



Agricultural Impact Assessment

Lichty Pit

July 2024

5999, 6043 8th Line East & 7190 Side Road 12 Centre Wellington, Ontario

Part of Lots 11 & 12, Concession 4

Prepared for:
James Thome Construction Ltd.
7270 Side Road 14, Ariss Ontario

Prepared by:
Stovel and Associates Inc.
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1.0 INTRODUCTION

Stovel and Associates Inc. (“SAI”) was retained by James Thoume Construction Ltd. (“Thoume”) to complete an Agricultural Impact Assessment (“AIA”) for a proposed Class A Pit (Above the Water Table) on lands located south of Ponsonby described as Part of Lots 11 & 12, Concession 4 West (Geographic Township of Pilkington), Township of Centre Wellington, County of Wellington. The lands are municipally addressed as 5999, 6043 8th Line East, and 7190 Sideroad 12, Township of Centre Wellington (See Figure 1). The subject lands are approximately 42.7 ha in size.

Thoume intends to file an application with the Ontario Ministry of Natural Resources and Forestry (MNR) for an Aggregate Resources Act (“ARA”) licence, as well as apply for a Zoning By-Law Amendment (“ZBA”) and Official Plan Amendment (“OPA”) under the Planning Act to permit the establishment of a mineral aggregate operation of the subject lands.

This report follows the general direction provided with the Province’s *Draft Agricultural Impact Assessment Guidance Document*, released in March 2018 by the Ministry of Agriculture, Food, and Rural Affairs (“OMAFRA”). The report also addresses the planning policies related to the consideration and protection of agricultural resources, as set out in the Provincial Policy Statement and the County of Wellington Official Plan.



 study site (approximate)

Date: November 2023
 scale: not to scale
 compiled from: Google Earth


 Stovel and Associates Inc.

Figure 1: Location of Subject Lands
 James Thoume Construction:
 Proposed Lichy Pit

1.1 Data Collection and Review

In preparing this AIA, the following background materials at the upper-tier and lower-tier municipal levels were reviewed:

- County of Wellington Official Plan (Consolidated Version February 2024).
- Township of Centre Wellington Zoning By-Law No. 2009-045 (Office Consolidation May 2023).
- Natural Environment Technical Report (SAI, 2024).
- Hydrogeologic Assessment (Groundwater Science Corp. 2024).
- Noise Impact Assessment (Aeroustics Engineering Ltd., 2023).
- Stage 1 and 2 Archaeological Assessments (Lincoln Environmental Consulting Corp, 2022 and 2024).
- Planning Report and ARA Summary Statement (Stovel and Associates Inc, 2024).
- Site Plan of Proposed Lichy Pit – James Thome Construction Ltd. (SAI, 2024).

In addition to the plans and reports that were specifically prepared for the submission of the ARA and Planning Act applications, the following background materials were also reviewed:

- Soil data resource information which includes Ontario Soil Survey reports and mapping, the provincial digital soil resource database, and Canada Land Inventory Agricultural Capability mapping.
- Aerial photography (historic and recent drone survey) with scale of 1:10,000 or smaller.
- OMAFRA's Agricultural System Portal for information on specialty crops, drainage, surrounding crops and livestock.
- OMAFRA's constructed and agricultural Artificial Drainage Mapping.
- Parcel mapping/fabric of the area.
- *County and Township Agriculture Profile – Wellington County Municipality; Township: Centre Wellington* statistics produced by the Province of Ontario.

An agricultural land use survey was also conducted, with additional information gathered from Google Satellite Imagery (2024). The aerial photographic mapping and roadside images have been utilized to gain a better understanding of the agricultural operations and activities in both the primary and secondary study areas (see Section 2.0). Farm Data Sheets were also delivered to potential livestock operations (21 in total) in the Secondary Study Area (Appendix A). A summary of the agricultural land use survey is provided in Section 2.0 of this report.

1.2 Overview of Mineral Aggregate Operation Proposal

The subject lands are located on the east and west sides of Sideroad 12, just north of 8th Line East. The subject lands have an area of approximately 42.7 hectares (105.5 acres)

proposed to be licensed, with approximately 29.1 hectares proposed for extraction. The subject lands will be operated as a new pit in two phases, utilizing two different haul road locations/entrances; one for each phase. The entrance/exit and scale facilities will be located on Sideroad 12, approximately 100 m north of the intersection of Sideroad 12 and 8th Line.

Aggregate extraction will be 1.5 m above the established water table and rehabilitation will be back to an agricultural condition. Extraction will commence on Lot 12 and will work North-East. Once Lot 12 is extracted, Lot 11 extraction will commence and will also work North-East.

The proposed extraction limit focuses on existing agricultural fields. The farmstead and related buildings are included in the licence limit but are not proposed to be removed or extracted. Cox Creek is located beyond the proposed licence limit. The forested flood plain marks the limits of the proposed licence.

Extraction will occur in two phases, so that the agricultural use of the property will be maintained for as long as possible. Phase 1 is south of Sideroad 12 and Phase 2 is north of Sideroad 12. Each extraction phase will be progressively rehabilitated back to agriculture following extraction.

Currently, the subject lands are characterized by elevation changes, with the lowland area associated with the Cox Creek flood plain representing the lowest elevations in proximity to the proposed pit.

The Site Plans for the proposed Lichy Pit are included as part of the Application Package for Class A Pit Licence.

1.3 Purpose of the Study

The purpose of this AIA is to evaluate potential impacts on agriculture from the proposed aggregate extraction operation and identify mitigation measures to abate these impacts to the extent feasible. This report also provides information for the preparation and implementation of an effective progressive rehabilitation plan for agricultural rehabilitation including the provision of baseline pre-extraction documentation.

As part of this AIA, surrounding agricultural land uses and structures on properties within 1.5 kilometre (km) of the subject lands have been documented to assess the potential impact of the proposed aggregate operation on surrounding agricultural uses/operations and determine the extent of mitigation that may be required.

Given that there is little change in topography and landform across the property a detailed onsite soil survey and Canada Land Inventory (CLI) Evaluation was not completed. Information from the County of Wellington Soil Survey about the soil texture, drainage and agricultural capability of the soil has been reviewed in this AIA.

2.0 DESCRIPTION OF AGRICULTURAL RESOURCE BASE

The following paragraphs provide a description of the agricultural resource base on the site and surrounding area. The description is divided into the following categories:

- Agricultural land uses and agricultural operations;
- Parcel size;
- Soils and soil capability for agriculture;
- Microclimate; and
- Agricultural drainage.

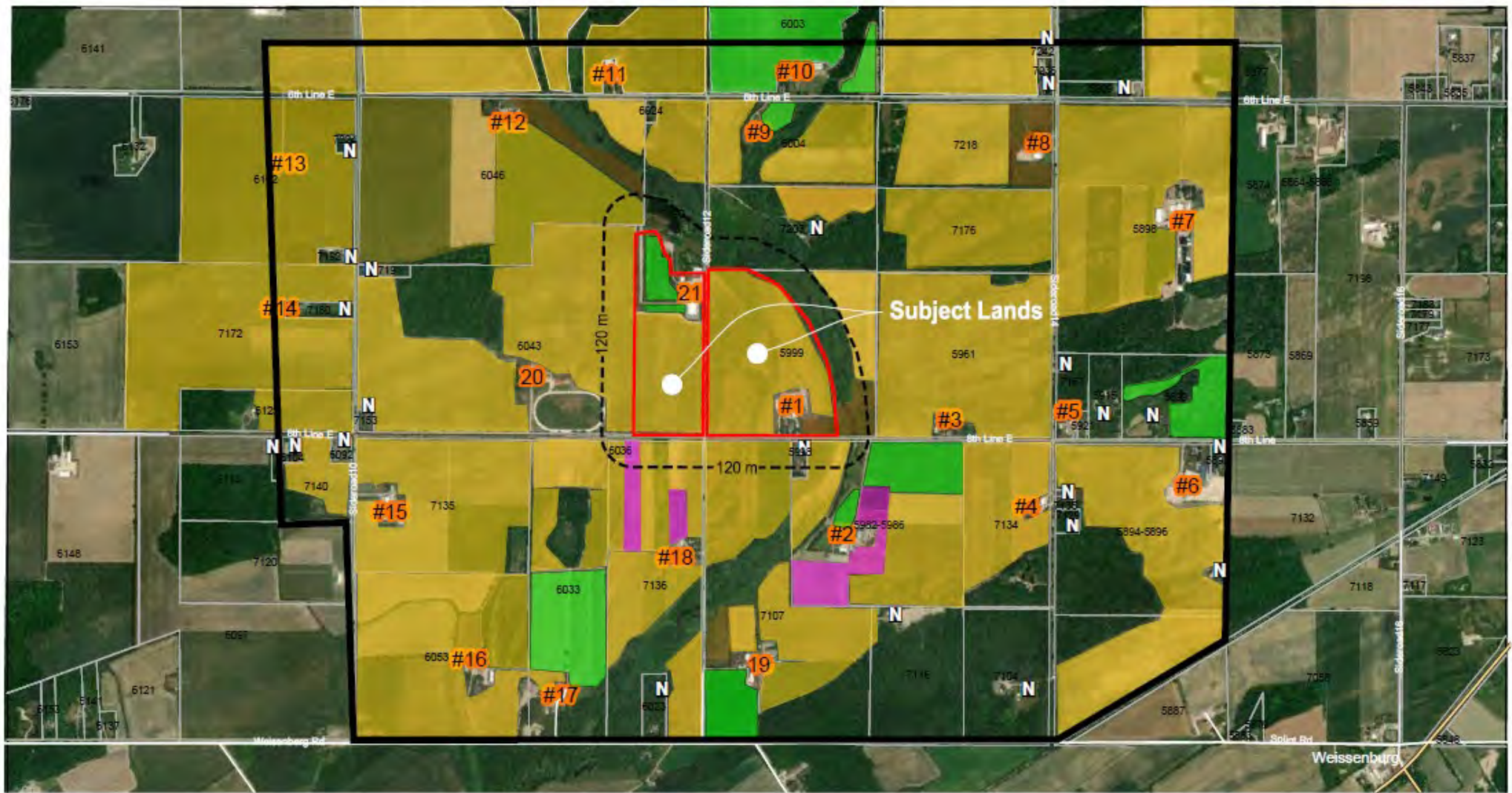
The examination is based on a study area comprised of a 'Primary Study Area' and a 'Secondary Study Area'. In the context of this report, the Subject Lands or Subject Property and The Primary Study Area ('PSA') represent the same lands. The Primary Study Area is the area that has the potential to be directly impacted by the aggregate extraction operation.

The Secondary Study Area ('SSA') includes a larger area surrounding the Primary Study Area. For this assessment, a Secondary Study Area of 1.5 km from the subject lands was established.

A plan identifying the adjacent properties, existing crops and existing barns and residential structures within the study area is included as Figure 2 of this report. The inventory of existing agricultural land uses, cropping practices and structures is based on observations made during reconnaissance surveys in 2021, 2022 and 2024. A review of historic representative of agricultural production patterns and livestock types in the broader region.

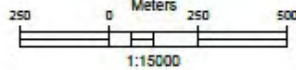
Accompanying the Agricultural Land Use Map is an Agricultural Operations Summary (Table 1). Each agricultural operation that was observed in the field was summarized in Table 1. The description of these operations includes the following: type of operation, associated crop type, brief description of onsite infrastructure and other related notes about the agricultural operation. Appendix B provides a photograph for each agricultural operation noted on the Agricultural Land Use Map.

A review of aerial photography was also undertaken to confirm that the land uses in the Secondary Study Areas.



**Agriculture Land Use Map
Figure 2**

Province of Ontario, Esri Canada, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, NRCan, Parks Canada, Maxar



Legend

- Small Grains / Forage
- Pastureland
- Speciality Crop
- Row Crop
- Non Farm Residence
- Subject Lands (PSA)
- Environment Features
- #1 Agricultural Operation Number
- Secondary Study Area
- Adjacent Lands



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Table 1: Agricultural Land Use Data

Parcel No.	Address	Type of Farm/Name	Type of Barn	Type of Crop	Notes
1	5999 8 Line E	Mixed (Beef/Horses)	1 New Pole Barn, 1 Large Storage Barn, Red Implement Shed. Several feed storage silos. Small storage Barn. 2 Concrete Silos	Row Crop	This is Subject Lands. Phase 1
2	5982 8 Line E	JN Produce and Flowers	3 Greenhouses, Mixed Livestock (Dairy) Barns. Bank Barn with extension. Concrete Silo. Two Roscos. Coverall	Forage/Corn/ Small Area Speciality Crop for Flowers/Produce/Berries	Approximately 8 ha. of Flowers/Produce/Berries (Speciality Crop Area).Closest Speciality Crop Field is estimated 175m from Eighth line
3	5961 8 Line E	Cash Crop	Wooden Bank Barn. Wooden Implement Shed. Concrete Silo	Corn	South-East of Subject Lands. No evidence of livestock.
4	7134 SR 14	Heritage Acres	Cash Crop Farm	Row Crop	Garage for Equipment
5	7157 SR 14	Driven Performance	Trailer Rental/Storage	N/A	Car Garage/Trailer Rental place
6	5894-5896 8 Line E	Flash Freight Systems Trucking/Spruce Brook Farms	Steel quanset storage. Grain Elevator storage. Weigh scales. New Steel storage barn. No evidence of livestock.	Row Crop	Agricultural related use.
7	5898 6 Line E	Chicken	Chicken and Multiple Storage barns	Row Crop	Eggs, flours, and produce are also sold roadside at this property.

