

**For Office Use Only:**

File Number 2NPL2024044  
Related File Number —  
Pre-consultation Meeting July 19, 2023  
Application Submitted Feb 5, 2024  
Complete Application Feb 9, 2024

Public Notice Sign  
Application Fee \$12,178.00  
Conservation Authority Fee Yes - applicable  
Well & Septic Info Provided Yes - OSSE Future (consent)  
Planner Hanne Yager

**Check the type of planning application(s) you are submitting.**

- ☐ Official Plan Amendment
- ☒ Zoning By-Law Amendment
- ☐ Temporary Use By-law
- ☐ Draft Plan of Subdivision/Vacant Land Condominium
- ☐ Condominium Exemption
- ☐ Site Plan Application
- ☐ Extension of a Temporary Use By-law
- ☐ Part Lot Control
- ☐ Cash-in-Lieu of Parking
- ☐ Renewable Energy Project or Radio Communication Tower

Please summarize the desired result of this application (for example, a special zoning provision on the subject lands to include additional use(s), changing the zone or official plan designation of the subject lands, creating a certain number of lots, or similar)

This application will change the zoning of two parcels within the Hamlet that are currently zoned Agriculture. The resulting Hamlet Residential zoning will allow for 2 lots to be severed along with a small piece to be added to an existing lot. As requested a Geotechnical Report was prepared in support of the two lots being slightly less than 1 ac. each. The final result will be 2 lots, one with an existing house, the other lot being vacant.

Property Assessment Roll Number: 336 070 19000

**A. Applicant Information**

**Name of Owner**

2716452 Ontario Limited

**Address**

1449 Windham Road 11

**Town and Postal Code**

Windham Centre, On, N0E2A0

**Phone Number**

519-426-8673

**Cell Number**

-

**Email**

-

**Name of Applicant**

Same as above

**Address**

**Town and Postal Code**

**Phone Number**

**Cell Number**

**Email**

**Name of Agent**

R. C. Dixon, O.L.S.

**Address**

277 Emily St.

**Town and Postal Code**

Simcoe, On N3Y1J5

**Phone Number**

**Cell Number**

519-410-1632

**Email**

dixonr@amtelecom.net

Unless otherwise directed, Norfolk County will forward all correspondence and notices regarding this application to both owner and agent noted above.

☐ Owner

☒ Agent

☐ Applicant

Names and addresses of any holder of any mortgagees, charges or other encumbrances on the subject lands:



**B. Location, Legal Description and Property Information**

1. Legal Description (include Geographic Township, Concession Number, Lot Number, Block Number and Urban Area or Hamlet):

Parts of Lot 3 Concession 12 - Township of Townsend  
Hamlet of Bloomsburg (show as Parts 1, 2 and 3 on photo plans)

Municipal Civic Address: 196 County Road 24 / Old Hwy. 24

Present Official Plan Designation(s): Hamlet

Present Zoning: Agriculture

2. Is there a special provision or site specific zone on the subject lands?

☐ Yes ☒ No If yes, please specify corresponding number:

3. Present use of the subject lands:

Residential and farm yard.

4. Please describe **all existing** buildings or structures on the subject lands and whether they will be retained, demolished or removed. If retaining the buildings or structures, please describe the type of buildings or structures, and illustrate the setback, in metric units, from the front, rear and side lot lines, ground floor area, gross floor area, lot coverage, number of storeys, width, length, and height on your attached sketch which must be included with your application:

see attached survey plans

5. If an addition to an existing building is being proposed, please explain what it will be used for (for example: bedroom, kitchen, or bathroom). If new fixtures are proposed, please describe.

6. Please describe **all proposed** buildings or structures/additions on the subject lands. Describe the type of buildings or structures/additions, and illustrate the setback, in metric units, from front, rear and side lot lines, ground floor area, gross floor area, lot coverage, number of storeys, width, length, and height on your attached sketch which must be included with your application:

undefined single family dwelling.

7. Are any existing buildings on the subject lands designated under the *Ontario Heritage Act* as being architecturally and/or historically significant? Yes ☐ No ☒

If yes, identify and provide details of the building:

\_\_\_\_\_

8. If known, the length of time the existing uses have continued on the subject lands:

50 + years

9. Existing use of abutting properties:

residential and agriculture

10. Are there any easements or restrictive covenants affecting the subject lands?

☐ Yes ☐ No If yes, describe the easement or restrictive covenant and its effect:

existing easements for hydro and gas at front (see plans)

### C. Purpose of Development Application

**Note: Please complete all that apply.**

1. Please explain what you propose to do on the subject lands/premises which makes this development application necessary:

This would allow for the creation of 2 lots - One with an existing dwelling and the other being vacant lot. The other land shown as Parcel 3 would be a boundary adjustment to be added to the lot adjacent to the west.

2. Please explain why it is not possible to comply with the provision(s) of the Zoning By-law/and or Official Plan:

The subject lands, while being within the Hamlet are currently zoned Agriculture and must be changed to Hamlet Residential in order to be severed.

3. Does the requested amendment alter all or any part of the boundary of an area of settlement in the municipality or implement a new area of settlement in the municipality? ☐ Yes ☒ No If yes, describe its effect:

\_\_\_\_\_  
\_\_\_\_\_

4. Does the requested amendment remove the subject land from an area of employment? ☐ Yes ☒ No If yes, describe its effect:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



5. Does the requested amendment alter, replace, or delete a policy of the Official Plan?  
☐ Yes ☒ No If yes, identify the policy, and also include a proposed text of the policy amendment (if additional space is required, please attach a separate sheet):

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6. Description of land intended to be severed in metric units:

Frontage: Parcel 1 - 69.98 Parcel 2 - 57.49 Parcel 3 - 0 (see sketches)  
Depth: Parcel 1 - 57 Parcel 2 - 57 Parcel 3 - 34.54 "  
Width: Parcel 1 - 69.98 Parcel 2 - 57.49 Parcel 3 - 68.37 "  
Lot Area: Parcel 1 - 3817 m<sup>2</sup> Parcel 2 - 3215 m<sup>2</sup> Parcel 3 - 2337 m<sup>2</sup> "  
Present Use: All parcels are non-productive agriculture or residential  
Proposed Use: Hamlet Residential  
Proposed final lot size (if boundary adjustment): —

If a boundary adjustment, identify the assessment roll number and property owner of the lands to which the parcel will be added: 336 070 19100

Description of land intended to be retained in metric units:

Frontage: 365 m on north 671 m on W.  
Depth: 671 m  
Width: 592 m  
Lot Area: 39.06 ha ±  
Present Use: Agriculture  
Proposed Use: Agriculture  
Buildings on retained land: 1 barn to be removed

7. Description of proposed right-of-way/easement:

Frontage: n/a  
Depth: \_\_\_\_\_  
Width: \_\_\_\_\_  
Area: \_\_\_\_\_  
Proposed use: \_\_\_\_\_

8. Name of person(s), if known, to whom lands or interest in lands to be transferred, leased or charged (if known):



## 9. Site Information

## Zoning

## Proposed

Please indicate unit of measurement, for example: m, m<sup>2</sup> or %

Lot frontage	(Parcel 1)	30 m	69.98 m
Lot depth		—	57 m
Lot width		30 m	69.98 m
Lot area		1.0 ha	38.7 ha
Lot coverage		—	—
Front yard		6 m	13.3 m
Rear yard		9 m	14.81 m
Left Interior side yard		3m + 1.2m	16.24 m
Right Interior side yard		"	43.81
Exterior side yard (corner lot)		—	—
Landscaped open space		—	—
Entrance access width		—	—
Exit access width		—	—
Size of fencing or screening		—	—
Type of fencing		—	—

## 10. Building Size

Number of storeys	N/A	
Building height	"	
Total ground floor area	"	
Total gross floor area	"	
Total useable floor area	"	

## 11. Off Street Parking and Loading Facilities

Number of off street parking spaces	N/A	
Number of visitor parking spaces	"	
Number of accessible parking spaces	"	
Number of off street loading facilities	"	

12. Residential (if applicable)

Number of buildings existing: Parcel 1 - 2 Parcel 2 - 0

Number of buildings proposed: n/c 1

Is this a conversion or addition to an existing building? ☐ Yes ☒ No

If yes, describe: \_\_\_\_\_

Type	Number of Units	Floor Area per Unit in m2
Single Detached	<u>Unknown at this time</u>	
Semi-Detached		
Duplex		
Triplex		
Four-plex		
Street Townhouse		
Stacked Townhouse		
Apartment - Bachelor		
Apartment - One bedroom		
Apartment - Two bedroom		
Apartment - Three bedroom		

Other facilities provided (for example: play facilities, underground parking, games room, or swimming pool):

13. Commercial/Industrial Uses (if applicable)

Number of buildings existing: n/a

Number of buildings proposed: \_\_\_\_\_

Is this a conversion or addition to an existing building? ☐ Yes ☐ No

If yes, describe:

Indicate the gross floor area by the type of use (for example: office, retail, or storage):

Seating Capacity (for assembly halls or similar): n/a

Total number of fixed seats: \_\_\_\_\_

Describe the type of business(es) proposed: \_\_\_\_\_

Total number of staff proposed initially: \_\_\_\_\_

Total number of staff proposed in five years: \_\_\_\_\_

Maximum number of staff on the largest shift: \_\_\_\_\_

Is open storage required: ☐ Yes ☐ No

Is a residential use proposed as part of, or accessory to commercial/industrial use?

☐ Yes ☐ No If yes please describe:

\_\_\_\_\_  
\_\_\_\_\_

14. Institutional (if applicable)

Describe the type of use proposed: n/a

Seating capacity (if applicable): \_\_\_\_\_

Number of beds (if applicable): \_\_\_\_\_

Total number of staff proposed initially: \_\_\_\_\_

Total number of staff proposed in five years: \_\_\_\_\_

Maximum number of staff on the largest shift: \_\_\_\_\_

Indicate the gross floor area by the type of use (for example: office, retail, or storage):

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

15. Describe Recreational or Other Use(s) (if applicable)

n/a  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



#### D. Previous Use of the Property

1. Has there been an industrial or commercial use on the subject lands or adjacent lands? ☐ Yes ☐ No ☒ Unknown

If yes, specify the uses (for example: gas station or petroleum storage):

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2. Is there reason to believe the subject lands may have been contaminated by former uses on the site or adjacent sites? ☐ Yes ☒ No ☐ Unknown

3. Provide the information you used to determine the answers to the above questions:

local knowledge

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4. If you answered yes to any of the above questions in Section D, a previous use inventory showing all known former uses of the subject lands, or if appropriate, the adjacent lands, is needed. Is the previous use inventory attached? ☐ Yes ☐ No

#### E. Provincial Policy

1. Is the requested amendment consistent with the provincial policy statements issued under subsection 3(1) of the *Planning Act, R.S.O. 1990, c. P. 13*? ☒ Yes ☐ No

If no, please explain:

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2. It is owner's responsibility to be aware of and comply with all relevant federal or provincial legislation, municipal by-laws or other agency approvals, including the Endangered Species Act, 2007. Have the subject lands been screened to ensure that development or site alteration will not have any impact on the habitat for endangered or threatened species further to the provincial policy statement subsection 2.1.7? ☒ Yes ☐ No

If no, please explain:

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3. Have the subject lands been screened to ensure that development or site alteration will not have any impact on source water protection? ☒ Yes ☐ No

If no, please explain:

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Note: If in an area of source water Wellhead Protection Area (WHPA) A, B or C please attach relevant information and approved mitigation measures from the Risk Manager Official.

4. Are any of the following uses or features on the subject lands or within 500 metres of the subject lands, unless otherwise specified? Please check boxes, if applicable.

**Livestock facility or stockyard** (submit MDS Calculation with application)

☐ On the subject lands or ☐ within 500 meters – distance           —          

**Wooded area**

☐ On the subject lands or ☐ within 500 meters – distance           —          

**Municipal Landfill**

☐ On the subject lands or ☐ within 500 meters – distance           —          

**Sewage treatment plant or waste stabilization plant**

☐ On the subject lands or ☐ within 500 meters – distance           —          

**Provincially significant wetland (class 1, 2 or 3) or other environmental feature**

☐ On the subject lands or ☐ within 500 meters – distance           —          

**Floodplain**

☐ On the subject lands or ☐ within 500 meters – distance           —          

**Rehabilitated mine site**

☐ On the subject lands or ☐ within 500 meters – distance           —          

**Non-operating mine site within one kilometre**

☐ On the subject lands or ☐ within 500 meters – distance           —          

**Active mine site within one kilometre**

☐ On the subject lands or ☐ within 500 meters – distance           —          

**Industrial or commercial use (specify the use(s))**

☐ On the subject lands or ☐ within 500 meters – distance           —          

**Active railway line**

☐ On the subject lands or ☐ within 500 meters – distance           —          

**Seasonal wetness of lands**

☐ On the subject lands or ☐ within 500 meters – distance           —          

**Erosion**

☐ On the subject lands or ☐ within 500 meters – distance           —          

**Abandoned gas wells**

☐ On the subject lands or ☐ within 500 meters – distance           —

## F. Servicing and Access

1. Indicate what services are available or proposed:

Water Supply

☐ Municipal piped water

☐ Communal wells

☒ Individual wells

☐ Other (describe below)

---

Sewage Treatment

☐ Municipal sewers

☐ Communal system

☒ Septic tank and tile bed in good working order

☐ Other (describe below)

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Storm Drainage

☐ Storm sewers

☒ Open ditches

☐ Other (describe below)

- 
2. Existing or proposed access to subject lands:

☒ Municipal road

☐ Provincial highway

☐ Unopened road

☐ Other (describe below)

Name of road/street: Old Hwy. 24

## G. Other Information

1. Does the application involve a local business? ☐ Yes ☒ No

If yes, how many people are employed on the subject lands?

- 
2. Is there any other information that you think may be useful in the review of this application? If so, explain below or attach on a separate page.

As the removal of the subject lands result in the  
retained area will be less than 40ha.



## H. Supporting Material to be submitted by Applicant

In order for your application to be considered complete, **folded** hard copies (number of paper copies as directed by the planner) and an **electronic version (PDF) of the properly named site plan drawings, additional plans, studies and reports** will be required, including but not limited to the following details:

1. Concept/Layout Plan
2. All measurements in metric
3. Key map
4. Scale, legend and north arrow
5. Legal description and municipal address
6. Development name
7. Drawing title, number, original date and revision dates
8. Owner's name, address and telephone number
9. Engineer's name, address and telephone number
10. Professional engineer's stamp
11. Existing and proposed easements and right of ways
12. Zoning compliance table – required versus proposed
13. Parking space totals – required and proposed
14. All entrances to parking areas marked with directional arrows
15. Loading spaces, facilities and routes (for commercial developments)
16. All dimensions of the subject lands
17. Dimensions and setbacks of all buildings and structures
18. Location and setbacks of septic system and well from all existing and proposed lot lines, and all existing and proposed structures
19. Gross, ground and useable floor area
20. Lot coverage
21. Floor area ratio
22. Building entrances, building type, height, grades and extent of overhangs
23. Names, dimensions and location of adjacent streets including daylighting triangles
24. Driveways, curbs, drop curbs, pavement markings, widths, radii and traffic directional signs
25. All exterior stairways and ramps with dimensions and setbacks
26. Retaining walls including materials proposed
27. Fire access and routes
28. Location, dimensions and number of parking spaces (including visitor and accessible) and drive aisles
29. Location of mechanical room, and other building services (e.g. A/C, HRV)
30. Refuse disposal and storage areas including any related screening (if indoors, need notation on site plan)
31. Winter snow storage location

32. Landscape areas with dimensions
33. Natural features, watercourses and trees
34. Fire hydrants and utilities location
35. Fencing, screening and buffering – size, type and location
36. All hard surface materials
37. Light standards and wall mounted lights (plus a note on the site plan that all outdoor lighting is to be dark sky compliant)
38. Business signs (make sure they are not in sight lines)
39. Sidewalks and walkways with dimensions
40. Pedestrian access routes into site and around site
41. Bicycle parking
42. Architectural elevations of all building sides
43. All other requirements as per the pre-consultation meeting

In addition, the following additional plans, studies and reports, including but not limited to, **may** also be required as part of the complete application submission:

- ☐ Zoning Deficiency Form
- ☐ On-Site Sewage Disposal System Evaluation Form (to verify location and condition)
- ☐ Architectural Plan
- ☐ Buildings Elevation Plan
- ☐ Cut and Fill Plan
- ☐ Erosion and Sediment Control Plan
- ☐ Grading and Drainage Control Plan (around perimeter and within site) (existing and proposed)
- ☐ Landscape Plan
- ☐ Photometric (Lighting) Plan
- ☐ Plan and Profile Drawings
- ☐ Site Servicing Plan
- ☐ Storm water Management Plan
- ☐ Street Sign and Traffic Plan
- ☐ Street Tree Planting Plan
- ☐ Tree Preservation Plan
- ☐ Archaeological Assessment
- ☐ Environmental Impact Study

- ☐ Functional Servicing Report
- ☐ Geotechnical Study / Hydrogeological Review
- ☐ Minimum Distance Separation Schedule
- ☐ Noise or Vibration Study
- ☐ Record of Site Condition
- ☐ Storm water Management Report
- ☐ Traffic Impact Study – please contact the Planner to verify the scope required

Site Plan applications will require the following supporting materials:

1. Two (2) complete sets of the site plan drawings folded to 8½ x 11 and an electronic version in PDF format
2. Letter requesting that the Holding be removed (if applicable)
3. A cost estimate prepared by the applicant's engineer
4. An estimate for Parkland dedication by a certified land appraiser
5. Property Identification Number (PIN) printout

Standard condominium exemptions will require the following supporting materials:

- ☐ Plan of standard condominium (2 paper copies and 1 electronic copy)
- ☐ Draft condominium declaration
- ☐ Property Identification Number (PIN) printout

Your development approval might also be dependent on other relevant federal or provincial legislation, municipal by-laws or other agency approvals.

**All final plans must include the owner's signature as well as the engineer's signature and seal.**

### **I. Development Agreements**

A development agreement may be required prior to site plan approval, subdivision and condominium applications. Should this be necessary for your development, you will be contacted by the agreement administrator with further details of the requirements including but not limited to insurance coverage, professional liability for your engineer, additional fees and securities.



### J. Transfers, Easements and Postponement of Interest

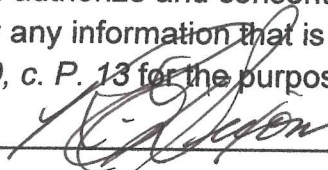
The owner acknowledges and agrees that if required, it is their solicitor's responsibility on behalf of the owner, to disclose the registration of all transfer(s) of land and/or easement in favour of the County and/or utilities. Also, the owner further acknowledges and agrees that it is their solicitor's responsibility on behalf of the owner for the registration of postponements of any charges in favour of the County.

