AGRICULTURAL IMPACT ASSESSMENT
FOR
ALLOA PLANNING AREA

PREPARED FOR:

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EXECUTIVE SUMMARY

The purpose of the Agricultural Impact Assessment (AIA) is to identify and evaluate potential impacts of the proposed settlement area boundary expansion (SABE) and subsequent development of the Alloa Planning 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 conformity with provincial and municipal agricultural policies.

The Alloa Planning Area is located within the Town of Caledon's prime agricultural area, however, these lands are not recognized by the Region, nor Province, as being part of a prime agricultural area. Despite the fact that these lands are intended in the long-term for urban uses, the Town's policies require that an AIA be completed to satisfy provincial and municipal requirements for proposed SABE in a prime agricultural area.

The lands within the Alloa Planning Area are predominately in agricultural production of common field crops. There are five active agricultural operations, one empty livestock facility, three remnant agricultural operation, four agriculture-related uses, and approximately 142 non-agricultural uses which includes about 130 non-farm residences.

The AIA determined that the proposed SABE and subsequent development of the Alloa Planning Area 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 be negligible.

1. INTRODUCTION

1.1 Retainer

Colville Consulting Inc. was retained by the Alloa Landowner Group to complete an Agricultural Impact Assessment (AIA) for the Alloa Planning Area. These lands, herein referred to as the Subject Lands, are located east and south of the proposed Highway 413 Corridor, west of Chinguacousy Road, and north of Mayfield Road in the Town of Caledon. The Subject Lands are part of the 2051 New Urban Area within the Urban System and mapped as Designated Greenfields in the Region of Peel Official Plan (2022) and are currently designated Prime Agricultural Area and Environmental Policy Area in the Town of Caledon Official Plan (2018).

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 Designated Greenfield Area within the Urban System. The updated Official Plan was approved by the Province in November of 2022, allowing the Region's mapping to take precedence.

At the March 26, 2024 Council Meeting for the Town of Caledon, Council adopted the Future Caledon Official Plan. The Future Caledon Official Plan has not yet received approval from the Province, however, the adopted Future Caledon Official Plan aligns with the Region of Peel Official Plan and shows the Subject Lands designated New Urban Area 2051 within the Urban Area. As the Future Caledon Official Plan has not received provincial approval, the Town of Caledon Official Plan policies and schedules are to be applied to the proposed *development* and the entirety of the Subject Lands are considered to be part of a *prime agricultural area*.

1.2 Description of Proposed Development

The Town of Caledon adopted the Future Caledon Official Plan and will require the development of a Secondary Plan to implement phasing of new proposed *development*. Until the Future Caledon Official Plan has been approved by the Province, the Town of Caledon Official Plan (2018) policies shall apply.

The proposed *development* seeks to create a new community within the Town of Caledon, which will consist of a range of non-agricultural land uses. At this time, a development concept plan has not been prepared for the proposed settlement area boundary expansion (SABE).

1.3 Professional Qualifications

Colville Consulting Inc. was established in 2003 and provides agricultural and environmental consulting services to both private and public sector clients throughout Ontario. Colville Consulting Inc. has extensive experience working in Caledon and the GTA on several agricultural-related projects including the preparation of AIAs for *settlement area* boundary expansions into agricultural areas.

This study was led by Sean Colville, who has over 30 years of experience preparing Agricultural Impact Assessments in Ontario and assisted with the preparation of the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) draft Agricultural Impact Assessment Guidance Document (2018). John Liotta was the Project Manager responsible for completing the field investigations and preparation of the AIA. John has over 5 years of formal education in Environmental and Agricultural Planning and has assisted in

preparing a number of AIAs with Colville Consulting Inc. The CVs of Sean Colville and John Liotta can be found in Appendix A.

1.4 Purpose of Study

The Subject Lands are currently located within the Town of Caledon's Prime Agricultural Area. Section 5.1.1.17.1 of the Town of Caledon Official Plan states, "Proposals in the Prime Agricultural Area that have the potential to negatively impact agricultural uses will require an Agricultural Impact Assessment." Non-agricultural *development* within the Prime Agricultural Area has the potential to negatively impact *agricultural uses*, therefore an AIA is required for before *development* can commence within the Alloa Planning Area.

The Alloa Planning Area encompasses approximately 724.06 ha (1789.19 acres) of land, with an estimated net developable area of approximately 600 ha (1,500 acres). Collectively, the Alloa Landowner Group controls approximately 61% of the estimated net developable area. The Alloa Landowners Group has expressed interest in pursuing various background studies, including an AIA, to understand the existing conditions and the limitations of future *development*, following the completion of the Secondary Plan.

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

1.5 Study Area

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

1.5.1 Primary Study Area

The *PSA* is located east and south of the proposed Highway 413 Corridor, west of Chinguacousy Road, and north of Mayfield Road in the Town of Caledon. The *PSA* is made up of multiple irregularly shaped parcels and, combined, are approximately 724.06 ha (1789.19 acres) in size. The *PSA* is primarily in agricultural production and contains a mix of various agricultural, commercial, industrial, utility, institutional, and rural residential land uses.

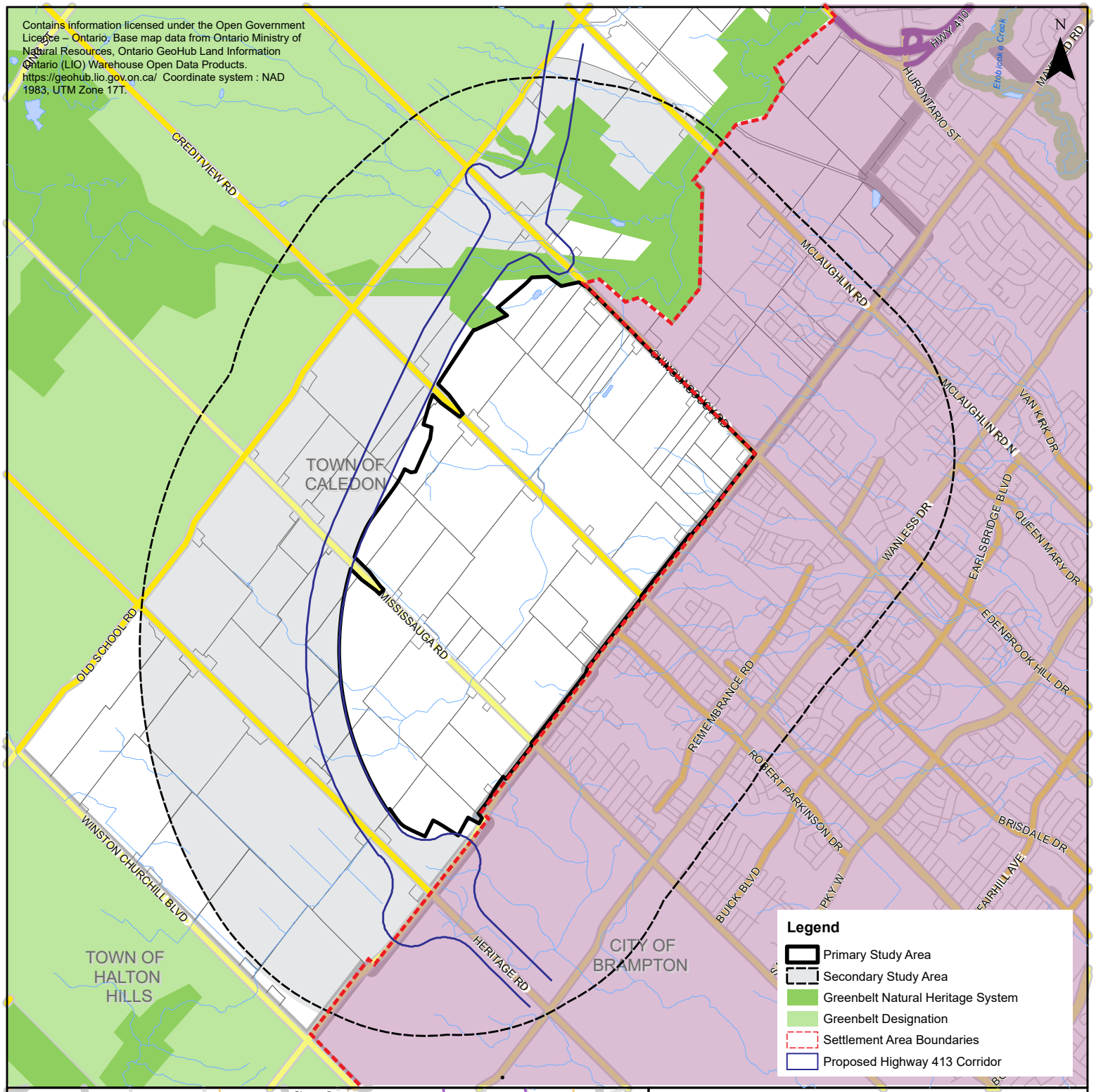

Figure 1
Location of Subject Lands

Agricultural Impact Assessment
Alloa Planning Area

Prepared for: Alloa Landowner Group

Prepared by: Colville Consulting Inc.

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1.5.2 Secondary Study Area

The *Secondary Study Area*, herein referred to as the *Study Area*, includes all lands within 1.5 km (1,500 m) of the *PSA* boundaries. The *Study Area* is generally bounded to the east by Mclaughlin Road, to the south by Wanless Drive, to the west by Winston Churchill Boulevard, and to the north by King Street.

The *Study Area* is primarily part of the 2051 New Urban Area within the Urban System of the Region of Peel Official Plan, with lands to the north and west of the Subject Lands designated as Prime Agricultural Area and Rural Lands. The northeastern portion of the *Study Area* is within the Mayfield West Settlement Boundary, while the remainder of the *Study Area* is designated as Prime Agricultural Area and Environmental Policy Area in the Town of Caledon Official Plan. The majority of the eastern and southern portion of the *Study Area* is located within the *settlement area* boundary of Brampton and is designated for a range of *non-agricultural uses*.

2. SCOPE OF STUDY

The proposed scope of the AIA will follow the methodology recommended in the Draft Agricultural Impact Assessment Guidance Document (2018). It includes:

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

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

Planscape Inc. completed an Agricultural Impact Assessment (Phase 1 & 2) as part of the Region of Peel's MCR. This study helped inform the most appropriate location for the Region's SABE. The report concluded that prime agricultural areas were unavoidable and preferred SABE locations were determined in part by the lands' ability to meet MDS setback requirements, minimize impacts on existing agricultural operations, preserve the integrity of the GGH agricultural system, and protect agricultural infrastructure. The results of the Planscape Inc. AIA, along with input from other technical disciplines, helped inform the final SABE locations adopted by the Region of Peel.

3. METHODOLOGY

The study methodology for the AIA was prepared in accordance with the OMAFRA draft Agricultural Impact Assessment Guidance Document (2018). It includes a review of relevant provincial, regional, and local agricultural policies, other agricultural-related sources of information, and the completion of field inventories. Upon compilation and assessment of the data, the potential impacts of the proposed *development* will be considered and recommendations to avoid and/or minimize potential impacts will be made. The AIA also assesses the *development's* consistency with 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 (adopted March 2024);
- Town of Caledon Official Plan (2018 Consolidation)
- Planscape Inc.'s Region of Peel Phase 1: Preliminary Agricultural Impact Assessment (2020);
- Planscape Inc.'s Region of Peel Phase 2: Agricultural Impact Assessment (2021);
- Soil Survey of Peel County – Report No. 18 of the Ontario Soil Survey (1953);
- OMAFRA's digital soil Resource Database to obtain soil series and CLI agricultural capability mapping and data;
- British Columbia Ministry of Agriculture's Guide to Edge Planning: Promoting Compatibility Along Agricultural-Urban Edges (2006);
- MHBC's Edge Planning Report – The Region of Peel & The Town of Caledon LEAR Study and MDS Review (2015);
- OMAFRA's The Minimum Distance Separation (MDS) Document: Formulae and Guidelines for Livestock Facility and Anaerobic Digester Odour Setbacks. Publication 853 (2016);
- OMAFRA's Artificial Drainage Systems mapping;
- OMAFRA's AgriSuite, AgMaps and Agri-Systems Portal databases;
- OMAFRA's Draft Agricultural Impact Assessment (AIA) Guidance Document (2018); and
- Ortho-rectified, digital aerial photography viewed using Google Earth™.

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

3.2 Field Inventories

Field inventories were completed on September 7, 2023. Field inventories included a reconnaissance level land use survey of the surrounding area to identify agricultural operations, relative level of investment in agriculture, the cropping pattern observed, and the mix of land uses within the Subject Lands and *Study Area*. Information required to calculate the *MDS I* setback requirements was also collected during the land use survey.

3.2.1 Land Use Survey

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

3.2.2 MDS Calculations

The *MDS* is a land use planning tool developed by OMAFRA to minimize land use conflicts and nuisance complaints arising from odours generated by *livestock operations*. The *MDS* calculates a recommended separation distance between a *livestock* or *manure storage* and other land use(s). The most recent version of the MDS guidelines, *The Minimum Distance Separation (MDS) Document, Publication 853* (2016), came into effect on March 1st, 2017. The *MDS formulae* only apply to lands designated *prime agricultural area* or rural. The *MDS* does not apply to lands in non-agricultural land use designations.

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

The *MDS I formula* is required for the proposed *development*. The information required to complete an *MDS I* calculation was obtained through a combination of sources. As per the MDS Guidelines, we attempted to gather information directly from the landowner/tenant. Where landowners could not be contacted or were not available, self-addressed envelopes were left in mailboxes of potential *livestock operations*.

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

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

This information was collected for all *livestock facilities* (active and *retired*). In cases where we were not able to collect information directly from the landowner, we used visual observations of the *livestock facility* and determined the most likely type of *livestock* housed and the type of *manure storage* system used. These

observations were supplemented with aerial photography and web mapping tools such as AgMaps and Google Earth™. Barn capacity and lot size were determined using these online mapping tools.

3.3 Evaluation of the Agricultural System

An *Agricultural System* includes a continuous and productive land base, comprised of *prime agricultural areas*, including *specialty crop areas*, and *rural lands*, as well as a complementary *agri-food network* that together enable the agri-food sector to thrive. An evaluation of the *Agricultural System* and associated features within the *Study Area* was completed through a reconnaissance level land use survey on September 7, 2023, and online review to assist in identifying agricultural related features.

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

3.4 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 been included in the Region of Peel Official Plan's 2051 New Urban Area within the Urban System, which was approved by the Province. As discussed above, the Region of Peel assessed 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 Evaluation of Agricultural Priority

When determining agricultural capability, the *PPS* directs *development* to "lower priority agricultural lands". Although, the *PPS* or other provincial planning documents do not specifically define in policy "lower priority agricultural lands", there are a number of considerations used by OMAFRA to determine the 'agricultural priority' of an area. These considerations include the criteria such as the current land use, amount of capital investment in agricultural infrastructure, amount of land under active cultivation, existing degree of lot fragmentation to the surrounding agricultural land base, and proximity to incompatible land uses such as urban and rural *settlement areas*. The AIA considers these criteria to assess the agricultural priority of the Subject Lands.

3.6 Identification of Potential Impacts and Mitigation Measures

Potential impacts of the proposed new community *development* were identified following an assessment of the agricultural resources on and adjacent to the Subject Lands. Direct impacts evaluated include an assessment of elements such as the loss of *prime agricultural land*, agricultural infrastructure, land

improvements, and cropland. Indirect impacts that may result from the proposed *development* were also evaluated and included an assessment of elements such as the impacts related to surficial drainage, disruption to farm operations, non-farm traffic, restricted farm access, *MDS* conflicts, hydrogeological features, trespass, and vandalism. Mitigation measures that avoid or minimize potential impacts on the agricultural land base and the *agri-food network* are then developed.

3.7 Assessment of Conformity with Agricultural Policies

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

4. AGRICULTURAL POLICIES

Land Use Policy and *development* in Ontario is 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.

The Provincial Planning Statement provides 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.

4.1.1 Prime Agricultural Areas

Section 4.3 of the *PPS* 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 *PPS* 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

Section 4.3.4.1 of the *PPS* 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."

Section 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."

Section 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."

The "in effect" Town of Caledon Official Plan includes the Subject Lands with the Town's *prime agricultural area.* However, they are no longer provincially recognized as part of a *prime agricultural area*, following the provincial approval of the updated Region of Peel Official Plan. Following approval by the Province, the

Future Caledon Official Plan will bring the plan into conformity with the Region of Peel Official Plan and the Subject Lands will no longer be part of the Town's *prime agricultural area.*

The proposed new community *development* will remove the Subject Lands from the Town of Caledon's *prime agricultural area* and will need to address and comply with Sections 4.3 and 2.3.2 of the *PPS*.

4.2 Region of Peel Official Plan

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

4.3 Town of Caledon Official Plan

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

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

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

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

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

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

4.4 Future Caledon Official Plan

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

however, the proposed *development* has been assessed for consistency with the policies of the Future Caledon Official Plan.

Schedule B4 of the Future Caledon Official Plan shows that the Subject Lands are designated New Community Area within the Town's Urban Area. No portion of the Subject Lands are located within the Town's Rural Lands, nor Prime Agricultural Area land use designation. Therefore, the agricultural policies of the Future Caledon Official Plan will not apply to the proposed *development* following provincial approval of the Future Caledon Official Plan. If the Province modifies the Future Caledon Official Plan so that any portion of the Subject Lands are excluded from the Urban Area, the AIA will be updated through an addendum to evaluate the proposed *development's* consistency with the approved Future Caledon Official Plan.

5. STUDY FINDINGS

5.1 Physiography

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

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

The Subject Lands exhibit undulating topography, characterized by gently rising and falling terrain. The varied elevations and contours have influenced the development of the soils found on the Subject Lands through differences in erosion, drainage, deposition, and weathering.

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 Georgetown WWTP station (1981-2010) were obtained from the online database (Appendix B).

Environment Canada's Georgetown WWTP Station is located approximately 10 km from the Candidate Sites. Records show that this area receives an average of 877.4 mm of precipitation annually; 741.5 mm of rainfall and 135.9 cm of snowfall. The daily average temperature in this area ranges from a high of 20°C to a low of -6.3°C.

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

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

5.3 Agricultural Crop Statistics

Agricultural crop statistics are available from OMAFRA and Statistics Canada's Agriculture and Food Statistics Census of Agriculture. The Subject Lands are located within the Census Western Ontario Region, Peel Region. Agricultural crop statistics were obtained from the online database and are included in

Appendix C. This data provides a general overview of agriculture and agri-food operations in the area but is unlikely to be inclusive of all operations present at the time of this report.

