned mines.	Low	Species affinity is for Boreal forests and rarely roosts in anthropogenic structures. Subject property occurs at extreme southern end of species range and lacks preferred boreal forest habitat.
Tri-colored Bat	Endangered	Roosts in trees, rock crevices and occasionally buildings during summer. Overwinters in caves and mines.	Moderate	Available habitat on-site unlikely to meet bat maternity colony requirements however the site and surrounding area may provide foraging and non-maternal roost habitat.
Reptilian				
Blanding's Turtle	Threatened	Inhabits quiet lakes, streams and wetlands with abundant emergent vegetation. Frequently occurs in adjacent upland forests.	Low	Suitable aquatic habitat is not present on-site.
Eastern Musk Turtle	Special Concern	Wetlands. Highly aquatic habitats.	Low	Suitable aquatic habitat is not present on-site.
Eastern Ribbonsnake	Special Concern	Marshy edges of wetlands and watercourses.	Low	Suitable aquatic habitat is not present on-site.
Northern Map Turtle	Special Concern	Highly aquatic species, found only in lakes and large rivers.	Low	Suitable aquatic habitat is not present on-site.
Snapping Turtle	Special Concern	Highly aquatic species, found in a wide variety of wetlands, water bodies and watercourses.	Low	NHIC data indicates snapping turtle to have occurred within 1km of site. However, no suitable aquatic habitat is present on-site to support snapping turtle. Species not observed during investigations.
Spotted Turtle	Endangered	Secretive wetland species.	Low	Suitable aquatic habitat is not present on-site.
Wood Turtle	Endangered	Primarily terrestrial forest species. Associated with clear, gravelly streams.	Low	Suitable aquatic habitat is not present on-site.
Plants				
American Ginseng	Endangered	Rich, moist, relatively mature deciduous forests.	Low	No suitable habitat on-site.
Black Ash	Endangered	Predominantly a wetland species, found in swamps, floodplains and fens.	Low	No suitable wetland habitat on-site. Species not observed on-site.
Butternut	Endangered	Inhabits a wide range of habitats including upland and lowland deciduous and mixed forests.	Low	Species not observed on-site.
Lichens				
Pale-bellied Frost Lichen	Endangered	Grows on the bark of hardwood trees such as white ash, black walnut, American elm and ironwood. Can also be found growing on fence posts and boulders.	Low	Species believed to be extirpated from the Ottawa area.
Fish				
American Eel	Endangered	Primarily nocturnal, hiding in soft substrate or submerged vegetation during the day.	Low	No suitable aquatic habitat on-site.
Bridle Shiner	Special Concern	Prefers clear water with abundant vegetation over silty or sandy vegetation	Low	No suitable aquatic habitat on-site.
Channel Darter	Special Concern	Prefers clear water with abundant vegetation over silty or sandy vegetation	Low	No suitable aquatic habitat on-site.
Lake Sturgeon	Endangered	Large lakes and rivers. Forages in cool water, 4-9m deep over soft substrates. Spawns in shallower, fast-flowing areas over rocks or gravel.	Low	No suitable aquatic habitat on-site.
Northern Brook Lamprey	Special Concern	Prefers shallow areas with warm water. Larvae burrows in soft substrate for up to 7 years.	Low	No suitable aquatic habitat on-site.
River Redhorse	Special Concern	Prefers fast-flowing, clear rivers over rocky substrate	Low	No suitable aquatic habitat on-site.
Silver Lamprey	Special Concern	Larvae live 4-7 years in burrows, preference to soft substrate.	Low	No suitable aquatic habitat on-site.
Insects				
Bogbean Buckmoth	Endangered	Preferred food plant is bog bean, present in a variety of wetlands including bogs, swamps and fens.	Low	Preferred wetland habitat is not present on-site.
Gypsy Cuckoo Bumble Bee	Endangered	Inhabits a wide range of habitats: open meadows, agricultural and urban areas, boreal forests and woodlands.	Low	Currently the only known population is in Pinery Provincial Park.
Monarch Butterfly	Special Concern	Caterpillars require milkweed plants confined to meadow and open areas. Adult butterflies use more diverse habitat with a variety of wildflowers	Moderate	Potentially suitable foraging habitat available for Monarch on-site.
Mottled Duskywing	Endangered	Larval food plant (New Jersey Tea) found in sandy areas and alvars.	Low	Sandy areas and alvars not present in the study area.
Nine-spotted Lady Beetle	Endangered	Habitat generalist	Low	No recent occurrence reports in the area, thought to be locally extirpated
Rusty-patched Bumble Bee	Endangered	Habitat generalist	Low	Currently the only known population is in Pinery Provincial Park.
Traverse Lady Beetle	Endangered	Habitat generalist	Low	No new records of Traverse Lady Beetle in Ontario, species thought to be absent in former habitats.
West Virginia White Butterfly	Special Concern	Requires mature moist deciduous woods with larval host plant toothwort.	Low	Necessary vegetation and toothwort plant not present on-site or within study area.
Yellow-banded Bumble Bee	Special Concern	Habitat generalist; mixed woodlands, variety of open habitat	Moderate	Potentially suitable foraging habitat available for yellow-banded bumble bee on-site.