### K. Permission to Enter Subject Lands

Permission is hereby granted to Norfolk County officers, employees or agents, to enter the premises subject to this application for the purposes of making inspections associated with this application, during normal and reasonable working hours.

### L. Freedom of Information

For the purposes of the *Municipal Freedom of Information and Protection of Privacy Act*, I authorize and consent to the use by or the disclosure to any person or public body any information that is collected under the authority of the *Planning Act, R.S.O. 1990, c. P. 13* for the purposes of processing this application.

  
\_\_\_\_\_  
Owner/Applicant Signature

Feb. 5/24  
\_\_\_\_\_  
Date

### M. Owner's Authorization

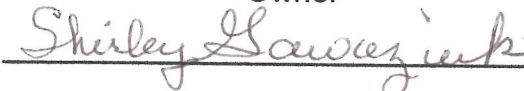
If the applicant/agent is not the registered owner of the lands that is the subject of this application, the owner(s) must complete the authorization set out below.

I/We 2716452 Ontario Limited am/are the registered owner(s) of the lands that is the subject of this application.

I/We authorize R-C. Dixon to make this application on my/our behalf and to provide any of my/our personal information necessary for the processing of this application. Moreover, this shall be your good and sufficient authorization for so doing.

  
\_\_\_\_\_  
Owner

Jan. 30/24  
\_\_\_\_\_  
Date

  
\_\_\_\_\_  
Owner

\_\_\_\_\_  
Date

**N. Declaration**

I, R. C. Dixon of Simcoe

solemnly declare that:

all of the above statements and the statements contained in all of the exhibits transmitted herewith are true and I make this solemn declaration conscientiously believing it to be true and knowing that it is of the same force and effect as if made under oath and by virtue of *The Canada Evidence Act*.

Declared before me at:

Hannelore Yager

R. C. Dixon

Owner/Applicant Signature

In Norfolk County

This 5<sup>th</sup> day of February

A.D., 20 24

Hannelore Yager

A Commissioner, etc.

Hannelore Tenley Yager, a  
Commissioner, etc., Province of Ontario,  
for the Corporation of Norfolk County.  
Expires November 21, 2025.



## Pre-Submission Consultation Meeting Notes

**Date:** July 19, 2023

**Description of Proposal:** Re-zone from Agricultural to Hamlet Residential for Lot Severance

**Property Location:** 196 Old Highway 24

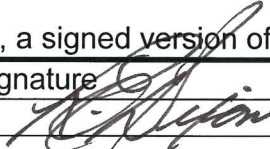
**Roll Number:** 3310336070190000000

**Please read all the information in this document on the requirements for future development planning applications.** As a result of the information shared at the pre-consultation meeting dated July 19, 2023, the following applications and qualified professional documents/reports are required as part of a complete application. Please include all listed items with the application to ensure a complete application. The County reserves the right to change, reduce or add requirements for a complete application, particularly if the submission does not match the proposal as reviewed during the pre-submission consultation meeting.

Please note that various fees are associated with each application, and there are also costs for qualified professionals retained to complete various documents/reports. All requirements identified are minimum and determined as of the date of the pre-consultation meeting, with the information available at that time. As the proposal proceeds, more information is made public, additional applications, studies, reports, etc., may be required. The information in this document is applicable for a maximum of one (1) year from the meeting date.

**Before you submit your application, please contact the assigned Planner to confirm submission requirements and the applicable fee.**

As part of a complete application, a signed version of these meeting notes is required.

Proponent / Agent Name	Signature	Date
Richard Dixon		Feb 5/24

### Attendance List

Proponent	Richard Dixon, Agent
Community Development – Planning and Agreement	Tricia Givens, Director, Planning (Chair) Hannelore Yager, Planner
Building and Zoning	Jonathan Weir, Building Inspector



	Roxanne Lambrecht, Zoning Administrator
Environment & Infrastructure Services – Development Engineering	Brett Hamm, Junior Development Technologist
Long Point Regional Conservation Authority	Isabel Johnson, Resource Planner

**Privileged Information and Without Prejudice**

**List of Application Requirements\* and General Comments**

**Planning Department**

<b>Planning application(s) required to proceed</b>		<b>Required</b>
Official Plan Amendment Application		
Zoning By-law Amendment Application		X ✓
Site Plan Application		
Draft Plan of Subdivision Application		
Draft Plan of Condominium Application		
Part Lot Control Application		
Consent / Severance Application		X
Minor Variance Application		
Removal of Holding Application		
Temporary Use By-Law Application		
Other -		
<b>Planning requirements for a complete application</b> The items below are to be submitted as part of the identified Planning Application(s). ** electronic/PDF copies of all plans, studies and reports are required**	<b>Required at OPA/ Zoning Stage</b>	<b>Required at Site Plan Stage</b>
Agricultural Impact Assessment		
Air Treatment Control Study		
Archeological Assessment		
Contaminated Site Study		
Concept Plan	X ✓	
Dust, Noise and Vibration Study		
Elevation Plan		
Environmental Impact Study		
Geotechnical Study	X ✓	
Heritage Impact Assessment		
Hydrogeological Study		
Landscaping Plan		
Market Impact Analysis		
Minimum Distance Separation Schedule	X**	
MOE D-Series Guidelines Analysis		
Neighbourhood Plan		
Odour Mitigation Plan		
Parking Assessment		

## Privileged Information and Without Prejudice

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#### Proposal Summary

The westerly portion would be 2 lots within the Hamlet, the most westerly portion lot would have the existing house and garage. To the east of the foregoing lot and shown as Parcel 2 is the second lot to be severed and currently has a partially torn down barn. This parcel would be a residential lot and would contain the only other dwelling to be constructed.

Parcel 3 is within the Hamlet, is vacant, and not readily farmable. It is proposed to add on the lot adjacent to the west. See attached sketches for details as to size, area, etc.



### Privileged Information and Without Prejudice

Planning Justification Report/Impact Analysis		
Photometrics (Lighting) Plan		
Record of Site Condition		
Restricted Land Use Screening Form		
Site Plan/Drawing		
Topographical Study		
<b>Additional Planning requirements</b>		<b>Required</b>
Development Agreement		
Parkland Dedication/Cash-in-lieu of Parkland		

\* Any changes to a proposal may necessitate changes to Planning Department submission requirements. Reports and studies are subject to peer review.

\*\* If the barn located on the retained lands (to the south of Parcel 2) contains or previously contained livestock, MDS Calculations are required to be submitted.

Community Development fees, applications, and helpful resources can be found can be found by visiting <https://www.norfolkcounty.ca/government/planning/>

### Planning Comments

Each severance will require a separate application. The Zoning By-Law Amendment will need to be submitted before the consents. The LPRCA will be circulated for comment on both Zoning By-Law and Consent to Sever applications – payment applicable fees would be required as part of a complete application, please contact the LPRCA for confirmation.

Staff requirements for a complete Zoning By-Law Amendment include a Geotechnical study and concept plan. On the submitted concept plan, please show the following:

- Dimensions of the lots to be severed (area, frontage, width, depth) which are subject of the Zoning By-Law Amendment
- Dimensions and set-backs of any existing buildings or structures
  - o Please note whether they are to remain or be removed
- Approximate dimensions and set-backs (to lot line and wells) of existing and proposed septic systems
- Approximate location of existing and proposed well
- Dimensions of existing hydro and gas easement – HydroOne and Enbridge to be circulated by Planning Staff

The concept plan submitted shows the proposed lots to be created are 3817 sq. m. and 3275 sq. m. in lot area, which are below the 4000 sq. m. requirement in the RH Zone. The size of the retained parcel is unknown – the Agricultural Zone requires a lot area of 40 ha. A site specific Zoning provision will be required for the lots to be severed, and may be required for

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the lot to be retained.

At time of submission for a consent to sever, please include in the submission package:

- Concept plan showing the items noted above for all three parcels
- On-Site Sewage System Evaluation Form
- Preliminary Screening Form for any removal of a barn to demonstrate compliance with the Endangered Species Act.
- Brief describing the *legal or technical reason* for the proposed *minor* boundary adjustment

#### *Notes on Severance:*

The hydroelectric lines which intersect Parcels 1 and 2 and the lands to be retained will need to either be disconnected, or, an easement be established through a consent to sever application. As the barn on Parcel 2 is proposed to be removed, disconnection may be the simplest approach.

MDS and spatial separation requirements may be triggered by the barn located on the retained lands located south of Parcel 2. Conditions may apply.

The existing ramp on Parcel 2 may be required to be removed as a condition of consent.

--.

Endangered and threatened species and their habitat are protected under the provinces Endangered Species Act, 2007 (ESA), O. Reg. 242/08 & O. Reg. 830/21. The Act prohibits development or site alteration within areas of significant habitat for endangered or threatened species without demonstrating that no negative impacts will occur. The Ministry of Environment, Conservation and Parks provides the service of responding to species at risk information requests and project screenings. The proponent is responsible for discussing the proposed activity and having their project screened with MECP (Ministry of Environment, Conservation and Parks).

Please be advised that it is the owner's responsibility to be aware of and comply with all relevant federal or provincial legislation, municipal by-laws, or other agency approvals.

[see Appendix A for additional comments]

#### **Assigned Planner:**

Hannelore Yager, Planner  
[Hannelore.yager@norfolkcounty.ca](mailto:Hannelore.yager@norfolkcounty.ca)  
Ext. 8095

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**Development Engineering**

<b>Development Engineering requirements to proceed</b> The below requirements are to be submitted as part of the Planning application.	<b>Required at Official Plan / Zoning Application Stage:</b>	<b>Required at Severance Application Stage:</b>	<b>Potentially Required (See Notes Section)</b>
<b>General Requirements</b>			
Concept Plan	X	X	
Area Rough Grading Plan			
Lot Grading Plan		X	
Siltation and Erosion Control Plan			
General Plan of Services			
Plan and Profile Drawings			
Utility Plan			
Geotechnical Report			
Functional Servicing Report			
<b>Water Servicing Requirements</b>			
Water Modelling (County Consultant)			
<b>Sanitary Servicing Requirements</b>			
Sanitary Drainage Plan			
Sanitary Design Sheet			
Sanitary Modelling (County Consultant)			
<b>Storm Water Servicing Requirements</b>			
Storm Water Management Design Report (including calculations)			
Storm Water Drainage Plan			
Establish/Confirm Legal and Adequate Outlet			
Anticipated Flow/Analysis to Receiving Collection System			
<b>Transportation Requirements</b>			
Traffic Impact Study			
Improvements to Existing Roads & Sidewalk (urbanization, pavement structure, widening sidewalk replacement, upgrades, extension and accessibility)			



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**General Comments:**

1. All reports and drawings are to be signed and stamped by a Professional Engineer (P. Eng) and adhere to Norfolk County's Design Criteria. A copy of this criteria is available upon request.

**Required at Zoning By-law Amendment Stage:**

2. The following reports/studies will be required at time of Zoning By-law Amendment Submission:
  - a. Concept Plan;

**Required at Severance Stage Notes:**

1. As per Norfolk County By-law 2017-04, a lot grading plan will be required for the severed lands at time of building permit application.
2. As per Norfolk County By-law 2016-32, an entrance permit and installation of entrance will be required for the severed parcels at time of building permit application.
3. As per Norfolk County By-law 2016-32, if any modifications/changes are made to the existing entrance, an entrance permit and installation of modified entrance will be required at time of building permit application.
3. Further Development Engineering comments may be provided at the time of future planning application stage.

Brett Hamm  
Junior Development Technologist  
Extension 8122  
[Brett.Hamm@norfolkcounty.ca](mailto:Brett.Hamm@norfolkcounty.ca)

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### **Agreements**

A development agreement is not required with the current proposal. If your concept changes, a recommended condition of your planning application approval could be to enter into a development agreement with the County that will be registered on title to the subject lands, at the Owner's expense. The additional requirements for a development agreement could include, but are not limited to the following:

- Engineering drawing review
- Engineer's schedule of costs for the works
- Clearance letter and supporting documentation to support condition clearance
- User fees and performance securities
- Current property identification number (PIN printout) (can be obtained by visiting <https://help.onland.ca/en/home/>)
- Owner's commercial general liability insurance to be obtained and kept in force during the terms of the agreement
- Postponement of interest. If there are mortgages / charges on your property identifier, your legal representative will be required to obtain a postponement from your bank or financial institution to the terms outlined in your development agreement
- Transfers and / or transfer easements along with registered reference plan

Annette Helmig  
Agreement and Development Coordinator  
Extension 8053

[Annette.Helmig@norfolkcounty.ca](mailto:Annette.Helmig@norfolkcounty.ca)

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### **Conservation Authority**

#### **Long Point Regional Conservation Authority**

#### **Site Characteristics**

The subject property located at 196 Old Highway 24 is subject to flooding hazards from Davis Creek.

#### **Provincial Policy Statement, 2020, Section 3.1 Natural Hazards**

Conservation Authorities have been delegated responsibilities from the Minister of Natural Resources and Forestry to represent the provincial interests regarding natural hazards encompassed by Section 3.1 of the Provincial Policy Statement, 2020 (PPS). The overall intent of Section 3.0 - Protecting Public Health and Safety of the PPS is to reduce the potential public cost or risk to Ontario's residents from natural or human-made hazards.

The parcels to be severed appear to be outside the area subject to flooding. Staff can advise that the proposed application is consistent with section 3.1 of the Provincial Policy Statement, 2020.

#### **Ontario Regulation 178/06**

The retained property is regulated by Long Point Region Conservation Authority under Ontario Regulation 178/06. Permission from this office is required prior to any development within the regulated area.

Development is defined as:

- the construction, reconstruction, erection or placing of a building or structure of any kind,
- any change to a building or structure that would have the effect of altering the use or potential use of the building or structure, increasing the size of the building or structure or increasing the number of dwelling units in the building or structure,
- site grading, or
- the temporary or permanent placing, dumping or removal of any material, originating on the site or elsewhere (Conservation Authorities Act, R.S.O. 1990, c. 27, s. 28 (25))

LPRCA fees, applications, and helpful resources can be found by visiting <https://lprca.on.ca/planning-permits/planning-fees/>

Isabel Johnson, Resource Planner  
ijohnson@lprca.on.ca



## **Privileged Information and Without Prejudice**

### **Building**

#### **Zoning Administrator:**

- proposing severance of 2 lots to be rezoned as RH
  - parcel 1 has existing house and detached garage
  - parcel 2 has existing barn and shed, both must be demolished or need a Planning Application to keep them
- proposing severance of parcel 3 (within the Hamlet Boundary) to be added to an adjacent lot
- parcel 1 and 2 have minimum 30m frontage but both are deficient in lot area (minimum 0.4 hectares or 0.988 acres)
  - parcel 1 = 3817sqm (0.94 acres)
  - parcel 2 = 3275sqm (0.81 acres)
- parcel 1 existing house meets RH setbacks to property lines and height restriction, detached garage meets setback and height restriction for a detached accessory building

Roxanne Lambrecht  
Zoning Administrator  
Extension 1839  
[Roxanne.Lambrecht@norfolkcounty.ca](mailto:Roxanne.Lambrecht@norfolkcounty.ca)

#### **Building Inspector:**

##### **FARM BLDG AND SEPTIC SPATIAL SEPARATIONS:**

1. For fire safety reasons, farm buildings are required to have spatial separation calculations completed when located less than 30m from a property line. A qualified Designer will be required to provide spatial separation calculations as per OBC SubSection 9.10.14 for the exposed building face of the farm building with a setback of 7.60m from the proposed rear property line of Parcel 2. If calculations determine proposed property line creates a hazard, options for compliance include:
  - a. Demolishing existing buildings on retained lands. No demolition permit is required to demolish a farm building.
  - b. Complete compensating construction. Obtain a building permit and have inspections completed in accordance with the Ontario Building Code
  - c. Propose an alternative location for the proposed property line to remove the hazard based on spatial separation calculations.
2. It is not known where the existing onsite sewage system is located on Parcel 1. An On-Site Sewage System Evaluation form needs to be completed by a qualified person engaged in the business of constructing onsite sewage systems. If a sewage system

### **Privileged Information and Without Prejudice**

evaluation determines the system is too close to the proposed property lines the options for compliance are:

- a. move the property line
- b. relocate the septic system, this will require a septic permit to be obtained and the work to be completed

Please reach out to the building department as you get closer to having the planning and applicable approvals in place and staff will be happy to assist you with information on preparing for the building and septic permit stage of the project.

All general permitting inquiries: by email: [permits@norfolkcounty.ca](mailto:permits@norfolkcounty.ca) or by phone: 226-NORFOLK (226-667-3655) Ext 6016

Jonathan Weir  
Building Inspector  
[Jonathan.Weir@norfolkcounty.ca](mailto:Jonathan.Weir@norfolkcounty.ca)

### **Additional Agency Comments & Requirements**

#### **Ministry of Transportation**

Thank you for providing the MTO with the opportunity to review and provide comments.

The proposed work within Norfolk County is not located adjacent to a provincial highway or within MTO's Permit Control Area, and as such, does not require MTO review, approval or permits.

Please be advised that MTO will not be attending the Pre-con meeting to be held on July 19th. If you have any question or concerns please feel free to contact me.

Michael Kilgore  
Project Manager  
519.851.1212  
[michael.kilgore@ontario.ca](mailto:michael.kilgore@ontario.ca)

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### **Appendix A: Planning Reference Materials**

Following is a summary of some land use planning reference materials. It is the requirement of the applicant to ensure compliance with applicable legislation, policies and regulations.

#### **Provincial Policy Statement, 2020**

<https://www.ontario.ca/page/provincial-policy-statement-2020>

#### **Norfolk County Official Plan**

<https://www.norfolkcounty.ca/government/planning/official-plan/>

Section 9.6.1 outlines requirements in relation to requests to amend the Official Plan.

Section 9.6.2 outlines requirements in relation to requests to amend the Zoning By-law.

Section 9.6.3.2. outlines requirements in relation to consents to sever across Norfolk County.

