

2438305 ONT LTD.

DESIGN AND OPERATIONS REPORT AND FILL MANAGEMENT
PLAN

MUNICIPALITY OF LAKESHORE, ON

RWDI #2104267

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1 INTRODUCTION AND PURPOSE

RWDI AIR Inc. (RWDI) is pleased to provide 2438305 ONT Ltd. (2438305 ONT) this Design and Operations Report and Fill Management Plan (D&O/FMP) for the importation of excess soils and liquid soils at a property municipally addressed 2064 Manning Road, Municipality of Lakeshore, ON (Site). Specifically, the imported soils will be utilized for beneficial reuse for site development purposes (regrading/leveling of the Site), and sale to market, as applicable.

The Site is approximately 35-hectare (ha) in areal extent and is located on Manning Road, south of Highway 22, within the Municipality of Lakeshore (Municipality). The site is accessed from Manning Road, using the access driveway directly south of the 2064 Manning Road property.

The Site Location Plan (**Figure 1**) shows the location of the property relative to major arterial roads and highways. **Figure 2** shows the overall Site Plan, including the proposed Fill Management Area, the truck haul route, and the location of the access gates.

This D&O/FMP was prepared in consideration of the Ministry of the Environment, Conservation and Parks (MECP) document entitled "*Management of Excess Soil – A Guide for Best Management Practices*", as revised April 4, 2019 (Excess Soil Guideline) and Ontario Regulation 406/19 – *On-Site and Excess Soil Management* (O. Reg. 406/19). The MECP's Excess Soil Guideline and O. Reg. 406/19 provides guidance on the best management practices in managing excess soil resulting from excavation and construction activities. Additionally, this D&O/FMP outlines the proposed importation protocols for incoming liquid soils to the Site such that liquid soils are managed in an environmentally diligent manner while 2438305 ONT goes through the Ministry of Environment, Conservation and Parks (MECP) approvals process for receiving liquid soils.

The purpose of this D&O/FMP is to establish a management system in consideration of the importation of off-Site source soils, as well as to establish protocols to verify and confirm the suitability to accept off-Site source soils at the Site. Based on the regulatory requirements imposed by O. Reg. 406/19, for the Site to receive and condition liquid soils from various project areas, the Site requires to be classified as a Class 1 Soil Management Site under an MECP Environmental Compliance Approval (ECA). Thus, this D&O/FMP is being prepared to support an Application for an ECA to allow the Site to manage dry and liquid soils.



2 SITE CHARACTERISTICS

2.1 Site Background and Land Use

The Site is owned and operated by 2438305 ONT Ltd., which conducts metal processing, sandblasting, and painting, Blanchard grinding, and metal processing, rolling, and forming within the industrial footprint of the property located directly north of the proposed soil importation site.

The Site property contains three (3) zoning designations, *General Employment Zone Exception 2 M1-2*, *General Employment Zone Exception 2 M1-2(h2)*, and *Urban Reserve Zone Exception 5 (UR-5)*. The portions of the Site designated as M1-2 and M1-2(h2) zoning are bisected by a north/south trending drainage conveyance ditch (Little Baseline Drain West). These lands are currently utilized for agricultural purposes. The portion of the Site designated as UR-5 zoning comprises of the access road to the main soil importation area of the Site and to the other operational business portion of the Site. The portions of the Site designated as M1-2 and M1-2(h2) zoning make up an area of approximately 35 ha.

The permitted uses, regulations, and exemption details for land uses under the M1-2 zoning designation can be found within the attached Municipality's Zoning By-Law (2-2012) (Zoning By-law) (**Appendix A**). The Zoning By-Law stipulates that, among other exemptions, the M1-2 zoning land use designation, which is proposed to be utilized for soil management operations, may be used such that "*permitted uses shall include only non-effluent producing industrial uses...*", and that "*Vehicular access shall be restricted to County Road No. 19*". Per the Zoning By-law, "*non-effluent producing*" is defined as the following:

"... an employment use which either does not discharge wastewater or discharges wastewater from one or more of the following sources only:

a) sanitary sewage from employee washrooms; storm water drainage; and water used for indirect cooling and pressure testing of equipment and for other ancillary purposes."

It is noted that effluent as defined above would not be produced on the Site during the importation and processing of dry and liquid soil, and Site access would be restricted to County Road No. 19 via the access road.

Per Municipality's Official Plan (November 22, 2010) with *Section 6.11.2 – Land Use Policies*, attached in **Appendix B**, land uses that involve the handling of solid or liquid wastes may be considered as appropriate for lands designated Employment Designation based on the submission of an impact assessment satisfactory to the Municipality.

An impact assessment summary letter was submitted to the Municipality, which outlines the suitability of the Site to be utilized for a liquid and dry soil processing facility and how potential environmental risks associated with the operation of Class 1 Soil Management facility will be managed with consideration toward protecting the natural environment and that the Site is appropriately zoned for the intended usage. The impact assessment references key assessment findings, as outlined herein, favouring the suitability of the Site for the intended use in consideration of the appropriate land use zoning designation and environmental protection.



The surrounding land uses are primarily agricultural or industrial and are zoned as Agriculture or Urban Reserve, which provides a significant buffer between the Site and nearest residential areas. A rail line is located directly to the south of the Site, and a drainage conveyance ditch (Manning Road Drain) is located to the west of the property boundary, on the eastern side of Manning Road.

The Site, which is currently receiving and managing liquid soil, was identified by the MECP as not appropriately licensed/approved for the management of liquid soils. The submission of this D&O/FMP forms the basis for the ECA Application toward designating the Site as a Class 1 Soil Management facility such that the MECP recognizes the efforts put forth by 2438305 ONT to appropriately seek approval to manage liquid and dry soils as a Class 1 Soil Management facility compliant with O. Reg 406/19.

2.2 Description of Beneficial Reuse of Imported Materials

The O. Reg. 406/19 On-Site and Excess Soil Management guideline encourages the beneficial reuse of excess soils either on the Source Site, or beneficial reuse of excess soils on another site (Receiving Site). The intent is to discourage the landfilling of soil that could otherwise be beneficially reused, recognizing that soil is an important resource. This should result in lessening the amount of material being landfilled thereby reducing the strain on available landfill capacity within the province, as well as potentially reducing greenhouse gas emissions from unnecessary soil transportation, while maintaining strong protection of human health and the environment.

The owners or developers of sites undergoing development activities that require soil for specific uses, such as the construction of berms or new roads, are encouraged to consider importing excess soil for this use. Reusing excess soil limits the need to import soil from natural or virgin sources and may reduce the transportation distances associated with soil importation. An additional beneficial outcome will be reduction in construction costs by making it easier and safer to reuse excess construction soils.

For the purposes of this D&O/FMP, imported dry soils that satisfy the appropriate environmental standards will be utilized for beneficial reuse related to Site development purposes and/or for sale to market. The liquid soils will also be imported and processed prior to their beneficial reuse related to either Site development purposes or for sale to market. Liquid soils will be mixed with available on-Site dry soil, such that the dried and solidified liquid soil satisfies the *Test Method for the Determination of Liquid Waste* set out in Schedule 9 of *Ontario Regulation 347 - General - Waste Management* (O. Reg. 347). Acceptable slump test results will allow the soil to be finally placed for beneficial reuse on-Site or temporarily stored in accordance with O. Reg. 406/19 ahead of exportation. Adequate soil quality evaluations will be completed to determine the final beneficial reuse for the processed soils.

For the purposes of this document, the following definitions should be considered.

- **Source Site** – Site from which soil materials are to be excavated and considered for importation to 2064 Manning Road, Tecumseh, ON.



- **Receiving Site** – Property owned and operated by 2438305 ONT Ltd. located at 2064 Manning Road, Tecumseh, ON – the definition of “*Site*” is hereby expanded within this D&O/FMP to also include “*Receiving Site*”, which can be interchangeable within the context of this D&O/FMP.
- **Qualified Person** – as defined under O. Reg. 153/04 consisting of an individual licensed by Professional Geologist Ontario (PGO) or a qualified individual licensed by Professional Engineers Ontario (PEO) competent to complete the required assessments outlined within this document.

2.3 Receiving Site Characterization

The Receiving Site is located on glaciomarine quaternary soil deposits which in this area consists of fine-textured massive to well laminated silts and clays with minor sand and gravel. In Essex County, this layer is typically underlain by Tavistock and Catfish Creek till, which are composed of clayey silt till and very compact, stony, sandy silt till, respectively (Morris, 1994). These Pleistocene deposits commonly are 35 metres (m) or more in thickness and typically overlay the bedrock surface which is composed of middle Devonian age limestone, dolostone, and shales of the Hamilton Group. The Site is located within the Essex source water protection area, and there are no identifiable aquifers in the overburden material, likely due to the low permeability and hydraulic conductivity of the overburden clayey soils. There are no active permits to take water within 500 m of the property boundary based on a search of the MECP Water Well Records.

The above-mentioned drainage conveyance ditches are bounded by a 120 m buffer zone on either side which are classified by the Essex Region Conservation Authority (ERCA) as “*Intake Protection Zone 3 – Event Based Areas*” and have a surface water vulnerability score of 4 – 7.9. This event-based area indicates where a contaminant release from an “extreme event” from a specific activity listed as a drinking water threat could present a risk to the regional drinking water system.

For the purposes of accepting excess soil the Site is characterized by the following.

- Overburden thickness is greater than 35 m.
- Non-Potable and Potable Ground Water Conditions – Based on a review of the MECP Water Supply Well Records there are no drinking water supply wells within 250 m of the Site identified for domestic use.
- Environmentally Sensitive Areas
 - Areas of Natural Significance – The Ontario Ministry of Natural Resources and Forestry’s (MNRF) Natural Heritage Information Centre database was accessed. No registered Areas of Natural or Scientific Interest (ANSI) were identified in the vicinity of the Site.
 - There are designated woodland areas located approximately 450 m north and 50 m south, south of the rail right-of-way (ROW), from the Site boundaries.
 - Water Body – There are no permanent water bodies identified within 30 m of the Site, however, one (1) drainage conveyance ditch runs along the eastern side of Manning Road, along the west



most property boundary, and another ditch transects the Site, approximately 630 m east of Manning Road. Both these surface drainage features are highlighted as “*Event Based Areas*” by the ERCA.

2.4 Applicable Site Condition Standards

The Excess Soil Guideline emphasizes the use of Ontario Regulation 153/04 (O. Reg. 153/04), or more specifically, the “*Soil, Ground Water and Sediment Standards, for Use Under Part XV.1 of the Environmental Protection Act*” for volumes of excess soils less than 350 cubic metres (m³) and the “*Generic Excess Soil Quality Standards*” provided under the “*Rules for Soil Management and Excess Soil Quality Standards*” under Ontario Regulation 406/19 for volumes in excess of 350 m³ (MECP Standards), as a guide toward evaluating the environmental quality of soil and groundwater to which the *Receiving Site* should be evaluated, as well as applying these same criteria toward the environmental quality of imported soil to be brought to the *Receiving Site*. Revisions to the O. Reg. 153/04 criteria as outlined in Ontario Regulation 407/19 – *Records of Site Condition – Part XV.1 of the Act* (O. Reg. 407/19) came into effect July 1, 2020. As such, O. Reg. 407/19 was also considered as part of this FMP. In addition, O. Reg. 406/19 outlines the required criteria and provides operational requirements to allow for the importation of excess soils to a Site for the purposes of beneficial reuse as follows.

- Rules for soil reuse including the applicable volume independent soil standards (which came into effect on January 1, 2021).
- Testing, tracking and registration requirements (which came into effect on January 1, 2022).
- Restrictions of the landfilling of soils (which come into effect on January 1, 2025).

Based on previously evaluated geologic conditions of the Site, the following information is presented in support toward the rationale to which the Site may be environmentally evaluated for the purposes of being established as a Class 1 Soil Management facility.

1. The overburden thickness is greater than 2 m.
2. Native soil at the Site is interpreted to be fine-grained based on the above-noted characterization and as defined in Section 42 under O. Reg. 153/04.
3. The Site is a mixed use for *General Employment* and *Urban Reserve* purposes as defined in Section 1 under O. Reg. 153/04, with the component of the Site that is proposed to be used for the receipt of excess soil and liquid soil complying with the *General Employment* land use zoning designation.
4. A municipal potable water supply is available.
5. The site is not located within 30 m of a body of water (as defined in Section 43.1 of O. Reg. 153/04).
6. MECP Water Supply Well Records indicate that groundwater is not used as a drinking water source within 250 m of the Site and that the area is serviced by municipal supplied drinking water. Further, the clayey



soil at the Site would preclude the vertical and lateral migration of any chemicals within the subsurface from Site.

3 SOIL IMPORTATION TO THE RECEIVING SITE

3.1 Physical Attributes of the Imported Soil

Imported soil (dry and liquid) at the Site is expected to be placed for the following uses.

- Site development, including regrading/levelling the Site toward a 2.3 m increase in the eastern property elevation, and the construction of screening/noise attenuation berms along the perimeter of the property boundary, excluding the site access road entrance.

Dry soil, as well as liquid soil that is dried and solidified, that is received at the Site can be either fine or coarse-grained material so long as the materials allow for the desired compaction and other physical soil properties specified for the Site development, as relevant, and if deemed necessary as determined by a qualified engineer licensed to practice in the Province of Ontario.

The environmental stewardship management of liquid soil is relatively similar to dry soil but requires separate approval from the MECP. As such, these soils will be tracked separately to permit the MECP to recognize and acknowledge that 2438305 ONT is diligent in its operational requirements and is adhering to industry standards to manage soils, including liquid soils, in an environmentally sound manner at the Site such as preventing off-site liquid discharges from liquid soil solidification processes.

3.2 Soil Characterization Report

Both dry and liquid soil will be imported to the Site, which require separate tracking and placement procedures. As such, the separate soil loads will be authorized for entry and placement in the facility following their respective procedures, outlined below.

For dry soil loads, the Source Site will be required to provide 2438305 ONT with a copy of a "*Soil Characterization Report*" as required by clause 12 (4) (c) of O. Reg. 406/19. This report, which is to be completed by the Source Site's Qualified Person (QP) will include the following minimum requirements.

