Fennario
MEADOWS

LAVENDER OPERATIONS BRIEF

2752 8th CONCESSION SOUTH, TOWNSHIP OF CLEARVIEW

JUNE 25, 2021

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Agritourism and the Small Farm in Ontario

Making a living from a small farm (100-acres or less) in Ontario requires ingenuity. Traditional cultivation of cash crops, livestock, fruits or vegetables at this scale is not economical in the global world of industrialized farming. Consequently, the small farm has turned to alternative ways of generating revenue. Included on this list are specialty crops and organic foods such as heirloom tomatoes, carrots and other vegetables designed for local markets. Complementing this approach is the invitation to visitors to experience the farm environment. For a small farm, visitors help subsidize the farmer's costs by picking the produce themselves and/or with small admission fees and farmgate sales. The rural regions where these farms are located also benefit as visitors explore the area and patronize other local businesses in their area. This is agritourism and it is saving the small farm and bolstering the economies and employment opportunities in rural Ontario.

The June 11th issue of the Creemore Echo quoted Laurie Severn, Creemore BIA president, when she announced plans to make lavender the theme for Creemore's main street: "We've seen a positive trend in agritourism in the region over the past few years and we're seeing success from farms that are attracting visitors who are interested in learning more about farming practices or nature, and just being able to enjoy the outdoors."

Our Lavender Farm

Fennario is a 100-acre farm. It occupies land that has been farmed for over 150 years. It is prime farmland with rich soil and a beautiful landscape, hugging the Niagara Escarpment and bordered on the west side by the Bruce Trail. It's located between the hamlets of Glen Huron and Dunedin, about 8 kilometers northwest of Creemore. It is NEC Protected.

To perpetuate its existence as a farm, we have planted 30 acres of lavender, complementing our hay crop. Lavender is a durable perennial whose annual blossom can be used for essential oils, lotions, dried bouquets and sachets, culinary and a variety of other purposes. It requires no pesticide or herbicide use and very little if any water. The lifespan of a plant is anywhere from 5 to 10 years depending on growing conditions. Although it is known for its purple blossoms, pink and white varieties also thrive in the local, Clearview climate.

Our primary source of revenue for Fennario will be products that we produce from the plants raised. We also propose to open the farm to a limited and controlled number visitors during the summer months. There are more than 20 such farms in southwestern Ontario alone and a comparable operation right in the Creemore area. These operations follow the same business model as the orchards, wineries, fruit farms and flower gardens that are open to the public and are well-integrated into their rural communities who benefit from their presence.

Concerns With Our Plan

Last December, opposition began to organize their concerns with our plan, primarily among estate owners in the area. We have received notice that over 50 letters of concern have reached the NEC in the time since. Those concerns seem to be based on erroneous benchmarks to our plan and an overview that was created for the NEC late last year. We have since amended our approach in consideration of some of the concerns, which we will explain here in greater detail along with our plan to resolve any other issues that seem to have stemmed from a lack of correct information. We have offered to do this directly with the organizers of this group.

The Scale of the Visitors Operation

There are concerns that Fennario will mirror a very large lavender business near Milton known as Terre Bleu. The owner of this operation claimed to have had 50 thousand visitors in 2019. They have a large pavilion at the entrance and several acres of available parking. We are in no way trying to replicate the Terre Bleu scale or activity level, and recent portrayals of our project as a bustling "tourist attraction" or "lavender theme park' are inaccurate and unnecessarily inflammatory. This was never our intention.

Purple Hills is a lavender farm located just west of Creemore with roughly an acre of parking (estimated capacity for roughly 50 cars) and several acres of lavender. On a busy Saturday, 20 or 30 cars can be seen in the parking lot during peak season in July. The farm is coveted by the local businesses because visitors typically head into Creemore to see the local shops and restaurants. Fennario is comparable in scale to this example.

In consideration for our neighbours and the feedback we have received, we have made the following changes or clarifications to our plan. They should resolve the concerns that have been raised.

Traffic:

- We hired Crozier Engineering to conduct an extensive traffic and safety review. We collected data on existing road use from June 11th to June 13th. On the basis of accepted standards of analysis and the data collected, they have concluded that "the proposed development can be supported from a transportation perspective. The addition of site generated traffic is anticipated to have a minimal impact on the boundary road network and the nearby hamlets of Dunedin and Glen Huron."
- We have reduced the size of the parking area by almost half with a *maximum* capacity now for 50 cars – including staff working at the farm. This is a reduction of more than 50% from the original plan for 90 spaces plus a staff parking area. Although this parking capacity would allow for 100 to 120 cars to visit each day, we believe that is unlikely except in the midst of peak season in July. This is also consistent with the capacity of

Purple Hills. This is a clear reflection of our intended scale and desired integration into a peaceful neighbourhood.

- Visitor activity will continue to be controlled by using a reservation system (similar to a restaurant) that modulates traffic flow by assigning visit times. Reservations have become a standard practice at many similar venues.

Visibility to the road:

- Except for a few plants in the shrubbery gardens near our existing barn, and the restored rose garden, there will be no lavender planted on the street side of the farm. There will be no reason for people to stop and take pictures. We have eliminated the pond as a feature on the property entirely. The front of the farm, adjacent to the 8th Concession, will continue to be a hay field.
- Neither the parking, the lavender fields, or any retail activity will be visible to any of our neighbours or the street. All activity will take place beyond the crest of the first hill on the farm, at the end of the driveway. It is unlikely that any foot traffic through our fields will be seen except from a distance of several hundred metres.
- Instead of using the existing shed for any retail activity, we will build another small shed (134 sq metres, in keeping with NEC guidelines) beyond the crest of the hill and out-of-sight from both the street and any neighbours. This shed will be used as a clean environment to process the harvest and to support a modest retail activity.
- The farm was never intended to be an "event" location. We will not host weddings or similar activity. We will not be preparing food on site and no alcoholic beverages will be served.

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Environmental concerns:

- Lavender requires the use of neither herbicides or pesticides. The plants only require watering until they are rooted and then prefer the dry, sandy soil.
- Fennario will use less water than the average household. There is a healthy well and several natural springs on the property.
- Garbage disposal will be contracted and hidden from view. A washroom, to be located in the visitor center, will conform to the Clearview building code and have appropriate septic support.

Integration with the neighborhood:

- In keeping with past practices (before this debate began), I invite the neighbours within walking distance to feel free to return to the property on Sunday mornings and appreciate the landscape that they have once enjoyed. There are no obligations associated with this offer.

Agricultural quality of the property

- Fennario is one of several remaining working farms that dominate the land use on the west side of the 8th Concession, south of 12/13 sideroad. Other current agricultural uses include cattle and cash crops.
- We hired Stantec Engineering's agrologist to do an assessment of the quality of the soil and general agricultural fitness of the farm using the standards defined by the Canada Land Inventory. This rating is an important factor on the permissibility of On Farm Diversified Uses, such as agritourism.

  Their report concludes with:

  "The soil capability of the Subject Lands is much higher than what was mapped in the Regional Area mapping. The Regional Area mapping indicated that the Subject Lands were predominantly non- agricultural CLI Class 7 lands. The revised soil mapping indicates that the Subject Lands contain approximately 64% prime agricultural land.

  Even though permission was not obtained to inspect the properties north and south of the Subject Lands, visual inspection from the Subject Lands property boundary indicated that similar soils and CLI Capability Ratings would be expected on these neighbouring properties. The property to the north appears to be growing a good small grain crop in one field and a good hay crop in another area. The property to the south had a portion of the lands cultivated for row crop production. As such, the relatively large amount of Prime Agricultural on the Subject Lands does not appear to be an anomaly but is consistent with the visual observations of the neighboring properties."

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In summary, our project is:

- Consistent with objectives and regulations of the Niagara Escarpment Plan.
- Showcases the natural beauty of the land itself in an environmentally sound fashion while allowing public access.
- Demonstrates sensitivity to the needs and concerns of the neighbourhood.
- Provides an economically viable model for the small Ontario farm.
- Promises economic and employment benefits in this part of rural Ontario.

We hope that you will support this plan and look forward to the opportunity to host the Commission as a fine example of what's possible on the Niagara Escarpment.

PASCUZZO PLANNING INC.

SENT VIA EMAIL Judy.Rhodes-Munk@ontario.ca

June 25, 2021

Niagara Escarpment Commission
Attn: Judy Rhodes-Munk, MCIP, RPP
1450 7th Avenue
Owen Sound, ON.
N4K 2Z1

RE: **Fennario Lavender Farm – NEC Development Application S/A/2020-2021/469**
2752 Concession 8 South, Township of Clearview, County of Simcoe

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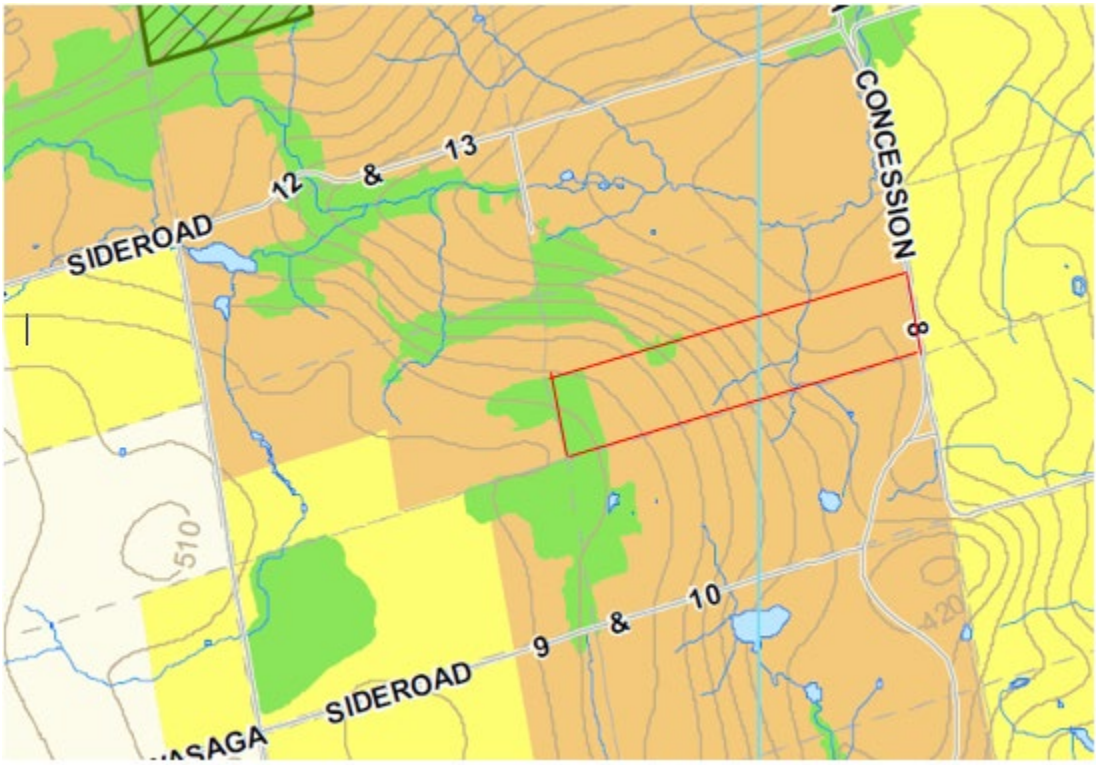
Dear Judy:

As you are aware Pascuzzo Planning Inc. was previously retained by Rainbow Waters Farms Inc. to assist with NEC Development Application S/A2020-2021/469. This Planning Review was prepared to be reviewed in conjunction with the Operations Plan, Traffic Opinion Letter and Soil Survey prepared by others. Also please find attached the Site Plan and Field Area figures.

The subject property is designated Escarpment Protection Area and Escarpment Natural Area in the Niagara Escarpment Plan (NE Plan).



1.4 Escarpment Protection Area

1.4.3 Permitted Uses

Subject to Part 2, Development Criteria, the following uses may be permitted:

1. *Agricultural uses.*
2. *Agriculture-related uses* and *on-farm diversified uses,* in *prime agricultural areas.*

The existing use being the existing Lavender farm is an Agricultural use.

The proposed use is an On-Farm Diversified use in a Prime Agricultural Area.

On-farm diversified use: Use that is secondary to the principal *agricultural use* of the *property*, and is limited in area. *On-farm diversified uses* include, but are not limited to, *home occupations*, *home industries*, *agri-tourism uses*, and uses that produce value-added agricultural products (Provincial Policy Statement, 2014).

Below is a review of Section 2.8.7 of the NE Plan which includes the criteria required for On-Farm Diversified Uses.

2.8.7 On-Farm Diversified Uses are subject to the following criteria:

a) The use is located on a farm that is actively in agricultural use

The existing farm has been actively in agricultural use for more than 100 years. Lavender was recently planted and is actively being farmed on the property as the primary agricultural use.

b) The use is secondary to the principal agricultural use of the farm

The opening of the property to guests and the production and sale of lavender products is inherently secondary to the primary agricultural use (Lavender).

c) The use shall be compatible with and shall not hinder surrounding agricultural operations and other land uses

There is no reason to believe that the proposed Lavender operation will hinder the surrounding agricultural operations. The following page displays photos which describe visually how the existing Lavender fields are not visible from Concession 8 South.

View facing west from Concession 8 South looking up the existing driveway.

View facing west from Concession 8 South looking towards the existing drive shed

d) The use is appropriate to available rural services and infrastructure

The proposed Lavender operation can be serviced with private water (existing well) and private sanitary services (private septic system). A Traffic Opinion letter was prepared by C.F. Crozier & Associates and concludes that the proposed development can be supported from a transportation perspective.

e) The use maintains the agricultural/rural character of the area

The majority of the properties on the west side of Concession 8 South are currently involved in active farming operations of some kind. The existing Lavender farm and proposed On-Farm Diversified use are consistent with and will maintain the agricultural/rural character of the area. A Soil Survey report was prepared by Stantec and concludes that 64% of the property is actually Prime Agricultural Lands (CLI 1-3) and that the existing Class 7 category being referenced on the property is incorrect. Further, the Stantec report also recommends that the neighboring properties should also be classified as Prime Agricultural Area.

f) The impact of multiple uses in prime agricultural areas is limited and does not undermine the agricultural nature of the area

The proposed scale of the Lavender operation is small and can easily be controlled based on access to the property through a proposed gate. The operation will not undermine the agricultural nature of the area.

g) The use is limited in area to up to two (2) percent of a farm lot, to a maximum of 10,000 square meters

The proposed parking area and visitor/production shed are far less than the maximum 10,000 square meters at approximately 2000 square meters.

h) The gross floor area of building used for an on-farm diversified uses is limited to 20 percent of the maximum area allowed for on-farm diversified use as set out in 2.8.7 (g)

The proposed 130 square meter visitor/production shed is far less than 20% of the maximum area allowed for an on-farm diversified use (2000 square meters).

i) Existing buildings, structures or facilities on the property, that are no longer needed to support agricultural uses, should be used where possible

The existing drive shed on the property will continue to be used to support the primary agricultural use.

j) All buildings, structures and facilities, including parking areas, associated with the use shall be designed and located to have minimal impact on agricultural uses in the area and the Escarpment's open landscape character; and

As displayed in the images on page 3, neither the proposed parking area nor the visitor/production shed will be seen from the road or neighboring properties.

k) The land supporting the use shall not be severed from the farm lot exclusively for the on-farm diversified use.

Not applicable

Based on the above, the proposed On-Farm Diversified use is not in conflict with the NE Plan.

Kind Regards

PASCUZZO PLANNING INC.

Andrew Pascuzzo, MCIP, RPP

Soil Survey
Fennario Lavender Farm Site

Final Report

June 25, 2021
File: 160961425

Prepared for:

Rainbow Waters Farm Inc.
25 Scrivener Square, Suite 412
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Prepared by:

Stantec Consulting Ltd.
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SOIL SURVEY OF FENNARIO LAVENDER FARM SITE

This document entitled Soil Survey of Fennario Lavender Farm Site was prepared by Stantec Consulting Ltd. (“Stantec”) for the account of Rainbow Waters Farm Inc. (the “Client”). Any reliance on this document by any third party is strictly prohibited. The material in it reflects Stantec’s professional judgment in light of the scope, schedule and other limitations stated in the document and in the contract between Stantec and the Client. The opinions in the document are based on conditions and information existing at the time the document was published and do not take into account any subsequent changes. In preparing the document, Stantec did not verify information supplied to it by others. Any use which a third party makes of this document is the responsibility of such third party. Such third party agrees that Stantec shall not be responsible for costs or damages of any kind, if any, suffered by it or any other third party as a result of decisions made or actions taken based on this document.

Prepared by _____
(signature)

Edward Mozuraitis, P.Ag., Can-CISEC
Agricultural Evaluation and Rehabilitation Specialist

Reviewed by _____
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Mark Knight, MA, MCIP, RPP
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1.0 INTRODUCTION

1.1 PROJECT OVERVIEW

Stantec Consulting Ltd. (Stantec) was retained by Mr. Jim Muzyka on behalf of Fennario Lavender Farm to conduct a Soil Survey for the purposes of permitting agri-tourism on the Subject Lands for the property located on the southern half of Lot 11, Concession 9 at 2752 8th Concession South Road, Township of Clearview, Simcoe County, approximately five kilometres west of the Town of Creemore (see **Figure 1**, Appendix B).

The Niagara Escarpment Plan (NE Plan) designates the subjects lands Escarpment Protection. The Escarpment Protection Area designation of the NE Plan (section 1.4) lists permitted uses in section 1.4.3. The second permitted use in section 1.4.3 (2) identifies that Agriculture-related uses and On-Farm Diversified uses are permitted in Prime Agricultural Areas.

The definition of Prime Agricultural Areas in the NEC Plan is:

"**Prime agricultural area**: An area 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 that 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 (Provincial Policy Statement, 2014)."

The definition of Prime Agricultural Lands in the NEC Plan is:

"**Prime agricultural land**: *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* (Provincial Policy Statement, 2014)."

Specifically, that even though lands may be occupied by class 4-7 based on topography, they should still be considered within the Prime Agricultural Area as they are part of an area where there is a local concentration of farms that exhibit characteristics of ongoing agriculture. It would appear that the majority of the lands west of the 8th concession and south of Sideroad 12, including the subject lands, could meet the test to be considered within the Prime Agricultural Area. However, the province is not including them as candidate lands as explained visually above. The County of Simcoe is currently reviewing the Prime Agricultural areas as part of their ongoing Municipal Comprehensive Review.

This study will identify the soils on the Subject Lands and determine the CLI soil capability for agriculture. Thereby, this study will determine the amount of Prime Agricultural Lands in the Subject Lands.

1.2 SUBJECT LANDS

As stated above, the Subject Lands are located on the south half of Lot 11, Concession 9, in the Township of Clearview, County of Simcoe. They are designated in the “Niagara Escarpment Plan Area” in the County of Simcoe Official Plan (Schedule 5.1). The Subject Lands are specifically located at 2752 8th Concession South Road on the west side of the road and are approximately 41 ha (101 ac) in size.

1.3 PURPOSE OF REPORT

The NEC states that as a rule, agri-tourism can only be conducted on areas which are Prime Agricultural Areas with mainly prime agricultural land. The current Regional Soil Survey and Regional Canada Land Inventory (CLI) indicate that the Subject Lands and surrounding area comprise of mainly non-agricultural CLI Class 7 lands. After a reconnaissance overview of the area through air photo interpretation, it was determined that there is arable land in the Subject Lands and surrounding area. The goal is to conduct a soil survey and interpretive CLI soil capability for agriculture map to illustrate the type and extent of prime (CLI Class 1 to 3) agricultural land in the Subject Lands and indicate whether the Subject Lands have sufficient prime agricultural lands to permit an agri-tourism enterprise on the newly established lavender farm.

2.0 STUDY FINDINGS

2.1 PHYSIOGRAPHY

The Subject Lands are located on the Niagara Escarpment physiographic region. In this area the escarpment is mainly covered with loamy and clayey till moraine while the face of the escarpment is exposed at several locations.

2.2 REGIONAL SOILS

2.2.1 Soil Series

The Soil Survey of Simcoe County - No. 29, of the Ontario Soil Survey (Wicklund, R.E., Richards, N.R., 1961), includes a soil map that shows the distribution of the various soil series mapping in the county. The county level survey mapped the soils at a scale of 1:63,360 which is appropriate for county level planning decisions. However, for site specific development applications, more detailed soil mapping is often required.

The digital Provincial Soil Resource database is compiled and administered by the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) and includes most of the soil surveys completed in Ontario. Much of this information is accessible from the Province's Agricultural Information Atlas, an interactive online application that enables users to obtain agricultural information for Ontario such as soils and drainage, as well as data layers from other Government of Ontario ministries (e.g., lot boundaries). The database was accessed in June 2021. The Soil Survey of Simcoe County mapping shows that there is one soil polygon (map unit) on the Subject Lands. As shown in Figure 2, it comprises of a complex of two soil series, the Osprey Loam and the Dunedin Loam. Percy Fine Sandy Loam soils were mapped just off the northeast corner of the Subject Lands. The description of the Osprey Loam, Dunedin Loam, and Percy Fine Sandy Loam soils, paraphrased from the Soil Survey of Simcoe County, is provided below.

Osprey Loam Soils

The soils of the Osprey series have an irregular steeply sloping topography, and the steep slopes usually interfere with the use of heavy machinery. The Osprey soils are developed on a stony loam glacial till which has been derived mostly from limestone. Free carbonates are usually present at a depth of 45 centimetres. However, free carbonates occur on the soil surface in some locations. The open nature of the soil and the steep slopes provide good drainage.

Dunedin Loam Soils

The soils of the Dunedin series form part of a very complex area around the Niagara Escarpment. The face of the Escarpment in the local area is comparatively steep, rising up to 200 metres in a little more than half a kilometre in many places. These areas have many deep gullies and stream beds. As a result,

the topography is very rugged, and slopes are short and steep. The Dunedin soils have developed from clay glacial till materials containing over 60 per cent. of clay. Because of the large percentage of clay in the soil, it is very slowly permeable to water and, therefore, internal drainage is very slow. External drainage over the steep slopes is, of course, very rapid. These soils are therefore well drained.

Percy Fine Sandy Loam Soils

The soils of the Percy series have developed from fine sand outwash materials. They occupy a total of approximately 770 hectares in the County and because of this small area are relatively unimportant. The soils are found mainly on gently rolling topography and they are well drained. Fine sandy loam is the only type mapped but, in a few areas, it was necessary to map a stony phase of the type because of the presence of numerous stones on the surface of what is commonly a stone free soil.

At the Regional scale, the Subject Lands were mapped entirely as a complex of Osprey and Dunedin

2.2.2 CLI Soil Capability for Agriculture Classification

The CLI is an interpretative system that assesses the limitations of land for growing common field crops based on soil, topographic and climatic characteristics. The CLI system has seven soil classes that descend in quality from Class 1, which has few limitations, to Class 7 soils which have no agricultural capability for common field crops. Class 2 through 7 soils have one or more significant limitations, and each of these are denoted by a capability subclass. There are thirteen subclasses described in CLI Report No. 2 (1971). Eleven of these subclasses have been adapted to Ontario soils. More information regarding the CLI Classification system is provided in Appendix A.

2.3 REFINED SOILS INFORMATION

2.3.1 Detailed Soil Survey

A soil survey was completed on May 19, 2021. Site conditions were mainly sunny and warm. The Subject Lands were traversed on foot and the soil profile was exposed at twenty-three locations using a hand-held Dutch auger. The physical properties of the soil, such as the mode of deposition, soil horizons and horizon depths, depth to bedrock, soil texture, drainage, and stoniness, were described and recorded on field data sheets. The slope percentage within the soil polygons were measured using a hand-held clinometer. An additional 9 soil slope measurements were taken without exposing the soil profile.

The soil survey confirmed the presence of the Osprey Loam soil series on b (0.5-2%) to g (30-60%) slopes. Percy Fine Sandy Loam soil series on c (2-5%) to g (30-60%) slopes were also identified on the Subject Lands. Nearly all the soils within the Subject Lands have been mapped as the Osprey Loam soil (85.7%). No Dunedin Clay Loam soils were mapped during the soil survey. Some organic were identified along the south-central boundary of the Subject Lands, while some Bottom Land soils were identified at the base of ravines and along the small watercourse traversing the central portion of the Subject Lands.

Figure 4 shows the location of the soil map units based on the results of the refined soil survey. The percent of each soil unit and slope class is summarized in Table 1. Soil Data sheets completed during the soil survey are provided in Appendix C.

Table 1: Soil Series and Slope Classes within the Subject Lands

Soil Series	Slope Class	Percent Area of Soil Series within Subject Lands	Percent Area of Slope Classes within Subject Lands
Osprey Loam	b	85.7	7.2
	c		31.3
	d		19.3
	e		3.9
	f		15.4
	g		8.6
Percy Fine Sandy Loam	c	10.2	3.9
	d		2.7
	e		1.2
	f		1.6
	g		0.8
Organic		0.6	0.6
Bottom Land		3.1	3.1
Not Mapped (building areas)		0.4	0.4

2.3.2 Detailed CLI Soil Capability for Agriculture

The results of the detailed soil survey were used to refine the CLI capability ratings for the Subject Lands. The agricultural capability for common field crops was interpreted using OMAFRA's Classifying Prime and Marginal Agricultural Soils and Landscapes: Guidelines for the Application of the Canada Land Inventory in Ontario. The detailed soil survey confirmed that the Subject Lands do not predominantly consist of CLI Class 7 lands. The Osprey soils mapped on b-class slopes are rated CLI Class 1.

The Osprey and Dunedin soils mapped on c-class slopes are rated CLI Class 2t. The Class 2t lands have moderate limitations for common field crop production due to minor topographic limitations which can lead to an increased potential for water erosion and/or there is a lack of uniformity in moisture distribution, that can affect seed germination and plant growth across the soil unit.

The Osprey and Dunedin soils mapped on d-class slopes are rated CLI Class 3t. The Class 3t lands have moderately severe limitations that reduce the choice of crops or require special conservation practices.

The Osprey and Dunedin soils mapped on e-class slopes are rated CLI Class 4t. The Class 4t lands have severe limitations that restrict the choice of crops, or require special conservation practices and very careful management, or both.

The Osprey and Dunedin soils mapped on f-class slopes are rated CLI Class 5t. The Class 5t lands have very severe limitations that restrict their capability to producing perennial forage crops, and improvement practices are feasible.

The Osprey and Dunedin soils mapped on g-class slopes are rated CLI Class 6t. The Class 6t lands are unsuited for cultivation but are capable of use for unimproved permanent pasture.

Bottom Land soils were identified along the base of ravines and along the watercourse traversing the Subject Lands. These Bottom Lands soils are rated CLI Class 5wi due to wetness and potential inundation limitations. These Class 5wi lands also have very severe limitations that restrict their capability to producing perennial forage crops, and improvement practices are feasible.

A small area of Organic soils were located along the central part of the southern boundary of the Subject Lands. Organic soils are not rated by the CLI Soil Capability for Agriculture system.

The location of the mapped soils is shown in the attached map (**Figure 4**, Appendix B) and their corresponding CLI soil capability for agriculture ratings are shown in the other attached map (**Figure 5**, Appendix B). The information CLI information for the Subject Lands is summarized in Table 2 below:

Table 2: Soil Capability for Agriculture for Common Field Crops within the Subject Lands

OMAFRA Soil Capability Class	Percent Area of Subject Lands
1	7.2
2	35.2
3	22.0
4	5.1
5	20.1
6	9.4
0	0.6
Not Mapped (building areas)	0.4

3.0 CONCLUSIONS AND RECOMMENDATIONS

The soil capability of the Subject Lands is much higher than what was mapped in the Regional Area mapping. The Regional Area mapping indicated that the Subject Lands were predominantly non-agricultural CLI Class 7 lands. The revised soil mapping indicates that the Subject Lands contain approximately 64% prime agricultural land.

Even though permission was not obtained to inspect the properties north and south of the Subject Lands, visual inspection from the Subject Lands property boundary indicated that similar soils and CLI Capability Ratings would be expected on these neighbouring properties. The property to the north appears to be growing a good small grain crop in one field and a good hay crop in another area. The property to the south had a portion of the lands cultivated for row crop production. As such, the relatively large amount of Prime Agricultural on the Subject Lands does not appear to be an anomaly but is consistent with the visual observations of the neighbouring properties.

Because the Subject Lands have been shown to contain Prime Agricultural Soils (64% CLI Class 1 to 3) and that there is probably a similar classification for neighbouring properties, the local area should be classified as a Prime Agricultural Area.

4.0 REFERENCES

Agriculture and Agri-Food Canada. ISO 19131 Canada Land Inventory (CLI) – Data Product Specification; https://sis.agr.gc.ca/cansis/nsdb/cli/index.html accessed June 2021.

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Hoffman, D.W., Wicklund, R.E. and Richards, N.R. 1962. Soil Survey of Simcoe County; Report No. 29 of the Ontario Soil Survey; Research Branch, Canada Department of Agriculture and the Ontario Agricultural College. 109p. Accompanied by coloured soil maps, scale 1:63 360.

Jarvis, I.E., MacDonald, K.B. and Denholm, K.A. 1998. Location and Extent of The Soils of Southern Ontario – A user's guide to series, catenae and soil legend information. 80p.

Ontario Centre for Soil Resource Evaluation (OCSRE). 1993. Field Manual for Describing Soils in Ontario (4th edition, compiled by K.A. Denholm and L.W. Schut).62 pp.

APPENDIX A
CANADA LAND INVENTORY INFORMATION

Appendix A CANADA LAND INVENTORY INFORMATION

The following information has been obtained from:

Classifying Prime and Marginal Agricultural Soils and Landscapes: Guidelines for Application of the Canada Land Inventory in Ontario. http://www.omafra.gov.on.ca/english/landuse/classify.htm - Last Accessed June 18,2021

Capability Classes and Subclasses

In the CLI system there are seven capability classes. Soils descend in quality from Class 1, which is highest, to Class 7 soils which have no agricultural capability for the common field crops. Class 1 soils have no significant limitations. Class 2 through 7 soils have one or more significant limitations, and each of these are denoted by a capability subclass.

Definitions of the Capability Classes

Class 1 - Soils in this class have no significant limitations in use for crops.

Soils in Class 1 are level to nearly level, deep, well to imperfectly drained and have good nutrient and water holding capacity. They can be managed and cropped without difficulty. Under good management they are moderately high to high in productivity for the full range of common field crops

Class 2 - Soils in this class have moderate limitations that reduce the choice of crops or require moderate conservation practices.

These soils are deep and may not hold moisture and nutrients as well as Class 1 soils. The limitations are moderate, and the soils can be managed and cropped with little difficulty. Under good management they are moderately high to high in productivity for a wide range of common field crops.

Class 3 - Soils in this class have moderately severe limitations that reduce the choice of crops or require special conservation practices.

The limitations are more severe than for Class 2 soils. They affect one or more of the following practices: timing and ease of tillage; planting and harvesting; choice of crops; and methods of conservation. Under good management these soils are fair to moderately high in productivity for a wide range of common field crops.

Class 4 - Soils in this class have severe limitations that restrict the choice of crops, or require special conservation practices and very careful management, or both.

The severe limitations seriously affect one or more of the following practices: timing and ease of tillage; planting and harvesting; choice of crops; and methods of conservation. These soils are low to medium in productivity for a narrow to wide range of common field crops but may have higher productivity for a specially adapted crop.

Class 5 - Soils in this class have very severe limitations that restrict their capability to producing perennial forage crops, and improvement practices are feasible.

The limitations are so severe that the soils are not capable of use for sustained production of annual field crops. The soils are capable of producing native or tame species of perennial forage plants and may be improved through the use of farm machinery. Feasible improvement practices may include clearing of bush, cultivation, seeding, fertilizing or water control.

Class 6 - Soils in this class are unsuited for cultivation but are capable of use for unimproved permanent pasture.

These soils may provide some sustained grazing for farm animals, but the limitations are so severe that improvement through the use of farm machinery is impractical. The terrain may be unsuitable for the use of farm machinery, or the soils may not respond to improvement, or the grazing season may be very short.

Definitions of the Capability Subclasses

Subclass I - Inundation by streams or lakes: Flooding by streams and lakes causes crop damage or restricts agricultural use.

Subclass T - Topography: This subclass denotes limitations due to slope steepness and length. Such limitations may hinder machinery use, decrease the uniformity of crop growth and maturity, and increase water erosion potential.

