AGRICULTURAL IMPACT ASSESSMENT

TRAFALGAR PIT EXPANSION

PART LOT 17 CONCESSION 2 NTR
MUNICIPALITY OF THAMES CENTRE
MIDDLESEX COUNTY

PREPARED FOR:
Paton Aggregates & Soils Ltd.

PREPARED BY:
Esher Planning Inc.

September 2026

Table of Contents

1.0 Introduction 4
1.1 Purpose of the Study 4
1.2 Location 5
1.3 Description of the Proposal 5
1.4 Review of Background Information 5
1.4 Analysis of Impact 6
1.6 Mitigation Measures and Net Impacts 6
2.0 Agricultural Policy Requirements 7
2.1 Provincial Planning Statement (PPS 2024) 7
2.2 Middlesex County Official Plan 8
2.4 Municipality of Thames Centre Official Plan (OP) 9
2.5 Municipality of Thames Centre Zoning By-law 10
3.0 Study Area and Methodology 10
3.1 Primary Study Area 10
3.2 Secondary Study Area 10
3.3 Study Methodology 10
4.0 DESCRIPTION OF SOILS AND LANDS 11
4.1 Physiography 11
4.2 Surficial Geology 11
4.3 Surface Drainage Features 11
4.4 Soil Resources 12
4.5 Canada Land inventory (CLI) Agricultural Classification 13
4.6 OMAFRA Agricultural Systems Portal 14
4.7 Statistics Canada Census of Agriculture Review 14
4.8 Land Use Characteristics 15
4.9 Agricultural Investment 16
5.0 Assessment of Impacts to Agriculture 17
5.1 Loss of Agricultural Resources 17
5.2 Impacts to Agricultural Operations 18
5.3 Dust Impact 18
5.4 Water Resources 19
5.5 Traffic 19
6.0 Mitigation Measures 20

6.1 Avoidance 20
6.2 Minimizing Impacts 20
6.3 Mitigating Impacts 20
7.0 Rehabilitation 21
8.0 Conclusions 21
..... 24
APPENDIX 1 35
Agricultural Profile and Crop Yeilds 35
APPENDIX 2: SOIL SAMPLING 36

1.0 Introduction

Paton Aggregates and Soils Ltd. is submitting applications that would permit the expansion of a sand and gravel pit operation ("Trafalgar Expansion Pit") in the Municipality of Thames Centre. In addition to the municipal Planning Act applications, the proponent has submitted an application to the Ministry of Natural Resources (MNR) under the *Aggregate Resources Act* (ARA) for Class A, Pit Below the Water table.

This Agricultural Impact Assessment (AIA) has been prepared as part of the application submission, as required by the Provincial Planning Statement, 2024 and the Middlesex County planning policies. The report was prepared in accordance with the provincial Agricultural Impact Assessment (AIA) Guidance Document (OMAFA, 2026). It addresses the applicable provincial and municipal policies for locating new aggregate operations in agricultural areas.

The Official Plan for Middlesex County identifies the subject property as 'Prime Agricultural Area'. The subject property is also identified as "Primary Mineral Aggregate Resource Area'. The Township Official Plan also designates the property as Agriculture. Mineral Aggregate extraction is a permitted use in the Prime Agricultural Area, both within and outside the Mineral Aggregate Resource Area, subject to the policies of the Plan. The Provincial Planning Statement (PPS 2024) permits aggregate extraction on prime agricultural lands in prime agricultural areas as an interim use, and requires that an Agricultural Impact Assessment, or equivalent, be completed to assess the impacts on the agricultural system.

1.1 Purpose of the Study

This AIA has been prepared to identify and evaluate the potential impacts of the proposed Trafalgar Expansion Pit on agricultural operations and the Agricultural System. The report also recommends mitigation measures that avoid, minimize and/or eliminate identified potential adverse impacts to the extent feasible. A description of the agricultural operations and agricultural resources within the Primary Study Area (i.e. Subject Lands and immediate adjacent area) and broader Secondary Study Area is presented and is based on a review of available background information, field studies and discussions with the proponent.

The AIA provides an assessment of conformity to the applicable agricultural policies and an assessment of any potential conflicts with surrounding agricultural operations within the Study Area.

1.2 Location

The subject property is located on the south side of Trafalgar St., west of Elgin Road and southwest of Thamesford (see Figure 1). The Expansion is adjacent to the existing Trafalgar pit which operates under Aggregate Resources Act licence #626167 and has a licenced area of 27.3 hectares. The proposed pit expansion has an area of 11 hectares and is located adjacent to the east limit of the existing Trafalgar Pit. This parcel is currently in agricultural use.

Surrounding land uses include gravel pit operations and agricultural uses. There are also natural heritage features in the area, including the North Dorchester Swamp, a Provincially Significant Wetland complex (see **Figure 2** and **Figure 3**).

1.3 Description of the Proposal

The proposed pit expansion would add an additional licensed area of approximately 11 hectares, with extraction proposed on a portion (9.4 ha) of the subject lands. The expansion will extend the supply of aggregate reserves at this location allowing the applicant to continue to supply sand and gravel products the local market. This particular operation currently supplies cow bedding sand to the agricultural market as one of their important aggregate products.

Rehabilitation will be undertaken progressively, with the final land use consisting of a pond with meadow sideslopes. The balance of the property outside of the licenced area will continue to be farmed. The proposed rehabilitation will be compatible with the surrounding land uses. A complete description of the operation can be found in the Summary Report and on the ARA Site Plans.

1.4 Review of Background Information

The background review included:

- a review of the soils information from the provincial digital soil resource database for the Subject Lands and published reports (Soil Survey of Middlesex County)
- the Agricultural Impact Assessment Guidance Document (OMAFA 2026);
- a review of the Middlesex County Official Plan and Municipality of Thames Centre Official Plan policies and land use designations;
- a review of the parcel fabric in the Study Area to assess the level of fragmentation of agricultural lands;
- a review OMAFA's Agricultural Information Atlas, Agricultural Systems Portal mapping to obtain agricultural resources information; and
- a review aerial photographic imagery to review the type and extent of agricultural operations on Site and in the surrounding area and to identify potential sources of conflict.

1.4 Analysis of Impact

In accordance with the OMAFA's AIA Guidance Document, the potential negative effects of the proposed aggregate extraction operation on agriculture were evaluated through an assessment of:

- The quality and quantity of agricultural land impacted;
- Fragmentation of agricultural lands and operations;
- The type of agricultural, agriculture-related or on-farm diversified uses being impacted and their significance for supporting other agricultural production in the surrounding area;
- The infrastructure, services or assets important to the surrounding agricultural community and agri-food sector;
- The disruption or loss of function to artificial drainage and irrigation installations;
- Changes to surface drainage features which could have an effect on adjacent lands;
- Changes to hydrogeological conditions that could affect neighboring municipal or private wells, sources of irrigation water and sources of water for livestock; and
- Disruption to surrounding farm operations, activities and management (e.g. temporary loss of productive agricultural lands, cultivation, seeding, spraying, harvesting, field access, use of road network).

1.6 Mitigation Measures and Net Impacts

As outlined in the AIA Guidance Document, whenever possible, development should avoid impacts on the agricultural system. When impacts cannot be avoided, mitigation measures will be prepared to minimize or mitigate potential impacts of the proposed aggregate operation. The net impacts will then be assessed based on the assumption that the proposed mitigation measures will be put in place. For aggregate sites, the loss of agricultural lands is temporary and is replaced through the progressive rehabilitation of the site to restore the agricultural capability of the affected lands. The proposed rehabilitation of the Trafalgar Pit Expansion is discussed further in section 7 of this report.

2.0 Agricultural Policy Requirements

2.1 Provincial Planning Statement (PPS 2024)

The Provincial Planning Statement is considered a policy statement for the purpose of section 3 of the Planning Act. After review and consultation, the Province released the current version of the PPS in August 2024 and the PPS 2024 took effect on October 20, 2024.

The PPS recognizes that the Province's natural heritage resources, water, agricultural lands, mineral aggregate resources, cultural heritage and archaeological resources provide important environmental, economic and social benefits. The wise use and management of these resources over the long term is a key provincial interest. The province must ensure that its resources are managed in a sustainable way to conserve biodiversity, protect essential ecological processes and public health and safety, provide for the production of food and fiber, minimize environmental and social impacts and meet its long term economic needs.

Prime agricultural areas are defined 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.

Section 4.3.5.1 states that:

"Planning authorities may only permit non-agricultural uses in prime agricultural areas for:

a) extraction of minerals, petroleum resources and mineral aggregate resources,

b) limited non-residential uses, provided that all of the following are demonstrated:

1. the land does not comprise a specialty crop area;

2. the proposed use complies with the minimum distance separation formulae;

3. there is an identified need within the planning horizon identified in the official plan as provided for in policy 2.1.3 for additional land to accommodate the proposed use; and

4. alternative locations have been evaluated, and i. there are no reasonable alternative locations which avoid prime agricultural areas; and ii. there are no reasonable alternative locations in prime agricultural areas with lower priority agricultural lands."

Section 4.5.3.2 states:

"*Impacts from any new or expanding non-agricultural uses on the agricultural system are to be avoided, or where avoidance is not possible, minimized and mitigated as determined through an agricultural impact assessment or equivalent analysis, based on provincial guidance*."

The Subject Lands and most of the Study Area are within a prime agricultural area. The proposed extraction area is mapped as primarily class 4 agricultural land which does not meet the definition of prime agricultural land, however, the Official Plans for both Middlesex County and Municipality of Thames Centre designate the subject lands as "prime agriculture". As defined by the PPS, prime agricultural areas may include prime (i.e., class 1-3) and non-prime (class 4-7) agricultural lands.

Natural heritage features, most notably the Dorchester Swamp located south and east of the site, are also prominent in the area. As noted in the site description, there are also existing active sand and gravel pits located to the north and east of the proposed expansion.

Section 4.5.4 of the PPS states

"1. In prime agricultural areas, on prime agricultural land, extraction of mineral aggregate resources is permitted as an interim use provided that: a) impacts to the prime agricultural areas are addressed, in accordance with policy 4.3.5.2; and b) the site will be rehabilitated back to an agricultural condition.

2. Despite policy 4.5.4.1.b), complete rehabilitation to an agricultural condition is not required if: a) the depth of planned extraction makes restoration of pre-extraction agricultural capability unfeasible; and b) agricultural rehabilitation in remaining areas is maximized."

The Rehabilitation Plans outline the details of the proposed restoration of the site which will include a pond and meadow sideslopes. The depth of the planned extraction precludes rehabilitation to an agricultural condition without a substantial volume of backfill. Approximately 45 percent or almost half of the aggregate resource in the proposed expansion is below the water table. For aggregate applications, MNR defines "below the water table" as extraction that occurs within 1.5 metres of the maximum predicted groundwater table.

2.2 Middlesex County Official Plan

The Middlesex County Official Plan was approved under Section 17 of the Planning Act with Ministry modifications on July 7, 2023. The Plan directs and guides the County in land use policy and physical planning on a broad basis. It establishes an upper-tier policy framework that provides guidance to local municipalities in the preparation of local official plans and zoning by-laws. The Plan contains specific land use policies for Settlement Areas, Agricultural Areas, and Natural Environment Areas. It also provides a policy framework for issues such as Resource Management, Growth Management, and the provision of Physical Services, such as transportation facilities. The County Official Plan provides a framework for more detailed strategies, policies, and land use designations in local official plans.