- Identification and dimensions of each area of potential environmental concern (APEC) identified within the project area at the Source Site.
- Identification and dimensions of each part of the Source Site project Area that was subject to sampling.
- Identification and dimensions of each APEC within the project area where soil is to be excavated for importation to the Receiving Site including the related potentially contaminating activity identified in the Source Site's "*Assessment of Past Use Report*".



- Description of investigation methods used, including any necessary modification to the methodologies required in Table 1 of Schedule E of O. Reg. 153/04.
- Description of the stratigraphy from ground surface to the depth of the deepest planned excavation within the Source Site project area.
- Approximate depth to water table within each excavation from which soil is to be imported to the Receiving Site.
- Description of each area where samples were taken including the following.
 - Minimum number of samples required per O. Reg. 406/19 and total number of samples collected.
 - Locations and depths of each sample and the rationale for the selection of sampling locations.
 - The parameter groups analyzed including a rationale for the choice of parameter groups where additional parameter groups were added.
 - Date of sample collection.
 - Date of sample analysis.
 - Contaminants with measurable concentrations.
 - Distribution of each contaminant present at the Source Site.
 - Discussion of field screening results as well as a discussion and analysis of laboratory analytical results provided by an accredited Canadian Analytical Laboratory Association (CALA) environmental laboratory to provide the required analysis.
 - If applicable, a rationale as to why leachate analysis (such as the Synthetic Precipitation Leachate Procedure (SPLP) and/or the toxicity leachate characteristic procedure (TCLP)) may not have been completed on at least 10% of the number of required soil samples.
- Tables that provide soil quality data contained in the laboratory-provided certificates of analysis taken from within the project area at the Source Site. Tables are to provide an identification of the sample location, sample depths, date of sample collection, date of analysis and the laboratory identification number.
- Laboratory certificates of analysis for all samples analyzed by the CALA-accredited environmental laboratory.
- Quality assurance and quality control (QA/QC) results per Table 1 of Schedule E of O. Reg. 153/04.
- Original signatures of the QP who conducted and/or supervised the preparation and implementation of the *Sampling and Analysis Plan* and preparation of the *Soil Characterization Report*, including a statement by the QP confirming the findings and conclusions of the soil characterization report.

For liquid soils, the incoming loads are not expected to be accompanied by a “Soil Characterization Report” for the source material. As such, the vacuum-truck driver and/or company representative will be expected to complete a



comprehensive checklist that describes as best as possible any pertinent information about the Source Site and expected quality of the proposed imported soil, as well as the weight of the soil importation as measured by the depositor truck's onboard scale. Upon importation of either a liquid or dry soil load, drivers will be required to either deposit the relevant soil-specific documentation in an on-Site drop box or deliver an electronic copy directly to 2438305 ONT Ltd.

In addition, the liquid and dry soil importations to the Site will undergo several visual inspections. For liquid soils, soil importations will be visually inspected by the respective vacuum-truck drivers at the time of each soil importation. Visual inspections will be further enforced at the facility entrance by using closed-circuit television (CCTV) surveillance prior to entering the soil processing area. Once deposited at the Site, the liquid soils will continually be inspected by a 2438305 ONT trained operator, even during soil solidification. Both the liquid and dry soil loads will be visually inspected by a trained Site representative such that the loads are received and placed correctly at an appropriate frequency of once per week. Prior to final placement and/or temporarily stored for off-Site beneficial reuses, the solidified soils must satisfy the slump test to demonstrate that it is adequately solidified and can meet specified Receiving Site requirements for reuse.

Liquid soil will be tracked separately from dry soil and will be deposited within the initial receiving area or staging area. The liquid soils will be mixed in place using dry soil, until the liquid soil becomes 'solid' and attains an optimum moisture level for placement purposes, as described in **Section 4.1**. Supernatant liquid is not anticipated to require special handling, however, in the case where excess supernatant liquid of acceptable quality requires management, it is expected that it will be utilized for dust management on Site roadways in areas where it cannot readily and/or directly enter the surface water drainage network, and/or allowed to evaporate. Depending on chemical analytical testing results and specific operational requirements, excess supernatant liquid may also be trucked off-Site for disposal at an appropriately MECP-licensed liquid waste treatment facility.

3.3 Chemical Attributes of the Imported Soil

Dry imported soil should be evaluated by the Source Site QP that the soil is suitable for delivery to the Receiving Site in consideration of the specific potential parameters of concerns at the Source Site. In the absence of identified specific parameters of concern at the Source Site, dry soil imported to the Receiving Site should be analyzed for common industry screening constituents, which are found in O. Reg. 406/19, which are: Metals, inorganics (including pH, sodium adsorption ratio (SAR) and electrical conductivity (EC)), and petroleum hydrocarbon compounds (PHCs, including fractions F1 through F4), as well as including benzene, toluene, ethylbenzene, and xylenes (BTEX) are to be analyzed for each sample. In addition, the analysis will include any additional contaminants of potential concern identified within the Source Site's *Assessment of Past Uses Report* and *Soil Characterization Report*.

Sampling frequency of materials to be imported from the Source Site are to meet the requirements outlined in O. Reg. 406/19 for either In-Situ or Stockpile sampling as required by the regulation and summarized in the following.

- In-Situ Sampling (soil to be excavated from Source Site)



- Minimum of three (3) soil samples if the soil to be excavated volume is less than 600 cubic metres (m³).
- At least one (1) additional soil sample for each 200 m³ above the initial 600 m³ for the first 10,000 m³ of soil to be excavated.
- At least one (1) additional soil sample for each 450 m³ after the first 10,000 m³ of soil to be excavated.
- At least one (1) additional soil sample for each additional 2,000 m³ after the first 40,000 m³ of soil to be excavated.
- Stockpile Sampling (materials previously excavated at the Source Site).
 - Sufficient number of samples to be collected at different depths within a stockpile to characterize the stockpiles' lateral and vertical profile for the contaminants of concern within the stockpile.
 - Samples are not to be collected from the surface of the stockpile.
 - Sampling frequency outlined in Table 2 of Schedule E of O. Reg. 153/04 shall be followed.
- Leachate analyses (e.g., SPLP or TCLP) of the required parameters should be completed for at least 10% of the soil samples as described in O. Reg. 406/19 unless the Source Site QP can provide a rationale regarding why leachate analysis is not necessary to meet the general and specific objectives of the excess soil characterization. For stockpiled soils, leachate analysis will be completed for a minimum of three (3) samples plus 10% of the required number of soil samples detailed in Table 2 of Schedule E to O. Reg. 153/04 (*Minimum Stockpile Sampling Frequency*).

Based on the applicable site condition standards outlined in **Section 2.4**, the soil to be imported for beneficial reuse (site development purposes) must satisfy the following criteria.

Criteria

Soil from the Source Site to meet the [Table 3.1](#) criteria for Industrial/Commercial/Community Property Use (ICC) of the MECP Standards for the above-mentioned list of parameters. Leachate analysis for any required parameters specified within the MECP Standards will be completed. Soil pH is to meet the surface soil criteria specified under Section 41(1)(b)(i) of Ontario Regulation 153/04 (as amended).

Imported soils awaiting placement at the Receiving Site will not be stored within 10 m of the property line (boundary). The imported soils will not be placed at the Receiving Site within 30 m of a waterbody.

Liquid soils being imported for liquid-waste disposal will not be subject to prior chemical screening, however, the vacuum-truck driver and/or vacuum truck company representative will be expected to complete a comprehensive checklist that describes as best as possible any pertinent information about the Source Site and expected quality of the proposed imported soil. In addition, prior to moving the solidified liquid soils from the initial receiving area, the soil will be analyzed for its quality, following the above noted dry soils screening protocol, with quality testing frequency determined by its volume and potential destination site, in accordance with O. Reg. 406.



3.4 Protocol for Incoming Source Site Soil

Prior to importation of dry soils from the Source Site to the Receiving Site, the Source Site representative will provide the following documentation for review by the Receiving Site's QP to verify that the materials proposed for importation to the Site are suitable and identify any concerns with the materials proposed to be imported to the Receiving Site.

- A source Site Soil Assessment Report with a copy of a Source Site *QP Declaration Form* as provided in **Appendix C**.
- Per O. Reg. 406/19, as of January 1, 2021, a "*Source Site Soil Characterization Report*" and "*Excess Soil Destination Report*", prepared and signed by a QP will be required for the movement of excess soils.

This documentation should show, at a minimum, that the incoming soil meets the chemical and physical attributes as an acceptable soil under the Receiving Site's FMP.

The importation of liquid soils to the Receiving Site will not include the above-mentioned documentation, however, the vacuum-truck driver and/or company representative will complete a comprehensive checklist that describes as best as possible any pertinent information about the Source Site and expected quality of the proposed imported soil, as well as the weight of the soil importation as measured by the depositor truck's onboard scale.

Upon importation of either a liquid or dry soil load, drivers will be required to either deposit the relevant excess soil-specific documentation in an on-Site drop box or deliver an electronic copy directly to 2438305 ONT Ltd. Vacuum-truck drivers will also be responsible for visually inspecting each liquid soil load upon importation to the Site. Visual inspections will be further enforced at the facility entrance by using closed-circuit television (CCTV) surveillance prior to entering the soil processing area. Once deposited at the Site, the liquid soils will continually be inspected by a 2438305 ONT trained operator, even during soil solidification.

Visual and olfactory inspections will be undertaken by a trained facility representative at a frequency of once per week to confirm that incoming soil is screened for unacceptable odours (i.e. hydrocarbon, sewage, etc.), visible staining (i.e. oil, rust, sheen, etc.), and excessive debris (i.e. metal, plastic, glass, tires, wood, etc.), as well as physical properties such as the slump test requirements (per Schedule 9 of Ontario Regulation 347 – *Test Method for the Determination of "Liquid Waste" (Slump Test)*) to be acceptable as a solid material. An example *Imported Soil Inspection Form* is attached in **Appendix D** for reference.

2438305 ONT will rely on the documentation provided by the Source Site representative in determining the proper management action for incoming soil. Suspicious odours or visually identifiable concerns noted within the incoming soil during the Receiving Site inspections may prompt a supplemental soil verification sampling event at the Receiving Site to verify the quality of the soil that is being imported from select Source Sites. The tested imported soil chemical parameters will be identified per **Section 3.2** of this FMP on a case-by-case basis by a trained Site representative as relevant constituents of potential concern deemed as adequate screening chemicals to evaluate the quality of the imported soil per individual Source Site (i.e., hydrocarbons for fuel



stations). The frequency of the Receiving Site soil verification sampling will be subject to the identification of a concern based on the initial screening inspection of incoming soils.

Where large soil volumes are accepted at the Receiving Site, the extent of the soil assessment parameter list may be adjusted (i.e., decreased as VOCs are reliably not detected above laboratory reporting limits) in consideration of historical/available chemical results.

3.5 Imported Soil Placement

The importation and environmental stewardship management of dry and liquid soils are relatively similar but require different and separate approval by the MECP. 2438305 ONT will manage dry soil as a soil Receiving Site under Ontario's new Excess Soil Regulation, *Ontario Regulation 406/19 – On-Site and Excess Soil Management* (O. Reg. 406). For liquid soils, 2438305 ONT will document and manage importations at the Site such that any excess supernatant is contained and does not enter the natural environment by placing the imported liquid soils at the initial receiving area, described in **Section 4.1**. These proposed activities will be in line with the Site seeking classification as a Class 1 Soil Management Site to manage liquid soils. This will permit the MECP to recognize that 2438305 ONT is practicing due diligence and instilling appropriate industry standards to manage soil, as well as acknowledge that 2438305 ONT can manage liquid soil in an environmentally sound manner.

Acceptable imported dry soil will be placed for Site development purposes including regrading/leveling and berm placement.

The soil to be imported and managed at the Site must satisfy the Table 3.1 criteria of the MECP Standards for soil with an ICC land use designation.

Liquid soil imported to the Site will be placed within the above-mentioned initial receiving area following the visual inspection and approval for entry to the Site.

4 SITE OPERATIONS

4.1 Managing Imported Soil at the Receiving Site

As previously discussed, the imported soil will be placed depending on the state of the soil (whether it is dry or liquid). Excess dry soil will be accepted and managed to the appropriate standards for beneficial reuse for Site development purposes. Liquid soils will be received for the purpose of liquid-waste disposal and will therefore be managed differently from the dry soil importations. Acceptable processed soils will either be finally placed for beneficial reuse on-Site or temporarily stored on-Site in accordance with O. Reg. 406/19 ahead of exportation for off-Site beneficial reuse. Refer to **Figure 2** for the location of the Fill Management Area within the Site.

Imported dry soil, whether it be fine or coarse-grained material, may be temporarily stored on exposed native fine textured soil at the Receiving Site. The dry soil to be imported and managed at the Receiving Site must satisfy



the Table 3.1 criteria of the MECP Standards for soil with an ICC property use as outlined in **Section 3.2** of this D&O/FMP.

Imported excess dry soil will be managed at the Site in such a way to minimize impact to surface water runoff quality and volume, as well as protection to groundwater resources by only accepting Table 3.1 quality soil for placement at the Receiving Site and enhancing protection of groundwater and surface water resources through performing incoming soil load inspections as detailed in **Section 3.4** of this D&O/FMP, such that unacceptable loads are rejected.

Liquid soil which is deemed of appropriate quality for importation to the Receiving Site will be safely placed within the initial receiving area. The initial receiving area will consist of an open excavation, which shall be actively managed such that there is sufficient freeboard to prevent any overflow of liquid. This freeboard shall be maintained such that both overflow and overfilling are prevented during additional load placements and precipitation events. Thus, once liquid soils accepted for importation to the Receiving Site and are unloaded within the initial receiving area, the liquid soil will be prevented from entering the Site's surface water drainage network.

Once received, liquid soil loads will be adequately mixed with dry soil of acceptable quality to decrease the liquid soil's overall moisture content and to exfiltrate the supernatant from the liquid soil. By mechanically mixing an adequate amount of dry soil with the liquid soils, the physical properties of the liquid soils will shift such that they meet the slump test criteria, and the soil mixture may thus be considered solid soil. This mixing process will absorb the supernatant and preclude ponding and in turn runoff from occurring on-Site. Soil solidification will continue until the mixed soil reaches an optimum moisture level for placement and compaction purposes. Natural flocculants like sawdust and/or straw may be incorporated to help solidify the remaining liquid soil while the soils are mechanically agitated to release trapped water. Once the soil is adequately solidified and satisfies the slump test criteria, the soil will be analyzed for its quality with quality testing frequency determined by its volume and its potential destination site, in accordance with O. Reg. 406.