3.2 Vegetation Communities

Vegetation communities on-site were confirmed by GEMTEC in 2023, following protocols utilized in the Southern Ontario Ecological Land Classification System (Lee et al., 2008). Vegetation at the site represents a mosaic of cultural meadow, deciduous forest, and commercial areas.

Table 3.1 below provides a summary of the various vegetation communities identified on-site.

Table 3.2 Vegetation Communities On-site

ELC Type	Description	Size (ha)
Cultural Meadow (CUM)	The majority of the site, fronting to Orchard Road, is comprised of a cultural meadow. Comprised primarily of old agricultural fields, species consisted of mullein (Verbascum sp.), goldenrod (Solidago sp.), Queen Anne's lace (Daucus carota), red clover (Trifolium pratense), cow vetch (Vicia cracca), green bristlegrass (Setaria viridis), daisy (Bellis perennis), legumes (Fabaceae sp.), switchgrass (Panicum virgatum), bull thistle (Cirsium vulgare), chicory (Cichorium intybus), and panicled aster (Symphyotrichum lanceolatum). Located along the north property boundary, adjacent to Highway 401 was an area dominated entirely by common reed (*Phragmites australis*).	9.27
Fresh – Moist Sugar Maple – Hardwood Deciduous Forest (FODM6-5)	Located in the northwest portion of the site is a deciduous forest, dominated by sugar maple (Acer saccharum) and American elm (Ulmus americana), with other common constituents including white ash (Fraxinus americana) and bitternut hickory *(Carya cordiformis).* The shrub layer included ironwood (Ostrya virginiana), American beech (Fagus grandifolia), basswood (Tilia americana), and buckthorn (Rhamnus cathartica). Herbaceous vegetation consisted of large-leaved aster (Eurybia macrophylla), broadleaved goldenrod (Solidago flexicaulis), and wood fern (Dryopteris sp.).	2.49
Fresh – Moist Poplar Mixed Forest (FOMM8-1)	The southeastern corner of the property is comprised of a mixed forest. Tree species consisted of a mixture of eastern white cedar (*Thuja occidentalis*), balsam poplar (*Populus balsamifera*), and trembling aspen (*Populus tremuloides*), white ash, river birch (*Betula nigra*), willow (*Salix* sp.), with the addition of black walnut (*Juglans nigra*) in the shrub layer. Herbaceous vegetation was comprised of goldenrod, wild raspberry (*Rubus moluccanus*), milkweed (*Asclepias* sp.), horsebane (*Ambrosia trifida),* New England aster (*Symphyotrichum novae-angliae*), cattail (*Typha* sp.), red osier dogwood (*Cornus sericea*), and joe-pye-weed (*Eutrochium purpureum*).	0.58

ELC Type	Description	Size (ha)
Commercial (CVC)	Located along the west side of the property is an existing commercial area comprised of a parking lot and petting zoo.	1.18

No plant SAR were observed on-site during the field investigation.

3.3 Wildlife

Targeted wildlife surveys were not completed as part of this project. During the field investigation, four avian species were observed or noted as flying overhead within the study area: American crow, American goldfinch, field sparrow, and mourning dove. A larger diversity of avian species would be expected to occur on-site during the active breeding season.

No animal SAR were observed during the field investigation.

No other evidence of wildlife activity, including amphibian, reptilian, mammalian, or fish species, were observed on-site during the time of the field investigation.

3.4 Fish Habitat

No surface water features were identified on-site through the desktop review and confirmed through the field investigation. Within the study area, to the southeast of the subject property, are three local, unevaluated wetlands, a watercourse, and three small waterbodies.

No aquatic SAR were identified during the desktop review or the field investigation.

