Esher Planning Inc.

SCOPED
AGRICULTURAL IMPACT ASSESSMENT

HARRINGTON PIT
PART LOT 30 CONCESSION 1 (WEST ZORRA)
TOWNSHIP OF ZORRA, OXFORD COUNTY

PREPARED FOR:
1000394952 Ontario Inc.

PREPARED BY:
M. Horton, MCIP, RPP
Esher Planning Inc.

REGISTERED PROFESSIONAL PLANNER (RPP)

JANUARY 2026

Table of Contents

REPORT FIGURES

1.0 Introduction

In October 2024, 1000394952 Ontario Inc. submitted an application for a Zoning Bylaw Amendment (Application #ZN5-24-09) in order to permit a sand and gravel pit operation ("**Harrington Pit**"). The application proposes to re-zone the lands located at 316829 31st Line from General Agricultural (A2) to Aggregate Industrial (ME). A related application for a Class A, Pit Above Water Table License was submitted to the Ministry of Natural Resources (MNR) under the *Aggregate Resources Act* (ARA) in July 2024.

In late October 2024, after the Zoning amendment application was submitted, the province introduced a new Provincial Planning Statement (PPS 2024) that replaced the 2020 PPS. With respect to mineral aggregates and prime agricultural areas, the 2024 PPS changes include revisions to the policies for complete rehabilitation to an agricultural use which remove the requirement to evaluate alternatives on non-prime agricultural lands and introducing a policy that requires that impacts 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, as determined by the province.

This Scoped Agricultural Impact Assessment (AIA) has been prepared to address the policy requirements of the 2024 PPS. The report was prepared based on the Agricultural Impact Assessment (AIA) Guidance Document (2025) prepared by the Ontario Ministry of Agriculture, Food and Agribusiness (OMAFA) and evaluates the potential impacts of the proposed Harrington Pit on local agricultural operations and the agricultural system. The report also outlines the mitigation measures that avoid, minimize and/or eliminate identified potential adverse impacts to the extent feasible.

1.1 Description of the Proposal

The proposed Harrington Pit is located at 316829 31st Line. The property legally described as Part of Lot 30, Concession 1 in the Geographic Township of West Zorra, Oxford County (see **Figure 1**). The property is bounded by Road 96 to the north, 31st Line to the east, and a mixture of residential, agricultural and aggregate lands to the south.

The property is currently in agricultural use. The community of Harrington is located to the east of the proposed pit. There is a cluster of Aggregate pit licenses located adjacent to and southwest of the site as shown on **Figures 2 and 3**.

The proposed pit has licensed area of approximately 27.8 hectares, with extraction proposed on a portion (23.6 ha) of the subject lands. The pit will supply sand and gravel products to the local construction markets.

Rehabilitation of the pit will be undertaken progressively, with the final land use plan to restore the agricultural lands and wooded areas that currently exist on the property. The proposed rehabilitation will be compatible with the surrounding land uses. A complete description of the operation can be found in the ARA Summary Statement and is detailed on the ARA Site Plans.

1.2 Assessment of Potential Impacts

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).

1.3 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 recommended 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 Pit is discussed further in section 7 of this report.

2.0 Agricultural Policy Requirements

The Official Plan for the Township of Zorra designates the subject property as 'Agricultural Reserve (See **Figure 4**)'. The property is also identified in the Official Plan within an area mapped as "Aggregate Resource". Mineral Aggregate extraction is generally permitted as an interim use in the Agriculture designation. This is consistent with the policies of the Provincial Planning Statement (PPS 2024) which permit aggregate extraction on prime agricultural lands in prime agricultural areas as an interim use. The PPS requires that an Agricultural Impact Assessment, or equivalent, be completed to assess the impacts on the agricultural system. The relevant agricultural policy requirements are outlined in the following sections.

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. The current version of the PPS 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.

