

# PLANNING REPORT:

## MAES PIT

Applications to Amend the Municipality of Middlesex Centre Official Plan and Zoning By-law to facilitate an Application for a Class 'A', Category 1 License for Mineral Resource Extraction

PART LOTS 1 & 2, CONCESSION 2  
GEOGRAPHIC TOWNSHIP OF LOBO  
MUNICIPALITY OF MIDDLESEX CENTRE  
MIDDLESEX COUNTY

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## 1.0 INTRODUCTION

The following report has been prepared to address, in part, the complete application requirements of the Planning Act regarding a proposal to establish a gravel pit in the former Township of Lobo, near the Village of Komoka. A corresponding Aggregate Resources Act Application has been submitted to the Ministry of Natural Resources, for a Class ‘A’, Category 1 License (pit below water). The required approvals are summarized in Table 1. The project is referred to as the “**Maes Pit**”. The site is located on part of Lots 1 and 2, Concession 2, in the Municipality of Middlesex Centre, in the County of Middlesex. Amiens Road borders the site to the southwest (see **Figure 1**). The site is paralleled on some parts of the northwest side by a CN rail line and by natural areas. Adjacent agricultural lands are located to the southwest, the southeast and the northeast. A small pond is currently located on site and was constructed by the landowner.

Other small ponds are located off site between the CNR and the proposed licence area and have been historically and presently used for irrigation.

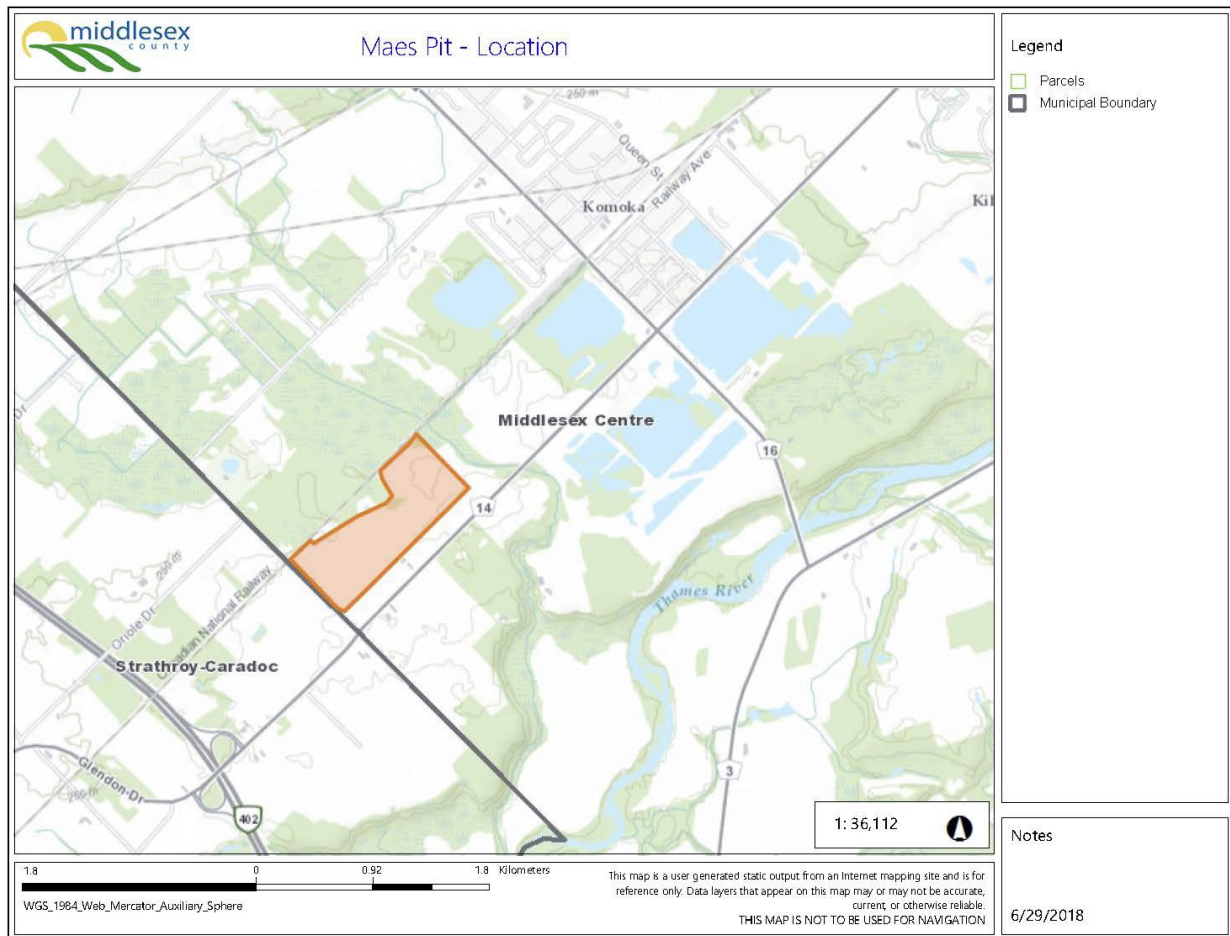
**Table 1: Required Approvals**

Application	Approval Authority
<ul style="list-style-type: none"> <li>• Municipality of Middlesex Centre Official Plan Amendment to designate the subject lands as Extractive Industrial</li> </ul>	County of Middlesex
<ul style="list-style-type: none"> <li>• Municipality of Middlesex Centre Zoning By-law Amendment to re-zone the subject lands from (A) Agricultural to (M3) Extractive Industrial Zone in order to permit aggregate extraction</li> </ul>	Municipality of Middlesex Centre
<ul style="list-style-type: none"> <li>• Aggregate Resources Act (ARA) Category ‘1’ License (Class ‘A’ pit below the watertable)</li> </ul>	Ministry of Natural Resources (MNR)

A series of technical reports have been prepared to support the applications noted above. These technical reports, and their recommendations, have been considered in the preparation of this Planning Report. For ease of reference, these technical reports and plans include the following:

- **“Natural Environment Technical Report: Level I & II” prepared by Biologic Inc.**
- **“Hydrogeologic Assessment” prepared by Novaterra Environmental Ltd. (NEL)**
- **“Noise Impact Study” prepared by HCG Engineering Ltd**
- **“Summary Statement” prepared by Bill Bradshaw, P.Eng.**
- **“Aggregate Resources Act Site Plans” prepared by Bill Bradshaw, P.Eng.**
- **“Ministry of Culture Stage I and Stage II Archaeological Assessment” prepared by Timmins Martelle Heritage Consultants Inc.**

## Site Location



## 2.0 SUBJECT PROPERTY AND ADJACENT LAND USES

### 2.1 Property Location and Description

The proposed Maes Pit is located east of Amiens Road, south of the CN railway and north of Glendon Drive (County Rd 14) in the Municipality of Middlesex Centre. The subject lands have been in agricultural uses for a large number of years and are currently in crop use. Once the site is licensed, the farm use will continue for as long as possible in lands not immediately required for extractive purposes.

The Existing Features Plan (Site Plans, page 1 of 4) included with this report shows the proposed licence area and adjacent lands within 120 metres of the site, including their land uses and zoning designations.

## 3.0 DESCRIPTION OF THE PROPOSAL

### 2.2 Surrounding Land Uses

The adjacent lands are primarily agricultural with interspersed aggregate extraction pits and woodlands. [See Figure 2] The proposed license boundary primarily consists of agricultural fields with several hedgerows. A farm pond is located within the northeast end of the proposed license boundary. To the immediate north and east of the proposed boundary is a large wooded area that contains the Komoka/South Strathroy Creek Wetland complex, several farm irrigation ponds and the Komoka Creek. To the south and west the surrounding land uses include agricultural fields with a small number of residences situated along Glendon Drive and Amiens Road

The proposal would permit the establishment of a sand and gravel operation, with proposed extraction below the established water table. The proposed licence is for an area of 24.7 hectares (61 acres), with extraction proposed on a portion (21.3 ha) of the subject lands.

The proposed annual tonnage limit is 200,000 tonnes. With a total estimated resource volume of 3.7 Million tonnes, and based on market demand estimates, the life span of the pit is expected to be 15-20 years.

Rehabilitation will be undertaken progressively, with the final land use plan consisting of a large pond and shoreline areas.

