

**TOWN OF CALEDON  
PLANNING  
RECEIVED**

February 20th, 2026

**AGRICULTURAL IMPACT ASSESSMENT  
FOR  
MAYFIELD TULLAMORE SECONDARY PLAN AREA**

**PREPARED FOR:**

MAYFIELD TULLAMORE LANDOWNERS GROUP INC.

130 ADELAIDE STREET WEST, SUITE 2800  
TORONTO, ON  
M5H3P5

**PREPARED BY:**



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

C24035

AUGUST 2024 (REVISED FEBRUARY 2026)

**TABLE OF CONTENTS**

**EXECUTIVE SUMMARY ..... V**

**1. INTRODUCTION..... 1**

1.1 Retainer.....1

1.2 Development in Ontario.....1

1.2.1 Planning Framework.....1

1.2.2 Defined Terms and Meanings.....1

1.2.3 Guidance Documents .....2

1.3 Qualified Professionals.....2

1.4 Description of Proposed Development .....3

1.5 Purpose of Study .....3

1.6 Study Area.....4

1.6.1 Primary Study Area.....4

1.6.2 Secondary Study Area.....4

**2. SCOPE OF STUDY..... 6**

**3. METHODOLOGY..... 7**

3.1 Background Data Collection.....7

3.2 Field Inventories.....7

3.2.1 Land Use Survey .....8

3.2.2 MDS Calculations .....8

3.3 Evaluation of the Agricultural System .....9

3.4 Evaluation of Alternative Locations .....9

3.5 Identification of Potential Impacts and Mitigation Measures.....9

3.6 Assessment of Consistency with Agricultural Policies.....10

**4. AGRICULTURAL POLICIES ..... 11**

4.1 Provincial Policy Statement .....11

4.1.1 Prime Agricultural Areas.....11

4.1.2 Policies for Removal of Land from Prime Agricultural Areas .....11

4.2	Region of Peel Official Plan .....	12
4.3	Future Caledon Official Plan .....	13
<b>5.</b>	<b>STUDY FINDINGS .....</b>	<b>14</b>
5.1	Physiography .....	14
5.2	Climate.....	14
5.3	Agricultural Crop Statistics .....	14
5.3.1	Regional Municipality of Peel .....	15
5.3.2	Town of Caledon.....	15
5.4	Specialty Crop Areas .....	16
5.5	Regional Soils.....	16
5.5.1	Soil Series .....	16
5.5.2	CLI Agricultural Land Classification .....	20
5.6	Land Use.....	21
5.6.1	Agricultural Uses .....	21
5.6.2	Agriculture-Related Uses.....	23
5.6.3	On-Farm Diversified Uses .....	23
5.6.4	Non-Agricultural Uses.....	23
5.6.5	Land Use Summary .....	24
5.6.6	Cropping Pattern .....	24
5.7	Land Improvements.....	25
5.7.1	Drainage Improvements in Subject Lands .....	25
5.7.2	Drainage Improvements in Study Area.....	25
5.7.3	Other Land Improvements .....	25
5.8	Fragmentation of Agricultural Lands.....	27
5.9	Minimum Distance Separation.....	29
5.9.1	Application of MDS.....	29
5.9.2	MDS Guidelines .....	29
5.9.3	MDS Results .....	32
5.10	Economic and Community Benefits of Agriculture .....	34
<b>9.</b>	<b>ASSESSMENT OF IMPACTS TO AGRICULTURE .....</b>	<b>36</b>

9.1	Direct Impacts.....	36
9.1.1	Prime Agricultural Lands .....	36
9.1.2	Agricultural Infrastructure .....	36
9.1.3	Agricultural Land Improvements .....	36
9.1.4	Loss of Crop Land.....	37
9.2	Indirect Impacts.....	37
9.2.1	Disruption to Surficial Drainage.....	37
9.2.2	Disruption to Farm Operations.....	38
9.2.3	Trespass and Vandalism .....	38
9.2.4	Minimum Distance Separation .....	38
9.2.5	Transportation Impacts.....	38
9.2.6	Economic and Community Impacts.....	39
9.3	Implementation of Edge Planning Techniques .....	39
9.3.1	Subdivision Design: Density, Road, and Lot Patterns .....	40
9.3.2	Building Design and Layout .....	40
9.3.3	Open Space and Landscape Design .....	40
9.3.4	Urban-Side Buffer Design.....	40
9.3.5	Trail System .....	41
9.4	Summary of Impacts.....	41
<b>10.</b>	<b>CONSISTENCY WITH AGRICULTURAL POLICIES .....</b>	<b>44</b>
10.1	Provincial Planning Statement .....	44
10.2	Region of Peel Official Plan .....	44
10.3	Future Caledon Official Plan .....	45
<b>11.</b>	<b>CONCLUSION .....</b>	<b>47</b>
<b>12.</b>	<b>GLOSSARY OF TERMS .....</b>	<b>48</b>
<b>13.</b>	<b>REFERENCES .....</b>	<b>53</b>

**LIST OF FIGURES**

**Figure 1: Location**.....5  
**Figure 2: Regional Soils and CLI Mapping**.....18  
**Figure 3: Land Use Mapping**.....22  
**Figure 4: Tile Drainage**.....26  
**Figure 5: Fragmentation of Agricultural Land Base** .....28  
**Figure 6: Minimum Distance Separation**.....33

**LIST OF TABLES**

**Table 1. Reporting Farms in the Town of Caledon – 2021 Census** .....16  
**Table 2. Regional Soil Series for Subject Lands** .....20  
**Table 3. Summary of Observed Land Uses**.....24  
**Table 4. MDS Setback Requirements for Proposed Development** .....34  
**Table 5. Summary of Impacts**.....42

**APPENDICES**

- Appendix A – Curriculum Vitae
- Appendix B – Structure Plan
- Appendix C – Climate Normals Data
- Appendix D – Agricultural Crop Statistics
- Appendix E – Canada Land Inventory Information
- Appendix F – Site Photographs
- Appendix G – Land Use Notes
- Appendix H – AgriSuite MDS Reports

## EXECUTIVE SUMMARY

The purpose of the Agricultural Impact Assessment (AIA) is to identify and evaluate potential impacts of the proposed Secondary Plan application and subsequent *development* of the Mayfield Tullamore Secondary Plan Area on the local Agricultural System. Where impacts are identified, recommendations are provided to avoid, or where avoidance is not possible, minimize potential impacts to the extent feasible. The AIA includes a review of background information, field work, analysis of impacts, assessment of agricultural priority, analysis of net impacts following mitigation measures, and assessment of the proposal's consistency with provincial and municipal agricultural policies.

Following the provincial approval of the Future Caledon Official Plan on October 22, 2025, the Mayfield Tullamore Secondary Plan Area has been redesignated from Prime Agricultural Area to New Community Area within the Urban Area of the Future Caledon Official Plan. As such, the Subject Lands are no longer recognized provincially, regionally, or locally as being part of a *prime agricultural area*.

The Mayfield Tullamore Secondary Plan Area is predominately in agricultural production of common field crops. There are also natural heritage features, two golf courses, and disturbed areas identified within the Study Area. There are two remnant agricultural operations, one active agricultural operation, one agriculture-related land use, and approximately 34 non-agricultural uses which includes approximately 28 non-farm residences.

The AIA determined that the proposal is consistent with provincial and municipal policies. Impacts associated with the proposal are primarily limited to the loss of *prime agricultural lands*, cultivatable land, tile drainage, and farm infrastructure. The AIA has recommended mitigation measures that will avoid, or minimize, impacts to the local Agricultural System, to the extent possible. Net indirect impacts following implementation of recommended mitigation measures will minimize potential impacts.

## **1. INTRODUCTION**

### **1.1 Retainer**

Colville Consulting Inc. was retained by the Mayfield Tullamore Landowners Group (MTLG) to complete an Agricultural Impact Assessment (AIA) for the Mayfield Tullamore Secondary Plan Area. These lands, herein referred to as the Subject Lands, are generally located east of Dixie Road, west of Torbram Road, north of Mayfield Road, and south of Old School Road, in the Town of Caledon. The Mayfield Tullamore Landowners Group control eleven parcels within the Subject Lands, accounting for the majority of the area of the Subject Lands. The majority of the Subject Lands are part of the Urban System and designated as part of the 2051 New Urban Area in the Region of Peel Official Plan (November 2022), with a smaller portion designated Prime Agricultural Area. The Subject Lands are primarily designated New Community Area within the Urban Area of the Future Caledon Official Plan.

The portion of the Subject Lands which are designated Prime Agricultural Area in the Region of Peel and Future Caledon Official Plans are located within the Natural Heritage System of the Protected Countryside designation in the Greenbelt Plan. It is understood that no *development* is proposed within the Greenbelt Plan area. The Subject Lands are also part of the Greater Golden Horseshoe and form part of the Agricultural Land Base's prime agricultural area.

Contrary to what is shown in the Agricultural Land Base mapping, the Province no longer recognizes the Subject Lands as being part of a *prime agricultural area*. The Region of Peel updated its Official Plan, through a Municipal Comprehensive Review (MCR), which designated the Subject Lands as 2051 New Urban Area. The updated Official Plan was approved by the Province in November of 2022, allowing the Region's mapping to take precedence. The Future Caledon Official Plan was subsequently approved by the Province on October 22, 2025 and is consistent with the Region's official plan, providing further confirmation that the Subject lands are no longer part of a *prime agricultural area*.

### **1.2 Development in Ontario**

#### **1.2.1 Planning Framework**

The *Provincial Planning Statement 2024 (PPS)* provides the framework for land use planning and *development* in Ontario. It provides policy direction on matters of provincial interest related to land use planning and *development*. The intent of the planning statement is to ensure "Ontario's vibrant agricultural sector and sensitive areas will continue to form part of the province's economic prosperity and overall identity. Growth and development will be prioritized within urban and rural settlements that will, in turn, support and protect the long-term viability of rural areas, local food production, and the agri-food network. In addition, resources, including natural areas, water, aggregates and agricultural lands will be protected."

#### **1.2.2 Defined Terms and Meanings**

Italicized terms throughout this AIA are often consistent with terms and definitions contained in the *Provincial Planning Statement* and provincial guidance documents. The definitions of these italicized terms are provided in the Glossary of Terms section of this report.

### 1.2.3 Guidance Documents

This AIA refers to several provincial guidance documents, materials, and technical criteria that are frequently considered when preparing an AIA. These guidance documents are meant to inform and assist planning authorities and decision-makers when implementing the policies of the *Provincial Planning Statement*. The guidance documents also provide practitioners with direction on what the Province considers important and how studies such as an AIA are to be undertaken. As stated in the *PPS*, “Information, technical criteria and approaches outlined in provincial guidance are meant to support implementation but not add to or detract from the policies of this Provincial Planning Statement”.

Throughout this AIA, there are several references to documents and data sources prepared by the Ontario Ministry of Agriculture, Food, and Rural Affairs (OMAFRA). However, in June of 2024, the ministry was re-organized and two separate ministries were formed: the Ministry of Agriculture, Food and Agribusiness (OMAF) and the Ministry of Rural Affairs (MRA). For the purposes of this report, references to OMAFA and OMAFRA are often used interchangeably.

### 1.3 Qualified Professionals

The Ontario Ministry of Agriculture, Food and Agribusiness (OMAF) prepared the Agricultural Impact Assessment (AIA) Guidance Document, and published it in 2026. This document provides guidance on how to prepare an AIA and the qualifications practitioners should have in order to prepare an AIA. The AIA guidance document states that professionals involved in the development of an AIA should have “knowledge, training, and experience in:

- ♦ Ontario agri-business, agricultural supply chains, rural/agricultural economic development;
- ♦ Rural and agricultural land use planning;
- ♦ Canada Land Inventory (CLI) classification system for assessing agricultural land, and where necessary, soil science and soil mapping procedures;
- ♦ Minimum distance separation and biosecurity practices and protocols;
- ♦ Reviewing technical information from non-agricultural disciplines (e.g., hydrology, hydrogeology, geotechnical and transportation reports) assessing their relevance and utility in identifying potential agricultural impacts;
- ♦ Identifying, assessing, and evaluating the potential measures to avoid, minimize and mitigate impacts to the agricultural system; and
- ♦ Providing expert testimony in Ontario.”

The guidance document goes on to say that “A university or college degree(s) in one of the following is usually needed: land use planning, agriculture, soil science, geoscience, landscape architecture, resource management and related disciplines, environmental related disciplines, or agricultural engineering.”

The guidance document states that “professionals contributing to an AIA should have a relevant academic base, experience in Ontario’s land use planning system and provincial policies, and preferable membership in a professional organization with a code of ethics and ongoing professional development requirements”. As an example of such a professional organization, it specifically refers to the Ontario Institute of Agrologists (OIA) and registered professional agrologists (P.Ag.).

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 *development* related to *settlement area* boundary expansion applications across the province of Ontario.

This study was led by Sean Colville, B.Sc., P.Ag., who has over 35 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, B.Sc., P.Ag., was responsible for completing the field investigations and preparation of the AIA. John has over seven combined years of formal education in Environmental and Agricultural Planning, and work experience preparing Agricultural Impact Assessments with Colville Consulting Inc.

Colville Consulting Inc. staff meet the guidance documents qualifications for QPs. The curriculum vitae (CV) of Sean Colville and John Liotta can be found in Appendix A.

#### **1.4 Description of Proposed Development**

Following the provincial approval of the Future Caledon Official Plan on October 22, 2025, the Subject Lands have been redesignated from Prime Agricultural Area to Urban Area. A Secondary Plan will be required to establish specific land uses and implement phasing of new proposed *development*.

The Structure Plan for the Mayfield Tullamore Secondary Plan Area was reviewed and indicates a mix of urban-related land uses within the boundaries of the Subject Lands. The Structure Plan shows community areas, medium density residential uses, open space uses, neighbourhood centres, parks, schools, and urban corridor, existing schools and recreational centre, and a network of roads. A copy of the Structure Plan can be found in Appendix B.

#### **1.5 Purpose of Study**

The Future Caledon Official Plan identifies an Agricultural Impact Assessment as a requirement in the preparation of secondary plans within the Town of Caledon. One of the purposes of the Secondary Plan is to provide policies regarding the phasing of *development*. This AIA will identify the potential indirect impacts of the proposed *development* of the Subject Lands on the surrounding agricultural operations. The assessment of these impacts will be used to provide input regarding the phasing of *development* within the Subject Lands.

This AIA has been prepared in accordance with OMAFA's Agricultural Impact Assessment (AIA) Guidance Document (2026). 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 also assesses whether the proposed *development* is consistent with provincial, regional, and municipal agricultural policies.

## **1.6 Study Area**

To be consistent with the Agricultural Impact Assessment Guidance Document (2026), the Study Area should include both a *Primary* and *Secondary Study Area*. For this AIA, the *Primary Study Area (PSA)* encompasses the Subject Lands, while all lands within approximately 1.5 kilometers (1,500 m) of the Subject Lands' boundaries comprised the *Secondary Study Area*. Figure 1 shows the location of both the *Primary* and *Secondary Study Area*.

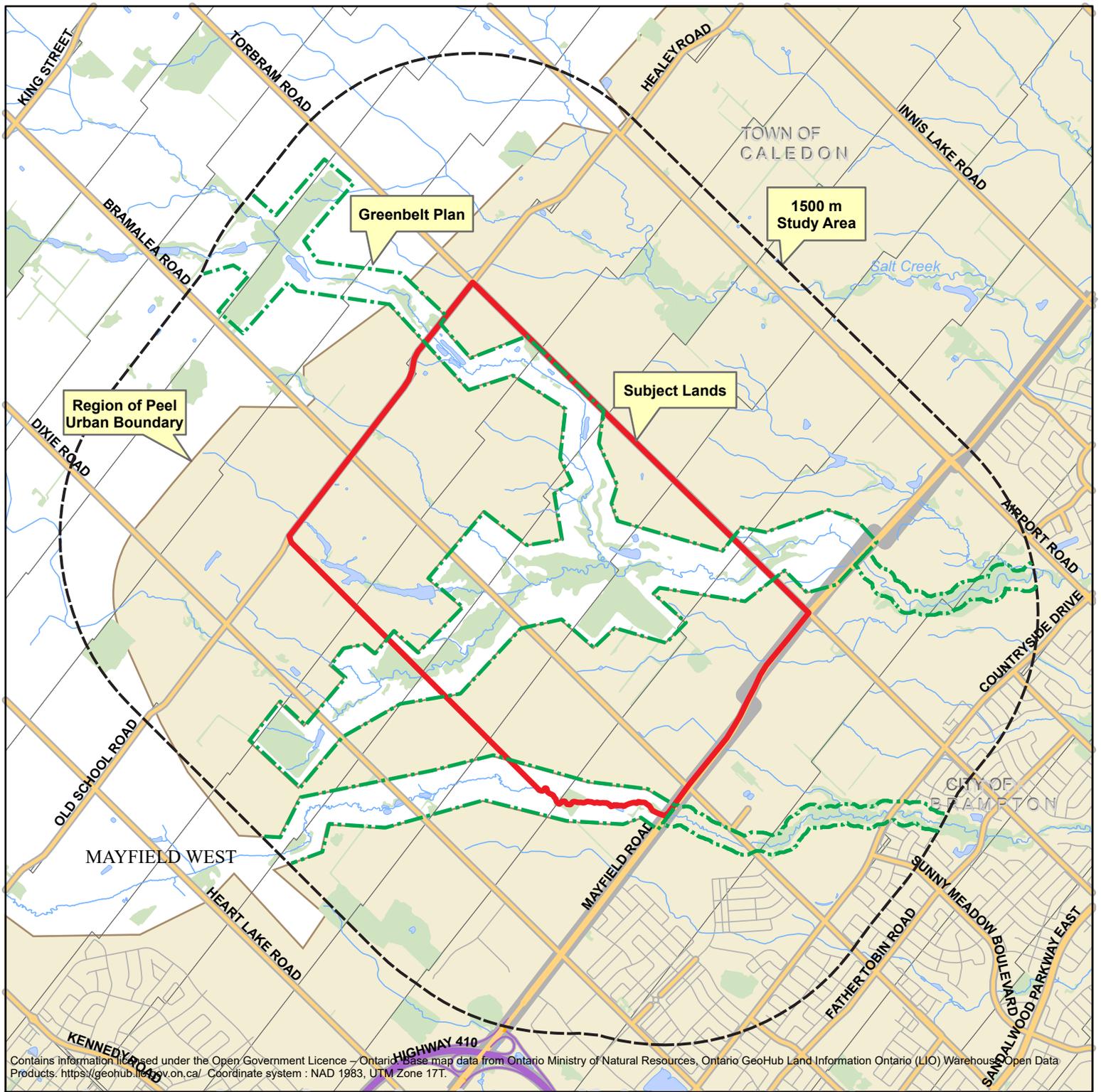
### **1.6.1 Primary Study Area**

The *PSA* is generally located east of Dixie Road, west of Torbram Road, north of Mayfield Road, and south of Old School Road, in the Town of Caledon. The Subject Lands are made up of multiple parcels and, combined, are approximately 618.05 ha (1,527.24 acres) in size. The Subject Lands are primarily in agricultural production for common field crops and also contain natural heritage areas, two golf courses, various agricultural and non-agricultural uses, and a number of non-farm residences.

### **1.6.2 Secondary Study Area**

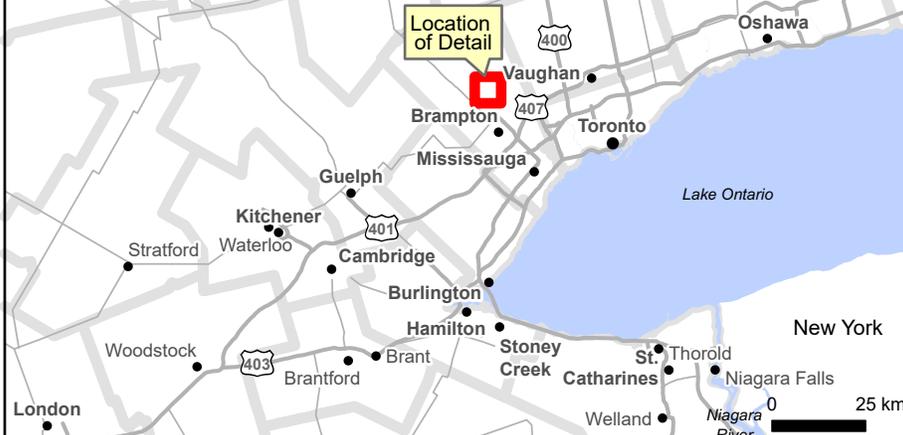
The *Secondary Study Area* (i.e., Study Area) includes all lands within 1.5 km of the Subject Lands and is generally bounded by Airport Road to the west, Heart Lake Road to the east, Countryside Drive to the south, and King Street to the north. The majority of the lands in the southeastern portion of the *Study Area* are located within the settlement area boundary of the City of Brampton and are designated for a range of *non-agricultural uses*. The remaining lands in the *Study Area* are primarily in agricultural production and also contain natural heritage features.

Figure 1 shows the location of both the *Primary* and *Secondary Study Area*.



Contains information licensed under the Open Government Licence – Ontario. Base map data from Ontario Ministry of Natural Resources, Ontario GeoHub Land Information Ontario (LIO) Warehouse, Open Data Products. <https://geohub.info.gov.on.ca/> Coordinate system : NAD 1983, UTM Zone 17T.

**LOCATION MAP**



**Figure 1**  
**Location of Subject Lands**

Agricultural Impact Assessment for  
Mayfield Tullamore Secondary Plan Area

Prepared for:  
**Mayfield Tullamore  
Landowners Group**

Prepared by:  
**COLVILLE**  
CONSULTING INC.

0 0.5 KM  
1:35,000



DATE:  
Feb 2026

FILE:  
C24035

## 2. SCOPE OF STUDY

To be consistent with the Agricultural Impact Assessment Guidance Document (2026), the study scope includes:

- ♦ a review of applicable agricultural policies and other background information and land use information for lands within the surrounding area (e.g., aerial photography);
- ♦ a review of data sources such as AgMaps and the Agricultural Systems Portal and OMAFA'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 *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, and the Future Caledon Official Plan; and
- ♦ the preparation of a report summarizing our findings.

The findings of this study have been summarized in this report. Given the provincial approval of the Region of Peel and Future Caledon Official Plans, and the subsequent removal of the Subject Lands from the *prime agricultural area*, this AIA does not assess alternative locations for the proposed *development*.

