Agricultural Report 142239 Grey Road 9, Municipality of West Grey

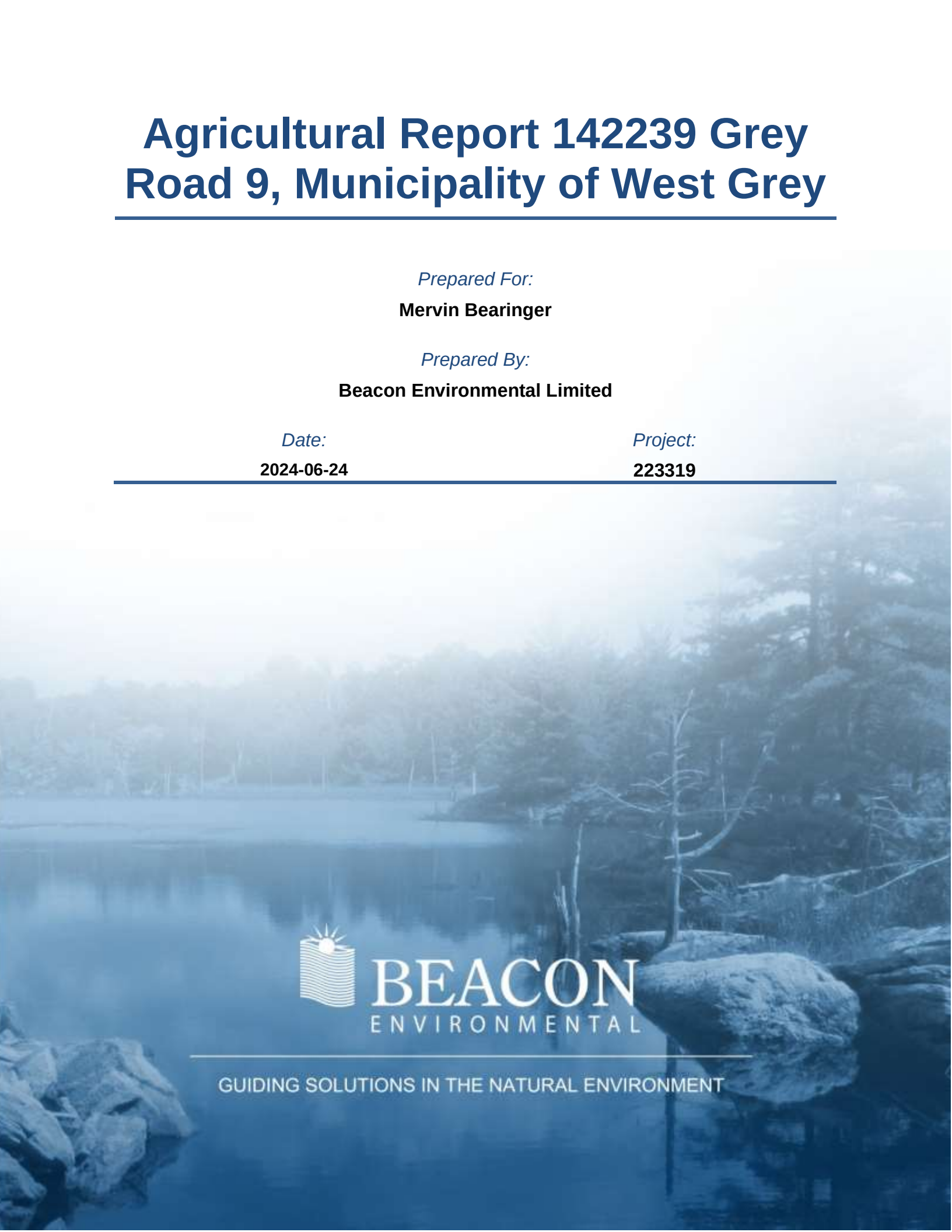
Prepared For:

Mervin Bearinger

Prepared By:

Beacon Environmental Limited

Date:	*Project:*
2024-06-24	**223319**



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Report Versions Issued

Version	Date	Revisions
1.	June 2024	First Draft

1. Introduction

Beacon Environmental Limited (Beacon) was retained to conduct an Agricultural Report (AR) for a proposed severance of property at 142239 Grey Road 9, in the Municipality of West Grey, in the County of Grey (hereafter the "subject property"; **Figure 1**). The subject property is a large parcel of land of approximately 109.8 ha (~271 ac) and is currently developed with a residence, a barn, and outbuildings with associated paddocks. The remainder of the subject property is farmed by tenant farmers, generally with a rotation of corn and soybean. Treed hedgerows, forest stands, and watercourses also occur on the subject property. The AR was requested as part of a Consent Application for a proposed severance of the subject property to create two additional lots, each with access from Grey Road 9, and each with proposed new agricultural practices.

Presently the subject property is designated as Hazard Lands and Agricultural in the County of Grey Official Plan (County OP; 2023, Consolidated), and also zoned as Agricultural (A1) and Natural Environment (NE) in the Municipality of West Grey Zoning By-Law (37-2006).

The landowner is proposing to sever two lots from the subject property. Severed Lot 1 (western lot) would have a lot area of 39.6 ha and a lot frontage of 389 m and will maintain the existing structures and continue raising beef cattle on the property. Severed Lot 2 (central lot) would have a lot area of 29.5 ha and a lot frontage of 198 m, and a building envelope positioned at the front of the lot, situated outside of the forest stand (area zoned Natural Environment). The future building envelope is proposed to contain a single detached residential dwelling, accessory structure, and barn. The proposed agricultural use is to raise beef cattle.

The Retained Lot (eastern lot) would have an area of 40.7 ha and a lot frontage of 400 m and is proposed to contain a future building envelope that will include a single detached residential dwelling, accessory structure, and barn. The proposed agricultural use is to raise beef cattle.

Severed Lot 2 (hereafter the "study area") would have a lot area under 40 ha, triggering the requirement for an AR to justify the undersized lot creation as per Section 5.2.3 of the County OP.

This AR provides a detailed description and understanding of the agricultural capability of the subject property, focussed on the study area, through the following:

- A desktop survey of the subject property to provide an interpretation of the agricultural capability of the soil for various crops, including an assessment of the present Canada Land Inventory (CLI) designations;
- A reconnaissance level land use survey to characterize the land uses observed on and adjacent to the subject property. This includes the types of land uses, both agricultural and non- agricultural, cropping patterns and natural land cover;
- A comparison of the CLI agricultural capability of the subject property and the adjacent lands;
- An assessment of potential conflicts with surrounding agricultural operations including an assessment of the minimum distance separation (MDS) requirements; and
- A review of the applicable agricultural policy contained in the County OP.

It is Beacon's opinion, per the following report, that the proposed severances, in particular Severed Lot 2, subject to approvals and permits as may be required as part of the application, can proceed in a manner that is consistent with Section 5.2.3 of the County OP.

2. Background and Study Objectives

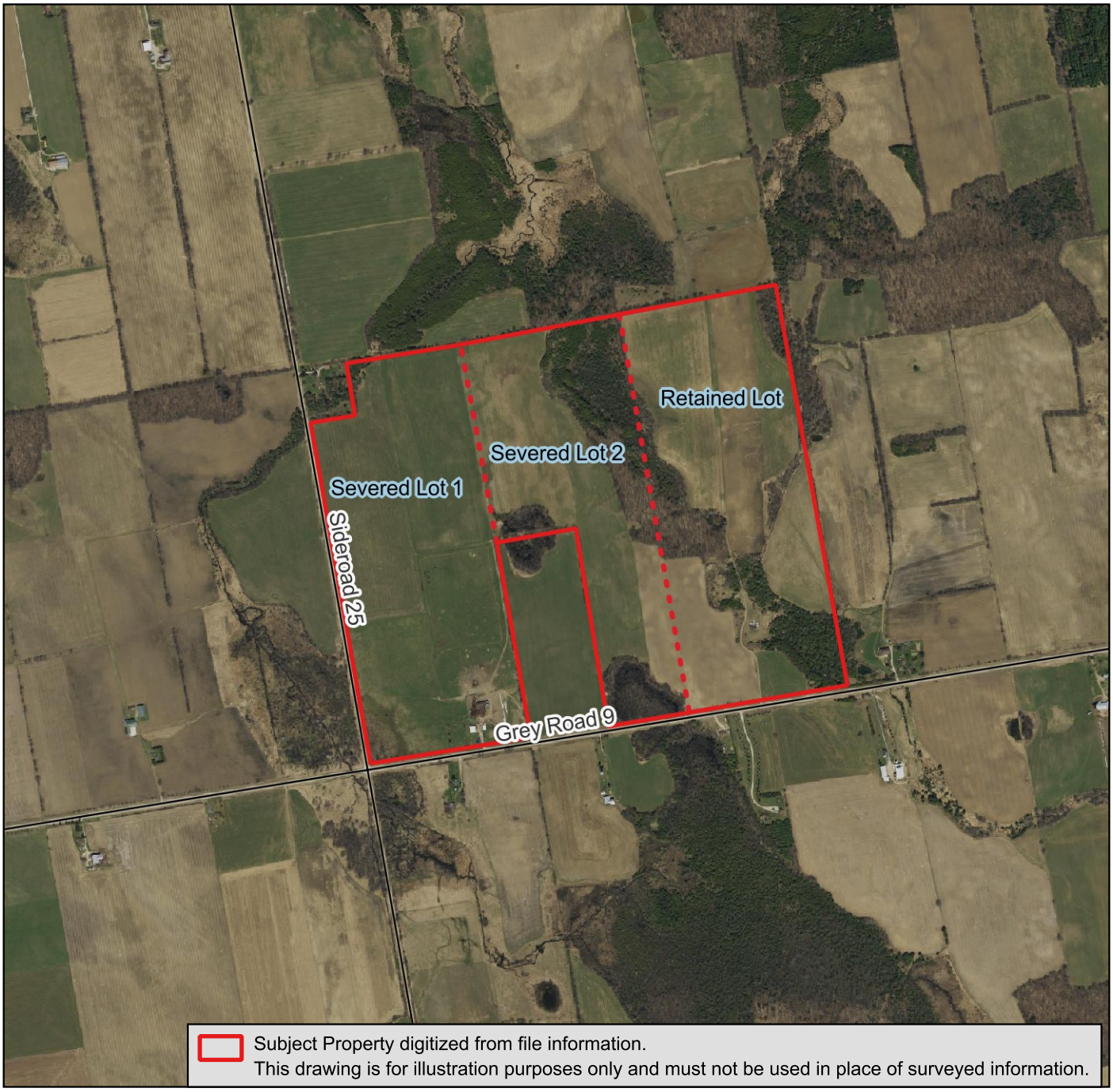
The study commenced with a background assessment of the present agricultural characteristics of the subject property. Background information including published documents and information from provincial agencies was gathered and reviewed at the outset of the project, including the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) March 2018 "Draft Agricultural Impact Assessment Guidance Document".