#### Surrounding Lands



### 3.1 Aggregate Resource

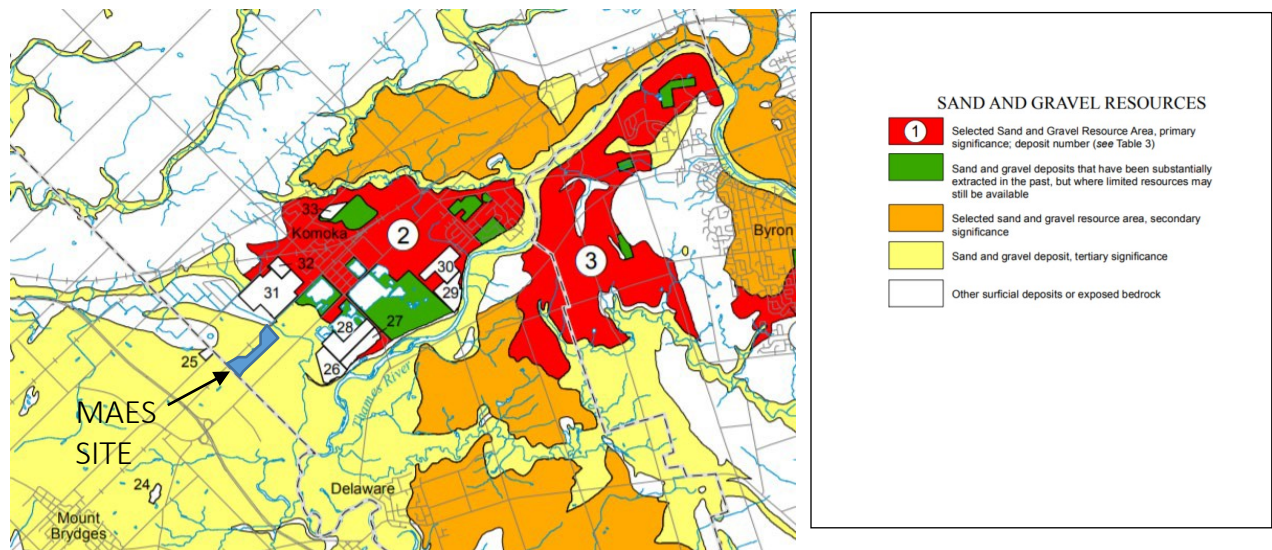
The proposed area to be licensed and zoned for extraction is situated in a glaciolacustrine plain deposit and is identified in the Aggregate Resources Inventory Paper (ARIP) #80 for the County of Middlesex, as a mineral aggregate resource of secondary significance. This deposit has historically been a source of high quality aggregate for several commercial pits within the Municipality of Middlesex Centre.

The applicant commissioned Englobe to conduct a geotechnical investigation of the site in March 2017 to determine the quantity and quality of the aggregate resources on the property and to estimate the elevation of the groundwater table across the site. A total of five (5) boreholes and seven (7) test pits provided information to determine the quality and quantity of aggregate on site, and to establish the groundwater table elevation.

The results of the geotechnical investigations indicate that there is an extensive sand and gravel deposit on the site with an estimated thickness of 10 metres across the site. The majority of the resource is located below the water table. The borehole logs found in the aggregate assessment and hydrogeology reports provide further information about the deposit.

Based on these geotechnical investigations, the estimated resource within the area to be licensed will yield approximately 3.7 million tonnes. Over 90% of the aggregate is below the water table.

#### Aggregate Resource Inventory Mapping



### 3.2 Operations and Phasing

The operation of the site will be phased, and the sequence of operations has been designed to allow for the progressive rehabilitation of the site as early as possible during the course of the operation. All undisturbed areas of the site will remain in agricultural use. A berm will be constructed along the southerly limit of the licensed area to provide a visual and acoustic screen. The operations will proceed from west to east across the site in 3 phases. A scale and scalehouse will be installed in the north west portion of the licensed area, near the proposed pit entrance onto Amiens Rd., on the south side of the CN Rail line.

Equipment to be used will include loaders, haul trucks, bulldozers, and portable processing equipment, as well as a dragline for below water extraction. The portable crushing and screening plant will follow the extraction face, and will be generally restricted to the western portion of the site, as per the recommendations of the noise impact study. The depth of the proposed below water extraction is a maximum of 9 metres.

There is one residence located within 150 metres of the proposed pit, on the north side of the railway tracks, on Amiens Road. There are also residences along Glendon Road to the south of the proposed pit which are located outside of the 150 metre boundary of the site. Temporary berms will be constructed along the perimeter to store stripped topsoil and/or overburden for future rehabilitation of the site. These temporary berms will protect nearby residences from noise impacts from the aggregate operation. These acoustic berms are designed to comply with the Ministry of Environment guidelines and reflect the technical recommendations of the Noise Impact Study prepared by HCG Engineering.

There are 3 archaeological locations identified within the proposed licensed area. These locations are described in detail in the report prepared by Timmins Martelle. As recommended by the archaeology consultant, these locations are protected with a 70 m buffer zone that will be demarcated by a post and wire fence to be erected under the supervision of a licensed archaeologist. The protected areas are clearly depicted on the site operations plan. No machine travel or ground disturbance 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.

Aggregate processing operations and shipping will only occur during daytime hours and processing of material on this property will be done in designated areas as shown on the site plans. Existing vegetation will be maintained to visually buffer the pit from the adjacent land uses. Fencing will be upgraded to meet the requirements of the Aggregate Resources Act along the site boundaries to prevent inadvertent access into the property.

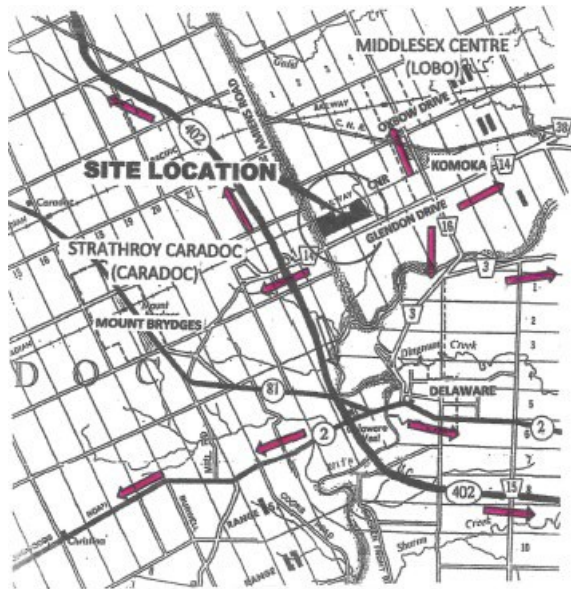
The proposed hours of operation are 7am – 6pm Monday to Friday, and 8am – 12pm on Saturdays. There will be no operations on Sundays or civic holidays. The site plans have incorporated the technical recommendations from all the reports to minimize any negative impacts on the adjacent land uses from the proposed pit.

### 3.3 Haul Route

The aggregate resource from the site will be utilized locally to supply materials for construction of roads, homes, and other developments in the area. Materials will be transported from the site by truck to supply local construction projects.

The access to the site is proposed to be to Amiens Road. An entrance permit will be required from the Municipality. Amiens Road is a paved road. After exiting the pit trucks will proceed south easterly towards Glendon Drive (County Road 14) before turning right towards Highway 402, or left towards Komoka. Figure 2 below shows the possible haul routes that would be used.

If the maximum amount of aggregate is extracted in a calendar year, an average of 24 trucks per working day will enter and exit the site. In reality, there may be some days when there will be more trucks coming and going. There may also be many days when there will be no trucks on site.



### 3.4 Rehabilitation

During the removal of aggregate this site shall be progressively rehabilitated to a natural environment after use in pond areas and slopes adjacent to the pond, with rehabilitation to agricultural uses in the perimeter areas. The agricultural lands around the perimeter of the pond area shall be returned to soil capabilities that are the same as the present capabilities.

The archaeology report completed for this application identified 3 sites which are recommended for Stage 3 investigation (excavation of one metre units by hand and intervals of 10 metres). These areas are identified on the Site Plans as Location 1, Location 2 and Location 3. These areas are protected with a buffer area which will be demarcated with fencing to avoid any disturbance. There is potential for future extraction in these areas, subject to the completion of additional archaeology work and sign off from the Ministry of Culture and Sport (MTCS). Note that the rehabilitation plans contemplate these areas as being extracted, in order that the applicant could assess the hydrogeology impacts at the time of the application. If these sites remain protected, the rehabilitation plans would be revised and updated accordingly.

The proposed final land uses are compatible with the surrounding land uses. Rehabilitation shall be ongoing as extraction is completed in areas no longer required for operations and where the extents of extraction have been reached. The following notes are taken from the Progressive and Final Rehabilitation Plans (enclosed) and address the details of the progressive rehabilitation and final rehabilitation for this site. Berms/stockpiles will be constructed on the perimeter of the site to attenuate noise and/or visual screening and will be used for rehabilitation of the site.



### 3.5 Background Reports and Site Plans

The Site Plans form the basis of the pit license application under the Aggregate Resources Act and also form an integral part of the review process of the applications to amend the Municipality's Official Plan and Zoning By-law. The Site Plans are labelled as follows:

- i) Existing Features (Drawing 1);
- ii) Operational Plan (Drawing 2);
- iii) Consultant Recommendations (Drawing 3); and,
- iv) Progressive Rehabilitation and Final Rehabilitation Plans (Drawing 4).