Agricultural resources are one of many provincial land use planning interests that must be considered when making land use planning decisions. The PPS indicates that "when more than one policy is relevant, a decision-maker should consider all of the relevant policies to understand how they work together." For example, it may be necessary to also consider provincial interests related to the creation of complete communities, efficient servicing, cultural heritage, natural heritage, the protection of municipal drinking water sources, mineral aggregate resources and watershed planning. Together with information on other provincial interests, an AIA will help approval authorities consider the merits of proposed non-agricultural uses.

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."

The PPS policies allow for extraction of aggregate resources in prime agricultural areas.

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*."

This AIA report have been prepared to assess the potential impacts of the proposed pit on the agricultural system and identifies the measures which have been incorporated into the proposed pit design to mitigate or minimize impacts.

Section 4.5.4 of the PPS states

"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.

According to the Canada Land inventory mapping, the site contains class 3 and class 4 lands. Approximately 70 percent of the area to be licenced is class 4 lands. Class 1-3 lands are considered "prime agricultural land" according to the PPS definitions. The Rehabilitation Plans outline the details of the proposed restoration of the site to an agricultural condition with an objective to restore the lands to the same or better agricultural capability as pre-extraction. This is consistent with the PPS policies outlined in Section 4.5.4.

2.2 Oxford County Official Plan

The Oxford County Official Plan is the policy document that establishes the overall land use strategy for both the County and the eight area municipalities that comprise the County, including the Township of Zorra. Official Plan Amendment (OPA) 269, to update the County's agricultural policies was adopted by County Council on May 25, 2022, and approved by the Province on February 8, 2024. The key updates to the policies of this Section include: ensuring continued protection of the County's prime agricultural areas for long term agricultural use, while recognising changing crops, commodities, markets and technologies; ensuring consistency with Provincial direction and, wherever possible, reflective of local goals and objectives; including provisions to ensure that uses are permitted at appropriate scales, are compatible with surrounding land uses, and are appropriately sited; and incorporation of a number of new/updated terms.

According to the OPA Over 90 percent of agricultural land in the County is within Classes I, II and III agricultural land capability. In, 2016 87 percent of the total County land base was devoted to agricultural production, and the agricultural industry was the fourth most important employer in the County. Further, there were over 1875 farms in the County reporting total annual gross farm receipts of over $709 million, with a continued trend toward fewer, but larger and more intensive farming operations. Based on the total value of products sold, Oxford County farms were, on average, the third most productive in Ontario.

Sand and gravel extraction and ancillary uses are permitted in the Agricultural Reserve as interim uses, in accordance with the policies in Section 3.4, Resource Extraction Policies (OP Section 3.1.4.1). Based on the planning analysis outlined in the Planning Justification Report submitted with the application, the proposal conforms with the policies in Section 3.4 of the Official Plan.

The proposed rehabilitation of the site allows for the interim use of the site for aggregate extraction while returning the lands to an agricultural use, with reforestation on a portion of the site, once extraction is complete.

3.0 DESCRIPTION OF SOILS AND LANDS

4.1 Physiography

Based on Chapman and Putnam's physiography mapping, the subject lands fall within the Oxford Till Plain. The surface is drumlinized and the till consists of a pale brown calcareous loam in which limestone is the dominant material, although grey or pale brown dolostone also occurs (Chapman and Putnam 1984:143–144).

4.2 Surficial Geology

The area proposed for extraction lies in an ice contact glacial deposit and is classified as a primary significance zone in the Aggregate Resources Inventory Paper for Oxford and Brant Counties (ARIP 159). The mapped resource area comprises a series of glaciofluvial ice-contact deposits that trend northeastward into the County of Perth (part of the Lakeside moraine). This has historically been an important source of sand and gravel and there are currently 12 aggregate licences within the selected resource area.

4.3 Soil Resources

According to the Soils Mapping of Oxford County the western part of the site is identified a clay loam soil of the Huron Series. These soils are developed from clay and clay loam textured till and therefore the texture of the entire profile is finer than most soils in the county. These soils are somewhat coarser in texture than the Huron soils in the lower half of the county. Hay and cereal grains are the principal crops grown on these soils.