The County and Township Agricultural Profile for Peel includes data from 2011, 2016, and 2021 census periods. The total number of farms in the Town of Caledon decreased from 365 in 2011, to 345 in 2016, to 308 in 2021. Following a small decline in the total area of cropland between 2011 and 2016 from 64,724 acres to 63,239 acres, there was a significant increase between 2016 and 2021 to 73,460 acres. The Region of Peel experienced similar trends with total farms decreasing from 440 in 2011, to 408 in 2016, to 377 in 2021 and total cropland decreasing from 74,193 acres in 2011, to 67,408 acres in 2016, before increasing to 80,409 acres in 2021. This data indicates that although the total number of farms in the Town of Caledon and the Region of Peel have decreased, the average farm size has increased.

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

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

5.4 Specialty Crop Areas

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

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

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

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

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

5.5 Regional Soils

5.5.1 Soil Series

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

The *Soil Survey of Peel County* mapping shows that the soils within the Subject Lands are comprised primarily of Chinguacousy Clay Loam soils (73.53%), with smaller amounts of Jeddo Clay Loam soils (21.66%), and Bottom Land soils (4.81%). Regional scale soil mapping is shown in Figure 2.

Chinguacousy Clay Loam

Chinguacousy Clay Loam soils occur on smooth, very gently sloping topography. These soils are the imperfectly drained member of the Oneida catena and have developed from a fine textured, morainal till parent material. The till parent material is derived mainly from a mix of limestone/dolostone and shale bedrock. Surface stoniness is slight to non-stony and erosion is slight due to the nearly level to very gentle slopes on which these soils are commonly found. The surface of the till may include a veneer of glaciolacustrine material that does not exceed depths of 40 cm. The surface drainage is slow to moderate and internal drainage is slow. Mottles are present and gley colours at depth may be present.

Chinguacousy Clay Loam soils are generally low in organic matter, phosphorus, and calcium, and moderately supplied with potassium. Additions of lime, manure, and mineral fertilizers can be used to maintain the quality of these soils. The installation of tile drainage may also permit the production of a wider range of crops and earlier spring cultivation. These soils are good agricultural soils that can product good to fair yields of common field crops.

Jeddo Clay Loam

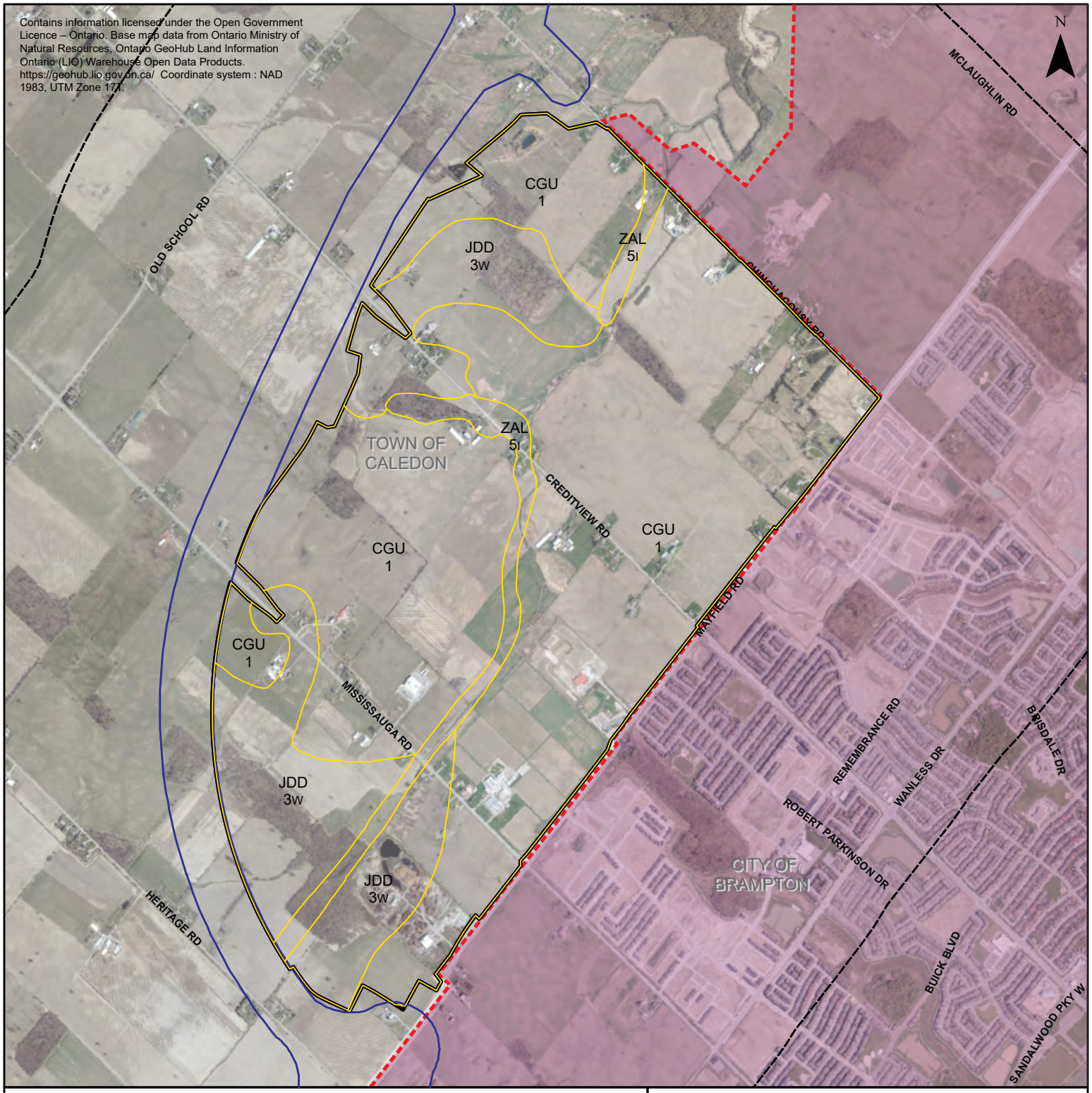
The Jeddo Clay Loam series is the poorly drained member of the Oneida *catena* and occurs in smooth, nearly level to very gently sloping topography. The soil profile development is similar to the Chinguacousy soils, although gley colours usually occur within 50 cm of the surface. Both the surface and internal drainage is slow.

Crop production on the Jeddo Clay Loam is limited primarily by poor drainage. 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 drained, they are typically only suitable for permanent *forage* crops such as hay and *pasture*.

Jeddo Clay Loam soils contain moderate to high levels of organic matter and potash, moderate to low levels of phosphate, and typically have sufficient levels of calcium to support crop production.

Bottom Land

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



Primary Study Area
Secondary Study Area
Soils (OMAFRA)
Settlement Area Boundaries

Soil Series Name ⟶ **CGU**

CLI Class ⟶ **3W** ⟵ CLI Subclass

CLI AGRICULTURAL CAPABILITY CLASSES

Class 1 - No significant limitations in use for crops.

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

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

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

SOIL SERIES

CGU - Chinguacousy Clay Loam
JDD - Jeddo Clay Loam
ZAL - Bottom Land

Figure 2
Soils and CLI

Agricultural Impact Assessment
Alloa Planning Area

Prepared for: Alloa Landowner Group

Prepared by: Colville Consulting Inc.

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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 D.

According to the provincial database, the majority of the Subject Lands are mapped as CLI Class 1 lands (73.43%), with smaller areas mapped as CLI Class 3 (21.45%) and Class 5 (5.12%), as shown in Figure 2. CLI Class 1 soils have no or very minor limitations for common field crop production. CLI Class 3W soils have moderately severe limitations for common field crop production due to excess water. CLI Class 5I soils have very severe limitations for common field crop production due to periodic flooding by streams or lakes. The composition of soils mapped within the Subject Lands and their associated CLI Class are summarized in Table 1 below.

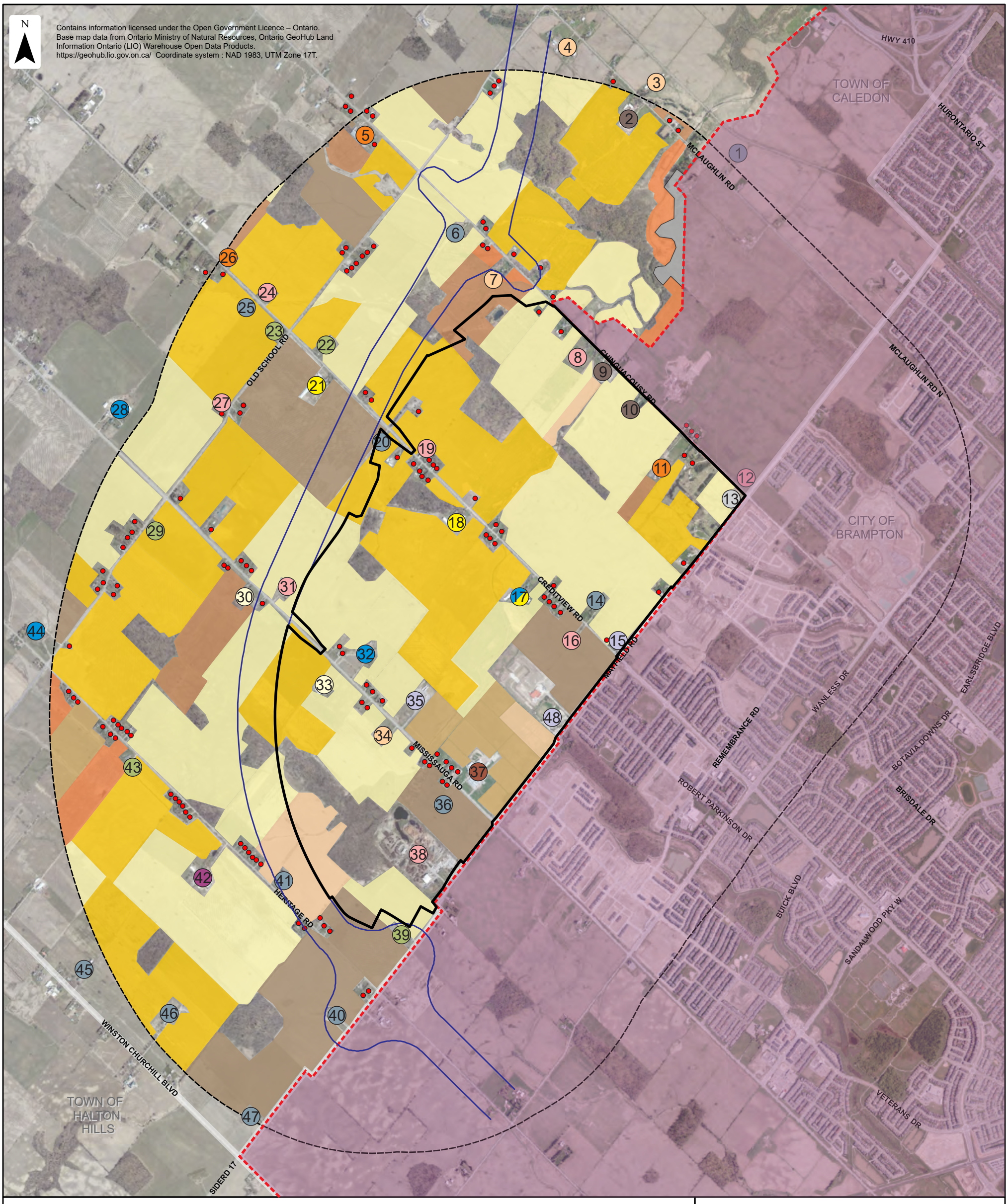
Table 1. Regional Soil Series for PSA

Soil Series	CLI Class	Area (Ha)	% of PSA
Chinguacousy Clay Loam	**1**	532.39	73.53
Jeddo Clay Loam	**3W**	156.83	21.66
Bottom Land	**5I**	34.84	4.81
Totals		**724.06**	**100.00%**

5.6 Land Use

A reconnaissance level land use survey was completed on September 7, 2023. The land use survey identified the number and type of agricultural operations (both active and inactive), *agriculture-related uses*, *on-farm diversified uses*, and the extent and type of non-agricultural land uses within the *Study Area*. Inactive farm operations were evaluated to determine whether they should be considered an *empty livestock facility* or as a *remnant* farm. *Remnant* farms have no infrastructure that is suitable for housing *livestock*, whereas the infrastructure for an *empty livestock facility* is still in a condition that could permit the keeping of *livestock* with minimal investment. The crop types observed within the *Study Area* were recorded and mapped.

The purpose of the land use survey is to document the mix of agricultural and *non-agricultural uses* 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 observed. Photographs from the land use survey can be found in Appendix E. All observed land uses are numbered, and short descriptions of these operations are included in the land use survey notes in Appendix F.



Legend

Agricultural Uses
- Hobby Farm
- Equestrian Operation
- Beef Operation
- Dairy Operation
- Poultry Operation
- Cash Crop Operation
- Empty Livestock Facility
- Remnant Farm

Agriculture-Related Uses
- Grain Elevator
- Research Centre

Non-Agricultural Uses
- Commercial
- Utility
- Institutional
- Non-Farm Residence

Crop Pattern
- Soybeans
- Corn
- Cover Crop
- Forage/Hay
- Pasture
- Idle
- Cultivated
- Disturbed

- Primary Study Area
- Secondary Study Area
- Settlement Area Boundaries
- Proposed Highway 413 Corridor

Figure 3
Land Use Mapping

Agricultural Impact Assessment
Alloa Planning Area

Prepared for: Alloa Landowner Group

Prepared by: COLVILLE CONSULTING INC.

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Thirty-two *agricultural uses* were identified during the land use survey. The *agricultural uses* include one *hobby farm*, three equestrian operations, two beef operations, three *dairy operations*, two poultry operations, one dairy/poultry operation, five *cash crop* operations, eleven *remnant* farms, and four *empty livestock facilities*.

Four *agriculture-related uses* were identified during the land use survey. These uses include three grain elevators and one research centre. No *on-farm diversified uses* were observed during the land use survey and desktop review.

In addition to the approximately 130 *non-farm residences* observed (excluding residences within the Brampton and Caledon *settlement areas*), twelve *non-agricultural uses* were identified within the *Study Area*. These uses include eight commercial uses, three institutional uses, and one utility use. Commercial, industrial, and residential uses located within the City of Brampton or Town of Caledon *settlement areas* were not included within the land use notes. A large number of commercial and residential uses were observed within the urban areas.

5.6.1 Agricultural Uses

The *PPS* definition of *agricultural uses*: "means the growing of crops, including nursery, biomass and horticultural crops; raising of livestock; raising of other animals for food, fur or fibre, including poultry and fish; aquaculture; apiaries; agro-forestry; maple syrup production; and associated on-farm buildings and structures, including, but not limited to livestock facilities, manure storages, value-retaining facilities and 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., *empty livestock facilities*), *livestock operations*, *cash crop* operations, or *hobby farms*.

Subject Lands

Nine *agricultural uses* were identified within the Subject Lands. These uses include one *empty livestock facility* (#34), one equestrian operation (#11), one *dairy operation* (#32), one poultry operation (#18), one dairy/poultry operation (#17), one beef operation (#33), and three *remnant* farms (#14, #20, and #36).

The Subject Lands are comprised of several parcels under different forms of ownership (i.e., local and non-local). Under non-local ownership, agricultural lands are leased to local farm operations. Tenants of agricultural lands that are leased typically have less incentive to invest in agricultural land improvements (i.e., artificial tile drainage) and agricultural infrastructure.

Historical aerial imagery covering the Subject Lands was reviewed prior to the land use survey. These images show that the land uses within the Subject Lands have remained relatively unchanged, with the majority of the lands being in agricultural production. These images also indicate an increase in non-agricultural land uses and the deterioration of some agricultural infrastructure.

Study Area

Within the *Study Area*, twenty-three *agricultural uses* were identified. These include one *hobby farm* (#42), two equestrian operations (#5 and #26), one beef operation (#30), two *dairy operations* (#28 and #44), one

poultry operation (#21), five *cash crop* operations (#22, #23, #29, #39, and #43), eight *remnant* farms (#1, #6, #25, #40, #41, #45, #46, and #47), and three *empty livestock facilities* (#3, #4, and #7).

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 uses may include uses such as:

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

Four agriculture-related land uses were identified within the *Study Area*. These uses include three grain elevators (#2, #9, and #10) and one research centre (#37). The research centre, Pioneer Hi-Bred Production Limited, is an agricultural research and development centre.

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, and uses that produce value-added agricultural products".

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

5.6.4 Non-Agricultural Uses

Non-agricultural land uses include *non-farm residences*, residential clusters, hamlets and *settlement areas*, municipal utilities, commercial and industrial operations, recreational uses, and institutional uses. Approximately 130 *non-farm residences* were observed throughout the *Study Area*, excluding those within the City of Brampton and Town of Caledon *settlement areas*.

Excluding the *non-farm residences*, twelve *non-agricultural uses* were identified within the *Study Area*. These uses include eight commercial uses, three institutional uses, and one utility use.

5.6.5 Land Use Summary

Table 2 below summarizes the types of land uses observed within the Subject Lands and *Study Area*.