**It is the responsibility of the proponent to review and ensure relevant Official Plan policies are addressed in any future development application.**

#### **Norfolk County Zoning By-Law 1-Z-2014**

<https://www.norfolkcounty.ca/government/planning/new-zoning-by-law/>

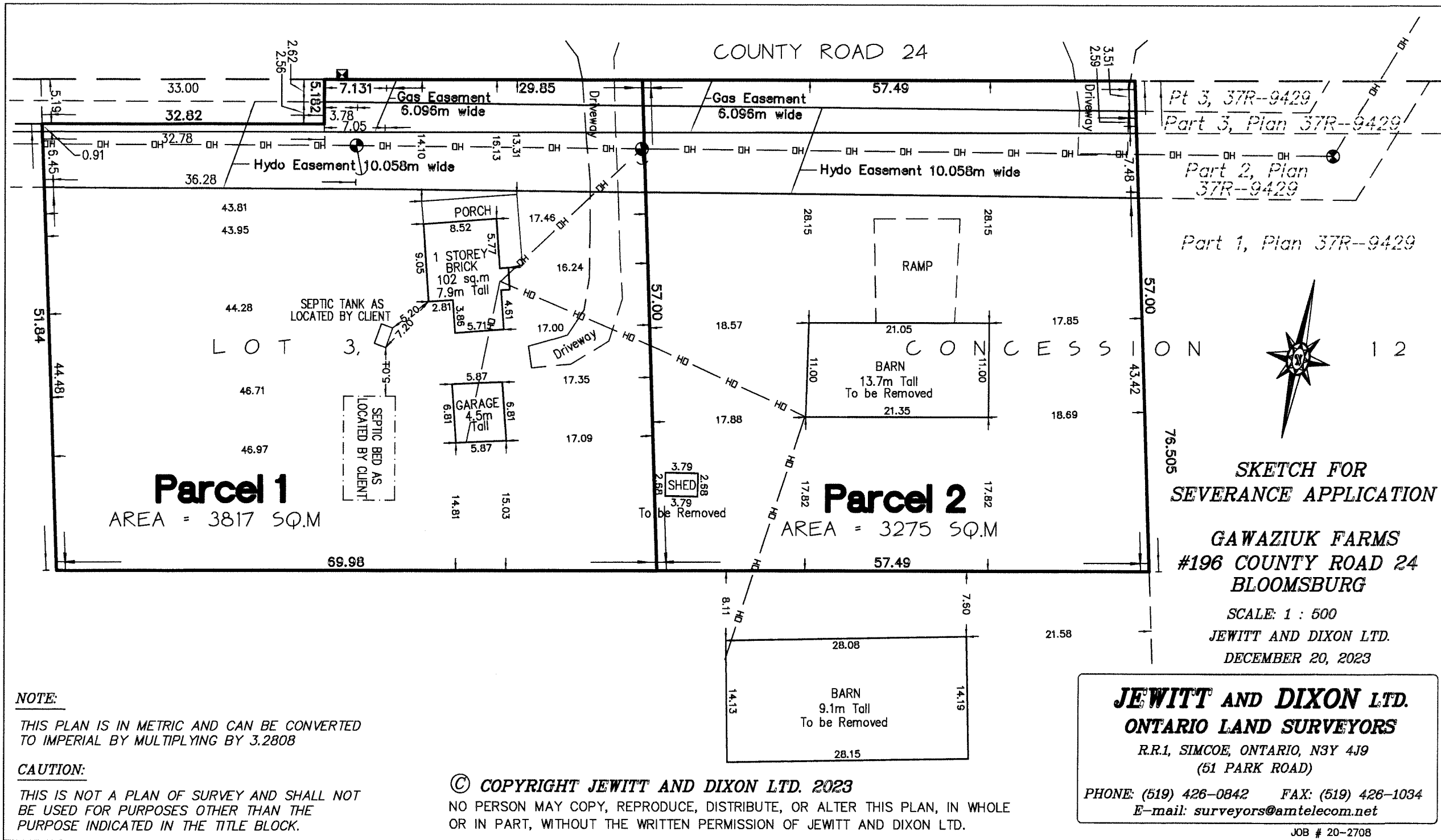
Section 5.7. outlines permitted uses and provisions in the RH zone.

The provisions of the Norfolk County Zoning By-Law shall apply to all lands within the boundaries of Norfolk County. No land, building or structure shall be used, erected, or altered in whole or in part except in conformity with the provisions of this By-Law. No land, building or structure shall be used or occupied except for uses that are specifically identified in the By-Law as permitted uses by the relevant zoning category.

**It is the responsibility of the proponent to review and ensure relevant Zoning By-law provisions are addressed in any future development application**







**NOTE:**

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Pt 3, 37R-9429  
Part 3, Plan 37R-9429

Part 2, Plan  
37R-9429

Part 1, Plan 37R-9429



SKETCH FOR  
SEVERANCE APPLICATION

GAWAZIUK FARMS  
#196 COUNTY ROAD 24  
BLOOMSBURG

SCALE: 1 : 500

JEWITT AND DIXON LTD.

DECEMBER 20, 2023

**JEWITT AND DIXON LTD.**  
**ONTARIO LAND SURVEYORS**

R.R.1, SIMCOE, ONTARIO, N3Y 4J9  
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E-mail: [surveyors@amtelecom.net](mailto:surveyors@amtelecom.net)

JOB # 20-2708

# COUNTY ROAD 24

Part 9, Plan 37R--9429

LOT 3

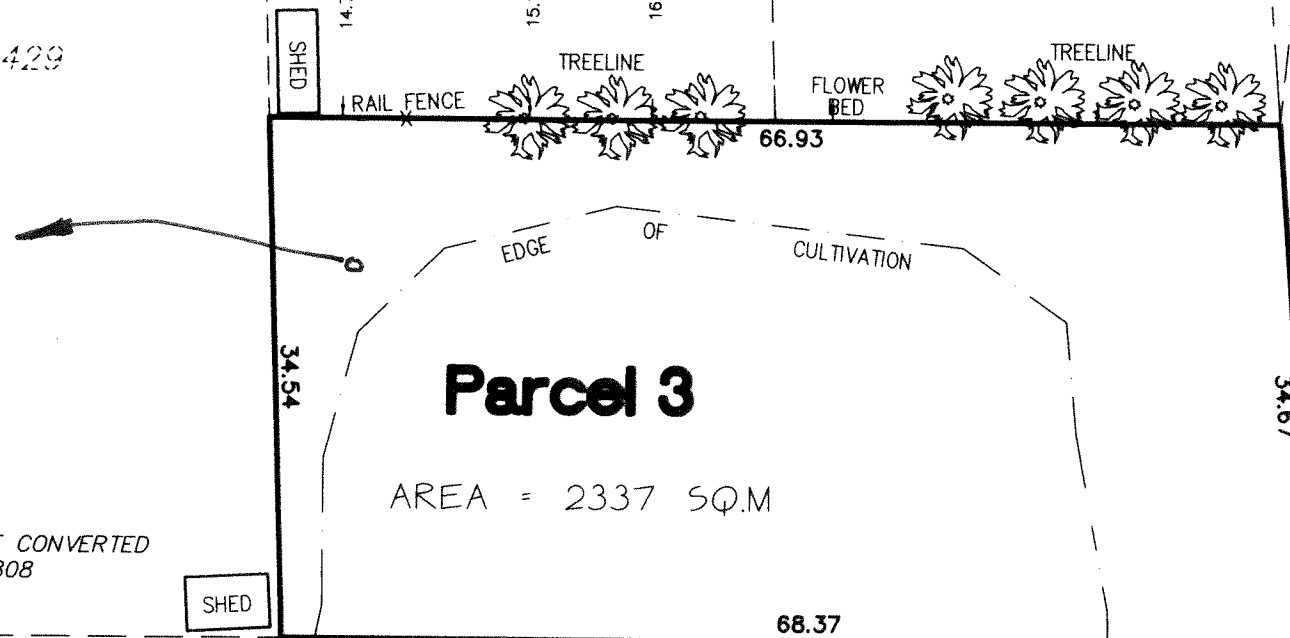
LOT 4

LOT 3

Part 8, Plan 37R--9429

Part 1, Plan 37R--114

CONCESSION



SKETCH FOR  
SEVERANCE APPLICATION

GAWAZIUK FARMS  
#196 COUNTY ROAD 24  
BLOOMSBURG

JEWITT AND DIXON LTD.  
DECEMBER 2, 2020

**JEWITT AND DIXON LTD.**  
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JOB # 20-2708

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**Preliminary Geotechnical Engineering Report  
196 Old Highway 24, Bloomsburg, ON**

**Report #7938 Gawaziuk - Bloomsburg  
October 13, 2023**

**Prepared for:**  
Mr. Eugene Gawaziuk

**Prepared by:**  
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Woodstock, ON N4S 3L4  
Tel: 519-266-4680  
Fax: 519-266-3666  
[www.aaenvironmental.ca](http://www.aaenvironmental.ca)



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## **1.0 INTRODUCTION**

### **1.1 Proposed Construction**

Eugene Gawaziuk (the client), retained the services of A & A Environmental Consultants Inc. (A&A) to conduct a preliminary geotechnical investigation for a proposed development, the specific type of which has not been determined yet. The development is located at 196 Old Highway 24, Bloomsburg, Ontario. Three (3) boreholes were advanced and sampled for this geotechnical investigation, and the information obtained will be used to provide recommendations for the design of foundations at the site. See Section 4.0 for additional details of the proposed development.

### **1.2 Purpose and Limitations of Report**

The purpose of this study is to provide geotechnical information, recommendations, and comments for the design and construction of the proposed development. The number of boreholes has been selected to provide representative information sufficient to determine parameters needed for design, specifications, and construction of the proposed development. Conditions elsewhere near or beneath the footprint of the structures may be found to differ, during construction, from those at the borehole locations. Should this occur, the contractor should contact the design engineer for recommendations as how to best proceed and what changes if any, should be made.

The information in this report is intended for this specific proposed structure and has been prepared for the client, and their nominated engineers and designers. It is assumed that the designers will use all appropriate contemporary standards, governing regulations, and codes in the performance of their work. Third party use or reproduction, in part or in full, of this report is prohibited without written authorization from A&A. This report is also subject to the Statement of Limitations which form an integral part of this document.

### **1.3 Liaison during design and/or Construction**

On-going liaison with A&A during the final design and construction phases of the project is recommended to confirm that they are in keeping with the intentions of this report.

## 2.0 SCOPE OF WORK

### 2.1 Proposed Scope of Work

The scope of work for the geotechnical investigation of the proposed development is as follows:

- Advanced three (3) boreholes to sample for geotechnical analysis. All three (3) boreholes were advanced to a maximum depth of 6.1 m below the existing ground surface (mbgs). All boreholes were backfilled upon completion as per current regulations.
- Submit select soil samples to a geotechnical laboratory to provide information for the soil samples recovered.
- Prepare a geotechnical report summarizing the results of the field investigation and laboratory testing program, to include discussion of specific concerns that need to be addressed during design and/or construction. Specifically, the report is to include:
  - Site plan showing locations of the boreholes.
  - Borehole records.
  - Recommendations for:
    - Site preparation.
    - Construction dewatering if required.
    - Earthworks.
    - Potential reuse of existing fill materials and/or native soils indicated in the boreholes.
    - Excavation requirements.
    - Geotechnical resistances for foundation designs at ULS and SLS conditions.
    - Lateral earth pressure coefficients for existing soils and typical imported materials.

## 3.0 SITE DESCRIPTION

### 3.1 Current Land Use and Location

The site is a farm/residential land with an exiting house and two barns located at South of Highway 24, Bloomsburg, Ontario as shown in **Figure 1**, (Appendix A). The approximate UTM coordinates of the site are Zone 17T; 556984.06 m Easting; 4748237.50 m Northing. The site inspected is rectangularly shaped with the municipal address of 196 Old Highway 24, Bloomsburg, ON. The site is located in an area consists of a mix of agricultural land and residential.

### 3.2 Site Topography and Regional Geology

The current topography of the subject site is approximately a flat, with a gentle slope towards the south. Based on Toporama map, it is recorded the average elevation at the subject site area is 235.0 m (masl). The groundwater flow is expected to be directed to southwest direction towards Davis Creek. The groundwater flow direction may also be influenced by utility trenches and other subsurface structures and may migrate in the bedding stone of nearby subsurface utility trenches. Groundwater flow direction can only be confirmed with the long-term measurement of groundwater elevations at the project site.

The site is located in the physiographic region known as Norflok Sand Plain and the physiographic landform in which the site exists is Sand Palins. The site is situated in surficial geology region called Coarse-textured glaciolacustrine deposits, which is comprised of sand, gravel, minor silt and clay.

### 4.0 PROPOSED DEVELOPMENT

It is understood that the proposed development has not yet been determined. However, it is assumed to be a residential building, which may consist of the following:

- One or two-storey residential houses without basements.
- Parking spaces, roads, Low Impact Development (LID) controls, sewer, and watermain.

The general arrangement of the proposed development is not available at the time of writing this report.

### 5.0 METHOD OF INVESTIGATION

#### 5.1 Field Investigation

A&A engaged a utility locating company to map locations of public and private underground utilities. A&A then scheduled the drilling of boreholes for sampling in accordance with the borehole drilling and sampling plan.

The geotechnical investigation for the planned development consisted of the following activities:

- In the month of October 2023, A&A attended the site located at 196 Old Highway 24, Bloomsburg, Ontario.
- Boreholes were advanced using a track mounted drill unit with 152.4 mm (6 inch) diameter continuous flight hollow stem auger at locations shown in **Figure 2**.
- Sampling of the overburden materials encountered in the boreholes was carried out at regular intervals using a drive open conventional spoon sampler in conjunction with



standard penetration testing (SPT) “N” values. The SPT were conducted following the standard method ASTM D1586 and the results of SPT, in terms of the number of blows per 0.3 m of split-spoon sampler penetration, were provided in borehole logs. **Table 1** shows the borehole advanced depth and location. **Figure 2** in Appendix A depicts the locations of the boreholes in relation to the proposed development. Samples submitted for analysis are to be representative of the boreholes and their locations within the proposed development.

**Table 1 - Borehole Advanced Depths and Location**

Borehole No.	UTM Coordinates – UTM 17T		Depth (m)
	Northing	Easting	
BH1	4748227.20	557022.57	6.1
BH2	4748194.05	557041.72	6.1
BH3	4748210.17	556998.17	6.1

- All boreholes (BH1 to BH3) were used for the geotechnical investigation and all boreholes were backfilled upon completion as per current regulations. All soil samples tested for moisture content and three (3) soil samples were selected for soil gradation and index testing.

## 5.2 Sampling Procedures

Select samples recovered from the geotechnical investigation were submitted to GeoTrust Engineering Limited (GeoTrust) for soil testing. The geotechnical laboratory testing program includes the following scope:

- Water moisture content per ASTM D2216.
- Grain size analyses per ASTM D422 & D2217.
- Atterberg Limits per ASTM 4318.

The results of the laboratory tests are discussed in the text of this report. The results of laboratory tests are presented in **Appendix C** and appended to borehole logs.

## 6.0 LABORATORY TESTING AND RESULTS OF INVESTIGATION

### 6.1 Subsurface Conditions Overview

The borehole logs provided in **Appendix B** summarize the soil types observed during drilling. Explanation of the symbols and terms used to describe the borehole logs are also included in **Appendix B**.

Bagged samples selected from the boreholes were analyzed for grain size analysis and Atterberg limits, and all soil samples were tested for natural moisture content.

It should be noted that the boundaries between the strata on the borehole records have been inferred from drilling observations and non-continuous sampling. The boundaries generally represent a transition from one soil type to another and should not be inferred to represent an exact plane of geological change. Further, conditions will vary between and beyond the boreholes.

All three (3) boreholes were advanced to a maximum depth of 6.1 m below the existing ground surface (mbgs). The strength variations are detailed in the borehole logs in **Appendix B**.

The combination of lab results and standard penetration test N values were used to estimate geotechnical resistance values. This translation was based on generally accepted, recorded correlations from thousands of similar tests. Soil characteristics for each hole may be found in **Appendices B & C**.

## 6.2 Detailed Summary

All three (3) boreholes revealed underlain the surface to be characterised as follows:

- **Topsoil:**

The thickness of the topsoil explored in boreholes generally ranged from 100 to 150 mm (mbgs). The data provided here pertaining to the topsoil thickness is confirmed at the borehole locations only and may vary between and beyond the borehole locations. This information is not considered to be sufficient for estimating topsoil quantities and associated costs.

- **Native Soil:**

The surficial topsoil layer underlies the following layers of native soils, which extend to the end of the explored borehole depth at the borehole locations.

- **Weathered/Disturbed Soil:** The upper weathered soil zone was encountered beneath the topsoil layer and extended to approximate depth of 0.7 m (mbgs). It consists of silty sand, organic, very loose, dark brown to brown, damp to moist, trace topsoil inclusions, rootlets, no odour, and trace organic.
- **Sandy Silt to Silt:** Beneath the weathered/distributed layer, native soil deposits of sandy silt to silt were encountered, extending to the explored borehole depth. These deposits consist of sandy silt to silt trace to some sand, trace clay, loose to very dense, moist to wet, and brown in color.



### 6.3 Summary of Subsurface Conditions to Anticipated Depths of Construction

In the following tables (Tables 2-3), the relevant properties of the various deposits are briefly described. For details of the subsurface conditions, reference should be made to the individual borehole logs. The "Notes on Sample Description" preceding the borehole logs are an integral part of and should be read in conjunction with this report.

**Table 2 - Typical Values of Atterberg Limits (%)**

BH # / Sample No.	Depth (m)	Soil Description	Atterberg Limits		
			W <sub>L</sub>	W <sub>P</sub>	I <sub>P</sub>
BH1 - (SS3)	1.5 - 2.1	Sandy Silt, trace Clay	Non-Plastic		
BH2 - (SS5)	3.0 - 3.6	Silt, some Sand, trace Clay	Non-Plastic		
BH3 - (SS7)	4.5 - 5.3	Silt, trace Clay and Sand	Non-Plastic		

**Table 3 - Sieve and Hydrometer Analysis**

BH # / Sample No.	Grain Size Content (%)				Depth (m)	Soil Description
	Gravel	Sand	Silt	Clay		
BH1 - (SS3)	--	35	58	7	1.5 - 2.1	Sandy Silt, trace Clay
BH2 - (SS5)	--	19	72	9	3.0 - 3.6	Silt, some Sand, trace Clay
BH3 - (SS7)	--	3	88	9	4.6 - 5.2	Silt, trace Clay and Sand

### 6.4 Groundwater Conditions

Ground water observations and measurements were obtained in the open boreholes at the completion of drilling and are summarized on the appended borehole logs. Groundwater was observed during drilling at depths ranged from 2.7 to 3.9 m (mbgs). Perched groundwater may occur above these depths particularly following heavy rainfall or snowmelt. It should be noted that groundwater levels vary and are subjected to seasonal fluctuations and can respond to major precipitation events. The depth of groundwater table can also be influenced by the presence of underground features such as utility trenches. During construction, it is essential to maintain the groundwater table at least 1.0 m below the foundations level.