### 3. METHODOLOGY

The study methodology for the AIA was prepared in accordance with the OMAFA Agricultural Impact Assessment Guidance Document (2026). It includes a review of relevant provincial, regional, and local agricultural policies, provincial guidance documents and other agricultural-related sources of information. The information gathered was supplemented with data obtained during field inventories. Following the collection 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 proposed *development's* consistency with the 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);
- ♦ Future Caledon Official Plan and Land Use Schedules (October 2025 Consolidation)
- ♦ Soil Survey of Peel County – Report No. 18 of the Ontario Soil Survey (1953);
- ♦ OMAFA'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);
- ♦ OMAFA's Artificial Drainage Systems mapping;
- ♦ OMAFA's AgriSuite, AgMaps, and Agri-Systems databases;
- ♦ OMAFA's Agricultural Impact Assessment (AIA) Guidance Document (2026); 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 uses, agricultural uses, agriculture-related uses, on-farm diversified uses*, and the level of fragmentation based on the lot fabric. The review of aerial photographic imagery provides a general impression of the agricultural activity and level of agricultural investments on the Subject Lands and surrounding *Study Area*.

#### 3.2 Field Inventories

Field inventories were completed on June 26, 2024. 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 existing and retired), *agricultural-related uses*, *on-farm diversified uses*, and the extent and type of *non-agricultural 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 OMAFA 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 facility* 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 1<sup>st</sup>, 2017.

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

Guideline #36 of the Minimum Distance Separation (MDS) Guidance Document states in part that “MDS I setbacks are not required for proposed land use changes 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.” As previously stated, following the provincial approval of the Future Caledon Official Plan, the Subject Lands no longer form part of the *prime agricultural area*, and have been included in the *settlement area* of the Town of Caledon. As a result, the *MDS I formula* does not apply to the proposed *development*. However, the *MDS I formula* has been applied in order to identify areas which may be more sensitive to the introduction of *non-agricultural uses*, and to inform the phasing of future *development*.

The information required to complete *MDS I* calculations was obtained through a combination of sources. As per the *MDS* Guidelines, attempts were made to gather information directly from the landowner/tenant. Where landowners could not be contacted or were unavailable, self-addressed envelopes were left in mailboxes of potential *livestock facilities*.

OMAFA’s Agricultural Planning Tools Suite (AgriSuite) was used to determine the *MDS* requirements. It provides the most up to date software developed by OMAFRA to calculate the *MDS I* requirements for active *livestock facilities* and *unoccupied 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 *unoccupied*). In cases where it was not possible to collect information directly from the landowner, visual observations of the *livestock facility* were

used to determine 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 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 enables the agri-food sector to thrive. The evaluation of the *Agricultural System* was completed through a reconnaissance level land use survey on June 26, 2024,, a review of the information presented in OMAFA's Agricultural Systems Portal, and through interpretation of aerial photographic imagery. Components of the *agri-food network*, including regional infrastructure and transportation networks, on-farm buildings and infrastructure, and agricultural services, as well as small towns and hamlets that are supportive of the agricultural industry, were identified and mapped. 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.

### 3.4 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 primarily been included in the Region of Peel and Future Caledon Official Plans' 2051 New Urban Area, which was approved by the Province. The portion of the Subject Lands that are not located within the 2051 New Urban Area form part of the Greenbelt Plan Area and no development is proposed on these lands. The Region of Peel was required to assess alternative locations for *settlement area* boundary expansion, which indicates there are no reasonable alternative locations which avoid *prime agricultural areas* or locations of lower priority agricultural lands. Therefore, an assessment of alternative locations has not been completed as part of this AIA.

### 3.5 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 are those that directly impact the Subject Lands and include:

- a) Interim or permanent loss of agricultural land, including the quality and quantity of farmland lost;
- b) The type of *agricultural, agriculture-related, or on-farm diversified uses* being lost and the significance this has for supporting other agricultural production in the surrounding area;
- c) The loss of existing and future farming opportunities;
- d) The loss of infrastructure, services, or assets important to the surrounding agricultural community and agri-food sector;
- e) The loss of agricultural investments in structures and land improvements (e.g. artificial drainage);

- f) The disruption or loss of function to artificial drainage and irrigation installations; and,
- g) Changes to the soil drainage regime.

Indirect impacts can negatively affect adjacent lands, farm operations, and farm practices. They include:

- a) Fragmentation of agricultural lands and operations;
- b) *Minimum Distance Separation* changes (where applicable) that will constrain future farm operations;
- c) Changes to surface drainage features which could have an effect on adjacent lands;
- d) Changes to landforms, elevations, and slope, that could alter microclimatic conditions (e.g. modification to slopes that may reduce or improve cold air drainage opportunities and changes to elevation may have an impact on diurnal temperatures);
- e) Changes to hydrogeological conditions that could affect neighboring municipal or private wells, sources of irrigation water, and sources of water for *livestock*;
- f) Disruption to surrounding farm operations, activities, and management (e.g. temporary loss of productive agricultural lands, cultivation, seeding, spraying, harvesting, field access, use of road network);
- g) The potential effects of noise, vibration, dust, traffic and vandalism and trespassing on agricultural operations, lands, activities and investments;
- h) Potential compatibility concerns between agricultural operations employing *normal farm practices* and new non-farm *development* (e.g. nuisance complaints); and,
- i) The inability or challenges to move farm vehicles and equipment along roads due to increased traffic caused by haul routes, changes in road design.

Mitigation measures were then developed for both direct and indirect impacts identified, which avoid or minimize potential impacts on the *Agricultural System*.

### **3.6 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 are to be consistent with the *PPS* and to which the proposed *development* must comply with. A background review of all applicable provincial and municipal policies relating to agriculture was undertaken. Policies applicable to the proposed non-agricultural *development* were identified and assessed for consistency as part of this AIA.

## **4. AGRICULTURAL POLICIES**

### **4.1 Provincial Policy 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 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 previously stated, following the approval of the Region of Peel and Future Caledon Official Plans, the Subject Lands do not form part of a *prime agricultural area*. As such, the proposed *development* is not required to be consistent with the agricultural policies of the *PPS* for *settlement area* boundary expansion.

## 4.2 Region of Peel Official Plan

Schedule E1 of the Region of Peel Official Plan designates the Subject Lands as 2051 New Urban Area within the Urban System. Policy 5.3.1 of the Region of Peel Official Plan directs “the vast majority of the new population and employment growth to the Urban System, being lands within the Delineated Built-up Area with a focus on Strategic Growth Areas and other areas that leverage existing and planned infrastructure investments.” Since the Subject Lands no longer form part of the *prime agricultural area* of the Region of Peel, the proposed *development* is not required to be consistent with the agricultural policy of the Region of Peel Official Plan.

Policy 5.6.20.14.17.a) of the Region of Peel Official Plan states that the Region of Peel will “Require that the local municipalities’ secondary plans be undertaken on the basis of the following studies and technical analysis completed to the satisfaction of the local municipality:

- a) An agricultural impact assessment for each secondary plan area abutting or adjacent to agricultural areas in the Agricultural System prior to adopting an official plan amendment to implement the secondary plan in accordance with terms of reference prepared to the satisfaction of the Region, in consultation with relevant agencies. The agricultural impact assessment shall provide a further detailed evaluation where the settlement area boundary abuts or is adjacent to agricultural operations located outside of the Designated Greenfield Area and provide recommendations to avoid, minimize and/or mitigate adverse impacts. The implementation of recommendations of the agricultural impact assessment shall be incorporated into the secondary plan, as appropriate, and will include policies, at minimum, that will:
  - i) provide for the staging and sequencing within secondary plans so that an orderly transition from agriculture is achieved and agricultural uses and agriculture-related uses continue for as long as practical in the Designated Greenfield Area;
  - ii) require the implementation of mitigation measures in the secondary plan where agricultural uses and non-agricultural uses interface with emphasis on minimizing impacts to adjacent agricultural operations that are located outside of the Designated Greenfield Areas in the Greenbelt Plan Area including policy direction to implement recommendations such as locating compatible/less sensitive land uses, buffering and landscaping where urban and agricultural uses interface to the extent feasible and having regard for the nature and type of the agricultural operation and sensitivity of proposed land uses;
  - iii) identify through mapping any required Provincial minimum distance separation (MDS) I setback (the Setback Area) that extends into the secondary plan area; and
  - iv) prohibit development in the Setback Area; if and when the livestock and manure storage facilities that are creating the Setback Area are removed, thus eliminating the Setback Area, permit development in accordance with the requirements of the Secondary Plan.”

It should be noted that on July 1, 2025, the Region of Peel became a Regional Municipality without Planning Authority. As a result, the Region of Peel Official Plan became an Official Plan of the lower tier municipalities.

The AIA will assess the proposed *development* for consistency with Policy 5.6.20.14.17.a) of the Region of Peel Official Plan.

### 4.3 Future Caledon Official Plan

As previously stated, following the October 2025 provincial approval of the Future Caledon Official Plan, the Subject Lands have been redesignated from Agricultural Area to Designated Growth Area within the Urban Area. As a result, the proposed *development* is not required to be consistent with the agricultural policy of the Future Caledon Official Plan.

Policy 24.3 of the Future Caledon Official Plan outlines the policies for Official Plan Amendments for Secondary Plans. Policy 24.3.2 states in part that “Further to Policy 24.3.1, each secondary plan area will be based on the following supporting studies and technical analysis prepared to the satisfaction of the Town in accordance with applicable terms of reference:

- a) a local subwatershed study, or equivalent study, prepared in accordance with Part D, Section 13.9, Natural Environment System in New Community Areas and New Employment Areas;
- b) an agricultural impact assessment, if the secondary plan area abuts or is adjacent to prime agricultural areas outside the settlement area, that:
  - i) is prepared in accordance with terms of reference prepared to the satisfaction of the Town; provides a further detailed evaluation of potential impacts of non-agricultural development on the agricultural system, including agricultural operations and provides recommendations to avoid, minimize and/or mitigate adverse effects;
  - ii) recommends policies to be incorporated into the secondary plan, as appropriate, that:
    - provide for staging and sequencing within the secondary plan so that an orderly transition from agriculture is achieved and agricultural uses and agriculture-related uses continue for as long as practical in the designated growth area;
    - require the implementation of mitigation in the secondary plan where agricultural uses and non-agricultural uses interface with emphasis on minimizing impacts to the agricultural system and adjacent agricultural operations that are located outside of the designated growth area in the Greenbelt Plan Area;
    - address compatible/less sensitive land uses and edge planning, including buffering and landscaping where urban and agricultural uses interface to the extent feasible and having regard for the agricultural system, the nature and type of the agricultural operation and sensitivity of proposed land uses; and,
    - prohibit development in any required Provincial minimum distance separation setback (the Setback Area) for as long as the livestock and manure storage facilities that are creating the Setback Area are present”.

The AIA will assess the proposed *development* for consistency with Policy 24.3.2)b) of the 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, the Peel Plain to the south, and the Niagara Escarpment to the west. The lands gently slope towards Lake Ontario. The South Slope consists of a faintly drumlinized till plain with smooth slopes and is often deeply scoured 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 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 Toronto Pearson (Airport) station (1991-2020) were obtained from the online database (Appendix C).

Environment Canada's Toronto Pearson (Airport) station is located approximately 16 km from the Subject Lands. Records show that this area receives an average of 806.8 mm of precipitation annually; 697.4 mm of rainfall and 114.5 cm of snowfall. The daily average temperature ranges from a high of 22.1°C to a low of -5.0°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 7<sup>th</sup> before reaching temperatures greater than 12.8°C for 3 consecutive days around May 19<sup>th</sup>. During this time and up until the season's average ending date, September 30<sup>th</sup>, the area accumulates an average of 3200 crop heat units (CHU).

On average, the last spring frost in the Caledon area occurs on April 27<sup>th</sup> and the first fall frost is expected on October 20<sup>th</sup>. This provides the surrounding area with a growing period of approximately 174 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 OMAFA 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.

### **5.3.1 Regional Municipality of Peel**

The total number of farms in the Regional Municipality of Peel decreased from 408 in 2016 to 377 in 2021, while total cropland increased from 67,408 acres in 2016 to 80,409 acres in 2021.

Field crops grown in the Regional Municipality of Peel 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 barley for grain, corn for silage, and potatoes, whereas all other major field crop production in Peel increased.

Fruit crops grown in Peel include apples, grapes, strawberries, and raspberries. Fruit crop acreage decreased from 403 acres in 2016 to 284 acres in 2021. Vegetable crops grown in Peel include sweet corn, tomatoes, green peas, and green or wax beans. Vegetable crop acreage increased from 377 acres in 2016 to 519 acres in 2021.

### **5.3.2 Town of Caledon**

The total number of farms in the Town of Caledon decreased slightly from 345 in 2016 to 308 in 2021, with total cropland area increasing from 63,239 acres in 2016 to 73,460 acres in 2021.

Field crops grown in 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 and 2021 decreased for potatoes, while all other major field crops increased in production.

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

The Agricultural Systems Portal shows that there are 308 farms reporting within the Town of Caledon in the 2021 Census. These are summarized in Table 1 below. Of the 308 farms reporting in 2021, 127 farms had *livestock*; of which, cattle ranching and other animal production (i.e., horse and equine, apiculture, etc.) were the most common types of operations. Most farms reporting in Caledon are engaged in crop production, with oil seed and grain farming being the most common type of operation.

<b>Table 1. Reporting Farms in the Town of Caledon – 2021 Census</b>	
<b>Farm Type</b>	<b>Number Reported</b>
Total Number of Farms	308
Cattle Ranching and Farming	55
Hog and Pig Farming	3
Poultry and Egg Production	10
Sheep and Goat Farming	4
Other Animal Production	55
Oil Seed and Grain Farming	93
Vegetable and Melon Farming	27
Fruit Tree and Nut Farming	10
Greenhouse, Nursery, and Floriculture Production	14
Other Crop Farming	37

## 5.4 Specialty Crop Areas

The *PPS* defines *specialty crop areas* 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 in the Greenbelt Plan area: the Niagara Peninsula Tender Fruit and Grape Area and the Holland Marsh. The Province also recognizes *specialty crop areas* identified by municipalities which have included *specialty crop areas* in their land use schedules. The Regional of Peel has not identified any of the lands within its municipal boundaries as a *specialty crop area*. 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*, and no specialty crops were observed within the Study 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 July 2024.

The *Soil Survey of Peel County* mapping shows that the soils within the Subject Lands are comprised primarily of Chinguacousy Clay Loam (76.19%) soils, with smaller amounts of Pontypool Sandy Loam (7.83%), Jeddo Clay Loam (2.56%), Oneida Clay Loam (0.48%), and Bottom Land (12.94%) soils. Regional scale soil mapping is shown in Figure 2.

#### **Oneida Clay Loam – Brunisolic Gray Brown Luvisol**

The Oneida Clay Loam soil series is mapped on less than 1% of the Subject Lands. These well drained and relatively stone free soils are mapped on slopes ranging from very gently sloping (2-5%) to gently sloping (5-9%). The dark coloured, silty clay loam to clay loam surface horizon (Ap) is often 20 to 25 cm thick. The subsoil (B horizon) consists of silty clay loam to clay loam textures. It is common to find a well developed Bt horizon (the “t” indicates clay accumulations) just above the silty clay loam parent material (Ck horizon). The calcareous parent material is generally encountered at a depth of 60 to 80 cm.

Oneida soils have a relatively high bulk density, and the consistency is firm throughout the soil profile and will become very firm as the soil dries. These soils are moderately to slowly permeable due to their high clay content. However, surface run-off is rapid which results in a moderately well drained soil.

These soils have a Canada Land Inventory (CLI) rating for common field crop production of CLI Class 1 on very gentle 2-5% slopes and CLI Class 3T on 5-9% slopes. These soils need to be carefully managed due to their high bulk density to ensure that the soil structure is not damaged when under cultivation. Compaction of the soil can occur under wet soil conditions limiting root penetration and reducing air and water volumes in the soil. These soils are easily erodible on steeper slopes and best management practices are required to ensure the potential for erosion is minimized.

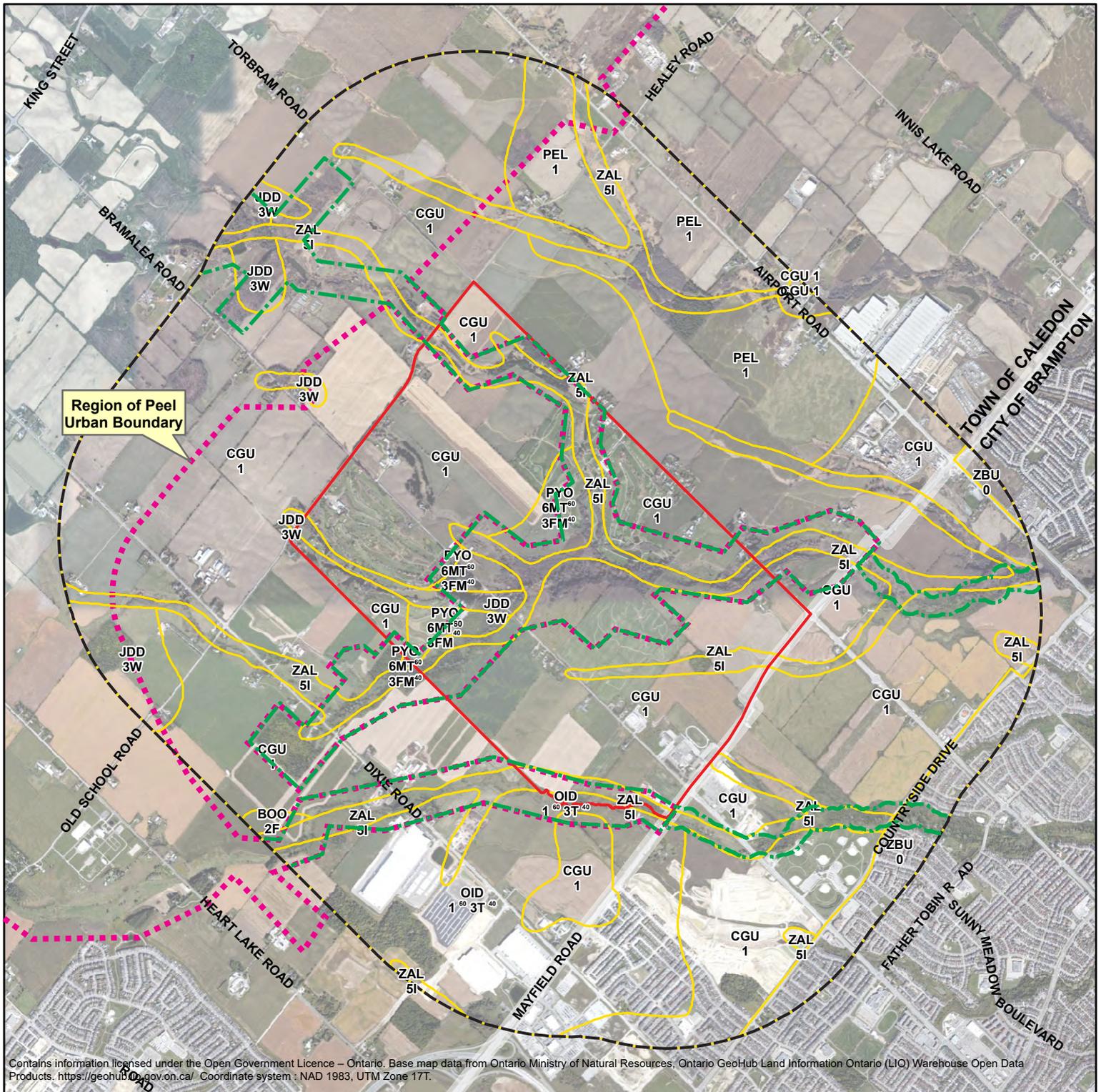
Oneida soils are well adapted to the growing of common field crops and a wide range of vegetable crops.

#### **Chinguacousy Clay Loam - Gleyed Brunisolic Gray Brown Luvisol**

The Chinguacousy Clay Loam soils are the dominant soil type mapped on the Subject Lands. They are the imperfectly drained member of the Oneida catena. Approximately 76.19% of the property is mapped as the Chinguacousy Clay Loam on very gentle slopes (2-5%). The Chinguacousy soil series has developed from the same calcareous, silty clay to silty clay loam till, parent material as the Oneida. Similar to the Oneida the parent material (Ckgj) is found between 60 and 80 cm from the surface and its consistency is firm. The friable, silty clay loam surface (Ap) is 20 to 25 cm deep and contains few stones. The Ap horizon typically overlies a firm, clay loam to silty clay loam subsoil (Bmgj and Btgj horizons).

The imperfectly drained Chinguacousy soils have a relatively high water holding capacity. They are moderately to slowly permeable and surface runoff is moderate. Excess soil water is often found in the upper soil horizons as a result of high groundwater or perched conditions during the growing season. As a result, mottles are present in the upper 50 cm of the soil profile.

Chinguacousy soils are generally found on nearly level slopes (0.5-2%) to very gentle slopes (2-5%). These soils are rated CLI Class 1 lands on nearly level slopes and a CLI Class 2D lands on very gentle slopes, indicating moderate limitations for common field crops due to a relatively high bulk density. The soil is easily compacted by machinery when soil moisture conditions are high. Tile drainage is often necessary to improve crop yields particularly where soil compaction has occurred. Erosion control measures may need to be implemented for lands under row crop production as Chinguacousy soils are also easily erodible.



Contains information licensed under the Open Government Licence – Ontario. Base map data from Ontario Ministry of Natural Resources, Ontario GeoHub Land Information Ontario (LIO) Warehouse Open Data Products. <https://geohub.ontario.ca/> Coordinate system : NAD 1983, UTM Zone 17T.

**Legend**

- Subject Lands
- 1500m Study Area
- Soil OMAFRA
- Greenbelt Plan

**CLI AGRICULTURAL CAPABILITY CLASSES**

**Class 1** - No significant limitations in use for crops.  
**Class 2** - Moderate limitations that restrict the choice of crops, or require moderate conservation practices.  
**Class 3** - Moderately severe limitations that restrict the choice of crops, or require special conservation practices.  
**Class 5** - Very severe limitations that restrict their capability in producing perennial forage crops, and improvement practices are feasible.  
**Class 6** - Very severe limitations that restrict soil to only producing perennial forage crops, and improvement practices are not feasible.  
**Class 0** - Not placed in a capability class.

