AGRICULTURAL IMPACT ASSESSMENT
FOR
MOUNT HOPE WEST LANDS

PREPARED FOR:

UNITED HOLDINGS INC.

122 ROMINA DRIVE
CONCORD, ONTARIO L4K 4Z7

PREPARED BY:

COLVILLE CONSULTING INC.

432 NIAGARA STREET, UNIT 2
ST. CATHARINES, ONTARIO L2M 4W3

C23083
JANUARY 2025

COLVILLE CONSULTING INC.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

APPENDICES

1. INTRODUCTION

1.1 Background

United Holdings Inc. is proposing to develop lands north of Bolton and referred to as the Mount Hope West Lands, herein referred to as the Subject Lands. They are comprised of several contiguous, irregularly shaped parcels, totalling approximately 33.59 ha (83.00 acres). The Subject Lands are generally located south of Castlederg Side Road, north of Columbia Way, east of the Greenbelt Plan Area, and west of Mount Hope Road in the Town of Caledon. According to the Region of Peel Official Plan, the Subject Lands form part of the Designated Greenfield Area within the 2051 New Urban Area within the Urban System. The Subject Lands are designated Prime Agricultural Area and Environmental Policy Area within the Town of Caledon Official Plan.

The Region of Peel updated its Official Plan through a Municipal Comprehensive Review (MCR), and subsequently included the Subject Lands within the Designated Greenfield Area within the Urban System. The updated Official Plan was approved by the Province in November of 2022, allowing the Region's mapping to take precedence. The provincial approval of the Region of Peel Official Plan resulted in the Subject Lands' removal from a provincially recognized *prime agricultural area.*

In March of 2024, the Town of Caledon adopted the Future Caledon Official Plan to align with higher-order planning documents. However, the Future Caledon Official Plan has not yet been approved by the Province and the Bolton Secondary Plan is not yet available. As the Future Caledon Official Plan has not yet received provincial approval, the Subject Lands are still considered to be part of a *prime agricultural area*.

1.2 Description of Proposed Development

Recently, the Town of Caledon Council endorsed the "Made in Caledon Growth Concept" which has been circulated to the Province for consideration. The Town of Caledon has also recently adopted the Future Caledon Official Plan. The Future Caledon Official Plan mapping identifies the Mount Hope West Lands as "Community Area" within the 2051 New Urban Area.

The Mount Hope West Lands encompass approximately 33.59 ha (83.00 acres) of land, with an estimated net developable area of approximately 31.70 ha (78.33 acres) that is controlled primarily by United Holdings Inc. A Development Concept Plan has been received, showing the proposed *development* of the Mount Hope West Lands. The development plan for the Mount Hope West Lands will include a mix of residential uses (i.e., single detached *dwellings*, semi-detached *dwellings*, street townhouses, and a mid/high-rise block), a commercial block, parkland, open space, a network of roads, and two stormwater management ponds. A copy of the Development Concept Plan can be found in Appendix A.

1.3 Retainer & Professional Qualifications

Colville Consulting Inc. was established in 2003 and provides agricultural and environmental consulting services to both private and public sector clients throughout Ontario. Colville Consulting Inc. has extensive experience preparing Agricultural Impact Assessments for proposed developments related to settlement area boundary expansion applications in the Town of Caledon and across the province of Ontario.

Untied Holdings retained Colville Consulting Inc. to complete an Agricultural Impact Assessment (AIA) on September 21.2023. This study was led by Sean Colville, who has over 30 years of experience preparing Agricultural Impact Assessments in Ontario and assisted with the preparation of the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) draft Agricultural Impact Assessment Guidance Document (2018). John Liotta was the Project Manager responsible for completing the field investigations and preparation of the AIA. John has over 5 years of formal education in Environmental and Agricultural Planning and has assisted in preparing a number of AIAs with Colville Consulting Inc. The CVs of Sean Colville and John Liotta can be found in Appendix B.

This AIA has been prepared in accordance with OMAFRA's Draft Agricultural Impact Assessment (AIA) Guidance Document (2018). The AIA assesses and evaluates the potential impacts of the proposed *development* on agricultural operations, the farming community, and the broader *Agricultural System*. In cases where impacts cannot be avoided, the AIA recommends ways to minimize and mitigate adverse impacts. The AIA will also assess whether the proposed *development* complies with provincial, regional, and local agricultural policies.

1.4 Purpose of Study

A Pre-Application Review Committee (PARC) meeting was held for the proposed development of the Mount Hope West Lands. The PARC meeting identified a number of technical studies required to facilitate the proposed development, including the completion of an Agricultural Impact Assessment. The purpose of the AIA is to identify the potential impacts on the Agricultural System associated with the proposed development and provide mitigation measures to avoid or minimize impacts to the extent possible. Colville Consulting Inc. was retained to satisfy the required AIA, which will also aid in the development of the Bolton Secondary Plan.

1.5 Study Area

The *Study Area* is primarily located within the Town of Caledon's Prime Agricultural Area. To be consistent with the draft Agricultural Impact Assessment Guidance Document (2018), the AIA must identify a P*rimary Study Area* and a S*econdary Study Area*. For this AIA, the *Primary Study Area (PSA)* includes the Subject Lands, while all lands within approximately 1.5 km (1,500 m) of the *PSA* comprise the *Secondary Study Area (SSA)*. Figure 1 shows the *Study Area*, which includes the Primary and Secondary *Study Areas*.

1.5.1 Primary Study Area

The PSA (i.e., Subject Lands) is generally located south of Castlederg Side Road, north of Columbia Way, east of the Greenbelt Plan area, and west of Mount Hope Road in the Town of Caledon. The *PSA* is made up of portions of multiple irregularly shaped parcels and, combined, are approximately 33.59 ha (83.00 acres) in size. The *PSA* is primarily in agricultural production and contains five *non-farm residences (NFRs)* with no agricultural infrastructure located within the *PSA*.

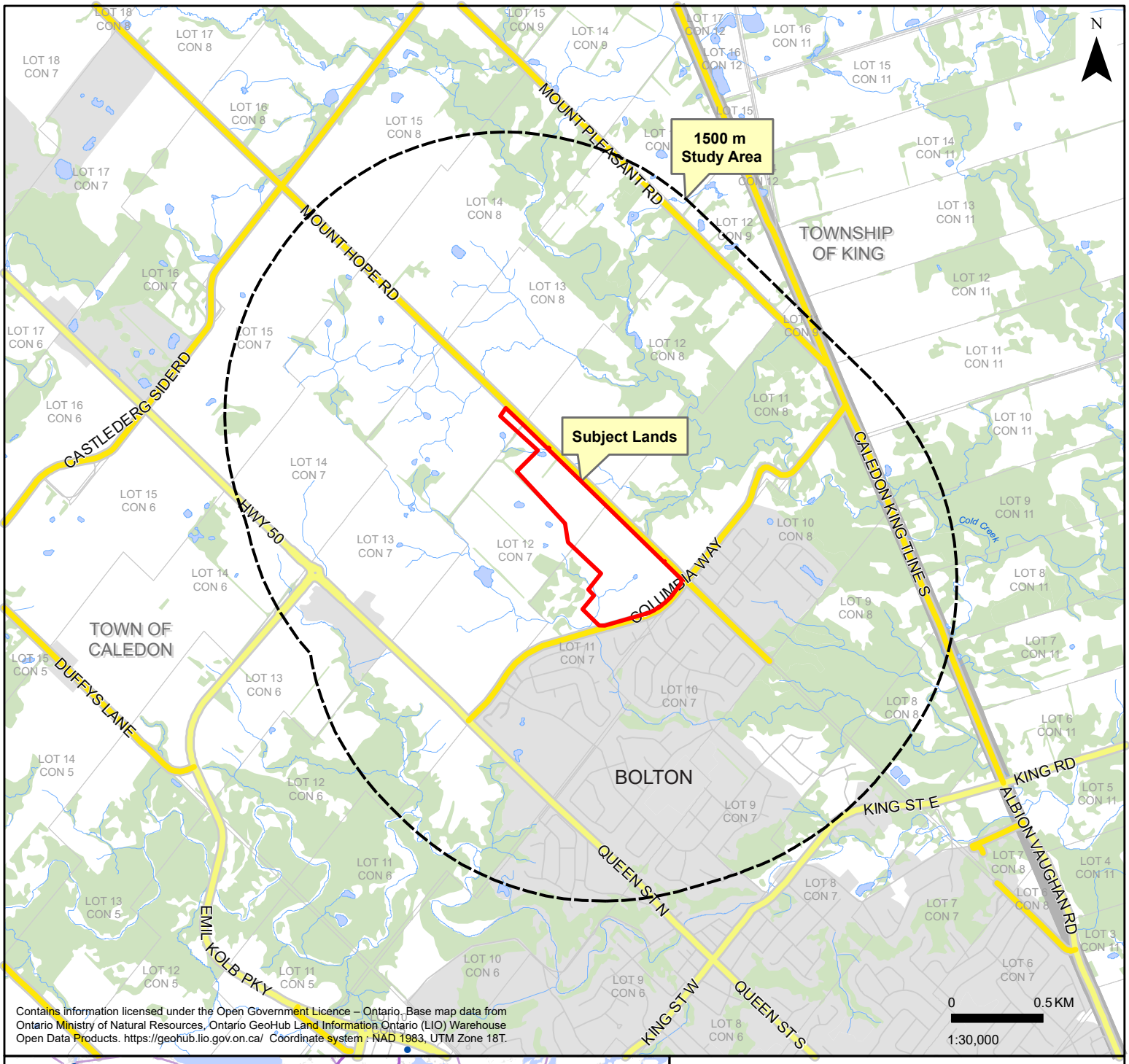


Figure 1
Location of Subject Lands

Agricultural Impact Assessment
Mount Hope West Lands

Prepared for: United Holdings Inc.

Prepared by: Colville Consulting Inc.

DATE: January 2025

FILE: C23083

1.5.2 Secondary Study Area

The *Secondary Study Area*, herein referred to as the *Study Area*, includes all lands within 1.5 km (1,500 m) of the *PSA* boundaries. The *Study Area* is generally bounded to the east by Mount Pleasant Road, to the south by King Street East, to the west by Duffys Lane, and to the north by Castlederg Sideroad.

The *Study Area* is designated in the Region of Peel Official Plan as Rural Land within the Rural System, as well as Built-up Area and Designated Greenfield Area within the Urban System. The southern portion of the *Study Area* is within the Bolton Settlement Boundary, while the remainder of the *Study Area* is designated as Prime Agricultural Area and Environmental Policy Area in the Town of Caledon Official Plan. A small area in the eastern portion of the *Study Area* is located within the Region of York and is designated Rural Area within the York Region Official Plan. Additionally, a large portion of the *Study Area* is located within the Greenbelt Plan and designated as Oak Ridges Moraine Conservation Area and Natural Heritage System within the Protected Countryside.

2. SCOPE OF STUDY

To be consistent with the Draft Agricultural Impact Assessment Guidance Document (2018), the study scope includes:

- a review of applicable agricultural policies, land use information, and other background information for lands within the surrounding area (e.g., aerial photography);
- a review of data sources such as AgMaps, the Agricultural Systems Portal, and OMAFRA's digital soil resource database (for soil and CLI information, parcel fabric and land fragmentation, artificial drainage, agri-food components, etc.);
- a land use survey of all lands within one and a half kilometres (1.5 km) of the Subject Lands and a characterization of the area;
- an assessment of the *Minimum Distance Separation (MDS)* requirements for the proposed *development* using the 2017 *MDS I formula*;
- an assessment of the level of fragmentation of agricultural lands in the *Study Area*;
- an assessment of the potential impacts of the proposed *development* on the *Agricultural System*, agricultural resources, farm operations, and the broader *agri-food network*;
- the identification of net impacts, mitigation measures and recommendations that can be implemented to avoid or minimize potential impacts;
- an assessment of the proposed *development's* consistency with agricultural policies in the *Provincial Planning Statement*, the Region of Peel Official Plan, the Town of Caledon Official Plan, and the Future Caledon Official Plan; and
- the preparation of a report summarizing our findings.

The AIA does not assess alternative locations for the proposed *development*. For *settlement area* boundary expansion in *prime agricultural areas*, the *Provincial Planning Statement (PPS)* requires an assessment of alternative locations. The purpose of this assessment is to show that there are no reasonable alternative locations which avoid *prime agricultural areas*. If *prime agricultural areas* are unavoidable, the assessment must show that there are no reasonable alternative locations on lower priority agricultural lands. Given the Provincial approval of the Region of Peel's 2051 New Urban Area, and the Subject Lands' inclusion in this area, it is reasonable to assume that additional assessment would yield no reasonable alternative locations for the proposed *development*.

3. METHODOLOGY

The study methodology for the AIA was prepared in accordance with the OMAFRA draft Agricultural Impact Assessment Guidance Document (2018). It includes a review of relevant provincial, regional, and local agricultural policies, other agricultural-related sources of information, and the completion of field inventories. Upon compilation and assessment of the data, the potential impacts of the proposed *development* will be considered and recommendations to avoid and/or minimize potential impacts will be made. The AIA also assesses the *development's* consistency with provincial, regional, and local agricultural policies.

3.1 Background Data Collection

Information sources reviewed for this study included:

- *Provincial Planning Statement* (2024);
- Region of Peel Official Plan and Land Use Schedules (2022);
- Town of Caledon Official Plan and Land Use Schedules (March 2024 Consolidation);
- Future Caledon Official Plan (adopted March 2024);
- Town of Caledon Agricultural Impact Assessment (AIA) Terms of Reference (2023);
- Soil Survey of Peel County – Report No. 18 of the Ontario Soil Survey (1953);
- British Columbia Ministry of Agriculture's Guide to Edge Planning: Promoting Compatibility Along Agricultural-Urban Edges (2015);
- MHBC's Edge Planning Report – The Region of Peel & The Town of Caledon LEAR Study and MDS Review (2015);
- OMAFRA's digital Soil Resource Database to obtain soil series and CLI agricultural capability mapping and data;
- OMAFRA's The Minimum Distance Separation (MDS) Document: Formulae and Guidelines for Livestock Facility and Anaerobic Digester Odour Setbacks. Publication 853 (2016);
- OMAFRA's Artificial Drainage Systems mapping;
- OMAFRA's AgriSuite, AgMaps and Agri-Systems databases;
- OMAFRA's Draft Agricultural Impact Assessment (AIA) Guidance Document (2018);
- Ontario Ministry of Natural Resources and Forestry's Ontario Digital Terrain Model (Lidar-Derived) 2014-2015 GTA Lidar DTM; and
- Ortho-rectified, digital aerial photography viewed using Google Earth™.

Aerial photography covering the *Study Area* and the parcel fabric were examined to assess the presence of *non-agricultural land uses*, *agricultural uses*, *agriculture-related uses*, *on-farm diversified uses*, and the level of fragmentation based on the lot fabric. This review will provide a general impression of the agricultural activity and level of agricultural investments in the area surrounding the Subject Lands.

3.2 Field Inventories

Field inventories were completed on October 26, 2023. Field inventories included a reconnaissance level land use survey of the surrounding area to identify agricultural operations, relative level of investment in agriculture, the cropping pattern observed, and the mix of land uses within the Subject Lands and *Study Area*. Information required to calculate the *MDS I* setback requirements was also collected during the land use survey.

3.2.1 Land Use Survey

The land use survey identified the number and type of agricultural operations (both active and *retired*), *agriculture-related uses*, *on-farm diversified uses*, and the extent and type of *non-agricultural land uses* in the area. Field crops observed were identified and mapped. Visual evidence of agricultural land improvements was recorded where identified.

3.2.2 MDS Calculations

The *MDS* is a land use planning tool developed by OMAFRA to minimize land use conflicts and nuisance complaints arising from odours generated by *livestock operations*. The *MDS* calculates a recommended separation distance between a *livestock* or *manure storage* and other land use(s). The most recent version of the MDS Guidelines, *The Minimum Distance Separation (MDS) Document, Publication 853* (2016), came into effect on March 1st, 2017.

The *MDS* uses two separate formulae depending on the type of land use proposed: *MDS I* and *MDS II*. The *MDS I formula* is used when a new non-agricultural *development* is proposed in proximity to *livestock facilities*. The *MDS II formula* is used when a new, enlarged, or remodeled *livestock facility* or *manure storage* system is proposed in proximity to existing or approved *development*.

The *MDS formulae* only apply to lands designated *prime agricultural area* or rural. The *MDS* does not apply to lands in areas not intended for agricultural use. Guideline #36 of the MDS Guidance Document states that "MDS I setbacks are NOT required for proposed land use changes (e.g., consents, rezonings, redesignations, etc.) within approved settlement areas, as it is generally understood that the long-term use of the land is intended to be for non-agricultural purposes."

The Subject Lands are not located within the Town of Caledon's settlement area; however, they are located within the Region of Peel's approved settlement area. Our interpretation of the application of the *MDS I formula* was confirmed with OMAFRA's land use planning branch on January 9, 2024. The OMAFRA land use planner agreed that the *MDS I* setbacks would not apply to the Subject Lands, as they are located within an approved settlement area.

Although the proposed development is not required to comply with *MDS I* setbacks, the *MDS I formula* was applied to the proposed development to identify the potential degree of impact associated with nuisance complaints from odours of surrounding agricultural operations and assist with the evaluation of the need for edge planning techniques to minimize potential conflicts

The information required to complete an *MDS I* calculation was obtained through a combination of sources. As per the MDS Guidelines, we attempted to gather information directly from the landowner/tenant.

Where landowners could not be contacted or were not available, self-addressed envelopes were left in mailboxes of potential *livestock operations*.

To calculate the *MDS* setback requirements, we used OMAFRA's Agricultural Planning Tools Suite (AgriSuite). It provides the most up to date software developed by OMAFRA to calculate the *MDS I* requirements for active *livestock facilities* and *empty livestock facilities* that are structurally sound and capable of housing *livestock*. To determine the *MDS I* setback requirements, specific information regarding each *livestock facility* is required. This includes:

- the type of *livestock* housed in the facility;
- the maximum capacity of the barn housing *livestock*;
- the type of *manure storage* facility; and
- the size of the property upon which the *livestock facility* is located.

This information was collected for all *livestock facilities* (active and *retired*). In cases where we were not able to collect information directly from the landowner, we used visual observations of the *livestock facility* and determined the most likely type of *livestock* housed and the type of *manure storage* system used. These observations were supplemented with aerial photography and web mapping tools such as AgMaps and Google Earth™. Barn capacity and lot size were determined using these online mapping tools.

3.3 Update of Soil Resources

The Soil Survey of Peel County, Report No. 18 of the Ontario Soil Survey (1953) is the primary document from which the soil series and soil agricultural capability information is derived for the Region of Peel. The soil mapping does not include information typically included in more recent soil surveys, such as assigning a slope class to the soil polygons. The original soil information was updated graphically by OMAFRA's Geomatic Services in Guelph, and a database was created containing detailed information on each soil map unit including the soils' Canada Land Inventory (CLI) agricultural capability rating. The database does include a slope class for each polygon, but these classes were assigned subsequent to the 1953 soil survey and are estimates based on roadside observations.

This information was reviewed prior to the start of this project. Following the review, it was determined that there was a need to update the soil and CLI capability mapping within the Subject Lands to better define the agricultural priority of the lands.

Geographic Information System (GIS) software was used to update the mapping. Existing soil mapping for Peel County (dated 1953) was generated at a scale of 1:63,360 and was upgraded to include CLI classifications in February 2008 at as scale of 1:50,000. A surface model was generated using topographic mapping obtained from the Ministry of Natural Resources and Forestry's 2014-2015 Ontario Digital Terrain Model (Lidar-Derived) dataset, which supplied a half meter interval contour set for the Subject Lands.

Slope classes were developed which are consistent with Agriculture Canada's *Manual for Describing Soils in the Field* (CanSIS, 1982 Revised) and the *Canadian System of Soil Classification* (1998), as well as using OMAFRA's *Classifying Prime and Marginal Agricultural Soils and Landscapes: Guidelines for the Application of the Canada Land Inventory in Ontario* (2022). A slope class map was then generated from the surface model and new soil polygons were delineated.

Slope classes A (0.0 – 0.5%) and B (0.5 – 2.0%) do not have a limitation for common field crop production and were therefore grouped together. The updated soil polygons were correlated to the County level soil mapping and the existing soil dataset to determine soil series names. The attributes table for this new soil data layer was updated with slope class, soil type, area (ha), percent, and CLI Capability Class. The revised soil series and CLI soil capability maps were then produced for the Subject Lands.

The refined soil mapping exercise was a desktop procedure and based on existing soils information and new digital contour data. The soil mapping produced through this exercise was not verified through field work.

3.4 Evaluation of the Agricultural System

An *Agricultural System* includes a continuous and productive land base comprised of *prime agricultural areas*, including *specialty crop areas*, and *rural lands*, as well as a complementary *agri-food network* that together enable the agri-food sector to thrive. An evaluation of the *Agricultural System* and associated features within the *Study Area* was completed through a reconnaissance level land use survey on October 26, 2023, and online review to assist in identifying agricultural related features.

Potential features identified include regional infrastructure and transportation networks, on-farm buildings and infrastructure, agricultural services, as well as small towns and hamlets that are supportive of agriculture and are important to the viability of the agri-food sector. The evaluation of the *Agricultural System* within the *Study Area* is used to identify the features and provide insight into the significance of those features on the overall *Agricultural System* within the Region.

3.5 Evaluation of Alternative Locations

The *PPS* directs *settlement area* boundary expansion to avoid *prime agricultural areas*, where possible. Where *prime agricultural areas* cannot be avoided, policy directs *development* to lower priority agricultural lands. The AIA must demonstrate that there are no reasonable alternative locations which avoid *prime agricultural areas* and there are no reasonable alternative locations in *prime agricultural areas* with lower priority agricultural lands.

The Subject Lands have been included in the Region of Peel Official Plan's 2051 New Urban Area within the Urban System, which was approved by the Province. The adopted Future Caledon Official Plan aligns with the Region's identification of lands for settlement area boundary expansion. Because these lands are now within the settlement area boundary, prime agricultural areas have been avoided and the need for an assessment of alternative locations is not required. Therefore, an assessment of alternative locations has not been completed as part of this AIA.

3.6 Evaluation of Agricultural Priority

The *PPS* directs *development* in prime agricultural areas to "lower priority agricultural lands". Although, the *PPS*, nor other provincial planning documents do not specifically define "lower priority agricultural lands", there are a number of considerations used by OMAFRA to determine the 'agricultural priority' of an area. These considerations include the criteria such as the current land use, amount of capital investment in agricultural infrastructure, amount of land under active cultivation, existing degree of lot fragmentation

to the surrounding agricultural land base, and proximity to incompatible (e.g., urban) land uses. The AIA considers these criteria to assess the agricultural priority of the Subject Lands.

3.7 Identification of Potential Impacts and Mitigation Measures

Potential impacts of the proposed *development* were identified following an assessment of the agricultural resources on and adjacent to the Subject Lands. Direct impacts evaluated include an assessment of elements such as the loss of *prime agricultural land*, agricultural infrastructure, land improvements, and cropland. Indirect impacts that may result from the proposed *development* were also evaluated and included an assessment of elements such as the impacts related to surficial drainage, disruption to farm operations, non-farm traffic, *MDS* conflicts, hydrogeological features, trespass, and vandalism. Mitigation measures that avoid or minimize potential impacts on the *Agricultural System* are then developed.

3.8 Assessment of Consistency with Agricultural Policies

All planning decisions must be consistent with the *PPS* and comply with applicable provincial land use plans. Municipalities also have their own agricultural policies that the proposed *development* must adhere to. A background review of all applicable provincial and municipal agricultural policies was undertaken. Policies applicable to the proposed *development* were identified and assessed for consistency as part of this AIA.

4. AGRICULTURAL POLICIES

4.1 Provincial Planning Statement

Land Use Policy and *development* in Ontario are directed by the *Provincial Planning Statement*. The *PPS* was issued under the authority of Section 3 of the Planning Act and came into effect on October 20, 2024. Section 3 of the Planning Act states that decisions affecting planning matters "shall be consistent with" policy statements issued under the Act.

4.1.1 Prime Agricultural Areas

Section 4.3 of the *Provincial Planning Statement* specifically deals with agricultural policy. Section 4.3.1.2 states that "As part of the agricultural land base, prime agricultural areas, including specialty crop areas, shall be designated and protected for long-term use for agriculture". The *Provincial Planning Statement* defines *prime agricultural areas* as areas where *prime agricultural lands* predominate. *Prime agricultural lands* include *specialty crop areas* and Canada Land Inventory (CLI) Classes 1, 2, and 3 soils, in this order of priority for protection.