## 7.0 DESIGN DISCUSSION AND RECOMMENDATIONS

### 7.1 General Considerations

The recommendations presented in the following sections of this report are based on the information available regarding the proposed construction, the results obtained from the Preliminary Geotechnical Investigation, and A&A's experience with similar projects. Since the

investigation only represents a portion of the subsurface conditions, it is possible that soil conditions may be encountered during construction that are substantially different than those encountered during the investigation. If these situations are encountered, adjustments to the design may be necessary. A qualified geotechnical engineer should be on-Site during the foundation preparation to ensure the subsurface conditions are the same/similar to what was observed during the investigation.

Contractors and/or subcontractors bidding on or undertaking the work should seek permission from owners to access the site for their own type of investigations, as well may make their own interpretations of the factual borehole results contained in this report. The following general comments are provided with respect to the conditions encountered and the intended scope of development.

It is understood that the proposed development has not been determined yet. However, it is assumed to be a one or two-storey house without a basement, along with associated infrastructure such as roads, parking spaces, Low Impact Development (LID) features, watermain, and sewer.

## **7.2 Foundations**

In accordance with the 2010 National Building Code of Canada (NBCC), the use of Limit States Design (LSD) is required for the design of buildings and their structural components including foundations. The limit states of LSD design are classified into two groups; the Ultimate Limit States (ULS) and the Serviceability Limit States (SLS). The recommended geotechnical resistances for the building foundations are presented for ULS and SLS conditions.

The values given for SLS geotechnical resistances are based on settlement values of less than 25 mm. Total differential settlements within a building should also be less than 19 mm.

Relevant information for the final design purposes including proposed final grades, finished floor elevations, drainage system, and proposed underside of foundations were not available to A&A at the time of writing this report. Then, A&A's geotechnical engineers must review the recommendations options presented in the following sections of foundation design once such development parameters become available.

### **7.2.1 Foundations on Engineered Fill**

The proposed structures can be supported by conventional spread and/or strip footings founded on engineered fill. Footings on engineered fill can be designed for a geotechnical reaction of 100 kPa at Serviceability Limit States (SLS) and for a factored geotechnical resistance of 150 kPa at the Ultimate Limit States (ULS), provided all requirements in **Appendix D** are adhered to. The first initial layer (350 mm thick) should consist of coarse 100 mm maximum size crushed stone to



stabilize the wet subgrade for construction traffic or alternatively the use of geogrid must be considered. The fill required to raise the grade can consist of inorganic soil, placed in shallow lifts, and compacted to 98-100 percent of Standard Proctor Maximum Dry Density (SPMDD). The footings placed on engineered fill must be structurally reinforced. All footing bases must be inspected by A&A prior to placement of concrete.

Prior to the placement of the engineered fill, all the existing fill and surficial softened native soils must be removed, and the exposed surface proof rolled. Any soft spots revealed during proof rolling must be sub-excavated and re-engineered. To reduce the risk of improperly placed engineered compacted fill, full-time supervision of the contractor is essential. Despite full time supervision, it has been found that contractors frequently bulldoze loose fill into areas and compact only the surface. The inspector, either busy on other portions of the site or absent during "off hours" will be unaware of this condition. For this reason, we cannot guarantee the performance of the engineered fill, and this guarantee must be the responsibility of the contractor. The owner and his representatives must accept the risk involved in the use of engineered fill and offset this risk with the monetary savings of avoiding deep foundations. This potential problem must be recognized and discussed at a pre-construction meeting. Procedures can then be instigated to reduce the risk of settlement resulting from un-compacted fill. During the construction of the engineered fill, all existing fill and soft/loose native soil must be removed.

### **7.2.2 Foundations on Native Soil**

Alternatively, the proposed structures foundations can be supported on conventional spread and/or strip footings founded on the undisturbed native soil at or below depth of 1.5 m below the existing grades at BH locations for a geotechnical reaction of 60 kPa at the Serviceability Limit States (SLS) and a factored geotechnical resistance of 90 kPa at the Ultimate Limit State (ULS). The recommended founding levels and geotechnical resistance for the proposed building structure will need to be confirmed by A & A at the time of construction. It is recommended that granular B engineered fill or equivalent, in max 200 mm thick and compacted to 100% SPMD, be placed beneath the footing and extending horizontally beyond all sides of the footing to a distance equal to its thickness.

### **7.2.3 General Foundation Considerations**

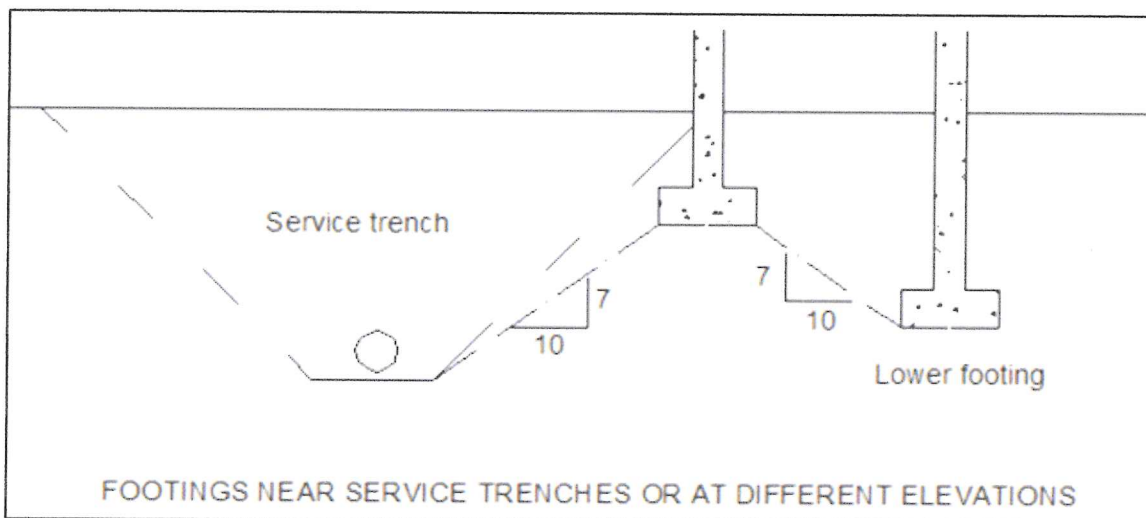
In the vicinity of the existing buried utilities, all footings must be lowered to undisturbed soils, or alternatively, the services must be structurally bridge. The footings should not be lowered to wet sandy deposits.

If applicable, where the footing extends to the cohesionless soils, the base of footings can easily be disturbed by foot traffic and should be covered by 50 mm of skim coat concrete immediately

after cleaning and inspection.

During winter construction, foundations and slab on grade must not be poured on frozen soil. Foundations must always be adequately protected from cold weather and freezing conditions.

Where it is necessary to place footings at different levels, the upper footing must be founded below an imaginary 10 horizontal to 7 vertical line drawn up from the base of the lower footing. The lower footing must be installed first to help minimize the risk of undermining the upper footing. Should any excavation extend below the existing footing within the influence zone of imaginary 10 horizontal to 7 vertical line from the base of the existing footing, underpinning will be required.



The recommended bearing capacities and the corresponding founding elevations would need to be confirmed by the representative of A&A during construction. It should be noted that the recommended bearing capacities have been calculated by A&A from the borehole information for the design stage only. The investigation and comments are necessarily on-going as new information of the underground conditions becomes available. For example, more specific information is available with respect to conditions between boreholes when foundation construction is underway. The interpretation between boreholes and the recommendations of this report must therefore be checked through field inspections provided by A&A to validate the information for use during the construction stage.

Backfilling of foundations shall be carried out with approved OPSS Granular B material provided. It can be placed in maximum 300 mm loose lifts and compacted to a minimum of 98% SPMDD. Filling should continue until the design subgrade elevations are obtained.



### 7.3 Frost Considerations

For any shallow structures, all exterior foundations and foundations in unheated areas must be provided with a minimum soil cover of 1.4 m or equivalent insulation for frost protection. The foundation depths recommended below are with respect to final grading levels. A perimeter drain tile, leading to an outward discharge, should be placed at the exterior face of the foundation wall where any high-water table can cause freeze thaw damage or unacceptable infiltration to the foundation.

### 7.4 Slab-On-Grade Floor Using Engineered Fill

Prior to construction of the floor slab, all topsoil, and surficial weak/softened native soil are removed and the base thoroughly proof rolled. The floor area should then be raised to within 200 mm underside of the floor slab using OPSS Granular B engineered fill or equivalent, placed in maximum 300 mm loose lifts and compacted to 98% SPMDD. To create a stable working surface and to distribute loadings, compacted OPSS Granular A or equivalent should be placed over the Granular B materials, below all floor slabs. The compacted OPSS Granular A or equivalent should be 200 mm thick at minimum, compacted to 100% SPMDD.

Floor slabs below unheated buildings or equipment should be provided with adequate insulation to prevent cracking from potential frost heave unless the compacted Granular A base is placed on clean limestone bedrock. A 100 mm thickness of high-density Styrofoam insulation, extending horizontally 1.8 m beyond the building/slab footprint, should be adequate to prevent frost heave where necessary.

The estimated modulus of subgrade reaction ( $k_s$ ) equal to  $25 \text{ MN/m}^3$  may be used for the design of slab-on-grade supported on native soils, provided that the construction is in accordance with the recommendations provided herein. If the engineered fill (Granular A or B Type II) having minimum thickness of 300 mm, this value can be increased to  $30 \text{ MN/m}^3$ . The estimated value provided above may need to be adjusted based on the structure size and locations of detail design.

The floor slabs should not be tied to any load-bearing walls or columns unless they have been designed accordingly. Contraction/expansion joints should be provided for the slabs as required by the structural engineer. It should be noted that permanent, fail-safe drainage should be designed around any depressed areas such as below grade pits, as well as behind retaining walls (if applicable).

## 7.5 Earthquake Design Parameters

Based on the borehole information and according to Table 4.1.8.4.A of OBC 2012, the subject site for the proposed structure can be classified as Class 'E' for seismic site response. Accordingly, the foundation factors  $F_a$  can be obtained from Table 4.1.8.4.B and  $F_v$  from Table 4.1.8.4.C for the design of the proposed structure.

Consideration may be given to conduct an earthquake site assessment with the use of in-situ testing of the seismic characteristics (i.e., Geophysical testing) which may lead to an improved site classification, if required.

## 7.6 Lateral Earth Pressure on Walls

The structures should be designed to withstand lateral earth pressure using the following equation:

$$p = k(\gamma h + q)$$

Where  $p$  is lateral earth pressure,  $k$  is coefficient of lateral earth pressure assumed to be 0.5 for at-rest condition,  $\gamma$  is backfill unit weight assumed to be  $20 \text{ kN/m}^3$ ,  $h$  is depth from the ground surface and  $q$  is surcharge at ground surface adjacent to the wall. The above expression assumes that backfill consisting of free-draining granular material with a drainage system to prevent the build-up of hydrostatic pressure behind the wall. The granular backfill should be compacted to at least 98% SPMDD, placed in maximum 200 mm lifts.

## 7.7 Groundwater Control

For foundation excavations extending below the groundwater level, it will be necessary to lower and maintain the groundwater level one meter below the excavation base. Seepage at the interface of weathered/disturbed native soils and undisturbed native soil should be expected but in all likelihood water seepage should be controllable using conventional pumping from collection sumps and ditches for most excavations. As the groundwater at the site may fluctuate seasonally it can be expected to be even higher in response to major precipitation events, no impact to the development is expected. The contractor is responsible to select and design of an appropriate dewatering system to keep groundwater level 1.0 m below foundations level during construction.

The magnitude of the hydrostatic uplift may be calculated using the following formula:

$$P = \gamma_w d$$

Where:

$P$  = hydrostatic uplift pressure acting on the base of the structure ( $\text{kPa}$ )

$\gamma_w$  = unit weight of water ( $9.8 \text{ kN/m}^3$ )



$d$  = depth of base of structure below the design high water level ( $m$ )

The resistance of gross uplift of the structure can be increased by simply increasing the mass of the structure.

## 7.8 Foundation Drainage

A conventional, perforated corrugated polyethylene drainage pipe (100 mm minimum), pre-wrapped with geotextile knitted sock conforming to OPSS 1840 should be embedded in a 300 mm layer of 19 mm clear crushed stone, and set adjacent to the perimeter footings. The drainage pipe should be connected positively to a suitable outlet, such as a sump pit or storm sewer.

In order to minimize ponding of water adjacent to the foundation walls, roof water should be controlled by a roof drainage system that directs water away from the building to prevent ponding of water adjacent to the foundation wall. The exterior grade should be sloped away from the building to promote water drainage away from the foundation walls.

## 7.9 Site Grading and Engineered Fill Construction

Site grading operations involving "cut and fill" procedures in the order of  $\pm 1$  m are expected through the site. It is recommended to construct engineered fill in areas to be raised in order to suitably support the future fire route, infrastructure servicing and lightly loaded building structures.

It is noted that topsoil stripping operations should be conducted when the ground is not wet and will support large scale construction equipment. Over-stripping can result when the ground conditions are wet and unstable.

Any shortfall of fill material required for site grading operations may be made with similarly graded imported soils for the various purposes described above. It is recommended that any proposed imported source materials be tested prior to importing, in order to ensure that the environmental quality of the imported fill meets all environmental approval criteria and to ensure that the natural moisture content of the fill is suitable for compaction.

It is recommended that engineered fill construction be conducted during the summer and early fall months when drier warmer weather conditions typically exist as the onsite soils are sensitive to moisture and will become difficult to handle and compact to the specified degree of compaction when wet.

The onsite deposits are frost susceptible. Constructing engineered fill, backfilling footings, foundation walls and service trenches using these finer grained soils during the winter months is not advisable, unless suitable weather conditions prevail, the soils are at suitable moisture content, and strict procedures are followed and monitored on a full-time basis by the

geotechnical engineer.

The onsite soils are susceptible to softening and deformation when exposed to excessive moisture and construction traffic. As a result, it is imperative that the grading/filling operations are planned and maintained to direct surface water run-off to low points and then be positively drained by suitable means. During periods of wet weather, construction traffic should be directed along the designated construction routes so as not to disturb and rut the exposed subgrade soil. Temporary construction roads consisting of clear crushed material (such as crushed stone or recycled concrete) may be required during poor weather conditions such as a wet spring or fall.

## **7.10 Site Servicing**

### **7.10.1 Excavation Conditions**

It is anticipated that municipal watermain and sewer servicing will generally be in the range of 2 to 4 m below final design grades. Excavation side slopes should comply with the current "Regulations for Construction Projects under the Ontario Occupational Health and Safety Act". Compact to very dense sandy silt to silt below or above groundwater table can be generally classified as Type 3 soils. The excavation in Type 3 soil can be carried out maintaining the side slopes not steeper than 1H:1V. The excavation side slopes should be suitably protected from erosion processes. For the conventional excavation depth, it is not anticipated to encounter major water flow into the excavation. Should unstable and/or wet conditions be encountered, side slopes are to be flattened to a stable configuration. The geotechnical engineer should be retained to examine and inspect cut slopes to ensure construction safety.

### **7.10.2 Pipe Bedding**

The native and re-compacted fill soil will generally provide suitable subgrade support to sewer and watermain servicing provided that the integrity of the base of the trench excavations can be maintained during construction. Any unsuitable soils exposed at the pipe subgrade should be sub-excavated and replaced with a minimum 150 mm bedding thickness of OPSS Granular A, compacted to at least 98% SPMDD. The bedding requirements for the services should be in accordance with Ontario Provincial Standard Drawings (OPSD) standards and the town Standards. Granular "A" should be used to backfill around the pipe to at least 150 mm above the top of the pipe. From the springline to 300 mm above the obvert of the pipe, sand cover shall be used. Particular attention should be given to ensure material placed beneath the haunches of the pipe is adequately compacted.



### 7.10.3 Trench Backfill

Excavated inorganic materials are considered suitable for reuse as trench backfill. If necessary, potential mixing of drier and wetter excavated soils in proper ratios can be done to produce a suitable mixture at or near the optimum water content for compaction in order to achieve the required compaction specification. Conversely, judicious addition of water may be required if the soils are significantly drier than their optimum moisture content in order to facilitate suitable compaction.

Backfilling of service trenches under proposed pavement areas shall be carried out using approved imported soils or imported OPSS approved Granular B materials provided it can be placed in maximum 300 mm lifts and compacted to a minimum of 98% SPMDD. The onsite fill materials may not meet compaction requirements or may contain substantial amounts of silt or clay and therefore, are not considered suitable to be used as backfill. It is expected that most material will have to be imported. Materials such as organic soils, overly wet soils, boulders and frozen materials (if work is carried out in the winter months) should not be used for backfilling. Backfilling operations should follow closely after excavation so that only a minimal length of trench slope is exposed at any one time to minimize potential problems. This will potentially minimize over-wetting of the subgrade material. Particular attention should be given to make sure frozen material is not used as backfill should construction extend into the winter season.

Proctor compaction tests must show that the soil is capable of being compacted to a satisfactory density; results submitted to A&A for approval and then be delivered on site within 2% of its optimum moisture content. Materials that have been imported and approved for use that are stored onsite should be maintained within 2% of their optimum moisture content. They should also be protected from the weather with tarps.

### 7.10.4 Pavement Structures

It is our understanding from the proposed development that new roadways, driveways, and parking areas will be constructed for this project. Detailed traffic loads have not been provided at the time of writing this report. The following recommendations for pavement structure are based on our experience with similar projects.

The recommended pavement structure is outlined in **Table 4**, based upon an estimate of the subgrade soil properties determined from visual examination and textural classification of the soil samples. Consequently, the recommended pavement structures should be considered for preliminary design purposes only. A functional design life of 8 to 10 years has been used to establish the pavement recommendations. This represents the number of years to the first rehabilitation, assuming regular maintenance is carried out. If required, a more refined pavement

structure design can be performed based on specific traffic data and design life requirements and will involve specific laboratory tests to determine frost susceptibility and strength characteristics of the subgrade soils, as well as specific data input from the client. Regular maintenance will be required due to the nature of the underlying fill material.