8	7218 SR 14	Windy Knoll Horse Farm	Steel Pole Barn & Steel Hip-Roof Barn.	Fenced Pasture/Row Crop	East of Subject Lands. Evidence of Horses.
9	6004 6 Line E	Possible Hobby Horse Farm	Horse Barn, Small Implement Shed	Forage	No evidence of livestock. North- East of Subject Lands
10	6003 6 Line E	Mixed Farm (Need to figure out if it is Dairy)	Bank Barn + Extension, New Steel Clad Pole Barn. Wood Bank Barn. Implement Shed.	Forage/Row Crop	Liquid Manure Storage Tank. Several Grain Storage Bins.
11	6029 6 Line E	Storage	Wooden Bank Barn + Extension. Concrete Silo	Row Crop	No evidence of livestock
12	6046 6 Line E	Mixed	Red wooden bank barn + Extension. Steel clad implement shed.	Pasture/Row Crop	Steel crop handler silo. 2 Concrete capped silo. Beef Cattle observed pasturing.
13	6102 6 Line E	Chicken Barn	1 Chicken Barn	Row Crop	Chicken Barn
14	7180 SR 10 E	Non-Farm Residence	Based on property mapping, it does not appear that there are any barns onsite.	N/A	Wooden Bank Barn appear to be located immediately West of property Line
15	7135 SR 10 E	Park Lawn Place	3 Steel Clad Barns, 2 Concrete Capped Silos. Mixed Farm	Row Crop	No evidence of livestock
16	6053 Weisenber g Road	Mixed/Beef Farm	1 Small Shed, Concrete Capped Silo, 2 Westeel Storage Containers, Implement Shed, 2 Steel Barns	Row Crop	West of Subject Lands
17	6033 Weisenber g Road	Possible Beef Farm	Possible Horse Barn, Bank Barn, and a shed	Small Grains/Row Crop	South-West of Subject Lands

18	7136 SR 12	Mixed Operation	Quanset storage hut, wooden bank barn, small implement shed, greenhouse, several capped concrete silos, Steel Clad barn	Specialty Crop /Pasture/Corn /Forage	Maple Syrup, Vegetables and cut flowers, firewood for sale.
19	7107 SR 12	Mixed Farm (Need to figure out if it is Dairy)	3 concrete capped silos, red bank barn + extension, Implement shed, multiple westeels.	Forage/Row Crop	Liquid Manure Storage Tank
20	6043 8 Line E	Horse Farm	Horse Barn, Wooden Bank Barn (Appears to be used for storage)	Small Grains/Row Crop	2 Barns, Horse Track. 1 old silo. Part of Subject Lands
21	7190 SR 12	Agri-business	Two Grain Storage Bins, Four steel-clad storage sheds.	Row Crop	Royackers Kennels

2.1.1 Primary Study Area – Agricultural Land Use

The Primary Study Area includes the subject lands. Agricultural Operation Nos. 1 and 21.



Agricultural Operation #1

Operation No. 1 is mixed beef and horse farm with several agricultural buildings. The surrounding lands include row crops and pasture/forage.



Agricultural Operation #21

Agricultural Operation No. 21 is an agricultural-related operation. Several storage buildings are used for equipment and material storage. A small dog kennel is also

included at No. 21. The farm fields to the south of No. 21 are part of a larger operation located on lands adjacent to the subject lands. These farm fields (row crops) are associated with Agricultural Operation No. 20.

As shown on the Agricultural Land Use Map, the predominant land use within 120m of the proposed licensed boundary is agricultural (field crops). Surrounding crops include corn, pasture lands, soybeans, and small grains. The subject lands are located north of Concession 8. Immediately north of the subject lands is Cox Creek and the associated forested valley system.

The agricultural uses within the Primary Study Area are primarily cash crop land (field corn, soybeans, and small grains).

2.1.2 Secondary Study Area – Agricultural Land Use

The Secondary Study Area includes several active agricultural operations, including beef, mixed beef/dairy, horse, and chicken. An agricultural-related operation (trucking/grain elevator) was noted on 8th Line south of the subject lands.

Several mixed operations also included the production and sale of cut flowers, vegetables, berries and maple syrup. Overall, it was observed that the secondary study area is comprised mainly of large fields of cash crop production.

Table 2 provides a summary of agricultural cropping systems in the Secondary Study Area. The area estimates associated with this Table are derived from field investigations conducted by SAI and supplemented by background mapping and aerial photography.

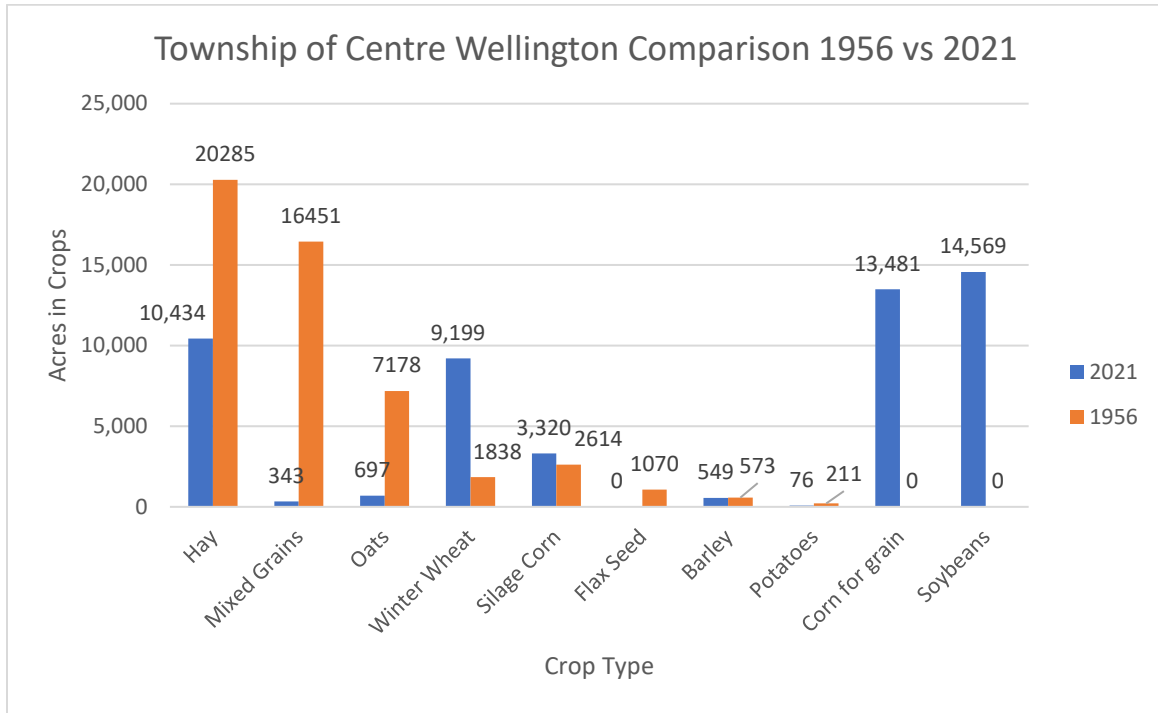
Table 2: Summary of Agricultural Cropping Systems

Crop Type	Subject Land Phase 1 (ha)	Subject Land Phase 2 (ha)	Primary Study Area (ha)	%	Secondary Study Area (ha)	%	Totals (ha)
Row Crop	21.09	11.30	50.53	5.5%	585.18	64.0%	635.71
Pastureland	0.87	0.00	2.70	0.3%	9.48	1.0%	12.17
Small Grains	0.00	2.35	2.37	0.3%	45.76	5.0%	48.14
Speciality Crop	0.00	0.00	0.51	0.1%	9.59	1.0%	10.11
Remaining Area	3.31	4.05	26.61	2.9%	182.27	19.9%	208.88
Study Area	25.27	17.70	82.73	9.0%	832.28	91.0%	915.00

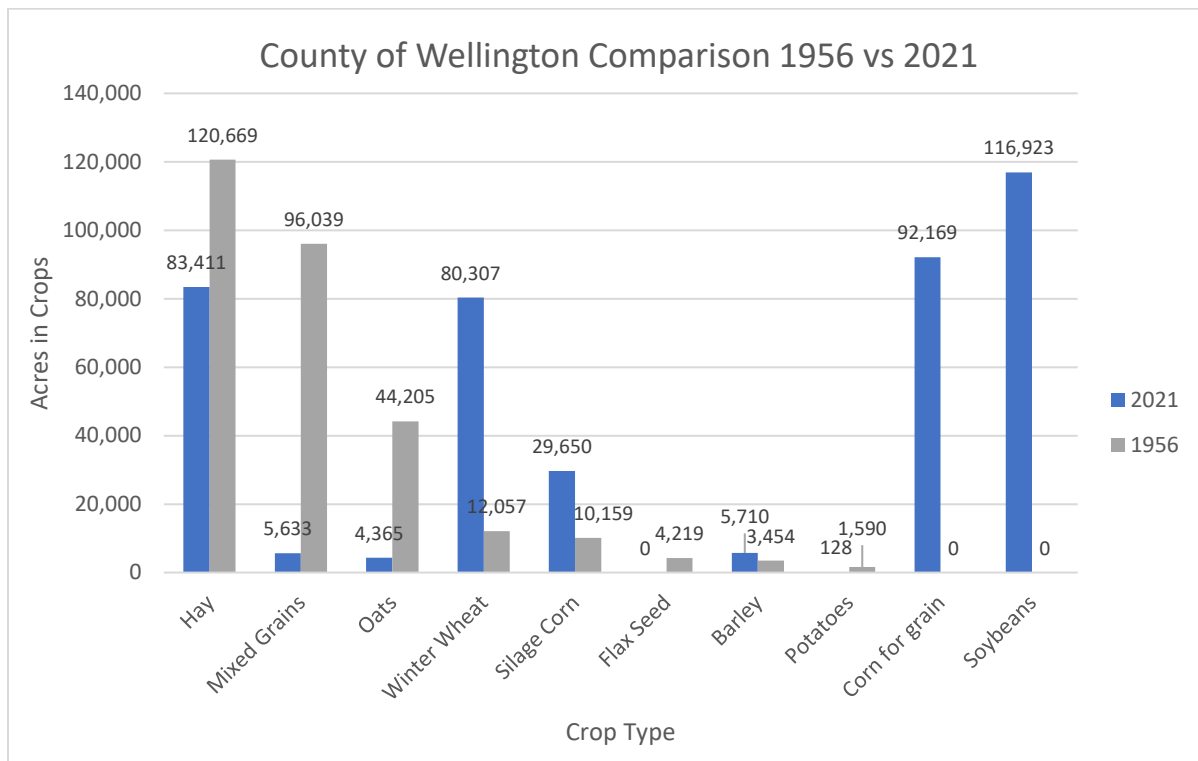
Based on the site visits and information provided by the landowners and farmers in the local area, the agricultural activities within both the Primary and Secondary Study Area are indicative of broader agricultural trends in the Township of Centre Wellington and the County of Wellington. Overall, both the Primary and Secondary Study Areas are representative of normal agricultural production in this area.

The proposed rehabilitation approach, discussed in further detail below, will return the lands to an agricultural condition that is consistent with the average parcel size an agricultural production found in this portion of the Township of Centre Wellington.

Graph 1 provides a summary of crop type comparisons from 1956 vs 2021 for the Township of Centre Wellington.



Graph 2 provides a summary of crop type comparisons from 1966 vs 2021 for the County of Wellington.



The most noteworthy in cropping patterns relate to the following:

- A significant increase in grain corn production since 1956. Grain corn is now the 2nd most produced crop in the County and the Township;
- Soybean production is the largest crop in the Township and County in 2021, and it wasn't recorded in the Township or County in 1956; and
- A significant reduction in Mixed Grains crop production from 1956 to 2021 in the County.

Based on the site visits, the agricultural activities within both the Primary and Secondary Study Areas are indicative of broader agricultural trends in the Township of Centre Wellington and the County of Wellington. Overall, both the Primary and Secondary Study Areas are representative of agricultural production in the local area.

2.2 Parcel Size

Parcel size mapping was reviewed for the Secondary Study Area. The following table provides a summary of farm parcel sizes encountered in the Secondary Study Area. The average farm parcel size was calculated to be approximately 41.92 ha, and the largest farm parcel in the Secondary Study Area was 144.59 ha.

The minimum farm parcel size in the Prime Agricultural Area (as set out in the County of Wellington Official Plan) is 34.4 ha. Eighteen (18) farm parcels exceed the minimum farm parcel size in the Secondary Study Area.

SAI reviewed the “*County and Township Ag Profile – Wellington County Municipality; Township: Centre Wellington*” statistics produced by the Province of Ontario (Appendix C). SAI compiled the Farm Parcel Sizes from the Secondary Study Area to the Province of Ontario’s Farm Parcel Sizes for Centre Wellington and the County of Wellington (See Table 3).