Table 2. Summary of Observed Land Uses

	Total Number	Active	Empty or Remnant
Agricultural	32	1 – Hobby Farm 3 – Equestrian Operation 2 – Beef Operation 3 – Dairy Operation 2 – Poultry Operation 1 – Dairy/Poultry Operation 5 – Cash Crop Operation	11 – Remnant Farm 4 – Empty Livestock Facility
Agriculture-Related	4	3 – Grain Elevator 1 – Research Centre	0
On-farm Diversified	0	0	0
	Total Number	**Type**	
Non-Agricultural	142	8 – Commercial 1 – Utility 3 – Institutional ~130 – Non-Farm Residential	

5.6.6 Cropping Pattern

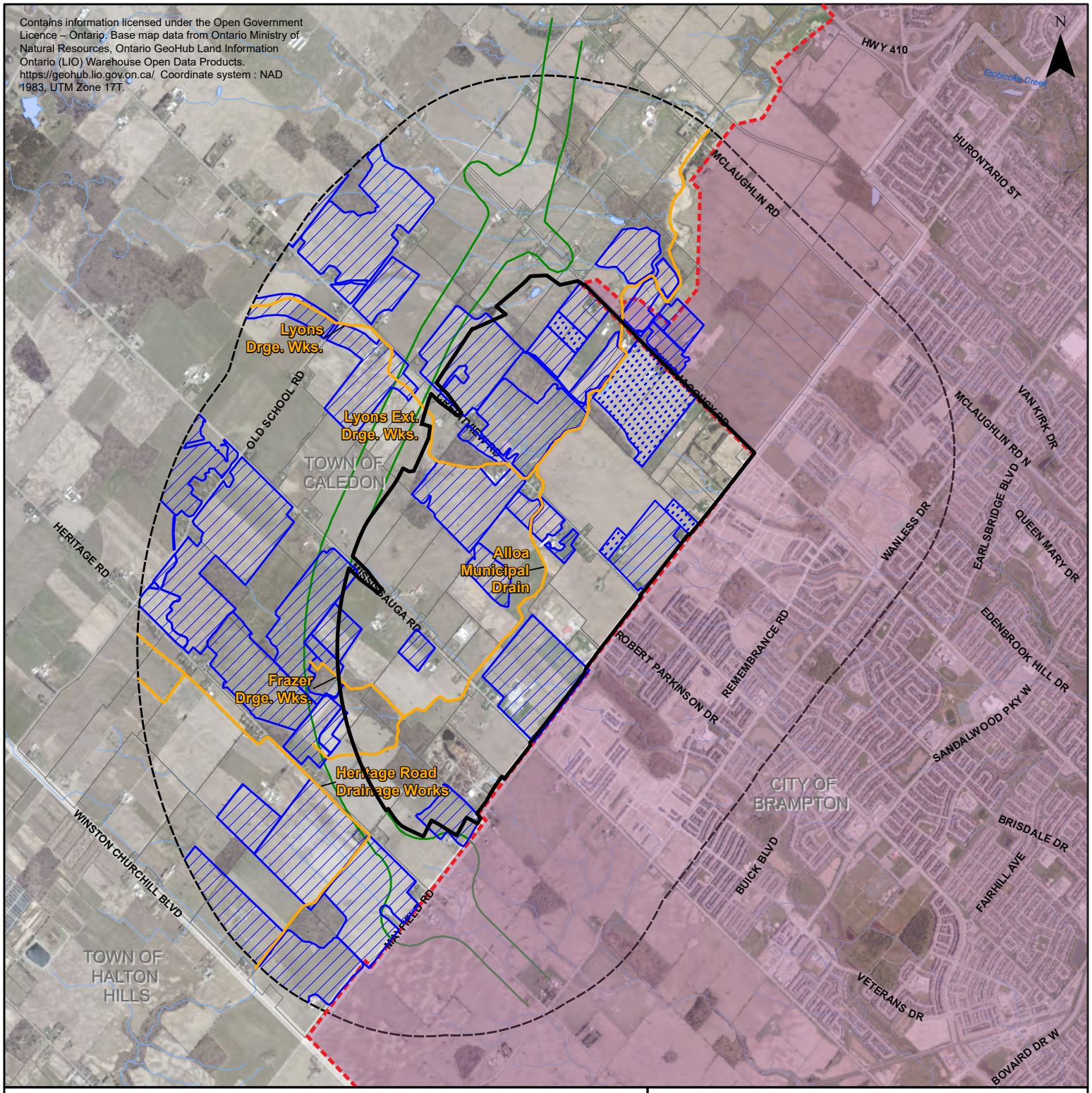
The land use survey completed on September 7, 2023, identified crops based on observations of crop stubble and other identifying features. As shown in Figure 3, the crops grown in the Subject Lands and *Study Area*, outside of the City of Brampton and Town of Caledon *settlement areas*, are predominantly 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 readily apparent. There are also areas of *pasture*, idle lands, forested areas and disturbed lands.

5.7 Land Improvements

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

5.7.1 Drainage Improvements in Subject Lands

According to OMAFRA's online mapping tool, AgMaps, the Subject Lands contain both random and systematic tile drainage. The random tile drainage is located in the northern and northeastern portions of the Subject Lands. Systematic tile drainage installations are more abundant than random tile drainage and can be found throughout the Subject Lands. Installation dates of the random tile drainage and most systematic tile drainage were not available through the AgMaps Portal. Available installation dates of systematic tile drainage within the Subject Lands shows installation between 1999 and 2014.



Legend

- Constructed Drain
- Primary Study Area
- Secondary Study Area
- Tile Drainage - Random
- Tile Drainage - Systematic
- Proposed Highway 413 Corridor
- Settlement Area Boundaries

Figure 4
Drainage Improvements

Agricultural Impact Assessment
Alloa Planning Area

Prepared for: Alloa Landowner Group

Prepared by: Colville Consulting Inc.

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Constructed drains are also present within the Subject Lands. The Alloa Municipal Drain traverses the Subject Lands, flowing in a northeastern direction before discharging into a tributary southeast of Highway 410. The Lyons Drainage Works municipal drain traverses the northcentral portion of the Subject Lands, flowing southwards, before connecting to the Alloa Municipal Drain, north of Creditview Road. The Frazer Drainage Works municipal drain traverses the southern portion of the Subject Lands, flowing southwards before connecting to the Alloa Municipal Drain.

5.7.2 Drainage Improvements in Study Area

Systematic tile drainage and smaller amounts of random tile drainage are located within the *Study Area*. The majority of the systematic tile drainage is located southwest and northwest of the Subject Lands, with smaller amounts of systematic tile drainage located west and northeast of the Subject Lands. Excluding the Subject Lands, the only random tile drainage within the *Study Area* is located west of the Subject Lands. There is no agricultural drainage installed southeast of the Subject Lands, as these lands are within the City of Brampton and Town of Caledon settlement areas.

Constructed drains are also present within the *Study Area*. As mentioned previously, the Alloa Municipal Drain, the Lyons Drainage Works, and Frazer Drainage Works municipal drains traverse the *Study Area*. Additionally, the Heritage Road Drainage Works municipal drain traverses the *Study Area*, following Heritage Road and branching off to the southwest at either end of the drain.

5.7.3 Other Land Improvements

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

5.8 Fragmentation of Agricultural Lands

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

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

The *PPS* planning policies recognize the impact of fragmentation on agricultural lands and try to minimize the fragmentation of agricultural lands for *non-agricultural uses*. For example, the *PPS* policies do not permit

lot creation in *prime agricultural areas* for residential purposes. New permitted *development* in *prime agricultural areas* should avoid further fragmentation of the agricultural land base whenever possible.

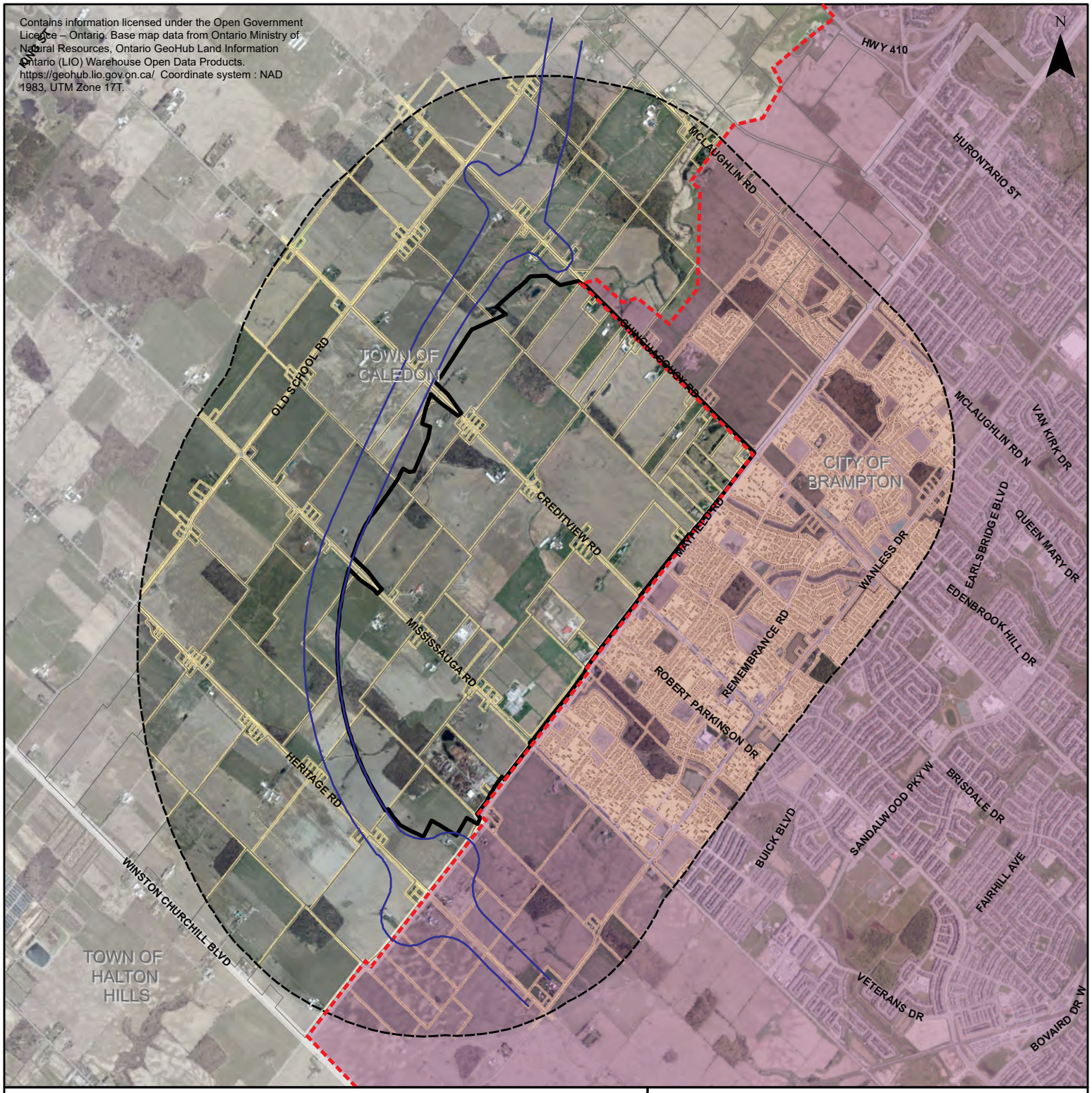
Based on our review of the lot fabric in the *Study Area* using AgMaps and direct observation of residential lots, there is a mix of parcel sizes ranging from single residential (< 1 ha) to large agricultural parcels (>60 ha). A number of the parcels within the agricultural land base are not suitably sized for a variety of *agricultural uses*. Table 3 compares the number of parcels of each size within the Subject Lands and *Secondary Study Area*. As shown in this table, most parcels within the Subject Lands and *Secondary Study Area* are 5 ha in size or smaller.

Table 3. Parcel Sizes

Location	Parcel Size	# of Parcels
Subject Lands	0 – 1 ha	41
	>1 – 5 ha	10
	>5 – 10 ha	9
	>10 – 20 ha	6
	>20 – 40 ha	12
	>40 ha	7
Total	**724.06 ha**	**85**
Secondary Study Area	0 – 1 ha	92
	>1 – 5 ha	5
	>5 – 10 ha	3
	>10 – 20 ha	14
	>20 – 40 ha	21
	>40 ha	23
Total	**1051.4 ha**	**136**

The parcel sizes within the Subject Lands and the *Secondary Study Area* were compared and the results show that the average parcel size within the Subject Lands is similar to that of the average parcel size within the *Secondary Study Area*. The average parcel size within the Subject Lands is approximately 8.3 ha, whereas the average parcel size within the *Secondary Study Area* (excluding lands within the City of Brampton and the Town of Caledon *settlement areas* and the Highway 413 easement) is approximately 7.7 ha. Parcel size mapping and data can be found in Appendix G.

The Subject Lands are immediately adjacent to the current City of Brampton and Town of Caledon *settlement areas*, which has been developed for a number of *non-agricultural uses*. The western and northern edges of the Subject Lands immediately abut the proposed Highway 413 Corridor, which will lead to further fragmentation of the area. The lands within the *Study Area* are highly fragmented and have a high occurrence of *non-agricultural uses*. The lot fabric in the *Study Area* is shown in Figure 5 below.



Legend

- Primary Study Area
- Secondary Study Area
- Lot Fabric
- Proposed Highway 413 Corridor
- Settlement Area Boundaries

Figure 5
Lot Fabric

Agricultural Impact Assessment
Alloa Planning Area

Prepared for: Alloa Landowner Group

Prepared by: Colville Consulting Inc.

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5.9 Minimum Distance Separation

5.9.1 Application of MDS

As previously mentioned, the *MDS formulae* only apply to lands outside of *settlement areas*. The Region of Peel has incorporated the majority of the Subject Lands into the 2051 New Urban Area and considers these lands to be within the Urban System. However, in the Town of Caledon, the Subject Lands are still recognized as part of the Town's *prime agricultural area* and are currently designated "Prime Agricultural Area". Therefore, we have applied the *MDS I formula* to the *livestock facilities* identified in the *Study Area*.

The *MDS I formula* was applied to all *livestock facilities* capable of housing *livestock* observed within 1500 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 new community *development* will contain a mix of non-agricultural land uses, which are considered to be Type B (more sensitive) land uses.

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 the calculation of *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.

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.

The Town of Caledon currently recognizes the Subject Lands as being part of a *prime agricultural area*. As such, the *MDS formulae* must be applied for the Town of Caledon *settlement area* boundary expansion. Section 4.2.3.3.1 j) of the Town of Caledon Official Plan states that the Caledon municipal comprehensive review will address "Compliance with minimum distance separation formulae."

This development application proposes to change the land use within the Subject Lands to a non-agricultural use. Therefore, once the Subject Lands are brought into the urban area, the MDS I formula will not apply to the livestock operations within the Subject Lands. The only livestock operations that require the application of the MDS I formula will be those farm operations that are in the Study Area and lie outside of the Subject Lands.

#10. MDS I Setbacks for Zoning By-Law Amendments and Official Plan Amendments

An MDS I setback is required for all proposed amendments to rezone or redesignate land to permit development in prime agricultural areas and rural lands presently zoned or designated for agricultural use. This shall include amendments to allow site-specific exceptions which add non-agricultural uses or residential uses to the list of agricultural uses already permitted on a lot, but shall exclude applications to rezone a lot for a residence surplus to a farming operation (e.g., to a rural residential zone) in accordance with Implementation Guideline #9 above.
Amendments to rezone or redesignate land already zoned or designated for a non-agricultural use, shall only need to meet the MDS I setbacks if the amendment(s) will permit a more sensitive land use than existed before. In other words, if the proposal is to change an existing Type A land use (e.g., industrial use outside of a settlement area) to a Type B land use (e.g., commercial) in accordance with Implementation Guidelines #33 and #34, then an MDS I setback shall be required.

The Subject Lands must be redesignated in the Town of Caledon Official Plan to permit the proposed *development*. Guideline #10 requires the application of the *MDS formulae* to redesignate land in a *prime agricultural area* for *development*. However, as addressed above, the MDS I formula only applies to the livestock operations that will remain in the *prime agricultural area*. This is more fully addressed in Guideline #36 below.

#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, nonagricultural uses, residential uses and/or dwellings closer to the subject livestock facility than the proposed development or dwellings 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 (See MDS Document).

Guideline #12 can be used to reduce the calculated *MDS* setbacks for Operation #42. This operation has at least four *non-agricultural uses* or *dwellings* within a 120° field of view between the closest part of the Subject Lands or *dwelling* and the nearest *livestock facility* and/or *manure storage* system associated with the operation. Although the *MDS I* setback for this operation can be reduced, the full *MDS* setback was applied to show that the proposed *development* can still meet all calculated *MDS I* setback requirements without the application of Guideline #12.

#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* and *settlement area* boundary expansion are considered to be Type B land uses. 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 Region of Peel's approved *settlement area* and are likely to be included in the Town of Caledon's *settlement area* following provincial approval of the Future Caledon Official Plan. Therefore, ultimately, the application of the *MDS formulae* to the proposed *development* within the future settlement area boundary is not required. The proposed *development* will comply with the *MDS formulae.*

5.9.2 MDS Results

The *MDS I formula* was applied to 16 *livestock facilities,* which are capable of housing *livestock*, observed within 1500 m of the Subject Lands. Figure 6 shows the *MDS I* setback requirements for the identified *livestock operations*. Figure 6 shows that one of the *MDS* setback requirements (Operation #7) for the *livestock operations* identified in the *Study Area* extends into the Subject Lands. However, the proposed *development* is not required to comply with the *MDS formulae* as it is within an approved *settlement area* (Guideline #36).

As mentioned previously, the *MDS I* setback for Operation #42 can be reduced due to the number of non-agricultural land uses within the intervening area. However, this *MDS* setback has not been reduced to show that the proposed *settlement area* expansion remains in compliance with the *MDS I formula* without reductions.

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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/ Coordinate system : NAD 1983, UTM Zone 17T.

N

416m
39m
219m
235m
317m
309m
309m
504m
334m
209m
229m
447m

HWY 410
TOWN OF CALEDON
HURONTARIO ST
MCLAUGHLIN RD
MCLAUGHLIN RD N
OLD SCHOOL RD
CHINGUACOUSY RD
CREDITVIEW RD
MAYFIELD RD
MISSISSAUGA RD
HERITAGE RD
CITY OF BRAMPTON
REMEMBRANCE RD
WANLESS DR
EARLSBRIDGE BLVD
BOTAVIA DOWNS DR
ROBERT PARKINSON DR
BRISDALE DR
BUICK BLVD
SANDALWOOD PKY W
VETERANS DR
WINSTON CHURCHILL BLVD
TOWN OF HALTON HILLS
SIDERD 17

Legend

Agricultural Uses
- Hobby Farm
- Equestrian Operation
- Beef Operation
- Dairy Operation
- Poultry Operation
- Cash Crop Operation
- Empty Livestock Facility
- Remnant Farm

Agriculture-Related Uses
- Grain Elevator
- Research Centre

Non-Agricultural Uses
- Commercial
- Utility
- Institutional
- Non-Farm Residence

MDS I Setback
- Livestock Facility
- Manure Storage

- Primary Study Area
- Secondary Study Area
- Settlement Area Boundaries
- Proposed Highway 413 Corridor

Figure 6
Minimum Distance Separation

Agricultural Impact Assessment
Alloa Planning Area

Prepared for: Alloa Landowner Group

Prepared by: COLVILLE CONSULTING INC.