### 3.6 Aggregate Resources Act License Application

An application for a class A, Category 3 License under the Aggregate Resources Act was submitted to the Ministry of Natural Resources and Forestry in May 2018. The applicant hosted an Information Session in XX 2018 and provided notification to neighbours and agencies, inviting comments on the applications. The applicant has been working to resolve concerns and objections raised in response to circulation of the ARA application.

As a result of the Province's emergency order in March 2020, in response to the covid-19 pandemic, a number of regulatory timelines were suspended. The ARA regulations provide applicants with a 2 year time limit to resolve objections on applications. For the proposed Maes Pit, the ARA process was originally scheduled to conclude in May 2020, however, MNRF has extended the deadline to December 2020.

At the time of this Planning Report, the applicant is still communicating with neighbours in an effort to resolve objections.

Additional information related to the ARA process and application can be provided on request.

## 4.0 LAND USE PLANNING ANALYSIS

The subject lands falls within the Planning jurisdiction of the County of Middlesex Official Plan and the Municipality of Middlesex Centre Official Plan. This report evaluates the proposed land use within the context of both Official Plans, as well as within the context of Provincial legislation including the Planning Act and the Provincial Policy Statement (2020).

The protection and management of aggregate resources has been deemed to be of provincial significance and their development is regulated by specific legislation. In addition to the Aggregate Resources Act (ARA), the development of aggregate extraction operations must respect the provisions of the Planning Act and give appropriate consideration to the policy framework established by the regional and municipal planning documents.

The proposed pit also requires approvals from the Municipality of Middlesex Centre, specifically, amendments to the local Official Plan and Zoning Bylaw. In addition, an Aggregate Resources Act (ARA) License from the Ministry of Natural Resources and Forestry (MNRF) will be required. The ARA application has been reviewed by the Upper Thames Valley Conservation Authority, the Ministry of Agriculture and Food and the Ministry of Environment, Conservation and Parks for review and comment.

The Planning Act and ARA applications to permit the development of the Maes pit are supported by a series of technical studies which have assessed the impact of the proposed operation on neighbouring residents, the natural environment, the agricultural capabilities of the land, the impact of roads and municipal water supply. The Site Plans detail the manner in which operations will be carried out as describe the sequence of mining and progressive rehabilitation.

### 4.1 Planning Act

When carrying out its responsibilities under the Planning Act, a municipality or any other authority which affects a planning matter must have regard for the provincial interests as identified in Section 2 of the Planning Act.

The provincial interests contained in Section 2 of the Planning Act are outlined in the table below. The Maes pit proposal has been evaluated in the context of these prescribed provincial interests:

**Table 2: Planning Act, Section 2 Evaluation**

Test	Provincial Interests	Maes Pit Proposal
2(a)	<i>The protection of ecological systems, including natural areas, features and functions.</i>	<p>The Natural Environmental Level 1 screening and technical evaluation prepared by BioLogic Consulting identified the following natural areas and features within the area to be licensed or within 120 metres of the subject property:</p> <ul style="list-style-type: none"> <li>a) threatened bird species (barn swallow, bank swallow)</li> <li>b) significant wildlife habitat (amphibian breeding habitat; species of conservation concern (Eastern Wood Pewee and Wood Thrush);</li> <li>c) Fish habitat</li> </ul> <p>The proposed extraction operations and associated development activities for the Maes Pit application have been assessed for impacts on the natural environment. Potential negative impacts have been mitigated through implementation of the Biologic report recommendation as Site Plan conditions.</p>
2(b)	<i>The protection of the agricultural resources of the Province</i>	<p>The PPS states that in prime agricultural areas, complete rehabilitation to an agricultural condition is not required if "outside of a speciality crop area, there is a substantial quantity of mineral aggregates below the water table warranting extraction, or the depth of planned extraction in a quarry makes restoration of pre-extraction agricultural capability unfeasible."</p> <p>There is a substantial amount of quality aggregates below the water table warranting extraction. Approximately 90% of the total amount of the aggregate on the site is located in the below water table.</p>
2(c)	<i>The conservation and management of natural resources and the mineral resource base.</i>	<p>Aggregate resources are a provincial interest and should be protected from incompatible land uses and developed responsibly. The proposed pit will provide a high quality supply of mineral aggregate material to the local and regional markets. Appropriate controls are in place, as recommended by the natural environment consultant, to ensure that no significant natural heritage features will be impacted by the pit operation.</p>

Test	Provincial Interests	Maes Pit Proposal
2(d)	<i>The conservation of features of significant architectural, cultural, historical, archaeological or scientific interest.</i>	There are 3 archaeological locations identified within the proposed licensed area. These locations are described in detail in the report prepared by Timmins Martelle. As recommended by the archaeology consultant, these locations are protected with a 70 m buffer zone that will be demarcated by a post and wire fence to be erected under the supervision of a licensed archaeologist. The protected areas are clearly depicted on the site operations plan. No machine travel or ground disturbance 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.
2(e)	<i>The supply, efficient use and conservation of energy and water</i>	Ground and surface water features have been studied and documented. Mitigation measures included on the Operations Plan such as, groundwater level monitoring and restriction of surface activities (such as refueling) will minimize the potential for groundwater disturbance or contamination in accordance with provincial guidelines.
2(k)	<i>The adequate provision of employment opportunities.</i>	The proposed aggregate extraction operation will result in the creation of employment opportunities locally. These primary resource jobs present a multiplier effect which can result in the creation of additional supplemental service jobs in the Township.
2(l)	<i>The protection of the financial and economic well-being of the Province and its municipalities.</i>	In addition to the employment opportunities created by the proposed operation, the Township will see an increase in revenue through increased assessment and annual tonnage contributions (TOARC) as well as property taxes associated with the proposed operation. A close to market supply of aggregate also helps to ensure that local construction material costs are lower than aggregate that has to be transported from further afield.
2(m)	<i>The coordination of planning activities of public bodies.</i>	The interests of public bodies and agencies are considered by the circulation requirements of the Planning Act and the ARA.
2(n)	<i>The resolution of planning conflicts involving public and private interests.</i>	The land use planning process, as well as the ARA licensing process, enables municipalities, agencies and the public to participate in the evaluation of this proposal.

Test	Provincial Interests	Maes Pit Proposal
2(o)	<i>The protection of public health and safety.</i>	The operational plan contains a variety of mitigation measures which have been developed to minimize the social impact of the proposed pit operation. The requirements of the Operation Plan and site plan notes therein are legally binding as per the ARA.
2(p)	<i>The appropriate location of growth and development.</i>	On- site investigation has confirmed the quality and extent of this resource. No significant natural or cultural heritage features will be negatively impacted by the proposed pit operation. The site is located with good access to infrastructure (roads) for delivery to service the area. The site is adjacent to an existing railway corridor. The property is within the settlement area of Komoka and identified for future employment uses. The proposed pit is a temporary use and does not preclude future employment uses at this location.

**4.2 Provincial Policy Statement (PPS) 2020**

The Minister of Municipal Affairs and Housing, under Section 3 of the Planning Act, can issue policy statements that provide direction to other ministries, municipalities and agencies on matters of provincial interest as they relate to land use planning. These policy statements are developed in consultation with other ministries and are updated from time to time. The latest PPS came into effect on April 30, 2014 and any land use decision by any authority that affects a planning matter must be consistent with the PPS.

The 2020 Provincial Policy Statement provides 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, integrates and long-term approach to planning and recognizes linkages among policy areas. (Part III)

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

he PPS states that in prime agricultural areas, complete rehabilitation to an agricultural condition is not required if “outside of a speciality crop area, there is a substantial quantity of mineral aggregates below the water table warranting extraction, or the depth of planned extraction in a quarry makes restoration of pre-extraction agricultural capability unfeasible.”

There is a substantial amount of quality mineral aggregates below the water table warranting extraction and most of the total amount of the aggregate is located close to and below the water table.

Section 2.5.4.1 also exempts a pit or quarry from complete rehabilitation to an agricultural condition where “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 of prime agricultural lands where rehabilitation is feasible. Where no other alternatives are found, prime agricultural lands shall be protected in order of priority: specialty crop areas, Canada Land Inventory Class 1, 2 and 3.”

The applicant has explored the possibility that there may be alternative mineral aggregate locations within the area that are located on less-prime agricultural land. However, the results of this investigation conclude that there are no agricultural lands in the nearby geographical townships that can be classified as Class 4 to 7 with known sources of primary and secondary aggregates and that are currently available for extraction. The applicant has also searched for resources on lands identified as designated growth areas and for resources on prime agricultural lands where rehabilitation to an agricultural use is feasible, but again, to date no suitable alternatives have been found.”