Table 3: Farm Parcel Size Comparison

Farm Parcel Size	Secondary S.A. Study Count	Secondary S.A. %	Centre Wellington (2021)	Centre Wellington %	County of Wellington (2021)	County of Wellington %
Total	29	100%	363	100%	2,617	100%
<10 Acres	0	0%	41	11.29%	204	7.8%
10 to 69 Acres	9	31%	104	28.65%	604	23.08%
70 to 129 Acres	13	45%	86	23.69%	742	28.35%
130 to 179 Acres	4	14%	30	8.26%	300	11.46%
180 to 239 Acres	2	7%	34	9.37%	276	10.55%
240 to 399 Acres	1	3%	31	8.54%	255	9.74%

400 to 559 Acres	0	0%	17	4.68%	91	3.48%
560 to 759 Acres	0	0%	9	2.48%	56	2.14%
760 to 1119 Acres	0	0%	5	1.38%	33	1.26%
1120 to 1599 Acres	0	0%	3	0.83%	19	0.73%
1600 to 2239 Acres	0	0%	2	0.55%	16	0.61%
2240 to 2879 Acres	0	0%	0	0.00%	3	0.11%
2880 to 3519 Acres	0	0%	0	0.00%	5	0.19%
3520 Acres and over	0	0%	1	0.28%	13	0.50%

Note: parcels within the Secondary Study Area must be deemed to be a farm. Severed non-farm parcels were not included in this analysis.

Based on this data, the parcel size was smaller in the Secondary Study Area than both the Township and County.

2.3 Soil and CLI Capability

The London loam and Guelph loam soils cover most of the subject properties. These soils are pale brown, calcareous, loam soils developed on glacial till. The till is derived from grey and brown limestones of the underlying rock strata. The Guelph loam is the well-drained member of this catena and the London loam is the imperfectly drained member.

The Guelph and London soils are important agricultural soils in Wellington County. The main crops grown are pasture, hay, mixed grains, oats, winter wheat and silage corn. Turnips for table use are grown commercially. Yields of most crops are well above the provincial average and could be economically increased by applying commercial fertilizers at somewhat higher rates than are currently used. Artificial drainage of the London loam could have a higher potential than the Guelph series due mainly to their smoother topography.

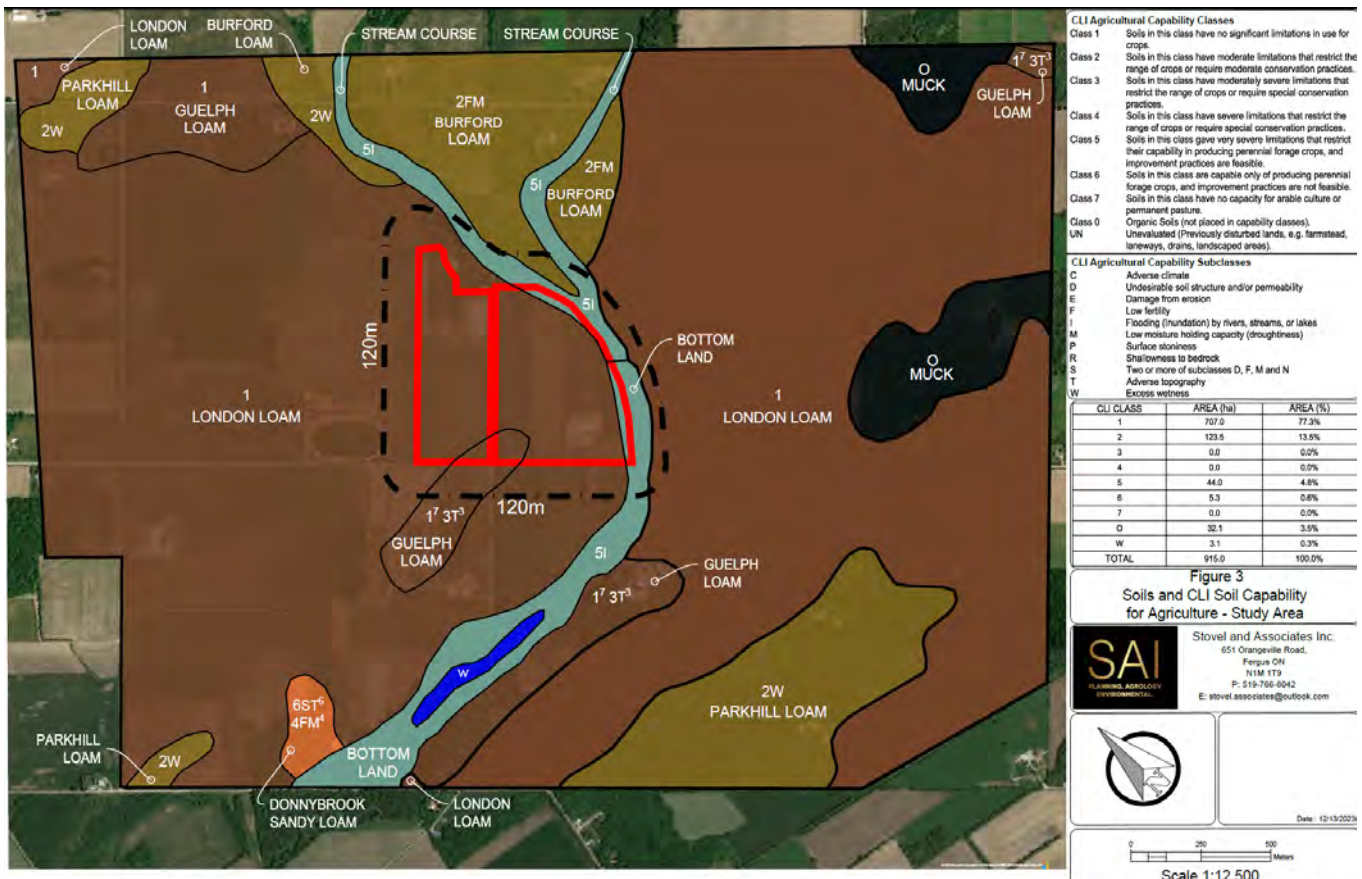
On the subject properties, two main soil series are mapped: the London loam soils account for 40.58 ha of the site and the Guelph loam soils account for 2.12 ha.

Two remaining soil series are mapped along the northern/northeastern perimeter of the subject land: Bottom Land and Burford loam. Bottom Land soils are developed on loam, sandy loam and silt loam materials. The internal drainage is variable. Bottom Land soils that have been cleared of trees are used for pasture lands in the Study Area. Burford

loam soils are well-drained loam materials developed over coarse outwash gravel. The topography is gently undulating except along the edge of the terraces where slopes are often steep. Gravel, stones and cobbles are usually present in the soil surface and throughout the profile. The Burford soils generally produce crops such as spring grains, winter wheat, hay, pasture and silage corn. Because of the open nature of the Burford soils, moisture deficiencies exist during the growing season. These soils often have low to medium content of essential plant nutrients.

The Canada Land Inventory (CLI) system uses soil attributes to create a seven-class system of land use capabilities. Class 1, 2 and 3 are capable of sustained common field crop production. Class 4 soils are limited for sustained agriculture while Class 5 is capable for use as permanent pasture and hay. The Class 6 soils are best utilized for wild, unimproved pasture and Class 7 is for soils or landforms that are not capable for use for arable culture or permanent pasture.

Figure 3 illustrates the distribution of soils onsite. The London loam and Guelph loam soils are mapped as Class 1 and Class 1/3T soils respectively. Burford loam soils are Class 2FM and Bottom Land soils are Class 5i.



Approximately 40.7 ha or 95.32% of the subject lands are considered to be Class 1-3 soils. The subject lands are considered prime agricultural land, i.e. Class 1-3 soils. Approximately 90.8% of the Secondary Study Area consists of Class 1-3 soils.

The following tables summarize the relative percent area occupied by each CLI - Class for the Secondary Study Area:

Table 3: Canada Land Inventory – Soil Capability for Agriculture

Canada Land Inventory Class (CLI) – Soil Capability for Agriculture	Area (ha)	Percent Occurrence (%)
Class 1	707.0	77.3%
Class 2	123.5	13.5%
Class 3	0.0	0.0%
Class 4	0.0	0.0%
Class 5	44.0	4.8%
Class 6	5.3	0.6%
Class 7	0.0	0.0%
Class 0	32.1	3.5%
W (River or Ponds)	3.1	0.3%
Total	915.0	100.0%

2.4 Microclimate for Speciality Crop Production

Climate data from the OMAFRA document titled “*Agronomy Guide for Field Crops - publication 811 (June 2009)*” was reviewed. The subject lands are located within 2700-2900 average accumulated crop heat units (CH-MI) available for corn production in Ontario. The crop heat units (CHU) index was originally developed for field corn and has been in use in Ontario for 30 years. The CHU ratings are based on the total accumulated crop heat units for the frost-free growing season in each area of the province. CHU averages range between 2500 near North Bay to over 3500 near Windsor. The higher the CHU value, the longer the growing season and the greater the opportunities for growing high-value crops. The subject property is located within the 2700-2900 average accumulated crop heat units (CH-MI) and as such, the agricultural lands are not subject to special climate conditions. Given the typical climatic conditions, there are limited opportunities for growing specialty crops on a large commercial basis in the Secondary Study Area and therefore there are no properties that have been identified as a specialty crop area in the County of Wellington Official Plan (as they do not meet the criteria as identified by the Province).

However, as set out on Figure 2 – Agricultural Land Use, two properties are being used for small-scale production of vegetables, berries and/or cut flowers in the Secondary Study Area. Census data also notes that portions of the Township and County are used for potatoes but these were not recorded in the Secondary Study Area.

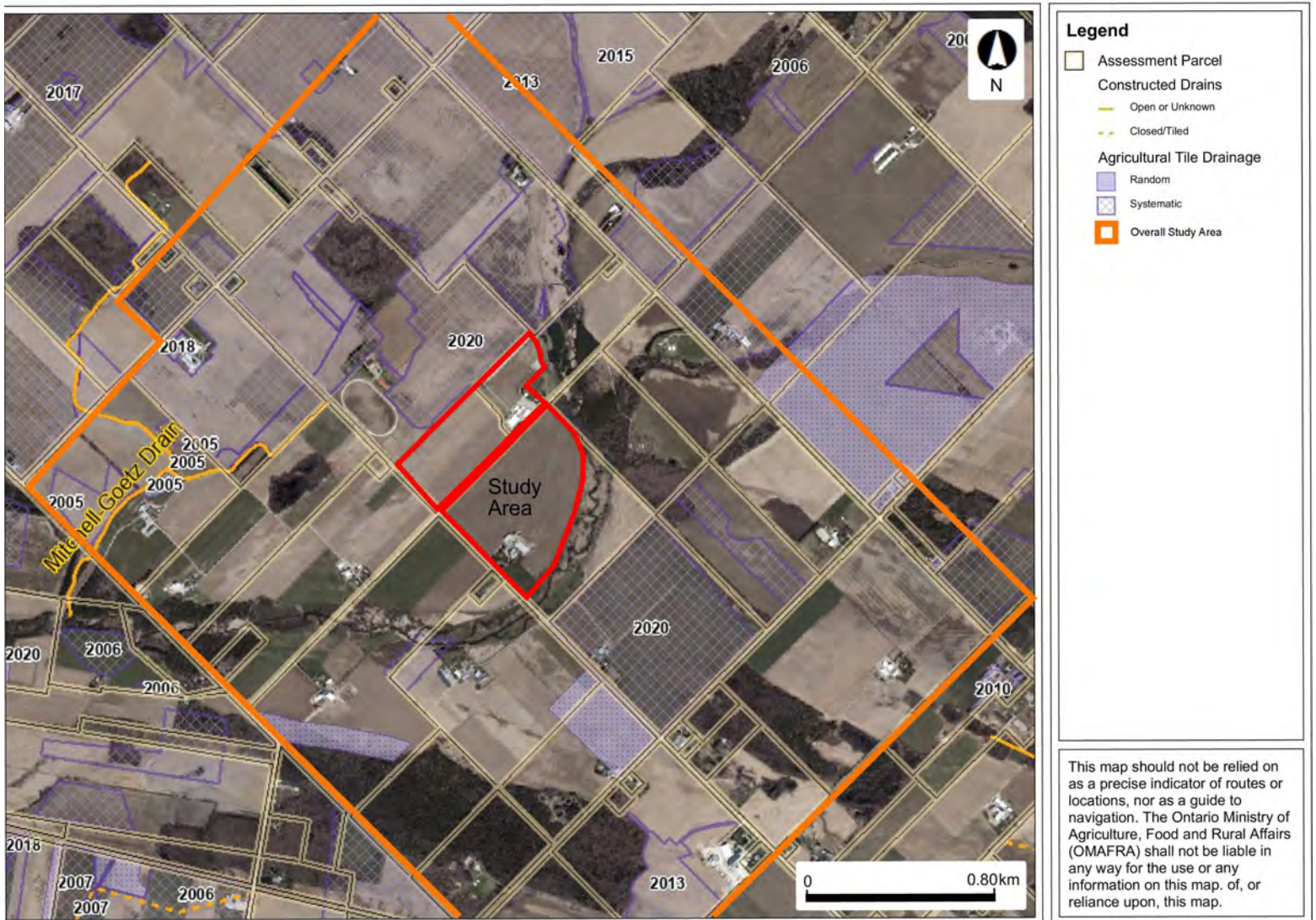
2.5 Agricultural Tile Drainage

Figure 4 illustrates the distribution of agricultural drains, and tile drainage (both systematic tile drainage and random tile drainage) in the study area. One agricultural drain is noted; Mitchell-Goetz Drain located southwest of the subject lands (approximately 400m).