**Soil Series Name** → **BOO** ← **Percentage of Area**

**CLI Class** → **1<sup>60</sup>3T<sup>40</sup>** ← **CLI Subclass**

**CLI AGRICULTURAL CAPABILITY SUBCLASSES**

- I** Inundation – periodic flooding by streams or lakes
- W** Excess Water – presence of excess soil moisture, other than that brought about by inundation
- T** Topography – subclass where topography is a limitation

**SOIL SERIES**

- BOO** - Bookton Sandy Loam
- JDD** - Jeddo Clay Loam
- CGU** - Chinguacousy Clay Loam
- OID** - Oneida Clay Loam
- PEL** - Peel Clay
- PYO** - Pontypool Sandy Loam
- ZAL** - Bottom Land
- ZBU** - Built Up Area

**Figure 2**  
**Soils and CLI**

**Agricultural Impact Assessment for  
Mayfield Tullamore Secondary Plan Area**

Prepared for:  
**Mayfield Tullamore  
Landowners Group**

Prepared by:  
**COLVILLE  
CONSULTING INC.**

0 0.5 KM  
1:35,000

N  
▲

DATE: Feb 2026	FILE: C24035
-------------------	-----------------

### **Jeddo Clay Loam – Humic Luvic Gleysol**

The Jeddo Clay Loam is found in close association with the Chinguacousy soil. These soils are mapped on the nearly level (0.5-2%) and very gentle (2-5%) slopes associated with low lying areas. Jeddo soils are the poorly drained member of the Oneida catena and have developed from similar clay till parent material. These soils are slowly permeable and are often saturated for much of the year. Temporary ponding following heavy rainfall events is a common problem, particularly in depressional areas where surface runoff is slow. Tile drainage is required to lower the high groundwater table during the growing season however, perched conditions may arise where compaction becomes a problem and tile drainage becomes less effective.

The dark coloured surface horizon is approximately 20-30 cm in depth and the organic matter content in this horizon is relatively high. The silty clay textures of the gleyed B horizons (Bg) also contain thin sand lenses indicating that the deposition of the surface material may also have had a lacustrine influence. The calcareous parent material (Ckg) is found at a depth of 60-80 cm.

In areas where these poorly drained soils can be effectively tile drained, they are rated CLI Class 3W for common field crops. They have a moderately severe limitation for common field crop production due to excessive wetness and require artificial drainage to obtain moderate yields. They are considered to be good agricultural soils if they can be effectively drained through the use of tile drainage and surficial drains. However, where these soils can not be feasibly drained, they have a CLI rating of Class 5W and are only suitable for permanent forage crops such as hay and pasture.

These soils are also susceptible to compaction and soil structure can be negatively impacted if these soils are worked under wet conditions. They are considered to be a “late” soil which means that they often cannot be worked by farmers until later in the growing season.

On the Subject Lands, Jeddo soils are mapped on 2.56% of the area.

### **Pontypool Sandy Loam**

The Pontypool Sandy Loam series is the only member of the Pontypool *catena* and has developed on poorly sorted sands and gravel. These soils are well drained and have coarse textures that consist of mainly sand, with pockets of gravel and a moderately textured till may also be present. They are mapped on approximately 7.83% of the Subject Lands. The Pontypool Sandy Loam soils mapped on the Subject Lands occur on gentle (5-9%) and very strong (30-45%) slopes, and are rated as CLI Class 3 and 6 lands, respectively.

Pontypool Sandy Loam soils are early soils which are low in organic matter. These soils often experience wind erosion and droughtiness due to the coarse texture of the soil and associated internal drainage. A wide range of crops are grown on this soil, such as corn, peas, tomatoes cereal grains, tree fruits, and hay. Usually the farm business consists of a combination of dairying, canning crop production, and fruit growing. Since the sandy loam requires heavy applications of manure to maintain and build up the organic matter content, the combination of dairy farming and growing of canning crops works out very well.

### **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. These soils are typically alluvial soils that include the associated valley slopes. The *soil profile* usually consists of variable textures and the drainage also often varies from poor along the valley floor to rapid along the valley slopes. They are mapped on approximately 12.94% of the Subject Lands.

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 (76.48%), with smaller areas mapped as CLI Class 3 (5.59%), Class 5 (12.94%), and Class 6 (4.70%), as shown in Figure 2. CLI Class 1 soils have no or very minor limitations for common field crop production. CLI Class 3F, 3M, 3T, and 3W soils have moderately severe limitations for common field crop production due to adverse low natural fertility, moisture deficiency, adverse topography, and excess water, respectively. CLI Class 5I soils have very severe limitations for common field crop production due to inundation (flooding) by streams or lakes. CLI Class 6 soils are unsuited for cultivation, but are capable of use for unimproved permanent pasture. The composition of soils mapped within the Subject Lands and their associated CLI Class are summarized in Table 2 below.

<b>Table 2. Regional Soil Series for Subject Lands</b>			
<b>Soil Series</b>	<b>CLI Class</b>	<b>Area (Ha)</b>	<b>% of Subject Lands</b>
Oneida Clay Loam	<b>1</b>	1.76	0.29
	<b>3T</b>	1.18	0.19
Chinguacousy Clay Loam	<b>1</b>	470.90	76.19
Jeddo Clay Loam	<b>3W</b>	15.83	2.56
Pontypool Sandy Loam	<b>3FM</b>	19.37	3.13
	<b>6MT</b>	29.05	4.70
Bottom Land	<b>5I</b>	79.96	12.94
<b>Totals</b>		<b>618.05</b>	<b>100.00%</b>

## 5.6 Land Use

A reconnaissance level land use survey was completed on June 26, 2024. The land use survey identified the number and type of agricultural operations (both existing and retired), *agriculture-related uses*, *on-farm diversified uses*, and the extent and type of *non-agricultural uses* within the *Study Area*. Following the initial submission of this AIA, peer review comments were received, which identified two additional *agricultural uses*. 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* in 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 3 shows the land uses and crop types identified. 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.

Twenty-four agricultural and former *agricultural uses* were identified during the land use survey. The *agricultural uses* include one *dairy operation*, six *hobby farms*, two beef operations, three *unoccupied livestock facilities*, and twelve *remnant farms*. *Remnant farms* have no infrastructure that is capable of housing *livestock*, whereas *unoccupied livestock facilities* are not currently housing *livestock*, but have infrastructure that is capable of housing *livestock* with minimal investment.

Three *agriculture-related uses* were identified during the land use survey. These uses include one grain elevator, one vegetable wholesaler, and one garden centre. No *on-farm diversified uses* were observed during the land use survey and desktop review.

In addition to the approximately 121 *non-farm residences* observed (excluding the residential area within the City of Brampton *settlement area*), twenty-five *non-agricultural uses* were identified within the Subject Lands and *Study Area*. These uses include six commercial uses, four institutional uses, ten industrial uses, three recreational uses, and two future residential developments. Non-agricultural land uses located within the City of Brampton *settlement area* were not included within the land use notes. A large number of commercial and residential uses were observed within the urban area.

### 5.6.1 Agricultural Uses

The *PPS* defines *agricultural uses* as “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 accommodation for full-time farm labour when the size and nature of the operation requires additional employment.”

Farm types were noted and identified as either active or *retired farm operations* (e.g., *unoccupied livestock facilities*), *livestock operations*, *cash crop operations*, or *hobby farms*. *Retired farm operations* were evaluated to determine whether they should be considered an *unoccupied livestock facility* or as a *remnant farm*. *Remnant farms* have no infrastructure suitable for housing *livestock*, whereas the infrastructure of an *unoccupied livestock facility* is still in a condition suitable for housing *livestock*, or would be with minimal investment.



- Legend**
- Subject Lands
  - 1500m Study Area
  - Greenbelt Plan
  - Regional Urban Boundary
- Agricultural Use**
- Remnant Farm
  - Beef Operation
  - Cash Crop Operation
  - Dairy Operation
  - Hobby Farm
  - Unoccupied Livestock Facility
  - Greenhouse
- Agriculture-Related Use**
- Vegetable Wholesaler
  - Grain Elevator
  - Garden Centre
- Non-Agricultural Use**
- Commercial
  - Institutional
  - Industrial
  - Future Residential Development
  - Recreational
  - Non-Farm Residential
- Crop Pattern**
- |   |  |
|---|--|
| <span style="background-color: #ffff00; border: 1px solid black; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> Soy        | <span style="background-color: #ffcc99; border: 1px solid black; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> Idle      |
| <span style="background-color: #d2b48c; border: 1px solid black; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> Corn       | <span style="background-color: #ffff00; border: 1px solid black; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> Hay       |
| <span style="background-color: #808080; border: 1px solid black; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> Cultivated | <span style="background-color: #008000; border: 1px solid black; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> Scrubland |
| <span style="background-color: #ffa500; border: 1px solid black; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> Cover Crop | <span style="background-color: #d3d3d3; border: 1px solid black; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> Disturbed |

Contains information licensed under the Open Government Licence – Ontario. Base map data from Ontario Ministry of Natural Resources, Ontario GeoHub Land Information Ontario (LIO) Warehouse Open Data Products. <https://geohub.lio.gov.on.ca/> Air photo: BING MAPS. Coordinate system : NAD 1983, UTM Zone 17T.

**Figure 3**  
General Land Use

Agricultural Impact Assessment for  
Mayfield Tullamore Secondary Plan Area

Prepared for:  
**Mayfield Tullamore Landowners Group**

Prepared by:  
**COLVILLE CONSULTING INC.**

0 1:25,000	0.5 KM	N ▲	DATE: Feb 2026	FILE: C24035
---------------	--------	--------	-------------------	-----------------

### **Subject Lands**

Three *agricultural uses* were identified within the Subject Lands. These uses include one *hobby farm* (#21), and two *remnant farms* (#27 and #48). The Subject Lands are currently *cultivated* with common field crops including soy, corn, hay, and also include large areas of idle lands, disturbed lands, and two golf courses.

### **Study Area**

Within the *Study Area*, excluding the Subject Lands, twenty-one *agricultural uses* were identified. These include one *dairy operation* (#32), five *hobby farms* (#14, #17, #30, #38, and #52), two beef operations (#16 and #35), ten *remnant farms* (#12, #13, #18, #19, #29, #34, #37, #39, #46, and #49), and three *unoccupied livestock facilities* (#33, #36, and #51). The two *empty livestock operations* observed were determined to have barns which are capable of housing *livestock*.

#### **5.6.2 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 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 the agricultural area;
- ♦ distribution facilities;
- ♦ food and beverage processors (e.g., wineries and cheese factories); and,
- ♦ agricultural biomass pelletizers.

Three *agriculture-related uses* were identified within the *Study Area*. These uses include one grain elevator (#28), one vegetable wholesaler (#31), and one garden centre (#3). The grain elevator is located in within the northern portion of the Subject Lands.

#### **5.6.3 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 Subject Lands nor *Study Area*.

#### **5.6.4 Non-Agricultural Uses**

*Non-agricultural uses* include *non-farm residences*, residential clusters, hamlets and *settlement areas*, municipal utilities, commercial and industrial operations, recreational uses, and institutional uses. Approximately 121

*non-farm residences* were observed throughout the Subject Lands and *Study Area*, excluding those within the City of Brampton *settlement area*.

Excluding the *non-farm residences*, twenty-five *non-agricultural uses* were identified within the Subject Lands and *Study Area*. These uses include six commercial uses (#1, #2, #5, #8, #9, and #44), four institutional uses (#22, #24, #25, and #41), three recreational uses (#20, #23, and #26), ten industrial uses (#4, #6, #7, #11, #15, #40, #42, #43, #45, and #50), and two future residential developments (#10 and #47).

**5.6.5 Land Use Summary**

Table 3 below summarizes the types of land uses observed within the Subject Lands and *Study Area*.

<b>Table 3. Summary of Observed Land Uses</b>			
	<b>Total Number</b>	<b>Active</b>	<b>Empty or Remnant</b>
<b>Agricultural</b>	24	Dairy Operation – 1 Hobby Farm – 6 Beef Operation – 2	Unoccupied Livestock Facility – 3 Remnant Farm- 12
<b>Agriculture-Related</b>	3	Grain Elevator – 1 Vegetable Wholesaler – 1 Garden Centre – 1	0
<b>On-farm Diversified</b>	0	0	0
	<b>Total Number</b>	<b>Type</b>	
<b>Non-Agricultural</b>	146	Commercial – 6 Industrial – 10 Future Residential Development – 2 Recreational – 3 Institutional – 4 Rural Residential - ~121	

The lands within the Study Area have already been significantly impacted by non-farm development.

**5.6.6 Cropping Pattern**

The land use survey completed on June 26, 2024, identified crops based on observations of crop stubble and other identifying features. As shown in Figure 3, the crops grown in the *Study Area*, outside of the City of Brampton *settlement area*, are predominantly a mix of corn, soybeans, hay, and cover crops or *cultivated* lands where land is being used for agricultural crops, but specific crops being grown were not observed. There are also areas of idle lands, scrublands, and disturbed lands.

## **5.7 Land Improvements**

OMAF's Agricultural Information Atlas (AgMaps) provides artificial drainage mapping for the province. This online tool was accessed to obtain drainage mapping for the *Study Area*. Figure 4 below shows the drainage improvements within the *Study Area*.

### **5.7.1 Drainage Improvements in Subject Lands**

According to OMAFA's online mapping tool, AgMaps, the Subject Lands contain small amounts of both random and systematic tile drainage. There is approximately 20.37 ha of systematic tile drainage and 31.97 ha of random tile drainage installed within the Subject Lands, with both primarily located in the central and northwestern portion of the Subject Lands, with a small portion of random tile drainage installed in the southern portion. The installation dates of the tile drainage were not available through the AgMaps Portal.

It should be noted that the majority of tile drainage mapped within the Subject Lands is mapped on a golf course. We have no reason to believe that the artificial drainage is not present on this recreational use now. However, the peer review of the initially submitted AIA indicated that it is unlikely that this artificial drainage is used as part of the golf course. As such, we have assumed that this artificial drainage has been removed.

There are no constructed drains present within the Subject Lands.

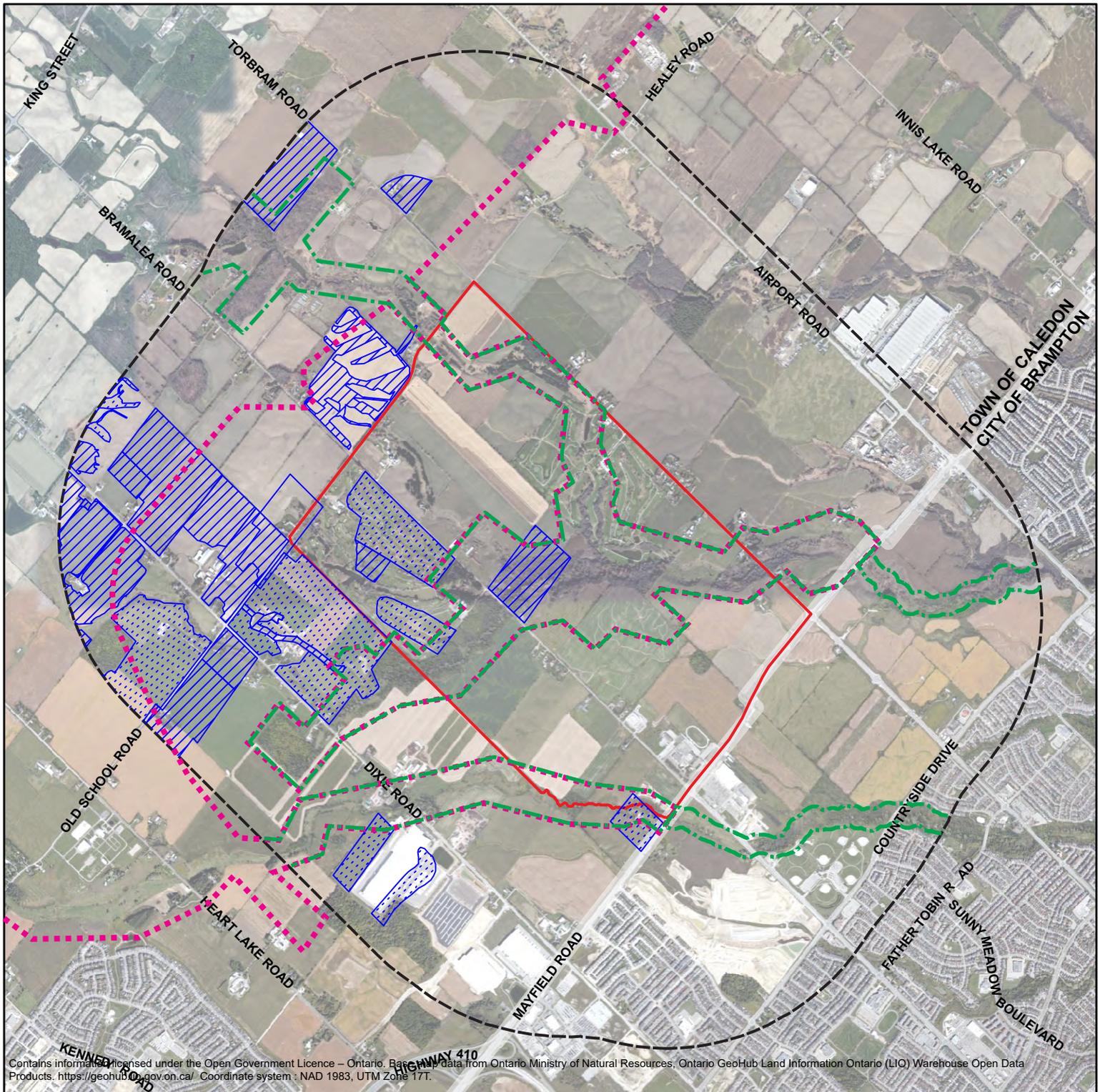
### **5.7.2 Drainage Improvements in Study Area**

Areas of both random and systematic tile drainage are installed within the *Study Area*. Both the systematic and random tile drainage installations are primarily located west of the Subject Lands, with smaller areas of systematic drainage installed to the north and random tile drainage installed to the south of the Subject Lands. Installation dates of the tile drainage were not available through the AgMaps Portal.

There are also no constructed drains present within the *Study Area*.

### **5.7.3 Other Land Improvements**

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



Contains information licensed under the Open Government Licence – Ontario. Base map data from Ontario Ministry of Natural Resources, Ontario GeoHub Land Information Ontario (LIO) Warehouse Open Data Products. <https://geohub.ontario.gov.on.ca/> Coordinate system : NAD 1983, UTM Zone 17T.

**Legend**

-  Subject Lands
-  1500m Study Area
-  Random Tile Drainage
-  Systematic Tile Drainage
-  Greenbelt Plan
-  Regional Urban Boundary

**Figure 4**  
**Land Improvements**

Agricultural Impact Assessment for  
Mayfield Tullamore Secondary Plan Area

Prepared for: **Mayfield Tullamore  
Landowners Group**

Prepared by: **COLVILLE**  
CONSULTING INC. 

0 0.5 KM  
1:35,000



DATE:  
Feb 2026

FILE:  
C24035

## 5.8 Fragmentation of Agricultural Lands

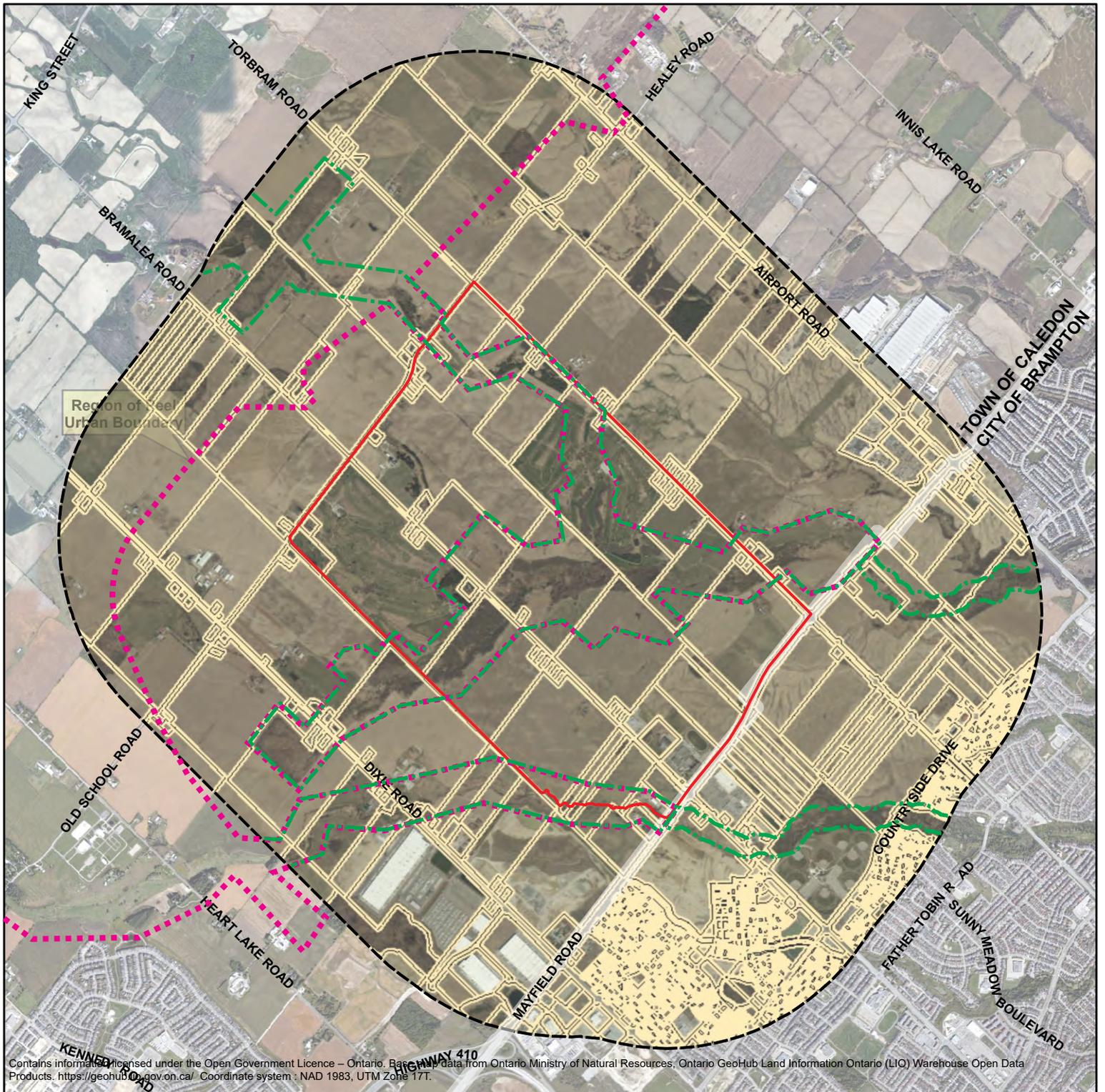
Fragmentation of agricultural lands can have a negative impact on their viability and long-term preservation for agricultural purposes. Fragmentation of farmlands can diminish the economic viability of the agricultural area by reducing farming efficiency and increasing operating costs for farmers who 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 alone cannot sustain a family farm without a secondary source of off-farm income to maintain the agricultural operation.