Table 9: Determination of Subclass T for Very Gravelly and Sandy Soils

Slope %	<2		2-5		5-9		9-15		15-30		30-60		>60	
Slope Type	S	C	S	C	S	C	S	C	S	C	S	C	S	C
CLI Class				2t	2t	3t	3t	4t	5t	5t	6t	6t	7t	7t

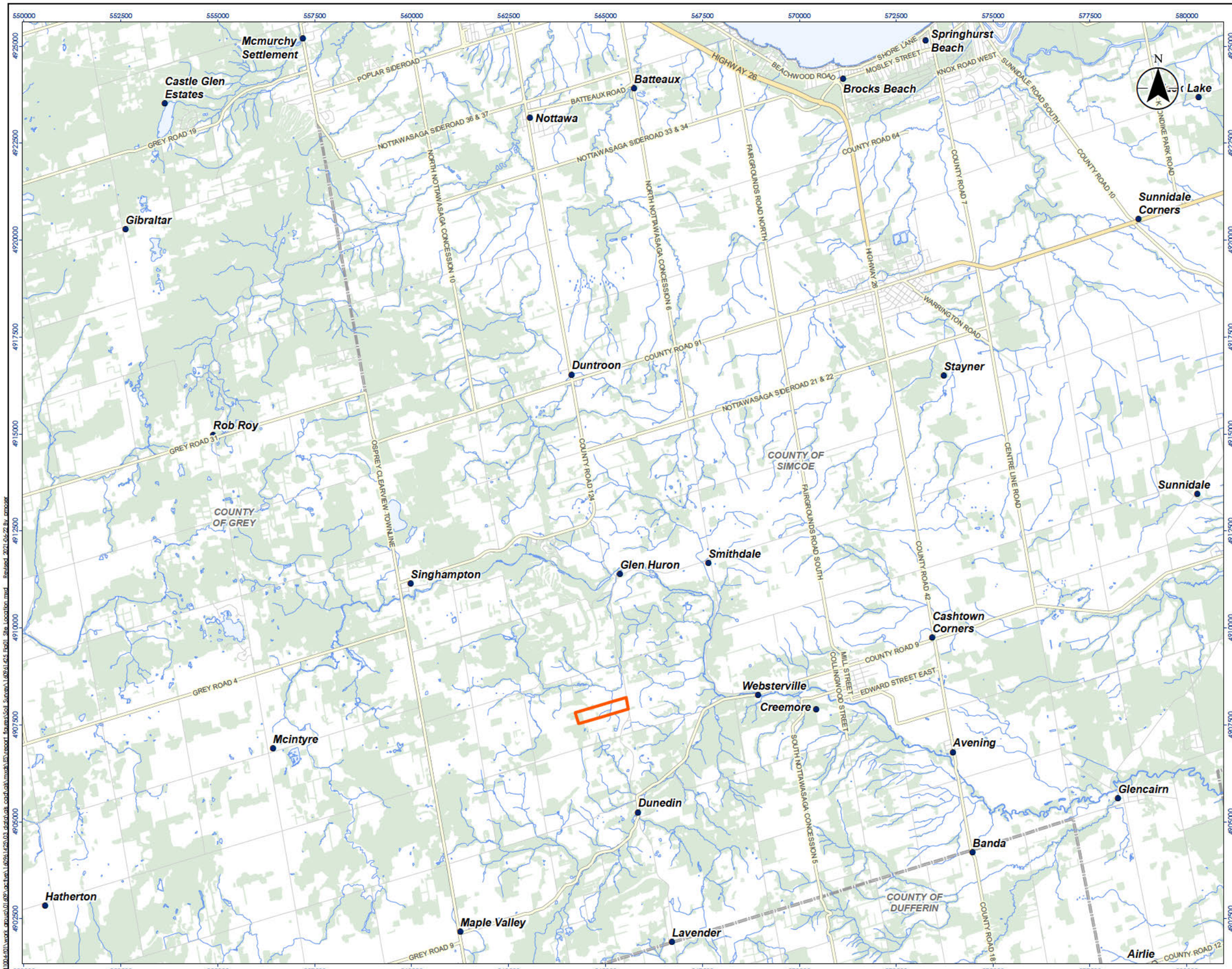
Table 10: Determination of Subclass T for Very Gravelly and Sandy Soils

Slope %	<2		2-5		5-9		9-15		15-30		30-60		>60	
Slope Type	S	C	S	C	S	C	S	C	S	C	S	C	S	C
CLI Class			2t	2t	3t	3t	4t	4t	5t	5t	6t	6t	7t	7t

S = Simple Slopes >50 m in length; C =Complex Slopes <50 m in length

Subclass W - Excess water: This subclass indicates the presence of excess soil moisture due to poor or very poor soil drainage. It is distinguished from Subclass I - water inundation which indicates risk of flooding from adjacent lakes or streams.

APPENDIX B
FIGURES



Stantec

Legend

- Study Area
- Expressway / Highway
- Major Road
- Minor Road
- Watercourse
- Waterbody
- Wooded Area
- Municipal Boundary - Upper Tier

0 2 4 km

1:100 000 (At original document size of 11x17)

Notes

1 Coordinate System: NAD 1983 UTM Zone 17N
2 Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario 2021
3 Orthoimagery © First Base Solutions 2021 Imagery Date 2016

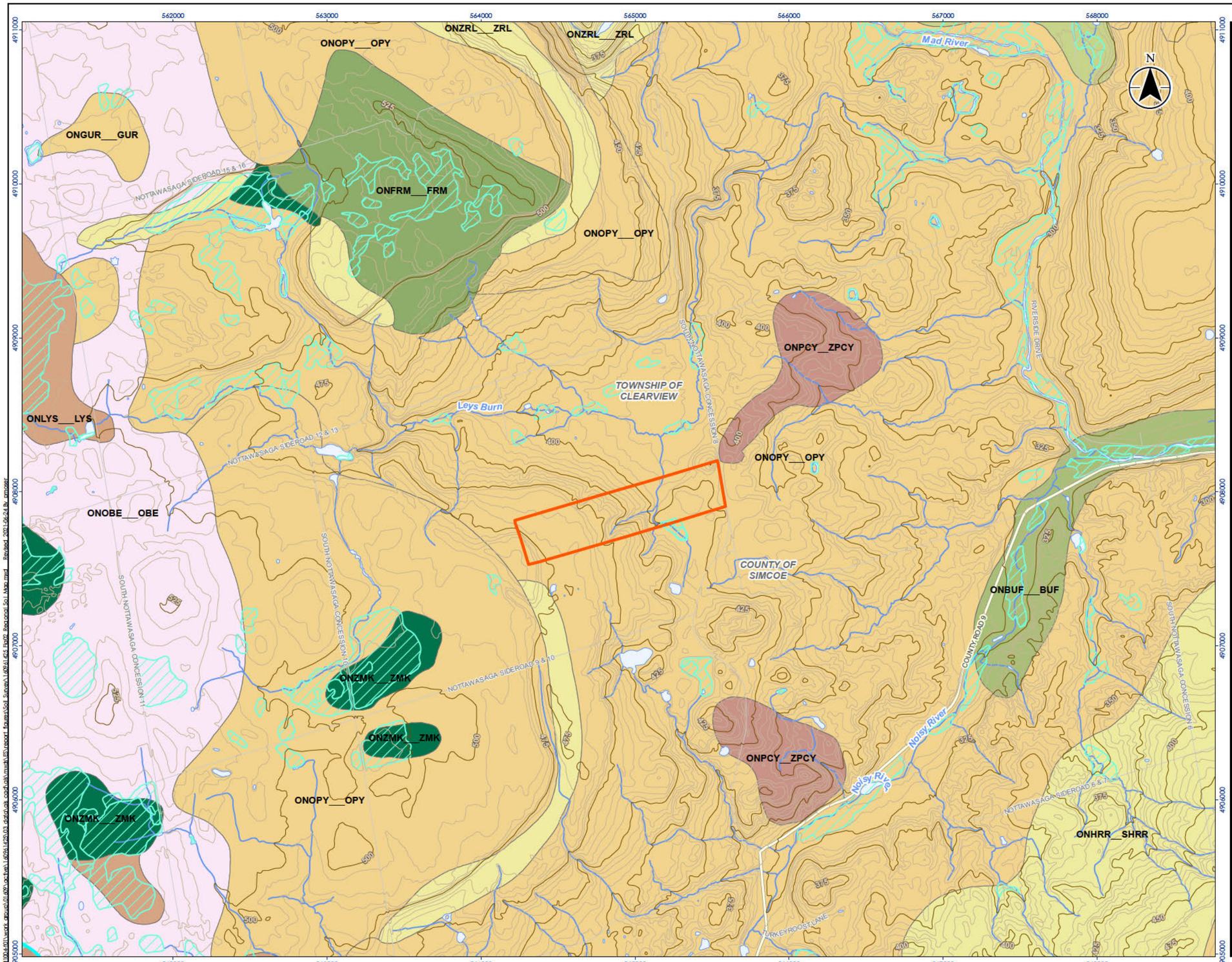
Project Location
Township of Clearview

160961425 REVA
Prepared by PRM on 2021-06-22
Technical Review by EM on 2021-05-26

Client/Project
FENNARIO LAVENDER FARM
2752 8TH CONCESSION SOUTH,
TOWNSHIP OF CLEARVIEW

Figure No.
1

Title
Site Location



Stantec

Legend

- Study Area
- Topographic Contour - 25m Interval (mAMSL)
- Topographic Contour - 5m Interval (mAMSL)
- Expressway / Highway
- Major Road
- Minor Road
- Watercourse
- Waterbody
- Wetland - Not evaluated per Ontario Wetland Evaluation System

Soil Name

- BUF - Burford Gravelly Loam
- FRM - Farmington Loam
- GUR - Guerin Loam
- SHRR - Harriston Loam - Steep Phase
- LYS - Lyons Loam
- ZMK - Muck
- OPY - Osprey Loam
- OBE - Otonabee Loam
- ZPCY - Percy Fine Sandy Loam - Stony Phase
- ZRL - Rockland
- SGT - Sargent Gravelly Sandy Loam
- TIG - Tioga Fine Sandy Loam

0 500 1 000 metres

1 25 000 (At original document size of 11x17)

Notes

1 Coordinate System: NAD 1983 UTM Zone 17N

2 Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario 2021

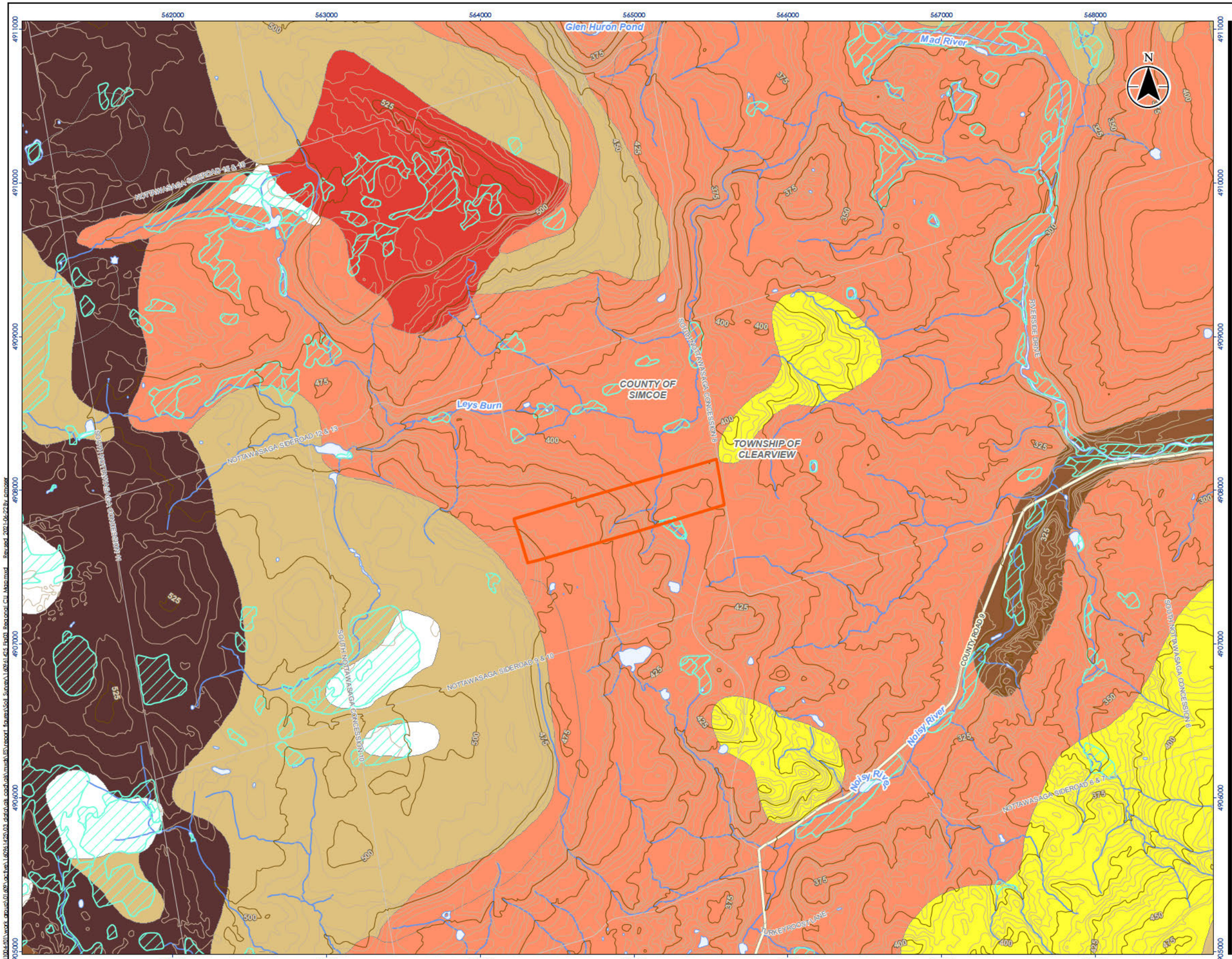
Project Location
Township of Clearview

160961425 REVA
Prepared by PRM on 2021-06-24
Technical Review by EM on 2021-06-23

Client/Project
FENNARIO LAVENDER FARM
2752 8TH CONCESSION SOUTH,
TOWNSHIP OF CLEARVIEW

Figure No.
2

Title
Regional Soil Map



Stantec

Legend

- Study Area
- Topographic Contour - 25m Interval (mAMSL)
- Topographic Contour - 5m Interval (mAMSL)
- Expressway / Highway
- Major Road
- Minor Road
- Watercourse
- Waterbody
- Wetland - Not evaluated per Ontario Wetland Evaluation System

Soils - Canada Land Inventory

Class

- 1
- 2
- 3
- 4
- 6
- 7
- Organic Soil

0 500 1 000 metres

1 25 000 (At original document size of 11x17)

Notes

1 Coordinate System: NAD 1983 UTM Zone 17N

2 Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario 2021

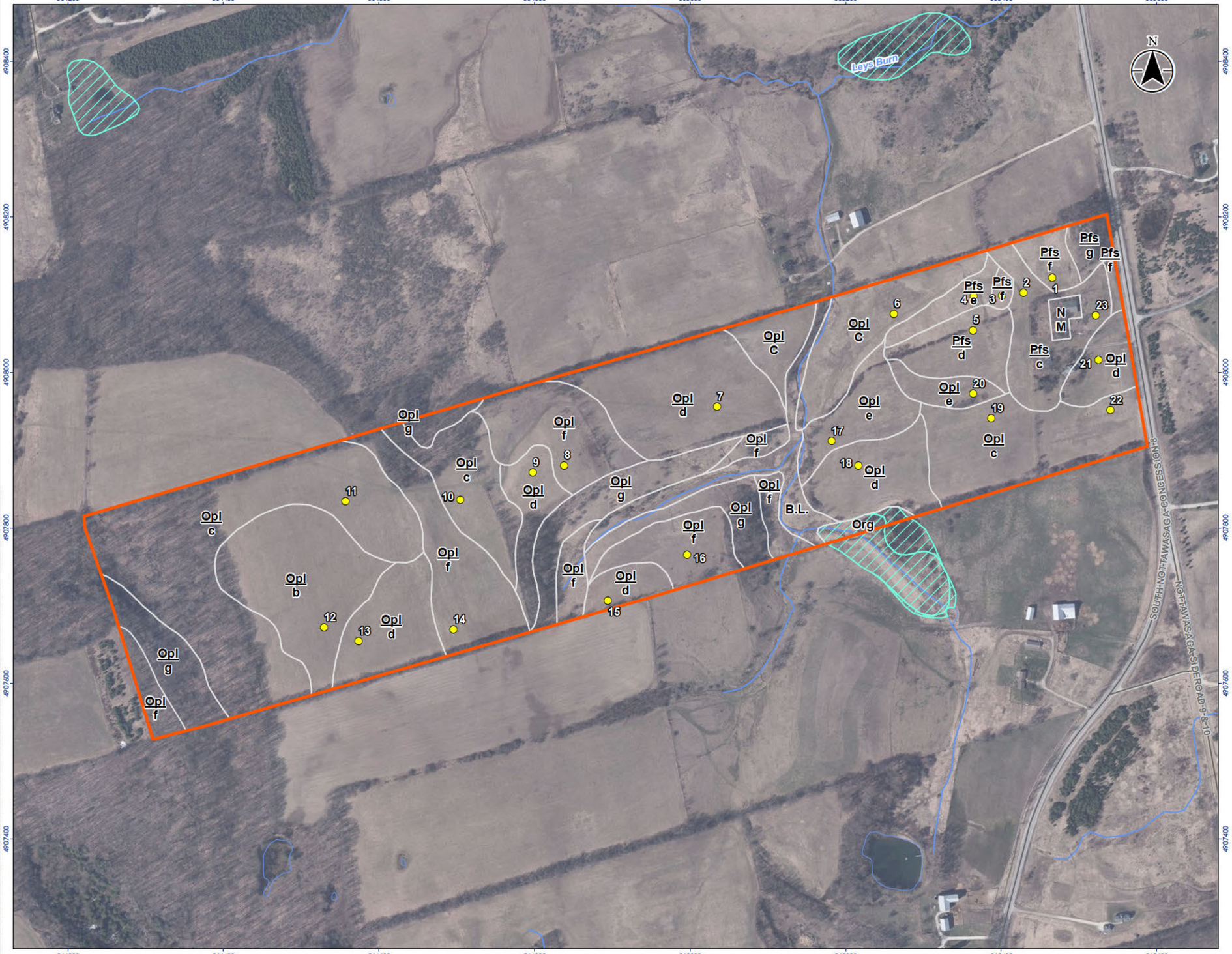
Project Location
Township of Clearview

160961425 REVA
Prepared by PRM on 2021-06-22
Technical Review by EM on 2021-06-22

Client/Project
FENNARIO LAVENDER FARM
2752 8TH CONCESSION SOUTH,
TOWNSHIP OF CLEARVIEW

Figure No.
3

Title
Regional CLI Map



Legend

- Study Area
- Soil Profile Examination Point
- Road
- Watercourse
- Wetland - Not evaluated per Ontario Wetland Evaluation System
- Soil Profile

N M - Not maped; soil disturbed due to buildings

Soil Types (parent material and soil name)

Stony loam till
- Opl - Osprey (well drained))

fSL outwash
- Pfs - Percy (well drained)

Alluvium, bottom land and floodplain soils□
- B.L. - Bottom Land (variable drainage)
- Org - Organic Soils

Topographic Classes
- B - simple 0.5-2% slope
- b - complex 0.5-2% slope
- C - simple 2-5% slope
- c - complex 2-5% slope
- d - complex 5-9% slope
- e - complex 9-15% slope
- f - complex 15-30% slope
- g - 30-60% slope

Map Symbol: Opl (Soil Type) / f (Topographic Class)

0 100 200 metres

1:5 000 (At original document size of 11x17)

Mapped at a scale of 1:10 000; enlarged to 1:5 000 for illustration purposes only

Notes
1. Coordinate System: NAD 1983 UTM Zone 17N
2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario 2021
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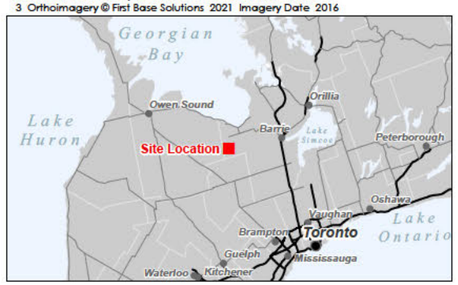

Project Location
Township of Clearview

160961425 REVA
Prepared by PRM on 2021-06-22
Technical Review by EM on 2021-06-22

Client/Project
FENNARIO LAVENDER FARM
2752 8TH CONCESSION SOUTH,
TOWNSHIP OF CLEARVIEW

Figure No.
4

Title
Soil Survey

Stantec

Legend

- Study Area
- Soil Profile Examination Point
- Road
- Watercourse
- Wetland - Not evaluated per Ontario Wetland Evaluation System

CLI Soil Capability for Agriculture Classes

- Class 1 - No significant limitations in use for crops.
- Class 2 - Moderate limitations that reduce the choice of crops or require moderate conservation practices.
- Class 3 - Moderately severe limitations that reduce the choice of crops or require special conservation practices.
- Class 4 - Severe limitations that restrict the choice of crops, or require special conservation practices and very careful management, or both.
- Class 5 - Very severe limitations that restrict their capability to producing perennial forage crops, and improvement practices are feasible.
- Class 6 - Unsuited for cultivation but are capable of use for unimproved permanent pasture.
- O - Organic soils; not rated under CLI soil classification system.
- N M - Not mapped; soil disturbed due to buildings

CLI Soil Capability for Agriculture Subclasses

i - Inundation or flooding hazard
t - Slope steepness and length
w - Excess soil wetness

Map Symbol — 3t — Capability Class / Capability Subclass

0 100 200 metres

1:5 000 (At original document size of 11x17)

Mapped at a scale of 1:10 000; enlarged to 1:5 000 for illustration purposes only

Notes

1 Coordinate System: NAD 1983 UTM Zone 17N
2 Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario 2021
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Project Location
Township of Clearview

160961425 REVA
Prepared by PRM on 2021-06-22
Technical Review by EM on 2021-06-22

Client/Project
FENNARIO LAVENDER FARM
2752 8TH CONCESSION SOUTH,
TOWNSHIP OF CLEARVIEW

Figure No.
5

Title
CLI Soil Capability for Agriculture

APPENDIX C
SOIL DATA SHEETS

Stantec

Site No.	Date (YY MM.DD)	W.P.	Project Number:
01	2021 05 19		160961425

Surveyor	Observation Type	Project Name
EJM	Auger	Lavender Farms

MODE OF DEPOSITION	NO. 1	SLOPE CLASS	SLOPE POSITION	SLOPE %	SLOPE LENGTH
	GF	f	M	18	30 m
	NO.2	DRAINAGE CLASS	STONINESS	ROCKINESS	
		W	0	0	
	NO.3				

HORIZONS				DEPTH (cm)		COLOURS		%	FIELD TEXTURE	CONSISTENCY
D	Ma	Suffix	Mod.	Upper	Lower	Matrix Colours	Mottle Colours	C.F.		
	A	pk		0	25	10YR3/3		1	fSL	
				25+		auger refusal		20+		

Mode of Deposition		Slope Class		Drainage Class		Slope Position		Stoniness/Rockiness		Consistency
MT	Morainal Till	Aa	0-0.5%	RA	Rapid	1	Crest	Ø	Non	L- Loose
LA	Lacustrine	Bb	0.5-2.0%	WE	Well	2	Upper Slope	1	Slightly	FR - Friable
GF	Glacial Fluvial	Cc	2-5%	MW	Mod. Well	3	Middle Slope	2	Moderately	F - Firm
GL	Glacio Lacustrine	Dd	5-9%	IM	Imperfect	4	Lower Slope	3	Very	VF - Very Firm
AL	Aluvial	Ee	9-15%	PO	Poor	5	Toe	4	Excessively	
OR	Organic	Ff	15-30%	VP	Very Poor	6	Depression	5	Exceedingly	
		Gg	30-45%			7	Level			

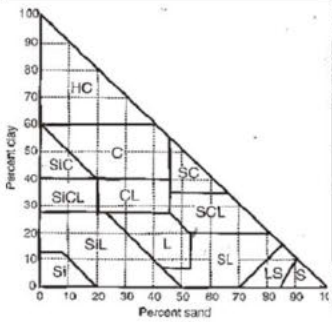
Depth to (cm):	
Bedrock	
Constricting Layer	
Carbonates	0
Gley Colours	
Water Table	

Mottles

Horizon	Abun.	Size	Contrast

Abundance	Size	Contrast
F - Few	F - Fine	Faint
C - Common	M - Medium	Distinct
M - Many	L - Large	Prominent

NOTES: land use: old alfalfa hay



Contrast - the difference between the mottle colour and the matrix colour, using the Munsell Soil Color Charts.

	Difference from matrix in		
	Hue* pages	Value* units	Chroma* units
Faint	0	≤2	≤1
	1	0	0
Distinct	0	3 - 4	2 - 4
	1	≤2	≤1
Prominent	0	≥4	≥4
	1	≥2	≥1
	2+	≥0	≥0

*Hue, Value, and Chroma differences are determined using the Munsell Soil Color Charts (see page 25) e.g. common, fine, distinct brown (10YR 5/3) mottles. Values in the table are taken from 1982 CanSIS manual for describing soils in the field.

Abundance - the proportion of the exposed surface occupied by mottles (%) (refer to Appendix II for additional area percentage charts).

Few <2% Common 2 - 20% Many >20%

Size - the diameter of the mottle if round, or, the greatest dimension if length is not more than 2 or 3 times the width, or, the width if the mottle is long and narrow.

Fine <5mm Medium 5 - 15mm Coarse >15mm

Stantec

Site No.	Date (YY MM.DD)	W.P.	Project Number:
02	2021 05 19		160961425

Surveyor	Observation Type	Project Name
EJM	Auger	Lavender Farms

MODE OF DEPOSITION	NO. 1	SLOPE CLASS	SLOPE POSITION	SLOPE %	SLOPE LENGTH
	GF	c	M	3 .0	25 m
	NO.2	DRAINAGE CLASS	STONINESS	ROCKINESS	
		W	0	0	
	NO.3				

HORIZONS				DEPTH (cm)		COLOURS		%	FIELD TEXTURE	CONSISTENCY
D	Ma	Suffix	Mod.	Upper	Lower	Matrix Colours	Mottle Colours	C.F.		
	A	p		0	20	10YR3/2		0	L -> fSL	
	B	m		20	65	10YR4/4		0	fSL	
	C	k		65	100+	10YR5/3		0	fSL	

Mode of Deposition		Slope Class		Drainage Class		Slope Position		Stoniness/Rockiness		Consistency
MT	Morainal Till	Aa	0-0.5%	RA	Rapid	1	Crest	Ø	Non	L- Loose
LA	Lacustrine	Bb	0.5-2.0%	WE	Well	2	Upper Slope	1	Slightly	FR - Friable
GF	Glacial Fluvial	Cc	2-5%	MW	Mod. Well	3	Middle Slope	2	Moderately	F - Firm
GL	Glacio Lacustrine	Dd	5-9%	IM	Imperfect	4	Lower Slope	3	Very	VF - Very Firm
AL	Aluvial	Ee	9-15%	PO	Poor	5	Toe	4	Excessively	
OR	Organic	Ff	15-30%	VP	Very Poor	6	Depression	5	Exceedingly	
		Gg	30-45%			7	Level			

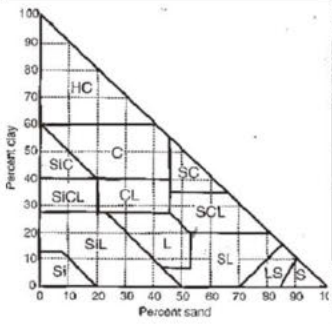
Depth to (cm):	
Bedrock	
Constricting Layer	
Carbonates	65
Gley Colours	
Water Table	

Mottles

Horizon	Abun.	Size	Contrast

Abundance	Size	Contrast
F - Few	F - Fine	Faint
C - Common	M - Medium	Distinct
M - Many	L - Large	Prominent

NOTES: land use: old alfalfa hay



Contrast - the difference between the mottle colour and the matrix colour, using the Munsell Soil Color Charts.

	Difference from matrix in		
	Hue* pages	Value* units	Chroma* units
Faint	0	≤2	≤1
	1	0	0
Distinct	0	3 - 4	2 - 4
	1	≤2	≤1
Prominent	0	≥4	≥4
	1	≥2	≥1
	2+	≥0	≥0

*Hue, Value, and Chroma differences are determined using the Munsell Soil Color Charts (see page 25) e.g. common, fine, distinct brown (10YR 5/3) mottles. Values in the table are taken from 1982 CanSIS manual for describing soils in the field.

Abundance - the proportion of the exposed surface occupied by mottles (%) (refer to Appendix II for additional area percentage charts).

Few <2% Common 2 - 20% Many >20%

Size - the diameter of the mottle if round, or, the greatest dimension if length is not more than 2 or 3 times the width, or, the width if the mottle is long and narrow.

Fine <5mm Medium 5 - 15mm Coarse >15mm

Stantec

Site No.	Date (YY MM.DD)	W.P.	Project Number:
03	2021 05 19		160961425

Surveyor	Observation Type	Project Name
EJM	Auger	Lavender Farms

MODE OF DEPOSITION	NO. 1	SLOPE CLASS	SLOPE POSITION	SLOPE %	SLOPE LENGTH
	GF	f	M	22	20 m
	NO.2	DRAINAGE CLASS	STONINESS	ROCKINESS	
		W	0	0	
	NO.3				

HORIZONS				DEPTH (cm)		COLOURS		%	FIELD TEXTURE	CONSISTENCY
D	Ma	Suffix	Mod.	Upper	Lower	Matrix Colours	Mottle Colours	C.F.		
	A	p		0	30	10YR3/2		0	fSL	
	B	m	1	20	65	10YR5/4		2	fSL	
	B	m	2	65	100+	10YR5/3		0	fSL	

Mode of Deposition

MT	Morainal Till
LA	Lacustrine
GF	Glacial Fluvial
GL	Glacio Lacustrine
AL	Aluvial
OR	Organic

Slope Class

Aa	0-0.5%
Bb	0.5-2.0%
Cc	2-5%
Dd	5-9%
Ee	9-15%
Ff	15-30%
Gg	30-45%

Drainage Class

RA	Rapid
WE	Well
MW	Mod. Well
IM	Imperfect
PO	Poor
VP	Very Poor

Slope Position

1	Crest
2	Upper Slope
3	Middle Slope
4	Lower Slope
5	Toe
6	Depression
7	Level

Stoniness/Rockiness

Ø	Non
1	Slightly
2	Moderately
3	Very
4	Excessively
5	Exceedingly

Consistency

L- Loose
FR - Friable
F - Firm
VF - Very Firm

Depth to (cm):

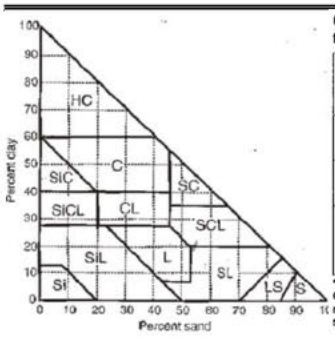
Bedrock	
Constricting Layer	
Carbonates	100+
Gley Colours	
Water Table	

Mottles

Horizon	Abun.	Size	Contrast

Abundance	Size	Contrast
F - Few	F - Fine	Faint
C - Common	M - Medium	Distinct
M - Many	L - Large	Prominent

NOTES:



Contrast - the difference between the mottle colour and the matrix colour, using the Munsell Soil Color Charts.

	Difference from matrix in		
	Hue* pages	Value* units	Chroma* units
Faint	0	≤2	≤1
	1	0	0
Distinct	0	3 - 4	2 - 4
	1	≤2	≤1
Prominent	0	≥4	≥4
	1	≥2	≥1
	2+	≥0	≥0

*Hue, Value, and Chroma differences are determined using the Munsell Soil Color Charts (see page 25) e.g. common, fine, distinct brown (10YR 5/3) mottles. Values in the table are taken from 1982 CanSIS manual for describing soils in the field.

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Few <2% Common 2 - 20% Many >20%

Size - the diameter of the mottle if round, or, the greatest dimension if length is not more than 2 or 3 times the width, or, the width if the mottle is long and narrow.

Fine <5mm Medium 5 - 15mm Coarse >15mm

Stantec

Site No.	Date (YY MM.DD)	W.P.	Project Number:
04	2021 05 19		160961425

Surveyor	Observation Type	Project Name
EJM	Auger	Lavender Farms

MODE OF DEPOSITION	NO. 1	SLOPE CLASS	SLOPE POSITION	SLOPE %	SLOPE LENGTH
	GF	e	U	13	25 m
	NO.2	DRAINAGE CLASS	STONINESS	ROCKINESS	
		W	0	0	
	NO.3				

HORIZONS				DEPTH (cm)		COLOURS		%	FIELD TEXTURE	CONSISTENCY
D	Ma	Suffix	Mod.	Upper	Lower	Matrix Colours	Mottle Colours	C.F.		
	A	p		0	25	10YR3/2		0	fSL	
	B	m		25	40	10YR4/6		0	fSL	
				40+		auger refusal		20+		

Mode of Deposition
- MT Morainal Till
- LA Lacustrine
- GF Glacial Fluvial
- GL Glacio Lacustrine
- AL Aluvial
- OR Organic

Slope Class
- Aa 0-0.5%
- Bb 0.5-2.0%
- Cc 2-5%
- Dd 5-9%
- Ee 9-15%
- Ff 15-30%
- Gg 30-45%

Drainage Class
- RA Rapid
- WE Well
- MW Mod. Well
- IM Imperfect
- PO Poor
- VP Very Poor

Slope Position
- 1 Crest
- 2 Upper Slope
- 3 Middle Slope
- 4 Lower Slope
- 5 Toe
- 6 Depression
- 7 Level

Stoniness/Rockiness
- Ø Non
- 1 Slightly
- 2 Moderately
- 3 Very
- 4 Excessively
- 5 Exceedingly

Consistency
- L- Loose
- FR - Friable
- F - Firm
- VF - Very Firm

Depth to (cm):

Bedrock	
Constricting Layer	
Carbonates	100+
Gley Colours	
Water Table	

Mottles

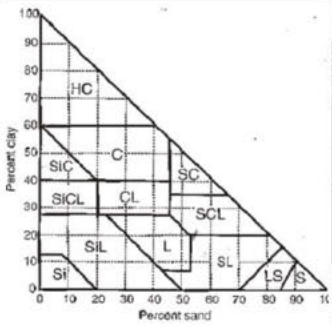
Horizon	Abun.	Size	Contrast

Abundance
- F - Few
- C - Common
- M - Many

Size
- F - Fine
- M - Medium
- L - Large

Contrast
- Faint
- Distinct
- Prominent

NOTES:



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Distinct	0	3 - 4	2 - 4
	1	≤2	≤1
Prominent	0	≥4	≥4
	1	≥2	≥1
	2+	≥0	≥0

*Hue, Value, and Chroma differences are determined using the Munsell Soil Color Charts (see page 25) e.g. common, fine, distinct brown (10YR 5/3) mottles. Values in the table are taken from 1982 CanSIS manual for describing soils in the field.