4.1.2 Policies for Removal of Land from Prime Agricultural Areas

Policy 4.3.4.1 of the *Provincial Planning Statement* states that "Planning authorities may only exclude land from prime agricultural areas for expansion of or identification of settlement areas in accordance with policy 2.3.2."

Policy 2.3.2.1 states that "In identifying a new settlement area or allowing a settlement area boundary expansion, planning authorities shall consider the following:

a) the need to designate and plan for additional land to accommodate an appropriate range and mix of land uses;
b) if there is sufficient capacity in existing or planned infrastructure and public service facilities;
c) whether the applicable lands comprise specialty crop areas;
d) the evaluation of alternative locations which avoid prime agricultural areas and, where avoidance is not possible, consider reasonable alternatives on lower priority agricultural lands in prime agricultural areas;
e) whether the new or expanded settlement area complies with the minimum distance separation formulae;
f) whether impacts on the agricultural system are avoided, or where avoidance is not possible, minimized and mitigated to the extent feasible as determined through an agricultural impact assessment or equivalent analysis, based on provincial guidance; and
g) the new or expanded settlement area provides for the phased progression of urban development."

Policy 2.3.2.2 states that "Notwithstanding 2.3.2.1.b), planning authorities may identify a new settlement area only where it has been demonstrated that the infrastructure and public service facilities to support development are planned or available."

As stated above, the long-term use of the Subject Lands is for urban related uses, and they are no longer considered by the Province to be part of a *prime agricultural area.* As such, the proposed *development* is not required to be consistent with policies 2.3.2 of the *Provincial Planning Statement*.

4.2 Region of Peel Official Plan

Section 3.3 of the Region of Peel Official Plan recognizes the *Agricultural System*, which includes lands designated as Prime Agricultural Area and Rural Lands. The Subject Lands are no longer located within the Region of Peel's Rural Lands land use designations. As previously stated, the Subject Lands have recently been included in the Region of Peel's 2051 New Urban Area following the Region's *settlement area* boundary expansion (SABE). Therefore, the proposed *development* is not required to be consistent with the agricultural policies of the Region of Peel Official Plan.

4.3 Town of Caledon Official Plan

Schedule A of the Town of Caledon Official Plan (2018) designates the Subject Lands as Prime Agricultural Area. Section 4.1.3 of the Official Plan identifies Prime Agricultural Areas and General Agricultural Areas as lands that "generally coincides with a relatively large area of high capability agricultural lands recognized as Class 1, 2, and 3 agricultural lands according to the Canada Land Inventory and the Soil Capability for Agriculture through the Region of Peel Official Plan."

Section 4.2.3.3.1 outlines the requirements for *settlement area* boundary expansion and states in part that "Expansions to settlements will require an amendment to this Plan and shall be undertaken through a municipal comprehensive review that will address the following:

h) An examination of reasonable alternative locations which avoid Prime Agricultural Areas, and reasonable alternative locations on lands with lower priority in the Prime Agricultural Area;
j) Compliance with minimum distance separation formulae;
o) Mitigation of impacts of settlement area expansions on agricultural operations which are adjacent to or close to the settlement area to the greatest extent feasible;".

As stated in section 5.1.1.1, the objective of the land use policies for lands designated as Prime Agricultural Area is "To protect Prime Agricultural Areas by encouraging the business of agriculture, by providing for innovation and diversification within agriculture, by providing additional economic opportunities through On-farm Diversified Uses, and by limiting non-agricultural uses and non-agricultural severances."

The requirement to complete an Agricultural Impact Assessment is outlined in Section 5.1.1.17.1 that states that "Proposals in the Prime Agricultural Area that have the potential to negatively impact agricultural uses will require an Agricultural Impact Assessment".

The AIA will address Section 4.1.3, 4.2.3, and 5.1.1.1 of the Town of Caledon Official Plan.

4.4 Future Caledon Official Plan

The Future Caledon Official Plan (2024) was adopted by Town Council on March 26, 2024, which will guide *development* to the year 2051. The Future Caledon Official Plan has not yet been approved by the Province; however, the proposed *development* has been assessed for consistency with the policies of the Future Caledon Official Plan.

Schedule B4 of the Future Caledon Official Plan shows that the Subject Lands are designated New Community Area within the Town's Urban Area. No portion of the Subject Lands are located within the Town's Rural Lands, nor Prime Agricultural Area land use designation. Therefore, the agricultural policies

of the Future Caledon Official Plan will not apply to the proposed *development* following provincial approval of the Future Caledon Official Plan. If the Province modifies the Future Caledon Official Plan so that any portion of the Subject Lands are excluded from the Urban Area, the AIA will be updated through an addendum to evaluate the proposed *development's* consistency with the approved Future Caledon Official Plan.

5. STUDY FINDINGS

5.1 Physiography

The Subject Lands are located within the South Slope Physiographic Region (Chapman and Putnam, 1984). This physiographic region lies between the Oak Ridges Moraine to the north and east, the Peel Plain to the south, and the Niagara Escarpment to the west. The lands gently slope towards Lake Ontario and in this portion of the South Slope, the slope is smoothed, faintly drumlinized, and scored at intervals by valleys tributary to the Humber River system.

The bedrock geology of the South Slope includes the limestones of the Verulam and Lindsay Formations, the grey shales of the Georgian Bay Formations, and the reddish shales of the Queenston Formation. The South Slope contains a variety of soils that have developed upon tills which are sandier in the east of the South Slope and more clayey and steeper sloped in the west. Bondhead Loam and Darlington Loam soils are the more desirable agricultural soils in the area, whereas the Chinguacousy Clay Loam, Oneida Clay Loam and Jeddo Clay Loam soils have drainage conditions and clayey textures that make it harder to work.

5.2 Climate

Climate data is available through Environment Canada's National Climate Data and Information Archive's online database. Climate Normals and Extremes for the Albion Field Centre Station (1981-2010) were obtained from the online database (Appendix C).

Environment Canada's Albion Field Centre Station is located approximately 6.8 km from the Subject Lands. Records show that this area receives an average of 821.5 mm of precipitation annually; 681.0 mm of rainfall and 140.5 cm of snowfall. The daily average temperature in this area ranges from a high of 19.9°C to a low of -7.0°C.

The Ministry of Agriculture and Food Factsheets provide data on crop production and growing seasons across Ontario. The rate of development of crops from planting to maturity is mainly dependent upon temperature. Areas within the Region of Peel begin to experience average temperatures greater than 10°C starting May 7th before reaching temperatures greater than 12.8°C for 3 consecutive days around May 19th. During this time and up until the season's average ending date, September 30th, the area accumulates an average of 3200 crop heat units (CHU).

On average, the last spring frost in the Caledon area occurs on May 3rd. The first fall frost is expected on October 8th. This provides the surrounding area with a growing period of approximately 150-170 days. The climate in the Caledon area provides a good overall growing period that can support a wide range of crops.

5.3 Agricultural Crop Statistics

Agricultural crop statistics are available from OMAFRA and Statistics Canada's Agriculture and Food Statistics Census of Agriculture. The Subject Lands are located within the Census Western Ontario Region, Peel Region. Agricultural crop statistics were obtained from the online database and are included in Appendix D. This data provides a general overview of agriculture and agri-food operations in the area but is unlikely to be inclusive of all operations present at the time of this report.

The County and Township Agricultural Profile for Peel includes data from 2011, 2016, and 2021 census periods. The total number of farms in the Town of Caledon decreased from 345 in 2016 to 308 in 2021, while total cropland increased from 63,239 acres in 2016 to 73,460 acres in 2021.

Field crops grown in the Town of Caledon include winter wheat, oats for grain, barley for grain, mixed grains, corn for grain, corn for silage, hay, soybeans, and potatoes. According to census data, field crop production between 2016-2021 decreased for potatoes, whereas all other major field crop production in the Town of Caledon increased in production. Census data from 2016 shows that there was no production of winter wheat, oats for grain, barley for grain, corn for grain, or corn for silage. This is highly unlikely to be reflective of the true crop production in the Town of Caledon in 2016.

Fruit crops grown in the Town of Caledon include apples, grapes, strawberries, and raspberries. Fruit crop acreage increased from 149 acres in 2016 to 196 acres in 2021. Vegetable crops grown in the Town of Caledon include sweet corn, tomatoes, green peas, and green or wax beans. Vegetable crop acreage increased from 240 acres in 2016 to 479 acres in 2021.

5.4 Specialty Crop Areas

The *PPS* defines a *specialty crop area* as: "areas designated using guidelines developed by the Province, as amended from time to time. In these areas, specialty crops are predominantly grown such as *tender fruits* (peaches, cherries, plums), grapes, other fruit crops, vegetable crops, greenhouse crops, and crops from agriculturally developed organic soil, usually resulting from:

a) soils that have suitability to produce specialty crops, or lands that are subject to special climatic conditions, or a combination of both;

b) farmers skilled in the production of specialty crops; and

c) a long-term investment of capital in areas such as crops, drainage, infrastructure and related facilities and services to produce, store, or process specialty crops."

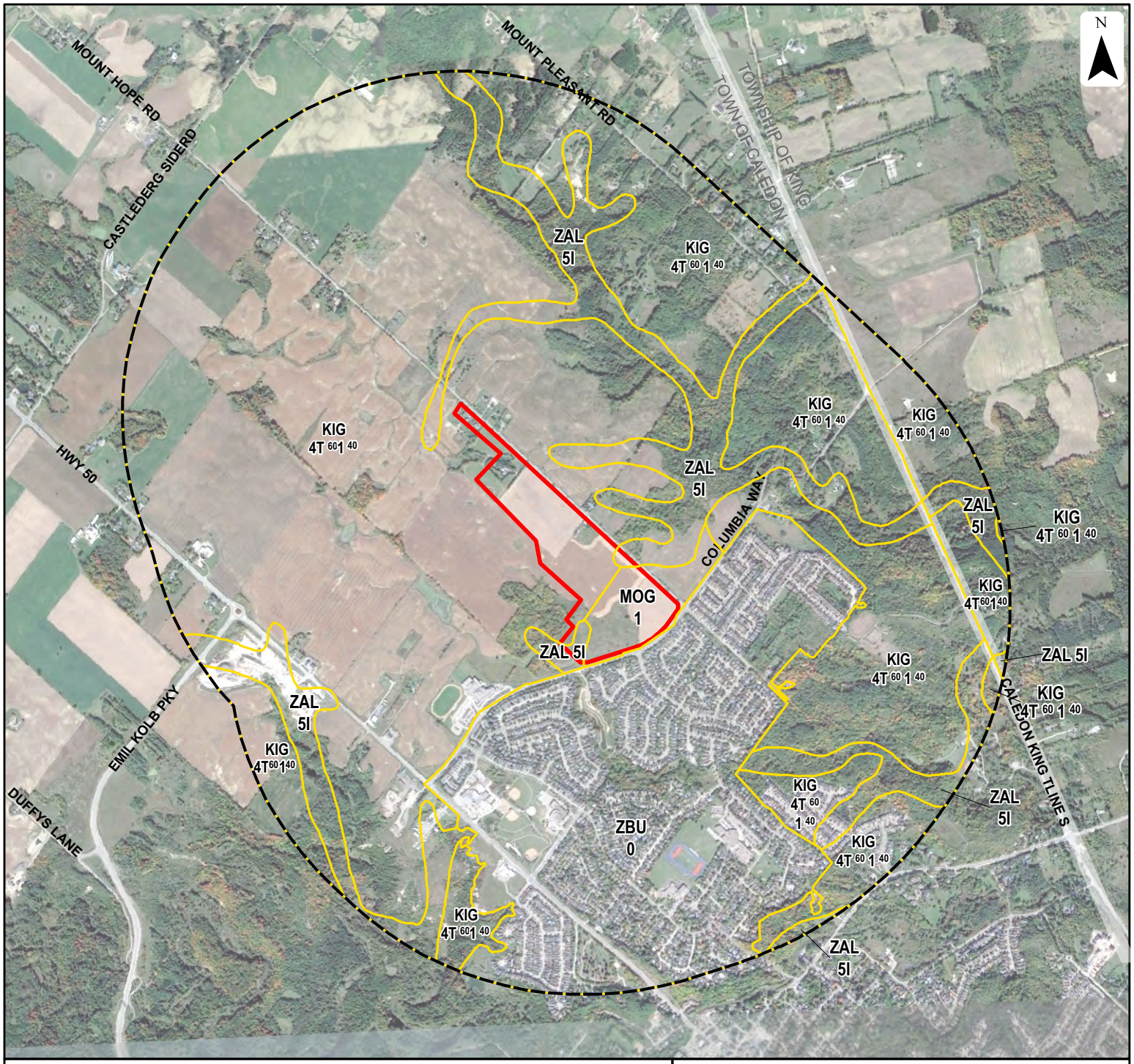
There are two *specialty crop areas* recognized by the Province through the Greenbelt Plan: the Niagara Peninsula Tender Fruit and Grape Area and the Holland Marsh. Neither the Subject Lands, nor any portion of the *Study Area*, are located within either of these *specialty crop areas*. Additionally, the Subject Lands do not exhibit any of the characteristics of a *specialty crop area*.

5.5 Regional Soils

5.5.1 Soil Series

The *Soil Survey of Peel County - No. 18 of the Ontario Soil Survey* (Hoffman, D.W., Richards, N.R., 1953) includes a soil map that shows the distribution of the various soil series in the Region of Peel. The digital Provincial Soil Resource database is compiled and administered by OMAFRA and includes most of the soil surveys completed in Ontario. Much of this information is accessible from the Province's Agricultural Information Atlas. The database was accessed in November 2023.

The *Soil Survey of Peel County* mapping shows that the soils within the Subject Lands are comprised primarily of King Clay Loam soils (61.92%), with smaller amounts of Monoghan Clay Loam soils (33.19%), and Bottom Land soils (4.89%). Regional scale soil mapping is shown in Figure 2.



Legend

- Subject Lands
- Study Area
- Soil and CLI

Soil Series Name → KIG ← Percentage of Area

CLI Class → 1 60 4T 40 ← CLI Subclass

CLI AGRICULTURAL CAPABILITY CLASSES

Class 1 - No significant limitations in use for crops.

Class 4 - Severe limitations that restrict the choice of crops, or require special conservation practices and very careful management, or both.

Class 5 - Very severe limitations that restrict their capability to producing perennial forage crops, and improvement practices are feasible.

Class 0 - Denotes organic soils, which are not assigned a capability class.

SOIL SERIES

KIG - King Clay Loam
MOG - Monoghan Clay Loam
ZAL - Bottom Land
ZBU - Built-Up Area

CLI AGRICULTURAL CAPABILITY SUBCLASSES

I Inundation – periodic flooding by streams or lakes

T Topography – limitations due to slope steepness and length

Figure 2
Soils and CLI

Agricultural Impact Assessment
Mount Hope West Lands

Prepared for: United Holdings Inc.

Prepared by: COLVILLE CONSULTING INC.

0 0.5 KM
1:25,000

DATE: Jan 2025

FILE: C23083

King Clay Loam

The King Clay Loam is the well drained member of the King *catena*. These soils occurs on smooth, moderately sloping topography formed from clayey till deposits, which causes them to exhibit Grey-Brown Podzolic characteristics. These soils have good internal and surficial drainage, and often experience severe erosion.

King Clay Loam soils can accommodate a wide range of crops and are well adapted for the growing of cereal grains, alfalfa, legumes, hay, and *pasture* due to their good internal drainage and nutrient supply. The high susceptibility for erosion may limit the production of crops, however, the use of *forage* crops and manure for erosion control prove effective in reducing erosion and improving crop yields.

Monoghan Clay Loam

The Monoghan Clay Loam is the imperfectly drained member of the King *catena*. These soils occur on smooth, gently sloping topography and developed on calcareous fine textured till, which causes them to exhibit Grey-Brown Podzolic characteristics. These soils have slow internal and surficial drainage. These soils do not suffer greatly from erosion and are well supplied with plant nutrients.

Monoghan Clay Loam soils can produce fairly good yields for most crop types, with crop production primarily limited by inadequate drainage. Applications of manure can be used to effectively maintain organic matter supply, while good tillage practices are required to successfully manage these soils.

Bottom Land

Bottom Land soils are low lying soils which occur along stream courses and are often subject to flooding. These soils are immature and show little horizon differentiation. The *soil profile* usually consists of variable textures and the drainage also often varies but is usually poor.

Bottom Land soils are not good agricultural soils and are typically used for *pasture* or are not farmed In areas where large amounts of Bottom Land soils are mapped, other agricultural crops can be grown, but are dependant on the timing and extent of flooding in the area.

5.5.2 CLI Agricultural Land Classification

The Canada Land Inventory (CLI) is an interpretative system for assessing the effects of climate and soil characteristics on the limitations of land for growing common field crops. The CLI system has seven soil classes that descend in quality from Class 1, which have no significant limitations, to Class 7 soils which have no agricultural capability for common field crops. Class 2 through 7 soils have one or more significant limitations, and each of these are denoted by a capability subclass. There are thirteen subclasses described in CLI Report No. 2 (1971). Eleven of these subclasses have been adapted to Ontario soils. More information regarding the CLI Classification system is provided in Appendix E.

According to the provincial database, the majority of the Subject Lands are mapped as CLI Class 1 lands (57.96%), CLI Class 4 lands (37.15%), and CLI Class 5 lands (4.89%), as shown in Figure 2. CLI Class 1 soils have no or very minor limitations for common field crop production. CLI Class 4T soils have severe limitations for common field crop production due to adverse topography. CLI Class 5I soils have very severe limitations for common field crop production due to periodic flooding by streams or lakes. The composition of soils mapped within the Subject Lands and their associated CLI Class are summarized in Table 1 below.

Table 1. Regional Soil Series for Subject Lands			
Soil Series	**CLI Class**	**Area (Ha)**	**% of Subject Lands**
King Clay Loam	**1**	8.32	24.77
	4T	12.48	37.15
Monoghan Clay Loam	**1**	11.15	33.19
Bottom Land	**5I**	1.64	4.89
Totals		**33.59**	**100.00%**

5.6 Refined Soil Resources

5.6.1 Updated Soil Resources

As described in the Section 3.3 of this report, the soil resources within the Subject Lands were refined through a desktop exercise using GIS software. The purpose of this exercise was to refine the regional scale mapping to a more appropriate scale as per the OMAFRA Guidelines for Detailed Soil Surveys for Agricultural Land Use Planning.

The results of the refined soil resources exercise confirmed the presence of King Clay Loam soils and Monoghan Clay Loam soils. This exercise also identified a small area within the Subject Lands containing Alluvial soils. Figure 3 shows the refined soil and CLI mapping for the Subject Lands.

Approximately 64.51% of the Subject Lands are mapped as King Clay Loam soils on simple B-Class slopes (0.5 – 2.0%), simple and complex C(c)-Class slopes (2.0 – 5.0%), and simple D-Class slopes (5.0 – 9.0%). Approximately 34.85% of the Subject Lands are mapped as Monoghan Clay Loam soils on simple B-Class and C-Class slopes. The remainder of the Subject Lands (0.64%) are mapped as Alluvial soils with variable slopes. Table 2 shows the area and percentage of each soil series on the Subject Lands.

Table 2. Refined Soil Series for Subject Lands		
Soil Series	**Area (Ha)**	**% of Subject Lands**
King Clay Loam	**21.67**	**64.51%**
Slope Class B	11.35	33.79%
Slope Class C	4.21	12.53%
Slope Class c	3.58	10.66%
Slope Class D	2.53	7.53%
Monoghan Clay Loam	**11.71**	**34.86%**
Slope Class B	2.94	8.75%
Slope Class C	8.77	26.11%
Alluvial	**0.21**	**0.63%**
Totals	**33.59**	**100.00%**

Note: Lower case indicates complex slopes (multidirectional and <50 m in length).

Legend

- Subject Lands
- Study Area
- Soil/CLI (REFINED)

Soil Series Name → KIG ← Percentage of Area

CLI Class → 1 60 4T 40 ← CLI Subclass

CLI AGRICULTURAL CAPABILITY CLASSES

Class 2 - Soils in this class have moderate limitations that restrict the range of crops or require moderate conservation practices.

Class 3 - Moderately severe limitations that reduce the choice of crops, or require special conservation practices.

Class 5 - Very severe limitations that restrict their capability to producing perennial forage crops, and improvement practices are feasible.

SOIL SERIES

KIG - King Clay Loam
MOG - Monoghan Clay Loam
ALU - Alluvial

CLI AGRICULTURAL CAPABILITY SUBCLASSES

D	Low Permeability	– undesirable soil structure and/or low permeability
I	Inundation	– periodic flooding by streams or lakes
T	Topography	– limitations due to slope steepness and length

Figure 3
Refined Soils and CLI

Agricultural Impact Assessment
Mount Hope West Lands

Prepared for: United Holdings Inc.

Prepared by: Colville Consulting Inc.

0 200 Meters
1:10,000

DATE: Jan 2025

FILE: C23083

5.6.2 Agricultural Capability

The results of the refined soil resources exercise were used to refine the CLI Capability ratings for the Subject Lands. The agricultural capability for common field crops was interpreted using OMAFRA's *Classifying Prime and Marginal Agricultural Soils and Landscapes: Guidelines for the Application of the Canada Land Inventory in Ontario*.

The results of this exercise confirmed that the Subject Lands are primarily comprised of *prime agricultural lands*, with a small portion of non-prime agricultural lands. The refined CLI capability rating for the Subject Lands are shown in Figure 3 and summarized in Table 3. Approximately 33.38 ha (99.37%) of the Subject Lands are *prime agricultural lands*, with the remaining 0.21 ha (0.63%) of the Subject Lands being non-prime agricultural lands.

Table 3. Regional CLI Capability Ratings for Subject Lands

CLI Rating	Soil Series	Area (Ha)	% of Subject Lands
CLI Class 2D	Monoghan Clay Loam on B-Class Slope	2.94	8.75%
CLI Class 2DT	Monoghan Clay Loam on C-Class Slope	8.77	26.11%
CLI Class 2D	King Clay Loam on B-Class Slope	11.35	33.79%
CLI Class 2DT	King Clay Loam on C-Class Slope	4.21	12.53%
CLI Class 2DT	King Clay Loam on c-Class Slope	3.58	10.66%
CLI Class 3T	King Clay Loam on D-Class Slope	2.53	7.53%
CLI Class 5I	Alluvial on Variable Slope	0.21	0.63%
Total		**33.59**	**100.00%**

5.6.3 Evaluation of Agricultural Productivity

The Hoffman Productivity Indices (HPI) are used to relate the productivity of land to the CLI capability based on expected yields. Assuming the same level of management is applied to different CLI classes, the productivity for each class will differ. Hoffman (1971) determined the average yields produced for common field crops on CLI classes 1 through 4 lands. He determined that CLI Class 2 lands produce yields approximately 20% less than CLI Class 1 lands and therefore has a value of 0.80 relative to a CLI Class 1 soil. The value for a CLI Class 3 soil is 0.64 and for a CLI Class 4 soil the value is 0.49. The values for CLI Classes 5, 6, & 7 were obtained through extrapolation. The HPI was calculated for the Subject Lands to assess the relative productivity of the land for common field crop production.

An HPI rating above 0.9 is considered to be equivalent in productivity to a CLI Class 1 soil. An HPI of between 0.73-0.89 is equivalent in productivity to a CLI Class 2 soil, an HPI in the range of 0.58-0.72 is equivalent in productivity to a CLI Class 3 soil, and so forth.

Table 4 below show the results of the HPI calculations using the CLI classifications determined through the refined soil resources exercise. The HPI was calculated to be 0.79 (rounded up), which is equivalent in productivity to CLI Class 2 soils.