Approximately 23 ha of systematic tile drainage and 254.4 ha of random tile drainage are reported in the Secondary Study Area.

The subject lands are not tile drained.

Figure 4:
Lichty - Agricultural Tile Drain Map



3.0 REHABILITATION RECOMMENDATIONS

The following operational and rehabilitation measures have been incorporated onto the Site Plan. These measures will help to mitigate impacts on agricultural soil resources and ensure that the site is progressively rehabilitated to a productive agricultural end use.

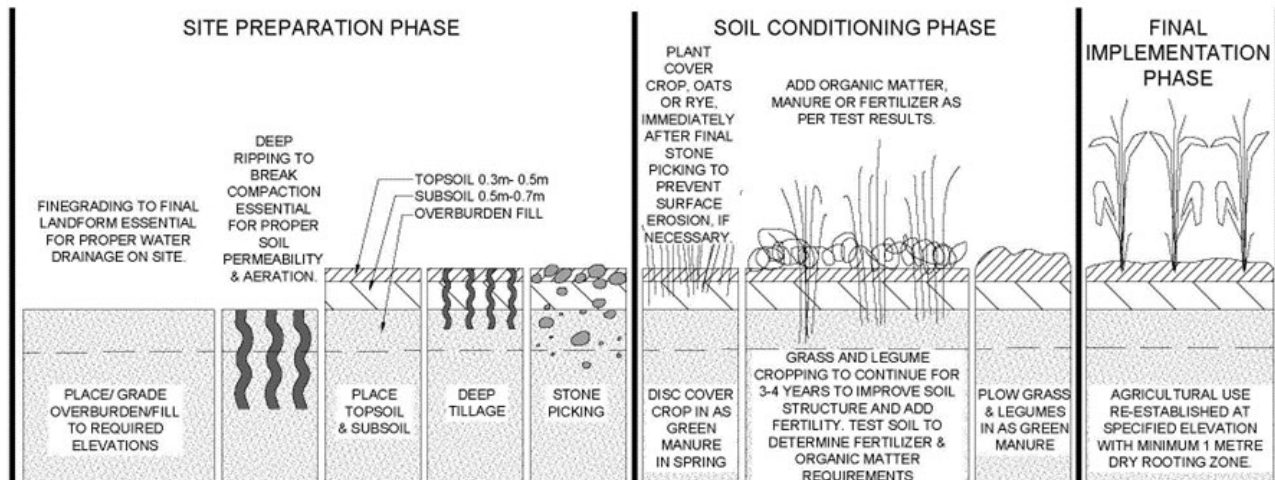
3.1 Soil Management and Progressive Rehabilitation

The following operational notes have been prepared to guide soil management and progressive rehabilitation activities at the proposed expansion pit:

- Topsoil and overburden will be stripped and piled separately in perimeter berms or in temporary stockpiles on the pit floor. Vegetation on all berms shall be maintained.
- In areas where onsite topsoil quantities are minimal, overburden and topsoil may be stored together in separate perimeter berms or temporary stockpile locations on the pit floor.
- Topsoil and overburden stockpiles will be graded to stable slopes and seeded with an appropriate grass-legume seed mixture to prevent erosion.
- Progressive rehabilitation of the pit floor will occur once the licensee has determined that the applicable area is not required for processing and stockpiling of aggregate. Once berms are no longer required as visual screens or acoustic barriers, they will be dismantled and the topsoil and overburden will be used for progressive rehabilitation of the pit floor and associated side slopes. Topsoil will be spread in a sufficient depth to grow a forage crop.
- All vegetation planted during the pit operation will be maintained in a healthy growing condition. Should any planted vegetation die, it will be replaced within one growing season.

As mentioned before, the maximum allowable disturbed area at one time is 15 ha, as the agriculture lands available can continue to be utilized.

In order to rehabilitate the subject land back to a similar soil fertility and productivity, a pre-disturbance soil sample will be conducted to measure proper levels.



3.2 Imported Soil and Topsoil

The following notes relate to the management of inert soil and topsoil. Imported soil may be used to enhance the agricultural rehabilitation of the site.

- Clean inert soil and topsoil may be imported to the site. Imported topsoil will be used to improve the productivity of the rehabilitated lands. Provisions related to the management of imported soil are noted on Page 3.
- In order to maximize recovery, importation of clean inert soil may be imported to facilitate side slope rehabilitation.
- Only sufficient material to create final grades, as shown, may be imported.
- Imported soil shall meet the Ministry of Environment, Conservation and Parks (MECP) parameters under Table 1 of MECP's "Soil, Groundwater and Sediment Standards for use under part XV.1 of the Environmental Protection Act (EPA)".
- Sampling and testing of material shall be performed at the source site, by a Qualified Person (QP) under the EPA prior to the importation of material onto the licensed site. A QP shall also design a fill monitoring program.
- Random sampling of all imported material shall be conducted at the request of MNRF. The licensee shall keep detailed records of the amount of material brought on site for rehabilitation purposes, as well as the testing results of all samples. All records and testing results shall be available upon request by MNRF or MECP.

It is estimated that approximately 100,000 m³ of clean, inert soil will be imported to the site and used to enhance agricultural rehabilitation.

3.3 Final Agricultural Rehabilitation

The progressive and final rehabilitation measures are set out on page 3 of the Site Plans. These measures will ensure that the site is rehabilitated to an agricultural condition. The following figure has been prepared to explain the suggested cropping sequence for the rehabilitated farm field.

Suggested Cropping Sequence for Rehabilitated Farm Field		
<u>Timeframe</u>	<u>Cropping Program</u>	<u>Comments</u>
Year 1	Seed cover crop (oats or rye)	Control soil erosion
Years 1-4	Seed legume or legume/grass mix	Preferably alfalfa
Year 5+	Hay or permanent pasture crop	See Note d) below

Notes:

- a) the application of manure improves soil structure and soil fertility;
- b) prior to seeding crops, samples should be taken for soil test analysis to determine the type and rates of fertilizer application;
- c) the site should be monitored for several years following restoration to check for signs of subsidence, compact, poor drainage and seed failure. If micro-depressions occur in the field due to subsidence, some additional land leveling, infilling, or surface drainage may be required. Where compacted layers are found, they should be broken up by tillage or subsoiling. The subsoiler should be used when the ground is dry to maximize benefits.
- d) the site may be capable of growing common row crops and common field crops, including soy beans and mixed grains. The farmer should consult a qualified crop specialist at year 5.

4.0 IMPACT ASSESSMENT AND MITIGATION MEASURES

The following section discusses the potential for agricultural impacts resulting from the proposed mineral aggregate operation. The impact assessment has been subdivided into two sections: direct impacts and indirect impacts. Mitigation measures are described, where relevant, to ensure that the impact on agriculture is minimized.

4.1 Direct Impacts

Direct impacts relate to considerations such as the removal of agricultural structures and infrastructure related to agriculture, and the consumption of agricultural lands.

Agricultural Structures

The proposed mineral aggregate operation will not result in the removal of any agricultural structures or infrastructure related to agriculture. The agricultural buildings are shown on the Site Plan. The extraction limit is set at approximately 15-30 m from these buildings.

No mitigation measures are required.

Consumption of Agricultural Lands

The proposed mineral aggregate operation will not result in the removal of agricultural lands. The mineral aggregate operation has been designed as an interim land use. Following the depletion of aggregate in each area, the disturbed lands will be rehabilitated back to agriculture.

The soil management protocol set out in Section 3 of this AIA provides suitable mitigation measures.

4.2 Indirect Impacts

Indirect impacts relate to the potential for influencing water levels/wells, traffic, noise and dust. These are addressed in the following paragraphs.

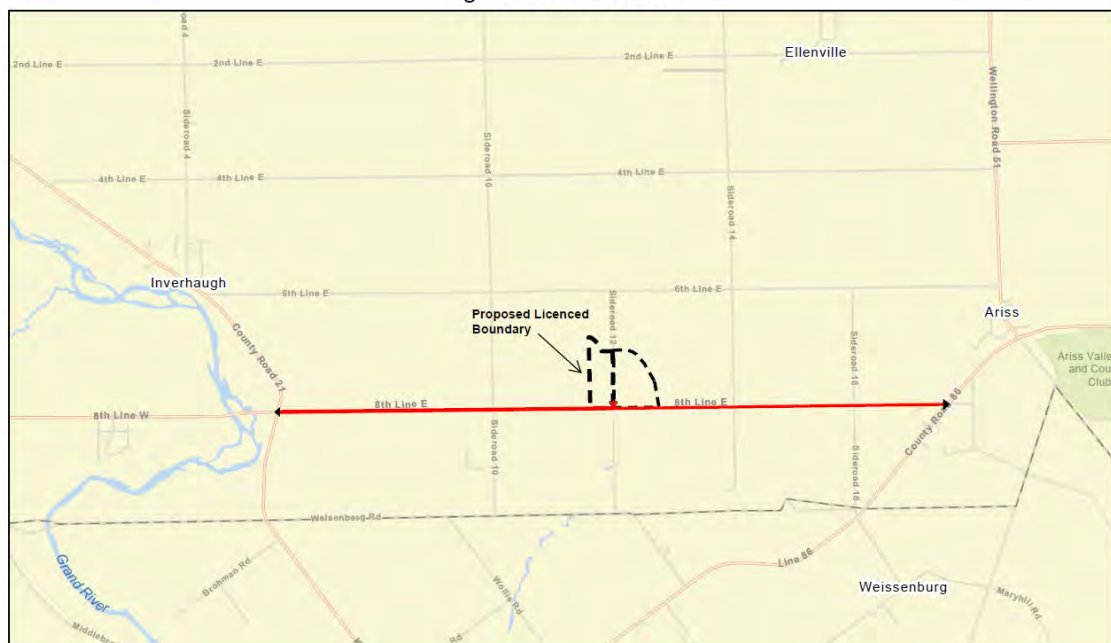
Water

The proposed mineral aggregate operation will remain above the established water table. A Hydrogeological Assessment was completed by GWS. No impacts on water wells are predicted. Therefore, it is concluded that there will be no indirect impacts on the water system resulting from the development of this proposed mineral aggregate operation.

Traffic

The proposed mineral aggregate operation has a maximum annual tonnage limit of 100,00 tonnes. This calculates out to an average hourly truck rate of 2 truck trips per hour. Peak trucking is estimated to be 6-8 truck trips per hour.

Figure 5: Haul Route



7/16/2024

Proposed Haul Route



0 0.4 0.8 1.6 mi
0 0.5 1 2 km

Province of Ontario, Esri Canada, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METINASA, USGS, EPA, NPS, USDA, NRCAN, Parks Canada



The proposed entrance for the mineral aggregate operation has been established at a location approximately 100 m north of the intersection of Sideroad 12/8th Line. This entrance/exit is well-removed from any adjacent agricultural operation. Trucks will also be moving slowly in both directions given the proximity of the intersection, requiring a full stop for outgoing truck traffic and an entrance a reduced speeds given the need for a northbound turn at 8th Line.

Truck-traffic will move from the pit entrance to 8th Line and will travel north towards Inverhaugh or south towards Ariss. 12th Sideroad will not be used as a truck route, except for local needs.

Given the low number of agricultural operations in proximity to the subject lands, there is no significant impact anticipated from truck traffic on adjacent agricultural operations.

Noise and Dust

A Noise Impact Assessment was completed by Aercoustics Engineering Ltd. Relevant mitigation measures were developed, including acoustic berms/barriers and restrictions on processing equipment, to ensure that the proposed mineral aggregate operation meets relevant Ministry guidelines. No noise-related impacts on adjacent agricultural operations are anticipated.

Dust will be controlled by the regular application of water or other approved dust suppressants. In addition, considerable effort has been expended on minimizing perimeter berming at the site. This will help to minimize the disturbed area at the site. The Site Plan includes notes to ensure that berms are properly vegetated and maintained. No dust-related impacts on adjacent agricultural operations are anticipated.

No additional mitigation measures, beyond the notes included on the Site Plan, are needed to ensure that agricultural operations are not impacted.

5.0 PLANNING POLICY FRAMEWORK

The following documents were reviewed as part of this AIA:

- Growth Plan,
- Provincial Policy Statement, 2020
- County of Wellington Official Plan.

Appendix D provides a summary of conformity with the provincial and municipal planning policy framework.

The following summarizes the main agricultural policies that must be considered in a proposal to establish a mineral aggregate operation on farmland in southern Ontario.

