

# Summary Report

## 1000394952 Ontario Inc. Harrington Pit

Part of Lot 30, Concession 1  
Township of Zorra  
(formerly West Zorra)  
County of Oxford

Submitted July 2024  
Revised March 2025



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- Appendix a: Hydrogeology report
- Appendix b: Natural environment report
- Appendix c: Archaeological report & entered into registrar letter  
Archaeological report: additional lands & entered into registrar letter  
Heritage checklist
- Appendix d: Noise impact assessment report
- Appendix e: Geotechnical report
- Appendix f: Site plans

# Summary Statement

## Introduction

This report has been prepared in support of an application for a Class "A" licence, pit above water by 1000394952 Ontario Inc., as required by the *Aggregate Resources of Ontario standards: A compilation of the four standards adopted by Ontario Regulation 244/97 under the Aggregate Resources Act*. It summarizes the information and conclusions of the consultants who have contributed to the preparation of the site plans including:

- ☐ Hydrogeology: Groundwater Science Corp.
- ☐ Natural Environment: Ken Dance Consulting
- ☐ Cultural Heritage: Archaeological Research Associates Ltd.
- ☐ Noise Assessment: HGC Engineering
- ☐ Resource Assessment: Englobe

The report is intended to supplement the information contained on the site plans, which have been prepared by Harrington McAvan Ltd (Appendix F), and to assist in the review of the license application which the company has filed with the Ministry of Natural Resources and Forestry and the planning application filed at the Township of Zorra.

## 1.0 Site Description

The area to be licensed consists of a total of 27.8 hectares (68.7 acres) located in Part lot 30, Concession 1, in the Township of Zorra, County of Oxford (see Figure 1). The site is located south of Road 96, a paved road and west of 31<sup>st</sup> Line, a gravel road. The existing farm entrance along Road 96 and a laneway off the 31<sup>st</sup> Line to access the house and buildings on the property.

The majority of the property to be licensed consists of moderately to steeply rolling agricultural fields to steep wooded slopes associated with the moraine that cover the property (see figures 2, 3 and 4). The topography ranges from approximately 379 m a.s.l. in the highest point in the south-central to 336 metres a.s.l. in the northeast corner of the site. A mixed wooded area and wetland feature is located within the western part of the property (see figures 5 and 6). The majority of the wooded area will be excluded from the proposed licence. An area of 3.8 hectares (9.4 acres) is proposed within the area to be extracted.