Though unlikely, any excess supernatant water that may be present will not be permitted to flow into the natural environment (i.e., surface water features). As previously discussed, the freeboard of the initial receiving area's open excavation shall be maintained such that neither liquid overflow nor overfilling occur. As such, any supernatant liquid that may form and approach the minimum freeboard limit shall be removed from the excavation appropriately. Supernatant liquid within the initial receiving area's open excavation that is suspected to have negative impacts such as oil sheening, excessive frothing, or offensive odours will undergo chemical analytical testing to determine its quality prior to use onsite for dust control or as a soil hydrating agent for placement. Alternatively, if suspected to not have the potential for on-Site usage, the supernatant liquid will be managed as a liquid waste in consideration of O. Reg. 347 and be manifested for transport and disposal to an appropriately licensed off-Site liquid treatment facility.

Supernatant liquid of acceptable quality may be used to hydrate drier soils for more effective soil placement needs from a geotechnical perspective, if necessary. This would be accomplished by placing the drier soils in bowl-shaped piles within the Site, and subsequently introducing the supernatant liquid. The bowl formation will maximize moisturization/hydrating of the dry soil, while preventing surface runoff of supernatant liquid. Soil that



is hydrated with the supernatant liquid will be analyzed for its quality with quality testing frequency determined by its volume and its potential destination site, in accordance with O. Reg. 406.

Both the solidified and hydrated soil that satisfies the Table 3.1 Standards will be utilized for on-Site improvements. If either the solidified and/or hydrated soils' quality does not meet specified Receiving Site requirements, the soil will be deemed unacceptable for reuse and would need to either; 1) be processed/mixed with other soil verified to be of better quality such that it be retested, compared, and satisfy the Table 3.1 Standards; or 2) remove the soil off-Site to a suitable location (i.e., different Receiving Site or another appropriately licensed facility to accept the soil). To evaluate off-Site disposal options, laboratory analysis as outlined previously may be required.

The supernatant liquids may also be used for dust control in areas where it cannot readily and/or directly enter the surface water drainage network. Where necessary, the supernatant may also be removed for off-Site disposal at an MECP-licensed liquid treatment facility.

4.2 Groundwater Monitoring Network

During on-Site operations, liquid may be removed from the liquid soil imported to the Receiving Site through three (3) transport pathways: the generation and extraction of supernatant liquid, evaporation, and infiltration into the subsurface and potentially into the groundwater regime. The latter warrants the establishment of a groundwater monitoring network and accompanying groundwater quality monitoring program to evaluate the Site's activities' potential impact to the local groundwater.

Shallow groundwater in the vicinity of the Site is presumed to follow surface topography and nearby watercourse flow and generally move in a northeasterly to easterly direction toward Pike Creek Drain and Lake St. Clair. It is anticipated that the fine-grained overburden soils (silts and clays) present in the area will inhibit groundwater movement in the subsurface and therefore, should help preclude the movement of potential contaminants off-Site.

There is currently no established groundwater monitoring program (i.e., groundwater monitoring wells) for the Site. Groundwater monitoring wells will be sequentially installed along the perimeter of the Fill Management Area and added to the groundwater monitoring program as operations proceed across the Site in an easterly direction. The proposed groundwater monitoring locations, including the background monitoring location located in the southwest corner of the Site's footprint, are shown in **Figure 2**. The background monitoring location (i.e., MW1) should be located hydraulically upgradient of the Site's operations, while the other monitoring locations should be located hydraulically cross-gradient (MW2) or downgradient (MW3 through MW12) to the Site. The depths of groundwater monitoring wells in the monitoring network may be informed by observations during drilling (e.g., saturated soil conditions, water level recover after drilling, etc).



The proposed groundwater monitoring program for the Site is summarized below and reflects the relevant assessment parameters per the Excess Soil Rules per O. Reg. 406.

Task	Monitoring Locations	Frequency	Parameters
Groundwater Level Monitoring	MW1, MW2, MW3, MW4, MW5, MW6, MW7, MW8, MW9, MW10, MW11, MW12	Semi-Annual (Spring and Fall)	Groundwater Level
Groundwater Sample Collection	MW1, MW2, MW3, MW4, MW5, MW6, MW7, MW8, MW9, MW10, MW11, MW12	Semi-Annual (Spring and Fall)	Field Parameters: pH, EC, Temperature Laboratory Parameters: Metals, pH, EC, PHCs F1 to F4, and BTEX

Note: Laboratory parameters as outlined in O. Reg. 406/19.

The findings from the groundwater level portion of the monitoring program should be compiled and evaluated to assess long-term groundwater elevation trends. The analytical results for the groundwater sample collection portion of the monitoring program should be compiled and evaluated to assess long-term trends and to assess current and potential groundwater impacts that may result from Site’s activities. The groundwater analytical results should also be compared to their relevant Ontario Drinking Water Standard (ODWS). The groundwater analytical results may also be compared to the analytical results of the soils accepted for importation and the supernatant liquid tested on-Site to assist in identifying the potential for impacts on groundwater quality.

The groundwater quality results should also be evaluated based on the Ministry of the Environment and Energy (MOEE) Guideline B-7 Reasonable Use Concept (Guideline B-7), such that the quality of the groundwater exiting the Site’s footprint does not exceed any maximum allowable concentrations for tested parameters. The maximum allowable concentration for a tested parameter at any point on any adjacent property is determined through Guideline B-7. The Guideline B-7 criteria are calculated based on the background groundwater concentrations. For evaluating groundwater quality based on Guideline B-7, proposed groundwater monitoring well MW1 should be considered as the background monitoring location, and proposed monitoring wells MW3 through MW12 may be considered as the groundwater compliance points for the Site. Monitoring location MW2 is presumed to be cross-gradient of the Site, though if initial groundwater level data reveals this location to be downgradient, then it may be considered a compliance point as well. Analysis of initial groundwater level data will help confirm which monitoring wells are to be considered compliance points.

The results and findings of the groundwater monitoring, including the groundwater levels and sample analytical results, as well as the analysis and interpretation of the data, should be presented in an Annual Report.

After three (3) years of monitoring, the groundwater monitoring program should be reevaluated, and if there has been no indication of unacceptable impacts to groundwater, the monitoring program should be revised. The criteria used to determine if there are no apparent unacceptable impacts to groundwater are outlined below.

- For the parameters of concern, the Guideline B-7 criteria will be assessed for the groundwater quality at the groundwater compliance points.



- The Guideline B-7 criteria are based on the ODWS. Where the background groundwater quality at MW1 satisfies the ODWS for a parameter of concern, the ODWS will be used for calculating the respective B-7 criterion. Where the background groundwater quality at MW1 is greater than the ODWS for a parameter of concern, the maximum historical background groundwater concentration at MW1 will be used in place of the respective ODWS for calculating the respective Guideline B-7 criterion.
- If there are no exceedances of the calculated Guideline B-7 criteria for the parameters of concern after three (3) years of monitoring that are attributed to the Site's activities, it will be determined that there has not been an unacceptable impact to groundwater and the groundwater monitoring program should be revised as outlined below.

Task	Monitoring Locations	Frequency	Parameters
Groundwater Level Monitoring	MW1, MW2, MW3, MW4, MW5, MW6, MW7, MW8, MW9, MW10, MW11, MW12	Annual (Spring)	Groundwater Level
Groundwater Sample Collection	MW1, MW2, MW3, MW4, MW5, MW6, MW7, MW8, MW9, MW10, MW11, MW12	Annual (Spring)	Field Parameters: pH, EC, Temperature Laboratory Parameters: Metals, pH, EC, PHCs F1 to F4, and BTEX

Note: Laboratory parameters as outlined in O. Reg. 406/19.

If revised, the findings of the groundwater monitoring program should continue to be presented in an Annual Report.

4.3 Hours of Operation

Except in emergency circumstances, the Site is expected to operate within normal business hours as outlined below.

- Monday to Friday – 7:00 am - 7:00 pm
- Saturday – 7:00 am - 12:00 pm

The nature of the Site is such that it will accept liquid soil loads from vacuum-trucks. These liquid soil loads are required to be emptied immediately upon arrival at the Site. Given the unexpected nature and timing of liquid soil removal, the facility will also operate 24-hours/day and 7 days/week, but only to accept emergency liquid soil loads. Thus, emergency hours of operation are limited and reserved solely for emergency use.

4.4 Dust and Noise Control

Best Management Practices (BMP) for dust and noise control may be required to be completed for the Receiving Site in consideration of trucks entering and leaving the site, as well as ancillary equipment used to manage imported soil placement. A BMP may be prepared to address the potential for dust and noise nuisance.



As discussed previously, supernatant liquids of acceptable quality may also be used for dust control in areas where it cannot readily and/or directly enter the surface water drainage network.

4.5 Surface Water Run-Off Control

Surface water runoff will be managed during the placement of soil such that the Site development activities will not adversely affect the current surface water management at the Site. As previously discussed, liquid soil accepted for importation to the Receiving Site will be safely placed within the initial receiving area. The initial receiving area will be an open excavation with a maintained freeboard such that there is no potential for any overflow of liquid. This freeboard shall be maintained such that both overflow and overfilling are prevented during additional load placements and precipitation events. Thus, once liquid soils accepted for importation to the Receiving Site and are unloaded within the initial receiving area, the liquid soil will be prevented from entering the Site's surface water drainage network. It is noted that dewatering bags were considered as a measure for liquid run-off control in the initial receiving area, though this was determined to be an inefficient control proportional to the amount of space required or to address any chemical in a dissolved state within the resultant water exiting the dewatering bags.

As discussed previously, supernatant liquid within the initial receiving area's open excavation that is suspected to have negative impacts such as oil sheening, excessive frothing, or offensive odours will undergo chemical analytical testing to determine its quality prior to use onsite for dust control or as a soil hydrating agent for placement. Alternatively, if suspected to not have the potential for on-Site usage, the supernatant liquid will be managed as a liquid waste in consideration of O. Reg. 347 and be manifested for transport and disposal to an appropriately licensed off-Site liquid treatment facility. Thus, supernatant liquids utilized on-Site for beneficial purposes, such as dust control and/or hydrating drier soils, will be of acceptable quality and will be used where it could potentially runoff into the on-Site watercourses and therefore, would not adversely impact the Site's surface water drainage network.

As a measure of sediment control, silt fencing shall be considered for installation along the east and west perimeters of the drainage conveyance ditch that transects the Site, as well as along the western boundary of the property, east of the drainage conveyance ditch that runs along Manning Road. It is noted, however, that the Site is not anticipated to generate significant potential for runoff due to the relatively small volumes of soil being proposed for importation to the Receiving Site.

To appropriately assess the effectiveness of the Site's surface water run-off controls, inspections of the Site's drainage conveyance ditches shall be undertaken monthly, as well as during periods of heavy rainfall and snowmelt. Should the Site's surface water run-off control measures prove insufficient during an inspection, then additional sediment control measures in consideration of those available within the Ontario Provincial Standards (OPSS) may be considered, such as, but not necessarily limited to, straw bale check dams, rock check dams, etc.



4.6 Site Security

Site access is controlled by a lockable manned gate, which is located where the access driveway from Manning Road enters the main Site footprint (see **Figure 2**). To prevent unauthorized entry to the Site, soil loads will be tracked by the facility at the gate. The gate's condition will be inspected routinely and repaired, as necessary.

4.7 Record Keeping

Documentation as part of the FMP component of the facility operation will include the following items.

1. Date of arrival of imported soil to the Receiving Site.
2. Name and location of the Source Site.
3. Weight of soil received per load or per Source Site project, as reported by the depositor truck's onboard scales.
4. Map of the approximate location of imported soil placement from each individual Source Site project.
5. For dry soils, documentation from the Source Site, *Soil Characterization Report* and *Soil Destination Report* which is to include soil analytical results (chemical and physical) with a review by 2438305 ONT deeming the soil to satisfy the Table 3.1 soil criteria, as outlined in **Section 3.2** of this FMP.
6. For liquid soils, the comprehensive checklist that describes as best as possible any pertinent information about the Source Site and expected quality of the proposed imported soil. Once suitable, stockpiled solidified soils of acceptable quality can be utilized for permeant management on-Site, its placement management practices will be the same as outlined for dry soils.
7. Acknowledgment from the Receiving Site documenting that the incoming *Source Site* soil is acceptable for receipt at the Receiving Site and that the type, quality, and quantity received was appropriate. The Receiving Site will notify the Source Site representative whether the imported soil is acceptable for receipt, or whether the soil is rejected as imported fill and will be considered as contaminated soil based on verification chemical analytical testing results, if completed.
8. Documentation for rejected loads. If imported soil is rejected based on visual, olfactory, and/or verification chemical testing, the imported soil will be managed as a waste and disposed of accordingly.

4.8 Signage

The public can contact 2438305 ONT regarding the Site using contact information from signage posted at the main entrance of the Site. The signage provides applicable phone numbers to designated 2438305 ONT contact(s) in case of emergencies or public complaints.



4.9 Rejecting Imported Soil

A load of imported soil may be rejected based on the following criteria.

- 1) Soils containing unnatural/man-made unacceptable debris such as plastic, asphalt, pressure-treated wood, metals, etc. (> 10% by volume of Source Site project). Loads where these materials are present cannot be managed appropriately and as such cannot be placed for Site development purposes.
- 2) Soils containing inert debris present in the soil loads such as concrete, brick, trees, etc. (> 20% by volume of Source Site project). Loads where these materials are present cannot be managed appropriately and as such cannot be placed for Site development purposes.
- 3) The visual and olfactory inspections prompted the collection of an additional soil sample(s) for analytical testing, which indicates that the soil chemical quality does not satisfy the soil criteria outlined herein. The imported soil should then be treated as a solid, non-hazardous waste, in consideration of Ontario Regulation 347/90 and Ontario Regulation 558/00. Non-hazardous contaminated soil would require to be transported off-Site to a nearby facility that is licensed to receive contaminated soil. Measures taken to dispose of soils rejected for importation to the Receiving Site will be carried out at the expense of the Source Site. Documentation of the reasons for the rejection on any Excess Soils will be retained at the Receiving Site with copies provided to the Source Site.