0 0.5 KM
1:25,000

DATE: Feb. 2025

FILE: C23061

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.

As mentioned previously, the *MDS I* setbacks are not applicable to development within the Subject Lands (refer to Guideline #36). However, these *MDS* setbacks have been calculated and mapped to guide in the phasing of *development*. The proposed *development* will comply with all *MDS I* setback requirements.

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 PSA	Complies with MDS I Setback?
3	391 m	N/A	1,525 m	Yes
4	416 m	N/A	1,530 m	Yes
5	219 m	219 m	1,165 m	Yes
7	317 m	N/A	120 m	Yes
11	182 m	182 m	Not applicable	Yes
17	358 m	358 m	Not applicable	Yes
18	322 m	N/A	Not applicable	Yes
21	309 m	309 m	505 m	Yes
26	235 m	235 m	1605 m	Yes
28	504 m	504 m	1,540 m	Yes
30	334 m	334 m	350 m	Yes
32	270 m	270 m	Not applicable	Yes
33	450 m	450 m	Not applicable	Yes
34	395 m	N/A	Not applicable	Yes
42	447 m	N/A	1292 m	Yes
44	209 m	229 m	1,565 m	Yes

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 plays a key role in the Town of Caledon and Region of Peel economies. According to Census of Agriculture data, the total number of farms in the Region of Peel decreased from 440 in 2011, to 408 in 2016, to 377 farms in 2021. The Town of Caledon observed a similar trend of decreasing farm numbers, with data showing 365 farms in 2011, 345 farms in 2016, and 308 farms in 2021. These farms employ residents from the Region of Peel and the Town of Caledon, contributing economically to the area and supporting the *agri-food network*.

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

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

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

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 SABE. With the anticipated increase in population, it is likely that demand for local agricultural products will also increase. Farm operations in the Town of Caledon will need to adjust or expand their operations to take advantage of the population increase.

With the implementation of mitigation measures such as phasing of the development to minimize direct impacts on the Subject Lands, and 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.

6. ASSESSMENT OF AGRICULTURAL PRIORITY

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

The Subject Lands are currently located within the Town of Caledon's *prime agricultural area*; therefore, an assessment of the agricultural priority of the Subject Lands is required to be consistent with OMAFRA's draft Agricultural Impact Assessment Guidance Document. This analysis involves an assessment of whether the lands are considered to be part of a *specialty crop area*, the soil capability relative to other lands within the *Study Area*, the level of investment in agricultural infrastructure and land improvements, the parcel size, presence of existing non-agricultural land uses, ability to minimize potential conflict (e.g., meeting the *MDS I* setback requirements), and the zoning of the parcels.

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

1. The main reason we consider these lands to be of lower priority agricultural lands is that the long-term future of agriculture in the Alloa Planning Area is in question due to the inclusion of these lands within the 2051 New Urban Area in the Region of Peel Official Plan and adopted Future Caledon Official Plan. This will eventually result in an increase in non-farm *development* in the future and the removal of these lands from the Town of Caledon's Prime Agricultural Area designation following provincial approval of the Future Caledon Official Plan. The Planscape Inc. AIA (Phase 1 & 2) evaluated alternative locations as part the Region's MCR process and determined the Subject Lands were an appropriate location for SABE;
2. The Subject Lands are not located within a *specialty crop area* and no specialty crops such as vegetable or fruit crops are grown in the vicinity;
3. They are located in a highly fragmented agricultural area in which there is a mix of agricultural and non-agricultural land uses. Additionally, the Subject Lands abut the Planned Highway 413 Corridor, which will further fragment the agricultural land base. The presence and prevalence of the non-agricultural land uses increases the potential for conflict arising between agricultural and non-agricultural land uses, which in turn reduces the agricultural priority of the area;
4. The Subject Lands are located in close proximity to the *settlement area* boundaries of the City of Brampton and the Town of Caledon. The close proximity and high concentration of non-agricultural land uses significantly increases the potential for conflicts with agriculture and make these lands less desirable to farm than other lands further removed from these non-agricultural influences;

5. High traffic volumes along Mayfield Road and Mississauga Road make moving farm machinery difficult and dangerous at times. Traffic volumes are expected to increase following the *development* of Highway 413 and as *development* within the *Study Area* continues;
6. *MDS I* setbacks can be met for the proposed *development* on the Subject Lands; and
7. The close proximity of the City of Brampton and Town of Caledon *settlement area* boundaries and non-agricultural land uses creates potential *MDS* II setback constraints that would limit the opportunity for new or expanding livestock operations within the Subject Lands.

7. ASSESSMENT OF ALTERNATIVE LOCATIONS

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

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

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

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

Planscape Inc. completed an Agricultural Impact Assessment (Phase 1 & 2) as part of the Region of Peel's MCR. This study helped inform the most appropriate location for the Region's SABE. The report concluded that prime agricultural areas were unavoidable and preferred SABE locations were determined in part by the lands' ability to meet MDS setback requirements, minimize impacts on existing agricultural operations, preserve the integrity of the GGH agricultural system, and protect agricultural infrastructure. The results of the Planscape Inc. AIA, along with input from other technical disciplines, helped inform the final SABE locations adopted by the Region of Peel.

8. ASSESSMENT OF IMPACTS TO AGRICULTURE

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

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

8.1 Direct Impacts

8.1.1 Prime Agricultural Lands

The Subject Lands are approximately 724.06 ha (1,789.19 acres) in size, of which approximately 689.22 ha are *prime agricultural lands*. *Development* of the Subject Lands will lead to the loss of approximately 689.22 ha of *prime agricultural lands*. Although eventually these lands will no longer be available for agricultural uses, to mitigate this loss in the short-term, *development* should be phased and *prime agricultural lands* should be kept in agricultural production until the land is needed for *development*.

8.1.2 Agricultural Infrastructure

There are nine agricultural operations within the Subject Land which contain some agricultural infrastructure; three of which are *remnant* farms with limited infrastructure that would not support a *livestock operation*. *Development* of the Subject Lands will eventually result in the loss of the infrastructure associated with these operations. To mitigate this loss, *development* should be phased, and the agricultural infrastructure should be left in place until the lands are required for development.

8.1.3 Agricultural Land Improvements

The Subject Lands contain approximately 186.27 ha of systematic tile drainage and 44.79 ha of random tile drainage. The *development* of the Subject Lands will result in the removal of the systematic and random tile drainage. *Development* of the Subject Lands will result in the loss of this agricultural investment.

8.1.4 Loss of Crop Land

The Subject Lands are primarily *cultivated* for the production of common field crops, but also contain small portions of forested area, idle lands, and disturbed lands. Of the Subject Lands' 724.06 ha, approximately 579.6 ha of land are *cultivated*. The inclusion of the Subject Lands into the settlement area boundary will result in the eventual loss of these cultivatable lands. To mitigate this loss, lands should be left in agricultural production until the lands are required for development.

Consideration should be given to the establishment of urban *agricultural* and/or *agricultural-related* uses in the portion of the Subject Lands that are not planned for *development*.

8.2 Indirect Impacts

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

8.2.1 Disruption to Surficial Drainage

The *development* of the Subject Lands has the potential to cause changes in surface runoff, which can have a potential negative impact on adjacent agricultural lands. 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.

8.2.2 Disruption to Artificial Drainage System

The municipal drainage system in the Study Area that flows through the Subject Lands has the potential to be disrupted as development proceeds. The construction of Hwy 413 also has the potential to disrupt the drainage system. We recommend that the municipal drainage system and all other potential outlets for artificial tile drainage be considered and maintained to ensure that the farm operations are not negatively impacted by changes within the Subject Lands.

8.2.3 Disruption to Farm Operations

Most active agricultural operations in the *Study Area* are well removed from the Subject Lands and separated by the proposed 413 Highway. These farms are unlikely to experience any form of disruption to their operations.

Expanding settlement areas have the potential to create *MDS II* constrains for agricultural operations outside of the expanded boundary that wish to establish a new *livestock operation* or expand an existing operation. All identified *livestock operations* located outside of the Region's *settlement area* have at least one *non-agricultural use* located between the *livestock operation* and the Subject Lands. Therefore, the Subject Lands' inclusion within the *settlement area* is not anticipated to create any new *MDS II* related constraints for landowners wishing to expand their *livestock operations*.

There are few farm operations to the east of the Subject Lands (east of Chinguacousy Rd.). These operations are closer to the existing settlement area boundary of Mayfield West, and are well removed from the future urban area. It is unlikely that they will be negatively impacted by the proposed development.

Those agricultural operations which are located within the Subject Lands have the highest potential for disruption to their operations. Access points to these operations should be identified and construction activity should ensure that access to these farmlands are maintained at all times until they are needed for development.

Development of the Subject Lands and subsequent removal of farmland may have an impact on the flexibility on some of the surrounding farm operations if they relied on the Subject Lands as an additional source of

farmland to supplement their home operation. However, the adjacent lands will not be directly affected and 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 are anticipated.

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

8.2.4 Trespass and Vandalism

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

It is also anticipated that the proposed 413 Highway will provide significant protection by separating farmlands and operations from the new urban lands.

8.2.5 Minimum Distance Separation

The *MDS I* setback requirements have been calculated for all *livestock facilities* capable of housing *livestock* in the *Study Area*. There are no MDS I constraints to the proposed development within the Subject Lands. The proposed *settlement area* boundary expansion will comply with the *MDS formulae*.

8.2.6 Transportation Impacts

The Region's expansion of the urban area and the proposed 400 series highway (Hwy 413) that forms the western and northern boundaries of the Subject Lands will have a significant influence on 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 Mississauga Road, and it is likely that the *development* of the Alloa Planning Area will introduce significantly more traffic to these roads over time. Given the close proximity of the City of Brampton and Town of Caledon *settlement areas* and the existing *non-agricultural uses* within the *Study Area*, it is likely that the agricultural operations in the *Study Area* have already become accustomed to non-farm traffic and modified their practices accordingly. It is unlikely that increased traffic levels from the *development* of the Subject Lands will significantly impact the farm operations to the north and west of the 400 series highway. Many of the farm operations to the northeast

of the Subject Lands are also within the Region's 2051 New Urban Area 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 *settlement area* boundary expansion and recommendations outlined in that study should be adhered to if potential impacts are identified. Additionally, 'Share the Road' signage should be placed along the newly created agricultural/urban interface.

8.2.7 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 this area still provides economic and community benefits, the influence of agriculture is waning in the *Study Area*. Of the thirty-two agricultural uses identified within the Subject Lands and Study Area, fourteen were inactive (i.e., empty livestock facilities and remnant farms). During the land use survey, there were limited observations of recent investments in agricultural infrastructure or land improvements.

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 new community *development*. To mitigate the loss of agricultural inputs to the economy, the proposed new community *development* should be phased to allow agricultural activities to continue until the land is to be developed.

8.3 Implementation of Edge Planning Techniques

The agricultural/urban interface (AUI) is typically the area where farm operations are negatively impacted the most. When settlement area boundary expansion is being proposed, some consideration should be given to minimizing the length of the AUI. The proposed development of the Alloa Planning Area does not substantially create a new agricultural/urban interface because the majority of the boundary is already formed by existing urban areas or the future 400 series highway.

The only area that does not abut the urban area or the 400 series highway is along a portion of the eastern boundary (i.e., Chinguacousy Road). However, there are no farm operations that immediately abut the AUI. The only farm operations are located along McLaughlin Road and they are separated from the Subject Lands by natural heritage features that effectively form a significant buffer. No edge planning techniques will be necessary.

It is recommended that consideration be given to establishing edge planning techniques where appropriate as a temporary mitigation measure within the Subject Lands. We have recommended that development occur in an organized and phased manner to mitigate potential conflicts between farm operations within the Subject Lands and new development. These temporary measures are not intended to be permanent unless they can be incorporated into the landscape plan for the future urban area.

For example, establishing vegetative screening can be an effective edge planning technique. 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, ensure that the plant species will not negatively affect adjacent crop land (i.e., no invasive species, tree/shrub species that will not carry insects/disease, etc.).

8.4 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.

Table 5. Summary of Impacts

Potential Impact	Potential Degree of Impact	Mitigation Measure	Anticipated Net Impact
Direct Impacts			
Loss of prime agricultural land	High	• *Development* should be phased to allow for continued cultivation until lands are required for development.	Eventual loss of 689.22ha of prime agricultural lands
Loss of agricultural infrastructure	Moderate	• *Development* should be phased to allow agricultural operations until lands are required for *development*.	Eventual loss of agricultural infrastructure from agricultural operations within Subject Lands
Loss of agricultural land improvements	Low	• None	Eventual loss of approximately 231.06 ha of tile drainage
Loss of cropland	High	• *Development* should be phased to allow for continued cultivation until lands are required for *development*.	Eventual loss of approximately 579.6 ha of cultivatable land
Indirect Impacts			
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. • Establish 'Share the Road' signage along the new agricultural/urban interface	No significant impact anticipated
Trespass, Vandalism, and Stray Pets	Low	• 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.	No significant impact anticipated

Table 5. Summary of Impacts

Potential Impact	Potential Degree of Impact	Mitigation Measure	Anticipated Net Impact
Noise, Dust & Light	Low	♦ Adhere to Ministry of the Environment, Park and Conservation (MECP) guidelines	No Impact
Conflict with MDS formula	Low	♦ None required. Complies with MDS Formulae	No Impact
Economic	Low	♦ None required	No significant impact
Wells, Irrigation, water bodies	Low	♦ Completion of Hydrogeological study to identify potential impacts ♦ Implement recommendations if impact identified	No impact anticipated

9. CONFORMITY WITH AGRICULTURAL POLICIES

9.1 Provincial Policy Statement

The updated Region of Peel Official Plan shows that the Subject Lands are within the 2051 New Urban Area in the Urban System and designates the Subject Lands as Designated Greenfields Area. The Provincial approval of the Region of Peel Official Plan in November of 2022 resulted in the Subject Lands being removed from the provincially recognized *prime agricultural area*. Therefore, the agricultural policies of the *PPS* are not applicable to the Subject Lands. The proposed *development* will comply with the *MDS formulae* and recommendations have been made to mitigate the potential impacts of the *settlement area* expansion. *Development* of the Subject Lands does not conflict with the agricultural policies of the *PPS*.

9.2 Region of Peel Official Plan

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

9.3 Town of Caledon Official Plan

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

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

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

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

9.4 Future Caledon Official Plan

Schedule B4 of the adopted Future Caledon Official Plan indicates that the Subject Lands will be designated New Community Area within the Town's Urban Area. No development is proposed within the portion of the Subject Lands that are within the Town's Rural Lands or Prime Agricultural Area land use designation.

Therefore, the agricultural policies of the Future Caledon Official Plan are not applicable to the proposed *development*, pending provincial approval of the Future Caledon Official Plan.

10. CONCLUSION

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

1. The majority of the Subject Lands are not located in a provincially recognized *prime agricultural area* and are not part of the Region's *Agricultural Land Base*. Additionally, there is no *development* planned within the Greenbelt Plan area or the portion of the Subject Lands designated as Prime Agricultural Area in the Region of Peel Official Plan. Therefore, the proposed *development* complies with the agricultural polices of the *PPS*, Growth Plan, Greenbelt Plan, and the Region of Peel Official Plan;

2. The Town of Caledon still considers the Subject Lands to be part of their *prime agricultural area* and they are currently designated Prime Agricultural Area in the Town of Caledon Official Plan. However, it is understood that the agricultural designation is under review by the Town and is likely to be removed from its *prime agricultural area*. Therefore, the proposed *settlement area* boundary expansion will comply with the local official plan;

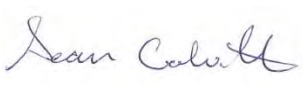
3. Potential impacts associated with the *development* of the Subject Lands for a new community are primarily limited to the loss of *prime agricultural land*, cultivatable land, tile drainage, and farm infrastructure. Mitigation measures have been provided that will ensure that potential impacts will 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 is consistent with *PPS* policy 2.3.2.1 e) and f);

5. The Subject Lands are located within the Region of Peel's 2051 New Urban Area and are not part of the agricultural land base. Therefore, these are lower priority lands and are a reasonable location for settlement area expansion compared to other lands within the Region's prime agricultural area; and

6. The proposed *development* will comply with all relevant provincial and regional agricultural policies. It is anticipated that the majority of the Subject Lands will be brought into the Town of Caledon *settlement area* and will comply with the local agricultural policies at such time.

Respectfully submitted by:



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Colville Consulting Inc.

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11. GLOSSARY OF TERMS

Agricultural uses:* - means the growing of crops, including nursery and horticultural crops; raising of *livestock* and other animals for food, or fur, including poultry and fish; aquaculture; agro-forestry; maple syrup production; and associated on-farm buildings and structures.

Agriculture-related uses:* - farm-related commercial and farm-related industrial uses that are small scale and directly related to the farm operation and are required in close proximity to the farm operation.

Agricultural System: - An agricultural system is comprised of two components:

- An agricultural land base consisting of prime agricultural areas, including specialty crop areas, and rural lands that together create a continuous productive land base for agriculture.
- An agri-food network that includes infrastructure, services, and assets, important to the viability of the agri-food sector.

Agri-food network:* - includes the infrastructure, services and other agri-food assets needed to sustain and enhance the prosperity of the agri-food sector.

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.

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

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

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

Dairy farm/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.

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

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

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.

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

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

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

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

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

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

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

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

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

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

Normal farm practices:* - means a practice, as defined in the *Farming and Food Production Protection Act, 1998*, that is conducted in a manner consistent with proper and acceptable customs and standards as established and followed by similar agricultural operations under similar circumstances; or makes use of

innovative technology in a manner consistent with proper advanced farm management practices. *Normal farm practices* shall be consistent with the *Nutrient Management Act, 2002* and regulations made under that Act.

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

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

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

Provincial Policy Statement: - the Provincial Policy Statement (PPS) was issued under Section 3 of the Planning Act and came into effect in May of 1996 and subsequently updated in 1997 and again in 2005. The PPS provides policy direction on matters of provincial interest related to land use planning and development.

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 livestock/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*.

Settlement areas:* - As defined in the Provincial Policy Statement, 2005, this means urban areas and rural settlement areas within municipalities (such as cities, towns, villages, and hamlets) that 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 planning horizon provided for in policy 1.1.2of the PPS. In cases where land in designated growth areas is not available, the settlement area may be no larger than the area where development is concentrated.