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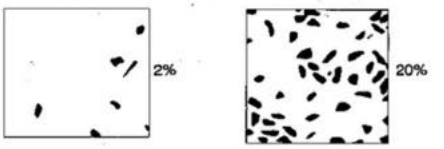


Size - the diameter of the mottle if round, or, the greatest dimension if length is not more than 2 or 3 times the width, or, the width if the mottle is long and narrow.

Fine <5mm Medium 5 - 15mm Coarse >15mm

Stantec

Site No.	Date (YY MM.DD)	W.P.	Project Number:
05	2021 05 19		160961425

Surveyor	Observation Type	Project Name
EJM	Auger	Lavender Farms

MODE OF DEPOSITION	NO. 1	SLOPE CLASS	SLOPE POSITION	SLOPE %	SLOPE LENGTH
	MT	d	M	7	45 m
	NO.2	DRAINAGE CLASS	STONINESS	ROCKINESS	
		W	0	0	
	NO.3				

HORIZONS				DEPTH (cm)		COLOURS		%	FIELD TEXTURE	CONSISTENCY
D	Ma	Suffix	Mod.	Upper	Lower	Matrix Colours	Mottle Colours	C.F.		
	A	p		0	25	10YR3/3		0	L	
	B	m	1	25	50	10YR4/3		2	L	
	B	m	2	50	80	10YR4/4		2	L	
	B	m	3	80	100+	10YR5/4		10	L	

Mode of Deposition

MT	Morainal Till
LA	Lacustrine
GF	Glacial Fluvial
GL	Glacio Lacustrine
AL	Aluvial
OR	Organic

Slope Class

Aa	0-0.5%
Bb	0.5-2.0%
Cc	2-5%
Dd	5-9%
Ee	9-15%
Ff	15-30%
Gg	30-45%

Drainage Class

RA	Rapid
WE	Well
MW	Mod. Well
IM	Imperfect
PO	Poor
VP	Very Poor

Slope Position

1	Crest
2	Upper Slope
3	Middle Slope
4	Lower Slope
5	Toe
6	Depression
7	Level

Stoniness/Rockiness

Ø	Non
1	Slightly
2	Moderately
3	Very
4	Excessively
5	Exceedingly

Consistency

L-	Loose
FR -	Friable
F -	Firm
VF -	Very Firm

Depth to (cm):

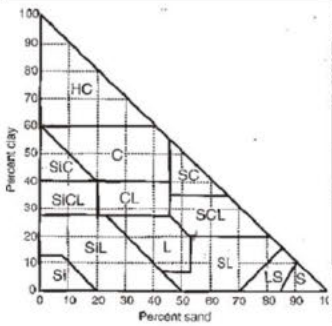
Bedrock	
Constricting Layer	
Carbonates	100+
Gley Colours	
Water Table	

Mottles

Horizon	Abun.	Size	Contrast

Abundance	Size	Contrast
F - Few	F - Fine	Faint
C - Common	M - Medium	Distinct
M - Many	L - Large	Prominent

NOTES:



Contrast - the difference between the mottle colour and the matrix colour, using the Munsell Soil Color Charts.

	Difference from matrix in		
	Hue* pages	Value* units	Chroma* units
Faint	0	≤2	≤1
	1	0	0
Distinct	0	3 - 4	2 - 4
	1	≤2	≤1
Prominent	0	≥4	≥4
	1	≥2	≥1
	2+	≥0	≥0

*Hue, Value, and Chroma differences are determined using the Munsell Soil Color Charts (see page 25) e.g. common, fine, distinct brown (10YR 5/3) mottles. Values in the table are taken from 1982 CanSIS manual for describing soils in the field.

Abundance - the proportion of the exposed surface occupied by mottles (%) (refer to Appendix II for additional area percentage charts).

Few <2% Common 2 - 20% Many >20%

Size - the diameter of the mottle if round, or, the greatest dimension if length is not more than 2 or 3 times the width, or, the width if the mottle is long and narrow.

Fine <5mm Medium 5 - 15mm Coarse >15mm

Stantec

Site No.	Date (YY MM.DD)	W.P.	Project Number:
06	2021 05 19		160961425

Surveyor	Observation Type	Project Name
EJM	Auger	Lavender Farms

MODE OF DEPOSITION	NO. 1	SLOPE CLASS	SLOPE POSITION	SLOPE %	SLOPE LENGTH
	MT	C	M	3	70 m
	NO.2	DRAINAGE CLASS	STONINESS	ROCKINESS	
		W	0	0	
	NO.3				

HORIZONS				DEPTH (cm)		COLOURS		%	FIELD TEXTURE	CONSISTENCY
D	Ma	Suffix	Mod.	Upper	Lower	Matrix Colours	Mottle Colours	C.F.		
	A	p		0	25	10YR3/2		0	L	
	B	m	1	25	45	10YR4/4		0	L	
	B	m	2	45	70	10YR4/3		0	L	
	C	k		70	100+	10YR5/3		0	L -> fSL	

Mode of Deposition

MT	Morainal Till
LA	Lacustrine
GF	Glacial Fluvial
GL	Glacio Lacustrine
AL	Aluvial
OR	Organic

Slope Class

Aa	0-0.5%
Bb	0.5-2.0%
Cc	2-5%
Dd	5-9%
Ee	9-15%
Ff	15-30%
Gg	30-45%

Drainage Class

RA	Rapid
WE	Well
MW	Mod. Well
IM	Imperfect
PO	Poor
VP	Very Poor

Slope Position

1	Crest
2	Upper Slope
3	Middle Slope
4	Lower Slope
5	Toe
6	Depression
7	Level

Stoniness/Rockiness

Ø	Non
1	Slightly
2	Moderately
3	Very
4	Excessively
5	Exceedingly

Consistency

L- Loose
FR - Friable
F - Firm
VF - Very Firm

Depth to (cm):

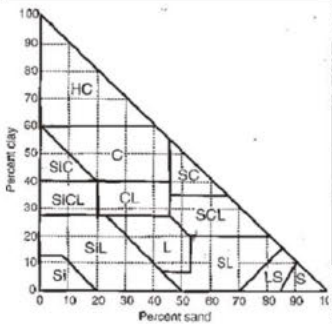
Bedrock	
Constricting Layer	
Carbonates	70
Gley Colours	
Water Table	

Mottles

Horizon	Abun.	Size	Contrast

Abundance	Size	Contrast
F - Few	F - Fine	Faint
C - Common	M - Medium	Distinct
M - Many	L - Large	Prominent

NOTES:



Contrast - the difference between the mottle colour and the matrix colour, using the Munsell Soil Color Charts.

	Difference from matrix in		
	Hue* pages	Value* units	Chroma* units
Faint	0	≤2	≤1
	1	0	0
Distinct	0	3 - 4	2 - 4
	1	≤2	≤1
Prominent	0	≥4	≥4
	1	≥2	≥1
	2+	≥0	≥0

*Hue, Value, and Chroma differences are determined using the Munsell Soil Color Charts (see page 25) e.g. common, fine, distinct brown (10YR 5/3) mottles. Values in the table are taken from 1982 CanSIS manual for describing soils in the field.

Abundance - the proportion of the exposed surface occupied by mottles (%) (refer to Appendix II for additional area percentage charts).

Few <2% Common 2 - 20% Many >20%

Size - the diameter of the mottle if round, or, the greatest dimension if length is not more than 2 or 3 times the width, or, the width if the mottle is long and narrow.

Fine <5mm Medium 5 - 15mm Coarse >15mm

Stantec

Site No.	Date (YY MM.DD)	W.P.	Project Number:
07	2021 05 19		160961425

Surveyor	Observation Type	Project Name
EJM	Auger	Lavender Farms

MODE OF DEPOSITION	NO. 1	SLOPE CLASS	SLOPE POSITION	SLOPE %	SLOPE LENGTH
	MT	d	U	8	20 m
	NO.2	DRAINAGE CLASS	STONINESS	ROCKINESS	
		W	0	0	
	NO.3				

HORIZONS				DEPTH (cm)		COLOURS		%	FIELD TEXTURE	CONSISTENCY
D	Ma	Suffix	Mod.	Upper	Lower	Matrix Colours	Mottle Colours	C.F.		
	A	p		0	30	10YR3/3		0	L	
	B	m		30	50	10YR4/3		2	L	
	C	k		50	100	10YR5/4		5	L	

Mode of Deposition
- MT Morainal Till
- LA Lacustrine
- GF Glacial Fluvial
- GL Glacio Lacustrine
- AL Aluvial
- OR Organic

Slope Class
- Aa 0-0.5%
- Bb 0.5-2.0%
- Cc 2-5%
- Dd 5-9%
- Ee 9-15%
- Ff 15-30%
- Gg 30-45%

Drainage Class
- RA Rapid
- WE Well
- MW Mod. Well
- IM Imperfect
- PO Poor
- VP Very Poor

Slope Position
- 1 Crest
- 2 Upper Slope
- 3 Middle Slope
- 4 Lower Slope
- 5 Toe
- 6 Depression
- 7 Level

Stoniness/Rockiness
- Ø Non
- 1 Slightly
- 2 Moderately
- 3 Very
- 4 Excessively
- 5 Exceedingly

Consistency
- L- Loose
- FR - Friable
- F - Firm
- VF - Very Firm

Depth to (cm):

Bedrock	
Constricting Layer	
Carbonates	50
Gley Colours	
Water Table	

Mottles

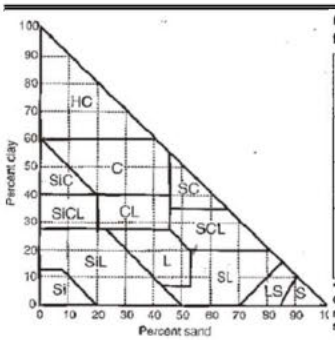
Horizon	Abun.	Size	Contrast

Abundance
- F - Few
- C - Common
- M - Many

Size
- F - Fine
- M - Medium
- L - Large

Contrast
- Faint
- Distinct
- Prominent

NOTES: *sampled at break in slope between 8% and 20%*



Contrast - the difference between the mottle colour and the matrix colour, using the Munsell Soil Color Charts.

	Difference from matrix in		
	Hue* pages	Value* units	Chroma* units
Faint	0	≤2	≤1
	1	0	0
Distinct	0	3 - 4	2 - 4
	1	≤2	≤1
Prominent	0	≥4	≥4
	1	≥2	≥1
	2+	≥0	≥0

*Hue, Value, and Chroma differences are determined using the Munsell Soil Color Charts (see page 25) e.g. common, fine, distinct brown (10YR 5/3) mottles. Values in the table are taken from 1982 CanSIS manual for describing soils in the field.

Abundance - the proportion of the exposed surface occupied by mottles (%) (refer to Appendix II for additional area percentage charts).

Few <2% Common 2 - 20% Many >20%

Size - the diameter of the mottle if round, or, the greatest dimension if length is not more than 2 or 3 times the width, or, the width if the mottle is long and narrow.

Fine <5mm Medium 5 - 15mm Coarse >15mm

Stantec

Site No.	Date (YY MM.DD)	W.P.	Project Number:
08	2021 05 19		160961425

Surveyor	Observation Type	Project Name
EJM	Auger	Lavender Farms

MODE OF DEPOSITION	NO. 1	SLOPE CLASS	SLOPE POSITION	SLOPE %	SLOPE LENGTH
	MT	f	M	17	40 m
	NO.2	DRAINAGE CLASS	STONINESS	ROCKINESS	
		W	0	0	
	NO.3				

HORIZONS				DEPTH (cm)		COLOURS		%	FIELD TEXTURE	CONSISTENCY
D	Ma	Suffix	Mod.	Upper	Lower	Matrix Colours	Mottle Colours	C.F.		
	A	p		0	25	10YR3/2		0	L	
	B	m		25	60	10YR4/4		2	L	
	C	k		60	100	10YR5/4		5	L	

Mode of Deposition
- MT Morainal Till
- LA Lacustrine
- GF Glacial Fluvial
- GL Glacio Lacustrine
- AL Aluvial
- OR Organic

Slope Class
- Aa 0-0.5%
- Bb 0.5-2.0%
- Cc 2-5%
- Dd 5-9%
- Ee 9-15%
- Ff 15-30%
- Gg 30-45%

Drainage Class
- RA Rapid
- WE Well
- MW Mod. Well
- IM Imperfect
- PO Poor
- VP Very Poor

Slope Position
- 1 Crest
- 2 Upper Slope
- 3 Middle Slope
- 4 Lower Slope
- 5 Toe
- 6 Depression
- 7 Level

Stoniness/Rockiness
- Ø Non
- 1 Slightly
- 2 Moderately
- 3 Very
- 4 Excessively
- 5 Exceedingly

Consistency
- L- Loose
- FR - Friable
- F - Firm
- VF - Very Firm

Depth to (cm):

Bedrock	
Constricting Layer	
Carbonates	60
Gley Colours	
Water Table	

Mottles

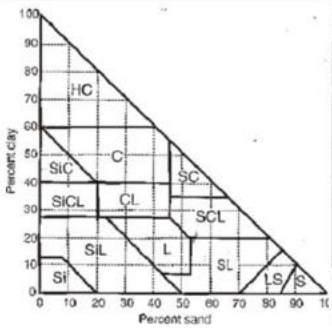
Horizon	Abun.	Size	Contrast

Abundance
- F - Few
- C - Common
- M - Many

Size
- F - Fine
- M - Medium
- L - Large

Contrast
- Faint
- Distinct
- Prominent

NOTES: *Land Use: grass & clover hay*



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	Difference from matrix in		
	Hue* pages	Value* units	Chroma* units
Faint	0	≤2	≤1
	1	0	0
Distinct	0	3 - 4	2 - 4
	1	≤2	≤1
Prominent	0	≥4	≥4
	1	≥2	≥1
	2+	≥0	≥0

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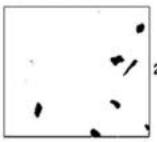
Abundance - the proportion of the exposed surface occupied by mottles (%) (refer to Appendix II for additional area percentage charts).

Few <2% Common 2 - 20% Many >20%



Size - the diameter of the mottle if round, or, the greatest dimension if length is not more than 2 or 3 times the width, or, the width if the mottle is long and narrow.

Fine <5mm Medium 5 - 15mm Coarse >15mm

Stantec

Site No.	Date (YY MM.DD)	W.P.	Project Number:
09	2021 05 19		160961425

Surveyor	Observation Type	Project Name
EJM	Auger	Lavender Farms

MODE OF DEPOSITION	NO. 1	SLOPE CLASS	SLOPE POSITION	SLOPE %	SLOPE LENGTH
	MT	d	M	8	45 m
	NO.2	DRAINAGE CLASS	STONINESS	ROCKINESS	
		W	0	0	
	NO.3				

HORIZONS				DEPTH (cm)		COLOURS		%	FIELD TEXTURE	CONSISTENCY
D	Ma	Suffix	Mod.	Upper	Lower	Matrix Colours	Mottle Colours	C.F.		
	A	p		0	25	10YR3/3		1	L	
	B	m		25	45	10YR4/4		2	L	
	C	k		45	100	10YR5/3		5	L -> fSL	

Mode of Deposition

MT	Morainal Till
LA	Lacustrine
GF	Glacial Fluvial
GL	Glacio Lacustrine
AL	Aluvial
OR	Organic

Slope Class

Aa	0-0.5%
Bb	0.5-2.0%
Cc	2-5%
Dd	5-9%
Ee	9-15%
Ff	15-30%
Gg	30-45%

Drainage Class

RA	Rapid
WE	Well
MW	Mod. Well
IM	Imperfect
PO	Poor
VP	Very Poor

Slope Position

1	Crest
2	Upper Slope
3	Middle Slope
4	Lower Slope
5	Toe
6	Depression
7	Level

Stoniness/Rockiness

Ø	Non
1	Slightly
2	Moderately
3	Very
4	Excessively
5	Exceedingly

Consistency

L-	Loose
FR -	Friable
F -	Firm
VF -	Very Firm

Depth to (cm):

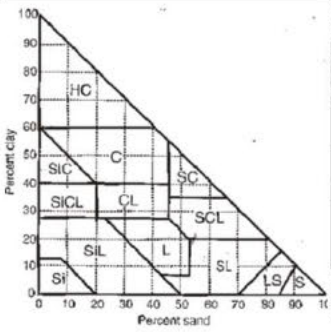
Bedrock	
Constricting Layer	
Carbonates	45
Gley Colours	
Water Table	

Mottles

Horizon	Abun.	Size	Contrast

Abundance	Size	Contrast
F - Few	F - Fine	Faint
C - Common	M - Medium	Distinct
M - Many	L - Large	Prominent

NOTES: *Land Use: grass & clover hay*



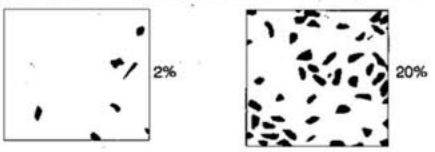
Contrast - the difference between the mottle colour and the matrix colour, using the Munsell Soil Color Charts.

	Difference from matrix in		
	Hue* pages	Value* units	Chroma* units
Faint	0	≤2	≤1
	1	0	0
Distinct	0	3 - 4	2 - 4
	1	≤2	≤1
Prominent	0	≥4	≥4
	1	≥2	≥1
	2+	≥0	≥0

*Hue, Value, and Chroma differences are determined using the Munsell Soil Color Charts (see page 25) e.g. common, fine, distinct brown (10YR 5/3) mottles. Values in the table are taken from 1982 CanSIS manual for describing soils in the field.

Abundance - the proportion of the exposed surface occupied by mottles (%) (refer to Appendix II for additional area percentage charts).

Few <2% Common 2 - 20% Many >20%



Size - the diameter of the mottle if round, or, the greatest dimension if length is not more than 2 or 3 times the width, or, the width if the mottle is long and narrow.

Fine <5mm Medium 5 - 15mm Coarse >15mm

Stantec

Site No.	Date (YY MM.DD)	W.P.	Project Number:
10	2021 05 19		160961425

Surveyor	Observation Type	Project Name
EJM	Auger	Lavender Farms

MODE OF DEPOSITION	NO. 1	SLOPE CLASS	SLOPE POSITION	SLOPE %	SLOPE LENGTH
	MT	c	M	3	30 m
	NO.2	DRAINAGE CLASS	STONINESS	ROCKINESS	
		W	0	0	
	NO.3				

HORIZONS				DEPTH (cm)		COLOURS		%	FIELD TEXTURE	CONSISTENCY
D	Ma	Suffix	Mod.	Upper	Lower	Matrix Colours	Mottle Colours	C.F.		
	A	p		0	25	10YR3/3		1	L	
	B	m		25	65	10YR5/4		3	L	
	C	k		65	100	10YR5/3		5	L -> fSL	

Mode of Deposition

MT	Morainal Till
LA	Lacustrine
GF	Glacial Fluvial
GL	Glacio Lacustrine
AL	Aluvial
OR	Organic

Slope Class

Aa	0-0.5%
Bb	0.5-2.0%
Cc	2-5%
Dd	5-9%
Ee	9-15%
Ff	15-30%
Gg	30-45%

Drainage Class

RA	Rapid
WE	Well
MW	Mod. Well
IM	Imperfect
PO	Poor
VP	Very Poor

Slope Position

1	Crest
2	Upper Slope
3	Middle Slope
4	Lower Slope
5	Toe
6	Depression
7	Level

Stoniness/Rockiness

Ø	Non
1	Slightly
2	Moderately
3	Very
4	Excessively
5	Exceedingly

Consistency

L-	Loose
FR -	Friable
F -	Firm
VF -	Very Firm

Depth to (cm):

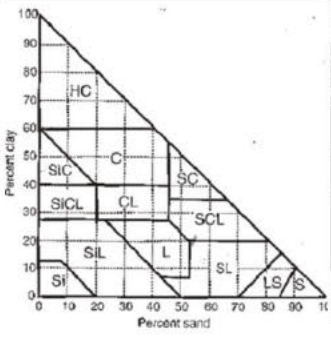
Bedrock	
Constricting Layer	
Carbonates	65
Gley Colours	
Water Table	

Mottles

Horizon	Abun.	Size	Contrast

Abundance	Size	Contrast
F - Few	F - Fine	Faint
C - Common	M - Medium	Distinct
M - Many	L - Large	Prominent

NOTES: *Land Use: grassy hay with minor amount of alfalfa*



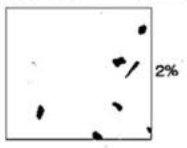
Contrast - the difference between the mottle colour and the matrix colour, using the Munsell Soil Color Charts.

	Difference from matrix in		
	Hue* pages	Value* units	Chroma* units
Faint	0	≤2	≤1
	1	0	0
Distinct	0	3 - 4	2 - 4
	1	≤2	≤1
Prominent	0	≥4	≥4
	1	≥2	≥1
	2+	≥0	≥0

*Hue, Value, and Chroma differences are determined using the Munsell Soil Color Charts (see page 25) e.g. common, fine, distinct brown (10YR 5/3) mottles. Values in the table are taken from 1982 CanSIS manual for describing soils in the field.

Abundance - the proportion of the exposed surface occupied by mottles (%) (refer to Appendix II for additional area percentage charts).

Few <2% Common 2 - 20% Many >20%



Size - the diameter of the mottle if round, or, the greatest dimension if length is not more than 2 or 3 times the width, or, the width if the mottle is long and narrow.

Fine <5mm Medium 5 - 15mm Coarse >15mm

Stantec

Site No.	Date (YY MM.DD)	W.P.	Project Number:
11	2021 05 19		160961425

Surveyor	Observation Type	Project Name
EJM	Auger	Lavender Farms

MODE OF DEPOSITION	NO. 1	SLOPE CLASS	SLOPE POSITION	SLOPE %	SLOPE LENGTH
	MT	c	L	2 - 5	30 m
	NO.2	DRAINAGE CLASS	STONINESS	ROCKINESS	
		MW	0	0	
	NO.3				

HORIZONS				DEPTH (cm)		COLOURS		%	FIELD TEXTURE	CONSISTENCY
D	Ma	Suffix	Mod.	Upper	Lower	Matrix Colours	Mottle Colours	C.F.		
	A	p		0	25	10YR3/3		1	L	
	B	m		25	55	10YR5/3		2	L	
	B	mgj		55	85	10YR5/4	10YR4/6	2	L	
	C	k		85	100	10YR5/3		4	L	

Mode of Deposition

MT	Morainal Till
LA	Lacustrine
GF	Glacial Fluvial
GL	Glacio Lacustrine
AL	Aluvial
OR	Organic

Slope Class

Aa	0-0.5%
Bb	0.5-2.0%
Cc	2-5%
Dd	5-9%
Ee	9-15%
Ff	15-30%
Gg	30-45%

Drainage Class

RA	Rapid
WE	Well
MW	Mod. Well
IM	Imperfect
PO	Poor
VP	Very Poor

Slope Position

1	Crest
2	Upper Slope
3	Middle Slope
4	Lower Slope
5	Toe
6	Depression
7	Level

Stoniness/Rockiness

Ø	Non
1	Slightly
2	Moderately
3	Very
4	Excessively
5	Exceedingly

Consistency

L-	Loose
FR -	Friable
F -	Firm
VF -	Very Firm

Depth to (cm):

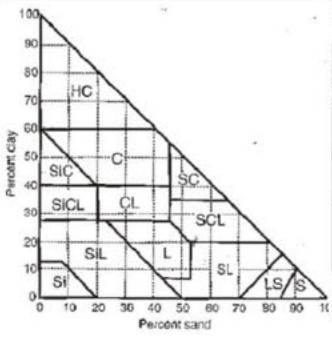
Bedrock	
Constricting Layer	
Carbonates	85
Gley Colours	
Water Table	

Mottles

Horizon	Abun.	Size	Contrast

Abundance	Size	Contrast
F - Few	F - Fine	Faint
C - Common	M - Medium	Distinct
M - Many	L - Large	Prominent

NOTES: *Land Use: grassy hay with minor amount of alfalfa*



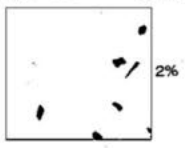
Contrast - the difference between the mottle colour and the matrix colour, using the Munsell Soil Color Charts.

	Difference from matrix in		
	Hue* pages	Value* units	Chroma* units
Faint	0	≤2	≤1
	1	0	0
Distinct	0	3 - 4	2 - 4
	1	≤2	≤1
Prominent	0	≥4	≥4
	1	≥2	≥1
	2+	≥0	≥0

*Hue, Value, and Chroma differences are determined using the Munsell Soil Color Charts (see page 25) e.g. common, fine, distinct brown (10YR 5/3) mottles. Values in the table are taken from 1982 CanSIS manual for describing soils in the field.

Abundance - the proportion of the exposed surface occupied by mottles (%) (refer to Appendix II for additional area percentage charts).

Few <2% Common 2 - 20% Many >20%



Size - the diameter of the mottle if round, or, the greatest dimension if length is not more than 2 or 3 times the width, or, the width if the mottle is long and narrow.

Fine <5mm Medium 5 - 15mm Coarse >15mm

Stantec

Site No.	Date (YY MM.DD)	W.P.	Project Number:
12	2021 05 19		160961425

Surveyor	Observation Type	Project Name
EJM	Auger	Lavender Farms

MODE OF DEPOSITION	NO. 1	SLOPE CLASS	SLOPE POSITION	SLOPE %	SLOPE LENGTH
	MT	B	L	1.5	60 m
	NO.2	DRAINAGE CLASS	STONINESS	ROCKINESS	
		MW	0	0	
	NO.3				

HORIZONS				DEPTH (cm)		COLOURS		%	FIELD TEXTURE	CONSISTENCY
D	Ma	Suffix	Mod.	Upper	Lower	Matrix Colours	Mottle Colours	C.F.		
	A	p		0	25	10YR3/3		2	L	
	B	m		25	45	10YR5/3		4	L	
	B	mgj		45	70	10YR5/4	10YR4/6	4	L	
	C	k		70	100	10YR5/3		6	L	

Mode of Deposition
- MT Morainal Till
- LA Lacustrine
- GF Glacial Fluvial
- GL Glacio Lacustrine
- AL Aluvial
- OR Organic

Slope Class
- Aa 0-0.5%
- Bb 0.5-2.0%
- Cc 2-5%
- Dd 5-9%
- Ee 9-15%
- Ff 15-30%
- Gg 30-45%

Drainage Class
- RA Rapid
- WE Well
- MW Mod. Well
- IM Imperfect
- PO Poor
- VP Very Poor

Slope Position
- 1 Crest
- 2 Upper Slope
- 3 Middle Slope
- 4 Lower Slope
- 5 Toe
- 6 Depression
- 7 Level

Stoniness/Rockiness
- Ø Non
- 1 Slightly
- 2 Moderately
- 3 Very
- 4 Excessively
- 5 Exceedingly

Consistency
- L- Loose
- FR - Friable
- F - Firm
- VF - Very Firm

Depth to (cm):

Bedrock	
Constricting Layer	
Carbonates	70
Gley Colours	
Water Table	

Mottles

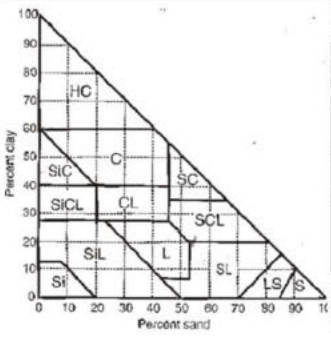
Horizon	Abun.	Size	Contrast

Abundance
- F - Few
- C - Common
- M - Many

Size
- F - Fine
- M - Medium
- L - Large

Contrast
- Faint
- Distinct
- Prominent

NOTES: *Land Use: grassy hay with minor amount of alfalfa*



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	Difference from matrix in		
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	1	0	0
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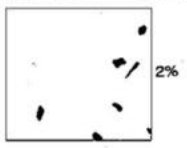
Abundance - the proportion of the exposed surface occupied by mottles (%) (refer to Appendix II for additional area percentage charts).

Few <2% Common 2 - 20% Many >20%



Size - the diameter of the mottle if round, or, the greatest dimension if length is not more than 2 or 3 times the width, or, the width if the mottle is long and narrow.

Fine <5mm Medium 5 - 15mm Coarse >15mm

Stantec

Site No.	Date (YY MM.DD)	W.P.	Project Number:
13	2021 05 19		160961425

Surveyor	Observation Type	Project Name
EJM	Auger	Lavender Farms

MODE OF DEPOSITION	NO. 1	SLOPE CLASS	SLOPE POSITION	SLOPE %	SLOPE LENGTH
	MT	d	M	8	40 m
	NO.2	DRAINAGE CLASS	STONINESS	ROCKINESS	
		W	0	0	
	NO.3				

HORIZONS				DEPTH (cm)		COLOURS		%	FIELD TEXTURE	CONSISTENCY
D	Ma	Suffix	Mod.	Upper	Lower	Matrix Colours	Mottle Colours	C.F.		
	A	p		0	25	10YR3/2		2	L	
	B	m		25	70	10YR4/4		4	L	
	C	k		70	100	10YR5/4		6	L	

Mode of Deposition

MT	Morainal Till
LA	Lacustrine
GF	Glacial Fluvial
GL	Glacio Lacustrine
AL	Aluvial
OR	Organic

Slope Class

Aa	0-0.5%
Bb	0.5-2.0%
Cc	2-5%
Dd	5-9%
Ee	9-15%
Ff	15-30%
Gg	30-45%

Drainage Class

RA	Rapid
WE	Well
MW	Mod. Well
IM	Imperfect
PO	Poor
VP	Very Poor

Slope Position

1	Crest
2	Upper Slope
3	Middle Slope
4	Lower Slope
5	Toe
6	Depression
7	Level

Stoniness/Rockiness

Ø	Non
1	Slightly
2	Moderately
3	Very
4	Excessively
5	Exceedingly

Consistency

L-	Loose
FR -	Friable
F -	Firm
VF -	Very Firm

Depth to (cm):

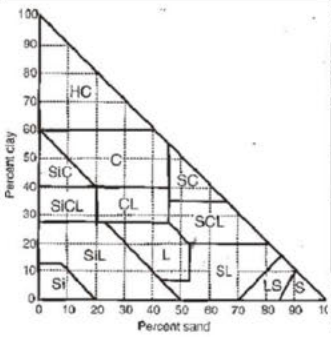
Bedrock	
Constricting Layer	
Carbonates	70
Gley Colours	
Water Table	

Mottles

Horizon	Abun.	Size	Contrast

Abundance	Size	Contrast
F - Few	F - Fine	Faint
C - Common	M - Medium	Distinct
M - Many	L - Large	Prominent

NOTES: *Land Use: grassy hay*



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	1	≤2	≤1
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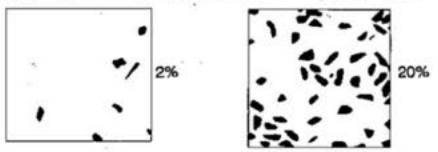


Size - the diameter of the mottle if round, or, the greatest dimension if length is not more than 2 or 3 times the width, or, the width if the mottle is long and narrow.

Fine <5mm Medium 5 - 15mm Coarse >15mm

Stantec

Site No.	Date (YY MM.DD)	W.P.	Project Number:
14	2021 05 19		160961425

Surveyor	Observation Type	Project Name
EJM	Auger	Lavender Farms

MODE OF DEPOSITION	NO. 1	SLOPE CLASS	SLOPE POSITION	SLOPE %	SLOPE LENGTH
	MT	d	U	7	40 m
	NO.2	DRAINAGE CLASS	STONINESS	ROCKINESS	
		W	0	0	
	NO.3				

HORIZONS				DEPTH (cm)		COLOURS		%	FIELD TEXTURE	CONSISTENCY
D	Ma	Suffix	Mod.	Upper	Lower	Matrix Colours	Mottle Colours	C.F.		
	A	p		0	25	10YR3/3		2	L	
	B	m		25	65	10YR4/4		5	L	
	C	k		65	100	10YR5/4		10	L	

Mode of Deposition
- MT Morainal Till
- LA Lacustrine
- GF Glacial Fluvial
- GL Glacio Lacustrine
- AL Aluvial
- OR Organic

Slope Class
- Aa 0-0.5%
- Bb 0.5-2.0%
- Cc 2-5%
- Dd 5-9%
- Ee 9-15%
- Ff 15-30%
- Gg 30-45%

Drainage Class
- RA Rapid
- WE Well
- MW Mod. Well
- IM Imperfect
- PO Poor
- VP Very Poor

Slope Position
- 1 Crest
- 2 Upper Slope
- 3 Middle Slope
- 4 Lower Slope
- 5 Toe
- 6 Depression
- 7 Level

Stoniness/Rockiness
- Ø Non
- 1 Slightly
- 2 Moderately
- 3 Very
- 4 Excessively
- 5 Exceedingly

Consistency
- L- Loose
- FR - Friable
- F - Firm
- VF - Very Firm

Depth to (cm):

Bedrock	
Constricting Layer	
Carbonates	65
Gley Colours	
Water Table	

Mottles

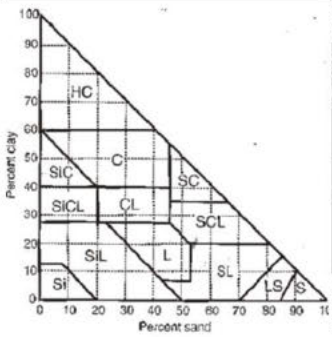
Horizon	Abun.	Size	Contrast

Abundance
- F - Few
- C - Common
- M - Many

Size
- F - Fine
- M - Medium
- L - Large

Contrast
- Faint
- Distinct
- Prominent

NOTES: *Land Use: grassy hay*



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	Difference from matrix in		
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	1	≥2	≥1
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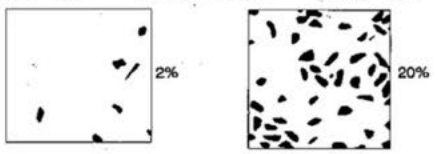
Abundance - the proportion of the exposed surface occupied by mottles (%) (refer to Appendix II for additional area percentage charts).