4.10 Contingency Plan

If the presence of unacceptable imported soil conditions is suspected after placement is complete, 2438305 ONT would verify that the soil is of acceptable quality (i.e., re-analysis of the soil). If unacceptable soil quality is determined, the soil would be removed and exported to a facility that is licensed to manage this quality soil (non-hazardous or hazardous, as relevant).

5 CONCLUSION

Overall, by following the stipulations of this FMP, it is not anticipated that contingency measures will be required at the 2438305 ONT Site as it relates to the importation of soil that meets the imported soil criteria for Source Sites set out in this D&O/FMP.

QA/QC measures are to be in place during soil importation activities such that the placement of soil can be completed without negatively impacting the environment.



6 CLOSURE

We trust that this Design & Operations, as well as Fill Management Plan, provides sufficient information for your requirements. Should there be any questions or comments, please contact us.

Sincerely,

RWDI

A handwritten signature in blue ink, appearing to read 'Anthony Vanderheyden'.

Anthony Vanderheyden, B.A.Sc., EIT
Scientist | Geosciences

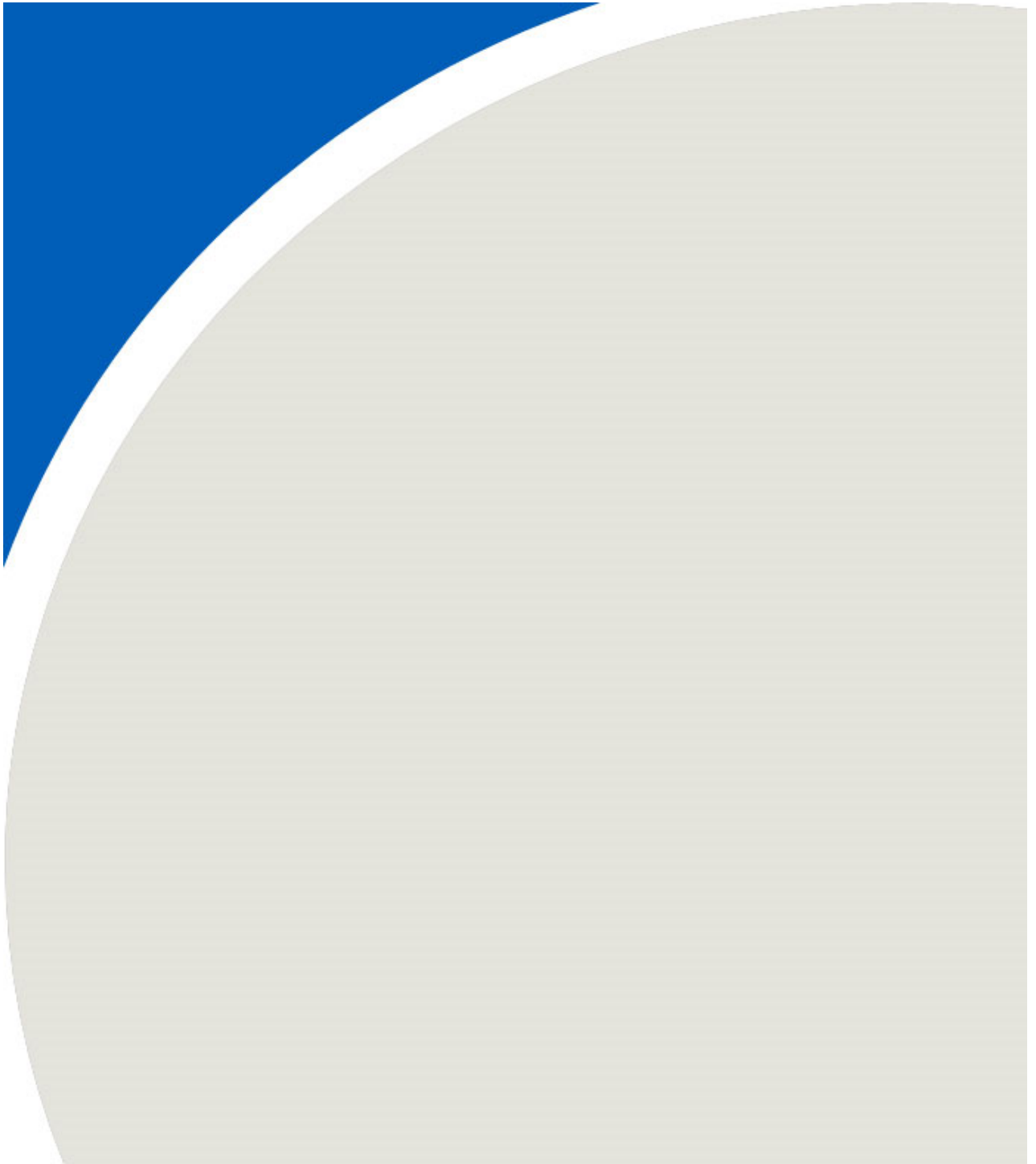
A handwritten signature in blue ink, appearing to read 'Brent J. Langille'.

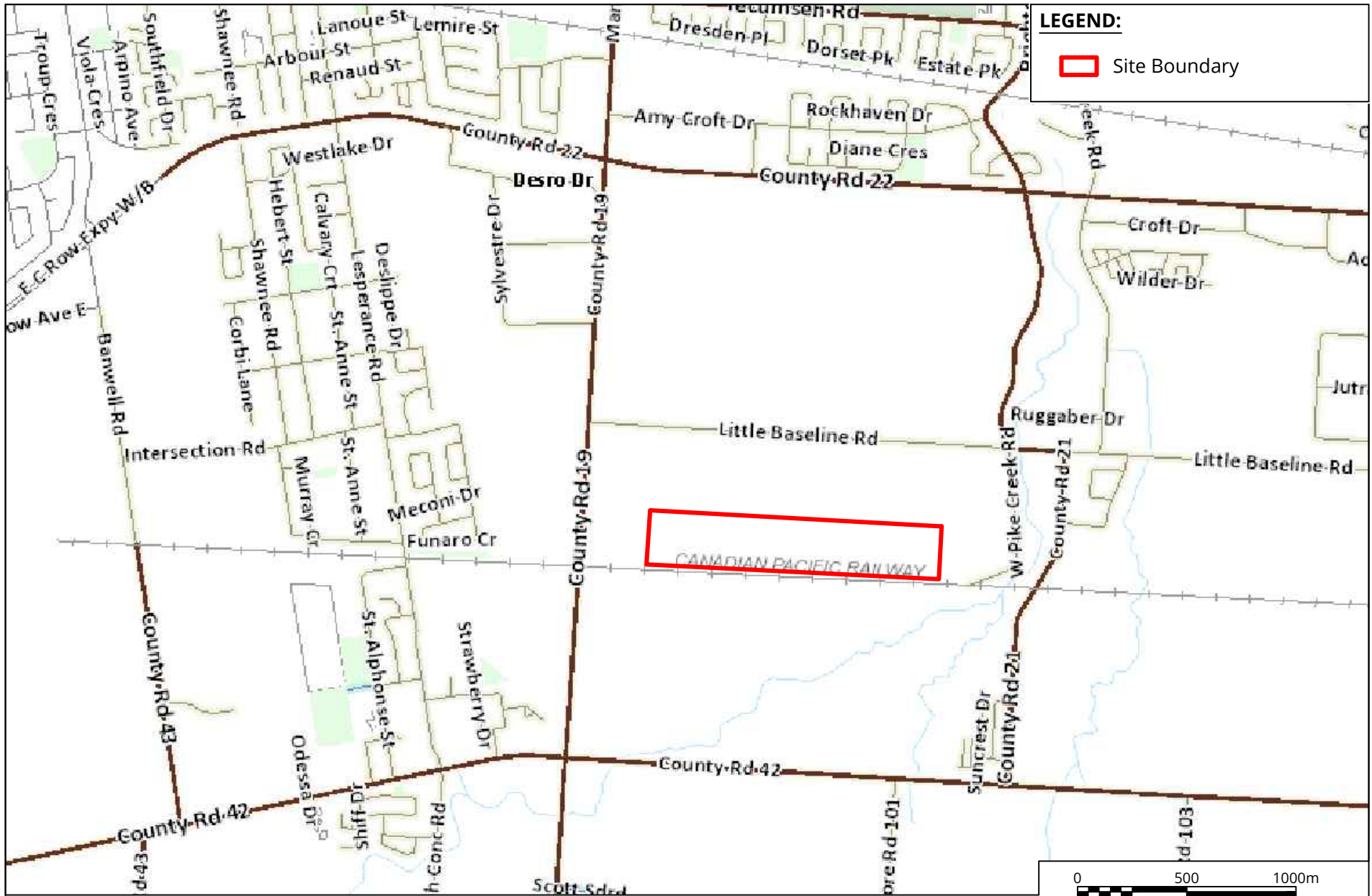
Brent J. Langille, B.Sc., P.Geo., QP_{ESA}
Senior Technical Director | Principal

BJL/BCB

Attach.

FIGURES





Site Location

Maden Industrial Ltd.
Soils Management Proposal

Maden Industrial Ltd. - Tecumseh, ON

Note: Basemap from the County of Essex (2020).

True North



Drawn by: AUV | Figure: 1

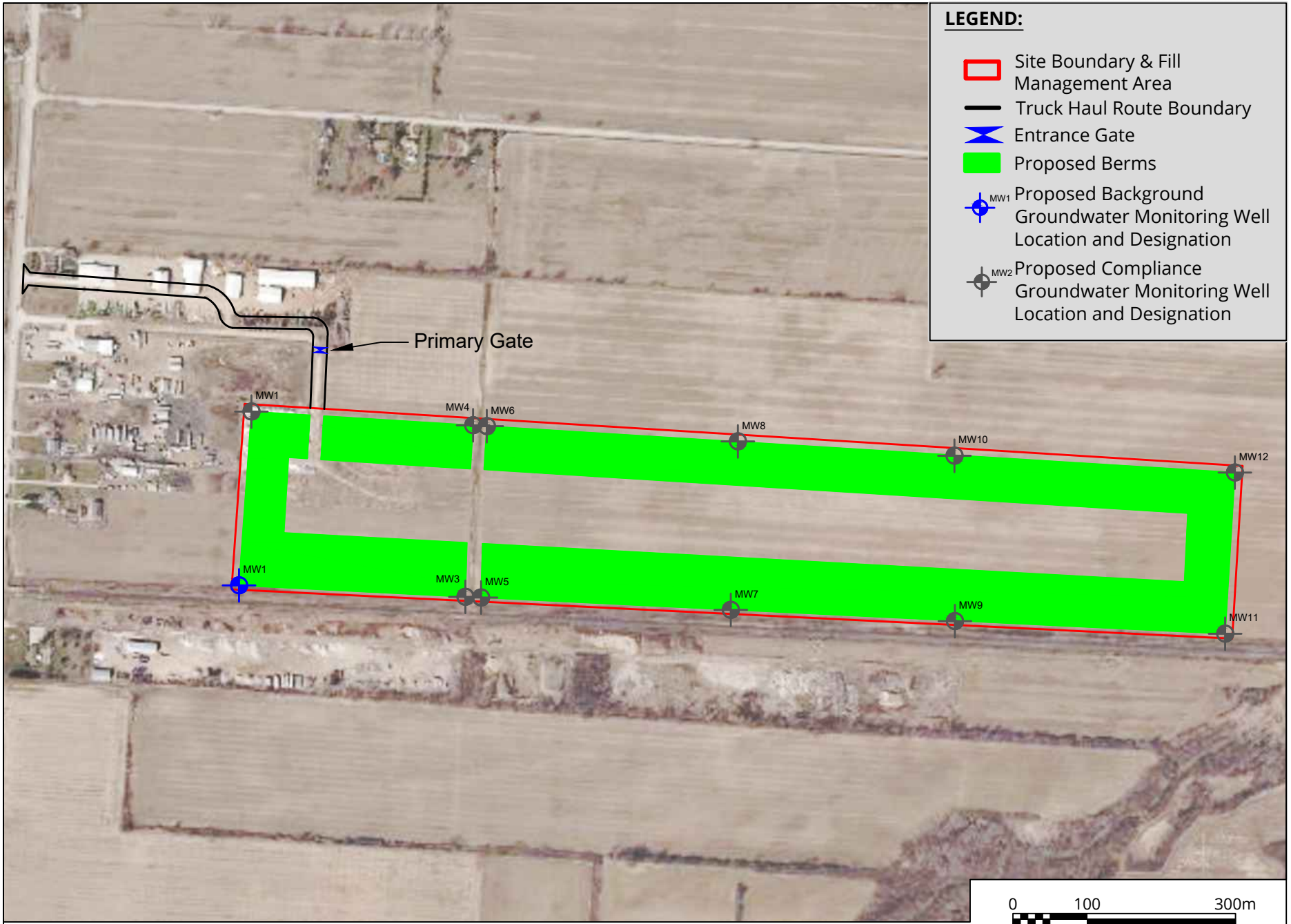
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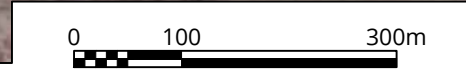
Project #2104267

L:\2104267\04\Deliverables\ECA\Application\Package\Alt. 02. D&O and FMP\Drawings\Figures\Working Folder\20220811_RWDI\2104267_DRF\Fig Hydrogeology_Fig2SitePlan.dwg



LEGEND:

-  Site Boundary & Fill Management Area
-  Truck Haul Route Boundary
-  Entrance Gate
-  Proposed Berms
-  ^{MW1} Proposed Background Groundwater Monitoring Well Location and Designation
-  ^{MW2} Proposed Compliance Groundwater Monitoring Well Location and Designation



