

# PLANNING JUSTIFICATION **REPORT** & AGGREGATE RESOURCES ACT SUMMARY **STATEMENT**

EMERSON PIT

259 Windham East Quarter Line Road  
Part of Lots 5 & 6, Concession 13, Geographic Township of  
Delhi (Windham), County of Norfolk

Date:

**July, 2019**

Prepared for:

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# EXECUTIVE SUMMARY

Livingston Excavating and Trucking Inc. is applying for a Category 1, Class A (Below Water) Pit under the Aggregate Resources Act and a Zoning By-law Amendment from the County of Norfolk to permit below water extraction at the pit located at 259 Windham East Quarter Line Road.

The site is located to the north of the Town of Simcoe, on lands described as Part of Lots 5 and 6, Concession 13, Geographic Township of Windham (Delhi), County of Norfolk.

Livingston Excavating and Trucking Inc. owns approximately 39 ha of land, of which 36 ha is currently licensed under the Aggregate Resources Act for a Category 7, Class B (above water) pit. The purpose of the proposed Category 1, Class A (below water) pit licence application is to permit extraction below the water table and permit an increase in annual tonnage. The remainder of the applicant's property includes an existing barn that will remain on-site.

The proposed Emerson Pit represents good planning and is consistent with the Provincial Policy Statement (PPS) and conforms to the County of Norfolk Official Plan and has regard to matters of provincial interest laid out in the Planning Act for the following reasons:

- Making this site available for aggregate extraction represents the wise use and management of resources, providing economic benefits, while minimizing potential social and environmental impacts;
- The proposed Emerson Pit contains approximately 5 million tonnes of a high quality aggregate resource suitable for most road building and construction projects that would supply the County of Norfolk and surrounding local markets;
- The County of Norfolk Official Plan recognizes that this area contains aggregate potential and this area is to be protected for future aggregate extraction;
- Aggregate extraction is already a permitted use on the site and in the surrounding area;
- The aggregate from the proposed pit will be shipped to market from the existing entrance/exit on Fourteenth Street West whereby truck will travel east along the existing haul route (Fourteenth Street West) to Park Road or Highway 24;
- The operation is appropriately designed, buffered and/or separated from sensitive land uses to minimize impacts;
- Surrounding domestic water supplies will be protected and the applicant will implement a well monitoring program;
- There are limited surface water features within the surrounding area and the proposed pit will not negatively impact these features through implementation of the proposed mitigation measures;
- A portion of the proposed extraction area is identified as a prime agricultural area. Provincial and local planning policy permits mineral aggregate extraction within this area subject to meeting certain requirements;
- There will be no negative impact to significant natural features taking into consideration proposed mitigation measures and the rehabilitation plan;
- The site will be progressively rehabilitated for natural heritage purposes and include the establishment of a 23.9 ha pond; and
- There are no significant cultural heritage resources within the proposed extraction area.

# 1.0 INTRODUCTION

Livingston Excavating and Trucking Inc. is applying for a Category 1, Class A pit under the Aggregate Resources Act and a Zoning By-law Amendment from the County of Norfolk to permit a pit at 259 Windham East Quarter Line Road.

The site is located to the north of the Town of Simcoe, on lands described as Part of Lots 5 and 6, Concession 13, Geographic Township of Windham (Delhi), County of Norfolk. **See Figures 1 and 2.**

Livingston Excavating and Trucking Inc. owns approximately 39 ha of land, of which 36 ha is currently licensed under the Aggregate Resources Act. The existing Category 7, Class B sand and gravel pit (License No. 625637) is an above water pit and is permitted to ship a maximum of 20,000 tonnes of aggregate per annum. The purpose of the proposed licence application is to replace the existing Category 7, Class B licence with a Category 1, Class A licence in order to permit extraction below the water table and increase the annual tonnage. The proposed extraction limit for the site is 25.9 ha.

Prior to filing the applications, Livingston Excavating and Trucking Inc. met with the County of Norfolk to discuss the required applications and technical studies. See **Appendix 1** for a copy of the pre-consultation record from the County of Norfolk.

The following applications are required in order to permit the proposed Emerson Pit.

- Aggregate Resources Act: Class A, Category 1 (below water) Licence
- Planning Act: A Zoning By-law Amendment is required from the County of Norfolk to rezone the site from “Agriculture (A)” site specific exception 14.871 and “Hazard Lands (HL)” to “Extractive Industrial (MX)” to permit mineral extraction.

Attached as **Appendix 2** is a copy of the proposed County of Norfolk Zoning By-law Amendment.

In addition to this Planning Report and Aggregate Resources Act Summary Statement, the following technical reports have been submitted as part of the application:

- Aggregate Resource Act Site Plans, by MHBC, (May 2019);
- Stage 1 and 2 Archaeological Assessment, by Golder Associates Ltd, July, 2015;
- Stage 3 Archaeological Assessment by Timmins Martelle Heritage Consultants, May, 2018;
- Level 1 and 2 Hydrogeologic Assessment, by Groundwater Science Corp, May, 2019;
- Level 1 and 2 Natural Environment Technical Report and Environmental Impact Study by Biologic, June, 2019;
- Traffic Impact Assessment by RC Spencer Associates Inc., April 2019; and
- Noise Impact Study” by HGC Engineering, May, 2019.

This report provides a summary of the proposed Emerson Pit and the various technical reports. This report also provides a summary and analysis of applicable planning policy contained within the Provincial Policy Statement (PPS), County of Norfolk Official Plan, County of Norfolk Zoning By-law and the Aggregate Resources Act.

## 1.1 The Proposed Emerson Pit

The proposed licence area of the Emerson Pit is 36 ha, of which 25.9 ha is proposed for extraction. See **Figure 3** for a simplified operations schematic.

As noted, the site is currently a licensed above water pit and is permitted to ship a maximum of 20,000 tonnes per annum. The purpose of this proposal is to increase the depth of extraction (below the water table) and increase the permitted annual tonnage to 150,000 tonnes per annum. The proposed Emerson Pit is located to the north of the Town of Simcoe and approximately 3 km west of Highway 24 which provides access to Highway 403.

The proposed pit contains approximately 5 million tonnes of aggregate and extraction is proposed to a maximum depth of +/-213.5 metres above sea level (mASL) which includes extraction below the water table. Extraction within the proposed pit would proceed in three areas, starting in the north-eastern limit of the pit. The phasing of the operation is generally from east to west.

The proposed phasing plan has been designed to minimize site disturbance and maximize rehabilitation. The phasing plan will allow the agricultural uses to be maintained until the area is required for extraction and to maximize rehabilitation where extraction has occurred.

The following are the hours of operation for the proposed pit which are consistent with the hours of the existing approved pit:

- Processing, site preparation, rehabilitation and shipping is permitted from 7:00 am to 6:00 pm Monday to Saturday;
- Winter sand delivery is permitted 24/7 during the winter season; and
- No operations will take place on Sundays or statutory holidays.

The aggregate processing area will occur within a defined area shown in Area 1 and will be located on the pit floor. This area will maximize separation distance with surrounding residents and is located beside an existing mineral aggregate operation. There will be no crushing outside of this area, however a portable screener is permitted within other areas of the pit in accordance with the site plan requirements. Highway trucks will use the internal haul route in Area 1 to proceed south to the existing entrance/exit onto Fourteenth Street West. **See Figure 3.**

Rehabilitation of the site will be progressive and, as soon as possible, depleted areas shall be restored to maximize rehabilitated areas and minimize disturbed areas. The rehabilitation plan has been designed to include:

- 23.9 ha pond; and
- 2.0 ha natural heritage features

The rehabilitation plan developed for the site has been designed to provide a variety of habitats to facilitate biodiversity on the site. **See Figure 4.** For additional details on the proposed operation and rehabilitation please refer to the Aggregate Resources Act Site Plans prepared by MHBC.

# 2.0 SUBJECT SITE AND SURROUNDING LAND USES

## 2.1 Description of the Subject Site & Surrounding Lands

The site is located to the north of the Town of Simcoe, on lands described as Part of Lots 5 and 6, Concession 13, Geographic Township of Windham (Delhi), County of Norfolk. The site is located within a rural area and is located west of Highway 24, and is accessed from Fourteenth Street West.

The licence area of the proposed Emerson Pit is 36 ha, of which 25.9 ha is proposed for extraction.

The site is generally flat with surface drainage flowing from west to east. A small offline agricultural/ irrigation pond is located to the north of the proposed licence boundary and a portion of the Class D agricultural drain (Petite Drain) is located within the licence boundary but outside of the extraction area and is setback a minimum of 30 metres from the extraction limit.

The site is predominately agricultural lands and ranges in elevation from +/-224 mASL along the southern boundary of the site to +/- 228 mASL along the northern boundary of the site. There is a knoll that traverses in a north/south direction along the western part of the site with an elevation of approximately +/- 233 mASL.

There is an existing barn on the site (outside of the licensed boundary in the north west corner). A scale house is the only building proposed within the licence boundary.

The following land uses surround the proposed operation:

- To the **south**: rural residential uses and agricultural uses. On the south side of 14<sup>th</sup> Street West there is a cluster of rural residential uses.
- To the **west**: Solar farm and agricultural uses.
- To the **east**: Existing Dufferin Aggregates gravel pit and rural residential uses.
- To the **north**: Agricultural uses, inclusive of farm residences and farm buildings.

The predominant land uses in the surrounding area are agriculture, aggregate extraction and rural residential uses. See **Figure 2**.

## 2.2 On-site Mineral Aggregate Resource

Schedule J-4 of the County of Norfolk Official Plan (CNOP) identifies a “Sand and Gravel Resource Area” on the site. See **Figure 5**.

The detailed site investigation confirms the presence of a known deposit of mineral aggregate resources. In total, the proposed extraction contains approximately 5 million tonnes of a high quality aggregate that is suitable for most road building and construction projects.

## 2.3 On-site and Adjacent Agricultural Uses

The majority of the proposed Emerson Pit is an active agricultural use with corn, beans and potatoes being the principal crops. There is no major agricultural infrastructure and no significant agricultural investment within the proposed licence area.

The Canada Land Inventory (CLI) system “Soil Capability Classification for Agriculture” is the recognized system in Ontario for classifying soils according to their inherent capability for agriculture. The best soils, with no significant limitations for crop use, are designated Class 1. Soils designated Class 2 to Class 6 have decreasing capability for common field crops. Class 7 soils have no agricultural capability. Class 1 to 3 lands are considered prime agricultural lands.

The proposed Emerson Pit is mapped as Class 2 and Class 3. Class 2-3 soils are considered prime agricultural soils. See **Figure 6**.

The policies of the Provincial Policy Statement and the CNOP permit the interim extraction of mineral aggregate resources in prime agricultural areas on prime agricultural lands, provided that the rehabilitation of the site will be carried out to substantially the same area and average soil quality for agriculture. However, agricultural rehabilitation is not required on prime agricultural lands if the following criteria can be demonstrated:

- 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;*
- 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;*
- 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*

*d. agricultural rehabilitation in remaining areas is maximized. (PPS, 2014 2.5.4.1)*

The site includes 25.9 ha that is proposed to be extracted and not rehabilitated back to agricultural for the following reasons:

- This area contains a substantial quantity of mineral aggregate reserves below the water table. In total the site contains approximately 5 million tonnes of aggregate, of which 74% is located below the water table. The lands will be rehabilitated back to a 23.9 ha pond and 2.0 ha of natural features; and
- Alternative locations have been considered and found unsuitable by the applicant. The site is currently licensed under the ARA for extraction. Extraction is an established use in the area and will allow the applicant to utilize existing infrastructure in place such as the approved haul route. The applicant also operates other licensed gravel pits within the County and this site is strategically located to serve other market areas.

As such, the site was selected by the applicant since:

- the site is currently licensed for extraction;
- the site is mapped as a "Sand and Gravel Resource Area" on Schedule J-4 of the CNOP and mineral aggregate operations are a permitted use in the Official Plan;
- the site is strategically located to serve other market areas;
- the site does not contain any major investment or infrastructure related to the onsite agricultural uses;
- the site and surrounding area contain limited environmental features and are appropriate to extract from a natural heritage perspective; and
- Regarding the test to maximize agricultural rehabilitation in remaining areas, the only areas where below extraction is not occurring is the perimeter surrounding the proposed extraction area. This is a thin strip of land that varies between 15 and 30m in width. Based on the rehabilitation of the site to a 23.9 ha pond, the remaining 2.0 ha is proposed to be planted as vegetated areas to promote connectivity and linkages to the pond and would not be feasible for agriculture production.

## 2.4 On-site and Adjacent Natural Heritage Features

Land Use Schedule B-6/ B-15 of the CNOP designates the site as “Agricultural” and “Natural Hazard”. Natural Heritage Schedule C-4 of the CNOP does not identify natural features on the site. See **Figures 7 and 8**.

A Natural Environment Level 1 and 2 Technical Report was prepared by Biologic. Adjacent lands within 120 metres of the site do not contain the following significant natural heritage features:

- Significant wetlands;
- Significant woodlands;
- Significant valleylands; or
- Significant Areas of Natural and Scientific Interest.

Within the 120 metre of the licence boundary the following features were identified as being significant:

- Endangered or threatened species habitat (butternut);
- Potential specialized habitat for wildlife (potential amphibian habitat); and
- Fish habitat (off-line agricultural pond).

Within the licence boundary but outside of the extraction limit the following significant natural heritage features were identified:

- Habitat for endangered or threatened species (butternut); and
- Fish habitat (Class D Agricultural Drain (Petite Drain)).

The report identifies that there will be no direct impacts to these features and indirect impacts can be mitigated by:

1. The aggregate extraction operation shall not extend beyond the extraction area to avoid encroachment and accidental harm to vegetation. To define the limit of extraction, marker posts along said limit shall be installed on the northern boundary prior to site preparation in Area 1 or 2;
2. A 30 metre extraction setback shall be maintained from the municipal drain which is located to the north to provide a buffer to these features;
3. To avoid sedimentation impacts on the drain, silt fencing shall be placed and maintained along the north boundary of the licence boundary along the extraction limit in Area 2 prior to site preparation. This fence shall not be removed until the stripped areas are extracted below grade and sloped to direct surface water towards the pit;
4. The silt fencing shall be inspected prior to site preparation on site to ensure it was installed correctly. During operations the fencing shall be inspected to ensure that the

- fencing is being maintained and functioning properly. Any issues that are identified are resolved in the same day;
5. The silt fencing shall be installed according to the Guidelines for Erosion and Sediment Control for Urban Construction Sites (OMNR, 1987) and the applicable standards established in the Ontario Provincial Standard Specification. Ontario Provincial Standard Drawings (OPSS/OPSD) documents;
  6. Overland flow of disturbed areas shall be contained within the limit of extraction; and
  7. A spills plan should be incorporated into the Site Plan.

Biologic has also recommended the following for the rehabilitation plan:

1. Sculpting of the pond edges is recommended in order to help diversify the natural heritage features of the open water pond and to encourage wildlife use; and
2. Natural aquatic vegetation planting shall occur in the shallow edges of the open water pond. Furthermore, habitat features such as large woody debris to promote aquatic habitat complexity and nest boxes for waterfowl and other water birds shall be installed.

These recommendations have been incorporated into the Aggregate Resources Act Site Plans and the details are further outlined in the Biologic Report.

## 2.5 On-site and Adjacent Water Resources

A Water Resources Assessment has been prepared by Groundwater Science Corp. The purpose of the report was to assess the hydrogeological, and hydrological conditions and to identify any potential adverse effects on water resources, water uses and the natural environment as a result of the proposed pit.

A section of the Class D Agricultural Drain (Petite Drain) is located within the licence boundary, but outside of the extraction area. The Petite Drain is setback 30 metres from the extraction limit.

Outside of the licence boundary, within the 120 metre adjacent lands there are the following environmental features:

- Small offline agricultural/ irrigation pond to the north;
- A section of the Class D Agricultural Drain (Petite Drain) to the north;
- Small dug agricultural pond to the north of the Petite Drain; and
- Gravel pit pond to the east as a result of below water extraction.

Based on the water resources assessment, Groundwater Science Corp. concluded:

1. The Petite Drain is a losing stream over much of the average year and only under high water table conditions in the spring does some localized groundwater flow to it from a small north west portion of the site;

2. There is no significant potential for negative groundwater related water level, volume or temperature impacts to local natural environmental features;
3. Based on the setting, maintenance of annual groundwater recharge volume, small scale of projected groundwater level changes and separation distance from the extraction area to the local water wells there is no significant potential for negative impacts to local water supplies;
4. Below water extraction would remain outside of the identified WHPA for the Northwest Wellfield and the Cedar Street Wellfield;
5. Although mapping available in CNOP (2018) suggested the Cedar Street Well Head Protection Area (WHPA) and Nitrate Issue Contributing Area (ICA) extended to the vicinity of the proposed operation, current (revised) source water protection mapping indicates that the WHPA and ICA does not;
6. The proposed pit is not anticipated to have any adverse effects to groundwater/surface water resources and a well monitoring program will be implemented to verify this; and
7. Although no impacts to water supplies are predicted if a groundwater interference complaint is received appropriate measures as deemed necessary by the MECP will be taken to rectify the problem.