<https://www.openstreetmap.org/#map=13/43.2500/-81.0254&layers=T>, March 4, 2024

## Location

## Wilhelm Excavating Harrington Pit



Figure  
**1**



Figure 2



Figure 3



Figure 4



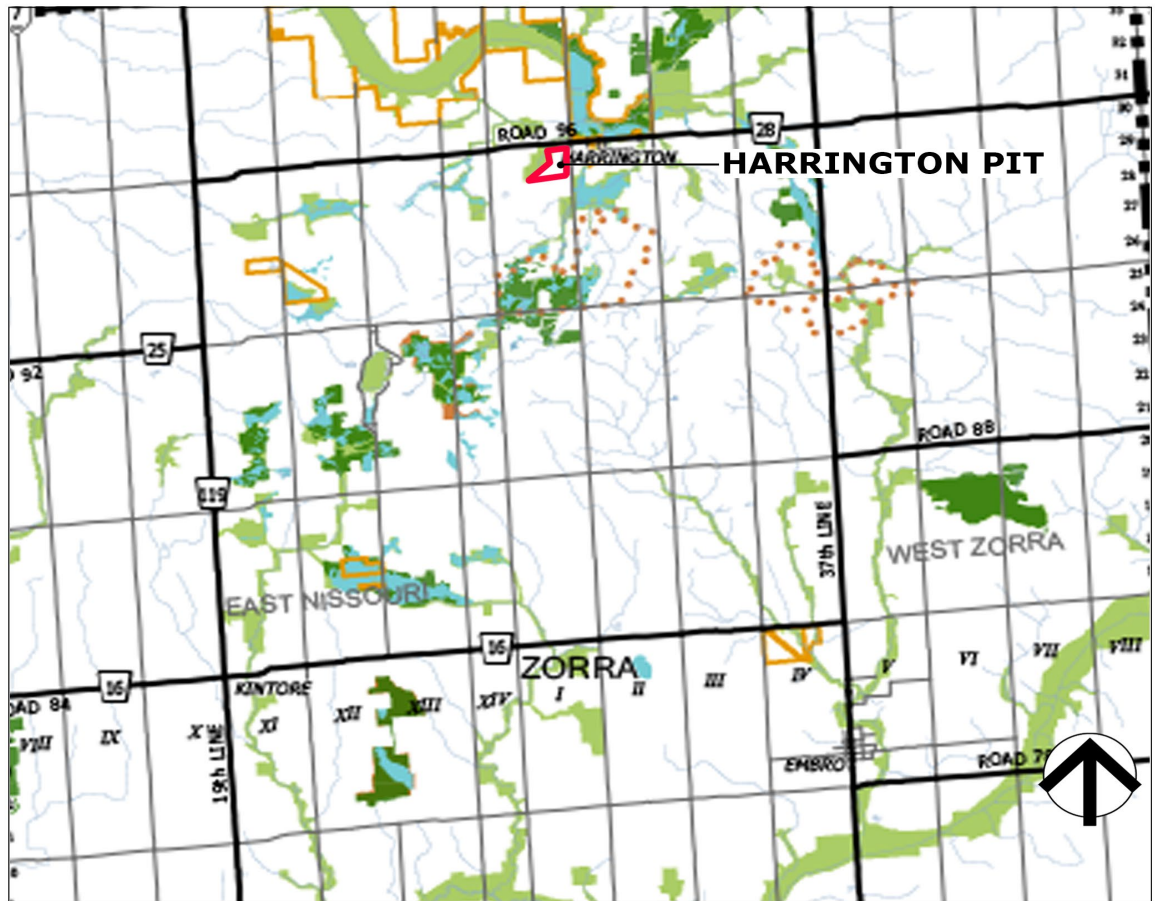
Figure 5



Figure 6

The lands to the north and east have active agricultural fields and/or wooded areas associated with the Wildwood Conservation area. The Wildwood Conservation Area is a large conservation area consisting of 1417 hectares (3500 acres) of land under the authority of the Upper Thames River Conservation Authority (UTRCA) and is located to the north and northwest of the subject site (see figure 7). The area is used for camping, hiking, fishing and boating and has Wildwood Lake reservoir. The dam was constructed in 1965.

There are rural residences, along the 31<sup>st</sup> Line and Road 96 within 120 m of the site and the community of Harrington West located to the northeast of the site. There are two pits licensed under the Aggregate Resources Act adjacent to the site. The Township of Zorra's Robinson pit, licence no. 602642 is located directly to the south and St. Marys Cement's Harrington Pit #2, licence no. 2260 to the southwest. Both licensed pits are currently active.



County of Oxford, Official Plan, Appendix C-1- Environmental Features Plan, March 11, 2015

## Environmental Features

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### Legend

- LOCALLY SIGNIFICANT  
NATURAL HERITAGE FEATURES
- PROVINCIAL  
SIGNIFICANT WETLANDS
- LIFE SCIENCE AREAS OF NATURAL  
AND SCIENTIFIC INTEREST
- SIGNIFICANT VALLEYLANDS
- CONSERVATION AUTHORITY LAND
- EARTH SCIENCE AREA OF NATURAL  
AND SCIENTIFIC INTEREST
- WATERSHED BOUNDARIES