Site Plan
Design and Operations Report & Fill Management Plan

Maden Industrial Ltd. - Tecumseh, ON

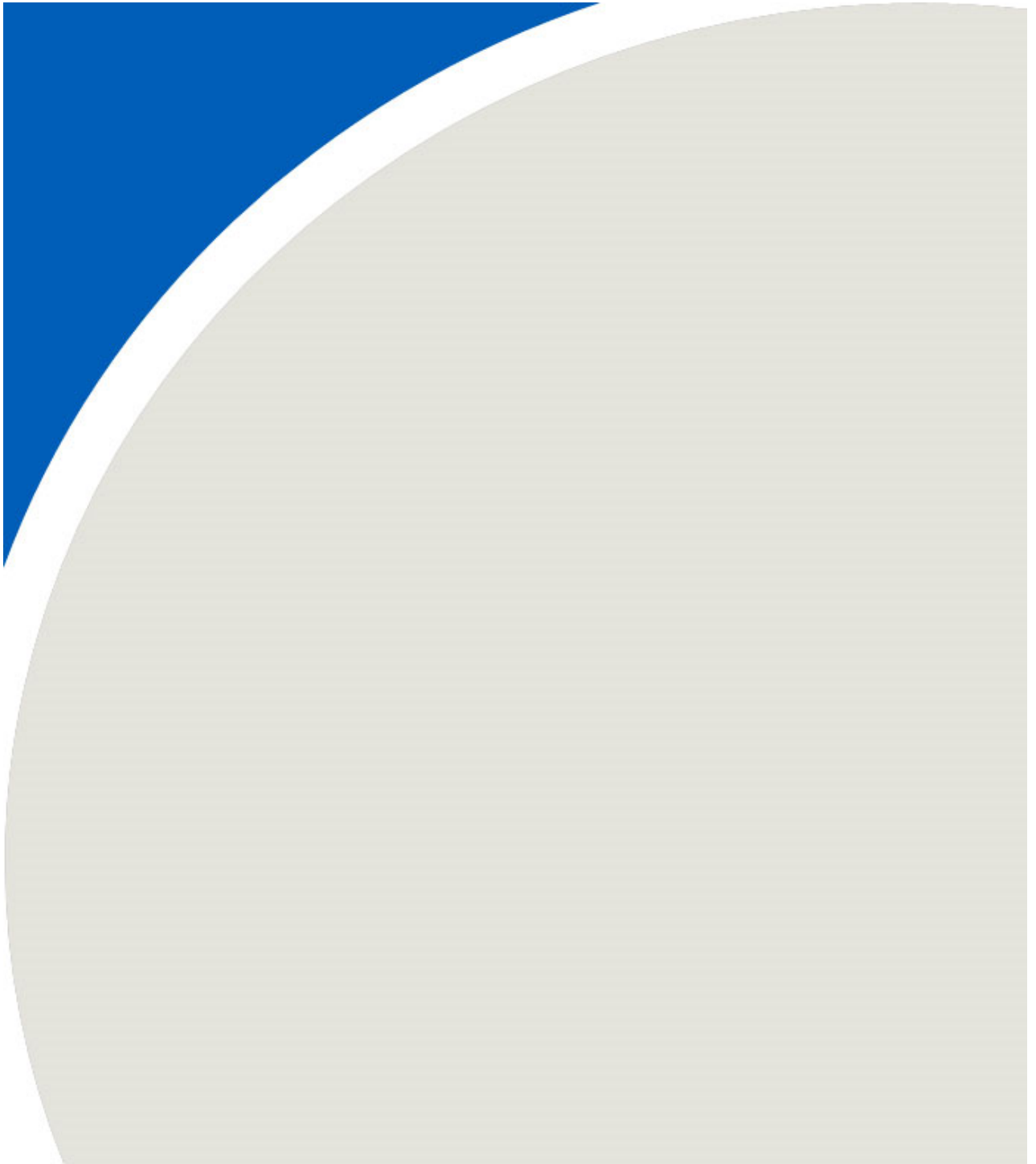


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Approx. Scale: 1:7000	
Date Revised: Mar. 24, 2022	



Project #2104267

APPENDICES





APPENDIX A

TOWN OF LAKESHORE
ZONING BY-LAW (JANUARY 10,
2012, MODIFIED DECEMBER 2,
2019)

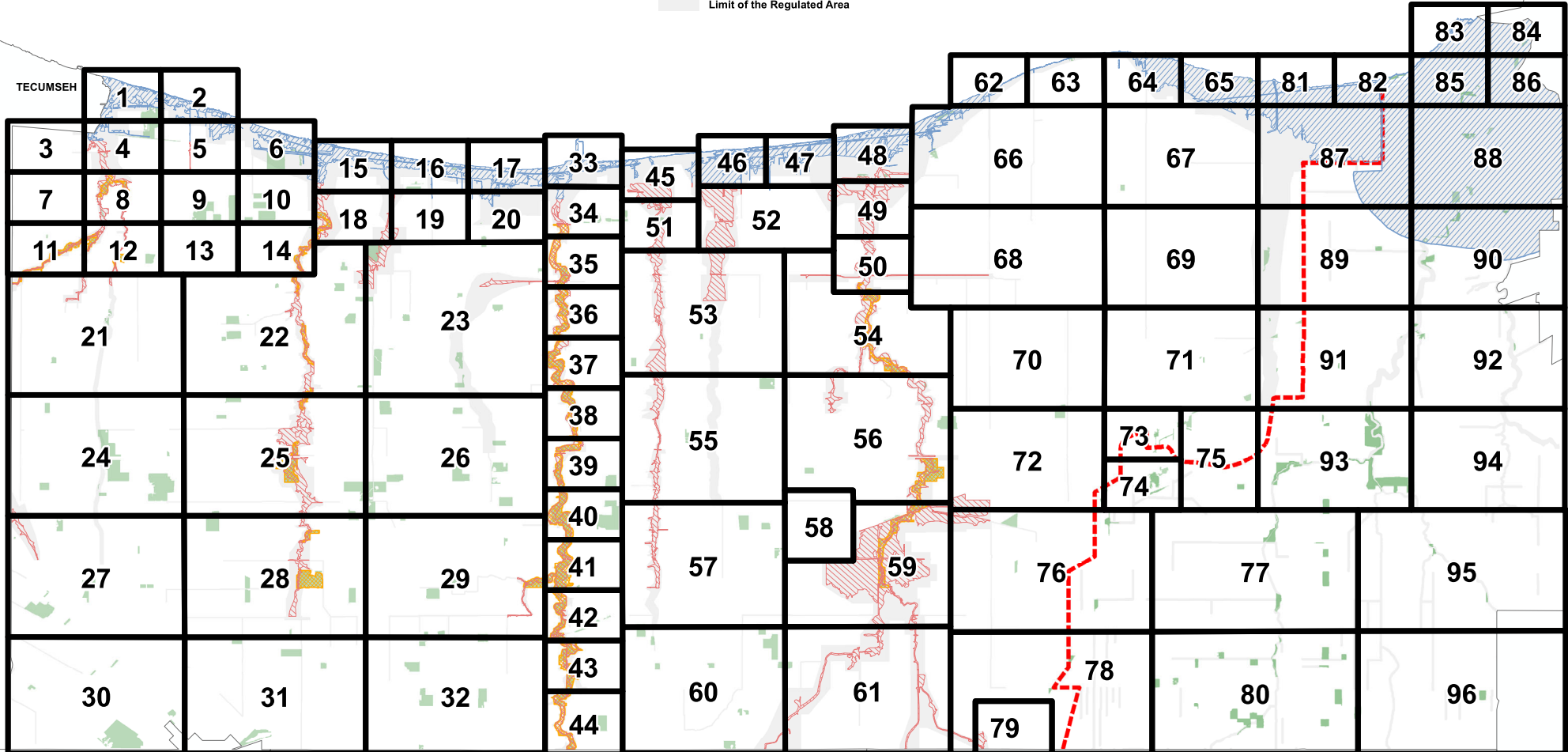


Town of Lakeshore Zone Map Index

Schedule "A"

Council Adoption - January 2012

- Lake St. Clair Floodprone Area
- Inland Floodplain Development Control Area
- Conservation Authority Jurisdiction Boundary
- Significant Valley Lands (ERCA)
- Woodlands
- Limit of the Regulated Area



TECUMSEH

ESSEX

KINGSVILLE

LEAMINGTON








CHATHAM KENT

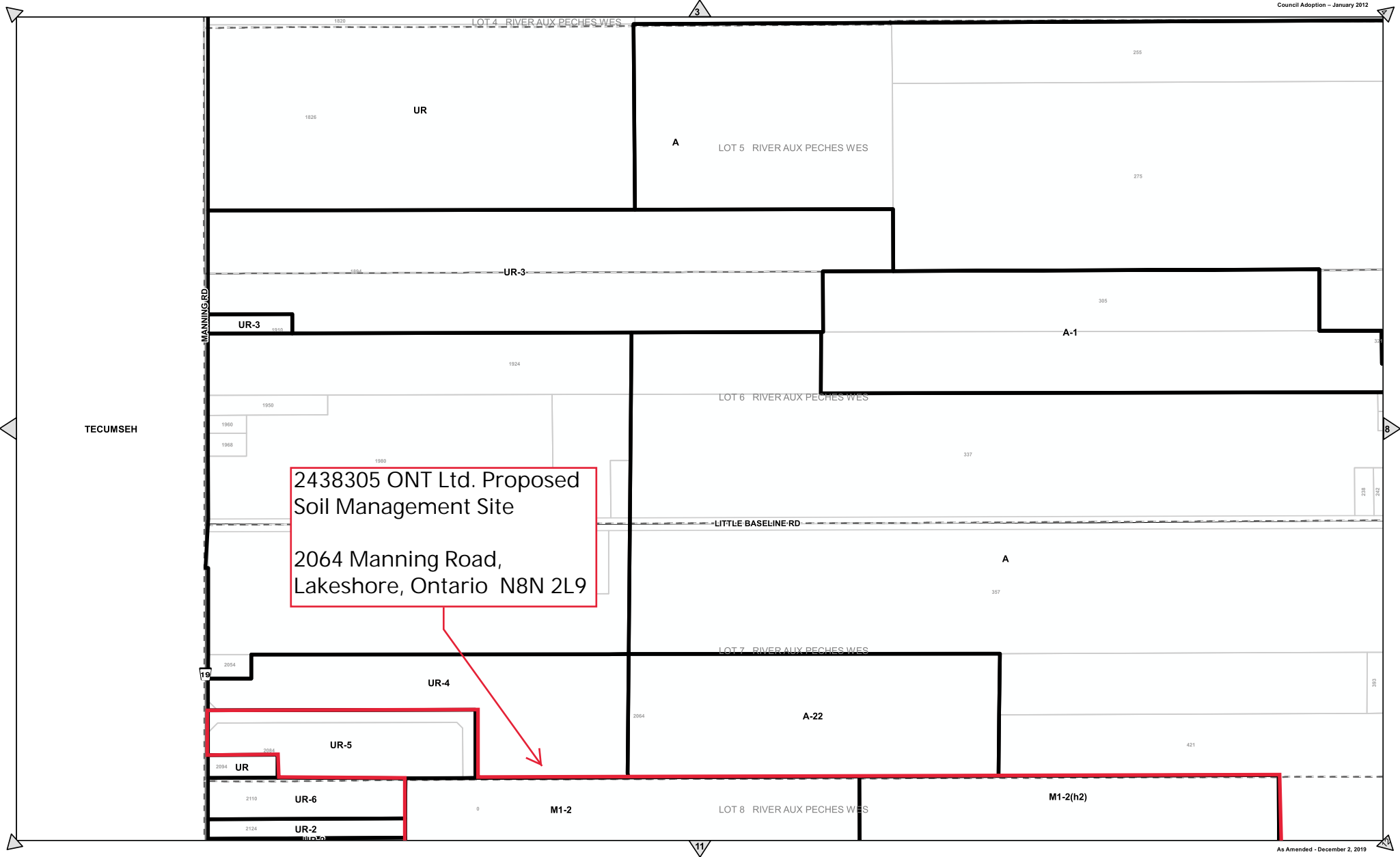
Zone Symbol	Zone Title
<i>Residential Zones</i>	
R1	Residential – Low Density
R2	Residential – Medium Density
R3	Residential – High Density
RM	Residential Mobile Home Park
RW1	Residential Waterfront – Watercourse
RW2	Residential Waterfront – Lake St. Clair
<i>Hamlet Zones</i>	
HR	Hamlet Residential
HC	Hamlet Commercial
HE	Hamlet Employment
<i>Commercial Zones</i>	
CS	Service Commercial
CR	Rural Commercial/Employment
CN	Neighbourhood Commercial
CT	Recreational/Tourist Commercial
<i>Mixed Use Zones</i>	
CA	Central Area
MU	Mixed Use

Zone Symbol	Zone Title
<i>Employment Zones</i>	
M1	General Employment
M2	Business Park
<i>Institutional Zones</i>	
I1	Major Institutional
I2	Minor Institutional
<i>Agriculture Zone</i>	
A	Agriculture
<i>Environmental Protection, Parks and Open Space Zones</i>	
EP	Environmental Protection
W	Wetland
P	Parks and Open Space
<i>Urban Reserve Zone</i>	
UR	Urban Reserve
<i>(h) Holding Symbol (see Section 5.5 in the Zoning By-law)</i>	

Town of Lakeshore Comprehensive Zoning By-Law Schedule "A" - Map 7

Council Adoption - January 2012

-  Railway
-  Lake St Clair Floodprone Areas
-  Significant Valley Lands (ERCA)
-  Conservation Authority Jurisdiction Boundary
-  Inland Floodplain Development Control
-  Woodlands
-  Limit of the Regulated Area