Agriculture is the predominant land use and economic mainstay in the County. Consequently, the protection of the farming community and agricultural land represent major thrusts in the policies of this the County Official Plan. All of the land within the County is designated Agricultural Area save and except identified Settlement Areas on Schedule 'A' Land Use. Local Official Plans identify specific land uses in greater detail. All of the Agricultural Area in the County is determined to be Prime Agricultural Areas as defined by the Provincial Policy Statement.

Aggregate extraction is only permitted in the Agricultural Area as an interim use where the site will be rehabilitated back to an agricultural condition in which substantially the same areas and same average soil capability for agriculture are restored. The County Official Plan also acknowledges the significance of aggregates to the local economy and the fact that they are a non-renewable resource. It suggests that primary deposits be developed that have minimal impact and constraints with respect to agricultural land and the natural environment.

The proposed pit expansion is within an area of agricultural and mineral extractive land uses. The phasing of extraction and progressive rehabilitation of the site are informed by the technical reports and are designed to minimize impacts of the proposed pit operations.

2.4 Municipality of Thames Centre Official Plan (OP)

The Thames Centre Official Plan recognizes the importance of agriculture to the local economy and sets out policies to protect agricultural lands. Mineral aggregates are also recognized as an important resource in the area. The Official Plan sets out that aggregate resources should be developed in an appropriate manner which limits their impact on surrounding areas. Areas of extraction shall be progressively rehabilitated and returned to their former use, either agriculture or natural environment (OP Section 3.3.4).

The Trafalgar Pit Expansion property is currently designated as "Agricultural" in the Thames Centre Official Plan (see **Figure 5**). The property is also identified as a "Aggregate Resource Area" on Appendix 3 of the Official Plan (see **Figure 6**).

The proposed expansion is for below water extraction, and the lands will be rehabilitated to pond with meadow side slopes. The depth of the resource below the water table precludes complete rehabilitation to an agricultural after use (OP Section 3.3.3.3).

The proposed rehabilitation of the site is consistent with provincial and municipal policies and allows for the interim use of the site for aggregate extraction while returning the lands to an appropriate use once extraction is complete. Paton Bros has a excellent record of successful agricultural rehabilitation at their aggregate operations. The existing Trafalgar Pit is currently undergoing progressive rehabilitation in accordance with the approved Site Plans.

2.5 Municipality of Thames Centre Zoning By-law

The Township implements its Official Plan policies and regulates land uses through its Zoning By-Law. Zoning By-law 75-2006, as Amended. **Figure 7** shows the current zoning schedule for the site.

Applications for zoning by-law amendments have been submitted to rezone the lands from "Agricultural" (A) Zone to Extractive Industrial (M3) Zone to permit the establishment of the proposed Expansion Pit.

3.0 Study Area and Methodology

The Study Area for the AIA includes a Primary Study Are and a Secondary Study Area that have been established in accordance with the OMAFA AIA Guidelines. **Figure 3** shows the Study Areas.

3.1 Primary Study Area

The Primary Study Area includes all lands/properties which are potentially directly impacted by the proposed aggregate extraction operation. This includes the Subject Lands (e.g. the proposed licensed area) and any lands immediately adjacent (e.g. 120 m) to the licensed area which are potentially directly impacted by the operation (e.g. changes to surface drainage patterns).

3.2 Secondary Study Area

The Secondary Study Area includes the lands that could potentially be affected by indirect impacts of the proposed aggregate operation. For this study, the Secondary Study Area includes all lands within a minimum of 1.0 km of the Subject Lands. The Secondary Study Area also includes the haul route to assess whether changes to the proposed use of or upgrades to a local road may have an impact on agricultural operations.

3.3 Study Methodology

The study methodology involves a review of background information and site-specific information collected through field inventories. The background information includes information obtained through a review of planning documents and information provided by Study Team members; a review of existing published documents to obtain soil and climate resource and drainage information; a review of agricultural systems mapping; and a review of the lot fabric within the Study Area.

The field inventories included a land use survey of the surrounding area to identify agricultural operations, relative levels of agricultural investment, cropping patterns and mix of land uses.

4.0 DESCRIPTION OF SOILS AND LANDS

4.1 Physiography

The physiography of Southwestern Ontario was altered significantly by the glacial and interglacial periods that took place throughout the Quaternary period. The overburden deposits which are present in the study area were formed by numerous glacial events during the late Wisconsinan glacial stage approximately 10,000 to 23,000 years before present. There were two distinct glacial lobes present in Southwestern Ontario during this period. The Huron Lobe advanced from Lake Huron southwards, and the Erie Lobe advanced from the northeast, receding to the east.

During the advancement of the glacial ice sheets, bedrock and unconsolidated sediments were eroded. During the recession of the glaciers, the eroded materials were deposited in lakes, rivers and along spillways, contributing to the present configuration of moraines, abandoned spillways, drumlins, eskers, abandoned shorelines, and various still water sediment deposits.

The surficial deposits were mapped and categorized into a number of physiographic regions by Chapman and Putnam. The Site is part of a physiographic region known as the Oxford Till Plain and is also mapped as a drumlinized till plains landform in the eastern portion of the Site and spillways in the western portion of the Site. This region is characterized by three valley systems cut by meltwaters, and the presence of drumlins arranged in a northwesterly orientation (Chapman and Putnam 1984).

4.2 Surficial Geology

The proposed area to be licensed and zoned for extraction is within an ice-contact, stratified drift deposit, identified in the Aggregate Resources Inventory Paper for Middlesex County (ARIP 078) as an area of primary significance. The deposit consists of sand and gravel, and the material is suitable for a range of construction products including Granular A and Granular B, winter sand, and sand fill products.

4.3 Surface Drainage Features

There are no surface water features (creeks, drainage channels, ponds or wetlands) within the proposed licence area. On-site sheet-flow runoff would follow the ridge slope, moving off-site,

primarily to flat lying agricultural fields (to the north and south), where additional infiltration is expected.

4.4 Soil Resources

The site is mapped as comprising two soil units, with the Caledon soil series representing approximately 70% of the site and the Brisbane soil series representing approximately 30%. The available CLI mapping identifies the soils as having sandy loam surface textures, with differences in slope, drainage and agricultural capability between the two units.

Soil Characteristics and CLI Agricultural Capability (see Figure 9)

Characteristic	Caledon	Brisbane
Approximate site proportion	70%	30%
Surface texture	Sandy loam	Sandy loam
Slope	12%	3.5%
Slope range	9–15%	2–5%
Slope class	E	C
Surface stoniness	0	0
CLI agricultural capability	Class 4	Class 2
CLI limitations	T – Topography	F – Low natural fertility; M – Moisture deficiency

The Caledon soil unit occupies approximately 70% of the site. The mapped soil has a sandy loam surface texture and occurs on slopes ranging from approximately 9 to 15%, with an average mapped slope of 12% (slope class E). Surface stoniness is recorded as zero. The soil is identified as well drained and is assigned a Class 4 agricultural capability rating, with topography (T) identified as the principal CLI limitation.

The principal agricultural constraint associated with this soil unit is therefore the site's relatively steep topography. Slopes in the 9–15% range can limit the suitability and efficiency of conventional agricultural operations, particularly with respect to machinery access and operation. Sloping terrain may also increase the potential for surface runoff and soil erosion where the soil is cultivated or otherwise left exposed. Accordingly, the Class 4 designation indicates that the soil has more significant limitations for agriculture than the Class 2 Brisbane soil mapped elsewhere on the site.

The Brisbane soil unit occupies approximately 30% of the site. It has a sandy loam surface texture and occurs on relatively gentle slopes ranging from approximately 2 to 5%, with an average mapped slope of 3.5% (slope class C). Surface stoniness is recorded as zero. The soil is identified as imperfectly drained and has a Class 2 agricultural capability rating. The mapped CLI limitations are F (low natural

fertility) and M (moisture deficiency).

The relatively gentle slopes of the Brisbane soil present less of a topographic constraint to agricultural operations than the Caledon soil. However, the mapped F and M limitations indicate constraints associated with soil fertility and moisture availability. These characteristics can affect crop productivity and may require appropriate agricultural management, including nutrient management and practices intended to maintain soil moisture during periods of limited precipitation.

Overall, the site contains soils with moderate to significant agricultural limitations, with the principal constraints differing between the two mapped soil units. The Caledon soil (70%) is Class 4T, with topography representing the principal limitation, whereas the Brisbane soil (30%) is Class 2FM, with low natural fertility and moisture deficiency identified as the principal limitations.

The distribution of the soil units is therefore relevant to interpretation of the site's agricultural capability. The larger Caledon component is characterized by steeper slopes and a correspondingly lower CLI capability class, while the Brisbane component occurs on gentler terrain but has limitations related to fertility and moisture availability.

Located in the southern limits of the project area is Burford sandy loam. This soil type is developed on gravelly glaciofluvial outwash deposits with cobble-sized coarse fragments present. Burford sandy loam is characterized as rapidly draining. Thorndale loam is present in the northwest of the project area and is developed on level to undulating topography comprising loamy till. Higher gravel content consisting of cobbles and stones is typical. Thorndale loam is characterized as imperfectly draining with a high moisture holding capacity.

At the present time, the site is in agricultural use, with the majority of the site cultivated for cash crops (see figure 2 - photo). The yields for the property in 2023 were 152 bushels/acre of corn and 38 bushels/acre of beans in 2024, which is below average for the local area reported by the ministry reports. Extraction will extend below the groundwater table on the majority of the property with final rehabilitation of the site to a pond with meadow sideslopes.

Soil sampling was undertaken on the site in 2024 with samples analysed at A & L Laboratories. Results of the soil sampling are provided in Appendix B. The soil texture is predominantly sand (88%) and soil ph is 7.5. The soil samples showed medium levels of sodium, potassium and magnesium and high levels of calcium.

4.5 Canada Land inventory (CLI) Agricultural Classification

According to the OMAFA AgMaps database, the Canada Land Inventory mapping shows that the majority of the area to be licensed is class 4. (see **Figure 9**). Class 4 soils generally have limitations

that restrict the range of crops or require special conservation practices, or both. The 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. The soils are low to fair in productivity for common field crops but may have higher productivity for a specially adapted crop.

In Ontario, class 1-3 agricultural lands are considered "prime agricultural" lands. Although the site soils do not meet the criteria to be considered prime agricultural land. the County and Township Official Plan mapping identifies this site as being within a prime agricultural area, which can include a range of prime agricultural land and non-prime agricultural lans. Provincial and local planning policies allow aggregate extraction within prime agricultural areas, as an interim land use, subject to meeting the policies set out in the planning documents.

The rehabilitation plans for the Trafalgar Street pit expansion are designed to ensure that agricultural uses can continue areas of the property that are not actively being extracted and ensures that the progressive rehabilitation maximizes agricultural rehabilitation. The proposed extraction below the water table precludes rehabilitation to an agricultural after use; however, the PPS provisions do not require complete rehabilitation to an agricultural use where there is a substantial quantity of materal below the water table. The final rehabilitation of the pit will restore the site to a pond with side slopes and will be compatible with the surrounding landscape.

4.6 OMAFRA Agricultural Systems Portal

A review of the OMAFRA Agricultural System Portal noted that there were no farmers markets, pick your own, nurseries, specialty farms, frozen food manufacturing, refrigerated warehousing/storage, livestock assets or abattoirs within the Study Area. The closest roadways are Trafalgar Street, and Hunt Road, and there are no major highways in the immediate area.