Figure  
7

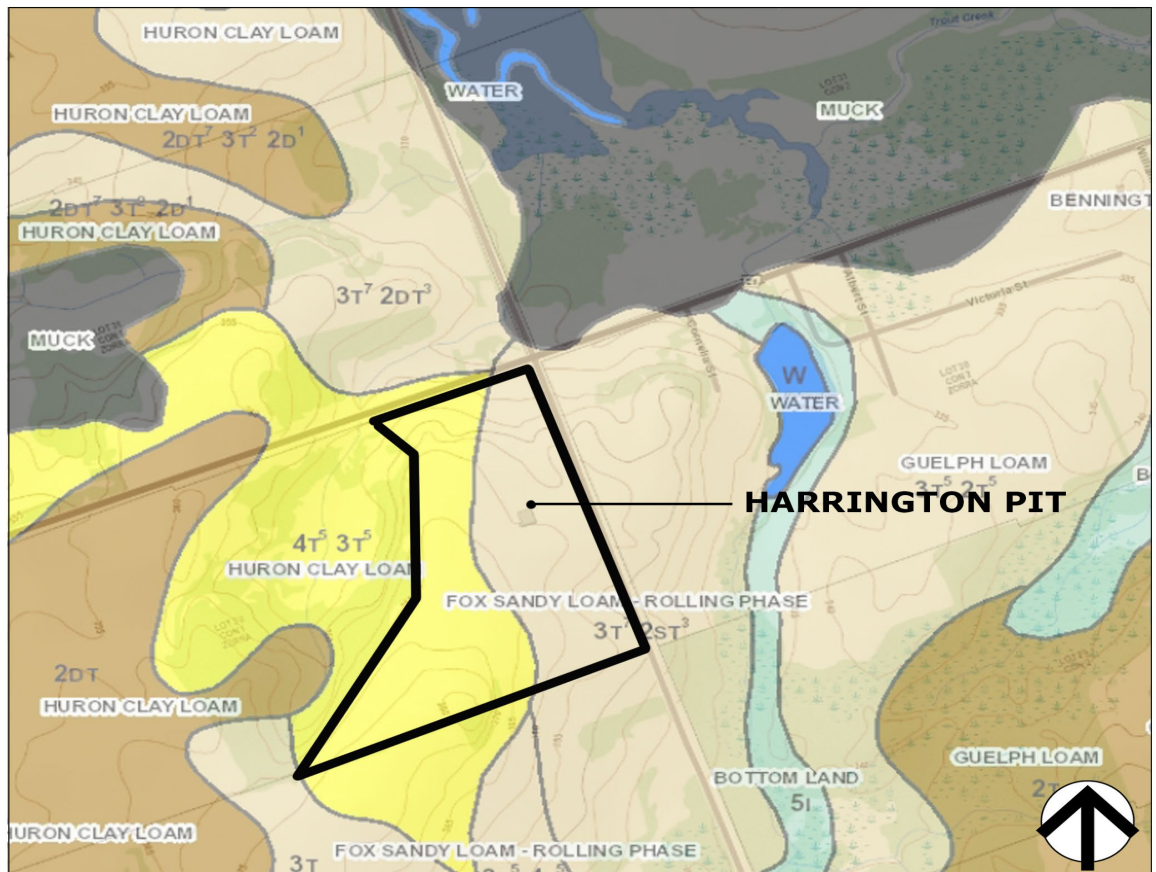
## 1.1 Agricultural Classification

Soil Capability mapping from OMAFRA, 2023 has classified the soils on the site within the following two classifications: 3T7 2ST3 and 4T5 3T5 (see figure 8). These classifications put 30% of the eastern lands in Class 2 agricultural lands and the remaining 70% in Class 3. The western half of the site consists of 50% Class 3 and 4 lands because of adverse topography. Either the steepness or pattern of the slopes limits agricultural use. Class 2 soils have moderate limitations in use for crops or require moderate conservation practices. Class 3 and 4 soils have moderate to severe limitations that restrict the range of crops or require special conservation practices or both.

Soils mapping of Oxford County obtained from the Ministry of Agriculture, Food and Rural Affairs has shown the western part of the site within an area identified as Hucl, a clay loam of the Huron Series. On page 27-28 of *The Soils of Oxford County Report No. 28* it states, *“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. Some isolated small areas of Huron soils are shown on the soil map in Blenheim Township and in the northern portion of East and West Zorra Townships. These soils are somewhat coarser in texture than the Huron soils in the lower half of the county. These are also morainic areas with many steep slopes. Hay and cereal grains are the principal crops grown and for this purpose the Huron soils rank among the best in the county. The surface texture is frequently silt loam as well as clay loam and many of them therefore have the same ease of cultivation as the Guelph soils. Dairy farming is prevalent in these areas and the result is that hay and pasture grasses constitute a large part of the farm acreage.”*

The eastern part of the site is mapped within “Fxsl-r”, a sandy loam, rolling phase of the Fox Series. *The Soils of Oxford County Report No. 28* indicates that 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. Topsoil thickness ranges between 270 mm and 455 mm in test pits and boreholes completed by Englobe within the cultivated fields. Two areas in the northern part of the site are not farmed because of wet soil conditions and within an old pit that has steep slopes. The western part consists of steep wooded slopes and in the northwest, previously grazed areas are now covered with scrubby vegetation and trees (see figure 5). 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.



AgMaps, Ontario Ministry of Agriculture, Food and Rural Affairs, Web, March 2023

## Soil Capability for Agriculture

## Wilhelm Excavating Harrington Pit

### Legend

<input type="checkbox"/>	Soil Name Label
Soil Capability for Agriculture	
	Unclassified
	Class 1
	Class 2
	Class 3
	Class 4
	Class 5
	Class 6
	Class 7
	Organic Soil
	Water



Figure  
8

The proposed extraction will remove most of the sand and gravel deposit covered by the veneer of Tavistock till and establish uniform, gently sloping fields, thereby reducing some of the limitations (adverse topography, surface stoniness, etc.). The site plans have been designed to minimize soil movement and storage, the stripping and replacing of topsoil and subsoil separately, compaction removal and stone removal, as required, and conditioning of soil to produce good soil tilth. Extraction will remain a minimum of 1.5 metres above the water table elevations as determined in the hydrogeological report completed by Groundwater Science (see Appendix A).

Proposed rehabilitation techniques to restore the agricultural fields on site to an agricultural use will include the following as indicated on the site plan:

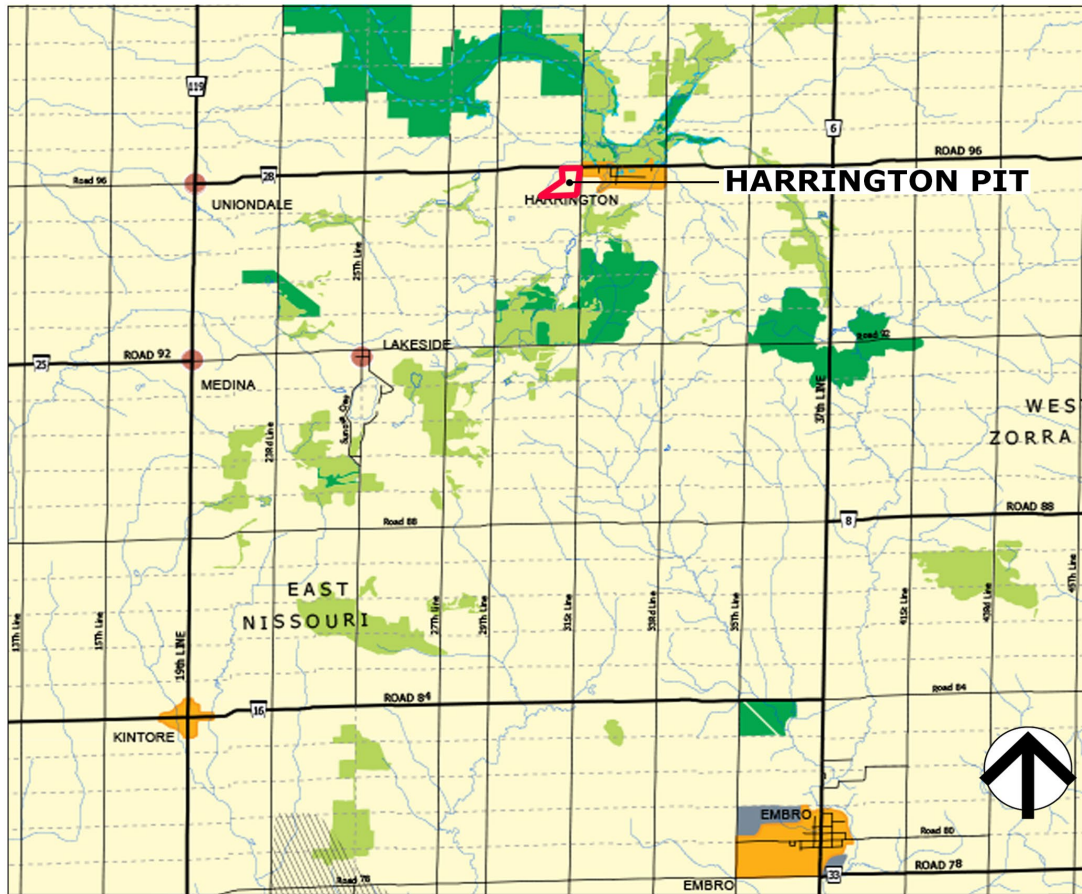
- Deep ripping to eliminate compaction, as required
- Spreading approximately 200 mm overburden and rough grading
- Removal of stones larger than 75 mm, as required
- Spreading of on-site topsoil 270-300 mm (average) and fine grading
- Seeding with an appropriate grass/legume mixture and tree planting on sections of the side slopes
- Using accepted farming practices to restore to agriculture

The rehabilitation of the existing class 1 and 3 soils on site to the same average soil capability for agriculture complies with Section 2.2.3.6 of the Provincial Policy Statement (2020) which states, *“In prime agricultural areas, on prime agricultural land, extraction of mineral aggregates is permitted as an interim use provided that rehabilitation of the site will be carried out whereby substantially the same areas and same average soil quality for agriculture are restored”*.

## **1.2 Planning and Land Use Considerations**

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 where the proposed pit is located. The Official Plan sets out general policies for future land use. The proposed pit is located in an area which is designated as “Agriculture Reserve” as shown on Schedule Z-1 (Township of Zorra Land Use Plan) of the County of Oxford Official Plan (see figure 9). The proposed licence is also located in a “Sand and Gravel Resource Area” identified on Schedule 2-1 “Mineral and Petroleum Resources”.

Sand and gravel extraction and ancillary uses are permitted as an interim use in the Agricultural designation in accordance with the to the policies outlined in Section 3.4 (Resource Extraction) of the County Official Plan. An Amendment to the Township of Zorra Zoning Bylaw is required to permit the proposed pit.



County of Oxford, Official Plan, Appendix Z-1- Land Use Plan, January 27, 2017

## Land Use

### Legend

- AGRICULTURAL RESERVE
- SETTLEMENT
- OPEN SPACE
- ENVIRONMENTAL PROTECTION
- QUARRY AREA
- FUTURE URBAN GROWTH
- LIMESTONE RESOURCE AREA
- RURAL CLUSTERS
- FLOODLINE

## Wilhelm Excavating Harrington Pit



Figure  
9

The current zoning of the property is “General Agricultural” (A2). See figure 10. An application to rezone the lands to “Aggregate Industrial” (ME) is required to permit the proposed use.