The background assessment involved review of documentation for the subject property from sources that included, but was not limited to the following:

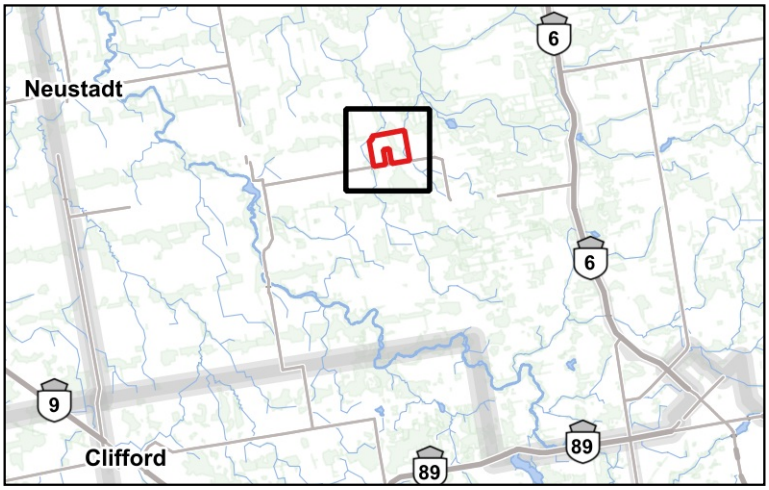
- Ontario Ministry of Natural Resources and Forestry (MNRF) Ontario Base Mapping;
- MNRF Land Information Ontario (LIO) Database;
- Agriculture and Agri-Food Canada:
    - The Soils of Grey County (https://sis.agr.gc.ca/cansis/publications/surveys/on/on17/index.html); and
    - CLI Mapping – Bruce (https://sis.agr.gc.ca/cansis/publications/maps/cli/250k/agr/cli_250k_agr_41a.jpg);
- OMAFRA Soil Survey Complex (https://data.ontario.ca/dataset/soil-survey);
- OMAFRA AgMaps Geographic Information Portal (https://www.lioapplications.lrc.gov.on.ca/AgMaps/Index.html?viewer=AgMaps.AgMaps&locale=en-CA);
- Colour, orthorectified, 2006, 2010 and 2015 aerial photography from First Base Solutions; and
- Grey County aerial photography (https://maps.grey.ca/).

The specific objectives that have been completed as part of this AR include the following:

- Review applicable agricultural policies and other background information;
- Assess the soil capability for common field crop productions using the CLI classification system;
- Undertake a land use survey of all lands within 750 m of the study area;
- Assess the MDS requirements for the proposed severances;
- Assess the potential for fragmentation and the potential for direct and indirect impacts on agricultural resources within the study area; and
- Assess compliance with local agricultural policies.



Subject Property digitized from file information.
This drawing is for illustration purposes only and must not be used in place of surveyed information.



Site Location	Figure 1
West Grey Ag Report	
BEACON ENVIRONMENTAL	Project: 223319 Last Revised: June 2024
Client: Mervin Bearinger	Prepared by: JN Checked by: CG
N 1:15,000	Inset Map: 1:250,000

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3. Agricultural Policy Context

The applicable municipal and provincial policies that are subject to review include:

- Provincial Policy Statement (PPS; 2020); and
- County OP (2023, Consolidated).

3.1 Provincial Policy Statement (2020)

The PPS provides policy direction on matters of provincial interest related to land use planning and development including agriculture. The PPS establishes the policy framework for setting land use priorities in Ontario as well as regulating development.

The 2020 PPS modifies and updates many of the former policies from the former documents. In relation to agriculture, the 2020 PPS provides the requirement for municipalities to designate prime agricultural areas at the municipal level. This means that municipalities must specifically distinguish between prime agricultural areas and rural areas that may contain lesser quality agricultural capabilities. Upper and lower tier Official Plans must now designate prime agricultural areas and rural areas separately and provide distinct policy direction for land uses in each of these designations.

Section 2.3.2 of the PPS (2020) requires that:

> *Planning authorities shall designate prime agricultural areas and specialty crop areas in accordance with guidelines developed by the Province, as amended from time to time.*

The PPS (2020) defines specialty crop areas as provided below. There are no specialty crop areas in or adjacent to the subject property.

> *Specialty crop area: means areas designated using guidelines developed by the Province, as amended from time to time. In these areas, specialty crops are predominantly grown such as tender fruits (peaches, cherries, plums), grapes, other fruit crops, vegetable crops, greenhouse crops, and crops from agriculturally developed organic soil, usually resulting from:*
>
> > *a) Soils that have suitability to produce specialty crops, or lands that are subject to special climatic conditions, or a combination of both;*
> > *b) Farmers skilled in the production of specialty crops; and*
> > *c) A long-term investment of capital in areas such as crops, drainage, infrastructure and related facilities and services to produce, store, or process specialty crops.*

Policy 2.3.2 references provincial guidelines to assist in the identification of “prime agricultural areas”. OMAFRA has provided that over time technical guidance for the identification of “prime agricultural areas” has been outlined in the Foodland Guidelines (1978-1992), the Comprehensive Set of Policy Statements (1994), four PPSs and a draft Land Evaluation and Area Review (LEAR) Guideline. The OMAFRA online document *Classifying Prime and Marginal Agricultural Soils and Landscapes:*

Guidelines for Application of the Canada Land Inventory in Ontario is the guideline available on the date of this report and was used in the analysis of the subject property. Additionally, OMAFRA has prepared further detailed written guidelines in their Publication 851 entitled "Guidelines on Permitted Uses in Ontario's Prime Agricultural Areas" (OMAFRA 2016).

The PPS (2020) has also provided the definition of a prime agricultural area as follows:

> *Prime agricultural area: means areas where prime agricultural lands predominate. This includes areas of prime agricultural lands and associated Canada Land Inventory Class 4 through 7 lands, and additional areas where there is a local concentration of farms which exhibit characteristics of ongoing agriculture. Prime agricultural areas may be identified by the Ontario Ministry of Agriculture and Food using guidelines developed by the Province as amended from time to time. A prime agricultural area may also be identified through an alternative agricultural land evaluation system approved by the Province.*

The definition of prime agricultural area again references provincial guidelines. The definition provides that prime agricultural areas may also be identified using an alternate agricultural land evaluation as supported by the province.

It is important to distinguish between a prime agricultural area which is the basis of provincial land use policy and prime agricultural lands which describes the agricultural capability of the land and soils. The PPS (2020) defines prime agricultural lands as follows:

> *Prime agricultural land means specialty crop areas and/or Canada Land Inventory Class 1, 2, and 3 lands, as amended from time to time, in this order of priority for protection.*

In addition, Section 2.3.6.2 states that,

> *Impacts from any new or expanding non-agricultural uses on surrounding agricultural operations and lands are to be mitigated to the extent feasible.*

3.2 County of Grey Official Plan (2023, Consolidated)

The County OP affords a number of land use policies related to agriculture. The County has requested that an AR prepared by Agrologist address all relevant policies of Section 5.2.3 of the County OP which is provided below:

> *5.2.3 Consent Policies*
>
> > *Lot creation in the Agricultural land use type is generally discouraged and may only be permitted for agricultural uses, agricultural-related uses, surplus farmhouse severances, infrastructure, and conservation lots in accordance with section 5.2.3 of this Plan.*
> > *1) A consent for one new lot may be permitted provided the original farm parcel is a minimum of 40 hectares. The options for consent would be:*

a) One lot severed to create a farm parcel of generally 40 hectares in size, provided both the severed and retained lots are 40 hectares in size and are both intended to be used for agricultural uses. Where a severance is proposed to create a farm lot smaller than 40 hectares, an official plan amendment will not be required, but an Agricultural Report is required by a qualified individual, (which may include an agrologist, agronomist, or a professional agricultural business degree) that addresses the following criteria:

1) Agriculture shall be the proposed use of both the severed and retained lots,

2) A farm business plan is required, demonstrating the viability of the severed and retained uses for the farm operations proposed,

3) Demonstration that both the severed and retained lots will be economically viable and flexible to respond to economic change. The applicant shall provide information necessary to evaluate the viability of the new farming operations on the parcels of land. Information pertaining to the scale and nature of the operation, projected revenue, expenses, financing, soil quality, water quality and quantity, and any other viability criteria relevant to the proposal shall be provided to the satisfaction of the County, in consultation with the Province,

4) Demonstration that nearby lots of similar size and farm capability to the proposed lots are not available and suitable for the intended agricultural use,

5) The suitability of both the severed and retained lots should be assessed based on:

i. The type and size of agricultural operations common in the area or to the type of agricultural operation proposed, or

ii. Demonstration that a new viable form of agriculture is suitable for the area and lot sizes proposed,

6) Demonstration that both the severed and retained lots remain sufficiently large to permit a change; in the agricultural product produced, an adjustment in the scale of operation, or diversification; and

7) Both the severed and retained lots shall comply with Provincial MDS Formulae.

3.3 Minimum Distance Separation

Both the PPS (2020) and the County OP require that the severances comply with the MDS requirements.

Land use planning principles promote the grouping together of compatible land uses, while providing distance between unlike or incompatible land uses. MDS formulae were developed to be used as a basis for reducing and minimizing nuisance complaints due to odour from livestock facilities and to reduce land use incompatibility in relation to livestock operations. The MDS is a land use planning tool

that determines a recommended separation distance between a livestock barn or manure storage and another land use. The objective of MDS is to minimize nuisance complaints due to odour and thereby reduce potential land use conflicts.

MDS is made up of two separate, but related formulae (MDS I and MDS II). MDS I provides the minimum distance separation between proposed new development and existing livestock facilities and/or permanent manure storages located in areas where the keeping of livestock is permitted. MDS II provides the minimum distance separation between proposed new, enlarged, or remodelled livestock facilities and/or permanent manure storages and existing or approved development located in areas where the keeping of livestock is permitted. For the proposed severances, the MDS I formula is applicable for the severances and the MDS II formula is applicable as there are new farming uses proposed on the new lots.

4. Methodology

4.1 Background Review

Background information noted in **Section 2** above, including published documents and information from provincial agencies was gathered and reviewed at the outset of the project. Other sources of information, such as topographic maps, were also consulted prior to commencing the field investigation.

4.2 Field Investigation

A field investigation within the subject property was undertaken on April 8, 2024. The purpose of the field investigation was to document existing conditions, and to undertake a reconnaissance survey to document agricultural operations, relative level of investment in agricultural operations, the cropping pattern observed, and the mix of land uses within the general area.

4.2.1 Land Use and Infrastructure

A reconnaissance land use survey of the general area was undertaken to document the number and type of existing and retired agricultural operations, including evidence of agricultural land improvements. The type and location of field crops was also documented from roadside surveys as well as the local knowledge of the existing farmer, and the new owner.