Groundwater Science Corp. has recommended that the following measures be implemented for the proposed pit:

1. Extraction below the water table will be initiated along the north boundary of Area 1 outside the main processing area;
2. Prior to below water extraction, monitoring well MW3 shall be deepened or replaced to ensure the well screen intercepts the water table;
3. Prior to below water extraction baseline groundwater quality samples for anions, metals and petroleum hydrocarbon indicators (BTEX, F1, F2, F3 AND F4) will be obtained at MW1, MW2 and MW3;
4. During below water extraction water level measurements shall be obtained on a daily basis at MW1, MW2 AND, MW3, and the drilled well using data loggers. Manual measurements and data will shall be downloaded as accessible twice yearly;
5. Each year below water extraction operations occur, groundwater quality samples for anions, metals and petroleum hydrocarbon indicators (BTEX, F1, F2, F3 and F4) shall be obtained at MW1, MW2 and MW3 in late summer or early fall;
6. Following each year of below water extraction the monitoring results shall be summarized and submitted as an annual report to the Ministry of Natural Resources and Forestry;
7. Aggregate washing is only permitted if a Permit to Take Water has been obtained; and
8. The following conditions from the existing Category 7, Class B licence shall also apply:
  - a. Dewatering shall not occur on-site;
  - b. A mandatory response to water well interference complaint if received and completion of work that may be deemed necessary by the MECP regarding well interference complaints; and

- c. The inclusion of the spills response program.

These recommendations have been incorporated into the Aggregate Resources Act Site Plans and the details are further outlined in the Groundwater Science Corp. Report.

## 2.6 On-site and Adjacent Cultural Heritage Resources

Cultural heritage resources consist of archaeological resources, built heritage resources, and cultural heritage landscapes. Significant cultural heritage resources are identified in the Provincial Policy Statement as resources that are valued for the important contribution they make to our understanding of the history of a place, an event, or a person.

In 2015, Golder Associates conducted a Stage 1 and 2 Archaeological Assessment for the site. The Stage 1 and 2 Assessment identified nine (9) archaeological locations, two (2) of which were determined to warrant a Stage 3 Archaeological Assessment (Locations 4 and 5). Attached as **Appendix 3** is correspondence from the Ministry of Tourism Culture and Sport confirming that the provincial requirements have been satisfied.

The Stage 3 Archaeological Assessment was completed by Timmins Martelle Heritage Consultants Inc. in 2018. The Stage 3 Archaeological Assessment recommended that two sites (Locations 4 and 5) undergo a Stage 4 Archaeological Assessment if development is proposed within these areas. These areas have been identified on the Aggregate Resources Act site plans and no site disturbance in these defined areas is permitted until a further Archaeological Assessment is completed. Attached as **Appendix 4** is correspondence from the Ministry of Tourism Culture and Sport confirming that the provincial requirements have been satisfied. See **Figure 3** for a simplified operations schematic inclusive of the archaeological protection areas.

Timmins Martelle Heritage Consultants Inc. recommended the following:

1. Further archaeological assessment is recommended for Location 4 and 5 if development is proposed within these areas;
2. Location 4 and 5 plus a 20 metre protective buffer shall be preserved for the duration of the operation or until such time as the archaeological site has been subject to further archaeological investigation and a report has been submitted to MTCS, clearance has been provided, and has been accepted into the provincial register;
3. Locations 4 and 5 and the 20 metre protective buffer shall be demarcated with 1.2 metre marker posts that do not exceed 60 metres apart and shall be maintained for the duration of the operation;
4. Erection of the marker posts shall be supervised by a licensed archaeologist and a report documenting the effectiveness of the long-term protection strategy shall be reported to the MTCS;
5. With the exception of agricultural uses, no ground disturbance is permitted within the archaeological sites and their 20 metre protective buffer; and

6. Prior to the surrender of the ARA licence, a restrictive covenant shall be registered on title to ensure the archaeological sites continue to be preserved.

In addition to the above noted recommendations, the Aggregate Resources Act site plans also require the applicant to stop work within the affected area of the pit in the event that buried archaeological material or human remains are found during the operation of the pit and to complete the required actions to ensure cultural heritage resources are conserved.

If locations 4 & 5 are cleared by the Ministry of Tourism, Culture and Sport prior to license surrender the restrictive covenant shall not be required and these areas may be extracted.

These recommendations have been incorporated into the Aggregate Resources Act Site Plans and the details are further outlined in the Stage 1 and 2 Archaeological Assessment (2012) and Stage 3 Archaeological Assessment (Locations 4 and 5).

## 2.7 Surrounding Land Uses

Provincial and County policies require new mineral aggregate operations to minimize social impacts on surrounding sensitive land uses.

As shown on See **Figure 2**, the following land uses surround the proposed operation:

- To the south: rural residential uses and agricultural uses. On the south side of 14th Street West there is a cluster of rural residential uses.
- To the west: Solar farm and agricultural uses.
- To the east: Existing Dufferin Aggregates gravel pit and rural residential uses.
- To the north: Agricultural uses, inclusive of farm residences and farm buildings.

The surrounding residential uses are considered sensitive land uses and the proposed pit has been appropriately designed, buffered and/or separated from sensitive land uses.

The following sections of this report outline considerations related to water wells, noise, air and traffic and how the operation has been designed to minimize impacts on surrounding sensitive land uses.

### 2.7.1 Water Wells

A Water Resources Assessment has been prepared by Groundwater Science Corp. The report assessed any potential adverse effects on private wells as a result of the proposed pit.

The Groundwater Science Corp. Water Resources Assessment concluded that based on the setting, maintenance of annual groundwater recharge volume, small scale of projected

groundwater level changes and separation distance from the extraction area to the local water wells there is no significant potential for negative impacts to local water supplies.

Groundwater Science Corp has recommended that the following measures be implemented to ensure the protection of wells:

- A well monitoring program shall be implemented for water quality and quantity; and
- If a groundwater interference complaint is received appropriate measures as deemed necessary by the MECP will be taken to rectify the problem.

The well monitoring program includes the requirement during below water extraction to monitor on-site wells (MW1, MW2, MW3 and the drilled well) water levels daily using data loggers while the pit is in operation. During below water extraction groundwater quality samples are to be obtained in late summer or early fall. Following each year of below water extraction, the monitoring results will be summarized and submitted in an annual report to the Ministry of Natural Resources and Forestry (MNRF).

The proposed well monitoring program and groundwater interference plan will ensure all water supplies are protected. These recommendations have been incorporated into the Aggregate Resources Act Site Plans and the details are further outlined in the Groundwater Science Corp. Report.

## 2.7.2 Noise

A Noise Impact Assessment was prepared by HGC to assess potential noise impacts from the proposed pit on surrounding residential receptors.

With the implementation of the mitigation measures outlined in the HGC Report, the sound exposures from the proposed Emerson Pit will be in compliance with MECP noise guidelines for surrounding sensitive land uses. The mitigation measures have been incorporated in the Aggregate Resources Act Site Plans. The mitigation measures include:

1. All mobile construction equipment used for site preparation, rehabilitation or to maintain the operations in the pit shall produce sound levels which comply with MECP Guidelines NPC-115, "sound levels due to construction equipment";
2. Processing, site preparation, rehabilitation and shipping is permitted from 7:00 am to 6:00 pm Monday to Saturday, winter sand delivery is permitted 24/7 during the winter season and no operations will take place on Sundays or statutory holidays. These are the same hours of operation for the existing approved gravel pit on-site;
3. The processing plant (screener and crusher) and aggregate recycling plant shall be located on the pit floor (1.5 m above the water table), surrounded by localized stockpiles 6 metres in height and the peak of the stockpile shall be within 20 m of the equipment, and shall break the line of sight between the equipment and receptors within 300 m of the equipment. The processing plant (screener and crusher) and aggregate recycling plant are

- restricted to an area in the north-east corner of the site. The processing plant and aggregate recycling plant shall not be operated simultaneously;
4. The portable screener shall be set up on the pit floor (1.5 m above the water table), surrounded by localized stockpiles 6 metres in height and the peak of the stockpile shall be within 20 m of the equipment, and shall break the line of sight between the equipment and receptors within 300 m of the equipment. The portable screener is only permitted in a certain area. The portable screener and dragline shall not be operated simultaneously;
  5. The dragline shall be set up on the pit floor (1.5 m above the water table), surrounded by localized stockpiles 6 metres in height and the peak of the stockpile shall be within 20 m of the equipment, and shall break the line of sight between the equipment and receptors within 300 m of the equipment. The dragline is only permitted in a certain area. The dragline and portable screener shall not be operated simultaneously;
  6. Whenever possible, extraction and processing equipment shall be located as close as possible to working faces in order to maximize acoustical shielding;
  7. In certain areas of the dragline and portable screening plant are not permitted to occur;
  8. The extraction and shipping of material from the sand knoll located in Areas 2 and 3 is permitted without the need for localized stockpiles or perimeter berms (see berm sequencing detail). Equipment to be used shall be limited to a loader (103 dba) and shipping truck (102 dba). No other equipment is permitted to operate on-site concurrently while the sand knoll is being extracted if the berms required for Areas 2 and 3 have not been constructed;
  9. Noise attenuation berms shall be constructed along the east, south and west boundaries of the site and along the southern boundary of the main processing area;
  10. Any proposed changes to noise controls shall be reviewed by a qualified acoustical consultant to ensure that the operation will remain in compliance with the relevant noise impact criteria; and
  11. Should further archaeological investigation be completed for location 4 (afhc-52) and location 5 (afhc-55) the location and extent of Berms 1 and 3 are permitted to be reconfigured however, the dragline and portable screening plant is prohibited from operating in location 4.

With the mitigation measures proposed, HGC concludes that MECP noise guidelines can be met. These requirements will minimize the impact of noise created by the proposed Emerson Pit and prevent adverse impacts on surrounding sensitive land uses.

See **Figure 3** for a simplified operations schematic which identifies the noise attenuation requirements. These recommendations have been incorporated into the Aggregate Resources Act Site Plans.

### 2.7.3 Air Quality

The Province of Ontario has the following prescribed conditions that apply to all new mineral aggregate operations to control dust emissions:

1. Dust will be mitigated on-site;
2. Water or another provincially approved dust suppressant will be applied to internal haul roads and processing areas as often as required to mitigate dust; and
3. Processing equipment will be equipped with dust suppressing or collection devices where the equipment creates dust and is being operated within 300 metres of a sensitive receptor.

These requirements have been incorporated into the Aggregate Resources Act site plans to minimize the impact of dust created by the proposed Emerson Pit and prevent adverse impacts on surrounding properties.

### 2.7.4 Traffic

A Traffic Impact Study was prepared by R.C Spencer & Associates to confirm if the future traffic generated by the proposed pit can be accommodated by existing roads and intersections.

The proposed pit will utilize the existing entrance/exit currently approved for the Class B sand and gravel pit (License No. 624804) for shipping, onto Fourteenth Street West. Trucks will travel east along on Fourteenth Street West and go south at Park Road (County Road 40) to Queensway West (Highway 3) or north/ south at Norfolk Street North (Highway 24) to ultimately access Highway 403.

R.C Spencer & Associates concluded that no improvements are required to the existing road network and that the existing road network has sufficient capacity to accommodate both the roadway growth and traffic generated from the proposed pit. See **Figure 10** for the haul route location.

# 3.0 PLANNING ANALYSIS

The following is an assessment of the proposed pit application relative to the policies and provisions of the following documents:

- Provincial Policy Statement;
- County of Norfolk Official Plan;
- County of Norfolk Zoning By-law; and
- Aggregate Resources Act.

## 3.1 Provincial Policy Statement (2014)

The Provincial Policy Statement (PPS) was issued under Section 3 of the Planning Act and came into effect on April 30, 2014.

The PPS provides policy direction on matters of provincial interest related to land use planning and development. The PPS provides for appropriate development while protecting resources of provincial interest, public health and safety, and the quality of the natural environment. (Part 1, Preamble).

The PPS is a policy-led planning approach that recognizes the complex inter-relationship among environmental, economic and social factors in land use planning. The PPS supports a comprehensive, integrated and long-term approach to planning and recognizes linkages among policy areas (Part III, How to Read the Provincial Policy Statement).

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 protect essential ecological processes and public health and safety, minimize environmental and social impacts, and meet its long-term economic needs (Part IV, Vision for Ontario's Land Use Planning System).

The following is a summary to demonstrate how the proposal is consistent with the PPS.

- The management or use of mineral aggregate resources is a permitted use in the rural area (Policy 1.1.5.2);
- The proposed pit represents an efficient use of existing infrastructure by utilizing the approved entrance/exit of the existing licensed pit to access Fourteenth Street West and utilize an existing approved haul route (Policies 1.1.5.5, 1.6.7.1, 1.6.7.2, 1.7.1 a);

- The proposed pit optimizes the long term availability of mineral aggregate resources, utilizes existing infrastructure and has been appropriately designed, buffered and/or separated to prevent or mitigate adverse effects (Policy 1.2.6.1);
- Making this site available for aggregate extraction represents the wise use and management of resources, providing economic benefits, while minimizing potential impacts (Section 2.0);
- The proposed pit will protect natural features and increase biodiversity for the long term and ensure no negative impact to significant natural heritage features (Policies 2.1.1, 2.1.2, 2.1.5, 2.1.8);
- There are no significant wetlands located on-site (Policy 2.1.4);
- Development and site alteration is not proposed in significant wetlands in the Canadian Shield north of Ecoregions 5E, 6E and 7E1, significant woodlands in Ecoregions 6E and 7E (excluding islands in Lake Huron and the St. Marys River)<sup>1</sup>, significant valleylands in Ecoregions 6E and 7E (excluding islands in Lake Huron and the St. Marys River)<sup>1</sup>, significant wildlife habitat, significant areas of natural and scientific interest or coastal wetlands in Ecoregions 5E, 6E and 7E1 that are not subject to policy 2.1.4(b) (Policy 2.1.5);
- Within the licence boundary, but outside of the extraction limit there is fish habitat located within the Class D Agricultural Drain (Petite Drain). The Petite Drain is setback a minimum of 30 metres from the extraction limit and the feature will be protected. Fish habitat in the off-line agricultural pond on adjacent lands will be protected (Policy 2.1.6);
- Within the licence boundary, but outside of the extraction limit there is habitat for endangered and threatened species (butternut). The butternut tree is setback 25 metres from the extraction limit and the feature will be protected. Habitat for endangered and threatened species (butternut) on adjacent lands will be protected (Policy 2.1.7);
- To the north on adjacent lands there is fish habitat in the Petite Drain and off-line agricultural/ irrigation pond as well as potential specialized habitat for wildlife (potential amphibian habitat) in the off-line agricultural pond. These features will be protected. (Policy 2.1.8);
- The proposed pit will protect the quality and quantity of water (Policy 2.2.1);
- The proposed pit will not have a negative impact on municipal drinking water supplies or designated vulnerable areas (Policy 2.2.1.e.1);
- There are no vulnerable or sensitive surface water or sensitive ground water features on site (Policy 2.2.1.e.2);
- Water will be efficiently managed on-site by directing drainage to the proposed pond area (Policy 2.2.1.f.);

- There are no sensitive surface water or sensitive ground water features on site. (Policy 2.2.2);
- The extraction of mineral aggregate resources in a prime agricultural area is being done in accordance with policies 2.4 and 2.5 of the PPS (Policy 2.3.6.1);
- The site will be progressively rehabilitated (Policy 2.4.3/ 2.4.4.1);
- The subject site is identified as a "Sand and Gravel Resource Area" on Schedule J-4 of the CNOP; this area is protected for future extraction (Policy 2.5.1);
- The proposal makes available a mineral aggregate resource that is located close to the Town of Simcoe and surrounding market areas (Policy 2.5.2.1);
- The operation has been designed in a manner which minimizes social, economic and environmental impacts (2.5.2.2);
- The operation has been designed to allow for aggregate recycling (2.5.2.3);
- Rehabilitation of the site will be progressive, and the site will be rehabilitated to a pond with natural features, consistent with the adjacent gravel pit rehabilitation to the east (Policy 2.5.3.1);
- The proposed pit meets the criteria for not rehabilitating back to agriculture (Policy 2.5.4.1);
- There are no significant cultural heritage resources located within the proposed extraction area, adjacent significant archaeological resources will be conserved (Policies 2.6.1, 2.6.2, 2.6.3);
- There are hazard lands on-site and the operation has been appropriately designed to avoid impacts on hazard lands (Policies 3.1.1, 3.1.2); and
- The proposed pit represents the wise use and management of an aggregate resource in an area directly adjacent to an existing sand and gravel pit (Policy 3.2.1).

## 3.2 County of Norfolk Official Plan (October 5, 2018 Consolidation)

The application for the proposed pit is required to conform to the County of Norfolk Official Plan (CNOP).

The site is located in the rural area of the County on Schedule A-2 of the CNOP designated "Agricultural" on Schedule B-2 of the CNOP and is identified as a "Sand and Gravel Resource Area" on Schedule J-4 of the CNOP. In accordance with policy 4.6.1(i) of the CNOP new pits in Aggregate Resource Areas identified Schedule J-4 are permitted without an Official Plan Amendment.

The following are the land use designations that currently apply to the proposed pit based on CNOP. In summary, the site is:

- Is designated as "Agricultural" and "Hazard Lands" on Schedule B-2 (**Figure 7**);
- Is located in an area identified as a "Sand and Gravel Resource Area" on Schedule J-4 (**Figure 5**);
- Is not located within a natural heritage feature designation on Schedule C-4 (**Figure 8**);
- Although mapping on Schedule D-4 of the CNOP suggested the Cedar Street Well Head Protection Area (WHPA) C, D and E and Nitrate Issue Contributing Area (ICA) extended to the vicinity of the Emerson Pit, current (revised) source water protection mapping indicates that the WHPA and ICA does not (**Figure 9**); and
- Is located on a collector road that is used as an existing haul route on Schedule E-1/E-2 (**Figure 10**).

The following is a summary to demonstrate how the proposal conforms to the CNOP.