Table 4. Relative Agricultural Productivity for Subject Lands					
CLI Class	**Area (HA)**	**Percentage**	**Points**	**HPI**	**Total Productivity Index Range**
1	0.00	0.00%	1	0.00	0.90 – 1.00
2	30.85	91.85%	0.8	0.7348	**0.73 – 0.89**
3	2.53	7.52%	0.64	0.0481	0.58 - 0.72
4	0.00	0.00%	0.49	0.0000	0.43 - 0.57
5	0.21	0.63%	0.33	0.0021	0.28 - 0.42
6	0.00	0.00%	0.17	0.00	0.10 - 0.27
7, O, & NM	0.00	0.00%	0.02	0.00	0.00 – 0.09
	33.59	**100.00%**		**0.7850**	**CLI Class 2**

5.7 Land Use

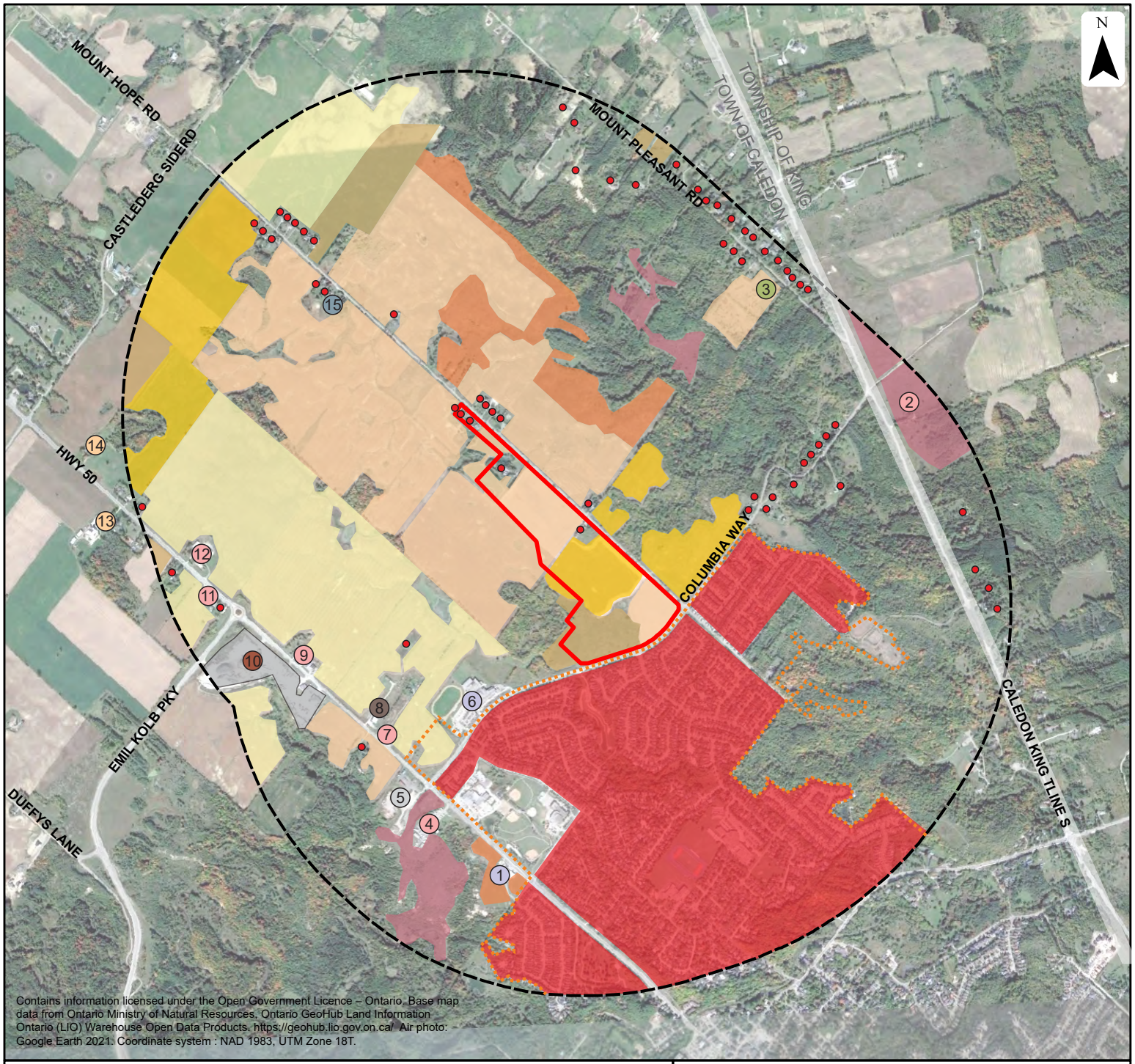
A reconnaissance level land use survey was completed on October 26, 2023. The land use survey identified the number and type of agricultural operations (both active and inactive), *agriculture-related uses*, *on-farm diversified uses*, and the extent and type of *non-agricultural land uses* within the *Study Area*. Inactive farm operations were evaluated to determine whether they should be considered an *empty livestock facility* or as a *remnant* farm. *Remnant* farms have no infrastructure that is suitable for housing *livestock*, whereas the infrastructure for an *empty livestock facility* is still in a condition that could permit the keeping of *livestock* with minimal investment. The crop types observed within the *Study Area* were recorded and mapped.

The purpose of the land use survey is to document the mix of agricultural and *non-agricultural uses* within the Subject Lands and *Study Area*; identify agricultural operations that may be sensitive to the introduction of new land uses; and identify *livestock facilities* to calculate the *MDS* setback requirements. Figure 4 shows the land uses and crop types observed. Photographs from the land use survey can be found in Appendix F. All observed land uses are numbered, and short descriptions of these operations are included in the land use survey notes in Appendix G.

Four *agricultural uses* were identified during the land use survey. The *agricultural uses* include one *cash crop* operation, one *remnant* farm, and two *empty livestock facilities*.

One *agriculture-related use* was identified during the land use survey. The *agriculture-related use* identified was a nursery, John's Nursery Garden. No *on-farm diversified uses* were observed during the land use survey and desktop review.

In addition to the approximately 62 *non-farm residences* observed (excluding residences within the Bolton *settlement area*), ten *non-agricultural uses* were identified within the *Study Area*. These uses include six commercial uses, two institutional uses, one industrial use, and one municipal yard works use. Commercial, industrial, and residential uses located within the Bolton *settlement area* were not included within the land use notes. A large number of commercial and residential uses were observed within the urban area.



Legend

Subject Lands
Study Area
Settlement Area Boundary

Agricultural Uses
- Cash Crop Operation
- Empty Livestock Facility
- Remnant Farm

Agriculture-Related Uses
- Nursery

Non-Agricultural Uses
- Commercial
- Municipal Yard Works
- Institutional
- Industrial
- Non-Farm Residence
- Residential

Crop Pattern
- Winter Wheat
- Corn
- Cover Crop
- Forage/Hay
- Pasture
- Idle
- Cultivated
- Scrubland
- Disturbed

Figure 4
Land Use Mapping

Agricultural Impact Assessment
Mount Hope West Lands

Prepared for: United Holdings Inc.

Prepared by: Colville Consulting Inc.

0 0.5 KM
1:25,000

DATE: Jan 2025

FILE: C23083

5.7.1 Agricultural Uses

The *PPS* definition of *agricultural uses*: "means the growing of crops, including nursery, biomass, and horticultural crops; raising of livestock; raising of other animals for food, fur or fibre, including poultry and fish; aquaculture; apiaries; agro-forestry; maple syrup production; and associated on-farm buildings and structures, including, but not limited to livestock facilities, manure storages, value-retaining facilities, and housing for farm workers, when the size and nature of the operation requires additional employment."

Farm types were noted and identified as either active or inactive farm operations (e.g., *empty livestock facilities*) *livestock operations*, *cash crop* operations, or *hobby farms*.

Subject Lands

No *agricultural uses* were identified within the Subject Lands during the land use survey and desktop review.

Study Area

Within the *Study Area*, four *agricultural uses* were identified. These include one *cash crop* operation (#3), one *remnant* farm (#15), and two *empty livestock facilities* (#13 and #14).

5.7.2 Agriculture-Related Uses

Agriculture-related uses are farm-related commercial and industrial uses. As defined in the *PPS*, these are uses "that are directly related to farm operations in the area, support agriculture, benefit from being in close proximity to farm operations, and provide direct products and/or services to farm operations as a primary activity". These uses may include uses such as:

- retailing of agriculture-related products (e.g., farm supply co-ops, farmers' markets, and retailers of value-added products like wine or cider made from produce grown in the area);
- *livestock* assembly yards;
- farm equipment repair shops;
- industrial operations that process farm commodities from the area such as abattoirs, feed mills, grain dryers, cold/dry storage facilities and fertilizer storage facilities, which service agricultural area;
- distribution facilities;
- food and beverage processors (e.g., wineries and cheese factories); and
- agricultural biomass pelletizers.

One *agriculture-related land use* was identified within the *Study Area*. The *agriculture-related use* identified is a nursery (#8). The nursery is John's Nursery Garden which sells bedding plants, hanging baskets, vegetables, trees, shrubs, and triple mix through the associated garden centre.

5.7.3 On-Farm Diversified Uses

The *PPS* defines *on-farm diversified uses* as "uses that are secondary to the principal agricultural use of the property, and are limited in area. On-farm diversified uses include, but are not limited to, home occupations, home industries, agri-tourism uses, uses that produce value-added agricultural products, and electricity generation facilities and transmission systems, and energy storage systems".

No *on-farm diversified uses* were identified within the *Study Area*.

5.7.4 Non-Agricultural Uses

Non-agricultural land uses include *non-farm residences*, residential clusters, hamlets and *settlement areas*, municipal utilities, commercial and industrial operations, recreational uses, and institutional uses. Approximately 62 *non-farm residences* were observed throughout the *Study Area*, excluding those within the Bolton *settlement area*.

Excluding the *non-farm residences*, ten *non-agricultural uses* were identified within the *Study Area*. These uses include six commercial uses, two institutional uses, one industrial use, and one municipal yard works use.

5.7.5 Land Use Summary

Table 5 below summarizes the types of land uses observed within the Subject Lands and *Study Area*. The lands uses observed do not reflect a vibrant agricultural system.

Table 5. Summary of Observed Land Uses

	Total Number	Active	Empty or Remnant
Agricultural	4	1 – Cash Crop Operation	2 – Empty Livestock Facility 1 – Remnant Farm
Agriculture-Related	1	1 – Nursery	0
On-farm Diversified	0	0	0
	Total Number	**Type**	
Non-Agricultural	72	2 – Institutional 6 – Commercial 1 – Industrial 1 – Municipal Yard Works 62 – Non-Farm Residential	

5.7.6 Cropping Pattern

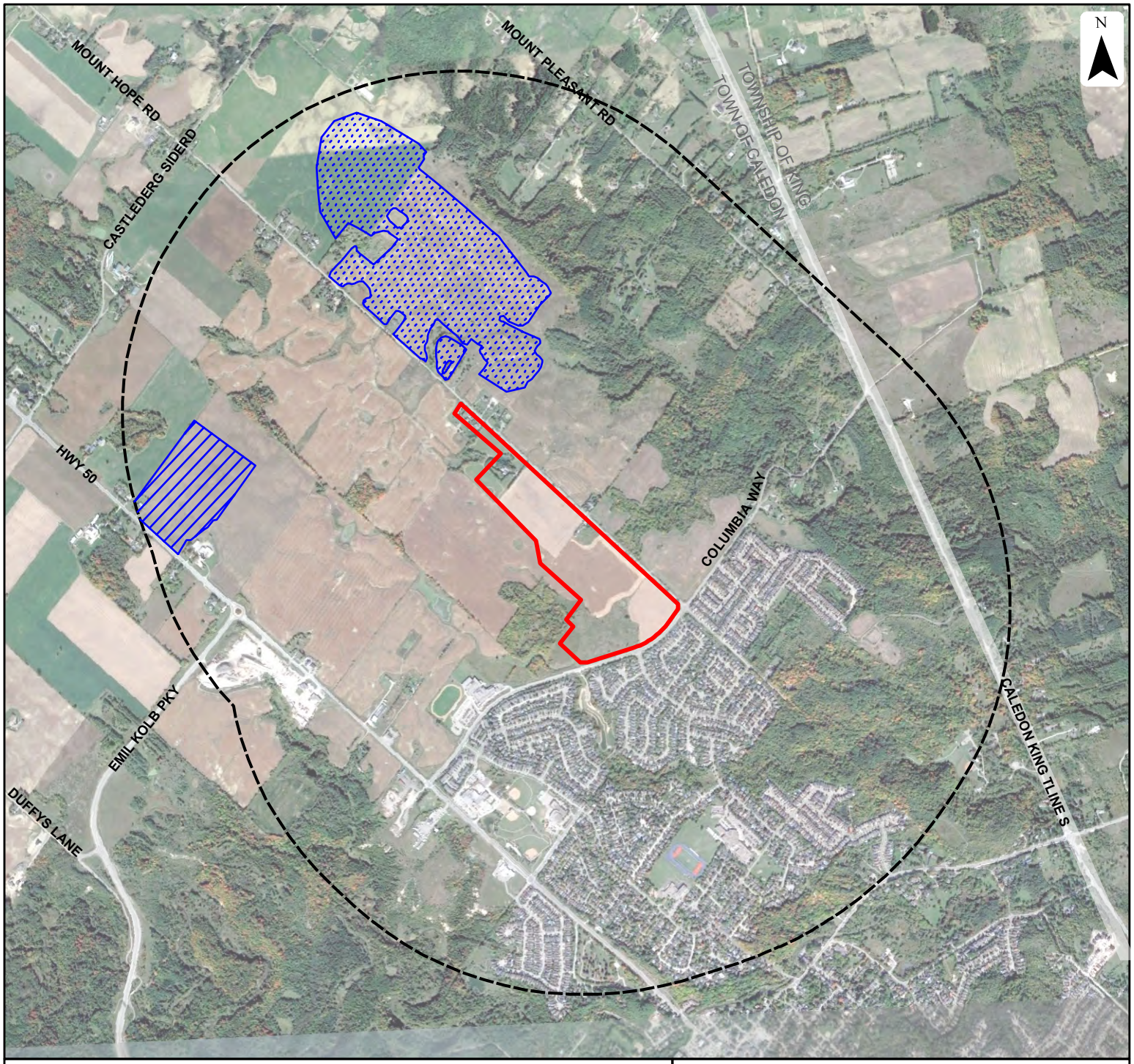
The land use survey completed on October 26, 2023, identified crops based on observations of crop stubble and other identifying features. As shown in Figure 4, the crops grown in the Subject Lands and *Study Area*, outside of the Bolton *settlement area*, are predominantly a mix of corn, winter wheat, hay, and cover crops or *cultivated* lands where land is being used for agricultural crops, but specific crops being grown were not readily apparent. There are also areas of *pasture*, idle lands, scrublands, forested areas, and disturbed lands.

5.8 Land Improvements

OMAFRA's Agricultural Information Atlas (AgMaps) provides artificial drainage mapping for the province. This online tool was accessed to obtain drainage mapping for the Subject Lands and *Study Area*. Figure 5 below shows the drainage improvements within the Subject Lands and *Study Area*.

5.8.1 Drainage Improvements in Subject Lands

According to OMAFRA's online mapping tool, AgMaps, no portion of the Subject Lands contain random tile drainage, systematic tile drainage, nor any constructed drains.



Legend

- Subject Lands
- Study Area

Tile Drainage (MNRF)

- Random
- Systematic

Figure 5
Land Improvements

Agricultural Impact Assessment
Mount Hope West Lands

Prepared for: United Holdings Inc.

Prepared by: COLVILLE CONSULTING INC.

0 0.5 KM
1:25,000

DATE: Jan 2025

FILE: C23083

5.8.2 Drainage Improvements in Study Area

Random tile drainage and a smaller area of systematic tile drainage are located within the *Study Area*. The systematic tile drainage is located in the western portion of the *Study Area,* whereas the random tile drainage is located in the northern portion of the *Study Area*. There is approximately 16.97 ha of systematic tile drainage and 66.7 ha of random tile drainage within the *Study Area*.

According to OMAFRA's online mapping tool, AgMaps, no portion of the *Study Area* contain constructed drains. The installation dates of the random and systematic tile drainage in the *Study Area* were not available through AgMaps.

5.8.3 Other Land Improvements

No other investments in land improvements within the Subject Lands nor *Study Area* were identified using the AgMaps Portal or during the land use survey.

5.9 Fragmentation of Agricultural Lands

Fragmentation of agricultural lands can have a negative impact on the viability of agricultural lands and its long-term preservation for agricultural purposes. Fragmentation of farmlands can diminish the economic viability of the agricultural area by reducing farming efficiency and increasing operating costs for farmers who must manage multiple small, separated parcels. Larger farm parcels can accommodate a wider range of agricultural activities and ensure long term viability of the property. In contrast, smaller farm parcels cannot offer the same flexibility and may not be viable as standalone parcels. Generally, smaller farm parcels cannot sustain a family farm without a secondary source of income (off farm) to maintain the agricultural operation.

Additionally, agricultural areas which have been fragmented often have a higher occurrence *of non-agricultural land uses*, which in turn can result in more frequent occurrences of conflict arising between agricultural and *non-agricultural land uses*. Agricultural areas with lower levels of fragmentation are considered to be more viable economically for *agricultural uses* and generally have fewer sources of *non-agricultural land use* conflicts. In most cases, these areas have a higher priority for protection. High levels of fragmentation in an agricultural area lower the areas agricultural priority.

The *PPS* planning policies recognize the impact of fragmentation on agricultural lands and try to minimize the fragmentation of agricultural lands for *non-agricultural uses*. For example, the *PPS* policies do not permit lot creation in *prime agricultural areas* for residential purposes. New permitted *development* in *prime agricultural areas* should avoid further fragmentation of the agricultural land base whenever possible.

Based on our review of the lot fabric in the *Study Area* using AgMaps and direct observation of residential lots, there is a mix of parcel sizes ranging from single residential (< 1 ha) to large agricultural parcels (>60 ha). A number of the parcels within the agricultural land base are not suitably sized for a variety of *agricultural uses*.

The Subject Lands are immediately adjacent to the existing Bolton *settlement area*, which has been developed for a number of *non-agricultural uses*. Areas in the western and northeastern portion of the *Study Area* have also been included in the 2051 New Urban Area within the Region of Peel Official Plan. The eventual *development* of these lands for *non-agricultural land uses* will lead to further fragmentation of the agricultural

land base in this area. The lands within the *Study Area* have a relatively high level of fragmentation and have a high occurrence of *non-agricultural uses*. The lot fabric in the *Study Area* is shown in Figure 6 below.

5.10 Minimum Distance Separation

5.10.1 Application of MDS

As previously mentioned, the *MDS formulae* only apply to lands outside of approved *settlement areas*. Guideline #36 of the MDS Guidance Document states that "MDS I setbacks are NOT required for proposed land use changes (e.g., consents, rezonings, redesignations, etc.) within approved settlement areas, as it is generally understood that the long-term use of the land is intended to be for non-agricultural purposes."

The Subject Lands are designated 2051 New Urban Area in the provincially approved Region of Peel Official Plan and the adopted Future Caledon Official Plan. As such, the Subject Lands are part of an approved settlement area. Through a phone call with an OMAFRA land use planner on January 9, 2024, it was confirmed that, although the Subject Lands are designated Prime Agricultural Area within the approved Town of Caledon Official Plan, Guideline #36 applies to the Subject Lands due to of their inclusion within the Region of Peel's approved *settlement area*. It is worth noting that the land use planner also stated that under similar circumstances, local municipalities may require the application of the *MDS formulae* if the regional municipality defers the requirement to the local municipality through Official Plan policy. However, the Region of Peel has not deferred this requirement to the local municipalities.

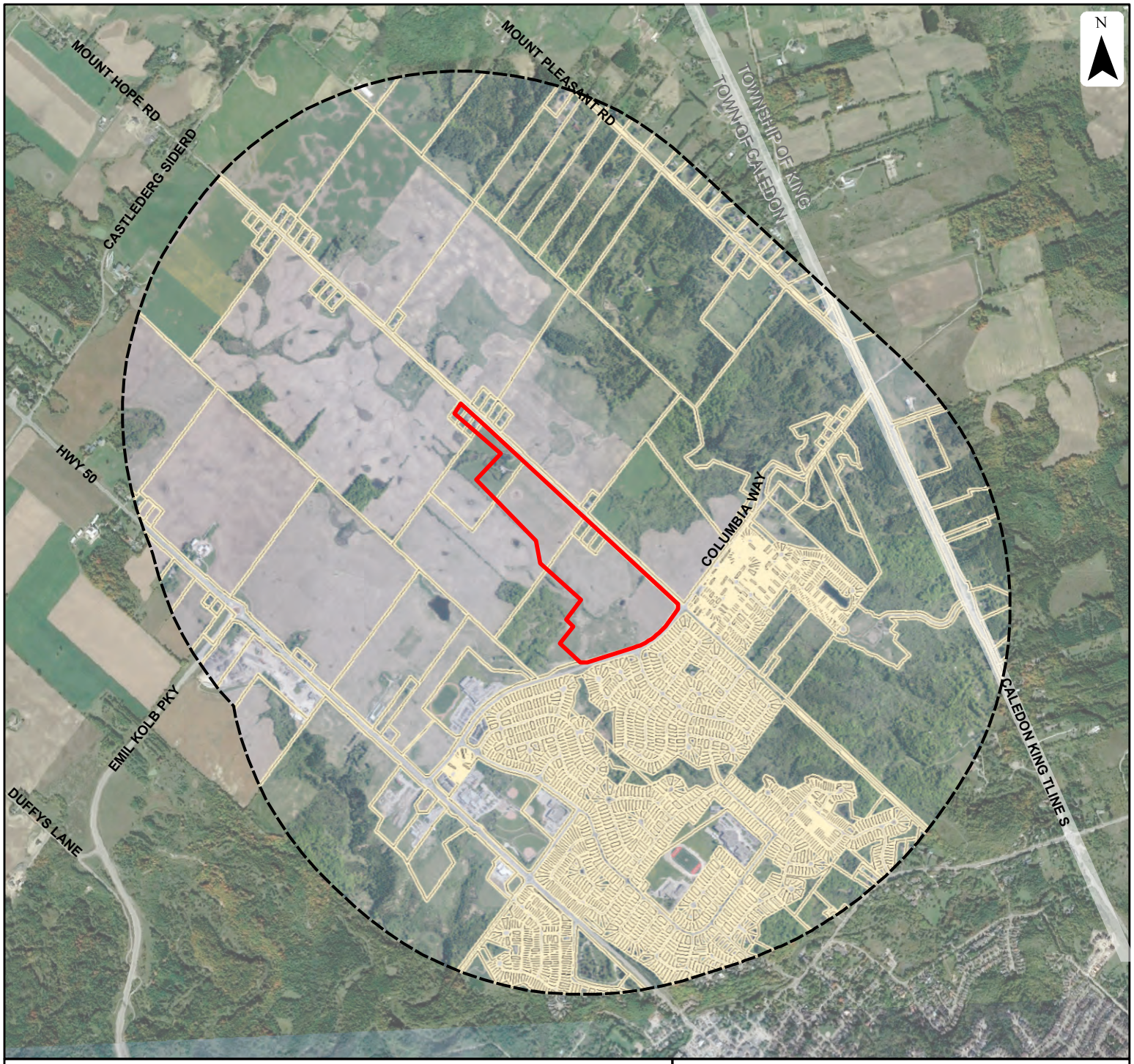
Section 4.2.3.3.1 of the Town of Caledon Official Plan outlines policy for *settlement area* boundary expansion. Section 4.2.3.3.1 states in part that:

> *Expansions to settlements will require an amendment to this Plan and shall be undertaken through a municipal comprehensive review that will address the following:*
>
> *j) Compliance with minimum distance separation formulae;*

The Town of Caledon Official Plan defines the *minimum distance separation formulae* as "Formulae and guidelines developed by the Province, as amended from time to time, to separate uses to reduce incompatibility concerns about odour from livestock facilities." Given the confirmation that Guideline #36 applies to the Subject Lands, and the Town of Caledon clearly states that the Provincial *MDS formulae* and guidelines are to be used, the proposed *development* is not required to comply with *MDS I* setbacks. Therefore, compliance with the *MDS formulae* has been achieved for the proposed *development*.

Although it is not required through policy, *MDS I* setbacks were calculated for all *livestock facilities* capable of housing *livestock* observed within 1,500 m of the Subject Lands. The purpose of this exercise was to identify the potential degree of impact associated with nuisance complaints from odours of surrounding agricultural operations and provide mitigation measures if impacts were anticipated.

The factors used to determine the *MDS I* setback requirements for these facilities include: the type of *livestock*; the maximum capacity of the barn for *livestock*; the type of *manure storage* system; and the type of land use (Type A and Type B). The proposed *development* will contain a mix of *non-agricultural land uses*, which are considered to be Type B (more sensitive) land uses.



Legend

- Subject Lands
- Study Area
- Lot Fragmentation

Figure 6
Lot Fragmentation

Agricultural Impact Assessment
Mount Hope West Lands

Prepared for: United Holdings Inc.