The eastern part of the site is mapped as a sandy loam soil of the Fox Series. The parent materials of the Fox Series soils are calcareous sand, deposited either as glacial outwash or as deltaic material. There is variability in soil materials and a diversity of soil development profile. These soils also possess a variable topography and much of the land is rolling. The slopes are generally not too steep for cultivation and produce crops commonly grown in the area.

The majority of the area to be licensed is presently in agricultural use. According to the ARA Summary Report (Harrington McAvan Ltd, 2025) topsoil thickness ranges between 270 mm and 455 mm within the cultivated fields across the site. Two areas in the northern part of the site are not farmed because of wet soil conditions and an old excavation or borrow pit that has steep slopes. The western part of the property is characterized by steep wooded slopes and in the northwest, previously grazed areas are now covered with scrubby vegetation and trees.

Average crop yields over the past three years are: 43 bushels/acre of soya beans in 2020, 76 bushels/acre of wheat in 2021 and 41 bushels/acre of beans in 2022.

4.4 Topography

The prominent topographical feature at the site is a north-south trending ridge, which varies in elevation from approximately 366 metres above sea level (mASL) near the farmhouse on the site to 379.2 mASL (maximum height) near the southern site boundary. This ridge extends further southward, and several gravel pits have been developed within this feature. A small (likely farm use)

historical borrow pit is developed at the northern end of this ridge, near Road 96. The pit was excavated to an elevation of approximately 347.4 masl.

The ground surface slopes away from the ridge, to approximately 335- 349 masl along 31st Line; 335-345 masl along Road 96; and, 340-355 within the main valley west of the site. The western valley edge, within the wooded area, is steeply sloped (eg. 20-40% in some areas). Within the proposed licence potential runoff flows radially away from the central ridge.

The rehabilitation plan for the site will create a level pit floor with an elevation of 341 – 343 masl with a 3:1 meadow side slope along the eastern and southeastern limits of the licence area. The western slope will also be 3:1 with restoration of the woodland area as detailed on the Site Plans. The topography of the rehabilitated site will be an improvement to the existing topography which creates some limitations for agricultural use.

4.5 Canada Land inventory (CLI) Agricultural Classification

Canada Land Inventory mapping has classified the soils on the site as class 3 and class 4 with the following two classifications: 3T7 2ST3 and 4T5 3T5(see **Figure 6**). Approximately 30% of the site is mapped as class 3 agricultural lands and the remaining 70% is class 4. Class 3 and 4 soils have moderate to severe limitations that restrict the range of crops or require special conservation practices or both. The soil capability subclasses indicate limitations based on topography (T) and stoniness (S) of the soil. At this site, the topography and the steepness or pattern of the slopes limits agricultural use on this site. As noted previously, the proposed rehabilitation will reduce these limitations by creating a more uniform and flatter surface for farm machinery and crops.

In Ontario, class 1-3 agricultural lands are considered “prime agricultural” lands. 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 Harrington Pit are designed to ensure that agricultural uses can continue on areas of the property that are not actively being extracted and ensures that the progressive rehabilitation maximizes agricultural rehabilitation. The final rehabilitation of the pit will restore the site to the same agricultural capability that exists pre-extraction, and will reduce the current limitations based on improved topography and stoniness.

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.

The rehabilitation to an agricultural after use ensures that there will be no loss of agricultural lands in the long term. 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.

The proposed pit lands are 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.

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

The OMAFA AIA Guidelines note that 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. For this proposal, the proposed aggregate pit will be an interim use of agricultural lands in an agricultural area. The lands will be returned to agriculture in a phased rehabilitation plan. The site is within an area that has been identified as a significant sand and gravel resource area. This area is characterized by overlapping provincially important agriculture and aggregate resource areas. Given the extent of prime agricultural lands in the County and given that this proposal is within an important aggregate

resource area, opportunities to avoid prime agricultural areas are not available. As noted in this report, the majority of the site is class 4 agricultural land, which is a lower priority for protection than class 1-3 prime agricultural land.

