

September 9, 2025  
Project No. 2505036

VIA EMAIL: [REDACTED]

Attn: Tim & Angie Fletcher  
[REDACTED]

**Re: Engineering Support for Severance and Lot Development  
Karst Assessment for the property located at  
442538 Con Rd 21, Georgian Bluffs, ON, N0H 2T0**

Dear Mr. & Mrs. Fletcher,

This letter provides the findings of the Karst Topography Assessment (or Karst Study) for the property located at 442538 Concession Road 21, Georgian Bluffs, ON, N0H 2T0, within the County of Grey, roll number 420362000605800. The location of the Site is shown on Figure 1. This letter report has been conducted in support of a proposed severance on the north portion of the property.

The subject property encompasses approximately 40.15 acre (16.25 hectares) and is located approximately 8 km east of Wiarton, Ontario. Access to the property is achieved from the south side of Concession Road 21. The property use is identified as "Single family detached (not on water)". The proposed severance is located in the northeast corner of the property and is planned to be 74.4 metres by 103.8 metres in size. GEI was retained to complete a scoped karst assessment on the (cleared) area to the south of the proposed severance, where a future single home dwelling may be developed. It should be noted that the investigation was limited to the cleared (non-forested) area to the west and south of the proposed severance.

The subject property falls partially within the Karst Area, as outlined in Appendix "A" of the Grey County Official Plan. Due to the potential for hydraulically active karst features at the Site, a review of the subsurface is conducted herein to assess risks involved with Site development. The scope of this review includes:

- Review of geologic and physiographic mapping,
- Review of aerial photography,
- A site visit and reconnaissance of the study area on September 8, 2025,
- The documentation of the nature of soil and bedrock in five excavated testholes,
- Review of nearby well records using the MECP water well database.

The scope of work described herein relies on surface and subsurface exploration via excavated testholes that are a minimum of 1 meter x 1 meter in diameter, down to bedrock or a maximum of 2 metres depth. No detailed subsurface exploration (such as drilling) or geophysical work was conducted as part of this Assessment.

### **Karst – Background**

Karst topography is generally found in areas where carbonate rock, such as limestone or dolostone, are exposed at surface or lie beneath shallow surficial sediment or overburden. It can be found near surface or below ground at depth, or potentially near lithological contacts between carbonate-based rock types and other lithological units. Karst is created through the chemical weathering (i.e., dissolution) of carbonate bedrock, subsequently forming a network of voids beneath the surface. At the surface, evidence of this type of weathering can be seen as irregular or hummocky rock outcrops, crevasses, or sinkhole patterns in the land topography.

The nature of the karst (i.e., how large, abundant, and connected the voids are) and the site setting (i.e., if the voids are part of an active surface water or groundwater system with significant dissolution) will determine the potential for interference with proposed development.

### **Geologic Setting**

The subject property is located in the physiographical region of the Bruce Peninsula (Chapman and Putnam, 1984), which extends northward into Lake Huron, separating Georgian Bay from the main body of the lake. This region is underlain primarily by Paleozoic sedimentary rocks, particularly limestone and dolostone of Ordovician and Silurian age. These carbonate rocks form the backbone of the region and are part of the broader Great Lakes-St. Lawrence Lowlands physiographic province. The bedrock is relatively flat-lying and has been sculpted by glacial processes during the Pleistocene ice ages.

The soil types mapped over the property are the Wiarton Silt Loam in the north where the development would occur and the Osprey Loam in the south. The Wiarton Loam series is described as a pale yellow-tan looking, calcareous, till sourced soil with both loam and silt loam variants. It is typically associated with gently sloping topography and has variable drainage. The Osprey Series is a soil type developed from light buff-colored stony till of dolomitic origin, with numerous limestone boulders dotting the surface and buff-colored rock fragments throughout the matrix. The topography ranges from irregular moderately sloping to very steeply sloping and the stoniness varies from stony to very stony.