**Table 4 – Recommended Pavement Structure Thickness**

Pavement Layer	Compaction Requirements	Light Duty Parking (Cars)	Heavy-Duty Parking Area
Asphaltic Concrete (wearing course)	92 to 96.5% SPMDD*	40mm OPSS HL3	40mm OPSS HL3
Asphaltic Concrete (binder course)		40mm OPSS HL8	80mm OPSS HL8
OPSS Granular A Base (or 20mm Crushed Limestone)	100% SPMDD*	150mm	150mm
OPSS Granular B Subbase (or 50mm Crusher Run Limestone)	100% SPMDD*	250mm	350mm
* Standard Proctor Maximum Dry Density, ASTM-D698			

Alternatively, consideration should be given to the use of rigid Portland Cement Concrete pavement where there is intense truck use, parking and turning of vehicles. **Table 5** provides the minimum recommended rigid pavement structure.

**Table 5 - Minimum Rigid Concrete Pavement Structure**

Pavement Layer	Compaction Requirements	Heavy Duty Pavement
Portland Cement Concrete (CAN3-CSA A23.1) - Class C-2	CAN3-CSA A23.1	225mm
Base Course: Granular A (OPSS 1010) or 19 mm Crusher Run Limestone	100% Standard Proctor Maximum Dry Density (ASTM-D698)	150mm

It must be noted that this structure does not provide full protection of the subgrade from frost penetration; therefore, the pavement slabs must be separated from the building structure.

Concrete should be proportioned, mixed, placed and cured in accordance with the requirements of CSA Standard CAN/CSA-A23.1-14 for class C-2 exposure, with the following key requirements:

- Minimum 28-day compressive strength: 32 MPa



- Air entrainment (14-20mm): 5 to 8 %
- Maximum water/cementing material ratio: 0.45

Concrete should be placed and spread in a manner which avoids segregation. It should be consolidated with a vibratory screed or internal vibrators. Consolidation close to form edges must be given special consideration.

Concrete should be finished to a thickness tolerance of 0 to plus 10mm. Concrete must be cured adequately to provide durability and strength. Curing can be accomplished by wet blankets, sprinkling, plastic sheets and curing compounds. Curing should begin immediately after the loss of bleed water.

Concrete pavement should be provided with joints to control stresses and prevent the formation of irregular cracks. Recommended joint spacing is 24 to 30 times slab thickness to a maximum dimension of about 4.0m. We would also recommend that load transfer dowels be placed at 50 mm spacing at the joints.

Sawed joints should be cut before random cracking occurs in the slab, usually within 6 to 18 hours after concrete placement. The maximum thickness (aperture) of control joints should be 6mm, while the depth of control joints should be about 1/4th of the slab thickness.

The pavement should be closed to traffic until a minimum flexural strength of 2MPa is attained or an approximate compressive strength of 20MPa. This minimum strength is generally reached when the concrete can be saw cut without ravelling.

Additional comments on the construction of parking areas and access roadways are as follows:

- As part of the subgrade preparation, proposed parking areas and access roadways should be stripped of all topsoil, loose to very loose fill and/or native soil materials within a minimum depth of 0.6m below the underside of the designed subbase and then thoroughly proof rolled by using a loaded truck or a roller with a minimum rated capacity of 20 tons, under the full-time supervision of this office. Any localized soft or unstable areas detected must be further sub-excavated and bridged by using clean fill materials like adjacent areas placed in shallow lifts (maximum 200mm thick and at or near "±2%" optimum moisture contents) and compacted to at least 98 percent of Standard Proctor Maximum Dry Density (SPMDD). Similarly, the fill required to raise the grade should consist of inorganic soil, placed in the shallow lifts, and compacted to the aforementioned SPMDD requirements.
- The long-term performance of the pavement structure is highly dependent upon the subgrade support conditions. Stringent construction control procedures should be maintained to ensure uniform subgrade moisture and density conditions are achieved. In addition, the need for adequate drainage cannot be over-emphasized. The finished

pavement surface and underlying subgrade should be free of depressions and should be sloped (preferably at a minimum grade of two percent) to provide effective surface drainage toward catch basins. Surface water should not be allowed to pond adjacent to the outside edges of pavement areas. Continuous pavement subdrains should be provided along both sides of the driveway/access routes and drained into respective catch basins to facilitate drainage of the subgrade and granular materials. This is particularly important in heavy-duty pavement areas. The subdrain invert should be maintained at least 0.3m below subgrade level. Subdrains should also be provided at all catch basins within the parking area.

- The locations and extent of sub-drainage required within the paved areas should be reviewed by this office in conjunction with the proposed lot grading. Assuming that satisfactory crossfalls in the order of two percent have been provided, subdrains extending from and between catch basins may be satisfactory. If shallower crossfalls are considered, a more extensive system of sub-drainage may be necessary and should be reviewed by this office.
- The above pavement structure considers that construction will be carried out during the dry period of the year. If the subgrade becomes excessively wet or rutted during construction activities, additional sub-base material or placement of geogrids may be required. The need for additional sub-base material and/or placement of geogrids including filter fabric to stabilize the base is best determined during construction. It is recommended that the existing subgrade be heavily proof-rolled prior to placement and any areas showing excessive deflection be replaced prior to placing the granular sub-base material.
- The most severe loading conditions on light-duty pavement areas and the subgrade may occur during construction. Consequently, special provisions such as restricted access lanes, half-loads during paving, etc., may be required, especially if construction is carried out during unfavourable weather.
- It is recommended that A&A be retained to review the final pavement structure designs and drainage plans prior to construction to ensure that they are consistent with the recommendations.

#### **7.10.5 Curbs and Sidewalks**

The concrete for any new exterior curbs and sidewalks should be proportioned, mixed, placed, and cured in accordance with the requirements of OPSS 353, OPSS 1350 and the municipality. During cold weather, the freshly placed concrete should be covered with insulating blankets to protect against freezing. The subgrade for the sidewalks should consist of undisturbed natural soil or well compacted fill. A minimum 100 mm thick layer of compacted (minimum 98% SPMD) Granular A is recommended below sidewalk slabs.




## 8.0 LIMITATIONS OF REPORT


This report has been prepared for Mr. Eugene Gawaziuk (the client), who retained the services of A&A to conduct a preliminary geotechnical investigation for a proposed development of residential townhouses development located at 196 Old Highway 24, Bloomsburg, Ontario. Further dissemination of this report is not permitted without A&A's prior written approval. A&A has carefully assessed all information provided to them during this investigation but makes no guarantees or warranties as to the accuracy or completeness of this provided information.

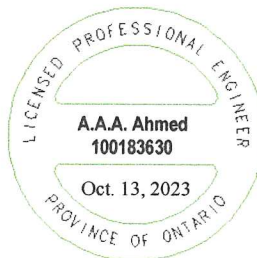
The comments given in this report are intended only for the guidance of design engineers and architects. Contractors bidding on or undertaking the work, should in this light, decide that further field investigations, and interpretations of the factual borehole results are necessary to draw their own conclusions as to how the subsurface conditions may affect them. Should soil conditions during excavation for the foundations prove to be different than what have been described in this report, the author of this report should be notified as soon as possible. No liability or claims may be made by owners or third parties against A&A for factors outside (A&A's) control. An independent quality control firm must be made available for all concrete and compaction testing associated with construction. All testing results should be made available to the owner, designers, consultant, and general contractor.

The site investigation and recommendations follow generally accepted practice for Geotechnical Consultants in Ontario. Materials testing has been completed in accordance with ASTM or CSA Standards or modifications of these standards that have become standard practice.

  
Thomas Demers, P Eng., QP<sub>ESA</sub>  
Project Manager

Reviewed by:

  
Aly Ahmed, Ph. D., P.Eng.  
Principal Engineer



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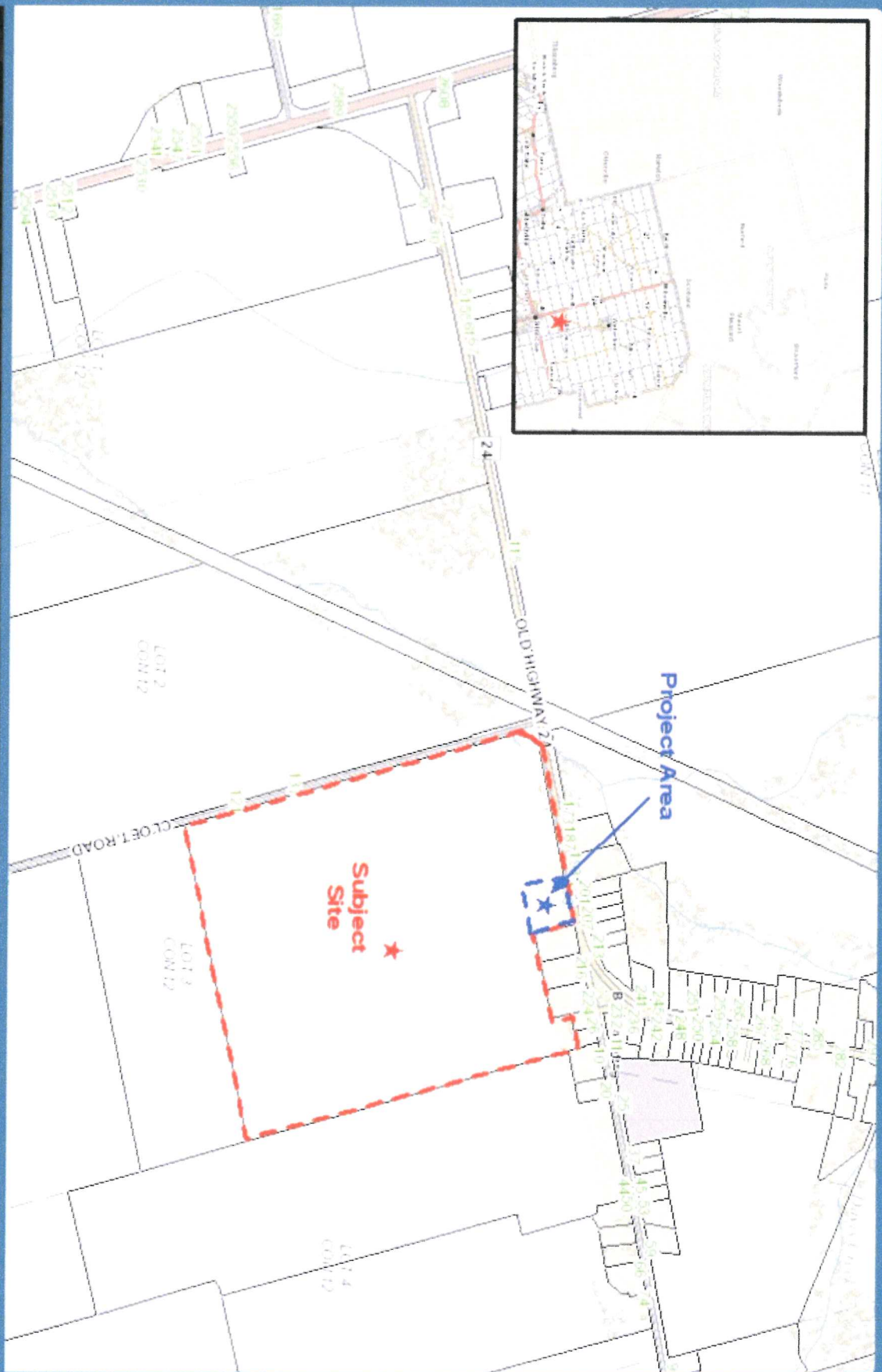
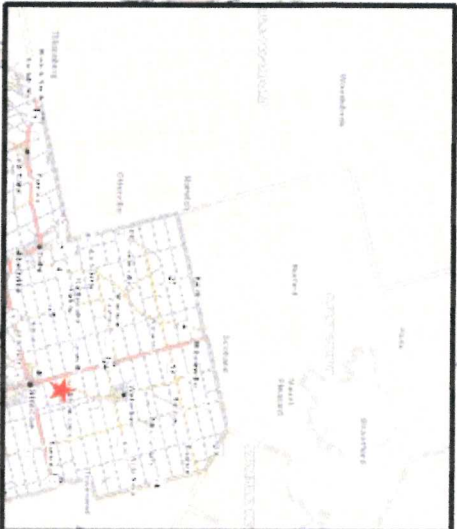
## 9.0 REFERENCES

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## **APPENDIX A – Site Drawings**

**Figure 1 – Approximate Site Location Map for 196 Old Highway 24, Bloomsburg, ON.**



16 Young St.,  
Woodstock, ON, N4S 3L4  
Tel: 519 266-4680

# Location Map Indicating the Project Area on the Subject Site at 196 Old Highway 24, Bloomsburg, Ontario



Project #: 7938  
October 2023



## Figure 2 - Approximate Geotechnical Borehole Location Plan





**Legend**

- ⊕ Geotechnical Borehole
- - - Site Boundary
- - - Project Area

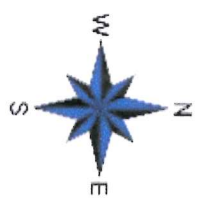
**A&A ENVIRONMENTAL CONSULTANTS INC.**

16 Young St.  
Woodstock, ON, N4S 3L4  
Tel: 519 286-4680

**Satellite Image Indicating the Geotechnical Borehole Locations  
Within the Project Area at 196 Old Highway 24, Bloomsburg, Ontario**

0 m 20 m

Project: 7938  
October 2023



## **APPENDIX B – Borehole Logs and Explanation of Terms and Symbols**



## Explanation of Terms and Symbols

The terms and symbols used on the borehole logs to summarize the results of field investigation and subsequent laboratory testing are described in these pages.

Abbreviations, graphic symbols and relevant test method designations are as follows:

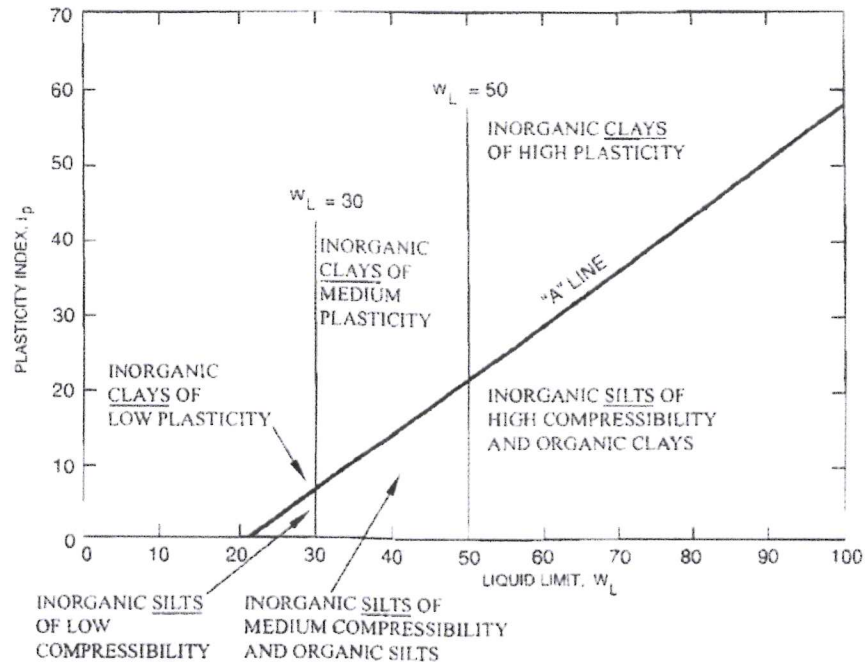
$w$	Water Content
$w_L, LL$	Liquid Limit
$w_p, PL$	Plastic Limit
$I_p$	Plasticity Index
$\gamma$	Soil unit weight
$K$	Coefficient of Lateral earth pressure
$K_s$	Module of vertical subgrade reaction
$P$	Lateral earth pressure
$Q$	Surcharge load
$H$	Depth from the ground surface
$B$	Width of rectangular footing
$P$	Hydrostatic uplift pressure
$d$	Depth of structure's base below the design water level
$\gamma_w$	Unit weight of water
$\Phi$	Geotechnical resistance factor
$\phi$	Internal friction angle of soil
$c$	Cohesion
$c_u, S_u$	Undrained shear strength
$V_s$	Shear wave velocity
<b>SPT-N</b>	Penetration resistance
<b>SPMMD</b>	Standard Proctor Maximum Dry Density
<b>MRD</b>	Marshal Maximum Relative Density

Soils are classified and described according to their engineering properties and behaviours.

<b>Noun</b>	gravel, sand, silt, clay	<b>&gt; 35 % and main fraction</b>
<b>"and"</b>	and gravel, and silt, etc.	<b>&gt;35 %</b>
<b>Adjective</b>	gravelly, sandy, silty, clayey, etc.	<b>20 to 35 %</b>
<b>"some"</b>	some sand, some silt, etc.	<b>10 to 20%</b>
<b>"trace"</b>	trace sand, trace silt, etc.	<b>1 to 10 %</b>



The plasticity chart (after Casagrande, 1948):



Correlation of soil parameters with uncorrected SPT values for: a) cohesionless soils and b) cohesive soil

Compactness Condition	SPT N-INDEX (blows per 0.3 m)
Very Loose	0 to 4
Loose	4 to 10
Compact	10 to 30
Dense	30 to 50
Very Dense	>50

(a)

Consistency	Undrained Shear Strength (kPa)	SPT N-INDEX (blows per 0.3 m)
Very soft	< 12	0 to 2
Soft	12 - 25	2 to 4
Firm	25-50	4 to 8
Stiff	50 - 100	8 to 15
Very stiff	100 - 200	15 to 30
Hard	>200	>30

(b)

- Standard Penetration Tests (SPT); followed the methods described in ASTM Standard D1586-08a. The number of blows by a 63.5 kg (140 lb) hammer dropped from 760 mm (30 in.) is recorded for a depth of 460 mm (18"). The last two 150 mm distances (total = 300 mm) are used to calculate the SPT-N index.