Prepared by: COLVILLE CONSULTING INC.

0 0.5 KM
1:25,000

DATE: Jan 2025

FILE: C23083

The remaining factors required to calculate the *MDS* setbacks were determined through field observations recorded during the land use survey, aerial photographic interpretation, and site-specific information provided by landowners, where possible. When a landowner could not be contacted, self-addressed envelopes and forms requesting information which would enable the calculation of *MDS* setback requirements at *livestock operations* that had the potential to create *MDS* constraints for the Subject Lands were left.

The lot sizes were determined using the AgMaps measuring tool. In some cases, the building capacity was estimated based on the building dimensions, as measured using either the AgMaps measuring tool or the Google Earth® measuring tool.

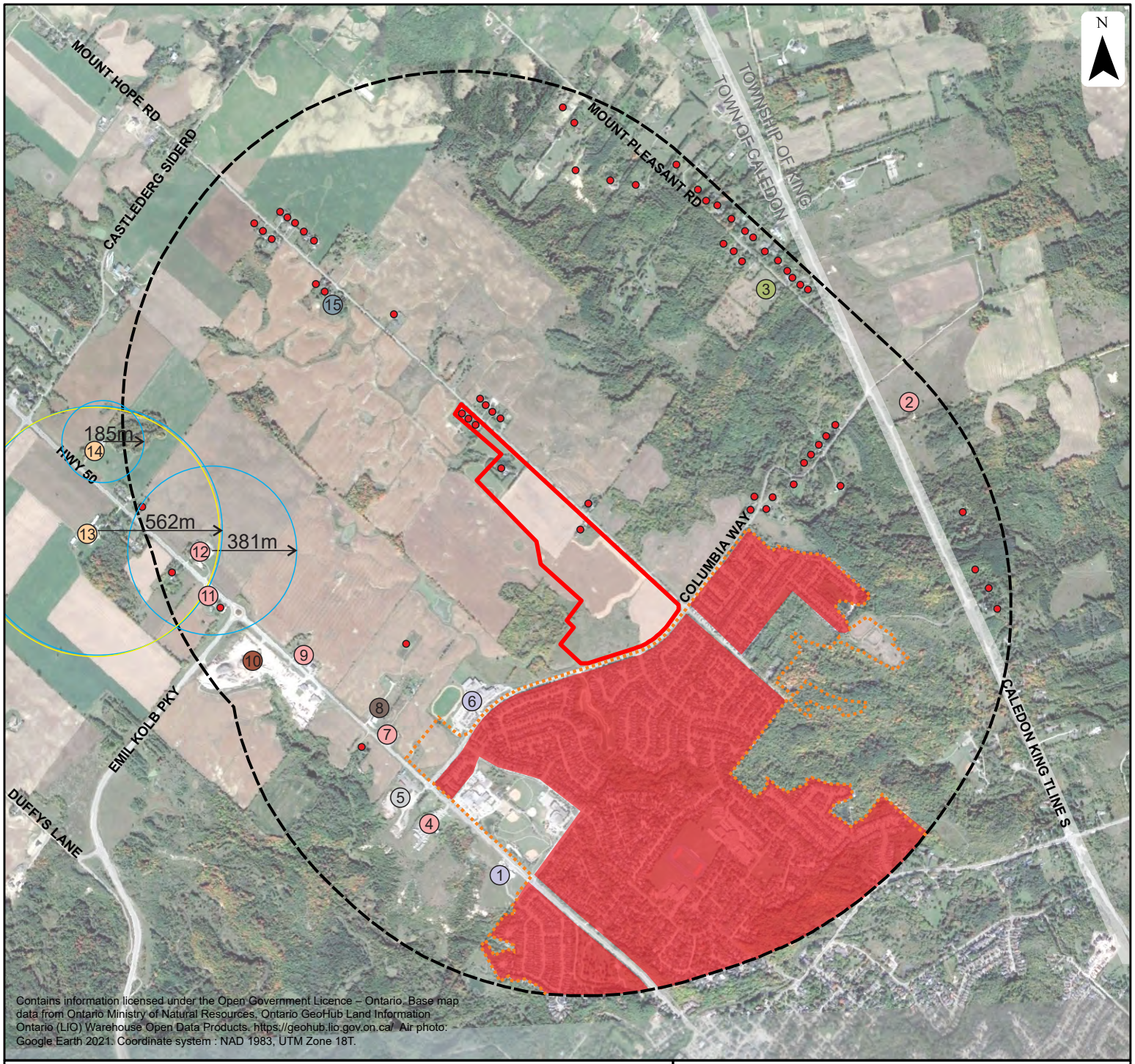
5.10.2 MDS Results

The *MDS I formula* was applied to three *livestock facilities,* which are capable of housing *livestock*, observed within 1,500 m of the Subject Lands. Figure 7 shows the *MDS I* setback distances for the identified *livestock operations*. Figure 7 shows that none of the *MDS* setbacks for the *livestock operations* identified in the *Study Area* extend into the Subject Lands.

Table 6 summarizes the level of encroachment the proposed *development* has on the *livestock operations* and the level of compliance with *MDS* setback achievable. The AgriSuite *MDS* reports for these operations are provided in Appendix H. Although the proposed *development* is not required to comply with the MDS I setback requirements, the calculated *MDS I* setbacks do not encroach into the Subject Lands and specific mitigation measures to minimize conflict are not required.

Table 6. MDS Setback Requirements for Proposed Development

Site Number	MDS I Setback Requirement – Livestock Facility	MDS I Setback Requirement – Manure Storage	Nearest Distance to Subject Lands	Complies with MDS I Setback?
12	381 m	N/A	825 m	Yes
13	562 m	562 m	1,400 m	Yes
14	185 m	N/A	1,340 m	Yes



Legend

Subject Lands
Study Area
Settlement Area Boundary

Agricultural Uses
- Cash Crop Operation
- Empty Livestock Facility
- Remnant Farm

Agriculture-Related Uses
- Nursery

Non-Agricultural Uses
- Commercial
- Municipal Yard Works
- Institutional
- Industrial
- Non-Farm Residence
- Residential

MDS I Setbacks
- Livestock Facility
- Manure Storage

Figure 7
MDS I Mapping

Agricultural Impact Assessment
Mount Hope West Lands

Prepared for: United Holdings Inc.

Prepared by: Colville Consulting Inc.

0 0.5 KM
1:25,000

DATE: Jan 2025

FILE: C23083

5.11 Economic and Community Benefits of Agriculture

Identifying the economic and community benefits associated with agriculture in the *Study Area* is an important consideration and informs the impacts associated with the proposed *development*. The agriculture and agri-food sector is one of the largest primary goods producing sectors and plays a key role in the Town of Caledon and Region of Peel economies. According to Census of Agriculture data, the total number of farms in the Region of Peel decreased from 440 in 2011, to 408 in 2016, to 377 farms in 2021. The Town of Caledon observed a similar trend of decreasing farm numbers, with data showing 365 farms in 2011, 345 farms in 2016, and 308 farms in 2021. These farms employ residents from the Region of Peel and the Town of Caledon, contributing economically to the area and supporting the *agri-food network*.

As of 2021, the agriculture, forestry, fishing and hunting industry employed approximately 1,465 individuals within the Region of Peel, which is a decrease from the 2,010 individuals employed in 2016. The Town of Caledon observed a similar decrease in individuals employed by the agriculture, forestry, fishing and hunting industry, with data showing the industry employed 600 individuals in 2016 and 505 individuals in 2021. Within the Region of Peel, there were approximately 6,993 agri-food businesses in 2021, with 569 of these businesses located within the Town of Caledon. Both the Region of Peel and the Town of Caledon have experienced a slight increase in agri-food businesses between 2016 and 2021.

As of 2021, of the 308 total farms within the Town of Caledon, seven farms were valued under $200,000, three farms were valued between $200,000 and $499,999, 26 farms were valued between $500,000 and $999,999, and 272 farms were valued $1,000,000 and over. Over the past three census periods, the number of farms valued at $1,000,000 and over has increased, with the number of farms valued under $1,000,000 decreasing.

The Subject Lands are located in a fast-developing area in which the lands are being transformed from agriculture to *non-agricultural uses*, in part due to the Region of Peel *settlement area* boundary expansion. While agriculture in this area still provides economic and community benefits, the influence of agriculture is waning in the *Study Area*.

With the implementation of mitigation measures to minimize indirect impacts on surrounding farm operations, it is expected that the proposed *development* will have negligible impact on the *agri-food network* in the area.

6. ASSESSMENT OF AGRICULTURAL PRIORITY

The *PPS* requires that non-agricultural *development* avoid locating in *prime agricultural areas* whenever possible. Where this is not possible or practical, the *PPS* directs *development* to "lower priority agricultural lands". Although, neither the *PPS* nor OMAFRA specifically defines in policy "lower priority agricultural lands", there are a number of considerations used by OMAFRA to determine the 'agricultural priority' of an area. These considerations include the ability of the site to comply with the requirements of *MDS formulae*, current land use, amount of capital investment in agricultural infrastructure, amount of land under active cultivation, existing degree of lot fragmentation to the surrounding agricultural land base, and proximity to incompatible land uses such as urban and rural *settlement areas*.

In the long term, the Subject Lands are destined for non-agricultural uses as a result of the Region's decision to include these lands within the settlement area boundary, and the Future Caledon Official Plan's conformance with the Regional Official Plan. However, the Subject Lands are currently located within the Town of Caledon's *prime agricultural area* through the approved Town of Caledon Official Plan. Therefore, an assessment of the agricultural priority of the Subject Lands is required to be consistent with OMAFRA's draft Agricultural Impact Assessment Guidance Document. This analysis involves an assessment of whether the lands are considered to be part of a *specialty crop area*, the soil capability relative to other lands within the *Study Area*, the level of investment in agricultural infrastructure and land improvements, the parcel size, presence of existing *non-agricultural land uses*, ability to minimize potential conflict (e.g., meeting the *MDS I* setback requirements), and the zoning of the parcels.

We have concluded that the Subject Lands are lower priority agricultural lands for the following reasons:

1. The main reason we consider these lands to be of lower priority agricultural lands is that the long-term future of agriculture in the area surrounding the Mount Hope West Lands is in question due to the inclusion of these lands within the 2051 New Urban Area within the Urban System and mapped as Designated Greenfields Area in the Region of Peel Official Plan. This will eventually result in an increase in non-agricultural *development* in the future and the removal of these lands from the Town of Caledon's Prime Agricultural Area designation following provincial approval of the Future Caledon Official Plan, which conforms to the Region of Peel Official Plan;
2. The Subject Lands are not located within a *specialty crop area* and no specialty crops such as vegetable or fruit crops are grown in the vicinity;
3. There is not a significant amount of investment in agricultural infrastructure and land improvements;
4. They are located in a highly fragmented agricultural area in which there is a mix of agricultural and *non-agricultural land uses*. The presence and prevalence of the *non-agricultural land uses* increases the potential for conflict arising between agricultural and *non-agricultural land uses*, which in turn reduces the agricultural priority of the area;
5. The Subject Lands are located immediately adjacent to the existing Bolton *settlement area* boundary. The close proximity and high concentration of *non-agricultural land uses* significantly increases the

potential for conflicts with agriculture and make these lands less desirable to farm than other lands further removed from these non-agricultural influences;

6. High traffic volumes along Highway 50, Columbia Way, and Caledon King Townline South make moving farm machinery difficult and dangerous at times. Traffic volumes are expected to increase as *development* within the *Study Area* continues;
7. *MDS I* setbacks can be met for the proposed *development* on the Subject Lands, although the proposed *development* is not required to comply with the *MDS I* setbacks; and
8. The close proximity of the existing Bolton *settlement area* boundary and *non-agricultural land uses* creates potential *MDS II* setback constraints that would limit the opportunity for new or expanding *livestock operations* within the Subject Lands.

7. ASSESSMENT OF ALTERNATIVE LOCATIONS

The evaluation of alternative locations as part of an AIA needs to demonstrate that higher quality agricultural land was avoided by selecting lower priority lands when *prime agricultural areas* cannot be avoided.

Section 2.3.2 of the *PPS* states that "In identifying a new settlement area or allowing a settlement area boundary expansion, planning authorities shall consider the following:

a) The need to designate and plan for additional land to accommodate an appropriate range and mix of land uses;
b) If there is sufficient capacity in existing or planned infrastructure and public service facilities;
c) Whether the applicable lands comprise specialty crop areas;
d) The evaluation of alternative locations which avoid prime agricultural areas and, where avoidance is not possible, consider reasonable alternatives on lower priority agricultural lands in prime agricultural areas;
e) Whether the new or expanded settlement area complies with the minimum distance separation formulae;
f) Whether impacts on the *agricultural system* are avoided, or where avoidance is not possible, minimized and mitigated to the extent feasible as determined through an agricultural impact assessment or equivalent analysis, based on provincial guidance; and
g) The new or expanded settlement areas provides for the phased progression of urban development."

As stated previously, the Subject Lands are no longer provincially recognized as being part of a *prime agricultural area* following provincial approval of the Region of Peel Official Plan in November 2022. Therefore, an assessment of alternative locations for *settlement area* boundary expansion is not required for the proposed *development*.

8. ASSESSMENT OF IMPACTS TO AGRICULTURE

Farm operations can be adversely impacted by new non-agricultural *development* on adjacent lands. Non-agricultural *development* adjacent to agricultural lands can cause disruptions to existing farm practices as a result of construction activity, an increase in non-farm traffic, incidence of trespass and vandalism, and increased levels of noise, dust, and lighting. Farmers may also experience an increase in nuisance complaints from residents and/or patrons of non-agricultural facilities. These complaints are often related to issues such as odour, light, dust, and noise generated through *normal farm practices*.

The proposed *settlement area* boundary expansion (SABE) will have both direct and indirect impacts. It is unlikely that the proposed SABE will have significant, long-term negative effects on the surrounding agricultural lands and community.

8.1 Direct Impacts

8.1.1 Prime Agricultural Lands

The Subject Lands are approximately 33.59 ha (83.00 acres) in size, of which approximately 33.38 ha are *prime agricultural lands*. *Development* of the Subject Lands will lead to the loss of approximately 33.38 ha of *prime agricultural lands*. To mitigate this loss in the short-term, the lands should be kept in agricultural production until the land is needed for *development*.

8.1.2 Agricultural Infrastructure

There are no agricultural operations within the Subject Land and no agricultural infrastructure is present. The *development* of the Subject Lands will have no impacts associated with the loss of agricultural infrastructure.

8.1.3 Agricultural Land Improvements

The Subject Lands do not contain any systematic tile drainage nor random tile drainage. There are also no constructed drains located within the Subject Lands. *Development* of the Subject Lands will not result in any loss of agricultural land improvements.

8.1.4 Loss of Crop Land

The Subject Lands are primarily *cultivated* for the production of common field crops, but also contain small portions of forested area. Of the Subject Lands' 33.59 ha, approximately 29.83 ha of land are *cultivated*. The inclusion of the Subject Lands into the *settlement area* boundary will result in the eventual loss of these cultivatable lands. The loss of approximately 29.83 ha of cultivatable land is expected to have a negligible impact on the *Agricultural System* in the area.

8.2 Indirect Impacts

Potential impacts to adjacent farm operations and farm practices are considered to be indirect impacts. These would include changes to the surface drainage that could impact adjacent lands, disruption to farm traffic and access to adjacent agricultural fields, instances of trespass and vandalism, and conflicts arising from farm odour and other nuisance complaints often received by farmers in close proximity to *non-agricultural uses*.

8.2.1 Disruption to Surficial Drainage

The *development* of the Subject Lands has the potential to cause changes in surface runoff, which can have a potential negative impact on adjacent agricultural lands. It is our understanding that a Grading Plan and Stormwater Management Plan are being developed as part of the proposed *development*. Implementation of the recommendations provided in these studies will minimize or eliminate the potential impacts, which are expected to be negligible.

8.2.2 Disruption to Farm Operations

All active agricultural operations in the *Study Area* are well removed from the Subject Lands. These farms are unlikely to experience any form of disruption to their operations. *Development* of the Subject Lands and subsequent removal of farmland may have an impact on the flexibility on some of the surrounding farm operations if they relied on the Subject Lands as an additional source of farmland to supplement their home operation. However, the adjacent lands will not be directly affected, and current farm operations will still be able to cultivate common field crops and other agricultural products without limitation.

New non-agricultural *development* may have an impact on the existing farm wells, irrigation ponds, and ponds or other waterbodies used to provide *livestock* with sources of water in the surrounding area. It is our understanding that a Hydrogeological Study is being prepared to facilitate the proposed *development*. It is anticipated that the Hydrogeological Study will provide recommendations to mitigate impacts if impacts to these water sources are anticipated.

Noise, dust, and light can have a negative impact on some farm operations. Construction may temporarily generate greater levels of noise, dust, and lighting. No sensitive farm operations were identified that would be impacted by noise, dust, and lighting. However, it is recommended that these elements be controlled and in compliance with Ministry of Environment, Conservation and Parks (MECP) guidelines. No negative indirect impacts are anticipated from construction activity.

8.2.3 Trespass and Vandalism

Some farm operations within the *Study Area* may already have to deal with the potential for trespass and vandalism due to the close proximity of the Bolton *settlement area* and the abundance of *non-agricultural uses* in the surrounding area. People walking their pets in farmer's fields, crossing and damaging fences, and rutting fields with dirt bikes and all-terrain vehicles are all examples of trespass and vandalism that may occur. As a result of the potential increase in urban population and construction activities, there is also a chance that debris (litter) can end up in farmer's fields. Establishing temporary buffers, fencing, and other short-term edge planning techniques should be considered to minimize impacts.

The proposed *development* should consider the use of permanent edge-planning techniques along the boundary of the Greenbelt Plan area. Edge planning techniques are discussed in further detail in Section 8.3 of this report.

8.2.4 Minimum Distance Separation

The *MDS I* setback requirements have been calculated for all *livestock facilities* capable of housing *livestock* in the *Study Area*. Although MDS I formula is not applicable, the calculated setbacks do not encroach into the Subject Lands. No specific mitigation measures are required to address the MDS and potential for

conflicts related to odours generated from surrounding livestock operations The proposed *settlement area* boundary expansion will comply with the *MDS formulae*.

8.2.5 Transportation Impacts

The Region of Peel and the Town of Caledon's expansion of the urban area will have a significant influence on the agricultural character of the area, and it is expected that traffic volumes will increase accordingly. Currently, there is a substantial amount of traffic along Highway 50, Columbia Way, and Caledon King Townline South, and it is likely that the *development* of the Subject Lands will introduce more traffic to these roads over time. Given the close proximity of the Bolton *settlement area* and the existing *non-agricultural uses* within the *Study Area*, it is likely that the agricultural operations in the *Study Area* have already become accustomed to non-farm traffic and modified their practices accordingly. It is unlikely that increased traffic levels from the proposed *development* of the Subject Lands will significantly impact farm operations. Increased traffic levels will have no long-term impact on these farm operations.

A Traffic Impact Study is being prepared for the proposed *development*. To ensure transportation impacts are minimized, recommendations outlined in the Traffic Impact Study should be adhered to if potential impacts are identified.

8.2.6 Economic and Community Impacts

Local and regional economies and agricultural communities can be adversely impacted by the introduction of new *development* on agricultural lands as a result of the loss of farmland, fragmentation, removal of agricultural investments, commodities, services, and impacts to other farming operations.

While agriculture in the Town of Caledon provides economic and community benefits, the influence of agriculture is waning in the *Study Area*. The agricultural inputs to the local agricultural economy and community generated by agricultural activity on the Subject Lands are negligible and will not have a negative impact the Town of Caledon's agri-food network. As previously noted, there are no active farm operations and agricultural investments within the Subject Lands' boundary.

The proposed *development* is anticipated to be beneficial to the local and regional economies through the increase in population and job creation. The loss of input to the agricultural economy is likely to be offset by the additional inputs to the economies associated with the proposed *development*. With the anticipated increase in population, it is likely that demand for local agricultural products will also increase. It is our understanding that a Fiscal Impact Analysis is being completed in support of the proposed development of the Subject Lands. It is anticipated that this analysis will show that the economic benefits of the development will outweigh the loss of inputs to the agricultural economy.

8.3 Implementation of Edge Planning Techniques

The agricultural/urban interface (AUI) is typically the area where farm operations are negatively impacted the most. When *settlement area* boundary expansion is being proposed, some consideration should be given to minimizing the length of the AUI. The proposed *development* of the Subject Lands does not substantially create a new agricultural/urban interface because the majority of the boundary is already formed by existing urban areas or roadways. Edge planning techniques should be considered along the boundary of the Greenbelt Plan area.

The *Guide to Edge Planning: Promoting Compatibility Along Agriculture-Urban Edges* (2015) developed by the British Columbia Ministry of Agriculture and Lands provides a basis for achieving compatibility where agricultural and urban uses interface. *Edge Planning: Strategies for Rural and Urban Interface* (2015) developed by MHBC for the Peel Agricultural Advisory Working Group provides a review of case study examples, methods and recommendation for addressing the mitigation of conflict where *settlement areas* and *prime agricultural areas* interface. These guides recognize and address the potential negative impacts that agricultural and *non-agricultural uses* can have on one another and presents options to prevent such impacts. Edge planning techniques to reduce potential impacts on farmers and non-farmers are discussed below.

8.3.1 Subdivision design: density, road, and lot patterns

The proposed *development* layout should be designed to maximize, to the extent possible, a setback distance from the *non-agricultural uses* and farm operations. Creating a vegetated buffer between farming operations and the *non-agricultural uses* will further enhance the effectiveness of the setback. In addition to this, the consideration of lot dimensions and density, along with road and service design can help reduce impacts to adjacent farming activities and help to reduce impacts to urban land uses. Overall, the design of the proposed *development* should be directing vehicular and pedestrian traffic away from the agricultural-urban interface (AUI) as much as possible.

8.3.2 Building design and layout

Building setbacks from the AUI can help create separation between agricultural and urban land uses. The urban-side of the AUI should consider a setback distance, rear-yard for housing, and green spaces to provide physical separation from the farmlands. Setbacks could include space for a wide, vegetated buffer. There is a range of recommended building setback distances from the AUI depending on the type of land use. The recommended setback distance from the AUI is 15 metres for commercial or industrial land uses, 30 metres for residential land uses, and 90 metres for institutional land uses. Based on the Development Concept Plan received, it is unlikely that these setback distances will require modifications to the existing plan.

8.3.3 Open space and landscape design

Any open space and landscape design should retain existing tree cover (where possible) in natural state in designated buffer areas. When selecting plant species for open space areas and landscape design, species which will not negatively affect adjacent farmland and provide greater benefit to residents should be given priority (i.e., use native, non-invasive species, low maintenance/drought tolerant plants, tree/shrub species that will filter dust and spray drift from agricultural area (e.g., conifers), tree/shrub species that will not carry insects/disease, etc.).

8.3.4 Urban-side buffer design

As part of the building setback, the urban-side buffer design should include a continuous vegetative buffer along the urban-side of the AUI within the building setback. Buffers can provide a visual screen of farmlands and activities, provide a deterrent to trespass onto farms, as well as capture dust, spray drift, and litter. A buffer design with a total minimum separation distance of 30 metres (including vegetative buffer) between housing and the AUI is recommended and found to be effective in reducing nuisance complaints.

The *Guide to Edge Planning: Promoting Compatibility Along Agriculture-Urban Edges* recommends a minimum vegetative buffer width of 15 metres for residential or institutional land uses, and 8 metres for commercial or industrial land uses. Crown density of the buffer should be 50-75% to provide optimal screening and air circulation. Furthermore, the vegetative buffer should include both deciduous and coniferous plantings to ensure four-season screening is provided. If there is excess soil generated as a result of *development*, the construction of topsoil berms can also be considered to provide some visual screening and potentially increase the height of the vegetative screen.

The height of the vegetative buffer should exceed 6 metres at plant maturity to create an effective vegetative screen and capture more dust and spray drift between agricultural and urban land uses. A good vegetative buffer will also reduce the intensity of winds, which will minimize the extent of obnoxious odours originating from *livestock operations*. It can also minimize sound and lighting generated by farm operations.

8.3.5 Trail System

The creation of a trail system through the Subject Lands may provide opportunities to improve vegetated buffers, separating agricultural areas from urban land uses. If a trail system is created, it should be situated along the urban edge of the vegetative buffer and must not reduce the effectiveness of the vegetative buffer. Where possible, the trail width should be limited to a maximum of one-third of the total landscape buffer width. Special attention should be given to trail areas to prevent trespass onto agricultural lands.