5.1 Provincial Policy Statement 2020

The 2020 Provincial Policy Statement (PPS) was issued under section 3 of the Planning Act and came into effect on April 30, 2020. The PPS establishes the policy foundation for regulating the development and use of land in the province and provides policy directions on matters of provincial interest related to land use planning and development. It provides a vision for land use planning in Ontario that encourages efficient use of land, resources and public investment in infrastructure. The PPS strongly encourages development that would provide long-term prosperity, environmental health, and social well-being. The 2020 PPS applies to planning decisions made on or after the effective date and applies to the consideration of the proposed official plan and zoning bylaw amendment applications.

The PPS defines “Prime Agricultural Areas” as:

“Areas where prime agricultural lands predominate. this includes areas of prime agricultural lands in associated Canada Land Inventory (“CLI”) Classes 4 through 7 lands, and additional areas where there is a local concentration of farms which exhibit characteristics of ongoing agriculture. prime agricultural areas may be identified by the Ontario Ministry of Agriculture and Food using guidelines developed by the province as amended from time to time. a prime agricultural area may also be identified through an alternative agricultural land evaluation system approved by the Province.”

The PPS defines Prime Agricultural Land as:

Specialty crop areas and/or Canada land inventory Class 1, 2 and 3 lands as amended from time to time, in this order of priority for protection.”

As previously noted, the majority of the subject lands consist of Classes 1, 2, and 3 soils and therefore, the subject lands are considered to be “prime agricultural lands” as defined by the PPS. Based on the CLI mapping of the surrounding area, the surrounding lands consist of predominantly Classes 1-3 soils and exhibit characteristics of ongoing agriculture; thus, the area is considered a “prime agricultural area”

The PPS defines Specialty Crop Areas as:

“Areas designated using guidelines developed by the province, as amended from time to time in these areas, specialty crops are the predominantly grown, such as tender fruits (peaches, cherries and 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 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 speciality crops.”*

The lands in surrounding areas have not been identified or designated as a specialty crop area by the Province and do not exhibit characteristics of a specialty crop production as defined by the PPS. Accordingly, the subject lands are not within a specialty crop area.

in prime agricultural areas, the PPS permits limited non-agricultural uses such as the extraction of mineral aggregate resources are permitted in prime agricultural areas in accordance with policy 2.3.6. and 2.5.4 of the PPS.

Policy 2.3.6.1 (a) provides that extraction of mineral aggregate resources is permitted in Prime Agricultural Areas in accordance with Policy 2.5 of the PPS.

Furthermore, policy 2.3.6.2 provides that “impacts from any new or expanding non-agricultural uses on surrounding agricultural operations and lands are to be mitigated to the extent feasible”. anticipated impacts on the surrounding agricultural activities are discussed and addressed in Section 5 of this report.

Policy 2.5 of the PPS deals specifically with mineral aggregate resources. Policy 2.5.1. provides that mineral aggregate resources shall be protected for long-term use. Therefore, although the PPS recognizes the importance of prime agricultural lands, it also recognizes the importance of sustaining mineral resources is for long-term use.

Policy 2.5.2.2 of the PPS requires that “*extraction shall be undertaken in a manner which minimizes social, economic and environmental impacts.*” The impacts of the operations on the surrounding agricultural lands uses are discussed in section 5.0 of this Report.

The PPS recognizes that extraction is an interim land use, and as such, progressive and final rehabilitation is required to accommodate future land uses. Policy 2.5.4.1 of the PPS states that extraction of mineral aggregate resources is permitted as an interim use provided that the site will be rehabilitated back to an “*agricultural condition*”. Where below water table extraction is proposed, rehabilitation to an agricultural condition is not required. However, the proposed license does not include any below-water table extraction.

The PPS defines “agricultural condition” as:

“A condition in which substantially the same areas in same average soil capability for agriculture are restored.”

The application proposes to return the license area to a predominantly agricultural condition through progressive and final rehabilitation. Approximately 42.7 hectares (105.5 acres) of land on the subject lands within the extraction area is currently in agricultural production. The following table summarizes how much land will be returned to an agricultural condition.

Table 4 – Agricultural Land to be Rehabilitated

a) Total area to be licensed	42.7 ha
b) Total area to be extracted	29.1 ha
c) Total land to be rehabilitated	29.1 ha
d) Area to be rehabilitated to agricultural condition (pit floor)	29.1 ha
e) Area loss through side slope rehabilitation	0 ha
f) percentage of land to be rehabilitated back to agricultural condition	100%

The rehabilitation plan and Section 3 of this AIA prescribed a process/methodology to rehabilitate and restore the licensed area. Rehabilitation will satisfy the intent of PPS policy 2.5.4.1, returning a majority of the lands to an agricultural condition. Agricultural rehabilitation will be maximized.

Given the foregoing, it is our opinion that the associated rehabilitation plan for the proposed pit is consistent with the PPS.

5.2 The Growth Plan for the Greater Golden Horseshoe

The Growth Plan for the Greater Golden Horseshoe (“Growth Plan”) is the government of Ontario’s initiative to plan for growth and development in a way that supports economic prosperity, protects the environment, and helps communities achieve a high quality of life. The Growth Plan was issued under the authority of Section 7 of the Places to Grow Act, 2005 and applies to the Greater Golden Horseshoe Growth Plan Area (“GGHPA”). Any planning decisions made for lands in the GGHPA must conform to the policies of the Growth Plan.

The Growth Plan advocates for a balanced approach to the wise use and management of all resources, including those related to water, natural heritage, agriculture, cultural heritage, and mineral aggregates. Policy 4.2.6 of the Growth Plan requires that the Province identify an Agricultural System for the Greater Golden Horseshoe and that Prime Agricultural areas, including specialty crop areas, be designated in accordance with mapping identified by the province and these areas will be protected for long-term use for agriculture. The Growth Plan (2020) provides the following description of an agricultural system:

“The system mapped and issued by the Province in accordance with this Plan, comprised of a group of interconnected elements that collectively create a viable, thriving agricultural sector. It has two components: 1. an agricultural land base comprised of prime agricultural areas, including specialty crop areas, and rural lands that together create a continuous productive land base for agriculture; 2. An agri-food network which includes infrastructure, services, and assets important to the viability of the agri-food sector.”

The County of Wellington has not adopted the Provincial mapping of Prime Agricultural Areas, as the Municipal Comprehensive Review for the County has not been finalized. Based on the draft mapping, the subject lands are located in a Prime Agricultural Area. Policy 4.2.6 states that when agricultural uses and non-agricultural uses interface outside of settlement areas, land use compatibility will be achieved by avoiding or where avoidance is not possible, minimizing and mitigating adverse impacts on the Agricultural System. Where mitigation is required, measures should be incorporated as part of the non-agricultural uses, as appropriate, within the area being developed. Section 4.0 of this report provides for the mitigation measures recommended to manage how the proposed non-agricultural use will interface with the surrounding agricultural areas.

Policy 4.2.8 (3) states that in Prime Agricultural Areas, applications for new mineral aggregate operations will be supported by an Agricultural Impact Assessment, and where possible, will seek to maintain or improve connectivity of the Agricultural System. As the license is proposed to be progressively rehabilitated back to an agricultural condition, connectivity of the agricultural system will be maintained in the long-term.

A comprehensive analysis of Growth Plan policies has been undertaken in the Planning Justification Report. The proposed ARA site plans prescribe an approach for progressive rehabilitation that ensures the amount of disturbed area is minimized. Furthermore, there is no below-water extraction proposed. Given the foregoing, it is our opinion that the proposed agricultural rehabilitation plans for the proposed pit are consistent with the policies of the Growth Plan.

5.3 County of Wellington Official Plan

The County of Wellington Official Plan (“OP”) was adopted by Wellington County Council on September 24, 1998, approved by the Ministry of Municipal Affairs on April 13, 1999 and came into effect on May 6, 1999. The OP was last updated in February, 2024.

Prime Agricultural Areas in the OP are defined as: *“Class 1, 2 and 3 agricultural soils, associated Class 4 to 7 soils and additional areas where there is a local concentration of farms which exhibit the characteristics of ongoing agriculture, and specialty crop land will be designated as prime agricultural areas. These areas will be protected for agriculture.”*

Permitted uses in Prime Agricultural Areas include licensed aggregate operations (Policy 6.4.3 k).

New or expanded *mineral aggregate operations* shall only be established through amendment to Mineral Aggregate Area shown on Schedule D (Mineral Aggregate Resource Areas) of the OP. New or expanded *mineral aggregate operations* also require appropriate rezoning and licensing.

Rezoning applications to allow mineral aggregate operations are subject to all relevant policies of this Plan. In considering proposals to establish new aggregate operations, the following matters will be considered:

- a) *the impact on adjacent land uses and residents and public health and safety;*
- b) *the impact on the physical (including natural) environment;*
- c) *the capabilities for agriculture and other land uses;*
- d) *the impact on the transportation system;*
- e) *existing and potential municipal water supply resources are protected in accordance with Sections 4.9.5 and 4.9.5.9 of this Plan and the applicable Source Protection Plan.*
- f) *the possible effect on the water table or surface drainage patterns;*
- g) *the manner in which the operation will be carried out;*
- h) *the nature of rehabilitation work that is proposed; and*
- i) *the effect on cultural heritage resources and other matters deemed relevant by Council.*

It is essential that extraction be carried out with as little social and environmental cost as practical. Provincial standards, guidelines and regulations will be used to assist in minimizing impacts.

Items c) and h) above are relevant to this AIA.

Policy 6.6.8 of the OP addresses rehabilitation requirements. All proposals for new aggregate extraction shall include a plan for eventual rehabilitation. The plan shall:

- a) *provide for progressive rehabilitation whenever feasible;*
- b) *be prepared in detail by a recognized expert;*
- c) *be compatible with the long-term uses permitted by the surrounding official plan designations;*
- d) *on lands designated Prime Agricultural Areas, provide a detailed agricultural rehabilitation plan which restores substantially the same areas and average soil quality for agriculture as before extraction occurred; and*
- e) *on lands designated Secondary Agricultural Areas, provide an agricultural rehabilitation plan which, whenever feasible, restores substantially the same areas and average soil quality for agriculture as before extraction occurred.*

Section 2 of this report documents the capabilities of the onsite soils. The onsite soils are considered to be prime agricultural lands, i.e. Classes 1-3 soils, in a Prime Agricultural Area.

The Site Plan provides detailed notes related to Progressive and Final Rehabilitation. The Site Plan provides for a rehabilitation effort to return the site to an agricultural condition. Section 3 of this AIA documents the rehabilitation considerations.

The proposed application conforms to the agricultural policies of the County of Wellington Official Plan.

6.0 CONCLUSIONS

Stovel and Associates Inc. (“SAI”) was retained by James Thome Construction Ltd. (“Thome”) to complete an Agricultural Impact Assessment (“AIA”) for a proposed Class A Pit (Above the Water Table) on lands located south of Ponsonby described as Part of Lots 11 and 12, Concession 4 West (Geographic Township of Pilkington), Township of Centre Wellington, County of Wellington. The lands are municipally addressed as 5999, 6043 8th Line East, and 7190 Sideroad 12, Township of Centre Wellington (See Figure 1). The subject lands are approximately 42.7 ha in size.

Relevant guidelines and planning policies were considered in the preparation of this AIA. Background documentation, including agricultural mapping and agricultural statistics, was supplemented by data collected through reconnaissance investigations of the Secondary Study Area and Farm Data Sheets. Based on this information, it was concluded that the subject lands are comprised of prime agricultural lands in a prime agricultural area.

The Site Plans were developed to ensure that as much land as practically possible will be returned to similar agricultural capability. Mitigation measures such as the employment of silt fencing, acoustic barriers, and progressive rehabilitation will be employed to ensure that there will be no significant impact on agricultural resources.

Based on the completion of this AIA, it is concluded that the proposed mineral aggregate operation conforms to the relevant policy framework dealing with aggregate extraction in the prime agricultural area.

Robert Stovel

Robert P Stovel, M.Sc., R.P.P., P.Ag

July 31, 2024

Rob Stovel Jr.

Robert L Stovel, B.Sc.

July 31, 2024

APPENDIX A: Completed Farm Data Sheets

FARM DATA SHEET

Minimum Distance Separation I (MDSI)

NOTE TO FARM OWNER(S)
By filling out this form you will help to ensure that new land uses will be located a suitable distance from your livestock operation.