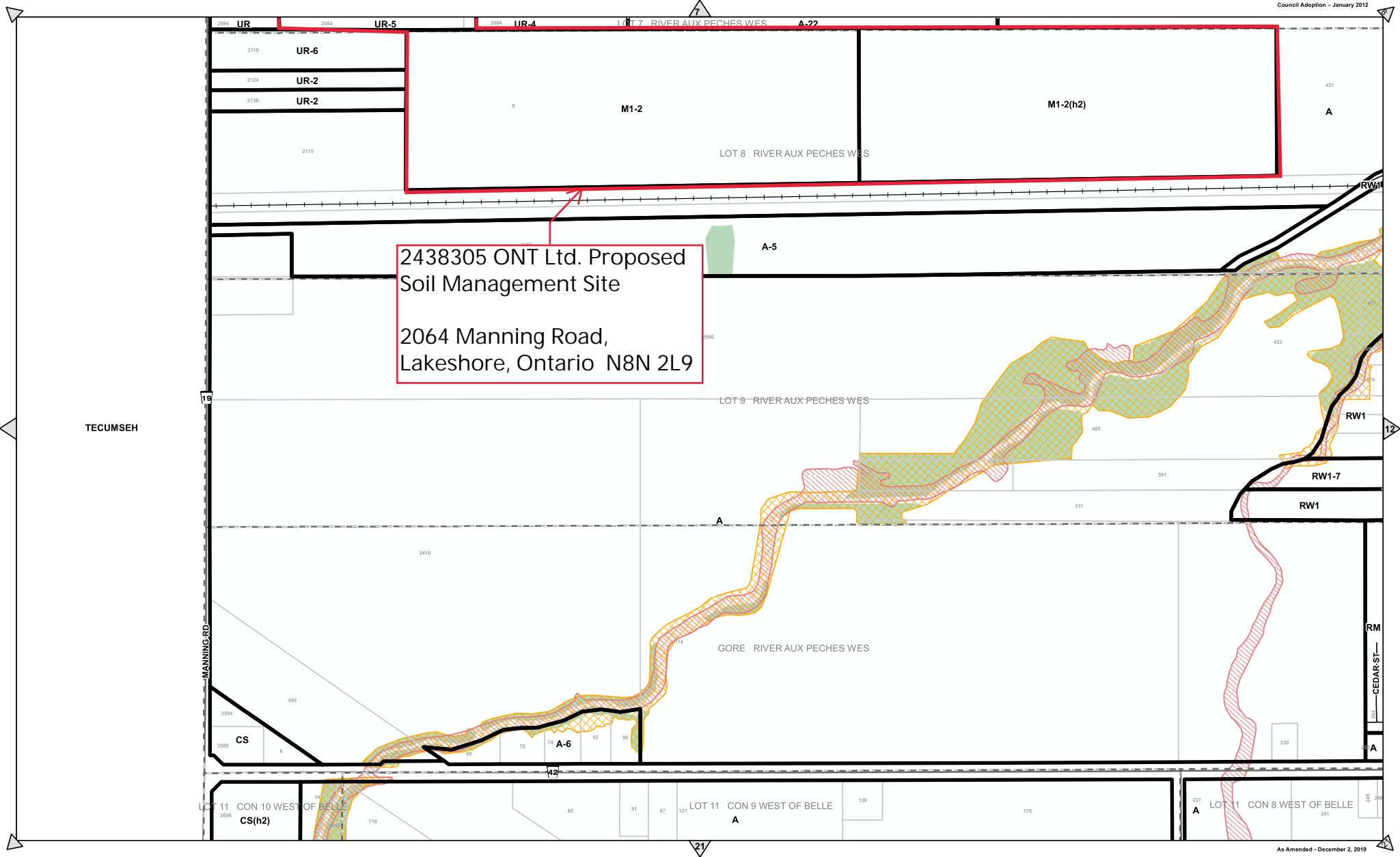


2438305 ONT Ltd. Proposed
Soil Management Site
2064 Manning Road,
Lakeshore, Ontario N8N 2L9

Town of Lakeshore Comprehensive Zoning By-Law Schedule "A" - Map 11

Council Adoption - January 2012

- +— Railway
- Lake St Clair Floodprone Areas
- Significant Valley Lands (ERCA)
- Conservation Authority Jurisdiction Boundary
- Woodlands
- Inland Floodplain Development Control
- Woodlands
- Limit of the Regulated Area



2438305 ONT Ltd. Proposed
Soil Management Site

2064 Manning Road,
Lakeshore, Ontario N8N 2L9

5.0 Zones and Zoning Maps

5.1 General

For the purpose of this By-law all the lands within the boundaries of the *Town* are hereby divided into various *zones* to which the provisions and regulations herein shall respectively apply.

5.2 Establishment of Zones

For the purpose of this By-law the map and map parts hereto attached as Schedule "A" shall be referred to as the zoning maps for the *Town*. The zoning maps shall be divided into the following *zones* and such *zones* are indicated on the zoning maps by zone symbols consisting of letters and numbers, as the case may be, as listed below:

<i>Zone Symbol</i>	<i>Zone Title</i>
<i>Residential Zones</i>	
R1	Residential – Low Density
R2	Residential – Medium Density
R3	Residential – High Density
RM	Residential Mobile Home Park
RW1	Residential Waterfront – Watercourse
RW2	Residential Waterfront – Lake St. Clair
<i>Hamlet Zones</i>	
HR	Hamlet Residential
HC	Hamlet Commercial
HE	Hamlet Employment
<i>Commercial Zones</i>	
CS	Service Commercial
CR	Rural Commercial/Employment
CN	Neighbourhood Commercial
CT	Recreational/Tourist Commercial

Zone Symbol	Zone Title
<i>Mixed Use Zones</i>	
CA	Central Area
MU	Mixed Use
<i>Employment Zones</i>	
M1	General Employment
M2	Business Park
<i>Institutional Zones</i>	
I1	Major Institutional
I2	Minor Institutional
<i>Agriculture Zone</i>	
A	Agriculture
<i>Environmental Protection, Parks and Open Space Zones</i>	
EP	Environmental Protection
W	Wetland
P	Parks and Open Space
<i>Urban Reserve Zone</i>	
UR	Urban Reserve

5.3 Use of Zone Symbols

The *zone* symbols listed in Section 5.2 (Establishment of Zones) shall be used to refer to land, *buildings*, and *structures* and to the *use* thereof permitted by this by-law in the said *zones*, and whenever in this by-law the word “*zone*” is used, preceded by any of the said *zone* symbols, such *zone* shall mean any area within the *Town* delineated on the zoning maps and designated thereon by the said *zone* symbol.

5.4 Defined Areas

Certain areas within any of the various *zones* or within parts of more than one *zone* may be more specifically regulated and such areas shall be known as “defined areas”. All *zones* may be subdivided into one or more defined areas which shall be designated by reference to the symbol of the *zone* within which each such defined area is located together with an additional

symbol, either letter, number, or both, so as to differentiate different defined areas within a *zone* from each other and from other areas within the *zone*.

5.5 Holding Zone (h) Provisions

Where the zoning applying to any *lot* or area includes the holding symbol (h) suffixed to any *zone* symbol, only *existing uses* shall be permitted until such time as the holding symbol (h) is removed. Application of the holding symbol (h) indicates that *development* of the lands is premature at the present time. However, it does indicate the *use* to which lands, *buildings* or *structures* may be put at such time in the future as the holding symbol is removed by amendment to this by-law in accordance with Section 36 of the *Planning Act*. Section 8.3.2.1 of the Town of Lakeshore Official Plan outlines the criteria to be satisfied in order to remove the holding symbol (h); however, more specific criteria or holding provisions may be included in the Zoning By-law, provided that such criteria is in conformity with the Town of Lakeshore Official Plan.

The following table establishes the holding *zone* provisions, including the extent of permitted *uses* while the holding symbol (h) is in place, and the conditions that must be satisfied for the removal of the holding symbol (h).

Holding Symbol	Permitted Uses Until the Holding Symbol Is Removed	Conditions For Removal of the Holding Symbol
h1	<i>Existing uses</i> shall be the only <i>uses</i> permitted in the interim.	Provision of municipal services (storm drainage, water and sanitary sewage) in accordance with Section 7.0 of the Town of Lakeshore Official Plan.
h2	<i>Existing uses</i> shall be the only <i>uses</i> permitted in the interim.	That site plan approval has been granted by the <i>Town</i> and a site plan agreement has been entered into, pursuant to the provisions of the <i>Planning Act</i> .
h3	In the CR-39 zone the uses identified as i) and vi) through xv) shall be permitted in addition to existing uses.	That site plan approval has been granted by the <i>Town</i> and a site plan agreement has been entered into, pursuant to the provisions of the <i>Planning Act</i> .
h4	<i>Existing uses</i> shall be the only <i>uses</i> permitted in the interim.	The holding symbol shall not be removed until such time as the subdivision agreement is executed by the owner and the <i>Town</i> and the development receives final approval by the <i>County</i> .
h5	<i>Existing uses</i> shall be the only <i>uses</i> permitted in the interim.	That a fully executed subdivision, condominium, development or site plan control agreement is executed by the owner and the <i>Town</i> and if required, that the development receives final approval by the <i>County</i> .
h6	<i>Existing uses</i> shall be the only <i>uses</i> permitted	That adequate sewage disposal and the provision of other services has been accommodated in accordance with

Holding Symbol	Permitted Uses Until the Holding Symbol Is Removed	Conditions For Removal of the Holding Symbol
	in the interim.	Section 7.0 of the Town of Lakeshore Official Plan, development applications are approved, various agreements are in place, plans of subdivision or condominium are approved, where necessary.
h7	<i>Existing uses</i> shall be the only <i>uses</i> permitted in the interim	A <i>consent</i> approval to provide an appropriate access easement (permanent) over the subject lands in favour of the lands to the east; and a site plan has been approved and a site plan agreement entered into, including among other items the conveyance of sufficient lands for the widening of Patillo Road.
h8	<i>Existing uses</i> shall be the only <i>uses</i> permitted in the interim.	<p>That zoning approval has been granted by the <i>Town</i> to rezone the lands to an MU zone.</p> <p>That draft plan of subdivision, draft plan of condominium, and/or site plan approval has been granted by the <i>Town</i> and an agreement has been entered into, pursuant to the provisions of the <i>Planning Act</i>.</p> <p>That the land use compatibility and built form policies of Section 3.4.3 of the Town of Lakeshore Official Plan and the guidelines of the Corridor Transformation Strategy - County Road 22 Special Planning Area Design Guidelines have been addressed to the satisfaction of the Town.</p> <p>Provision of municipal services (storm drainage, water and sanitary sewage) in accordance with Section 7.0 of the Town of Lakeshore Official Plan.</p>
h9	<i>Existing uses</i> shall be the only <i>uses</i> permitted in the interim.	The holding symbol shall not be removed until such time as the subdivision agreement is executed by the owner and the <i>Town</i> and the development receives final approval by the <i>County</i> .
h10	<i>Existing uses</i> shall be the only <i>uses</i> permitted in the interim.	<p>The Owner has paid to the <i>Town</i> all costs associated with the installation of a new water service on the <i>lot</i> containing the rectory from the municipal water main to the property line (right of way limit).</p> <p>The Owner has installed new private septic systems on both the <i>lot</i> containing the rectory and the <i>lot</i> containing the church building, to the satisfaction of the <i>Town</i>.</p>
h11	<i>Existing uses</i> shall be the only <i>uses</i> permitted in the interim.	<p>A Site Plan and Site Plan Agreement between the owner and the <i>Town</i> has been approved and registered on title.</p> <p>A Certificate of Approval from the Ministry of Environment</p>

Holding Symbol	Permitted Uses Until the Holding Symbol Is Removed	Conditions For Removal of the Holding Symbol
		has been received.
h12	<i>Existing uses</i> shall be the only <i>uses</i> permitted in the interim.	<p>Three additional soil test sample pits have been investigated by a qualified person along the east and north property lines to the satisfaction of the <i>Town</i>.</p> <p>A Record of Site Condition (RSC) has been filed in the Environmental Site Registry under Section 168.3.1 of the <i>Environmental Protection Act</i> and a written acknowledgement from the Ministry of Environment confirming the filing of the RSC has been provided to the <i>Town</i>,</p> <p>Issues related to servicing and access to County Road No. 46 have been addressed to the satisfaction of the <i>Town</i> and the <i>County of Essex</i>,</p>
h13	<i>Existing uses</i> shall be the only <i>uses</i> permitted in the interim.	The Owner has either connected to the municipal waterline on County Road 42 or has obtained a permanent easement for the private waterline to the north of the subject property, to the satisfaction of the municipality.
h14	Cultivation of land and the production of crops only (excluding: the breeding and care of livestock uses or other farm animals, mushroom operations etc. and buildings or structures for the same)	<p>Provision of municipal services to the satisfaction of the <i>Town</i> (storm drainage, water and sanitary sewage) in accordance with Section 7.0 of the <i>Town of Lakeshore Official Plan</i>.</p> <p>Certificate of Approval.</p> <p>That a subdivision agreement between the Owner and the <i>Town</i> has been executed and registered.</p>
h15	Existing uses shall be the only uses permitted.	Provision of access acceptable to the <i>Town</i> from Lot 277, Plan 1624, to Haven Avenue be established.
h16	In the CR-48 zone, a single detached dwelling shall be permitted, in addition to any existing uses.	That Site Plan Approval has been granted by the <i>Town</i> and a site plan agreement has been entered into, pursuant to the provisions of the <i>Planning Act</i> .
h17	In the CR-49 zone, the use identified as, a) warehouse, shall be permitted, in addition to existing uses.	Hard surfacing (cement or asphaltic binder or any other permanent type of surfacing) and curbing (concrete or rolled asphalt or other suitable obstruction, designed to provide a neat appearance) of parking areas and their approaches.