8.4 Summary of Impacts

The potential direct and indirect impacts identified are summarized in Table 7 along with the potential degree of impact, mitigation measures to avoid or minimize the potential impact and the resulting anticipated impact.

Table 7. Summary of Impacts

Potential Impact	Potential Degree of Impact	Mitigation Measure	Anticipated Net Impact
Direct Impacts			
Loss of prime agricultural land	Moderate	• None	Eventual loss of 33.38 ha of prime agricultural lands
Loss of agricultural infrastructure	Low	• None	No Impact
Loss of agricultural land improvements	Low	• None	No Impact
Loss of cropland	Low	• Continue farming lands until needed for development	Eventual loss of approximately 29.83 ha of cultivatable land
Indirect Impacts			
Surficial Drainage	Low	• Implement recommendations of Grading Plan and Stormwater Management Plan if impact identified.	No impact anticipated
Disruption to Farm Operations	Low	• Ensure that access to farm operations and farm fields is maintained at all times throughout construction.	No impact anticipated
Non-farm traffic	Low	• Implement recommendations of Traffic Impact Study if impact identified.	No significant impact anticipated
Trespass, Vandalism, and Stray Pets	Low	• Consider the use of edge planning techniques along the boundary of the Greenbelt Plan area.	No significant impact anticipated
Noise, Dust & Light	Low	• Adhere to Ministry of the Environment and Climate Change (MOECC) guidelines	No Impact
Conflict with MDS formula	Low	• None required. Complies with MDS Formulae	No Impact
Economic	Low	• The Region, Town and land developers promote local farm livestock and produce	No significant negative impact
Wells, Irrigation, water bodies	Low	• Implement recommendations of Hydrogeological study if impact identified.	No impact anticipated

9. CONSISTENCY WITH AGRICULTURAL POLICIES

9.1 Provincial Planning Statement

The updated Region of Peel Official Plan shows the Subject Lands within the 2051 New Urban Area, within the Urban System. The Provincial approval of the Region of Peel Official Plan in November of 2022 resulted in the Subject Lands being removed from the provincially recognized *prime agricultural area*. Therefore, the agricultural policies regarding settlement area boundary expansion in the *PPS* are no longer applicable to the Subject Lands.

The proposed development will comply with the *MDS formulae* and recommendations have been made to mitigate the potential impacts of the proposed *development* on the Agricultural System. The Subject Lands are not part of a specialty crop area, and they are no longer located in a provincially recognized *prime agricultural area*. The Subject Lands are lower priority agricultural lands and represent a reasonable location for the proposed *development*. For these reasons, the proposed *development* does not conflict with the agricultural policies of the *PPS*.

9.2 Region of Peel Official Plan

The Region of Peel Official Plan recognizes the Rural System, which includes lands designated as Prime Agricultural Area and Rural Lands. The Subject Lands are not located within the Rural System of the Region of Peel. The updated Regional Official Plan shows the Subject Lands within the 2051 New Urban Area in the Urban System and designates the Subject Lands as Designated Greenfields Area. As such, adherence to the agricultural policies of the Region of Peel Official Plan is not required.

9.3 Town of Caledon Official Plan

Section 4.2.3.3.1 of the Town of Caledon Official Plan outlines the requirements for *settlement area* boundary expansion and states that "Expansions to settlements will require an amendment to this Plan and shall be undertaken through a municipal comprehensive review". Section 4.2.3.3.1 states in part that the municipal comprehensive review "will address the following:

h) An examination of reasonable alternative locations which avoid Prime Agricultural Areas, and reasonable alternative locations on lands with lower priority in the Prime Agricultural Area;
j) Compliance with minimum distance separation formulae;
o) Mitigation of impacts of settlement area expansions on agricultural operations which are adjacent to or close to the settlement area to the greatest extent feasible;".

Section 5.1.1.17.1 of the Town of Caledon Official Plan states "Proposals in the Prime Agricultural Area that have the potential to negatively impact agricultural uses will require an Agricultural Impact Assessment".

This AIA fulfills the requirement of completing an Agricultural Impact Assessment for non-agricultural *development* in the Town of Caledon's Prime Agricultural Area. *Development* of the Subject Lands will avoid the Region's *prime agricultural areas* and utilize lower priority agricultural lands. The proposed *development* will comply with the *MDS formulae*, and mitigation measures have been provided to minimize impacts on existing agricultural resources. Therefore, the proposed *development* is consistent with the agricultural policies of the Town of Caledon Official Plan.

The adopted Future Caledon Official Plan indicates that the Subject Lands will be included in the Town's settlement area boundary expansion following regional approval. Following approval of the Future Caledon Official Plan, the proposed development will no longer be required to be consistent with the agricultural policies of the Town of Caledon Official Plan.

9.4 Future Caledon Official Plan

Schedule B4 of the adopted Future Caledon Official Plan indicates that the Subject Lands will be designated New Community Area within the Town's Urban Area. Therefore, the agricultural policies of the Future Caledon Official Plan are not applicable to the proposed *development*, pending provincial approval of the Future Caledon Official Plan.

10. CONCLUSION

This AIA has identified and described the agricultural resources and farm operations within the Subject Lands and *Study Area*. The potential impacts associated with the proposed *development* have been assessed and we have determined the following:

1. The Subject Lands are not located in a provincially recognized *prime agricultural area* and are not part of a *specialty crop area*;
2. The approved Town of Caledon Official Plan considers the Subject Lands to be part of their *prime agricultural area* through its Prime Agricultural Area land use designation. However, it is likely to be removed from the *prime agricultural area* following provincial approval of the Future Caledon Official Plan. Therefore, the proposed *settlement area* boundary expansion will ultimately comply with the local official plan;
3. Potential impacts associated with the *development* of the Subject Lands are primarily limited to the loss of *prime agricultural land* and cultivatable land. Recommendations have been provided that will ensure potential impacts will be avoided or mitigated to the extent possible. The net indirect impacts will be negligible with the implementation of the recommended mitigation measures;
4. The proposed *development* will comply with the *MDS I formula*;
5. The majority of lands outside of the Bolton *settlement area* boundary are considered to be part of a *prime agricultural area*. The Subject Lands are located within the Region of Peel's 2051 New Urban Area and are not part of the agricultural land base. The adopted Future Caledon Official Plan also indicates that the Subject Lands will be included within the Town's settlement area boundary expansion. Therefore, the Subject Lands are lower priority lands and are a reasonable location for *settlement area* expansion compared to other lands within the Region's *prime agricultural area*; and
6. The proposed *development* will comply with all relevant provincial and regional agricultural policies. It is anticipated that the Subject Lands will be brought into the Town of Caledon *settlement area* and will comply with the local agricultural policies at such time.

Respectfully submitted by:

Sean Colville, B.Sc., P.Ag.
Colville Consulting Inc.

John Liotta, B.Sc.Env, A.Ag.(P)
Colville Consulting Inc.

11. GLOSSARY OF TERMS

Agricultural uses:* - the growing of crops, including nursery, biomass, and horticultural crops; raising of *livestock*; raising of other animals for food, fur or fibre, including poultry and fish; aquaculture; apiaries; agro-forestry; maple syrup production; and associated on-farm buildings and structures, including, but not limited to livestock facilities, manure storages, value-retaining facilities, and housing for farm workers, when the size and nature of the operation requires additional employment.

Agriculture-related uses:* - those farm-related commercial and farm-related industrial uses that are directly related to farm operations in the area, support agriculture, benefit from being in close proximity to farm operations, and provide direct products and/or services to farm operations as a primary activity.

Agricultural system: - means a system comprised of a group of inter-connected elements that collectively create a viable, thriving agri-food sector. It has two components:

- An agricultural land base comprised of *prime agricultural areas*, including *specialty crop* areas. It may also include *rural lands* that help to create a continuous productive land base for agriculture.
- An *agri-food network* which includes agricultural operations, *infrastructure*, services, and assets important to the viability of the agri-food sector.

Agri-food network:* - a network within the *agricultural system* that includes elements important to the viability of the agri-food sector such as regional *infrastructure* and transportation networks; agricultural operations including on-farm buildings and primary processing; infrastructure; agricultural services, farm markets, and distributors; and vibrant, agriculture-supportive communities.

Agri-tourism uses:* - means those farm-related tourism uses, including limited accommodation such as a bed and breakfast, that promote the enjoyment, education or activities related to the farm operation.

Anaerobic digester:* - A permanent structure designed for the decomposition of organic matter by bacteria in an oxygen-limiting environment.

Cash crop: - means a crop being produced for income purposes and not to supplement a livestock operation by contributing to feed requirements.

Catena: - the group of soils that have developed on the same parent material but as a result of being located on a different position in the landform the group differs by drainage class (i.e., well drained, imperfectly drained, and poorly drained).

Cultivated: - means lands that have recently been under active agricultural production, however, depending on the season or growth stage of the crop during the land use survey or through aerial photographic interpretation the crop type could not be determined.

Development: - means the creation of a new lot, a change in land use, or the construction of buildings and structures, requiring approval under the Planning Act; but does not include activities that create or maintain infrastructure authorized under an environmental assessment process; or works subject to the Drainage Act.

Dwelling:* - Any permanent building that is used, or intended to be used, continuously or seasonally, as a domicile by one or more persons and usually containing cooking, eating, living, sleeping, and sanitary facilities.

Edge planning techniques: - a set of best management practices to improve land use compatibility where agricultural and non-agricultural uses interface.

Empty livestock facility/operation: - A livestock barn that does not currently house any livestock, but that housed livestock in the past and continues to be structurally sound and reasonably capable of housing livestock.

Forage/Pasture: - means a crop that consists of either pastureland, including rough grazing, or hay crops including silage and haylage.

Former livestock facility:* - means an empty livestock facility that no longer contains manure or livestock. The buildings are generally in fair to good condition and the potential for housing livestock in the building remains. The MDS formula is applied to these facilities.

Hobby farm: - A residential dwelling, with or without accessory buildings, which may include some crop production for personal consumption or limited sale; and/or small numbers of livestock raised for personal consumption, pleasure, or limited sale. A hobby farm normally will generate little or no income and as such may not have a Farm Business Registration Number.

Idle agricultural lands: - means lands that have not been used for agricultural production for at least five years (estimated).

Inclusion: - a small soil polygon that occurs within a larger soil polygon and which is comprised of a different soil type or is located on a different slope class, however it is too small to map as a single unit given the scale of map.

Livestock:* - includes dairy, beef, swine, poultry, horses, goats, sheep, ratites, fur-bearing animals, deer & elk, game animals, birds, and other animals.

Livestock facility:* - means one or more barns or permanent structures with livestock-occupied portions, intended for keeping or housing livestock. A livestock facility also includes all manure or material storages and anaerobic digesters.

Livestock Operation: - an agricultural operation dedicated to the raising breeding, and/or managing of livestock for the purpose of producing food, fibre, or other animal-derived products.

Manure Storage: - A permanent storage which is structurally sound and reasonably capable of storing manure and which typically contains liquid manure (<18% dry matter) or solid manure (≥18% dry matter), and may exist in a variety of:

- locations (under, within, nearby, or remote from barn);
- materials (concrete, earthen, steel, wood);
- coverings (open top, roof, tarp, or other materials);
- configurations (rectangle, circular); and
- elevations (above, below or partially above-grade).

Minimum Distance Separation (MDS) formulae: - formulae and guidelines developed by the province, as amended rom time to time, to separate uses so as to reduce incompatibility concerns about odour from livestock facilities.

Minimum Distance Separation (MDS) I formulae: - used to determine the minimum distance separation for new development from any existing and some former livestock facilities.

Minimum Distance Separation (MDS) II formulae: - used to determine the minimum distance separation for new or expanding livestock facilities from existing non-farm land uses.

Non-agricultural uses:* - Buildings designed or intended for a purpose other than an *agricultural use*; as well as land, vacant or otherwise not yet fully developed, which is zoned or designated such that the principal or long-term use is not intended to be an *agricultural use*, including, but not limited to: commercial, future urban development, industrial, institutional, *open space uses*, *recreational uses*, *settlement area*, *urban reserve*, etc.

Non-farm residential (NFR): - means residential buildings and lots not associated with a farm operation such as farm retirement lots/severances and/or other residences in the Agricultural and Rural Area. Second farm residences for farm help would be considered a farm residence if it is on an existing farm operation.

Normal farm practices:* - means a practice, as defined in the *Farming and Food Production Protection Act, 1998*, that is conducted in a manner consistent with proper and acceptable customs and standards as established and followed by similar agricultural operations under similar circumstances; or makes use of innovative technology in a manner consistent with proper advanced farm management practices. *Normal farm practices* shall be consistent with the *Nutrient Management Act, 2002* and regulations made under that Act.

On-farm Diversified Use: - means uses that are secondary to the principal agricultural use of the property, and are limited in area. On-farm diversified uses include, but are not limited to, home occupations, home industries, agritourism uses, and uses that produce value-added agricultural products. Ground-mounted solar facilities are permitted in prime agricultural areas, including specialty crop areas, only as on-farm diversified uses.

Prime agricultural area:* - means an area where *prime agricultural land* predominates. Prime agricultural areas may also be identified through an alternative agricultural land evaluation system approved by the Province.

Prime agricultural land:* - means land that includes *specialty crop lands* and/or Canada Land Inventory Class 1, 2 and 3 soils, in this order of priority for protection.

Provincial Planning Statement, 2024: - the Provincial Planning Statement (PPS), 2024 is a streamlined province-wide land use planning policy framework that replaces both the *Provincial Policy Statement, 2020* and *A Place to Grow: Growth Plan for the Greater Golden Horseshoe, 2019* while building upon housing-supportive policies from both documents. The PPS 2024 provides municipalities with the tools and flexibility they need to build more homes. It enables municipalities to:

- plan for support development, and increase the housing supply across the province;
- align development with infrastructure to build a strong and competitive economy that is investment-ready;
- foster the long-term viability of rural areas; and
- protect agricultural lands, the environment, public health and safety.

Remnant: - means a location where one or more farm buildings once stood. All or some of the buildings have fallen, are severely structurally unsound and/or been removed. No MDS would be applied to a remnant farm operation.

Retired farm operation: - means a former farm operation whose buildings or farm related structures remain; however, it has either been converted to a non-agricultural use; would require significant upgrades and

investment to modernize; or it is in poor condition and not suitable for agricultural uses. The MDS may still apply if it is a former livestock facility.

Rural areas:* - means a system of lands within municipalities that ma include *rural settlement areas*, *rural lands*, *prime agricultural areas*, natural heritage features and areas, and resource areas.

Rural lands:* - means lands which are located outside *settlement areas* and which are outside *prime agricultural areas*.

Settlement areas:* - means urban areas and rural settlement areas within municipalities (such as cities, towns, villages, and hamlets). Ontario's *settlement areas* vary significantly in terms of size, density, population, economic activity, diversity and intensity of land uses, service levels, and types of infrastructure available. Settlement areas are:

a) built up areas where development is concentrated and which have a mix of land uses; and

b) lands which have been designated in an official plan for development over the long term.

Soil profile: - a vertical section of the soil through all its horizons and extending into the soil parent material.

Specialty crop area:* - means areas within the agricultural land base designated based on provincial guidance. In these areas, specialty crops are predominantly grown such as tender fruits (peaches, cherries, plums), grapes, other fruit crops, vegetable crops, greenhouse crops and crops from agriculturally developed organic soil., usually resulting from:

a) soils that have suitability to produce specialty crops, or lands that are subject to special climatic conditions, or a combination of both;

b) farmers skilled in the production of specialty crops; and

c) a long-term investment of capital in areas such as crops, drainage, infrastructure and related facilities and services to produce, store, or process specialty crops.

Tender fruit: - a term applied to tree fruits such as peaches, apricots, and nectarines which are particularly sensitive to low winter and/or spring temperatures.

Wooded: - Forested areas of various age composition and size.

** Indicates that the definition is essentially derived from OMAFRA publications.*

12. REFERENCES

British Columbia Ministry of Agriculture. Guide to Edge Planning – Promoting Compatibility Along Agricultural-Urban Edges, 2015. Retrieved from: https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/agriculture-and-seafood/agricultural-land-and-environment/strengthening-farming/planning-for-agriculture/823100-3_edge_guide_2015.pdf

Chapman, L.J. and D.F. Putnam, 1994. The Physiography of Southern Ontario, Third Edition. Government of Ontario. Ontario, Canada.

D.W. Hoffman & N.R. Richards. Soil Survey of Peel County – Report No. 18 of the Ontario Soil Survey. 1953. Experimental Farms Service and The Ontario Agricultural College. Guelph, Ontario.

Environment Canada's National Climate Data and Information Archive's online database. https://climate.weather.gc.ca/climate_normals/results_1981_2010_e.html?searchType=stnName&txtStationName=Albion+Field+Centre&searchMethod=contains&txtCentralLatMin=0&txtCentralLatSec=0&txtCentralLongMin=0&txtCentralLongSec=0&stnID=4851&dispBack=1

Future Caledon Official Plan. February 2024 Draft. https://pub-caledon.escribemeetings.com/filestream.ashx?DocumentId=37787

MHBC, 2015. Edge Planning Report – The Region of Peel & Town of Caledon LEAR Study and MDS Review: A Review of Implemented Practices to Address Planning on the Rural-Urban Fringe. Retrieved from: https://www.peelregion.ca/planning/paawg/pdf/Edge_Planning_Report.pdf

OMAFRA, Nancy Rutherford, Land Use Planner. OMAFRA. Personal Communication. January 9, 2024.

OMAFRA. Agriculture Information Atlas. Available Online: http://www.gisapplication.lrc.gov.on.ca/AIA/Index.html?viewer=AIA.AIA&locale=en-US

OMAFRA. Agricultural System Portal. Available Online: https://www.arcgis.com/aPPS/mapviewer/index.html?webmap=09ff270acab24673858afe480a8fac4c

OMAFRA. Minimum Distance Separation Document & AgriSuite Software (OMAFRA, 2017)

Ontario Ministry of Agriculture, Food and Rural Affairs website, December 2022. Classifying Prime and Marginal Agricultural Soils and Landscapes: Guidelines for Application of the Canada Land Inventory in Ontario.

Ontario Ministry of Agriculture, Food and Rural Affairs 1997. Crop Heat Units for Corn and Other Warm Season Crops in Ontario. OMAFRA Factsheet 93-119., Queen's Printer for Ontario.

Ontario Ministry of Agriculture, Food and Rural Affairs, 2016. Guidelines of Permitted uses in Ontario's Prime Agricultural Areas Publication 851, Queen's Printer for Ontario.

Ontario Ministry of Agriculture, Food and Rural Affairs and Ministry of Environment. 2017. Minimum Distance Separation (MDS) Document *Formulae and Guidelines for Livestock and Anaerobic Digestor Odor Setbacks.* Publication 853, Queen's Printer for Ontario.

Ontario Ministry of Agriculture, Food and Rural Affairs. Digital Soil Resource information provided by Guelph Geomatics Services. 2010.

Ontario Ministry of Natural Resources and Forestry. Ontario Digital Terrain Model (Lidar-Derived) – 2014-2015 GTA Lidar DTM.

Ontario Ministry of Municipal Affairs. Provincial Planning Statement. 2024, King's Printer for Ontario.

Region of Peel Official Plan, April 2022. https://www.peelregion.ca/officialplan/download/_media/region-of-peel-official-plan-april2022.pdf.

Town of Caledon Official Plan, March 2024 Consolidation. https://www.caledon.ca/en/town-services/resources/Business-Planning--Development/Policy/Official-Plan/April-1-OP-OCnsolidation/OP-Text-and-Maps-ACCESSIBLE.pdf.

APPENDIX A

Development Concept Plan

MOUNT HOPE WEST

Land Use Concept

MOUNT HOPE ROAD

COLUMBIA WAY

Secondary Plan Boundary

Frontage Measurement-**6,945m**

Other Lands Owned By Applicant (Greenbelt)

Existing Residential Lands

13.7m Laneway Semi-Detached-**180 Units**

15.2m Street Semi-Detached-**118 Units**

6m Street Towns-**274 Units**

11m Single detached-**34 Units**

Mid/High-rise Block 60UPH-250UPH

1.64ha * 60-250 = **99-410 Units**

Commercial Block-1.72ha

Park

Open Space

SWM

NHS

Channel Realignment

Date: January 23, 2025

APPENDIX B

Curriculum Vitae

SEAN M. COLVILLE, B.Sc., P.Ag.

432 Niagara St., Unit 2, St. Catharines, ON L2M 4W3
Tel: (905) 935-2161 | Email: sean@colvilleconsultinginc.com

EDUCATION

B.Sc.Geology, Acadia University, 1986
Soil Science, University of Guelph, 1984

PROFESSIONAL AFFILIATIONS

Ontario Institute of Agrology
Agricultural Institute of Canada

POSITIONS HELD

2003 – Present	**President** - Colville Consulting Inc., St. Catharines, Ontario
2001 – 2003	**Senior Project Manager** - ESG International Inc., St. Catharines, Ontario
1998 – 2001	**Senior Project Manager** - ESG International Inc., Guelph, Ontario
1988 – 1998	**Project Manager** - ESG International Inc., Guelph, Ontario
1984 – 1988	**Soil Scientist –** MacLaren Plansearch Ltd., Halifax, Nova Scotia
1982 – 1983	**Assistant Soil Scientist** – Nova Scotia Department of Agriculture and Marketing

EXPERIENCE

Colville Consulting Inc. (CCI) was established in June of 2003 by Sean Colville. CCI offers agricultural and environmental consulting services to clients across Ontario, catering to both public and private sectors. Sean has over 35 years of agricultural consulting experience, which includes agricultural resource evaluation studies, soil surveys, interpretations of agricultural capability, agricultural impact assessments, alternative site assessments, and soil and microclimatic rehabilitation/restoration projects. Sean has extensive experience interpreting agricultural land use policies for a wide variety of development applications.

Sean is a Professional Agrologist (P.Ag.), and a member of both the Ontario Institute of Agrology and the Agricultural Institute of Canada. Sean has been recognized by the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) as an expert in the identification of Prime Agricultural Areas and in the interpretation of the Minimum Distance Separation requirements for livestock operations.

Sean has presented expert testimony before the Ontario Land Tribunal (formerly OMB, LPAT), Consolidated Joint Board, Assessment Review Board, Ontario Superior Court, and the Normal Farm Practices Protection Board. Sean's testimonies have involved land use planning matters as they relate to agriculture, impact assessments, resource evaluations, soil science, and normal farm practices.

Agricultural Impact Assessments and Alternative Site Studies

Colville Consulting Inc. specializes in agricultural impact assessment and alternative site studies for development applications in Prime Agricultural Areas. Sean has prepared over 200 agricultural impact assessments for a wide variety of development projects, including settlement area boundary expansions, linear facilities (Class EAs), new and expanding aggregate operations, and residential, commercial, recreational, industrial, and institutional developments. The majority of these projects required the interpretation of agricultural land use policies, an inventory and assessment of the agricultural resources,

land use, land tenure, an assessment of conflict potential including determination of minimum distance separation requirements, interpretation of the agricultural priority, and development of mitigation measures to avoid or minimize potential impacts. Justification of the location for development proposals in agricultural areas is required by the Provincial Policy Statement and can often be addressed by an alternative site study.

Recent examples of Sean Colville's agricultural work include:

- Agricultural Impact Assessment for Stubbes New Durham Precast Plant (2021)
- Agricultural Impact Assessment for New Tecumseth Community Builders Inc., County of Simcoe (2021)
- Agricultural Impact Assessment for Caledon Costco (2021)
- Agricultural Impact Assessment for Walker Industries' Redford Pit Expansion, West Grey (2022)
- Agricultural Impact Assessment for Milton Business Park (2022)
- Minimum Distance Separation for Mono Hills Corporation (2022)
- Land Evaluation and Area Review for Norfolk County (2022)

Publications

Rees, H.W.; Duff, J.P.; Colville, S.; Soley, T and Chow T.L. 1995. Soils of selected agricultural areas of Moncton Parish, Westmoreland County, New Brunswick. New Brunswick. Soil Survey Report No. 15. CLBRR Contribution No. 95-13, Research Branch, Agriculture AND Agri-Food Canada, Ottawa, Ontario

Rees, H.W.; Duff, J.P.; Colville, S.; Soley, T and Chow T.L. 1996. Soils of selected agricultural areas of Shediac and Botsford Parishes, Westmoreland County, New Brunswick. New Brunswick. Soil Survey Report No. 16. CLBRR Contribution No. 95-13, Research Branch, Agriculture and Agri-Food Canada, Ottawa, Ontario. 127 pp. with maps.