4.2.2 MDS Assessment

OMAFRA's online Agricultural Planning Tools Suite (AgriSuite) was used to calculate the MDS requirements. The online portal provides the most up to date software developed by OMAFRA to calculate the MDS I requirements for the livestock facilities and empty livestock facilities that are structurally sound and capable of housing livestock. To determine the MDS I setback requirements, the following information regarding any livestock facility within the MDS assessment area was acquired:

- The type of livestock and manure associated with the facility;
- The existing maximum capacity of the barn housing livestock; and
- The size of the property upon which the livestock facility is located.

The MDS information was collected for all livestock facilities (active and empty). In cases where we were not able to collect information directly from the landowner, we used visual observations of the livestock facility, as well as the local knowledge of the existing farmer on the subject property and determined the most likely type of livestock housed and the type of manure system used. These observations were supplemented with aerial photography and web mapping tools such as Google Earth®. Barn capacity and lot size was determined using GIS software and on-line mapping tools.

Additionally, because new livestock facilities are proposed on Severed Lot 2 and the Retained Lot, information from the landowner regarding the agricultural operations proposed for each lot was acquired for the MDS II calculations. The proposed agricultural use on Severed Lot 2 and the Retained Lot is to raise beef cattle.

5. Agricultural Resources

5.1 Bedrock and Physical Geography

The subject property lies over a complex of limestone, dolostone, shale, sandstone, gypsum, and salt (Ontario Geological Survey 2003). The physiography of the area is described in Chapman and Putman (1984) as the Horseshoe Moraines. The Horseshoe Moraines physiographic region runs parallel along the eastern shore of Lake Huron to the base of the Bruce Peninsula and southeast along the escarpment, then southwest toward Lake Erie. The general area is characterized by till ridges and kame moraines. The most northeastern section of the subject property is located within a kame moraine, while the remainder of the subject property is located within an area described as drumlinized till plains (Chapman and Putman 1984).

Figure 2 shows the majority of the subject property to consist of sand, gravel and silt, associated with glaciofluvial deposits (Ontario Geological Survey 2003).

5.2 Topography and Drainage

The overland drainage from the subject property flows generally in a south to north direction. The Ontario Base Map, supplemented with field observations, reveals that the topography ranges from gently sloped to steeper slopes (i.e., >25%), primarily in areas associated with forest cover in the northern central portion of the subject property.

Using slope class definitions found in the 4th Edition Field Manual for Describing Soils in Ontario (Denholm and Schut 1993), the land associated with the study area contains nearly level to very gentle slopes (i.e., 0.5% - 5.0%) to strong slopes in the most northeastern corner, associated with the forested area.

5.3 Climate

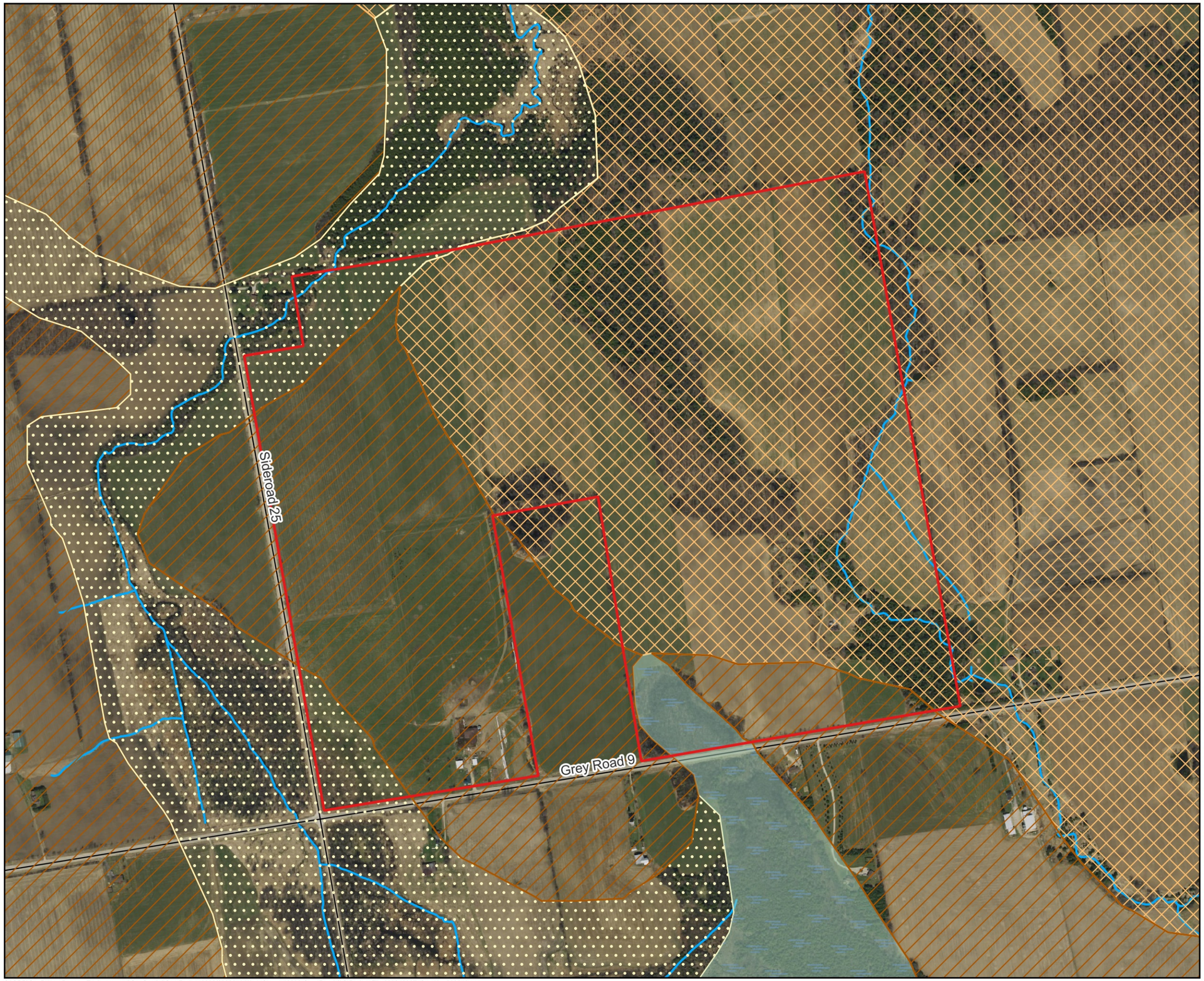
The analysis of climate was restricted to a review of existing published literature. Instrumentation was not employed to measure the climate of the subject property.

5.3.1 Crop Heat Units

The Crop Heat Unit (CHU) measurement was originally designed for selecting corn varieties and can be used as a means of comparing the climactic conditions of different areas of the province. The CHU value of an area is based upon temperature and is detailed in a Factsheet 93-119 (Brown and Bootsma 1997) produced by OMAFRA. Specifically, crop heat units are determined using daily minimum and maximum air temperatures accumulated over the growing season. The CHU rating of an area is determined by the total accumulated crop heat units for the frost-free growing season in the various areas of the province (Brown and Bootsma 1997).

The CHU measurement system was revised in accordance with changing farming practices and crop varieties (OMAFRA 2011). Under the new CHU measurement system, the proportion of crop heat units in the study area is found to be 2,700 CHU (**Figure 3**), consistent with moderately good farming opportunity. More specific measurements are not available for this method.

Figure 3. Crop Heat Units (OMAFRA 2011). Subject Property Indicated by Red Arrow



Surficial Geology

Figure 2

West Grey Ag Report

Legend

- Subject Property digitized from file information. This drawing is for illustration purposes only and must not be used in place of surveyed information.
- Permanent Watercourse (OHN; MNRF)

Surficial_Geology

- Muck, peat, marl
- Sand
- Stoney sandy silt till
- Undifferentiated sand, gravel and silt

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5.4 Soils

The Soil Survey of Grey County (Report No. 17) prepared by the Experimental Farms Service, Canada Department of Agriculture and the Ontario Agricultural College was published in 1954 and mapped the soils of the entire County. Included with that report is a printed map of the soils in the County presented at a scale of 1:63,360.

Additionally, OMAFRA provides an interactive online Agricultural Systems Portal to access agricultural production, land use and the agri-food network information. The Portal includes most of the data provided by the soil surveys completed throughout Ontario. The database was accessed in April 2024.

5.4.1 Subject Property Soil Types

The background review identified four soil types mapped within the subject property. The primary soil series covering the central and western portions is the Harriston Silt Loam Series, with the Pike Lake Loam Series in the northeastern portion of the subject property. The eastern central portion of the subject property consists of Parkhill Loam while the remaining land consists of Bottom Land Soils (**Figure 4**). Each of these are described in the following subsections.

5.4.1.1 Harriston Silt Loam Series

The Soil Survey of Grey County (1954) describes the Harriston Silt Loam Series as moderately deep or deep, moderately well drained, or well drained soils that have moderately fine texture to moderately coarse texture. Generally, this soil series has very gentle slopes (2-5%), although this soil series can have slightly steeper slopes (5-9%), associated with drumlinized areas.

5.4.1.2 Pike Lake Loam Series

The Soil Survey of Grey County (1954) describes the Pike Lake Loam Series as being well to excessively drained and developed on calcareous gravelly materials containing pockets of till. Although the Pike Lake Loam polygon associated with the subject property describes 70% of the polygon's slope to range from 15-30%, the land associated with the Pike Lake Loam in the northeastern portion of the subject property would align with the slopes identified as 5-9% in the remaining 30% of that polygon.

The Soil Survey of Grey County (1954) states the following:

> *Some of the lower slope phases of the Pike Lake loam are under cultivation and grow fair crops of hay including alfalfa and grain crops such as oats, buckwheat, and rye.*

5.4.1.3 Parkhill Loam Series

The Soil Survey of Grey County (1954) describes the Parkhill Loam Series as poorly drained with the groundwater table generally close to the surface for a good portion of the year. Most of this soil series within the subject property is identified by the Soil Survey of Grey County (1954) as either permanent

pasture or woodlot. The Parkhill Loam Series is generally found in association with Harriston soils and are usually on level to depressional areas.

5.4.1.4 Bottom Land Series

The Soil Survey of Grey County (1954) describes Bottom Land Series as low-lying soils associated with watercourses and are subject to periodical flooding. The Bottom Land Series is generally only used for pasture where possible.

5.5 Canada Land Inventory

The CLI is a comprehensive multi-disciplinary land inventory of rural Canada, covering over 2.5 million square kilometers of land and water. The CLI consists of a soil survey with rankings from 1 to 7, with Class 1 soil being the best agricultural land and Class 7 having no capability for agricultural activities. The CLI also provides sub-classes which specify the limitations of the soil (for example, excessive water, adverse climate, stoniness, and topography).