3.5 Species at Risk

As outlined in the Endangered Species Act (Ontario, 2007), only species listed as threatened or endangered and their general habitat receive automatic protection. When a species-specific recovery strategy is developed, a specific habitat regulation will be established, which eventually replaces the automatic habitat protection. Species of special concern and their habitat do not receive protection under the *Endangered Species Act* (ESA).

As discussed in Section 3.1, the desktop screening exercise identified the moderate to high potential for three avian (eastern meadowlark, grasshopper sparrow, and wood thrush) and three mammalian (eastern small-footed myotis, little brown myotis, and tri-colored bat) SAR to be present within the project area.

Following completion of the field investigation, no SAR species have been confirmed to occur on-site or within the immediate study area.

Potential impacts associated with the proposed project to SAR identified as having a moderate or high potential to occur on-site, are discussed in the subsections below.

3.5.1 Eastern Meadowlark, Grasshopper Sparrow, and Wood Thrush

Eastern meadowlarks are listed as threatened under the ESA, meaning that both individuals and habitat receive automatic protection. Grasshopper sparrow and wood thrush are listed as special concern; therefore, only individuals receive protection. All three species were identified on the Natural Heritage Information Centre database as historically occurring in the area.

Eastern meadowlark nest and forage in dense tall grass fields and have a higher tolerance for woody vegetation, no suitable grass fields were identified during the field investigation. As such eastern meadowlark are not anticipated to occur on-site or be impacted by any future development on-site.

Similarly, grasshopper sparrows are area-sensitive grassland species that nest on the ground. The site does not contain suitable grassland habitat for grasshopper sparrow. As such grasshopper sparrow are not anticipated to occur on-site or be impacted by any future development on-site.

Wood thrush nest in moist, deciduous forests stands with dense deciduous undergrowth. Deciduous woodlands on-site may support wood thrush, however as a species of special concern, wood thrush habitat is not protected under the ESA. The potential for wood thrush to occur on-site can be addressed through the application of standard avoidance and mitigation measures.

Considering the mobile nature of the three avian species, any future development on-site is not anticipated to impact any of the avian species discussed above. Mitigation measures to protect avian SAR are provided in Section 4.

3.5.2 Eastern Small-Footed Myotis, Little Brown Myotis, and Tri-Colored Bat

Three mammalian SAR were identified as having a moderate potential to occur on-site or within the project area. Eastern small-footed myotis (*Myotis leibii*), little brown myotis (*Myotis lucifugus*), and tri-colored bat (*Perimyotis subflavus*) are all provincially listed as endangered under the ESA.

Potential roosting habitats for mammalian SAR is limited to the forested areas on-site and anthropogenic buildings and structures within the study area.

Future development on-site may directly impact eastern small-footed myotis, little brown myotis, and tri-colored bat through the loss of wooded habitat and possible roosting trees. Potential indirect impacts include temporary increased disturbances due to human presence and elevated noise levels during construction, and habitat encroachment.

Avoidance and mitigation measures to prevent harm to eastern small-footed myotis, little brown myotis, and tri-colored bat and associated habitat are provided in Section 4.

4.0 AVOIDANCE AND MITIGATION MEASURES

The following avoidance and mitigation measures are recommended in order to minimize or avoid, to the greatest extent possible, the potential impacts from potential future development on the local environment, including potential SAR and their habitat:

- Vegetation removal should occur outside of March 15 to November 30 to avoid the key breeding bird period, and bat summer active season. The timing windows provides protection of migratory birds, roosting bats and avoids contravention of the Migratory Bird Convention Act and ESA.
    - If vegetation clearing activities must take place during the aforementioned timing window than a nest survey and site sweep shall be conducted by a qualified professional to ensure no impacts to birds or turtles.
    - Vegetation removal within the forest has the potential to impact SAR bats, if the timing window cannot be adhered to consultation with the MECP is required to determine whether the project will required an authorization.
- To protect trees identified to be retained during construction, the Critical Root Zone (CRZ) should be identified and fenced. The CRZ is defined as 10 cm from the base of the tree for every centimetre in diameter of the tree trunk at breast height.
- Perform daily pre-work sweeps of any construction areas to ensure no species at risk are present and to remove any wildlife from inside the construction area.
- Erosion and sediment control, prepared by a qualified person and measures implemented prior to any construction works and be maintained until all disturbed ground has been permanently stabilized.
- During construction if any SAR are identified on-site all work should stop and a qualified professional and the MECP should be contacted for next steps.