JOHN LIOTTA, B.Sc. (Env.), EMA, A.Ag.(P)

432 Niagara St., Unit 2, St. Catharines, ON L2M 4W3
Tel: (905) 935-2161 | Email: john@colvilleconsultinginc.ca

EDUCATION

Bachelor of Science in Environmental Sciences, University of Guelph, 2018
Environmental Management and Assessment Graduate Certificate, Niagara College, 2022

PROFESSIONAL AFFILIATIONS

Eco Canada – Environmental Professional in Training
Ontario Institute of Agrologists – Articling Agrologist

POSITIONS HELD

2022 – Present – Colville Consulting Inc., St. Catharines, Agrologist/Ecologist

EXPERIENCE

John Liotta, Agrologist and Ecologist at Colville Consulting Inc., has over 5 years of formal educational training and experience in Environmental and Agricultural Planning. John has completed Agricultural Impact Assessments, Minimum Distance Separation (MDS) Requirements, and Agricultural Characterization Reports in his role as at Colville Consulting Inc.

Through his education at the University of Guelph and Niagara College, John has gained a broad base knowledge of Environmental and Agricultural Planning and Management, which he has applied in his current role at Colville Consulting Inc. His work at Colville Consulting Inc. includes the interpretation of provincial, regional, and local land use policies, creation and interpretation of land use maps, regional soils mapping, and agricultural protection policies. He has participated in the completion of Agricultural Impact Assessments, Minimum Distance Separation Assessments, and Agricultural Characterization Reports. His field work activities include land use surveys and post-construction avian and bat mortality monitoring for wind turbines in the County of Haldimand, Ontario.

A selection of projects John has been involved with at Colville Consulting Inc. include:

- Post-Construction Avian and Bat Mortality Monitoring for Pattern Energy, Korea Electric Power Corporation, and Samsung Renewable Energy Inc., Grand Renewable Energy Park, County of Haldimand, Ontario
- Agricultural Impact Assessment for landowner group, City of Pickering
- Agricultural Impact Assessment for landowner, Township of North Dumfries, Ontario
- Agricultural Characterization Report for landowner, Township of Beckwith, Ontario
- Agricultural Characterization Report for landowner, Town of Carleton Place, Ontario
- Minimum Distance Separation Report for landowner, Town of Caledon, Ontario
- Agricultural and Rural Lands Discussion Paper for municipality, Town of Blue Mountain, Ontario
- Agricultural Impact Assessment for Wildfield Village, Town of Caledon
- Agricultural Impact Assessment for Redford Pit Expansion, West Grey

ADDITIONAL TRAINING AND WORKSHOPS

Standard First Aid, CPR C, AED – St. John's Ambulance (2023)
Workplace Hazardous Materials Information System
Natural Gas Pipeline Safety Training – TC Energy (2022)
Excavation Safety Training – TC Energy (2022)
Supervisor (Level 2) Ground Disturbance Training (2022)

APPENDIX C

Climate Normals Data

Climate Normals 1981-2010 Station Data

Metadata including Station Name, Province or Territory, Latitude, Longitude, Elevation, Climate ID, WMO ID, TC ID

STATION_NAME	PROVINCE	LATITUDE	LONGITUDE	ELEVATION	CLIMATE_ID	WMO_ID	TC_ID
ALBION FIELD CENTRE	ON	43°55'00.000'	79°50'00.000'	281.9 m	6150103		

Legend

A = WMO "3 and 5 rule" (i.e. no more than 3 consecutive and no more than 5 total missing for either temperature or precipitation)
B = At least 25 years
C = At least 20 years
D = At least 15 years

1981 to 2010 Canadian Climate Normals station data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Code
Temperature														
Daily Average (°C)	-7	-5.9	-1.4	6.1	12.4	17.3	19.9	19.1	14.3	8.1	2.1	-3.9	6.7	D
Standard Deviation	3.1	2.5	2.2	1.6	2	1.3	1.4	1.5	1	1.6	1.2	3.1	2.6	D
Daily Maximum (°C)	-2.8	-1.4	3.7	11.6	18.8	23.7	26.3	25.1	19.9	13.2	5.8	-0.3	12	D
Daily Minimum (°C)	-11.2	-10.4	-6.6	0.5	5.9	10.9	13.5	13	8.6	2.9	-1.7	-7.4	1.5	D
Extreme Maximum (°C)	12	14.5	24.5	30	33	34.5	36.1	35	34.4	30.6	22.2	19.5		
Date (yyyy/dd)	1988/31	1984/23	1986/30	1990/25	1998/15	1988/25	1975/31	Jan-75	Mar-73	Feb-71	Jan-74	Mar-82		
Extreme Minimum (°C)	-36.5	-35	-31.5	-21.1	-6.1	-1.5	1.7	-0.5	-5	-11.5	-19	-32		
Date (yyyy/dd)	1994/16	1979/18	Aug-84	Jul-72	Apr-74	Dec-80	May-72	1982/29	1973/21	1978/17	1989/22	Nov-77		
Precipitation														
Rainfall (mm)	24	22.2	27.3	63	76.1	75.5	81.8	77.4	75	64.9	67.8	25.9	681	D
Snowfall (cm)	36.4	28	23	4	0	0	0	0	0	3.4	13.8	31.9	140.5	D
Precipitation (mm)	60.4	50.2	50.3	67	76.1	75.5	81.8	77.4	75	68.3	81.7	57.7	821.5	D
Average Snow Depth (cm)		27		0	0	0	0	0	0	0	0			
Median Snow Depth (cm)		29		0	0	0	0	0	0	0	0			
Snow Depth at Month-end (cm)	22	4		0	0	0	0	0	0	0	0			
Extreme Daily Rainfall (mm)	26	33	42.5	50.5	58	68	68.9	58	48.2	56	47.4	31		
Date (yyyy/dd)	1996/26	1984/13	1997/25	2000/21	Dec-00	2000/24	1985/15	Apr-89	Oct-86	May-95	Dec-92	1979/24		
Extreme Daily Snowfall (cm)	20.3	33	20	16.5	0.6	0	0	0	0	20	19	33		
Date (yyyy/dd)	1976/13	Oct-81	Sep-80	Feb-75	1984/14	Jan-69	Jan-69	Jan-69	Jan-69	1997/26	1986/20	Oct-92		
Extreme Daily Precipitation (mm)	26	61	43.5	50.5	58	68	68.9	58	48.2	56	47.4	36.8		
Date (yyyy/dd)	1996/26	Oct-81	1997/25	2000/21	Dec-00	2000/24	1985/15	Apr-89	Oct-86	May-95	Dec-92	Dec-72		
Extreme Snow Depth (cm)	42	43		5	0	0	0	0	0	20	4	7		
Date (yyyy/dd)	1985/20	Dec-85		Mar-85	Jan-83	Jan-83	Jan-83	Jan-83	Jan-83	1981/23	1984/19	1984/20		
Days with Rainfall														
>= 0.2 mm	3.3	3.6	5.2	9.9	10.3	10.2	9	9.8	10.8	11.2	9.3	3.7	96.2	D
>= 5 mm	1.7	1.5	2.2	4.2	5	4.4	4.9	4.5	4.5	4.2	4.2	1.9	43.2	D
>= 10 mm	0.89	0.76	0.78	2	2.3	2.9	2.6	2.8	2.5	2.4	2.4	1	23.5	D
>= 25 mm	0.16	0.1	0.11	0.37	0.53	0.61	0.68	0.63	0.68	0.33	0.53	0.11	4.8	D
Days With Snowfall														
>= 0.2 cm	9.8	6.4	5.3	1.4	0.05	0	0	0	0	0.58	4	6.8	34.3	D
>= 5 cm	2.6	2	1.5	0.26	0	0	0	0	0	0.21	0.68	2.3	9.4	D
>= 10 cm	0.89	0.65	0.74	0.11	0	0	0	0	0	0.11	0.32	0.89	3.7	D
>= 25 cm	0.06	0.05	0	0	0	0	0	0	0	0	0	0.11	0.22	D
Days with Precipitation														
>= 0.2 mm	12.4	9.4	9.6	10.8	10.3	10.2	9	9.8	10.8	11.3	12.1	9.8	125.5	D
>= 5 mm	4.4	3.4	3.7	4.5	5	4.4	4.9	4.5	4.5	4.3	5	3.9	52.5	D
>= 10 mm	1.9	1.5	1.7	2.1	2.3	2.9	2.6	2.8	2.5	2.5	2.9	2	27.9	D
>= 25 mm	0.22	0.15	0.16	0.37	0.53	0.61	0.68	0.63	0.68	0.39	0.53	0.21	5.2	D
Days with Snow Depth														
>= 1 cm				0	0	0	0	0	0	0				
>= 5 cm				0	0	0	0	0	0	0				
>= 10 cm				0	0	0	0	0	0	0				
>= 20 cm				0	0	0	0	0	0	0				
Wind														
Speed (km/h)		9.4		9	8.9	8.9	7.2	5.4		7.7				
Most Frequent Direction	CALM	NW	CALM	CALM	NW	NW	NW	NW	CALM	NW	CALM	CALM	CALM	
Maximum Hourly Speed (km/h)	56	63	64	50	48	45	35	37	39	42	60	66	66	
Date (yyyy/dd)	1974/31	1971/27	May-76	1975/19	Jan-70	1971/29	Jan-77	Apr-83	Oct-70	1973/14	Feb-71	1972/13	1972/13	
Direction of Maximum Hourly Speed	NW	SW	W	NW	SW	W	SW	S	W	NW	W	W	W	
Bright Sunshine														
Total Hours		85.6			240.9	240.2	255.9	197		130	71.8	19.4		
Days with measurable		18.3			26	29	28	31		28	18.8	7		
% of possible daylight hours		29.3			52.8	52	54.6	45.5		38	24.7	7		
Extreme Daily	8.9	10.1	10.7	13.5	14.3	15	14.9	14.3	11.7	10.6	9.5	9		
Date (yyyy/dd)	1970/30	1979/27	1981/25	1972/27	1971/22	Aug-76	1970/22	Feb-70	Jan-70	1985/27	Mar-71	Mar-69		

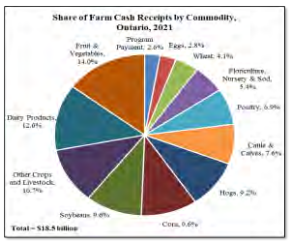
APPENDIX D

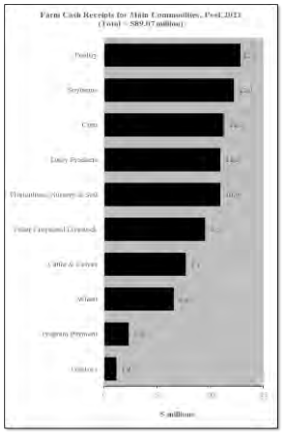
Agricultural Crop Statistics

County & Township Ag Profile - Peel Regional Municipality; Townships: Brampton, Caledon

Peel Regional Municipality at a Glance - 2021

Item	Peel	Province	Percent of province	Percent from 2016
Farms, 2021 Census (number)				
Total	377	48,346	0.78%	-7.60%
Under 10 acres	52	3,217	1.62%	-1.89%
10 to 69 acres	122	12,686	0.96%	-23.27%
70 to 129 acres	70	10,924	0.64%	0.00%
130 to 179 acres	22	4,422	0.50%	-12.00%
180 to 239 acres	22	3,981	0.55%	4.76%
240 to 399 acres	18	5,366	0.33%	-5.26%
400 to 559 acres	24	2,865	0.84%	4.35%
560 to 759 acres	12	1,698	0.71%	50.00%
760 to 1,119 acres	16	1,600	1.00%	0.00%
1,120 to 1,599 acres	8	720	1.11%	100.00%
1,600 to 2,239 acres	5	451	1.11%	-44.44%
2,240 to 2,879 acres	5	173	2.89%	-
2,880 to 3,519 acres	0	95	0.00%	-
3,520 acres and over	1	118	0.85%	0.00%
Land Use, 2021 Census (acres)				
Land in crops	80,409	9,051,011	0.89%	19.29%
Summerfallow land	384	13,964	2.75%	412.00%
Tame or seeded pasture	2,722	400,480	0.68%	-11.97%
Natural land for pasture	2,859	626,366	0.46%	-26.10%
Christmas trees, woodland & wetland	4,703	1,269,535	0.37%	-17.23%
All other land	4,506	404,714	1.11%	40.24%
Total area of farms	95,583	11,766,071	0.81%	14.69%
Greenhouse Area, 2021 Census (square feet)				
Total area in use	571,719	201,055,888	0.28%	-34.27%
Farm Capital Value, 2021 Census (farms reporting)				
Under $200,000	11	1,212	0.91%	-54.17%
$200,000 to $499,999	5	3,223	0.16%	-68.75%
$500,000 to $999,999	40	8,699	0.46%	-43.66%
$1,000,000 and over	321	35,212	0.91%	8.08%
Total Gross Farm Receipts, 2021 Census (farms reporting)				
Under $10,000	74	7,277	1.02%	-16.85%
$10,000 to $24,999	55	7,429	0.74%	-28.57%
$25,000 to $49,999	48	6,263	0.77%	-15.79%
$50,000 to $99,999	31	6,093	0.51%	-20.51%
$100,000 to $249,999	48	6,817	0.70%	-27.27%
$250,000 to $499,999	35	4,448	0.79%	6.06%
$500,000 to $999,999	32	3,954	0.81%	39.13%
$1,000,000 to $1,999,999	9	2,462	0.37%	-47.06%
$2,000,000 and over	10	1,696	0.59%	42.86%
Farms by Industry Group, 2021 Census (number of farms)				
Beef cattle ranching and farming	53	7,986	0.66%	35.90%
Dairy cattle and milk production	13	3,188	0.41%	-31.58%
Hog and pig farming	3	1,189	0.25%	200.00%
Poultry and egg production	13	2,061	0.63%	44.44%
Sheep and goat farming	4	1,309	0.31%	-50.00%
Other animal production	64	4,556	1.40%	-36.63%
Oilseed and grain farming	112	18,194	0.62%	6.67%
Vegetable and melon farming	29	1,562	1.86%	-9.38%
Fruit and tree nut farming	18	1,211	1.49%	0.00%
Greenhouse, nursery and floriculture	23	1,672	1.38%	-28.13%
Other crop farming	45	5,418	0.83%	2.27%



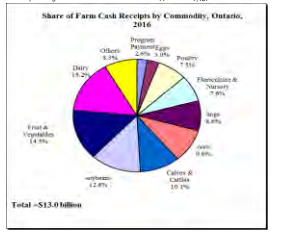


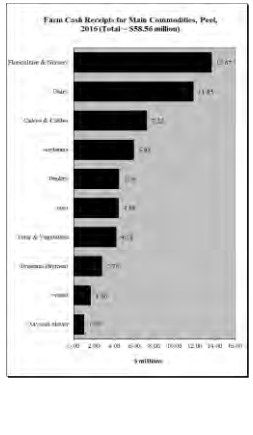
F - too unreliable to be published
Sources: 2021 & 2016 Census of Agriculture, OMAFRA
2022-06-21

County & Township Ag Profile - Peel Regional Municipality; Townships: Brampton, Caledon

Peel Regional Municipality at a Glance - 2016

Item	Peel	Province	Percent of province	Percent from 2011
Farms, 2016 Census (number)				
Total	408	49,600	0.82	-7.27
Under 10 acres	53	3,051	1.74	17.78
10 to 69 acres	159	12,625	1.26	-2.45
70 to 129 acres	70	10,742	0.65	-13.58
130 to 179 acres	25	4,592	0.54	-3.85
180 to 239 acres	21	4,262	0.49	-12.50
240 to 399 acres	19	6,008	0.32	-42.42
400 to 559 acres	23	3,093	0.74	4.55
560 to 759 acres	8	1,900	0.40	-42.86
760 to 1,119 acres	16	1,593	1.00	-23.81
1,120 to 1,599 acres	4	801	0.50	33.33
1,600 to 2,239 acres	9	457	1.97	50.00
2,240 to 2,879 acres	0	168	0.00	-100.00
2,880 to 3,519 acres	0	88	0.00	-
3,520 acres and over	1	110	0.91	0.00
Land Use, 2016 Census (acres)				
Land in crops	67,408	9,021,298	0.75	-9.15
Summerfallow land	75	15,885	0.47	-56.90
Tame or seeded pasture	3,092	514,168	0.60	-30.25
Natural land for pasture	3,869	783,566	0.49	0.36
Christmas trees, woodland & wetland	5,682	1,542,637	0.37	-20.75
All other land	3,213	470,909	0.68	-20.03
Total area of farms	83,339	12,348,463	0.67	-11.19
Greenhouse Area, 2016 Census (square feet)				
Total area in use	869,770	158,511,328	0.55	-24.82
Farm Capital Value, 2016 Census (farms reporting)				
Under $200,000	24	2,142	1.12	41.18
$200,000 to $499,999	16	7,433	0.22	-52.94
$500,000 to $999,999	71	12,500	0.57	-25.26
$1,000,000 and over	297	27,525	1.08	1.02
Total Gross Farm Receipts, 2016 Census (farms reporting)				
Under $10,000	89	9,536	0.93	-17.59
$10,000 to $24,999	77	8,376	0.92	2.67
$25,000 to $49,999	57	6,755	0.84	-8.56
$50,000 to $99,999	39	6,263	0.62	11.43
$100,000 to $249,999	66	7,022	0.94	-14.29
$250,000 to $499,999	33	4,707	0.70	-19.51
$500,000 to $999,999	23	3,689	0.62	4.55
$1,000,000 to $1,999,999	17	2,019	0.84	30.77
$2,000,000 and over	7	1,233	0.57	-12.50
Farms by Industry Group, 2016 Census (number of farms)				
Beef cattle ranching and farming	39	6,786	0.57	-15.22
Dairy cattle and milk production	19	3,439	0.55	-24.00
Hog and pig farming	1	1,229	0.08	-
Poultry and egg production	9	1,816	0.50	12.50
Sheep and goat farming	8	1,097	0.73	-11.11
Other animal production	101	5,902	1.71	10.99
Oilseed and grain farming	105	16,876	0.62	-2.78
Vegetable and melon farming	32	1,856	1.72	60.00
Fruit and tree nut farming	18	1,362	1.32	-18.18
Greenhouse, nursery and floriculture	32	2,050	1.56	-31.91
Other crop farming	44	7,187	0.61	-31.25





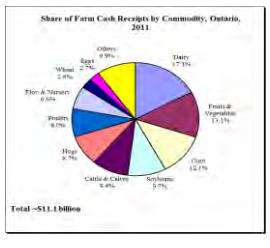
x Suppressed data
Sources: 2016 & 2011 Census of Agriculture and Strategic Policy Branch, OMAFRA
2017-06-02

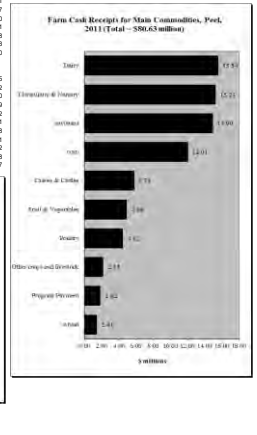
County & Township Ag Profile - Peel Regional Municipality; Townships: Brampton, Caledon

Peel Regional Municipality at a Glance - 2011

Item	Peel	Province	Percent of province	Percent from 2011
Major Field Crops, 2016 Census (acres)				
Winter wheat	8,510	1,080,378	0.79	-26.33
Oats for grain	209	82,206	0.25	-24.82
Barley for grain	1,761	103,717	1.70	-47.48
Mixed grains	425	92,837	0.46	-32.97
Corn for grain	13,448	2,162,004	0.62	1.54
Corn for silage	1,717	295,660	0.58	-15.76
Hay	12,931	1,721,214	0.75	-26.05
Soybeans	24,582	2,783,443	0.88	8.45
Potatoes	30	34,685	0.09	-44.44
Major Fruit Crops, 2016 Census (acres)				
Total fruit crops	403	51,192	0.79	-6.06
Apples	123	15,893	0.77	-58.16
Sour Cherries	0	2,121	0.00	-100.00
Peaches	0	5,232	0.00	-100.00
Grapes	x	18,718	-	-
Strawberries	56	2,915	1.92	-29.11
Raspberries	x	680	-	-
Major Vegetable Crops, 2016 Census (acres)				
Total vegetables	377	135,420	0.28	-22.11
Sweet corn	68	22,910	0.30	-46.46
Tomatoes	32	15,744	0.20	-39.62
Green peas	10	16,268	0.06	25.00
Green or wax beans	7	9,732	0.07	-22.22
Livestock Inventories, 2016 Census (number)				
Total cattle and calves	9,113	1,623,710	0.56	-23.62
Steers	1,934	305,514	0.63	-0.92
Beef cows	1,383	236,253	0.59	-22.48
Dairy cows	1,766	311,960	0.57	-30.53
Total pigs	57	3,534,104	-	-
Total sheep and lambs	1,075	321,495	0.33	2.67
Poultry Inventories, 2016 Census (number)				
Total hens and chickens	192,868	50,759,994	0.38	-11.08
Total turkeys	106	3,772,146	-	-

Item	Peel	Province	Percent of province	Percent from 2011
Farms, 2011 Census (number)				
Total	440	51,950	0.85	
Under 10 acres	45	2,741	1.64	
10 to 69 acres	163	12,681	1.29	
70 to 129 acres	81	11,779	0.69	
130 to 179 acres	26	4,969	0.52	
180 to 239 acres	24	4,801	0.50	
240 to 399 acres	33	8,460	0.39	
400 to 559 acres	22	3,359	0.65	
560 to 759 acres	14	2,026	0.69	
760 to 1,119 acres	21	1,587	1.32	
1,120 to 1,599 acres	3	788	0.38	
1,600 to 2,239 acres	6	436	1.38	
2,240 to 2,879 acres	1	152	0.66	
2,880 to 3,519 acres	0	79	0.00	
3,520 acres and over	1	92	1.09	
Land Use, 2011 Census (acres)				
Land in crops	74,193	8,929,947	0.83	
Summerfallow land	174	23,460	0.74	
Tame or seeded pasture	4,433	648,758	0.68	
Natural land for pasture	3,855	984,809	0.39	
Christmas trees, woodland & wetland	7,170	1,612,444	0.44	
All other land	4,018	468,828	0.86	
Total area of farms	93,843	12,668,236	0.74	
Greenhouse Area, 2011 Census (square feet)				
Total area in use	1,156,880	133,520,541	0.87	
Farm Capital Value, 2011 Census (farms reporting)				
Under $200,000	17	2,562	0.66	
$200,000 to $499,999	34	12,994	0.26	
$500,000 to $999,999	95	15,276	0.62	
$1,000,000 to $1,999,999	13	2,588	0.83	
$2,000,000 and over	8	803	1.00	
Farms by Industry Group, 2016 Census (number of farms)				
Beef cattle ranching and farming	46	7,105	0.65	
Dairy cattle and milk production	25	4,036	0.62	
Hog and pig farming	0	1,235	0.00	
Poultry and egg production	8	1,619	0.49	
Sheep and goat farming	9	1,446	0.62	
Other animal production	91	6,966	1.31	
Oilseed and grain farming	108	15,818	0.68	
Vegetable and melon farming	20	1,531	1.31	
Fruit and tree nut farming	22	1,548	1.42	
Greenhouse, nursery and floriculture	47	2,372	1.98	
Other crop farming	64	8,274	0.77	





x Suppressed data
Sources: 2016 & 2011 Census of Agriculture and Strategic Policy Branch, OMAFRA
2017-06-02