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 property 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 Subject Lands will maintain the agricultural designation and be returned to active agricultural use. In this way, the long-term use of the lands has been maintained, resulting in a minimization of the impact of the short-term loss of agricultural land use.

6.3 Mitigating Impacts

When avoidance techniques and minimizing 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

Progressive rehabilitation is a requirement of the Aggregate Resources Act. It is also best practice that will contribute to successful agricultural rehabilitation. In the early stages of the operation, stripped soils and overburden will be stored separately in the berms that have been designed to provide acoustic and visual screening. As the operation progresses, stripped soils may be moved directly to depleted areas where they can immediately be used for agricultural rehabilitation. 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. During rehabilitation the soils shall be replaced in a manner than approximates the original soil profile so that the same average soil capability will be restored.

A grass-legume cover crop will be established initially in order to maximize results. Crops should be plowed under annually in order to promote and increase organic matter. Crops should be monitored at least twice during the growing season to ensure success of cover crop and control of weed growth. Over seeding and reseeding may be necessary to control weeds and ensure successful crop establishment.

The side slopes will be graded to the desired slope prior to the replacement of topsoil and subsoil. Slope contours on the pit floor will be as uniform as possible and grading will ensure there are no irregular undulations or depression areas on the rehabilitated pit floor. Slopes to be created will be in the range of 1% to 2% to provide for adequate surface drainage toward an outlet or infiltration or on-site surface water features.

The Rehabilitation Plans for the Harrington Pit include the following information:

- Surface drainage will be directed to the infiltration area in the southeast area of the rehabilitated site, and the existing drainage pattern to the northeast will be maintained.

- The sequence and direction of rehabilitation is as follows:
  A) Perimeter slopes shall be rehabilitated as the limits of extraction are reached at a minimum slope of 3:1
  B) Deep ripping of fields shall be performed to eliminate compaction (where required).
  C) Spreading of 200mm subsoil/overburden and rough grading.
  D) Spreading of 360mm available topsoil and fine grading.
  E) The rehabilitated areas shall be seeded with a mixture of grasses and legumes that may include the following at a rate of approximately 125 kg/ha: Buckwheat; red clover; white clover; tall fescue; annual rye, or agricultural crop.

- All vegetation planted during the rehabilitation process will be maintained in a healthy growing condition

- Progressive rehabilitation of the side slopes of Area 1 will begin as extraction starts in Area 2. No more than 50 percent of the total licenced area will be disturbed at any time.

8.0 Conclusions

The proposed Harrington Pit is located in a prime agricultural area, with 30 percent of the site meeting the definition of prime agricultural land (class 1-3 soil). The progressive and final rehabilitation of the site will restore the site to the same agricultural capability that exists pre-extraction and will reduce the current limitations based on improved topography and stoniness.

The operations and phasing plans are designed to ensure that agricultural uses can continue on areas of the property that are not actively being extracted and ensures that the progressive rehabilitation maximizes the areas available for agricultural use while the pit is operational.

The proposed pit will not have a direct impact on any farm operations, retire any agricultural infrastructure or other agricultural related facilities, or result in a loss of investment in land improvements, such as tile drainage installations.

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 the area surrounding the site.

The Soil Capability for Agriculture mapping for the area, from the OMAFA Agricultural Information Atlas (AgMaps), indicates that Canada Land Inventory (CLI) for the site is class 3 and class 4. Presently the site is in agricultural use, with the majority of the site cultivated for cash crops. The proposed pit will be progressively rehabilitated back to an agricultural use, with the same soil capabilities as pre-extraction. No impacts on the surrounding agricultural uses or to the agricultural system are anticipated as a result of the proposed pit operation.

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

- Mineral aggregate extraction is a permitted use within prime agricultural areas in accordance with provincial and municipal planning policy.
- The subject lands are not within a specialty crop area.
- The properties will be rehabilitated back to agriculture with the same average soil capability that currently exists.
- 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.
- Extraction will be above the water table and no water taking is proposed. As a result, 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 which include berms.
- The rehabilitation plan is designed to ensure a successful agricultural rehabilitation process.