## LOG OF BOREHOLE BH1

1 OF 1

PROJECT: Geotechnical Investigation

CLIENT: Gawaziuk Bloomsburg

PROJECT LOCATION: 196 Old Highway 24, Bloomsburg, ON

DATUM: --

BH LOCATION: Refer to Figure 2 - Approximate Boreholes Location Plan N 4748227.2 E 557022.57

## DRILLING DATA

Method: Hollow Stem Auger

Diameter: 200mm

Date: Oct-05-2023

PROJECT NO.: 7938

DRAWING NO.: 1

SOIL PROFILE			SAMPLES			GROUND WATER CONDITIONS	ELEVATION	DYNAMIC CONE PENETRATION RESISTANCE PLOT				PLASTIC LIMIT	NATURAL MOISTURE CONTENT	LIQUID LIMIT	POCKET PEN (C <sub>u</sub> ) (kPa)	NATURAL UNIT WT (kN/m <sup>3</sup> )	REMARKS AND GRAIN SIZE DISTRIBUTION (%)			
(m)	DESCRIPTION	STRATA PLOT	NUMBER	TYPE	"N" BLOWS 0.3 m			SHEAR STRENGTH (kPa)										W <sub>p</sub>	W	W <sub>L</sub>
ELEV DEPTH								○ UNCONFINED	+ FIELD VANE & Sensitivity	● QUICK TRIAXIAL	x LAB VANE									
0.0	Topsoil: 100 mm																GR SA SI CL			
0.1	Silty Sand: Silty sand, organic, rootlets, very loose, dark brown to brown, damp, no odour		1	SS	2															
0.7	Sandy Silt: Sandy silt, trace clay, brown, loose to dense, moist to wet, no odour		2	SS	6															
1																				
2			3	SS	6												0 35 58 7			
3																				
4			4	SS	37															
3.0	Silt: Silt, trace to some sand, trace clay, brown, dense to very dense, moist to wet, no odour		5	SS	54															
4			6	SS	42															
5																				
6			7	SS	77															
7																				
8			8	SS	86															
6.1	End of Borehole:  Notes: Water Level (i) During Drilling: 3.9 m																			

W. L. 3.9 mBGL  
During Drilling

0 35 58 7

## GROUNDWATER ELEVATIONS

Measurement 1st 2nd 3rd 4th

## GRAPH NOTES

+ 3, X 3: Numbers refer to Sensitivity

○ = 3% Strain at Failure

# LOG OF BOREHOLE BH2

1 OF 1

PROJECT: Geotechnical Investigation				DRILLING DATA																
CLIENT: Gawaziuk Bloomsburg				Method: Hollow Stem Auger																
PROJECT LOCATION: 196 Old Highway 24, Bloomsburg, ON				Diameter: 200mm																
DATUM: --				Date: Oct-05-2023																
BH LOCATION: Refer to Figure 2 - Approximate Boreholes Location Plan N 4748194.05 E 557041.72				PROJECT NO.: 7938																
DRAWING NO.: 2																				
SOIL PROFILE		SAMPLES		DYNAMIC CONE PENETRATION RESISTANCE PLOT		SHEAR STRENGTH (kPa)		PLASTIC LIMIT		NATURAL MOISTURE CONTENT		LIQUID LIMIT		POCKET PEN. (C <sub>p</sub> ) (MPa)		NATURAL UNIT WT (kN/m <sup>3</sup> )		REMARKS AND GRAIN SIZE DISTRIBUTION (%)		
(m) ELEV DEPTH	DESCRIPTION	STRATA PLOT	NUMBER	TYPE	"N" BLOWS 0.3 m	GROUND WATER CONDITIONS	ELEVATION	20 40 60 80 100	20 40 60 80 100	W <sub>p</sub>	W	W <sub>L</sub>	10 20 30				GR	SA	SI	CL
0.0	Topsoil: 150 mm																			
0.2	Silty Sand: Silty sand, organic, rootlets, very loose, dark brown to brown, damp, no odour		1	SS	2															
0.7	Sandy Silt: Sandy silt, trace clay, brown, compact to very dense, moist to wet, no odour		2	SS	11															
			3	SS	22															
			4	SS	60															
2.9	Silt: Silt, trace to some sand, trace clay, brown, dense, moist to wet, no odour		5	SS	40															
			6	SS	43															
			7	SS	41															
			8	SS	30															
6.1	End of Borehole:																			
	Notes: Water Level (i) During Drilling: 3.6 m																			

GROUNDWATER ELEVATIONS

Measurement 1st 2nd 3rd 4th

GRAPH NOTES

+ 3, X 3: Numbers refer to Sensitivity

○ ●=3% Strain at Failure



# LOG OF BOREHOLE BH3

1 OF 1

PROJECT: Geotechnical Investigation

CLIENT: Gawaziuk Bloomsburg

PROJECT LOCATION: 196 Old Highway 24, Bloomsburg, ON

DATUM: --

BH LOCATION: Refer to Figure 2 - Approximate Boreholes Location Plan N 4748210.17 E 556998.17

## DRILLING DATA

Method: Hollow Stem Auger

Diameter: 200mm

Date: Oct-05-2023

PROJECT NO.: 7938

DRAWING NO.: 3

SOIL PROFILE			SAMPLES			GROUND WATER CONDITIONS	ELEVATION	DYNAMIC CONE PENETRATION RESISTANCE PLOT					PLASTIC LIMIT w <sub>p</sub>	NATURAL MOISTURE CONTENT w	LIQUID LIMIT w <sub>L</sub>	POCKET PEN. (CU) (kPa)	NATURAL UNIT WT (kNm <sup>-3</sup> )	REMARKS AND GRAIN SIZE DISTRIBUTION (%)	
(m)	DESCRIPTION	STRATA PLOT	NUMBER	TYPE	"N" BLOWS 0.3 m			SHEAR STRENGTH (kPa)											WATER CONTENT (%)
ELEV DEPTH								○ UNCONFINED ● QUICK TRIAXIAL	+ FIELD VANE & Sensitivity × LAB VANE	20	40	60							
0.0	Topsoil: 150 mm																GR SA SI CL		
0.2	Silty Sand: Silty sand, organic, rootlets, very loose, dark brown to brown, damp, no odour		1	SS	2								○						
0.7	Sandy Silt: Sandy silt, trace clay, brown, loose to compact, moist to wet, no odour		2	SS	7								○						
			3	SS	4								○						
			4	SS	6									○					
			5	SS	16									○					
3.6	Silt: Silt, trace to some sand, trace clay, brown, compact, wet, no odour		6	SS	16								○						
			7	SS	18								○				0 3 88 9		
			8	SS	14								○						
6.1	End of Borehole:  Notes: Water Level (i) During Drilling: 2.7 m																		

W. L. 2.7 mBGL During Drilling

0 3 88 9

## GROUNDWATER ELEVATIONS

Measurement 1st 2nd 3rd 4th

## GRAPH NOTES

+ 3, X 3: Numbers refer to Sensitivity

○ = 3% Strain at Failure

## **APPENDIX C – Grain Size Distribution and Test Results**



**GEOTRUST ENGINEERING LIMITED**

GEOTRUST Engineering Limited  
71 Chepstow, London, ON, N6G 3S5  
Tel: +1 647-870-6903  
[www.geotrustengineering.ca](http://www.geotrustengineering.ca)  
[aly.ahmed@geotrustengineering.ca](mailto:aly.ahmed@geotrustengineering.ca)

# **GEOTECHNICAL TESTING REPORT DATA**

**7938 - Gawaziuk Bloomsburg**

**Prepared for:**

**A & A Environmental Consultants Inc.**

**By:**

**GeoTrust Engineering Limited**

**Project No. GT23001TA**

**Oct 12, 2023**

Project No. GT23001TA





**GEOTRUST ENGINEERING LIMITED**

GEOTRUST Engineering Limited  
71 Chepstow, London, ON, N6G 3S5  
Tel: +1 647-870-6903  
[www.geotrustengineering.ca](http://www.geotrustengineering.ca)  
[aly.ahmed@geotrustengineering.ca](mailto:aly.ahmed@geotrustengineering.ca)

Oct 12, 2023

A&A Environmental Consultants 16 Young  
Street, Woodstock, Ontario, N4S 3L4

**Attention :** Dr. Ali A. Rasoul Ph.D, EP, P.Geo, QP - Principle

**RE:** LABORATORY TEST RESULTS - Project: 7938 – Gawaziuk Bloomsburg GT

Dear Dr. Rasoul,

GeoTrust Engineering Limited (GeoTrust) is pleased to provide the Final Laboratory Testing Report Data for the project mentioned above. This report presents the results of laboratory testing conducted on soil samples received at GeoTrust Laboratory on October 8, 2023. The laboratory testing included the following.

1. Water Moisture Content - ASTM D2216
2. Particle Size Analysis (Hydrometer) - ASTM D422 - D2217
3. Atterberg Limits - ASTM 4318

The results of the testing are summarized in the attached **Tables 1 and 2**. Grain size distribution curves are presented in **Appendix A**.

We trust that this information meets your present requirements. If we can be of additional assistance in this regard, please contact this office.

For and on behalf of GeoTrust Engineering Limited,

*Alain CP*

**Alain Conrado-Palafox**, M Sc  
Lab Supervisor

*Aly Ahmed*

**Aly Ahmed**, Ph D, P.Eng.,  
Lab General Manager

Project No. GT23001TA

**Table 1: Summary of Grain Size and Atterberg Limits Testing Results**

BH / Sample No.	Depth (m)	Atterberg Limits (%)				Soil Compositions (%)				Soil Description
		LL	PL	PI	Sample Type	Gravel	Sand	Silt	Clay	
<b>BH1 (SS3)</b>	1.5 - 2.1	Non-Plastic				--	35	58	7	Sandy Silt, trace Clay
<b>BH2 (SS5)</b>	3.0 - 3.6	Non-Plastic				--	19	72	9	Silt, some Sand, trace Clay
<b>BH3 (SS7)</b>	4.6 -5.2	Non-Plastic				--	3	88	9	Silt, trace Clay and Sand

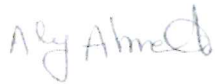
**Table 2: Summary of Moisture Content Results**

BH No.	Sample No. / Depth (m)							
	SS1 (0-0.6)	SS2 (0.8-1.4)	SS3 (1.5-2.1)	SS4 (2.3-2.9)	SS5 (3.0-3.6)	SS6 (3.8 - 4.4)	SS7 (4.6- 5.2)	SS8 (5.3 - 5.9)
BH1	8.89	5.61	12.91	16.36	16.43	20.20	16.97	17.08
BH2	15.92	20.01	16.56	13.67	17.29	21.89	16.51	21.45
BH3	10.60	6.68	8.82	31.08	25.43	21.00	25.01	25.48

## CLOSURE

We trust that this information is satisfactory for your present requirements. Should you have any questions or require additional information, please do not hesitate to contact this office.

For and Behalf of GeoTrust Engineering Limited,



**Aly Ahmed**, Ph D., P.Eng. Lab  
General Manager

## **APPENDIX A**



# UNIFIED SOIL CLASSIFICATION SYSTEM

LS 702/D 422

CLAY AND SILT

SAND

GRAVEL

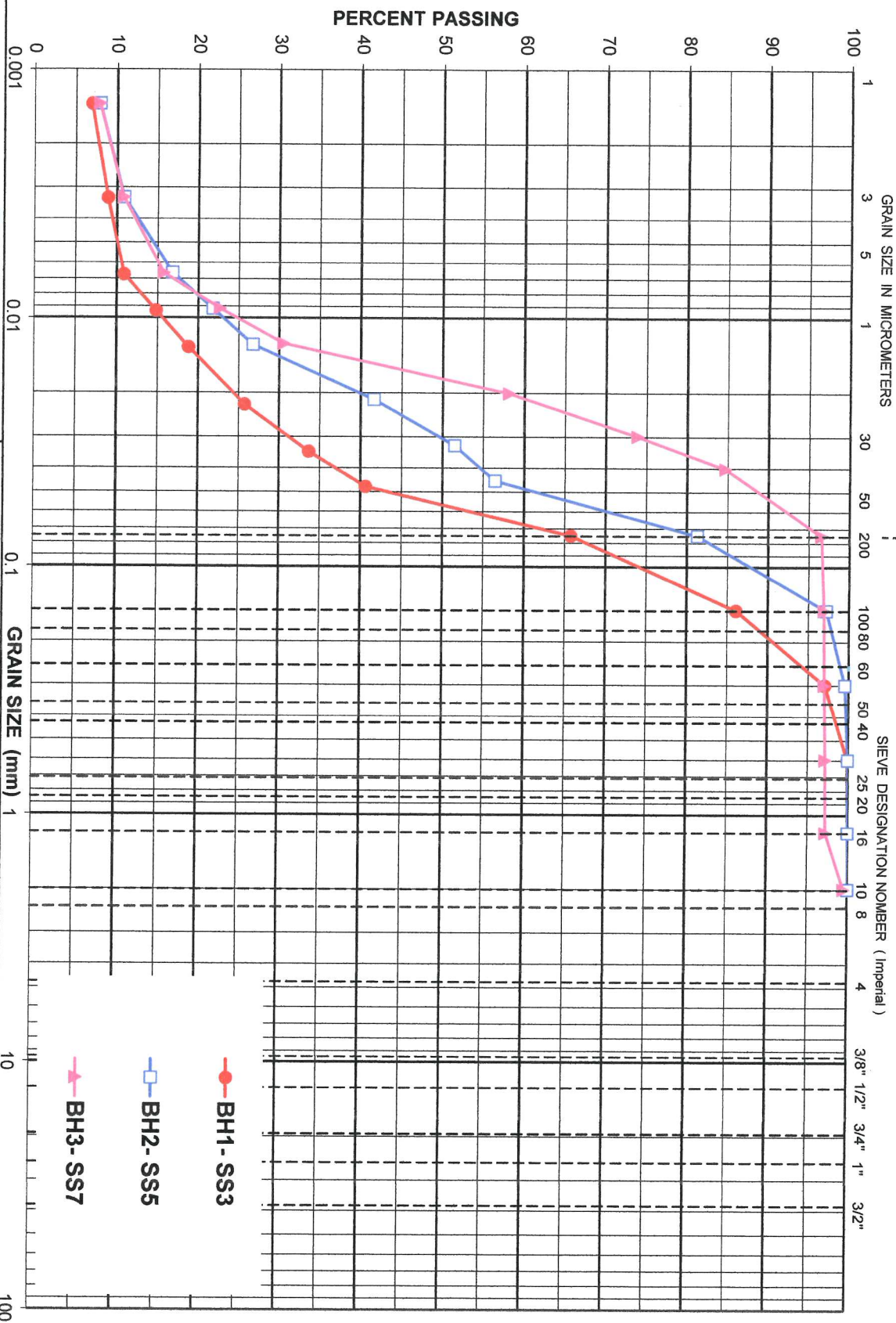
Fine

Medium

Coarse

Fine

Coarse



GEOTRUST ENGINEERING LIMITED

## GRAIN SIZE DISTRIBUTION

Figure No.: 1

PROJECT NO.: GT230011A

DATE: Oct 12, 2023

## **APPENDIX D – General Arrangements for Engineered Fill**

## **GENERAL REQUIREMENTS FOR ENGINEERED FILL**

Compacted imported soil that meets specific engineering requirements and is free of organics and debris and that has been continually monitored on a full-time basis by a qualified geotechnical representative is classified as engineered fill. Engineered fill that meets these requirements and is bearing on suitable native subsoil can be used for the support of foundations.

Imported soil used as engineered fill can be removed from other portions of a site or can be brought in from other sites if suitable. In general, most of Ontario soils are too wet to achieve the 100% Standard Proctor Maximum Dry Density (SPMDD) and will require drying and careful site management if they are to be considered for engineered fill. Imported non-cohesive granular soil is preferred for all engineered fill. For engineered fill, A&A recommends use of OPSS Granular 'B' sand and gravel fill material only.

Adverse weather conditions such as rain make the placement of engineered fill to the required degree of density difficult or impossible; engineered fill should not be placed during freezing conditions, i.e., normally not between December 15 and April 1 of each year. If the project demands placement of engineered fill in winter (December 15-April 1) it can be placed only under the following conditions:

- All frozen material and or snow must be removed before placement of engineered fill on a daily basis
- Only Granular B Type 2 or Granular A (including crushed concrete or crushed limestone)
- The fill placement must be supervised on a full-time basis by a geotechnical consultant

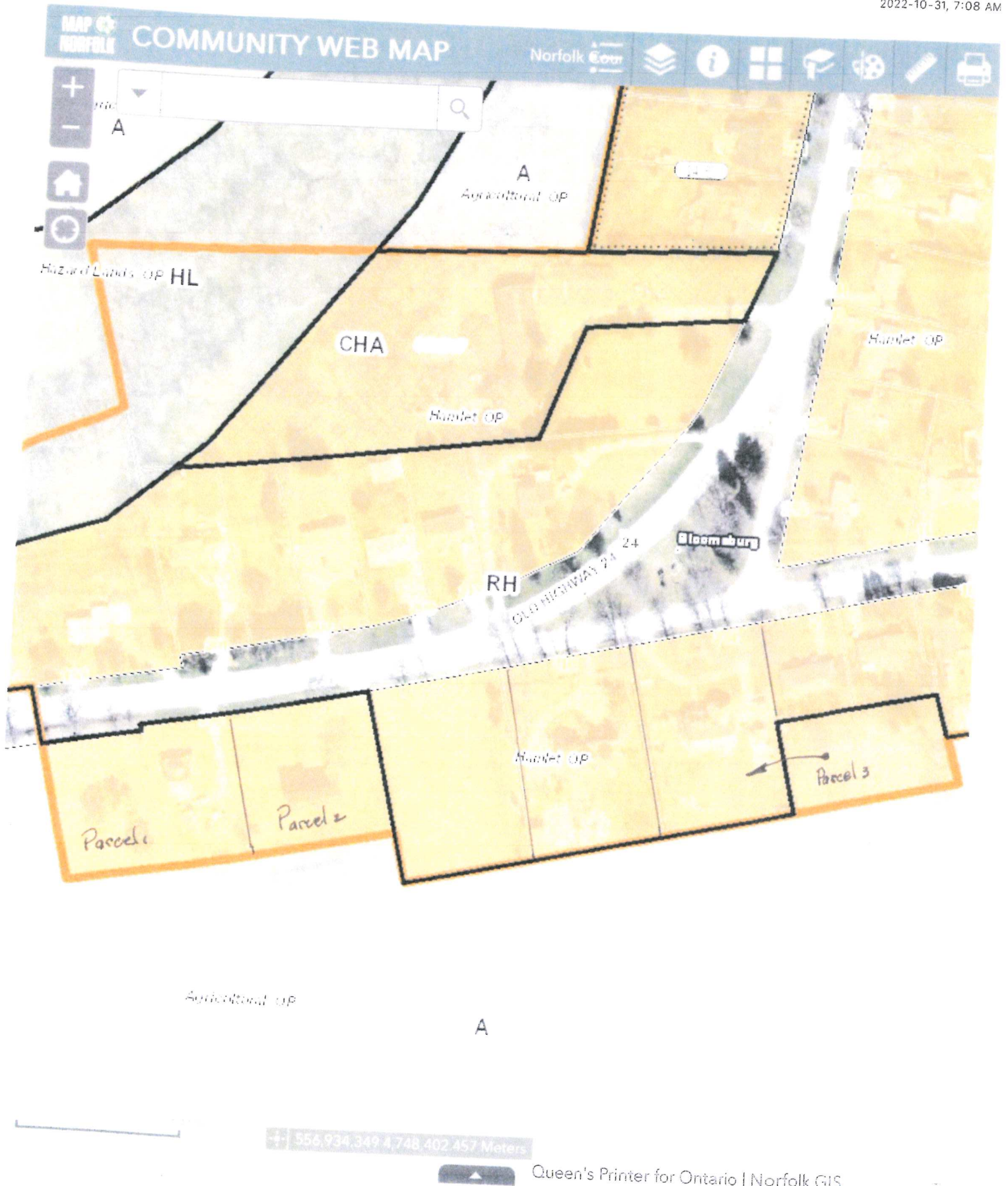
The location of the foundations on the engineered soil pad is critical and certification by a qualified surveyor that the foundations are within the stipulated boundaries is mandatory. Since layout stakes are often damaged or removed during fill placement, offset stakes must be installed and maintained by the surveyors during the course of fill placement so that the contractor and engineering staff are continually aware of where the engineered fill limits lie.