4.7 Statistics Canada Census of Agriculture Review

The information available on the Statistics Canada Census for Agriculture was reviewed to obtain a more complete picture of the agricultural landscape in Thames Centre and Middlesex County. The most recent data available is for 2021 and data for 2011 and 2016 was reviewed to identify trends (See **Appendix 1** for data tables).

Middlesex has some of the richest agricultural lands in Southwestern Ontario and has direct access to two major border crossings to the United States. Data compiled by OMAFA has illustrated that agricultural abundance and innovation are key contributors to Middlesex County's communities and economy. Agri-business represents more than a quarter of all enterprises in Middlesex County with a total of $552 million worth of goods produced each year.

Middlesex County's 2,352 farms are comprised of 246,592 hectares of farmland and in addition to crops, include an abundant and prosperous variety of cattle, pork, poultry and egg operations. The complexion of agriculture in the County of Middlesex has changed somewhat in the last decade. However, corn, soybeans, swine, dairy, and poultry, have remained key staples over the years. In addition, field vegetables are also key.

According to the Agriculture Census Data for 2021, Thames Centre has 382 farms which represents just over 15% of the farms in Middlesex County and , and approximately 75,000 acres of farmland or 12% of the Total Farm area in the County. Between 2016 and 2021, the total number of farms in Thames Centre has increased by 5% from 364 to 382. However, the Total Farm area has decreased from 82,774 acres to 74,962 acres or 10%. Major field crops according to the census data are corn, soybeans, and winter wheat. Livestock inventories show a decrease in cattle and increase in pigs and poultry over this period.

The expansion lands have produced the following crop yields for the 2024 and 2023 year respectively:

- 38 bushels/acre of beans for 2024
- 152 bushels/acre of corn for 2023

In 2024, the estimated average Ontario corn yield was about 204 bushels per acre, while the average soybean yield was approximately 53 bushels per acre, according to Agricorp data. Middlesex County yeilds for 2024 were slightly lower than the provincial average, with reports of 196 bushels per acre for corn and 52 bushels per acre for soybeans. The yields on the proposed expansion lands are substantially lower than the average yeild for the County. This is consistent with the soils on the site which are of lower capability for agriculture.

4.8 Land Use Characteristics

The Primary Study Area consists of lands within 120 m of the proposed pit expansion. The land uses in the Primary Study Area consist mainly of row crop production, rotating between corn and soybeans.

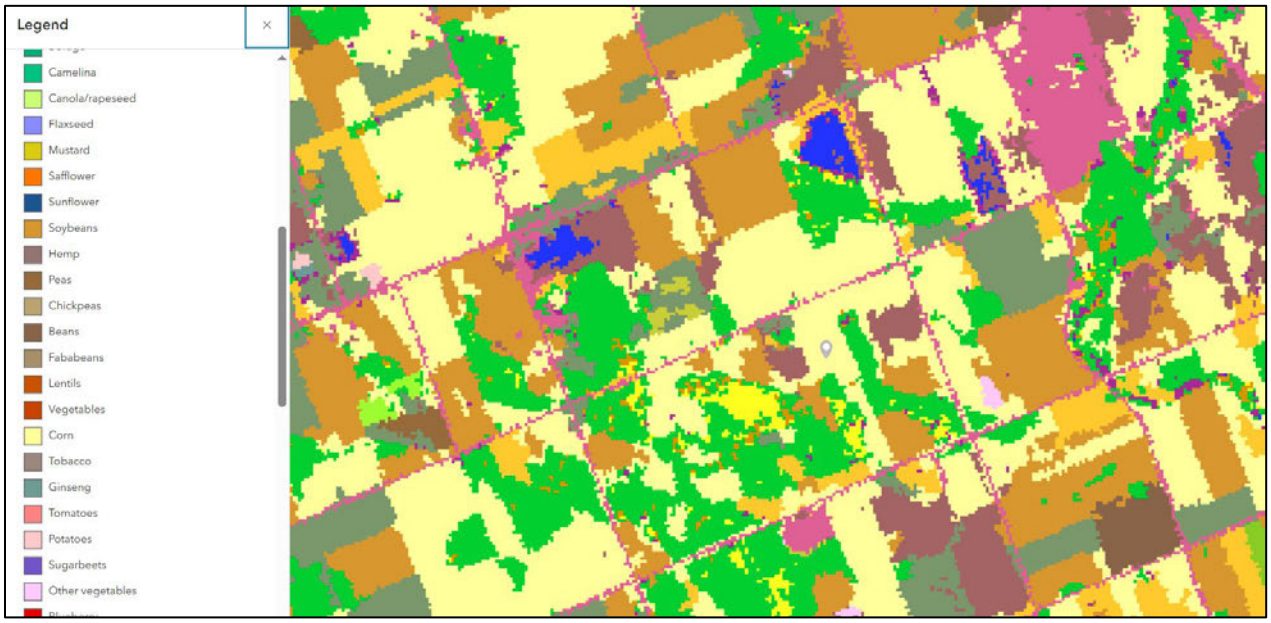
Land use in the Secondary Study Area is characterised by agricultural and aggregate uses and natural heritage features. There are active farm operations to the east and north of the proposed expansion. There are also a natural heritage features in the vicinity. All of these land uses have co-existed with the pit operations in the area for several years. There are no specialty crops grown within the Study Area.

4.9 Agricultural Investment

Investment in agricultural land improvements is common in prime agricultural areas. These land improvements often include investment in artificial tile drainage installations and major investments such as the construction of municipal drains which benefit the broader agricultural community. In areas with imperfectly and poorly drained soil such as those in the study area, the installation of artificial drainage can significantly improve the productivity of the soil. According to OMAFA's AgMaps there are no municipal drains or agricultural tile drainage areas are mapped in the Study Area.

Agricultural facilities in the Study Area were identified through the Agricultural Systems Portal mapping, together with aerial photographic interpretation, and roadside evaluations. The Agricultural Systems Portal contains mapping information on agricultural production, land use, and the agri-food network. Based on the mapping there are no agri-food system facilities within the Primary or Secondary Study Area.

Agriculture and Agri-Food Canada (AAFC) annual crop inventory mapping. 2023



5.0 Assessment of Impacts to Agriculture

The PPS requires that impacts from any new or expanding non-agricultural uses on surrounding agricultural operations and lands be mitigated to the extent feasible.

5.1 Loss of Agricultural Resources

The proposed below water extraction will result in the loss of approximately 9 ha of agricultural land. In the short term, while extraction is being undertaken, the phasing of the operation will allow for agricultural uses to continue in areas that are not being extracted, minimizing the short term loss of agricultural lands. The site will be progressively rehabilitated as outlined on the Site Plans.

According to the 2021 Agriculture and Food Statistics data (StatsCan) the area of farmland in Thames Centre is 30,336 hectares. At the municipal level, the Trafalgar Pit Expansion will result in the loss of approximately 0.02 percent of the farmland area in Thames Centre.

Thames Centre currently has 36 licenced aggregate operations with a total licenced area of 1,065 hectares, according to the provincial ALPS database. 60 percent of the licences are permitted to extract from below the water table. Conservatively, the total below water extraction area in the municipality is approximately 644 hectares. A detailed examination of all of the site plans for the municipality is outside the scope of this report, however, if all of the below water licences were located on farmland, the corresponding loss of farmland, as a cumulative total, would be approximately 2 percent. The Trafalgar Pit Expansion would add 0.01 percent to this total. The cumulate impact can be considered as minor.

The Trafalgar Street Pit and the proposed areas of expansion are managed by Paton Bros. The proposed expansion area is currently being farmed, and farming will continue on the portions of the property that are not actively being extracted. This will minimize the impact of the eventual long-term loss of the agricultural lands for common field crop production and the impact on the local agricultural system.

The Agricultural System Portal mapping shows a relatively low level of agricultural investment and few components of the agri-food network within the study areas. As a result, the proposed pit expansion will have a low impact on agriculture and agri-food industry.

5.2 Impacts to Agricultural Operations

Farm operations can be adversely impacted by new non-farm development on adjacent lands. The Subject Lands are not located near other active agricultural operations which greatly reduces the potential for disruption to farm operations.

Extractive industrial uses have the potential for increases in noise, vibration, dust and truck haul traffic within the Study Area. These issues have been addressed in detail in separate reports by other consultants. Because there are few agricultural operations in close proximity to the proposed pit expansion, increases in noise, vibration, dust and truck traffic are not expected to have a significant impact on agriculture or agri-food businesses in the area.

Farm operators can be adversely affected by increases in the volume of trucks on roads commonly used to move farm implements. The proposed pit expansion will utilize an existing entrance and haul route and will not generate additional truck traffic. The tonnage limit for the proposed expansion will be combined with the limit for the existing pit operation with no corresponding increase in truck traffic.

5.3 Dust Impact

There are a number of typical sources of fugitive dust emissions resulting from mineral aggregate operations including: on-site traffic on Internal roads, material stockpiles, loading / unloading areas, material conveyance system; crushing and screening equipment; and active pit faces.

The ARA sets provincial standards for dust control in pits and quarries (see below). All new licences must adhere to the prescribed conditions as set out in the ARA provincial standards:

- Dust will be mitigated on site;
- Water or other provincially approved dust suppressants will be applied to internal haul roads and processing areas as often as required to mitigate dust;
- Processing equipment will be equipped with dust suppressing or collecting devices, where the equipment makes dust or is operated within 300 metres of a sensitive receptor; and
- If required, an environmental compliance approval (ECA) will be obtained from the processing equipment to be used on site.

The Site Plans for the proposed Trafalgar Extension Pit have been designed to minimize the open areas which are potential dust sources. In addition, the Operations Plan requires that vegetation be installed on all berms to reduce dust on site. The haul roads within the pit are treated with dust

suppressants when required. Only MECP approved dust suppressants are used, the most common of which is water.

The proposed extension will not increase the processing capacity of the existing pit operations, and no new equipment will be added as a result of the pit extension. Sand and gravel will be extracted from the expansion area by front end loader and transferred to the processing plant, which will remain on the existing licence. A berm will be constructed along the boundaries of the pit expansion, which will act as a wind break.

As a result, it is not anticipated that dust will have an impact on surrounding local agricultural uses.

5.4 Water Resources

Management of water resources is an important consideration for farm operations, particularly for watering field crops and livestock. Changes to the hydrologic and/or hydrogeologic conditions in the area surrounding the subject lands could have a negative impact on farm operations and crop yields.

The proposed aggregate operations on the subject lands are below the water table. No water taking or pumping of water is proposed. A Hydrogeology Report was prepared by Groundwater Science Corp. and has concluded that there will be no impact on the domestic water wells in the area as a result of the proposed expansion.

Given the conclusions of the Hydrogeology report and the types of crops and livestock operations within the study area, it is not anticipated that the surrounding agricultural operations will be impacted from a groundwater or surface water resource perspective. No water taking or any significant changes to the local drainage patterns/features are proposed as a result of the proposed operation.

5.5 Traffic

The proposed pit will operate as an extension of the existing pit and the truck traffic volumes to and from the pit operation are not expected to change. The existing entrance and established haul route will also remain unchanged. The majority of the shipments from the expansion will be on existing haul routes which are designed to carry truck traffic. The proposed expansion is not expected to have any additional impact on agricultural traffic or farm vehicle movement in the area.

6.0 Mitigation Measures

The Provincial Planning Statement (PPS 2024) states that planning authorities may permit the extraction of mineral aggregate resources in prime agricultural areas (PPS Section 4.3.5.1 a)

Section 4.3.5.2 states that "*Impacts from any new or expanding non-agricultural uses on the agricultural system are to be avoided, or where avoidance is not possible, minimized and mitigated as determined through an agricultural impact assessment or equivalent analysis, based on provincial guidance*".