The bedrock underlying the soils has been mapped as the Amabel Formation. The Amabel Formation is a Middle Silurian aged carbonate rock unit from approximately 430-425 million years ago that forms a prominent geological feature across southern Ontario and parts of the northern Great Lakes region. It is composed primarily of thick-bedded limestone and dolostone with minor shale interbeds. Due to its carbonate composition and well-developed joint systems, the Amabel Formation is generally considered susceptible to chemical weathering and dissolution, making it a significant karst-forming unit responsible for numerous caves, sinkholes, and underground drainage systems throughout its extent, most notably in areas like the Bruce Peninsula and Manitoulin Island in Ontario. The formation typically ranges from 30 to 150 meters in thickness and serves as both an important aquifer and a distinctive landscape-forming geological unit. Additionally, according to the Karsts of Southern Ontario and Manitoulin Island GIS Mapping (Ontario Geologic Survey, 2008; Brunton, Dodge), the area of the subject property is considered to be an area of potential and known karst. These areas are shown in Figure 2.

Regionally, the area is gently sloping toward the south in the direction of Scale Lake, where the southern property limit is abutting the shoreline. Outside of the cleared areas within the property, the forested areas are mapped as having Significant Woodlands and generally overlap with National Heritage System (NHS) areas. Near the shoreline of Scale Lake, the property also contains GSCA regulated areas.

A review of the Ministry of Environment, Conservation and Parks (MECP) water well database was also completed as part of this investigation. While no well record is found within the property based on the database, it is likely that the record located 20m north of the property (Well ID 2508747) within the farmers field likely belongs to the house located within the proposed severance. It reported 1.67 metres of stony soil before intercepting limestone bedrock. The pumping test reports a static water level of 18.59 metres below ground surface (mbgs). The neighbouring property to the east (Well ID 2507837) reported 0.91 metres of clay before intercepting limestone bedrock. The pumping test reports a static water level of 9.14 mbgs. Approximately 300m to the northwest, the well record (Well ID 7415195) reported 1.52 metres of stony clay before intercepting limestone bedrock. The pumping test reports a static water level of 11.58 mbgs.

It is expected that the soils/overburden to be fairly thin with the Amabel Formation being confirmed by the reports of limestone bedrock in the well records. Given the slight elevation difference north the south portion of the property, and given and expected bedrock topography in the area, the groundwater system is expected to regionally flow south to south-west with a more local component to the south.

### **Site Setting and Reconnaissance**

A site visit conducted by GEI Consultants Canada was conducted on September 8, 2025. As mentioned earlier, the subject property encompasses approximately 40.15 acre (16.25 hectares) and is located approximately 8 km east of Warton, Ontario. The proposed severance is located in the northeast corner of the property and is planned to be 74.4 metres by 103.8 metres in size. Based on the planned severance, the retained lot will have the driveway located west of the severed lot approximately 16.2 metres in width that trends southward. The property (where currently cleared) is generally flat with a gentle decreasing slope southward to Scale Lake. Forested areas are to the west and south of the cleared area.

During the field activities, several instances of outcropping bedrock (at surface) were identified (indicated on Figure 3). Based on visual observations, they appeared to be weathered carbonate rock (dolostone) with a thin layer of vegetation growing over it. Based on the outcrop locations, it appears to be a E-W band of gently rolling bedrock topography.

Based on the topography and surficial features observed at the time of the site visit, the results of the field assessment completed by GEI suggest that there is no evidence of hydraulically active karstic features, such as areas of subsidence or springs that would be expected to limit development in the area of the investigation. No evidence of disappearing or re-appearing streams, pooled water resulting from bedrock sources, seeps, or sinks were identified.

### **Testhole Investigation Findings**

As part of the field investigations, five testholes (TH01 to TH05) were excavated. The testhole locations were chosen to be advanced in the area of the future driveway and distributed within the cleared area where the dwelling would be located.

The client was responsible for arranging a contractor and completing the testholes using an excavator at the discretion of GEI staff. The location of each testhole is provided in Figure 3 and the testhole logs are noted in Table 1.