PPS 2020 includes updated settlement area policies which allow for the conversion of existing employment areas outside of a municipal comprehensive review. Until the official plan review or update in policy through a comprehensive review is undertaken or completed, lands within existing employment areas may be converted to a designation that permits non-employment uses, provided that the area has not been identified as provincially or regionally significant, subject to meeting the criteria set out in the Plan. The Maes pit proposal will require an amendment to the Official Plan, however this would not necessarily require a change in designation, only an extension of the Aggregate Resource Overlay as shown on the Land Use Schedule. This would enable future employment uses once extraction is complete.

There are no policies in the PPS that prohibit aggregate extraction in settlement areas. In fact, there are numerous examples in Ontario of aggregate extraction within settlement areas. For example, within the City of London, a major resource extraction area exists in the Byron area, surrounded by residential uses. The after use is anticipated to be a combination of residential and recreational uses. There are several other active aggregate licenses within the Urban Growth Boundary of the City of London. In Middlesex Centre, the settlement area of Komoka also has a long history of aggregate extraction occurring within the limits of the settlement area. Similar examples can be found in many other areas of the province including Brant County, Wellington County, Town of St. Marys, City of Ottawa and other municipalities.

The following table provides an evaluation of the Maes pit proposal in the context of the relevant policies of the PPS. The evaluation is based largely on findings of various technical studies referenced previously in Section 1.0 of this report.

**Table 4: Provincial Policy Statement – Consistency Analysis**

PPS (2020) Policies	Analysis
<p><b>1.0 Building Strong Healthy Communities</b></p> <p><b>1.1.3 Settlement Areas</b></p> <p><i>The vitality of settlement areas is critical to the long-term economic prosperity of our communities. Development pressures and land use change will vary across Ontario. It is in the interest of all communities to use land and resources wisely, to promote efficient development patterns, protect resources, promote green spaces, ensure effective use of infrastructure and public service facilities and minimize unnecessary public expenditures.</i></p> <p><b>1.1.3.2 Land use patterns within settlement areas shall be based on densities and a mix of land uses which:</b></p> <ul style="list-style-type: none"> <li><i>a) efficiently use land and resources;</i></li> <li><i>b) are appropriate for, and efficiently use, the infrastructure and public service facilities which are planned or available, and avoid the need for their unjustified and/or uneconomical expansion;</i></li> <li><i>c) minimize negative impacts to air quality and climate change, and promote energy efficiency;</i></li> <li><i>d) prepare for the impacts of a changing climate;</i></li> <li><i>e) support active transportation;</i></li> <li><i>f) are transit-supportive, where transit is planned, exists or may be developed; and</i></li> <li><i>g) are freight-supportive.</i></li> </ul>	<p>The proposed Maes Pit is located in a Settlement Area as identified in the Official Plan for the municipality. The lands are currently in agricultural use. The Official Plan identifies the lands as a future employment area. The proposed aggregate use is considered an interim land use. Only a portion of the existing farm would be licensed. There is a substantial area of the property that would be available for future use as employment lands. The pond area that would be created as a result of the aggregate extraction could be incorporated into a future employment use.</p>
<p><b>1.3.2 Employment Areas:</b></p> <p><b>1.3.2.1 Planning authorities shall plan for, protect and preserve employment areas for current and future uses and ensure that the necessary infrastructure is provided to support current and projected needs.</b></p> <p><b>1.3.2.2 At the time of the official plan review or update, planning authorities should assess employment areas identified in local official plans to ensure that this designation is appropriate to the planned function of the employment area.</b></p>	<p>The proposed aggregate operation is considered an interim use. There will be employment opportunities (direct and indirect) created as a result of the proposed pit operation. The proposed use does not preclude future employment uses, as an after use once extraction and rehabilitation is completed.</p>

PPS (2020) Policies	Analysis
<p><b>1.2.6 Land Use Compatibility</b></p> <p><i>1.2.6.1 Major facilities and sensitive land uses should be planned to ensure they are appropriately designed, buffered and/or separated from each other to prevent or mitigate adverse effects from odour, noise and other contaminants, minimize risk to public health and safety, and to ensure the long-term viability of major facilities.</i></p>	<p>The site plans for the proposed pit have been designed to ensure that appropriate mitigation measures are in place to minimize the effects of noise and dust from the operation. The recommendations of the Noise Assessment Report prepared by HGC Engineering have been incorporated into the design of the pit.</p>
<p><i>1.7.1 Long-term economic prosperity should be supported by:</i></p> <p><i>d) optimizing the long-term availability and use of land, resources, infrastructure, and public service facilities;</i></p>	<p>The proposed pit will increase the availability of close-to-market supplies of aggregate resources in this area of Middlesex County. The aggregate deposits in the Komoka area have been an aggregate important supply area for many years. With existing reserves being depleted in this area, the proposed Maes pit will extend the local supply to the Region.</p>
<p><b>2.0 Wise Use and Management of Resources</b></p>	
<p><b>2.1 Natural Heritage</b></p> <p><i>2.1.1 Natural features and areas shall be protected for the long term.</i></p> <p><i>2.1.2 The diversity and connectivity of natural features in an area, and the long-term ecological function and biodiversity of natural heritage systems, should be maintained, restored or, where possible, improved, recognizing linkages between and among natural heritage features and areas, surface water features and ground water features.</i></p>	<p>The Natural Heritage Report has evaluated the impacts of the proposal on significant wetlands, woodlands, fish habitat, and habitat of endangered species and threatened species. The recommended mitigative measures are incorporated to ensure no negative impacts on these natural features or their functions.</p> <p>Special consideration has been given to the potential Eastern Hog-nosed Snake habitat, significant woodlands, the PSW and associated significant wildlife habitats from potential encroachment, accidental vegetation/habitat removal, sedimentation, and potential species encounters.</p>



PPS (2020) Policies	Analysis
<p><b>2.2 Water</b></p> <p><i>2.2.1 Planning authorities shall protect, improve or restore the quality and quantity of water by:</i></p> <ul style="list-style-type: none"> <li><i>a) using the watershed as the ecologically meaningful scale for integrated and long-term planning, which can be a foundation for considering cumulative impacts of development;</i></li> <li><i>b) minimizing potential negative impacts, including cross-jurisdictional and cross-watershed impacts;</i></li> <li><i>c) evaluating and preparing for the impacts of a changing climate to water resource systems at the watershed level;</i></li> <li><i>d) identifying surface water resource systems consisting of ground water features, hydrologic functions and natural heritage features and areas, and surface water features including shoreline areas, which are necessary for the ecological and hydrological integrity of the watershed;</i></li> <li><i>e) maintaining linkages and related functions among ground water features, hydrologic functions and natural heritage features and areas and surface water features including shoreline areas;</i></li> <li><i>f) implementing necessary restrictions on development and site alteration to:</i> <ul style="list-style-type: none"> <li><i>1. protect all municipal drinking water supplies and designated vulnerable areas; and</i></li> <li><i>2. protect, improve or restore vulnerable surface and ground water, sensitive surface water features and sensitive ground water features, and their hydrologic functions;</i></li> </ul> </li> <li><i>g) planning for efficient and sustainable use of water resources, through practices for water conservation and sustaining water quality;</i></li> <li><i>h) ensuring consideration of environmental lake capacity, where applicable; and</i></li> <li><i>i) ensuring stormwater management practices minimize stormwater volumes and contaminant loads, and maintain or increase the extent of vegetative and pervious surfaces.</i></li> </ul>	<p>No surface water features, hydrologic features or municipal drinking water sources are located on or within 120 metres of the property. The proposal will ensure the preservation of existing groundwater quality and quantity by retaining a buffer between the pit floor and the established high water table.</p> <p>Several operational best practices have been included on the Operations Plan in order to minimize any potential for surface activities to impact groundwater quality.</p> <p>These include groundwater level monitoring and restriction of surface activities in accordance with provincial guidelines. Further, contingency measures have been implemented on the site plans in order to provide for appropriate corrective actions should groundwater be encountered during extraction.</p>