6.1 Avoidance

Any change in land use within or adjacent to an identified or designated prime agricultural area will result in the potential for impacts to the adjacent agricultural area. The severity of the potential impacts is related to the type and size of the change in land use, and the degree of agricultural activities and operations in the surrounding area.

The first method of addressing potential impacts is to avoid the potential impact. In this study, the proposed aggregate pit will be an interim use of agricultural lands in an agricultural area. The lands will be restored to a pond with wetland areas and meadow sideslopes as part of the phased rehabilitation plan. Given the extent of prime agricultural lands in Middlesex County and given that this proposal is for an expansion of an existing pit operation, opportunities to avoid prime agricultural areas are not available. As previously noted, while the lands are designated as prime agricultural, the soil class is primarily class 4.

6.2 Minimizing Impacts

When avoidance is not possible, the next priority would be to minimize impacts to the extent feasible. Mitigation measures should be developed to lessen the potential impacts. The minimization of impacts can be achieved during the design process and through proactive planning measures that provide for the separation of land uses.

In the short term, the Subject Lands will continue to be used for agriculture until such time as the aggregate extraction commences. The phasing of the pit will maintain lands in agricultural use during pit operations as much as possible. In the long term the creation of a pond on the site will result in the long term loss of approximately 9 ha of farmland for crops. The Subject Lands will maintain the agricultural designation and be returned to a use that is compatible with the surrounding agricultural area.

6.3 Mitigating Impacts

When avoidance techniques and minimizing impacts potential impacts to agriculture have not achieved the desired effect the next priority is to mitigate any further impact. With respect to this study and the Subject Lands, Mitigation Measures will include the use of berms and fencing to provide separation and physical barriers to reduce trespassing and potential vandalism, and for sound attenuation.

7.0 Rehabilitation

The proposed pit expansion will be rehabilitated back to a pond and meadow side slopes as shown on Figure 10. Rehabilitation will be coordinated with the adjacent Trafalgar Pit, which is being progressively rehabilitated back to an agricultural use.

Progressive rehabilitation is a requirement of the Aggregate Resources Act. In the early stages of the operation, stripped soils and overburden will be stored separately in berms. Stripping will be limited to what is required for a season of operations. This practice reduces the area that is disturbed at any one time and reduces the time that land is out of agricultural production. It also reduces double handling of soil materials.

8.0 Conclusions

The purpose of the AIA is to characterize the agricultural features of the Study Area, identify potential impacts to those features, and recommend mitigation measures to eliminate, reduce or mitigate identified impacts. This AIA has described the land uses, agricultural investments, and activities, and components of the agri-food system within the Subject Lands and the broader Study Area.

The subject lands are currently in common field crop production and are leased by a single farmer who will continue to farm the lands until required for extraction purposes. No active livestock operations were identified in either the Primary Study Area (i.e., the Subject Lands) or within the Secondary Study Area.

The proposed Trafalgar Expansion Pit will not result in a significant negative impact on the long-term agricultural uses and operations on the subject lands and within the study areas. This opinion recognizes the following:

- Mineral aggregate extraction is a permitted use within prime agricultural areas in accordance with provincial policy.
- The subject lands are not within a specialty crop area.

- The properties will be rehabilitated back to a use that is compatible with the surrounding agricultural area
- No new haul routes are being created and existing truck traffic to/from the existing aggregate operations is not changing as a result of the proposed expansion.
- No impacts are anticipated on the availability of groundwater resources for the continued operation of surrounding agricultural uses.
- Impacts from dust, noise and visibility will be mitigated through implementation of prescribed conditions and technical requirements / recommendations and berming.
- The rehabilitation plan is designed to ensure a successful agricultural rehabilitation process.

In my professional opinion, based on this assessment, the proposed Trafalgar Expansion Pit is consistent with the Provincial and municipal agricultural policies.

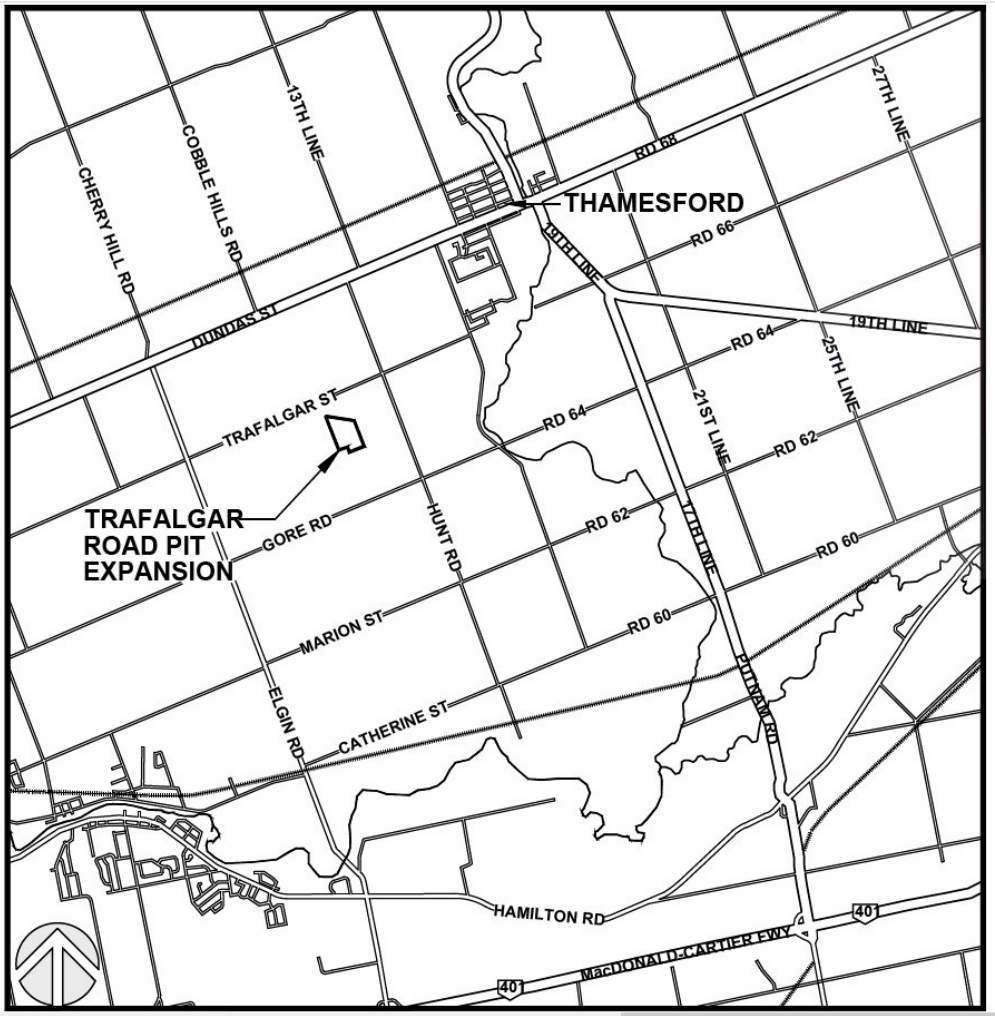
Prepared By:

[redacted]