In general, the results can be summarized as follows:

1. All five testholes intercepted bedrock but did not intercept the water table.
2. All of the soils were slightly damp, but no standing or moving water was evident within the soils or at the soil/bedrock interface.
3. All five testholes intercepted the following two soil types:
  - A black organic rich topsoil primarily consisting of silt and clay.
  - A brown clay rich loam with major components of silt and clay, minor variable fine sand. Trace amounts of gravel and boulders were evident.
4. In addition to the above, TH05 intercepted a stony clay rich loam layer below the clay loam with higher amounts of gravel and cobbles reaching up to 35%.
5. The testholes were stopped when dolostone bedrock was encountered at depths varying from 0.51 mbgs to 0.99 mbgs. The bedrock was tan coloured when weathered with a grey colour on the fresh surface when broken. No hummocky features or fractures/fissures were evident.
6. No active or significant karst features were evident.

## Conclusions and Recommendations

Based on the findings of this investigation, no evidence of significant karst features, or hydraulically active karst were identified in the area investigated. Additionally, no evidence of active karst features was encountered in any of the testholes completed as part of this investigation. Karst features are not expected to affect or compromise future development within the area indicated in pink on Figure 3, nor should the development negatively affect the natural environment and water resources.

Based on the findings of this report, the following recommendations are made:

1. That at the time of construction, if bedrock is encountered, that the bedrock surface be inspected in areas where it is exposed and in the locations of the proposed footings in order to confirm the nature of the bedrock and the presence or absence of any fractures or dissolution features that may pose structural limitations or potential for mass wasting under sewage systems.
2. The thickness of overburden be confirmed where sewage systems (if applicable) are constructed to ensure that the requirements of the Ontario Building Code are met. Should excavations encounter significant fractures or karst features, a qualified person should be retained for further inspection.

## Limitations

The information in this report is intended for the sole use of Mr. and Mrs. Fletcher. GEI Consultants Canada accepts no liability for use of this information by third parties. Any decisions made by third parties based on this report are made at the sole risk of the third parties.

The conclusions and recommendations in this report are based on publicly available geological information. The conclusions pertaining to the condition of soils and/or bedrock at the site are based on the subsurface investigation and the interpretation of the respective soils and bedrock based on visual observations. GEI cannot guarantee the condition of soil and/or bedrock that may be encountered at the site between testhole locations or outside of the study area. All boundaries and property limits shown in the figures are approximations.

If you have any questions, please feel free to contact the undersigned.

Sincerely,

GEI Consultants Canada Ltd.