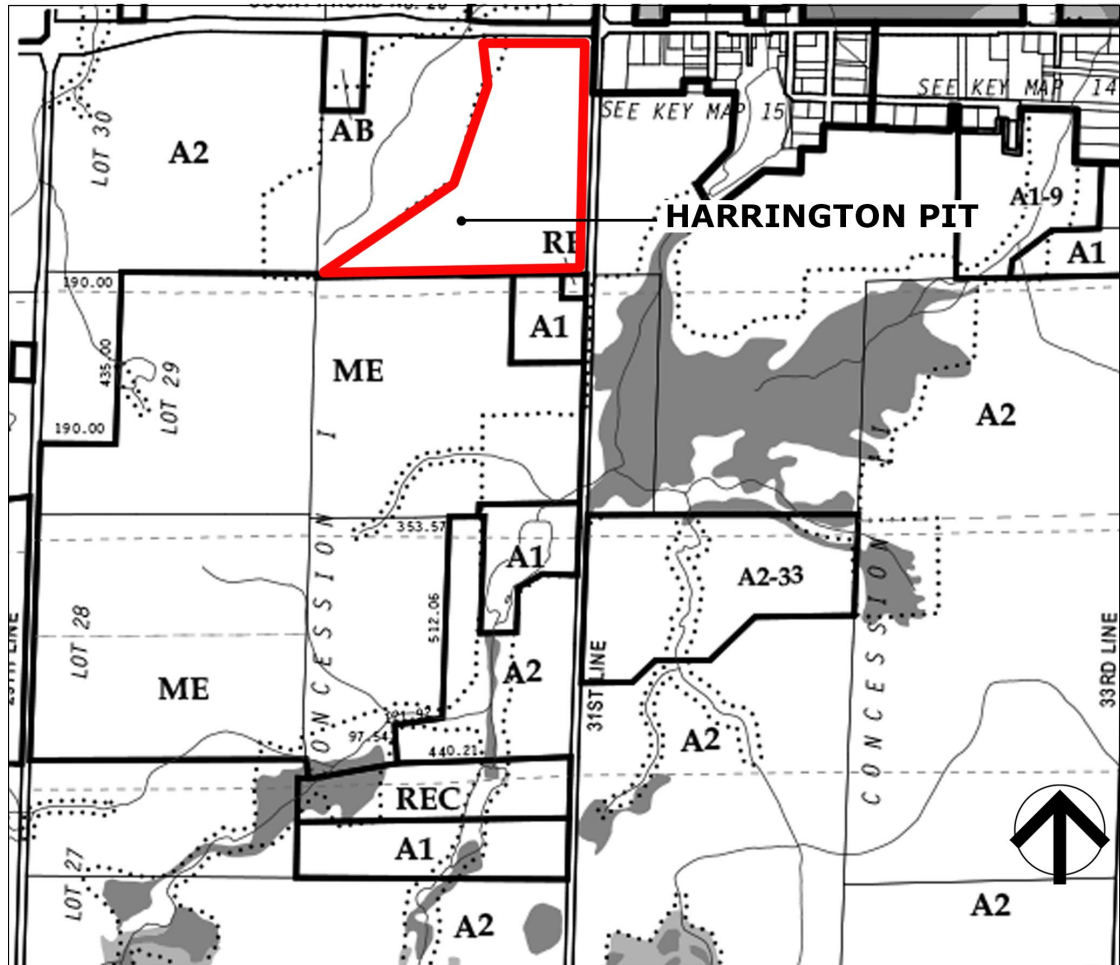
The OP policies require that the application have regard for any potential land use conflicts, including conflicts with other resource areas to ensure impacts are avoided or minimized. Potential impacts on the adjacent settlement area located east of the site (Hamlet of Harrington) and the Natural Heritage feature located west of the site as well as an assessment of the suitability of local roads to accommodate expected levels of truck traffic are also matters that need to be considered as part of the municipal review process.

The applications for the proposed gravel pit are supported by a series of technical studies which assess the impact of the proposed operation on neighbouring residents, the natural environment, the agricultural capabilities of the land, the impact of roads and water resources. The Site Plans detail the manner in which operations will be carried out as described by the sequence of mining and progressive rehabilitation.

The operations and the rehabilitation of the pit have been designed to minimize impacts and ensure that the lands are returned to agricultural use. The Natural Heritage Report has evaluated the impacts of the proposal on significant wetlands, woodlands, fish habitat, and habitat of endangered species and threatened species. The recommended mitigative measures are incorporated to ensure no negative impacts on these natural features or their functions.

In summary, the proposed pit:

- Is compatible with the surrounding landscape and reflects the importance of agricultural lands, through progressive and final rehabilitation.
- Will not have a negative impact on the natural environment.
- Has been designed to mitigate impacts on the environment and local residents.
- Maintains the intent and purpose of the County Official Plan policies.
- Represents wise use of resources.
- Is consistent with the policies of the Provincial Policy Statement (PPS 2020)



County of Oxford, Zoning By-law 58-18- Key Map 13, May 31, 2019

## Zoning

## Wilhelm Excavating Harrington Pit

### Legend






-  ENVIRONMENTAL PROTECTION 1 OVERLAY  
See General Provisions 5.23.1
-  ENVIRONMENTAL PROTECTION 2 OVERLAY  
See General Provisions 5.23.2
-  LIMESTONE RESOURCE
-  FLOODPLAIN AND FILL REGULATED AREA  
See General Provisions 5.9
-  REGULATORY FLOOD AND FILL LINES



Figure  
**10**

## 1.3 Source Protection Area

### Surface Water

There are no surface water features within the proposed licence. The significant wetlands and the 30 m setbacks are located to the west of the proposed licence. As noted, there is a small area in the northeast corner of the site with wet soil conditions. The coarse, sandy soils on site have high infiltration rates and relatively little surface runoff can be expected on the site except during heavy rainfall events and spring snow melt over frozen ground. Surface drainage is mainly internal and directed to the low areas or depressions within the fields.