Few <2% Common 2 - 20% Many >20%



Size - the diameter of the mottle if round, or, the greatest dimension if length is not more than 2 or 3 times the width, or, the width if the mottle is long and narrow.

Fine <5mm Medium 5 - 15mm Coarse >15mm

Stantec

Site No.	Date (YY MM.DD)	W.P.	Project Number:
15	2021 05 19		160961425

Surveyor	Observation Type	Project Name
EJM	Auger	Lavender Farms

MODE OF DEPOSITION	NO. 1	SLOPE CLASS	SLOPE POSITION	SLOPE %	SLOPE LENGTH
	MT	d	M	7	30 m
	NO.2	DRAINAGE CLASS	STONINESS	ROCKINESS	
		W	0	0	
	NO.3				

HORIZONS				DEPTH (cm)		COLOURS		%	FIELD TEXTURE	CONSISTENCY
D	Ma	Suffix	Mod.	Upper	Lower	Matrix Colours	Mottle Colours	C.F.		
	A	p		0	25	10YR3/3		2	L	
	B	m		25	60	10YR4/4		3	L	
	C	k		60	100	10YR5/4		7	L	

Mode of Deposition

MT	Morainal Till
LA	Lacustrine
GF	Glacial Fluvial
GL	Glacio Lacustrine
AL	Aluvial
OR	Organic

Slope Class

Aa	0-0.5%
Bb	0.5-2.0%
Cc	2-5%
Dd	5-9%
Ee	9-15%
Ff	15-30%
Gg	30-45%

Drainage Class

RA	Rapid
WE	Well
MW	Mod. Well
IM	Imperfect
PO	Poor
VP	Very Poor

Slope Position

1	Crest
2	Upper Slope
3	Middle Slope
4	Lower Slope
5	Toe
6	Depression
7	Level

Stoniness/Rockiness

Ø	Non
1	Slightly
2	Moderately
3	Very
4	Excessively
5	Exceedingly

Consistency

L-	Loose
FR -	Friable
F -	Firm
VF -	Very Firm

Depth to (cm):

Bedrock	
Constricting Layer	
Carbonates	60
Gley Colours	
Water Table	

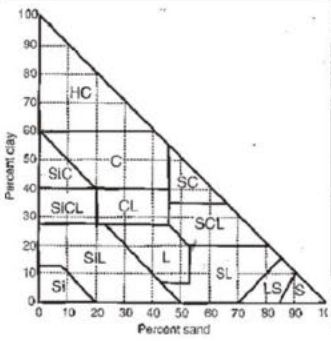
Mottles

Horizon	Abun.	Size	Contrast

Abundance	Size	Contrast
F - Few	F - Fine	Faint
C - Common	M - Medium	Distinct
M - Many	L - Large	Prominent

NOTES: *Land Use: grassy hay*

Samples at break in slope between 7% and 13%



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	Difference from matrix in		
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	1	0	0
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	1	≤2	≤1
Prominent	0	≥4	≥4
	1	≥2	≥1
	2+	≥0	≥0

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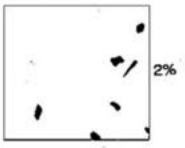


Size - the diameter of the mottle if round, or, the greatest dimension if length is not more than 2 or 3 times the width, or, the width if the mottle is long and narrow.

Fine <5mm Medium 5 - 15mm Coarse >15mm

Stantec

Site No.	Date (YY MM.DD)	W.P.	Project Number:
16	2021 05 19		160961425

Surveyor	Observation Type	Project Name
EJM	Auger	Lavender Farms

MODE OF DEPOSITION	NO. 1	SLOPE CLASS	SLOPE POSITION	SLOPE %	SLOPE LENGTH
	MT	F	M	18	70 m
	NO.2	DRAINAGE CLASS	STONINESS	ROCKINESS	
		W	0	0	
	NO.3				

HORIZONS				DEPTH (cm)		COLOURS		%	FIELD TEXTURE	CONSISTENCY
D	Ma	Suffix	Mod.	Upper	Lower	Matrix Colours	Mottle Colours	C.F.		
	A	p		0	25	10YR3/3		1	L	
	B	m		25	50	10YR4/4		2	L	
	C	k		50	100	10YR5/4		5	L	

Mode of Deposition

MT	Morainal Till
LA	Lacustrine
GF	Glacial Fluvial
GL	Glacio Lacustrine
AL	Aluvial
OR	Organic

Slope Class

Aa	0-0.5%
Bb	0.5-2.0%
Cc	2-5%
Dd	5-9%
Ee	9-15%
Ff	15-30%
Gg	30-45%

Drainage Class

RA	Rapid
WE	Well
MW	Mod. Well
IM	Imperfect
PO	Poor
VP	Very Poor

Slope Position

1	Crest
2	Upper Slope
3	Middle Slope
4	Lower Slope
5	Toe
6	Depression
7	Level

Stoniness/Rockiness

Ø	Non
1	Slightly
2	Moderately
3	Very
4	Excessively
5	Exceedingly

Consistency

L-	Loose
FR -	Friable
F -	Firm
VF -	Very Firm

Depth to (cm):

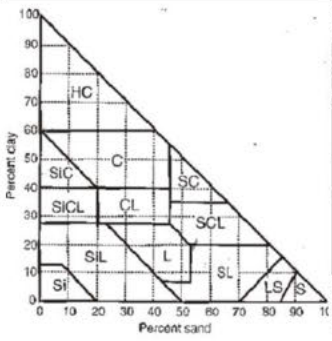
Bedrock	
Constricting Layer	
Carbonates	50
Gley Colours	
Water Table	

Mottles

Horizon	Abun.	Size	Contrast

Abundance	Size	Contrast
F - Few	F - Fine	Faint
C - Common	M - Medium	Distinct
M - Many	L - Large	Prominent

NOTES: *Land Use: grassy hay*



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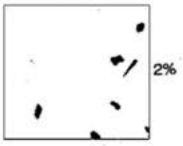

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Fine <5mm Medium 5 - 15mm Coarse >15mm

Stantec

Site No.	Date (YY MM.DD)	W.P.	Project Number:
17	2021 05 19		160961425

Surveyor	Observation Type	Project Name
EJM	Auger	Lavender Farms

MODE OF DEPOSITION	NO. 1	SLOPE CLASS	SLOPE POSITION	SLOPE %	SLOPE LENGTH
	MT	e	M	13	40 m
	NO.2	DRAINAGE CLASS	STONINESS	ROCKINESS	
		W	0	0	
	NO.3				

HORIZONS				DEPTH (cm)		COLOURS		%	FIELD TEXTURE	CONSISTENCY
D	Ma	Suffix	Mod.	Upper	Lower	Matrix Colours	Mottle Colours	C.F.		
	A	p		0	25	10YR3/3		0	L	
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Mode of Deposition
- MT Morainal Till
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Slope Class
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Drainage Class
- RA Rapid
- WE Well
- MW Mod. Well
- IM Imperfect
- PO Poor
- VP Very Poor

Slope Position
- 1 Crest
- 2 Upper Slope
- 3 Middle Slope
- 4 Lower Slope
- 5 Toe
- 6 Depression
- 7 Level

Stoniness/Rockiness
- Ø Non
- 1 Slightly
- 2 Moderately
- 3 Very
- 4 Excessively
- 5 Exceedingly

Consistency
- L- Loose
- FR - Friable
- F - Firm
- VF - Very Firm

Depth to (cm):

Bedrock	
Constricting Layer	
Carbonates	50
Gley Colours	
Water Table	

Mottles

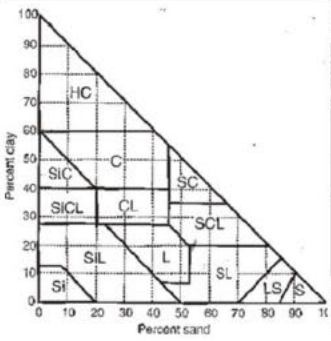
Horizon	Abun.	Size	Contrast

Abundance
- F - Few
- C - Common
- M - Many

Size
- F - Fine
- M - Medium
- L - Large

Contrast
- Faint
- Distinct
- Prominent

NOTES: *Land Use: grassy hay with minor amount of alfalfa*



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	2+	≥0	≥0

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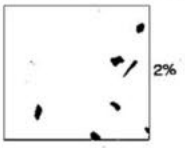


Size - the diameter of the mottle if round, or, the greatest dimension if length is not more than 2 or 3 times the width, or, the width if the mottle is long and narrow.

Fine <5mm Medium 5 - 15mm Coarse >15mm

Stantec

Site No.	Date (YY MM.DD)	W.P.	Project Number:
18	2021 05 19		160961425

Surveyor	Observation Type	Project Name
EJM	Auger	Lavender Farms

MODE OF DEPOSITION	NO. 1	SLOPE CLASS	SLOPE POSITION	SLOPE %	SLOPE LENGTH
	MT	d	M	6	45 m
	NO.2	DRAINAGE CLASS	STONINESS	ROCKINESS	
		W	0	0	
	NO.3				

HORIZONS				DEPTH (cm)		COLOURS		%	FIELD TEXTURE	CONSISTENCY
D	Ma	Suffix	Mod.	Upper	Lower	Matrix Colours	Mottle Colours	C.F.		
	A	p		0	25	10YR3/3		0	L	
	B	m		25	60	10YR4/4		2	L	
	C	k		60	100	10YR5/4		8	L	

Mode of Deposition
- MT Morainal Till
- LA Lacustrine
- GF Glacial Fluvial
- GL Glacio Lacustrine
- AL Aluvial
- OR Organic

Slope Class
- Aa 0-0.5%
- Bb 0.5-2.0%
- Cc 2-5%
- Dd 5-9%
- Ee 9-15%
- Ff 15-30%
- Gg 30-45%

Drainage Class
- RA Rapid
- WE Well
- MW Mod. Well
- IM Imperfect
- PO Poor
- VP Very Poor

Slope Position
- 1 Crest
- 2 Upper Slope
- 3 Middle Slope
- 4 Lower Slope
- 5 Toe
- 6 Depression
- 7 Level

Stoniness/Rockiness
- Ø Non
- 1 Slightly
- 2 Moderately
- 3 Very
- 4 Excessively
- 5 Exceedingly

Consistency
- L- Loose
- FR - Friable
- F - Firm
- VF - Very Firm

Depth to (cm):

Bedrock	
Constricting Layer	
Carbonates	50
Gley Colours	
Water Table	

Mottles

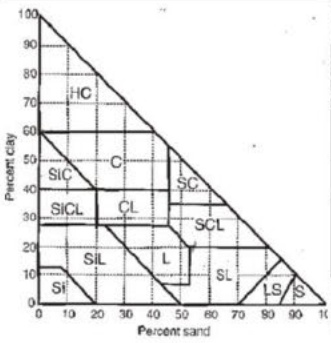
Horizon	Abun.	Size	Contrast

Abundance
- F - Few
- C - Common
- M - Many

Size
- F - Fine
- M - Medium
- L - Large

Contrast
- Faint
- Distinct
- Prominent

NOTES: *Land Use: grassy hay with minor amount of alfalfa*



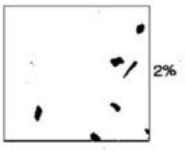
Contrast - the difference between the mottle colour and the matrix colour, using the Munsell Soil Color Charts.

	Difference from matrix in		
	Hue* pages	Value* units	Chroma* units
Faint	0	≤2	≤1
	1	0	0
Distinct	0	3 - 4	2 - 4
	1	≤2	≤1
Prominent	0	≥4	≥4
	1	≥2	≥1
	2+	≥0	≥0

*Hue, Value, and Chroma differences are determined using the Munsell Soil Color Charts (see page 25) e.g. common, fine, distinct brown (10YR 5/3) mottles. Values in the table are taken from 1982 CanSIS manual for describing soils in the field.

Abundance - the proportion of the exposed surface occupied by mottles (%) (refer to Appendix II for additional area percentage charts).

Few <2% Common 2 - 20% Many >20%



Size - the diameter of the mottle if round, or, the greatest dimension if length is not more than 2 or 3 times the width, or, the width if the mottle is long and narrow.

Fine <5mm Medium 5 - 15mm Coarse >15mm

Stantec

Site No.	Date (YY MM.DD)	W.P.	Project Number:
19	2021 05 19		160961425

Surveyor	Observation Type	Project Name
EJM	Auger	Lavender Farms

MODE OF DEPOSITION	NO. 1	SLOPE CLASS	SLOPE POSITION	SLOPE %	SLOPE LENGTH
	MT	d	M	6	45 m
	NO.2	DRAINAGE CLASS	STONINESS	ROCKINESS	
		W	0	0	
	NO.3				

HORIZONS				DEPTH (cm)		COLOURS		%	FIELD TEXTURE	CONSISTENCY
D	Ma	Suffix	Mod.	Upper	Lower	Matrix Colours	Mottle Colours	C.F.		
	A	p		0	25	10YR3/3		0	L	
	B	m		25	60	10YR4/4		2	L	
	C	k		60	100	10YR5/4		8	L	

Mode of Deposition

MT	Morainal Till
LA	Lacustrine
GF	Glacial Fluvial
GL	Glacio Lacustrine
AL	Aluvial
OR	Organic

Slope Class

Aa	0-0.5%
Bb	0.5-2.0%
Cc	2-5%
Dd	5-9%
Ee	9-15%
Ff	15-30%
Gg	30-45%

Drainage Class

RA	Rapid
WE	Well
MW	Mod. Well
IM	Imperfect
PO	Poor
VP	Very Poor

Slope Position

1	Crest
2	Upper Slope
3	Middle Slope
4	Lower Slope
5	Toe
6	Depression
7	Level

Stoniness/Rockiness

Ø	Non
1	Slightly
2	Moderately
3	Very
4	Excessively
5	Exceedingly

Consistency

L- Loose
FR - Friable
F - Firm
VF - Very Firm

Depth to (cm):

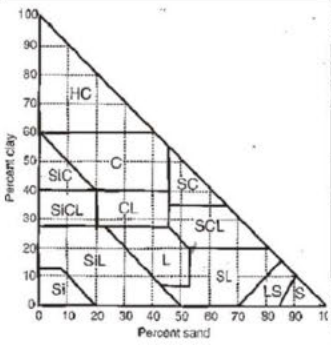
Bedrock	
Constricting Layer	
Carbonates	60
Gley Colours	
Water Table	

Mottles

Horizon	Abun.	Size	Contrast

Abundance	Size	Contrast
F - Few	F - Fine	Faint
C - Common	M - Medium	Distinct
M - Many	L - Large	Prominent

NOTES: *Land Use: field of lavender*



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	Difference from matrix in		
	Hue* pages	Value* units	Chroma* units
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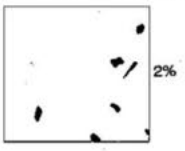
	1	0	0
Distinct	0	3 - 4	2 - 4
	1	≤2	≤1
Prominent	0	≥4	≥4
	1	≥2	≥1
	2+	≥0	≥0

*Hue, Value, and Chroma differences are determined using the Munsell Soil Color Charts (see page 25) e.g. common, fine, distinct brown (10YR 5/3) mottles. Values in the table are taken from 1982 CanSIS manual for describing soils in the field.

Abundance - the proportion of the exposed surface occupied by mottles (%) (refer to Appendix II for additional area percentage charts).

Few <2% Common 2 - 20% Many >20%



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Fine <5mm Medium 5 - 15mm Coarse >15mm

Stantec

Site No.	Date (YY MM.DD)	W.P.	Project Number:
20	2021 05 19		160961425

Surveyor	Observation Type	Project Name
EJM	Auger	Lavender Farms

MODE OF DEPOSITION	NO. 1	SLOPE CLASS	SLOPE POSITION	SLOPE %	SLOPE LENGTH
	MT	3	M	13	30 m
	NO.2	DRAINAGE CLASS	STONINESS	ROCKINESS	
		W	0	0	
	NO.3				

HORIZONS				DEPTH (cm)		COLOURS		%	FIELD TEXTURE	CONSISTENCY
D	Ma	Suffix	Mod.	Upper	Lower	Matrix Colours	Mottle Colours	C.F.		
	A	p		0	25	10YR3/3		0	L	
	B	m		25	45	10YR4/4		2	L	
	C	k		45	100	10YR5/4		5	L	

Mode of Deposition

MT	Morainal Till
LA	Lacustrine
GF	Glacial Fluvial
GL	Glacio Lacustrine
AL	Aluvial
OR	Organic

Slope Class

Aa	0-0.5%
Bb	0.5-2.0%
Cc	2-5%
Dd	5-9%
Ee	9-15%
Ff	15-30%
Gg	30-45%

Drainage Class

RA	Rapid
WE	Well
MW	Mod. Well
IM	Imperfect
PO	Poor
VP	Very Poor

Slope Position

1	Crest
2	Upper Slope
3	Middle Slope
4	Lower Slope
5	Toe
6	Depression
7	Level

Stoniness/Rockiness

Ø	Non
1	Slightly
2	Moderately
3	Very
4	Excessively
5	Exceedingly

Consistency

L- Loose
FR - Friable
F - Firm
VF - Very Firm

Depth to (cm):

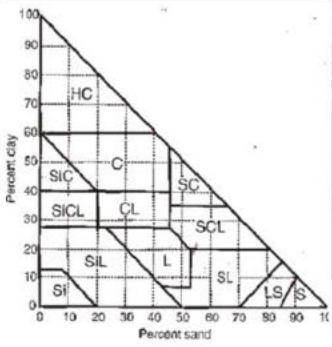
Bedrock	
Constricting Layer	
Carbonates	45
Gley Colours	
Water Table	

Mottles

Horizon	Abun.	Size	Contrast

Abundance	Size	Contrast
F - Few	F - Fine	Faint
C - Common	M - Medium	Distinct
M - Many	L - Large	Prominent

NOTES:



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	Difference from matrix in		
	Hue* pages	Value* units	Chroma* units
Faint	0	≤2	≤1
	1	0	0
Distinct	0	3 - 4	2 - 4
	1	≤2	≤1
Prominent	0	≥4	≥4
	1	≥2	≥1
	2+	≥0	≥0

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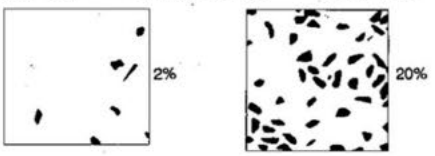

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Fine <5mm Medium 5 - 15mm Coarse >15mm

Stantec

Site No.	Date (YY MM.DD)	W.P.	Project Number:
21	2021 05 19		160961425

Surveyor	Observation Type	Project Name
EJM	Auger	Lavender Farms

MODE OF DEPOSITION	NO. 1	SLOPE CLASS	SLOPE POSITION	SLOPE %	SLOPE LENGTH
	MT	d	M	7	40 m
	NO.2	DRAINAGE CLASS	STONINESS	ROCKINESS	
		W	0	0	
	NO.3				

HORIZONS				DEPTH (cm)		COLOURS		%	FIELD TEXTURE	CONSISTENCY
D	Ma	Suffix	Mod.	Upper	Lower	Matrix Colours	Mottle Colours	C.F.		
	A	p		0	25	10YR3/3		0	L	
	B	m		25	55	10YR4/3		2	L	
	C	k		55	100	10YR5/4		5	L	

Mode of Deposition

MT	Morainal Till
LA	Lacustrine
GF	Glacial Fluvial
GL	Glacio Lacustrine
AL	Aluvial
OR	Organic

Slope Class

Aa	0-0.5%
Bb	0.5-2.0%
Cc	2-5%
Dd	5-9%
Ee	9-15%
Ff	15-30%
Gg	30-45%

Drainage Class

RA	Rapid
WE	Well
MW	Mod. Well
IM	Imperfect
PO	Poor
VP	Very Poor

Slope Position

1	Crest
2	Upper Slope
3	Middle Slope
4	Lower Slope
5	Toe
6	Depression
7	Level

Stoniness/Rockiness

Ø	Non
1	Slightly
2	Moderately
3	Very
4	Excessively
5	Exceedingly

Consistency

L- Loose
FR - Friable
F - Firm
VF - Very Firm

Depth to (cm):

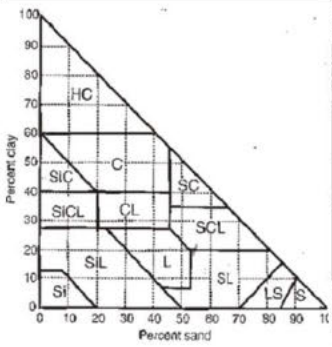
Bedrock	
Constricting Layer	
Carbonates	55
Gley Colours	
Water Table	

Mottles

Horizon	Abun.	Size	Contrast

Abundance	Size	Contrast
F - Few	F - Fine	Faint
C - Common	M - Medium	Distinct
M - Many	L - Large	Prominent

NOTES:



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	Hue* pages	Value* units	Chroma* units
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	1	0	0
Distinct	0	3 - 4	2 - 4
	1	≤2	≤1
Prominent	0	≥4	≥4
	1	≥2	≥1
	2+	≥0	≥0

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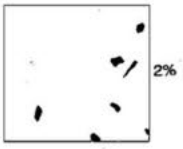


Size - the diameter of the mottle if round, or, the greatest dimension if length is not more than 2 or 3 times the width, or, the width if the mottle is long and narrow.

Fine <5mm Medium 5 - 15mm Coarse >15mm

Stantec

Site No.	Date (YY MM.DD)	W.P.	Project Number:
22	2021 05 19		160961425

Surveyor	Observation Type	Project Name
EJM	Auger	Lavender Farms

MODE OF DEPOSITION	NO. 1	SLOPE CLASS	SLOPE POSITION	SLOPE %	SLOPE LENGTH
	MT	c	M	3	40 m
	NO.2	DRAINAGE CLASS	STONINESS	ROCKINESS	
		W	0	0	
	NO.3				

HORIZONS				DEPTH (cm)		COLOURS		%	FIELD TEXTURE	CONSISTENCY
D	Ma	Suffix	Mod.	Upper	Lower	Matrix Colours	Mottle Colours	C.F.		
	A	p		0	25	10YR3/2		0	L	
	B	m		25	65	10YR4/3		2	L	
	C	k		65	100	10YR5/3		5	L	

Mode of Deposition		Slope Class		Drainage Class		Slope Position		Stoniness/Rockiness		Consistency
MT	Morainal Till	Aa	0-0.5%	RA	Rapid	1	Crest	Ø	Non	L- Loose
LA	Lacustrine	Bb	0.5-2.0%	WE	Well	2	Upper Slope	1	Slightly	FR - Friable
GF	Glacial Fluvial	Cc	2-5%	MW	Mod. Well	3	Middle Slope	2	Moderately	F - Firm
GL	Glacio Lacustrine	Dd	5-9%	IM	Imperfect	4	Lower Slope	3	Very	VF - Very Firm
AL	Aluvial	Ee	9-15%	PO	Poor	5	Toe	4	Excessively	
OR	Organic	Ff	15-30%	VP	Very Poor	6	Depression	5	Exceedingly	
		Gg	30-45%			7	Level			

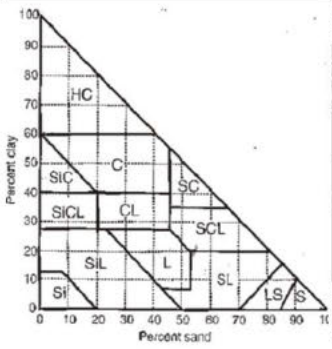
Depth to (cm):	
Bedrock	
Constricting Layer	
Carbonates	65
Gley Colours	
Water Table	

Mottles

Horizon	Abun.	Size	Contrast

Abundance	Size	Contrast
F - Few	F - Fine	Faint
C - Common	M - Medium	Distinct
M - Many	L - Large	Prominent

NOTES:



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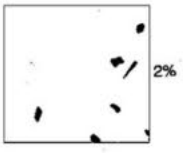
	Difference from matrix in		
	Hue* pages	Value* units	Chroma* units
Faint	0	≤2	≤1
	1	0	0
Distinct	0	3 - 4	2 - 4
	1	≤2	≤1
Prominent	0	≥4	≥4
	1	≥2	≥1
	2+	≥0	≥0

*Hue, Value, and Chroma differences are determined using the Munsell Soil Color Charts (see page 25) e.g. common, fine, distinct brown (10YR 5/3) mottles. Values in the table are taken from 1982 CanSIS manual for describing soils in the field.

Abundance - the proportion of the exposed surface occupied by mottles (%) (refer to Appendix II for additional area percentage charts).

Few <2% Common 2 - 20% Many >20%



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Fine <5mm Medium 5 - 15mm Coarse >15mm

Stantec

Site No.	Date (YY MM.DD)	W.P.	Project Number:
22	2021 05 19		160961425

Surveyor	Observation Type	Project Name
EJM	Auger	Lavender Farms

MODE OF DEPOSITION	NO. 1	SLOPE CLASS	SLOPE POSITION	SLOPE %	SLOPE LENGTH
	GF	c	M	4	40 m
	NO.2	DRAINAGE CLASS	STONINESS	ROCKINESS	
		W	0	0	
	NO.3				

HORIZONS				DEPTH (cm)		COLOURS		%	FIELD TEXTURE	CONSISTENCY
D	Ma	Suffix	Mod.	Upper	Lower	Matrix Colours	Mottle Colours	C.F.		
	A	p		0	25	10YR3/3		0	L	
	B	m		20	60	10YR4/4		0	fSL	
	C	k		60	100+	10YR5/3		0	fSL	

Mode of Deposition

MT	Morainal Till
LA	Lacustrine
GF	Glacial Fluvial
GL	Glacio Lacustrine
AL	Aluvial
OR	Organic

Slope Class

Aa	0-0.5%
Bb	0.5-2.0%
Cc	2-5%
Dd	5-9%
Ee	9-15%
Ff	15-30%
Gg	30-45%

Drainage Class

RA	Rapid
WE	Well
MW	Mod. Well
IM	Imperfect
PO	Poor
VP	Very Poor

Slope Position

1	Crest
2	Upper Slope
3	Middle Slope
4	Lower Slope
5	Toe
6	Depression
7	Level

Stoniness/Rockiness

Ø	Non
1	Slightly
2	Moderately
3	Very
4	Excessively
5	Exceedingly

Consistency

L- Loose
FR - Friable
F - Firm
VF - Very Firm

Depth to (cm):

Bedrock	
Constricting Layer	
Carbonates	60
Gley Colours	
Water Table	

Mottles

Horizon	Abun.	Size	Contrast

Abundance	Size	Contrast
F - Few	F - Fine	Faint
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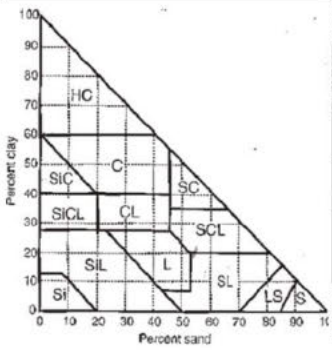
M - Many	L - Large	Prominent

NOTES:



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	Difference from matrix in		
	Hue* pages	Value* units	Chroma* units
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	1	≤2	≤1
Prominent	0	≥4	≥4
	1	≥2	≥1
	2+	≥0	≥0

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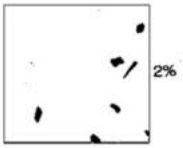
Few <2% Common 2 - 20% Many >20%



Size - the diameter of the mottle if round, or, the greatest dimension if length is not more than 2 or 3 times the width, or, the width if the mottle is long and narrow.

Fine <5mm Medium 5 - 15mm Coarse >15mm

JUNE 24, 2021

REFER TO FILE: 2082-5959

Niagara Escarpment Commission
1450 7th Avenue
Owen Sound, ON N4K 2Z1

Attention: Judy Rhodes-Munk
Senior Planner

RE: 2752 CONCESSION 8
TRAFFIC OPINION LETTER
CLEARVIEW TOWNSHIP, SIMCOE COUNTY

Dear Judy,

This letter has been prepared to support the development application for the proposed Lavender Farm located at 2752 Concession 8 (the "site") in Clearview Township. The site is within the Niagara Escarpment Planning Area.

The purpose of this letter is to address the transportation aspects relating to the proposed Lavender Farm. This letter assesses the expected trip generation of the site, reviews the access and safety aspects of the proposed development, and includes an operations analysis of the site access.

Background

The site is approximately 40.5 ha (100 acres) and is located on the west side of Concession 8 Nottawasaga. The site is bounded by agricultural lands to the north, west and south and Concession 8 to the east. The site currently consists of agricultural land, the foundation of a barn and a drive shed. The site has an existing driveway connection to Concession 8.

Development Proposal

The development proposal envisions the lands to be used as a Lavender Farm, with a light gravel parking area to be constructed on site, providing up to 50 parking spaces. The parking area is positioned in such a way that it is hidden from the view of the road and neighbouring properties. While the lot area is 40.5 hectares in total, the areas in use for the Lavender Farm operations equates to 13.5 hectares (32 acres). The remaining areas will not be accessible to visitors.

The existing 300 square metre drive shed will remain for equipment storage. A 1,450 square foot shed, hidden from view of the roadway and neighbouring properties, will accommodate the personal needs of guests and provide a small retail area for the sale of lavender products. The remnants of the old barn are to remain and will be used from time to time for educational purposes. The existing driveway is to be regraded as part of the proposed improvements and widened to permit two-way travel and larger vehicles. A Development Concept Plan prepared by Pascuzzo Planning Inc. can be refenced as **Attachment A**

Boundary Road Network

Concession 8 Nottawasaga is a north-south road under the jurisdiction of Clearview Township. The roadway is one lane in each direction and has a gravel shoulder of less than 2 metres on both the east and west sides. Concession 8 has a posted speed limit of 80 km/h at the property frontage.

Along Concession 8, the Hamlet of Glen Huron is located 3.3 km north of the site and the Hamlet of Dunedin is located 2.7 km to the south. The Village of Creemore is east of the site connected by Sideroad 9&10 and County Road 9. Sideroad 9&10 is an unpaved road under the jurisdiction of Clearview Township. The sideroad connects to Concession 8 at a north-south orientation, then curves connecting to County Road 9 at an east-west orientation.

Trip Generation

Visitors to the Lavender Farm will be allowed on a limited basis starting in the summer of 2022. Visitors will be welcomed from 9 a.m. to 6 p.m. in the summer months. Tickets for defined two-hour time slots will be required to be purchased in advance and ticket sales will be calibrated so as to ensure the available parking supply is not exceeded. Per information provided by the proponent, the average stay of visitors is expected to be 90 minutes.

To assess the additional trips the development will add to the roadway, two different methodologies were considered for trip generation; trip generation forecasts using the Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition data, and a first principals approach based on the parking provisions. These trips represent the trip generation expected during the peak hours of the roadway during the Saturday and Sunday peak hours. The peak hour refers to the 60-minute timeframe where the greatest volume of vehicles are measured on the roadway. Outside of these time periods, the volume of vehicles on the roadway would be less.

A Lavender Farm use does not have a dedicated use for forecasting in the ITE Trip Generation Manual. Instead, as the most similar land use, the trips were forecasted using Land Use Code (LUC) 411 "Public Park", which assess the trip generation based on the acreage of the site. Accordingly, the trip generation was forecasted based on the area proposed to be used for the Lavender Farm operations (32 acres) as well as sensitivity test of the total lot area (100 acres).

As noted previously, the proposed parking area will accommodate 50 vehicles. While the farm is not expected to have maximum sell-out on a regular basis, this report also reviews the operations from a worst-case perspective, with an assumed 50 vehicles arriving and 25 vehicles departing during a one-hour period. The outbound vehicles are less, as it has been assumed that guests will depart sporadically throughout the 2-hour window but arrive in a concentrated fashion.

The resulting peak hour trip generations for the Saturday and Sunday peak hours is summarized in **Table 1**. Relevant excerpts from the ITE Trip Generation Manual are included as **Attachment B**.

Table 1: Trip Generation Comparison

Methodology	LUC	Peak Hours	Number of Trips		
			Inbound	Outbound	Total
Public Access Area (32 acres)	411	Saturday	18	15	33
		Sunday	17	26	43
Total Area (100 acres)		Saturday	25	21	46
		Sunday	21	34	55
Proposed Parking	N/A	Saturday	50	25	75
		Sunday	50	25	75

As summarized in **Table 1**, the site is expected to generate between 33 and 75 peak hour trips depending on the methodology used. As noted previously, the first principles approach assumes that the parking lot would be full, whereas the ITE trip generation results represent forecasted typical operations and are considered to be more consistent with expected visitation.