Gerhard Kiessling, P.Geo.  
Project Geologist / Hydrogeologist

## Enclosures

### Figures

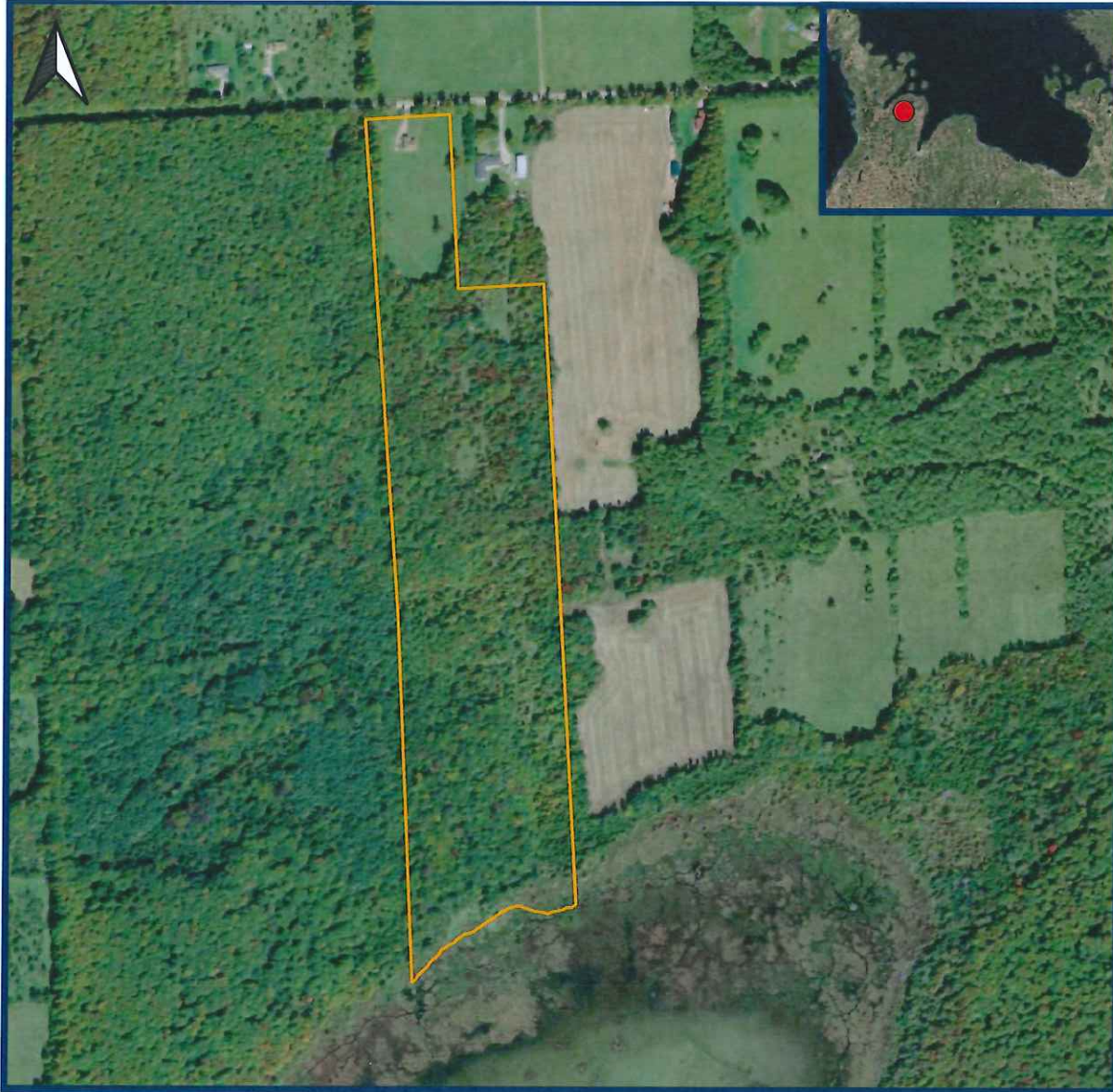
Figure 1	Property Location
Figure 2	Bedrock Geology and Karst Mapping
Figure 3	Testhole Locations

### Tables

Table 1	Testhole Logs and Locations
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### Appendices

Appendix A	Site Photographs
Appendix B	Parcel Report
Appendix C	County Official Plan Maps
Appendix D	Well Records