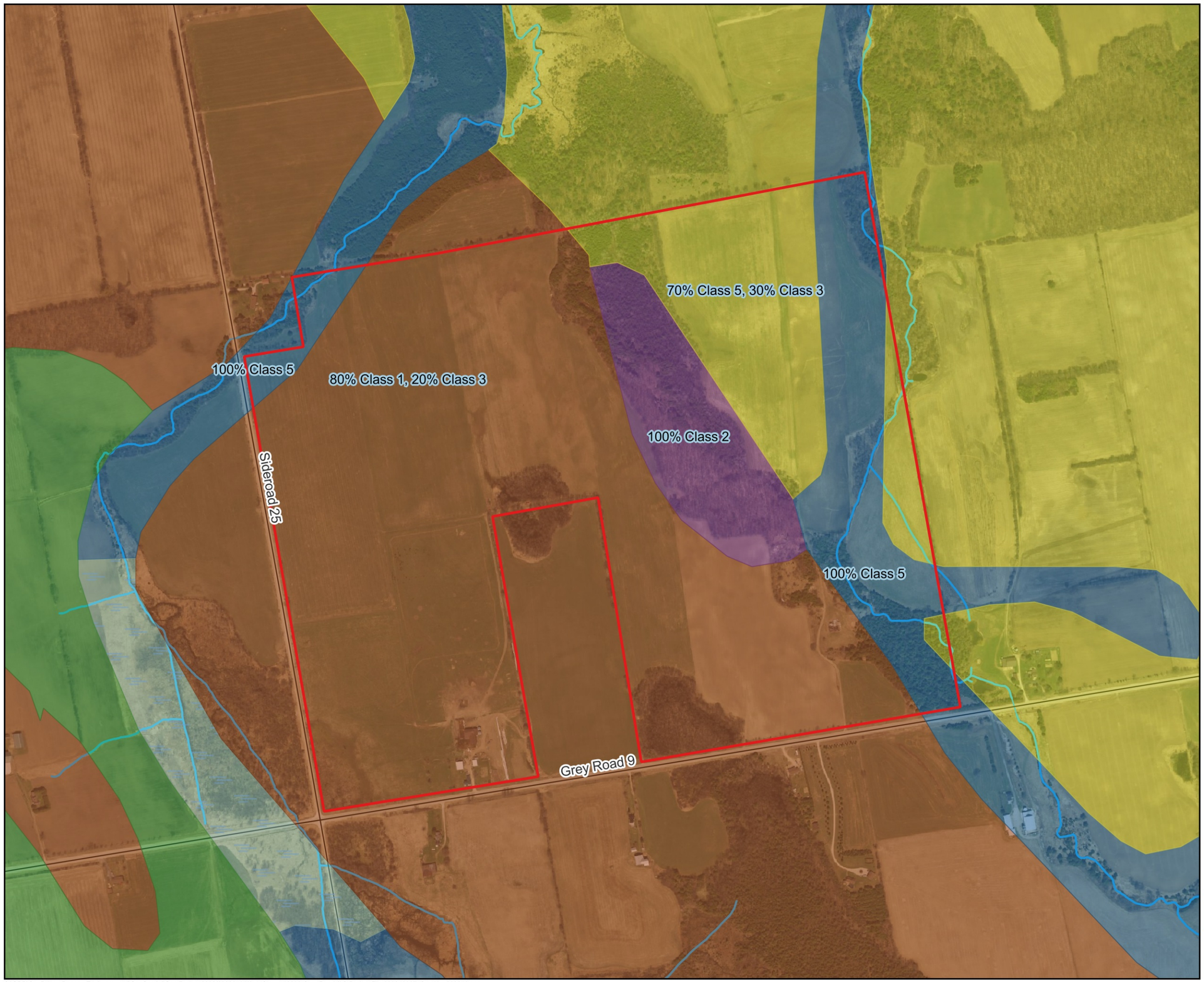
The CLI ranking is the classification of climate and soil capability for the production of common field crops (e.g., corn, soybeans, small grains, and forages). Class 1 soils have no significant limitations for agriculture, while Class 2 soils have moderate limitations that restrict the range of crops or require moderate conservation practices. Class 3 soils have moderately severe limitations that restrict the range of crops or require moderate conservation practices. Class 4 soils have severe limitations for use with crops. Class 5 soils have severe limitations that restrict capability to producing perennial forage crops, and improvement practices are feasible. The Class 5 limitations are so severe that the soils are not capable of use for sustained production of annual field crops. Class 6 soils are capable only of producing perennial forage crops, and improvement practices are not feasible. Class 7 soils have no capacity for arable culture or permanent pasture.

The CLI Mapsheet 41a (Bruce 1966) describes the land associated with the subject property as being in a complex area (polygon) of Class 1, 3 and 5 soils. The legend on the Mapsheet provides definitions for the subclasses (based on limitations) and describes the subject property as having flooding (I), stoniness (P), topography (T), and water (W) limitations.

The land associated with the study area is described on the CLI Agricultural Capability mapping provided by OMAFRA (AgMaps Geographic Information Portal) as also being in an area of Class 1, 3 and 5 soils, with an area of Class 2 soils associated with the location of the Parkhill Loam soil.

OMAFRA more recently, in cooperation with the MNRF, compiled a geo-spatial soils database (Soil Survey Complex) for Southern Ontario (March 2023). The database consolidated the existing soil data mapped on a county basis. Similar to the CLI Agricultural Capability mapping noted above, the updated soil complex database contains other descriptive information including slope class, CLI ranking, stoniness, drainage class and soil texture.

The Soil Survey Complex suggests that the central and western portions of the subject property are contained within a polygon that consists of Harriston Silt Loam of 80% Class 1 and 20% Class 3 CLI



Soil Series	Figure 4

West Grey Ag Report

Legend

- Subject Property digitized from file information. This drawing is for illustration purposes only and must not be used in place of surveyed information.
- Permanent Watercourse (OHN; MNRF)
- BOTTOM LAND
- HARRISTON SILT LOAM
- LISTOWEL SILT LOAM
- MUCK
- PARKHILL LOAM
- PIKE LAKE LOAM

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rating (**Figure 4**). In Ontario, there are eleven limitation subclasses (**Table 1**). The limitation subclass of the Class 3 soils is listed as T. Most of the study area is contained within this polygon.

Table 1. CLI Limitation Sub-Class Description

Code	CLI Sub-Class Description
C	Land subject to crop heat unit regimes of < 2300 (i.e., adverse Climate)
D	Adverse soil structure (i.e., Depth of rooting zone is restricted)
E	Loss of soil profile from Erosion
F	Low inherent soil Fertility
I	Subject to occasional flooding (Inundation) from adjacent streams or water bodies
M	Low inherent moisture holding capacity
P	Presence of surface stones > 15 cm diameter
R	Presence of consolidated bedrock within one metre of the soil surface
S	Presence of a combination of the Subclasses F and M, or, the presence of a combination of the Subclasses P and R, with a third limitation (e.g., 3FMT = 3ST or 5PRE = 5SE)
T	Presence of adverse Topography
W	Subject to excessive Water saturation in the soil profile

The Soil Survey Complex suggests that the northeastern portion of the subject property, including the most northeastern tip of the study area, is contained within a polygon that consists of Pike Lake Loam of 70% Class 5 with a limitation class of P and T, and 30% Class 3 CLI rating with a limitation class of P (**Figure 4**). A small portion of the eastern side of the study area is contained within a polygon that consists of Parkhill Loam of 100% Class 2 soils with a limitation class of W. Finally, the most northwestern tip, and the most eastern border of the subject property are contained within polygons that consist of 100% Bottom Land of 100% Class 5 soils with a limitation class of I.

Table 2 summarizes the soil capability associated with the subject property in the OMAFRA digital database (Soil Survey Complex March 2023).

Table 2. Agricultural Capability Classes Associated with the Subject Property as Shown in the OMAFRA Digital Soil Survey Complex (March 2023)

Soil Series	CLI Capability Rating	Agricultural Capability Class	Agricultural Capability Subclass 1	Agricultural Capability Subclass 2	Drainage Class	A Horizon Soil Texture
Harriston Silt Loam	Class 1 (80%)	Soils have no significant limitations in use for crops.	None	None	Moderately Well	Silt loam
Harriston Silt Loam	Class 3 (20%)	Soils have moderately severe limitations on use for crops.	Presence of adverse Topography	None	Moderately Well	Silt loam
Pike Lake Loam	Class 5 (70%)	Soils have severe limitations that restrict capability to producing perennial forage crops, and	Presence of surface stones > 15 cm diameter	Presence of adverse Topography	Well to excessively	Loam

Soil Series	CLI Capability Rating	Agricultural Capability Class	Agricultural Capability Subclass 1	Agricultural Capability Subclass 2	Drainage Class	A Horizon Soil Texture
		improvement practices are feasible				
Pike Lake Loam	Class 3 (30%)	Soils have moderately severe limitations on use for crops.	Presence of surface stones > 15 cm diameter	None	Well to excessively	Loam
Parkhill Loam	Class 2 (100%)	Soils have moderate limitations that restrict the range of crops or require moderate conservation practices	Subject to excessive Water saturation in the soil profile	None	Poor	Loam
Bottom Land	Class 5 (100%)	Soils have severe limitations that restrict capability to producing perennial forage crops, and improvement practices are feasible	Subject to occasional flooding (Inundation) from adjacent streams or water bodies	None	Poor	Varied

It is important to note that neither the subject property, nor the surrounding lands are identified by the province as specialty crop areas.