In addition to the measures above, exclusion fencing is recommended to be installed along the edge of any future construction areas for the protection of wildlife SAR:

- To protect migrating turtles associated with the off-site habitat, exclusion fencing should be installed around the any future construction areas prior to construction commencing to prohibit the movement of turtles into the construction area. Following installation of exclusion fencing, a qualified professional should be retained to sweep the construction area to remove any turtles which may be trapped within the exclusion fencing.
    - Exclusion fencing should follow the protocols outlined in the Species at Risk Branch: Best Practices Technical Note: Reptile and Amphibian Exclusion Fencing Version 1.1 (MNRF, July 2013).
- To prevent turtles nesting within the construction zone, all stockpiled materials should be covered with a geotextile between May 1 and August 1 of any year.

5.0 CLOSURE

This Species at Risk Assessment was completed based on our understanding of the project at the time of writing. The investigation undertaken by GEMTEC with respect to this report and any conclusions or recommendations made in this report reflect the best judgements of GEMTEC based on the site conditions observed during the investigations undertaken at the date(s) identified in the report and on the information available at the time the report was prepared.

This report has been prepared for the application noted and it is based, in part, on visual observations made at the site, all as described in the report. Unless otherwise stated, the findings contained in this report cannot be extrapolated or extended to previous or future site conditions or for portions of the site that were unavailable for direct investigation.

Should new information become available during future work or other studies, GEMTEC should be requested to review the information and, if necessary, re-assess the conclusions presented herein.

We trust this report provides sufficient information for your present purposes. If you have any questions concerning this report, please do not hesitate to contact our office.

Sincerely,

Emily Pentz, B.Sc.
Junior Biologist

Taylor Warrington, B.Sc.
Biologist

6.0 REFERENCES

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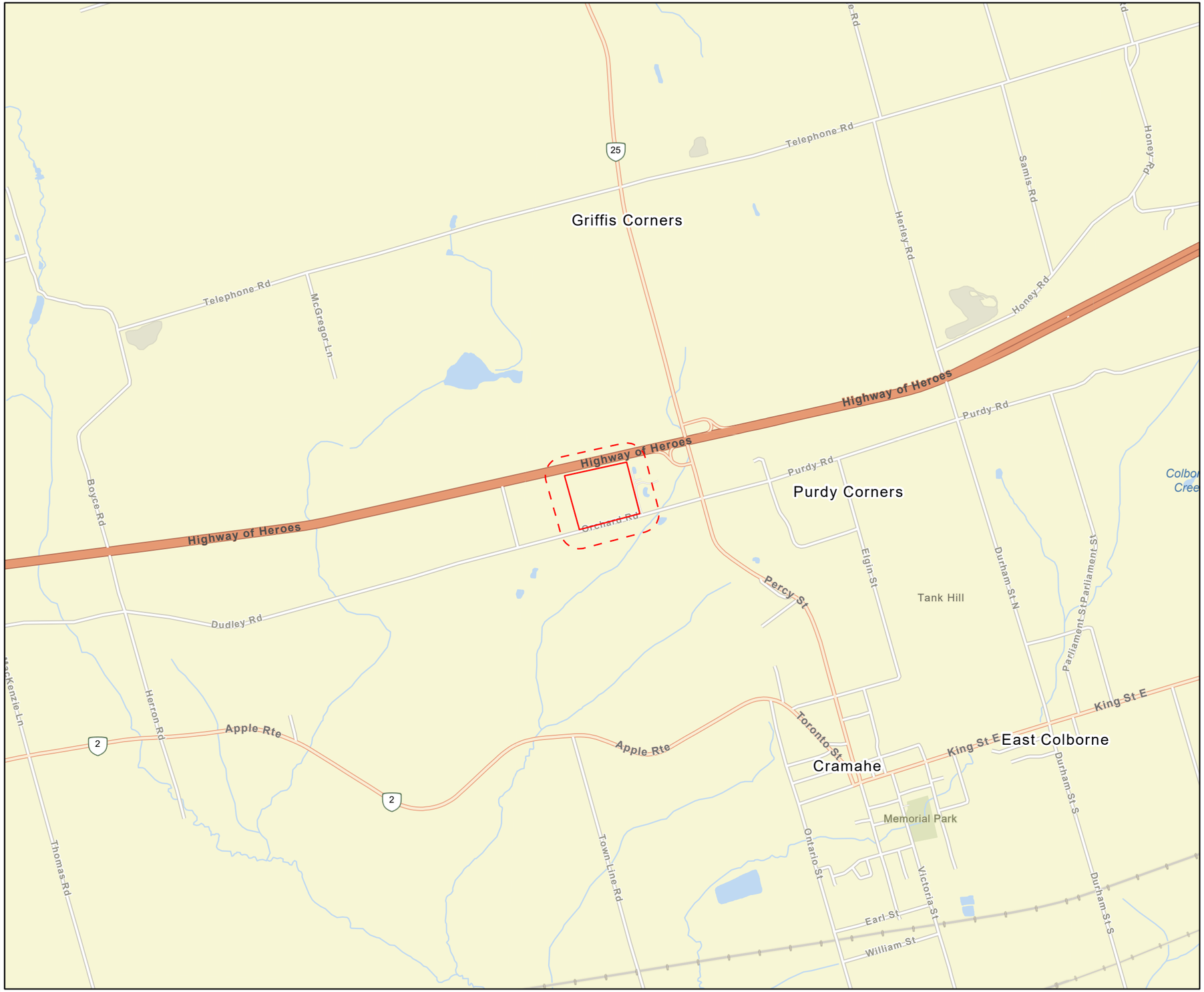
APPENDIX A