Caledon Township at a Glance - 2021

Item	Caledon	Province	Percent of province	Percent from 2016
Farms, 2021 Census (number)				
Total	308	48,346	0.64%	-10.72%
Under 10 acres	32	3,217	0.99%	10.34%
10 to 69 acres	97	12,686	0.76%	-27.61%
70 to 129 acres	59	10,924	0.54%	-7.81%
130 to 179 acres	22	4,422	0.50%	-8.33%
180 to 239 acres	22	3,981	0.55%	22.22%
240 to 399 acres	14	5,396	0.26%	-26.32%
400 to 559 acres	21	2,865	0.73%	5.00%
560 to 759 acres	10	1,698	0.59%	25.00%
760 to 1,119 acres	13	1,600	0.81%	-18.75%
1,120 to 1,599 acres	7	720	0.97%	75.00%
1,600 to 2,239 acres	5	451	1.11%	-37.50%
2,240 to 2,879 acres	5	173	2.89%	-
2,880 to 3,519 acres	0	95	0.00%	-
3,520 acres and over	1	118	0.85%	0.00%
Land Use, 2021 Census (acres)				
Land in crops	73,460	9,051,011	0.81%	16.16%
Summerfallow land	357	13,964	2.56%	376.00%
Tame or seeded pasture	2,135	400,480	0.53%	-29.95%
Natural land for pasture	2,159	626,366	0.34%	-42.64%
Christmas trees, woodland & wetland	3,860	1,269,535	0.30%	-25.08%
All other land	3,680	404,714	0.91%	35.89%
Total area of farms	85,652	11,766,071	0.73%	9.83%
Greenhouse Area, 2021 Census (square feet)				
Total area in use	112,279	201,055,888	0.06%	-61.84%
Farm Capital Value, 2021 Census (farms reporting)				
Under $200,000	7	1,212	0.58%	-22.22%
$200,000 to $499,999	3	3,223	0.09%	-89.66%
$500,000 to $999,999	26	8,699	0.30%	-67.90%
$1,000,000 and over	272	35,212	0.77%	10.57%
Total Gross Farm Receipts, 2021 Census (farms reporting)				
Under $10,000	64	7,277	0.88%	-12.33%
$10,000 to $24,999	43	7,429	0.58%	-33.85%
$25,000 to $49,999	43	6,263	0.69%	-10.42%
$50,000 to $99,999	26	6,093	0.43%	-23.53%
$100,000 to $249,999	41	6,817	0.60%	-26.79%

Item	Caledon	Province	Percent of province	Percent from 2016
Major Field Crops, 2021 Census (acres)				
Winter wheat	9,822	1,144,406	0.86%	-
Oats for grain	344	84,320	0.41%	-
Barley for grain	916	68,756	1.33%	-
Mixed grains	443	59,961	0.74%	4.24%
Corn for grain	19,776	2,202,465	0.85%	-
Corn for silage	1,471	289,678	0.51%	-
Hay	12,656	1,704,017	0.74%	45.35%
Soybeans	26,211	2,806,255	0.93%	15.48%
Potatoes	4	39,193	0.01%	-83.33%
Major Fruit Crops, 2021 Census (acres)				
Total fruit crops	196	48,661	0.40%	31.54%
Apples	55	16,008	0.34%	-
Sour Cherries	0	1,383	0.00%	-
Peaches	0	4,608	0.00%	-
Grapes	54	18,432	0.29%	-
Strawberries	56	2,633	2.13%	-
Raspberries	16	438	3.65%	-
Major Vegetable Crops, 2021 Census (acres)				
Total vegetables	479	127,893	0.37%	99.58%
Sweet corn	112	20,518	0.55%	-
Tomatoes	28	14,814	0.19%	7.69%
Green peas	28	14,044	0.20%	211.11%
Green or wax beans	18	8,709	0.21%	260.00%
Livestock Inventories, 2021 Census (number)				
Total cattle and calves	8,356	1,604,810	0.52%	-5.48%
Steers	1,940	299,540	0.65%	1.15%
Beef cows	1,184	224,194	0.53%	-
Dairy cows	1,505	327,272	0.46%	-
Total pigs	165	4,071,902	0.00%	189.47%
Total sheep and lambs	542	322,508	0.17%	-42.40%
Poultry Inventories, 2021 Census (number)				
Total hens and chickens	351,400	53,802,772	0.65%	82.51%
Total turkeys	2,098	2,453,126	0.09%	1879.25%

Caledon Township at a Glance - 2016

Item	Caledon	Province	Percent of province	Percent from 2011
Farms, 2016 Census (number)				
Total	345	49,600	0.70	-5.48
Under 10 acres	29	3,051	0.95	45.00
10 to 69 acres	134	12,625	1.06	-5.63
70 to 129 acres	64	10,742	0.60	-7.25
130 to 179 acres	24	4,592	0.52	-4.00
180 to 239 acres	18	4,262	0.42	-18.18
240 to 399 acres	19	6,008	0.32	-29.63
400 to 559 acres	20	3,093	0.65	11.11
560 to 759 acres	8	1,900	0.40	-33.33
760 to 1,119 acres	16	1,593	1.00	-20.00
1,120 to 1,599 acres	4	801	0.50	33.33
1,600 to 2,239 acres	8	457	1.75	33.33
2,240 to 2,879 acres	0	168	0.00	-
2,880 to 3,519 acres	0	88	0.00	-
3,520 acres and over	1	110	0.91	0.00
Land Use, 2016 Census (acres)				
Land in crops	63,239	9,021,298	0.70	-2.29
Summerfallow land	75	15,885	0.47	-9.64
Tame or seeded pasture	3,048	514,168	0.59	-23.82
Natural land for pasture	3,764	783,566	0.48	4.44
Christmas trees, woodland & wetland	5,152	1,542,637	0.33	-23.37
All other land	2,708	470,909	0.58	-23.22
Total area of farms	77,986	12,348,463	0.63	-5.65
Greenhouse Area, 2016 Census (square feet)				
Total area in use	294,236	158,511,328	0.19	-55.12
Farm Capital Value, 2016 Census (farms reporting)				
Under $200,000	9	2,142	0.42	-18.18
$200,000 to $499,999	29	7,433	0.39	93.33
$500,000 to $999,999	81	12,500	0.65	28.57
$1,000,000 and over	246	27,525	0.89	-3.91
Total Gross Farm Receipts, 2016 Census (farms reporting)				
Under $10,000	73	9,536	0.77	-21.51
$10,000 to $24,999	65	8,376	0.78	1.56
$25,000 to $49,999	48	6,755	0.71	-2.04
$50,000 to $99,999	34	6,263	0.54	13.33
$100,000 to $249,999	56	7,022	0.80	-13.85

Item	Caledon	Province	Percent of province	Percent from 2011
Major Field Crops, 2016 Census (acres)				
Winter wheat	0	1,080,378	0.00	-100.00
Oats for grain	0	82,206	0.00	-
Barley for grain	0	103,717	0.00	-
Mixed grains	425	92,837	0.46	-
Corn for grain	0	2,162,004	0.00	-100.00
Corn for silage	0	295,660	0.00	-100.00
Hay	8,707	1,721,214	0.51	-45.23
Soybeans	22,698	2,783,443	0.82	14.98
Potatoes	24	34,685	0.07	-51.02
Major Fruit Crops, 2016 Census (acres)				
Total fruit crops	149	51,192	0.29	-22.80
Apples	x	15,893	-	-
Sour Cherries	0	2,121	0.00	-
Peaches	0	5,232	0.00	-
Grapes	x	18,718	-	-
Strawberries	x	2,915	-	-
Raspberries	x	680	-	-
Major Vegetable Crops, 2016 Census (acres)				
Total vegetables	240	135,420	0.18	-30.43
Sweet corn	x	22,910	-	-
Tomatoes	26	15,744	0.17	-27.78
Green peas	9	16,268	0.06	-
Green or wax beans	5	9,732	0.05	-44.44
Livestock Inventories, 2016 Census (number)				
Total cattle and calves	8,840	1,623,710	0.54	-21.98
Steers	1,918	305,514	0.63	-0.47
Beef cows	x	236,253	-	-
Dairy cows	x	311,960	-	-
Total pigs	57	3,534,104	-	-
Total sheep and lambs	941	321,495	0.29	-2.79
Poultry Inventories, 2016 Census (number)				
Total hens and chickens	192,538	50,759,994	0.38	-11.16
Total turkeys	106	3,772,146	-	-

Item	Caledon	Province	Percent of province	Percent from 2011
Farms, 2011 Census (number)				
Total	365	51,950	0.70	
Under 10 acres	20	2,741	0.73	
10 to 69 acres	142	12,681	1.12	
70 to 129 acres	69	11,779	0.59	
130 to 179 acres	25	4,969	0.50	
180 to 239 acres	22	4,801	0.46	
240 to 399 acres	27	8,460	0.42	
400 to 559 acres	18	3,359	0.54	
560 to 759 acres	12	2,026	0.59	
760 to 1,119 acres	20	1,587	1.26	
1,120 to 1,599 acres	3	788	0.38	
1,600 to 2,239 acres	6	436	1.38	
2,240 to 2,879 acres	0	152	0.00	
2,880 to 3,519 acres	0	79	0.00	
3,520 acres and over	1	92	1.09	
Land Use, 2011 Census (acres)				
Summerfallow land	83	23,460	0.35	
Tame or seeded pasture	4,001	648,758	0.62	
Natural land for pasture	3,597	984,809	0.37	
Christmas trees, woodland & wetland	6,723	1,612,444	0.42	
All other land	3,527	468,828	0.75	
Total area of farms	82,655	12,668,236	0.65	
Greenhouse Area, 2011 Census (square feet)				
Total area in use	655,620	133,520,541	0.49	
Farm Capital Value, 2011 Census (farms reporting)				
Under $200,000	11	2,562	0.43	
$200,000 to $499,999	15	12,994	0.12	
$500,000 to $999,999	63	15,276	0.41	
$1,000,000 and over	256	21,118	1.21	
Total Gross Farm Receipts, 2011 Census (farms reporting)				
Under $10,000	93	12,263	0.76	
$10,000 to $24,999	64	9,098	0.70	
$25,000 to $49,999	49	6,720	0.73	
$50,000 to $99,999	30	6,189	0.48	
$100,000 to $249,999	65	6,985	0.93	

Item	Caledon	Province	Percent of province	Percent from 2011
Major Field Crops, 2011 Census (acres)				
Winter wheat	9,686	1,100,003	0.88	
Oats for grain	0	71,040	0.00	
Barley for grain	0	126,881	0.00	
Mixed grains	0	106,162	0.00	
Corn for grain	12,292	2,032,356	0.60	
Corn for silage	1,973	271,701	0.73	
Hay	15,898	2,077,911	0.77	
Soybeans	19,741	2,464,870	0.80	
Potatoes	49	37,384	0.13	
Major Fruit Crops, 2011 Census (acres)				
Total fruit crops	193	52,740	0.37	
Apples	102	15,830	0.64	
Sour Cherries	x	2,342	-	
Peaches	x	6,455	-	
Grapes	x	18,383	-	
Strawberries	54	3,283	1.64	
Raspberries	x	902	-	
Major Vegetable Crops, 2011 Census (acres)				
Total vegetables	345	129,595	0.27	
Sweet corn	61	25,540	0.24	
Tomatoes	36	16,558	0.22	
Green peas	x	15,121	-	
Green or wax beans	9	9,186	0.10	
Livestock Inventories, 2011 Census (number)				
Total cattle and calves	11,331	1,741,381	0.65	
Steers	1,927	291,263	0.66	
Beef cows	1,717	282,062	0.61	
Dairy cows	2,336	318,158	0.73	
Total pigs	x	3,088,646	-	
Total sheep and lambs	968	352,807	0.27	
Poultry Inventories, 2011 Census (number)				
Total hens and chickens	216,721	46,902,316	0.46	
Total turkeys	x	3,483,828	-	

$250,000 to $499,999	32	4,448	0.72%	6.67%
$500,000 to $999,999	26	3,954	0.66%	44.44%
$1,000,000 to $1,999,999	9	2,452	0.37%	-40.00%
$2,000,000 and over	8	1,696	0.47%	33.33%
Farms by Industry Group, 2021 Census (number of farms)				
Beef cattle ranching and farming	43	7,986	0.54%	19.44%
Dairy cattle and milk production	12	3,188	0.38%	-33.33%
Hog and pig farming	3	1,189	0.25%	200.00%
Poultry and egg production	10	2,061	0.49%	11.11%
Sheep and goat farming	4	1,309	0.31%	-42.86%
Other animal production	55	4,556	1.21%	-38.20%
Oilseed and grain farming	93	18,194	0.51%	-3.13%
Vegetable and melon farming	27	1,562	1.73%	42.11%
Fruit and tree nut farming	10	1,211	0.83%	-16.67%
Greenhouse, nursery and floriculture	14	1,672	0.84%	-12.50%
Other crop farming	37	5,418	0.68%	-11.90%

$250,000 to $499,999	30	4,707	0.64	-3.23
$500,000 to $999,999	18	3,689	0.49	20.00
$1,000,000 to $1,999,999	15	2,019	0.74	25.00
$2,000,000 and over	6	1,233	0.49	0.00
Farms by Industry Group, 2016 Census (number of farms)				
Beef cattle ranching and farming	36	6,786	0.53	-18.18
Dairy cattle and milk production	18	3,439	0.52	-18.18
Hog and pig farming	1	1,229	0.08	-
Poultry and egg production	9	1,816	0.50	12.50
Sheep and goat farming	7	1,007	0.64	0.00
Other animal production	89	5,902	1.51	8.54
Oilseed and grain farming	96	16,876	0.57	7.87
Vegetable and melon farming	19	1,856	1.02	35.71
Fruit and tree nut farming	12	1,362	0.88	0.00
Greenhouse, nursery and floriculture	16	2,050	0.78	-44.83
Other crop farming	42	7,187	0.58	-27.59

$250,000 to $499,999	31	5,086	0.61	
$500,000 to $999,999	15	3,248	0.46	
$1,000,000 to $1,999,999	12	1,558	0.77	
$2,000,000 and over	6	803	0.75	
Farms by Industry Group, 2011 Census (number of farms)				
Beef cattle ranching and farming	44	7,105	0.62	
Dairy cattle and milk production	22	4,036	0.55	
Hog and pig farming	0	1,235	0.00	
Poultry and egg production	8	1,619	0.49	
Sheep and goat farming	7	1,446	0.48	
Other animal production	82	6,966	1.18	
Oilseed and grain farming	89	15,818	0.56	
Vegetable and melon farming	14	1,531	0.91	
Fruit and tree nut farming	12	1,548	0.78	
Greenhouse, nursery and floriculture	29	2,372	1.22	
Other crop farming	58	8,274	0.70	

APPENDIX E

Canada Land Inventory Information

Canada Land Inventory Soil Capability Classification for Agriculture

The Canada Land Inventory (CLI) classification system was developed to classifying soil capability for agricultural use for use across Canada. CLI is an interpretative system which assesses the effects of climate and soil characteristics on the limitations of land for growing common field crops. It classifies soils into one of seven capability classes based on the severity of their inherent limitations to field crop production. Soils descend in quality from Class 1, which is highest, to Class 7 soils which have no agricultural capability for the common field crops. Class 1 soils have no significant limitations. Class 2 through 7 soils have one or more significant limitations, and each of these are denoted by a capability subclass.

In Ontario the document, "Classifying Prime and Marginal Agricultural Soils and Landscapes: Guidelines for Application of the Canada Land Inventory in Ontario" (OMAFRA, 2008) provides a Provincial interpretation of the CLI classification system. These guidelines are based on the "Canada Land Inventory, Soil Capability Classification for Agriculture" (ARDA Report No. 2, 1965) and have been modified for use in Ontario. In Ontario, CLI Classes 1 to 4 lands are generally considered to be arable lands and Classes 1 to 3 soils and specialty crop lands are considered to be prime agricultural lands.

The following definitions were taken from Classifying Prime and Marginal Agricultural Soils and Landscapes: Guidelines for Application of the Canada Land Inventory in Ontario (2008).

Definitions of the Capability Classes

Class 1 - Soils in this class have no significant limitations in use for crops. Soils in Class 1 are level to nearly level, deep, well to imperfectly drained and have good nutrient and water holding capacity. They can be managed and cropped without difficulty. Under good management they are moderately high to high in productivity for the full range of common field crops

Class 2 - Soils in this class have moderate limitations that reduce the choice of crops, or require moderate conservation practices. These soils are deep and may not hold moisture and nutrients as well as Class 1 soils. The limitations are moderate and the soils can be managed and cropped with little difficulty. Under good management they are moderately-high to high in productivity for a wide range of common field crops.

Class 3 - Soils in this class have moderately severe limitations that reduce the choice of crops or require special conservation practices. The limitations are more severe than for Class 2 soils. They affect one or more of the following practices: timing and ease of tillage; planting and harvesting; choice of crops; and methods of conservation. Under good management these soils are fair to moderately high in productivity for a wide range of common field crops.

Class 4 - Soils in this class have severe limitations that restrict the choice of crops, or require special conservation practices and very careful management, or both. The severe limitations seriously affect one or more of the following practices: timing and ease of tillage; planting and harvesting; choice of crops; and methods of conservation. These soils are low to medium in productivity for a narrow to wide range of common field crops, but may have higher productivity for a specially adapted crop.

Class 5 - Soils in this class have very severe limitations that restrict their capability to producing perennial forage crops, and improvement practices are feasible. The limitations are so severe that the soils are not capable of use for sustained production of annual field crops. The soils are capable of producing native or tame species of perennial forage plants and may be improved through the use of farm machinery. Feasible improvement practices may include clearing of bush, cultivation, seeding, fertilizing or water control.

Class 6 - Soils in this class are unsuited for cultivation, but are capable of use for unimproved permanent pasture. These soils may provide some sustained grazing for farm animals, but the limitations are so severe that improvement through the use of farm machinery is impractical. The terrain may be unsuitable for the use of farm machinery, or the soils may not respond to improvement, or the grazing season may be very short.

Class 7 - Soils in this class have no capability for arable culture or permanent pasture. This class includes marsh, rockland and soil on very steep slopes.

Definitions of the Prime and Non-prime Agricultural Lands

In Ontario, CLI Classes 1, 2 and 3 and specialty crop lands are considered prime agricultural lands. Non-prime agricultural lands are comprised of CLI Class 4-7 lands.

Organic soils (Muck) are not classified under the CLI system but are mapped and identified as O in the provincial mapping.

Definitions of the Capability Subclasses

Capability Subclasses indicate the kinds of limitations present for agricultural use. Thirteen Subclasses were described in CLI Report No. 2. Eleven of these Subclasses have been adapted to Ontario soils.

Subclass Definitions:

Subclass C - Adverse climate: This subclass denotes a significant adverse climate for crop production as compared to the "median" climate which is defined as one with sufficiently high growing-season temperatures to bring common field crops to maturity, and with sufficient precipitation to permit crops to be grown each year on the same land without a serious risk of partial or total crop failures. In Ontario this subclass is applied to land averaging less than 2300 Crop Heat Units.

Class	Crop Heat Units
1	>2300
2C	1900-2300
3C	1700-1900
4C	<1700

Subclass D - Undesirable soil structure and/or low permeability: This subclass is used for soils which are difficult to till, or which absorb or release water very slowly, or in which the depth of rooting zone is restricted by conditions other than a high water table or consolidated bedrock. In Ontario this subclass is based on the existence of critical clay contents in the upper soil profile.

Class	Soil Characteristics
2D	The top of a clayey horizon >15 cm thick occurs within 40 cm of the soil surface. Clayey materials in this case must have >35% clay content.
3D	The top of a very fine clayey (clay content >60%) horizon >15 cm thick occurs within 40 cm of the soil surface

Subclass E - Erosion: Loss of topsoil and subsoil by erosion has reduced productivity and may in some cases cause difficulties in farming the land e.g. land with gullies.

Class	Soil Characteristics
2E	Loss of the original plough layer, incorporation of original B horizon material into the present plough layer, and general organic matter losses have resulted in moderate losses to soil productivity.
3E	Loss of original solum (A and B horizons) has resulted in a plough layer consisting mostly of

	Loamy or Clayey parent material. Organic matter content of the cultivated surface is less than 2%.
4E	Loss of original solum (A and B horizons) has resulted in a cultivated layer consisting mainly of Sandy parent material with an organic matter content of less than 2%; shallow gullies and occasionally deep gullies which cannot be crossed by machinery may also be present.
5E	The original solum (A and B horizons) has been removed exposing very gravelly material and/or frequent deep gullies are present which cannot be crossed by machinery.

Subclass F - Low natural fertility*:* This subclass is made up of soils having low fertility that is either correctable with careful management in the use of fertilizers and soil amendments or is difficult to correct in a feasible way. The limitation may be due to a lack of available plant nutrients, high acidity, low exchange capacity, or presence of toxic compounds.

Class	Upper Texture Group (>40 and <100 cm from surface)	Lower Texture Group (remaining materials to 100 cm depth)	Drainage Class	Additional Soil Characteristics[1]
2F	Sandy	Sandy or very gravelly	Rapid to imperfect	Neutral or alkaline parent material with a Bt horizon within 100 cm of the surface
3F	Sandy	Sandy or very gravelly	Any drainage class	Neutral or alkaline parent material with no Bt horizon present within 100 cm of surface
3F	Sandy	Loamy or Clayey	Any drainage class	Acid parent material
3F	Loamy or clayey	Any Texture Group	Any drainage class	Acid parent material
4F	Sandy	Sandy or very gravelly	Any drainage class	Acid parent material
4F	Very gravelly	Any texture	Rapid to imperfect	Neutral to alkaline parent material
5F	Very Gravelly	Any texture	All drainage classes	Acid parent material

[1] "Acid" means pH<5.5; "Neutral" pH 5.5 to 7.4; "Alkaline" pH>7.4 as measured in 0.01 M CaCl2 (CSSC, 1998). PH 's measured in distilled water tend to be slightly higher (up to 0.5 units).

Bt horizon should be fairly continuous and average more than 10cm thickness

Subclass I - Inundation by streams or lakes: Flooding by streams and lakes causes crop damage or restricts agricultural use.

Class	Soil Characteristics
3I	Frequent inundation with some crop damage; estimated frequency of flooding is less than once every 5 years (Floodplain); includes higher floodplain-terraces on which cultivated field crops can be grown.
5I	Very frequent inundation with some crop damage; estimated frequency of flooding is at least once every 5 years (Floodplain); includes active floodplain areas on which forage crops can be grown primarily for pasture.
7I	Land is inundated for most of the growing season; often permanently flooded (Marsh)

Subclass M – Moisture deficiency: Soils in this subclass have lower moisture holding capacities and are more prone to droughtiness.

Class	Soil Texture Groups		Drainage	Additional Soil Characteristics
	Upper materials1	Lower materials2		
2M	15 to 40 cm of loamy or finer materials	Sandy to Very Gravelly	Well	
2M	40 to < 100 cm of sandy to very gravelly material.	Loamy to Very Fine Clayey	Well	
2M	Sandy		Rapid to well	Well developed Bt3 horizon occurs within 100 cm of surface
3M	Sandy material to > 100cm		Rapid	Bt horizon absent within 100 cm of surface
4M	Very Gravelly to > 100 cm		Rapid	Bt horizon present within 100 cm of surface
5M	Very gravelly to > 100cm		Very rapid	Bt horizon absent within 100cm

Subclass P - Stoniness: This subclass indicates soils sufficiently stony to hinder tillage, planting, and harvesting operations.

Class	Soil Characteristics
2P	Surface stones cause some interference with tillage, planting and harvesting; stones are 15-60 cm in diameter, and occur in a range of 1-20 m apart, and occupy <3% of the surface area. Some stone removal is required to bring the land into production.
3P	Surface stones are a serious handicap to tillage, planting, and harvesting; stones are 15-60 cm in diameter, occur 0.5-1m apart (20-75 stones/100 m^2), and occupy 3-15% of the surface area. The occasional boulder >60 cm in diameter may also occur. Considerable stone removal is required to bring the land into production. Some annual removal is also required.
4P	Surface stones and many boulders occupy 3-15% of the surface. Considerable stone and boulder removal is needed to bring the land into tillable production. Considerable annual removal is also required for tillage and planting to take place.
5P	Surface stones 15-60 cm in diameter and/or boulders >60 cm in diameter occupy 15-50% of the surface area (>75 stones and/or boulders/100 m2).
6P	Surface stones 15-60 cm in diameter and/or boulders >60 cm in diameter occupy >50% of the surface area.

Subclass R - Shallowness to Consolidated Bedrock: This subclass is applied to soils where the depth of the rooting zone is restricted by consolidated bedrock. Consolidated bedrock, if it occurs within 100 cm of the surface, reduces available water holding capacity and rooting depth. Where physical soil data were available, the water retention model of McBride and Mackintosh was used to assist in developing the subclass criteria.