PPS (2020) Policies	Analysis
<p><b>2.3 Agriculture</b></p> <p><i>2.3.1 Prime agricultural areas shall be protected for long-term use for agriculture.</i></p> <p><i>2.3.6 Non-Agricultural Uses in Prime Agricultural Area</i></p> <p><i>2.3.6.1 Planning authorities may only permit non-agricultural uses in prime agricultural areas for:</i></p> <ul style="list-style-type: none"> <li><i>a) extraction of minerals, petroleum resources and mineral aggregate resources in accordance with policies 2.4 and 2.5</i></li> <li><i>b) limited non-residential uses</i></li> </ul>	<p>There is a substantial amount of aggregate resource below the water table warranting extraction. The rehabilitation will be to natural environment (pond) with surrounding lands around the pond being returned to agricultural use.</p> <p>The proposed use and rehabilitations plans do not preclude the future use of the lands for employment uses.</p>
<p><b>2.5. Mineral Aggregate Resources</b></p> <p><i>2.5.2.1 As much of the mineral aggregate resources as is realistically possible shall be made available as close to markets as possible.</i></p> <p><i>Demonstration of need for mineral aggregate resources, including any type of supply/demand analysis, shall not be required, notwithstanding the availability, designation or licensing for extraction of mineral aggregate resources locally or elsewhere.</i></p>	<p>The proposed pit will provide a significant supply of commercially viable aggregate material for the local and regional market. The proposed pit will increase access to close-to-market supply of aggregates in local construction markets.</p>
<p><i>2.5.2.2 Extraction shall be undertaken in a manner which minimizes social, economic, and environmental impacts.</i></p>	<p>The technical studies prepared in support of the proposed Maes pit demonstrate that no natural or cultural heritage features will be impacted by the development. The hydrogeological study has confirmed groundwater elevations and a series of operational practices designed to restrict activities which could present threats to groundwater have been included on the operations plan. Adherence to provincial standards for noise and dust will minimize any potential social impacts and nuisances. The TOARC contributions will provide a sustained fund to the Township for road maintenance along the proposed haul route and ensure safe vehicular access to and from the site is provided over the long-term with minimal disruption to existing traffic flows.</p>

PPS (2020) Policies	Analysis
<p><b>2.5.3 Rehabilitation</b></p> <p><i>2.5.3.1 Progressive and final rehabilitation shall be required to accommodate subsequent land uses, to promote land use compatibility, to recognize the interim nature of extraction, and to mitigate negative impacts to the extent possible. Final rehabilitation shall take surrounding land use and approved land use designations into consideration.</i></p>	<p>As described previously in this report, the Maes pit shall be progressively rehabilitated to a natural environment after use in pond areas and slopes adjacent to the pond, with rehabilitation to agricultural uses in the perimeter areas. The agricultural lands around the perimeter of the pond area shall be returned to soil capabilities that are the same as the present capabilities. The potential for future employment uses is not precluded by the proposal.</p>
<p><b>2.6 Cultural Heritage and Archaeology</b></p> <p><i>2.6.2 Development and site alteration shall only be permitted on lands containing archaeological resources or areas of archaeological potential unless significant archaeological resources have been conserved.</i></p>	<p>A Stage I and II Archeological Assessment was completed by Timmins Martelle and accepted by the Ministry of Tourism, Culture and Sport. The proposed licensed area contains 3 sites of archaeological significance. Appropriate protection to these areas, as recommended by the archaeological consultant, has been incorporated into the Site Plans. The proposal is consistent with the PPS in this regard.</p>

## 4.2 County of Middlesex Official Plan

The Middlesex County Official Plan provides an upper tier policy framework that provides guidance to the local municipalities in the preparation of local Official Plans and Zoning By-laws. It sets the framework for coordination and cooperation amongst the local municipalities and the County on planning and development issues that cross municipal boundaries. Local Official Plans complement the County Plan by providing more detailed strategies, policies and land use designations for planning and development at the local level.

Protection of aggregate resources is one of the goals of the Plan:

*The County, in conjunction with the Province shall ensure that as much of the mineral aggregate resources as is realistically possible is made available to supply the need, as close to market as possible; extraction is undertaken and completed in an orderly fashion; and, extraction does not have a permanent adverse impact on the Natural System or the agricultural land base. Operational impacts on residential and other sensitive land uses shall be minimized. (Section 2.2.3)*

The Maes Pit site is located within a Settlement Area, and the detailed policies related to Urban Settlement Areas are found in the Middlesex Centre Official Plan, and discussed in the following section of this report.

Middlesex County OP Policies	Analysis
<p><b>2.2.1 Natural System</b></p> <p>The County’s Natural System includes the following elements which, while listed separately for convenience, are inter-connected and functionally dependent:</p> <ul style="list-style-type: none"> <li>• Natural Heritage Features <ul style="list-style-type: none"> <li>○ Significant woodlands</li> <li>○ Wildlife habitat</li> <li>○ Endangered and threatened species habitat</li> <li>○ Aquatic ecosystems including fish habitat</li> <li>○ River, stream, ravine and upland corridors</li> <li>○ Aggregate resource areas</li> <li>○ ANSIs</li> </ul> </li> </ul> <p>The maintenance of this System requires that the ecological functions and processes which created and now sustain it are also maintained and where necessary, rehabilitated or enhanced</p> <p><b>2.2.1.2 General Policies</b></p> <p>Identify, protect, maintain and encourage rehabilitation of the Natural System  The County supports the protection of existing woodlands and will continue to enforce the County Woodlands Conservation By-law</p> <p><b>2.2.1.3 Natural System Policies</b></p> <p>Certain parts of the County’s Natural System preclude development. These are designated as Natural Environment Areas on Schedule A and include:</p> <ul style="list-style-type: none"> <li>• Wetlands;</li> <li>• Floodplains; and</li> <li>• Flood regulated water courses.</li> </ul> <p>Significant portions of Endangered Species Habitats also preclude development. These areas are not shown on Schedule A in order to protect the endangered species; however, the Province should be consulted regarding these habitats, as required.  The remaining Natural Heritage Features, Groundwater Features and Natural Hazards listed as elements of the Natural System in Section 2.2.1.1 do not preclude development; however, there is an interest on the part of the Province, Conservation Authorities and the County in protecting these Features and Hazards from incompatible land uses.</p>	<p>The Natural Environmental Level 1 screening and technical evaluation prepared by BioLogic Consulting identified the following natural areas and features within the area to be licensed or within 120 metres of the subject property:</p> <ul style="list-style-type: none"> <li>- threatened bird species (barn swallow, bank swallow)</li> <li>- significant wildlife habitat (amphibian breeding habitat)</li> <li>- significant woodlands</li> </ul> <p>The proposed extraction operations and associated development activities for the Maes Pit application have been assessed for impacts on the natural environment. Potential negative impacts have been mitigated through implementation of the Biologic report recommendation as Site Plan conditions</p>

Middlesex County OP Policies	Analysis
<p><b>2.2.3 Aggregate Resources</b></p> <p>The County, in conjunction with the Province shall ensure that as much of the mineral aggregate resources as is realistically possible is made available to supply the need, as close to market as possible; extraction is undertaken and completed in an orderly fashion; and, the extraction does not have a permanent adverse impact on the Natural System or the agricultural land base. Operational impacts on residential and other sensitive land uses shall be minimized.</p>	<p>The policies recognize the importance of protecting aggregate resources within the County, as well as the need to balance resource extraction with protection of agricultural lands and the natural environment.</p>
<p><b>2.2.3.2 General Policies</b></p> <p>Aggregate and non-aggregate resources shall be recognized and managed as non-renewable resources.</p> <p>Areas of aggregate resource, as identified on Schedule C, shall be protected for extraction purposes.</p> <p>Consideration of the expansion of existing extractive operations and of new aggregate extraction areas shall include an evaluation of the impact on area residents and on the Natural System including ground and surface waters. Extraction and processing operations shall be located in such a way to minimize the impact on the natural and social environments.</p> <p>All pit and quarry operations shall be subject to a program of progressive rehabilitation as specified in the Aggregate Resources Act, regulations under this Act and in the license for the property.</p> <p>Aggregate extraction is only permitted in the Agricultural Area if site rehabilitation is carried out and substantially the same acreage and soil capability for agriculture will occur after extraction and rehabilitation is complete except in the following instances:</p> <ul style="list-style-type: none"> <li>a) where extraction occurs below the water table,</li> <li>b) where the lands do not constitute Prime Agricultural Land,</li> <li>c) where there is an approved, underlying land use designation which permits uses other than agriculture in a local official plan.</li> </ul>	<p>The proposed aggregate operation has been assessed for impacts on groundwater, surface water, natural heritage as well as social impacts such as noise and dust. Mitigative measures have been incorporated into the operating plans.</p> <p>The rehabilitation plan calls for progressive rehabilitation of the site. As there is a significant amount of resource located below the water table, the rehabilitation plans will result in a pond area. The property around the pond will be rehabilitated to the same soil capability that exists pre-extraction to provide opportunity for cultivation.</p>