- Making this site available for aggregate extraction represents the wise use and management of resources, providing economic benefits to the County, while minimizing social and environmental impacts (Section 2.2.1.2 (c)).
- Schedule A2 of the CNOP identifies the site as being within the Rural Area.
- The Rural Area includes lands designated "Agriculture". Schedule B-2 of the CNOP designates the site as "Agricultural".
- Schedule J-4 of the CNOP designates the site as a "Sand and Gravel Resource Area".
- Notwithstanding that the mapping on Schedule D-4 of the CNOP suggested the Cedar Street Well Head Protection Area (WHPA) C, D and E and Nitrate Issue Contributing Area (ICA) extended to the vicinity of the Emerson Pit, current (revised) source water protection mapping indicates that the WHPA and ICA does not. The Source Protection Plan does not contain policies for WHPA-D and E areas and therefore the policies do not apply. (Policy 3.3.1)

- There are no provincially significant features (Provincially Significant Wetlands (PSWs) or habitat of endangered species and threatened species) located within the proposed extraction area. (Policy 3.5.1)
- Schedule C-4 does not identify any natural heritage features within the extraction area. Within the licence boundary, but outside of the extraction limit there is fish habitat located within the Class D Agricultural Drain (Petite Drain). The Petite Drain is setback 30 metres from the extraction limit and the feature will be protected. To the north on adjacent lands there is fish habitat in the Petite Drain and off-line agricultural/ irrigation pond as well as potential specialized habitat for wildlife (potential amphibian habitat) in the off-line agricultural pond. These features will be protected. (Policy 3.5.2 (a) and (b))
- Within the licence boundary, but outside of the extraction limit there is habitat for endangered and threatened species (butternut). The butternut tree is setback 25 metres from the extraction limit and the feature will be protected. Habitat for endangered and threatened species (butternut) on adjacent lands will be protected. (3.5.2 (c))
- The rehabilitation plan has been developed for the site that includes a pond and natural features. (3.5.2.(i))
- Dust will be mitigated on site. (Policy 3.6 (a))
- The proposed pit operation is appropriate for the rural area and meets the policy requirements under Section 7.2 of the CNOP. (Policy 4.3 (b))
- Mineral aggregate resources play an important economic role in the County of Norfolk and the proposed pit will contribute to economic growth in the County. (Policy 4.6.1)
- The proposed operation has been designed to include aggregate recycling as an accessory use to the aggregate operation. (4.6.1(d))
- The proposed operation is not located within or adjacent to a provincially significant wetland. Within the licence boundary, but outside of the extraction limit there is habitat for endangered and threatened species (butternut). The butternut tree is setback 25 metres from the extraction limit and the feature will be protected. Habitat for endangered and threatened species (butternut) on adjacent lands will be protected. (Policy 4.6.1(f))
- There are no natural heritage features listed on Table 2 within the extraction area. Within the licence boundary, but outside of the extraction limit there is fish habitat located within the Class D Agricultural Drain (Petite Drain). The Petite Drain is setback a minimum of 30 metres from the extraction limit and the feature will be protected. To the north on adjacent lands there is fish habitat in the Petite Drain and off-line agricultural/ irrigation pond as well as potential specialized habitat for wildlife (potential amphibian habitat) in the off-line agricultural pond. These features will be protected. (Policy 4.6.1(g))
- The proposed operation not located within an Urban Area, Hamlet Area or Resort Area designation and is appropriately located and buffered from sensitive receptors. (Policy 4.6.1(h))

- Schedule J-4 of the CNOP designates the site as a “Sand and Gravel Resource Area” and therefore an amendment to the CNOP is not required to permit extraction, however a Zoning By-law amendment is required and has been submitted to the County of Norfolk and is included in **Appendix 2**. (Policy 4.6.1(i))
- The site is an existing licensed pit and extraction of material is feasible and is proposed in three areas. (Policy 4.6.1(k)(i))
- The site is separated from adjacent roads, property boundaries and surrounding land uses. The setbacks from surrounding land uses have been determined by the technical impact assessments and the provisions of the Aggregate Resources Act. (Policy 4.6.1(k)(ii))
- The existing road network has sufficient capacity to accommodate both the roadway growth and additional traffic generated from the proposed pit. (Policy 4.6.1(k)(iii))
- There are no natural heritage features listed on Table 2 within the extraction area. Within the licence boundary, but outside of the extraction limit there is fish habitat located within the Class D Agricultural Drain (Petite Drain). The Petite Drain is setback a minimum of 30 metres from the extraction limit and the feature will be protected. To the north on adjacent lands there is fish habitat in the Petite Drain and off-line agricultural/ irrigation pond as well as potential specialized habitat for wildlife (potential amphibian habitat) in the off-line agricultural pond. These features will be protected. No impacts are anticipated to water quality or quantity and a well monitoring program has been incorporated into the ARA site plans. (Policy 4.6.1(k)(iv))
- The rehabilitation plan developed for the site has been designed to provide a variety of habitats to facilitate biodiversity on the site and the plan will ensure that ecological functions of the site will be restored in the long term. (Policy 4.6.1(k)(v))
- There are no significant cultural heritage resources located within the proposed extraction area, adjacent cultural heritage resources will be protected. (Policy 4.6.1(k)(vi))
- The Aggregate Resources Act application will be circulated to appropriate provincial agencies and the LPRCA for comment. (Policy 4.6.1(k)(vii))
- An Aggregate Resources Act licence application has been submitted to the MNRF for approval. (Policy 4.6.1(k)(viii))
- Aggregate washing is not proposed at this time for the operation, however if aggregate washing is proposed the appropriate applications (permit to take water) will be submitted to MECP for approval. (Policy 4.6.1(l)(i))
- The proposed extraction area contains approximately 5 million tonnes of a high quality aggregate of which 74% is below the water table. (Policy 4.6.1 (l)(ii))
- Alternatives for extraction have been reviewed and have found to be unsuitable. (Policy 4.6.1 (l)(iii))

- The proposed rehabilitation plan is a 23.9 hectare pond with 2.0 hectares of natural features. The small area outside of the pond would not be practical for agriculture production and have been proposed to be rehabilitated to natural features to facilitate biodiversity on the site. (Policy 4.6.1 (l)(iv))
- The proposed rehabilitation plan has been prepared in accordance with the requirements of the Aggregate Resources Act. Rehabilitation of the site will be progressive and depleted areas shall be restored as soon as possible to maximize rehabilitated areas and minimize disturbed areas. The proposed final rehabilitation plan has been prepared with consideration of surrounding land uses. (Policy 4.6.1(o))
- The proposed rehabilitation plan meets the policy requirements for not requiring complete agricultural rehabilitation. (Policy 4.6.1(p))
- The Water Resources Report concluded that there is no significant potential for negative groundwater related water level, volume or temperature impacts to local natural environmental features. (Policy 4.6.4(c))
- A Stage 1 and 2 Archaeological Assessment as well as a Stage 3 Archaeological Assessment (Locations 4 and 5) were completed by a licensed archaeologist. The Stage 3 Archaeological Assessment recommended that two sites (Locations 4 and 5) undergo a Stage 4 Archaeological Assessment if development was proposed within these areas. This area has been identified on the Aggregate Resources Act site plans and no site disturbance in this defined area is permitted until a further Archaeological Assessment is completed. (Policy 5.7.4 (b)&(c))
- The ARA site plans require any human remains to be reported the police and MTCS. (Policy 5.7.4 (g))
- The Rural Area accommodates rural resource activities such as extraction. The site is located in the Rural Area the proposed operation will contribute to the local economy. Resource based activities contribute to the Norfolk County economy significantly. (Policy 6.7)
- While the site is located on agricultural land the site's productivity for agriculture is limited and therefore it is appropriate for a non-agricultural use such as aggregate extraction. (Policy 6.7.1 (a))
- Aggregate extraction is listed as a permitted use in the "Agricultural" designation (Policy 7.2.1(f)) subject to meeting the Natural Resources policy requirements of CNOP. (Policy 6.7.1 (b))

### 3.3 County of Norfolk Zoning By-law 1-Z-2014

The subject site is zoned "Agriculture (A) special provision 14.871" and "Hazard Land (HL)" in the County of Norfolk Zoning By-law No. 1-Z-2014. See **Figure 11**.

The site specific special provision is a result of the OMB decision for the Category 7, Class B pit that is currently licensed on the site. The site specific provisions are:

*14.871 In addition to the uses permitted in the A Zone, notwithstanding the definition of pit or quarry nothing contained herein shall prohibit the levelling or removal of any hill, provided:*

- a) It is for the purpose of extending, increasing or improving the lands for agricultural purposes;*
- b) No excavation takes place below the average grade of the land surrounding the hill; and*
- c) There is a hill to be leveled. [OMB decision April 10, 2015].*

The site is proposed to be zoned "Extractive Industrial (MX)" to permit the proposed pit.

Attached as **Appendix 2** is a copy of the proposed County of Norfolk Zoning By-law Amendment.

# 4.0 AGGREGATE RESOURCES ACT SUMMARY STATEMENT

Livingston Excavating and Trucking Inc. is applying for a Category 1, Class A Pit Below Water under the Aggregate Resources Act (“ARA”). The site is located to the north of the Town of Simcoe, on lands described as Part of Lots 5 and 6, Concession 13, Geographic Township of Windham (Delhi), County of Norfolk.

Livingston Excavating and Trucking Inc. owns approximately 39 ha of land, of which 36 ha is currently licensed under the Aggregate Resources Act. The existing Category 7, Class B sand and gravel pit (License No. 625637) is an above water pit and is permitted to ship a maximum of 20,000 tonnes of aggregate per annum. The purpose of the proposed licence application is to replace the existing Category 7, Class B licence with a Category 1, Class A licence in order to permit extraction below the water table and increase the annual tonnage. The proposed extraction limit for the site is 25.9 ha.

The complete Aggregate Resources Act application consists of the following:

## 4.1.1 Site Plans

The Site Plans provide details of existing features, the operational plan, progressive rehabilitation, planned final rehabilitation and cross-sections of existing conditions and planned final rehabilitation of the site. The site plans are included in the application package.

## 4.1.2 Reports

The following sections fulfill the study requirements of the Aggregate Resources Act:

- 2.2.1 & 2.2.2 Hydrogeological Level 1 and Level 2 Technical Report, Groundwater Science Corp.
- 2.2.3 & 2.2.4 Natural Environment Level 1 and 2 Technical Report, Biologic.
- 2.2.5 & 2.2.6 A Stage 1-2 Archaeological/Heritage Assessment, Golder Associates Ltd.
- 2.2.7 Stage 3 and 4 Cultural Heritage Resource Report, Timmins Martelle Heritage Consultants;
- 2.2.8 A Noise Impact Analysis, HGC Engineering.

- 2.2.10 Each Report includes the qualifications and experience of the individual(s) that have prepared the Report.

Although not required by the Aggregate Resources Act, a Traffic Impact Study was also submitted.

### **4.1.3 Summary Statement: Required Information**

The following sections are structured to provide information required under the Provincial Standards Version 1.0 for a Category 1 - Class A Pit Below Water, Aggregate Resources Act Summary Statement.

#### **4.1.3.1 Planning and Land Use Considerations – Standard 2.1.1**

The proposed pit represents good planning and is consistent with the Provincial Policy Statement (PPS) and conforms to the County of Norfolk Official Plan for the following reasons:

- Making this site available for aggregate extraction represents the wise use and management of resources, providing economic benefits, while minimizing potential social and environmental impacts;
- The proposed Emerson Pit contains approximately 5 million tonnes of a high quality aggregate resource suitable for most road building and construction projects that would supply the surrounding local markets;
- The County of Norfolk Official Plan recognizes that this area contains aggregate resources and should be protected for future aggregate extraction;
- Aggregate extraction is already a permitted use on the site and in the area. There is an adjacent licensed gravel pit to the east of the proposed pit;
- The operation is appropriately designed, buffered and/or separated from sensitive land uses to minimize impacts;
- Surrounding domestic water supplies will be protected and the applicant will implement a well monitoring program;
- Although no impacts to water supplies are predicted if a groundwater interference complaint is received appropriate measures as deemed necessary by the MECP will be taken to rectify the problem;
- Surrounding water resources will be protected;
- During below water extraction an annual water resources monitoring report will be completed and submitted to the Ministry of Natural Resources and Forestry;
- There will be no negative impact to significant natural features taking into consideration proposed mitigation measures and the rehabilitation plan;
- The site will be progressively rehabilitated for natural heritage purposes, including the establishment of a pond;
- The proposed operation meets the policy requirements not requiring rehabilitation back to agriculture;
- The aggregate from the proposed pit will be shipped to market from the existing entrance/exit for the existing licensed pit on Fourteenth Street West onto an existing haul route; and

- There are no significant cultural heritage resources located within the proposed extraction area, adjacent cultural heritage resources will be protected.

#### 4.1.3.2 **Agricultural Classification of the Proposed Site – Standard 2.1.2**

The proposed Emerson Pit is mapped as Class 2 and 3 agricultural land. See **Figure 6**. The proposed operation meets the policy requirements not requiring rehabilitation back to agriculture. See Section 2.3 of this Report for additional information on how this application addresses the required tests to allow for extraction in a prime agricultural area.

#### 4.1.3.3 **Quality and Quantity of Aggregate On-site – Standard 2.1.3**

The site contains approximately 5 million tonnes of high quality aggregate that can be used for a variety of construction uses.

#### 4.1.3.4 **Main Haulage Routes – Standard 2.1.4**

The proposed pit will utilize the existing entrance/exit currently approved for the Class B sand and gravel pit (License No. 624804) for shipping, onto Fourteenth Street West. Trucks will travel east along on Fourteenth Street West and go south at Park Road (County Road 40) to Queensway West (Highway 3) or north/ south at Norfolk Street North (Highway 24). See **Figure 10**.

#### 4.1.3.5 **Progressive and Final Rehabilitation – Standard 2.1.5**

The Aggregate Resources Act Site Plans include the requirements for progressive and final rehabilitation of the site. The site will be progressive rehabilitated generally in accordance with the phasing schematic shown in **Figure 3**.

The proposed rehabilitation plan includes a 23.9 ha pond and 2.0 ha of natural heritage features.

The proposed Rehabilitation Plan is illustrated on **Figure 4**.

# 5.0 CONCLUSIONS

For the reasons set out in this report, the proposed Emerson Pit and corresponding Zoning By-law Amendment:

- Is consistent with the Provincial Policy Statement;
- Conforms to the County of Norfolk Official Plan; and
- Addresses the requirements of the Aggregate Resources Act.

Respectfully submitted,

**MacNaughton Hermsen Britton Clarkson Planning Limited**

A handwritten signature in black ink that reads "Brian Zeman". The signature is written in a cursive style with a large, stylized initial 'B'.

Brian Zeman, BES, MCIP RPP  
President

# Figures

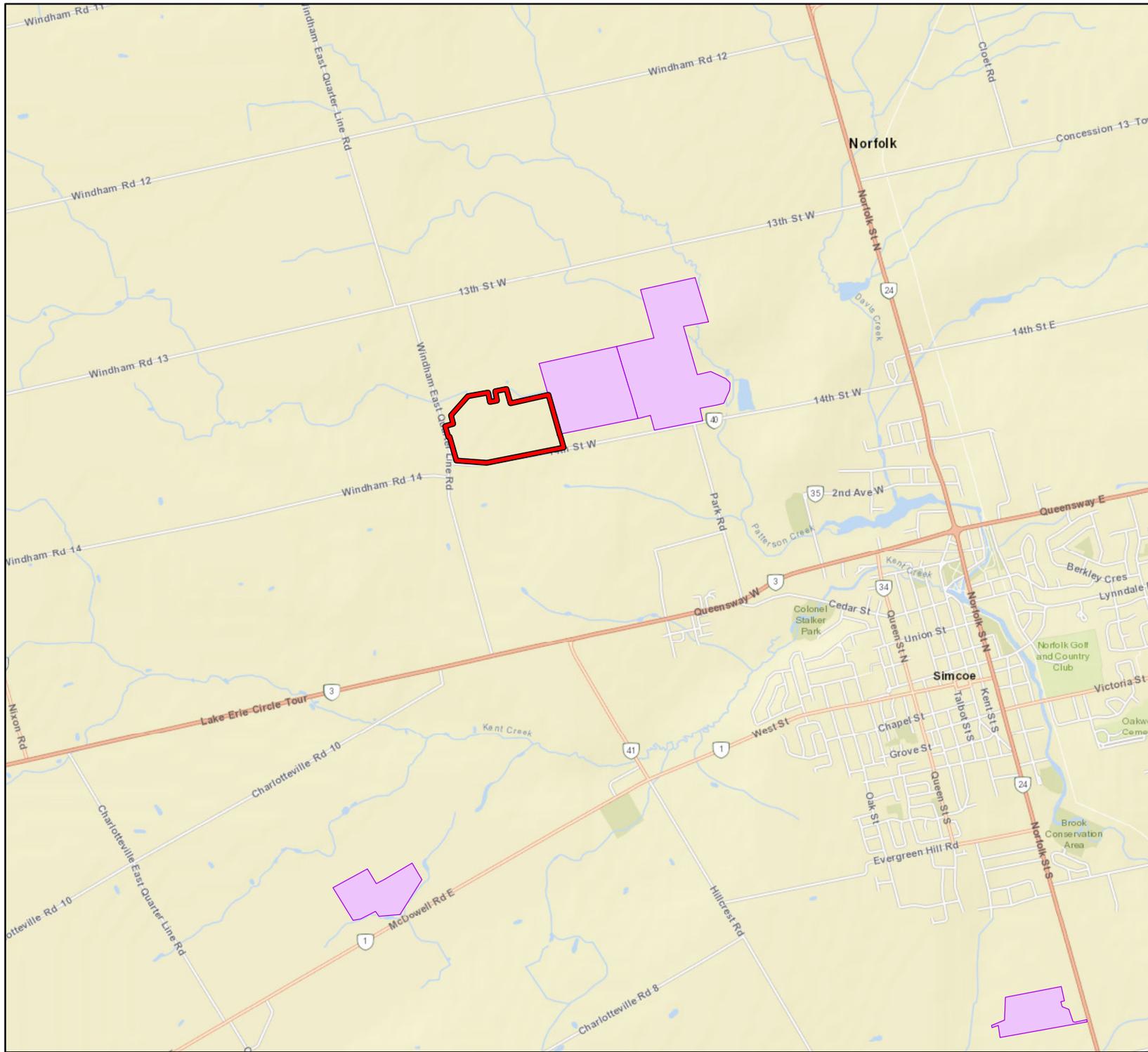


FIGURE 1

## Location Map

### EMERSON PIT

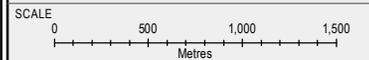
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Geographic Township of  
Delhi (Windham)  
COUNTY OF NORFOLK