Additionally, agricultural areas which have been fragmented often have a higher occurrence of *non-agricultural uses*, which in turn can result in more frequent occurrences of conflict arising between *agricultural* and *non-agricultural uses*. Agricultural areas with lower levels of fragmentation are considered to be more economically viable 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 area's agricultural priority.

The agricultural policies of the *PPS* recognize the impact of fragmentation on agricultural lands and try to minimize their fragmentation 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, there is a mix of parcel sizes ranging from single residential (<1 ha) to large agricultural sized parcels (>60 ha). A number of the parcels within the agricultural land base are not suitably sized for a variety of *agricultural uses*. Within the *Study Area*, excluding lands within the built-up area, there are a total of 250 parcels. The average parcel size within the *Study Area* was determined to be 6.0 ha, indicating a high degree of fragmentation. Of the 250 parcels, 67 parcels were identified through AgMaps as being Farm Property Class Tax Rated Parcels (2024 Program Year, 2025 Tax Year). The average size of Farm Property Class Tax Rated Parcels within the *Study Area* was calculated to be 23.1 ha.

Additionally, the current lot fabric is not reflective of the near-term lot fabric. New community areas were observed to be in development during the land uses survey, and the GTA West Corridor traverses the Subject Lands and *Study Area*, which will lead to further fragmentation of the area. The Subject Lands are also immediately adjacent to the current City of Brampton *settlement area*, which has been developed for a number of *non-agricultural uses*. The lands within the *Study Area* are highly fragmented and have a high occurrence of *non-agricultural uses*. Fragmentation of the *Study Area* is shown in Figure 5 below.



Contains information licensed under the Open Government Licence – Ontario. Base map data from Ontario Ministry of Natural Resources, Ontario GeoHub Land Information Ontario (LIO) Warehouse Open Data Products. <https://geohub.ontario.gov.on.ca/> Coordinate system : NAD 1983, UTM Zone 17T.

**Legend**

- Subject Lands
- 1500m Study Area
- Fragmentation
- Greenbelt Plan
- Region of Peel Urban Boundary

**Figure 5  
Fragmentation**

Agricultural Impact Assessment for  
Mayfield Tullamore Secondary Plan Area

Prepared for: **Mayfield Tullamore  
Landowners Group**

Prepared by: **COLVILLE**  
CONSULTING INC.

0 0.5 KM  
1:35,000



DATE:  
Feb 2026

FILE:  
C24035

## 5.9 Minimum Distance Separation

### 5.9.1 Application of MDS

The *Minimum Distance Separation* is a tool used to minimize potential impacts and conflicts between *non-agricultural land uses* and *agricultural land uses*. In areas outside of approved *settlement areas*, new *non-agricultural uses* are required to meet the setbacks calculated using the *Minimum Distance Separation I formula* as contained in OMAFRA's The Minimum Distance Separation (MDS) Implementation Document: Formulae and Guidelines for Livestock Facility and Odour Setbacks, Publication 853 (2016) document. It is applied to all farm operations that have infrastructure in a condition that is capable of housing *livestock* and/or have an *anaerobic digester* on-site.

The *MDS I formula* provides the minimum separation distance between existing *livestock facilities* (including *unoccupied livestock facilities*) and new *non-agricultural land uses* proposed in a rural or agricultural land use designation. It deals specifically with odour and does not account for noise, dust, or other farm-generated products. An *unoccupied livestock-facility* is one that no longer appears to house *livestock*, but appears to be capable of housing *livestock* with little to no additional investment. The *MDS* is not applied to *remnant farms* with barns that are in poor condition and not suitable for housing *livestock*.

The *MDS formulae* are only applied to proposed *development* outside of an approved *settlement area*. As previously stated, the Subject Lands are located within the *settlement area* of the Region of Peel and Future Caledon Official Plans. Therefore, the proposed *development* is not required to meet the *MDS I* setback requirements. However, *MDS I* setbacks have been calculated 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 *MDS I formula* was applied to all *livestock facilities* (active and *unoccupied*) observed within 1,500 m of the Subject Lands. 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* is considered to be a Type B (more sensitive) land use. 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 were left requesting information which would enable us to calculate the *MDS* setback requirements at *livestock* operations that had the potential to create *MDS* constraints for the Subject Lands.

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.

### 5.9.2 MDS Guidelines

OMAFRA's The Minimum Distance Separation Implementation Document: Formulae and Guidelines for Livestock Facility and Anaerobic Digester Odour Setbacks, Publication 8533 (2016) document contains a set of guidelines which outline how the *MDS I formula* is to be applied. The following are the relevant *MDS* guidelines for *settlement area* boundary expansion.

**#1. Referencing MDS in Municipal Planning Documents**

In accordance with the Provincial Policy Statement, 2014, this MDS Document shall apply in prime agricultural areas and on rural lands. Consequently, the appropriate parts of this MDS Document shall be referenced in municipal official plans, and detailed provisions included in municipal comprehensive zoning by-laws such that, at the very least, MDS setbacks are required in all designations and zones where livestock facilities and anaerobic digesters are permitted.

Section 17.2.2 of the Future Caledon Official Plan states in part that “Where agricultural uses and non-agricultural uses interface outside of settlement areas, land use compatibility will be achieved:

- ii. in accordance with all Provincial land use compatibility requirements, in Provincial policies and Plans, including minimum distance separation, as applicable”.

**#2. For What, and When is an MDS Setback Required?**

The MDS I setback distances shall be met prior to the approval of: proposed lot creation in accordance with Implementation Guidelines #8 and #9; rezonings or re-designations in accordance with Implementation Guideline #10; building permits on a lot which exists prior to March 1, 2017 in accordance with Implementation Guideline #7; and as directed by municipalities for local approvals for agriculture-related uses or on-farm diversified uses in accordance with Implementation Guideline #35.

The information used to carry out an MDS I calculation must reflect the circumstances at the time that the municipality deems the planning or building permit application to be complete.

The Subject Lands have been included in the *settlement area* of the Future Caledon and Region of Peel Official Plans. While the proposed *development* is not required to comply with the *MDS I formula*, it has been applied in order to identify areas which may be more sensitive to the introduction of *non-agricultural land uses*.

**#6. Required Investigation Distances for MDS**

A separate MDS I setback shall be required to be measured from all existing livestock facilities and anaerobic digesters on lots in the surrounding area that are reasonably expected by an approval authority to be impacted by the proposed application.

As part of municipal consideration of planning or building permit applications, all existing livestock facilities or anaerobic digesters within a 750 m distance of a proposed Type A land use and within a 1,500 m distance of a proposed Type B land use shall be investigated and MDS I setback calculations undertaken where warranted.

In circumstances where large livestock facilities (e.g., >1,200 Nutrient Units) exist beyond the 750 m or 1,500 m study area, MDS I setbacks from these facilities should also be calculated.

As discussed further below, the proposed *development* is considered to be a Type B land use. Therefore, all existing *livestock facilities* or *anaerobic digesters* with 1,500 m of the Subject Lands have been investigated and *MDS I* setback calculations completed, where warranted.

**#12. Existing Uses that Do Not Conform to MDS**

An MDS I setback is required for proposed development or dwellings, even though there may be existing or approved development or dwellings nearby that do not conform to MDS I requirements.

However, a reduced MDS I setback may be permitted provided there are four, or more, non-agricultural uses, residential uses and/or dwellings closer to the subject livestock facility than the proposed development or dwelling and those four or more non-agricultural uses, residential uses and/or dwellings are:

- ♦ located within the intervening area (120° field of view shown in Figure 4 in Section 7 of this MDS Document) between the closest part of the proposed development or dwelling and the nearest livestock facility or anaerobic digester;
- ♦ located on separate lots; and
- ♦ of the same or greater sensitivity (i.e., Type A or Type B in accordance with Implementation Guidelines #33 and #34) as the proposed development or dwelling.

If ALL of the above conditions are met, the MDS I setback for the proposed development or dwelling may be reduced such that it is located no closer to the livestock facility or anaerobic digester than the furthest of the four non-agricultural uses, residential uses and/or dwellings as shown in Figure 4.

Guideline #12 can be used to reduce the calculated *MDS I* setback for Operation #32 and Operation #35, as this operation has at least four *non-agricultural uses* or *dwellings* within a 120° field of view between the closest part of the *non-agricultural use* or *dwelling* and the nearest *livestock facility* and/or *manure storage* system associated with the operation.

**#19. Cumulative Design Capacity of Livestock Facilities on a Lot**

MDS calculations shall be based on the combined design capacity for all livestock barns on a lot, even if they are unoccupied livestock barns or separated by a substantial distance on the lot.

Where there are no livestock barns on a lot, MDS calculations shall be based on the combined design capacity for all manure storages on a lot, even if they are unused manure storages or separated by a substantial distance on the lot.

Within the Study Area there are farm operations with more than one barn located on the same property. Therefore, the *MDS I* setbacks have been calculated based on the combined design capacity of all *livestock* barns on a lot and applied to the *livestock facility* nearest to the Subject Lands.

**#34. Type B Land Uses (More Sensitive)**

For the purposes of MDS I, proposed Type B land uses are characterized by a higher density of human occupancy, habitation or activity including, but not limited to:

- ♦ new or expanded settlement area boundaries;
- ♦ an official plan amendment to permit development, excluding industrial uses, on land outside a settlement area;
- ♦ a zoning by-law amendment to permit development, excluding industrial uses or dwellings, on land outside a settlement area; and
- ♦ the creation of one or more lots for development on land outside a settlement area, that results in four or more lots for development, which are in immediate proximity to one another (e.g., sharing a common contiguous boundary, across the road from one another, etc.), regardless of whether any of the lots are vacant.

Because of the increased sensitivity of these uses, a new or expanding Type B land use will generate an MDS I setback that is twice the distance as the MDS I setback for a Type A land use. This is reflected in the value of Factor E which is 2.2 for Type B versus 1.1 for Type A.

The proposed *development* consists of a Type B land use with a higher density of human occupancy, habitation, and activity. Therefore, *MDS I* setbacks have been calculated for a Type B land use, which generates an *MDS I* setback that is twice that of a Type A land use.

**#36. Non-Application of MDS Within Settlement Areas**

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 located within the *settlement area* of the Future Caledon and Region of Peel Official Plans. Therefore, the *MDS formulae* are not required to be applied to the proposed *development*. However, *MDS I* setbacks have been calculated to show compliance with the *MDS formulae* as required by the Future Caledon Official Plan. The *MDS I* setbacks have been mapped in order to identify areas that may be more sensitive to the introduction of *non-agricultural land uses*.

**#40. Measurement of MDS Setbacks for Development and Dwellings**

For proposed development, MDS I setbacks are measured as the shortest distance between the area proposed to be rezoned or redesignated to permit development and either: the surrounding livestock occupied portions of livestock barns, manure storages or anaerobic digesters. Refer to Figure 7 in Section 7 of this MDS Document. This shall include areas proposed to be rezoned or redesignated with site-specific exceptions that add non-agricultural uses or residential uses to the list of agricultural uses already permitted on a lot.

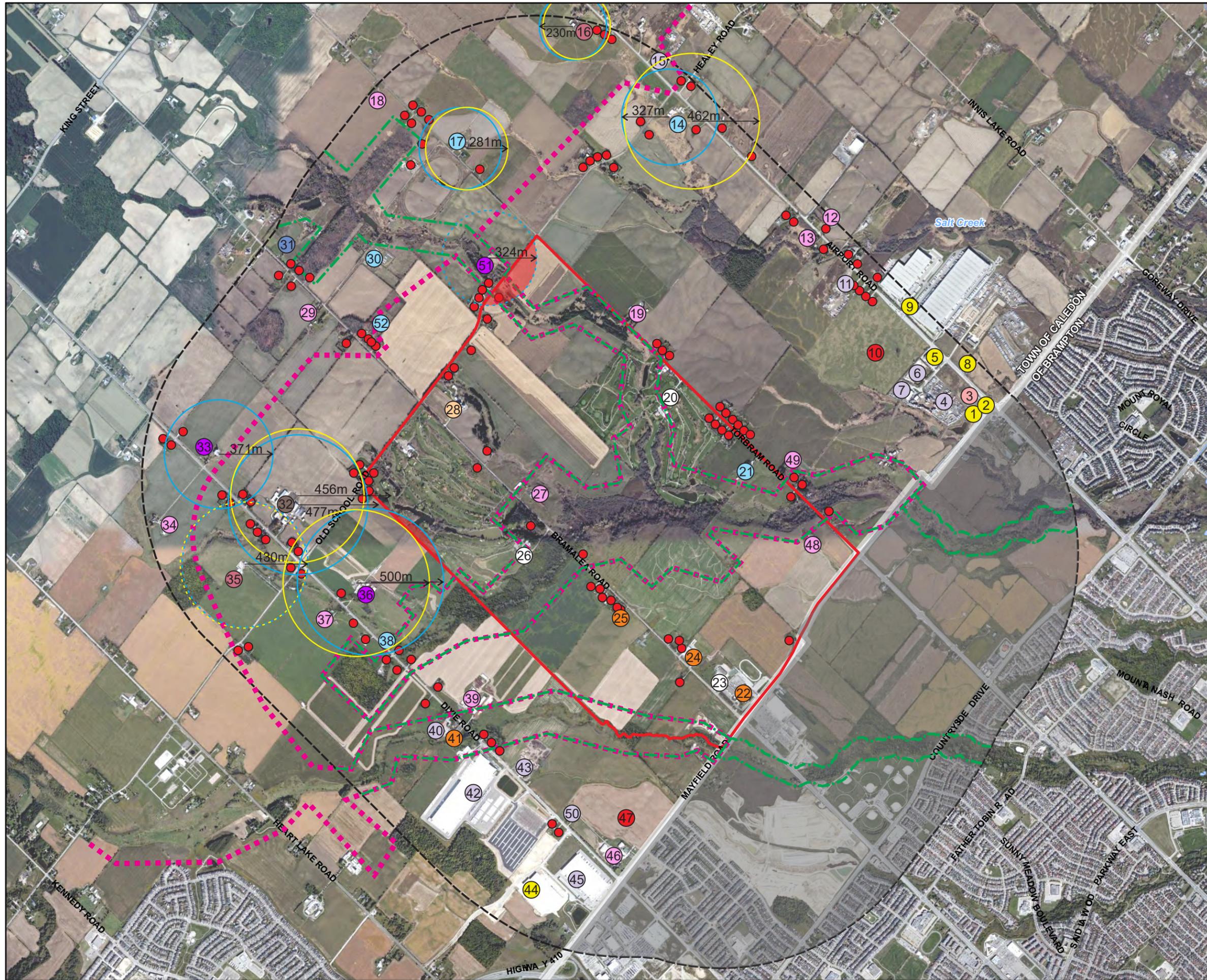
For building permit applications for proposed dwellings, where required in accordance with Implementation Guideline #7, MDS I setbacks are measured as the shortest distance between the proposed dwelling and either the surrounding manure storages, anaerobic digesters or the livestock occupied portions of the livestock barns.

*MDS I* setback distances have been applied to the shortest distance between the Subject Lands and the *manure storages* or *livestock* occupied portions of the *livestock facility*.

**5.9.3 MDS Results**

The *MDS I formula* was applied to ten *livestock facilities*, which are capable of housing *livestock*, observed within 1,500 m of the Subject Lands. Figure 6 shows the *MDS I* setback distances for the identified *livestock operations*. The *MDS I* setbacks for Operations #32 and #35 can be reduced due to the presence of four or more non-agricultural land uses within the intervening area. However, the *MDS I* setback distance was only reduced for Operation #32 as the full *MDS I* setback for Operation #35 does not encroach into the Subject Lands. Figure 6 shows that three of the *MDS* setback distances for the *livestock operations* identified in the *Study Area* extend into the Subject Lands (Operations #32, #36, and #51). As previously stated, the proposed *development* is not required to comply with the *MDS I* setback distances, as the Subject Lands are within an approved *settlement area*.

Table 4 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.



- Legend**
- Subject Lands
  - 1500m Study Area
  - Greenbelt Plan
  - Regional Urban Boundary
- Agricultural Use**
- Remnant Farm
  - Beef Operation
  - Cash Crop Operation
  - Dairy Operation
  - Hobby Farm
  - Unoccupied Livestock Facility
  - Greenhouse
- Agriculture-Related Use**
- Vegetable Wholesaler
  - Grain Elevator
  - Garden Centre
- Non-Agricultural Use**
- Commercial
  - Institutional
  - Industrial
  - Future Residential Development
  - Recreational
  - Non-Farm Residential
- MDS I**
- Livestock Facility Setback (Confirmed)
  - Manure Storage Setback (Confirmed)
  - Livestock Facility Setback (Unconfirmed)
  - Manure Storage Setback (Unconfirmed)
  - Area of Encroachment

Contains information licensed under the Open Government Licence – Ontario. Base map data from Ontario Ministry of Natural Resources, Ontario GeoHub Land Information Ontario (LIO) Warehouse Open Data Products. <https://geohub.lio.gov.on.ca/> Air photo: BING MAPS. Coordinate system : NAD 1983, UTM Zone 17T.

**Figure 6**  
**MDS I Mapping**

Agricultural Impact Assessment for  
Mayfield Tullamore Secondary Plan Area

Prepared for:  
**Mayfield Tullamore  
Landowners Group**

Prepared by:  
**COLVILLE**  
CONSULTING INC.

0 0.5 KM  
1:25,000

DATE:  
Feb 2026

FILE:  
C24035

**Table 4. 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?
14	327 m	462 m	1,214 m	Yes
16	230 m	230 m	1,452 m	Yes
17	281 m	281 m	798 m	Yes
21	228 m	228 m	Within Subject Lands	Yes
32	477 m*	456 m*	455 m	Yes
33	371 m	N/A	993 m	Yes
35	430 m	430 m	970 m	Yes
36	500 m	500 m	431 m	Yes
51	324 m	N/A	174 m	Yes

\* MDS I setback distance reduced through application of Guideline #12

## 5.10 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 at one time played a larger role in the Town of Caledon and Region of Peel economies. However, 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 from 2016 to 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* can minimize the short-term impacts of development on the *Agricultural System*. However, the longer-term impacts will be difficult to mitigate as the area transforms to an urban area.

## 9. 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 *development* will have both direct and indirect impacts. It is unlikely that the proposed *development* will have significant, long-term negative effects on the surrounding agricultural lands and community.

### 9.1 Direct Impacts

#### 9.1.1 Prime Agricultural Lands

The Subject Lands are approximately 618.05 ha (1,527.23 acres) in size, of which approximately 509.04 ha are *prime agricultural lands*. *Development* of these lands will lead to the loss of the *prime agricultural lands*. However, the portion of the Subject Lands which are located within the Greenbelt Plan area (approximately 197.3 ha) are not proposed for development. The proposed *development* will result in the loss of approximately 410 ha of *prime agricultural lands*. To mitigate this loss, *development* should be phased, and *prime agricultural lands* should be kept in agricultural production until the land is needed for development.

#### 9.1.2 Agricultural Infrastructure

There are three agricultural operations and one *agriculture-related use* within the Subject Land which contain agricultural infrastructure. However, one of the agricultural operations within the Subject Lands is located within the Greenbelt Plan area and will not be removed as part of the proposed *development*. The proposed *development* will eventually result in the loss of the infrastructure associated with the operations located within the developable portion of the Subject Lands. To mitigate this loss, *development* should be phased and the agricultural infrastructure should be left in place until the land is to be developed.

#### 9.1.3 Agricultural Land Improvements

The Subject Lands contain approximately 20.37 ha of systematic tile drainage and 31.97 ha of random tile drainage. The majority of agricultural land improvements are located within the Greenbelt Plan Area or the golf course within the Subject Lands. The *development* of the golf course may have resulted in the removal of the tile drainage and it has been assumed that this is the case. The *development* of the Subject Lands will result in the removal of the systematic and random tile drainage within the developable portion of the Subject Lands, resulting in the loss of approximately 2.7 ha of random tile drainage and 1.3 ha of systematic tile drainage. *Development* of the Subject Lands will result in the loss of this agricultural investment, but it will have a negligible impact on the local *Agricultural System*.

#### 9.1.4 Loss of Crop Land

The Subject Lands are primarily *cultivated* for the production of common field crops, but also contain large portions of natural heritage areas, recreational uses, and disturbed lands. Of the Subject Lands' 618.05 ha, approximately 213.22 ha of land are *cultivated*.

The proposed Phasing Plan for the Mayfield Tullamore Secondary Plan Area was reviewed as part of this AIA. The Phasing Plan identifies the *development* of *cultivated* lands in both Phase 1 and Phase 2 of the proposed *development*. While, from an agricultural perspective, it is preferable that all *cultivated* lands be deferred to Phase 2, it is recognized that *development* phasing is a multidisciplinary exercise and cannot reasonably be based solely on the presence of *cultivated* lands.

It is understood that Phase 1 includes landowners who are actively participating in the secondary plan process and that this phase is intended to facilitate timely *development* due to the availability of capital and servicing. As such, some *development* of *cultivated* lands in Phase 1 is anticipated. However, not all of Phase 1 will be developed concurrently, and will be developed as servicing become available. The Draft Official Plan Amendment states that "The Phases should proceed in accordance with the extension of water and wastewater servicing infrastructure, beginning with Phase 1. Refinements to the sequencing of development may be considered through the review of subsequent development applications, in consideration of the timely provision of infrastructure and services, and shall not require an amendment to this Plan."

It is recommended that lands within Phase 1 continue to be *cultivated* until such time as they receive *development* approvals and construction is ready to proceed. Lands within Phase 2 should remain in active agricultural production until they are required for *development*. Notably, the *cultivated* lands located within the southwestern and northeastern portions of the Subject Lands are proposed to be developed in Phase 2, which will minimize agricultural impacts in the short term.

Ultimately, the *development* of the Subject Lands will result in the loss of all cultivatable lands within the developable area; however, the proposed phasing approach minimizes these impacts where feasible and supports the continued *agricultural use* of the lands for as long as practicable.

## 9.2 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*.

### 9.2.1 Disruption to Surficial Drainage

The proposed *development* has the potential to cause changes in surface runoff, which can have a potential negative impact on adjacent agricultural lands. To ensure potential impacts are mitigated, a Grading Plan and Stormwater Management Plan should be prepared. Implementation of the recommendations provided in these studies will minimize or eliminate the potential impacts, which are expected to be negligible.