### Groundwater Table

Groundwater Science Corp. was retained to complete a review of the hydrogeologic information available for the site and surrounding area and determine the groundwater table elevations on site (see Appendix A). The water table at the site was measured and determined by the installation and monitoring of 5 water table wells on the perimeter of the proposed licensed area, supported by additional wells located in the existing Township pit. As requested by MNR, two additional wells were installed January 2025. The water table was measured to correspond to the top of the saturated zone within the unconfined surficial sand and gravel aquifer. The maximum predicted water table elevation varies across the proposed extraction area from approximately 339 masl (at MW4) to 343.3 masl (at MW6) near the southwest corner of the site.

### Source Protection

As noted on page 7 of the Groundwater Science report, *“Based on the review of available Source Protection mapping, the site is not within any identified Well Head Protection Area (WHPA) or Intake Protection Zone (IPZ). In addition, there is no WHPA-Q area identified at, or near the site. The site is within an area mapped as a Highly Vulnerable Groundwater Recharge Area, likely due to the surficial geology.”*

## 1.4 Quality and Quantity of Aggregate On Site

The site is located within a glacial deposit consisting of ice-contact stratified drift with gravel greater than 6 metres in thickness. The property is shown as A Sand and Gravel Resources Area in the County's Official Plan (see figure 11). The Robinson property is mapped within Selected sand and gravel deposit 1a of primary significance on map #2 in the *Aggregate Resources Inventory Paper (ARIP) of the Township of Zorra, Report 61, 1986*, Ministry of Northern Development and Mines. On pages 11 and 12 of the ARIP report it states: *“Selected Sand and Gravel Resource Area 1 is made up of six deposits of ice-contact stratified drift which are located near Harrington West in the northern part of the township. Cowan (1975, p. 41) believed the sediments were deposited at or near an ice margin and represent a period of stagnant ice with considerable subglacial drainage. Although the sediments are mainly fine sand interspersed with till, coarse gravel and sand are available in commercial quantities in a*

*number of knolls and kames. The sand and gravel pits for the most part are located in these gravelly knolls and kames. Face heights and gravel contents vary considerably from site to site. For example, pit faces in Area 1A range from 15 to 75 feet (5 to 23 m) and gravel contents from 35 to greater than 60 percent. The gravel knolls in Area 1 are easily extracted and contain material with fairly uniform distribution. There are also few quality constraints. Chert content here is the lowest in the township, averaging 5 to 10 percent. Although oversize material is present, it is acceptable for crushing. Consequently, the granular material is suitable for a range of aggregate products including Granular Base Course (G.B.C.), A, B and C, 16 mm crushed Type A and Hot-Laid (H.L.) No. 4 stone. The coarse sands require blending for hot-laid sand.”*

The geological information has been updated in ARIP 159, County of Oxford and the County of Brant, OGS 2014. The following information is presented on page 21 of the report:

*“Select Sand and Gravel Resource Area 1 is located in the north-central part of the Township of Zorra. The selected resource area comprises a series of glaciofluvial ice-contact deposits that trend northeast into the County of Perth (part of the Lakeside moraine) where the deposits have also been selected as a primary resources (Rowell 2013). There are currently 13 licensed operations located within the selected resource area (Pit Nos. 2 to 14), although Pit no. 10 would appear to be completely rehabilitated. Cowan (1975a) suggests that the sediments within this selected resource area were deposited at or near the ice margin, and represent a period of stagnant ice with considerable subglacial drainage. As a result, the aggregate materials is quite variable ranging from silty sand (see Table 7); to layers of clean medium to coarse sand with pea gravel; to granular materials interspersed with till; to thick beds of clean, well-stratified, well sorted sand and gravel; to layers of predominately pebble and cobble clasts in a medium to coarse sand matrix.*

*The coarse aggregate content varies from approximately 35 to 60%, including crushable materials that ranges from 13 to 22%. A coarse aggregate content in excess of 70% has been reported. Previously collected gradation results for this selected resource area are presented in Table 10. The clasts are rounded to subrounded with a maximum clast size of about 24 cm. Generally, cobble-sized clasts range from 10 to 18 cm. A few boulders were noted in some areas of the selected resource area. Lithological results are also presented in Table 10 and indicate 28 to 40% limestone, 42 to 48% dolostone, 3 to 9% chert, 0 to 13% sandstone and 8 to 13% Precambrian clasts. The Precambrian clasts appear to be quite competent with few deleterious rock types (e.g. a high percent of mica-bearing clasts).*