### Legend

- Licensed Boundary
- Other ARA Licensed Sites

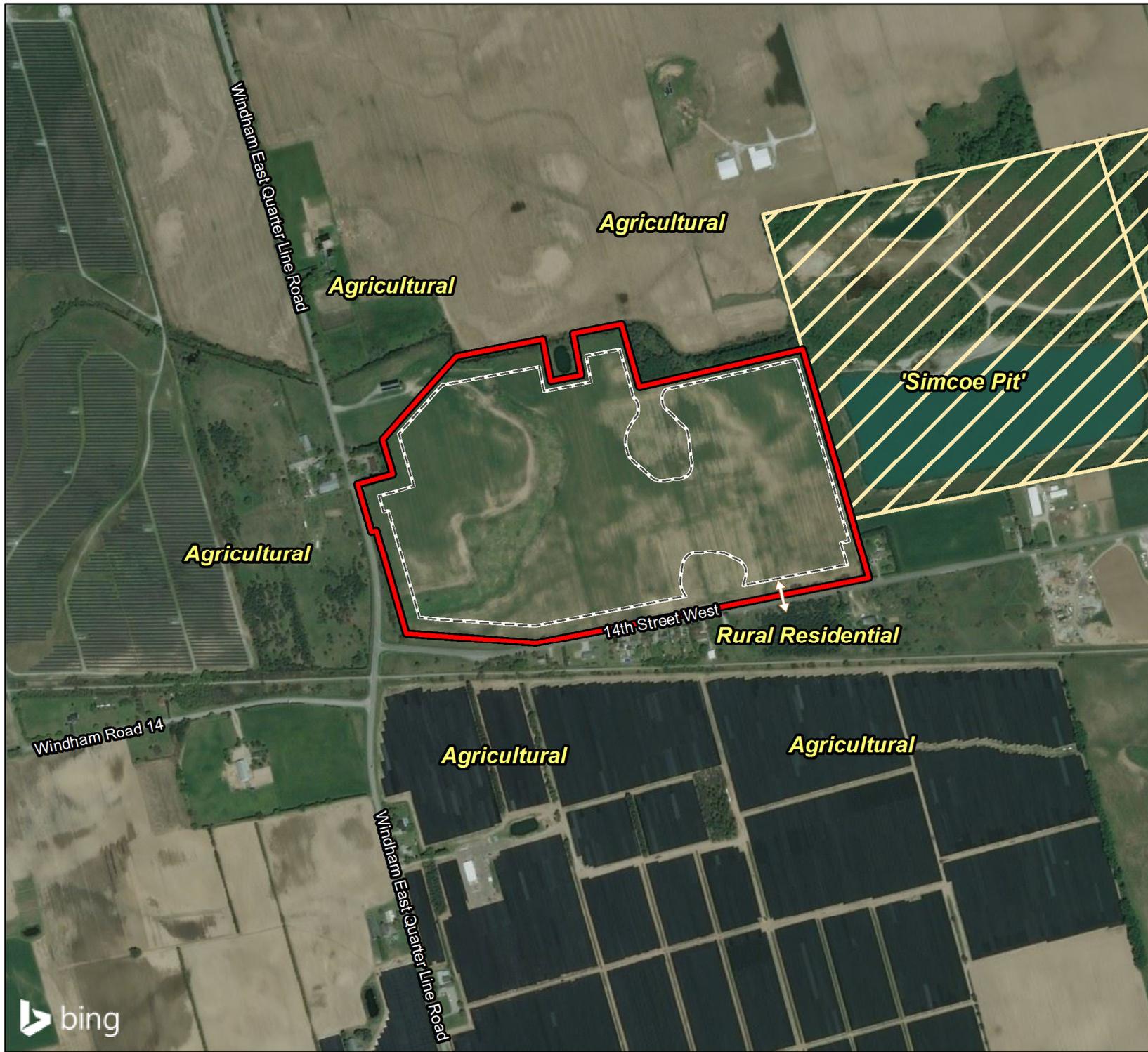
DATE May 2019

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 Figures\GIS\LocationMap.mxd

**PLANNING  
URBAN DESIGN  
& LANDSCAPE  
ARCHITECTURE**



**FIGURE 2**  
**Site and**  
**Surrounding Lands**

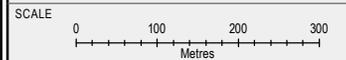
**EMERSON PIT**  
 Part of Lots 5 & 6, Con 13,  
 Geographic Township of  
 Delhi (Windham)  
 COUNTY OF NORFOLK

**Legend**

-  Licensed Boundary
-  Proposed Extraction Limit
-  Other ARA Licensed Site
-  Entrance/Exit

DATE **May 2019**

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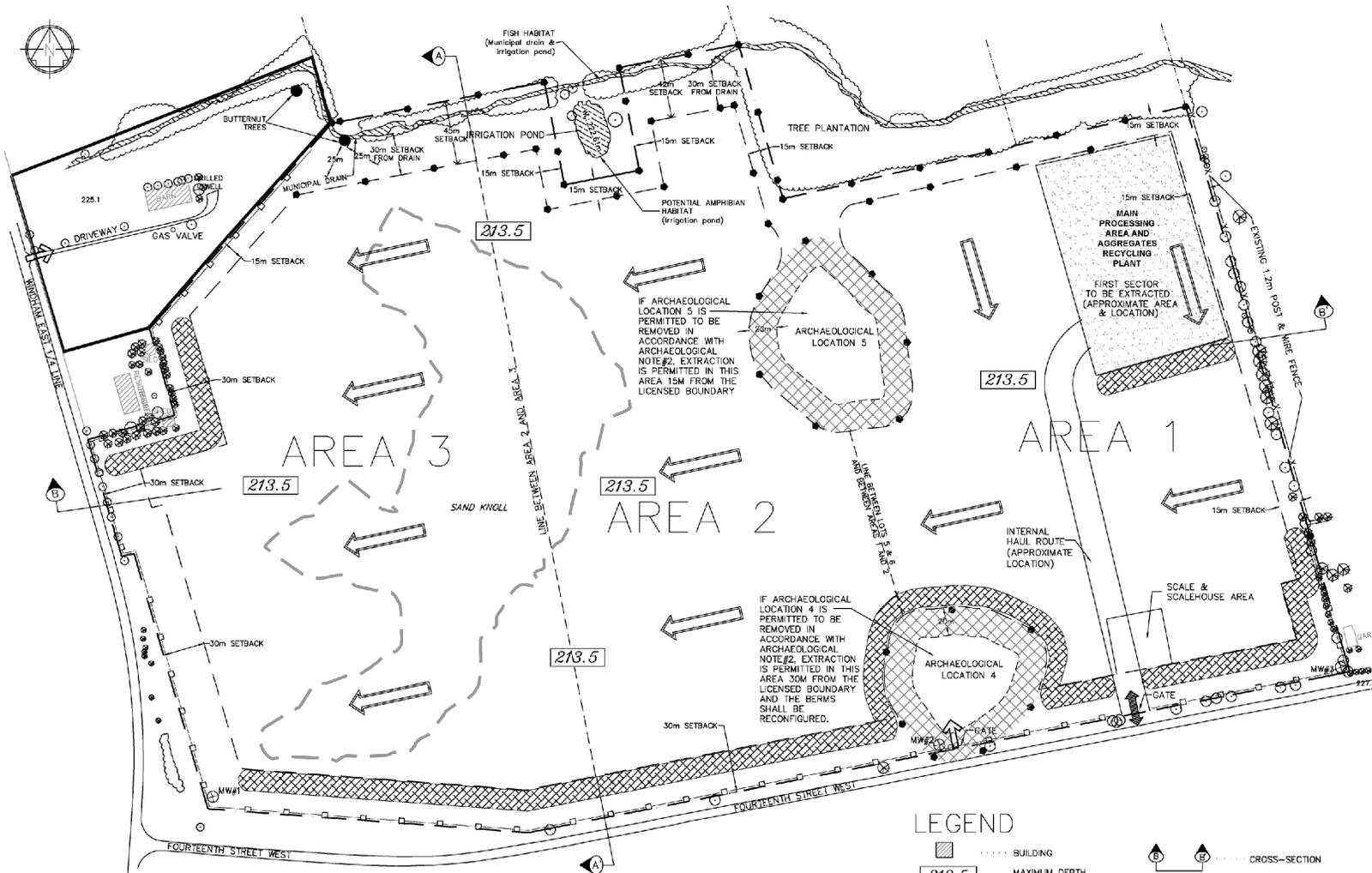


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**FIGURE 3**  
**Operational Plan**

**EMERSON PIT**  
Part of Lots 5 & 6, Con 13,  
Geographic Township of  
Delhi (Windham)  
COUNTY OF NORFOLK



**LEGEND**

	BUILDING		CROSS-SECTION
	MAXIMUM DEPTH OF EXTRACTION		MARKER POST
	EXCAVATION DIRECTION		MONITORING WELL
	EXTRACTION SETBACK		1.2m POST & WIRE FENCE
	LICENCE BOUNDARY		ARCHAEOLOGY 20M PROTECTIVE BUFFER
	ADDITIONAL LANDS OWNED BY APPLICANT		GATE
	AREA BOUNDARY		LOT LINE
	EXISTING 1.2m HIGH FENCE		WATER
	WATER		TREE DRIP LINE
	LOT LINE		FIELD ENTRANCE (NO HAUL TRUCK PERMITTED)
	APPROVED PIT ENTRANCE/EXIT		BERM
	WATER		SAND KNOLL

DATE **May 2019**

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County of Norfolk Official Plan, Schedule D - Source Water Protection  
County of Norfolk GIS  
Service Layer Credits:

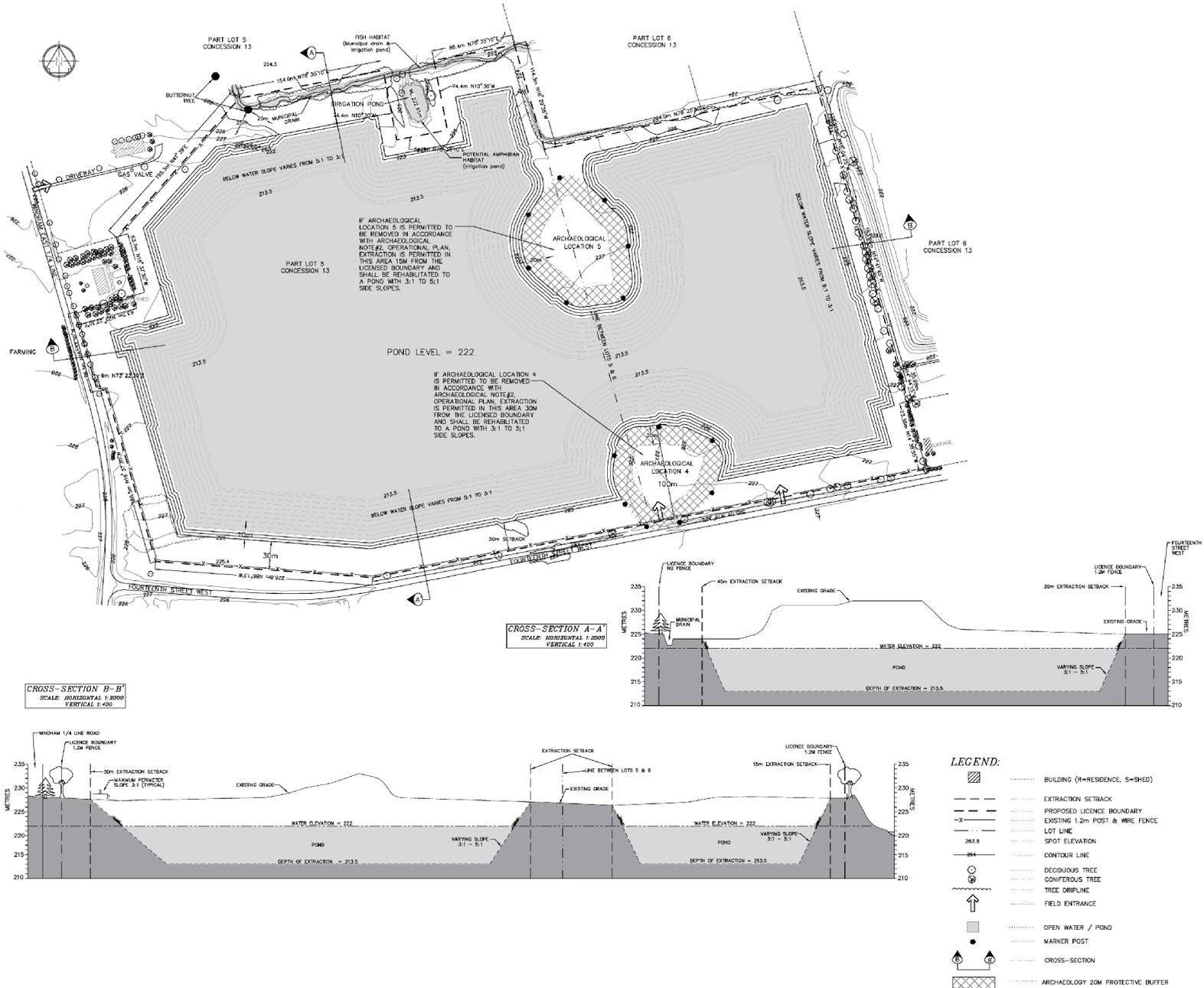
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**PLANNING URBAN DESIGN & LANDSCAPE ARCHITECTURE**  
**MHBC**

**FIGURE 4**  
**Progressive Rehabilitation**  
**& Final Rehabilitation Plan**

**EMERSON PIT**  
 Part of Lots 5 & 6, Con 13,  
 Geographic Township of  
 Delhi (Windham)  
 COUNTY OF NORFOLK



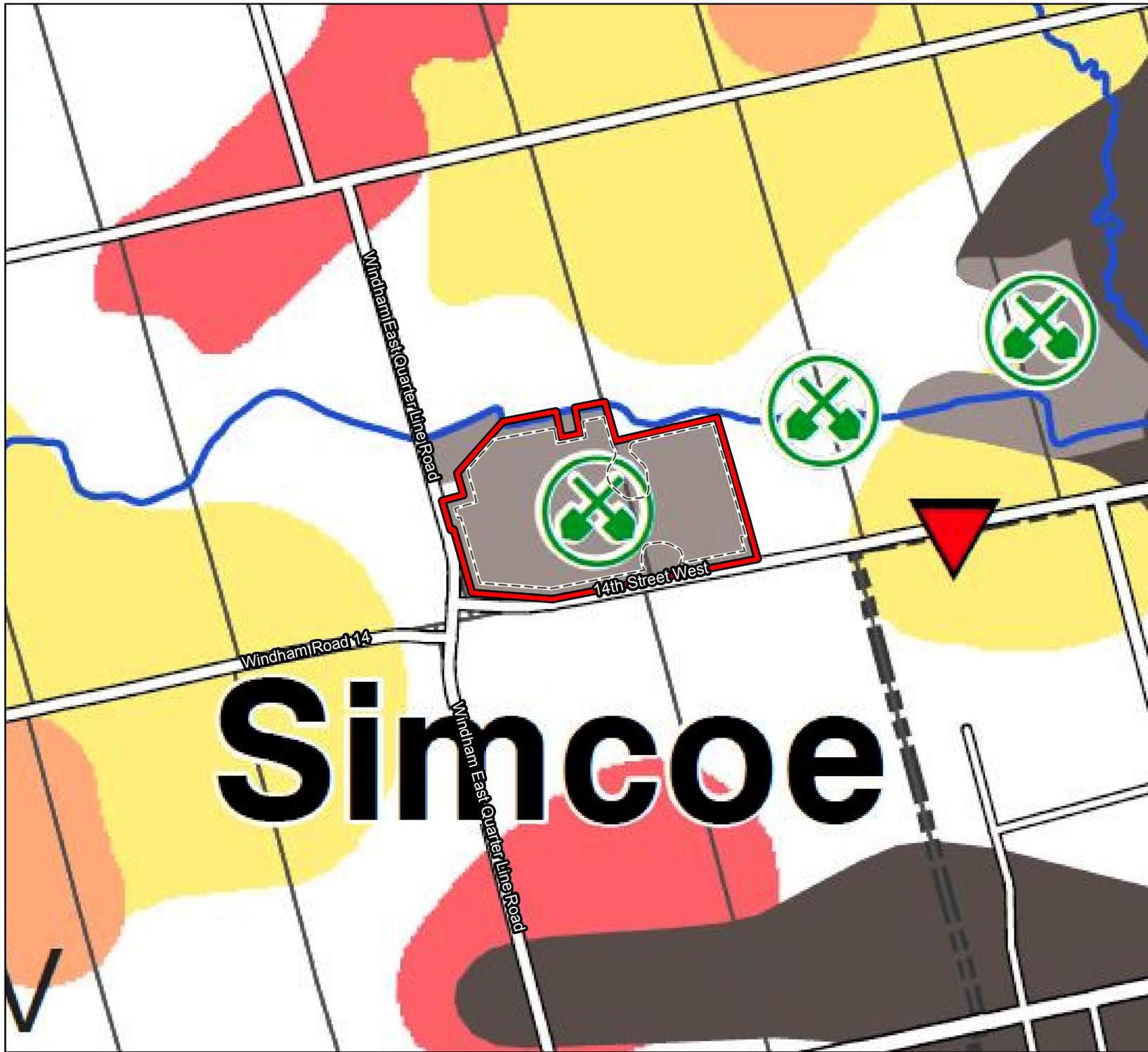
DATE **May 2019**

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 County of Norfolk Official Plan, Schedule D - Source Water Protection  
 County of Norfolk GIS  
 Service Layer Credits:

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 Figure\GIS\RehabPlan.mxd





**FIGURE 5**  
**County of Norfolk**  
**Official Plan**  
**Natural Resources**  
**EMERSON PIT**  
 Part of Lots 5 & 6, Con 13,  
 Geographic Township of  
 Delhi (Windham)  
 COUNTY OF NORFOLK

**Legend**

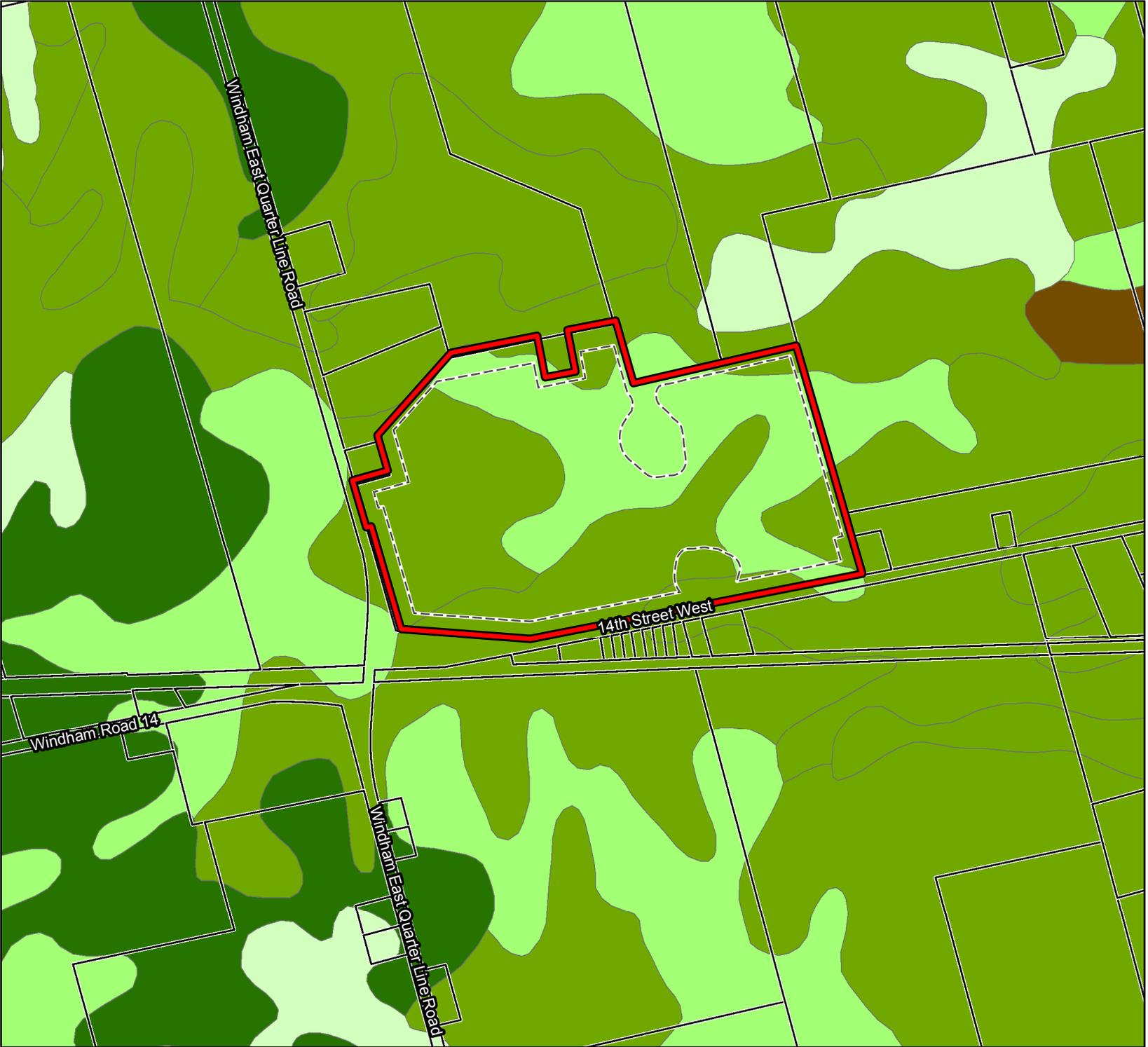
-  Licensed Boundary
-  Proposed Extraction Limit
  
- AGGREGATE RESOURCES (Section 4.6.1)**
- Pits and Quarries 
- Sand & Gravel Resource Area 
- Buried Aggregate Resource Area 
  
- PETROLEUM RESOURCES (Section 4.6.2)**
- Active Petroleum Pools 
- Suspended Petroleum Pools 
- Abandoned Petroleum Pools 
  
- WASTE MANAGEMENT (Section 8.10)**
- Closed Waste Disposal Site 
- Urban Area Boundary 

DATE May 2019

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 County of Norfolk Official Plan, Schedule J - Natural Resources  
 County of Norfolk GIS  
 Service Layer Credits:



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 Figures\GIS\NaturalResources\_Overlay.mxd



**FIGURE 6**  
**Canada Land Inventory**  
**Soils Capability for**  
**Agriculture**  
**EMERSON PIT**  
 Part of Lots 5 & 6, Con 13,  
 Geographic Township of  
 Delhi (Windham)  
 COUNTY OF NORFOLK

**Legend**

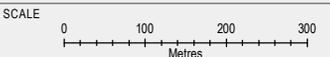
-  Licensed Boundary
-  Proposed Extraction Limit

**Soils Capability for Agriculture Class**

-  1
-  2
-  3
-  4
-  5

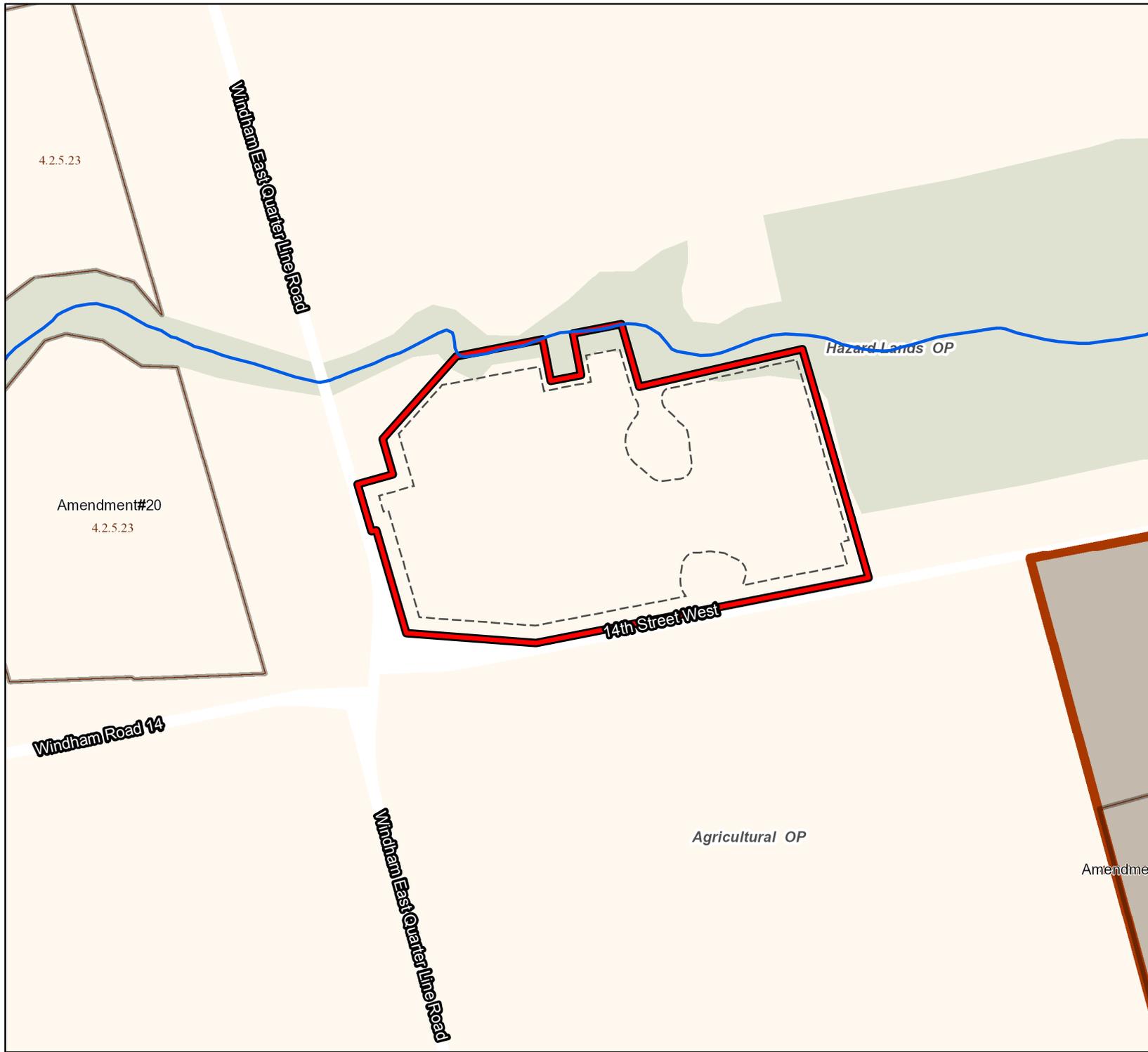
DATE **May 2019**

SOURCES  
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 County of Norfolk GIS  
 Service Layer Credits:



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**FIGURE 7**  
**County of Norfolk**  
**Official Plan**  
**Land Use**  
**EMERSON PIT**  
 Part of Lots 5 & 6, Con 13,  
 Geographic Township of  
 Delhi (Windham)  
 COUNTY OF NORFOLK

**Legend**

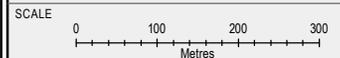
-  Licensed Boundary
-  Proposed Extraction Limit

**Land Use**

-  Agricultural
-  Hazard Lands
-  Industrial/Business Park
-  Urban Area Boundary

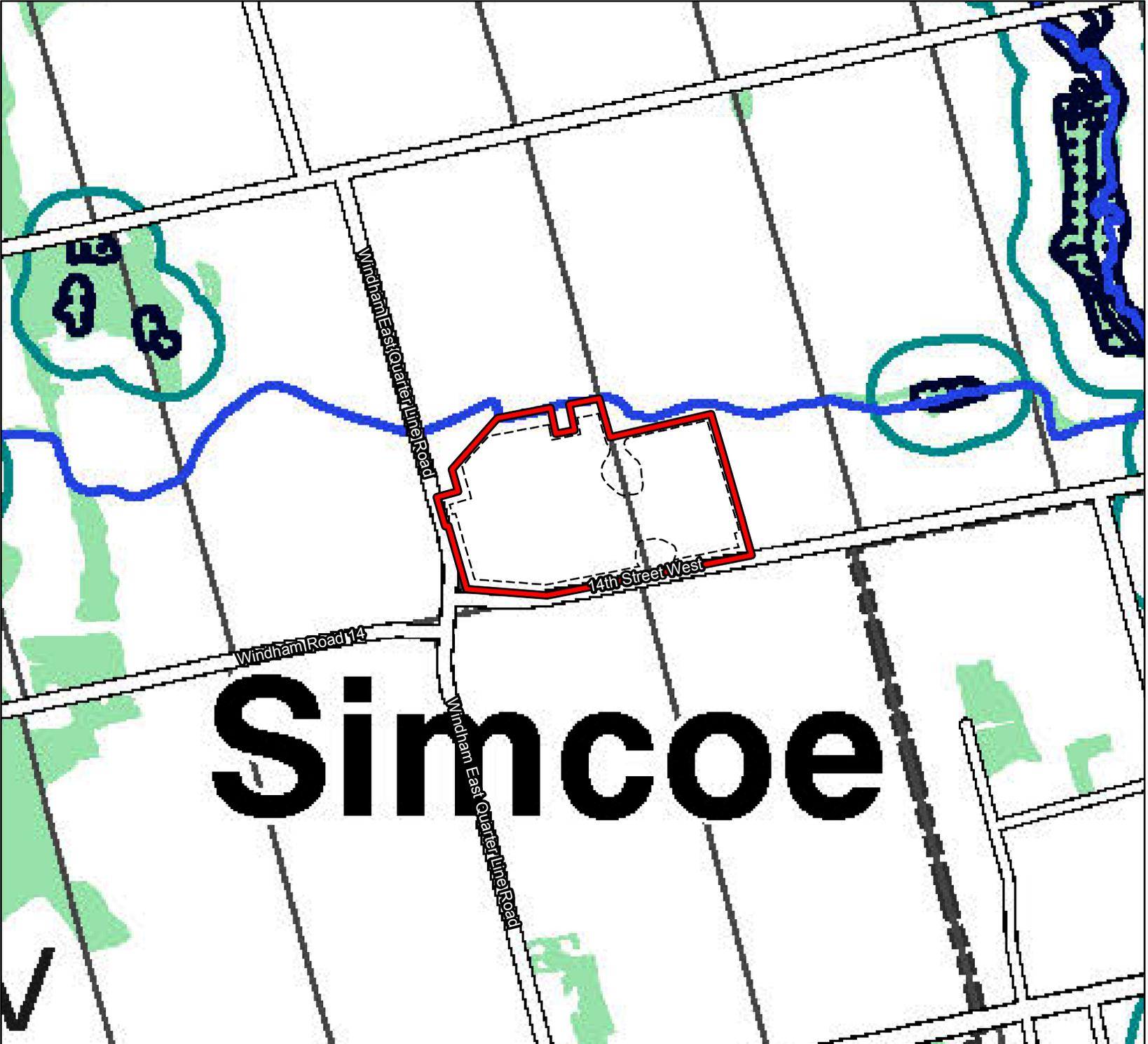
DATE May 2019

SOURCES  
 Contains information licensed under the Open Government Licence - Ontario  
 County of Norfolk Official Plan, Schedule B-6 and B-15 - Land Use  
 County of Norfolk GIS  
 Service Layer Credits:



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**FIGURE 8**  
**County of Norfolk**  
**Official Plan**  
**Natural Heritage**  
**EMERSON PIT**  
 Part of Lots 5 & 6, Con 13,  
 Geographic Township of  
 Delhi (Windham)  
 COUNTY OF NORFOLK

**Legend**

- Licensed Boundary
- Proposed Extraction Limit

**NATURAL HERITAGE (Section 3.0)**

- Provincially Significant Wetland
- Adjacent Land
- Significant Woodland
- Urban Area Boundary

# Simcoe

DATE May 2019

SOURCES  
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 County of Norfolk Official Plan, Schedule C - Natural Heritage  
 County of Norfolk GIS  
 Service Layer Credits:



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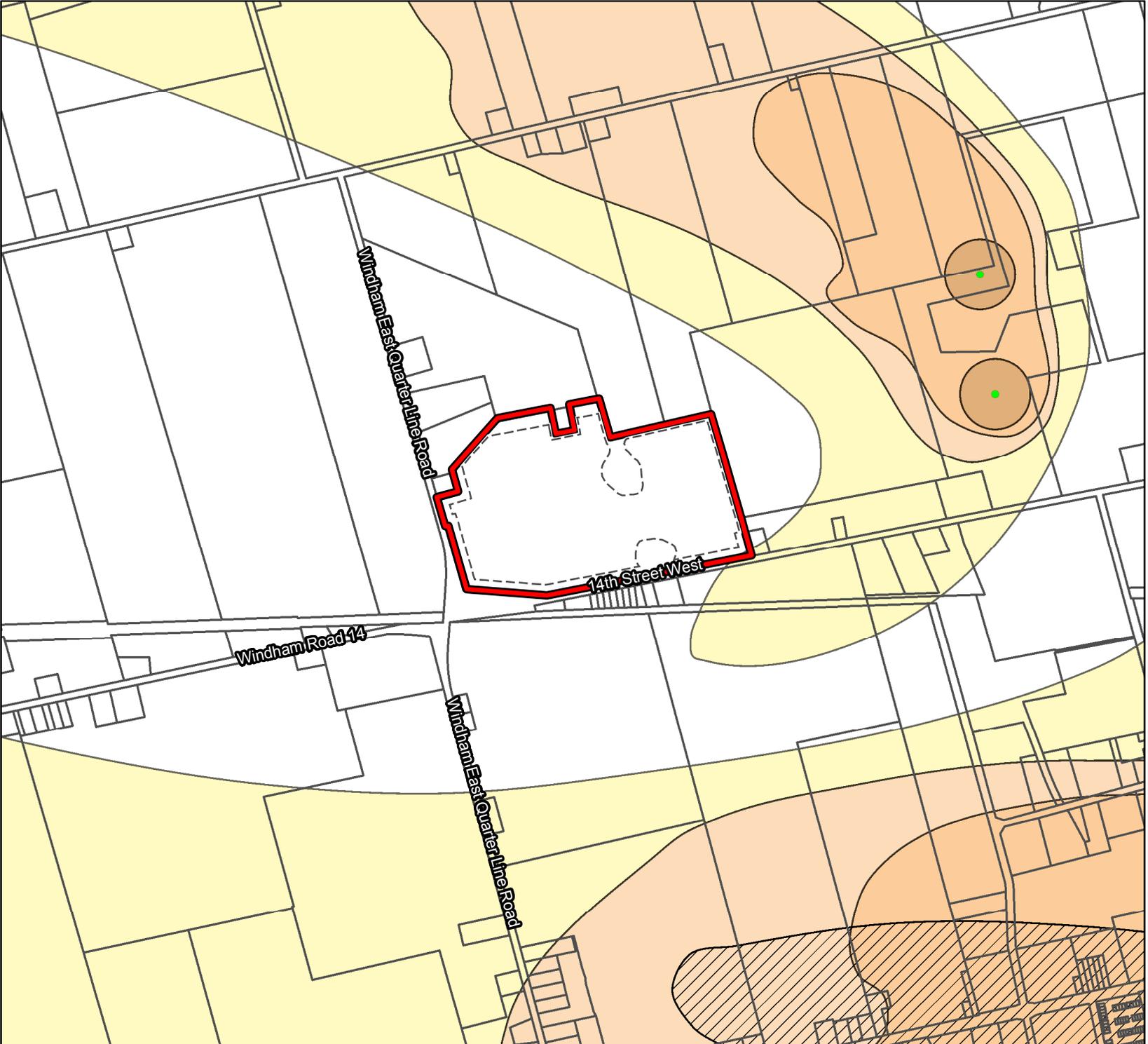


FIGURE 9  
**Long Point Region  
 Source Water Protection  
 EMERSON PIT**  
 Part of Lots 5 & 6, Con 13,  
 Geographic Township of  
 Delhi (Windham)  
 COUNTY OF NORFOLK

**Legend**

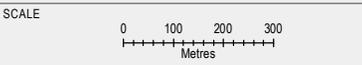
- Licensed Boundary
- Proposed Extraction Limit

*Wellhead Protection Area*

- WHPA-A
- WHPA-B
- WHPA-C
- WHPA-D
- Issue Contributing Area

DATE May 2019

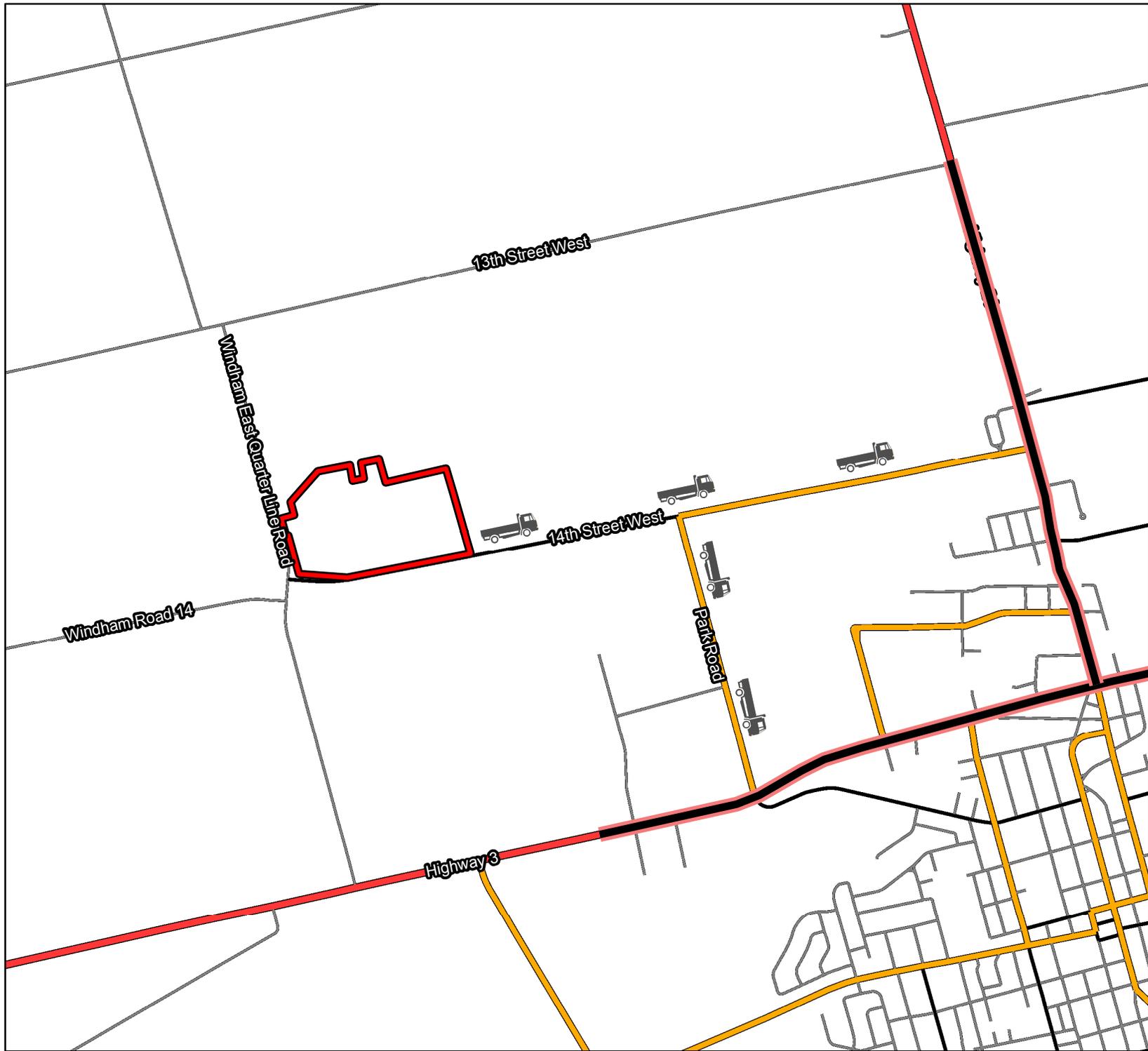
SOURCES  
 Contains information licensed under the Open Government Licence - Ontario  
 County of Norfolk Official Plan, Schedule D - Source Water Protection  
 County of Norfolk GIS  
 Service Layer Credits: NGIS



Document Path: N:\Briant\Y268C Livingston - Class A Emerson Pit\Drawings\Planning Report  
 Figures\GIS\SWP\_Overlay.mxd

PLANNING  
 URBAN DESIGN  
 & LANDSCAPE  
 ARCHITECTURE

**FIGURE 10**  
**County of Norfolk**  
**Official Plan**  
**Transportation**  
**EMERSON PIT**  
 Part of Lots 5 & 6, Con 13,  
 Geographic Township of  
 Delhi (Windham)  
 COUNTY OF NORFOLK



**Legend**

-  Licensed Boundary
-  Haul Route Direction
- Roads**
-  Provincial Highway
-  Connecting Link
-  Arterial Road
-  Collector Road
-  Local Road

DATE May 2019

SOURCES  
 Contains information licensed under the Open Government Licence - Ontario  
 County of Norfolk Official Plan, Schedule E - Transportation  
 County of Norfolk GIS  
 Service Layer Credits:

SCALE  
 0 100 200 300  
 Metres

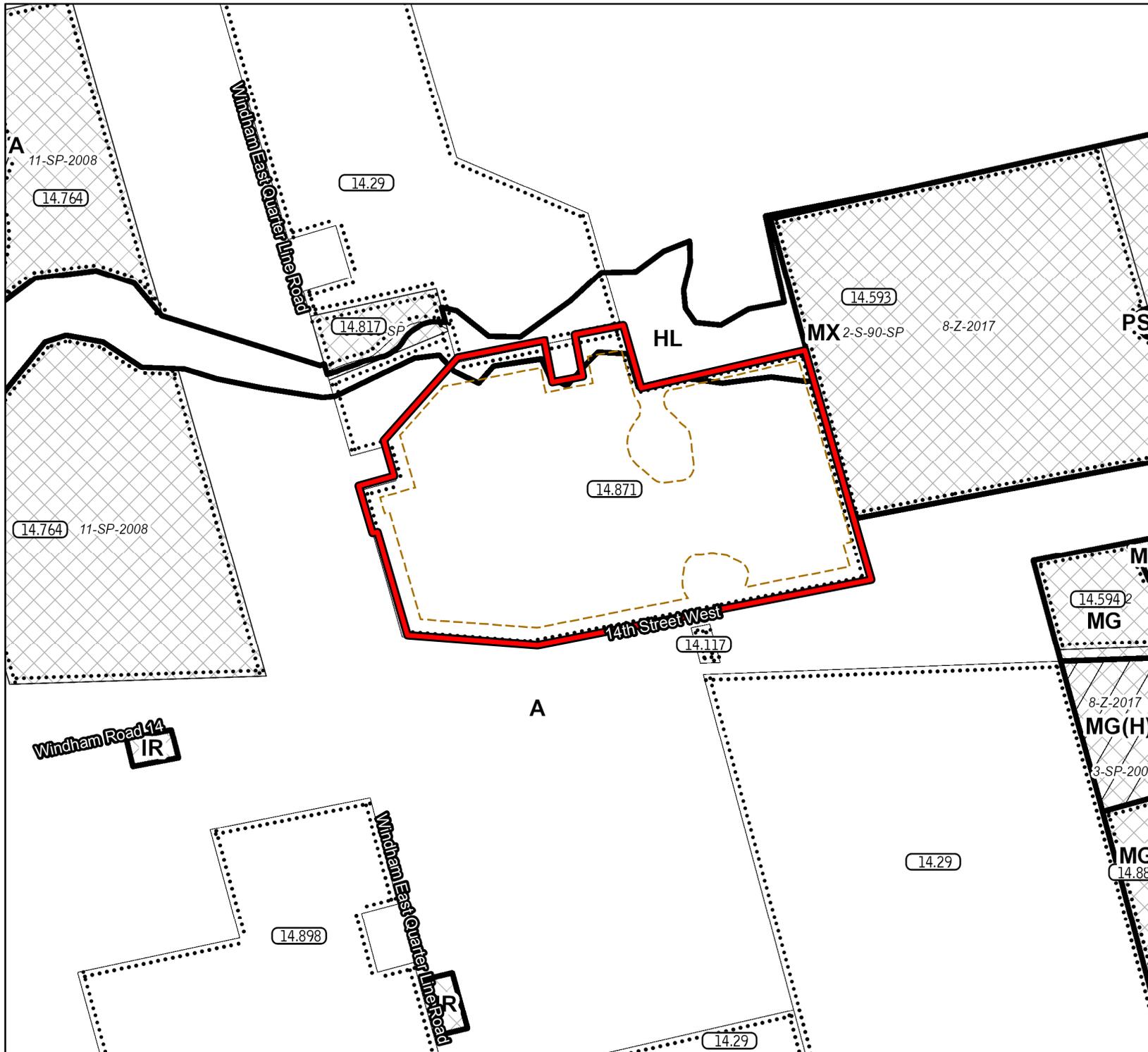
Document Path: N:\Briant\Y268C Livingston - Class A Emerson Pit\Drawings\Planning Report Figures\GIS\Trans\_Overlay.mxd

FIGURE 11  
**County of Norfolk  
 Zoning By-law**

**EMERSON PIT**  
 Part of Lots 5 & 6, Con 13,  
 Geographic Township of  
 Delhi (Windham)  
 COUNTY OF NORFOLK

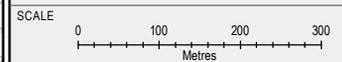
**Legend**

-  Licensed Boundary
-  Proposed Extraction Limit



DATE May 2019

SOURCES  
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 Service Layer Credits:



Document Path: N:\Briant\Y268C Livingston - Class A Emerson Pit\Drawings\Planning Report  
 Figures\GIS\Zoning.mxd



# Appendices

# Appendix 1

---

**From:** Carly Marshall  
**Sent:** January-31-19 4:54 PM  
**To:** [Shannon.VanDalen@norfolkcounty.ca](mailto:Shannon.VanDalen@norfolkcounty.ca)  
**Cc:** Brian Zeman <[bzeman@mhbcplan.com](mailto:bzeman@mhbcplan.com)>; Livingstons <[Livingston@kwic.com](mailto:Livingston@kwic.com)>  
**Subject:** 259 Windham East Quarter Line Road-Class "A" Pit

Hi Shannon,

Thank you for taking the time today to discuss the Livingston application and confirming that the attached pre-con minutes are still valid subject to you confirming that Development Engineering does not have any updated comments. Also, thank you for confirming that based on the updated County of Norfolk Official Plan an Official Plan Amendment is no longer required as part of the application.

Regards,

**CARLY MARSHALL** M.PI | Planner

**MHBC** Planning, Urban Design & Landscape Architecture

113 Collier Street | Barrie | ON | L4M 1H2 | T 705 728 0045 x 228 | F 705 728 2010  
| [cmarshall@mhbcplan.com](mailto:cmarshall@mhbcplan.com)

**Follow us:** [Webpage](#) | [Linkedin](#) | [Facebook](#) | [Twitter](#) | [Vimeo](#)



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**PRE-CONSULTATION MEETING CHECKLIST**  
**\*\*\* Private and Confidential, and without Prejudice\*\*\***

**For the Proposal of:** Livingston Excavating – Class “A” licence Category

**Property Location:** 259 Windham East Quarter Line Road

**Roll Number:** 403.025.11201

---

As a result of the information shared at the pre-consultation meeting dated May 25<sup>th</sup>, 2016 the following applications and qualified professional documents / reports may be required as part of the development review process.

Please note that various fees are associated with each application and there are also costs for qualified professionals retained to complete various documents / reports. All requirements identified are minimum and determined as of the date of the pre-consultation meeting with the information available at that time. **As the proposal proceeds and more information is made available, additional applications, studies, reports, etc. may be required.**

**This checklist is applicable for a period of one (1) year from the date of meeting. If an application is not received within that time frame, a subsequent pre-consultation meeting may be required due to changes in policies and technical requirements.**

---

**Attendance:**

Proponent	Brian Zeman – MHBC Gary Livingston – Livingston Excavating
Community Planning	Shannon VanDalen
Building & Bylaw	Fritz Enzlin
Public Works and Engineering Services	Doug Lyons Bob Fields Kevin Verkindt
Community Services –EMS	Jerry Hazlewood
Community Services - Fire	Dennis Friesen
Community Services – Parks and Facilities	Adam Chamberlin
Employee and Business Services	Lydia Harrison

**COMMUNITY PLANNING**

PLANNING APPLICATIONS REQUIRED TO PROCEED	Check if
Official Plan Amendment Application	<b>X</b>
Zoning By-law Amendment Application	<b>X</b>
Site Plan Application	
Subdivision Application	

**\*\*\*PRIVATE AND CONFIDENTIAL\*\*\***

**\*\*\*And Without Prejudice\*\*\***

<b>Condominium Application</b>			
<b>Part Lot Control Application</b>			
<b>Consent/ Severance Application</b>			
<b>Minor Variance Application</b>			
<b>Removal of Holding Application</b>			
<b>Temporary Use By-law Application</b>			
<b>PLANNING REQUIREMENTS TO PROCEED</b> The below requirements are to be submitted as part of the <u>Official Plan and Zoning By-law Amendment</u> Planning Application(s).	<b>Potentially Required</b>	<b>Required</b>	<b># of copies</b>
Proposed Site Plan / Drawing (as per above Planning		✘	12
Planning Impact Analysis Report / Justification Report		✘	3
Environmental Impact Study (Full or Scoped)			
Agricultural Impact Assessment Report			
Archaeological Assessment			
Heritage Impact Assessment			
Market Impact Analysis			
Dust, Noise and/or Vibration Study			
MOE D-Series Guidelines Analysis			
Landscaping Plan		✘	3
Elevation Plans			
Photometrics (Lighting) Plan			
Shadow Analysis Report			
Record of Site Condition			
Contaminated Site Study			
Minimum Distance Separation Schedule			
Parking Assessment			
Hydrogeological Study		✘	4
Tree Management Plan			
Park Grading and Layout Plan			
Slope Stability Analysis			
Agreement: Development Agreement			
<i>** Please note that with Agreements a copy of PIN; Certificate of Insurance and Letter of required are required.</i>			

**Notes:**

**Provincial Policy Statement:**

Lands identified within Prime Agriculture policy framework. Prime Agricultural areas shall be protected for long-term agricultural use.

**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 the extraction of minerals, petroleum resources and mineral aggregate resource, in accordance with policies 2.4 and 2.5 of the PPS.

Please refer to relevant sections within the Provincial Policy Statement as part of Justification report.

**Norfolk County Official Plan:**

➤ **Designation – Agriculture**

The primary use of land shall be for farming, agriculture, nursery and horticulture crops production, aquaculture, agro-forestry, maple syrup production and agriculture-related uses.

The extraction of aggregate, mineral or petroleum resources shall be permitted in accordance with the *Aggregate Resources Act*, the *Mining Act* or the *Oil, Gas and Salt Resources Act*, as appropriate subject to the policies of Section 5.5 (Natural Resources) of the Official Plan.