The proposed Harrington Pit is consistent with the Provincial Policy Statement and conforms with the Oxford County Official Plan.

FIGURES

FIGURE 1: LOCATION

100039452 Ontario Inc.

HARRINGTON PIT

PART LOT 30 CONCESSION 1 (WEST ZORRA)
TOWNSHIP OF ZORRA, OXFORD COUNTY

FIGURE 2: SURROUNDING LANDS

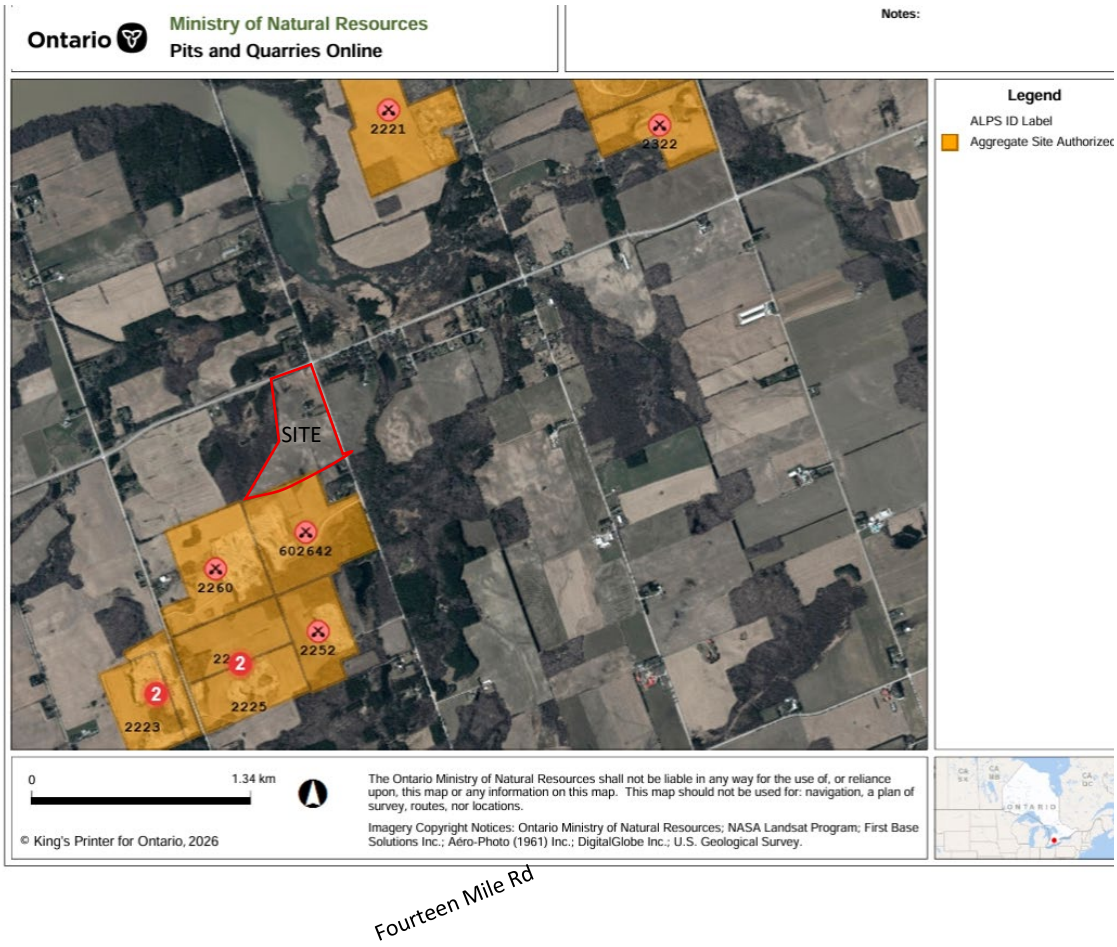
100039452 Ontario Inc.