### 9.2.2 Disruption to Farm Operations

Most active agricultural operations in the *Study Area* are well removed from the Subject Lands and are unlikely to experience any form of disruption to their operations. The southeastern edge of the Subject Lands also immediately abut lands that are part of the City of Brampton *settlement area*. Access points to farm operations should be identified and construction activity should ensure that access to farmlands is maintained at all times. It is unlikely that there will be a negative impact on farm operations due to the proposed *development*.

The proposed *development* will have no impact on the flexibility of surrounding lands to accommodate changes in types of farming. The adjacent lands will not be affected and 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. A Hydrogeological Study should be prepared with consideration of potential impacts on agricultural wells and water sources. It is anticipated that the Hydrogeological Study will provide recommendations to mitigate impacts if impacts to these water sources occur.

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.

### 9.2.3 Trespass and Vandalism

Farm operations within the *Study Area* may already have to deal with the potential for trespass and vandalism due to the proximity of the City of Brampton *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 buffers, fencing, and other edge planning techniques should be considered to minimize impacts.

### 9.2.4 Minimum Distance Separation

The *MDS I* setback requirements have been calculated for all active *livestock* and *retired livestock operations* capable of housing *livestock* in the *Study Area*. There are no development constraints related to the *MDS*. The proposed Secondary Plan and subsequent *development* will comply with the *MDS formulae*.

### 9.2.5 Transportation Impacts

The Region's expansion of the urban area and the proposed 400 series highway that traverses the central portion of the Subject Lands will substantially transform the agricultural character of the area. It is expected that traffic volumes will increase accordingly. Currently, there is a substantial amount of traffic along Mayfield Road, and it is likely that the Mayfeild Tullamore *development* will introduce significantly more traffic to these roads over time. Given the close proximity of the City of Brampton *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. Many of the farm operations to the west and east of the Subject Lands are also within the Region's settlement area boundary and will eventually be retired. Increased traffic levels will have no long-term impact on these farm operations.

In the short-term, to ensure transportation impacts are minimized, a Traffic Impact Study should be prepared for the proposed *development* and recommendations outlined in that study to minimize impacts on farm operations should be adhered to minimize potential impacts.

### **9.2.6 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 still provides economic and community benefits, the influence of agriculture is waning in the *Study Area*. 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*. To mitigate the loss of agricultural inputs to the economy, the proposed *development* should be phased to allow agricultural activities to continue until the land is to be developed.

## **9.3 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 occurs, 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 represent a suite of best practices intended to promote land use compatibility between agricultural and *non-agricultural uses*, and are discussed below. While a range of edge planning techniques are available, it is recognized that not all techniques will be feasible or appropriate in all circumstances.

It is our opinion that the specific edge planning techniques to be implemented for the proposed *development* should not be prescribed at this stage of the planning process. Rather, the selection and design of

appropriate edge planning techniques should be determined through a multidisciplinary review at later stages of development, such as during site plan approval, plan of subdivision, or other detailed design processes, and secured through conditions of approval.

### **9.3.1 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.

### **9.3.2 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.

### **9.3.3 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.).

### **9.3.4 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.

#### **9.3.5 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. The trail system 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.

### **9.4 Summary of Impacts**

The potential direct and indirect impacts identified are summarized in Table 5 along with the potential degree of impact, mitigation measures to avoid or minimize the potential impact, and the resulting anticipated impact.

<b>Table 5. Summary of Impacts</b>			
<b>Potential Impact</b>	<b>Relative Degree of Impact</b>	<b>Mitigation Measure</b>	<b>Anticipated Net Impact</b>
<b>Direct Impacts</b>			
Loss of <i>prime agricultural land</i>	High	♦ Consider phasing <i>development</i> to allow for continued cultivation until lands are required for <i>development</i> .	Eventual loss of approximately 410 ha of <i>prime agricultural lands</i>
Loss of agricultural infrastructure	Moderate	♦ Consider phasing <i>development</i> to allow agricultural operations until lands are required for <i>development</i> .	Eventual loss of agricultural infrastructure from two agricultural operations and one agriculture-related use
Loss of agricultural land improvements	Low	♦ None required	Loss of approximately 4.0 ha of actively-used tile drainage
Loss of cropland	High	♦ Consider phasing <i>development</i> to allow for continued cultivation until lands are required for <i>development</i> .	Eventual loss of approximately 213.22 ha of cultivatable land
<b>Indirect Impacts</b>			
Surficial Drainage	Low	♦ Prepare a Grading Plan and Stormwater Management Plan. ♦ Implement recommendations 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.	No significant impact anticipated
Non-farm traffic	Low	♦ Traffic Impact Study to assess potential impacts. ♦ Implement recommendations if impact identified.	No significant impact anticipated

Table 5. Summary of Impacts			
Potential Impact	Relative Degree of Impact	Mitigation Measure	Anticipated Net Impact
Trespass, Vandalism, and Stray Pets	Low	<ul style="list-style-type: none"> <li>♦ Implement edge planning techniques to minimize conflicts along the agricultural and urban interface.</li> <li>♦ If trespass and unintended damage to farm fencing, machinery, crops, etc. become a problem for neighbouring farm operations, place signage reminding residents that farm lands are private and that trespassing is prohibited.</li> </ul>	No significant impact anticipated
Noise, Dust & Light	Low	<ul style="list-style-type: none"> <li>♦ Adhere to MECP guidelines</li> </ul>	No impact
Conflict with <i>MDS formulae</i>	Low	<ul style="list-style-type: none"> <li>♦ None required. Complies with MDS Formulae</li> </ul>	No impact
Economic	Low	<ul style="list-style-type: none"> <li>♦ None required</li> </ul>	No significant impact
Wells, Irrigation, water bodies	Low	<ul style="list-style-type: none"> <li>♦ Completion of Hydrogeological Study to identify potential impacts.</li> <li>♦ Implement recommendations if impact identified.</li> </ul>	No impact anticipated

## 10. CONSISTENCY WITH AGRICULTURAL POLICIES

### 10.1 Provincial Planning Statement

The Region of Peel Official Plan shows the Subject Lands as within the 2051 New Urban Area, within the Urban System. The Provincial approval of the Region of Peel Official Plan in November 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* is consistent with the agricultural policies of the *PPS*.

There are three operations within the Study Area (#32, #36, and #51) that generate *MDS I* setbacks which encroach into the Subject Lands. However, because the Subject Lands have been included in the *settlement area* of the Town of Caledon, the *MDS I formula* is not required, as per the Minimum Distance Separation (MDS) Guidance Document, Publication 853, 2016. Future *development* will comply with the *MDS formula*.

### 10.2 Region of Peel Official Plan

Policy 5.6.20.14.17.a) of the Region of Peel Official Plan states that the Region of Peel will “Require that the local municipalities’ secondary plans be undertaken on the basis of the following studies and technical analysis completed to the satisfaction of the local municipality:

- a) An agricultural impact assessment for each secondary plan area abutting or adjacent to agricultural areas in the Agricultural System prior to adopting an official plan amendment to implement the secondary plan in accordance with terms of reference prepared to the satisfaction of the Region, in consultation with relevant agencies. The agricultural impact assessment shall provide a further detailed evaluation of potential impacts of non-agricultural development where agricultural operations where the settlement area boundary abuts or is adjacent to agricultural operations located outside of the Designated Greenfield Area or is adjacent to agricultural operations located outside of the Designated Greenfield Area and provide recommendations to avoid, minimize and/or mitigate adverse impacts. The implementation of recommendations of the agricultural impact assessment shall be incorporated into the secondary plan, as appropriate, and will include policies, at a minimum, that will:
  - i) provide for the staging and sequencing within secondary plans so that an orderly transition from agriculture is achieved and agricultural uses and agriculture-related uses continue for as long as practical in the Designated Greenfield Area;
  - ii) require the implementation of mitigation measures in the secondary plan where agricultural uses and non-agricultural uses interface with emphasis on minimizing impacts to adjacent agricultural operations that are located outside of the Designated Greenfield Areas in the Greenbelt Plan Area including policy direction to implement recommendations such as locating compatible/less sensitive land uses, buffering and landscaping where urban and agricultural uses interface to the extent feasible and having regard for the nature and type of the agricultural operation and sensitivity of proposed land uses;

- iii) identify through mapping any required Provincial minimum distance separation (MDS) I setback (the Setback Area) that extends into the secondary plan area; and
- iv) prohibit development in the Setback Area; if and when the livestock and manure storage facilities that are creating the Setback Area are removed, thus eliminating the Setback Area, permit development in accordance with the requirements of the Secondary Plan.”

This AIA has fulfilled the requirement for the completion of an Agricultural Impact Assessment as part of the Secondary Plan Process. Potential impacts of the proposed *development* have been assessed, and recommendations have been made to minimize and mitigate identified impacts to the agricultural system, including recommendations for staging of the proposed *development*, and the implementation of edge planning techniques. MDS I setbacks were calculated, and although MDS I setbacks encroach into the Subject Lands, the MDS I setbacks are not required provincially due to the Subject Lands’ inclusion within an approved *settlement area*. As such, the proposed *development* complies with the applicable policies of the Region of Peel Official Plan.

It should be noted that on July 1, 2025, the Region of Peel became a Regional Municipality without Planning Authority. As a result, the Region of Peel Official Plan became an Official Plan of the lower tier municipalities.

### **10.3 Future Caledon Official Plan**

Policy 24.3.2 states in part that “Further to Policy 24.3.1, each secondary plan area will be based on the following supporting studies and technical analysis prepared to the satisfaction of the Town in accordance with applicable terms of reference:

- b) an agricultural impact assessment, if the secondary plan area abuts or is adjacent to prime agricultural areas outside the settlement area, that:
  - a. is prepared in accordance with terms of reference prepared to the satisfaction of the Town; provides a further detailed evaluation of potential impacts of non-agricultural development on the agricultural system, including agricultural operations and provides recommendations to avoid, minimize and/or mitigate adverse effects;
  - b. recommends policies to be incorporated into the secondary plan, as appropriate, that:
    - i. provide for staging and sequencing within the within the secondary plan so that an orderly transition from agriculture is achieved and agricultural uses and agriculture-related uses continue for as long as practical in the designated growth area;
    - ii. require the implementation of mitigation in the secondary plan where agricultural uses and non-agricultural uses interface with emphasis on minimizing impacts to the agricultural system and adjacent agricultural operations that are located outside of the designated growth area in the Greenbelt Plan Area;
    - iii. address compatible/less sensitive land uses and edge planning, including buffering and landscaping where urban and agricultural uses interface to the extent feasible and having regard for the agricultural system, the nature and type of the agricultural operation and sensitivity of proposed land uses; and,

- iv. prohibit development in any require Provincial minimum distance separation setback (the Setback Area) for as long as the livestock and manure storage facilities that are creating the Setback Area are present”.

This AIA has been prepared to address the requirements of Policy 24.3.1.b). Potential impacts of the proposed *development* have been assessed, and recommendations have been made to minimize and mitigate identified impacts to the *Agricultural System*, including recommendations for staging of the proposed *development* and the implementation of edge planning techniques. As stated above, MDS I setbacks were calculated, and although MDS I setbacks encroach into the Subject Lands, the MDS I setbacks are not required provincially due to the Subject Lands’ inclusion within an approved *settlement area*. As such, the proposed *development* complies with the applicable policies of the Future Caledon Official Plan.

## 11. 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. Following the provincial approval of the Region of Peel and Future Caledon Official Plans, the Subject Lands are part of an approved *settlement area* and do not form part of a provincially, regionally, or locally recognized *prime agricultural area*. The long-term use of these lands is for urban-related uses;
2. The Subject Lands are not part of a *specialty crop area*, and no specialty crops were observed within the Study Area;
3. Potential impacts of the proposed *development* are primarily limited to the loss of *prime agricultural land*, cultivatable land, tile drainage, and farm infrastructure. Mitigation measures have been provided that will ensure that potential impacts will be minimized 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* formulae; and
5. The proposed *development* is consistent with all relevant provincial agricultural policies and will comply with all relevant municipal agricultural policies.

Respectfully submitted by:



---

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



---

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

## 12. 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.

**Beef operation:** a farm operation whose predominant livestock is beef cattle, including cow-calf operations.

**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).

**Common Field Crops:** - Common field crops in Ontario include corn; soybeans; small grains and perennial forages (e.g., hay & pasture).

**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.

**Dairy operation:** - a farm whose primary livestock is dairy cattle, including dairy heifers.

**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.

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

**Gleyed:** – means soils that are poorly drained and exhibit greyish colours in the profile indicating that they have developed in a reduced environment (i.e., oxygen depleted) due to high water tables throughout the year.

**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).

**Livestock:\*** - includes dairy, beef, swine, poultry, horses, goats, sheep, ruminants, 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.

**Manure Storage\*:** - A permanent storage which is structurally sound and reasonable 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 from 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.

**Morainal till:** - generally a compact, poorly sorted, and poorly stratified material deposited by glacial action.

**Mottles:** - are spots of colour in soil horizons, caused by impeded drainage. The mottle colours are recorded as faint, distinct or prominent depending on the contrast between the mottle colour and the basic horizon colour.

**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 Uses:\*** - 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.

**Primary Study Area:\*** - the primary study area includes the Subject Lands (i.e. the lands where the development is taking place).

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

**Rural residential cluster:\*** - means four or more, adjacent rural lots, generally one hectare or less in size, sharing a common contiguous boundary. Lots located directly across a road from one another shall be considered as having a common boundary.

**Scrub land:** - means lands that are no longer farmed and woody species (young trees and shrubs) have begun regenerating and/or sparsely treed areas.

**Secondary Study Area (Study Area):\*** - the Secondary Study Area (Study Area) includes all lands that will be potentially impacted by the development. The Secondary Study Area may vary in its extent, but includes, at minimum, lands adjacent to the Primary Study Area.

**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 horizon:** - a layer of soil, approximately parallel to the land surface, which differs from adjacent layers in properties such as texture, colour, structure, etc. As an example, the surface horizon of a mineral soil is recorded as the "A" horizon. If the surface is ploughed then the suffix p is used (i.e., Ap) if the surface has not been ploughed, as in a forest soil, a humic layer generally develops and an eluviated light coloured soil horizon often forms immediately below. These horizons are identified with the suffix h is used (i.e., Ah) and e (i.e., Ae), respectively. The weathered portion of the profile below the A horizons is identified as the "B" horizon and the unweathered, parent material is the "C" horizon.

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

**Soil texture:** - the relative portion of particle sizes in soil (i.e., sand, silt, and clay) that are used to describe the soil textural class (e.g., clay, sandy clay loam, sandy loam, loam, clay loam, sand, loamy sand, etc.).

**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.

**Unoccupied livestock facility:** - A livestock facility 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 without significant additional investment.

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

### 13. REFERENCES

- 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](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)
- 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)
- OMAFRA. *Classifying Prime and Marginal Agricultural Soils and Landscapes: Guidelines for Application of the Canada Land Inventory in Ontario*. December 2022.
- 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, 2020. *Implementation Procedures for the Agricultural System in Ontario's Greater Golden Horseshoe Supplementary Direction to a Place to Grow: A Growth Plan for the Greater Golden Horseshoe Publication 856*, 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 Digester Odor Setbacks*. Publication 853, Queen's Printer for Ontario.
- Ontario Ministry of Agriculture, Food and Rural Affairs. *Digital Soil Resource information provided 2010*. Guelph Geomatics Services.
- 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](https://www.peelregion.ca/officialplan/download/_media/region-of-peel-official-plan-april2022.pdf).
- Town of Caledon. *Future Caledon Official Plan*, October 2025. <https://pub-caledon.escribemeetings.com/filestream.ashx?DocumentId=38343>

**APPENDIX A**

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, P.Ag.**

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 – Professional 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

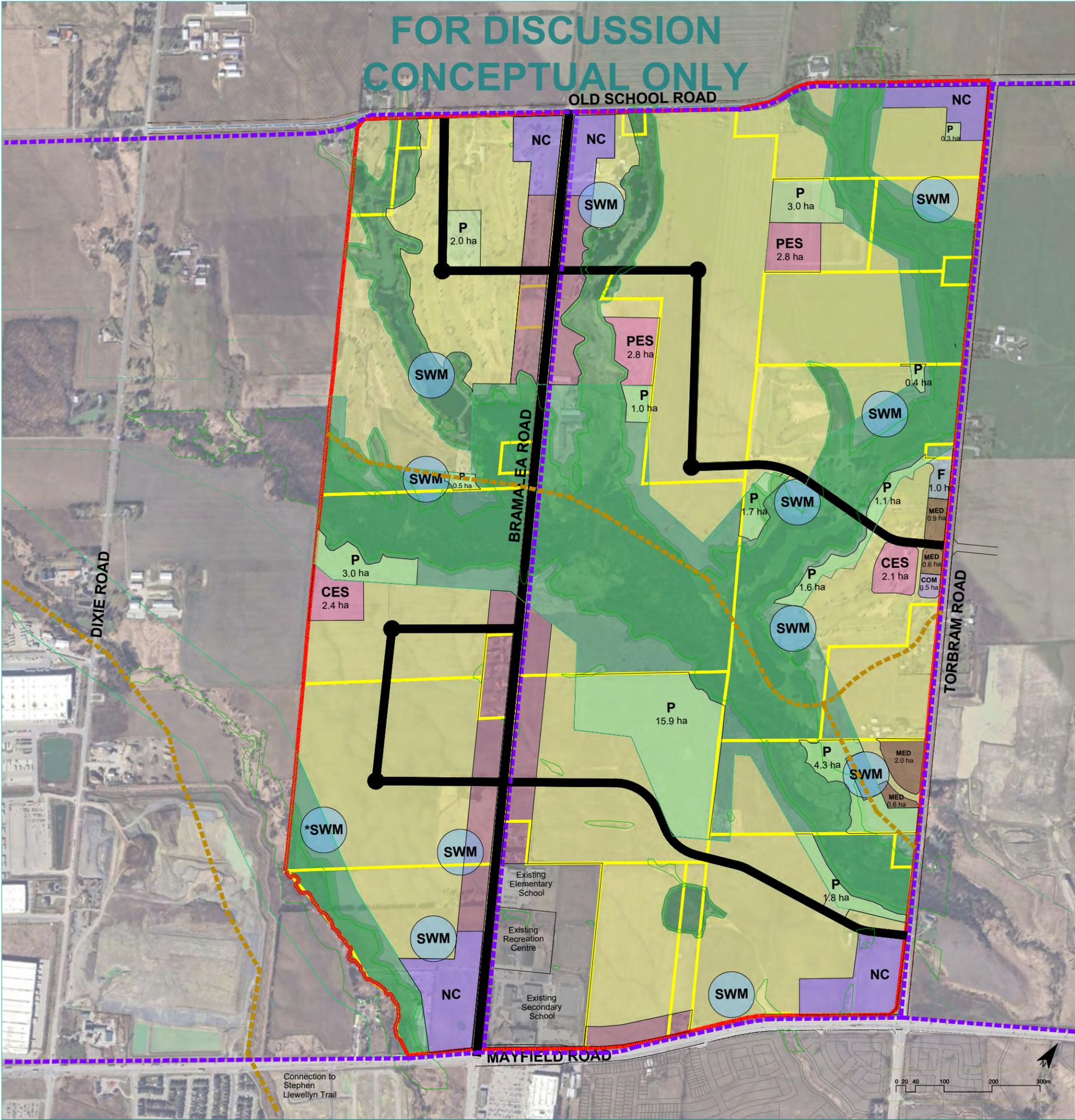
### **ADDITIONAL TRAINING AND WORKSHOPS**

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 B**

### Structure Plan

# FOR DISCUSSION CONCEPTUAL ONLY



## MAYFIELD TULLAMORE LAND OWNERS GROUP

## STRUCTURE PLAN-PREFERRED OPTION

LAND USE	AREA OUTSIDE GB	AREA WITHIN GB	TOTAL
Community Area	267.4	0.0	267.4
Medium Density	3.9	0.0	3.9
Urban Corridor	27.6	0.0	27.6
Neighbourhood Centre	21.9	0.0	21.9
School	10.2	0.0	10.2
Park	5.4	31.3	36.7
Collector Roads (incl. Bramalea)	26.3	0.7	27.0
Open Space	29.0	165.3	194.3
Existing Schools and Rec Centre	20.0	0.0	20.0
<b>TOTAL</b>	<b>411.7</b>	<b>197.3</b>	<b>609.0</b>

### TRAILS

- Multi Use Trail
- Multi Use Path

Note:  
Natural Heritage features are not show as they are under study. The developable area is preliminary and requires further technical study to confirm the limit. As such, the developable area is subject to change.