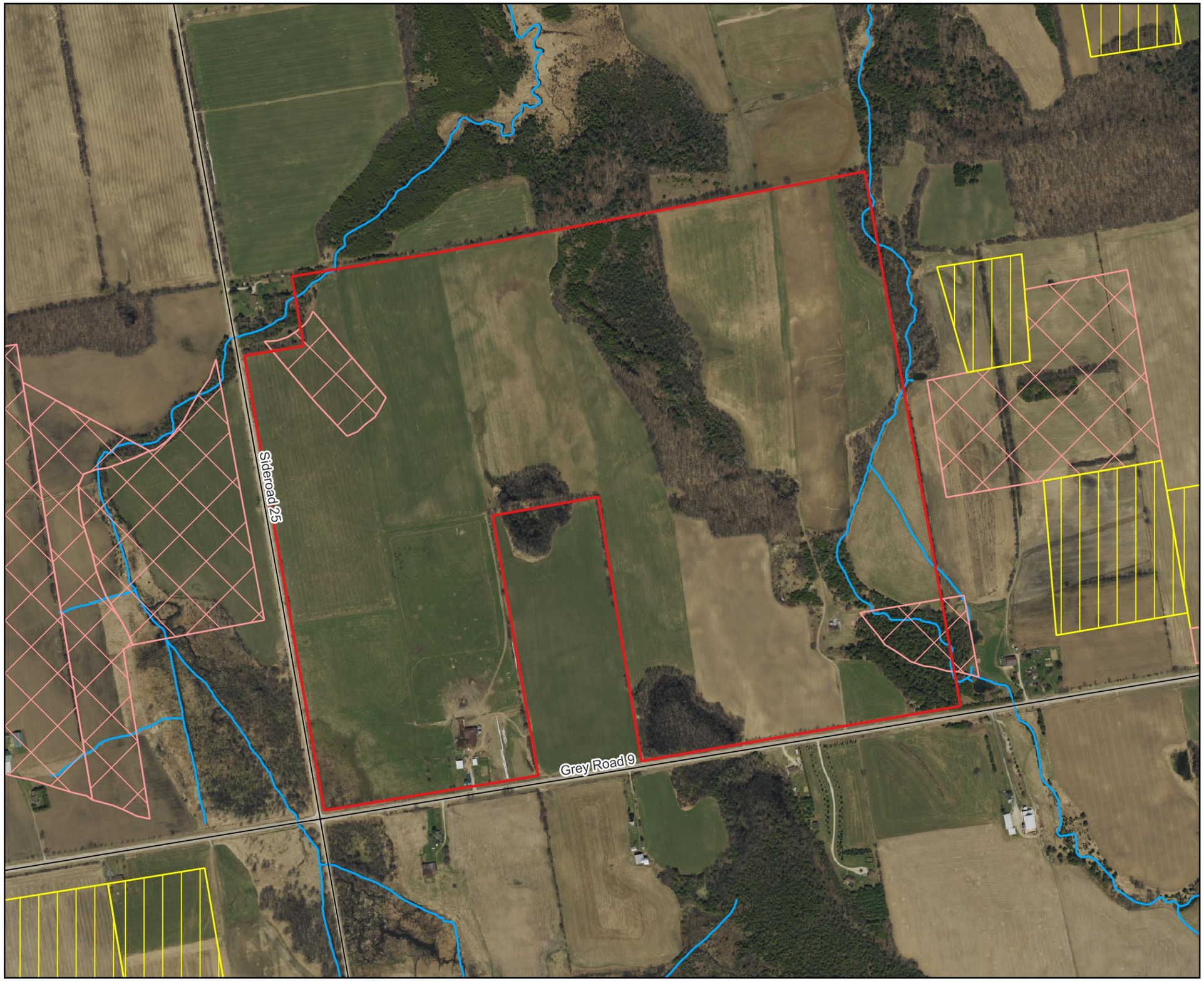
5.6 Municipal Drainage

Municipal drains have been a fixture of rural Ontario's infrastructure since the 1800s. Most municipal drains were constructed to improve the drainage of agricultural land by serving as the discharge point for private agricultural tile drainage systems. Tile drainage is both agronomically and economically beneficial for reasons including better growing conditions, improved soil structure, better trafficability, reduced energy consumption, more timely planting and harvest, and improved yields for a variety of crops.

OMAFRA maintains records of artificial drainage in Ontario. The LIO online database was accessed for the most up to date records of artificial drainage within and adjacent to the subject property. There are two areas identified as “Random Tile Drainage”; one (1) in the most northwestern corner, and one (1) in the most southeastern corner (**Figure 5**).

Additionally, the web-based mapping service from OMAFRA (AgMaps) was consulted. The same two (2) areas of “Random” agricultural tile drainage are identified on AgMaps.

At the time of the site inspection, it was apparent that tile drainage was being installed on the subject property. Heavy equipment was installing tile drainage, and large rolls of drainage pipe were stockpiled to be installed.



Soil Series	Figure 4

West Grey Ag Report

Legend

- Subject Property digitized from file information. This drawing is for illustration purposes only and must not be used in place of surveyed information.
- Permanent Watercourse (OHN; MNRF)

Tile Drainage Areas

- Random
- Systematic

BEACON ENVIRONMENTAL

Project: 223319
Last Revised: June 2024

Client: Mervin Bearinger

Prepared by: JN
Checked by: CG

N

1:7,000

0 100 200 m

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5.7 Agricultural Land Use and Infrastructure

A land use reconnaissance survey was undertaken on April 8, 2024.

5.7.1 Subject Property

As noted previously, the subject property is a large parcel of land of approximately 109.8 ha (~271 ac) and is currently developed with a residence, a barn, and outbuildings with associated paddocks. The remainder of the subject property is farmed by tenant farmers, generally with a rotation of corn and soybean. Treed hedgerows, forest stands, and a watercourse also occur on the subject property.

At the time of the site visit, a large portion of the subject property was under agricultural production and the previous landowner still had 40 beef cows on site in a barn with capacity for 100 cows with outside uncovered manure storage to the north of the existing residence. Other than the tile drainage being installed, there was no indication of recent upgrades or related investment into the existing agricultural infrastructure.

5.7.2 Surrounding Use

The subject property lies ~3.7 km east of the boundary of the Village of Ayton. There are a mix of land uses in the area surrounding the subject property, consistent with the regional land uses. To examine land use change in the area over time, aerial photos from 2006, 2010, 2015, 2018 and 2020 were compared to the most recent aerial photography available through Google Earth®. Land use surrounding and within the subject property is consistent between years and was always primarily agricultural.

The Agricultural Resources Inventory or ARI (OMAFRA 1983) provides an overview and reference of the location, quantity, and quality of the historical use of agricultural land in Ontario. The ARI evaluated the mix of crops and classified their proportion more specifically, thereby identifying land use systems which are valid over a long period of time. The ARI shows agricultural resources within the general area to consist of corn, hay systems, grain systems, mixed systems, and woodlands. Within the subject property, the agricultural resources are listed as a grain system (western and central portions), a hay system (eastern portion), with areas of woodland, consistent with most recent uses. Approximately 14 ha of land to the north of the existing barn is a fenced pasture area for the existing livestock.

6. Agricultural Assessment

Land use planning decisions attempt to balance the competing demands for land. Generally, the primary factor in the evaluation of agricultural lands is soil capability ratings (CLI mapping). Additional factors in land planning decisions include the existing investments in agricultural facilities, land and infrastructure and changes to agricultural land use patterns, the presence of rural non-farm residents and their integration, land fragmentation, intrusions of non-agriculture land uses, and non-resident ownership of lands.

Beacon understands that this AR was requested as part of a Consent Application for a proposed severance of the subject property to create two additional lots, each with access from Grey Road 9. Severed Lot 1 would have a lot area of 39.6 ha and a lot frontage of 389 m, Severed Lot 2 would have a lot area of 29.5 ha and a lot frontage of 198 m, and the Retained Lot would have an area of 40.7 ha and a lot frontage of 400 m. Severed Lot 2, the study area, would have a lot area under 40 ha, triggering the requirement for an AR to justify the undersized lot creation as per Section 5.2.3 of the County OP. The following analysis provides further assessment of agricultural resources, agricultural infrastructure, fragmentation, MDS setbacks, and land use conflict.

6.1 Agricultural Resources

As noted in Section 5.5, the subject property, or the surrounding lands are not identified by the Province as specialty crop areas; in this regard, the proposed severances will not consume prime agricultural land, conversely, they will continue to make use of prime agricultural land.

The primary soil series in the study area is the Harriston Loam Series. A detailed review of the CLI mapping was completed for the study area to assess the land for qualification as prime agricultural land (Class 1, 2 and 3 soils). According to the CLI classification rating (refer to **Table 1**), the soils in the study area qualify as prime agricultural land (Class 1 and 3).

Most of the subject property lies within a polygon that consists of Class 1 and Class 3 CLI ratings.

6.2 Agricultural Infrastructure

Agricultural investment is directly related to the improvement of land through tile drainage or irrigation equipment, and through the improvements to agricultural infrastructure (e.g., barns, manure storage, sheds). Agricultural fields and facilities that have increased capital investment are generally more worthy of preservation and are readily identifiable through visual inspection of the facilities.

Generally speaking, livestock rearing requires an investment in agricultural facilities, dairy operations require a relatively large investment in maintaining facilities for the production of milk, and poultry and hog operations require specific production facilities that involve capital investment. Conversely, beef production, hobby horse and sheep operations generally require less infrastructure, and therefore, less investment. A large investment in infrastructure can occur for certain cash crops as well, as some facilities include large storage and drying equipment.

Within the subject property, land improvement was being undertaken through installation of tile drainage. Other than tile drainage, there was no indication of recent upgrades or related investment into the existing agricultural infrastructure.

6.3 Fragmentation

The conversion of agricultural lands to residential, recreational, or commercial land can have a variety of effects, including fragmentation of the landscape. Fragmentation of farmlands generally reduces the

economic viability of the lands by reducing the efficiency of which lands can be farmed and increasing the operating costs for other farms, particularly if the fragmentation results in several small and separated parcels.

Although severance of the proposed lots will remove a small amount of farmland for the creation of two single detached residential dwellings, accessory structures, and barns, on Severed Lot 2 [the study area], and the Retained Lot, the existing farming (corn) operations are expected to continue. There will be an overall loss of tillable land presently farmed but the remaining tillable land will remain easily accessible, and the proposed development will not reduce the efficiencies of farmed lands in the area.

6.4 Land Use Conflict

The level of compatibility between differing land uses obviously varies. As a general rule, uses that have few “people” interfacing with agriculture enhance compatibility. Land use conflict can be described on a micro (neighbour to neighbour) level and a macro (urban form) level. Micro conflicts can include dust, odours, noise, chemicals, etc., while macro conflict can include pollutants in water sources, flooding, and livestock noise.

6.4.1 MDS Analysis

Farm operations were documented during the land use reconnaissance survey on April 8, 2024. The survey estimated the most likely use of the facilities from roadside assessment and from the local knowledge of the existing farmer on the subject property. Data collected included the identification of land use, identification and visual assessment of barns or any building capable of housing livestock, identification of animal types, if observed on the property, number of animals and barn location with respect to other land uses. Recent aerial photography (2006, 2010, 2015, 2018 and 2020) and GIS software (QGIS 3.34.1) was also used to assist in the identification of farm infrastructure within 750 m of the subject property.

Software developed by the OMAFRA was used to calculate the MDS I requirements for the livestock facilities. This includes former livestock operations which have buildings that are structurally sound and capable of housing livestock. To determine the MDS I setback requirements, specific information regarding each livestock facility is required by the formulae. Livestock facilities are defined in the OMAFRA guidance document entitled *Minimum Distance Separation (MDS) Document, Publication 853 (2016)* as “All livestock barns and manure storages on a lot, as well as all unoccupied livestock barns and unused manure storages on a lot.”

The OMAFRA formula requires specific information regarding neighbouring livestock operations. The information includes:

- The lot size;
- The type of livestock housed in the barn;
- The maximum capacity of the barn;
- The type of manure storage system; and
- The type of land use proposed adjacent to existing livestock facilities.