Trip Distribution

The proposed Lavender Farm is expected to draw visitors from the nearby municipalities within Simcoe County, Grey County and Dufferin County, as well as visitors from the Greater Toronto Area (GTA). Based on navigation software, visitors from the Town of Collingwood, the Town of the Blue Mountains and the Town of Wasaga Beach are expected to arrive from and depart to the north on Concession 8 towards County Road 124.

Visitors arriving from the Village of Creemore or the New Tecumseth area are anticipated travel along County Road 9 and Sideroad 9&10, arriving from and departing to the south on Concession 8. Depending on navigational software settings and personal preference, some visitors may not choose to drive on Sideroad 9&10 as it is an unpaved roadway. Visitors from Shelburne, Orangeville or the GTA would also arrive and depart from the south on Concession 8 and then east on County Road 9 towards County Road 124.

As the site is expected to draw from many areas surrounding the site, we have assumed an even distribution of 50 percent to and from the north, and 50 percent to and from the south. This distribution could vary depending on the origin of visitors for any given two-hour time block. The trip distribution is illustrated in Figure 1.

Operations Assessment

Traffic data was collected by Ontario Traffic, Inc. from Friday June 11th, 2021 to Sunday June 13th, 2021at the site access and has been included as **Attachment C**. The counts recorded peak hour volumes of 69 and 57 two-way trips on the Saturday and Sunday, respectively. The Saturday peak hour was found to be between 1:45 p.m. and 2:45 p.m. while the Sunday peak hour was found to be from 11:45 am to 12:45 pm. The total two-way daily trips on Saturday and Sunday were recorded to be 540 vehicles and 418 vehicles, respectively.

It is noted that the Transportation Association of Canada (TAC) Geometric Design Guide for Canadian Roads (GDGCR) identifies rural local roadways to typically have daily volumes of less than 1,000 vehicles, though Concession 8 has some attributes of a collector roadway given that it connects two arterial roads (County Road 9 and County Road 124). The recorded data is approximately half of what would be considered the typical upper limit for a local rural roadway.

The volumes generated by the Lavender Farm have been applied to the boundary road network based on the distribution in **Figure 1.** As noted previously, the site was assessed based on three methods of approximating traffic volumes. The expected total volumes at the site access for each scenario are illustrated in **Figure 2** through **Figure 4.**

The expected traffic operations are summarized in **Table 2.** Capacity analysis reports have been included as **Attachment D**.

Table 2: Forecasted Access Operations

Methodology	Intersection	Peak Hour	Level of Service	Control Delay	Maximum v/c Ratio	95th Percentile Queue Length
Public Access Area (32 acres)	Concession 8 & Site Access	Saturday	A	8.9 s	0.02 (EB) 0.03 (SB)	1 veh. (EB)
		Sunday	A	8.8 s	0.03 (EB) 0.02 (SB)	1 veh. (EB)
Total Area (100 acres)		Saturday	A	8.9 s	0.02 (EB) 0.04 (SB)	1 veh. (EB)
		Sunday	A	8.9 s	0.04 (EB) 0.02 (SB)	1 veh. (EB)
Proposed Parking		Saturday	A	9.1 s	0.03 (EB) 0.04 (SB)	1 veh. (EB)
		Sunday	A	9.0 s	0.03 (EB) 0.03 (SB)	1 veh. (EB)

Note[1]: The Level of Service of a stop-controlled intersection is based on the delay associated with the critical minor road approach.

As presented in **Table 2**, regardless of the trip generation methodology the site access is anticipated operate with a Level of Service "A" in the Saturday and Sunday peak hours. The delay for vehicles exiting the site is expected to be less than 10 seconds and the queueing will be less than one vehicle waiting to turn onto Concession 8. The volume-to-capacity ratio is expected to be less than 0.04, demonstrating that the intersection and boundary road network has significant capacity available, even following the addition of site generated traffic volumes.

As illustrated in **Figures 2 through 4**, 38 two-way vehicles or less are anticipated to travel through the hamlets of Dunedin and Glen Huron during the roadway peak-hours. Hourly volumes of this nature are anticipated to have a minimal impact on the operations of the boundary road network.

The site volumes, even if sustained throughout the course of a day, would not exceed the typical 1,000 vehicle threshold noted for a rural local road.

The addition of the trips generated on Concession 8 is not expected to have an operational impact on the surrounding hamlets of Dunedin and Gen Huron.

Speed Observations

Anecdotally, it was indicated that there were concerns with driver speeds on Concession 8. The traffic data collected indicated that the average speed across all days was 80 - 82 km/h, and the 85th percentile speed was 88 - 90 km/h. Of all vehicles, 4.5 – 7.8 percent of vehicles traveled at a speed of 95 km/h or greater. The traffic data is provided as **Attachment C**.

Sight Distance Measurement

A sight distance assessment was completed to demonstrate that the proposed access provides sufficient stopping and intersection sight distance. The minimum stopping sight distance requirements

were obtained from the TAC GDGCR. As noted previously, Concession 8 has a posted speed limit of 80 km/h which corresponds to a design speed of 100 km/h, representing an industry standard increase of 20 km/h for higher speed roads.

Section 2.5 of the TAC GDGCR provides stopping sight distances for various design speeds on level roadways. For a design speed of 100 km/h, a stopping sight distance of 185 metres is required,

Section 9.9 of the TAC GDGCR provides intersection sight distance for different intersection control types. For this access, the applicable cases Case B1 – Left turns from the minor road" has the greatest sight distance requirement of 210 metres for 100 km/h design speed roads.

Relevant excerpts from TAC GDGCR have been included as **Attachment E**. The minimum and available sight distances, which were established from a field visit, are summarized in **Table 3**.

Table 3: Minimum Sight Distance Requirements

Access	Oncoming Traffic	Stopping Sight Distance		Intersection Sight Distance	
		Minimum Standard	Available Distance	Minimum Standard	Available Distance
Concession 8	Northbound	185 m	205 m [1]	210 m	230 m
	Southbound	185 m	+250 m	210 m	+250 m

Note[1]: The stopping sight distance measurement was less as the object height for stopping sight distance is lower than for intersection sight distance (0.6m stopping sight distance and 1.3m intersection sight distance)

As summarized above, the proposed access can be supported from a sight distance perspective.

Conclusions

The proposed Lavender Farm is expected to generate between 33 and 75 two-way trips during the Saturday and Sunday peak hours, based on the accessible area of the farm and the proposed number of parking spaces. The site is expected to draw visitors from nearby municipalities within Simcoe County, Grey County and Dufferin County, as well as visitors to the area from the Greater Toronto Area (GTA).

Regardless of the trip generation methodology employed, the site access is expected to operate at a Level of Service "A" with less than 10 seconds of delay and queueing of less than one vehicle exiting the site access. The volume-to-capacity ratio demonstrates that the boundary road network is anticipated to have excess capacity with the addition of the site generated trips.

Traffic counts completed on Concession 8 recorded peak volumes of 69 and 57 two-way trips on the Saturday and Sunday, respectively and total two-way volumes of 540 vehicles and 418 vehicles, respectively. It is noted that the Transportation Association of Canada (TAC) Geometric Design Guide for Canadian Roads (GDGCR) identifies rural local roadways to have typical daily volumes of less than 1,000 vehicles. The recorded data is approximately half of what would be considered the typical upper limit for a local rural roadway.

The available intersection and stopping sight distance to the north and south on Concession 8 exceeds the minimum requirements outlined in the TAC GDGCR. Accordingly, the proposed development can be supported from a sight distance perspective.

Based on the above, the proposed development can be supported from a transportation perspective. The addition of site generated traffic is anticipated to have a minimal impact on the boundary road network and the nearby hamlets of Dunedin and Glen Huron.

Should you have any questions or require any further information, please do not hesitate to contact the undersigned.

Yours truly,

C.F. CROZIER & ASSOCIATES INC.

[redacted]

Madeleine Ferguson, P.Eng.
Manager of Transportation
/kh

C.F. CROZIER & ASSOCIATES INC.

[redacted]

Alexander Heming, MBA, P.Eng.
Associate, Manager of Transportation

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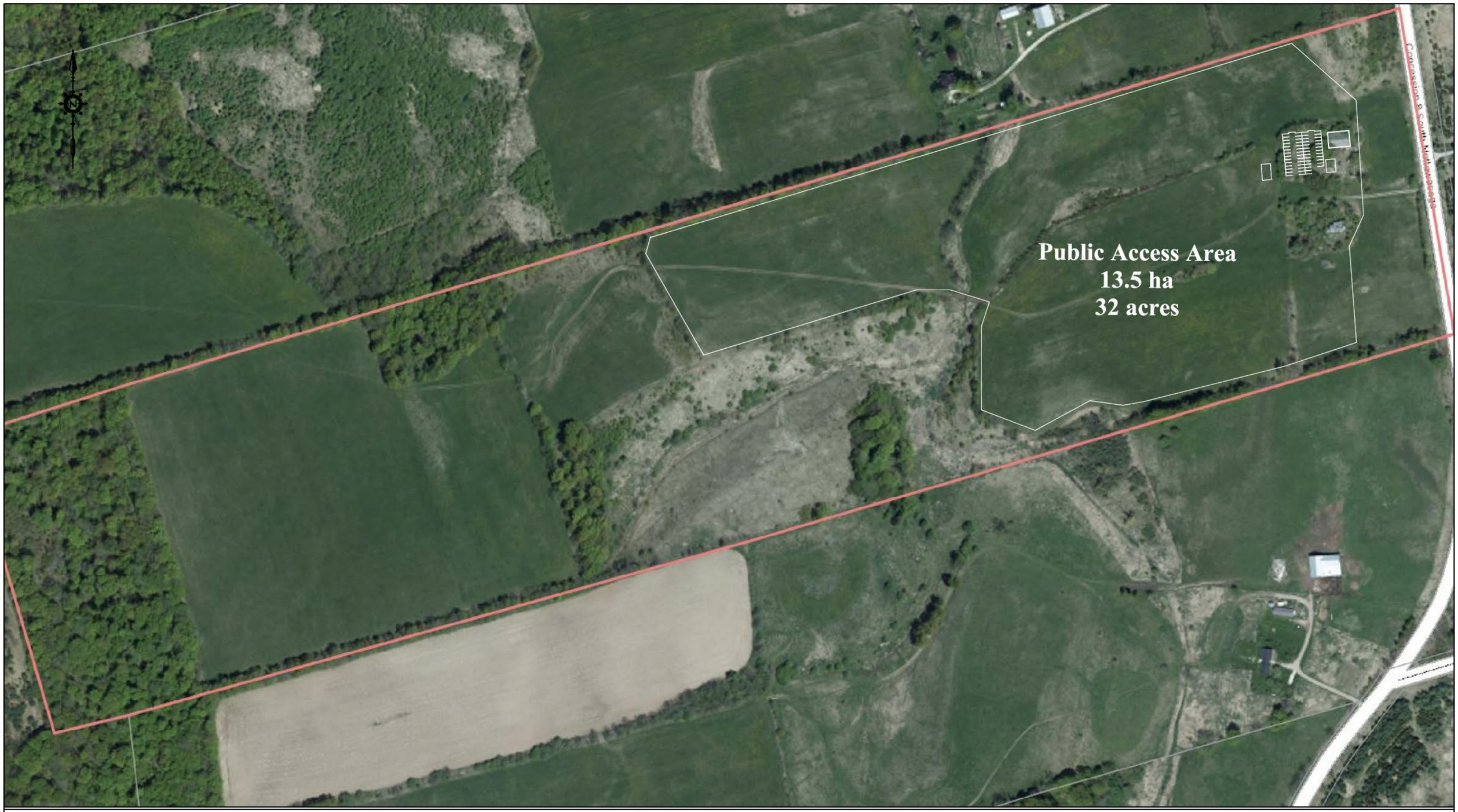
Encl.

Attachment A:	Development Plan
Attachment B:	ITE Trip Generation Excerpts
Attachment C:	Traffic Data
Attachment D:	Detailed Capacity Analysis Worksheets
Attachment E:	TAC GDGCR Excerpts

Attachment A

Development Plan



FENNARIO
LAVENDER FARM

Property Characteristics
40.5 ha +/- Lot Area
310 m +/- Frontage
1650 +/- Depth

Gravel Parking Area
50 spaces
1350 m²

2752 Concession 8 South
Township of Clearview
County of Simcoe

PASCUZZO PLANNING INC.

SITE PLAN
FENNARIO
LAVENDER FARM

2752 Concession 8 South
Township of Clearview
County of Simcoe

Existing
Box Elders

Existing Shed
300 m²

Gravel
Parking Area

6 m wide drive

6 m wide drive

Existing
Cedar Hedge

Proposed
Visitor
Production Shed
130 m²

Existing
Hay Field
to remain

Existing
Barn Foundation

Existing
Entrance

Existing Driveway

Proposed
Gate

Concession 8 South Nottawasaga

Existing
Lavender Field
1.5 ha (3.7 acres)

Rose
Garden

Existing
Hay Field
to remain

Existing
Lavender Field
3 ha (7.4 acres)

House
Previously Removed 2019

Property Characteristics
40.5 ha +/- Lot Area
310 m +/- Frontage
1650 +/- Depth

Gravel Parking Area
50 spaces
1350 m²

DISTANCES SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048

PROJECT: 1015-20	DRAWN: AP	DATE: JUNE 2021

DWG: 1015-20-SP1

PASCUZZO PLANNING INC.

Attachment B

ITE Trip Generation Manual, 10th Edition Excerpts

Land Use: 411
Public Park

Description

Public parks are owned and operated by a municipal, county, state, or federal agency. The parks surveyed vary widely as to location, type, and number of facilities, including boating or swimming facilities, beaches, hiking trails, ball fields, soccer fields, campsites, and picnic facilities. Seasonal use of the individual sites differs widely as a result of the varying facilities and local conditions, such as weather. For example, some of the sites are used primarily for boating or swimming; others are used for softball games. Soccer complex (Land Use 488) is a related use.

Additional Data

The percentage of the park area that is used most intensively varies considerably within the studies contained in this land use; therefore, caution should be used when using acres as an independent variable.

Time-of-day distribution data for this land use are presented in Appendix A. For the three sites with data, the overall highest vehicle volumes during both a Saturday and Sunday were counted between 10:30 and 11:30 a.m.

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Arizona, California, New Jersey, New York, North Carolina, and Oregon.

Source Numbers

186, 392, 407, 709, 729, 852, 905

Public Park
(411)

Vehicle Trip Ends vs: **Acres**
On a: **Saturday, Peak Hour of Generator**

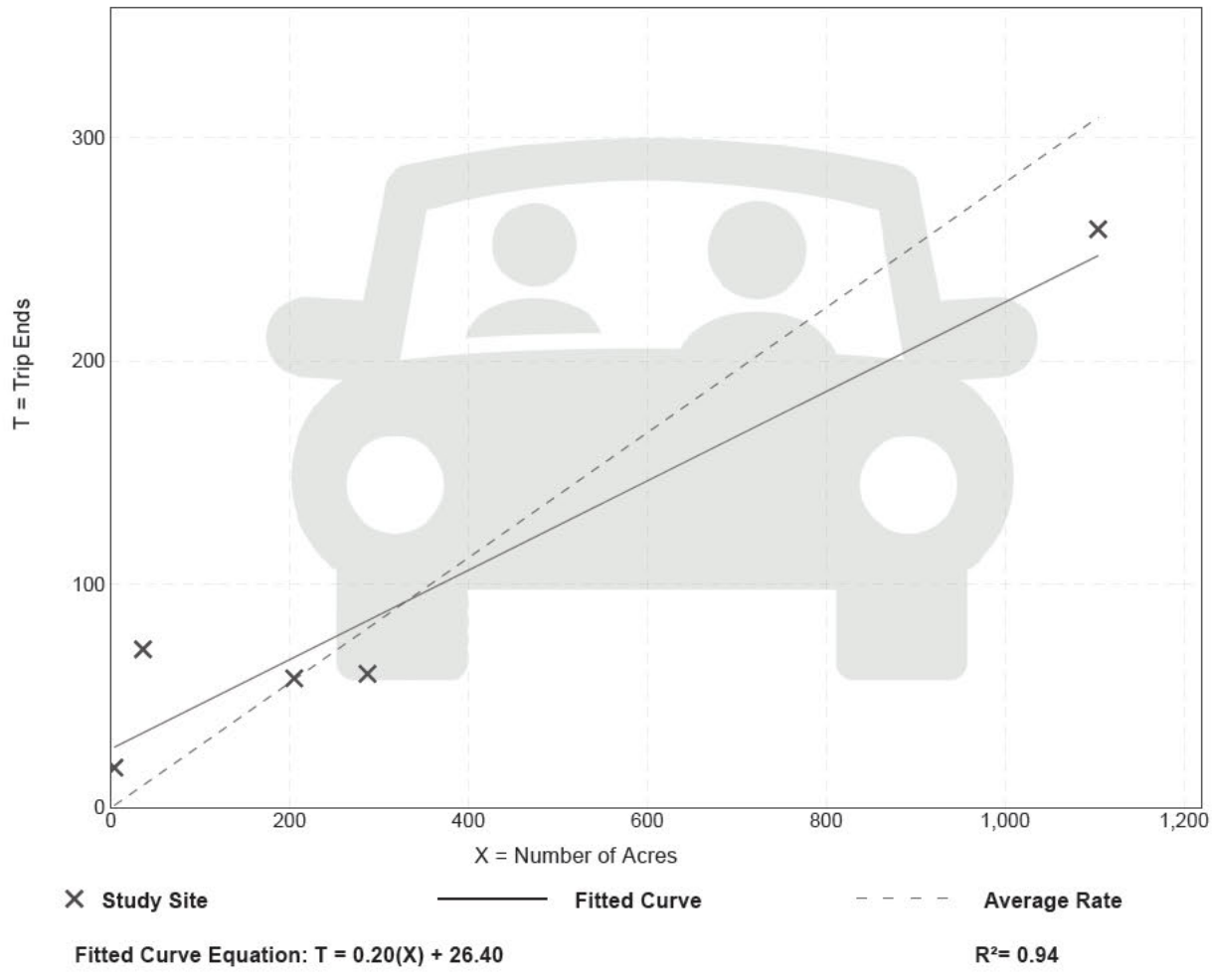
Setting/Location: **General Urban/Suburban**
Number of Studies: 5
Avg. Num. of Acres: 327
Directional Distribution: 55% entering, 45% exiting

Vehicle Trip Generation per Acre

Average Rate	Range of Rates	Standard Deviation
0.28	0.21 - 4.50	0.37

Data Plot and Equation

Caution – Small Sample Size



Public Park
(411)

Vehicle Trip Ends vs: **Acres**
On a: **Sunday, Peak Hour of Generator**

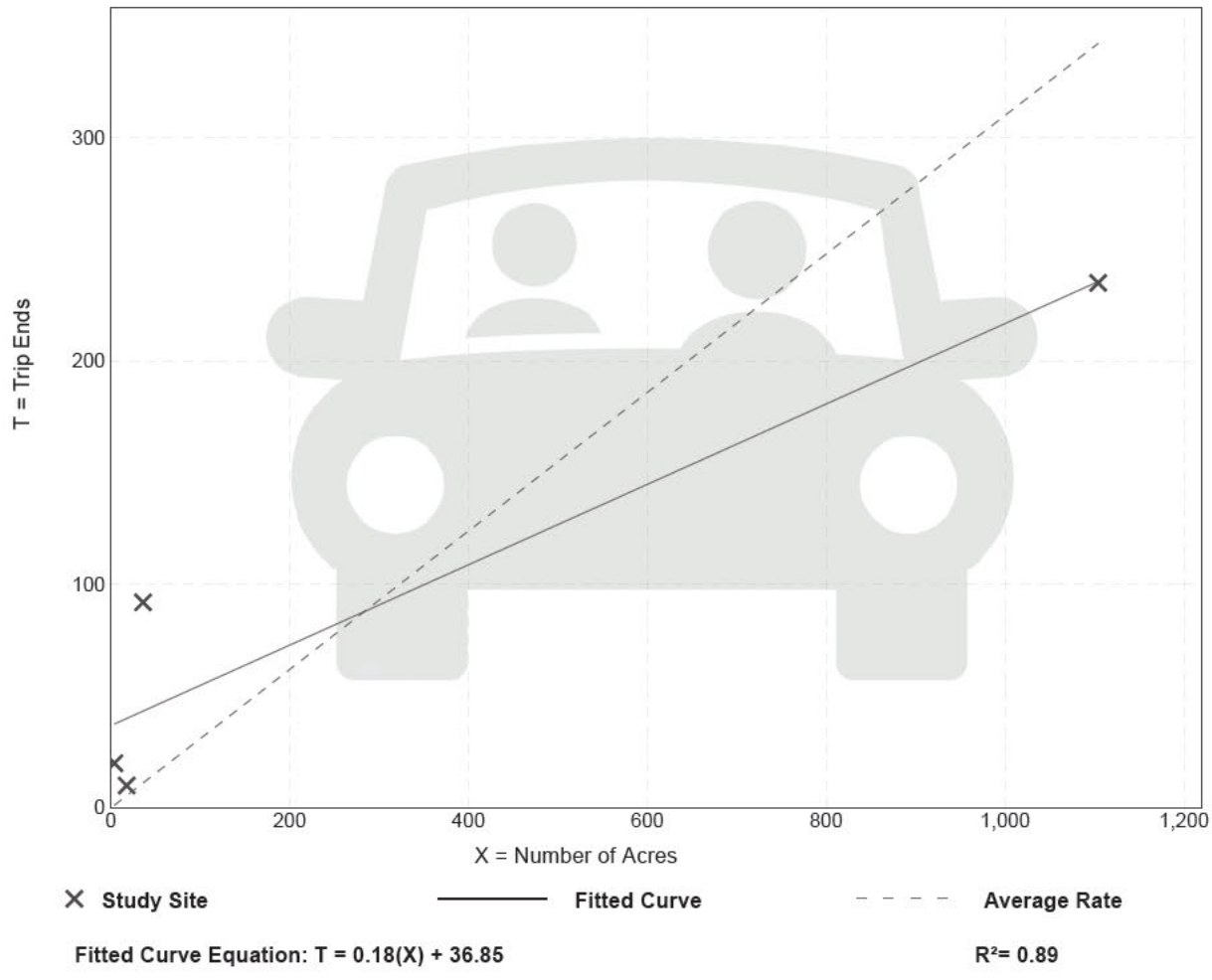
Setting/Location: **General Urban/Suburban**
Number of Studies: 4
Avg. Num. of Acres: 290
Directional Distribution: 39% entering, 61% exiting

Vehicle Trip Generation per Acre

Average Rate	Range of Rates	Standard Deviation
0.31	0.21 - 5.00	0.57

Data Plot and Equation

Caution – Small Sample Size



Fitted Curve Equation: T = 0.18(X) + 36.85

R^2= 0.89

Attachment C

Traffic Data

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 1
Station ID: U272
2752 Concession 8 Nottawasaga Rd

Date Start: 11-Jun-21
Date End: 13-Jun-21
Date Start: 11-Jun-21

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
06/12/21	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1
	0	1	0	0	0	0	0	0	0	0	0	0	0	1
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15	0	1	0	0	0	0	0	0	0	0	0	0	0	1
06:30	0	1	2	0	0	0	0	0	0	0	0	0	0	3
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	0	2	3	0	0	0	0	0	0	0	0	0	0	5
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	3	0	0	0	0	0	0	0	0	0	0	0	3
07:45	0	2	1	0	0	0	0	0	0	0	0	0	0	3
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11:00	1	2	1	0	0	0	0	0	0	0	0	0	0	4
11:15	0	7	1	0	0	0	0	0	0	0	0	0	0	8
11:30	1	4	0	0	0	0	0	0	0	0	1	0	0	6
11:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1
	2	14	2	0	0	0	0	0	0	0	1	0	0	19
Total	12	55	31	0	1	0	0	0	0	0	1	0	1	101
Percent	11.9%	54.5%	30.7%	0 0%	1.0%	0.0%	0.0%	0.0%	0.0%	0 0%	1.0%	0.0%	1.0%	

Ontario Traffic, Inc.
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NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
12 PM	0	3	5	0	0	0	0	0	0	0	0	0	0	8
12:15	0	5	0	0	0	1	0	0	0	0	0	0	0	6
12:30	2	7	3	0	0	0	0	0	0	0	0	0	0	12
12:45	1	2	0	0	0	0	0	0	0	0	0	0	0	3
	3	17	8	0	0	1	0	0	0	0	0	0	0	29
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14:30	2	5	2	0	0	0	0	0	0	0	0	0	0	9
14:45	0	4	2	0	0	0	0	0	0	0	0	0	0	6
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16:45	1	2	0	0	0	0	0	0	0	0	0	0	0	3
	5	12	2	0	0	0	0	0	0	0	0	0	0	19
17:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
17:15	1	1	0	0	0	0	0	0	0	0	0	0	0	2
17:30	0	0	1	0	0	0	0	0	0	0	0	0	0	1
17:45	0	7	0	0	0	0	0	0	0	0	0	0	0	7
	1	10	1	0	0	0	0	0	0	0	0	0	0	12
18:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
18:15	0	1	2	0	0	0	0	0	0	0	0	0	0	3
18:30	1	3	0	0	0	0	0	0	0	0	0	0	0	4
18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1	5	2	0	0	0	0	0	0	0	0	0	0	8
19:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
19:15	1	1	0	0	0	0	0	0	0	0	0	0	0	2
19:30	0	2	0	0	0	0	0	0	0	0	0	0	0	2
19:45	0	1	1	0	0	0	0	0	0	0	0	0	0	2
	1	6	1	0	0	0	0	0	0	0	0	0	0	8
20:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
20:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:30	0	2	0	0	0	0	0	0	0	0	0	0	0	2
20:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	3	0	0	0	0	0	0	0	0	0	0	0	3
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:15	0	1	1	0	1	0	0	0	0	0	0	0	0	3
21:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1
21:45	0	2	0	0	0	0	0	0	0	0	0	0	0	2
	0	4	1	0	1	0	0	0	0	0	0	0	0	6
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	27	107	38	0	1	1	0	0	0	0	0	0	0	174
Percent	15.5%	61.5%	21.8%	0 0%	0.6%	0.6%	0.0%	0.0%	0.0%	0 0%	0.0%	0.0%	0.0%	

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 1
Station ID: U272
2752 Concession 8 Nottawasaga Rd

Date Start: 11-Jun-21
Date End: 13-Jun-21
Date Start: 11-Jun-21

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
06/13/21	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1
	0	1	0	0	0	0	0	0	0	0	0	0	0	1
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	0	1	0	0	0	0	0	0	0	0	0	0	1
	0	0	1	0	0	0	0	0	0	0	0	0	0	1
08:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
08:15	0	1	0	0	0	0	0	0	0	0	0	0	0	1
08:30	0	1	1	0	0	0	0	0	0	0	0	0	0	2
08:45	0	2	0	0	0	0	0	0	0	0	0	0	0	2
	0	5	1	0	0	0	0	0	0	0	0	0	0	6
09:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
09:15	0	6	2	0	0	0	0	0	0	0	0	0	0	8
09:30	0	2	1	0	0	0	0	0	0	0	0	0	0	3
09:45	0	1	1	0	0	0	0	0	0	0	0	0	0	2
	0	9	5	0	0	0	0	0	0	0	0	0	0	14
10:00	2	4	0	0	0	0	0	0	0	0	0	0	0	6
10:15	0	2	1	0	0	0	0	0	0	0	0	0	0	3
10:30	4	5	0	0	0	0	0	0	0	0	0	0	0	9
10:45	0	1	1	0	0	0	0	0	0	0	0	0	0	2
	6	12	2	0	0	0	0	0	0	0	0	0	0	20
11:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3
11:15	3	5	0	0	0	0	0	0	0	0	0	0	0	8
11:30	0	3	1	0	0	0	0	0	0	0	0	0	0	4
11:45	0	5	0	0	0	0	0	0	0	0	0	0	0	5
	3	15	2	0	0	0	0	0	0	0	0	0	0	20
Total	9	42	11	0	0	0	0	0	0	0	0	0	0	62
Percent	14.5%	67.7%	17.7%	0 0%	0.0%	0.0%	0.0%	0.0%	0.0%	0 0%	0.0%	0.0%	0.0%	

Ontario Traffic, Inc.
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Site Code: 1
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2752 Concession 8 Nottawasaga Rd

Date Start: 11-Jun-21
Date End: 13-Jun-21
Date Start: 11-Jun-21

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
12 PM	2	3	4	0	0	0	0	0	0	0	0	0	0	9
12:15	9	5	1	0	0	0	0	0	0	0	0	0	0	15
12:30	0	6	2	0	0	0	0	0	0	0	0	0	0	8
12:45	0	4	0	0	0	0	0	0	0	0	0	0	0	4
	11	18	7	0	0	0	0	0	0	0	0	0	0	36
13:00	1	2	1	0	0	0	0	0	0	0	0	0	0	4
13:15	0	4	1	0	0	0	0	0	0	0	0	0	0	5
13:30	0	5	0	0	0	0	0	0	0	0	0	0	0	5
13:45	2	0	1	0	0	0	0	0	0	0	0	0	0	3
	3	11	3	0	0	0	0	0	0	0	0	0	0	17
14:00	0	2	0	0	0	0	0	1	0	0	0	0	0	3
14:15	2	0	0	0	0	0	0	0	0	0	0	0	0	2
14:30	0	5	3	0	0	0	0	0	0	0	0	0	0	8
14:45	1	2	0	0	0	0	0	0	0	0	0	0	0	3
	3	9	3	0	0	0	0	1	0	0	0	0	0	16
15:00	0	3	1	0	0	0	0	0	0	0	0	0	0	4
15:15	0	2	0	0	0	0	0	0	0	0	0	0	0	2
15:30	0	4	0	0	0	0	0	0	0	0	0	0	0	4
15:45	0	4	3	0	0	0	0	0	0	0	0	0	0	7
	0	13	4	0	0	0	0	0	0	0	0	0	0	17
16:00	3	2	0	0	0	0	0	0	0	0	0	0	0	5
16:15	0	4	0	0	0	0	0	0	0	0	0	0	0	4
16:30	0	0	2	0	0	0	0	0	0	0	0	0	0	2
16:45	1	2	0	0	0	0	0	0	0	0	0	0	0	3
	4	8	2	0	0	0	0	0	0	0	0	0	0	14
17:00	0	3	1	0	0	0	0	0	0	0	0	0	0	4
17:15	1	1	0	0	0	0	0	0	0	0	0	0	0	2
17:30	0	3	2	0	0	0	0	0	0	0	0	0	0	5
17:45	0	3	0	0	0	0	0	0	0	0	0	0	0	3
	1	10	3	0	0	0	0	0	0	0	0	0	0	14
18:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
18:15	0	1	1	0	0	0	0	0	0	0	0	0	0	2
18:30	1	0	3	0	0	0	0	0	0	0	0	0	0	4
18:45	0	1	1	0	0	0	0	0	0	0	0	0	0	2
	1	4	5	0	0	0	0	0	0	0	0	0	0	10
19:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3
19:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1
19:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	3	1	0	0	0	0	0	0	0	0	0	0	4
20:00	0	3	2	0	0	0	0	0	0	0	0	0	0	5
20:15	0	1	0	0	0	0	0	0	0	0	0	0	0	1
20:30	0	1	1	0	0	0	0	0	0	0	0	0	0	2
20:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	5	3	0	0	0	0	0	0	0	0	0	0	8
21:00	0	0	2	0	0	0	0	0	0	0	0	0	0	2
21:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	2	0	0	0	0	0	0	0	0	0	0	2
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	23	81	33	0	0	0	0	1	0	0	0	0	0	138
Percent	16.7%	58.7%	23.9%	0 0%	0.0%	0.0%	0.0%	0.7%	0.0%	0 0%	0.0%	0.0%	0.0%	
Grand Total	74	408	198	0	3	3	0	1	0	0	1	0	1	689
Percent	10.7%	59.2%	28.7%	0 0%	0.4%	0.4%	0.0%	0.1%	0.0%	0 0%	0.1%	0.0%	0.1%	

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2752 Concession 8 Nottawasaga Rd

Date Start: 11-Jun-21
Date End: 13-Jun-21
Date Start: 11-Jun-21

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
06/12/21	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
08:15	0	1	3	0	0	0	0	0	0	0	0	0	0	4
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	3	1	0	0	0	0	0	0	0	0	0	0	4
	0	4	5	0	0	0	0	0	0	0	0	0	0	9
09:00	1	1	0	0	0	0	0	0	0	0	0	0	0	2
09:15	0	5	5	0	0	0	0	0	0	0	0	0	0	10
09:30	0	5	5	0	0	0	0	0	0	0	0	0	0	10
09:45	0	4	1	0	0	0	0	0	0	0	0	0	0	5
	1	15	11	0	0	0	0	0	0	0	0	0	0	27
10:00	0	3	1	0	0	0	0	0	0	0	0	0	0	4
10:15	0	4	1	0	0	0	0	0	0	0	0	0	0	5
10:30	0	2	0	0	1	0	0	0	0	0	0	0	0	3
10:45	0	2	3	0	0	0	0	0	0	0	0	0	0	5
	0	11	5	0	1	0	0	0	0	0	0	0	0	17
11:00	0	3	3	0	1	0	0	0	0	0	0	0	0	7
11:15	1	4	4	0	0	0	0	0	0	0	0	0	0	9
11:30	1	3	2	0	0	0	0	0	0	0	0	0	0	6
11:45	0	2	2	0	0	0	0	0	0	0	0	0	0	4
	2	12	11	0	1	0	0	0	0	0	0	0	0	26
Total	3	42	32	0	2	0	0	0	0	0	0	0	0	79
Percent	3.8%	53.2%	40.5%	0 0%	2.5%	0.0%	0.0%	0.0%	0.0%	0 0%	0.0%	0.0%	0.0%	