*Historical MTO aggregate quality test results indicate that Petrographic Numbers range from 100.0 to 127.3 for granular and 16 mm and from 122.5 to 182.3 for Hot Laid (HL) and concrete coarse aggregate (CA) products (see Table 9). The high Petrographic Numbers generally reflect the presence and percentage of chert. Other aggregate quality test results for this selected resource area are presented in Table 9 and indicate that the granular materials is generally acceptable for the production of Granular A and B, SSM and HL (CA) products with proper processing and beneficiation. The sand fraction will require blending and beneficiation for the production of HL and concrete fine aggregate (FA) products.”*

A geotechnical investigation was completed on August 16 to 18, 2022 and January 22, 2023 by Englobe. The fieldwork consisted of four sampled boreholes and seven test pits. Split-spoon samples were recovered from the boreholes and bulk samples were taken from the test pits.

The Geotechnical report dated June 27, 2023 by Englobe, states the following: *“The investigation has revealed that the property contains significant quantities of sand, gravel and cobble materials that extend across the entire property. Fine sand and silty sand materials were also encountered in the southeast quadrant of the site. Taking into account anticipated site setbacks, the estimated extraction area of the granular deposit is approximately 21 hectares. With a minimum average thickness of 12 m, it is estimated that a minimum of 2.5 million cubic metres of quality granular material may be extracted, which would translate to approximately 5 million metric tonnes by weight. The granular materials including the fine sand and silty sand can be blended with the coarser materials and be manufactured into Granular ‘B’, which is a classification of the Provincial Ministries for road sub-base material. There is also excellent potential to manufacture crushed aggregate materials such as 19 mm clear stone, coarse concrete aggregate and Granular ‘A’.*

*The investigation has shown that the site has a minimum of 5 million metric tonnes of sand, gravel and cobble materials of commercial value.”*

Englobe completed a second geotechnical engineering report, *“Slope Stability Assessment”* of the west slope as requested by Upper Thames Conservation authority (UTRCA). In the December 2024 report, they state *“the proposed excavation works are estimated to be around 660,000m<sup>3</sup> and can be safely constructed without adversely affecting the long-term stability of the slopes”* The additional resources in the west slope were not included in the Englobe 2023 report and are also located 1.5m above the high water table. Based on the updated hydrogeological information from January 2025, using the AutoCAD Civil program, we have confirmed Englobe’s volume calculation. There is a minimum of 6.2 million tonnes of resources above the water table in the proposed licence.



## 1.5 Main Haul Routes and Proposed Truck Traffic To and From Site

All materials will be hauled and shipped through the proposed upgraded entrance/exit along the north boundary of the site onto County Road 28. County Road 28 is a full load road designed for truck traffic. R.J. Burnside & Associates Limited completed a Traffic Study in 2024 and concluded that traffic operations at the proposed access onto Oxford Road 28 are expected to have minimal impact on the existing traffic on the road (see figure 12). The applicant will be required to obtain a permit from the road authority to construct the proposed entrance/exit up to the required standards.



Figure 12

## 1.6 Progressive and Final Rehabilitation

The rehabilitation of the site back to an agricultural after use complies the Provincial Policy Statement (2020). The operation of farm machinery is difficult on some of the steep, sandy slopes. All existing topsoil and overburden on site will be stripped and stockpiled separately in berms or stockpiles and replaced as quickly as possible in the progressive rehabilitation process. Berms/stockpiles may be constructed on the perimeter of the site to attenuate noise and/or visual screening and will be used for rehabilitation of the site.

Side slopes may be built using on-site overburden or with off spec materials found on site required for this purpose to improve the agricultural capability of the soil. This will facilitate both maximum resource utilization as well as timely progressive rehabilitation of the property. Refer to notes on the site plan in Appendix F for details of the progressive and final rehabilitation and hydrogeology notes regarding maximum depth of extraction in the site.

The amount of area disturbed will be minimized to reduce any impacts on the surrounding lands. There is sufficient on-site overburden and therefore, importation of clean, excess soil is not required for this property. Topsoil may also be imported to enhance the final rehabilitation to agricultural use. The final rehabilitation will be compatible with the surrounding lands and land use and maintain the existing natural features on and adjacent to the site. The owner will cultivate the rehabilitated lands and plant the areas with a cover crop of grasses and legumes to get the soil productive and return the land to crops. Coniferous trees will be planted as shown on the site plans will remain after extraction and rehabilitation is completed.

On completion of the perimeter berms, on-site overburden stripped will be used to progressively backfill and rehabilitate parts of the site. This will minimize the amount of area disturbed at any given time.

Rehabilitation techniques to restore the areas to agriculture and tree planting will include the following as indicated on the site plan:

- Spreading of available on-site overburden and rough grading
- Spreading of available on-site topsoil and fine grading
- Seeding with an appropriate grass/legume mixture
- Using accepted practices to restore to meadow use
- tree planting as noted on page 5 of the site plans

As noted in the hydrogeological assessment by Groundwater Science Corp., the site acts as a recharge area, with groundwater flow contributing to the local and regional systems. Excavation of the proposed pit will internalize all overland runoff and convert it into infiltration and groundwater recharge through the soils replaced during rehabilitation.