HARRINGTON PIT

PART LOT 30 CONCESSION 1 (WEST ZORRA)
TOWNSHIP OF ZORRA, OXFORD COUNTY

N

FIGURE 3: GRAVEL PIT LICENCES



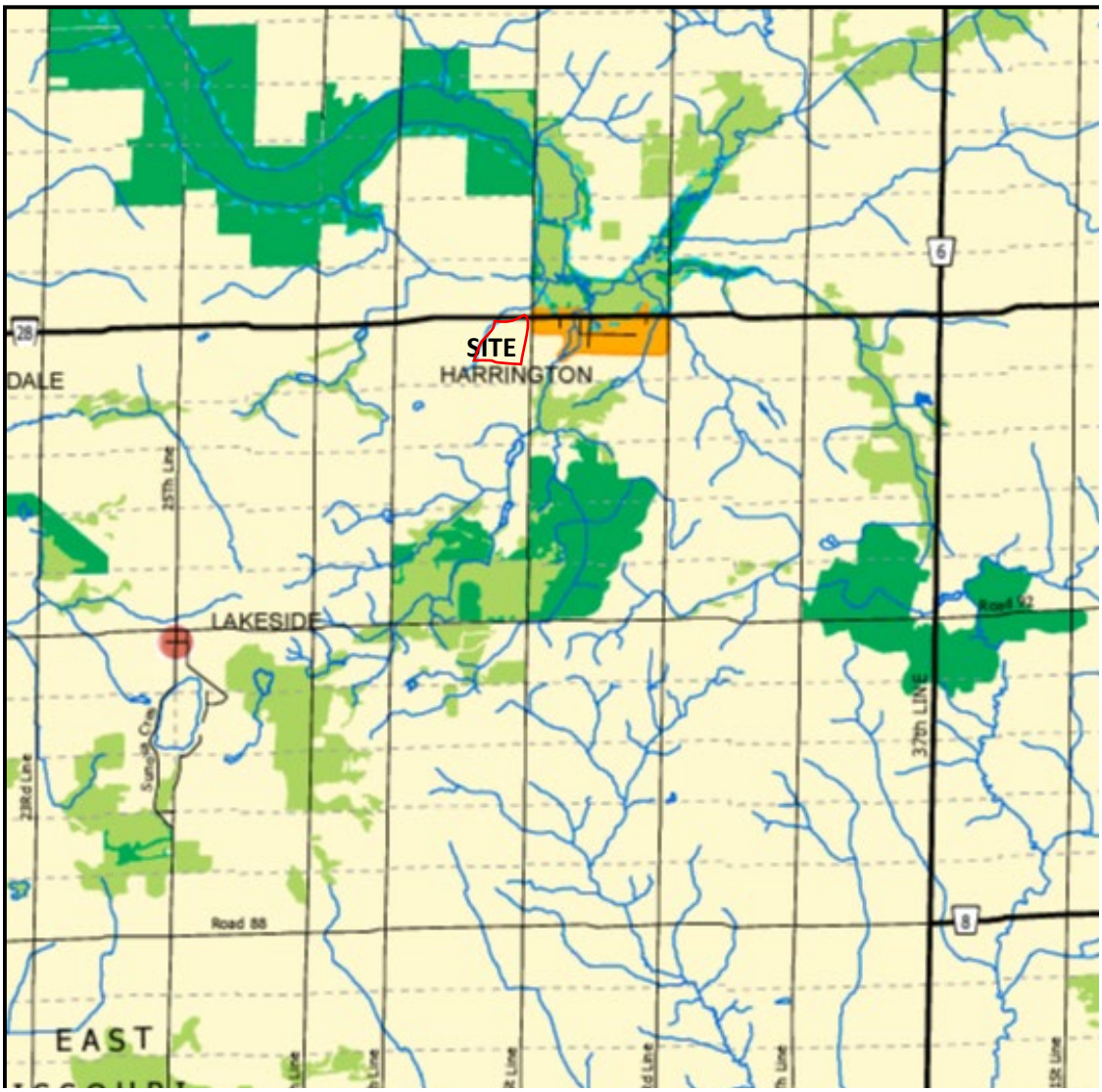
100039452 Ontario Inc.