**SWM** Stormwater Management Facility

\* Provisional SWM

MGP File No.: 24-3365  
Date: June 20, 2024  
Date or Air Photography: April 2024 Google

**MGP** Malone  
Given  
Persons.  
140 Renfrew Drive, Suite 201 | Markham, ON | L3R 0B3  
905 513 0170 | mgp.ca

## **APPENDIX C**

### Climate Normals Data

LOCATION_NAME	PROVINCE	PERIOD_OF_RECORD	ELEMENT_GROUP	NORMALS_ELEMENT	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Code
TORONTO PEARSON (AIRPORT)	ON	Normal	Temperature	Daily Average (°C)		-5	-4.4	0.6	7	13.7	19.2	22.1	21.1	16.9	10	4.1	-1.6	8.6 B
TORONTO PEARSON (AIRPORT)	ON	Normal	Temperature	StdDev Mean Monthly Temperature (°C)		3	3	2.2	1.6	2	1.3	1.8	1.3	1.7	1.3	2	2.1	1.3 B
TORONTO PEARSON (AIRPORT)	ON	Normal	Temperature	Daily Maximum (°C)		-1.2	-0.3	5	12	19.2	24.5	27.4	26.3	22.3	14.6	7.9	1.9	13.3 B
TORONTO PEARSON (AIRPORT)	ON	Normal	Temperature	Daily Minimum (°C)		-8.9	-8.5	-3.8	1.9	8.2	13.9	16.6	15.8	11.6	5.3	0.2	-5	3.9 B
TORONTO PEARSON (AIRPORT)	ON	Normal	Temperature	Maximum Daily Mean (°C)		13.4	10.9	18.2	22.4	27.6	29.5	31.8	31.5	28.5	24.5	16.1	14.1	
TORONTO PEARSON (AIRPORT)	ON	Normal	Temperature	Maximum Daily Mean (°C) Date (yyyy/mm/dd)	2008-01-08	2017-02-23	2012-03-22	2002-04-17	2006-05-30	2012-06-20	2011-07-21	2006-08-01	2016-09-07	2002-10-01	2020-11-10	2001-12-05		
TORONTO PEARSON (AIRPORT)	ON	Normal	Temperature	Minimum Daily Mean (°C)		-24.7	-22.3	-18.8	-4.7	0.9	8.4	13.6	13.2	4.5	-1	-9.6	-18.6	
TORONTO PEARSON (AIRPORT)	ON	Normal	Temperature	Minimum Daily Mean (°C) Date (yyyy/mm/dd)	1994-01-15	2015-02-15	2003-03-03	2003-04-06	2020-05-08	1992-06-20	1992-07-31	1992-08-13	1993-09-30	2020-10-30	2018-11-22	2017-12-31		
TORONTO PEARSON (AIRPORT)	ON	Normal	Temperature	Extreme Maximum (°C)		17.6	17.7	26	29.6	34.1	36.2	37.9	35	31.8	24.3	18.3		
TORONTO PEARSON (AIRPORT)	ON	Normal	Temperature	Extreme Maximum (°C) Date (yyyy/mm/dd)	2005-01-13	2017-02-23	2012-03-22	2002-04-16	2006-05-29	1994-06-18	2011-07-21	2001-08-08	2016-09-07	2019-10-01	2020-11-10	2001-12-05		
TORONTO PEARSON (AIRPORT)	ON	Normal	Temperature	Minimum Daily Maximum (°C)		-21	-19.1	-12.8	-3	4.8	10	15.4	16.2	9.9	2.3	-5.9	-14.5	
TORONTO PEARSON (AIRPORT)	ON	Normal	Temperature	Minimum Daily Maximum (°C) Date (yyyy/mm/dd)	1994-01-15	2015-02-15	2003-03-03	2003-04-04	2020-05-08	1992-06-20	1992-07-31	1992-08-13	2000-09-28	2020-10-30	2018-11-22	2017-12-31		
TORONTO PEARSON (AIRPORT)	ON	Normal	Temperature	Maximum Daily Minimum (°C)		11.3	6.5	11.9	16.3	22.2	24.4	26	26.3	23.4	19.4	12.3	9.8	
TORONTO PEARSON (AIRPORT)	ON	Normal	Temperature	Maximum Daily Minimum (°C) Date (yyyy/mm/dd)	2008-01-08	2009-02-11	2012-03-23	2002-04-17	2006-05-30	2012-06-20	2011-07-21	2006-08-01	2001-09-09	2002-10-01	2002-11-10	2001-12-05		
TORONTO PEARSON (AIRPORT)	ON	Normal	Temperature	Extreme Minimum (°C)		-31	-25.5	-24.7	-9.2	-4.7	3	7.9	8	-1.2	-5.4	-13.9	-24.3	
TORONTO PEARSON (AIRPORT)	ON	Normal	Temperature	Extreme Minimum (°C) Date (yyyy/mm/dd)	1994-01-16	2015-02-15	2003-03-03	1995-04-05	2020-05-09	1998-06-05	1992-07-22	1992-08-20	1993-09-30	2020-10-31	2019-11-13	2004-12-20		
TORONTO PEARSON (AIRPORT)	ON	Long-Term	Temperature	Maximum Daily Mean (°C)		13.4	10.9	18.2	24	27.6	29.5	31.8	31.5	30	24.5	16.7	15	
TORONTO PEARSON (AIRPORT)	ON	Long-Term	Temperature	Maximum Daily Mean (°C) Date (yyyy/mm/dd)	2008-01-08	2017-02-23	2012-03-22	1990-04-26	2006-05-30	2012-06-20	2011-07-21	2006-08-01	1953-09-02	2002-10-01	1974-11-01	1966-12-08		
TORONTO PEARSON (AIRPORT)	ON	Long-Term	Temperature	Minimum Daily Mean (°C)		-24.7	-23.4	-18.8	-11.1	0.9	5.3	11.4	9.5	2.5	-3.6	-11.7	-20.9	
TORONTO PEARSON (AIRPORT)	ON	Long-Term	Temperature	Minimum Daily Mean (°C) Date (yyyy/mm/dd)	1994-01-15	1943-02-15	2003-03-03	1972-04-07	2020-05-08	1945-06-01	1968-07-03	1965-08-30	1965-09-27	1969-10-22	1949-11-26	1942-12-20		
TORONTO PEARSON (AIRPORT)	ON	Long-Term	Temperature	Extreme Maximum (°C)		17.6	17.7	26	31.1	34.4	36.7	37.9	38.3	36.7	31.8	25	20	
TORONTO PEARSON (AIRPORT)	ON	Long-Term	Temperature	Extreme Maximum (°C) Date (yyyy/mm/dd)	2005-01-13	2017-02-23	2012-03-22	1990-04-25	1962-05-16	1952-06-25	2011-07-21	1948-08-25	1953-09-02	2019-10-01	1950-11-01	1982-12-03		
TORONTO PEARSON (AIRPORT)	ON	Long-Term	Temperature	Minimum Daily Maximum (°C)		-21	-19.2	-15	-5	4.4	9.4	15.4	15.6	6.7	0	-7.3	-17.8	
TORONTO PEARSON (AIRPORT)	ON	Long-Term	Temperature	Minimum Daily Maximum (°C) Date (yyyy/mm/dd)	1994-01-15	1979-02-17	1938-03-03	1972-04-07	1976-05-07	1945-06-01	1992-07-31	1964-08-13	1950-09-24	1969-10-22	1987-11-21	1955-12-20		
TORONTO PEARSON (AIRPORT)	ON	Long-Term	Temperature	Maximum Daily Minimum (°C)		11.3	6.5	12.6	17.5	22.2	24.4	26	26.3	23.4	19.4	13.9	12.8	
TORONTO PEARSON (AIRPORT)	ON	Long-Term	Temperature	Maximum Daily Minimum (°C) Date (yyyy/mm/dd)	2008-01-08	2009-02-11	1989-03-28	1990-04-26	2006-05-30	1959-06-29	2011-07-21	2006-08-01	2001-09-09	2002-10-01	1956-11-01	1966-12-08		
TORONTO PEARSON (AIRPORT)	ON	Long-Term	Temperature	Extreme Minimum (°C)		-31.3	-31.1	-28.9	-17.2	-5.6	0.6	3.9	1.1	-3.9	-18.3	-31.1		
TORONTO PEARSON (AIRPORT)	ON	Long-Term	Temperature	Extreme Minimum (°C) Date (yyyy/mm/dd)	1981-01-04	1943-02-15	1950-03-04	1972-04-07	1966-05-07	1949-06-08	1968-07-30	1965-08-30	1965-09-27	1969-10-23	1949-11-26	1942-12-20		
TORONTO PEARSON (AIRPORT)	ON	Normal	Precipitation	Rainfall (mm)		33.8	23.9	34	70.7	77.5	80.7	74	68.5	67	62.7	35.3	697.4 B	
TORONTO PEARSON (AIRPORT)	ON	Normal	Precipitation	Snowfall (cm)		31.5	27.7	17.2	4.5	0.1	0	0	0	0	0.2	9.3	24.1	114.5 B
TORONTO PEARSON (AIRPORT)	ON	Normal	Precipitation	Precipitation (mm)		61.6	50.2	50.5	76.7	77.6	80.7	74	68.5	69.4	67.2	71.8	58.6	806.8 B
TORONTO PEARSON (AIRPORT)	ON	Normal	Precipitation	Average Snow Depth (cm)		6	7	3	0	0	0	0	0	0	0	0	3	2 C
TORONTO PEARSON (AIRPORT)	ON	Normal	Precipitation	Median Snow Depth (cm)		5	5	1	0	0	0	0	0	0	0	0	1	1 C
TORONTO PEARSON (AIRPORT)	ON	Normal	Precipitation	Snow Depth at Month-end (cm)		8	6	0	0	0	0	0	0	0	0	0	3	1 C
TORONTO PEARSON (AIRPORT)	ON	Normal	Precipitation	Extreme Daily Rainfall (mm)		59	25.8	40.8	55.8	59.4	53.8	126	41.4	66.4	64.8	52.4	30.2	
TORONTO PEARSON (AIRPORT)	ON	Normal	Precipitation	Extreme Daily Rainfall (mm) Date (yyyy/mm/dd)	2020-01-11	2009-02-11	1991-03-27	1992-04-11	2000-05-12	2000-06-13	2013-07-08	1991-08-03	1996-09-07	1995-10-05	1999-11-02	1998-12-06		
TORONTO PEARSON (AIRPORT)	ON	Normal	Precipitation	Extreme Daily Snowfall (cm)		26.4	30.4	15.2	10.4	2.8	0	0	0	0	2	19.4	17.4	
TORONTO PEARSON (AIRPORT)	ON	Normal	Precipitation	Extreme Daily Snowfall (cm) Date (yyyy/mm/dd)	2019-01-28	2008-02-06	1998-03-21	1994-04-06	2020-05-11	1991-06-01	1991-07-01	1991-08-01	1991-09-01	2018-10-27	2020-11-22	2014-12-21		
TORONTO PEARSON (AIRPORT)	ON	Normal	Precipitation	Extreme Daily Precipitation (mm)		59	40.4	40.8	55.8	59.4	53.8	126	41.4	66.4	64.8	52.4	30.2	
TORONTO PEARSON (AIRPORT)	ON	Normal	Precipitation	Extreme Daily Precipitation (mm) Date (yyyy/mm/dd)	2020-01-11	2001-02-08	1991-03-27	1992-04-11	2000-05-12	2000-06-13	2013-07-08	1991-08-03	1996-09-07	1995-10-05	1999-11-02	1998-12-06		
TORONTO PEARSON (AIRPORT)	ON	Normal	Precipitation	Extreme Snow Depth (cm)		67	48	30	12	0	0	0	0	0	0	18	36	
TORONTO PEARSON (AIRPORT)	ON	Normal	Precipitation	Extreme Snow Depth (cm) Date (yyyy/mm/dd)	1999-01-15	2008-02-13	2008-03-09	1994-04-07	1991-05-01	1991-06-01	1991-07-01	1991-08-01	1991-09-01	1991-10-01	2002-11-18	2008-12-24		
TORONTO PEARSON (AIRPORT)	ON	Long-Term	Precipitation	Extreme Daily Rainfall (mm)		59	31.8	41.7	55.8	92.7	53.8	126	80.8	108	121.4	86.1	40.9	
TORONTO PEARSON (AIRPORT)	ON	Long-Term	Precipitation	Extreme Daily Rainfall (mm) Date (yyyy/mm/dd)	2020-01-11	1975-02-24	1942-03-16	1992-04-11	1944-05-31	2000-06-13	2013-07-08	1970-08-30	1948-09-18	1954-10-15	1962-11-10	1962-12-06		
TORONTO PEARSON (AIRPORT)	ON	Long-Term	Precipitation	Extreme Daily Snowfall (cm)		36.8	39.9	32.3	26.7	2.8	0	0	0	0	7.4	33.5	28.2	
TORONTO PEARSON (AIRPORT)	ON	Long-Term	Precipitation	Extreme Daily Snowfall (cm) Date (yyyy/mm/dd)	1966-01-23	1965-02-25	1964-03-10	1939-04-10	2020-05-11	1938-06-01	1938-07-01	1938-08-01	1938-09-01	1962-10-25	1940-11-30	1944-12-11		
TORONTO PEARSON (AIRPORT)	ON	Long-Term	Precipitation	Extreme Daily Precipitation (mm)		59	55.9	41.7	55.8	92.7	53.8	126	80.8	108	121.4	86.1	40.9	
TORONTO PEARSON (AIRPORT)	ON	Long-Term	Precipitation	Extreme Daily Precipitation (mm) Date (yyyy/mm/dd)	2020-01-11	1965-02-25	1942-03-16	1992-04-11	1944-05-31	2000-06-13	2013-07-08	1970-08-30	1948-09-18	1954-10-15	1962-11-10	1962-12-06		
TORONTO PEARSON (AIRPORT)	ON	Long-Term	Precipitation	Extreme Snow Depth (cm)		67	48	30	13	0	0	0	0	0	13	18	36	
TORONTO PEARSON (AIRPORT)	ON	Long-Term	Precipitation	Extreme Snow Depth (cm) Date (yyyy/mm/dd)	1999-01-15	2008-02-13	2008-03-09	1975-04-04	1955-05-01	1955-06-01	1955-07-01	1955-08-01	1955-09-01	1969-10-22	2002-11-18	2008-12-24		
TORONTO PEARSON (AIRPORT)	ON	Normal	Days With ...	Freezing Rain or Freezing Drizzle		2	1.1	0.77	0.47	0	0	0	0	0	0	0.23	0.9	5.5 A
TORONTO PEARSON (AIRPORT)	ON	Normal	Days With ...	Thunderstorms		0.13	0.3	0.5	2.2	3.5	5.1	5.5	4.7	2.6	1.3	0.4	0.2	26.3 A
TORONTO PEARSON (AIRPORT)	ON	Normal	Days With ...	Hail		0	0	0.03	0.13	0.13	0.07	0	0.07	0	0.07	0.03	0	0.53 A
TORONTO PEARSON (AIRPORT)	ON	Normal	Days With ...	Fog, Ice Fog, or Freezing Fog		2	1.3	1.4	1	1.6	0.7	0.43	0.23	0.73	1.3	1.9	1.5	14.2 A
TORONTO PEARSON (AIRPORT)	ON	Normal	Days With ...	Smoke or Haze		2.5	2.2	2.8	2.1	3.5	4.5	4.2	2.9	2.4	3.1	2.5	37.2 A	
TORONTO PEARSON (AIRPORT)	ON	Normal	Days with Maximum Temperature	Days with Maximum Temperature <= -30 °C		0	0	0	0	0	0	0	0	0	0	0	0	0 C
TORONTO PEARSON (AIRPORT)	ON	Normal	Days with Maximum Temperature	Days with Maximum Temperature <= -20 °C		0.04	0	0	0	0	0	0	0	0	0	0	0	0.04 C
TORONTO PEARSON (AIRPORT)	ON	Normal	Days with Maximum Temperature	Days with Maximum Temperature <= -10 °C		2.6	1.1	0.24	0	0	0	0	0	0	0	0	0.15	4 C
TORONTO PEARSON (AIRPORT)	ON	Normal	Days with Maximum Temperature	Days with Maximum Temperature <= 0 °C		16.9	13.7	6.3	0.44	0	0	0	0	0	0	1.5	10.7	49.5 C
TORONTO PEARSON (AIRPORT)	ON	Normal	Days with Maximum Temperature	Days with Maximum Temperature > 0 °C		14.1												

TORONTO PEARSON (AIRPORT)	ON	Normal	Wind	Days with Gusts >= 90 km/h	0.19	0.32	0.29	0.2	0	0.13	0.1	0	0.11	0.22	0.32	0.14	2	D
TORONTO PEARSON (AIRPORT)	ON	Normal	Wind	Extreme Wind Speed (km/h)	80	70	72	82	70	59	56	59	61	76	72	76		
TORONTO PEARSON (AIRPORT)	ON	Normal	Wind	Extreme Wind Speed (km/h) Date (yyyy/mm/dd hh:mi)	2017-01-11 2:00	2002-02-01 15:00	2009-03-11 10:00	2011-04-28 10:00	2002-05-10 12:00	2011-06-01 15:00	1996-07-19 13:00	1992-08-10 19:00	2005-09-29 11:00	2003-10-15 12:00	1992-11-12 23:00	2008-12-28 9:00		
TORONTO PEARSON (AIRPORT)	ON	Normal	Wind	Direction of Extreme Wind Speed	W	W	W	W	W	W	NW	NW	NW	W	W	W		
TORONTO PEARSON (AIRPORT)	ON	Normal	Wind	Direction of Extreme Wind Speed Date (yyyy/mm/dd hh:mi)	2017-01-11 2:00	2002-02-01 15:00	2009-03-11 10:00	2011-04-28 10:00	2002-05-10 12:00	2011-06-01 15:00	1996-07-19 13:00	1992-08-10 19:00	2005-09-29 11:00	2003-10-15 12:00	1992-11-12 23:00	2008-12-28 9:00		
TORONTO PEARSON (AIRPORT)	ON	Normal	Wind	Extreme Gust Speed (km/h)	109	96	96	115	89	98	104	115	106	102	106	109		
TORONTO PEARSON (AIRPORT)	ON	Normal	Wind	Extreme Gust Speed (km/h) Date (yyyy/mm/dd)	1996-01-27	1997-02-27	1996-03-19	2009-04-25	1996-05-19	1991-06-15	2013-07-19	2009-08-11	2010-09-22	2002-10-07	1995-11-11	1996-12-01		
TORONTO PEARSON (AIRPORT)	ON	Normal	Wind	Direction of Extreme Gust Speed	SW	W	NE	W	SW	SW	NW	NE	NW	W	S			
TORONTO PEARSON (AIRPORT)	ON	Normal	Wind	Direction of Extreme Gust Speed Date (yyyy/mm/dd)	1996-01-27	1997-02-27	1996-03-19	2009-04-25	1996-05-19	1991-06-15	2013-07-19	2009-08-11	2010-09-22	2002-10-07	1995-11-11	1996-12-01		
TORONTO PEARSON (AIRPORT)	ON	Long-Term	Wind	Extreme Wind Speed (km/h)	80	77	97	82	71	63	61	71	77	92	80	76		
TORONTO PEARSON (AIRPORT)	ON	Long-Term	Wind	Extreme Wind Speed (km/h) Date (yyyy/mm/dd hh:mi)	2017-01-11 2:00	1958-02-17 8:00	1959-03-15 18:00	2011-04-28 10:00	1964-05-09 15:00	1980-06-20 10:00	1964-07-13 2:00	1958-08-31 13:00	1954-09-22 0:00	1954-10-16 0:00	1955-11-16 19:00	2008-12-28 9:00		
TORONTO PEARSON (AIRPORT)	ON	Long-Term	Wind	Direction of Extreme Wind Speed	W	N	SW	W	W	NW	E	W	W	W	W	W		
TORONTO PEARSON (AIRPORT)	ON	Long-Term	Wind	Direction of Extreme Wind Speed Date (yyyy/mm/dd hh:mi)	2017-01-11 2:00	1958-02-17 8:00	1959-03-15 18:00	2011-04-28 10:00	1964-05-09 15:00	1980-06-20 10:00	1964-07-13 2:00	1958-08-31 13:00	1954-09-22 0:00	1954-10-16 0:00	1955-11-16 19:00	2008-12-28 9:00		
TORONTO PEARSON (AIRPORT)	ON	Long-Term	Wind	Extreme Gust Speed (km/h)	115	105	124	115	109	107	135	115	106	104	122	109		
TORONTO PEARSON (AIRPORT)	ON	Long-Term	Wind	Extreme Gust Speed (km/h) Date (yyyy/mm/dd)	1978-01-26	1956-02-25	1964-03-05	2009-04-25	1983-05-02	1990-06-03	1956-07-01	2009-08-11	2010-09-22	1989-10-14	1955-11-17	1996-12-01		
TORONTO PEARSON (AIRPORT)	ON	Long-Term	Wind	Direction of Extreme Gust Speed	E	W	SW	W	W	W	NW	NE	NW	NW	SW	S		
TORONTO PEARSON (AIRPORT)	ON	Long-Term	Wind	Direction of Extreme Gust Speed Date (yyyy/mm/dd)	1978-01-26	1956-02-25	1964-03-05	2009-04-25	1983-05-02	1990-06-03	1956-07-01	2009-08-11	2010-09-22	1989-10-14	1955-11-17	1996-12-01		
TORONTO PEARSON (AIRPORT)	ON	Normal	Degree Days	Degree Days Above 24 °C	0	0	0	0	0.5	5.9	18.2	7.9	1.7	0	0	0	34.1	C
TORONTO PEARSON (AIRPORT)	ON	Normal	Degree Days	Degree Days Above 18 °C	0	0	0	0.7	16	65.4	129.5	101.1	32.4	2.5	0	0	347.6	C
TORONTO PEARSON (AIRPORT)	ON	Normal	Degree Days	Degree Days Above 15 °C	0	0	0.5	3.5	39.5	132.4	218.9	187.2	79.9	10.4	0.1	0	672.4	C
TORONTO PEARSON (AIRPORT)	ON	Normal	Degree Days	Degree Days Above 10 °C	0.2	0	4.4	22.5	125.5	275.2	373.7	341.9	203.8	52.2	6	0.3	1405.7	C
TORONTO PEARSON (AIRPORT)	ON	Normal	Degree Days	Degree Days Above 5 °C	3	1.7	22.2	89.5	285	425.1	528.7	496.9	351.3	159	39.5	5.2	2387.2	C
TORONTO PEARSON (AIRPORT)	ON	Normal	Degree Days	Degree Days Above 0 °C	22.1	17.9	79.3	214.9	419.3	575.1	683.7	651.9	501.3	308.1	131.4	38.7	3643.7	C
TORONTO PEARSON (AIRPORT)	ON	Normal	Degree Days	Degree Days Below 0 °C	175.2	134	59.6	3.1	0	0	0	0	0	0.1	13.4	87.3	472.6	C
TORONTO PEARSON (AIRPORT)	ON	Normal	Degree Days	Degree Days Below 5 °C	311.1	259.2	157.5	27.6	0.7	0	0	0	0	5.9	71.5	208.8	1042.4	C
TORONTO PEARSON (AIRPORT)	ON	Normal	Degree Days	Degree Days Below 10 °C	463.3	398.9	294.7	110.6	16.2	0.1	0	0	2.5	54.2	188	358.8	1887.3	C
TORONTO PEARSON (AIRPORT)	ON	Normal	Degree Days	Degree Days Below 15 °C	618.1	540.2	445.8	241.6	85.2	7.3	0.2	0.3	28.6	167.4	332.1	513.6	2980.4	C
TORONTO PEARSON (AIRPORT)	ON	Normal	Degree Days	Degree Days Below 18 °C	711.1	625	538.3	328.8	154.7	30.3	3.8	7.2	71.1	252.4	422	606.6	3751.3	C
TORONTO PEARSON (AIRPORT)	ON	Normal	Quintiles	Quintile 1 (Lower Bound)	24.4	20.2	18	22.2	14.4	20.4	20.4	11.6	25.2	17.6	10.2	17		
TORONTO PEARSON (AIRPORT)	ON	Normal	Quintiles	Quintile 1 (Upper Bound)	37.5	25.5	30	47.8	47.8	45	34	39.5	44.2	40.2	33	36.2		
TORONTO PEARSON (AIRPORT)	ON	Normal	Quintiles	Quintile 2 (Upper Bound)	47.6	38.4	40.7	63.5	67.4	59.4	57.6	52.6	54.2	58	52			
TORONTO PEARSON (AIRPORT)	ON	Normal	Quintiles	Quintile 3 (Upper Bound)	63.2	47.3	52.8	88.6	79.6	72.7	85.3	67.4	69.8	66.3	70.8	62.5		
TORONTO PEARSON (AIRPORT)	ON	Normal	Quintiles	Quintile 4 (Upper Bound)	72.2	75.3	63.7	102.7	93.3	109	100.8	91.9	86.3	95.6	91.9	72.4		
TORONTO PEARSON (AIRPORT)	ON	Normal	Quintiles	Quintile 5 (Upper Bound)	133.3	107.6	98.4	133.8	152.8	191.6	193.2	154.4	166.2	136.2	141.2	99.8		
TORONTO PEARSON (AIRPORT)	ON	Normal	Humidex	Days with Humidex >= 30	0	0	0	0.17	3.5	10	18.3	16.2	7.2	0.55	0	0	55.9	A
TORONTO PEARSON (AIRPORT)	ON	Normal	Humidex	Days with Humidex >= 35	0	0	0	0	0.9	4	8	6.2	2.1	0.14	0	0	21.3	A
TORONTO PEARSON (AIRPORT)	ON	Normal	Humidex	Days with Humidex >= 40	0	0	0	0	0.07	0.93	2.1	1.3	0.14	0	0	0	4.6	A
TORONTO PEARSON (AIRPORT)	ON	Normal	Humidex	Extreme Humidex	19	19.1	29.6	34.9	42.6	45.6	50.3	46.6	43	39.1	27.4	21.1		
TORONTO PEARSON (AIRPORT)	ON	Normal	Humidex	Extreme Humidex Date (yyyy/mm/dd)	2005-01-13	2018-02-20	2012-03-22	2002-04-16	2006-05-30	2018-06-30	1995-07-14	2006-08-01	2018-09-05	2007-10-08	2020-11-10	1998-12-06		
TORONTO PEARSON (AIRPORT)	ON	Long-Term	Humidex	Extreme Humidex	19	19.1	29.6	37.9	42.6	45.6	50.3	46.6	48	39.1	28.6	23.9		
TORONTO PEARSON (AIRPORT)	ON	Long-Term	Humidex	Extreme Humidex Date (yyyy/mm/dd)	2005-01-13	2018-02-20	2012-03-22	1990-04-25	2006-05-30	2018-06-30	1995-07-14	2006-08-01	1953-09-01	2007-10-08	1961-11-03	1982-12-03		
TORONTO PEARSON (AIRPORT)	ON	Normal	Wind Chill	Days with Wind Chill < -20	8.8	7	1.8	0	0	0	0	0	0	0	0.17	2.8	20.6	A
TORONTO PEARSON (AIRPORT)	ON	Normal	Wind Chill	Days with Wind Chill < -30	1.8	0.76	0.1	0	0	0	0	0	0	0	0	0.14	2.8	A
TORONTO PEARSON (AIRPORT)	ON	Normal	Wind Chill	Days with Wind Chill < -40	0.03	0.03	0	0	0	0	0	0	0	0	0	0	0.06	A
TORONTO PEARSON (AIRPORT)	ON	Normal	Wind Chill	Days with Wind Chill < -50	0	0	0	0	0	0	0	0	0	0	0	0	0	A
TORONTO PEARSON (AIRPORT)	ON	Normal	Wind Chill	Extreme Wind Chill	-40.2	-40.6	-36.2	-18.5	-8.9	0	0	0	-5.2	-8.9	-22.9	-37.2		
TORONTO PEARSON (AIRPORT)	ON	Normal	Wind Chill	Extreme Wind Chill Date (yyyy/mm/dd)	1994-01-15	2015-02-15	2003-03-03	1995-04-05	2020-05-09	1991-06-01	1991-07-01	1991-08-01	1993-09-30	2020-10-30	2005-11-25	2004-12-20		
TORONTO PEARSON (AIRPORT)	ON	Long-Term	Wind Chill	Extreme Wind Chill	-44.7	-40.6	-36.2	-25.4	-9.5	0	0	0	-8	-13.5	-25.4	-38.5		
TORONTO PEARSON (AIRPORT)	ON	Long-Term	Wind Chill	Extreme Wind Chill Date (yyyy/mm/dd)	1981-01-04	2015-02-15	2003-03-03	1972-04-07	1963-05-01	1953-06-01	1953-07-01	1953-08-01	1965-09-27	1969-10-23	1958-11-30	1980-12-25		
TORONTO PEARSON (AIRPORT)	ON	Normal	Humidity	Average Vapour Pressure (kPa)	0.4	0.4	0.5	0.6	1	1.5	1.8	1.8	1.4	1	0.7	0.5	1	A
TORONTO PEARSON (AIRPORT)	ON	Normal	Humidity	Average Relative Humidity - 0600LST (%)	79.2	77.4	75.2	73	75.7	77.6	79.3	83.7	85.5	83.6	81.4	80.7	79.3	A
TORONTO PEARSON (AIRPORT)	ON	Normal	Humidity	Average Relative Humidity - 1500LST (%)	69.7	65.7	58.5	53.4	53.6	54.4	52.9	55.2	57.3	61.6	66.7	70.5	60	A
TORONTO PEARSON (AIRPORT)	ON	Normal	Pressure	Average Station Pressure (kPa)	99.6	99.6	99.6	99.4	99.4	99.3	99.4	99.5	99.7	99.6	99.6	99.5	99.5	A
TORONTO PEARSON (AIRPORT)	ON	Normal	Pressure	Average Sea Level Pressure (kPa)	101.7	101.7	101.7	101.5	101.5	101.4	101.4	101.6	101.7	101.7	101.8	101.7	101.6	A
TORONTO PEARSON (AIRPORT)	ON	Normal	Visibility	Visibility < 1 km (hours with)	10	9.2	5.5	2.8	3.5	2.1	0.6	0.4	1.4	4.3	6.7	7	53.4	A
TORONTO PEARSON (AIRPORT)	ON	Normal	Visibility	Visibility 1 to 9 km (hours with)	126.9	97.1	76.3	60.5	50.6	53.5	39.7	43.4	43.8	55.1	82.5	103.8	833.2	A
TORONTO PEARSON (AIRPORT)	ON	Normal	Visibility	Visibility > 9 km (hours with)	606.9	571.7	662	656.3	689.5	664	702.9	699.5	674.3	684.1	630.3	632.9	7874.4	A
TORONTO PEARSON (AIRPORT)	ON	Normal	Cloud Amount	Cloud Amount 0 to 2 tenths (hours with)	129.8	154.2	206.3	184.4	221.7	212	229.5	261.4	257.1	200.2	141.7	131.8	2330	D
TORONTO PEARSON (AIRPORT)	ON	Normal	Cloud Amount	Cloud Amount 3 to 7 tenths (hours with)	94.6	104.6	117.6	121.6	152.7	179.7	214.4	200.2	166.8	139	108.3	99.8	1699.2	D
TORONTO PEARSON (AIRPORT)	ON	Normal	Cloud Amount	Cloud Amount 8 to 10 tenths (hours with)	519.7	421.2	420.1	414.1	369.7	328.3	300.1	282.4	296.1	404.8	512.4	4738.8	D	
TORONTO PEARSON (AIRPORT)	ON	Normal	Frost-Free	Average Date of Last Spring Frost													27-Apr	C
TORONTO PEARSON (AIRPORT)	ON	Normal	Frost-Free	Average Date of First Fall Frost													20-Oct	C
TORONTO PEARSON (AIRPORT)	ON	Normal	Frost-Free	Average Length of Frost-Free Period												174 Days	C	