With regard to the type of land use proposed, the OMAFRA Publication 853 (2016) recognizes two land use types; Type A and Type B. Type A land uses are generally characterized by uses that have a lower density of human occupancy, habitation, or activity. For the purposes of MDS I, Type A land uses include applications to rezone or redesignate agricultural lands for industrial, agricultural-related, or recreational use – low intensity purposes. Type B land uses generally have a higher density of human occupancy, habitation, or activity, and include applications to rezone or redesignate agricultural lands for residential, institutional, recreational use – high intensity, commercial or settlement area purposes.

The proposed land use change is a Type A land use, and the MDS I analysis used the Type A factor in all calculations.

Additionally, because new livestock facilities are proposed on Severed Lot 2 and the Retained Lot, information from the landowner was acquired to understand the parameters for the MDS II calculations to be completed. The proposed agricultural use on Severed Lot 2 and the Retained Lot is to raise beef cattle.

Methodology

Background information was gathered and reviewed at the outset of the project. Prior to visiting the site, aerial photography (Google Earth® 2018, Grey County GIS 2006, 2010, 2015 and 2020 [First Base Solutions], and OMAFRA's AgMaps imagery) was reviewed. The aerial imagery was used to identify potential livestock housing facilities within 750 m of the subject property. A review of the surrounding properties was undertaken during land use reconnaissance surveys using roadside assessment.

To determine MDS I from potential and existing livestock facilities, the OMAFRA Publication 853 (2016) was reviewed and used as our basis for evaluating livestock facilities. The Implementation Guidelines are provided by OMAFRA and outline the requirements that need to be considered as part of the application and calculation of the MDS formulae.

The OMAFRA Publication 853 (2016) provides direction for determining when a barn is a livestock facility. Section 8.5 of the OMAFRA Publication 853 (2016) provides key elements to consider in determining if a barn is structurally sound and reasonably capable of housing livestock. These key elements include the barn's foundation, walls, roof, internal structure, location, size and shape, historical use, era, current use, and presence of related buildings on site.

Although the actual number of livestock associated with the barns at the time of assessment may have been less than maximum capacity of the barns, the MDS I calculations below are based on maximum barn area for each farm. It is noted that the calculation of MDS I requires some interpretation based on the number and kind of animals producing manure, as well as the maximum livestock facility housing capacity that includes an allowance for feed bins, feed preparation areas, livestock assembly areas, livestock loading chutes, offices, and washrooms. Because the size of allowances for uses other than housing animals was not known, the GIS measurement of the area of each barn provides an overall size of the barn but does not differentiate between areas of the barn that may or may not be used by livestock. The MDS I calculations were based on maximum size of barn calculated by GIS software, therefore providing the most conservative MDS.

Analysis

The information collected during the reconnaissance survey, and interpretation of aerial photography was entered into the OMAFRA AgriSuite online software (https://agrisuite.omafra.gov.on.ca) and used to generate the MDS I setback distances for Type A land use (Lot creation for an agricultural use [e.g., farm split]). The MDS I reports generated by the MDS software are provided in **Attachment A**. **Table 3** summarizes the data collected for each livestock operation for each of the factors used to calculate the MDS I setback requirements, and the resultant setback requirements.

Table 3. Summary of Livestock Oerations Within 750 m of Subject Property

Farm	Livestock (# Based on Recon)	GIS Barn Area (m^2)	Number of Animals (Based on GIS Barn Size)	Manure Handling System	Distance from Barn and/or Manure (metres)
142157 Grey County Road 9	Beef Cows (NA)	~625	135	Solid, outside, no cover, >= 30% DM	278/278
142239 Grey County Road 9	Beef Cows (40)	~500	108	Solid, outside, no cover, >= 30% DM	257/257
142306 Grey County Road 9	Horses (N/A)	~115	4	Solid, outside, no cover, >= 30% DM	93
142316 Grey County Road 9	Beef Cows (NA)	~420	90	Solid, outside, no cover, >= 30% DM	241/241
142340 Grey County Road 9	Sheep (N/A)	~650	304	Solid, outside, no cover, >= 30% DM	179/179
142347 Grey County Road 9	Sheep (N/A)	~350	164	Solid, outside, no cover, >= 30% DM	162/162
142396 Grey County Road 9	Horses (N/A)	~560	19	Solid, outside, no cover, >= 30% DM	162/162

As shown in **Figure 6**, the only MDS I separation distance for each of the farms within 750 m of the subject property that encroaches into the subject property is in the most southeastern corner of the Retained Lot, and within a forested area. All development is proposed outside of the forested areas and as such, the MDS I setbacks will all be respected.

The MDS II reports generated by the MDS software are provided in **Attachment B**. **Table 4** summarizes the data for the proposed new livestock operations for each of the factors used to calculate the MDS II setback requirements, and provides the resultant setback requirements.

Table 4. Summary of Proposed New Livestock Operations

Farm	Proposed Livestock	GIS Barn Area (m^2)	Number of Animals (Based on GIS Barn Size)	Manure Handling System	Minimum Setback from Adjacent Buildings (metres)
Severed Lot 2	Beef Cows (~100)	~500	108	Solid, outside, no cover, >= 30% DM	182/182
Retained Lot	Beef Cows (~100)	~500	108	Solid, outside, no cover, >= 30% DM	182/182

As shown in **Figure 6** by the 182 m dimension line, the MDS II setback of 182 m between Severed Lot 2 and the Retained Lot, as well as other existing or approved development, can be achieved. The locations of the barns/manure storage on Severed Lot 2 and the Retained Lot must maintain the required MDS II minimum distance (182 m) from the dwelling on each lot.

6.4.2 Right to Farm

Agricultural practices may result in discomfort or inconveniences in areas adjacent to farming operations. The *Farming and Food Production Protection Act* (2002) protects farms from nuisance complaints made by neighbours, provided they are following normal farm practices. As defined in the *Act*, a normal farm practice is one that:

- Is conducted in a manner consistent with proper and acceptable customs and standards as established and followed by similar agricultural operations under similar circumstances; or
- Makes use of innovative technology in a manner consistent with proper advanced farm management practices.

The bulk of farm nuisance complaints are about odours emanating from manure handling and storage. However, examples of other nuisance complaints might include light from greenhouses at night, vibration from trucks, fans, or boilers, smoke from burning tree pruning or other organic wastes, flies from manure, spilled feed, noise from crop drying fans, irrigation pumps, dust from field tillage equipment, or truck traffic.

Due to the location of the severed lots, and intensity of the existing farm operations, disruption to farm practices surrounding the proposed lots is unlikely.

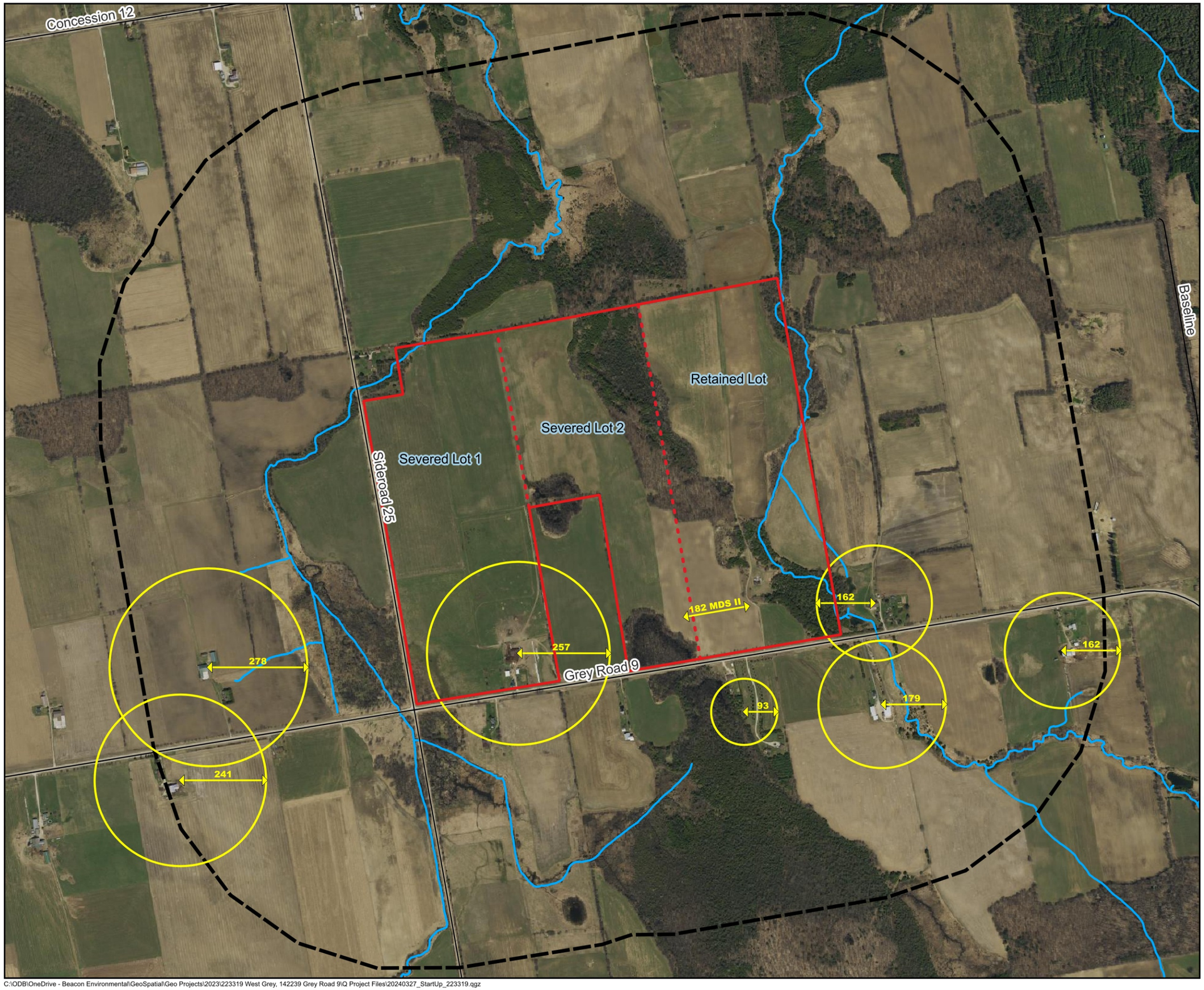
6.4.3 Traffic

Increased vehicle traffic along roadways can lead to safety issues with respect to the movement of slow moving, farm machinery and, as well, interrupt or alter farm traffic flow patterns. Due to the location and intensity of the existing farm operations and the location of the proposed lots, future farm traffic will likely not be affected.

6.4.4 Trespass and Vandalism

Trespassing and vandalism impacts are generally related to development within agricultural areas that primarily consist of specialty crop operations or large livestock operations. There are no designated specialty crop areas or large livestock operations within or adjacent to the proposed lots.