Holding Symbol	Permitted Uses Until the Holding Symbol Is Removed	Conditions For Removal of the Holding Symbol
h18	Existing uses shall be the only uses permitted.	Provision of full municipal services in accordance with Section 7.0 of the Town of Lakeshore Official Plan, development applications are approved, various agreements are in place, plans of subdivision or condominium are approved, where necessary.
h19	Existing uses shall be the only uses permitted in the interim	The holding symbol shall not be removed until such time as a Transportation Impact Assessment (TIA) has been reviewed and approved to the satisfaction of the County of Essex and the Town of Lakeshore.
h20	Existing uses shall be the only uses permitted in the interim	<p>The holding symbol shall not be removed until such time as the following have been completed to the satisfaction of the Town of Lakeshore:</p> <ul style="list-style-type: none"> • comply with the <i>Endangered Species Act</i>; • submit for approval and implement the recommendations from an Environmental Impact Assessment, Geotechnical Study, Environmental Site Assessment and Archaeological Assessment; • enter into an agreement for the construction and opening of the southerly abutting unopened road allowance (Admiral's Drive).
h21	Existing uses shall be the only uses permitted in the interim	<p>The holding symbol shall not be removed until such time as the following have been completed to the satisfaction of the Town of Lakeshore:</p> <ul style="list-style-type: none"> • That site plan approval and / or related agreements have been granted by the Town for the commercial development; <p>That site plan agreement, subdivision agreement or other development agreements have been granted by the Town for the residential development.</p>
h22	Existing uses shall be the only uses permitted in the interim	<p>The holding symbol shall not be removed until such time as the following have been completed to the satisfaction of the Town of Lakeshore:</p> <ul style="list-style-type: none"> • That existing building (former restaurant) be demolished. • That a Record of Site Condition under the

Holding Symbol	Permitted Uses Until the Holding Symbol Is Removed	Conditions For Removal of the Holding Symbol
h23	Existing uses shall be the only uses permitted in the interim	<p data-bbox="894 310 1463 342">Environmental Protection Act has been provided.</p> <ul data-bbox="846 352 1479 422" style="list-style-type: none"> <li data-bbox="846 352 1479 422">• Adequate sewage system to the satisfaction of the municipality. <p data-bbox="797 464 1507 569">The holding symbol shall be removed upon execution by the owner of a site plan agreement generally addressing the following matters:</p> <ul data-bbox="846 611 1507 1163" style="list-style-type: none"> <li data-bbox="846 611 1438 680">• Phasing plan to show how the cemetery will be phased; <li data-bbox="846 690 1507 795">• Landscape Plan to show entry features, berming and screening plantings in the first phase of the cemetery; <li data-bbox="846 806 1487 942">• Flat plot ground markers to be shown for the westerly portion of the first phase of cemetery, with raised plot ground markers shown for the easterly portion of the first phase of the cemetery; <li data-bbox="846 953 1507 1058">• In ground burial area for the cemetery to be setback through the approval of the site plan from Elmstead Road; and <li data-bbox="846 1068 1507 1163">• Completion of other relevant plans, drawings and studies, as identified in the pre-consultation meeting for the Site Plan Control Application.

5.6 Incorporation of Zoning Maps

The location and boundaries of the *zones* and defined areas established by this By-law as shown on the zoning maps hereto appended as Schedule "A" and map parts together with everything shown thereon and all succeeding amendments thereto, are hereby incorporated in and declared to form part of this By-law.

5.7 Application of Regulations

No *person* shall within any *zone* or defined area *use* any land or *erect*, build, construct, reconstruct, relocate, excavate for, *alter*, add to, enlarge, extend or *use* any *building* or *structure*, except in conformity with this by-law for the *zone* or defined area in which such land, *building*, *structure* or *use* is located.

5.8 Interpretation of Zone and Defined Area Boundaries

Where any uncertainty exists as to the location of the boundary of any of the said *zones* or defined areas as shown on the zoning maps, the following shall apply:

- a) The boundary of the *zones* are defined as the *street centrelines* or the *lot lines* and the projection thereof, unless otherwise shown.

Where *zone* boundaries or defined area boundaries are indicated as approximately following *lot lines* shown on a registered plan of subdivision, such *lot lines* shall be deemed to be the said boundary.

Where *zone* boundaries or defined area boundaries are indicated as approximately parallel to the *street line* and the distance from such *street line* is not indicated, such *zone* boundaries or defined area boundaries shall be construed as being parallel to such *street line* and the distance there from shall be determined by the *use* of the scale shown on the zoning maps.

Where a *street*, *private road*, electrical transmission line *right-of-way*, open *municipal drain* or *watercourse* is shown on the zoning maps, it is included within the *zone* or defined area of the adjoining property on either side thereof, and where such *street*, *private road*, electrical transmission line *right-of-way*, open *municipal drain* or *watercourse* serves as a boundary between two or more different *zones*, defined areas or both, a line midway in such *street*, *private road*, electrical transmission line *right-of-way*, open *municipal drain* or *watercourse* and extending in the general longitudinal direction thereof is considered the boundary between *zones*, defined areas, or both, unless specifically indicated otherwise.

Where a dedicated *street* or *right-of-way* shown on the zoning map is closed, the property formerly in the said *street* or *right-of-way* shall be included within the *zone* or defined area of the adjoining property on either side of the said closed *street* or *right-of-way* and the *zone* boundary or defined area boundary shall be the former *street centerline* of said closed *street* or *right-of-way*.

Where a *zone* or defined area boundary is indicated as following the edge of an open *municipal drain* or *watercourse*, the boundary shall follow the *top of bank* of such open *municipal drain* or *watercourse* and, in the event that the *top of bank* of such open *municipal drain* or *watercourse* changes, the boundary shall be taken as having moved with the *top of bank*.

Where a *zone* or defined area boundary is indicated as following the shoreline of Lake St. Clair, the boundary shall follow the water's edge and, in the event that the water's edge changes, the boundary shall be taken as having moved with the said water's edge.

Where a defined area boundary appears to follow a *zone* boundary it shall be taken as following such a *zone* boundary.

7.0 Permitted Uses

Subject to compliance with this By-law, the following *uses* shall be permitted within the *zones* corresponding to the columns identified with a “●” in Table 7.1. Where a superscript “E” (E) is identified next to a “●” symbol, only *existing uses* shall be permitted. All permitted uses shall be subject to the applicable *Zone Regulations* provided in Section 8.0 and the General Provisions including the site specific qualifications provided in Section 6.0, where applicable.

The *zone* symbols are defined and described in Section 5.2, and consist of letters and numbers, as the case may be, as listed below:

<i>Zone Symbol</i>	<i>Zone Title</i>
<i>Residential Zones</i>	
R1	Residential – Low Density
R2	Residential – Medium Density
R3	Residential – High Density
RM	Residential Mobile Home Park
RW1	Residential Waterfront – Watercourse
RW2	Residential Waterfront – Lake St. Clair
<i>Hamlet Zones</i>	
HR	Hamlet Residential
HC	Hamlet Commercial
HE	Hamlet Employment
<i>Commercial Zones</i>	
CS	Service Commercial
CR	Rural Commercial/Employment
CN	Neighbourhood Commercial
CT	Recreational/Tourist Commercial
<i>Mixed Use Zones</i>	
CA	Central Area
MU	Mixed Use
<i>Employment Zones</i>	
M1	General Employment

<i>Zone Symbol</i>	<i>Zone Title</i>
M2	Business Park
<i>Institutional Zones</i>	
I1	Major Institutional
I2	Minor Institutional
<i>Agriculture Zone</i>	
A	Agriculture
<i>Environmental Protection, Parks and Open Space Zones</i>	
EP	Environmental Protection
W	Wetland
P	Parks and Open Space
<i>Urban Reserve Zone</i>	
UR	Urban Reserve

Table 7.1 – Permitted Uses		R1	R2	R3	RM	RW1	RW2	HR	HC	HE	CS	CR	CA	CN	CT	MU	M1	M2	I1	I2	EP	W	P	A	UR	
(a) Residential Uses																										
Single detached dwelling		•	•			•	•	•					• ^E		• ^E	• ^E									•	• ^E
Semi-detached dwelling			•					•					• ^E			• ^E										
Duplex dwelling			•										• ^E			• ^E										
Triplex dwelling			•										• ^E			• ^E										
Townhouse dwelling			•										• ^E			•										
Apartment dwelling				•									•			•										
Secondary dwelling unit													•			•										
Seasonal dwelling						•	•																			
Accessory dwelling unit(s) in combination with a non-residential use									•		•	•	•	•	•	•										
Converted dwelling		•	•										•			•									•	• ^E
Mobile home park				•																					• ^E	
Mobile home				•																					• ^E	• ^E
Group home dwelling		•	•	•		•	•	•								•									•	• ^E
Home occupation		•	•			•	•	•								• ^E									•	•
(b) Agricultural and Rural Uses																										
Agricultural use																	• ^E	• ^E			• ^E				•	•
Agricultural use – Value Added																									•	
Abattoir																									•	• ^E
Agricultural commercial and/or industrial establishment									•			•													• ^E	
Agricultural processing establishment									•			•					•									
Agricultural service and supply establishment									•			•														
Farm produce outlet									•			•													•	•
Farm winery																									•	
Forestry use																									•	•
Greenhouse farm																									•	• ^E
Home occupation, agricultural																									•	•
Home industry																									•	• ^E
Kennel																									•	
Mushroom farm																									•	• ^E

Table 7.1 – Permitted Uses																											
	R1	R2	R3	RM	RW1	RW2	HR	HC	HE	CS	CR	CA	CN	CT	MU	M1	M2	I1	I2	EP	W	P	A	UR			
Organic soil conditioning																								•	• ^E		
Resource extraction operation																									•	• ^E	
Secondary farm dwelling																									•	• ^E	
(c) Commercial Uses																											
Animal clinic											•	•	•			•											
Animal shelter												•															
Auction establishment											•	•															
Automobile rental establishment											•					•											
Automobile repair establishment								•	•	•		• ^E				•	•										
Automobile sales and service establishment										•	• ^E					•											
Automobile service station								•		•	•	• ^E				•											
Automobile washing establishment								•									•										
Automobile washing establishment, Automatic								•		•	•	•				•											
Bed and breakfast establishment	•	•			•	•	•	•				•				•									•	• ^E	
Bake shop												•	•			•											
Building supply outlet								•	•	•						•	•										
Commercial school											•		•			•											
Day care centre								•				•	•			•			•	•							
Dry cleaning establishment								•		•		•	•			•											
Eating establishment								•		•	• ^E	•			•	•											
Financial institution								•		•		•				•											
Fitness centre								•		•		•				•											
Funeral home								•		•		•				•											
Greenhouse											•														•	• ^E	
Hotel										•		•			•	•											
Laundromat								•		•		•	•			•											
Motel										•					•	•											
Nursery and garden store										•	•					•											

Table 7.1 – Permitted Uses																								
	R1	R2	R3	RM	RW1	RW2	HR	HC	HE	CS	CR	CA	CN	CT	MU	M1	M2	I1	I2	EP	W	P	A	UR
Parking lot or structure, public												•			•									
Personal service shop								•		•		•	•		•									
Pharmacy								•		•		•			•									
Place of entertainment								•		•		•		•	•									
Printing establishment								•		•						•								
Private club								•				•		•	•				•			•		
Public club								•				•		•	•				•			•		
Public storage									•						• ^E	•								
Recreational vehicle sales, service, and storage establishment										•	•			•										
Retail establishment								•		•		•			•									
Retail establishment, convenience								•		•		•	•		•									
Retail and service uses related to recreation														•										
Retail use, accessory									•							•	•							
Service and repair establishment								•		•		•			•									
Shopping Centre								•		•		•	•		•									
Supermarket								•		•		•			•									
Taxi establishment										•														
(d) Employment Uses																								
Batching or recycling plant, concrete or asphalt																•								
Bus terminal										•														
Call centre																•	•							
Contractor's yard									•							•								
Laboratory or scientific research facility																•	•							
Landing strip																							•	
Manufacturing, heavy																•								
Manufacturing, light									•							•	•							
Office								•		•	•	•	•		•		•							
Propane transfer facility																•								

Table 7.1 – Permitted Uses																								
	R1	R2	R3	RM	RW1	RW2	HR	HC	HE	CS	CR	CA	CN	CT	MU	M1	M2	I1	I2	EP	W	P	A	UR
Service trade establishment										•	•					•	•							
Studio								•		•		•			•									
Transport terminal									•		•					•								
Utility yard																•								
Warehouse																•								
Wholesale establishment									•	•					•	•								
(e) Institutional Uses																								
Assembly hall								•				•			•			•	•				• ^E	
Community centre								•				•			•			•	•			•		
Cultural facility								•				•			•			•	•					
Hospital																		•						
Library								•							•			•	•					
Medical office								•		•					•			•	•					
Place of worship								•				•			•			•	•				• ^E	
Private school								•				•			•			•	•					
Public school								•				•			•			•	•					
Retirement home							•								•			•	•					
(f) Parks, Open Space and Outdoor Recreation Uses																								
Campground								• ^E							•								•	
Cemetery																		•	•				• ^E	
Conservation area																				•	•	•	•	• ^E
Fairs or exhibition grounds																		•					•	
Golf course								• ^E			•				•								•	
Hunting, trapping and fishing or Hunting, game and wildlife preserve																				•	•		•	• ^E
Marina								• ^E			•				•								•	
Park, Public or Private															•					•			•	
Tourist information services												•			•									

9.16 General Employment (M1) Zone Exceptions

Notwithstanding any other provisions of this By-law, the special regulations contained in this Section shall apply to the area or areas defined below and as shown on Schedule A:

9.16.1 General Employment Zone Exception 1 (M1-1) (Map 4)

- a) Permitted Uses: Shall include stormwater retention facilities. Only existing *buildings* and *structures* shall be permitted.
- b) Zone Regulations: Only existing buildings shall be permitted, an expansion of an existing building or construction of a new building will require relief from this by-law.

9.16.2 General Employment Zone Exception 2 (M1-2) (h2) (Map 7 and Map 11)

- a) Permitted Uses: Existing uses only until such time as the (h2) is removed. Upon removal of the (h2), permitted uses shall include only *non-effluent producing industrial uses* that have a dependency on the rail line, rail-related storage facilities and *uses accessory* to the foregoing permitted uses including *accessory* retail and office uses.
- b) Zone Regulations: All lot and building requirements shall be in accordance with the following regulations:
 - i) The maximum *lot coverage* shall be 50%.
 - ii) The maximum *height of main buildings* shall be 10.5 m.
 - iii) No building, structure or *outdoor storage* shall be located closer than 10 m to any *lot line* except the south *lot line* where there is no *yard* requirement.
 - iv) Vehicular access shall be restricted to County Road No. 19.

9.16.3 General Employment Zone Exception 3 (M1-3) (Map 3)

- a) Permitted Uses: An *animal clinic* shall be an additional permitted use.

9.16.4 General Employment Zone Exception 4 (M1-4) (Map 9)

- a) Permitted Uses: A *medical office* shall be an additional permitted use.