Karst Assessment  
442538 Concession Road 21  
Project: 2505036



**Legend**

 Property Outline

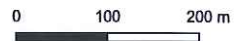


Figure 1

**Property Location**



Karst Assessment  
442538 Concession Road 21  
Project: 2505036



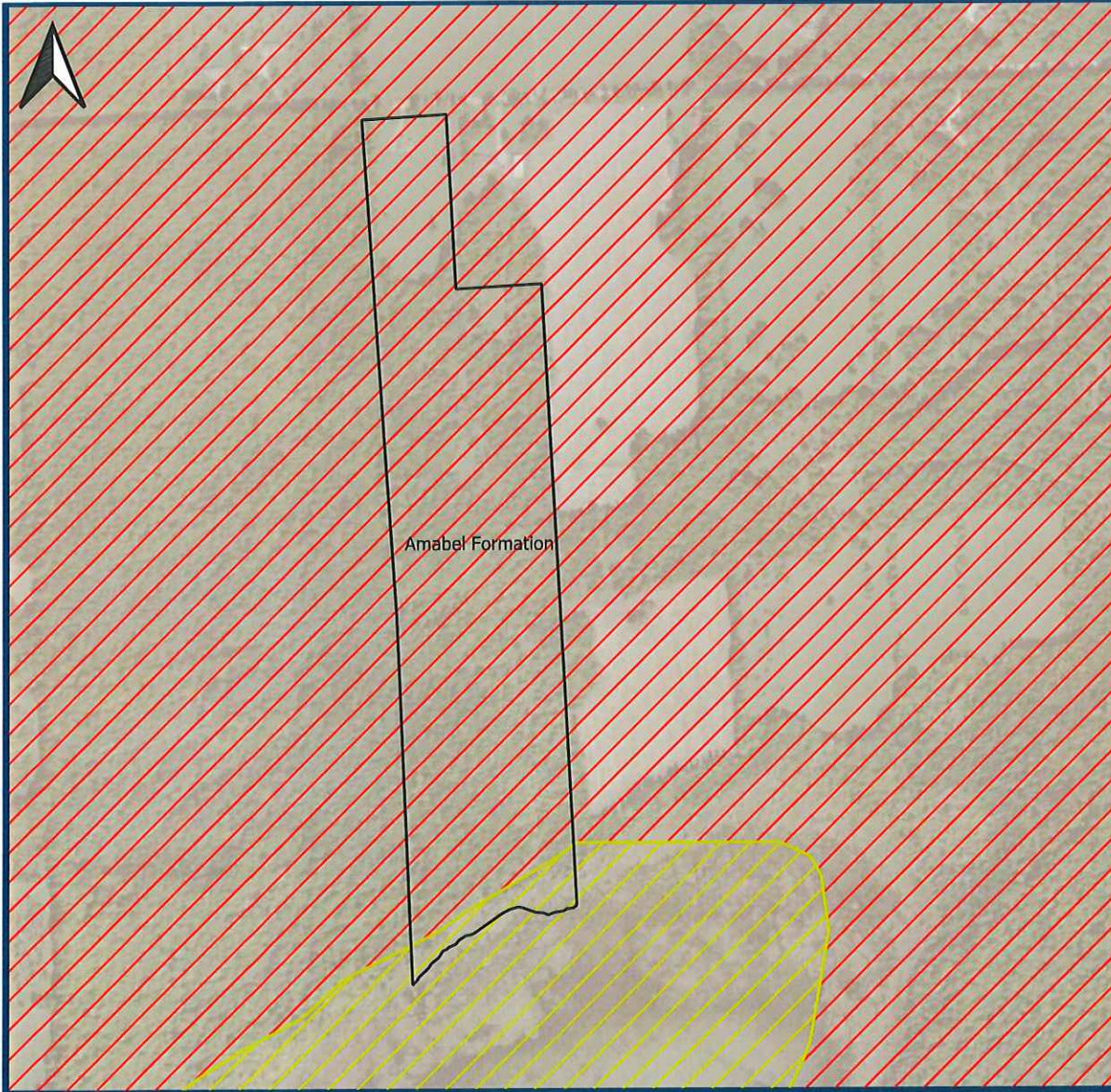
### Legend

-  Property Outline
-  Amabel Formation
-  Known Karst Areas
-  Potential Karst Areas

0 100 200 m



Figure 2  
**Bedrock Geology and  
Karst Mapping**



Karst Assessment  
442538 Concession Road 21  
Project: 2505036



### Legend

-  Property Outline
-  Testhole Locations
-  Bedrock Outcrop
-  Development Area
-  Proposed Severance
-  Woodland Areas