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

Specialty crop area:* - means areas within the agricultural land base designated based on provincial guidance. In these areas, specialty crops are predominantly grown such as tender fruits (peaches, cherries,

plums), grapes, other fruit crops, vegetable crops, greenhouse crops and crops from agriculturally developed organic soil., usually resulting from:

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

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

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

Study Areas: - a term used to identify the Primary Study Area and Secondary Study Area. The Primary Study Area includes the Subject Lands (e.g., the lands where development is taking place). The Secondary Study Area includes lands that will be potentially impacted by the development. The Secondary Study Area may vary in its extent, but should include, at a minimum, the lands adjacent to the Primary Study Area.

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.

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

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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

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JOHN LIOTTA, B.Sc. (Env.), EMA, EPt

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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

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.

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 has taken him to work with Colville Consulting. His work at Colville 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)
Windmill Safety Training – Stantec Inc (2022)
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

Climate Normals Data

Climate Normals 1981-2010 Station Data

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

STATION_NAME	PROVINCE	LATITUDE	LONGITUD	ELEVATION	CLIMATE_I	WMO_ID	TC_ID
*GEORGETOWN WWTP	ON	43°38'24.0	79°52'45.0	221.0 m	6152695		

* This station meets WMO standards for temperature and precipitation.

Legend

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

1981 to 2010 Canadian Climate Normals station data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Code
Temperature														
Daily Average (°C)	-6.3	-5.2	-0.9	6	12.3	17.4	20	19	14.8	8.4	2.8	-2.9	7.1	A
Standard Deviation	3.2	2.3	1.7	1.4	1.8	1.4	1.3	1.4	1.3	1.3	1.5	2.7	0.8	A
Daily Maximum (°C)	-1.7	-0.2	4.6	12.1	19.1	24.4	26.9	25.8	21.4	14.3	7.3	1.1	12.9	A
Daily Minimum (°C)	-10.9	-10.2	-6.4	-0.2	5.3	10.4	13	12.1	8.1	2.4	-1.7	-6.9	1.3	A
Extreme Maximum (°C)	17	15.5	25	31.5	34.5	36	37	36.5	35.5	29.5	22	20.5		
Date (yyyy/dd)	2005/13	1984/23	1986/30	1990/25	2006/29	1988/25	1988/07	2001/08	2002/09	2002/01	1987/03	1982/03		
Extreme Minimum (°C)	-33	-31.5	-28	-13	-5	-0.5	3	0	-4	-8.5	-15.5	-29.5		
Date (yyyy/dd)	1984/16	1994/10	1984/08	1982/05	1986/03	1980/09	1986/01	1982/29	1993/30	1987/26	1987/22	1980/25		
Precipitation														
Rainfall (mm)	29.7	28.4	35.2	71.3	79	74.8	73.5	79.3	86.2	67.8	79.9	36.4	741.5	A
Snowfall (cm)	38.1	31.7	22.1	5.2	0.3	0	0	0	0	0.5	8.6	29.5	135.9	A
Precipitation (mm)	67.8	60	57.2	76.5	79.3	74.8	73.5	79.3	86.2	68.3	88.5	65.9	877.4	A
Average Snow Depth (cm)		9	8	0	0	0	0	0	0	0	0	2		
Median Snow Depth (cm)		8	10	0	0	0	0	0	0	0	0	3		
Extreme Daily Rainfall (mm)	42.8	36.1	38.8	53.6	59.7	85.8	93	110.5	70.2	54.2	58.4	40.8		
Date (yyyy/dd)	1995/20	1968/01	1991/27	2000/20	1974/16	1982/28	1969/28	1969/16	1986/10	1995/05	1962/09	1979/24		
Extreme Daily Snowfall (cm)	40.6	27	20.3	23.6	8	0	0	0	0	11.2	15	27		
Date (yyyy/dd)	1966/22	1988/11	1964/10	1976/25	1983/14	1963/01	1963/01	1962/01	1963/01	1969/21	1991/28	1992/10		
Extreme Daily Precipitation (mm)	42.8	39.5	38.8	53.6	59.7	85.8	93	110.5	70.2	54.2	58.4	43.2		
Date (yyyy/dd)	1995/20	1985/12	1991/27	2000/20	1974/16	1982/28	1969/28	1969/16	1986/10	1995/05	1962/09	1972/12		
Extreme Snow Depth (cm)	29	27	28	3	0	0	0	0	0	0	8	15		
Date (yyyy/dd)	1984/25	1984/01	1984/05	2005/03	1983/01	1983/01	1983/01	1982/01	1982/01	1982/01	2005/25	2005/16		
Days with Maximum Temperature														
<= 0 °C	18.2	14.9	7.6	0.67	0	0	0	0	0	0	2.2	12.1	55.8	C
> 0 °C	12.8	13.3	23.4	29.3	31	30	31	31	30	31	27.8	18.9	309.4	C
> 10 °C	0.52	0.48	5.3	17.5	29.5	30	31	31	29.9	23.3	8	1.4	207.8	C
> 20 °C	0	0	0.63	3.4	11.8	23.9	30	28.7	17.2	4.3	0.24	0.05	120.3	C
> 30 °C	0	0	0	0.13	0.64	3.1	5.2	2.5	0.6	0	0	0	12.2	C
> 35 °C	0	0	0	0	0	0.08	0.28	0	0.04	0	0	0	0.4	C

Days with Minimum Temperature	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Code
> 0 °C	1.2	1	3.2	12.8	25.2	30	31	30.9	28.5	19.4	10.1	3.1	196.3	C
<= 2 °C	30.7	27.8	29.4	21	9	0.88	0	0.08	4	16.4	24.1	30	193.3	C
<= 0 °C	29.8	27.2	27.8	17.2	5.8	0.04	0	0.08	1.5	11.6	19.9	27.9	169	C
< -2 °C	26.5	24	22.8	11	1.6	0	0	0	0.17	5.4	13.6	22.4	127.3	C
< -10 °C	15.3	14	7.5	0.3	0	0	0	0	0	0	0.96	7.9	46	C
< -20 °C	4.3	2.9	0.7	0	0	0	0	0	0	0	0	0.84	8.7	C
< - 30 °C	0.13	0.09	0	0	0	0	0	0	0	0	0	0	0.22	C
Days with Rainfall														
>= 0.2 mm	4.1	4.1	6.4	11.6	11.8	11.2	10.6	10.6	11.7	12.2	11.4	6.5	112.1	A
>= 5 mm	1.9	1.8	2.4	4.9	5	4.8	4	4.6	5.1	4.6	4.8	2.6	46.7	A
>= 10 mm	0.92	1.1	1.2	2.4	3	2.2	2.3	2.6	3.1	2.3	2.9	1.3	25.1	A
>= 25 mm	0.27	0.19	0.12	0.32	0.48	0.52	0.56	0.6	0.62	0.31	0.54	0.04	4.6	A
Days With Snowfall														
>= 0.2 cm	9.4	6.2	4.8	1.4	0.04	0	0	0	0	0.27	2.5	6.9	31.5	A
>= 5 cm	2.6	2.4	1.6	0.44	0.04	0	0	0	0	0.04	0.5	2.3	9.8	A
>= 10 cm	0.88	0.85	0.72	0.12	0	0	0	0	0	0	0.19	0.81	3.6	A
>= 25 cm	0.08	0.15	0	0	0	0	0	0	0	0	0	0.04	0.27	A
Days with Precipitation														
>= 0.2 mm	12.6	9.4	10.6	12.4	11.9	11.2	10.6	10.6	11.7	12.3	13.3	12.3	138.9	A
>= 5 mm	4.6	4.2	4	5.3	5	4.8	4	4.6	5.1	4.7	5.4	4.8	56.5	A
>= 10 mm	1.9	2	2	2.6	3	2.2	2.3	2.6	3.1	2.4	3.1	2.2	29.2	A
>= 25 mm	0.35	0.35	0.12	0.32	0.48	0.52	0.56	0.6	0.62	0.35	0.54	0.12	4.9	A
Days with Snow Depth														
>= 1 cm			7	0	0	0	0	0	0	0	0.75	0		
>= 5 cm			0	0	0	0	0	0	0	0	0.25	0		
>= 10 cm			0	0	0	0	0	0	0	0	0	0		
>= 20 cm			0	0	0	0	0	0	0	0	0	0		
Degree Days														
Above 24 °C	0	0	0	0	0.2	1.3	4.9	1.8	0.2	0	0	0	8.4	C
Above 18 °C	0	0	0.1	1.1	8.5	36.3	76	55.2	14.8	0.8	0	0	192.7	C
Above 15 °C	0	0	0.5	3.7	24.6	87.7	155.5	125.4	47.9	4.3	0.1	0	449.6	C
Above 10 °C	0	0	2.7	18.3	93.2	220.3	308.8	275.8	152.4	33.3	3.3	0.5	1108.6	C
Above 5 °C	1	0.4	12.7	69.9	223	369.5	463.8	430.7	295.6	116	26.7	4.3	2013.6	C
Above 0 °C	11.9	11.5	55.3	184.3	377.4	519.5	618.8	585.7	445.5	258.9	102.3	29.4	3200.6	C
Below 0 °C	206.5	164.5	82.9	6.6	0	0	0	0	0	0.1	19.1	107.4	587.2	C
Below 5 °C	350.6	294.5	195.3	42.2	0.6	0	0	0	0.1	12.2	93.6	237.3	1226.3	C
Below 10 °C	504.6	435.2	340.3	140.7	25.8	0.8	0	0.1	6.9	84.6	220.1	388.5	2147.4	C
Below 15 °C	659.6	576.3	493.1	276.1	112.2	18.2	1.6	4.7	52.4	210.5	366.9	543	3314.6	C
Below 18 °C	752.6	661	585.7	363.5	189	56.8	15.2	27.5	109.3	300	456.8	636	4153.3	C

Probability of last temperature in spring of 0 °C or lower on or after indicated dates	10%	25%	33%	50%	66%	75%	90%
Date	6-Jun	30-May	28-May	19-May	16-May	15-May	7-May
Probability of first temperature in fall of 0 °C or lower on or before indicated dates	10%	25%	33%	50%	66%	75%	90%
Date	1-Sep	19-Sep	21-Sep	24-Sep	29-Sep	2-Oct	16-Oct
Probability of frost-free period equal to or less than indicated period (Days)	10%	25%	33%	50%	66%	75%	90%
Days	109	116	117	121	128	132	150

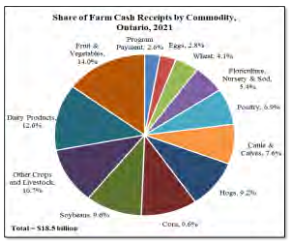
APPENDIX C

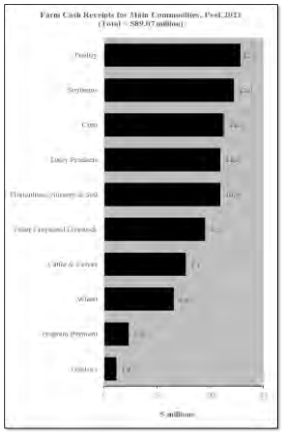
Agricultural Crop Statistics

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

Peel Regional Municipality at a Glance - 2021

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



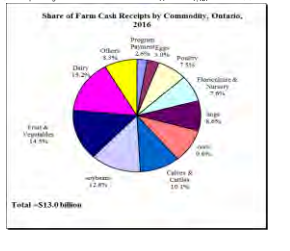


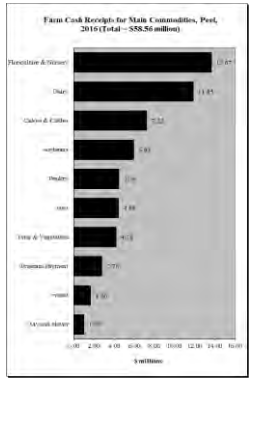
F - too unreliable to be published
Sources: 2021 & 2016 Census of Agriculture, OMAFRA
2022-06-21

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

Peel Regional Municipality at a Glance - 2016

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





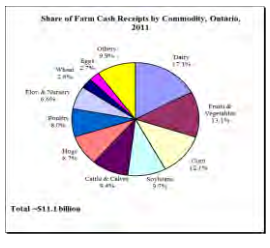
x Suppressed data
Sources: 2016 & 2011 Census of Agriculture and Strategic Policy Branch, OMAFRA
2017-06-02

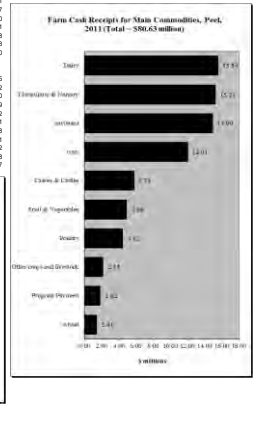
County & Township Ag Profile - Peel Regional Municipality; Townships: Brampton, Caledon

Peel Regional Municipality at a Glance - 2011

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

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





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

Caledon Township at a Glance - 2021

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

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

Caledon Township at a Glance - 2016

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

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

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

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

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

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

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

APPENDIX D

Canada Land Inventory Information

Canada Land Inventory Soil Capability Classification for Agriculture

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

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

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

Definitions of the Capability Classes

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

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

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

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

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

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

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

Definitions of the Prime and Non-prime Agricultural Lands

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

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

Definitions of the Capability Subclasses

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

Subclass Definitions:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Subclass T - Topography

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

Determination of Subclass T for Very Gravelly and Sandy Soils

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

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

S = Simple Slopes >50 m in length

C =Complex Slopes <50 m in length

Subclass W - Excess water:

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

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

APPENDIX E

Site Photographs

Photo 1: Operation #2 – Agriculture-related use (Grain Elevator).

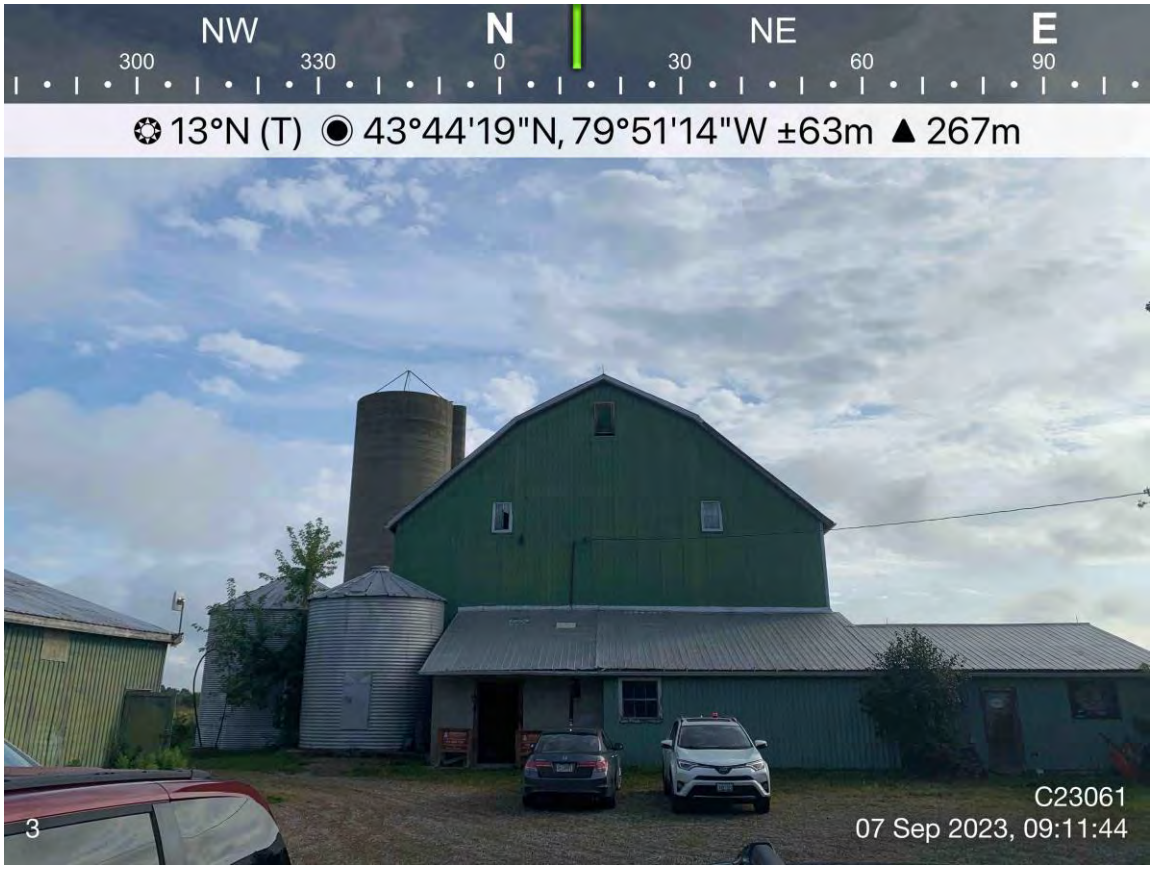


Photo 2: Operation #3 – Empty livestock facility showing bar, grain bins, and uncapped silo.