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SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
12 PM	0	6	2	0	0	0	0	0	0	0	0	0	0	8
12:15	2	2	5	0	0	0	0	0	0	0	0	0	0	9
12:30	0	2	2	0	0	0	0	0	0	0	0	0	0	4
12:45	4	3	3	0	0	0	0	0	0	0	0	0	0	10
	6	13	12	0	0	0	0	0	0	0	0	0	0	31
13:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
13:15	0	3	2	0	1	0	0	0	0	0	0	0	0	6
13:30	0	2	1	0	0	0	0	0	0	0	0	0	0	3
13:45	1	3	2	0	0	0	0	0	0	0	0	0	0	6
	1	12	5	0	1	0	0	0	0	0	0	0	0	19
14:00	3	7	2	0	0	0	0	0	0	0	0	0	0	12
14:15	2	3	1	0	0	0	0	1	0	0	0	0	0	7
14:30	2	4	4	0	0	0	0	0	0	0	0	0	0	10
14:45	1	8	0	0	0	0	0	0	0	0	0	0	0	9
	8	22	7	0	0	0	0	1	0	0	0	0	0	38
15:00	1	4	4	0	0	0	0	0	0	0	0	0	0	9
15:15	0	2	2	0	0	0	0	0	0	0	0	0	0	4
15:30	3	3	2	0	0	0	0	1	0	0	0	0	0	9
15:45	4	5	1	0	0	0	0	0	0	0	0	0	0	10
	8	14	9	0	0	0	0	1	0	0	0	0	0	32
16:00	2	3	3	0	0	0	0	0	0	0	0	0	0	8
16:15	0	0	2	0	0	0	0	0	0	0	0	0	0	2
16:30	0	1	2	0	0	0	0	0	0	0	0	0	0	3
16:45	0	5	1	0	0	0	0	0	0	0	0	0	0	6
	2	9	8	0	0	0	0	0	0	0	0	0	0	19
17:00	2	4	1	0	0	0	0	0	0	0	0	0	0	7
17:15	0	3	1	0	0	0	0	0	0	0	0	0	0	4
17:30	0	2	2	0	0	0	0	0	0	0	0	0	0	4
17:45	1	1	0	0	0	0	0	0	0	0	0	0	0	2
	3	10	4	0	0	0	0	0	0	0	0	0	0	17
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15	0	1	1	0	0	0	0	0	0	0	0	0	0	2
18:30	0	4	0	0	0	0	0	0	0	0	0	0	0	4
18:45	0	2	2	0	0	0	0	0	0	0	0	0	0	4
	0	7	3	0	0	0	0	0	0	0	0	0	0	10
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:15	1	2	1	0	0	0	0	0	0	0	0	0	0	4
19:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1
19:45	0	2	0	0	0	0	0	0	0	0	0	0	0	2
	1	5	1	0	0	0	0	0	0	0	0	0	0	7
20:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
20:15	0	1	0	0	0	0	0	0	0	0	0	0	0	1
20:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	2	0	0	0	0	0	0	0	0	0	0	0	2
21:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
21:15	0	3	0	0	0	0	0	0	0	0	0	0	0	3
21:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:45	0	0	1	0	0	0	0	0	0	0	0	0	0	1
	0	5	1	0	0	0	0	0	0	0	0	0	0	6
22:00	0	1	1	0	0	0	0	0	0	0	0	0	0	2
22:15	0	0	0	0	1	0	0	0	0	0	0	0	0	1
22:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:45	0	0	1	0	0	0	0	0	0	0	0	0	0	1
	0	1	2	0	1	0	0	0	0	0	0	0	0	4
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1
23:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Total	29	101	52	0	2	0	0	2	0	0	0	0	0	186
Percent	15.6%	54.3%	28.0%	0 0%	1.1%	0.0%	0.0%	1.1%	0.0%	0 0%	0.0%	0.0%	0.0%	

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 1
Station ID: U272
2752 Concession 8 Nottawasaga Rd

Date Start: 11-Jun-21
Date End: 13-Jun-21
Date Start: 11-Jun-21

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
06/13/21	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30	0	0	1	0	0	0	0	0	0	0	0	0	0	1
06:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	1	0	0	0	0	0	0	0	0	0	0	1
07:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	1	1	0	0	0	0	0	0	0	0	0	0	2
07:45	0	1	1	0	0	0	0	0	0	0	0	0	0	2
	0	3	2	0	0	0	0	0	0	0	0	0	0	5
08:00	3	1	0	0	0	0	0	0	0	0	0	0	0	4
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	1	0	0	0	0	0	0	0	0	0	0	1
08:45	0	2	1	0	0	0	0	0	0	0	0	0	0	3
	3	3	2	0	0	0	0	0	0	0	0	0	0	8
09:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
09:15	0	1	2	0	0	0	0	0	0	0	0	0	0	3
09:30	2	5	0	0	0	0	0	0	0	0	0	0	0	7
09:45	0	1	1	0	0	0	0	0	0	0	0	0	0	2
	2	9	3	0	0	0	0	0	0	0	0	0	0	14
10:00	0	1	2	0	0	0	0	0	0	0	0	0	0	3
10:15	0	3	1	0	0	0	0	0	0	0	0	0	0	4
10:30	0	3	0	0	0	0	0	0	0	0	0	0	0	3
10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	7	3	0	0	0	0	0	0	0	0	0	0	10
11:00	2	2	3	0	0	0	0	0	0	0	0	0	0	7
11:15	3	2	0	0	0	0	0	0	0	0	0	0	0	5
11:30	0	3	1	0	0	0	0	0	0	0	0	0	0	4
11:45	1	4	0	0	0	0	0	0	0	0	0	0	0	5
	6	11	4	0	0	0	0	0	0	0	0	0	0	21
Total	11	33	15	0	0	0	0	0	0	0	0	0	0	59
Percent	18.6%	55.9%	25.4%	0 0%	0.0%	0.0%	0.0%	0.0%	0.0%	0 0%	0.0%	0.0%	0.0%	

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 1
Station ID: U272
2752 Concession 8 Nottawasaga Rd

Date Start: 11-Jun-21
Date End: 13-Jun-21
Date Start: 11-Jun-21

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
12 PM	2	2	2	0	0	0	0	0	0	0	0	0	0	6
12:15	0	4	1	0	0	0	0	0	0	0	0	0	0	5
12:30	0	2	2	0	0	0	0	0	0	0	0	0	0	4
12:45	0	2	2	0	0	0	0	0	0	0	0	0	0	4
	2	10	7	0	0	0	0	0	0	0	0	0	0	19
13:00	6	3	0	0	0	0	0	1	0	0	0	0	0	10
13:15	2	2	1	0	0	0	0	0	0	0	0	0	0	5
13:30	1	3	1	0	0	0	0	0	0	0	0	0	0	5
13:45	0	3	0	0	0	0	0	0	0	0	0	0	0	3
	9	11	2	0	0	0	0	1	0	0	0	0	0	23
14:00	0	9	3	0	0	0	0	0	0	0	0	0	0	12
14:15	2	4	0	0	0	0	0	0	0	0	0	0	0	6
14:30	3	4	4	0	0	0	0	0	0	0	0	0	0	11
14:45	1	3	3	0	0	0	0	0	0	0	0	0	0	7
	6	20	10	0	0	0	0	0	0	0	0	0	0	36
15:00	0	2	4	0	0	0	0	0	0	0	0	0	0	6
15:15	0	6	1	0	0	0	0	0	0	0	0	0	0	7
15:30	3	3	2	0	0	0	0	0	0	0	0	0	0	8
15:45	0	5	0	0	0	0	0	0	0	0	0	0	0	5
	3	16	7	0	0	0	0	0	0	0	0	0	0	26
16:00	0	1	1	0	0	0	0	0	0	0	0	0	0	2
16:15	0	5	3	0	0	0	0	0	0	0	0	0	0	8
16:30	0	1	2	0	0	0	0	0	0	0	0	0	0	3
16:45	2	1	0	0	0	0	0	0	0	0	0	0	0	3
	2	8	6	0	0	0	0	0	0	0	0	0	0	16
17:00	0	2	3	0	0	0	0	0	0	0	0	0	0	5
17:15	0	1	0	0	0	0	0	0	0	0	0	0	0	1
17:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1
17:45	0	2	2	0	0	0	0	0	0	0	0	0	0	4
	0	6	5	0	0	0	0	0	0	0	0	0	0	11
18:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:30	3	3	0	0	0	0	0	0	0	0	0	0	0	6
18:45	0	5	1	0	0	0	0	0	0	0	0	0	0	6
	3	9	1	0	0	0	0	0	0	0	0	0	0	13
19:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
19:15	0	1	0	0	0	0	0	0	0	0	0	0	0	1
19:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1
19:45	0	2	2	0	0	0	0	0	0	0	0	0	0	4
	0	6	2	0	0	0	0	0	0	0	0	0	0	8
20:00	1	1	0	0	0	0	0	0	0	0	0	0	0	2
20:15	2	0	1	0	0	0	0	0	0	0	0	0	0	3
20:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:45	0	0	1	0	0	0	0	0	0	0	0	0	0	1
	3	1	2	0	0	0	0	0	0	0	0	0	0	6
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:15	0	0	1	0	0	0	0	0	0	0	0	0	0	1
22:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	1	0	0	0	0	0	0	0	0	0	0	1
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	28	87	43	0	0	0	0	1	0	0	0	0	0	159
Percent	17.6%	54.7%	27.0%	0 0%	0.0%	0.0%	0.0%	0.6%	0.0%	0 0%	0.0%	0.0%	0.0%	
Grand Total	77	371	241	0	11	2	1	3	2	0	0	0	0	708
Percent	10.9%	52.4%	34.0%	0 0%	1.6%	0.3%	0.1%	0.4%	0.3%	0 0%	0.0%	0.0%	0.0%	

Ontario Traffic, Inc.
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Site Code: 1
Station ID: U272
2752 Concession 8 Nottawasaga Rd

Date Start: 11-Jun-21
Date End: 13-Jun-21
Date Start: 11-Jun-21

NB, SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
06/12/21	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1
	0	1	0	0	0	0	0	0	0	0	0	0	0	1
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	1	0	0	0	0	0	0	0	0	0	0	1
	0	0	1	0	0	0	0	0	0	0	0	0	0	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15	0	1	0	0	0	0	0	0	0	0	0	0	0	1
06:30	0	1	2	0	0	0	0	0	0	0	0	0	0	3
06:45	0	0	1	0	0	0	0	0	0	0	0	0	0	1
	0	2	3	0	0	0	0	0	0	0	0	0	0	5
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	3	0	0	0	0	0	0	0	0	0	0	0	3
07:45	0	2	1	0	0	0	0	0	0	0	0	0	0	3
	0	5	1	0	0	0	0	0	0	0	0	0	0	6
08:00	0	2	4	0	0	0	0	0	0	0	0	0	0	6
08:15	0	2	3	0	0	0	0	0	0	0	0	0	0	5
08:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1
08:45	0	6	1	0	0	0	0	0	0	0	0	0	0	7
	0	11	8	0	0	0	0	0	0	0	0	0	0	19
09:00	1	4	1	0	0	0	0	0	0	0	0	0	0	6
09:15	2	7	8	0	0	0	0	0	0	0	0	0	0	17
09:30	1	7	10	0	0	0	0	0	0	0	0	0	0	18
09:45	1	9	4	0	0	0	0	0	0	0	0	0	0	14
	5	27	23	0	0	0	0	0	0	0	0	0	0	55
10:00	0	7	2	0	1	0	0	0	0	0	0	0	0	10
10:15	1	10	5	0	0	0	0	0	0	0	0	0	0	16
10:30	1	4	3	0	1	0	0	0	0	0	0	0	0	9
10:45	4	4	4	0	0	0	0	0	0	0	0	0	1	13
	6	25	14	0	2	0	0	0	0	0	0	0	1	48
11:00	1	5	4	0	1	0	0	0	0	0	0	0	0	11
11:15	1	11	5	0	0	0	0	0	0	0	0	0	0	17
11:30	2	7	2	0	0	0	0	0	0	0	1	0	0	12
11:45	0	3	2	0	0	0	0	0	0	0	0	0	0	5
	4	26	13	0	1	0	0	0	0	0	1	0	0	45
Total	15	97	63	0	3	0	0	0	0	0	1	0	1	180
Percent	8.3%	53.9%	35.0%	0 0%	1.7%	0.0%	0.0%	0.0%	0.0%	0 0%	0.6%	0.0%	0.6%	

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 1
Station ID: U272
2752 Concession 8 Nottawasaga Rd

Date Start: 11-Jun-21
Date End: 13-Jun-21
Date Start: 11-Jun-21

NB, SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
12 PM	0	9	7	0	0	0	0	0	0	0	0	0	0	16
12:15	2	7	5	0	0	1	0	0	0	0	0	0	0	15
12:30	2	9	5	0	0	0	0	0	0	0	0	0	0	16
12:45	5	5	3	0	0	0	0	0	0	0	0	0	0	13
	9	30	20	0	0	1	0	0	0	0	0	0	0	60
13:00	3	9	3	0	0	0	0	0	0	0	0	0	0	15
13:15	0	9	3	0	1	0	0	0	0	0	0	0	0	13
13:30	0	5	6	0	0	0	0	0	0	0	0	0	0	11
13:45	5	8	3	0	0	0	0	0	0	0	0	0	0	16
	8	31	15	0	1	0	0	0	0	0	0	0	0	55
14:00	6	12	2	0	0	0	0	0	0	0	0	0	0	20
14:15	3	8	2	0	0	0	0	1	0	0	0	0	0	14
14:30	4	9	6	0	0	0	0	0	0	0	0	0	0	19
14:45	1	12	2	0	0	0	0	0	0	0	0	0	0	15
	14	41	12	0	0	0	0	1	0	0	0	0	0	68
15:00	1	8	7	0	0	0	0	0	0	0	0	0	0	16
15:15	3	6	3	0	0	0	0	0	0	0	0	0	0	12
15:30	3	4	2	0	0	0	0	1	0	0	0	0	0	10
15:45	4	8	5	0	0	0	0	0	0	0	0	0	0	17
	11	26	17	0	0	0	0	1	0	0	0	0	0	55
16:00	5	5	4	0	0	0	0	0	0	0	0	0	0	14
16:15	0	5	3	0	0	0	0	0	0	0	0	0	0	8
16:30	1	4	2	0	0	0	0	0	0	0	0	0	0	7
16:45	1	7	1	0	0	0	0	0	0	0	0	0	0	9
	7	21	10	0	0	0	0	0	0	0	0	0	0	38
17:00	2	6	1	0	0	0	0	0	0	0	0	0	0	9
17:15	1	4	1	0	0	0	0	0	0	0	0	0	0	6
17:30	0	2	3	0	0	0	0	0	0	0	0	0	0	5
17:45	1	8	0	0	0	0	0	0	0	0	0	0	0	9
	4	20	5	0	0	0	0	0	0	0	0	0	0	29
18:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
18:15	0	2	3	0	0	0	0	0	0	0	0	0	0	5
18:30	1	7	0	0	0	0	0	0	0	0	0	0	0	8
18:45	0	2	2	0	0	0	0	0	0	0	0	0	0	4
	1	12	5	0	0	0	0	0	0	0	0	0	0	18
19:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
19:15	2	3	1	0	0	0	0	0	0	0	0	0	0	6
19:30	0	3	0	0	0	0	0	0	0	0	0	0	0	3
19:45	0	3	1	0	0	0	0	0	0	0	0	0	0	4
	2	11	2	0	0	0	0	0	0	0	0	0	0	15
20:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
20:15	0	1	0	0	0	0	0	0	0	0	0	0	0	1
20:30	0	2	0	0	0	0	0	0	0	0	0	0	0	2
20:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	5	0	0	0	0	0	0	0	0	0	0	0	5
21:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
21:15	0	4	1	0	1	0	0	0	0	0	0	0	0	6
21:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1
21:45	0	2	1	0	0	0	0	0	0	0	0	0	0	3
	0	9	2	0	1	0	0	0	0	0	0	0	0	12
22:00	0	1	1	0	0	0	0	0	0	0	0	0	0	2
22:15	0	0	0	0	1	0	0	0	0	0	0	0	0	1
22:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:45	0	0	1	0	0	0	0	0	0	0	0	0	0	1
	0	1	2	0	1	0	0	0	0	0	0	0	0	4
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1
23:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Total	56	208	90	0	3	1	0	2	0	0	0	0	0	360
Percent	15.6%	57.8%	25.0%	0 0%	0.8%	0.3%	0.0%	0.6%	0.0%	0 0%	0.0%	0.0%	0.0%	

Ontario Traffic, Inc.
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Site Code: 1
Station ID: U272
2752 Concession 8 Nottawasaga Rd

Date Start: 11-Jun-21
Date End: 13-Jun-21
Date Start: 11-Jun-21

NB, SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
06/13/21	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30	0	0	1	0	0	0	0	0	0	0	0	0	0	1
06:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1
	0	1	1	0	0	0	0	0	0	0	0	0	0	2
07:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	1	1	0	0	0	0	0	0	0	0	0	0	2
07:45	0	1	2	0	0	0	0	0	0	0	0	0	0	3
	0	3	3	0	0	0	0	0	0	0	0	0	0	6
08:00	3	2	0	0	0	0	0	0	0	0	0	0	0	5
08:15	0	1	0	0	0	0	0	0	0	0	0	0	0	1
08:30	0	1	2	0	0	0	0	0	0	0	0	0	0	3
08:45	0	4	1	0	0	0	0	0	0	0	0	0	0	5
	3	8	3	0	0	0	0	0	0	0	0	0	0	14
09:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3
09:15	0	7	4	0	0	0	0	0	0	0	0	0	0	11
09:30	2	7	1	0	0	0	0	0	0	0	0	0	0	10
09:45	0	2	2	0	0	0	0	0	0	0	0	0	0	4
	2	18	8	0	0	0	0	0	0	0	0	0	0	28
10:00	2	5	2	0	0	0	0	0	0	0	0	0	0	9
10:15	0	5	2	0	0	0	0	0	0	0	0	0	0	7
10:30	4	8	0	0	0	0	0	0	0	0	0	0	0	12
10:45	0	1	1	0	0	0	0	0	0	0	0	0	0	2
	6	19	5	0	0	0	0	0	0	0	0	0	0	30
11:00	2	4	4	0	0	0	0	0	0	0	0	0	0	10
11:15	6	7	0	0	0	0	0	0	0	0	0	0	0	13
11:30	0	6	2	0	0	0	0	0	0	0	0	0	0	8
11:45	1	9	0	0	0	0	0	0	0	0	0	0	0	10
	9	26	6	0	0	0	0	0	0	0	0	0	0	41
Total	20	75	26	0	0	0	0	0	0	0	0	0	0	121
Percent	16.5%	62.0%	21.5%	0 0%	0.0%	0.0%	0.0%	0.0%	0.0%	0 0%	0.0%	0.0%	0.0%	

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 1
Station ID: U272
2752 Concession 8 Nottawasaga Rd

Date Start: 11-Jun-21
Date End: 13-Jun-21
Date Start: 11-Jun-21

NB, SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
12 PM	4	5	6	0	0	0	0	0	0	0	0	0	0	15
12:15	9	9	2	0	0	0	0	0	0	0	0	0	0	20
12:30	0	8	4	0	0	0	0	0	0	0	0	0	0	12
12:45	0	6	2	0	0	0	0	0	0	0	0	0	0	8
	13	28	14	0	0	0	0	0	0	0	0	0	0	55
13:00	7	5	1	0	0	0	0	1	0	0	0	0	0	14
13:15	2	6	2	0	0	0	0	0	0	0	0	0	0	10
13:30	1	8	1	0	0	0	0	0	0	0	0	0	0	10
13:45	2	3	1	0	0	0	0	0	0	0	0	0	0	6
	12	22	5	0	0	0	0	1	0	0	0	0	0	40
14:00	0	11	3	0	0	0	0	1	0	0	0	0	0	15
14:15	4	4	0	0	0	0	0	0	0	0	0	0	0	8
14:30	3	9	7	0	0	0	0	0	0	0	0	0	0	19
14:45	2	5	3	0	0	0	0	0	0	0	0	0	0	10
	9	29	13	0	0	0	0	1	0	0	0	0	0	52
15:00	0	5	5	0	0	0	0	0	0	0	0	0	0	10
15:15	0	8	1	0	0	0	0	0	0	0	0	0	0	9
15:30	3	7	2	0	0	0	0	0	0	0	0	0	0	12
15:45	0	9	3	0	0	0	0	0	0	0	0	0	0	12
	3	29	11	0	0	0	0	0	0	0	0	0	0	43
16:00	3	3	1	0	0	0	0	0	0	0	0	0	0	7
16:15	0	9	3	0	0	0	0	0	0	0	0	0	0	12
16:30	0	1	4	0	0	0	0	0	0	0	0	0	0	5
16:45	3	3	0	0	0	0	0	0	0	0	0	0	0	6
	6	16	8	0	0	0	0	0	0	0	0	0	0	30
17:00	0	5	4	0	0	0	0	0	0	0	0	0	0	9
17:15	1	2	0	0	0	0	0	0	0	0	0	0	0	3
17:30	0	4	2	0	0	0	0	0	0	0	0	0	0	6
17:45	0	5	2	0	0	0	0	0	0	0	0	0	0	7
	1	16	8	0	0	0	0	0	0	0	0	0	0	25
18:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
18:15	0	1	1	0	0	0	0	0	0	0	0	0	0	2
18:30	4	3	3	0	0	0	0	0	0	0	0	0	0	10
18:45	0	6	2	0	0	0	0	0	0	0	0	0	0	8
	4	13	6	0	0	0	0	0	0	0	0	0	0	23
19:00	0	4	1	0	0	0	0	0	0	0	0	0	0	5
19:15	0	1	0	0	0	0	0	0	0	0	0	0	0	1
19:30	0	2	0	0	0	0	0	0	0	0	0	0	0	2
19:45	0	2	2	0	0	0	0	0	0	0	0	0	0	4
	0	9	3	0	0	0	0	0	0	0	0	0	0	12
20:00	1	4	2	0	0	0	0	0	0	0	0	0	0	7
20:15	2	1	1	0	0	0	0	0	0	0	0	0	0	4
20:30	0	1	1	0	0	0	0	0	0	0	0	0	0	2
20:45	0	0	1	0	0	0	0	0	0	0	0	0	0	1
	3	6	5	0	0	0	0	0	0	0	0	0	0	14
21:00	0	0	2	0	0	0	0	0	0	0	0	0	0	2
21:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	2	0	0	0	0	0	0	0	0	0	0	2
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:15	0	0	1	0	0	0	0	0	0	0	0	0	0	1
22:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	1	0	0	0	0	0	0	0	0	0	0	1
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	51	168	76	0	0	0	0	2	0	0	0	0	0	297
Percent	17.2%	56.6%	25.6%	0 0%	0.0%	0.0%	0.0%	0.7%	0.0%	0 0%	0.0%	0.0%	0.0%	
Grand Total	151	779	439	0	14	5	1	4	2	0	1	0	1	1397
Percent	10.8%	55.8%	31.4%	0 0%	1.0%	0.4%	0.1%	0.3%	0.1%	0 0%	0.1%	0.0%	0.1%	

Ontario Traffic, Inc.
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Site Code: 1
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2752 Concession 8 Nottawasaga Rd

Date Start: 11-Jun-21
Date End: 13-Jun-21
Date Start: 11-Jun-21

NB

Start Time	1 29	30 34	35 39	40 44	45 49	50 54	55 59	60 64	65 69	70 74	75 79	80 84	85 89	90 94	95 9999	Total	Average (Mean)	85th Percent
06/11/2																		
1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	90	90
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	95	95
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	65	65
06:00	0	0	0	0	0	0	0	0	0	1	0	1	1	0	**2**	5	86	95
07:00	0	0	0	0	0	0	0	0	1	1	2	2	2	**3**	1	12	84	91
08:00	0	0	0	0	**1**	0	0	0	**2**	**5**	**7**	**5**	0	1	2	23	77	84
09:00	**1**	0	0	0	0	0	**1**	0	2	2	3	0	1	1	0	11	68	77
10:00	0	0	0	0	0	**1**	0	1	0	3	2	3	**4**	0	0	14	77	86
11:00	0	0	0	0	0	0	0	**2**	2	3	7	3	1	1	0	19	76	81
12 PM	0	0	0	0	0	0	0	3	3	3	**5**	2	**4**	1	0	21	76	86
13:00	0	0	0	0	0	0	0	0	0	1	4	5	2	1	**2**	15	83	94
14:00	0	0	0	0	0	0	0	0	3	**4**	3	1	2	**3**	0	16	78	90
15:00	0	0	0	0	0	0	1	2	**4**	3	5	**6**	2	1	1	25	76	84
16:00	0	0	0	0	0	0	0	**4**	2	2	4	5	1	0	0	18	74	82
17:00	0	0	0	0	0	**1**	0	0	2	1	2	1	0	1	0	8	72	80
18:00	0	0	0	0	0	0	**2**	0	3	0	1	0	3	0	0	9	71	86
19:00	0	0	0	0	0	0	0	1	1	1	3	1	0	0	2	9	78	95
20:00	0	0	0	0	0	0	0	0	0	0	0	1	0	2	0	3	87	91
21:00	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2	85	90
22:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	65	65
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
Total	1	0	0	0	1	2	4	13	27	30	48	37	23	17	11	214		
Percent	0.5%	0.0%	0.0%	0.0%	0.5%	0.9%	1.9%	6.1%	12.6%	14.0%	22.4%	17.3%	10.7%	7.9%	5.1%			
AM Peak	09:00				08:00	10:00	09:00	11:00	08:00	08:00	08:00	08:00	10:00	07:00	06:00			
Vol.	1				1	1	1	2	2	5	7	5	4	3	2			
PM Peak						17:00	18:00	16:00	15:00	14:00	12:00	15:00	12:00	14:00	13:00			
Vol.						1	2	4	4	4	5	6	4	3	2			

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 1
Station ID: U272
2752 Concession 8 Nottawasaga Rd

Date Start: 11-Jun-21
Date End: 13-Jun-21
Date Start: 11-Jun-21

NB

Start Time	1 29	30 34	35 39	40 44	45 49	50 54	55 59	60 64	65 69	70 74	75 79	80 84	85 89	90 94	95 9999	Total	Average (Mean)	85th Percent
06/12/2																		
1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	90	90
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	85	85
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
06:00	0	0	0	0	0	0	0	0	0	0	0	3	0	1	**1**	5	86	94
07:00	0	0	0	0	0	0	0	1	1	0	0	2	1	1	0	6	78	89
08:00	0	0	0	0	0	0	**1**	1	1	4	0	2	0	0	1	10	73	80
09:00	0	0	0	0	0	**1**	1	1	**2**	**7**	**7**	5	**3**	1	0	28	76	84
10:00	0	0	0	**2**	**1**	0	0	**2**	1	4	6	**10**	2	**2**	1	31	76	84
11:00	**1**	0	**1**	0	0	0	1	1	2	4	6	0	3	0	0	19	69	79
12 PM	0	0	0	0	0	0	**2**	**3**	**6**	5	5	2	2	1	**3**	29	75	86
13:00	0	0	0	0	0	0	2	2	3	**7**	5	**8**	2	**5**	2	36	78	91
14:00	0	0	0	0	0	**1**	0	2	2	4	**6**	5	**4**	3	3	30	80	92
15:00	0	0	0	0	0	1	0	0	3	5	3	5	3	1	2	23	78	87
16:00	0	0	0	0	0	0	0	1	2	2	3	4	2	2	3	19	82	94
17:00	0	0	0	0	0	0	1	1	0	0	5	3	0	2	0	12	77	82
18:00	0	0	0	0	0	0	1	1	0	1	3	0	1	1	0	8	75	89
19:00	0	0	0	0	**1**	0	0	1	0	1	1	0	3	0	1	8	76	87
20:00	0	0	0	0	0	0	0	0	1	0	0	2	0	0	0	3	75	81
21:00	0	0	0	0	0	1	0	0	1	0	0	1	1	1	1	6	80	94
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
Total	1	0	1	2	2	4	9	17	25	44	50	52	28	22	18	275		
Percent	0.4%	0.0%	0.4%	0.7%	0.7%	1.5%	3.3%	6.2%	9.1%	16.0%	18.2%	18.9%	10.2%	8.0%	6.5%			
AM Peak	11:00		11:00	10:00	10:00	09:00	08:00	10:00	09:00	09:00	09:00	10:00	09:00	10:00	06:00			
Vol.	1		1	2	1	1	1	2	2	7	7	10	3	2	1			
PM Peak					19:00	14:00	12:00	12:00	12:00	13:00	14:00	13:00	14:00	13:00	12:00			
Vol.					1	1	2	3	6	7	6	8	4	5	3			

Ontario Traffic, Inc.
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2752 Concession 8 Nottawasaga Rd

Date Start: 11-Jun-21
Date End: 13-Jun-21
Date Start: 11-Jun-21

NB

Start Time	1 29	30 34	35 39	40 44	45 49	50 54	55 59	60 64	65 69	70 74	75 79	80 84	85 89	90 94	95 9999	Total	Average (Mean)	85th Percent
06/13/2																		
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
06:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	85	85
07:00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	75	75
08:00	0	0	0	0	0	0	0	0	0	**3**	1	1	0	0	**1**	6	78	80
09:00	0	0	0	0	0	**1**	0	**3**	1	1	1	4	**2**	**1**	0	14	74	85
10:00	0	0	0	0	0	0	0	2	2	3	3	**6**	2	1	1	20	78	85
11:00	0	0	0	0	0	1	0	2	**4**	1	**6**	5	1	0	0	20	74	82
12 PM	0	0	0	**1**	0	0	**2**	**3**	**5**	**7**	**4**	**5**	**6**	1	**2**	36	75	87
13:00	0	0	0	0	0	0	0	1	2	2	4	5	1	**2**	0	17	79	84
14:00	0	0	0	1	0	**1**	0	0	2	2	4	1	3	1	1	16	76	87
15:00	0	0	0	0	0	1	0	0	4	2	1	3	2	2	2	17	78	93
16:00	0	0	0	0	0	0	0	1	0	4	4	2	2	1	0	14	77	85
17:00	0	0	0	0	0	0	1	1	1	1	2	4	2	1	1	14	79	86
18:00	0	0	0	0	0	0	0	1	2	2	1	2	2	0	0	10	76	84
19:00	0	0	0	0	0	0	0	0	1	0	1	1	0	0	1	4	80	80
20:00	0	0	0	0	0	0	1	2	2	0	1	2	0	0	0	8	70	80
21:00	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	2	72	80
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
Total	0	0	0	2	0	4	4	16	27	28	34	42	24	10	9	200		
Percent	0.0%	0.0%	0.0%	1.0%	0.0%	2.0%	2.0%	8.0%	13.5%	14.0%	17.0%	21.0%	12.0%	5.0%	4.5%			
AM Peak						09:00		09:00	11:00	08:00	11:00	10:00	09:00	09:00	08:00			
Vol.						1		3	4	3	6	6	2	1	1			
PM Peak				12:00		14:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00	13:00	12:00			
Vol.				1		1	2	3	5	7	4	5	6	2	2			
Total	2	0	1	4	3	10	17	46	79	102	132	131	75	49	38	689		

	15th Percentile :	66 KPH
	50th Percentile :	77 KPH
	85th Percentile :	88 KPH
	95th Percentile :	154 KPH
Stats	10 KPH Pace Speed :	75-84 KPH
	Number in Pace :	263
	Percent in Pace :	38.2%
	Number of Vehicles > 60 KPH :	643
	Percent of Vehicles > 60 KPH :	93.3%
	Mean Speed(Average) :	81 KPH

Ontario Traffic, Inc.
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Site Code: 1
Station ID: U272
2752 Concession 8 Nottawasaga Rd

Date Start: 11-Jun-21
Date End: 13-Jun-21
Date Start: 11-Jun-21

SB

Start Time	1 29	30 34	35 39	40 44	45 49	50 54	55 59	60 64	65 69	70 74	75 79	80 84	85 89	90 94	95 9999	Total	Average (Mean)	85th Percent
06/11/2																		
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	**2**	3	92	96
05:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	80	80
06:00	0	0	0	0	0	0	0	0	**1**	0	1	0	0	1	1	4	82	94
07:00	0	0	0	0	0	0	**1**	0	0	1	0	**4**	2	2	1	11	82	90
08:00	0	0	0	**1**	0	0	0	**2**	0	**5**	**2**	1	1	1	0	13	72	84
09:00	0	0	0	0	0	0	0	0	0	5	0	2	**4**	**3**	1	15	83	91
10:00	0	0	0	0	**1**	0	1	2	1	1	0	2	4	1	0	13	74	87
11:00	0	0	0	0	0	0	1	1	1	1	2	0	0	3	1	10	78	91
12 PM	0	0	0	0	0	0	**1**	1	2	2	5	3	1	2	1	18	78	89
13:00	0	0	0	0	0	0	0	1	2	**4**	1	**4**	3	1	0	16	78	86
14:00	0	0	0	0	0	0	0	2	0	3	**9**	2	4	4	0	24	80	89
15:00	0	0	0	0	0	**2**	1	**4**	**3**	4	4	2	4	4	**2**	30	76	90
16:00	0	0	0	0	**3**	0	1	2	2	2	1	2	**7**	**5**	2	27	78	92
17:00	0	0	0	0	0	1	0	2	0	2	2	2	2	2	1	14	78	90
18:00	0	0	0	0	0	0	0	0	1	0	2	2	1	2	1	9	83	91
19:00	0	0	0	0	0	0	0	1	0	3	2	1	2	0	0	9	75	85
20:00	0	0	0	0	0	0	0	0	1	0	1	0	0	1	0	3	77	90
21:00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	2	75	95
22:00	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2	82	90
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	95	95
Total	0	0	0	1	4	3	7	18	14	33	33	28	36	33	15	225		
Percent	0.0%	0.0%	0.0%	0.4%	1.8%	1.3%	3.1%	8.0%	6.2%	14.7%	14.7%	12.4%	16.0%	14.7%	6.7%			
AM Peak				08:00	10:00		07:00	08:00	06:00	08:00	08:00	07:00	09:00	09:00	04:00			
Vol.				1	1		1	2	1	5	2	4	4	3	2			
PM Peak					16:00	15:00	12:00	15:00	15:00	13:00	14:00	13:00	16:00	16:00	15:00			
Vol.					3	2	1	4	3	4	9	4	7	5	2			