No Livestock on Farm

Owner(s) of Livestock Facility Laverne Martin

Contact Information

Email _____ Telephone 519-823-2200
 Civic Address 7190 Sideroad 12 Municipality Township of Centre Wellington
 Lot 11 Concession 4 Division _____
 Lot Size (where livestock facility is located) _____ hectares 47 acres
 Signature of Livestock Facility Owner Laverne Martin Date Jan. 10/24

BARN(S) SIZE Please provide the design capacity (Maximum number of livestock that can be reasonably housed in ALL of the livestock barns on the lot. _____ ft²/m² _____ ft²/m²

- Manure Storage Types** Solid manure: 18% dry matter, or more Liquid manure: <18% dry matter
- V1 Solid, inside, bedded pack
 - V2 Solid, outside, covered
 - V3 Solid, outside, no cover, ≥30% dry matter
 - V4 Solid, outside, no cover, 18% - <30% dry matter, with covered liquid runoff storage
 - V5 Liquid, inside, underneath slatted floor
 - V6 Liquid, outside, with a permanent, tight-fitting cover
 - L1 Solid, outside, no cover, 18% - <30% dry matter, with uncovered liquid runoff storage
 - L2 Liquid, outside, with a permanent floating cover
 - M1 Liquid, outside, no cover, straight-walled storage
 - M2 Liquid, outside, roof, but with open sides
 - H1 Liquid, outside, no cover, sloped-sided storage

Animal Type of Material	Description	Housing Capacity (maximum)	Manure Storage Type (select from list)
Beef Cattle	Cows, including calves to weaning (all breeds)		
	Feeders (7 – 16 months)		
	Backgrounders (7 – 12.5 months)		
	Shortkeepers (12.5 – 17.5 months)		
Dairy Cattle	Milking-age cows (dry or milking)		
	Large-framed; 545 – 658 kg (e.g. Holsteins)		
	Medium-framed; 455 – 545 kg (e.g. Guernseys)		
	Small-framed; 364 – 455 kg (e.g. Jerseys)		
	Heifers (5 months to freshening)		
	Large-framed; 182 – 545 kg (e.g. Holsteins)		
	Medium-framed; 148 – 455 kg (e.g. Guernseys)		
	Small-framed; 125 – 364 kg (e.g. Jerseys)		
	Calves (0 – 5 months)		
	Large-framed; 45 – 182 kg (e.g. Holsteins)		
Medium-framed; 39 – 148 kg (e.g. Guernseys)			
Small-framed; 30 – 125 kg (e.g. Jerseys)			
Horses	Large-framed, mature; >681 kg (e.g. draft or draft cross breeds including unweaned offspring)		
	Medium-framed, mature; 227 – 680 kg (e.g. saddle, riding and racing breeds including unweaned offspring)		
	Small-framed, mature; <227 kg (e.g. ponies and miniatures including unweaned offspring)		

FARM DATA SHEET

NOTE TO FARM OWNER(S)

By filling out this form you will help to ensure that new land uses will be located a suitable distance from your livestock operation.

Owner(s) of Livestock Facility Calvin Lichty

Contact Information

Email _____ Telephone 519-835 3649
 Civic Address 7107 Side Road 12 Municipality _____
 Lot 12 Concession 5 E Division _____
 Lot Size (where livestock facility is located) 130 ac hectares acres

Signature of Livestock Facility Owner Calvin Lichty Date _____

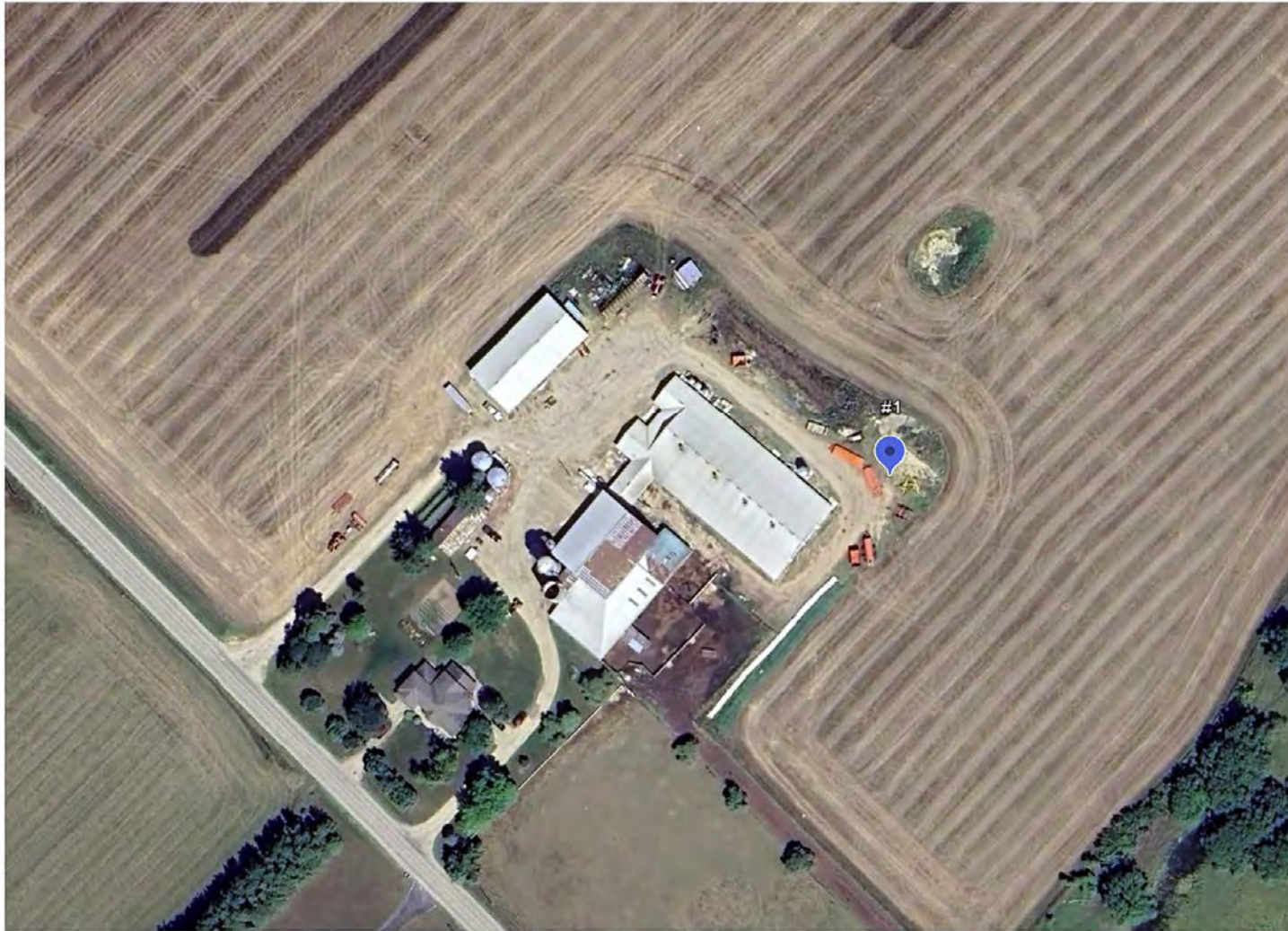
BARN(S) SIZE Please provide the design capacity (Maximum number of livestock that can be reasonably housed in ALL of the livestock barns on the lot. 7000 ft²/m² ft²/m²

- Manure Storage Types** Solid manure: 18% dry matter, or more Liquid manure: <18% dry matter
- V1 Solid, inside, bedded pack
 - V2 Solid, outside, covered
 - V3** Solid, outside, no cover, ≥30% dry matter
 - V4 Solid, outside, no cover, 18% - <30% dry matter, with covered liquid runoff storage
 - V5 Liquid, inside, underneath slatted floor
 - V6 Liquid, outside, with a permanent, tight-fitting cover
 - L1 Solid, outside, no cover, 18% - <30% dry matter, with uncovered liquid runoff storage
 - L2 Liquid, outside, with a permanent floating cover
 - M1** Liquid, outside, no cover, straight-walled storage
 - M2 Liquid, outside, roof, but with open sides
 - H1 Liquid, outside, no cover, sloped-sided storage

Animal Type of Material	Description	Housing Capacity (maximum)	Manure Storage Type (select from list)
Beef Cattle	Cows, including calves to weaning (all breeds)		
	Feeders (7 – 16 months)		
	Backgrounders (7 – 12.5 months)		
	Shortkeepers (12.5 – 17.5 months)		
Dairy Cattle	Milking-age cows (dry or milking)	70	V3 + M1
	Large-framed; 545 – 658 kg (e.g. Holsteins)		
	Medium-framed; 455 – 545 kg (e.g. Guernseys)		
	Small-framed; 364 – 455 kg (e.g. Jerseys)		
	Heifers (5 months to freshening)		
	Large-framed; 182 – 545 kg (e.g. Holsteins)	50	V2
	Medium-framed; 148 – 455 kg (e.g. Guernseys)		
	Small-framed; 125 – 364 kg (e.g. Jerseys)		
	Calves (0 – 5 months)		
	Large-framed; 45 – 182 kg (e.g. Holsteins)	10	V3
Medium-framed; 39 – 148 kg (e.g. Guernseys)			
Small-framed; 30 – 125 kg (e.g. Jerseys)			
Horses	Large-framed, mature; >681 kg (e.g. draft or draft cross breeds including unweaned offspring)		
	Medium-framed, mature; 227 – 680 kg (e.g. saddle, riding and racing breeds including unweaned offspring)		
	Small-framed, mature; <227 kg (e.g. ponies and miniatures including unweaned offspring)		