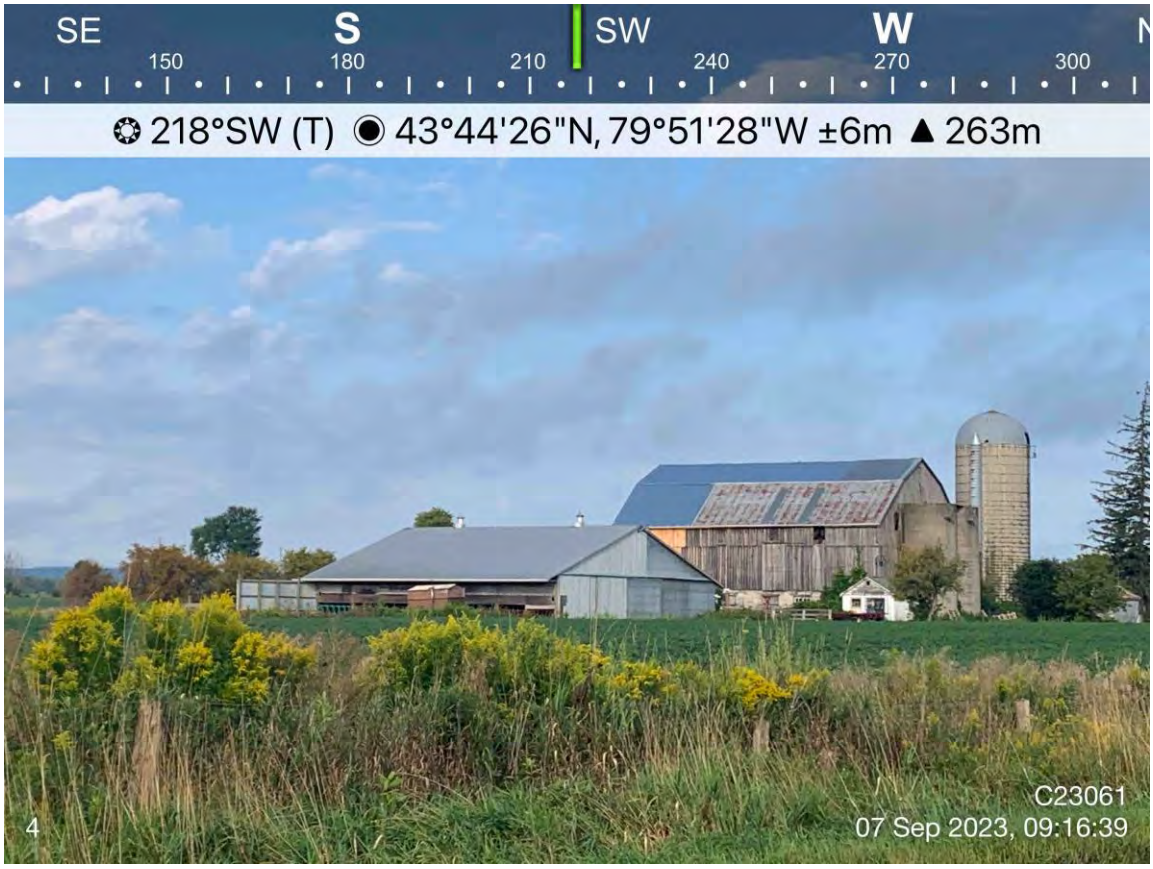


Photo 3: Operation #4 – Empty livestock facility showing barn, implement shed, capped and uncapped silo.

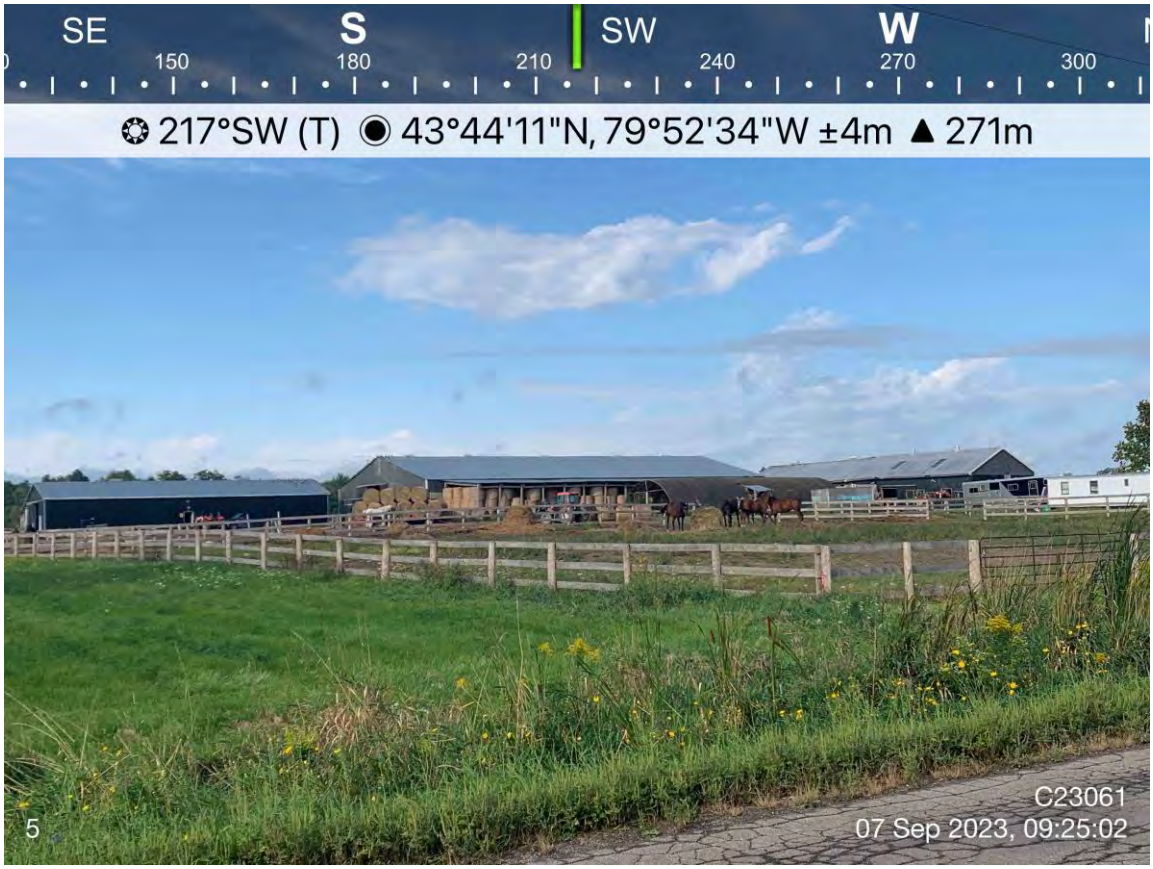


Photo 4: Operation #5 – Equestrian operation showing horses in paddocks, barns, and hay storage.

Photo 5: Operation #17 – Dairy/Poultry operation showing capped silo, implement sheds, and partial bank barn.

Photo 6: Operation #9 – Agriculture-related use (Grain Elevator).

Photo 7: Operation #10 - Agriculture-related use (Grain Elevator).

Photo 8: Operation #11 – Equestrian operation showing indoor riding area, barn, and paddocks.

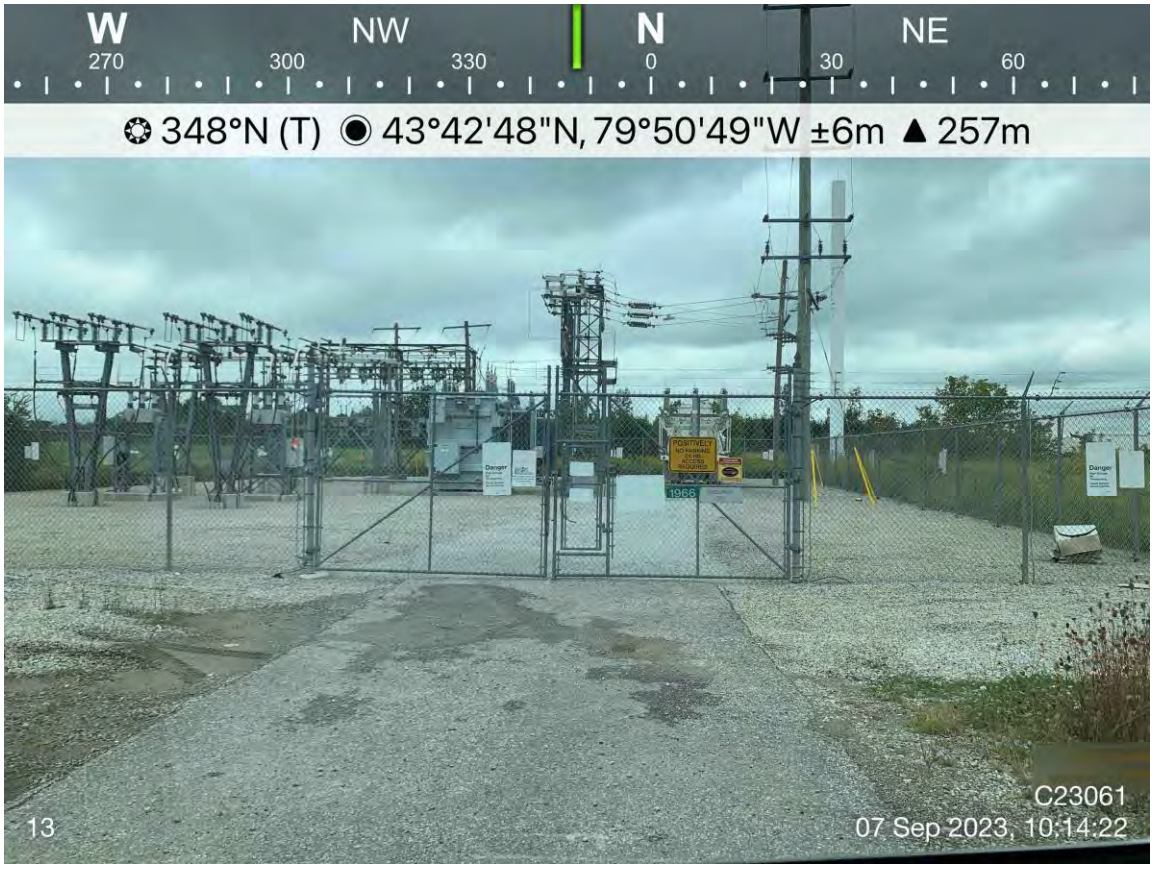


Photo 9: Operation #13 – Utility (electrical step-down station).

Photo 10: Operation #14 - Remnant farm showing uncapped cement silo, implement shed, and barn in poor condition.

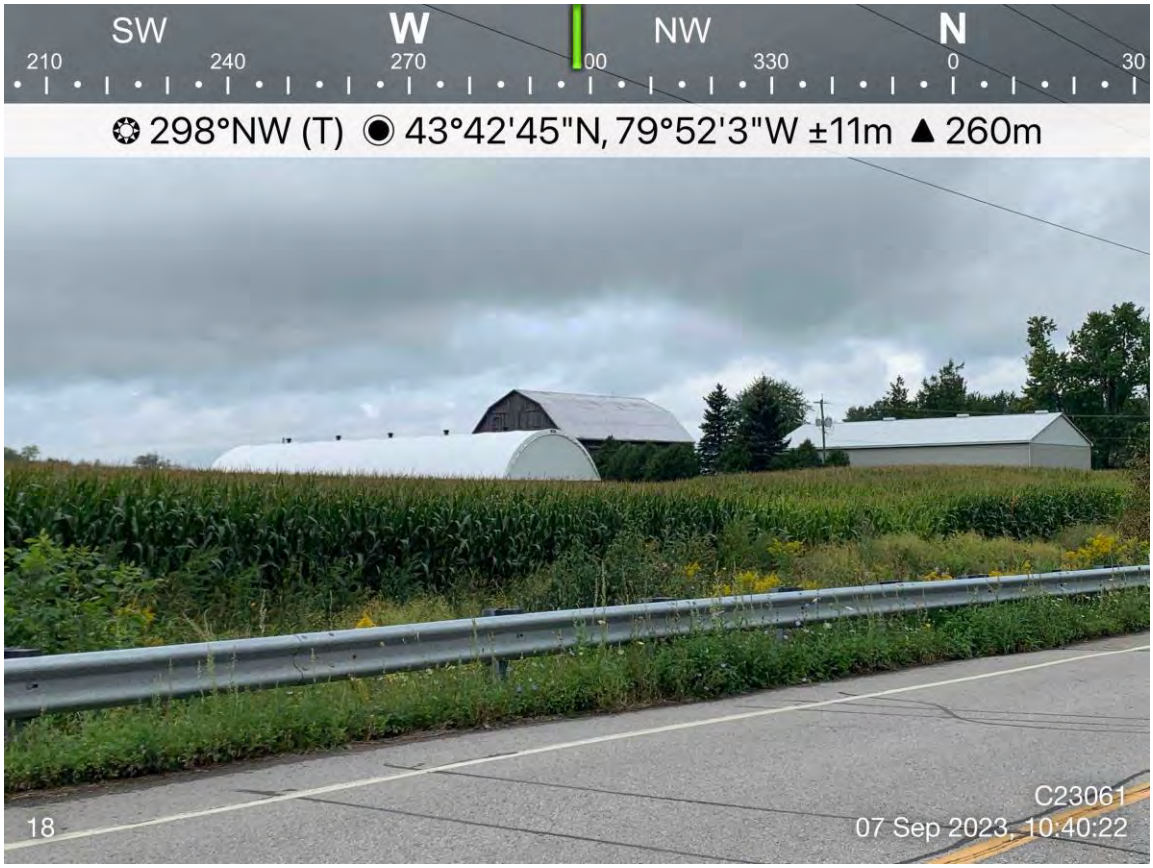


Photo 11: Operation #18 – Poultry operation showing plastic Quonset hut, implement shed, and bank barn.

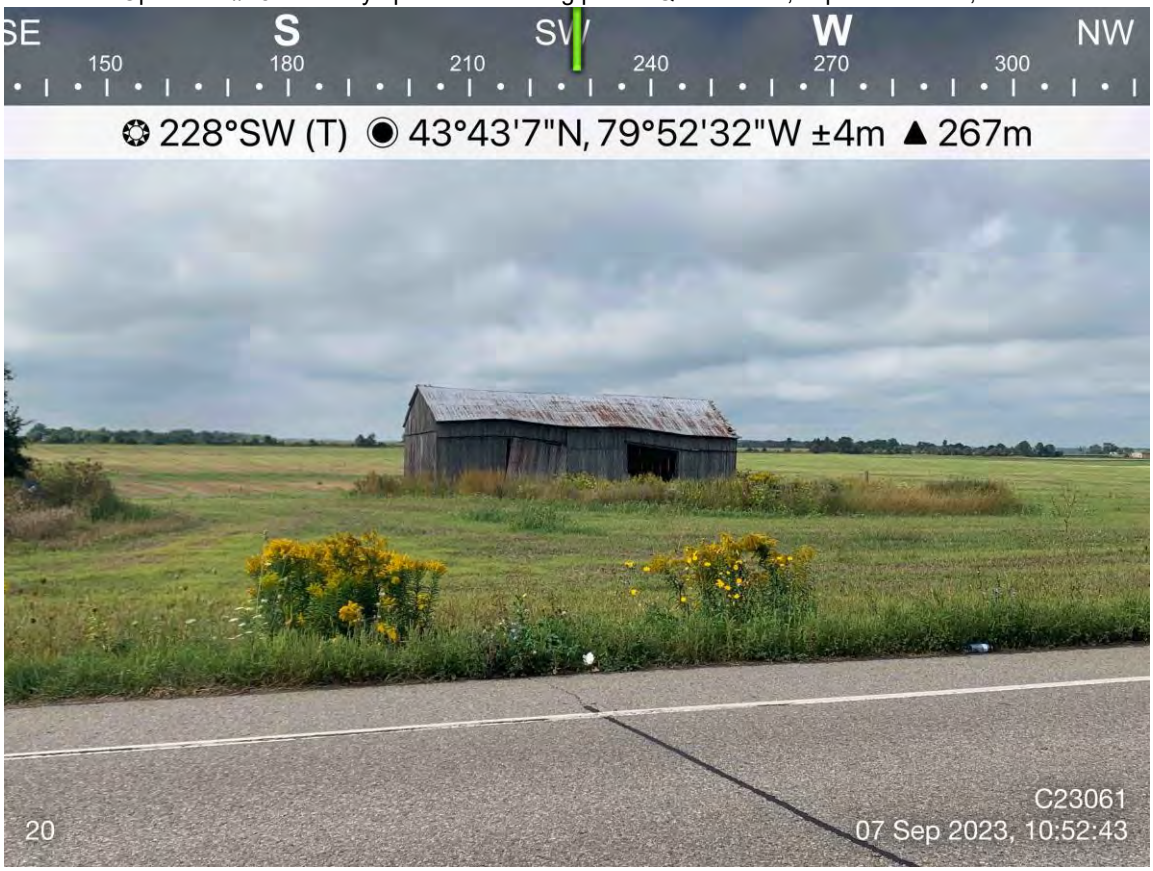


Photo 12: Operation #20 - Remnant farm showing partially collapsed building.

Photo 13: Operation #26 - Equestrian operation showing bank barn, paddock, and indoor riding area.

Photo 14: Operation #30 - Beef operation showing former indoor riding area and implement shed.

Photo 15: Operation #33 - Beef operation showing barn, implement shed, cows, and capped silos.

Photo 16: Operation #35 - Institutional use (Alloa Public School).

Photo 17: Operation #37 - Ariculture-related use (Caledon Research Centre).

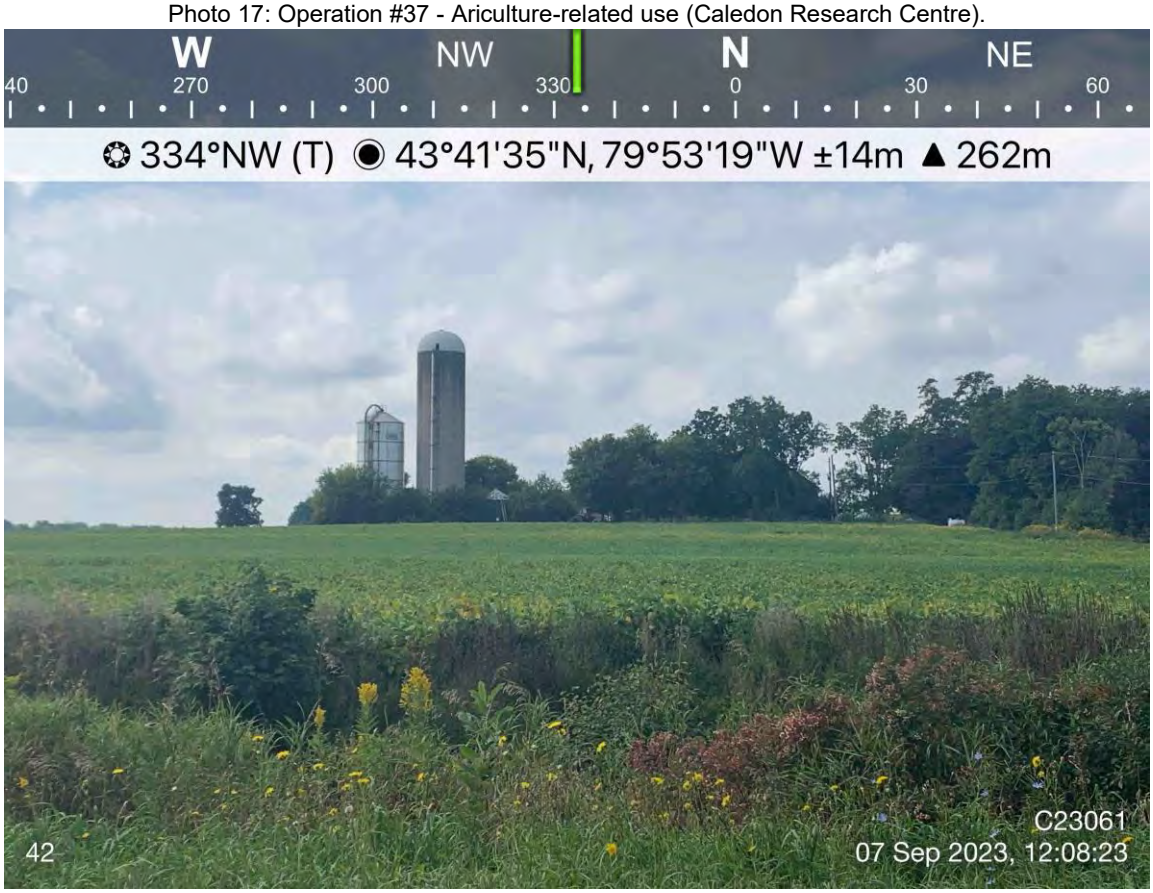


Photo 18: Operation #42 - Hobby farm showing overgrown area near grain bin and silo.