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2752 Concession 8 Nottawasaga Rd

Date Start: 11-Jun-21
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SB

Start Time	1 29	30 34	35 39	40 44	45 49	50 54	55 59	60 64	65 69	70 74	75 79	80 84	85 89	90 94	95 9999	Total	Average (Mean)	85th Percent
06/12/2																		
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
08:00	0	0	0	0	0	0	**1**	**2**	0	1	0	2	1	1	**1**	9	77	94
09:00	0	0	0	0	0	**1**	0	2	**6**	**4**	5	**4**	**5**	0	0	27	75	85
10:00	0	0	0	0	0	0	1	0	2	0	**8**	1	3	2	0	17	78	86
11:00	0	0	0	0	0	0	1	2	3	3	8	2	2	**4**	1	26	78	90
12 PM	0	0	0	**1**	0	0	0	1	2	3	**8**	3	**6**	**4**	**3**	31	81	91
13:00	0	0	0	0	0	0	0	0	2	5	3	**6**	1	1	1	19	79	84
14:00	0	0	0	0	0	**2**	**4**	2	3	**10**	6	5	5	1	0	38	73	84
15:00	**1**	0	0	0	0	0	0	**6**	**8**	5	4	4	2	1	1	32	71	82
16:00	0	0	0	0	**1**	0	2	1	2	0	5	2	4	2	0	19	75	87
17:00	0	0	0	0	0	0	1	0	0	3	5	6	1	1	0	17	78	83
18:00	0	0	0	0	0	2	0	0	0	1	1	1	2	2	1	10	79	90
19:00	0	0	0	0	0	0	0	0	0	0	3	0	3	1	0	7	82	87
20:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	2	80	95
21:00	0	0	0	0	0	1	0	2	0	1	1	0	0	1	0	6	68	75
22:00	0	0	0	0	0	0	0	0	0	2	0	0	0	1	1	4	82	94
23:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	85	85
Total	1	0	0	1	1	6	10	18	29	38	57	36	36	22	10	265		
Percent	0.4%	0.0%	0.0%	0.4%	0.4%	2.3%	3.8%	6.8%	10.9%	14.3%	21.5%	13.6%	13.6%	8.3%	3.8%			
AM Peak						09:00	08:00	08:00	09:00	09:00	10:00	09:00	09:00	11:00	08:00			
Vol.						1	1	2	6	4	8	4	5	4	1			
PM Peak	15:00			12:00	16:00	14:00	14:00	15:00	15:00	14:00	12:00	13:00	12:00	12:00	12:00			
Vol.	1			1	1	2	4	6	8	10	8	6	6	4	3			

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SB

Start Time	1 29	30 34	35 39	40 44	45 49	50 54	55 59	60 64	65 69	70 74	75 79	80 84	85 89	90 94	95 9999	Total	Average (Mean)	85th Percent
06/13/2																		
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
06:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	80	80
07:00	0	0	0	0	**1**	0	0	0	1	**1**	1	0	0	0	1	5	72	75
08:00	0	0	0	0	0	0	0	0	2	0	2	0	3	1	0	8	79	87
09:00	0	0	0	0	1	0	**1**	**2**	1	1	0	**4**	3	1	0	14	74	86
10:00	0	0	0	**1**	0	**1**	0	1	**3**	1	0	1	0	**2**	0	10	68	80
11:00	0	0	0	0	1	0	1	0	1	0	**5**	3	**4**	2	**4**	21	82	95
12 PM	0	0	0	0	0	0	0	2	1	**6**	2	2	2	**3**	1	19	78	90
13:00	0	0	0	0	0	**2**	0	0	0	3	**7**	4	2	3	2	23	79	91
14:00	0	**1**	**1**	0	0	1	**2**	**3**	1	3	5	**8**	**5**	3	**3**	36	76	92
15:00	0	0	0	0	0	2	2	3	**2**	1	1	6	5	3	1	26	76	89
16:00	0	0	0	0	0	0	1	2	0	6	1	3	2	0	1	16	75	85
17:00	0	0	0	0	0	0	0	0	1	2	1	3	2	1	1	11	81	86
18:00	0	1	0	0	**1**	0	1	0	0	0	4	3	3	0	0	13	73	85
19:00	0	0	0	0	0	0	1	0	1	0	1	2	1	1	1	8	80	94
20:00	0	0	0	0	0	0	0	0	1	1	0	1	0	1	2	6	84	95
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	90	90
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
Total	0	2	1	1	4	6	9	13	15	25	30	41	32	22	17	218		
Percent	0.0%	0.9%	0.5%	0.5%	1.8%	2.8%	4.1%	6.0%	6.9%	11.5%	13.8%	18.8%	14.7%	10.1%	7.8%			
AM Peak				10:00	07:00	10:00	09:00	09:00	10:00	07:00	11:00	09:00	11:00	10:00	11:00			
Vol.				1	1	1	1	2	3	1	5	4	4	2	4			
PM Peak		14:00	14:00		18:00	13:00	14:00	14:00	15:00	12:00	13:00	14:00	14:00	12:00	14:00			
Vol.		1	1		1	2	2	3	2	6	7	8	5	3	3			
Total	1	2	1	3	9	15	26	49	58	96	120	105	104	77	42	708		

	15th Percentile :	64 KPH
	50th Percentile :	78 KPH
	85th Percentile :	90 KPH
	95th Percentile :	153 KPH
Stats	10 KPH Pace Speed :	75-84 KPH
	Number in Pace :	225
	Percent in Pace :	31.8%
	Number of Vehicles > 60 KPH :	642
	Percent of Vehicles > 60 KPH :	90.7%
	Mean Speed(Average) :	82 KPH

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 1
Station ID: U272
2752 Concession 8 Nottawasaga Rd

Date Start: 11-Jun-21
Date End: 13-Jun-21
Date Start: 11-Jun-21

NB, SB

Start Time	1 29	30 34	35 39	40 44	45 49	50 54	55 59	60 64	65 69	70 74	75 79	80 84	85 89	90 94	95 9999	Total	Average (Mean)	85th Percent
06/11/2																		
1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	90	90
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	95	95
04:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	3	92	96
05:00	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	2	72	80
06:00	0	0	0	0	0	0	0	0	1	1	1	1	1	1	**3**	9	86	96
07:00	0	0	0	0	0	0	**1**	0	1	2	2	**6**	4	**5**	2	23	83	93
08:00	0	0	0	**1**	**1**	0	0	2	2	**10**	**9**	6	1	2	2	36	76	84
09:00	**1**	0	0	0	0	0	1	0	2	7	3	2	5	4	1	26	76	90
10:00	0	0	0	0	1	**1**	1	**3**	1	4	2	5	**8**	1	0	27	76	87
11:00	0	0	0	0	0	0	1	3	**3**	4	9	3	1	4	1	29	77	90
12 PM	0	0	0	0	0	0	1	4	5	5	10	5	5	3	1	39	77	87
13:00	0	0	0	0	0	0	0	1	2	5	5	**9**	5	2	2	31	80	88
14:00	0	0	0	0	0	0	0	2	3	**7**	**12**	3	6	**7**	0	40	79	90
15:00	0	0	0	0	0	**2**	**2**	**6**	**7**	7	9	8	6	5	**3**	55	76	89
16:00	0	0	0	0	**3**	0	1	6	4	4	5	7	**8**	5	2	45	76	89
17:00	0	0	0	0	0	2	0	2	2	3	4	3	2	3	1	22	76	90
18:00	0	0	0	0	0	0	2	0	4	0	3	2	4	2	1	18	77	88
19:00	0	0	0	0	0	0	0	2	1	4	5	2	2	0	2	18	77	85
20:00	0	0	0	0	0	0	0	0	1	0	1	1	0	3	0	6	83	91
21:00	0	0	0	0	0	0	1	0	0	0	0	1	0	1	1	4	81	94
22:00	0	0	0	0	0	0	0	0	1	0	1	0	0	1	0	3	77	90
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	95	95
Total	1	0	0	1	5	5	11	31	41	63	81	65	59	50	26	439		
Percent	0.2%	0.0%	0.0%	0.2%	1.1%	1.1%	2.5%	7.1%	9.3%	14.4%	18.5%	14.8%	13.4%	11.4%	5.9%			
AM Peak	09:00			08:00	08:00	10:00	07:00	10:00	11:00	08:00	08:00	07:00	10:00	07:00	06:00			
Vol.	1			1	1	1	1	3	3	10	9	6	8	5	3			
PM Peak					16:00	15:00	15:00	15:00	15:00	14:00	14:00	13:00	16:00	14:00	15:00			
Vol.					3	2	2	6	7	7	12	9	8	7	3			

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Site Code: 1
Station ID: U272
2752 Concession 8 Nottawasaga Rd

Date Start: 11-Jun-21
Date End: 13-Jun-21
Date Start: 11-Jun-21

NB, SB

Start Time	1 29	30 34	35 39	40 44	45 49	50 54	55 59	60 64	65 69	70 74	75 79	80 84	85 89	90 94	95 9999	Total	Average (Mean)	85th Percent
06/12/2																		
1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	90	90
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	85	85
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
06:00	0	0	0	0	0	0	0	0	0	0	0	3	0	1	1	5	86	94
07:00	0	0	0	0	0	0	0	1	1	0	0	2	1	1	0	6	78	89
08:00	0	0	0	0	0	0	**2**	**3**	1	5	0	4	1	1	**2**	19	75	89
09:00	0	0	0	0	0	**2**	1	3	**8**	**11**	12	9	**8**	1	0	55	75	85
10:00	0	0	0	**2**	**1**	0	1	2	3	4	**14**	**11**	5	**4**	1	48	77	87
11:00	**1**	0	**1**	0	0	0	2	3	5	7	14	2	5	4	1	45	74	87
12 PM	0	0	0	**1**	0	0	2	4	8	8	**13**	5	8	5	**6**	60	78	91
13:00	0	0	0	0	0	0	2	2	5	12	8	**14**	3	**6**	3	55	78	90
14:00	0	0	0	0	0	**3**	**4**	4	5	**14**	12	10	**9**	4	3	68	76	87
15:00	**1**	0	0	0	0	1	0	**6**	**11**	10	7	9	5	2	3	55	74	86
16:00	0	0	0	0	**1**	0	2	2	4	2	8	6	6	4	3	38	78	90
17:00	0	0	0	0	0	0	2	1	0	3	10	9	1	3	0	29	78	84
18:00	0	0	0	0	0	2	1	1	0	2	4	1	3	3	1	18	77	90
19:00	0	0	0	0	1	0	0	1	0	1	4	0	6	1	1	15	80	89
20:00	0	0	0	0	0	0	0	0	2	0	0	2	0	0	1	5	77	81
21:00	0	0	0	0	0	2	0	2	1	1	1	1	1	2	1	12	74	90
22:00	0	0	0	0	0	0	0	0	0	2	0	0	0	1	1	4	82	94
23:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	85	85
Total	2	0	1	3	3	10	19	35	54	82	107	88	64	44	28	540		
Percent	0.4%	0.0%	0.2%	0.6%	0.6%	1.9%	3.5%	6.5%	10.0%	15.2%	19.8%	16.3%	11.9%	8.1%	5.2%			
AM Peak	11:00		11:00	10:00	10:00	09:00	08:00	08:00	09:00	09:00	10:00	10:00	09:00	10:00	08:00			
Vol.	1		1	2	1	2	2	3	8	11	14	11	8	4	2			
PM Peak	15:00			12:00	16:00	14:00	14:00	15:00	15:00	14:00	12:00	13:00	14:00	13:00	12:00			
Vol.	1			1	1	3	4	6	11	14	13	14	9	6	6			

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2752 Concession 8 Nottawasaga Rd

Date Start: 11-Jun-21
Date End: 13-Jun-21
Date Start: 11-Jun-21

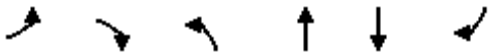
NB, SB

Start Time	1 29	30 34	35 39	40 44	45 49	50 54	55 59	60 64	65 69	70 74	75 79	80 84	85 89	90 94	95 9999	Total	Average (Mean)	85th Percent
06/13/2																		
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
06:00	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	84	85
07:00	0	0	0	0	**1**	0	0	0	1	1	2	0	0	0	1	6	72	76
08:00	0	0	0	0	0	0	0	0	2	3	3	1	3	1	1	14	80	87
09:00	0	0	0	0	1	**1**	**1**	**5**	2	2	1	**8**	**5**	2	0	28	75	87
10:00	0	0	0	**1**	0	1	0	3	**5**	**4**	3	7	2	**3**	1	30	75	88
11:00	0	0	0	0	1	1	1	2	5	1	**11**	8	5	2	**4**	41	78	89
12 PM	0	0	0	**1**	0	0	**2**	**5**	**6**	**13**	6	7	**8**	4	3	55	76	88
13:00	0	0	0	0	0	2	0	1	2	5	**11**	**9**	3	**5**	2	40	79	90
14:00	0	**1**	**1**	1	0	2	2	3	3	5	9	9	8	4	**4**	52	76	89
15:00	0	0	0	0	0	**3**	2	3	6	3	2	9	7	5	3	43	77	91
16:00	0	0	0	0	0	0	1	3	0	10	5	5	4	1	1	30	76	85
17:00	0	0	0	0	0	0	1	1	2	3	3	7	4	2	2	25	80	88
18:00	0	1	0	0	**1**	0	1	1	2	2	5	5	5	0	0	23	74	86
19:00	0	0	0	0	0	0	1	0	2	0	2	3	1	1	2	12	80	94
20:00	0	0	0	0	0	0	1	2	3	1	1	3	0	1	2	14	76	94
21:00	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	2	72	80
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	90	90
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
Total	0	2	1	3	4	10	13	29	42	53	64	83	56	32	26	418		
Percent	0.0%	0.5%	0.2%	0.7%	1.0%	2.4%	3.1%	6.9%	10.0%	12.7%	15.3%	19.9%	13.4%	7.7%	6.2%			
AM Peak				10:00	07:00	09:00	09:00	09:00	10:00	10:00	11:00	09:00	09:00	10:00	11:00			
Vol.				1	1	1	1	5	5	4	11	8	5	3	4			
PM Peak		14:00	14:00	12:00	18:00	15:00	12:00	12:00	12:00	12:00	13:00	13:00	12:00	13:00	14:00			
Vol.		1	1	1	1	3	2	5	6	13	11	9	8	5	4			
Total	3	2	2	7	12	25	43	95	137	198	252	236	179	126	80	1397		

	15th Percentile :	65 KPH
	50th Percentile :	78 KPH
	85th Percentile :	89 KPH
	95th Percentile :	118 KPH
Stats	10 KPH Pace Speed :	75-84 KPH
	Number in Pace :	488
	Percent in Pace :	34.9%
	Number of Vehicles > 60 KPH :	1284
	Percent of Vehicles > 60 KPH :	91.9%
	Mean Speed(Average) :	80 KPH

Attachment D

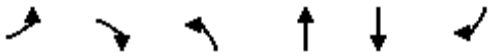
Detailed Capacity Analysis Worksheets



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	8	7	9	34	35	9
Future Volume (Veh/h)	8	7	9	34	35	9
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.85	0.73	0.92
Hourly flow rate (vph)	9	8	10	40	48	10
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	113	53	58			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	113	53	58			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	99	99	99			
cM capacity (veh/h)	883	1020	1559			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	17	50	58
Volume Left	9	10	0
Volume Right	8	0	10
cSH	942	1559	1700
Volume to Capacity	0.02	0.01	0.03
Queue Length 95th (m)	0.4	0.2	0.0
Control Delay (s)	8.9	1.5	0.0
Lane LOS	A	A	
Approach Delay (s)	8.9	1.5	0.0
Approach LOS	A		

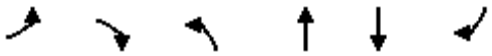
Intersection Summary			
Average Delay	1.8		
Intersection Capacity Utilization	19.0%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	13	13	8	37	20	9
Future Volume (Veh/h)	13	13	8	37	20	9
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.62	0.83	0.92
Hourly flow rate (vph)	14	14	9	60	24	10
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	107	29	34			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	107	29	34			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	98	99	99			
cM capacity (veh/h)	890	1052	1591			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	28	69	34
Volume Left	14	9	0
Volume Right	14	0	10
cSH	964	1591	1700
Volume to Capacity	0.03	0.01	0.02
Queue Length 95th (m)	0.7	0.1	0.0
Control Delay (s)	8.8	1.0	0.0
Lane LOS	A	A	
Approach Delay (s)	8.8	1.0	0.0
Approach LOS	A		

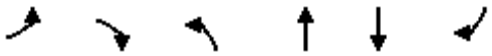
Intersection Summary			
Average Delay	2.4		
Intersection Capacity Utilization	18.8%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	11	10	12	34	35	13
Future Volume (Veh/h)	11	10	12	34	35	13
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.85	0.73	0.92
Hourly flow rate (vph)	12	11	13	40	48	14
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	121	55	62			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	121	55	62			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	99	99	99			
cM capacity (veh/h)	872	1018	1554			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	23	53	62
Volume Left	12	13	0
Volume Right	11	0	14
cSH	936	1554	1700
Volume to Capacity	0.02	0.01	0.04
Queue Length 95th (m)	0.6	0.2	0.0
Control Delay (s)	8.9	1.8	0.0
Lane LOS	A	A	
Approach Delay (s)	8.9	1.8	0.0
Approach LOS	A		

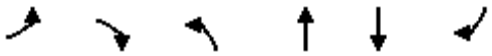
Intersection Summary			
Average Delay	2.2		
Intersection Capacity Utilization	19.1%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	17	17	11	37	20	10
Future Volume (Veh/h)	17	17	11	37	20	10
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.62	0.83	0.92
Hourly flow rate (vph)	18	18	12	60	24	11
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	114	30	35			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	114	30	35			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	98	98	99			
cM capacity (veh/h)	881	1051	1589			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	36	72	35
Volume Left	18	12	0
Volume Right	18	0	11
cSH	959	1589	1700
Volume to Capacity	0.04	0.01	0.02
Queue Length 95th (m)	0.9	0.2	0.0
Control Delay (s)	8.9	1.3	0.0
Lane LOS	A	A	
Approach Delay (s)	8.9	1.3	0.0
Approach LOS	A		

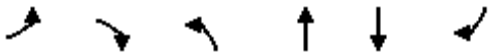
Intersection Summary			
Average Delay	2.9		
Intersection Capacity Utilization	19.2%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	13	13	25	34	35	25
Future Volume (Veh/h)	13	13	25	34	35	25
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.85	0.73	0.92
Hourly flow rate (vph)	14	14	27	40	48	27
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	156	62	75			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	156	62	75			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	98	99	98			
cM capacity (veh/h)	826	1009	1537			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	28	67	75
Volume Left	14	27	0
Volume Right	14	0	27
cSH	908	1537	1700
Volume to Capacity	0.03	0.02	0.04
Queue Length 95th (m)	0.8	0.4	0.0
Control Delay (s)	9.1	3.1	0.0
Lane LOS	A	A	
Approach Delay (s)	9.1	3.1	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	2.7		
Intersection Capacity Utilization	19.8%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	13	12	25	37	20	25
Future Volume (Veh/h)	13	12	25	37	20	25
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.62	0.83	0.92
Hourly flow rate (vph)	14	13	27	60	24	27
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	152	38	51			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	152	38	51			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	98	99	98			
cM capacity (veh/h)	830	1040	1568			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	27	87	51
Volume Left	14	27	0
Volume Right	13	0	27
cSH	920	1568	1700
Volume to Capacity	0.03	0.02	0.03
Queue Length 95th (m)	0.7	0.4	0.0
Control Delay (s)	9.0	2.4	0.0
Lane LOS	A	A	
Approach Delay (s)	9.0	2.4	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	2.7		
Intersection Capacity Utilization	20.0%	ICU Level of Service	A
Analysis Period (min)	15		

Attachment E

TAC GDGCR Excerpts

2.5.2.1 Object Height

In calculating sight distance, the designer must consider the type of object that is likely to be encountered on the roadway, which a driver will have to avoid by stopping or maneuvering. Because of the potential variation in object type, selection of object height has significantly more impact on sight distance requirements than, for example, driver eye height.

Table 2.5.1 presents commonly used object heights for various design scenarios.

Table 2.5.1: Object Height Design Domain

Object Height (m)	Applicability
0.00	Stopping sight distance for: • Risk of road washouts • Pavement markings in critical locations
0.15	Stopping sight distance for: • Risk of fallen trees or rocks • Risk of log or construction debris fallen from truck • Risk of fallen person Decision sight distance for most applications (see **Section 2.5.5**)
0.38	Stopping sight distance for: • Vehicle tail or brake light from 1999 TAC *Geometric Design Guide for Canadian Roads* • This value can be used if a more conservative approach is required.
0.60	Stopping sight distance for: • Vehicle tail or brake light • Research indicates that 95% of tail light heights and 90% of headlight heights exceed this value. • This value has been used in this guide to determine stopping sight distance requirements outlined in Tables 2.5.2 and 2.5.3
1.30	Passing sight distance for: • Top of car*

* Note: Some jurisdictions use an object height of 1.15 m for the top of a car, based on the premise that a driver needs to see at least 150 mm of the vehicle to discern its presence. This is supported by a study of driver visual capabilities which suggested that a high contrast object 150 mm high is the minimum height **detectable** at AASHTO stopping sight distances, and that drivers do not have the capability to **recognize** objects that are less than 300 mm in height, regardless of contrast, at or beyond minimum stopping sight distances.[51] This practice is not widely used.

In applying object heights less than 0.15 m the following points should be considered.

- The frequency of collisions occurring as a result of vehicles striking objects less than 0.15 m in height has been shown to be very low.[52]
- As discussed above, a driver's ability to discern small objects at a distance is limited.
- In general, a driver must see at least the top 0.15 m of an object in order to detect its presence.
- If such an object is of limited lateral size (e.g., a rock) a driver may well be able to take evasive action rather than stop, particularly on a roadway with low traffic volumes.
- Evasion might not be possible if the object were a fallen tree, but in many parts of the country this is an unlikely hazard since trees are not present or because local jurisdictions do not allow trees to remain close to the roadway. In areas where logging trucks are present, the designer should consider the possibility of a log falling onto the roadway from a truck.

The designer should adopt an object height based on the probability of a particular object occurring on the roadway, as shown on **Table 2.5.1**. If fallen trees or rocks are a real risk, an object height of 0.15 m is recommended. Otherwise, for stopping sight distance, a tail light height of 0.60 m is recommended. For passing sight distance, an object height of 1.30 m will allow the driver to discern the top of an oncoming typical car. A zero object height is recommended where road washouts are a serious risk, for example on approaches to bridges and culverts in mountainous areas. It is only recommended for pavement markings in critical situations such as at intersections or interchanges, as the driver's ability to discern the markings cannot be relied upon, and traffic signs should be used instead.

2.5.2.2 Deceleration Rate

Approximately 90 percent of all drivers decelerate at rates greater than 3.4 m/s^2. Such deceleration is within a driver's capability to stay within their lane and maintain steering control during the braking maneuver on wet surfaces. Therefore 3.4 m/s^2 is a comfortable deceleration for most drivers and is recommended as the deceleration threshold for determining stopping sight distance.[53]

Most vehicle braking systems and the tire-pavement friction levels of most roadways are capable of providing a deceleration rate of at least 3.4 m/s^2. Also, the friction available on most wet pavement surfaces and the capabilities of most vehicle braking systems can provide braking friction that exceeds this deceleration rate.

2.5.3 STOPPING SIGHT DISTANCE

Braking distance is the distance that it takes to stop a vehicle once the brakes have been applied. On a level roadway this distance can be determined using the following formula:

$$d_b = 0.039 \frac{V^2}{a} \qquad (2.5.1)$$

Where:

d_b = Braking distance (m)
V = Design speed (km/h)
a = Deceleration rate (m/s^2)

Stopping sight distance is the sum of the distance travelled during the perception and reaction time and the braking distance.

$$SSD = 0.278Vt + 0.039 \frac{V^2}{a} \quad (2.5.2)$$

Where:

SSD = Stopping sight distance (m)
t = Brake reaction time, 2.5 s
V = Design speed (km/h)
a = Deceleration rate (m/s^2)

Table 2.5.2 gives the minimum stopping sight distances on level grade, on wet pavement, for a range of design speeds. These values are used for vertical curve design, intersection geometry and the placement of traffic control devices. The stopping sight distances quoted in **Table 2.5.2** may need to be increased for a variety of reasons related to grade and vehicle type as noted below.

Table 2.5.2: Stopping Sight Distance on level roadways for Automobiles[54]

Design speed (km/h)	Brake reaction distance (m)	Braking distance on level (m)	Stopping sight distance	
			Calculated (m)	Design (m)
20	13.9	4.6	18.5	20
30	20.9	10.3	31.2	35
40	27.8	18.4	46.2	50
50	34.8	28.7	63.5	65
60	41.7	41.3	83.0	85
70	48.7	56.2	104.9	105
80	55.6	73.4	129.0	130
90	62.6	92.9	155.5	160
100	69.5	114.7	184.2	185
110	76.5	138.8	215.3	220
120	83.4	165.2	248.6	250
130	90.4	193.8	284.2	285

Note: Brake reaction distance predicated on a time of 2.5 s; deceleration rate of 3.4 m/s^2 used to determine calculated sight distance.

The Effect of Grade

Braking distances will increase on downgrades and decrease on upgrades. When the roadway is on a grade, formula 2.5.1 for braking distance is modified as follows:

$$d_b = \frac{V^2}{254\,[(a/9.81) + G]} \quad (2.5.3)$$

Where:

d_b = Braking distance (m)
V = Design speed (km/h)
a = Deceleration rate (m/s^2)
G = Grade (m/m) (G is positive if vehicles uphill and negative if downhill)

The minimum sight distance criterion for vehicles approaching an intersection, or travelling along a turning roadway, is stopping sight distance based on design speed. However, due to the relatively complex situations that drivers often encounter at intersections, it is desirable to provide more than the minimum stopping sight distance to enhance safety.

Providing decision sight distance is desirable wherever feasible, and is particularly desirable in advance of the critical intersection decision points. These include locations where drivers must make instantaneous decisions, where information and potential conflicts are difficult to perceive, and where unexpected maneuvers may be required. Values for stopping sight distance and for decision sight distance for different design vehicles over a range of design speeds are provided in **Chapter 2**.

Intersection sight distance is defined as the sight distance available from a point where vehicles are required to stop on the intersecting road, while drivers are looking left and right along the major roadway, before entering the intersection. The intersection sight distance is adequate when it allows the design vehicles to safely make all the maneuvers that are permitted by the layout (e.g., left turns, right turns, through moves), without significantly affecting vehicles travelling on the main roadway, as is described in further detail throughout this section.

Intersection sight distance is also a function of design vehicles. The design vehicle is typically defined as a vehicle that uses a given intersection daily or on a regular basis. It does not include a vehicle that may occur irregularly. As a result, very large vehicles such as long combination vehicles (LCVs) are rarely used as design vehicles. However, LCVs may be selected as design vehicles for some western Canadian highways, where they are common. In such a case, the designer must keep in mind that LCVs require more time than smaller vehicles to execute a turn or crossing maneuver, and therefore require more sight distance. Data for regionally-specific vehicles should be developed by the affected road authority to complement guidelines presented in this Guide.

For a discussion on sight distance considerations for pedestrians and cyclists at intersections, refer to **Chapter 6** and **Chapter 5** respectively.

9.9 AASHTO INTERSECTION SIGHT DISTANCE MODEL

9.9.1 PREFACE

This section presents the methodology for determining intersection sight distance requirements. This methodology reflects the most current North American approach adopted by AASHTO and is thoroughly grounded in research and technical analysis. In preparing this section on intersection sight distance, the gap acceptance methodology outlined in AASHTO's *Policy on Geometric Design of Highways and Streets*, 6th Edition, 2011 was adopted. The text in this section has been adapted, and in some cases used verbatim, from this AASHTO document.

9.9.2 SIGHT TRIANGLES

Specified areas along intersection approach legs and across their included corners should be clear of obstructions that might block a driver's view of potentially conflicting vehicles. These specified areas are known as clear sight triangles. The dimensions of the legs of the sight triangles depend on the design speeds of the intersecting roadways and the type of traffic control used at the intersection. These dimensions are based on observed driver behaviour and are documented by space-time profiles and speed choices of drivers on intersection approaches.[65] Two types of clear sight triangles are considered in intersection design: approach sight triangles and departure sight triangles.

9.9.2.1 Approach Sight Triangles

Each quadrant of an intersection should contain a triangular area free of obstructions that might block an approaching driver's view of potentially conflicting vehicles. The length of the legs of this triangular area, along both intersecting roadways, should be such that the drivers can see any potentially conflicting vehicles in both the horizontal and vertical plane in sufficient time to slow or stop before colliding within the intersection. **Figure 9.9.1** shows typical clear sight triangles to the left and to the right for a vehicle approaching an uncontrolled or yield-controlled intersection.

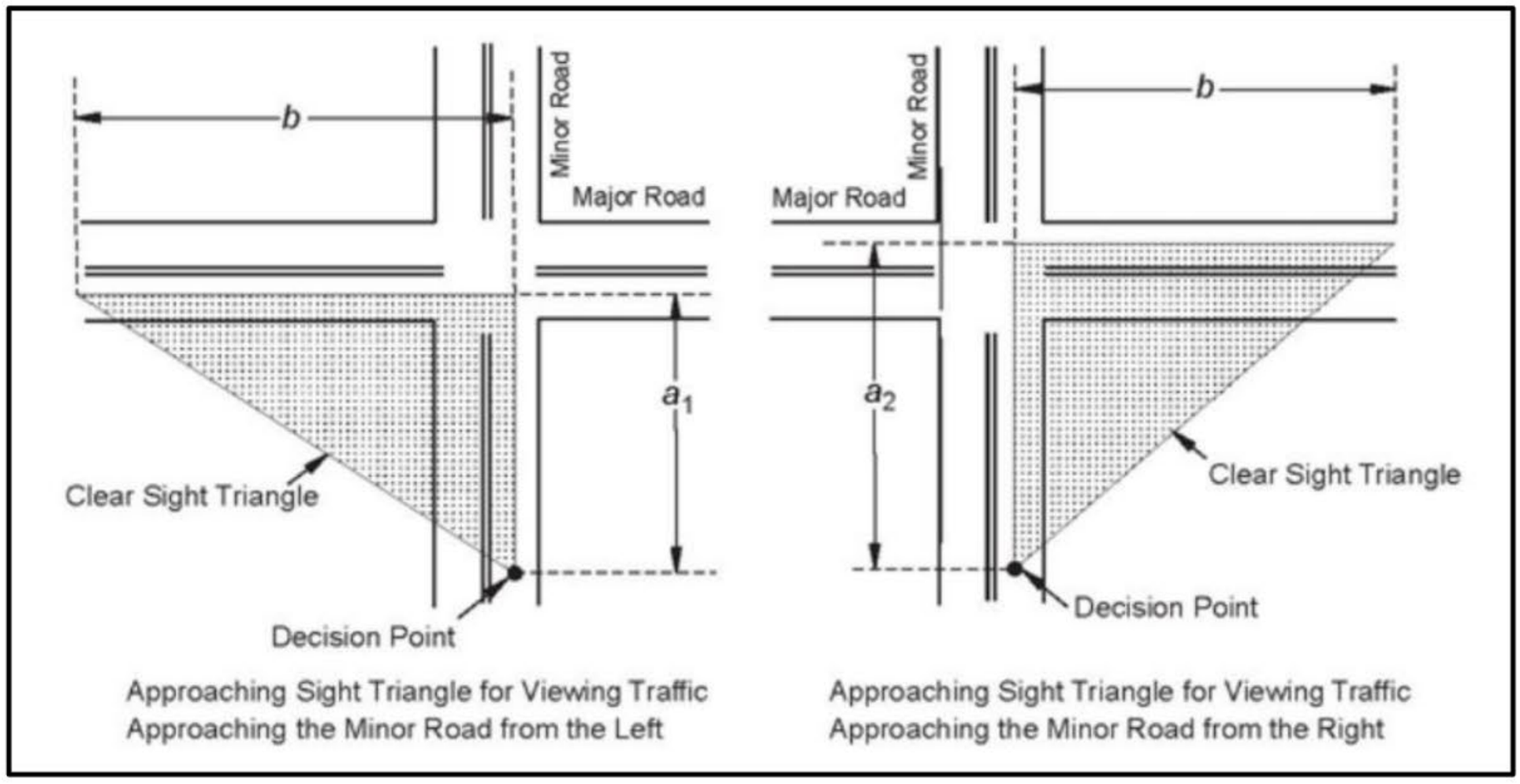


Figure 9.9.1: Approach Sight Triangle (Uncontrolled or Yield-Controlled)

The vertex of the sight triangle on a minor-road approach (or an uncontrolled approach) represents the decision point for the minor-road driver (see **Figure 9.9.1**). This decision point is the location at which the minor-road driver should begin to brake to a stop if another vehicle is present on an intersecting approach. The distance from the major road, along the minor road, is illustrated by the distance a_1 to the left and a_2 to the right. Distance a_2 is equal to distance a_1 plus the width of the lane(s) departing from the intersection on the major road to the right. Distance a_2 should also include the width of any median present on the major road unless the median is wide enough to permit a vehicle to stop before entering or crossing the roadway beyond the median.