Farming, particularly row crop (e.g., corn), is generally the focus of the surrounding agricultural practice. Mitigation measures may include but are not limited to improved fencing between the respective land uses, the use of signage indicating prosecution for violation of trespassing and plantings of low dense woody vegetation as a physical barrier.



MDS	Figure 6

West Grey Ag Report

Legend

- Subject Property digitized from file information. This drawing is for illustration purposes only and must not be used in place of surveyed information.
- Proposed Severance Lines
- Permanent Watercourse (OHN; MNRF)
- MDS Setbacks (Distances shown in m)

BEACON ENVIRONMENTAL

Project: 223319
Last Revised: June 2024

Client: Mervin Bearinger

Prepared by: JN
Checked by: CG

N

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0 200 400 m

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7. Agricultural Policy Conformity

The following commentary describes how the proposed land use changes conform with the relevant provincial, and municipal environmental legislation and policies, provided that development proceeds as indicated.

7.1 Provincial Policy Statement (2020)

Prime agricultural areas are included in Provincial land use policy and prime agricultural lands describe the agricultural capability of the land and soils. Prime agricultural areas exist where prime agricultural lands predominate and may be identified by OMAFRA using guidelines developed by the Province as amended from time to time. Prime agricultural lands include specialty crop areas and CLI Classes 1, 2 and 3 soils, in this order of priority for protection.

As noted above, the Soil Survey Complex suggests that most of the subject property (the central and western portions), including the study area and the areas proposed for development of single detached residential dwellings, accessory structures, and barns, are contained within a polygon that consists of 80% Class 1 and 20% Class 3 soils. The limitation subclass of the Class 3 soils is listed as T. These Class 1 and Class 3 soils meet the PPS (2020) definition of prime agricultural lands.

Section 2.3.6.2 of the PPS requires that impacts from new non-agricultural uses on surrounding agricultural operations be mitigated to the extent feasible. The proposed use of the severed lots, including the study area (Severed Lot 2), is continued row crop (e.g., corn) farming, and new agricultural uses on Severed Lot 2 and the Retained Lot (beef livestock). Non-agricultural uses will be limited to the two proposed single detached residential dwellings. The two non-agricultural uses will have zero to near-zero impact on the prime agricultural lands associated with the subject property, and on the surrounding agricultural operations, therefore, the proposed severance and associated new uses will be in compliance with the PPS.

7.2 County of Grey Official Plan (2023, Consolidated)

The County requested that an AR prepared by an Agrologist address all relevant policies of Section 5.2.3 of the County OP. **Table 5** provides an analysis of each relevant section of the County OP:

Table 5. Section 5.2.3 of the County OP Analysis

Section 5.2.3 Part	Examples
1.a	Severed Lot 2 would create a lot smaller than 40 ha and this Agricultural Report addresses the relevant criteria set out in Section 5.2.3 (Consent Policies) of the County Official Plan.
1.a.1	Agriculture is the proposed use of the severed and retained lots.
1.a.2	The farm business plan is supplied under separate cover by others.

Section 5.2.3 Part	Examples
1.a.3	The demonstration of economic viability is supplied under separate cover by others.
1.a.4	The proposed lots are well suited to the intended use as that is what is occurring presently. During the reconnaissance survey for the minimum distance separation (MDS) assessment, there was no indication of similar properties for sale in the area and therefore, nearby lots of similar size and farm capability are not available.
1.a.5.1	The severed and retained lots are proposed to have agricultural operations consistent with the existing operations on the subject property, and consistent with type and size of agricultural operations common in the area.
1.a.6	Both the severed and retained lots remain sufficiently large enough to each permit a single detached residential dwelling, accessory structure, and barn used to raise beef cattle. Additionally, the applicants intend to transition the existing rotation of field crops entirely to corn.
1.a.7	Both the severed and retained lots can comply with Provincial MDS Formulae. Importantly, the locations of the barns on Severed Lot 2 and the Retained Lot must maintain the required MDS II distance (182 m) from the dwelling on each lot.

8. Conclusions

Beacon was retained to provide an AR as part of a Consent Application for a proposed severance of the subject property to create two additional lots, each with access from Grey Road 9, and each with proposed new agricultural practices.

The landowner is proposing to sever two lots from the subject property. Severed Lot 1 would have a lot area of 39.6 ha and a lot frontage of 389 m and will maintain the existing structures and continue raising beef cattle on the property.

Severed Lot 2 would have a lot area of 29.5 ha and a lot frontage of 198 m, and a building envelope positioned at the front of the lot, situated outside of the Natural Environment area. The future building envelope is proposed to contain a single detached residential dwelling, accessory structure and barn. The proposed agricultural use is to raise beef cattle.

The Retained Lot would have an area of 40.7 ha and a lot frontage of 400 m and is proposed to contain a future building envelope that will include a single detached residential dwelling, accessory structure and barn. The proposed agricultural use is to raise beef cattle.

Severed Lot 2 will have a lot area under 40 ha, triggering the requirement for an AR to justify the undersized lot creation as per Section 5.2.3 of the County of Grey Official Plan (County OP; 2023, Consolidated).

The AR assesses the existing agricultural capability of the subject property and the potential impacts to agriculture, farm operations and the surrounding area. Beacon provides the following conclusions:

- The Soil Survey Complex suggests that most of the subject property (the central and western portions), including the study area and the areas proposed for development of single detached residential dwellings, accessory structures, and barns, are contained within a

polygon that consists of 80% Class 1 and 20% Class 3 soils. The limitation subclass of the Class 3 soils is listed as T. The soils in the study area qualify as prime agricultural land (Class 1 and 3);

- None of the subject property is designated by the Province as an area for specialty crops; the requirement for both prime agricultural soils and climate do not exist within or adjacent to the three proposed lots;
- Within the subject property, land improvement was being undertaken through installation of tile drainage. Other than tile drainage, there was no indication of recent upgrades or related investment into the existing agricultural infrastructure. No recent or significant agricultural investments or infrastructure would be impacted by the proposed severance;
- Farm operations were documented during land use reconnaissance survey undertaken in June 2022. The MDS study reviewed the livestock housing facilities within 750 m of the subject property and our review of the MDS 1 separation requirements demonstrates that the proposed three lot severance would not be impacted by neighbouring livestock facilities; and
- OMAFRA uses a number of priorities when considering agricultural priority, and the three proposed lots can be considered a lower priority agricultural area based on:
    - The ability to meet MDS requirements for each of the three proposed lots;
    - The location of the three proposed lots within close proximity of an existing settlement area;
    - The location of the three proposed lots at the boundary of a designated rural and agricultural area (County OP); and
    - The minimal amount of capital investments in agricultural infrastructure in comparison to other lands in the surrounding area.

It is Beacon's opinion that the severance as proposed, subject to the above recommendations and approvals and permits as may be required as part of the development, can proceed in a manner that is consistent with policies and regulations of the 2020 PPS, and particularly Section 5.2.3 of the County OP.

Prepared by:
Beacon Environmental Ltd.

Jamie Nairn, M.Sc., P.Ag.
Senior Ecologist

Reviewed by:
Beacon Environmental Ltd.

Carolyn Glass

Carolyn Glass, B.Sc. M.E.S.
Senior Ecologist

Appendix A

MDS I Report

Ontario

AgriSuite

223319 Grey Rd MDS1

General information

Application date
May 21, 2024

Municipal file number

Proposed application
Lot creation for an agricultural use (e.g. farm split)

Applicant contact information
Mervin Bearinger
6315 Highway 89
Clifford, ON
N0G 1M0

Location of subject lands
County of Grey
Township of West Grey
NORMANBY
Concession 10 , Lot 26
Roll number: 4205

Calculations

142157 Grey County Road 9

Farm contact information

142157 Grey County Road 9
Municipality of West Grey, ON
N0G 1C0

Location of existing livestock facility or anaerobic digestor
County of Grey
Township of West Grey
NORMANBY
Concession 10 , Lot 24
Roll number: 4205

Total lot size
100 ha

Notes
No indication of livestock - calculation based on information from client and air photo

Livestock/manure summary

Manure Form	Type of livestock/manure	Existing maximum number	Existing maximum number (NU)	Estimated livestock barn area
Solid	Beef, Cows, including calves to weaning (all breeds), Yard/Barn	135	135 NU	627 m²

Confirm Livestock/Manure Information (142157 Grey County Road 9)
The livestock/manure information has not been confirmed with the property owner and/or farm operator.

Setback summary

Existing manure storage	**V3. Solid, outside, no cover, >= 30% DM**
Design capacity	**135 NU**
Potential design capacity	**405 NU**

Factor A (odour potential) **0.7**
Factor D (manure type) **0.7**
Factor B (design capacity) **515.17**
Factor E (encroaching land use) **1.1**

Building base distance 'F' (A x B x D x E) (minimum distance from livestock barn)	**278 m (912 ft)**
Actual distance from livestock barn	**NA**
Storage base distance 'S' (minimum distance from manure storage)	**No existing manure storage**
Actual distance from manure storage	**NA**

142306 Grey County Road 9

Farm contact information

142306 Grey County Road 9
Municipality of West Grey, ON
N0G 1Co

Location of existing livestock facility or anaerobic digestor
County of Grey
Township of West Grey
NORMANBY
Concession 9 , Lot 28
Roll number: 4205

Total lot size
48 ha

Notes
No indication of livestock - calculation based on information from client and air photo

Livestock/manure summary

Manure Form	Type of livestock/manure	Existing maximum number	Existing maximum number (NU)	Estimated livestock barn area
Solid	Horses, Large-framed, mature; > 680 kg (including unweaned offspring)	4	5.7 NU	121 m²

Confirm Livestock/Manure Information (142306 Grey County Road 9)
The livestock/manure information has not been confirmed with the property owner and/or farm operator.

Setback summary

Existing manure storage **- Not Specified -**

Design capacity **5.7 NU**

Potential design capacity **11.4 NU**

Factor A (odour potential) **0.7**
Factor B (design capacity) **171.4**
Factor D (manure type) **0.7**
Factor E (encroaching land use) **1.1**

Building base distance 'F' (A x B x D x E) (minimum distance from livestock barn)	**93 m (305 ft)**
Actual distance from livestock barn	**NA**
Storage base distance 'S' (minimum distance from manure storage)	**No existing manure storage**
Actual distance from manure storage	**NA**

142316 Grey County Road 9

Farm contact information

142316 Grey County Road 9
Municipality of West Grey, ON
N0G 1C0

Location of existing livestock facility or anaerobic digestor
County of Grey
Township of West Grey
NORMANBY
Concession 9 , Lot 24
Roll number: 4205

Total lot size
100 ha

Notes
Calculation based on information from client and air photo

Livestock/manure summary

Manure Form	Type of livestock/manure	Existing maximum number	Existing maximum number (NU)	Estimated livestock barn area
Solid	Beef, Cows, including calves to weaning (all breeds), Yard/Barn	90	90 NU	418 m²

Confirm Livestock/Manure Information (142316 Grey County Road 9)
The livestock/manure information has not been confirmed with the property owner and/or farm operator.