APPENDIX B: Photography of Agricultural Operations

Operation #1: Aerial View



Operation #1: Street View



Operation #2: Aerial View



Operation #2: Street View



Operation #3: Aerial View



Operation #3: Street View



Operation #4: Aerial View



Operation #4: Street View



Operation #5: Aerial View



Operation #5: Street View



Operation #6: Aerial View



Operation #6: Street View



Operation #7: Aerial View



Operation #7: Street View



Operation #8: Aerial View



Operation #8: Street View



Operation #9: Aerial View



Operation #9: Street View



Operation #10: Aerial View



Operation #10: Street View



Operation #11: Aerial View



Operation #11: Street View



Operation #12: Aerial View



Operation #12: Street View



Operation #13: Aerial View



Operation #13: Street View



Operation #14: Aerial View



Operation #14: Street View



Operation #15: Aerial View



Operation #15: Street View



Operation #16: Aerial View



Operation #16: Street View



Operation #17: Aerial View



**Operation #15:
No Street View
Available/
Unable to
obtain
photograph
due to Road
Closure**

Operation #18: Aerial View



Operation #18: Street View



Operation #19: Aerial View



Operation #19: Street View



Operation #20: Aerial View



Operation #20: Street View



Operation #21: Aerial View



Operation #21: Street View



***APPENDIX C: County and Township Ag Profile –
Wellington County Municipality; Township:
Centre Wellington***

Centre Wellington Township at a Glance - 2021

Centre Wellington Township at a Glance - 2016

Centre Wellington at a Glance - 2011

Centre Wellington Township at a Glance - 2021				Centre Wellington Township at a Glance - 2016				Centre Wellington at a Glance - 2011								
Item	Centre Wellington	Province	Percent of province	Item	Centre Wellington	Province	Percent of province	Item	Centre Wellington	Province	Percent of province	Item	Centre Wellington	Province	Percent of province	
Farms, 2021 Census (number)																
Total	363	48,246	0.75%	6.41%	Major Field Crops, 2021 Census (number)	5,169	1,144,406	0.80%	6.15%	Winter wheat	1,100	1,144,406	0.80%	6.15%	Winter wheat	1,100
Under 100 acres	47	13,217	0.27%	66.40%	Oats for grain	687	84,301	0.83%	10.61%	Oats for grain	263	82,268	0.52	-0.80	Oats for grain	263
10 to 99 acres	104	12,886	0.26%	19.54%	Barley for grain	545	68,756	0.84%	-45.10%	Barley for grain	1,001	103,717	0.87	-42.07	Barley for grain	1,728
70 to 100 acres	36	19,824	0.39%	2.88%	Mixed grain	303	53,801	0.57%	44.17%	Mixed grain	750	10,207	0.62	-26.64	Mixed grain	1,065
100 to 179 acres	30	4,422	0.08%	-11.76%	Corn for silage	13,461	2,200,465	0.61%	2.91%	Corn for silage	13,160	2,140,504	0.61	-4.60	Corn for silage	14,550
180 to 259 acres	34	3,381	0.05%	6.25%	Hay	3,320	289,278	1.01%	-18.93%	Hay	4,005	256,669	1.39	-4.30	Hay	3,920
260 to 339 acres	37	5,366	0.07%	15.29%	Soybeans	14,569	2,806,255	0.52%	-1.84%	Soybeans	14,840	2,793,443	0.53	-0.07	Soybeans	14,850
400 to 559 acres	17	2,862	0.05%	21.43%	Produce	70	36,193	0.19%	88.89%	Produce	45	2,748,515	0.13	-1.26	Produce	47
560 to 799 acres	5	1,682	0.03%	-20.77%	Major Fruit Crops, 2021 Census (number)	25	45,461	0.05%	-26.47%	Apples	12	16,008	0.07%	-25.00%	Apples	10
700 to 1,119 acres	5	1,682	0.03%	-26.27%	Tree fruit	12	16,008	0.07%	-25.00%	Soft Choke	1	4,568	0.02%	-100.00%	Soft Choke	0
1,120 to 1,539 acres	3	729	0.01%	-25.00%	Strawberries	8	2,853	0.24%	-	Grapes	0	18,432	0.00%	-	Grapes	0
1,540 to 2,129 acres	2	401	0.00%	100.00%	Major Vegetable Crops, 2021 Census (number)	60	127,863	0.05%	-7.89%	Strawberries	1	438	0.23%	45.67%	Strawberries	1
2,130 to 2,879 acres	0	0	0.00%	-	Total vegetables	60	127,863	0.05%	-7.89%	Major Fruit Crops, 2021 Census (number)	25	45,461	0.05%	-26.47%	Apples	10
2,880 to 3,519 acres	0	0	0.00%	-	Winter wheat	1,100	1,144,406	0.80%	6.15%	Tree fruit	12	16,008	0.07%	-25.00%	Soft Choke	0
3,520 acres and over	1	118	0.00%	-	Oats for grain	687	84,301	0.83%	10.61%	Soft Choke	1	4,568	0.02%	-100.00%	Soft Choke	0
					Barley for grain	545	68,756	0.84%	-45.10%	Grapes	0	18,432	0.00%	-	Grapes	0
					Mixed grain	303	53,801	0.57%	44.17%	Strawberries	8	2,853	0.24%	-	Strawberries	1
					Corn for silage	13,461	2,200,465	0.61%	2.91%	Raspberries	1	438	0.23%	45.67%	Raspberries	4
					Hay	3,320	289,278	1.01%	-18.93%	Major Vegetable Crops, 2021 Census (number)	60	127,863	0.05%	-7.89%	Total vegetables	60
					Soybeans	14,569	2,806,255	0.52%	-1.84%	Winter wheat	1,100	1,144,406	0.80%	6.15%	Oats for grain	687
					Produce	70	36,193	0.19%	88.89%	Barley for grain	1,001	103,717	0.87	-42.07	Barley for grain	1,728
					Land Use, 2021 Census (hectares)	53,881	8,051,011	0.60%	-1.62%	Mixed grain	750	10,207	0.62	-26.64	Mixed grain	1,065
Land in crops	53,881	8,051,011	0.60%	-1.62%	Major Vegetative Crops, 2021 Census (hectares)	60	127,863	0.05%	-7.89%	Corn for silage	13,160	2,140,504	0.61	-4.60	Corn for silage	14,550
Barren/wooded land	34	1,584	0.17%	20.00%	Winter wheat	1,100	1,144,406	0.80%	6.15%	Hay	3,320	289,278	1.01%	-18.93%	Hay	3,920
Timber or wooded pasture	2,302	46,460	0.50%	22.07%	Oats for grain	687	84,301	0.83%	10.61%	Barley for grain	1,001	103,717	0.87	-42.07	Barley for grain	1,728
Natural land for pasture	1,006	626,368	6.16%	4.46%	Barley for grain	1,001	103,717	0.87	-42.07	Mixed grain	750	10,207	0.62	-26.64	Mixed grain	1,065
Cross-hatched, wooded & wetland	4,577	1,263,525	15.60%	18.77%	Major Vegetative Crops, 2021 Census (hectares)	60	127,863	0.05%	-7.89%	Corn for silage	13,160	2,140,504	0.61	-4.60	Corn for silage	14,550
All other land	2,756	484,714	4.80%	1.79%	Winter wheat	1,100	1,144,406	0.80%	6.15%	Barley for grain	1,001	103,717	0.87	-42.07	Barley for grain	1,728
Total area of farms	69,226	11,764,071	0.55%	2.21%	Oats for grain	687	84,301	0.83%	10.61%	Mixed grain	750	10,207	0.62	-26.64	Mixed grain	1,065
					Barley for grain	545	68,756	0.84%	-45.10%	Corn for silage	13,160	2,140,504	0.61	-4.60	Corn for silage	14,550
					Mixed grain	303	53,801	0.57%	44.17%	Hay	3,320	289,278	1.01%	-18.93%	Hay	3,920
					Corn for silage	13,461	2,200,465	0.61%	2.91%	Produce	70	36,193	0.19%	88.89%	Produce	47
					Hay	3,320	289,278	1.01%	-18.93%	Major Fruit Crops, 2021 Census (number)	25	45,461	0.05%	-26.47%	Apples	10
					Soybeans	14,569	2,806,255	0.52%	-1.84%	Tree fruit	12	16,008	0.07%	-25.00%	Soft Choke	0
					Produce	70	36,193	0.19%	88.89%	Soft Choke	1	4,568	0.02%	-100.00%	Soft Choke	0
					Land Use, 2016 Census (hectares)	54,767	9,021,298	0.61	-15.63	Grapes	0	18,432	0.00%	-	Grapes	0
Land in crops	54,767	9,021,298	0.61	-15.63	Barren/wooded land	36	1,688	0.18	71.16	Strawberries	1	438	0.23%	45.67%	Strawberries	1
Barren/wooded land	36	1,688	0.18	71.16	Major Vegetative Crops, 2016 Census (hectares)	60	127,863	0.05%	-7.89%	Major Fruit Crops, 2016 Census (number)	25	45,461	0.05%	-26.47%	Apples	10
Timber or wooded pasture	1,640	514,168	5.32	24.46	Winter wheat	1,100	1,144,406	0.80%	6.15%	Tree fruit	12	16,008	0.07%	-25.00%	Soft Choke	0
Natural land for pasture	1,053	703,566	7.13	30.40	Oats for grain	687	84,301	0.83%	10.61%	Barley for grain	1,001	103,717	0.87	-42.07	Barley for grain	1,728
Cross-hatched, wooded & wetland	4,649	1,263,627	13.46	54.29	Barley for grain	1,001	103,717	0.87	-42.07	Mixed grain	750	10,207	0.62	-26.64	Mixed grain	1,065
All other land	2,888	470,660	4.87	18.19	Mixed grain	750	10,207	0.62	-26.64	Corn for silage	13,160	2,140,504	0.61	-4.60	Corn for silage	14,550
Total area of farms	65,077	10,346,463	0.52	-15.13	Corn for silage	13,160	2,140,504	0.61	-4.60	Hay	3,320	289,278	1.01%	-18.93%	Hay	3,920
					Hay	3,320	289,278	1.01%	-18.93%	Produce	45	2,748,515	0.13	-1.26	Produce	47
					Soybeans	14,569	2,806,255	0.52%	-1.84%	Major Vegetable Crops, 2016 Census (hectares)	60	127,863	0.05%	-7.89%	Total vegetables	60
					Produce	45	2,748,515	0.13	-1.26	Winter wheat	1,100	1,144,406	0.80%	6.15%	Oats for grain	687
					Land Use, 2011 Census (hectares)	63,408	8,929,347	0.71	-11.63	Barley for grain	1,001	103,717	0.87	-42.07	Barley for grain	1,728
Land in crops	63,408	8,929,347	0.71	-11.63	Major Vegetative Crops, 2011 Census (hectares)	60	127,863	0.05%	-7.89%	Corn for silage	13,160	2,140,504	0.61	-4.60	Corn for silage	14,550
Barren/wooded land	144	25,452	0.44	20.00%	Winter wheat	1,100	1,144,406	0.80%	6.15%	Hay	3,320	289,278	1.01%	-18.93%	Hay	3,920
Timber or wood	3,171	648,758	0.53	22.07%	Oats for grain	687	84,301	0.83%	10.61%	Barley for grain	1,001	103,717	0.87	-42.07	Barley for grain	1,728
Natural land for pasture	2,129	884,839	9.22	34.86	Barley for grain	1,001	103,717	0.87	-42.07	Mixed grain	750	10,207	0.62	-26.64	Mixed grain	1,065
Cross-hatched, wooded & wetland	5,846	1,612,844	18.07	60.00	Mixed grain	750	10,207	0.62	-26.64	Corn for silage	13,160	2,140,504	0.61	-4.60	Corn for silage	14,550
All other land	3,640	498,828	5.51	13.46	Corn for silage	13,160	2,140,504	0.61	-4.60	Hay	3,320	289,278	1.01%	-18.93%	Hay	3,920
Total area of farms	77,388	12,688,236	0.61	2.11%	Hay	3,320	289,278	1.01%	-18.93%	Produce	45	2,748,515	0.13	-1.26	Produce	47
					Produce	45	2,748,515	0.13	-1.26	Major Fruit Crops, 2011 Census (number)	25	45,461	0.05%	-26.47%	Apples	10
					Major Fruit Crops, 2011 Census (number)	25	45,461	0.05%	-26.47%	Tree fruit	12	16,008	0.07%	-25.00%	Soft Choke	0
					Tree fruit	12	16,008	0.07%	-25.00%	Soft Choke	1	4,568	0.02%	-100.00%	Soft Choke	0
					Soft Choke	1	4,568	0.02%	-100.00%	Grapes	0	18,432	0.00%	-	Grapes	0
					Grapes	0	18,432	0.00%	-	Strawberries	1	438	0.23%	45.67%	Strawberries	1
					Strawberries	1	438	0.23%	45.67%	Major Vegetable Crops, 2011 Census (hectares)	60	127,863	0.05%	-7.89%	Total vegetables	60
					Major Vegetable Crops, 2011 Census (hectares)	60	127,863	0.05%	-7.89%	Winter wheat	1,100	1,144,406	0.80%	6.15%	Oats for grain	687
					Winter wheat	1,100	1,144,406	0.80%	6.15%	Oats for grain	687	84,301	0.83%	10.61%	Oats for grain	687
					Oats for grain	687	84,301	0.83%	10.61%	Barley for grain	1,001	103,717	0.87	-42.07	Barley for grain	1,728
					Barley for grain	1,001	103,717	0.87	-42.07	Mixed grain	750	10,207	0.62	-26.64	Mixed grain	1,065
					Mixed grain	750	10,207	0.62	-26.64	Corn for silage	13,160	2,140,504	0.61	-4.60	Corn for silage	14,550
					Corn for silage	13,160	2,140,504	0.61	-4.60	Hay	3,320	289,278	1.01%	-18.93%	Hay	3,920
					Hay	3,320	289,278	1.01%	-18.93%	Produce	45	2,748,515	0.13	-1.26	Produce	47
					Produce	45	2,748,515	0.13	-1.26	Major Fruit Crops, 2011 Census (number)	25	45,461	0.05%	-26.47%	Apples	10
					Major Fruit Crops, 2011 Census (number)	25	45,461	0.05%	-26.47%	Tree fruit	12	16,008	0.07%	-25.00%	Soft Choke	0
					Tree fruit	12	16,008	0.07%	-25.00%	Soft Choke	1	4,568				

APPENDIX D: Planning Policy Chart

Government Document	Policy Reference	Policy Text	Discussion of Conformity with Relevant Policy Provision
Growth Plan	Mineral Aggregate Resources		
	4.2.8.3	In prime agricultural areas, applications for new mineral aggregate operations will be supported by an agricultural impact assessment and, where possible, will seek to maintain or improve connectivity of the Agricultural System.	AIA has been completed.
	4.2.8.4 d)	outside the Natural Heritage System for the Growth Plan, and except as provided in policies 4.2.8.4 a), b) and c), final rehabilitation will appropriately reflect the long-term land use of the general area taking into account applicable policies of this Plan and, to the extent permitted under this Plan, existing municipal and provincial policies. In prime agricultural areas, the site will be rehabilitated in accordance with policy 2.5.4 of the PPS, 2020	Final rehabilitation will be to agriculture.
PPS,2020			
	2.3.6 - Non-Agricultural Uses in Prime Agricultural Areas		
	2.3.6.1	Planning authorities may only permit non-agricultural uses in prime agricultural areas for: a) extraction of minerals, petroleum resources and mineral aggregate resources; or b) limited non-residential uses, provided that all of the following are demonstrated:	Extraction of mineral aggregate resources in prime agricultural areas is a permitted use.
		1. the land does not comprise a specialty crop area;	The land is not part of a specialty crop area.
		2. the proposed use complies with the minimum distance separation formulae;	MDS does not apply to mineral aggregate operations.
		3. there is an identified need within the planning horizon provided for in policy 1.1.2 for additional land to accommodate the proposed use; and	Need is not a planning consideration for mineral aggregate operations.

		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.	Not applicable to this AIA.
	2.3.6.2	Impacts from any new or expanding non-agricultural uses on surrounding agricultural operations and lands are to be mitigated to the extent feasible.	AIA addresses the need for mitigation.
	2.5.3 Rehabilitation		
	2.5.3.1	Progressive and final rehabilitation shall be required to accommodate subsequent land uses, to promote land use compatibility, to recognize the interim nature of extraction, and to mitigate negative impacts to the extent possible. Final rehabilitation shall take surrounding land use and approved land use designations into consideration.	Progressive and Final Rehabilitation will be to an agricultural end use. This is an appropriate end use for the site given the surrounding agricultural resources in the Prime Agricultural Area.
	2.5.3.2	Comprehensive rehabilitation planning is encouraged where there is a concentration of mineral aggregate operations.	Not applicable as the surrounding area does not have a concentration of mineral aggregate operations.
	2.5.3.3	In parts of the Province not designated under the Aggregate Resources Act, rehabilitation standards that are compatible with those under the Act should be adopted for extraction operations on private lands.	Not applicable to this AIA.
	2.5.4 Extraction in Prime Agricultural Areas		
	2.5.4.1	In prime agricultural areas, on prime agricultural land, extraction of mineral aggregate resources is permitted as an interim use provided that the site will be rehabilitated back to an agricultural condition.	The proposal conforms to this policy. The site will be rehabilitated to an agricultural condition.
		Complete rehabilitation to an agricultural condition is not required if:	
		a) outside of a specialty crop area, there is a substantial quantity of mineral aggregate resources below the water table warranting extraction, or the depth of planned extraction in a quarry makes restoration of pre-extraction agricultural capability unfeasible;	Not applicable.

		b) in a specialty crop area, there is a substantial quantity of high quality mineral aggregate resources below the water table warranting extraction, and the depth of planned extraction makes restoration of pre-extraction agricultural capability unfeasible;	Not applicable.
		c) other alternatives have been considered by the applicant and found unsuitable. The consideration of other alternatives shall include resources in areas of Canada Land Inventory Class 4 through 7 lands, resources on lands identified as designated growth areas, and resources on prime agricultural lands where rehabilitation is feasible. Where no other alternatives are found, prime agricultural lands shall be protected in this order of priority: specialty crop areas, Canada Land Inventory Class 1, 2 and 3 lands; and	Not applicable.
		d) agricultural rehabilitation in remaining areas is maximized.	Not applicable.
County OP	4.6.5 - Agricultural Impact Assessment	Where development is proposed in prime or secondary agricultural areas, a Council may require an assessment of the impacts the development may have on agricultural activities in the area. An assessment may include any or all of the following:	
		a) the opportunity to use lands of lower agricultural potential;	Not applicable.
		b) compliance with the minimum distance separation formulae for livestock operations;	Not applicable.
		c) the degree to which agricultural expansion may be constrained;	This has been addressed in the AIA. The proposal will not have a significant impact on agricultural operations.
		d) potential interference with normal agricultural activities and practices;	This has been addressed in the AIA. The proposal will not have a significant impact on agricultural operations.
		e) potential interference with the movement of agricultural machinery on roads;	This has been addressed in the AIA. The proposal will not have a significant impact on agricultural operations.
		f) such other concerns as a Council may consider relevant.	