Report Figures

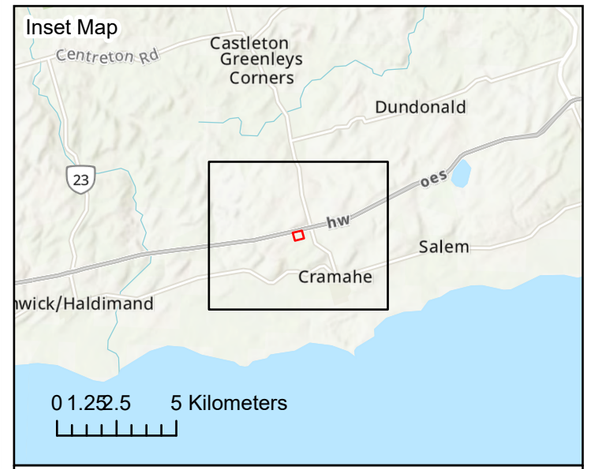
Figure A.1 – Site Location

Figure A.2 – Site Layout



Legend

- Property Boundary
- Study Area



Scale
1:25,000
0 200 400 800 1,200 1,600 Meters

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Client:	Project:
The Big Apple Inc.	101335.009

Location
218 Orchard Road
Colborne, Ontario

Drwn By:	Chkd By:	
EP	TW	Site Location

Date: October 2023	Rev.	
	0	Figure: A.1

Coordinate System: NAD 1983 UTM Zone 18N
Service Layer Credits: World Street Map: Province of Ontario, Esri Canada, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, NRCan, Parks Canada
World Topographic Map: Province of Ontario, Esri Canada, Esri, HERE, Garmin, SafeGraph, METI/NASA, USGS, EPA, NPS, USDA, NRCan, Parks Canada

Legend

- Property Boundary
- Study Area
- Local Wetland
- Waterbody
- Watercourse
- Vegetation Community

CUM = Cultural Meadow
CVC = Commercial
FOMM8-1 = Fresh – Moist Poplar Mixed Forest
FODM6-5 = Fresh – Moist Sugar Maple – Hardwood Deciduous Forest

Scale
1:2,750
0 25 50 100 150 Meters

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The Big Apple Inc.	101335.009

Location
218 Orchard Road
Colborne, Ontario

Drwn By:	Chkd By:	
EP	TW	Site Layout

Date: October 2023	Rev.	
	0	Figure: A.2

Coordinate System: NAD 1983 UTM Zone 18N
Service Layer Credits: Hybrid Reference Layer: Esri Community Maps Contributors, Province of Ontario, Esri Canada, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, NRCan, Parks Canada
World Imagery: Maxar, Microsoft

APPENDIX B

Site Visit Photographs

Site Photograph 1: Fresh – Moist Sugar Maple – Hardwood Deciduous Forest (FODM6-5).

Site Photograph 2: Fresh – Moist Poplar Mixed Forest (FOMM8-1).

Site Photograph 3: Cultural meadow (CUM)

Site Photograph 4: Cultural meadow (CUM).

GEMTEC Consulting Engineers and Scientists	Project: 218 Orchard Road Colborne, Ontario	**APPENDIX B**	**Site Photographs**
		File No. 101335.009	

experience • knowledge • integrity

civil	civil
geotechnical	géotechnique
environmental	environnementale
field services	surveillance de chantier
materials testing	service de laboratoire des matériaux

expérience • connaissance • intégrité