HARRINGTON PIT

PART LOT 30 CONCESSION 1 (WEST ZORRA)
TOWNSHIP OF ZORRA, OXFORD COUNTY

N

FIGURE 4: OXFORD COUNTY OFFICIAL PLAN
LAND USE SCHEDULE ZORRA TOWNSHIP



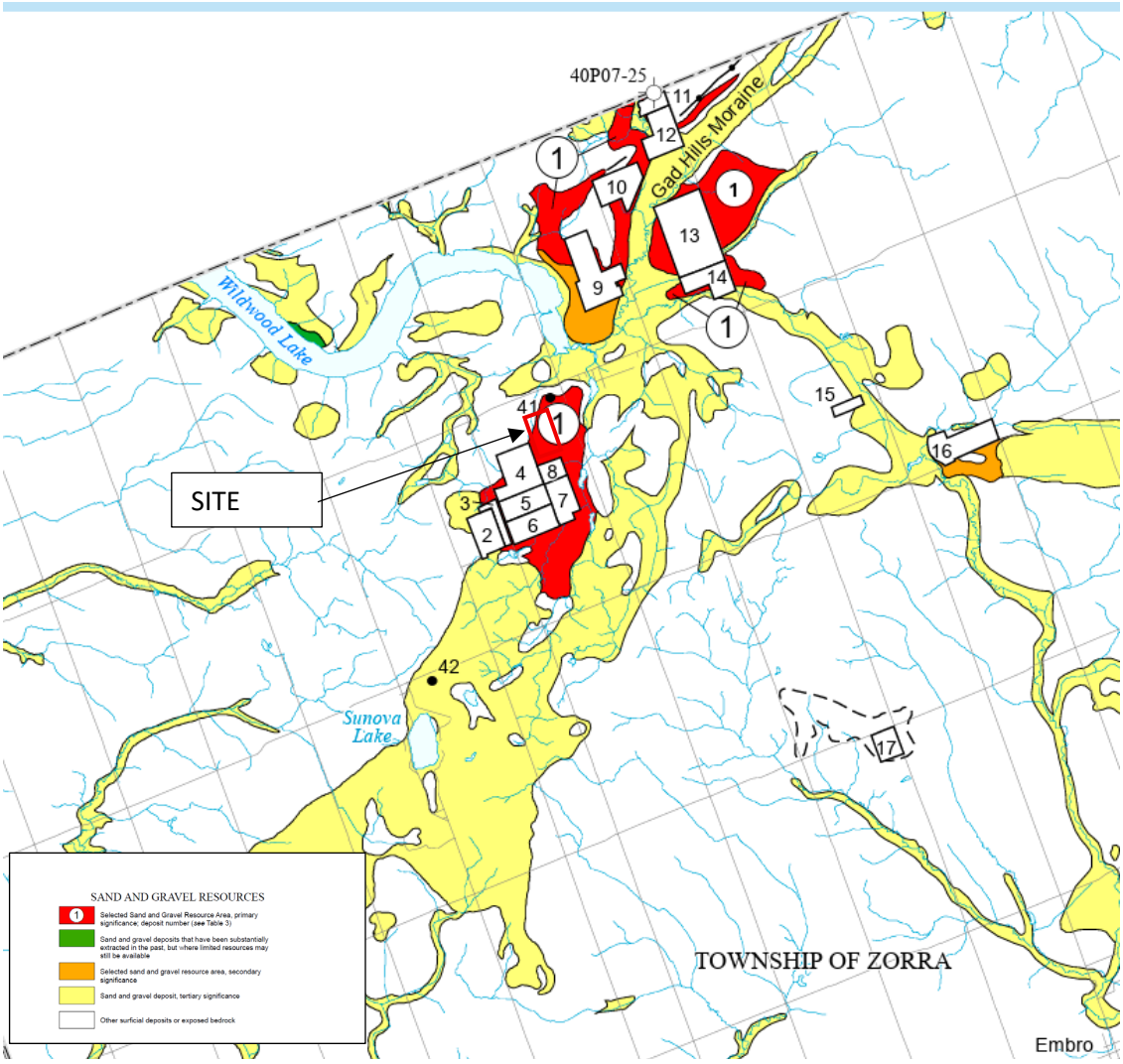
100039452 Ontario Inc.