The final rehabilitation to agricultural use will be compatible with the surrounding lands and land uses. Rehabilitation to agriculture is shown on the site plans.

## **2.0 Technical Reports**

### **2.1 Hydrogeological Assessment: Groundwater Science Corp. (Appendix A)**

The following conclusion is presented in the report:

*“Based on the results of the impact assessment there are no potential for significant adverse effects to groundwater and surface water resources and their uses; and there is no potential for significant impacts to local groundwater aquifers, natural environment features or water supply associated with the proposed Harrington pit.”*

*In order to confirm water table elevations at the site, the following monitoring program is recommended for a period of 3 years:*

- 1. For a period of 3 years water level measurements shall be obtained on a quarterly (seasonal) basis at MW-01, MW-02, MW-04 and DP1, as accessible.*
- 2. The monitoring results will be summarized annually by the Operator and made available to MNRF upon request.*

### **2.2 Natural Environment Level Two: Ken Dance (Appendix B)**

The following summary is presented in the technical report:

*Assuming that the recommended mitigation measures are successfully implemented, no negative impacts on any significant natural environment features or functions are expected, this includes Level 1 factors under the ARA and significant elements of the EPAs under the County of Oxford O.P.*

### **2.3 Archaeological Assessments Stage 2: Archaeological Research Associates Ltd. (Appendix C)**

The following recommendations are stated in the report, *“The Stage 1 assessment determined that the study area comprised of a mixture of areas of archaeological potential and areas of no archaeological potential. The Stage 2 assessment resulted in the discovery of one location of archaeological materials: Site 1 (AhHf-10). Site 1 was found to be of no further CHV1. It is recommended that no further assessment be required within the study area.”*

*Should previously undocumented archaeological resources be discovered, they may be a new archaeological site and therefore subject to Section 48 (1) of the Ontario Heritage Act. The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licensed consultant archaeologist to carry out archaeological fieldwork, in compliance with Section 48(1) of the Ontario Heritage Act.*

*The Funeral, Burial and Cremation Services Act, 2002, S.O. 2002, c. 33 requires that any person discovering human remains must notify the police or coroner and the Registrar at the Ministry of Public and Business Service Delivery.”*

*MCM (Ministry of Citizenship and Multiculturalism) entered the report into the Ontario Public Register of Archaeological Reports on August 23, 2023 and issued a letter of acceptance.*

## **2.4 Noise Assessment: HGC Engineering (Appendix D)**

The report has the following summary of the findings:

*“The results of our analysis indicate that sound levels produced by the proposed operations in the gravel pit under the worst case operational scenarios can comply with applicable MECP Guideline limits with the implementation of noise control measures.”*

The mitigation measures recommended in the noise report have been incorporated on the site plans and are found under the technical recommendations found on page 3 of the plans.

The report has the following conclusion:

*“These results indicate that the sound emissions from the proposed pit operations, with the noise control measures in place, are expected to comply with MECP guideline limits at all the neighbouring noise sensitive receptors under the worst case operating scenarios.”*

## **2.5 Site Plans: Harrington McAvan Ltd (Appendix E)**

## **3.0 Conclusion**

With the investigation and planning which has been prepared to support the extraction and rehabilitation of this site, we are confident that the site plans, as prepared, adequately address and mitigate any potential adverse impacts of the proposed operation on the surrounding land uses while maximizing the after use potential of the property. The rehabilitation of the site will improve the lands for agricultural use.

HARRINGTON MCAVAN LTD

BJ/wp

## ***Statement of Qualifications***

### ***Harrington McAvan Ltd*** ***Bernie Janssen, B.E.S.***

**Harrington McAvan Ltd (formerly Harrington and Hoyle Ltd.)** is a firm of landscape architects practicing in Ontario for the past thirty five years. The firm has expertise in landscape architecture, earth sciences, and biology, with a focus on stream and wetland restoration and rehabilitation projects.

Harrington McAvan Ltd have been producing Site Plans for aggregate licenses for the past twenty-one years and in that time have prepared over 150 successful plans. The firm has consulted to the Ontario Ministry of Natural Resources on a variety of new legislative initiatives and was retained in 1990 to prepare the *Generic 'Class A' Site Plans* as examples of new standards required under the Aggregate Resources Act (ARA). The firm is an associate member of the Ontario Stone, Sand & Gravel Association (formerly Aggregate Producers Association of Ontario).

**Mr. Bernie Janssen** received his Bachelor of Environmental Studies degree from the University of Waterloo in 1983. He had over fourteen years experience working in MNR's aggregate program in the greater Toronto and London areas, dealing with plans, license applications, and reports before joining Harrington and Hoyle Ltd in 1997.

Mr. Janssen specializes in compliance assessments and reports under the ARA, operations planning, and aggregate resource assessment. He was granted approval in 1998 by the Ministry of Natural Resources to prepare site plans under the Aggregate Resources Act.