The geometry of a clear sight triangle is such that when the driver of a vehicle without the right-of-way sees a vehicle that has the right-of-way on an intersecting approach, the driver of that potentially conflicting vehicle can also see the first vehicle. Distance b illustrates the length of this leg of the sight triangle. Thus, providing a clear sight triangle for vehicles without the right-of-way also allows the drivers of vehicles with the right-of-way to slow, stop, or avoid other vehicles if necessary.

Although desirable at higher volume intersections, approach sight triangles like those shown in **Figure 9.9.1** may not be needed for intersection approaches controlled by stop signs or traffic signals. In that case, the need for approaching vehicles to stop at the intersection is determined by the traffic control devices and not by the presence or absence of vehicles on the intersecting approaches.

9.9.2.2 Departure Sight Triangles

A second type of clear sight triangle provides sight distance sufficient for a stopped driver on a minor-road approach to depart from the intersection and enter or cross the major road. **Figure 9.9.2** shows typical departure sight triangles to the left and to the right of the location of a stopped vehicle on the minor road.

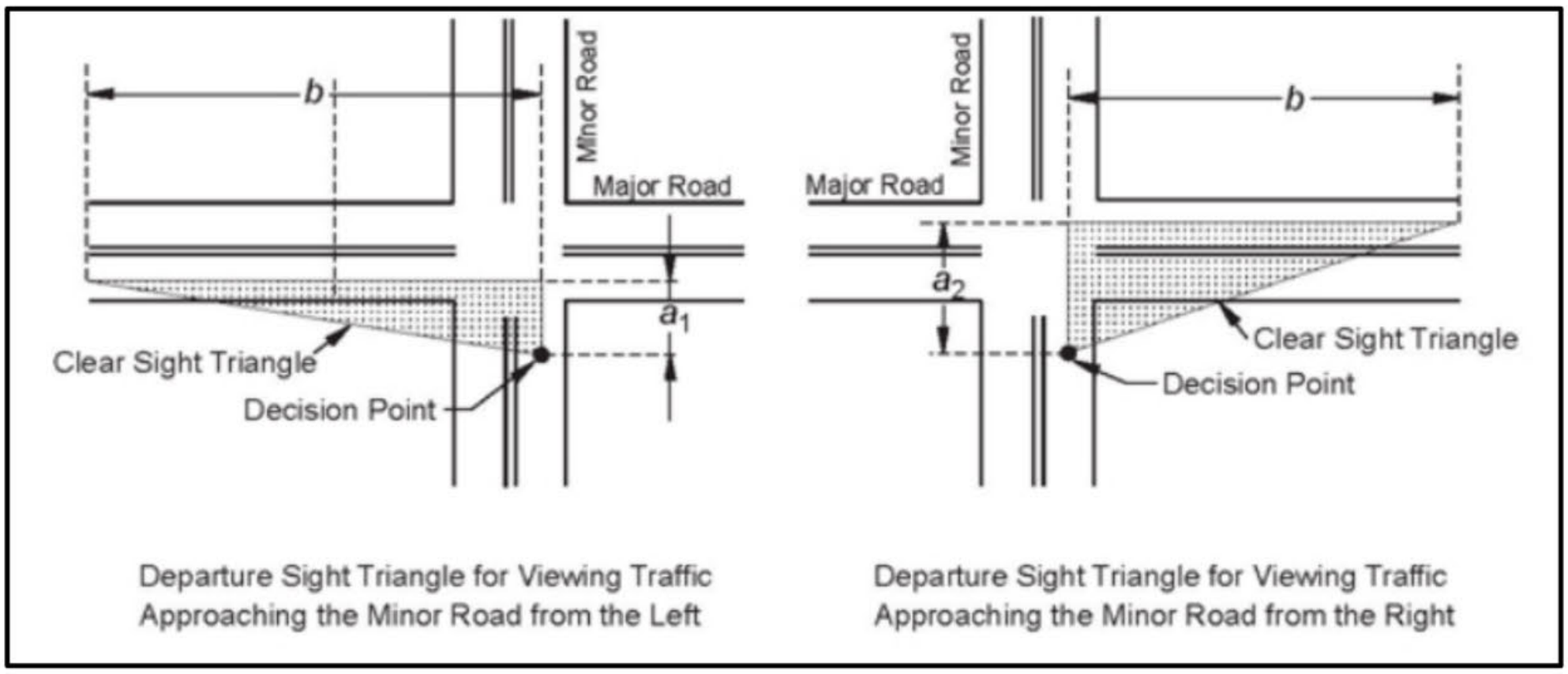


Figure 9.9.2: Departure Sight Triangles (Stop-Controlled)

Departure sight triangles should be provided in each quadrant of each intersection approach controlled by stop or yield signs. Departure sight triangles should also be provided for some signalized intersection approaches. Distance a_2 in **Figure 9.9.2** is equal to distance a_1 plus the width of the lane(s) departing from the intersection on the major road to the right. Distance a_2 should also include the width of any median present on the major road, unless the median is wide enough to permit a vehicle to stop before entering or crossing the roadway beyond the median. The appropriate measurement of distances a_1 and a_2 for departure sight triangles depends on the placement of any marked stop line that may be present and may therefore vary with site-specific conditions.

The recommended dimensions of the clear sight triangle for desirable traffic operations where stopped vehicles enter or cross a major road are based on assumptions derived from field observations of driver gap-acceptance behaviour.[66] Providing clear sight triangles like those shown in **Figure 9.9.2** also allows the drivers of vehicles on the major road to see any vehicles stopped on the minor-road approach and to be prepared to slow or stop, if needed.

9.9.2.3 Intersection Control

The recommended dimensions of the sight triangles vary with the type of traffic control used at an intersection because different types of control impose different legal constraints on drivers and, therefore, result in different driver behaviour. Procedures to determine sight distances at intersections are presented below, according to different types of traffic control, as follows:

- Case A – Intersections with no control
- Case B – Intersections with stop control on the minor road

- Case B1 – Left turn from the minor road
- Case B2 – Right turn from the minor road
- Case B3 – Crossing maneuver from the minor road
- Case C – Intersections with yield control on the minor road
- Case C1 – Crossing maneuver from the minor road
- Case C2 – Left or right turn from the minor road
- Case D – Intersections with traffic signal control
- Case E – Intersections with all-way stop control
- Case F – Left turns from the major road

Case A – Intersections with No Control

For intersections not controlled by yield signs, stop signs, or traffic signals, the driver of a vehicle approaching an intersection should be able to see potentially conflicting vehicles in sufficient time to stop before reaching the intersection. The location of the decision point (driver's eye) of the sight triangles on each approach is determined from a model that is analogous to the stopping sight distance model, with slightly different assumptions.

While some perceptual tasks at intersections may need substantially less time, the detection and recognition of a vehicle that is a substantial distance away on an intersecting approach, and is near the limits of the driver's peripheral vision, may take up to 2.5 s. The distance to brake to a stop can be determined from the same braking coefficients used to determine the stopping sight distance in **Table 2.5.2** (see Section 2.5 of this Guide).

Field observations indicate that vehicles approaching uncontrolled intersections typically slow to approximately 50% of their mid-block running speed. This occurs even when no potentially conflicting vehicles are present.[67] This initial slowing typically occurs at deceleration rates up to 1.5 m/s^2. Deceleration at this gradual rate has been observed to begin even before a potentially conflicting vehicle comes into view. Braking at greater deceleration rates, which can approach those assumed in stopping sight distance, can begin up to 2.5 s after a vehicle on the intersecting approach comes into view. Thus, approaching vehicles may be traveling at less than their mid-block running speed during all or part of the perception-reaction time and can, therefore, where needed, brake to a stop from a speed less than the mid-block running speed.

Table 9.9.1 shows the distance traveled by an approaching vehicle during perception-reaction and braking time, as a function of the design speed of the roadway on which the intersection approach is located. These distances should be used as the legs of the sight triangles shown in **Figure 9.9.1** as dimensions a_1 and b. Distance a_2 is longer than distance a_1, as defined in **Section 9.2.1**. Referring to **Figure 9.9.1**, a major roadway with an assumed design speed of 80 km/h and a minor roadway with an assumed design speed of 50 km/h needs a clear sight triangle with legs extending at least 75 m and 45 m along the major and minor roadways, respectively.

Table 9.9.1: Length of Sight Triangle Leg – Case A, No Traffic Control

Design Speed	Length of Leg (m)
20	20
30	25
40	35
50	45
60	55
70	65
80	75
90	90
100	105
110	120
120	135
130	150

Where the grade along an intersection approach exceeds 3%, the leg of the clear sight triangle along that approach should be adjusted by multiplying the appropriate sight distance from **Table 9.9.1** by the appropriate adjustment factor from **Table 9.9.2**.

Table 9.9.2: Adjustment Factors for Sight Distance Based on Approach Grade

Approach Grade (%)	Design Speed (km/h)													
	20	30	40	50	60	70	80	90	100	110	120	130	—	—
-6	1.1	1.1	1.1	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.2	—	—
-5	1.0	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.2	1.2	1.2	—	—
-4	1.0	1.0	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	—	—
-3 to +3	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	—	—
+4	1.0	1.0	1.0	1.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	—	—
+5	1.0	1.0	1.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	—	—
+6	1.0	1.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	—	—

The departure sight triangle like that shown in **Figure 9.9.2** is typically not needed at an uncontrolled intersection since these intersections typically have very low traffic volumes. If a motorist needs to stop at an uncontrolled intersection because of a conflicting vehicle on an intersecting approach, it is very unlikely another potentially conflicting vehicle will be encountered as the first vehicle departs the intersection.

This clear triangular area will allow the vehicles on either road to stop, if needed, before reaching the intersection. If the design speed of any approach is not known, it can be estimated by using the 85th percentile of the mid-block running speeds for that approach.

The distances shown in **Table 9.9.1** are generally less than the corresponding values of stopping sight distance for the same design speed. This relationship is illustrated in **Figure 9.9.3**. Where a clear sight triangle has legs that correspond to the stopping sight distances on their respective approaches, an even greater margin of efficient operation is provided. However, since field observations show that motorists slow down to some extent on approaches to uncontrolled intersections, it is not essential to provide a clear sight triangle with legs equal to the full stopping sight distance.

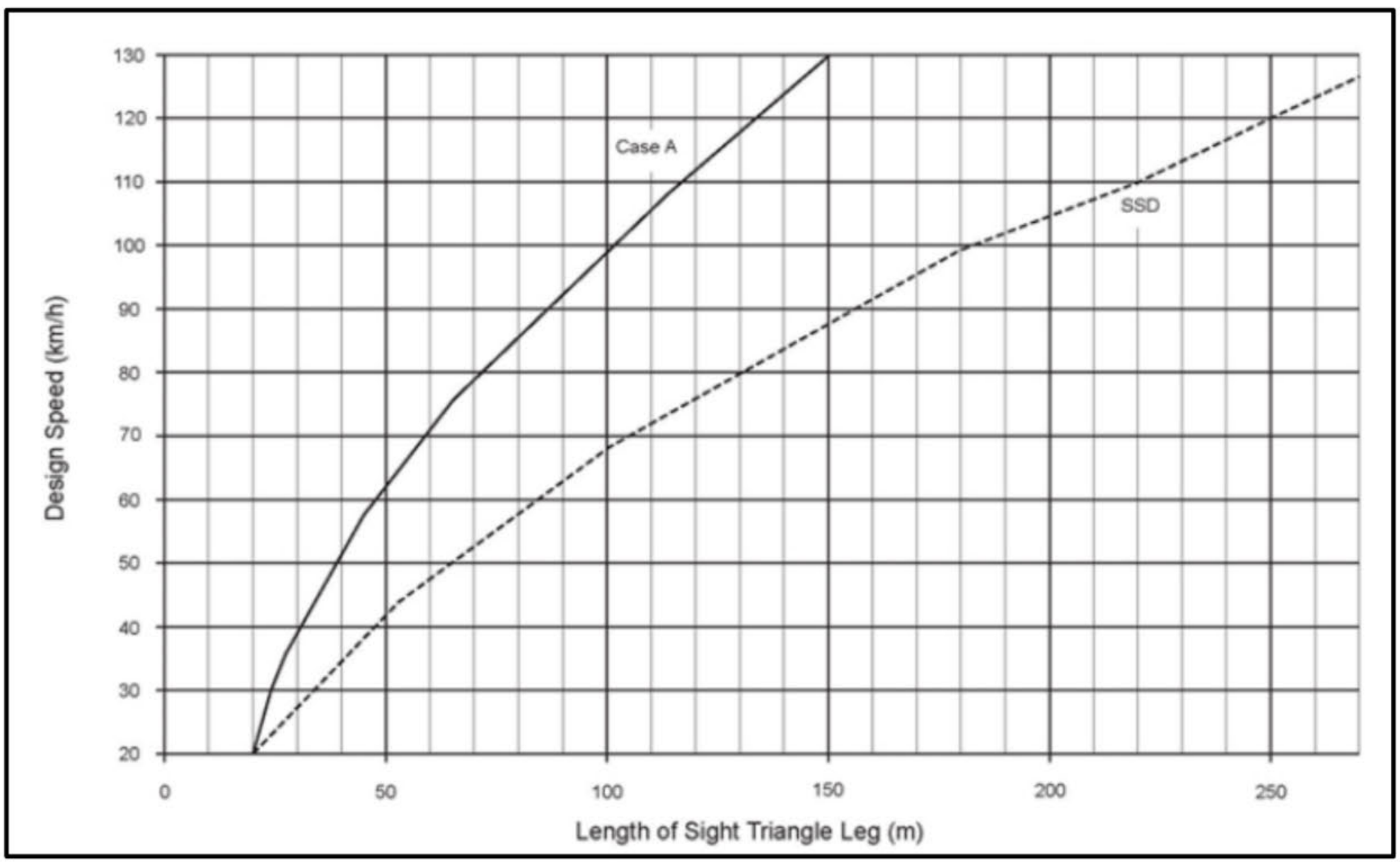


Figure 9.9.3: Length of Sight Triangle Leg – Case A, No Traffic Control

Case B – Intersections with Stop Control on the Minor Road

Departure sight triangles for intersections with stop control on the minor road should be considered for three situations:

- Case B1 – Left turns from the minor road
- Case B2 – Right turns from the minor road
- Case B3 – Crossing the major road from a minor-road approach

Intersection sight distance criteria for stop-controlled intersections are longer than the minimum stopping sight distance to allow the intersection to operate smoothly. Minor-road vehicle operators can wait until they can proceed safely without forcing a major-road vehicle to slow to less than 70% of their initial speed.

Case B1 – Left Turn from the Minor Road

Departure sight triangles for traffic approaching from either the right or the left, like those shown in **Figure 9.9.2**, should be provided for left turns from the minor road onto the major road for all stop-controlled approaches. The length of the leg of the departure sight triangle along the major road in both directions, shown as distance b in **Figure 9.9.2**, is the recommended intersection sight distance for Case B1.

The vertex (decision point) of the departure sight triangle on the minor road should be 4.4 m from the edge of the major-road traveled way. This represents the typical position of the minor-road driver's eye when a vehicle is stopped relatively close to the major road. Field observations of vehicle stopping positions found that, where needed, drivers will stop with the front of their vehicle 2.0 m or less from the edge of the major-road traveled way. Measurements of passenger cars indicate that the distance from the front of the vehicle to the driver's eye for the current North American passenger car population is nearly always 2.4 m or less.[68] Where practical, it is desirable to increase the distance from the edge of the major-road traveled way to the vertex of the clear sight triangle from 4.4 m to 5.4 m. This increase allows 3.0 m from the edge of the major-road traveled way to the front of the stopped vehicle, providing a larger sight triangle. The length of the sight triangle along the minor road (distance a in **Figure 9.9.2**) is the sum of the distance from the major road plus ½ lane width for vehicles approaching from the left, or 1½ lane widths for vehicles approaching from the right.

Field observations of the gaps in major-road traffic actually accepted by drivers turning onto the major road have shown that the values in **Table 9.9.3** provide sufficient time for the minor-road vehicle to accelerate from a stop and complete a left turn without unduly interfering with major-road traffic operations. The time gap acceptance time does not vary with approach speed on the major road. A constant value of time gap, independent of approach speed, can be used as a basis for intersection sight distance determinations. Observations have also shown that major-road drivers will reduce their speed to some extent when minor-road vehicles turn onto the major road. Where the time gap acceptance values in **Table 9.9.3** are used to determine the length of the leg of the departure sight triangle, most major-road drivers should not need to reduce speed to less than 70% of their initial speed.[69]

The intersection sight distance in both directions should be equal to the distance traveled at the design speed of the major road during a period of time equal to the time gap. In applying **Table 9.9.3**, it can usually be assumed that the minor-road vehicle is a passenger car; however, road authorities may provide more precise guidance on selection of the required design vehicle. Where substantial volumes of heavy vehicles enter the major road (e.g., from a ramp terminal), the use of tabulated values for single-unit or combination trucks should be considered.

Table 9.9.3 includes appropriate adjustments to the gap times for the number of lanes on the major road and for the approach grade of the minor road. The adjustment for the grade of the minor-road approach is needed only if the rear wheels of the design vehicle would be on an upgrade that exceeds 3% when the vehicle is at the stop line of the minor-road approach.

Table 9.9.3: Time Gap for Case B1, Left Turn from Stop

Design Vehicle	Time Gap (t_g)(s) at Design Speed of Major Road
Passenger car	7.5
Single-unit truck	9.5
Combination truck (WB 19 and WB 20)	11.5
Longer truck	To be established by road authority

Notes: Time gaps are for a stopped vehicle to turn left onto a two-lane highway with no median and with grades of 3% or less. The table values should be adjusted as follows:

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- For multi-lane highways: For left turns onto highways with more than a single lane in each direction, add 0.5 s for passenger cars and 0.7 s for trucks for each additional lane, from the left, in excess of one, to be crossed by the turning vehicle.
- For minor approach grades: If the approach grade is an upgrade that exceeds 3%, add 0.2 s for each percent grade for left turns.
- Some road authorities use higher values for certain specialized vehicles (e.g., Alberta uses 22 s for very long log trucks).

The intersection sight distance along the major road (distance b in **Figure 9.9.2**) is determined by:

$$ISD = 0.278\ V_{major}\ t_g \qquad (9.9.1)$$

Where:

ISD = intersection sight distance (length of the leg of sight triangle along the major road) (m)
V_{major} = design speed of the major road (km/h)
t_g = time gap for minor road vehicle to enter the major road (s)

For example, a passenger car turning left onto a two-lane major road should be provided sight distance equivalent to a time gap of 7.5 s in major-road traffic. If the design speed of the major road is 100 km/h, this corresponds to a sight distance of 0.278(100)(7.5) = 208.5 or 210 m, rounded for design.

A passenger car turning left onto a four-lane undivided roadway will need to cross two near lanes, rather than one. This increases the recommended gap in major-road traffic from 7.5 to 8.0 s. The corresponding value of sight distance for this example would be 223 m. If the minor-road approach to such an intersection is located on a 4% upgrade, then the time gap selected for intersection sight distance design for left turns should be increased from 8.0 to 8.8 s, equivalent to an increase of 0.2 s for each percent grade.

The design values for intersection sight distance for passenger cars are shown in **Table 9.9.4**. **Figure 9.9.4** includes design values, based on the time gaps for the design vehicles included in **Table 9.9.3**.

No adjustment of the recommended sight distance values for the major-road grade is generally needed because both the major- and minor-road vehicle will be on the same grade when departing from the intersection. However, if the minor-road design vehicle is a heavy truck and the intersection is located near a sag vertical curve with grades over 3%, then an adjustment to extend the recommended sight distance based on the major-road grade should be considered.

Table 9.9.4: Design Intersection Sight Distance – Case B1, Left Turn From Stop

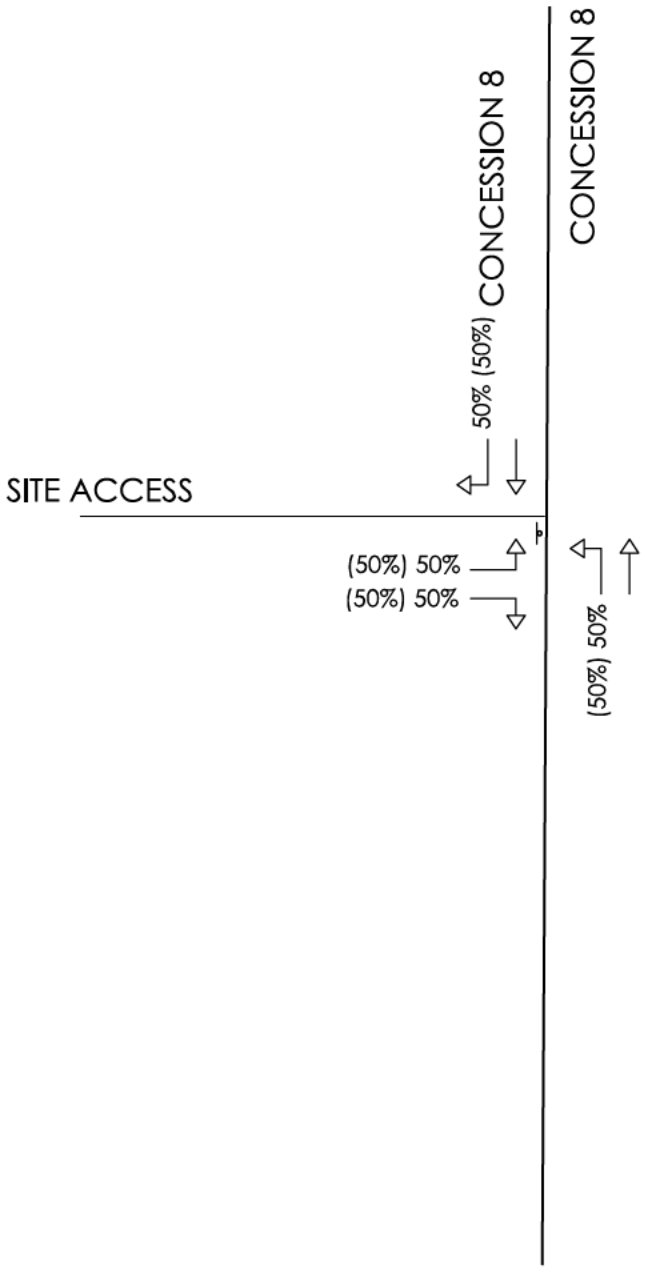
Design Speed (km/h)	Stopping Sight Distance (m)	Intersection Sight Distance for Passenger Cars	
		Calculated (m)	Design (m)
20	20	41.7	45
30	35	62.6	65
40	50	83.4	85
50	65	104.3	105
60	85	125.1	130
70	105	146.0	150
80	130	166.8	170
90	160	187.7	190
100	185	208.5	210
110	220	229.4	230
120	250	250.2	255
130	285	271.1	275

Note: Intersection sight distance shown is for a stopped passenger car to turn left onto a two-lane highway with no median and grades 3% or less. For other conditions, the time gap should be adjusted and the sight distance recalculated.

Sight distance design for left turns at divided-highway intersections should consider multiple design vehicles and median width. If the design vehicle used to determine sight distance for a divided-highway intersection is larger than a passenger car, then sight distance for left turns will need to be checked for that selected design vehicle and for smaller design vehicles as well. If the divided-highway median is wide enough to store the design vehicle with a clearance to the through lanes of approximately 1 m at both ends of the vehicle, no separate analysis for the departure sight triangle for left turns is needed on the minor-road approach for the near roadway to the left. In most cases, the departure sight triangle for right turns (case B2) will provide sufficient sight distance for a passenger car to cross the near roadway to reach the median. Possible exceptions are addressed in the discussion of case B3.

Figures

NOTE:
THIS FIGURE IS SCHEMATIC ONLY AND IS NOT TO BE SCALED.



LEGEND:

ϕ	STOP CONTROL
##(##)	WEEKEND SAT(SUN) PEAK HOUR VOLUMES

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TRIP DISTRIBUTION

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WWW.CFCROZIER.CA
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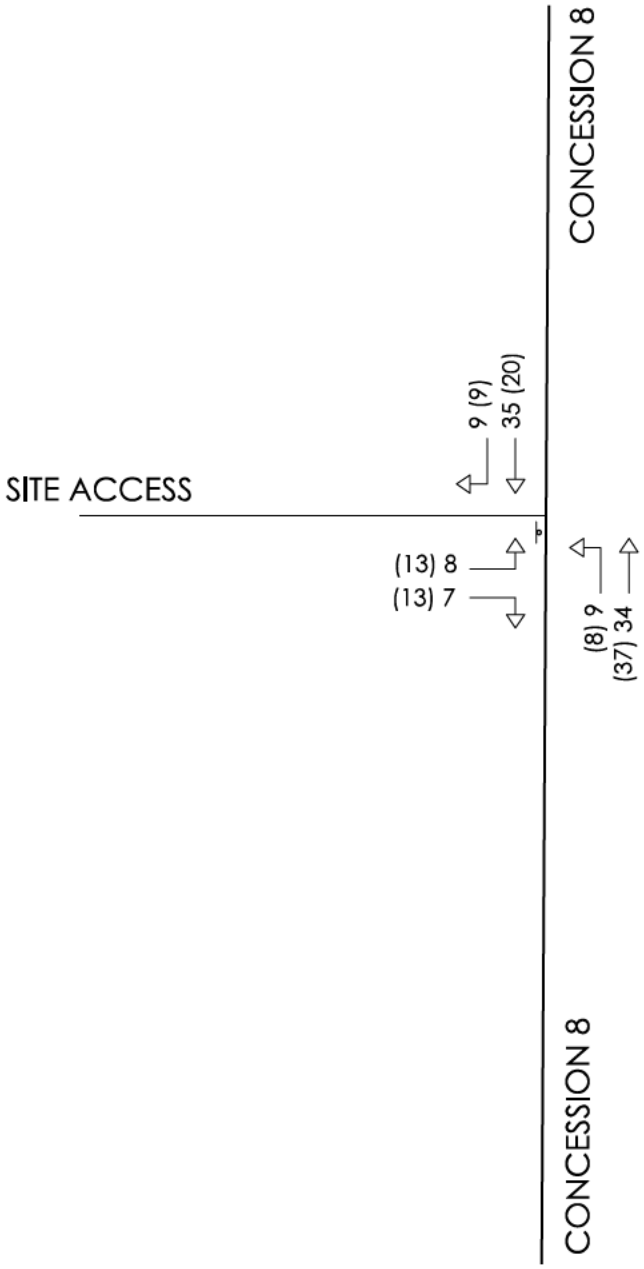
Drawn	Design	Project No.	
K.H.	K.H.		2082-5959
Date	Check	Scale	Dwg.
2021/06/09	K.H.	N.T.S	FIG. 1

NOTE:
THIS FIGURE IS SCHEMATIC ONLY AND IS NOT TO BE SCALED.



LEGEND:

	STOP CONTROL
##(##)	WEEKEND SAT(SUN) PEAK HOUR VOLUMES

N

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Date	Check	Scale	Dwg.
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NOTE:
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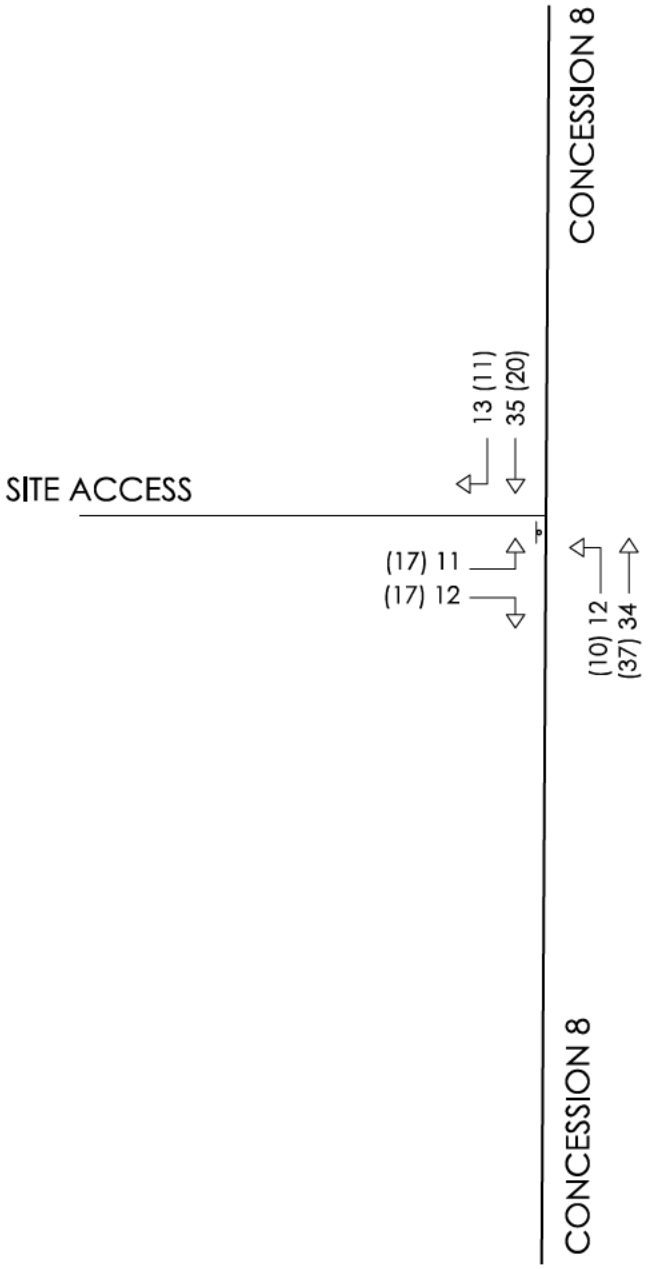

LEGEND:

STOP CONTROL

##(##) WEEKEND SAT(SUN) PEAK HOUR VOLUMES

N

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Date	Check	Scale	Dwg.
2021/06/09	K.H.	N.T.S	FIG. 3

NOTE:
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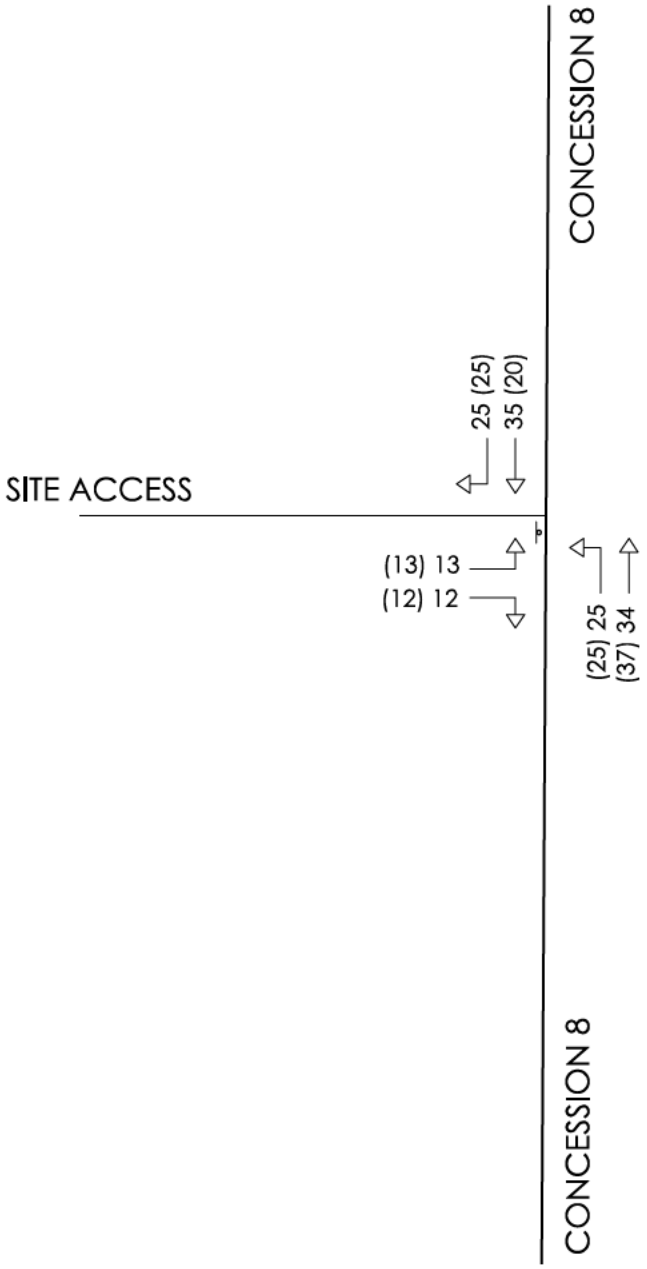

LEGEND:

	STOP CONTROL
##(##)	WEEKEND SAT(SUN) PEAK HOUR VOLUMES

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Date	Check	Scale	Dwg.
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