Setback summary

Existing manure storage	**V3. Solid, outside, no cover, >= 30% DM**
Design capacity	**90 NU**
Potential design capacity	**270 NU**

Factor A (odour potential) **0.7**
Factor B (design capacity) **447.01**
Factor D (manure type) **0.7**
Factor E (encroaching land use) **1.1**

Building base distance 'F' (A x B x D x E) (minimum distance from livestock barn)	**241 m (791 ft)**
Actual distance from livestock barn	**NA**
Storage base distance 'S' (minimum distance from manure storage)	**241 m (791 ft)**
Actual distance from manure storage	**NA**

142347 Grey County Road 9

Farm contact information

Wright
142347 Grey County Road 9
Municipality of West Grey, ON
P0G 1C0

Location of existing livestock facility or anaerobic digestor

County of Grey
Township of West Grey
NORMANBY
Concession 10 , Lot 29
Roll number: 4205

Total lot size

102 ha

Notes

Calculation based on information from client and air photo

Livestock/manure summary

Manure Form	Type of livestock/manure	Existing maximum number	Existing maximum number (NU)	Estimated livestock barn area
Solid	Sheep, Ewes & rams (dairy operation; includes unweaned offspring & replacements)	164	27.3 NU	350 m²

Confirm Livestock/Manure Information (142347 Grey County Road 9)

The livestock/manure information has not been confirmed with the property owner and/or farm operator.

Setback summary

Existing manure storage	**- Not Specified -**
Design capacity	**27.3 NU**
Potential design capacity	**82 NU**

Factor A (odour potential) **0.7**
Factor B (design capacity) **299.65**
Factor D (manure type) **0.7**
Factor E (encroaching land use) **1.1**

Building base distance 'F' (A x B x D x E) (minimum distance from livestock barn)	**162 m (531 ft)**
Actual distance from livestock barn	**NA**
Storage base distance 'S' (minimum distance from manure storage)	**No existing manure storage**
Actual distance from manure storage	**NA**

Client Farm

Farm contact information
Mervin Bearinger
142239 Grey County Road 9
Municipality of West Grey, ON
N0G 1C0

Location of existing livestock facility or anaerobic digestor
County of Grey
Township of West Grey
NORMANBY
Concession 10 , Lot 26
Roll number: 4205

Total lot size
109 ha

Livestock/manure summary

Manure Form	Type of livestock/manure	Existing maximum number	Existing maximum number (NU)	Estimated livestock barn area
Solid	Beef, Cows, including calves to weaning (all breeds), Yard/Barn	108	108 NU	502 m²

Setback summary

Existing manure storage **V3. Solid, outside, no cover, >= 30% DM**

Design capacity **108 NU**

Potential design capacity **324 NU**

Factor A (odour potential) **0.7**
Factor B (design capacity) **476.47**
Factor D (manure type) **0.7**
Factor E (encroaching land use) **1.1**

Building base distance 'F' (A x B x D x E)
(minimum distance from livestock barn) **257 m (843 ft)**

Actual distance from livestock barn **NA**

Storage base distance 'S'
(minimum distance from manure storage) **257 m (843 ft)**

Actual distance from manure storage **NA**

142340 Grey County Road 9

Farm contact information

Grein
Maple Creek Farm
142340 Grey County Road 9
Municipality of West Grey, ON
P0G 1C0

Location of existing livestock facility or anaerobic digestor

County of Grey
Township of West Grey
NORMANBY
Concession 9 , Lot 29
Roll number: 4205

Total lot size

61.5 ha

Livestock/manure summary

Manure Form	Type of livestock/manure	Existing maximum number	Existing maximum number (NU)	Estimated livestock barn area
Solid	Sheep, Ewes & rams (for meat lambs; includes unweaned offspring & replacements), Confinement	304	38 NU	650 m²

Confirm Livestock/Manure Information (142340 Grey County Road 9)

The livestock/manure information has not been confirmed with the property owner and/or farm operator.

Setback summary

Existing manure storage	**V3. Solid, outside, no cover, >= 30% DM**
Design capacity	**38 NU**
Potential design capacity	**114 NU**

Factor A (odour potential) **0.7**
Factor B (design capacity) **330.57**
Factor D (manure type) **0.7**
Factor E (encroaching land use) **1.1**

Building base distance 'F' (A x B x D x E) (minimum distance from livestock barn)	**179 m (587 ft)**
Actual distance from livestock barn	**NA**
Storage base distance 'S' (minimum distance from manure storage)	**179 m (587 ft)**
Actual distance from manure storage	**NA**

142396 Grey County Road 9

Farm contact information

142396 Grey County Road 9
Municipality of West Grey, ON
PoG 1C0

Location of existing livestock facility or anaerobic digestor

County of Grey
Township of West Grey
NORMANBY
Concession 9 , Lot 30
Roll number: 4205

Total lot size

40 ha

Livestock/manure summary

Manure Form	Type of livestock/manure	Existing maximum number	Existing maximum number (NU)	Estimated livestock barn area
Solid	Horses, Large-framed, mature; > 680 kg (including unweaned offspring)	19	27.1 NU	574 m²

Confirm Livestock/Manure Information (142396 Grey County Road 9)

The livestock/manure information has not been confirmed with the property owner and/or farm operator.

Setback summary

Existing manure storage	**V3. Solid, outside, no cover, >= 30% DM**
Design capacity	**27.1 NU**
Potential design capacity	**81.4 NU**

Factor A (odour potential) **0.7**
Factor D (manure type) **0.7**
Factor B (design capacity) **299.14**
Factor E (encroaching land use) **1.1**

Building base distance 'F' (A x B x D x E) (minimum distance from livestock barn)	**162 m (531 ft)**
Actual distance from livestock barn	**NA**
Storage base distance 'S' (minimum distance from manure storage)	**162 m (531 ft)**
Actual distance from manure storage	**NA**

Preparer signoff & disclaimer

Preparer contact information

Jamie Nairn
Beacon Environmental
126 Kimberley Avenue
Bracebridge, ON
P1L 1Z9
705-394-6977
jnairn@beaconenviro.com

Signature of preparer

Jamie Nairn	Date (mmm-dd-yyyy)

Note to the user

The Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) has developed this software program for distribution and use with the Minimum Distance Separation (MDS) Formulae as a public service to assist farmers, consultants, and the general public. This version of the software distributed by OMAFRA will be considered to be the official version for purposes of calculating MDS. OMAFRA is not responsible for errors due to inaccurate or incorrect data or information; mistakes in calculation; errors arising out of modification of the software, or errors arising out of incorrect inputting of data. All data and calculations should be verified before acting on them.

BEACON ENVIRONMENTAL

Appendix B

MDS II Report

Ontario

AgriSuite

223319 Grey Rd MDSIII

General information

Application date
May 30, 2024

Municipal file number

Applicant contact information
Mervin Bearinger
6315 Highway 89
Clifford, ON
N0G 1M0

Location of subject livestock facilities
County of Grey
Township of West Grey
NORMANBY
Concession 10 , Lot 26

Calculations

Severed Lot 2

Notes
Proposed to ~ 100 raise beef cattle (~500 m2 barn)

Livestock/manure summary

Manure Form	Type of livestock/manure	Existing maximum	Total after alteration	Estimated livestock barn area
Solid	Beef, Cows, including calves to weaning (all breeds), Yard/Barn	0 (0 NU)	108 (108 NU)	502 m²

Setback summary

Existing manure storage	**V3. Solid, outside, no cover, >= 30% DM**
Existing design capacity	**0 NU**
Design capacity after alteration	**108 NU**

Factor A (odour potential) **0.7**
Factor B (design capacity) **324.37**
Factor C (orderly expansion) **1.14**
Factor D (manure type) **0.7**

Building base distance 'F' (A x B x C x D)
(minimum distance from livestock barn) **182 m (597 ft)**

Storage base distance 'S'
(minimum distance from manure storage) **182 m (597 ft)**

Setback distance summary

Description	Building setbacks		Storage setbacks	
Type A land uses	**Minimum** 182 m (597 ft)	**Actual** NA (Not available)	**Minimum** 182 m (597 ft)	**Actual** NA (Not available)
Type B land uses	**Minimum** 364 m (1194 ft)	**Actual** NA (Not available)	**Minimum** 364 m (1194 ft)	**Actual** NA (Not available)
Nearest lot line (side or rear)	**Minimum** 18 m (60 ft)	**Actual** NA (Not available)	**Minimum** 18 m (60 ft)	**Actual** NA (Not available)
Nearest road allowance	**Minimum** 36 m (119 ft)	**Actual** NA (Not available)	**Minimum** 36 m (119 ft)	**Actual** NA (Not available)

Retained Lot

Notes
Proposed to ~ 100 raise beef cattle (~500 m2 barn)

Livestock/manure summary

Manure Form	Type of livestock/manure	Existing maximum	Total after alteration	Estimated livestock barn area
Solid	Beef, Cows, including calves to weaning (all breeds), Yard/Barn	0 (0 NU)	108 (108 NU)	502 m²
Liquid	- Not Specified -	0 (0 NU)	0 (0 NU)	NA

Setback summary

Existing manure storage **V3. Solid, outside, no cover, >= 30% DM**

Existing design capacity **0 NU**

Design capacity after alteration **108 NU**

Factor A (odour potential) **0.7**
Factor B (design capacity) **324.37**
Factor C (orderly expansion) **1.14**
Factor D (manure type) **0.7**

Building base distance 'F' (A x B x C x D)
(minimum distance from livestock barn) **182 m (597 ft)**

Storage base distance 'S'
(minimum distance from manure storage) **182 m (597 ft)**

Setback distance summary

Description	Building setbacks		Storage setbacks	
Type A land uses	**Minimum** 182 m (597 ft)	**Actual** NA (Not available)	**Minimum** 182 m (597 ft)	**Actual** NA (Not available)
Type B land uses	**Minimum** 364 m (1194 ft)	**Actual** NA (Not available)	**Minimum** 364 m (1194 ft)	**Actual** NA (Not available)
Nearest lot line (side or rear)	**Minimum** 18 m (60 ft)	**Actual** NA (Not available)	**Minimum** 18 m (60 ft)	**Actual** NA (Not available)
Nearest road allowance	**Minimum** 36 m (119 ft)	**Actual** NA (Not available)	**Minimum** 36 m (119 ft)	**Actual** NA (Not available)

Preparer signoff & disclaimer

Preparer contact information
Jamie Nairn
Beacon Environmental
126 Kimberley Avenue
Bracebridge, ON

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Signature of preparer

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