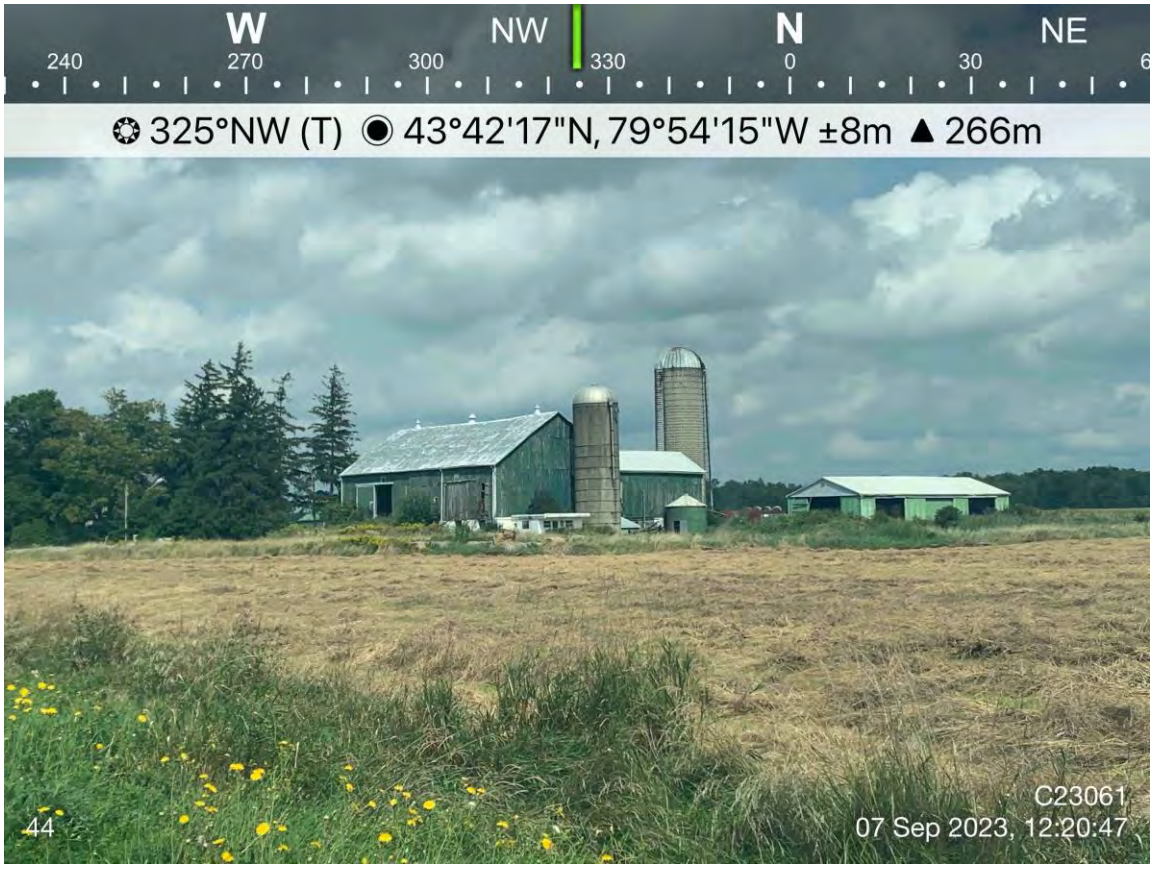


Photo 19: Operation #44 - Dairy operation showing bank barn, implement shed, grain bin, and silos.

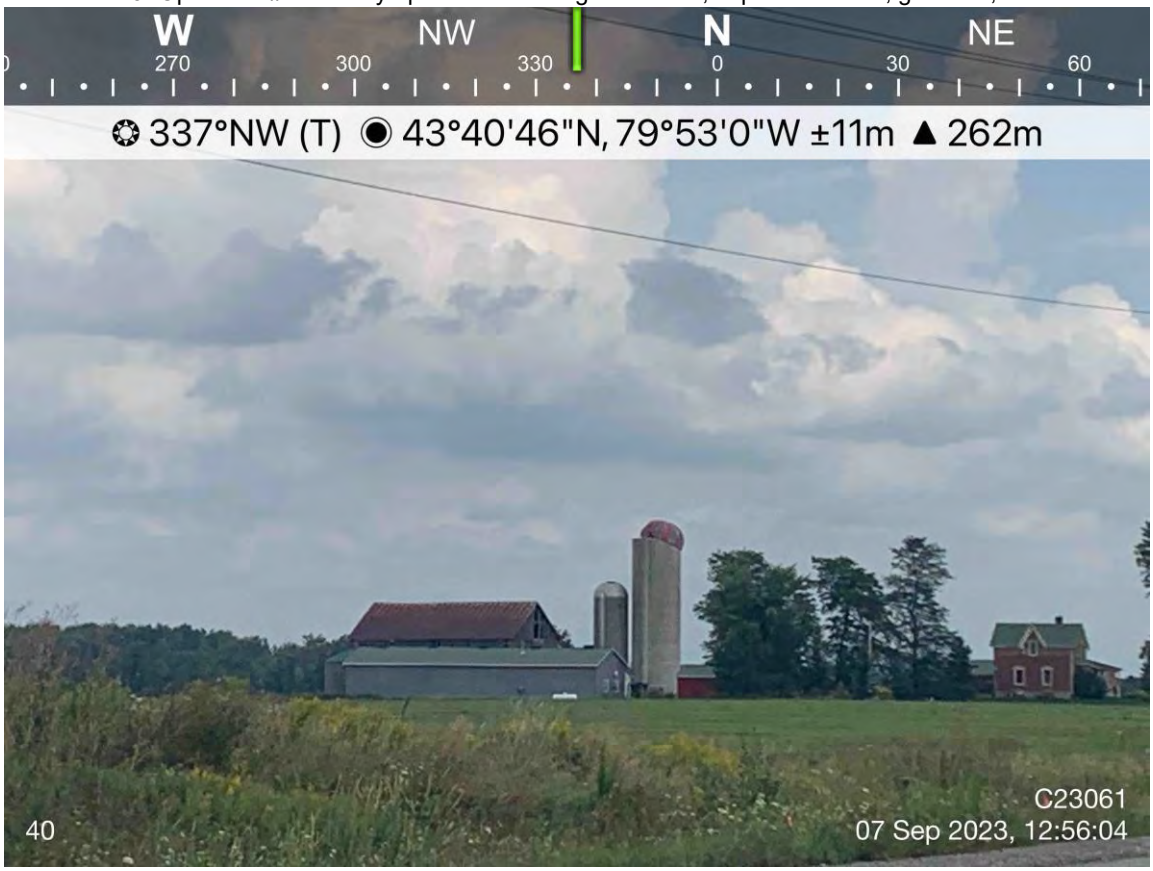


Photo 20: Operation #40 - Remnant farm showing bank barn in poor condition, silos, and implement shed.

Photo 21: Operation #39 – Cash crop operation showing implement sheds and shop building.

APPENDIX F

Land Use Notes

Land Use Survey Notes – AIA for Alloa Landowner Group			
Weather	Cloudy	**Date (s)**	September 7, 2023
Temperature	27°C	**File**	C23061

Site No.	Type of Use	Type of Operation	MDS Calculation Required?	Description of Operation
1	Agricultural	Remnant Farm	No	Property has been abandoned. Gated laneway, no entry. Steel side implement shed, small storage shed, abandoned residence.
2	Agriculture-Related	Grain Elevator	No	Grain elevator operation. Large implement shed, grain bins, and farm equipment observed.
3	Agricultural	Empty Livestock Facility	Yes	Retired dairy operation. Spoke with landowner. No livestock and no intention to farm again. Two steel grain bins, uncapped cement silo, implement shed, wooden bank barn in good-fair condition observed. Capable of housing livestock.
4	Agricultural	Empty Livestock Facility	Yes	Wood sided bank barn with recently replaced boards, one capped and two uncapped cement silos, steel sided implement shed, OFA member. Gated Laneway, no entry. No sign of livestock. Appears retired and empty but still capable of housing livestock.
5	Agricultural	Equestrian Operation	Yes	Spoke with farm help – max capacity of 15 horses. Three buildings now used as stables (two converted) in fair condition, 3 paddocks with wooden fencing in good condition, one Quonset hut, outdoor manure storage, hay bails observed, 11 horses observed in pasture.

6	Agricultural	Remnant Farm	No	Property has been abandoned. Gated laneway, no entry. Steel side implement shed in fair to poor condition, steel sided barn in poor condition and not capable of housing livestock.
7	Agricultural	Empty Livestock Facility	Yes	Wood sided bank barn with small amounts of hay for horses inside. Small greenhouse, steel Quonset hut. Nobody home, left MDS letter. No sign of livestock, pastures overgrown. Likely retired equestrian operation.
8	Non-Agricultural	Commercial	No	Two implement sheds likely used for storage. Possible appliance repair or storage business – fridges, dryers, washing machines observed outdoors.
9	Agriculture-Related	Grain Elevator	No	"Forest Lawn Farms." Grain elevator, plastic Quonset hut, shop building, implement shed, tractor trailers and farm equipment observed outside.
10	Agriculture-Related	Grain Elevator	No	Grain elevator, one large and two smaller implement sheds, farm equipment observed outside.
11	Agricultural	Equestrian Operation	Yes	Two horses observed in paddock. "M.S. Dhalival Farms". Wooden paddocks in poor condition and overgrown. Gated laneway, no entry. Indoor riding area, steel sided barn with stables. Listed on Google as "Fourfront Logistics"
12	Non-Agricultural	Commercial	No	"Caledon Trails" office building. Sign says selling semis and townhouses.
13	Non-Agricultural	Utility	No	Electrical step down station

14	Agricultural	Remnant Farm	No	Spoke with landowner. Former dairy operation with max capacity of 95 cows (55 milking cows, 45 young stock). Has no been operational for a long time and no plans to farm again. Wood sided bank barn in poor condition, missing side boards, and not capable of housing livestock. Steel side implement shed and dry shed in fair condition.
15	Non-Agricultural	Institutional	No	Home United Church
16	Non-Agricultural	Commercial	No	Large steel sided building likely used as a shop. No signage but likely a repair shop/light commercial operation.
17	Agricultural	Dairy/Poultry Operation	Yes	Wood sided bank barn with hay stored above and cows housed below, steel 1 storey barn with side fans housing chickens. Capped cement silo, steel sided implement shed and dry shed, steel grain bin, OFA member. Spoke with housekeeper, landowner not home. House keeper did not know type of cows or chickens.
18	Agricultural	Poultry Operation	Yes	Wood sided bank barn, plastic Quonset hut, steel sided implement shed, OFA member. Spoke to landowner – 24,000 broiler chicken capacity, manure spread on fields (no storage) and bank barn used for storage.
19	Non-Agricultural	Commercial	No	Moose Concrete and Renovations
20	Agricultural	Remnant Farm	No	Likely cash crop operation in the past. Farm buildings partially collapsed

21	Agricultural	Poultry Operation	Yes	Wood sided bank barn missing some boards, capped cement silo, 1 storey chicken barn, steel grain bin, steel sided implement shed OFA member. Spoke with landowner – 20,000 broiler chickens, outdoor manure storage.
22	Agricultural	Cash Crop Operation	No	Spoke with landowner – used to be dairy operation but barn has since collapsed. Now a cash crop operation for corn and soybeans. One capped and one uncapped cement silo observed, steel sided implement shed with farm equipment inside.
23	Agricultural	Cash Crop Operation	No	Steel sided implement shed, steel grain bin, gated laneway, no entry. Google lists property as "Old School Sap Company" and says maple syrup is sold through the business.
24	Non-Agricultural	Commercial	No	P+G Landscaping and Snow Removal. Shop located on property.
25	Agricultural	Remnant Farm	No	Remnants of barn foundation, uncapped cement silo, small implement shed, no signs of agricultural activity
26	Agricultural	Equestrian Operation	Yes	Wood sided bank barn, indoor riding area, outdoor manure storage, approximately 15 horses observed in paddocks, paddocks in fair condition, spoke with farm help – capable of housing 20 horses.
27	Non-Agricultural	Commercial	No	Royal Crown Construction
28	Agricultural	Dairy Operation	Yes	OFA member, capped cement silo, steel sided implement shed, wood sided bank barn, uncapped cement silo, farm equipment observed outside, no trespassing sign. "Lyonsdale Farms"
29	Agricultural	Cash Crop Operation	No	Steel grain bin, one small one larger steel sided implement shed, steel Quonset hut, very overgrown, possibly retired.

30	Agricultural	Beef Operation	Yes	Outdoor manure storage observed, indoor riding area as farm used to be an equestrian operation, fencing in good condition, OFA member, no trespassing, large area of hay storage. Google Street View shows horses in 2016 and cows in pasture in 2020. No large hay storage area while farm was equestrian operation.
31	Non-Agricultural	Commercial	No	Light commercial operation, no signage, dump truck observed outside, tire storage, and large shop.
32	Agricultural	Dairy Operation	Yes	Wood side bank barn, capped cement silo, three steel implement sheds, no trespassing, no livestock observed but likely active operation.
33	Agricultural	Beef Operation	Yes	"Elmoak Farms." Three capped cement silos, OFA member, steel sided implement shed, no trespassing, approximately 20 cows observed in pasture.
34	Agricultural	Empty Livestock Facility	Yes	Wood sided barn, steel sided implement shed in good condition, no livestock observed, no trespassing, barn capable of housing livestock but likely retired.
35	Non-Agricultural	Institutional	No	Alloa Public School
36	Agricultural	Remnant Farm	No	Steel sided barn in poor condition, not capable of housing livestock.
37	Agriculture-Related	Research Centre	No	Corteva Agriscience, Caledon Research Centre, Pioneer Agri-Bred Production Limited, five greenhouses, four industrial buildings.
38	Non-Agricultural	Commercial	No	GB Stone Inc. Landscape Supply, Walker Grown-Bark Office and Processing Facility. Landscaping materials observed on site.
39	Agricultural	Cash Crop Operation	No	Steel sided implement shed, plastic covered Quonset hut, shope area, wood sided implement shed, OFA member.

40	Agricultural	Remnant Farm	No	Two capped cement silos, wood sided bank barn in poor condition and missing boards, steel grain bin, steel sided implement shed, OFA member, barn not capable of housing livestock, private property, no trespassing.
41	Agricultural	Remnant Farm	No	Barn has collapsed, no sign of livestock, not capable of housing livestock.
42	Agricultural	Hobby Farm	Yes	Capped cement silo, two steel grain bins, steel feeder, wooden bank barn, steel sided implement shed, farm implements observed outside, plastic Quonset hut, possibly retired dairy operation, 20 chickens observed.
43	Agricultural	Cash Crop Operation	No	Steel sided implement shed with harvester inside, tractors and grain trailers observed outside, OFA member.
44	Agricultural	Dairy Operation	Yes	Wood sided bank barn in fair condition, two capped cement silos, hay stored on site, steel sided implement shed, spoke to landowner – 36 stalls, liquid manure store southeast of bank barn.
45	Agricultural	Remnant Farm	No	Capped cement silo, plastic Quonset hut, steel sided barn in poor condition, property appears abandoned, gated laneway, no trespassing, not capable of housing livestock.
46	Agricultural	Remnant Farm	No	Barn has been demolished, foundation of barn remains, property has been abandoned, gated laneway, no entry.