Melanie Horton, MCIP, RPP
Esher Planning Inc.
Revised September 24, 2026

FIGURES

FIGURE 1: LOCATION



PATON AGGREGATES & SOILS LTD

TRAFALGAR EXPANSION PIT

Part Lot 17, Concession 2, NTR
Municipality of Thames Centre, Middlesex County

N

FIGURE 2: SURROUNDING LANDS

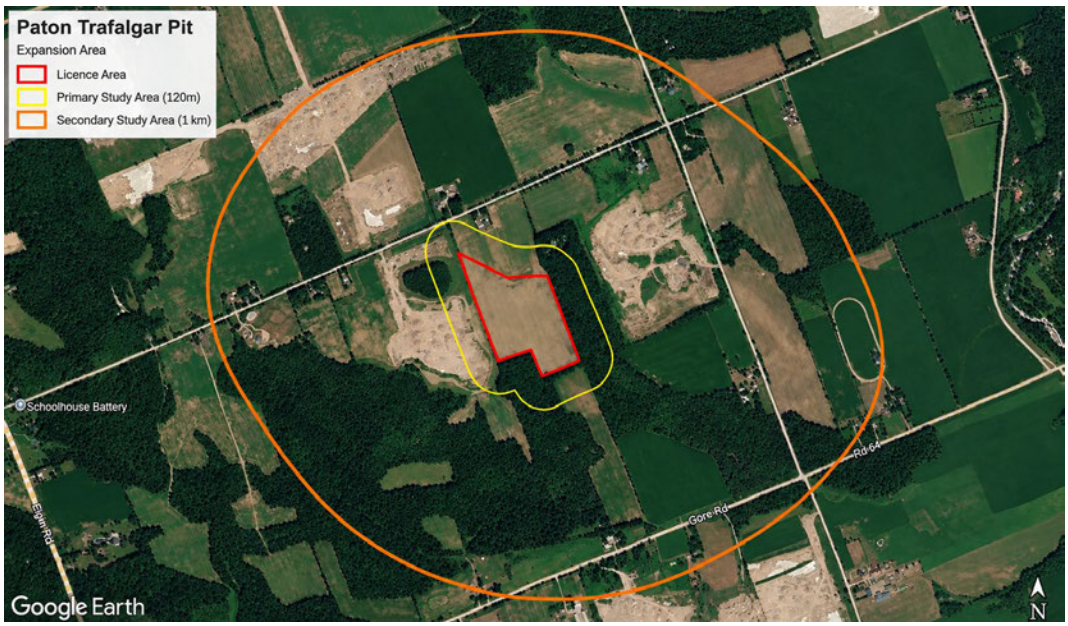
PATON AGGREGATES & SOILS LTD

TRAFALGAR EXPANSION PIT

Part Lot 17, Concession 2, NTR
Municipality of Thames Centre, Middlesex County

N

FIGURE 3: AIA STUDY AREAS



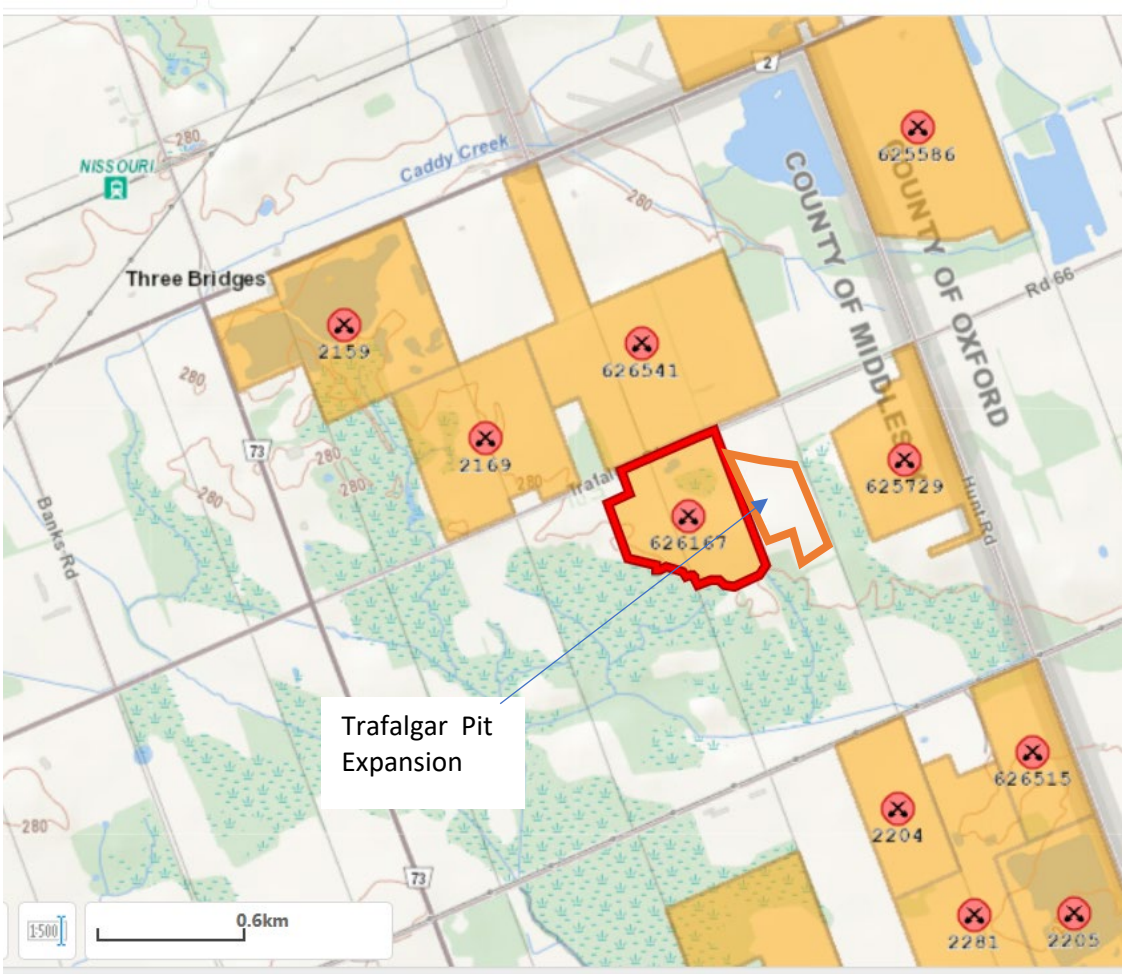
PATON AGGREGATES & SOILS LTD

TRAFALGAR EXPANSION PIT

Part Lot 17, Concession 2, NTR
Municipality of Thames Centre, Middlesex County

N

FIGURE 4: GRAVEL PIT LICENCES



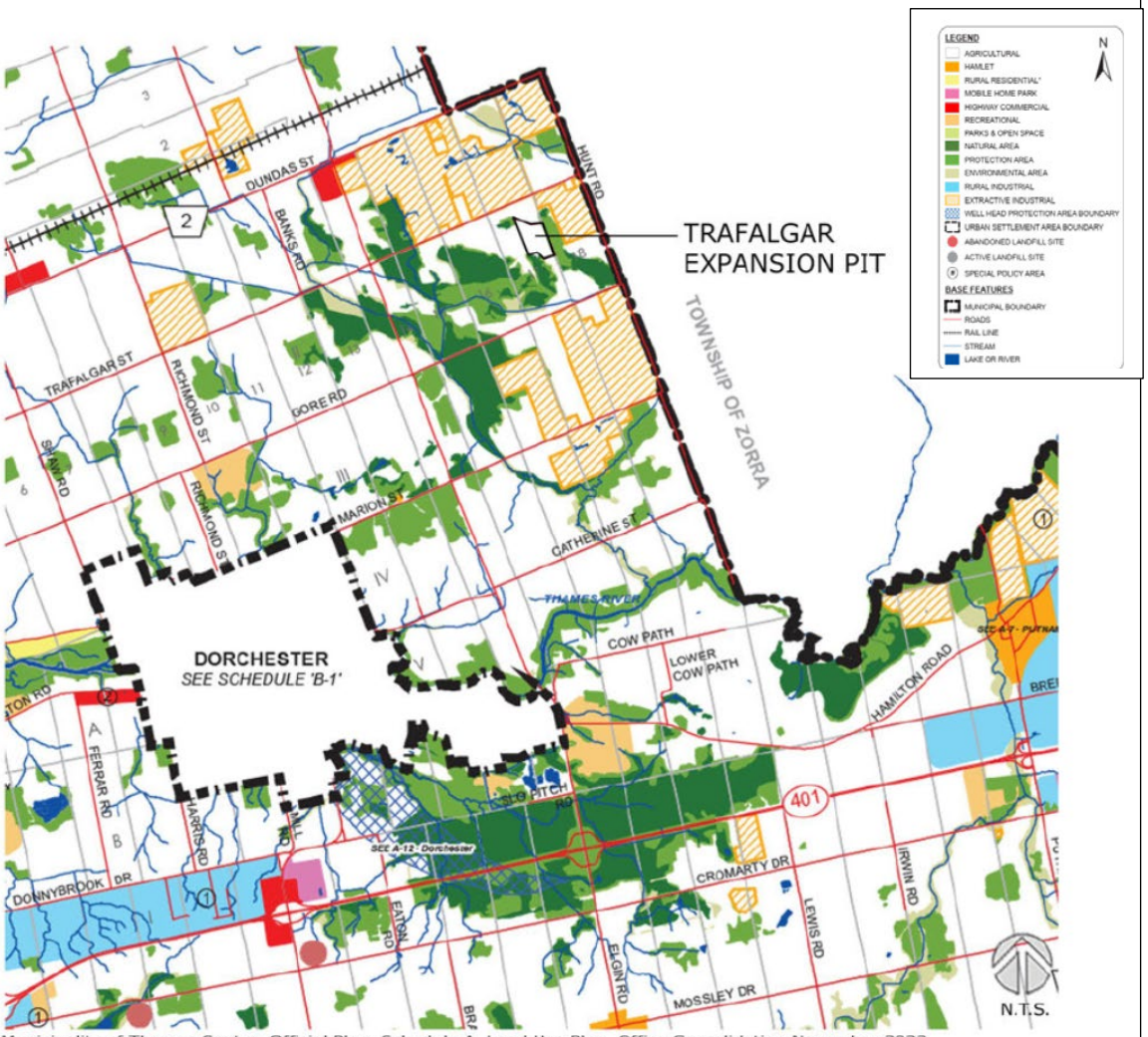
PATON AGGREGATES & SOILS LTD

TRAFALGAR EXPANSION PIT

Part Lot 17, Concession 2, NTR
Municipality of Thames Centre, Middlesex County

N

FIGURE 5: THAMES CENTRE OFFICIAL PLAN LAND USE SCHEDULE A



Municipality of Thames Centre, Official Plan, Schedule A, Land Use Plan, Office Consolidation November 2022

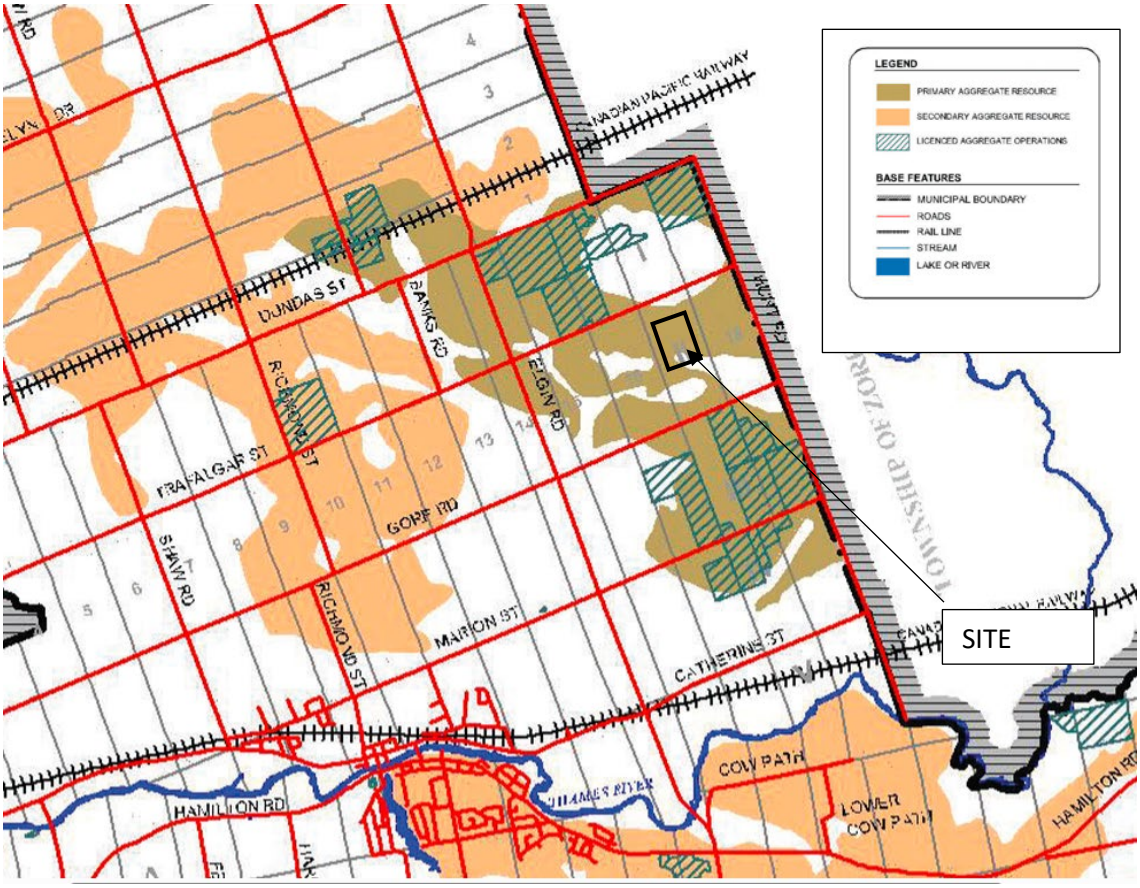
PATON AGGREGATES & SOILS LTD

TRAFALGAR EXPANSION PIT

Part Lot 17, Concession 2, NTR
Municipality of Thames Centre, Middlesex County

N

FIGURE 6: THAMES CENTRE OFFICIAL PLAN AGGREGATE RESOURCES MAP (Appendix 3)