An Official Plan Amendment is required as the lands are not identified as a Natural Resource Area on Scheduled “C” of the Official Plan.

Applications for Official Plan Amendment and/or Zoning By-law amendments shall be reviewed on the basis of the following:

- i. The feasibility of aggregate extraction proposal;
- ii. Compatibility with the surrounding land uses;
- iii. Impact of the proposed haulage routes;
- iv. Potential impact on groundwater quality and quantity, Provincially Significant Features, Natural Heritage Features, and the broad natural environment;
- v. Rehabilitation plans;
- vi. Matters raised by the Province or the appropriate Conservation Authority;
- vii. Whether approval will be granted under the *Aggregate Resources Act*.

Where extraction is proposed below the water table, the following criteria shall be satisfied:

- i. A hydrogeological study shall be conducted for aggregate operations that intend to use groundwater resources to wash their aggregate and will use greater than 50,000 litres per day during the washing period;
- ii. A substantial quantity of mineral aggregate is located below the water table warranting extraction below the water table;
- iii. Other alternatives have been considered by the applicant and have been found unsuitable. Other alternatives include resources on land committed to future urban uses, and resources in the Rural Area where rehabilitation to agricultural uses is possible; and
- iv. In those areas remaining above the water table following extraction, agricultural rehabilitation shall be maximized.

Rehabilitation of mineral aggregate extraction sites shall be required in accordance with the requirements of the *Aggregate Resources Act*. Progressive rehabilitation shall be encouraged. Progressive and final rehabilitation

shall be required to accommodate subsequent land uses, to promote land use compatibility, and to recognize the interim nature of extraction. Final rehabilitation shall take surrounding land use and the Land Use Designation of the lot and surrounding lots into consideration.

A rehabilitation program shall ensure that the pit or quarry can be utilized for agricultural purposes. Land in the Agricultural Area shall be rehabilitated to ensure that substantially the same areas and average soil quality for agriculture are restored. In the Agricultural Area, complete agricultural rehabilitation is not required if:

- i. extraction is permitted below the water table;
- ii. other alternatives have been considered and found unsuitable; and
- iii. agricultural rehabilitation in remaining areas is maximized.

Where agricultural rehabilitation is not required, other appropriate after uses, such as recreational uses may be considered in accordance with the policies of this Plan. Sites may also be rehabilitated to good wildlife habitat using native species for vegetation.

**Norfolk County Zoning By-law 1-Z-2014**

- Zone: "Agriculture (A)" and "Hazard Land (HL)"
- Site-Specific Provision: 14.871

14.871 In addition to the uses permitted in the A Zone, notwithstanding the definition of pit or quarry nothing contained herein shall prohibit the levelling or removal of any hill, provided:

- a) It is for the purpose of extending, increasing or improving the lands for agricultural purposes;
- b) No excavation takes place below the average grade of the land surrounding the hill; and
- c) There is a hill to be leveled. [OMB decision April 10, 2015].

**Site Plan Control**

Subject to Site Plan Control. Also addressed through *Aggregate Resources Act*.

Combined Official Plan and Zoning By-law Amendment Application: \$3 084.00

Site Plan Application: \$1 396.00

Site Plan Agreement: \$506.00

**BUILDING AND BY-LAW DIVISION**

<b>BUILDING &amp; BY-LAW REQUIREMENTS TO PROCEED</b> The below requirements are to be submitted as part of the <u>Official Plan and Zoning By-law Amendment</u> Planning Application.	<b>May be Required</b>	<b>Required</b>
Zoning Requirements		✘
Parking Requirements		
Septic Evaluation		
Sign Permit		
Zoning Deficiency Form		
Other		

**Notes:**

Noise By-law: 7am for construction.

**Fire and Emergency Medical Services**

<b>EMERGENCY SERVICES REQUIREMENTS TO PROCEED</b> The below requirements are to be submitted as part of the <u>Official Plan and Zoning By-law Amendment</u> Planning Application.	<b>May be Required</b>	<b>Required</b>
Emergency Services Plan/ Route		
Secondary Access for Emergency Purposes		
Fire Safety Plan		✘
Fire Hydrant Service Map (Showing service envelope of each hydrant)		
Rural Servicing Analysis		
Fire Flows Analysis		
Other		

**Notes:**

- Signage and 911 numbers required at entrances.
- Access on site to be directional
- Roadways to be constructed to minimum standards to accommodate emergency vehicles.

**PUBLIC WORKS AND ENVIROMENTAL SERVICES**

<b>PUBLIC WORKS AND ENVIRONMENTAL SERVICES REQUIREMENTS TO PROCEED</b> The below requirements are to be submitted as part of the <b>Official Plan and Zoning By-law Amendment</b> Planning Application.	<b>May be Required</b>	<b>Required</b>
<b>GENERAL</b>		
Concept Plan		
Existing Conditions/Contour Plan		
Rough Grading Plan		
Lot Grading Plan		X
Siltation Control Plan		X
General Plan of Services		
Plan and Profile Drawings		
Geotechnical Report		X
Hydrological Study		X
Functional Servicing Report		
Ministry of Environment and Climate Change approvals required		
<b>WATER</b>		
Water Servicing Plan (fire and domestic)		
Independent Water Pressure and Flow Testing Report		
Extension of Water Service		
Watermain looping		
Easement and/or block registration		
Disconnection of water service(s) to property line		
Disconnection of water service(s) to main		
Separate Fire Service Line		
Backflow (RPZ)		
<b>WASTEWATER</b>		
Sanitary Servicing Plan		
Sanitary Details Design Information		
Sanitary Flow Analysis of receiving collection system		
Pumping Station Design		
Extension of Wastewater Service		
Easement and/or block registration		
Disconnection of sanitary service(s) to property line		

Disconnection of sanitary service(s) to main		
Property Line Inspection Manhole		
<b>STORMWATER</b>		
Stormwater Management Report (including calculations)		X
Stormwater Servicing Plan		X
Stormwater Detail Design Information		X
Drainage and Grading Plan		X
Established Overland Flow Routes		X
Establish/Confirm Legal and Adequate Outlet		
Anticipated flow/analysis to receiving collection system		X
Extension of Stormwater Service		
Municipal Drainage		
<b>TRANSPORTATION</b>		
Traffic Impact Study		X
Entrance Permit		
Ministry of Transportation Jurisdiction		
Street Signage/Traffic Control Plan	X	
Secondary Access for Emergency Services		
Improvements to Existing Roads (urbanization, pavement structure, widening)		
Improvements to Existing Sidewalks (replacement, upgrade, extension, accessibility)		

**Notes:**

- The required plans will be addressed through the Aggregate Resource Plan.
- The required Storm Water, Geotechnical, & Hydrological Reports will be addressed through the Aggregate Resource Plan submission.
- A Municipal Drain (Pettit) runs along the north limit of the Subject Lands. Setback requirements will be required for any new structures/buildings on Site.
- The Subject Lands are in the Source Water Protection (WHPA C and D) area for the Cedar Street Well. A Risk Management Plan is required.

**Contact Information**

**Shannon Van Dalen**

Senior Planner – Community Planning Division  
Norfolk County  
185 Robinson Street, Suite 200  
Simcoe, ON  
519.426.5870 ext. 1834  
[shannon.vandalen@norfolkcounty.ca](mailto:shannon.vandalen@norfolkcounty.ca)

**Fritz R. Enzlin**

Chief Building Official  
Manager – Building and Bylaw Division  
Norfolk County  
185 Robinson Street, Suite 200  
Simcoe, ON N3Y 5L6  
519-426-5870 Ext: 2218  
[Fritz.enzlin@norfolkcounty.ca](mailto:Fritz.enzlin@norfolkcounty.ca)

**Kevin Verkindt**

Environmental Services Technologist- Public Works and Environmental Services  
Norfolk County  
183 Main Street  
Delhi, ON N4B 2M3  
519-582-2100  
[kevin.verkindt@norfolkcounty.ca](mailto:kevin.verkindt@norfolkcounty.ca)

**Doug Lyons**

Municipal Technologist (Development) – Public Works and Environmental Services  
Norfolk County  
183 Main Street  
Delhi, ON N4B 2M3  
519-582-2100  
[Doug.lyons@norfolkcounty.ca](mailto:Doug.lyons@norfolkcounty.ca)

**Lydia Harrison**

Property Management Coordinator - Employee and Business Services  
Norfolk County  
50 Colborne Street South  
Simcoe, ON N3Y 4H3  
[lydia.harrison@norfolkcounty.ca](mailto:lydia.harrison@norfolkcounty.ca)

**Bonnie Bravener**

Resource Technician  
Long Point Region Conservation Authority  
4 Elm St, Tillsonburg, ON N4G 0C4  
(519) 842-4242 ext. 233  
[bbravener@lprca.on.ca](mailto:bbravener@lprca.on.ca)

Should you require any further information regarding this matter, please feel free to contact me.

Sincerely,

John Dunlop  
Archaeology Review Officer

cc. Archaeology Licensing Officer  
Gerald Livingston, Livingston Excavation Inc.  
MaryJo Tait, Ministry of Natural Resources

<sup>1</sup>In no way will the ministry be liable for any harm, damages, costs, expenses, losses, claims or actions that may result: (a) if the Report(s) or its recommendations are discovered to be inaccurate, incomplete, misleading or fraudulent; or (b) from the issuance of this letter. Further measures may need to be taken in the event that additional artifacts or archaeological sites are identified or the Report(s) is otherwise found to be inaccurate, incomplete, misleading or fraudulent.

# Appendix 2

**The Corporation of Norfolk County**

**By-Law XX-Z-2019**

**Being a By-law to Amend Zoning By-Law 1-Z-2014, as amended, for property described as Part of Lots 5 & 6, Concession 13, Geographic Township of Windham, Norfolk County in the Name of Livingston Excavating and Trucking.**

**WHEREAS** Norfolk Council is empowered to enact this By-law, by virtue of the provisions of Section 34 of the Planning Act, R.S.O. 1990, CHAPTER P.13, as amended;

**AND WHEREAS** this By-law conforms to the Norfolk County Official Plan.

**NOW THEREFORE** the Council of The Corporation of Norfolk County hereby enacts as follows:

1. That Schedule A of By-Law 1-Z-2014, as amended, is hereby further amended by removing the special provision 14.871 from the subject lands identified on Map A (attached to and forming part of this By-law);
2. That Schedule A of By-law 1-Z-2014, as amended, is hereby further amended by changing the zoning of the subject lands identified on Map A (attached to and forming part of this By-Law) from Agriculture *Zone* (A) to Extractive Industrial *Zone* (MX);
3. That Schedule A of By-law 1-Z-2014, as amended, is hereby further amended by changing the zoning of the subject lands identified on Map A (attached to and forming part of this By-Law) from Hazard Lands *Zone* (HL) to Extractive Industrial *Zone* (MX);
4. That the effective date of this By-Law shall be the date of passage thereof.

ENACTED AND PASSED this **INSERT** day of **INSERT**, 2019.

---

Mayor

---

County Clerk

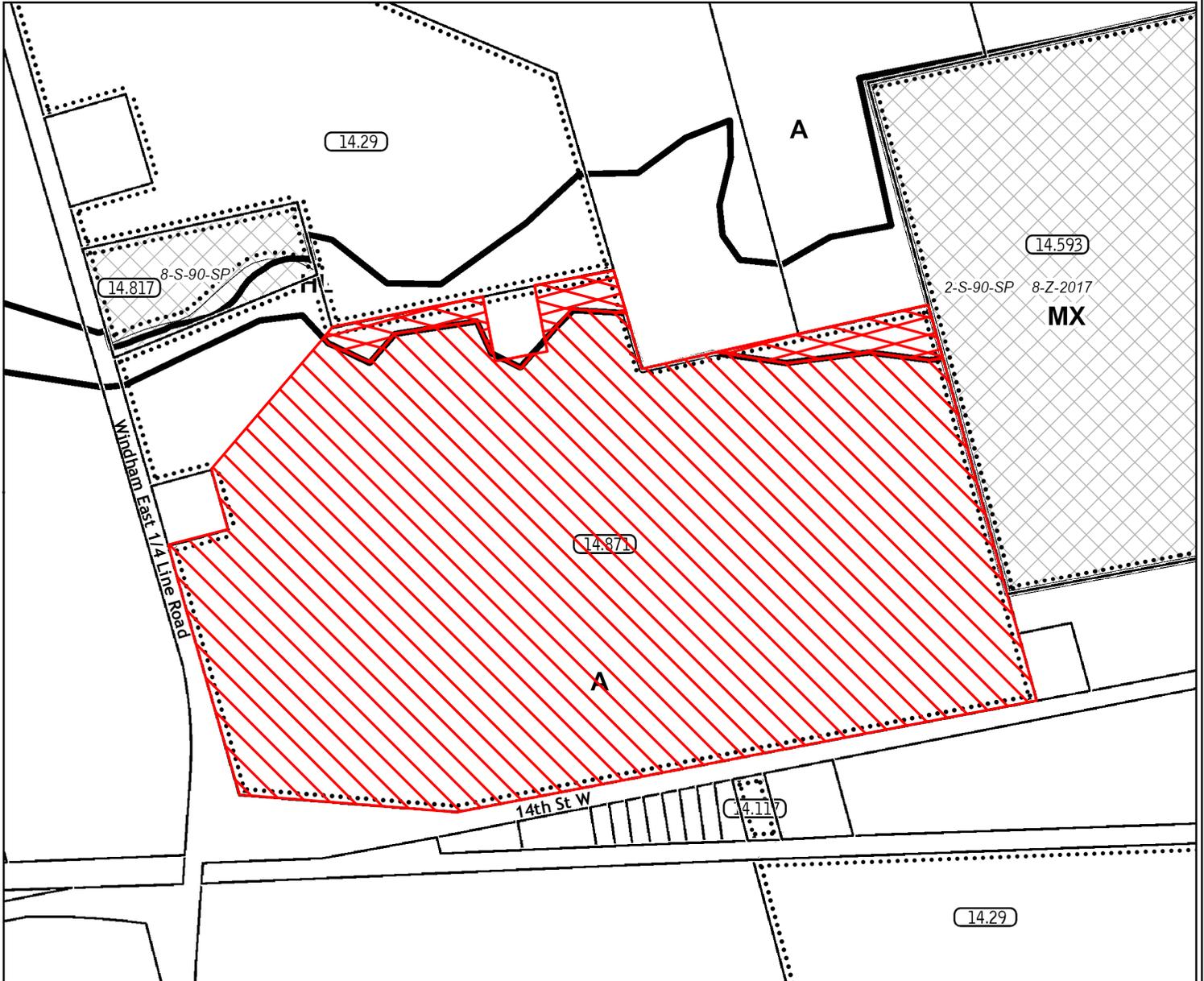
**Explanation of the Purpose and Effect of  
By-law XX-Z-2019**

This By-Law affects a parcel of land described as Part of Lots 5 & 6, Concession 13, Geographic Township of Windham, Norfolk County, located at 259 Windham East Quarter Line Road.

The parcel is presently zoned Agriculture (A) Special Provisions 14.871 and Hazard Lands (HL). The site specific zoning is a result of the OMB decision on the currently approved ARA licence for the parcel for an above water gravel pit.

The purpose of this By-law is to rezone the subject lands to permit a below water table aggregate extraction operation.

**Schedule 'A' to  
By-law \_\_\_ - Z - 2019**  
Part of Lot 5 & 6, Concession 13  
GEOGRAPHIC TOWNSHIP OF WINDHAM  
County of Norfolk



-  Lands to be rezoned from the Agricultural (A) Zone to the Extractive Industrial (MX) Zone
-  Lands to be rezoned from the Hazard Lands (HL) Zone to the Extractive Industrial (MX) Zone

This is Schedule 'A-1' to Zoning By-law \_\_\_-2019  
Passed this \_\_\_\_\_ day of \_\_\_\_\_, 2019

\_\_\_\_\_  
Mayor

\_\_\_\_\_  
County Clerk

# Appendix **3**

**Ministry of Tourism, Culture and Sport**

Archaeology Programs Unit  
Programs and Services Branch  
Culture Division  
401 Bay Street, Suite 1700  
Toronto ON M7A 0A7  
Tel.: (519) 675-6898  
Email: Katherine.Bishop@ontario.ca

**Ministère du Tourisme, de la Culture et du Sport**

Unité des programmes d'archéologie  
Direction des programmes et des services  
Division de culture  
401, rue Bay, bureau 1700  
Toronto ON M7A 0A7  
Tél. : (519) 675-6898  
Email: Katherine.Bishop@ontario.ca



Aug 14, 2015

Scott William James Martin (P218)  
Golder Associates Ltd.  
203 - 110 Hannover St. Catharines ON L2W 1A4

**RE: Review and Entry into the Ontario Public Register of Archaeological Reports: Archaeological Assessment Report Entitled, "Stage 1 and 2 Archaeological Assessment Livingston Pit Application Part of Lot 6, Concession 13 Township of Delhi, Norfolk County, Ontario", Dated Jul 30, 2015, Filed with MTCS Toronto Office on Aug 14, 2015, MTCS Project Information Form Number P218-213-2012, MTCS File Number 0003513**

Dear Dr. Martin:

This office has reviewed the above-mentioned report, which has been submitted to this ministry as a condition of licensing in accordance with Part VI of the Ontario Heritage Act, R.S.O. 1990, c 0.18.<sup>1</sup> This review has been carried out in order to determine whether the licensed professional consultant archaeologist has met the terms and conditions of their licence, that the licensee assessed the property and documented archaeological resources using a process that accords with the 2011 Standards and Guidelines for Consultant Archaeologists set by the ministry, and that the archaeological fieldwork and report recommendations are consistent with the conservation, protection and preservation of the cultural heritage of Ontario.