HARRINGTON PIT

PART LOT 30 CONCESSION 1 (WEST ZORRA)
TOWNSHIP OF ZORRA, OXFORD COUNTY

N

FIGURE 5: AGGREGATE RESOURCES INVENTORY MAP



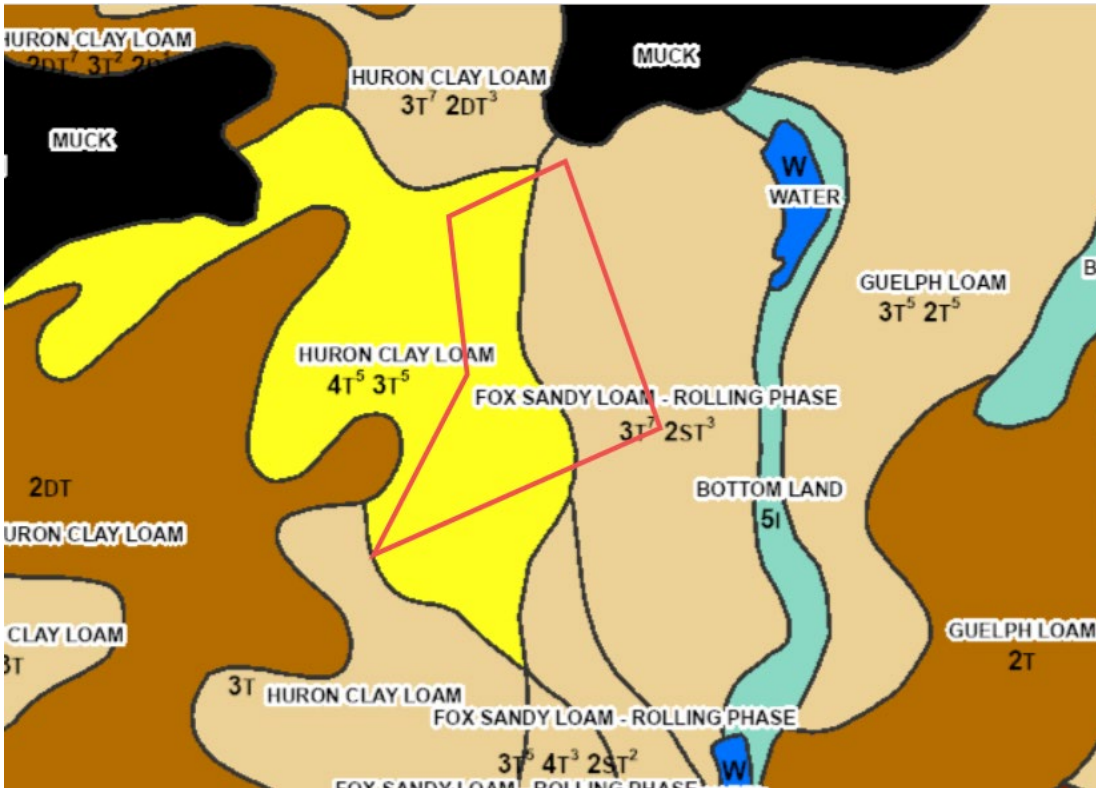
100039452 Ontario Inc.

HARRINGTON PIT

PART LOT 30 CONCESSION 1 (WEST ZORRA)
TOWNSHIP OF ZORRA, OXFORD COUNTY

N

FIGURE 6: SOILS AND CANADA LAND INVENTORY MAPPING



100039452 Ontario Inc.

HARRINGTON PIT

PART LOT 30 CONCESSION 1 (WEST ZORRA)
TOWNSHIP OF ZORRA, OXFORD COUNTY

N