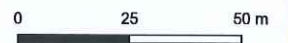


Figure 3

**Testhole Locations**

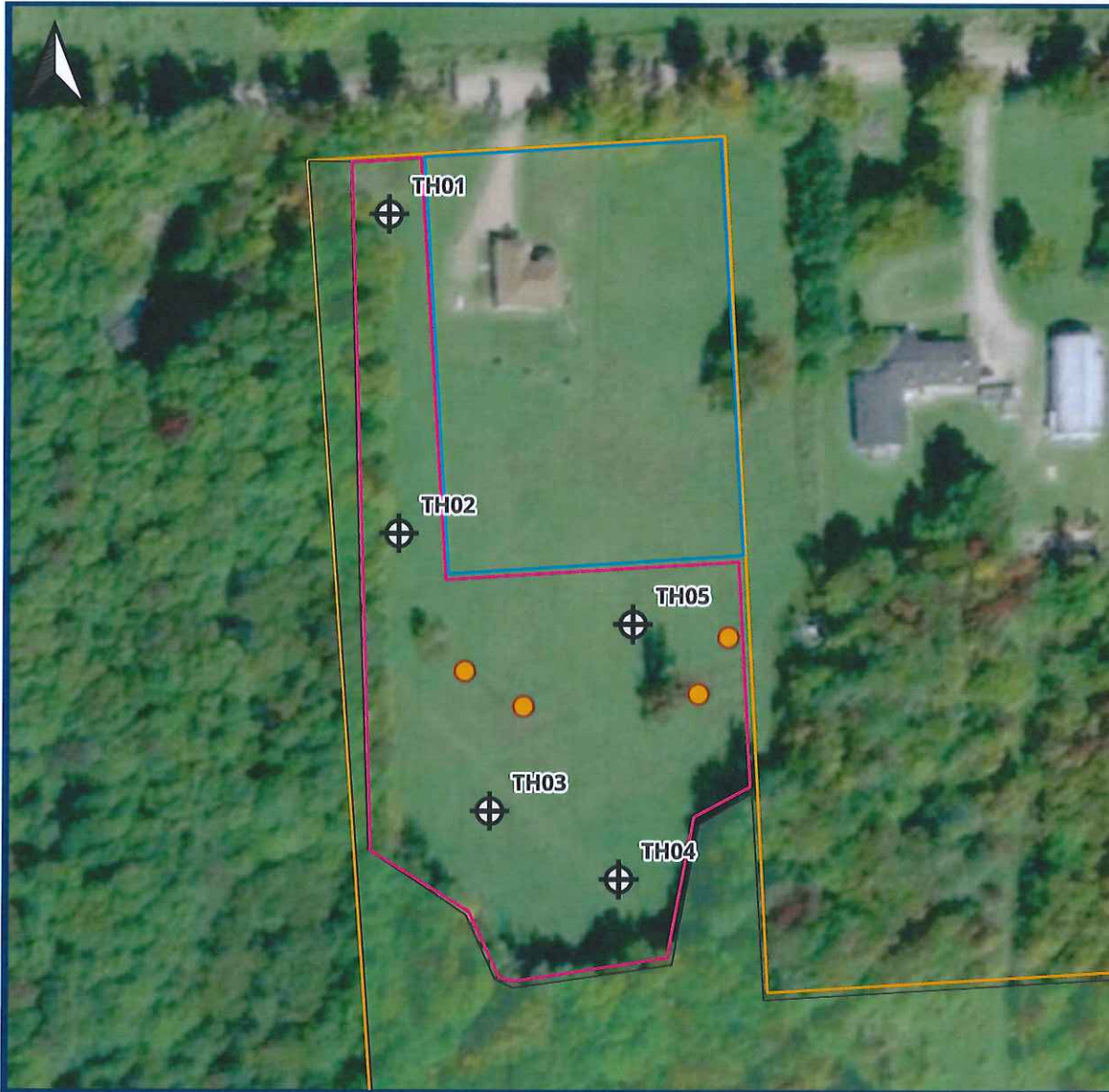


TABLE 1 : Testhole Logs and Locations

Hole ID	Easting	Northing	From (mbgs)	To (mbgs)	Unit	Notes/Log
TH01	497904	4954050	0.00	0.15	TOPSOIL	Black topsoil, silt and clay rich. Mixed with roots and organic material. Damp to dry.
			0.15	0.51	CLAY LOAM	Brown, silt and clay rich loam. Silt and clay dominant with minor fine sand component. Gravel and large boulders are trace. Soil is damp. No standing or flowing water present.
			0.51	N/A	BEDROCK	Bedrock. White dolostone, dry at interface between soils and rock surface. No significant fractures or active karst features evident.
TH02	497906	4953974	0.00	0.20	TOPSOIL	Black topsoil, silt and clay rich. Mixed with roots and organic material. Damp to dry.
			0.20	0.68	CLAY LOAM	Brown, silt and clay rich loam. Silt and clay dominant with minor fine sand component. Gravel and large boulders are trace. Soil is damp. No standing or flowing water present.
			0.68	N/A	BEDROCK	Bedrock. White dolostone, dry at interface between soils and rock surface. No significant fractures or active karst features evident.
TH03	497963	4953952	0.00	0.17	TOPSOIL	Black topsoil, silt and clay rich. Mixed with roots and organic material. Damp to dry.
			0.17	0.81	CLAY LOAM	Brown, silt and clay rich loam. Silt and clay dominant with minor fine sand component. Gravel and large boulders are trace. Soil is damp. No standing or flowing water present.
			0.81	N/A	BEDROCK	Brown stony loam. Silt and sand dominant with minor clay component. Gravel, cobbles, and large boulders present. Soil is dry. Its is unclear if bedrock is just below the 2.0mbgs mark, it appeared the excavator was having difficulty but it was not necessary to proceed further.
TH04	497959	4953891	0.00	0.20	TOPSOIL	Black topsoil, silt and clay rich. Mixed with roots and organic material. Damp to dry.
			0.20	0.86	CLAY LOAM	Brown, silt and clay rich loam. Silt and clay dominant with minor fine sand component. Gravel and large boulders are trace. Soil is damp. No standing or flowing water present.
			0.86	N/A	BEDROCK	Bedrock. White dolostone, dry at interface between soils and rock surface. No significant fractures or active karst features evident.