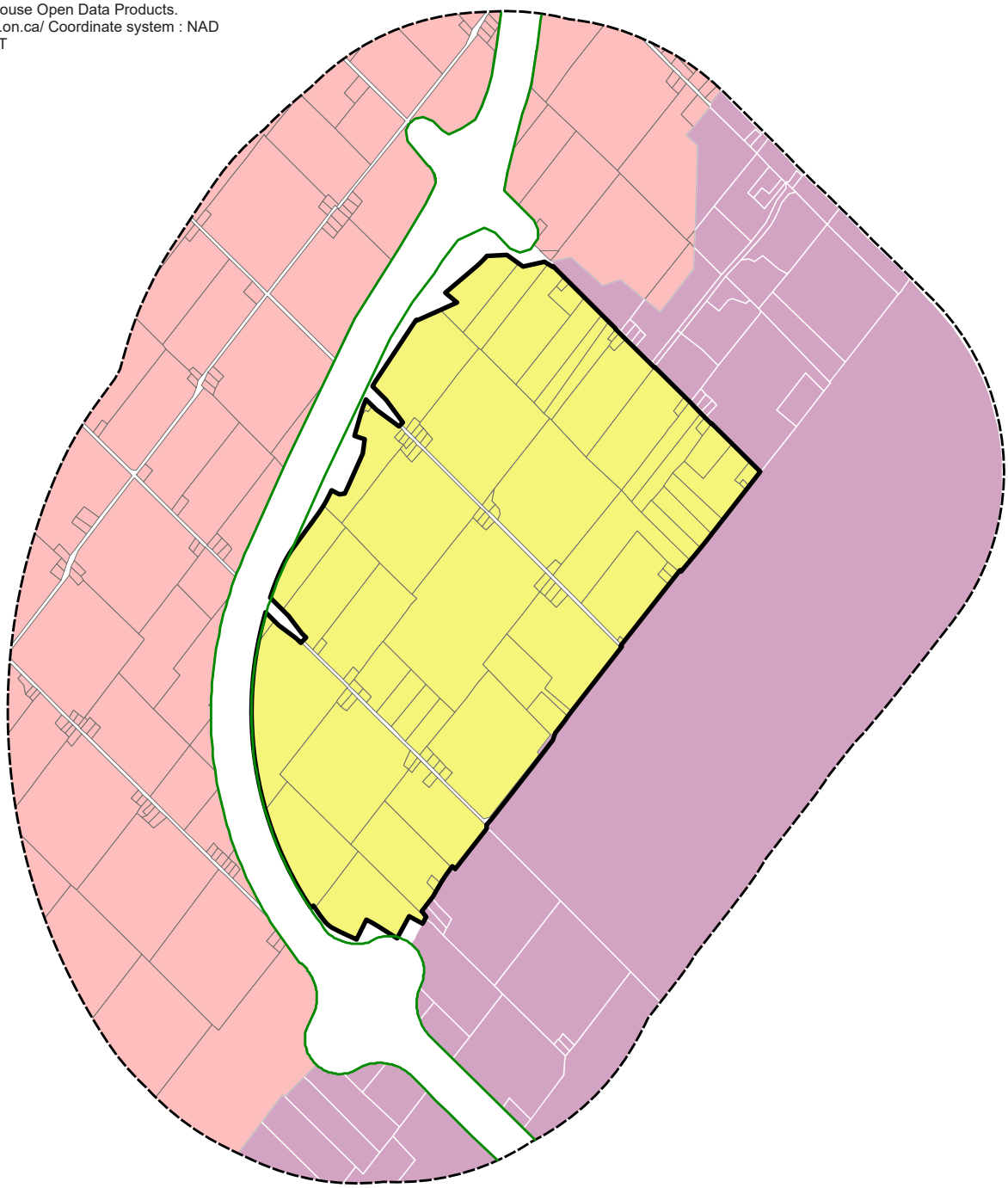
47	Agricultural	Remnant Farm	No	Capped cement silo, steel sided implement shed, OFA member, steel grain bin, no sign of livestock, landowner not home, left MDS letter, sign on barn says "Society Holsteins". Landowner responded to letter and said barn is now used to store equipment and would require significant investment to house livestock again.
48	Non-Agricultural	Institutional	No	Malala Yousafzai Public School

	Total Number	**Active**	**Retired or Remnant**
Agricultural	32	1 – Hobby Farm 3 – Equestrian Operation 2 – Beef Operation 3 – Dairy Operation 2 – Poultry Operation 1 – Dairy/Poultry Operation 5 – Cash Crop Operation	11 – Remnant Farm 4 – Empty Livestock Facility
Agriculture-related	4	3 – Grain Elevator 1 – Research Centre	0
On-farm Diversified	0	0	0
	Total Number	**Type**	
Non-Agricultural	12	8 – Commercial 1 – Utility 3 – Institutional	

APPENDIX G

Parcel Size Mapping & Data

N



Legend

- Primary Study Area (Average Parcel Size = 8.3 ha)
- Secondary Study Area (Average Parcel Size = 7.7 ha)
- Settlement Areas

Appendix G: Parcel Size

Agricultural Impact Assessment for Alloa Planning Area

Prepared For: Alloa Landowner Group

Prepared For: COLVILLE CONSULTING INC.

0 0.5 KM
1:40,000

DATE: Feb 2025

FILE: C23061

APPENDIX H

AgriSuite MDS Report

Ontario

AgriSuite

C23061

General information

Application date
Sep 25, 2023

Municipal file number

Proposed application
New or expanding settlement area boundary

Applicant contact information

ON

Location of subject lands
Regional Municipality of Peel
Town of Caledon
CHINGUACOUSY
Concession 4 WEST OF CENTRE ROAD , Lot 19
Roll number: 2124

Calculations

Operation #11

Farm contact information

ON

Location of existing livestock facility or anaerobic digestor
Regional Municipality of Peel
Town of Caledon
CHINGUACOUSY
Concession 3 WEST OF CENTRE ROAD , Lot 18
Roll number: 2124

Total lot size
6.04 ha

Livestock/manure summary

Manure Form	Type of livestock/manure	Existing maximum number	Existing maximum number (NU)	Estimated livestock barn area
Solid	Horses, Large-framed, mature; > 680 kg (including unweaned offspring)	7	10.6 NU	225 m²

Confirm Livestock/Manure Information (Operation #11)
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	**10.7 NU**
Potential design capacity	**10.7 NU**

Factor A (odour potential) **0.7**
Factor D (manure type) **0.7**
Factor B (design capacity) **168.83**
Factor E (encroaching land use) **2.2**

Building base distance 'F' (A x B x D x E) (minimum distance from livestock barn)	**182 m (597 ft)**
Actual distance from livestock barn	**NA**
Storage base distance 'S' (minimum distance from manure storage)	**182 m (597 ft)**
Actual distance from manure storage	**NA**

Operation #18

Farm contact information

ON

Location of existing livestock facility or anaerobic digestor
Regional Municipality of Peel
Town of Caledon
CHINGUACOUSY
Concession 4 WEST OF CENTRE ROAD , Lot 20
Roll number: 2124

Total lot size
40 ha

Livestock/manure summary

Manure Form	Type of livestock/manure	Existing maximum number	Existing maximum number (NU)	Estimated livestock barn area
Solid	Chickens, Broiler breeder growers (males/females transferred out to layer barn)	24000	80 NU	3791 m²

Setback summary

Existing manure storage	**No storage required (manure is stored for less than 14 days)**
Design capacity	**80 NU**
Potential design capacity	**80 NU**

Factor A (odour potential) **0.7**
Factor B (design capacity) **297.87**
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)	**322 m (1056 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 #21

Farm contact information

ON

Location of existing livestock facility or anaerobic digestor
Regional Municipality of Peel
Town of Caledon
CHINGUACOUSY
Concession 4 WEST OF CENTRE ROAD , Lot 22
Roll number: 2124

Total lot size
50.8 ha

Livestock/manure summary

Manure Form	Type of livestock/manure	Existing maximum number	Existing maximum number (NU)	Estimated livestock barn area
Solid	Chickens, Broiler breeder growers (males/females transferred out to layer barn)	20000	66.7 NU	3159 m²

Setback summary

Existing manure storage	**V3. Solid, outside, no cover, >= 30% DM**
Design capacity	**66.7 NU**
Potential design capacity	**66.7 NU**

Factor A (odour potential) **0.7**
Factor B (design capacity) **285.96**
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)	**309 m (1014 ft)**
Actual distance from livestock barn	**NA**
Storage base distance 'S' (minimum distance from manure storage)	**309 m (1014 ft)**
Actual distance from manure storage	**NA**

Operation #26

Farm contact information

ON

Location of existing livestock facility or anaerobic digestor
Regional Municipality of Peel
Town of Caledon
CHINGUACOUSY
Concession 3 WEST OF CENTRE ROAD , Lot 24
Roll number: 2124

Total lot size
3.95 ha

Livestock/manure summary

Manure Form	Type of livestock/manure	Existing maximum number	Existing maximum number (NU)	Estimated livestock barn area
Solid	Horses, Large-framed, mature; > 680 kg (including unweaned offspring)	20	28.6 NU	604 m²

Setback summary

Existing manure storage	**V3. Solid, outside, no cover, >= 30% DM**
Design capacity	**28.6 NU**
Potential design capacity	**28.6 NU**

Factor A (odour potential) **0.7**
Factor B (design capacity) **217.14**
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)	**235 m (771 ft)**
Actual distance from livestock barn	**NA**
Storage base distance 'S' (minimum distance from manure storage)	**235 m (771 ft)**
Actual distance from manure storage	**NA**

Operation #28

Farm contact information

ON

Location of existing livestock facility or anaerobic digestor
Regional Municipality of Peel
Town of Caledon
CHINGUACOUSY
Concession 4 WEST OF CENTRE ROAD , Lot 23
Roll number: 2124

Total lot size
60.06 ha

Livestock/manure summary

Manure Form	Type of livestock/manure	Existing maximum number	Existing maximum number (NU)	Estimated livestock barn area
Liquid	Dairy, Heifers Large Frame (182 - 545 kg) (eg. Holsteins), Free Stall	418	209 NU	2912 m²

Confirm Livestock/Manure Information (Operation #28)
The livestock/manure information has not been confirmed with the property owner and/or farm operator.

Setback summary

Existing manure storage	**V5. Liquid, inside, underneath slatted floor**
Design capacity	**209 NU**
Potential design capacity	**209 NU**

Factor A (odour potential) **0.7**
Factor D (manure type) **0.8**
Factor B (design capacity) **408.66**
Factor E (encroaching land use) **2.2**

Building base distance 'F' (A x B x D x E) (minimum distance from livestock barn)	**504 m (1654 ft)**
Actual distance from livestock barn	**NA**
Storage base distance 'S' (minimum distance from manure storage)	**504 m (1654 ft)**
Actual distance from manure storage	**NA**

Operation #3

Farm contact information

ON

Location of existing livestock facility or anaerobic digestor
Regional Municipality of Peel
Town of Caledon
CHINGUACOUSY
Concession 1 WEST OF CENTRE ROAD , Lot 21
Roll number: 2124

Total lot size
13.12 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	934 m²	46.7 NU	934 m²

Unoccupied Barn or Unused Storage (Operation #3)

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	**46.7 NU**
Potential design capacity	**46.7 NU**

Factor A (odour potential) **1**
Factor B (design capacity) **253.4**
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)	**391 m (1283 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 #30

Farm contact information

ON

Location of existing livestock facility or anaerobic digestor
Regional Municipality of Peel
Town of Caledon
CHINGUACOUSY
Concession 5 WEST OF CENTRE ROAD , Lot 21
Roll number: 2124

Total lot size
8.46 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	93	93.2 NU	433 m²

Confirm Livestock/Manure Information (Operation #30)
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	**93.2 NU**
Potential design capacity	**93.2 NU**

Factor A (odour potential) **0.7**
Factor B (design capacity) **309.68**
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)	**334 m (1096 ft)**
Actual distance from livestock barn	**NA**

Storage base distance 'S' (minimum distance from manure storage)	**334 m (1096 ft)**
Actual distance from manure storage	**NA**

Operation #32

Farm contact information

ON

Location of existing livestock facility or anaerobic digestor
Regional Municipality of Peel
Town of Caledon
CHINGUACOUSY
Concession 4 WEST OF CENTRE ROAD , Lot 20
Roll number: 2124

Total lot size
19.94 ha

Livestock/manure summary

Manure Form	Type of livestock/manure	Existing maximum number	Existing maximum number (NU)	Estimated livestock barn area
Liquid	Dairy, Heifers Large Frame (182 - 545 kg) (eg. Holsteins), Free Stall	59	29.4 NU	410 m²

Confirm Livestock/Manure Information (Operation #32)
The livestock/manure information has not been confirmed with the property owner and/or farm operator.

Setback summary

Existing manure storage	**V5. Liquid, inside, underneath slatted floor**
Design capacity	**29.4 NU**
Potential design capacity	**29.4 NU**

Factor A (odour potential) **0.7**
Factor B (design capacity) **218.84**
Factor D (manure type) **0.8**
Factor E (encroaching land use) **2.2**

Building base distance 'F' (A x B x D x E) (minimum distance from livestock barn)	**270 m (886 ft)**
Actual distance from livestock barn	**NA**
Storage base distance 'S' (minimum distance from manure storage)	**270 m (886 ft)**
Actual distance from manure storage	**NA**

Operation #33

Farm contact information

ON

Location of existing livestock facility or anaerobic digestor
Regional Municipality of Peel
Town of Caledon
CHINGUACOUSY
Concession 5 WEST OF CENTRE ROAD , Lot 20
Roll number: 2124

Total lot size
59.7 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	222	221.7 NU	1030 m²

Confirm Livestock/Manure Information (Operation #33)
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 **221.7 NU**

Potential design capacity **221.7 NU**

Factor A (odour potential) **0.7**
Factor B (design capacity) **417.23**
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) **450 m (1476 ft)**

Actual distance from livestock barn **NA**

Storage base distance 'S'
(minimum distance from manure storage) **450 m (1476 ft)**

Actual distance from manure storage **NA**

Operation #34

Farm contact information

ON

Location of existing livestock facility or anaerobic digestor
Regional Municipality of Peel
Town of Caledon
CHINGUACOUSY
Concession 5 WEST OF CENTRE ROAD , Lot 19
Roll number: 2124

Total lot size
39.55 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	963.8 m²	48.2 NU	964 m²

Confirm Livestock/Manure Information (Operation #34)
The livestock/manure information has not been confirmed with the property owner and/or farm operator.

Unoccupied Barn or Unused Storage (Operation #34)
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 **48.2 NU**

Potential design capacity **48.2 NU**

Factor A (odour potential) **1**
Factor B (design capacity) **256.38**
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) **395 m (1296 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 #4

Farm contact information

ON

Location of existing livestock facility or anaerobic digestor
Regional Municipality of Peel
Town of Caledon
CHINGUACOUSY
Concession 2 WEST OF CENTRE ROAD , Lot 22
Roll number: 2124

Total lot size
40.22 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	1101 m²	55 NU	1101 m²

Confirm Livestock/Manure Information (Operation #4)
The livestock/manure information has not been confirmed with the property owner and/or farm operator.

Unoccupied Barn or Unused Storage (Operation #4)
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 **55 NU**

Potential design capacity **55 NU**

Factor A (odour potential) **1**
Factor B (design capacity) **270.1**
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) **416 m (1365 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 #42

Farm contact information

ON

Location of existing livestock facility or anaerobic digestor
Regional Municipality of Peel
Town of Caledon
CHINGUACOUSY
Concession 6 WEST OF CENTRE ROAD , Lot 20
Roll number: 2124

Total lot size
41.75 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	1418 m²	70.9 NU	1418 m²
Solid	Chickens, Broiler breeder growers (males/females transferred out to layer barn)	20	0.1 NU	3 m²

Confirm Livestock/Manure Information (Operation #42)
The livestock/manure information has not been confirmed with the property owner and/or farm operator.

Unoccupied Barn or Unused Storage (Operation #42)
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	**V3. Solid, outside, no cover, >= 30% DM**
Design capacity	**71 NU**
Potential design capacity	**71 NU**

Factor A (odour potential) **1**
Factor B (design capacity) **289.8**
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)	**447 m (1467 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 #44

Farm contact information

ON

Location of existing livestock facility or anaerobic digestor
Regional Municipality of Peel
Town of Caledon
CHINGUACOUSY
Concession 5 WEST OF CENTRE ROAD , Lot 23
Roll number: 2124

Total lot size
39.45 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), Free Stall	36	18 NU	251 m²

Setback summary

Existing manure storage **L1. Solid, outside, no cover, 18-30% DM, with uncovered liquid runoff storage**

Design capacity **18 NU**

Potential design capacity **18 NU**

Factor A (odour potential) **0.7**
Factor B (design capacity) **193.33**
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) **209 m (686 ft)**

Actual distance from livestock barn **NA**

Storage base distance 'S' (minimum distance from manure storage) **229 m (751 ft)**

Actual distance from manure storage **NA**

Operation #5

Farm contact information

ON

Location of existing livestock facility or anaerobic digestor
Regional Municipality of Peel
Town of Caledon
CHINGUACOUSY
Concession 3 WEST OF CENTRE ROAD , Lot 23
Roll number: 2124

Total lot size
8.42 ha

Livestock/manure summary

Manure Form	Type of livestock/manure	Existing maximum number	Existing maximum number (NU)	Estimated livestock barn area
Solid	Horses, Large-framed, mature; > 680 kg (including unweaned offspring)	15	21.4 NU	453 m²

Setback summary

Existing manure storage **V3. Solid, outside, no cover, >= 30% DM**

Design capacity **21.4 NU**

Potential design capacity **21.4 NU**

Factor A (odour potential) **0.7**
Factor B (design capacity) **202.86**
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) **219 m (718 ft)**

Actual distance from livestock barn **NA**

Storage base distance 'S' (minimum distance from manure storage)	**219 m (718 ft)**
Actual distance from manure storage	**NA**

Operation #7

Farm contact information

ON

Location of existing livestock facility or anaerobic digestor
Regional Municipality of Peel
Town of Caledon
CHINGUACOUSY
Concession 3 WEST OF CENTRE ROAD , Lot 21
Roll number: 2124

Total lot size
29.25 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	453 m²	22.6 NU	453 m²

Confirm Livestock/Manure Information (Operation #7)
The livestock/manure information has not been confirmed with the property owner and/or farm operator.

Unoccupied Barn or Unused Storage (Operation #7)
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	**22.6 NU**
Potential design capacity	**22.6 NU**

Factor A (odour potential)	**1**	Factor B (design capacity)	**205.3**
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)	**317 m (1040 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#17

Farm contact information

ON

Location of existing livestock facility or anaerobic digestor
Regional Municipality of Peel
Town of Caledon
CHINGUACOUSY
Concession 4 WEST OF CENTRE ROAD , Lot 19
Roll number: 2124

Total lot size
60.81 ha

Livestock/manure summary

Manure Form	Type of livestock/manure	Existing maximum number	Existing maximum number (NU)	Estimated livestock barn area
Liquid	Dairy, Heifers Large Frame (182 - 545 kg) (eg. Holsteins), Free Stall	101	50.4 NU	703 m²
Solid	Chickens, Broiler breeder growers (males/females transferred out to layer barn)	11365	37.9 NU	1795 m²

Confirm Livestock/Manure Information (Operation#17)
The livestock/manure information has not been confirmed with the property owner and/or farm operator.

Setback summary

Existing manure storage	**V5. Liquid, inside, underneath slatted floor**
Design capacity	**88.3 NU**
Potential design capacity	**88.3 NU**

Factor A (odour potential) **0.7**
Factor B (design capacity) **305.3**
Factor D (manure type) **0.76**
Factor E (encroaching land use) **2.2**

Building base distance 'F' (A x B x D x E) (minimum distance from livestock barn)	**358 m (1175 ft)**
Actual distance from livestock barn	**NA**
Storage base distance 'S' (minimum distance from manure storage)	**358 m (1175 ft)**
Actual distance from manure storage	**NA**

Preparer signoff & disclaimer

Preparer contact information
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Signature of preparer

02-28-2025

John Liotta , Agrologist/Ecologist

Date (mmm-dd-yyyy)

Note to the user

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