The report documents the assessment/mitigation of the study area as depicted in Figure 1 "Location of Study Area", Figure 2 "Study Area in Detail", Figure 5 "Methods and Results of the Stage 2 Field Investigation", and Tile 1 (Supplementary) "Archaeological Site Locations", of the above titled report and recommends the following:

1. Golder Associates Ltd. was contracted by Bill Bradshaw of Bradshaw Engineering to conduct a Stage 1 and Stage 2 archaeological assessment on behalf of Livingston Trucking and Excavation for an approximate 38.45 hectares proposed aggregate property located on part of Lot 6, Concession 13, in the Former Township of Windham, now Norfolk County, Ontario. This assessment was undertaken as part of the aggregate pit licensing process, as outlined in Policy No. A.R. 2.01.08 of the Aggregate Resources Policy Manual, under the Aggregate Resources Act (Government of Ontario 2006).

2. The Stage 1 archaeological assessment determined that areas of archaeological potential were likely on the property and that a Stage 2 field assessment should be conducted. The Stage 2 archaeological assessment resulted in the identification of:

- a. Four archaeological sites producing pre-contact Aboriginal cultural material, Locations 3, 7, 8 and 9;
- b. Three producing Euro-Canadian material, Locations 1, 2 and 4; and,

c. Another two producing both Aboriginal and Euro-Canadian artifacts, Locations 5 and 6.

3. Pre-contact Aboriginal sites Locations 3, 7, 8 and 9 consisted of small amounts of cultural material, none diagnostic of early Ontario occupations and Euro-Canadian sites Locations 1, 2 and 6 had material with a late date of manufacture. The cultural heritage value or interest is low and no further archaeological assessment is recommended for these sites.

4. Location 4 (AfHc-54) and Location 5 (AfHc-55) have been determined to have a high cultural heritage value or interest and further archaeological assessment is recommended for these sites.

5. Given that these sites are situated in cultivated agricultural fields, the Stage 3 assessment of these sites should include a controlled surface pick-up (CSP) prior to the hand excavation of one meter square test units. The area will need to be re-ploughed and allowed to weather for the CSP to achieve a required surface visibility of at least 80%. The test unit excavation will further assess the nature and density of cultural material. As it is not clearly evident whether or not locations 4 and 5 will require Stage 4 mitigation, the one meter square test units should be placed and excavate don a five meter grid over each site to meet the requirements of the Standards and Guidelines (S&G 3.2.3, Table 3.1 (1,2)). Additional test units, amounting to 20% of the grid unit total should be placed and excavated in areas of interest within the site extent. Each test unit should be excavated by hand in stratigraphic levels to a depth of at least five centimeters into subsoil. The soil from all of the test units at both sites is to be screened through six millimeter gauge hardware cloth to facilitate the recovery of any cultural material that may be present.

Based on the information contained in the report, the ministry is satisfied that the fieldwork and reporting for the archaeological assessment are consistent with the ministry's 2011 Standards and Guidelines for Consultant Archaeologists and the terms and conditions for archaeological licences. This report has been entered into the Ontario Public Register of Archaeological Reports. Please note that the ministry makes no representation or warranty as to the completeness, accuracy or quality of reports in the register.

Should you require any further information regarding this matter, please feel free to contact me.

Sincerely,

Katherine Bishop  
Archaeology Review Officer

cc. Archaeology Licensing Officer  
Bill Bradshaw, Bradshaw Engineering  
Dave Munro, MNR

<sup>1</sup>In no way will the ministry be liable for any harm, damages, costs, expenses, losses, claims or actions that may result: (a) if the Report(s) or its recommendations are discovered to be inaccurate, incomplete, misleading or fraudulent; or (b) from the issuance of this letter. Further measures may need to be taken in the event that additional artifacts or archaeological sites are identified or the Report(s) is otherwise found to be inaccurate, incomplete, misleading or fraudulent.

# Appendix &

**Ministry of Tourism, Culture and Sport**

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Programs and Services Branch  
Culture Division  
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**Ministère du Tourisme, de la Culture et du Sport**

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Aug 3, 2018

Matthew Beaudoin (P324)  
Timmins Martelle Heritage Consultants Inc.  
1600 Attawandaron London ON N6G 3M6

**RE: Review and Entry into the Ontario Public Register of Archaeological Reports: Archaeological Assessment Report Entitled, "Stage 3 Archaeological Assessment Location 4 (AfHc-54) and Location 5 (AfHc-55) Livingston Aggregate Pit Part of Lots 5 and 6, Concession 13 Geographic Township of Windham Norfolk County, Ontario", Dated May 14, 2018, Filed with MTCS Toronto Office on May 25, 2018, MTCS Project Information Form Number P324-0161-2016, P324-0159-2016, MTCS File Number 0003513**

Dear Dr. Beaudoin:

This office has reviewed the above-mentioned report, which has been submitted to this ministry as a condition of licensing in accordance with Part VI of the Ontario Heritage Act, R.S.O. 1990, c 0.18.<sup>1</sup> This review has been carried out in order to determine whether the licensed professional consultant archaeologist has met the terms and conditions of their licence, that the licensee assessed the property and documented archaeological resources using a process that accords with the 2011 Standards and Guidelines for Consultant Archaeologists set by the ministry, and that the archaeological fieldwork and report recommendations are consistent with the conservation, protection and preservation of the cultural heritage of Ontario.

The report documents the assessment of the study area as depicted in Maps 4, 10 and 11 of the above titled report and recommends the following:

A Stage 3 archaeological assessment consisting of historical background research and a CSC was conducted for Location 4 (AfHc-54) and Location 5 (AfHc-55), located within part of Lots 5 and 6, Concession 13, Geographic Township of Windham, Norfolk County, Ontario. Our recommendations with respect to each of these locations are presented below.

1) Location 4 (AfHc-54) is a multicomponent site with a mid-19th century component and an undiagnostic native component.

a. The 19th century component is a c.1850-1870 domestic site spanning the ownership of part of Lots 5 and 6, Concession 13 by the Youngs family. The site has further cultural heritage value and is recommended for further Stage 3 testing. At this time, the proponent has decided to protect the site within the licensed area to allow for the potential to conduct the required archaeological work at a later date. Based on discussions with the MTCS, the sites would be protected with a 20 m buffer zone based on the

CSC site limits that would be demarcated with marker posts that shall be installed and maintained for the duration of the operation that would be erected under the supervision of a licensed archaeologist. This protected area will be clearly depicted on the site operations plan. No machine travel or ground disturbance, with the exception of normal agricultural activities, can occur within the protected area until further archaeological investigations have been completed by a licensed archaeologist and the report for the MTCS has been accepted into the provincial register. Prior to the surrender of the ARA Licence, a restrictive covenant shall be registered on title to ensure the archaeological sites continue to be conserved. If it is decided to conduct the additional archaeological investigations, the Stage 3 strategy should follow that established for sites where it is evident that the level of cultural heritage value or interest will result in a recommendation to proceed to Stage 4 (MTC 2011:51, Table 3.1). This will involve the excavation of one metre units across a 10 metre grid throughout the site, with an additional 40% of infill units placed in areas of interest.

b. The native component of Location 4 is two undiagnostic lithic artifacts. The archaeological site does not meet provincial criteria for Stage 3 testing and therefore no further work is recommended as the archaeological site is considered sufficiently documented. If diagnostics or higher quantities of native artifacts are recovered during the Stage 3 assessment of the 19th century component, the native component should be re-evaluated and potentially subject to an additional Stage 3 archaeological assessment.

2) Location 5 (AfHc-55) is a multicomponent site with a mid-19th to early-20th century component and an undiagnostic native component.

a. The 19th/20th century component is a c.1850-1930 domestic site spanning the ownership of part of Lots 5 and 6, Concession 13 by the Youngs family (c.1842-1897), followed by the Boughner family (post-1905). The site has further cultural heritage value and is recommended for further Stage 3 testing. At this time, the proponent has decided to protect the site within the licensed area to allow for the potential to conduct the required archaeological work at a later date. Based on discussions with the MTCS, the sites would be protected with a 20 m buffer zone based on the CSC site limits that would be demarcated with marker posts that shall be installed and maintained for the duration of the operation that would be erected under the supervision of a licensed archaeologist. This protected area will be clearly depicted on the site operations plan. No machine travel or ground disturbance, with the exception of normal agricultural activities, can occur within the protected area until further archaeological investigations have been completed by a licensed archaeologist and the report for the MTCS has been accepted into the provincial register. Prior to the surrender of the ARA Licence, a restrictive covenant shall be registered on title to ensure the archaeological sites continue to be conserved.

If it is decided to conduct the additional archaeological investigations, the Stage 3 strategy should follow that established for sites where it is evident that the level of cultural heritage value or interest will result in a recommendation to proceed to Stage 4 (MTC 2011:51, Table 3.1). This will involve the excavation of one metre units across a 10 metre grid throughout the site, with an additional 40% of infill units placed in areas of interest.

b. The native component of Location 5 is seven undiagnostic lithic artifacts. The archaeological site does not meet provincial criteria for Stage 3 testing and therefore no further work is recommended as the archaeological site is considered sufficiently documented. If diagnostics or higher quantities of native artifacts are recovered during the Stage 3 assessment of the 19th century component, the native component should be re-evaluated and potentially subject to an additional Stage 3 archaeological assessment.

Based on the information contained in the report, the ministry is satisfied that the fieldwork and reporting for the archaeological assessment are consistent with the ministry's 2011 Standards and Guidelines for Consultant Archaeologists and the terms and conditions for archaeological licences. This report has been entered into the Ontario Public Register of Archaeological Reports. Please note that the ministry makes no representation or warranty as to the completeness, accuracy or quality of reports in the register.

Should you require any further information regarding this matter, please feel free to contact me.

Sincerely,

John Dunlop  
Archaeology Review Officer

cc. Archaeology Licensing Officer  
Gerald Livingston, Livingston Excavation Inc.  
MaryJo Tait, Ministry of Natural Resources

<sup>1</sup>In no way will the ministry be liable for any harm, damages, costs, expenses, losses, claims or actions that may result: (a) if the Report(s) or its recommendations are discovered to be inaccurate, incomplete, misleading or fraudulent; or (b) from the issuance of this letter. Further measures may need to be taken in the event that additional artifacts or archaeological sites are identified or the Report(s) is otherwise found to be inaccurate, incomplete, misleading or fraudulent.

# Appendix **5**



# CURRICULUM VITAE

## Brian A. Zeman, BES, MCIP, RPP

### EDUCATION

1998  
Bachelor of Environmental Studies,  
Honours, Urban and Regional  
Planning, University of Waterloo

Brian Zeman, President of MHBC, joined MHBC as a Planner in 1998 after graduating from the University of Waterloo with a Bachelors Degree in Urban and Regional Planning.

Mr. Zeman provides planning services for all aspects of the firm's activities including residential, commercial and industrial uses while specializing in aggregate resource planning. He has experience in aggregate site planning and licensing and processes relating to aggregate applications.

Mr. Zeman is a member of the Canadian Institute of Planners and Ontario Professional Planners Institute.

### PROFESSIONAL ACCREDITATIONS / ASSOCIATIONS

- Full Member, Canadian Institute of Planners
- Full Member, Ontario Professional Planners Institute
- Member, Ontario Expropriation Association
- Certified by the Province of Ontario to prepare Aggregate Resources Act Site Plans

### PROFESSIONAL HISTORY

- |                |   |
|----------------|---|
| 2014 - Present | <b>President</b> , MacNaughton Hermsen Britton Clarkson Planning Limited                  |
| 2010 - 2014    | <b>Vice President and Partner</b> , MacNaughton Hermsen Britton Clarkson Planning Limited |
| 2005 - 2009    | <b>Partner</b> , MacNaughton Hermsen Britton Clarkson Planning Limited                    |
| 2004 - 2005    | <b>Associate</b> , MacNaughton Hermsen Britton Clarkson Planning Limited                  |
| 2001 - 2004    | <b>Senior Planner</b> , MacNaughton Hermsen Britton Clarkson Planning Limited             |
| 1998 - 2001    | <b>Planner</b> , MacNaughton Hermsen Britton Clarkson Planning Limited                    |

### CONTACT

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## CURRICULUM VITAE

**Brian A. Zeman**, BES, MCIP, RPP

### **PUBLICATIONS**

- Co Author of the “State of the Aggregate Resource in Ontario Study Paper 2 – Future Aggregate Availability & Alternatives Analysis, Prepared for the Ministry of Natural Resources dated December 2009.

### **SELECTED PROJECT EXPERIENCE**

- Research, preparation and co-ordination of reports / applications under the Planning Act, Niagara Escarpment Planning and Development Act, Oak Ridges Moraine Conservation Act, and the Aggregate Resources Act.
- Facilitate public meeting on major development applications.
- Project management for major development applications.
- Undertake aggregate Compliance Assessment Report inspections and preparation of reports.
- Planning evaluations and analysis for mineral aggregate development and resource management.
- Conduct notification and consultation procedures under the Aggregate Resources Act.
- Aggregate Resources Act site plan amendments.
- Planning evaluations for residential developments.
- Registration and planning of residential developments.
- Planning assessment for commercial, retail, office and industrial developments.
- Restoration planning for pits and quarries and preparation of recreational afteruse plans.
- Research and preparation of reports /evidence for hearings before the Ontario Municipal Board, Environmental Review Tribunal, Joint Board.
- Provide expert planning evidence before the Ontario Municipal Board, Environmental Review Tribunal and the Joint Board.

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## CURRICULUM VITAE

**Brian A. Zeman**, BES, MCIP, RPP

### SAMPLE PROJECT LIST

- Activa Group - Laurentian Subdivision, Kitchener
- Adventure Farm – Kirkwall Subdivision, Hamilton
- Aecon - Oliver Pit - Site Plan Amendment/Compliance Assessment Report
- Aggregate Producers Association of Ontario - Caledon Official Plan
- Aggregate Producers Association of Ontario - PPS Review
- Aggregate Producers Association of Ontario - Region of Halton Official Plan
- Blue Mountain Aggregates-Pit Deepening and Expansion
- Brampton Brick - Cheltenham Quarry Site Plan Amendment
- Brampton Brick - Niagara Escarpment Development Permit
- Cayuga Material & Construction - Property Investigation
- Cliff's Natural Resources – Chromite Aggregate Project
- Crisdawn Construction Inc. – Barrie Annexation Lands
- Dufferin Aggregates - Acton Quarry Afteruse Plan
- Dufferin Aggregates - Acton Quarry Expansion
- Dufferin Aggregates – City of Hamilton Official Plan
- Dufferin Aggregates - Milton Comprehensive Zoning By-law
- Dufferin Aggregates - Milton Quarry Afteruse Plan
- Dufferin Aggregates - Milton Quarry Extension
- Dufferin Aggregates - Property Investigations
- Dufferin Aggregates - Region of Halton Official Plan
- Dufferin Aggregates - Town of Halton Hills Official Plan
- Dufferin Aggregates – Town of Halton Hills Zoning By-law
- E.C. King Contracting - Sydenham Quarry Expansion Erie Sand & Gravel - Pelee Quarries
- Gies Construction - Old Chicopee Drive, Waterloo
- Hazad Construction - Conestoga Golf Course Subdivision Hallman Construction Limited - Consent for Church Site
- Home Depot - Barrie, Kitchener, Markham, Mississauga, Richmond Hill and Whitby
- J.C. Duff - Property Investigations
- Kulmatycky Rezoning/Plan of Subdivision/Area Study - Town of Paris
- Lafarge Canada – Brechin Quarry Site Plan Amendment
- Lafarge Canada – City of Hamilton Official Plan
- Lafarge Canada - Dundas Quarry Expansion
- Lafarge Canada - Lawford Pit
- Lafarge Canada – Limbeer Pit
- Lafarge Canada – Mosport Pit Site Plan Amendments
- Lafarge Canada - Oster Pit

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## CURRICULUM VITAE

### Brian A. Zeman, BES, MCIP, RPP

- Lafarge Canada - Property Investigations
- Lafarge Canada - Warren Merger Due Diligence
- Lafarge Canada-Wawa Site Plans
- Lincoln Village Subdivision - Phase 2 and 3, Waterloo
- Livingston Excavating - Simcoe Pit
- Nelson Aggregates Co., Burlington Quarry Extension
- Ontario Stone, Sand & Gravel Association – Region of Halton Aggregate Strategy
- Ontario Stone, Sand & Gravel Association - Region of Halton Official Plan
- Paris Land Development Limited - Subdivision
- Pitway Holdings - Brillinger Pit
- Pitway Holdings - Naylor/Forman Pit
- Pine Valley Homes - Ainsley Estates, Town of Wasaga Beach
- Pioneer Construction-Aggregate Resources Act Licensing-Thunder Bay
- Region of Durham - Homefounders Subdivision Riverbank Estates Inc. - Subdivision, Kitchener
- St. Marys Cement – Alternative Fuels
- St. Marys Cement - Bowmanville Quarry Deepening
- St. Marys Cement - Bowmanville Quarry Site Plan Amendment
- St. Marys Cement - Clarington Comprehensive Zoning By-law
- St. Marys Cement – Westside Marsh Project
- Steed & Evans - Contractor's Yard/Site Plan Amendment
- Tanem Developments - Bridge Street Subdivision University of Guelph - Canadian Tire
- University of Guelph - Commercial Centre University of Guelph - Office/Research Park
- YMCA – Redevelopment of Site, Barrie
- Zavarella Construction Ltd. - Consent/Rezoning/Plan of Subdivision/Area Study, Town of Paris

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