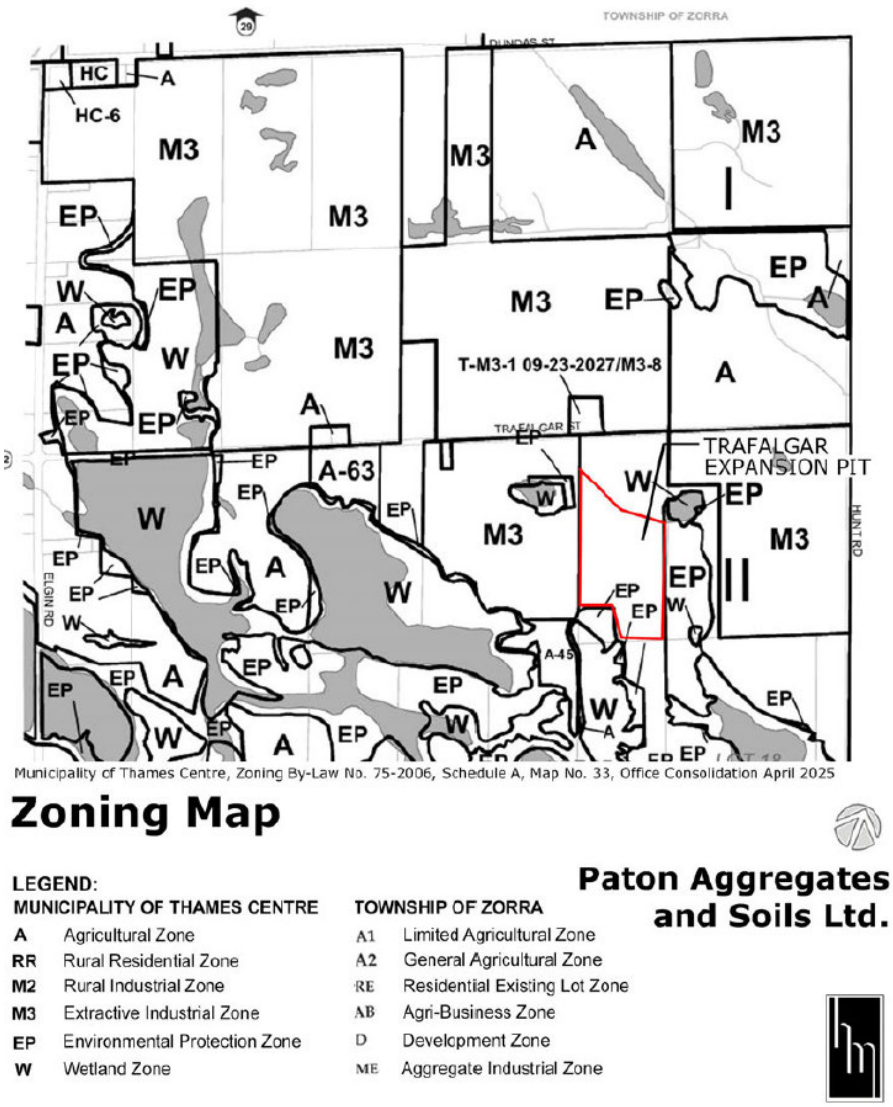
PATON AGGREGATES & SOILS LTD

TRAFALGAR EXPANSION PIT

Part Lot 17, Concession 2, NTR
Municipality of Thames Centre, Middlesex County

N

FIGURE 7: MUNICIPALITY OF THAMES CENTRE, ZONING



PATON AGGREGATES & SOILS LTD

TRAFALGAR EXPANSION PIT

Part Lot 17, Concession 2, NTR
Municipality of Thames Centre, Middlesex County

N

FIGURE 8: SOILS MAPPING

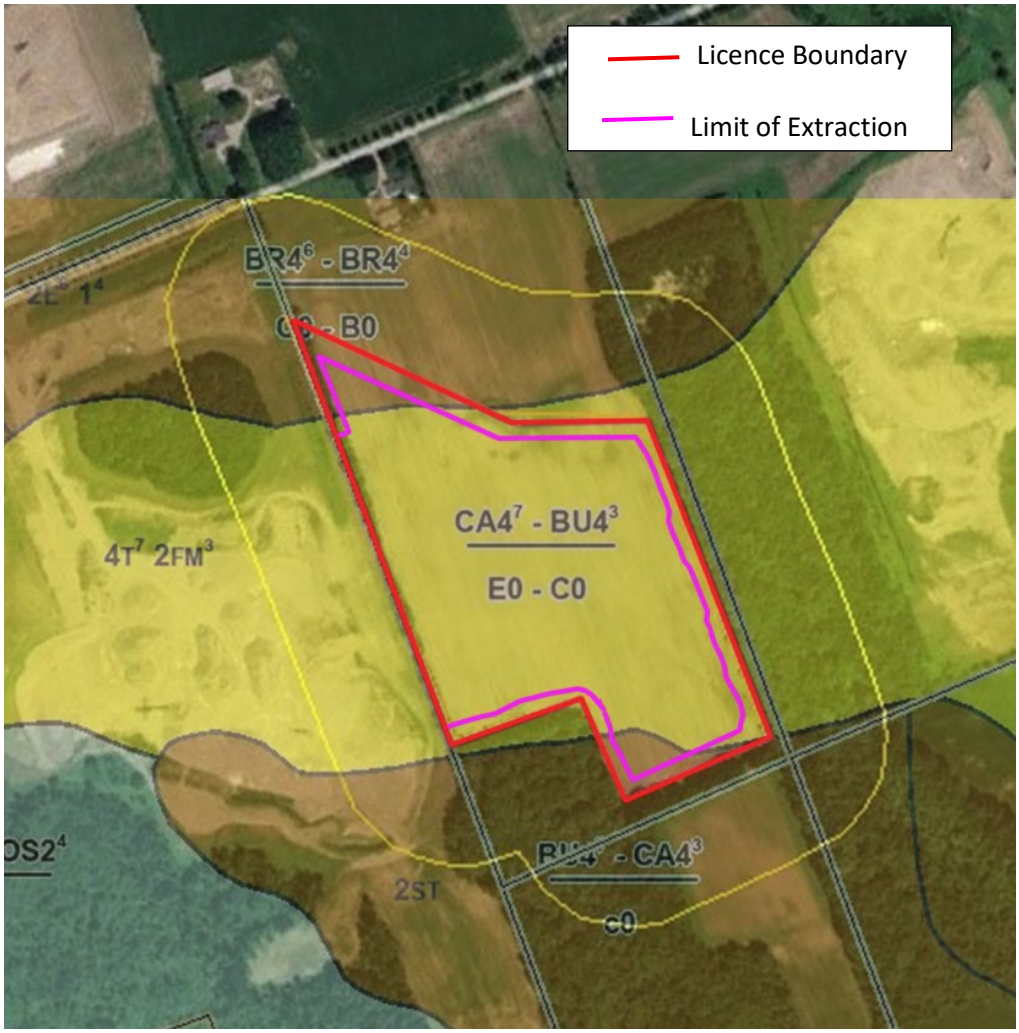
PATON AGGREGATES & SOILS LTD

TRAFALGAR EXPANSION PIT

Part Lot 17, Concession 2, NTR
Municipality of Thames Centre, Middlesex County

N

FIGURE 9: SOIL CAPABILITY FOR AGRICULTURE (CANADA LAND INVENTORY MAPPING)



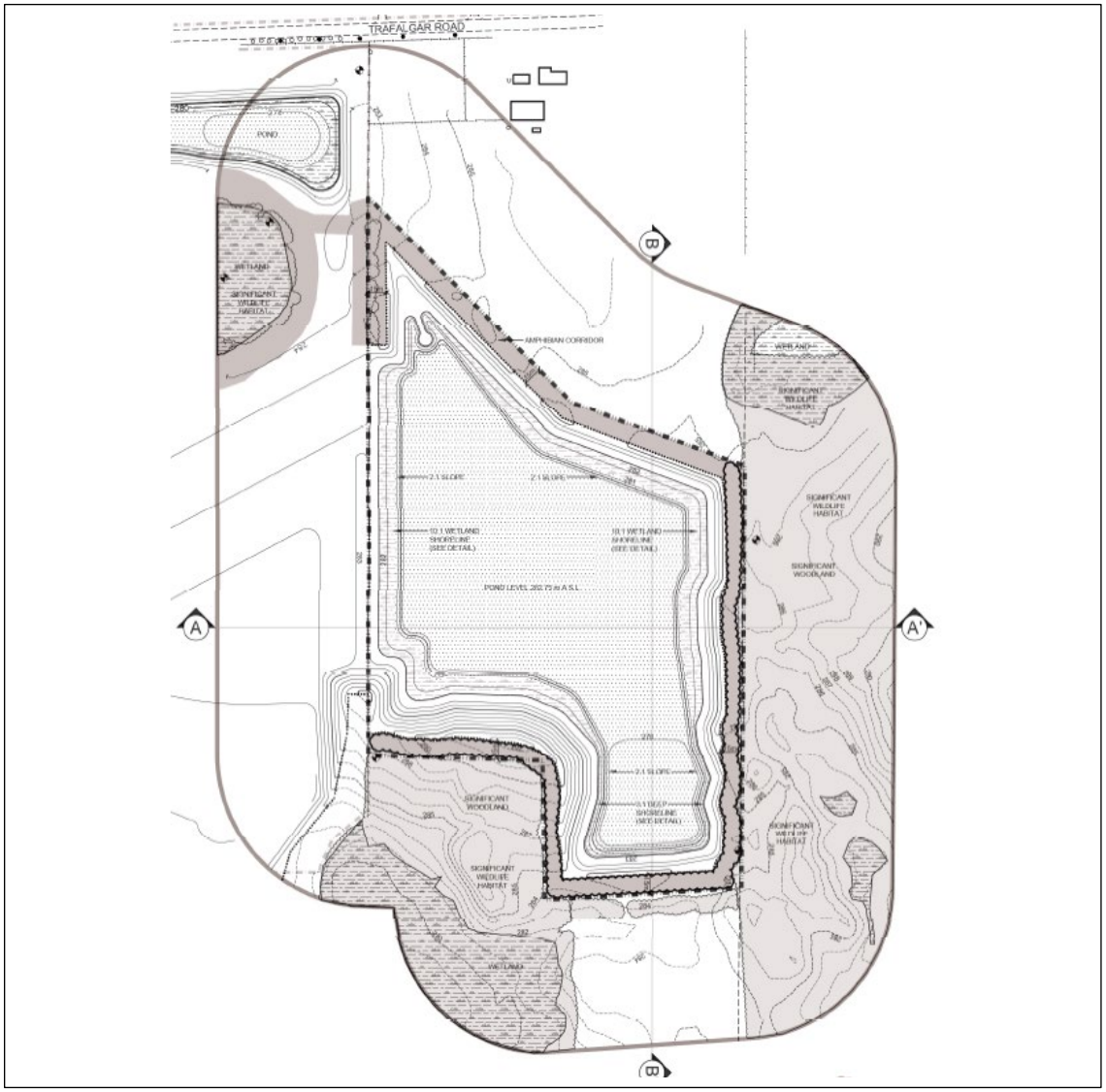
PATON AGGREGATES & SOILS LTD

TRAFALGAR EXPANSION PIT

Part Lot 17, Concession 2, NTR
Municipality of Thames Centre, Middlesex County

N

FIGURE 10: REHABILITATION PLAN



PATON AGGREGATES & SOILS LTD

TRAFALGAR EXPANSION PIT

Part Lot 17, Concession 2, NTR
Municipality of Thames Centre, Middlesex County

N

APPENDIX 1

Agricultural Profile and Crop Yeilds

SOIL SAMPLING LOCATIONS

2024 Yield by County - Corn
Production Insurance

	Corn				
County Name	**No. of Contracts**	**Insured Acres**	**Yield/Acre* (bu/ac)**	**Average Farm Yield* (bu/ac)**	**Actual Yield % of AFY**
BRANT	101	28,621	196	175	112%
BRUCE	331	55,354	211	179	118%
CHATHAM KENT	825	134,090	224	207	108%
DUFFERIN	83	12,534	191	162	118%
DURHAM	131	46,579	204	167	122%
ELGIN	413	100,257	200	197	101%
ESSEX	331	39,969	221	190	116%
FRONTENAC	29	5,433	163	136	120%
GREY	128	25,860	192	161	119%
HALDIMAND	141	21,287	193	163	118%
HALTON	40	6,385	166	151	110%
HAMILTON	74	15,015	187	167	112%
HASTINGS	104	16,428	187	144	130%
HURON	876	158,288	217	193	113%
KAWARTHA LAKES	104	21,245	182	158	115%
LAMBTON	528	78,090	185	192	96%
LANARK	51	7,149	197	168	117%
LEEDS GRENVILLE	124	19,156	171	150	114%
LNNX ADDGTON	51	10,161	189	148	128%
MIDDLESEX	728	131,606	196	196	100%
NIAGARA	117	17,427	186	166	112%
NORFOLK	184	43,551	206	185	111%
NORTHUMBERLAND	130	25,909	190	161	118%
OTTAWA	177	47,475	205	178	115%
OXFORD	390	83,259	224	202	111%
PEEL	43	11,211	178	159	112%
PERTH	602	95,247	220	198	111%
PETERBOROUGH	73	12,193	186	148	126%
PRESCOTT RUSSEL	252	67,106	172	178	97%
PRINCE EDWARD	68	12,527	192	143	135%
RAINY RIVER	11	1,681	126	141	89%
RENFREW	106	16,163	187	145	129%
SIMCOE	186	47,096	205	169	121%
STOR,DUN,GLEN'Y	375	100,550	206	182	113%
TIMISKAMING	12	1,738	139	113	122%
WATERLOO	78	17,714	204	172	119%
WELLINGTON	262	46,890	205	178	115%
YORK	35	13,154	183	165	111%
OTHER	160	22,550	187	173	108%
TOTAL	**8,454**	**1,616,947**	**203**	**184**	**110%**

NOTE:

Data is as of March 14, 2025 and may be subject to change;

*Based on Fully Reported yields (97.7% of liability has been fully reported);

Due to privacy, Agricorp does not disclose information where there are less than 10 customers enrolled in a crop plan.