	6.5.3 K) Permitted Uses in the Prime Agricultural Area	Permitted uses and activities in Prime Agricultural Areas may include: k) licensed aggregate operations	Licensed aggregate operations are a permitted use in the Prime Agricultural Area.
	6.6.5 New Mineral Aggregate Operations	New or expanded mineral aggregate operations shall only be established through amendment to Mineral Aggregate Area shown on Schedule B of this Plan. New or expanded mineral aggregate operations also require appropriate rezoning and licensing. Rezoning applications to allow mineral aggregate operations are subject to all relevant policies of this Plan. In considering proposals to establish new aggregate operations, the following matters will be considered:	
		a) the impact on adjacent land uses and residents and public health and safety;	
		b) the impact on the physical (including natural) environment;	
		c) the capabilities for agriculture and other land uses;	Agricultural capability mapping included in AIA.
		d) the impact on the transportation system;	This has been addressed in the AIA. The proposal will not have a significant impact on agricultural operations.
		e) existing and potential municipal water supply resources are protected in accordance with Sections 4.9.5 and 4.9.5.9 of this Plan and the applicable Source Protection Plan.	Not applicable.
		f) the possible effect on the water table or surface drainage patterns;	Not applicable.
		g) the manner in which the operation will be carried out;	This has been addressed in the AIA. The proposal will not have a significant impact on agricultural operations.
		h) the nature of rehabilitation work that is proposed; and	
		i) the effect on cultural heritage resources and other matters deemed relevant by Council.	Not applicable.
		It is essential that extraction be carried out with as little social and environmental cost as practical. Provincial standards, guidelines and regulations will be used to assist in minimizing impacts	This has been addressed in the AIA. The proposal will not have a significant impact on agricultural operations.
	6.6.6 Public Information	When planning approvals are being considered for new or expanded mineral aggregate operations, the following information shall be made available to the public.	

		a) detailed site plans which provide a description of the proposed aggregate operation including location, size, contours, topography, existing and proposed buildings and structures, setbacks, screening, buffers, entrances, exits, haul routes, drainage facilities, water table, any water diversions or storage, existing and anticipated final grades, excavation depth, stockpiles, and the sequence of operations and rehabilitation;	Site Plan has been prepared that addresses this.
		b) the estimated quality and quantity of the resource;	Not applicable.
		c) a description of the surrounding lands including land uses, locations and use of buildings and structures, fences, significant natural features and wells and other lands owned by the applicant;	Not applicable.
		d) Any related reports prepared by the proponents; and	Not applicable.
		e) any other information deemed relevant by Council.	
	6.6.8 Rehabilitation	All proposals for new aggregate extraction shall include a plan for eventual rehabilitation. The plan shall:	
		a) provide for progressive rehabilitation whenever feasible;	This has been included in the AIA and Site Plan.
		b) be prepared in detail by a recognized expert;	This has been addressed in the AIA.
		c) be compatible with the long term uses permitted by the surrounding official plan designations;	Progressive and Final Rehabilitation will be to an agricultural end use. This is an appropriate end use for the site given the surrounding agricultural resources in the Prime Agricultural Area.
		d) on lands designated Prime Agricultural Areas, provide a detailed agricultural rehabilitation plan which restores substantially the same areas and average soil quality for agriculture as before extraction occurred; and	Progressive and Final Rehabilitation will be to an agricultural end use. This is an appropriate end use for the site given the surrounding agricultural resources in the Prime Agricultural Area.
		e) on lands designated Secondary Agricultural Areas, provide an agricultural rehabilitation plan which, whenever feasible, restores substantially the same areas and average soil quality for agriculture as before extraction occurred.	Not applicable.

APPENDIX E – QUALIFICATIONS

ROBERT P. STOVEL, M.Sc., RPP, MCIP, P.Ag.

EDUCATION

M.Sc, Rural Planning, University of Guelph, 1988.

B.A. Geography, (Resources Management), Wilfrid Laurier University, 1986.

MEMBERSHIPS

Member of the Ontario Institute of Agrologists.

Member of the Ontario Professional Planners Institute and the Canadian Institute of Planners.

Member of the Ontario Stone, Sand and Gravel Association.

POSITIONS HELD

1995 - Present: Stovel and Associates Inc., Fergus, Ontario - President.

1993 - 1995: Ecological Services For Planning Ltd., Guelph, Ontario - Senior Project Manager.

1988 - 1992: Ecological Services For Planning Ltd., Guelph, Ontario - Environmental Planner.

1986 - 1987: Environmental Consultant. Waterloo, Ontario.

EXPERIENCE

- extensive project experience in environmental assessments, environmental management plans and ecological enhancement plans in Ontario. These projects have required considerable government and non-government agency liaison, interdisciplinary team coordination and the integration of a variety of scientific disciplines.

Aggregate Applications

- certified to prepare Class A site plans under the Aggregate Resources Act.
- prepared site plans for over 50 licensed pits and quarries in Ontario including: Ospringe Pit, Mallet Pit, Flamboro Quarries, Henderson Pit, Holman Pit, Looby Pit, Albion Pit, Puslinch Pit and Extension Properties, SAMI North Pit Extension and Peyton Pit.
- assisted in the preparation of environmental plans and agricultural rehabilitation plans for the proposed Batterman Pit (Grey County), Puslinch Pit, Caledon Sand & Gravel Inc. Pit and the proposed Shoemaker Pit.
- retained by Town of Mono and Township of East Garafraxa to peer review natural heritage studies

and ecological enhancement plans for proposed aggregate operation.

- retained by Township of Puslinch to peer review pit applications and Town of Caledon to review an AIA in support of pit and quarry application.
- conducted environmental evaluations and agricultural appraisals for various aggregate operations in southern Ontario.
- assisted in the preparation of the Section 9 report for the proposed expansions of the Ospringe Pit, the Darrington Pit and Flamboro Quarries.
- prepared Level 1 & 2 Natural Environment and Environmental Impact Statements for aggregate developments in Simcoe County, Perth County, Huron County, Grey County, Bruce County, Oxford County, Wellington County and the Regional Municipalities of York, Halton, Waterloo and Hamilton-Wentworth. These reports were prepared in accordance with the policy requirements of the Aggregate Resources Act (Technical Study Requirements), Wetland Policy Statement, Provincial Policy Statement and/or local/regional Official Plans.
- Assisted in the preparation of applications for Environmental Compliance Approvals for pit and quarry operations in southern Ontario.

Environmental Assessments

- prepared the ecological and agricultural components for municipal road projects in King Township and the City of Stratford.
- prepared agricultural impact assessments for provincial road projects in the County of Essex and the County of Peterborough.
- coordinated environmental assessment projects for waste management master plans in Victoria County, Essex County, Peterborough County and the Regional Municipality of Haldimand-Norfolk (agricultural component).
- prepared route selection reports for the proposed development of an 8" pipeline in Orillia. This project received provincial approval at the Ontario Energy Board in 1994.
- managed the environmental constraint mapping and geotechnical selection component of Ontario Hydro's construction of a 500 kV transmission line from Lennox to Bowmanville. This transmission line was constructed in 1992.

Environmental Inventories and Monitoring

- designed and implemented wetland vegetation monitoring programs for proposed aggregate and estate residential developments.
- designed a transplanting and propagation plan for *Carex jamesii*.
- completed the required seminar on the Ontario Wetland Evaluation System (3rd ed.) and the Wetland Environmental Impact Study; Technical Manual.

- completed surveys for the following wetlands: Orangeville Reservoir Wetland Complex, Hayesland-Christie Wetland Complex, Dalrymple Lake Wetland Complex, Star Wetland Complex, Eramosa River-Blue Springs Creek Wetland Complex, Orillia Filtration Swamp, Philips Lake Wetland Complex, Mossington Park Wetland Complex, Cranberry/Oil Well Bog, Humber River Marshes Wetland Complex, Mill Creek Wetland Complex, Speed River Wetland Complex and the Beaverton River Wetland Complex.
- managed deer wintering surveys in Ramara Township, Carden Township, Erin Township and Puslinch Township.
- coordinated fisheries inventories for coldwater and warmwater systems in Ontario (e.g. Eramosa River, Speed River, West Credit River, Dalrymple Lake, Warnock Lake, Caledon Creek, Greenock Creek and Spencer Creek).
- prepared terrestrial enhancement plans for a deer wintering area in Puslinch Township.
- completed forestry evaluations for woodland areas in Wellington County, Simcoe County and the Regional Municipalities of York, Peel and Hamilton-Wentworth.
- managed bird surveys in various Southern Ontario municipalities.
- coordinated vegetation surveys for alvar communities in Simcoe County, Victoria County and the Regional Municipality of Hamilton-Wentworth.
- completed vegetation management plan for alvar communities and upland forest communities for a proposed quarry in the Regional Municipality of Hamilton-Wentworth.

Subwatershed Planning

- participated in subwatershed planning studies in Laurel Creek, Grindstone Creek and Nichol Drain No. 2.
- completed historic vegetation mapping programs in Caledon Creek Subwatershed.

Agricultural Impact Assessment

- completed several agricultural assessments in Wellington County, Simcoe County and the Regional Municipalities of Peel, Halton, York and Hamilton-Wentworth. These studies addressed the potential impacts of proposed aggregate operations, residential developments, urban expansions and golf courses (Mad River, Chestnut Hill and Cardinal Golf Courses) on the local agricultural community.
- prepared impact assessment and alternate site evaluation study for a proposed new town site in the Town of East Gwillimbury.
- retained by Town of Mono to review applications to import fill for the purpose of improving agricultural lands.
- Retained by Township of Clearview and Town of Mono to provide expert opinion evidence at Normal Farm Practices Protection Board hearings.
- retained by Town of Mono, Township of Amaranth and Township of East Garafraxa to review the Provincial Agricultural System and implications of draft provincial mapping.

- calculated minimum distance separation requirements for various types of livestock operations.
- managed the agricultural component of the Victoria County Waste Management Master Plan.

ROBERT L. STOVEL, B.Sc.

EDUCATION

B.Sc., Providence College, 2020.

POSITIONS HELD

2021 to Present: Stovel and Associates Inc., Fergus, ON – Planner.

EXPERIENCE

Mr. Stovel has worked on several public-sector and private-sector developments.

Planning assignments include assistance with the preparation of planning justification reports for official plan amendments, zoning by-law amendments, consent applications, plan of subdivision applications and peer reviews of planning applications. In his capacity as a planner, Mr. Stovel has liaised with government and non-government agencies, interdisciplinary teams of consultants and the public.

Selected municipal planning projects include the following: peer review of CBM Pit Licence Applications (Lanci Pit Expansion and Aberfoyle South Pit Expansion), CBM Quarry (Caledon), Township of East Garafraxa (Development Review – Agriculture). As well, Mr. Stovel also assisted with a background study in the County of Middlesex addressing minimum farm parcel size in the Prime Agricultural Area.

With respect to private sector development applications, Mr. Stovel assisted in the design and municipal approvals for three subdivision applications in the County of Wellington. Mr. Stovel has experience with respect to the approvals required for pits and quarries in Ontario. Mr. Stovel has assisted with the preparation of private sector pit licence applications including: Lockhart Pit Expansion (Woolwich Township), Lichty Pit (Thoume Construction - Pilkington Township), and Innes Line Pit (SAMI - Southwest Oxford).

Mr. Stovel has also completed annual Compliance Assessment Reports for active gravel pits and several site plan amendments for municipal and private sector pits.

Mr. Stovel has extensive project experience in agricultural projects in Ontario, including: the preparation of Agricultural Impact Assessments (AIA's), peer review of MDS 1 calculations and AIA's, and Agricultural Rehabilitation Plans for disturbed landscapes including pits.