TH05	497928	4953907	0.00	0.25	TOPSOIL	Black topsoil, silt and clay rich. Mixed with roots and organic material. Damp to dry.
			0.25	0.76	CLAY LOAM	Brown, silt and clay rich loam. Silt and clay dominant with minor fine sand component. Gravel and large boulders are trace. Soil is damp. No standing or flowing water present.
			0.76	0.99	STONY CLAY LOAM	Brown, silt and clay rich loam. Silt and clay dominant with minor fine sand component. Increase in gravel and small boulders up to 25-35%. Soil is damp. No standing or flowing water present.
			0.99	N/A	BEDROCK	Brown stony loam. Silt and sand dominant with minor clay component. Gravel, cobbles, and large boulders present. Soil is dry. Its is unclear if bedrock is just below the 2.0mbgs mark, it appeared the excavator was having difficulty but it was not necessary to proceed further.

Notes:

- 1) mbgs = meters below ground surface
- 2) Co-ordinate system UTM NAD 83 17T, accuracy of +/- 4 meters.



Picture 1: TH-01 - Overhead view.



Picture 2: TH-01 - Side view showing soil profile.



Picture 3: TH-02 - Overhead view.



Picture 4: TH-02 - Side view showing soil profile.



Picture 5: TH-03 - Overhead view.



Picture 6: TH-03 - Side view showing soil profile.



Picture 7: TH-04 – Overhead view.



Picture 8: TH-04 - Side view showing soil profile.



Picture 9: TH-05 – Overhead view.



Picture 10: TH-05 - Side view showing soil profile.



Picture 11: One of the bedrock outcrops visible at surface.



Picture 12: Site Photo – Showing the driveway area, looking north.



Picture 13: Site Photo – Looking south from TH05



Picture 14: Site Photo – Looking south from the center of the development area



Picture 15: Site Photo – Looking east to south-east from the western edge of the property (forested area)



# Property Report

Data Sources: Grey County, Municipal Property Assessment Corporation, Teranet, King's Printer

Report Generated 09/08/2025 14:10:32

Roll Number	Address	Assessed Value	Acreage
420362000605800	442538 CONCESSION 21	\$281000	40.15

Notice: Assessed value may not reflect current market value [MPAC](#)

NEC Designation	Legal Description	Property Use
Escarpment Natural Area	CON 21 W PT LOT 23 LESS;RP16R8085 PART 1	Single family detached (not on water)

Zoning*
Rural,Niagara Escarpment Commission

\* Zoning may not be accurate. Confirm with local municipal zoning bylaw.