Counties with fewer than ten customers have been grouped as 'Other'. This includes:

ALGOMA MANITOULIN NIPISSING SUDBURY DIST THUNDER BAY TORONTO

2024 Yield by County - Soybeans
Production Insurance

	Soybeans				
County Name	No. of Contracts	Insured Acres	Yield/Acre* (bu/ac)	Average Farm Yield* (bu/ac)	Actual Yield % of AFY
BRANT	122	30,882	52	48	108%
BRUCE	412	97,539	53	49	108%
CHATHAM KENT	1,217	210,035	60	55	109%
DUFFERIN	110	23,770	48	43	111%
DURHAM	138	40,310	49	43	113%
ELGIN	433	96,768	55	52	104%
ESSEX	726	166,991	59	52	113%
FRONTENAC	42	12,791	49	39	126%
GREY	190	40,365	51	44	114%
HALDIMAND	304	85,162	54	43	125%
HALTON	45	18,193	42	39	110%
HAMILTON	84	23,588	50	45	113%
HASTINGS	148	22,453	50	40	125%
HURON	905	169,149	55	52	105%
KAWARTHA LAKES	133	33,655	47	41	117%
LAMBTON	1,093	227,356	47	51	94%
LANARK	56	11,714	55	45	120%
LEEDS GRENVILLE	135	25,733	50	43	116%
LNNX ADDGTON	68	18,280	51	39	130%
MIDDLESEX	779	143,267	52	52	101%
NIAGARA	237	69,829	51	42	121%
NIPISSING	18	2,769	51	43	120%
NORFOLK	235	43,136	56	48	115%
NORTHUMBERLAND	141	26,090	48	41	118%
OTTAWA	202	54,846	55	49	112%
OXFORD	354	49,842	58	54	107%
PEEL	55	21,616	48	42	114%
PERTH	604	80,255	57	54	106%
PETERBOROUGH	84	21,569	46	39	118%
PRESCOTT RUSSEL	275	86,629	45	46	99%
PRINCE EDWARD	89	17,217	48	36	134%
RAINY RIVER	15	5,920	38	45	85%
RENFREW	129	23,313	57	42	135%
SIMCOE	273	84,759	49	45	108%
STOR,DUN,GLEN'Y	385	102,245	59	51	117%
TIMISKAMING	49	19,252	40	34	118%
WATERLOO	78	16,068	54	50	109%
WELLINGTON	299	70,286	52	49	107%
YORK	39	18,586	44	43	102%
OTHER	232	28,003	50	47	105%
TOTAL	**10,933**	**2,340,230**	**53**	**49**	**109%**

NOTE:

Data is as of March 14, 2025 and may be subject to change;

*Based on Fully Reported yields (99.7% of liability has been fully reported);

Due to privacy, Agricorp does not disclose information where there are less than 10 customers enrolled in a crop plan.

Counties with fewer than ten customers have been grouped as 'Other'. This includes:

ALGOMA COCHRANE MANITOULIN SUDBURY DIST THUNDER BAY TORONTO

2024 Yield by County - Spring Wheat
Production Insurance

	Spring Wheat				
County Name	**No. of Contracts**	**Insured Acres**	**Yield/Acre* (bu/ac)**	**Average Farm Yield* (bu/ac)**	**Actual Yield % of AFY**
BRUCE	26	1,837	63	58	109%
GREY	11	749	71	63	113%
OTTAWA	33	2,117	50	60	83%
PERTH	11	1,107	66	57	117%
PRESCOTT RUSSEL	65	5,393	44	58	75%
RENFREW	35	2,951	57	51	111%
STOR,DUN,GLEN'Y	44	3,621	47	61	76%
TIMISKAMING	31	14,307	65	58	112%
WELLINGTON	11	1,522	70	65	107%
OTHER	66	7,527	62	62	99%
TOTAL	**333**	**41,130**	**59**	**59**	**100%**

NOTE:
Data is as of March 14, 2025 and may be subject to change;
*Based on Fully Reported yields (99.9% of liability has been fully reported);

Due to privacy, Agricorp does not disclose information where there are less than 10 customers enrolled in a crop plan.
Counties with fewer than ten customers have been grouped as 'Other'. This includes:

ALGOMA	COCHRANE	DUFFERIN	FRONTENAC	HAMILTON	HURON
LANARK	LEEDS GRENVILLE	MANITOULIN	MIDDLESEX	NIAGARA	NIPISSING
PEEL	RAINY RIVER	SIMCOE	SUDBURY DIST	THUNDER BAY	WATERLOO
YORK					

2024 Yield by County - Spring Grain
Production Insurance

	Spring Grain				
County Name	**No. of Contracts**	**Insured Acres**	**Yield/Acre* (lb/ac)**	**Average Farm Yield* (lb/ac)**	**Actual Yield % of AFY**
BRUCE	18	744	3,429	2,823	121%
GREY	21	1,121	3,006	2,632	114%
HURON	24	758	3,437	3,192	108%
PERTH	12	217	3,759	3,687	102%
WELLINGTON	10	1,328	4,345	3,458	126%
OTHER	107	7,130	3,156	3,037	104%
TOTAL	**192**	**11,296**	**3,332**	**3,056**	**109%**

NOTE:

Data is as of March 14, 2025 and may be subject to change;

*Based on Fully Reported yields (99.5% of liability has been fully reported);

Due to privacy, Agricorp does not disclose information where there are less than 10 customers enrolled in a crop plan.

Counties with fewer than ten customers have been grouped as 'Other'. This includes:

BRANT	DUFFERIN	DURHAM	ESSEX	FRONTENAC	HALDIMAND
HALTON	HASTINGS	KAWARTHA LAKES	KENORA	LAMBTON	LANARK
LEEDS GRENVILLE	MANITOULIN	MIDDLESEX	NIAGARA	NIPISSING	NORFOLK
NORTHUMBERLAND	OTTAWA	OXFORD	PEEL	PETERBOROUGH	PRESCOTT RUSSEL
PRINCE EDWARD	RAINY RIVER	RENFREW	SIMCOE	STOR,DUN,GLEN'Y	SUDBURY DIST
THUNDER BAY	TIMISKAMING	WATERLOO	YORK		

2024 Yield by County - White Beans
Production Insurance

	White Beans				
County Name	**No. of Contracts**	**Insured Acres**	**Yield/Acre* (lb/ac)**	**Average Farm Yield* (lb/ac)**	**Actual Yield % of AFY**
BRUCE	13	1,871	2,564	2,456	104%
CHATHAM KENT	11	962	2,588	2,591	100%
ELGIN	11	2,326	2,000	2,179	92%
GREY	11	1,653	2,680	2,199	122%
HURON	132	20,463	2,817	2,594	109%
MIDDLESEX	27	4,486	1,773	2,377	75%
OXFORD	10	1,692	2,291	2,621	87%
PERTH	54	5,977	2,651	2,499	106%
WELLINGTON	10	1,701	2,783	2,250	124%
OTHER	48	8,278	2,393	2,106	114%
TOTAL	**327**	**49,408**	**2,556**	**2,434**	**105%**

NOTE:

Data is as of March 14, 2025 and may be subject to change;

*Based on Fully Reported yields (100% of liability has been fully reported);

Due to privacy, Agricorp does not disclose information where there are less than 10 customers enrolled in a crop plan.

Counties with fewer than ten customers have been grouped as 'Other'. This includes:

BRANT	DUFFERIN	DURHAM	HALTON	KAWARTHA LAKES	LAMBTON
NORFOLK	NORTHUMBERLAND	OTTAWA	PETERBOROUGH	PRINCE EDWARD	SIMCOE
STOR,DUN,GLEN'Y	WATERLOO				

2024 Yield by County - Black Beans
Production Insurance

Black Beans					
County Name	No. of Contracts	Insured Acres	Yield/Acre* (lb/ac)	Average Farm Yield* (lb/ac)	Actual Yield % of AFY
CHATHAM KENT	29	1,718	2,738	2,626	104%
HURON	20	2,589	2,894	2,523	115%
MIDDLESEX	23	2,468	2,136	2,385	90%
OXFORD	24	3,648	2,752	2,717	101%
PERTH	41	4,003	2,510	2,630	95%
SIMCOE	15	2,890	2,438	1,864	131%
OTHER	40	6,535	2,008	2,132	94%
TOTAL	**192**	**23,850**	**2,419**	**2,375**	**102%**

NOTE:

Data is as of March 14, 2025 and may be subject to change;

*Based on Fully Reported yields (99.8% of liability has been fully reported);

Due to privacy, Agricorp does not disclose information where there are less than 10 customers enrolled in a crop plan.

Counties with fewer than ten customers have been grouped as 'Other'. This includes:

ALGOMA	BRANT	BRUCE	DUFFERIN	ELGIN	GREY
LAMBTON	MANITOULIN	NORFOLK	PEEL	PRINCE EDWARD	STOR,DUN,GLEN'Y
TIMISKAMING	WELLINGTON				

2024 Yield by County - Cranberry Beans
Production Insurance

Cranberry Beans					
County Name	No. of Contracts	Insured Acres	Yield/Acre* (lb/ac)	Average Farm Yield* (lb/ac)	Actual Yield % of AFY
MIDDLESEX	14	1,075	1,793	2,578	70%
OXFORD	27	4,166	1,953	2,729	72%
PERTH	18	2,200	2,137	2,459	87%
OTHER	20	2,963	2,467	2,404	103%
TOTAL	**79**	**10,403**	**2,122**	**2,564**	**83%**

NOTE:
Data is as of March 14, 2025 and may be subject to change;
*Based on Fully Reported yields (98.2% of liability has been fully reported);

Due to privacy, Agricorp does not disclose information where there are less than 10 customers enrolled in a crop plan.
Counties with fewer than ten customers have been grouped as 'Other'. This includes:

BRANT	BRUCE	DURHAM	ELGIN	GREY	HURON
NORFOLK	SIMCOE				

2024 Yield by County - Kidney Beans
Production Insurance

Kidney Beans					
County Name	**No. of Contracts**	**Insured Acres**	**Yield/Acre* (lb/ac)**	**Average Farm Yield* (lb/ac)**	**Actual Yield % of AFY**
MIDDLESEX	19	2,261	2,125	2,676	79%
OXFORD	26	4,328	2,212	2,579	86%
PERTH	14	2,403	2,266	2,342	97%
OTHER	23	3,751	2,516	2,222	113%
TOTAL	**82**	**12,743**	**2,296**	**2,446**	**94%**

NOTE:
Data is as of March 14, 2025 and may be subject to change;
*Based on Fully Reported yields (99.8% of liability has been fully reported);

Due to privacy, Agricorp does not disclose information where there are less than 10 customers enrolled in a crop plan.
Counties with fewer than ten customers have been grouped as 'Other'. This includes:
CHATHAM KENT ELGIN HURON LAMBTON NORFOLK SIMCOE
YORK

2024 Yield by County - Adzuki Beans
Production Insurance

Adzuki Beans					
County Name	**No. of Contracts**	**Insured Acres**	**Yield/Acre* (lb/ac)**	**Average Farm Yield* (lb/ac)**	**Actual Yield % of AFY**
MIDDLESEX	12	2,721	2,212	1,977	112%
PERTH	18	3,856	2,238	2,050	109%
OTHER	66	13,761	2,223	1,807	123%
TOTAL	**96**	**20,339**	**2,224**	**1,876**	**119%**

NOTE:

Data is as of March 14, 2025 and may be subject to change;

*Based on Fully Reported yields (98.8% of liability has been fully reported);

Due to privacy, Agricorp does not disclose information where there are less than 10 customers enrolled in a crop plan.