Foundations placed within the engineered soil pad must be backfilled with the same conditions and quality control as the original pad.

To perform satisfactorily, engineered fill requires the cooperation of the designers, engineers, contractors, and all parties must be aware of the requirements. The minimum requirements are as follows; however, the geotechnical report must be reviewed for specific information and requirements.

1. Prior to site work involving engineered fill, a site meeting to discuss all aspects must be convened. The surveyor, contractor, design engineer and geotechnical engineer must attend the meeting. At this meeting, the limits of the engineered fill will be defined. The contractor must make known where all fill material will be obtained and samples must be provided to the geotechnical engineer for review, and approval before filling begins.
2. Detailed drawings indicating the lower boundaries as well as the upper boundaries of the engineered fill must be available at the site meeting and be approved by the geotechnical engineer.
3. The building footprint and base of the pad, including basements, garages, etc. must be defined by offset stakes that remain in place until the footings and service connections are all constructed. Confirmation that the footings are within the pad, service lines are in place, and that the grade conforms to drawings, must be obtained by the owner in writing from the surveyor and A&A Consultants. Without this confirmation no responsibility for the performance of the structure can be accepted by A&A. Survey drawing of the pre and post fill location and elevations will also be required.
4. The area must be stripped of all topsoil and fill materials. Subgrade must be proof rolled. Soft spots must be dug out. The stripped native subgrade must be examined and approved by an A&A engineer prior to placement of fill.
5. The approved engineered fill must be compacted to 100% Standard Proctor Maximum Dry Density throughout. Granular Fill preferred. Engineered fill should not be placed (where it will support footings) during the winter months. Engineered fill compacted to 100% SPMDD will settle under its own weight approximately 0.5% of the fill height and the structural engineer must be aware of this settlement. In addition to the settlement of the fill, additional settlement due to consolidation of the underlying soils from the structural and fill loads will occur and should be evaluated prior to placing the fill.







Request ID: 023581547  
Demande n°:  
Transaction ID: 073037199  
Transaction n°:  
Category ID: CT  
Catégorie:

Province of Ontario  
Province de l'Ontario  
Ministry of Government Services  
Ministère des Services gouvernementaux

Date Report Produced: 2019/09/13  
Document produit le:  
Time Report Produced: 15:05:06  
Imprimé à:

# Certificate of Incorporation Certificat de constitution

This is to certify that

Ceci certifie que

**2716452 ONTARIO LIMITED**

Ontario Corporation No.

Numéro matricule de la personne morale en  
Ontario

**002716452**

is a corporation incorporated,  
under the laws of the Province of Ontario.

est une société constituée aux termes  
des lois de la province de l'Ontario.

These articles of incorporation  
are effective on

Les présents statuts constitutifs  
entrent en vigueur le

**SEPTEMBER 13 SEPTEMBRE, 2019**



Director/Directeur  
Business Corporations Act/Loi sur les sociétés par actions

Request ID / Demande n°

23581547

Ontario Corporation Number  
Numéro de la compagnie en Ontario

2716452

FORM 1

FORMULE NUMÉRO 1

BUSINESS CORPORATIONS ACT

/

LOI SUR LES SOCIÉTÉS PAR ACTIONS

ARTICLES OF INCORPORATION  
STATUTS CONSTITUTIFS

1. The name of the corporation is: *Dénomination sociale de la compagnie:*  
2716452 ONTARIO LIMITED

2. The address of the registered office is: *Adresse du siège social:*

c/o EUGENE GAWAZIUK  
1449 WINDHAM ROAD 11

(Street & Number, or R.R. Number & if Multi-Office Building give Room No.)  
(Rue et numéro, ou numéro de la R.R. et, s'il s'agit édifice à bureau, numéro du bureau)

WINDHAM CENTRE  
CANADA  
(Name of Municipality or Post Office)  
(Nom de la municipalité ou du bureau de poste)

ONTARIO  
N0E 2A0  
(Postal Code/Code postal)

3. Number (or minimum and maximum number) of directors is: *Nombre (ou nombres minimal et maximal) d'administrateurs:*  
Minimum 1 Maximum 10

4. The first director(s) is/are: *Premier(s) administrateur(s):*

First name, initials and surname  
*Prénom, initiales et nom de famille*

Resident Canadian State Yes or No  
*Résident Canadien Oui/Non*

Address for service, giving Street & No.  
or R.R. No., Municipality and Postal Code

*Domicile élu, y compris la rue et le numéro, le numéro de la R.R., ou le nom de la municipalité et le code postal*

\* EUGENE NICHOLAS  
GAWAZIUK

YES

1449 WINDHAM ROAD 11

WINDHAM CENTRE ONTARIO  
CANADA N0E 2A0

Request ID / Demande n°

23581547

Ontario Corporation Number  
Numéro de la compagnie en Ontario

2716452

---

\* SHIRLEY ANNE  
GAWAZIUK

YES

1449 WINDHAM ROAD 11

WINDHAM CENTRE ONTARIO  
CANADA N0E 2A0



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2716452

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5. Restrictions, if any, on business the corporation may carry on or on powers the corporation may exercise.

*Limites, s'il y a lieu, imposées aux activités commerciales ou aux pouvoirs de la compagnie.*

None.

6. The classes and any maximum number of shares that the corporation is authorized to issue:

*Catégories et nombre maximal, s'il y a lieu, d'actions que la compagnie est autorisée à émettre:*

The shares that the Corporation is authorized to issue are:

- (a) an unlimited number of Class A Common Shares ("Class A Common Shares");
  - (b) an unlimited number of Class B Common Shares ("Class B Common Shares");
  - (c) an unlimited number of Class A Special Shares ("Class A Special Shares");
  - (d) an unlimited number of Class B Special Shares ("Class B Special Shares");
- and,
- (e) an unlimited number of Class C Special Shares ("Class C Special Shares").

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2716452

7. Rights, privileges, restrictions and conditions (if any) attaching to each class of shares and directors authority with respect to any class of shares which may be issued in series:  
*Droits, privilèges, restrictions et conditions, s'il y a lieu, rattachés à chaque catégorie d'actions et pouvoirs des administrateurs relatifs à chaque catégorie d'actions que peut être émise en série:*

The shares of the Corporation shall have attached thereto the following rights, privileges, restrictions and conditions:

#### 7.1 CLASS A AND CLASS B COMMON SHARES

##### PAYMENT OF DIVIDENDS

(1) The Directors, in their discretion, may declare non-cumulative dividends out of the moneys of the Corporation properly applicable to the payment of dividends, at any time and from time to time on one class of the Class A Common Shares or the Class B Common Shares without regard to the payment of any dividends on any of the classes of Common Shares or the classes of Special Shares. The holders of the Class A and Class B Common Shares have the option to waive such dividends, in the holders of such shares sole and absolute discretion.

##### LIQUIDATION, DISSOLUTION OR WINDING-UP OF THE CORPORATION

(2) In the event of the liquidation, dissolution or winding-up of the Corporation, whether voluntary or involuntary, or any other distribution of the assets of the Corporation among its shareholders for the purpose of winding up its affairs, after redemption of all of the Special Shares, the holders of the Class A Common Shares shall be entitled to the first One Dollar (\$1.00) of the remaining capital of the Corporation and thereafter, the Class A Common Shares and the Class B Common Shares, both classes of Common Shares in equal ranking, shall be entitled to receive the remaining assets of the Corporation. No distribution shall be allowed to the Class A Common Shares and the Class B Common Shares resulting in the Corporation having insufficient net assets to redeem the Special Shares.

##### VOTING RIGHTS

(3) The holders of the Class A Common Shares shall be entitled to receive notice of, to attend meetings of the shareholders, and to vote at such meetings on the basis of one vote per share.

(4) The holders of the Class B Common Shares shall be entitled to receive notice of, to attend meetings of the shareholders, and to vote at such meetings on the basis of one vote per share.

#### 7.2 CLASS A, CLASS B, AND CLASS C SPECIAL SHARES

##### PAYMENT OF DIVIDENDS

(1) The Directors, in their discretion, may declare non-cumulative dividends out of the moneys of the Corporation properly applicable to the payment of dividends, at any time and from time to time, at a rate to be set by the Directors not to exceed 8% per annum of the Redemption Amount or Adjusted

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Ontario Corporation Number  
Numéro de la compagnie en Ontario

23581547

2716452

7. Rights, privileges, restrictions and conditions (if any) attaching to each class of shares and directors authority with respect to any class of shares which may be issued in series:  
*Droits, privilèges, restrictions et conditions, s'il y a lieu, rattachés à chaque catégorie d'actions et pouvoirs des administrateurs relatifs à chaque catégorie d'actions que peut être émise en série:*

Redemption Amount as defined in paragraphs 7.2 (5), 7.2 (6) and 7.2(7) below on one or more classes of the Special Shares without regard to the payment of any dividends on any other of the classes of Special Shares or the classes of Common Shares. The holders of the Class A, Class B, and Class C Special Shares shall have the option to waive such dividends, in the holders of such shares sole and absolute discretion.

#### REDEMPTION AND RETRACTION OF SPECIAL SHARES

(2) Subject to 7.2(12) below, the Corporation may at any time, upon giving notice as hereinafter provided, redeem the whole or any part of the Special Shares on payment for each share to be redeemed of the Redemption Amount, together with all dividends declared thereon and unpaid.

(3) The Corporation shall give not less than thirty (30) days written notice to the holders of the Class A Special Shares, not less than twenty-nine (29) days written notice to the holders of the Class B Special Shares, and no let than twenty-eight (28) days written notice to the holders of the Class C Special Shares of such redemption by mailing such notice to the registered holders of the shares to be redeemed specifying the date and the place of redemption. If such notice be given by the Corporation and an amount sufficient to redeem the shares be deposited with the trust company or bank of the Corporation on or before the date fixed for redemption, dividends on the shares to be redeemed shall cease after the date fixed for redemption, and the holders thereof shall thereafter have no rights against the Corporation in respect thereof, except, upon the surrender of the certificates for such shares, to receive payment therefor out of the monies so deposited.

(4) Subject to 7.2(12) below, the holders of the Class A Special Shares upon thirty (30) days written notice, the holders of the Class B Special Shares upon twenty-nine (29) days written notice, and the holders of the Class C Special Shares upon twenty-eight (28) days written notice, shall have the right to require the Corporation to redeem the whole or any part of the Special Shares held by the holder thereof on payment for each share to be redeemed of the Redemption Amount or Adjusted Redemption Amount, together with all dividends declared thereon and unpaid. The Corporation shall on the date of redemption redeem such shares by paying to such registered holder an amount equal to the Redemption Amount or Adjusted Redemption Amount of the shares being redeemed together with all dividends declared thereon and unpaid. Such payment shall be made by cheque payable at par at any branch of the trust company or bank of the Corporation. From and after the date of redemption such shares shall cease to be entitled to dividends and the holder thereof shall not be entitled to exercise any of the rights of the holders of Special Shares in respect thereof unless payment of the Redemption Price is not made on the Redemption Date, in which event the rights of the holder of the shares shall remain unaffected.



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Ontario Corporation Number  
Numéro de la compagnie en Ontario

23581547

2716452

7. Rights, privileges, restrictions and conditions (if any) attaching to each class of shares and directors authority with respect to any class of shares which may be issued in series:  
*Droits, privilèges, restrictions et conditions, s'il y a lieu, rattachés à chaque catégorie d'actions et pouvoirs des administrateurs relatifs à chaque catégorie d'actions que peut être émise en série:*

(5) The Redemption Amount for all Class A and Class B Special Shares shall, subject to Section 7.2 (7) below, be an amount established by the Directors of the Corporation to be equal to the fair market value of the property sold to, transferred to, or exchanged with, the Corporation on the date of first issuance (the Valuation Date) of the Special Shares affected, less the amount of non-share consideration, if any, paid or assumed by the Corporation as partial consideration for the purchase, acquisition or exchange of such property, divided by the number of Special Shares issued as consideration, or partial consideration for the purchase, acquisition or exchange of such property. The fair market value of the property transferred and of the non-share consideration given (calculated as of the Valuation Date) shall be determined by the Directors.

(6) The Redemption Amount for the Class C Special Shares shall be \$1.00 per share.

#### ADJUSTMENT OF REDEMPTION AMOUNT FOR CLASS A AND CLASS B SPECIAL SHARES

(7) In the event that the Minister of National Revenue or any other taxing authority asserts that any property or an aliquot portion thereof for which any Class A Special Share or Class B Special Share was issued or any share of the Corporation or aliquot portion thereof which was changed into any such Special Share, had a fair market value at the time of such issuance or change of other than the Redemption Amount, then the Directors of the Corporation shall confer and may by resolution determine an adjusted redemption amount for the Special Shares affected thereby. Upon such determination being confirmed by resolution of a majority of the holders of the class of Special Shares affected thereby, the Redemption Amount shall automatically be adjusted nunc pro tunc to be such adjusted redemption amount (the Adjusted Redemption Amount) so determined and confirmed. If any Class A Special Share or Class B Special Share is redeemed under Sections 7.2 (2) or (4) above prior to any such adjustment as described above resulting in the Adjusted Redemption Amount of such Class A Special Share or Class B Special Share being in excess of the Redemption Amount, the amount of such excess, together with interest thereon calculated from the date of redemption of such Class A Special Share or Class B Special Share at a rate per annum which is equal to the prime rate from time to time charged by the Corporations bank, in respect of each Class A Special Share or Class B Special Share so redeemed shall be a debt of the Corporation payable on demand to the former holder of each such Class A Special Share or Class B Special Share so redeemed. If any Class A Special Share or Class B Special Share is redeemed under Sections 7.2(2) or (4) above prior to any such adjustment as described above resulting in the Adjusted Redemption Amount of such Class A Special Share or Class B Special Share being less than the Redemption Amount, the amount of such difference together with interest thereon calculated from the date of



Request ID / Demande n°

Ontario Corporation Number  
Numéro de la compagnie en Ontario

23581547

2716452

7. Rights, privileges, restrictions and conditions (if any) attaching to each class of shares and directors authority with respect to any class of shares which may be issued in series:  
*Droits, privilèges, restrictions et conditions, s'il y a lieu, rattachés à chaque catégorie d'actions et pouvoirs des administrateurs relatifs à chaque catégorie d'actions que peut être émise en série:*

redemption at a rate per annum which is equal to the prime rate from time to time charged by the Corporations bank, in respect of each Class A Special Share or Class B Special Share so redeemed shall be a debt of the former holder of each such Class A Special Share or Class B Special Share so redeemed payable on demand to the Corporation.

#### LIQUIDATION, DISSOLUTION OR WINDING-UP OF THE CORPORATION

(8) In the event of the liquidation, dissolution or winding-up of the Corporation, whether voluntary or involuntary, or any other distribution of the assets of the Corporation among its shareholders for the purpose of winding up its affairs:

i) before distribution of any assets of the Corporation among the holders of the Common Shares, the Class B Special Shares, and the Class C Special Shares, the holders of the Class A Special Shares shall be entitled to receive an amount equal to the Redemption Amount or Adjusted Redemption Amount, together with any dividends declared thereon and unpaid and no more but shall not be entitled to participate any further in the property or assets of the Corporation

ii) before distribution of any assets of the Corporation among the holders of the Common Shares and the Class C Special shares, the holders of the Class B Special Shares shall be entitled to receive an amount equal to the Redemption Amount or Adjusted Redemption Amount, together with any dividends declared thereon and unpaid and no more but shall not be entitled to participate any further in the property or assets of the Corporation. No distribution shall be allowed to the Class B Special Shares resulting in the Corporation having insufficient net assets to redeem the Class A Special Shares.

iii) before distribution of any assets of the Corporation among the holders of the Common Shares, the holders of the Class C Special Shares shall be entitled to receive an amount equal to the Redemption Amount, together with any dividends declared thereon and unpaid and no more but shall not be entitled to participate any further in the property or assets of the Corporation. No distribution shall be allowed to the Class C Special Shares resulting in the Corporation having insufficient net assets to redeem the Class A Special Shares and the Class B Special Shares.

#### VOTING RIGHTS

(9) The holders of the Class A Special Shares shall be entitled to receive notice of, to attend meetings of the shareholders, and to vote at such meetings on the basis of one vote per share.

(10) The holders of the Class B Special Shares shall not be entitled to receive notice of or to attend meetings of the shareholders, and shall not be

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*Droits, privilèges, restrictions et conditions, s'il y a lieu, rattachés à chaque catégorie d'actions et pouvoirs des administrateurs relatifs à chaque catégorie d'actions que peut être émise en série:*

entitled to vote at such meetings.

- (11) The holders of the Class C Special Shares shall be entitled to receive notice of, to attend meetings of the shareholders, and to vote at such meetings on the basis of ten thousand (10,000) votes per share.

#### PAYING DIVIDENDS/REPURCHASE, RETRACTIONS AND REDEMPTIONS

- (12) Notwithstanding the foregoing provisions of Section 7, the Corporation shall not pay dividends, nor shall Shares be redeemed or retracted pursuant to Sections 7.2(2) and 7.2(4) above, if said action would cause the realizable value of the Corporation's assets to be less than the aggregate of its liabilities, the stated capital of all issued and outstanding Shares of the Corporation, and the redemption amount of all issued and outstanding Special Shares of the Corporation.

#### CONVERSION/EXCHANGE

- (13) The holders of the Class A, Class B, and Class C Special Shares shall not have the right nor be entitled to convert or exchange any of the Class A, Class B, or Class C Special Shares held by him or her into any other class of Shares.