## **APPENDIX D**

### **Agricultural Crop Statistics**

### Peel Regional Municipality at a Glance - 2021

Item	Peel	Province	Percent of province	Percent from 2016	Item	Peel	Province	Percent of province	Percent from 2016
<b>Farms, 2021 Census (number)</b>									
Total	377	48,346	0.78%	-7.80%	Major Field Crops, 2021 Census (acres)	10,343	1,144,408	0.90%	21.54%
Under 10 acres	52	3,217	1.62%	-1.80%	Wheat	344	84,230	0.41%	64.00%
10 to 19 acres	122	12,886	0.64%	-22.27%	Barley for grain	1,058	88,756	1.48%	42.21%
20 to 29 acres	70	10,024	0.64%	0.00%	Mixed grains	483	59,861	0.76%	45.00%
30 to 179 acres	24	4,422	0.50%	-12.00%	Corn for grain	19,831	2,022,465	0.89%	45.86%
180 to 239 acres	22	3,981	0.50%	4.70%	Corn for silage	1,271	299,878	0.54%	25.60%
240 to 399 acres	19	5,568	0.50%	0.00%	Hay	14,008	1,704,017	0.82%	8.31%
400 to 599 acres	24	2,866	0.64%	4.50%	Soybeans	29,915	2,068,255	1.07%	21.60%
600 to 759 acres	12	1,658	0.78%	0.00%	Other	4	39,193	0.02%	-76.87%
760 to 1,119 acres	18	1,601	1.00%	0.00%	<b>Major Fruit Crops, 2021 Census (acres)</b>				
1,120 to 1,599 acres	8	720	1.1%	102.00%	Apples	196	48,611	0.98%	-29.53%
1,600 to 2,239 acres	5	461	1.11%	-44.44%	Soft Cherries	0	1,383	0.00%	0.00%
2,240 to 2,879 acres	5	173	2.80%	0.00%	Plaches	132	10,808	0.62%	7.32%
2,880 to 3,519 acres	0	0	0.00%	0.00%	Other	0	4,608	0.00%	0.00%
3,520 acres and over	1	118	0.85%	0.00%	Grapes	60	18,432	0.93%	-
<b>Land Use, 2021 Census (acres)</b>									
Land in crops	80,409	9,051,011	0.80%	19.20%	Strawberries	59	2,833	2.24%	5.36%
Summerfallow land	384	13,984	2.73%	43.00%	Raspberries	17	458	0.98%	-
Tame or wooded pasture	2,722	400,460	0.68%	-11.37%	<b>Major Vegetable Crops, 2021 Census (acres)</b>				
Natural land for pasture	2,859	638,368	0.49%	-26.10%	Total vegetables	479	127,893	0.41%	37.87%
Christmas trees, woodland & wetland	4,703	1,299,535	0.31%	-17.33%	Tomatoes	112	20,518	0.91%	80.20%
All other land	4,598	404,714	1.11%	40.24%	Tomatoes	29	14,614	0.92%	0.00%
Total area of farms	95,383	11,786,011	0.81%	14.47%	Green peas	28	14,644	0.20%	180.00%
<b>Greenhouse Area, 2021 Census (square feet)</b>									
Total area in use	571,719	201,055,888	0.26%	-34.29%	Green or was beans	18	8,709	0.21%	157.14%
<b>Farm Capital Value, 2021 Census (farms reporting)</b>									
Under \$200,000	11	1,212	0.91%	-54.17%	<b>Livestock Inventories, 2021 Census (number)</b>				
\$200,000 to \$499,999	0	0	0.00%	-	Total cattle and calves	8,987	1,608,810	0.96%	-1.38%
\$500,000 to \$999,999	40	8,699	0.44%	-43.86%	Sheep	1,949	209,540	0.67%	0.78%
\$1,000,000 and over	32	35,212	0.91%	-6.80%	Beef cows	1,204	224,194	0.98%	-44.24%
<b>Total Gross Farm Receipts, 2021 Census (farms reporting)</b>									
Under \$10,000	74	7,227	1.02%	-18.86%	Dairy cows	1,700	327,272	0.95%	-3.74%
\$10,000 to \$24,999	48	7,429	0.74%	-28.37%	Total pigs	165	4,071,902	0.00%	189.47%
\$25,000 to \$49,999	31	6,033	0.51%	-29.51%	Total sheep and lambs	542	322,598	0.17%	-49.84%
\$50,000 to \$99,999	35	4,448	0.79%	6.00%	<b>Poultry Inventories, 2021 Census (number)</b>				
\$100,000 to \$199,999	10	2,462	0.37%	-47.86%	Total hens and chickens	422,213	53,807,772	0.78%	118.96%
\$200,000 and over	70	1,658	0.50%	-42.86%	Total turkeys	2,107	2,453,126	0.00%	189.74%
<b>Farms by Industry Group, 2021 Census (number of farms)</b>									
Beef cattle ranching and farming	53	7,868	0.68%	35.50%	<b>Farm Cash Receipts for Main Commodities, Peel, 2021 (Total = \$847.1 million)</b>				
Dairy cattle and milk production	13	3,188	0.41%	-28.37%	Flourish & Flour	0	0.00	0.00%	-
Hog and pig farming	3	1,189	0.25%	200.00%	Other	0	0.00	0.00%	-
Poultry and egg production	13	2,011	0.61%	44.44%	Barley	0	0.00	0.00%	-
Sheep and goat farming	14	5,096	0.31%	-60.00%	Wheat	0	0.00	0.00%	-
Other animal production	64	4,358	1.40%	-36.64%	Other	0	0.00	0.00%	-
Cheese and grain farming	112	18,134	0.62%	-27.27%	Other	0	0.00	0.00%	-
Vegetable and melon farming	29	1,562	1.80%	-0.38%	Other	0	0.00	0.00%	-
Fruit and tree nut farming	1,493	11,211	0.30%	0.00%	Other	0	0.00	0.00%	-
Greenhouse, nursery and floriculture	29	1,872	1.38%	-28.13%	Other	0	0.00	0.00%	-
Other crop farming	46	6,418	0.62%	2.27%	Other	0	0.00	0.00%	-

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

### Caledon Township at a Glance - 2021

Item	Caledon	Province	Percent of province	Percent from 2016	Item	Caledon	Province	Percent of province	Percent from 2016
<b>Farms, 2021 Census (number)</b>									
Total	308	48,346	0.64%	-10.72%	Major Field Crops, 2021 Census (acres)	9,822	1,144,408	0.89%	-
Under 10 acres	39	3,217	1.62%	-1.80%	Wheat	344	84,230	0.41%	64.00%
10 to 19 acres	97	12,886	0.74%	-27.81%	Barley for grain	1,058	88,756	1.48%	42.21%
20 to 29 acres	59	10,024	0.64%	0.00%	Mixed grains	483	59,861	0.76%	45.00%
30 to 179 acres	22	4,422	0.50%	-12.00%	Corn for grain	19,831	2,022,465	0.89%	45.86%
180 to 239 acres	22	3,981	0.50%	22.22%	Corn for silage	1,271	299,878	0.54%	25.60%
240 to 399 acres	14	5,568	0.78%	0.00%	Hay	14,008	1,704,017	0.82%	8.31%
400 to 599 acres	21	2,866	0.73%	5.00%	Soybeans	29,915	2,068,255	1.07%	21.60%
600 to 759 acres	12	1,658	0.90%	0.00%	Other	4	39,193	0.02%	-76.87%
760 to 1,119 acres	13	1,601	0.81%	-18.75%	<b>Major Fruit Crops, 2021 Census (acres)</b>				
1,120 to 1,599 acres	7	720	1.1%	102.00%	Apples	196	48,611	0.98%	-29.53%
1,600 to 2,239 acres	5	461	1.11%	-37.50%	Soft Cherries	0	1,383	0.00%	0.00%
2,240 to 2,879 acres	5	173	2.80%	0.00%	Plaches	132	10,808	0.62%	7.32%
2,880 to 3,519 acres	0	0	0.00%	0.00%	Other	0	4,608	0.00%	0.00%
3,520 acres and over	1	118	0.85%	0.00%	Grapes	60	18,432	0.93%	-
<b>Land Use, 2021 Census (acres)</b>									
Land in crops	73,460	9,051,011	0.81%	16.16%	Strawberries	59	2,833	2.24%	5.36%
Summerfallow land	357	13,984	2.96%	376.00%	Raspberries	17	458	0.98%	-
Tame or wooded pasture	2,159	400,460	0.51%	-29.00%	<b>Major Vegetable Crops, 2021 Census (acres)</b>				
Natural land for pasture	2,159	638,368	0.34%	-42.84%	Total vegetables	479	127,893	0.37%	99.54%
Christmas trees, woodland & wetland	3,860	1,299,535	0.30%	-25.38%	Tomatoes	112	20,518	0.91%	80.20%
All other land	3,880	404,714	0.91%	35.86%	Tomatoes	29	14,614	0.92%	0.00%
Total area of farms	82,052	11,786,011	0.73%	9.99%	Green peas	28	14,644	0.20%	180.00%
<b>Greenhouse Area, 2021 Census (square feet)</b>									
Total area in use	112,279	201,055,888	0.05%	-81.84%	Green or was beans	18	8,709	0.21%	200.00%
<b>Farm Capital Value, 2021 Census (farms reporting)</b>									
Under \$200,000	7	1,212	0.83%	-22.22%	<b>Livestock Inventories, 2021 Census (number)</b>				
\$200,000 to \$499,999	0	0	0.00%	-	Total cattle and calves	8,350	1,608,810	0.92%	-5.40%
\$500,000 to \$999,999	26	8,699	0.44%	-87.80%	Sheep	1,949	209,540	0.65%	1.15%
\$1,000,000 and over	80	35,212	0.71%	10.00%	Beef cows	1,184	224,194	0.93%	-
<b>Total Gross Farm Receipts, 2021 Census (farms reporting)</b>									
Under \$10,000	64	7,227	1.02%	-19.23%	Dairy cows	1,505	327,272	0.94%	-
\$10,000 to \$24,999	43	7,429	0.61%	-13.43%	Total pigs	165	4,071,902	0.00%	189.47%
\$25,000 to \$49,999	31	6,033	0.51%	-36.29%	Total sheep and lambs	542	322,598	0.17%	-49.84%
\$50,000 to \$99,999	26	4,448	0.63%	-22.31%	<b>Poultry Inventories, 2021 Census (number)</b>				
\$100,000 to \$199,999	41	6,817	0.60%	-36.79%	Total hens and chickens	351,400	53,807,772	0.65%	85.21%
\$200,000 and over	69	1,658	0.49%	-10.20%	Total turkeys	2,089	2,453,126	0.00%	189.20%

### Peel Regional Municipality at a Glance - 2016

Item	Peel	Province	Percent of province	Percent from 2011	Item	Peel	Province	Percent of province	Percent from 2011
<b>Farms, 2016 Census (number)</b>									
Total	408	48,600	0.82	-7.27	Major Field Crops, 2016 Census (acres)	8,510	1,080,378	0.79	-26.33
Under 10 acres	53	3,051	1.74	17.86	Wheat	209	82,208	0.25	-24.82
10 to 19 acres	159	12,917	1.29	-2.45	Barley for grain	1,781	103,717	1.29	-47.48
20 to 29 acres	95	9,237	0.65	-13.68	Mixed grains	425	92,837	0.48	-32.97
30 to 179 acres	13,448	2,022,465	0.94	-3.85	Corn for grain	14,848	2,022,465	0.92	1.54
180 to 239 acres	21	4,282	0.40	-12.60	Corn for silage	1,717	299,878	0.56	-18.75
240 to 399 acres	18	5,568	0.75	42.42	Hay	13,841	1,724,214	0.75	-28.05
400 to 599 acres	23	2,866	0.74	45.51	Soybeans	24,652	2,783,443	0.88	8.45
600 to 759 acres	8	1,658	0.43	-42.86	Other	30	34,885	0.09	-44.44
760 to 1,119 acres	16	1,593	1.00	-23.81	<b>Major Fruit Crops, 2016 Census (acres)</b>				
1,120 to 1,599 acres	8	720	1.00	33.33	Apples	140	51,192	0.79	-6.00
1,600 to 2,239 acres	9	457	1.07	1.00	Soft Cherries	0	1,212	0.00	-100.00
2,240 to 2,879 acres	0	188	0.00	-	Soft Cherries	0	2,121	0.00	-
2,880 to 3,519 acres	1	110	0.91	0.00	Plaches	0	5,232	0.00	-100.00
3,520 acres and over	1	110	0.91	0.00	Grapes	x	18,718	0.93	-
<b>Land Use, 2016 Census (acres)</b>									
Land in crops	67,408	9,021,298	0.75	-9.15	Strawberries	58	2,815	1.92	-20.11
Summerfallow land	75	15,885	0.47	-29.69	Other	x	680	0.00	-
Tame or wooded pasture	3,064	514,198	0.60	-30.25	<b>Major Vegetable Crops, 2016 Census (acres)</b>				
Natural land for pasture	3,669	783,366	0.49	-0.38	Total vegetables	377	135,420	0.38	-22.11
Christmas trees, woodland & wetland	5,882	1,542,627	0.27	-20.75	Tomatoes	68	22,910	0.39	-48.41
All other land	3,214	470,909	0.68	20.23	Tomatoes	38	15,744	0.20	-38.28
Total area of farms	83,339	12,342,463	0.67	-11.49	Green peas	10	16,268	0.06	25.00
<b>Greenhouse Area, 2016 Census (square feet)</b>									
Total area in use	169,770	185,113,328	0.55	-44.92	Green or was beans	7	9,732	0.07	-22.22
<b>Farm Capital Value, 2016 Census (farms reporting)</b>									
Under \$200,000	24	2,142	1.12	41.18	<b>Livestock Inventories, 2016 Census (number)</b>				
\$200,000 to \$499,999	18	7,433	0.60						

\$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	2,462	0.37%	49.00%
\$2,000,000 and over	8	1,696	0.47%	33.33%

**Farms by Industry Group, 2011 Census (number of farms)**

Beef cattle ranching and farming	43	7,986	0.54%	19.44%
Dairy cattle and milk production	12	3,189	0.34%	-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	4,558	1.21%	-38.20%
Cereal and grain farming	93	16,194	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	4,797	0.64	-3.23
\$500,000 to \$999,999	18	3,089	0.46	20.00
\$1,000,000 to \$1,999,999	15	2,919	0.74	25.00
\$2,000,000 and over	6	1,233	0.40	0.00

**Farms by Industry Group, 2016 Census (number of farms)**

Beef cattle ranching and farming	36	6,798	0.53	-18.18
Dairy cattle and milk production	16	3,439	0.52	-18.18
Hog and pig farming	1	1,229	0.09	-
Poultry and egg production	9	1,816	0.50	12.50
Sheep and goat farming	7	1,097	0.64	0.00
Other animal production	89	5,902	1.51	8.54
Cereal and grain farming	96	16,876	0.57	7.67
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	0.79	-44.83
Other crop farming	42	7,187	0.58	-27.59

\$250,000 to \$499,999	31	5,086	0.81
\$500,000 to \$999,999	15	3,348	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	4,006	0.35
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	6,968	1.18
Cereal and grain farming	99	15,816	0.56
Vegetable and melon farming	14	1,531	0.91
Fruit and tree nut farming	12	1,543	0.78
Greenhouse, nursery and floriculture	20	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

COLVILLE CONSULTING INC.