Middlesex County OP Policies	Analysis
<p>2.2.3.3. New Pits and Quarries</p> <p>Prior to making a decision on an amendment to a local official plan or zoning by-law to permit a new extractive use, or to allow the expansion of an existing extractive use, the local municipality shall consult with the County, the Conservation Authority and the Province to ensure that the effects on any Natural System Elements are properly considered. Consultation may include studies related to ground and surface water impacts, noise and dust impacts and other matters that may affect the natural environment and adjacent residents.</p> <p>Local municipalities shall include policies in their official plans to address the impact of new pits and quarries. Such policies shall address:</p> <ul style="list-style-type: none"> <li>• visual impact;</li> <li>• proximity to residential uses;</li> <li>• impact on Natural System Elements; and</li> <li>• site rehabilitation.</li> </ul> <p>In considering applications to permit new pits and quarries, local municipalities shall be satisfied that the following are addressed:</p> <ol style="list-style-type: none"> <li>a) the impact on adjacent land uses and residents;</li> <li>b) the impact on the natural environment;</li> <li>c) the capabilities of the subject land for agriculture and other land uses;</li> <li>d) the impact on the road network;</li> <li>e) the impact on any existing or potential municipal water supply resource areas;</li> <li>f) the manner in which the operation will be carried out;</li> <li>g) the nature of rehabilitation work that is proposed; and</li> <li>h) any other matters deemed necessary by the local municipality or the County.</li> </ol>	<p>In addition to the Planning Act applications for Official Plan amendment and rezoning, the proposed pit will require an Aggregate Resources Act (ARA) License from the Ministry of Natural Resources and Forestry.</p> <p>The proposed pit also requires approvals from the Municipality of Middlesex Centre, specifically, amendments to the local Official Plan and Zoning Bylaw.</p> <p>The Planning Act and ARA applications to permit the development of the Maes pit are supported by a series of technical studies which have assessed the impact of the proposed operation on neighbouring residents, the natural environment, the agricultural capabilities of the land, the impact of roads and municipal water supply. The Site Plans detail the manner in which operations will be carried out as describe the sequence of mining and progressive rehabilitation.</p> <p>Careful consideration and planning have gone into the design of the operations and the rehabilitation of the pit to minimize impacts.</p>

Middlesex County OP Policies	Analysis
<p><b>2.3.10 Natural Heritage Features</b></p> <p>When an application for development within a Natural Heritage Feature, or within the adjacent lands of the elements as identified in Table 1 is being considered by Council, the appropriate Conservation Authority and the Province shall be consulted. The applicant will be required to submit a suitable Development Assessment Report in accordance with the policies of Section 2.2.1.2. The report shall address protection of the Natural System and show how existing and potential hazards shall be accommodated in a manner consistent with accepted engineering techniques and resource management practices and applicable provincial policies.</p>	<p>The Natural Heritage Report has evaluated the impacts of the proposal on significant wetlands, woodlands, fish habitat, and habitat of endangered species and threatened species. The recommended mitigative measures are incorporated to ensure no negative impacts on these natural features or their functions. The report is consistent with the “Development Assessment Report” outlined in the County OP.</p>
<p><b>2.2.3.4 Site Plan Requirements</b></p> <p>It is the policy of this Plan that an application for a permit to operate a sand or gravel pit or quarry shall be accompanied by a Site Development Plan(s) to be submitted to the County, the local municipality and the Ministry of Natural Resources. The Site Development Plan(s) shall deal with those matters specified by the Province.</p>	<p>The Site Plans have been prepared in accordance with the Aggregate Resources Act requirements and include a description of: Existing Features, Operations Plan and Phasing, Rehabilitation as well as a series of cross sections to depict the elevation, grades and drainage of the land before during and after extraction on the property.</p>
<p><b>2.3.10 Natural Heritage Features</b></p> <p>Natural Heritage Features are shown on Schedule C and identify lands that have natural environment functions and significance which should be considered when development proposals are reviewed. The Natural Heritage Features shown on Schedule C have been consolidated from existing information sources.</p> <p>When an application for development within a Natural Heritage Feature, or within the adjacent lands of the elements as identified in Table 1 is being considered by Council, the appropriate Conservation Authority and the Province shall be consulted. The applicant will be required to submit a suitable Development Assessment Report in accordance with the policies of Section 2.2.1.2. The report shall address protection of the Natural System and show how existing and potential hazards shall be accommodated in a manner consistent with accepted engineering techniques and resource management practices and applicable provincial policies.</p>	<p>Natural heritage features and functions were identified in the proposed license boundary. Adjacent to the licence boundary there are confirmed or candidate (unevaluated) wildlife habitat.</p> <p>An detailed discussion of the potential impacts of the proposed pit on natural heritage features is provided in the BioLogic report. The report also includes recommended mitigation measures which are reflected on the Site Plans. The BioLogic report concludes that through the application of a 15m extraction setback from significant features and the installation of erosion and sediment control (ESC) fencing no impacts to significant natural heritage features are anticipated.</p>

### 4.3 Municipality of Middlesex Centre Official Plan

The subject lands are located within the Komoko-Kilworth Urban Settlement Area. Schedule A-2 of the Middlesex Centre Official Plan shows the lands within the proposed area to be licensed designated as primarily “*Settlement Employment*” and “*Strategic Employment Area*”, with portions of the north and east part of the proposed licensed area designated as “*Parks and Recreation*” and “*Natural Heritage Enhancement*”. There are also areas on the property designated “*Natural Environment*” on lands to the north and east of the site, outside of the proposed area to be licensed (**see Figure 5**)

Consistent with the Provincial and County Plans, the Middlesex Centre Official Plan recognizes the importance of Mineral Aggregate Resources which are identified as a policy overlay on Schedule A. The Maes pit site is not within the policy overlay area, and therefore an Official Plan Amendment is being submitted to add the subject lands to the Aggregate Resource Area.

The Official Plan policies in Section 4.2 set out the criteria to be assessed by the Municipality in considering applications for new extractive sites. This includes an assessment of potential impacts on: adjacent lands uses including visual impacts; natural areas or Greenland system; significant cultural heritage sites; existing road network; groundwater resources. Applications must also address the nature of progressive and final rehabilitation and the capabilities of the site of agriculture and other lands uses.

The proposed aggregate operation is considered an interim land use. There will be employment opportunities (direct and indirect) created as a result of the proposed pit operation. The proposed use does not preclude future employment uses, as an after use once extraction and rehabilitation is completed. There is no conversion of employment lands being sought.

As noted previously in this report, there are numerous examples across the Province of aggregate extraction within settlement areas. The proposed rehabilitation and after use would allow for future employment uses, therefore no amendment to the underlying land use designation is being sought, only an amendment to the overlay schedule. The goals and policies of the Settlement Employment Area designation will continue to apply.

Section 5.7 of the Official Plan contains policies for the Komoko-Kilworth Secondary Plan Area. Within the Secondary Plan Area, “*the protection of aggregate resources for future extraction subject to preserving long term use of the land for designated settlement area functions*” is one of the goals (Section 5.7.1 n)).

### 4.4 Municipality of Middlesex Centre Zoning By-law

The area to be licensed is currently zoned ‘A1’ (Agricultural) according to the Municipality of Middlesex Centre Zoning By-law, 2005-005. There are hazard lands identified on the subject lands as shown by the shaded area on the Zoning by-law mapping (**See Figure 6**).

An application for and amendment the zoning by-law is being submitted, and proposes to change the zoning to M4 (Extractive Industrial).