Class	Soil Characteristics
3R	Consolidated bedrock occurs at a depth of 50-100 cm from the surface causing moderately severe restriction of moisture holding capacity and/or rooting depth.
4R	Consolidated bedrock occurs at a depth of 20-50 cm from the surface causing severe restriction of moisture holding capacity and/or rooting depth.
5R	Consolidated bedrock occurs at a depth of 10 to 20 cm from the surface causing very severe restrictions for tillage, rooting depth and moisture holding capacity. Improvements such as tree removal, shallow tillage, and the seeding down and fertilizing of perennial forages for hay and grazing may be feasible.

6R	Consolidated bedrock occurs at a depth of 10-20 cm from the surface but improvements as in 5R are unfeasible. Open meadows may support grazing.
7R	Consolidated bedrock occurs at < 10cm from the surface.

Subclass S - Adverse soil characteristics: This subclass denotes a combination of limitations of equal severity. In Ontario it has often been used to denote a combination of F and M when these are present with a third limitation such as T, E or P.

Subclass T - Topography

The steepness of the surface slope and the pattern or frequency of slopes in different directions are considered topographic limitations if they: 1) increase the cost of farming the land over that of level or less sloping land; 2) decrease the uniformity of growth and maturity of crops; and 3) increase the potential of water and tillage erosion.

Determination of Subclass T for Very Gravelly and Sandy Soils

Slope %	<2		2-5		5-9		9-15		15-30		30-60		>60	
Slope type	S	C	S	C	S	C	S	C	S	C	S	C	S	C
Class				2T	2T	3T	3T	4T	5T	5T	6T	6T	7T	7T

Slope %	<2		2-5		5-9		9-15		15-30		30-60		>60	
Slope type	S	C	S	C	S	C	S	C	S	C	S	C	S	C
Class				2T	3T	3T	4T	4T	5T	5T	6T	6T	7T	7T

S = Simple Slopes >50 m in length

C =Complex Slopes <50 m in length

Subclass W - Excess water:

The presence of excess soil moisture, other than that brought about by inundation, is a limitation to field crop agriculture. Excess water may result from inadequate soil drainage, a high water table, seepage or runoff from surrounding areas.

Soil Textures and Depths	**Depth to Bedrock** (cm)	**Soil Class** (Drainage in place or feasible)	**Soil Class** (Drainage not feasible)
Very gravelly, sandy, or loamy extending >40 cm from the surface, or, <40 cm of any other textures overlying very gravelly, sandy or loamy textures	>100	2W	4W, 5W
>40 cm depth of clayey or very fine clayey textures, or, <40 cm of any other texture overlying clayey or very fine clayey textures	>100	3W	5W
<40 cm of peaty material overlying any texture	>100	3W	5W
All textures	50-100	4W	5W
All textures	0-50	NA	5W

APPENDIX F

Site Photographs

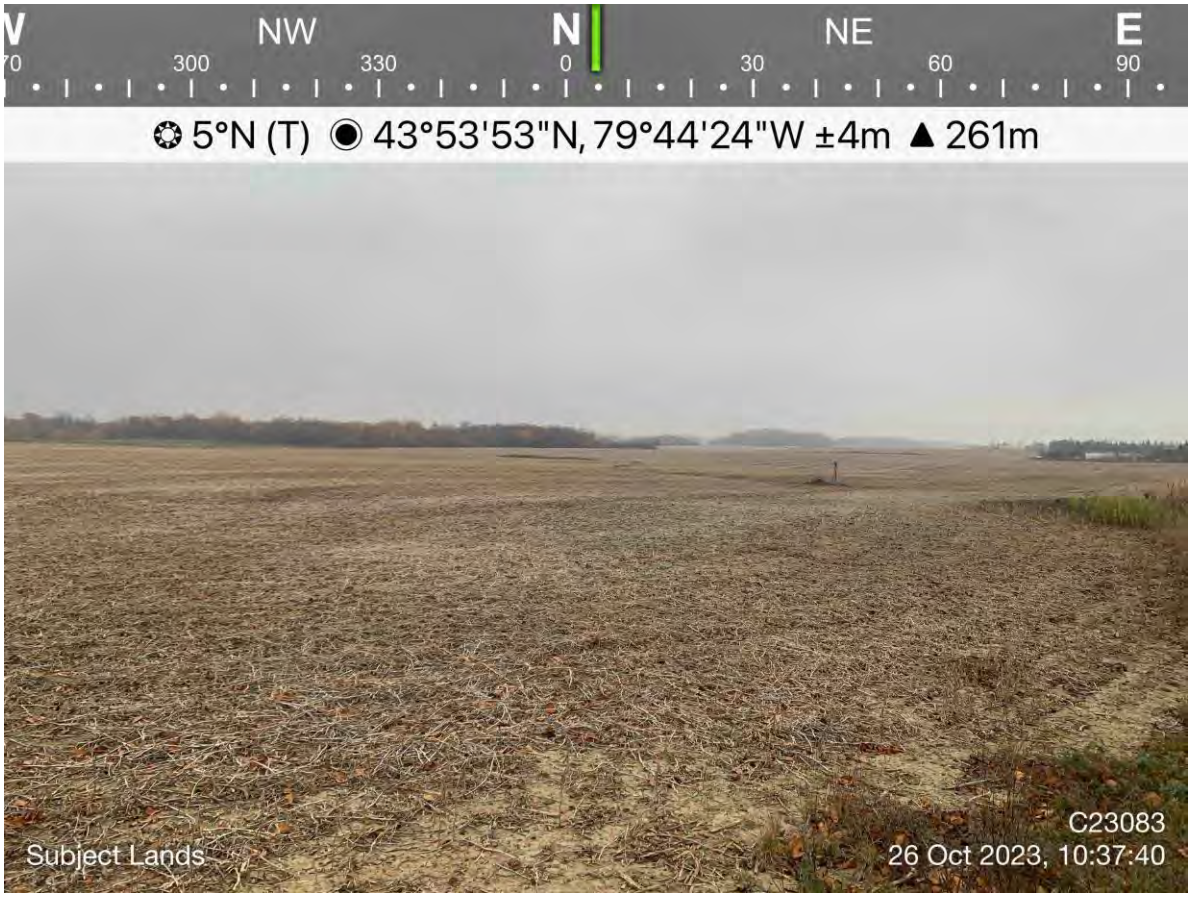


Photo 1: Subject Lands – Photo showing conditions of Subject Lands at time of land use survey.

Photo 2: Operation #6 – St. Michael Catholic Secondary School (Institutional Use).

Photo 3: Operation #15 – Remnant farm showing uncapped cement silo and demolished barn foundation.

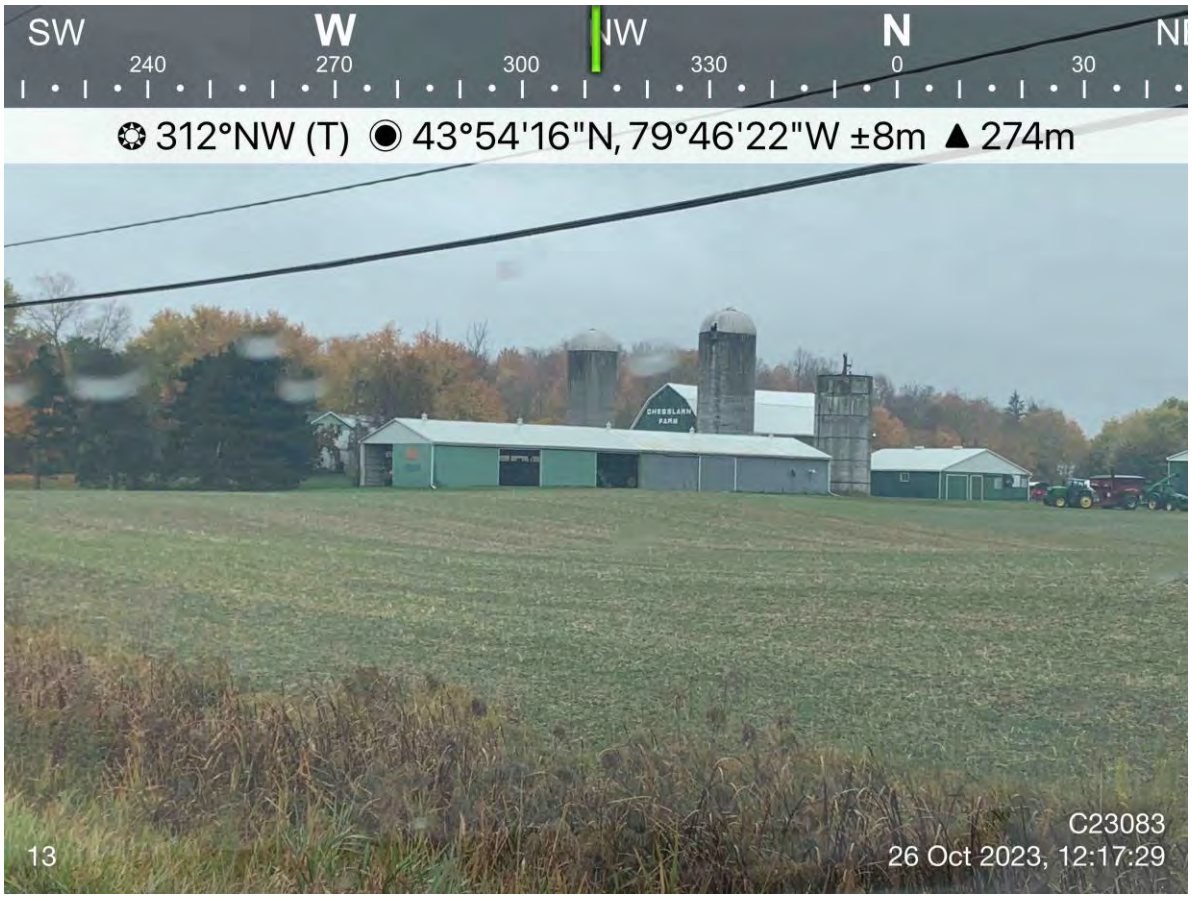


Photo 4: Operation #13 – Empty livestock facility showing two capped silos, one uncapped silo, implement shed, and barn.

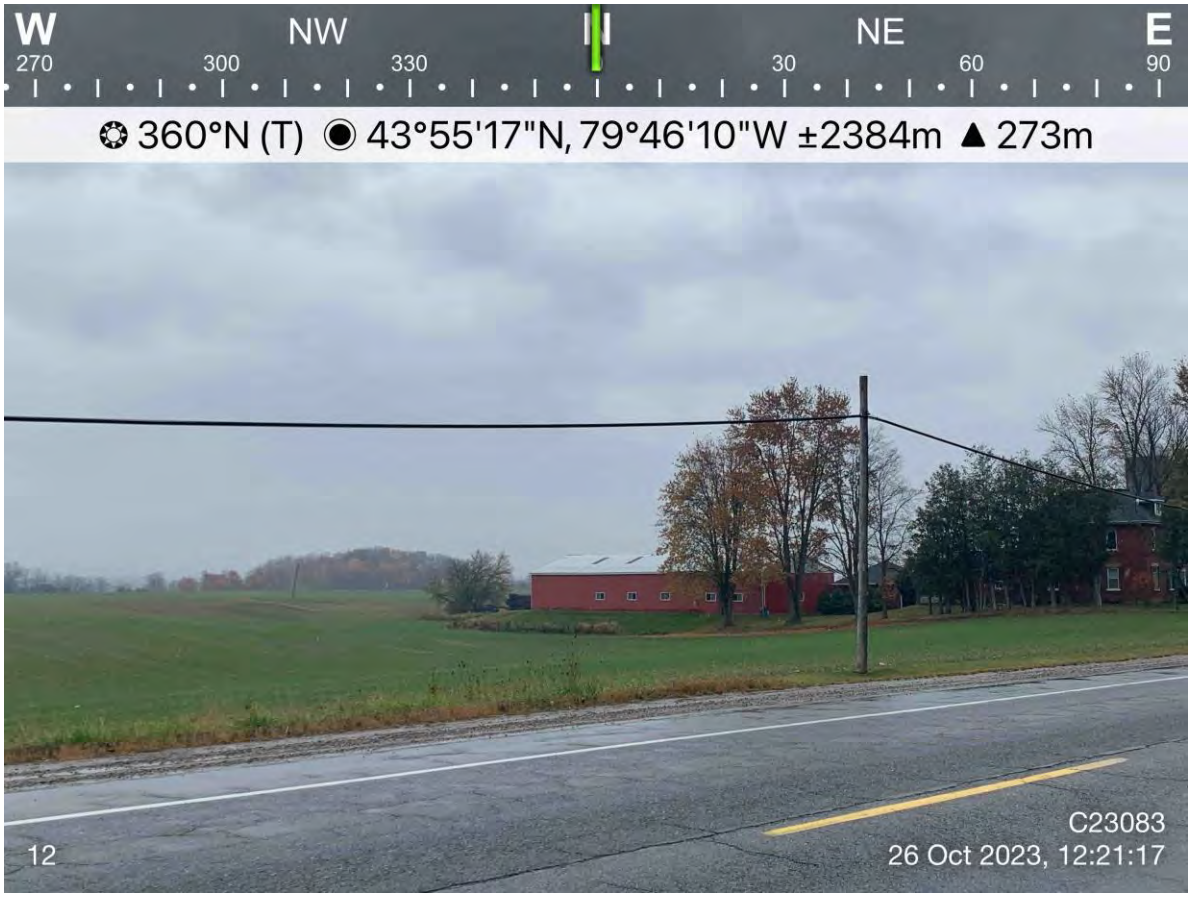


Photo 5: Operation #12 -Former livestock operation converted to commercial use showing implement shed.

Photo 6: Operation #8 – Nursery operation showing greenhouses and garden centre.

Photo 7: Operation #7 – Albion Auto Centre (Commercial Use).

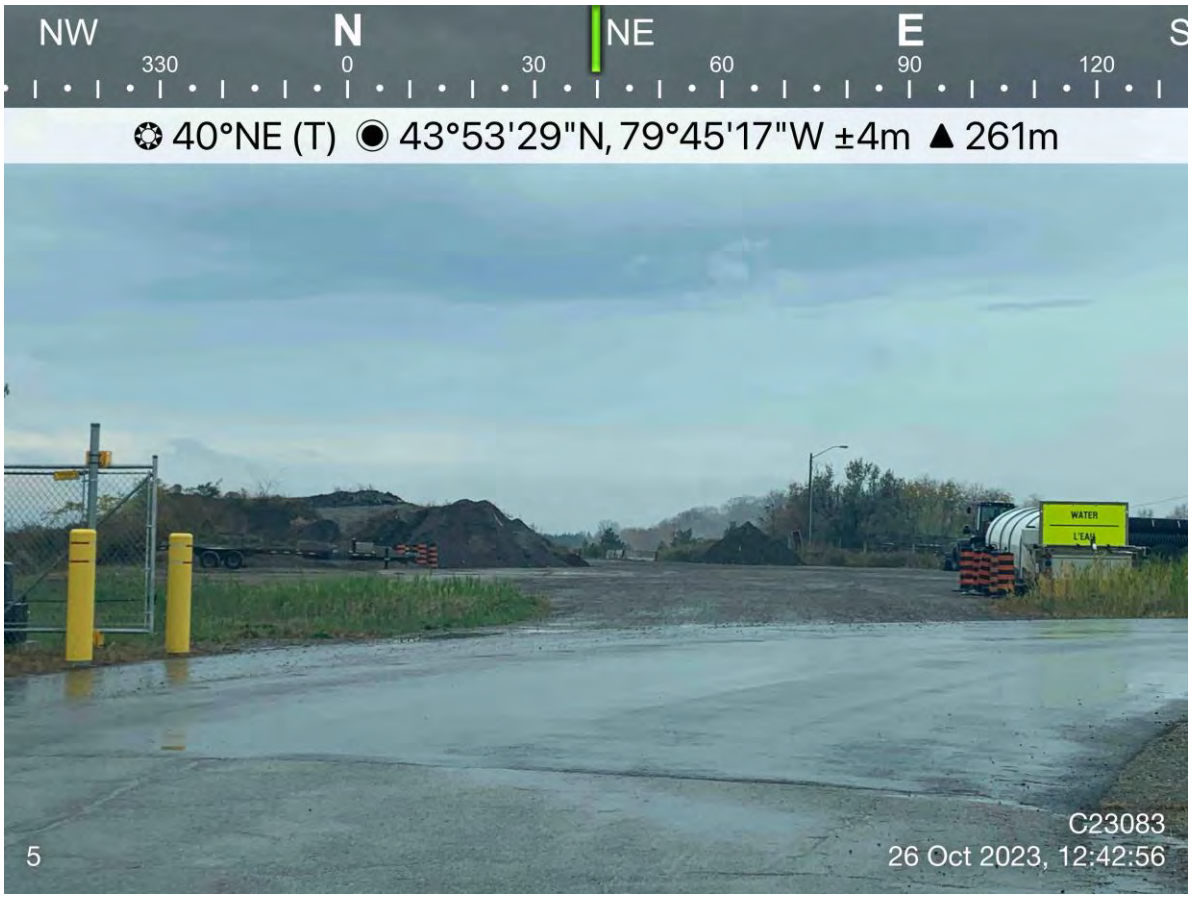


Photo 8: Operation #5 – Municipal Yard Works showing municiapl vehicles and aggregate stockpiles.

APPENDIX G

Land Use Notes

Land Use Survey Notes – AIA for 15070 Airport Road, Caledon			
Weather	Light rain	**Date (s)**	October 26, 2023
Temperature	17°C	**File**	C23083

Site No.	Type of Use	Type of Operation	MDS Calculation Required?	Description of Operation
1	Non-Agricultural	Institutional	No	Peel Regional Paramedic Services – Bolton Station
2	Non-Agricultural	Commercial	No	Light commercial operation, warehouse and small outdoor storage, no signage for business.
3	Agricultural	Cash Crop Operation	No	Small cash crop operation, implement shed in good condition, no sign of livestock, no trespassing
4	Non-Agricultural	Commercial	No	Motor Home Travel. Sale of trailers and RVs
5	Non-Agricultural	Municipal Yard Works	No	Municipal building with municipal vehicles on site, scrap asphalt yard, large shop, "Public Work Yard #3 Town of Caledon"
6	Non-Agricultural	Institutional	No	St. Michael Catholic Secondary School
7	Non-Agricultural	Commercial	No	Albion Auto Centre
8	Agriculture-Related	Nursery	No	John's Nursery Garden, OFA member, greenhouses, garden centre selling bedding plants, hanging baskets, vegetable plants, trees, shrubs, and triple mix
9	Non-Agricultural	Commercial	No	Esso gas station and convenience store
10	Non-Agricultural	Industrial	No	James Dick Construction Ltd., aggregate storage on property, large construction equipment observed outdoors
11	Non-Agricultural	Commercial	No	Ken's Lawnmower Services Ltd

12	Non-Agricultural	Commercial	Yes	Talked with tenant, no livestock or manure storage on property, declined to comment of nature of property but likely a commercial operation run out of this location based on four large snowplows, storage of large slabs of concrete and metal fencing. Likely a former dairy operation, OFA member, public notice sign located at front of property, steel sided implement shed, two capped cement silos
13	Agricultural	Empty Livestock Facility	Yes	Two capped cement silos, one uncapped cement silo, two implement sheds, wood sided bank barn, dry storage building, "Chesslawn Farm", spoke with landowner, OFA member, used to be dairy operation but currently empty, M1 manure storage, was told maximum capacity for 200 head of cattle
14	Agricultural	Empty Livestock Facility	Yes	Spoke with tenant, steel sided bank barn, one capped and one uncapped cement silo, OFA member, former equestrian operation with 8 stalls, barn currently used for storage, capable of housing livestock
15	Agricultural	Remnant Farm	No	Uncapped cement silo, demolished barn, no structures capable of housing livestock

	Total Number	**Active**	**Retired or Remnant**
Agricultural	4	1 – Cash Crop Operation	2 – Empty Livestock Facility 1 – Remnant Farm
Agriculture-related	1	1 – Nursery	0
On-farm Diversified	0	0	0
	Total Number	**Type**	
Non-Agricultural	10	2 – Institutional 6 – Commercial 1 – Industrial 1 – Municipal Yard Works	

APPENDIX H

AgriSuite MDS Report

Mount Hope West Lands

General information

Application date
Nov 8, 2023

Municipal file number

Proposed application
New or expanding settlement area boundary

Applicant contact information

ON

Location of subject lands
Regional Municipality of Peel
Town of Caledon
ALBION
Concession 7 , Lot 12

Calculations

Operation #12

Farm contact information

ON

Location of existing livestock facility or anaerobic digestor
Regional Municipality of Peel
Town of Caledon
ALBION
Concession 7 , Lot 14
Roll number: 2124

Total lot size
40 ha

Livestock/manure summary

Manure Form	Type of livestock/manure	Existing maximum number	Existing maximum number (NU)	Estimated livestock barn area
Solid	Unoccupied Livestock Barn	870 m²	43.5 NU	870 m²

Unoccupied Barn or Unused Storage (Operation #12)
The calculated setback is based on assumptions for an unoccupied barn or unused storage that may not reflect the actual design capacity.

Setback summary

Existing manure storage	**- Not Specified -**
Design capacity	**43.5 NU**
Potential design capacity	**43.5 NU**

Factor A (odour potential) **1**
Factor B (design capacity) **247**
Factor D (manure type) **0.7**
Factor E (encroaching land use) **2.2**

Building base distance 'F' (A x B x D x E) (minimum distance from livestock barn)	**381 m (1250 ft)**
Actual distance from livestock barn	**NA**
Storage base distance 'S' (minimum distance from manure storage)	**No existing manure storage**
Actual distance from manure storage	**NA**

Operation #13

Farm contact information

ON

Location of existing livestock facility or anaerobic digestor
Regional Municipality of Peel
Town of Caledon
ALBION
Concession 6 , Lot 15
Roll number: 2124

Total lot size
36.2 ha

Livestock/manure summary

Manure Form	Type of livestock/manure	Existing maximum number	Existing maximum number (NU)	Estimated livestock barn area
Liquid	Dairy, Milking-age Cows (dry or milking) Large Frame (545 - 658 kg) (eg. Holsteins), Tie Stall	200	285.7 NU	2044 m²

Setback summary

Existing manure storage	**V5. Liquid, inside, underneath slatted floor**
Design capacity	**285.7 NU**
Potential design capacity	**285.7 NU**

Factor A (odour potential) **0.7**
Factor B (design capacity) **455.95**
Factor D (manure type) **0.8**
Factor E (encroaching land use) **2.2**

Building base distance 'F' (A x B x D x E) (minimum distance from livestock barn)	**562 m (1844 ft)**
Actual distance from livestock barn	**NA**
Storage base distance 'S' (minimum distance from manure storage)	**562 m (1844 ft)**
Actual distance from manure storage	**NA**

Operation #14

Farm contact information

ON

Location of existing livestock facility or anaerobic digestor
Regional Municipality of Peel
Town of Caledon
ALBION
Concession 7 , Lot 15
Roll number: 2124

Total lot size
39.7 ha

Livestock/manure summary

Manure Form	Type of livestock/manure	Existing maximum number	Existing maximum number (NU)	Estimated livestock barn area
Solid	Horses, Large-framed, mature; > 680 kg (including unweaned offspring)	8	11.4 NU	242 m²

Setback summary

Existing manure storage **- Not Specified -**

Design capacity **11.4 NU**

Potential design capacity **11.4 NU**

Factor A (odour potential) **0.7**
Factor D (manure type) **0.7**
Factor B (design capacity) **171.43**
Factor E (encroaching land use) **2.2**

Building base distance 'F' (A x B x D x E)
(minimum distance from livestock barn) **185 m (607 ft)**

Actual distance from livestock barn **NA**

Storage base distance 'S'
(minimum distance from manure storage) **No existing manure storage**

Actual distance from manure storage **NA**

Preparer signoff & disclaimer

Preparer contact information
John Liotta
Colville Consulting Inc.
432 Niagara St Unit 2
St. Catharines, ON
L2M 4W3
905-935-2161 x110
john@colvilleconsultinginc.ca

Signature of preparer

01-27-2025

John Liotta , Agrologist/Ecologist

Date (mmm-dd-yyyy)

Note to the user

The Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) has developed this software program for distribution and use with the Minimum Distance Separation (MDS) Formulae as a public service to assist farmers, consultants, and the general public. This version of the software distributed by OMAFRA will be considered to be the official version for purposes of calculating MDS. OMAFRA is not responsible for errors due to inaccurate or incorrect data or information; mistakes in calculation; errors arising out of modification of the software, or errors arising out of incorrect inputting of data. All data and calculations should be verified before acting on them.