	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 <sup>1</sup>
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

<sup>1</sup> "Acid" means pH<5.5; "Neutral" pH 5.5 to 7.4; "Alkaline" pH>7.4 as measured in 0.01 M CaCl<sub>2</sub> (CSCC, 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.

COLVILLE CONSULTING INC.

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 <sup>2</sup> ), 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 m <sup>2</sup> ).
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.

COLVILLE CONSULTING INC.

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

# South Elevation

☉ 343°N (T) ● 43°47'20"N, 79°48'17"W ±4m ▲ 268m



28

C24035

26 Jun 2024, 10:06:06

Photo 1: Operation #28 – Grain elevator and drier located within the Subject Lands.

# East Elevation

☉ 256°W (T) ● 43°47'12"N, 79°48'52"W ±4m ▲ 269m



32

C24035

26 Jun 2024, 10:19:27

Photo 2: Operation #32 – Large dairy operation showing barns and hay storage.

# South Elevation

☉ 355°N (T) ● 43°47'15"N, 79°49'35"W ±4m ▲ 275m



Photo 3: Operation #33 – Empty livestock facility showing bank barn, implement shed, and silo.

# West Elevation

☉ 98°E (T) ● 43°46'53"N, 79°49'5"W ±4m ▲ 269m



Photo 4: Operation #36 – Empty livestock facility showing barn in fair to poor condition and uncapped silo.

# East Elevation

☉ 271°W (T) ● 43°48'37"N, 79°48'35"W ±4m ▲ 269m



Photo 5: Operation #18 – Remnant farm showing collapsed barn, silo, and implement shed.

# East Elevation

☉ 277°W (T) ● 43°48'54"N, 79°47'32"W ±4m ▲ 257m



Photo 6: Operation #16 – Beef operation showing bank barn, implement shed, and grain bin.

# East Elevation

☉ 258°W (T) ☉ 43°48'35"N, 79°47'7"W ±4m ▲ 254m



14

C24035

26 Jun 2024, 09:08:38

Photo 7: Operation #14 – Hobby farm showing barn, two silos, and farm building.

**APPENDIX G**

Land Use Notes

Land Use Survey Notes – AIA for Mayfield Tullamore Landowner Group			
Weather	Partially Cloudy	Date (s)	June 26, 2024
Temperature	26°C	File	C24035

Site No.	Type of Use	Type of Operation	MDS Calculation Required?	Description of Operation
1	Non-Agricultural	Commercial	No	Tim Hortons
2	Non-Agricultural	Commercial	No	Shell gas station
3	Agriculture-Related	Garden Centre	No	Caledon Sabzi Farm Garden Centre/Farmers Market. Retail store, sells plants soil, etc.
4	Non-Agricultural	Industrial	No	C-Cancontainers. Sipping container storage
5	Non-Agricultural	Commercial	No	Aecon Materials Engineering. Engineering consultants
6	Non-Agricultural	Industrial	No	Strada Aggregates – Caledon Depot. Aggregate storage
7	Non-Agricultural	Industrial	No	HGC The Herman Group. Transportation services/distribution centre for trucks
8	Non-Agricultural	Commercial	No	Commercial plaza with convenience store, two restaurants, and car sales/servicing
9	Non-Agricultural	Commercial	No	CESclean. Commercial cleaning services
10	Non-Agricultural	Future Residential Development	No	Lands have been disturbed, ongoing development, construction equipment and monitoring wells observed
11	Non-Agricultural	Industrial	No	No sign associated with business, tractor trailers and heavy equipment observed outside
12	Agricultural	Remnant Farm	No	Steel sided barn in fair condition, large dump truck in back, public notice sign File #RZ 2021-0011, no trespassing signs, no structures appear capable of housing livestock and non-agricultural development will be the future use of the lands
13	Agricultural	Remnant Farm	No	Property has been abandoned, all buildings in poor condition, public notice sign indicating future development
14	Agricultural	Hobby Farm	Yes	Three livestock facilities in fair condition, implement shed, outdoor manure storage, spoke with landowner who said they have 50 pigs, 75 lay hens, 25 goats, 35 cattle, 25 ducks, 10 rabbits, and 100 pigeons, and a liquid earthen manure pit
15	Non-Agricultural	Industrial	No	Metro Truck. Truck rentals and leasing

16	Agricultural	Beef Operation	Yes	Bank barn in fair condition, two implement sheds, grain bin, outdoor manure storage, spoke with landowner who informed they have 25 beef cattle and 12 sheep. Small operation
17	Agricultural	Hobby Farm	Yes	Bank barn in fair condition, capped silo, implement shed, OFA member, Harvistore system. Spoke with landowner who said there is currently 4 beef cattle but used to be a dairy operation for 100 cows
18	Agricultural	Remnant Farm	No	Barn collapsed, implement shed in fair condition, capped silo, no structures capable of housing livestock
19	Agricultural	Remnant Farm	No	Barn observed being demolished, two capped silos, no structures capable of housing livestock
20	Non-Agricultural	Recreational	No	Mayfield Golf Course
21	Agricultural	Hobby Farm	Yes	Manure pile near front of property, no trespassing, sign out front saying sheep, lambs, and rabbits for sale, OFA member
22	Non-Agricultural	Institutional	No	Mayfield Secondary School
23	Non-Agricultural	Recreational	No	Mayfield Recreation Complex
24	Non-Agricultural	Institutional	No	James Grieve Public School
25	Non-Agricultural	Institutional	No	Guru Nanak Nishka Sewa Centre. Gurudwara
26	Non-Agricultural	Recreational	No	Banty's Roost Golf Course
27	Agricultural	Remnant Farm	No	Two old barns in poor condition, two grain bins, gated entry, no trespassing, property abandoned and overgrown, no structures capable of housing livestock
28	Agriculture-Related	Grain Elevator	No	Grain elevator and drier, large implement shed, transport truck for hauling grain observed outside
29	Agricultural	Remnant Farm	No	Barn foundation remaining, other agricultural buildings overgrown and in poor condition, no structures capable of housing livestock
30	Agricultural	Hobby Farm	No	No trespassing, appears to have remnant barns, very large gardens, and outdoor storage. Appears to be used to produce vegetables, no structures capable of housing livestock observed.

31	Agriculture-Related	Vegetable Wholesaler	No	Sidhu Punjabi Farm. Vegetable crops sold for wholesale prices. No structures capable of housing livestock
32	Agricultural	Dairy Operation	Yes	Armstrong Manner Farms. Two plastic Quonset huts storing hay, three large dairy barns, gated laneway. Spoke with landowner who said there is capacity for 465 milking cows, 700 cows total including calves, and an H1 liquid manure storage system
33	Agricultural	Unoccupied Livestock Facility	Yes	Brymarie Farms. Bank barn in good condition, capped silo, implement shed, OFA member, spoke with landowner who said barn is empty and lands are tenant farmed. Barn appears capable of housing livestock
34	Agricultural	Remnant Farm	No	Barn missing large portion of roof, possibly now a cash crop operation, appears as though nobody lives on the property, implement shed likely used for storage, snow removal equipment observed outside. No structures capable of housing livestock
35	Agricultural	Beef Operation	Yes	Jackson's Farm. Bank barn in good/fair condition, hay storage, approximately 20 cows observed in pasture, property has been sold, nobody living on property and nowhere to leave MDS letter.
36	Agricultural	Unoccupied Livestock Facility	Yes	Bank barn in fair condition, uncapped silo, implement shed in poor condition, OFA member. Spoke with landowner who said barn is now empty but had 300 beef cattle this past winter
37	Agricultural	Remnant Farm	No	Demolished barn, manure storage decommissioned, no trespassing sign
38	Agricultural	Hobby Farm	No	Two beef cattle observed in pasture, OFA member, no agricultural buildings observed. Appears to be associated with Operation #36
39	Agricultural	Remnant Farm	No	Two large implement sheds, barn in poor condition, sign listing manure sales says permanently closed, OFA member, Ontario Cattleman's Association, no structures capable of housing livestock.
40	Non-Agricultural	Industrial	No	BP Landscaping and Snow Removal
41	Non-Agricultural	Institutional	No	Mayfield United Church
42	Non-Agricultural	Industrial	No	UPS facility/distribution centre
43	Non-Agricultural	Industrial	No	Salisbury Garden Supplies. Soil and aggregate stockpiles, grinds asphalt, sells firewood

44	Non-Agricultural	Commercial	No	Lindfast Solutions Group
45	Non-Agricultural	Industrial	No	Grainger Canada Distribution Centre
46	Agricultural	Remnant Farm	No	Spoke with landowner who said barn was capable of housing livestock last year but is no longer capable. Farm surrounded by ongoing development activity, Agricultural buildings in fair condition but not capable of housing livestock
47	Non-Agricultural	Future Residential Development	No	Lands have been disturbed, ongoing development, construction equipment and monitoring wells observed
48	Agricultural	Remnant Farm	No	Barn demolished, implement shed in poor condition, no structures capable of housing livestock
49	Agricultural	Remnant Farm	No	Barn demolished, lands disturbed for development, barn was standing in 2023 according to aerial images
50	Non-Agricultural	Industrial	No	Black Mamba Mobile Truck Trailer Repair
51	Agricultural	Unoccupied Livestock Facility	Yes	Barn in fair to poor condition, overgrown, no signs of livestock, assumed capable of housing livestock
52	Agricultural	Hobby Farm	No	Hobby farm with field shelter and paddocks for horses. No livestock observed. Field shelters do not require the calculation of MDS I setbacks.

	Total Number	Active	Empty or Remnant
<b>Agricultural</b>	24	Dairy Operation – 1 Hobby Farm – 6 Beef Operation – 2	Unoccupied Livestock Facility – 3 Remnant Farm- 12
<b>Agriculture-Related</b>	3	Grain Elevator – 1 Vegetable Wholesaler – 1 Garden Centre – 1	0
<b>On-farm Diversified</b>	0	0	0
	<b>Total Number</b>	<b>Type</b>	
<b>Non-Agricultural</b>	25	Commercial – 6 Industrial – 10 Future Residential Development – 2 Recreational – 3 Institutional – 4	

## **APPENDIX H**

AgriSuite MDS Report

## Mayfield Tullamore

### General information

<b>Application date</b> Jul 16, 2024	<b>Municipal file number</b>	<b>Proposed application</b> New or expanding settlement area boundary
---	------------------------------	--

<b>Applicant contact information</b> ON	<b>Location of subject lands</b> Regional Municipality of Peel Town of Caledon CHINGUACOUSY Concession 5 EAST OF CENTRE ROAD , Lot 19
--	---

### Calculations

#### Operation #14

<b>Farm contact information</b> ON	<b>Location of existing livestock facility or anaerobic digester</b> Regional Municipality of Peel Town of Caledon CHINGUACOUSY Concession 6 EAST OF CENTRE ROAD , Lot 22 Roll number: 2124	<b>Total lot size</b> 20 ha
---------------------------------------	--	--------------------------------

### Livestock/manure summary

Manure Form	Type of livestock/manure	Existing maximum number	Existing maximum number (NU)	Estimated livestock barn area
Liquid	Swine, Feeders (27 - 136 kg), Full Slats	50	9.5 NU	48 m <sup>2</sup>
Solid	Chickens, Layer hens (for eating eggs; after transfer from pullet barn), Floor Run	75	0.5 NU	7 m <sup>2</sup>
Solid	Goats, Dairy Kids, Confinement	25	0.8 NU	19 m <sup>2</sup>
Liquid	Ducks, Muscovy	25 m <sup>2</sup>	1 NU	25 m <sup>2</sup>
Solid	Beef, Cows, including calves to weaning (all breeds), Yard/Barn	35	35 NU	163 m <sup>2</sup>
Solid	Rabbits, Breeding females (including males, replacements & market animals), 1 Tier Cages	10	0.3 NU	18 m <sup>2</sup>

**Setback summary**

Existing manure storage	<b>H1. Liquid, outside, no cover, sloped-sided storage</b>		
Design capacity	<b>47.1 NU</b>		
Potential design capacity	<b>47.1 NU</b>		
Factor A (odour potential)	<b>0.81</b>	Factor B (design capacity)	<b>254.12</b>
Factor D (manure type)	<b>0.72</b>	Factor E (encroaching land use)	<b>2.2</b>
<hr/>			
Building base distance 'F' (A x B x D x E) (minimum distance from livestock barn)			<b>327 m (1073 ft)</b>
Actual distance from livestock barn			<b>NA</b>
Storage base distance 'S' (minimum distance from manure storage)			<b>462 m (1516 ft)</b>
Actual distance from manure storage			<b>NA</b>

**Operation #16**

<b>Farm contact information</b> ON	<b>Location of existing livestock facility or anaerobic digester</b> Regional Municipality of Peel Town of Caledon CHINGUACOUSY Concession 6 EAST OF CENTRE ROAD , Lot 24 Roll number: 2124	<b>Total lot size</b> 38 ha
---------------------------------------	---	--------------------------------

**Livestock/manure summary**

Manure Form	Type of livestock/manure	Existing maximum number	Existing maximum number (NU)	Estimated livestock barn area
Solid	Beef, Cows, including calves to weaning (all breeds), Yard/Barn	25	25 NU	116 m <sup>2</sup>
Solid	Sheep, Ewes & rams (for meat lambs; includes unweaned offspring & replacements), Outside Access	12	1.5 NU	17 m <sup>2</sup>

**Setback summary**

Existing manure storage	V3. Solid, outside, no cover, >= 30% DM		
Design capacity	26.5 NU		
Potential design capacity	26.5 NU		
Factor A (odour potential)	0.7	Factor B (design capacity)	213
Factor D (manure type)	0.7	Factor E (encroaching land use)	2.2
<hr/>			
Building base distance 'F' (A x B x D x E) (minimum distance from livestock barn)			230 m (755 ft)
Actual distance from livestock barn			NA
Storage base distance 'S' (minimum distance from manure storage)			230 m (755 ft)
Actual distance from manure storage			NA

**Operation #17**

<b>Farm contact information</b> ON	<b>Location of existing livestock facility or anaerobic digester</b> Regional Municipality of Peel Town of Caledon CHINGUACOUSY Concession 6 EAST OF CENTRE ROAD , Lot 24 Roll number: 2124	<b>Total lot size</b> 40.4 ha
---------------------------------------	---	----------------------------------

**Livestock/manure summary**

Manure Form	Type of livestock/manure	Existing maximum number	Existing maximum number (NU)	Estimated livestock barn area
Solid	Dairy, Heifers Large Frame (182 - 545 kg) (eg. Holsteins), Deep Bedded	100	50 NU	650 m <sup>2</sup>

**Setback summary**

Existing manure storage	<b>V4. Solid, outside, no cover, 18-30% DM, with covered liquid runoff storage</b>		
Design capacity	<b>50 NU</b>		
Potential design capacity	<b>50 NU</b>		
Factor A (odour potential)	<b>0.7</b>	Factor B (design capacity)	<b>260</b>
Factor D (manure type)	<b>0.7</b>	Factor E (encroaching land use)	<b>2.2</b>

Building base distance 'F' (A x B x D x E) (minimum distance from livestock barn)	<b>281 m (922 ft)</b>
Actual distance from livestock barn	<b>NA</b>
Storage base distance 'S' (minimum distance from manure storage)	<b>281 m (922 ft)</b>
Actual distance from manure storage	<b>NA</b>

**Operation #21**

<b>Farm contact information</b> ON	<b>Location of existing livestock facility or anaerobic digester</b> Regional Municipality of Peel Town of Caledon CHINGUACOUSY Concession 5 EAST OF CENTRE ROAD , Lot 19 Roll number: 2124	<b>Total lot size</b> 9.5 ha
---------------------------------------	---	---------------------------------

**Livestock/manure summary**

Manure Form	Type of livestock/manure	Existing maximum number	Existing maximum number (NU)	Estimated livestock barn area
Solid	Sheep, Ewes & rams (for meat lambs; includes unweaned offspring & replacements), Outside Access	205	25.6 NU	286 m <sup>2</sup>

**Confirm Livestock/Manure Information (Operation #21)**

The livestock/manure information has not been confirmed with the property owner and/or farm operator.

**Setback summary**

Existing manure storage	V3. Solid, outside, no cover, >= 30% DM		
Design capacity	25.6 NU		
Potential design capacity	25.6 NU		
Factor A (odour potential)	0.7	Factor B (design capacity)	211.26
Factor D (manure type)	0.7	Factor E (encroaching land use)	2.2
<hr/>			
Building base distance 'F' (A x B x D x E) (minimum distance from livestock barn)			228 m (748 ft)
Actual distance from livestock barn			NA
Storage base distance 'S' (minimum distance from manure storage)			228 m (748 ft)
Actual distance from manure storage			NA

**Operation #32**

<b>Farm contact information</b> ON	<b>Location of existing livestock facility or anaerobic digester</b> Regional Municipality of Peel Town of Caledon CHINGUACOUSY Concession 4 EAST OF CENTRE ROAD , Lot 23 Roll number: 2124	<b>Total lot size</b> 39.7 ha
---------------------------------------	---	----------------------------------

**Livestock/manure summary**

Manure Form	Type of livestock/manure	Existing maximum number	Existing maximum number (NU)	Estimated livestock barn area
Liquid	Dairy, Calves Large Frame (45 - 182 kg) (eg. Holsteins)	235	39.2 NU	764 m <sup>2</sup>
Liquid	Dairy, Heifers Large Frame (182 - 545 kg) (eg. Holsteins), Free Stall	465	232.5 NU	3240 m <sup>2</sup>

**Setback summary**

Existing manure storage	<b>H1. Liquid, outside, no cover, sloped-sided storage</b>		
Design capacity	271.7 NU		
Potential design capacity	271.7 NU		
Factor A (odour potential)	0.7	Factor B (design capacity)	447.98
Factor D (manure type)	0.8	Factor E (encroaching land use)	2.2
<hr/>			
Building base distance 'F' (A x B x D x E) (minimum distance from livestock barn)			552 m (1811 ft)
Actual distance from livestock barn			NA
Storage base distance 'S' (minimum distance from manure storage)			642 m (2106 ft)
Actual distance from manure storage			NA

**Operation #33**

<b>Farm contact information</b> ON	<b>Location of existing livestock facility or anaerobic digester</b> Regional Municipality of Peel Town of Caledon CHINGUACOUSY Concession 4 EAST OF CENTRE ROAD , Lot 24 Roll number: 2124	<b>Total lot size</b> 40.3 ha		
<b>Livestock/manure summary</b>				
<b>Manure Form</b>	<b>Type of livestock/manure</b>	<b>Existing maximum number</b>	<b>Existing maximum number (NU)</b>	<b>Estimated livestock barn area</b>
Solid	Unoccupied Livestock Barn	808 m <sup>2</sup>	40.4 NU	808 m <sup>2</sup>
<b>Unoccupied Barn or Unused Storage (Operation #33)</b>				
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	40.4 NU		
Potential design capacity	40.4 NU		
Factor A (odour potential)	1	Factor B (design capacity)	240.8
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)		371 m (1217 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 #35**

<b>Farm contact information</b> ON	<b>Location of existing livestock facility or anaerobic digester</b> Regional Municipality of Peel Town of Caledon CHINGUACOUSY Concession 3 EAST OF CENTRE ROAD , Lot 23 Roll number: 2124	<b>Total lot size</b> 39.5 ha
---------------------------------------	---	----------------------------------

**Livestock/manure summary**

Manure Form	Type of livestock/manure	Existing maximum number	Existing maximum number (NU)	Estimated livestock barn area
Solid	Beef, Cows, including calves to weaning (all breeds), Yard/Barn	194	194 NU	901 m <sup>2</sup>

**Confirm Livestock/Manure Information (Operation #35)**

The livestock/manure information has not been confirmed with the property owner and/or farm operator.

**Setback summary**

Existing manure storage	V3. Solid, outside, no cover, >= 30% DM		
Design capacity	194 NU		
Potential design capacity	194 NU		
Factor A (odour potential)	0.7	Factor B (design capacity)	398.17
Factor D (manure type)	0.7	Factor E (encroaching land use)	2.2
<hr/>			
Building base distance 'F' (A x B x D x E) (minimum distance from livestock barn)			430 m (1411 ft)
Actual distance from livestock barn			NA
Storage base distance 'S' (minimum distance from manure storage)			430 m (1411 ft)
Actual distance from manure storage			NA

**Operation #36**

<b>Farm contact information</b> ON	<b>Location of existing livestock facility or anaerobic digester</b> Regional Municipality of Peel Town of Caledon CHINGUACOUSY Concession 4 EAST OF CENTRE ROAD , Lot 22 Roll number: 2124	<b>Total lot size</b> 58.2 ha
---------------------------------------	---	----------------------------------

**Livestock/manure summary**

Manure Form	Type of livestock/manure	Existing maximum number	Existing maximum number (NU)	Estimated livestock barn area
Solid	Beef, Cows, including calves to weaning (all breeds), Yard/Barn	300	300 NU	1394 m <sup>2</sup>

**Setback summary**

Existing manure storage	V3. Solid, outside, no cover, >= 30% DM		
Design capacity	300 NU		
Potential design capacity	300 NU		
Factor A (odour potential)	0.7	Factor B (design capacity)	463.8
Factor D (manure type)	0.7	Factor E (encroaching land use)	2.2
<hr/>			
Building base distance 'F' (A x B x D x E) (minimum distance from livestock barn)			500 m (1640 ft)
Actual distance from livestock barn			NA
Storage base distance 'S' (minimum distance from manure storage)			500 m (1640 ft)
Actual distance from manure storage			NA

**Operation #51**

<b>Farm contact information</b> ON	<b>Location of existing livestock facility or anaerobic digester</b> Regional Municipality of Peel Town of Caledon CALEDON Concession 5 EAST SIDE OF CENTRE ROAD OR COMMUNICAT , Lot 23 Roll number: 2124	<b>Total lot size</b> 38.6 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	500 m <sup>2</sup>	25 NU	500 m <sup>2</sup>

**Confirm Livestock/Manure Information (Operation #51)**

The livestock/manure information has not been confirmed with the property owner and/or farm operator.

**Unoccupied Barn or Unused Storage (Operation #51)**

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	25 NU		
Potential design capacity	25 NU		
Factor A (odour potential)	1	Factor B (design capacity)	210
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)			324 m (1063 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**


02-11-26

John Liotta , Agrologist/Ecologist

Date (Month-Day-Year)

**Note to the user**

The Ontario Ministry of Agriculture, Food and Agribusiness (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 OMAFA will be considered to be the official version for purposes of calculating MDS. OMAFA 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.