9.16.5 General Employment Zone Exception 5 (M1-5) (Map 5)

- a) Zone Regulations:
 - i) Minimum landscape open space at 5%, whereby 20% is required for the M1 Zone;
 - ii) Minimum front yard setback at 1 ft (.3 m) whereby 7.5 m is required in the M1

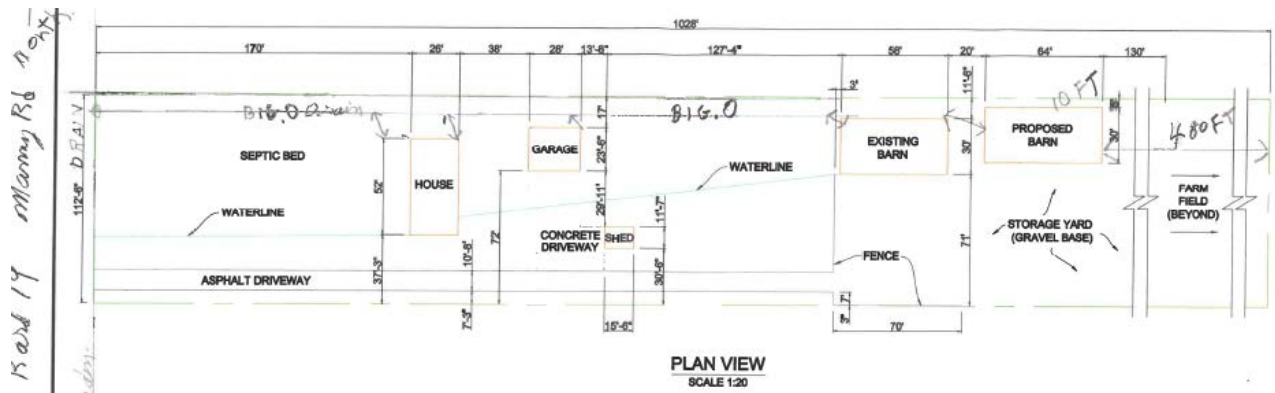
9.22 Urban Reserve (UR) Zone Exceptions

9.22.1 Urban Reserve Zone Exception 1 (UR-1) (Map 3 and Map 6)

- a) Permitted Uses: An existing trucking business and *accessory uses* shall be additional permitted uses. Only existing buildings and structures shall be permitted.
- b) Zone Regulations: Only existing buildings shall be permitted, an expansion of an existing building or construction of a new building will require relief from this by-law.

9.22.2 Urban Reserve Zone Exception 2 (UR-2) (Map 11)

- a) Permitted Uses: A septic tank cleaning business and a portable toilet rental business, shall be additional permitted uses. Only existing buildings and structures shall be permitted.
- b) Zone Regulations: Only existing buildings shall be permitted, an expansion of an existing building or construction of a new building will require relief from this by-law.
- c) Additional Uses: One (1) accessory structure shall be permitted as identified in drawing below:



9.22.3 Urban Reserve Zone Exception 3 (UR-3) (Map 7)

- a) Permitted Uses: An existing trucking business, including the storage and sale of earth, topsoil, fill, sand, gravel and stone, shall be additional permitted uses.
- b) Zone Regulations: Only existing buildings shall be permitted, an expansion of an existing building or construction of a new building will require relief from this by-law.
 - i) Notwithstanding Section 9.22.3 b) a maximum of four (4) accessory structures shall be permitted.
 - ii) Notwithstanding Section 6.5 a) xi), one (1) accessory structure shall have a maximum height of 8.6 metres and one (1) accessory structure shall have a maximum height of 7 metres.



APPENDIX B

TOWN OF LAKESHORE OFFICIAL PLAN (NOVERMBER 22, 2010)

6.11 Employment Designation

The Employment Designation consists of lands that are characterized by their high visual profile and accessibility and are generally comprised of industrial, employment, accessory commercial and related uses. Employment Designations are located along a Provincial Highway, Rural Regional Road, Rural Secondary Road, Rural Collector Road, Urban Commercial/Employment Collector Road, and Urban Commercial/Employment Local Road. Generally, these areas are expected to accommodate a wide range of employment uses requiring high visibility and good accessibility.

6.11.1 Permitted Uses

Subject to the other policies of this Plan, the following policies will apply in determining uses permitted on land designated Employment Designation on Schedule "C".

- a) The predominant use of land will be a wide range of employment and industrial uses, subject to the policies of this Section, including manufacturing, logistics operations, warehousing, distribution, offices and related industrial and business park uses, in addition to ancillary service commercial uses serving the Employment Area employees and the travelling public.
- b) Industrial uses that require open storage of goods and materials such as manufacturing, processing, assembling, repairing, wholesaling, warehousing, trucking and storage will be permitted, however, the open storage will be screened such that it is not visible from a Provincial Highway, Rural Regional Road, Rural Secondary Road, Rural Collector Road, Urban Arterial Road, Urban Commercial/Employment Collector Road, and Urban Residential Collector Road.
- c) For uses that exhibit any or all of the following characteristics, a study will be prepared in accordance with the relevant MOE guidelines to demonstrate that the proposed use is compatible with any nearby potentially incompatible or sensitive uses:
 - i) outdoor storage of goods and materials;
 - ii) frequent shipment of products and/or materials;
 - iii) long production hours and shift operations/unusual hours of operation;
 - iv) large volumes of traffic at off-peak hours; and/or
 - v) likelihood of nuisances, such as noise, odour, dust, lighting or vibration.
- d) Commercial and office uses associated with and clearly ancillary to the main employment use are permitted.
- e) Institutional uses or destination oriented commercial and shopping uses, such as Large Format Retail uses will not be permitted.
- f) Parks and open space uses will be permitted.

- g) Uses accessory to any of the permitted uses in the Employment Designation will be permitted.
- h) The specific uses permitted and accessory uses will be established in the Zoning By-law.

6.11.2 Land Use Policies

The following policies apply to land designated Employment Designation.

- a) Development within the Employment Designation will be further subject to the policies of Section 3.3.2. Servicing within the Employment Designation is dependent upon the particular Settlement Area and will be subject to the policies of Section 7.3.
- b) Development within the Employment Designation will also be subject to the policies of Section 5.0 and Schedule "B" to determine any natural resources, Natural Heritage Features and functions, which may be a constraint to development.
- c) Those uses that create or potentially create extreme environmental stress as a result of air, noise, and/or vibration emissions, and/or the generation and/or handling of solid or liquid wastes will only be considered based on the submission of an impact assessment satisfactory to the Town.
- d) Industrial uses located adjacent to a Provincial Highway or arterial road will generally be limited to self-contained uses that produce and/or store a product where there is a low probability of significant emissions.
- e) An appropriate separation distance, based upon the Ministry of the Environment's relevant guidelines related to land use compatibility, will be established between an industrial land use and any sensitive land use. This separation distance will be enforced through a site specific amendment to the Zoning By-law and site plan control through the use of a minimum building setback applied to any industrial use building adjacent to an established or approved sensitive land use.
- f) Deviation from established separation distances will require detailed supporting studies of the potential impacts on the sensitive land use by the Industrial use, and vice-versa, and any recommended mitigation measures.
- g) Separation distances between sensitive land uses and industrial uses, or for industrial uses abutting Provincial Highways or arterial roads will be implemented through the Zoning By-law, as a condition of draft plan approval and/or through site plan control and may include measures such as:
 - i) building orientation, design and setbacks;
 - ii) landscaping and screening;
 - iii) access controls;

- iv) road improvements and widenings;
 - v) restrictions on the range of permitted uses; and
 - vi) restrictions on outside storage.
- h) Adequate off-street parking and loading facilities will be provided for all permitted uses for employees and visitors. Vehicle access will be oriented such that industry-related traffic will be discouraged from using local roads where other options are available. Loading facilities and service areas will be located to avoid conflict between pedestrian circulation, service vehicles and movement along the public rights-of-way and visibility from roadways.
- i) The provision of appropriate and adequate landscaping and/or other forms of buffering will be provided to:
- i) enhance all parking lots, and outdoor loading, storage and service areas; and
 - ii) provide separation between the use and any adjacent use, where appropriate.
- j) Industrial uses will be developed in such a manner to ensure protection and screening of outdoor storage areas from all adjacent roads.
- k) Access to a Provincial Highway will require approval from the Province and the Town. Access to a County Road will require approval from the County and the Town.
- l) A high standard of site design and maintenance will be required through site plan control in accordance with Section 8.3.4.

6.11.3 Site-Specific Policy Areas

6.11.3.1 Comber Employment Area

The following policies apply to the lands designated Employment Designation and identified as the Comber Employment Area Site-Specific Policy Area 6.11.3.1 on Schedule "C":

- a) The uses permitted within the Employment Designation as outlined in Section 6.11.1 are permitted, and subject to the land use policies of Section 6.11.2.
- b) The lands identified as the Comber Employment Area Site-Specific Policy Area 6.11.3.1 Part A, permit the following additional uses, subject to the land use policies of Section 6.11.3.1 d):
 - i) recreational and entertainment based activities such as, but not limited to, a major speedway and entertainment facility;
 - ii) uses accessory to a motor speedway such as, but not limited to, race tracks, parking, and seating accommodations;
 - iii) uses complimentary to a motor speedway such as, but not limited to, concession stands, restaurant, a wide variety of entertainment facilities, campgrounds, hotels or motels; and

-
- iv) uses compatible with a motor speedway such as, but not limited to, service commercial and industrial uses that would service or share facilities with the other uses permitted such as, but not limited to, printing establishments, auto and auto parts sales and service, gas stations, and light manufacturing.
- d) The lands identified as the Comber Employment Area Site-Specific Special Policy Area 6.11.3.1 Part B, permit the following additional uses, subject to the land use policies of Section 6.11.3.1 d):
- i) recreational and entertainment based activities accessory and complimentary to a motor speedway and motor sport entertainment facility including: accessory uses such as race tracks, parking, seating accommodations; and complimentary and compatible uses such as concession stands, restaurants, a wide variety of entertainment facilities, campgrounds, hotels or motels, auto and auto parts sales and services establishments, gas stations and trial production and test facilities for automotive and farm implement manufacturers.
- e) The permitted uses outlined in Section 6.11.3.1 a) and b) are subject to the following policies:
- i) the implementing zoning by-law will place the entire property in a holding classification. The holding symbol will not be removed until such time as a complete servicing strategy and site plan is presented to and approved by the municipality and site plan and servicing agreements are entered into. The holding classification can be removed in phases. The Zoning By-law will establish where on the site the various uses are to be allowed once the holding classification is removed. Agriculture will be the only permitted use until the holding classification is removed.
- ii) the specific municipal servicing matters that must be addressed to the satisfaction of the applicable approval authority, and the Town, prior to the removal of the holding classification include:
- sanitary sewage treatment;
 - potable water supply;
 - storm water management;
 - vehicular traffic access including access to and from Highway No. 77 and 401;
- iii) the specific site plan matters that must be addressed to the satisfaction of the municipality prior to the removal of the holding classification include:
- noise mitigation measures;
 - air emissions;
 - on-site parking and on-site traffic movement;
 - signage;
 - lighting;
 - berming and landscaping.

- iv) Consents for any of the permitted uses will be granted, in accordance with the policies of Section 8.3.5.

6.11.3.2 Maidstone Rail-Related Employment Area

The following policies apply to the lands designated Employment Designation and identified as the Site-Specific Policy Area 6.11.3.2 on Schedule "C":

- a) The predominant use of land will be for dry industrial uses that require a location abutting a direct rail line. Examples of these types of industries include, but are not limited to, a transfer yard and a wood recutting operation;
- b) All development will be required to conform to high standards relating to parking, loading, lighting, landscaping, buffering, outdoor storage and access as set out in detail in the implementing zoning by-law and site plan agreements;
- c) Access to the lands will be restricted to County Road 19;
- d) The lands that are not planned for immediate development will be placed in a corresponding holding zone in the implementing zoning by-law. The holding provisions will not be removed until such time as development proposals complete with site plans are submitted and approved by the Town. In the interim, agricultural uses will be the only uses permitted on the site;
- e) Consent applications involving the lands will be in accordance with the policies of Section 8.3.5.2, and will generally not be permitted except for the creation of an easement or right-of-way or a minor lot alteration required for legal or technical reasons; and
- f) All development will be subject to site plan control in accordance with Section 8.3.4 of this Plan.

APPENDIX C

QUALIFIED PERSON (QP) DECLARATION FORM

SOURCE SITE QP DECLARATION FORM

For excess imported soils to 2064 Manning Road, Lakeshore,
ON

I, the Qualified Person (QP) (as defined by O. Reg 153/04) of the site located at _____ (Source Site), agree that the following statements are true regarding the soils being transported to the receiving site (2064 Manning Road, Lakeshore, ON).

1. All soil samples collected from the Source Site followed the sampling methodologies, including QA/QC samples, described in O. Reg 153/04. _____
Initial
2. The soil samples taken from the Source Site were taken from locations that adequately assess the identified Areas of Potential Environmental Concern (APECs). _____
Initial
3. All Samples were analyzed by a Canadian Association for Laboratory Accreditation (CALA) certified environmental laboratory. _____
Initial
4. All soil samples from the Source Site were analyzed for: Metals, PHC F1-F4, VOCs, PAHs, SAR, pH, EC, and PCBs.
If only selected parameters were analyzed due to specific Source Site Contaminants of Concern, further written documentation specifying this reasoning will be required. _____
Initial
5. All soil samples taken for the above parameters meet the requirements of O. Reg 153/04 **Table 3.1** criteria for **Industrial/Commercial/Community Property Use** (ICC). _____
Initial
6. If confirmatory testing of imported soils at the Receiving Site determines the soil does not meet the above-stated criteria, that soil will be immediately removed from the Receiving Site at the expense of the Source Site and/or representative contractor for the Source Site, which supplied the soils. _____
Initial
7. All soil samples collected from the Source Site soils proposed for exportation meet the requirements from the 2064 Manning Road, Lakeshore, ON Fill Management Plan. _____
Initial

Upon initialing the above statements and signing below I, the QP, confirm that I will be supervising the excavation of the excess soil on the Source Site and will allow transport of soils which meet the above criteria.

QP Company

QP Signature

Date

QP Name (please print)

APPENDIX D

A large decorative graphic on the page. It features a blue triangular shape in the top-left corner, separated from a large, light beige circular shape by a white curved line. The circular shape is the primary focus of the page's design.

EXAMPLE IMPORTED SOIL INSPECTION FORM