Counties with fewer than ten customers have been grouped as 'Other'. This includes:

ALGOMA	BRANT	BRUCE	DURHAM	ELGIN	GREY
HURON	KAWARTHA LAKES	LAMBTON	NORTHUMBERLAND	OXFORD	PEEL
PETERBOROUGH	PRINCE EDWARD	SIMCOE	STOR,DUN,GLEN'Y	WELLINGTON	YORK

2024 Yield by County - Japan/Other Beans
Production Insurance

Japan/Other Beans					
County Name	No. of Contracts	Insured Acres	Yield/Acre* (lb/ac)	Average Farm Yield* (lb/ac)	Actual Yield % of AFY
PERTH	31	3,733	2,322	2,475	94%
OTHER	23	2,134	2,180	2,207	99%
TOTAL	**54**	**5,866**	**2,272**	**2,380**	**95%**

NOTE:
Data is as of March 14, 2025 and may be subject to change;
*Based on Fully Reported yields (98.0% of liability has been fully reported);

Due to privacy, Agricorp does not disclose information where there are less than 10 customers enrolled in a crop plan.
Counties with fewer than ten customers have been grouped as 'Other'. This includes:
ELGIN GREY HURON MIDDLESEX OXFORD PRESCOTT RUSSEL
SIMCOE

2024 Yield by County - Canola
Production Insurance

Canola					
County Name	**No. of Contracts**	**Insured Acres**	**Yield/Acre* (lb/ac)**	**Average Farm Yield* (lb/ac)**	**Actual Yield % of AFY**
BRUCE	10	611	2,776	2,242	124%
CHATHAM KENT	16	1,100	3,351	2,537	132%
COCHRANE	11	5,160	2,642	2,075	127%
DUFFERIN	13	1,332	2,729	2,590	105%
ESSEX	21	1,752	2,726	2,542	107%
GREY	19	2,870	2,369	2,275	104%
LAMBTON	12	1,267	3,153	2,547	124%
NIPISSING	16	2,457	2,540	2,590	98%
RAINY RIVER	10	4,197	1,815	2,292	79%
TIMISKAMING	38	15,778	2,195	2,199	100%
OTHER	85	15,293	2,570	2,267	113%
TOTAL	**251**	**51,817**	**2,426**	**2,272**	**107%**

NOTE:
Data is as of March 14, 2025 and may be subject to change;
*Based on Fully Reported yields (99.7% of liability has been fully reported);

Due to privacy, Agricorp does not disclose information where there are less than 10 customers enrolled in a crop plan.
Counties with fewer than ten customers have been grouped as 'Other'. This includes:

ALGOMA	BRANT	DURHAM	HALDIMAND	HURON	KAWARTHA LAKES
LNNX ADDGTON	MANITOULIN	MIDDLESEX	NIAGARA	NORFOLK	NORTHUMBERLAND
OTTAWA	PERTH	PRINCE EDWARD	RENFREW	SIMCOE	STOR,DUN,GLEN'Y
SUDBURY DIST	THUNDER BAY	WELLINGTON	YORK		

2024 Yield by County - Oats
Production Insurance

Oats					
County Name	No. of Contracts	Insured Acres	Yield/Acre* (lb/ac)	Average Farm Yield* (lb/ac)	Actual Yield % of AFY
BRUCE	18	1,243	3,526	3,146	112%
DUFFERIN	10	709	3,165	3,191	99%
GREY	29	2,479	3,741	3,300	113%
HURON	24	1,163	3,650	3,207	114%
NIPISSING	14	1,189	2,819	3,179	89%
RENFREW	14	679	2,327	2,277	102%
SIMCOE	16	1,805	3,487	3,186	109%
TIMISKAMING	46	12,321	4,086	3,352	122%
OTHER	110	8,212	3,469	2,825	123%
TOTAL	**281**	**29,800**	**3,697**	**3,143**	**118%**

NOTE:
Data is as of March 14, 2025 and may be subject to change;
*Based on Fully Reported yields (99.8% of liability has been fully reported);

Due to privacy, Agricorp does not disclose information where there are less than 10 customers enrolled in a crop plan.
Counties with fewer than ten customers have been grouped as 'Other'. This includes:

ALGOMA	BRANT	CHATHAM KENT	COCHRANE	DURHAM	FRONTENAC
HALDIMAND	HALTON	HASTINGS	KAWARTHA LAKES	KENORA	LAMBTON
LANARK	LEEDS GRENVILLE	LNNX ADDGTON	MANITOULIN	MIDDLESEX	NIAGARA
NORFOLK	NORTHUMBERLAND	OTTAWA	OXFORD	PEEL	PERTH
PETERBOROUGH	PRESCOTT RUSSEL	PRINCE EDWARD	RAINY RIVER	STOR,DUN,GLEN'Y	SUDBURY DIST
WELLINGTON					

2024 Yield by County - Barley
Production Insurance

Barley					
County Name	No. of Contracts	Insured Acres	Yield/Acre* (lb/ac)	Average Farm Yield* (lb/ac)	Actual Yield % of AFY
BRUCE	16	873	4,776	3,651	131%
DUFFERIN	18	854	3,358	3,497	96%
GREY	33	2,815	3,686	3,272	113%
PRESCOTT RUSSEL	21	1,352	1,486	2,948	50%
RENFREW	16	1,383	3,482	3,076	113%
SIMCOE	16	1,387	4,175	3,234	129%
STOR,DUN,GLEN'Y	17	914	3,537	3,739	95%
TIMISKAMING	14	2,532	4,243	3,244	131%
WELLINGTON	13	1,379	5,057	3,812	133%
OTHER	131	7,894	3,490	3,220	108%
TOTAL	**295**	**21,383**	**3,666**	**3,291**	**111%**

NOTE:

Data is as of March 14, 2025 and may be subject to change;

*Based on Fully Reported yields (99.7% of liability has been fully reported);

Due to privacy, Agricorp does not disclose information where there are less than 10 customers enrolled in a crop plan.

Counties with fewer than ten customers have been grouped as 'Other'. This includes:

ALGOMA	BRANT	CHATHAM KENT	COCHRANE	DURHAM	ESSEX
FRONTENAC	HALDIMAND	HALTON	HAMILTON	HASTINGS	HURON
KAWARTHA LAKES	KENORA	LAMBTON	LANARK	LEEDS GRENVILLE	LNNX ADDGTON
MANITOULIN	MIDDLESEX	NIAGARA	NIPISSING	NORFOLK	NORTHUMBERLAND
OTTAWA	OXFORD	PARRY SOUND	PEEL	PERTH	PETERBOROUGH
PRINCE EDWARD	RAINY RIVER	SUDBURY DIST	THUNDER BAY	WATERLOO	

APPENDIX 2: SOIL SAMPLING

SOIL SAMPLING LOCATIONS

A & L Canada Laboratories Inc.

2136 Jetstream Road, London, Ontario, N5V 3P5
Telephone: (519) 457-2575 Fax: (519) 457-2664

Report Number: C24333-10128
Account Number: [redacted]

To: [redacted]

Attn:

For:

Reported Date: **Printed Date:** Dec 2, 2024

SOIL TEST REPORT

Sample Number	Lab Number	Organic Matter	Phosphorus - P ppm Bicarb	Phosphorus - P ppm Bray-P1	Potassium K ppm	Magnesium Mg ppm	Calcium Ca ppm	Sodium Na ppm	pH pH	pH Buffer	CEC meq/100g	Percent Base Saturations % K	% Mg	% Ca	% H	% Na
SIMS	092033	1.2	40 G	66 G	125 M	70 M	720 H	9 M	7.5		4.5	7.1	12.9	79.4		0.9

Sample Number	Sulfur S ppm	Zinc Zn ppm	Manganese Mn ppm	Iron Fe ppm	Copper Cu ppm	Boron B ppm	Soluble Salts ms/cm	Saturation %P	Aluminum Al ppm	Saturation %Al	Nitrate Nitrogen NO3-N ppm	K/Mg Ratio	Ca/Mg Ratio	ENR	Field ID
SIMS								5 L	579	0.1 G		0.55	6.2	24	

OE VL = VERY LOW, L = LOW, M = MEDIUM, H = HIGH, VH = VERY HIGH, G = GOOD, MA = MARGINAL, MT = MODERATE PHYTO-TOXIC, T = PHYTO-TOXIC, ST = SEVERE PHYTO-TOXIC

SOIL FERTILITY GUIDELINES (lbs/ac)

Sample Number	Crop	Yield Goal	Lime Tons/Acre	N	P2O5	K2O	Mg	Ca	S	Zn	Mn	Fe	Cu	B

The results of this report relate to the sample submitted and analyzed. All results are released based on acceptable QC data.
* Crop yield is influenced by a number of factors in addition to soil fertility.
No guarantee or warranty concerning crop performance is made by A & L.

Results Authorized By: [redacted] **Beth Wood, Agronomist**

A&L Canada Laboratories Inc. is accredited by the Standards Council of Canada for specific tests as listed on www.scc.ca and by the Canadian Association for Laboratory Accreditation as listed on www.cala.ca

A & L Canada Laboratories Inc.

2136 Jetstream Rd, London, Ontario, N5V 3P5

Telephone: (519) 457-2575 Fax: (519) 457-2664

REPORT NUMBER: C24333-10128

ACCOUNT NUMBER: [redacted]

REPORT OF ANALYSIS

TO: [redacted]

DATE RECEIVED: 2024-11-28

DATE REPORTED: 2024-12-02

Attn: [redacted]

LAB NO.	SAMPLE ID	ANALYSIS	RESULT	UNIT	METHOD
92033	SIMS	Sand	88	%	MSA Part 1 (1986) pp 404-408
92033	SIMS	Silt	9	%	MSA Part 1 (1986) pp 404-408
92033	SIMS	Clay	3	%	MSA Part 1 (1986) pp 404-408
92033	SIMS	Soil Textural Class	Sand		MSA Part 1 (1986) pp 383-385

Results Authorized By: [redacted]

A&L Canada Laboratories Inc. is accredited by the Standards Council of Canada for specific tests as listed on www.scc.ca and by the Canadian Association for Laboratory Accreditation as listed on www.cala.ca