#### 7.3 ALL CLASSES OF SHARES

- (1) Subject to the provisions of the Business Corporations Act, R.S.O. 1990, and the terms hereof, any of the foregoing paragraph 7 may be altered, amended or repealed or the application thereof suspended in any particular case or changes may be made in the rights, privileges, restrictions and conditions attaching to the Common Shares and Special Shares by Articles of Amendment, but no such alteration, amendment, repeal, suspension or change shall be adopted until approved by special resolution submitted to a special meeting of the shareholders of the class or classes of shares affected, duly called for the purpose of considering the resolution and passed, with or without amendment, at the meeting by at least two-thirds (2/3) of the votes cast, or consented to in writing by each shareholder of the class or classes of shares affected, entitled to vote at such a meeting or by such holder's attorney authorized in writing.

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8. The issue, transfer or ownership of shares is/is not restricted and the restrictions (if any) are as follows:

*L'émission, le transfert ou la propriété d'actions est/n'est pas restreinte. Les restrictions, s'il y a lieu, sont les suivantes:*

No share or shares of any class in the capital of the Corporation shall be issued or transferred without the express consent of the majority of the Directors of the Corporation expressed by a resolution passed by the Directors or by an instrument or instruments in writing signed by a majority of the Directors. The words "majority of Directors" shall mean, where the number of Directors of the Corporation is limited to two (2), both Directors of the Corporation, or, if limited to one (1), the single Director of the Corporation.



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9. Other provisions, (if any, are):

*Autres dispositions, s'il y a lieu:*

1. The number of the Corporations shareholders, exclusive of:

- (a) persons who are in its employment or that of an affiliate, and,
- (b) persons who, having been formerly in the employment of the Corporation or that of an affiliate, were, while in that employment, shareholders of the Corporation and have continued to be shareholders of that Corporation after termination of that employment,

is limited to not more than fifty (50) persons, two (2) or more persons who are the joint registered owners of one (1) or more shares being counted as one (1) shareholder.

2. Any invitation to the public to subscribe for the Corporation's securities is prohibited.

3. The Corporation may purchase subject to the provisions of the Business Corporations Act, any of its issued Common Shares.

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10. The names and addresses of the incorporators are  
*Nom et adresse des fondateurs*

First name, initials and last name  
or corporate name

*Prénom, initiale et nom de  
famille ou dénomination sociale*

Full address for service or address of registered office or of principal place of business  
giving street & No. or R.R. No., municipality and postal code  
*Domicile élu, adresse du siège social au adresse de l'établissement principal, y compris  
la rue et le numéro, le numéro de la R.R., le nom de la municipalité et le code postal*

- \* EUGENE NICHOLAS GAWAZIUK

1449 WINDHAM ROAD 11

WINDHAM CENTRE ONTARIO  
CANADA N0E 2A0

- \* SHIRLEY ANNE GAWAZIUK

1449 WINDHAM ROAD 11

WINDHAM CENTRE ONTARIO  
CANADA N0E 2A0

Name of Corporation  
2716452 ONTARIO LIMITED

Ontario Corporation Number  
2716452

Request ID  
23581547

ADDITIONAL INFORMATION FOR ELECTRONIC INCORPORATION

CONTACT PERSON

First Name	Last Name
Jamie	Pereira
Name of Law Firm	
MacLeod Hosack Nunn Pereira Kinkel LLP	

ADDRESS

Street #	Street Name	Suite #
39	Colborne Street North, PO Box	
Additional Information		City
		Simcoe
Province	Country	Postal Code
ONTARIO	CANADA	N3Y 4N5

TELEPHONE #: 519-426-6763



Name of Corporation  
2716452 ONTARIO LIMITED

Ontario Corporation Number  
2716452

Request ID  
23581547

## ELECTRONIC INCORPORATION TERMS AND CONDITIONS

The following are the terms and conditions for the electronic filing of Articles of Incorporation under the Ontario *Business Corporations Act* (OBCA) with the Ministry of Government Services. Agreement to these terms and conditions by at least one of the incorporators listed in article 10 of the Articles of Incorporation is a mandatory requirement for electronic incorporation.

- 1) The applicant is required to obtain an Ontario biased or weighted NUANS search report for the proposed name. The applicant must provide the NUANS name searched, the NUANS reservation number and the date of the NUANS report. The NUANS report must be kept in electronic or paper format at the corporation's registered office address.
- 2) All first directors named in the articles must sign a consent in the prescribed form. The original consent must be kept at the corporation's registered office address.
- 3) A Corporation acquiring a name identical to that of another corporation must indicate that due diligence has been exercised in verifying that the Corporation meets the requirements of Subsection 6(1) of Regulation 62 made under the OBCA. Otherwise, the Corporation is required to obtain a legal opinion on legal letterhead signed by a lawyer qualified to practise in Ontario that clearly indicates that the corporations involved comply with Subsection 6(2) of that Regulation by referring to each clause specifically. The original of this legal opinion must be kept at the Corporation's registered office address. The applicant must complete the electronic version of this legal opinion provided by one of the Service Providers under contract with the Ministry.
- 4) The date of the Certificate of Incorporation will be the date the articles are updated to the ONBIS electronic public record database. Articles submitted electronically outside MGS, ONBIS access hours, will receive an endorsement date effective the next business day when the system resumes operation, if the submitted Articles of Incorporation meet all requirements for electronic incorporation. Articles of Incorporation submitted during system difficulties will receive an endorsement date effective the date the articles are updated to the ONBIS system.
- 5) The electronic Articles of Incorporation must be in the format approved by the Ministry and submitted through one of the Service Providers under contract with the Ministry.
- 6) Upon receipt of the Certificate of Incorporation issued by the ONBIS system, a duplicate copy of the Articles of Incorporation with the Ontario Corporation Number and the Certificate of Incorporation must be kept in paper or electronic format. The Ministry will print and microfilm copies of the Certificate of Incorporation, the Articles of Incorporation and any other documentation submitted electronically. These will be considered the true original filed copies.
- 7) The sole responsibility for correctness and completeness of the Articles of Incorporation, and for compliance with the OBCA and all regulations made under it, lies with the incorporator(s) and/or their legal advisor(s), if any.

The incorporator(s) have read the above Terms and Conditions and they understand and agree to them.

I am an incorporator or I am duly authorized to represent and bind the incorporator(s).

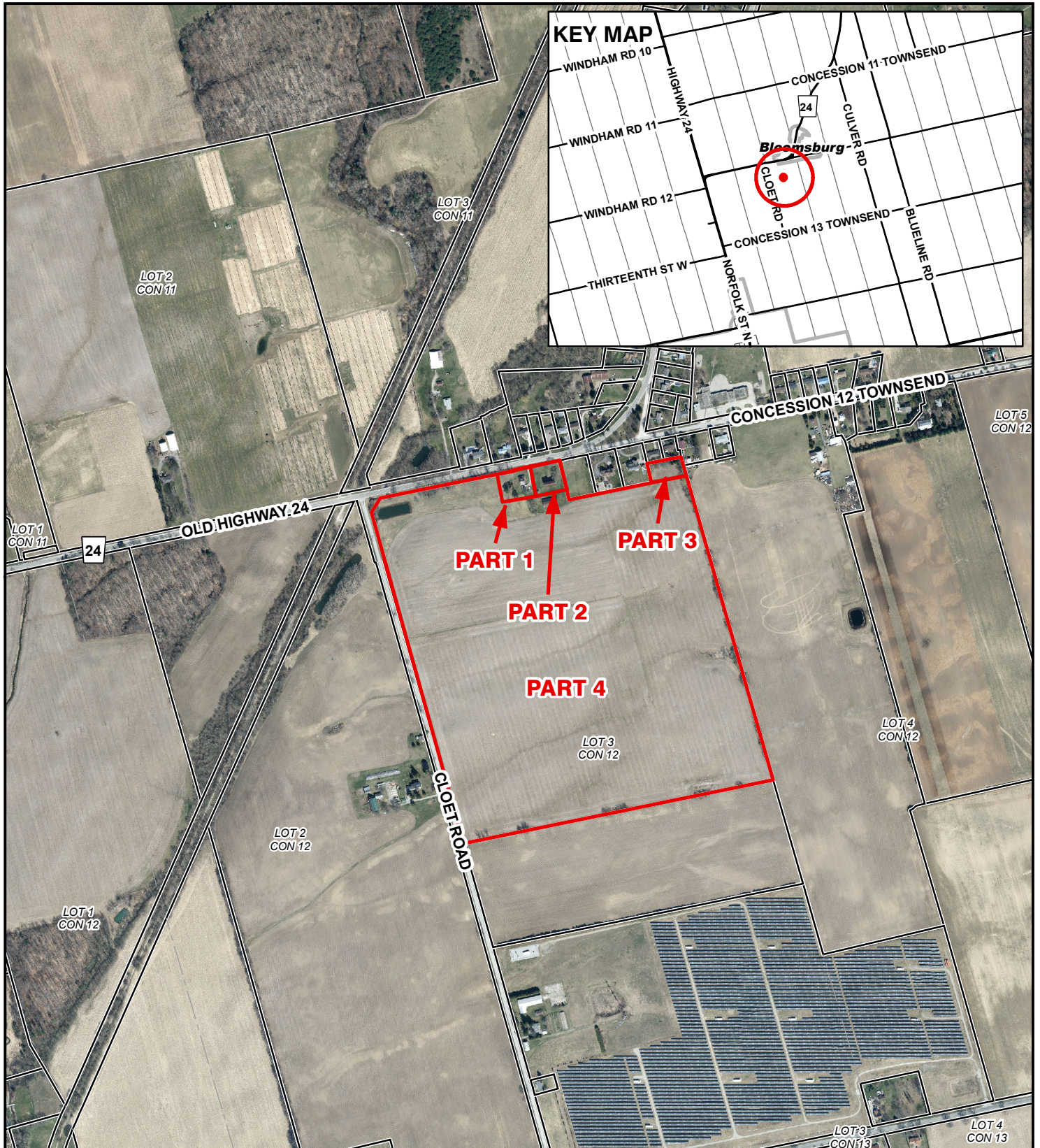
First Name  
Eugene

Last Name  
Gawaziuk





**MAP A**  
**CONTEXT MAP**  
Geographic Township of TOWNSEND

ZNPL2024044

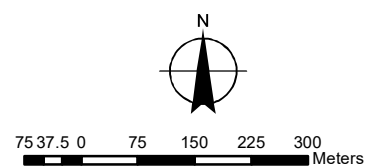


**Legend**

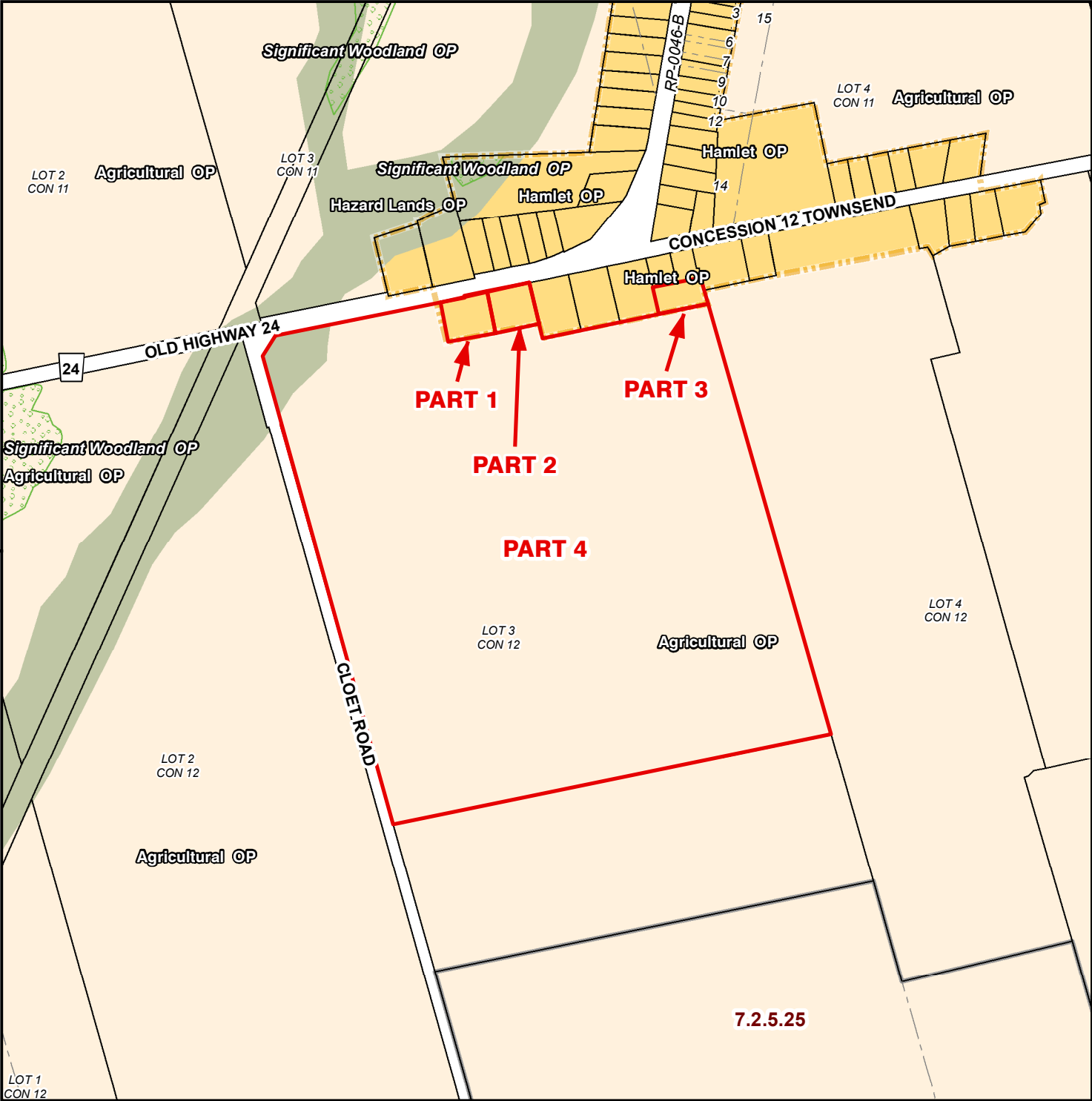
-  Subject Lands
-  Lands Owned

2020 Air Photo

2/13/2024







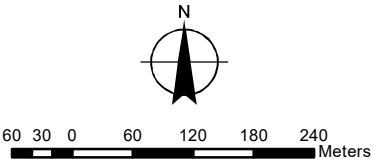
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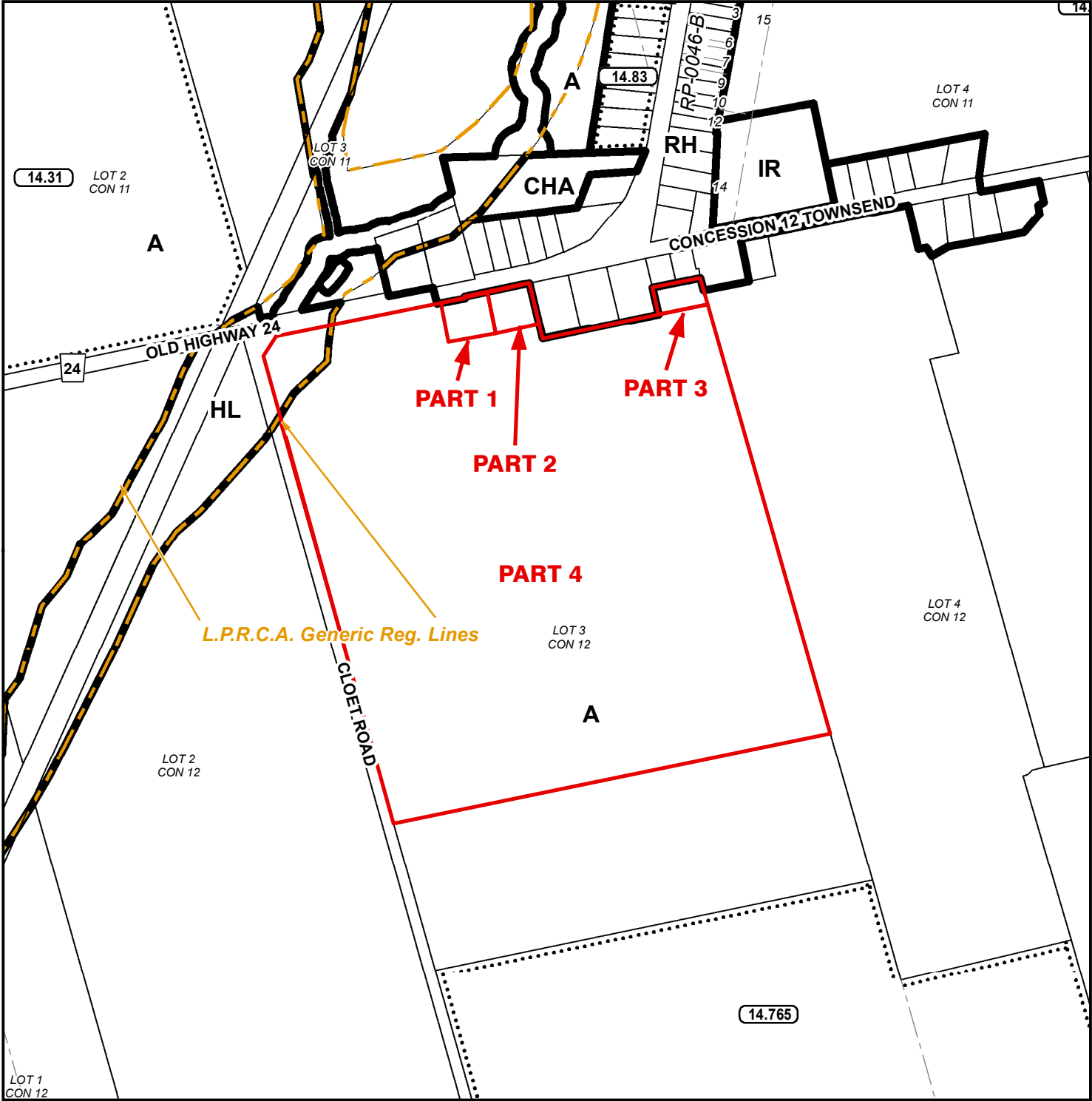
- Subject Lands
- Lands Owned

Official Plan Designations

- Agricultural
- Hazard Lands
- Hamlet
- Hamlet Area Boundary
- Significant Woodland

2/13/2024





LEGEND

Subject Lands

Lands Owned

LPRCA Generic RegLines

(H) - Holding

A - Agricultural Zone

CHA - Hamlet Commercial Zone

RH - Hamlet Residential Zone

HL - Hazard Land Zone

IR - Rural Institutional Zone

ZONING BY-LAW 1-Z-2014

2/13/2024

N

60 30 0 60 120 180 240

Meters