FIGURE 1: LOCATION MAP

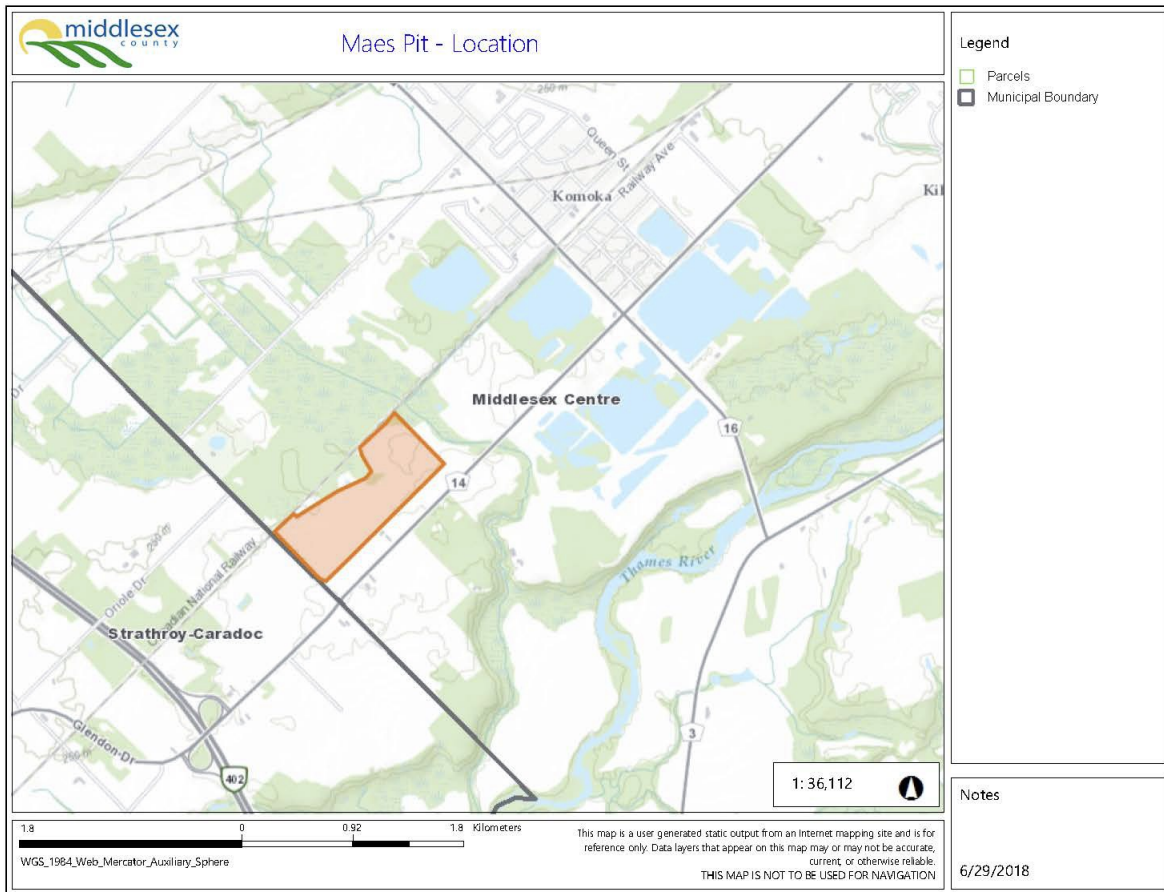


FIGURE 2: SURROUNDING LANDSCAPE

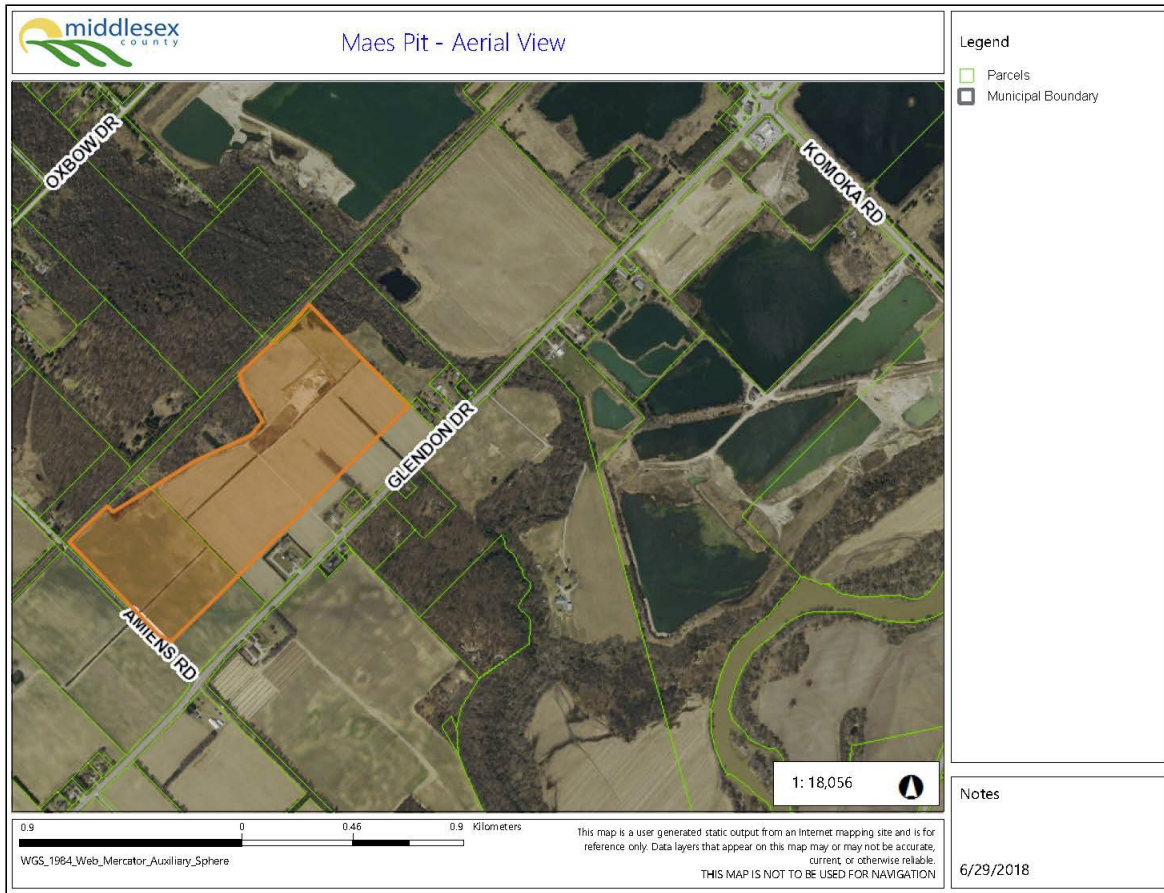
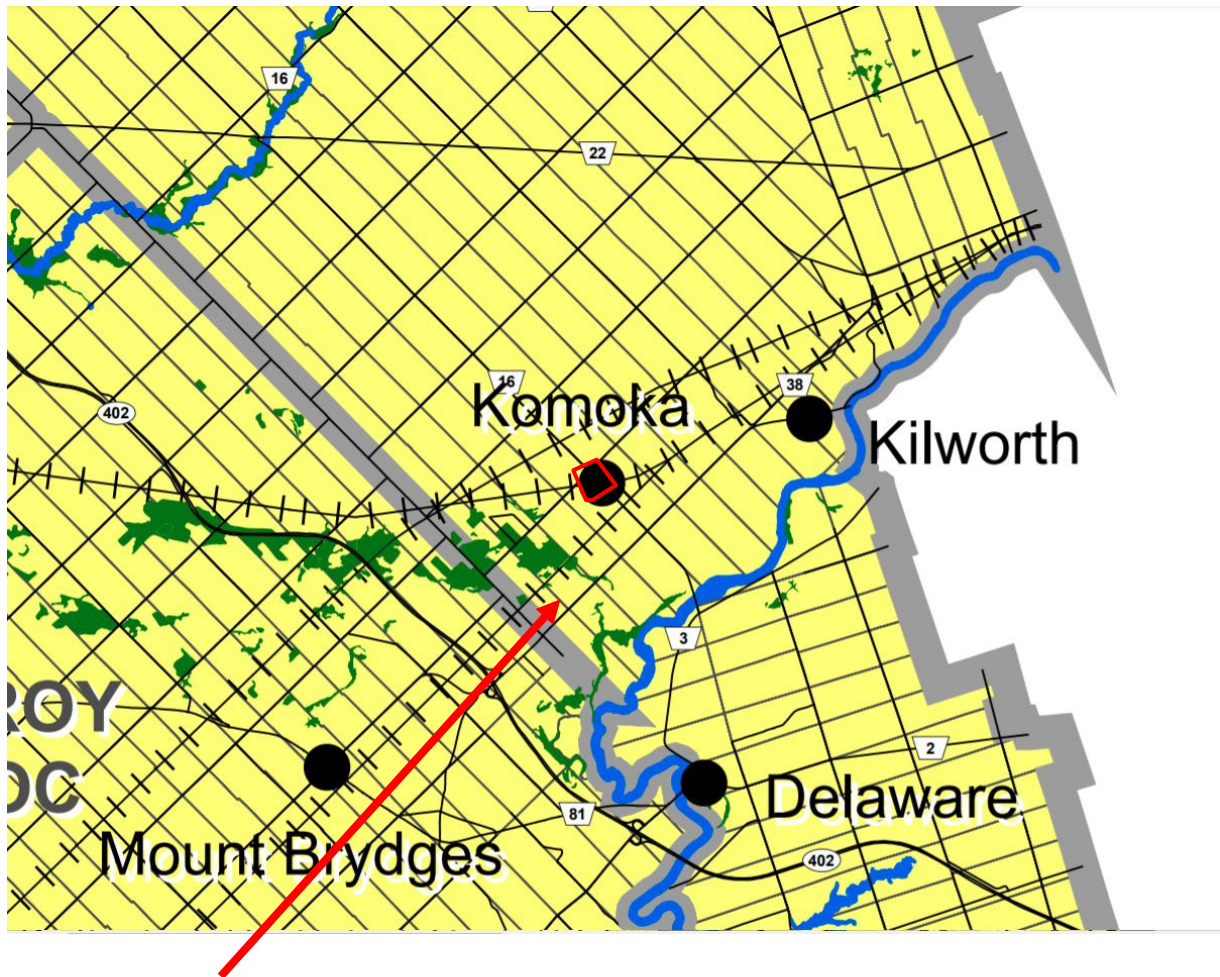


FIGURE 3: COUNTY OF MIDDLESEX OFFICIAL PLAN  
 SCHEDULE A LAND USE PLAN



MAES PIT SITE

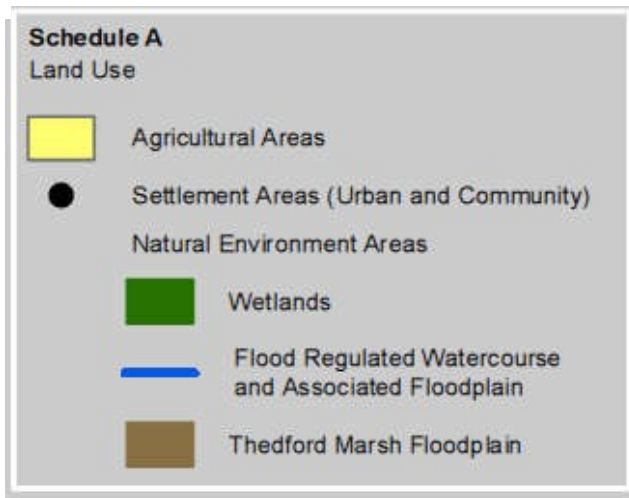
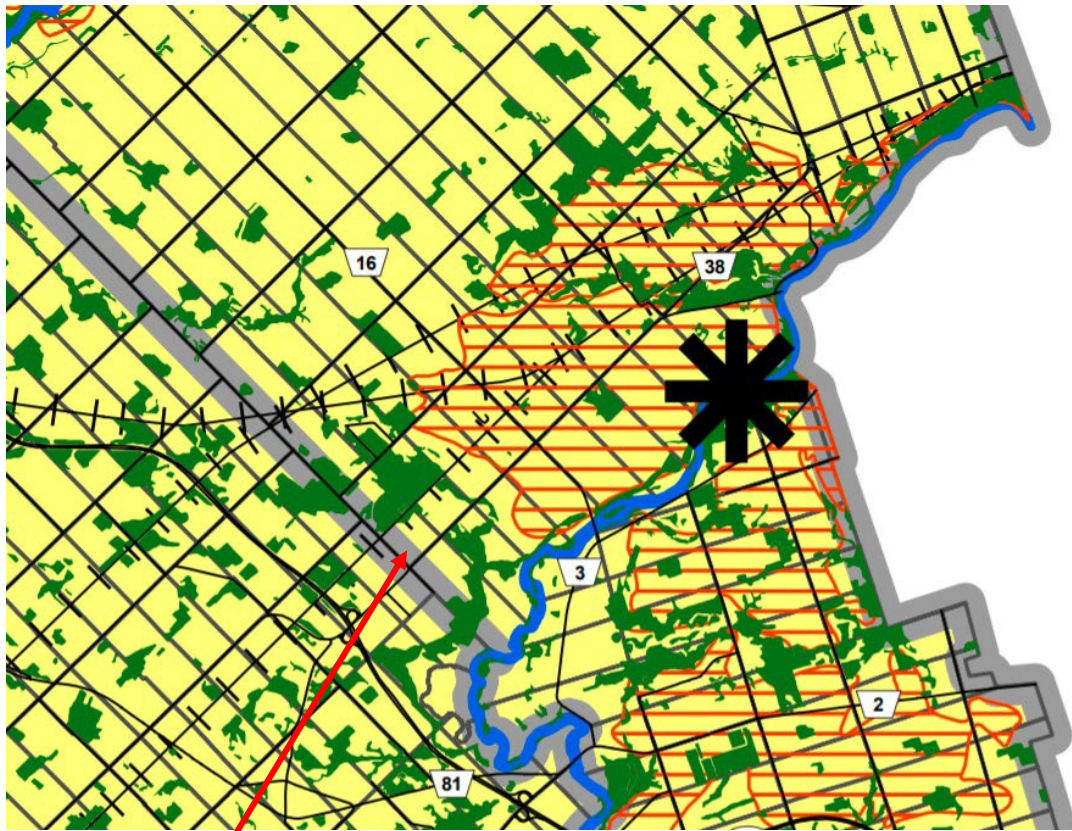


FIGURE 4: COUNTY OF MIDDLESEX OFFICIAL PLAN  
SCHEDULE 'C' NATURAL HERITAGE FEATURES



MAES PIT

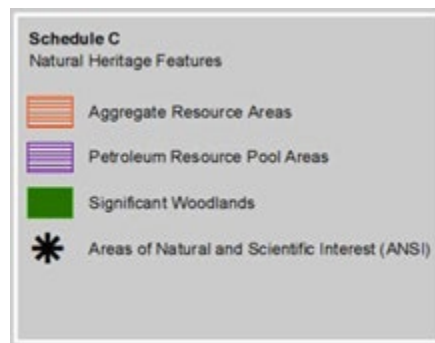


FIGURE 5: MUNICIPALITY OF MIDDLESEX CENTRE OFFICIAL PLAN, LAND USE SCHEDULE A-2: KOMOKA-KILWORTH URBAN SETTLEMENT AREA

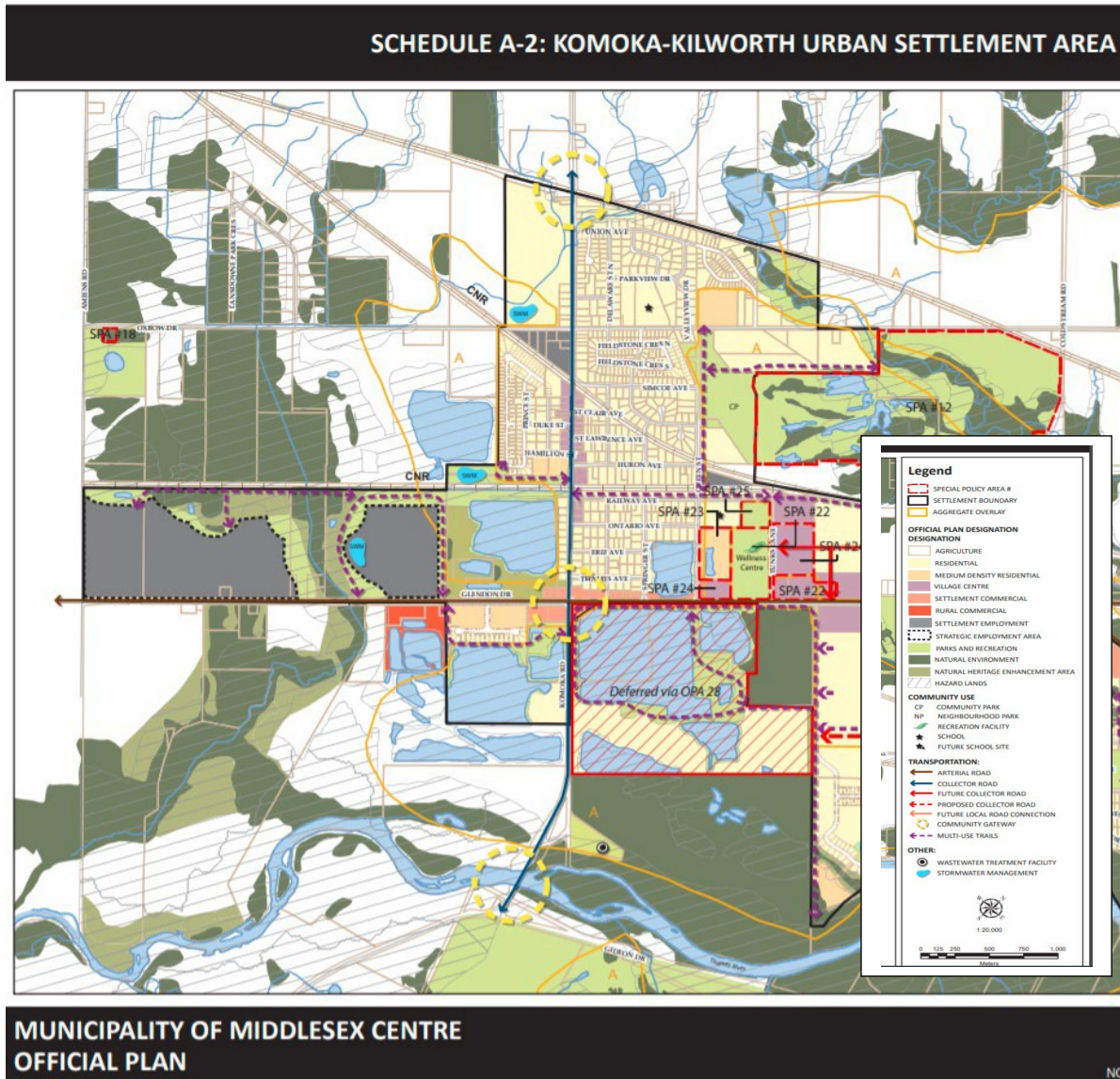


FIGURE 6: TOWNSHIP OF MIDDLESEX CENTRE ZONING BY-LAW