### Legend

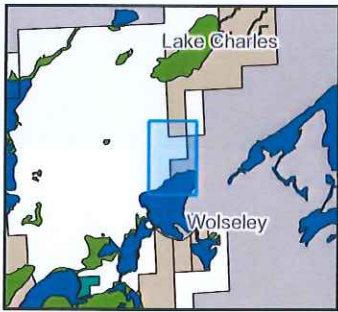
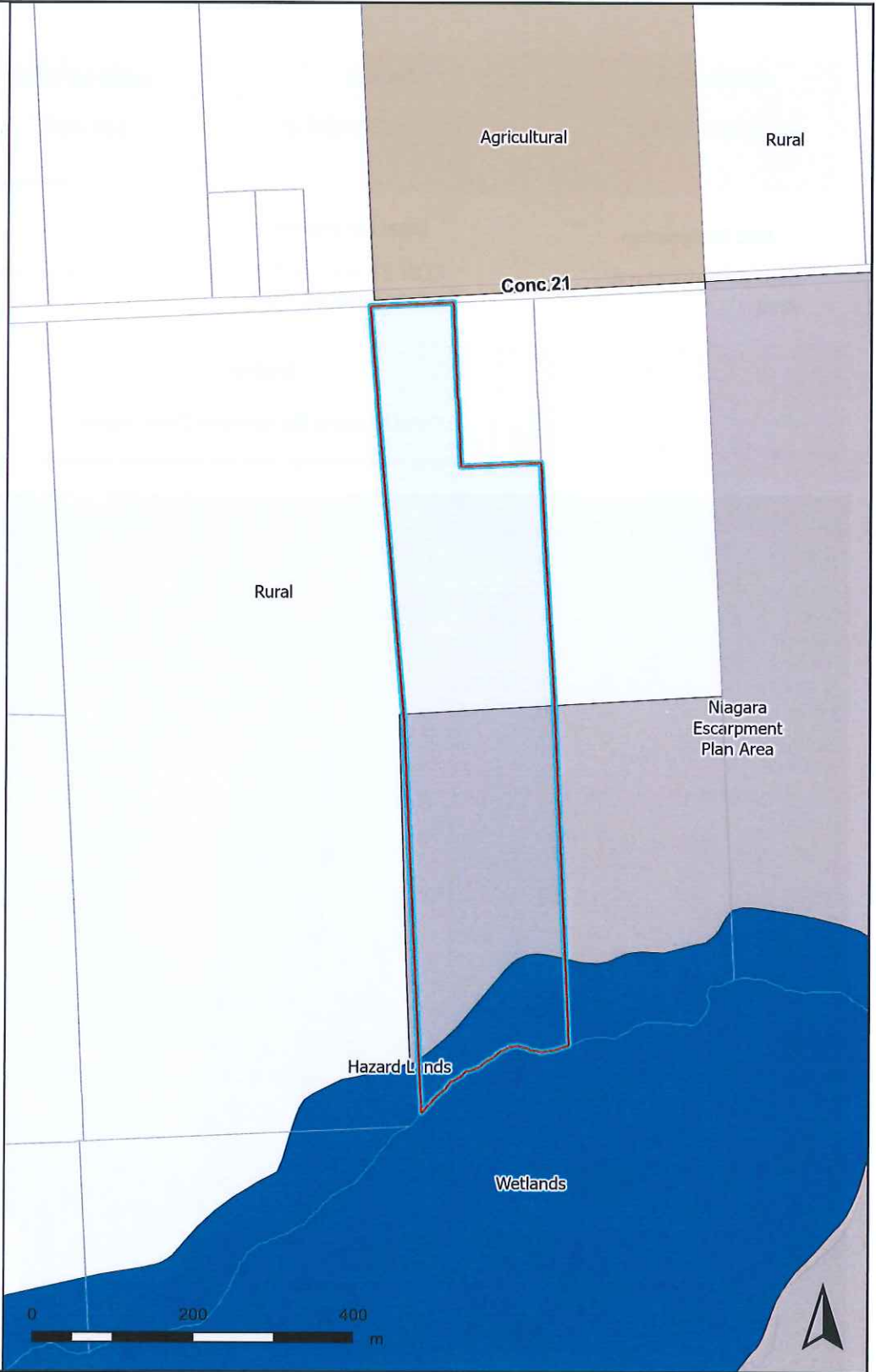
Assessment Parcel



County Official Plan (2018)

Land use

-  Agricultural
-  Hazard Lands
-  Niagara Escarpment Plan Area
-  Rural
-  Provincially Significant Wetlands



### Notes

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### Legend

Assessment Parcel

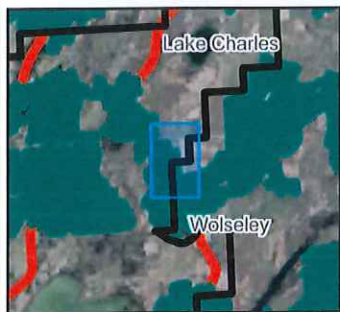


County Official Plan (2018)

NEC Boundary



NHS Core



### Notes

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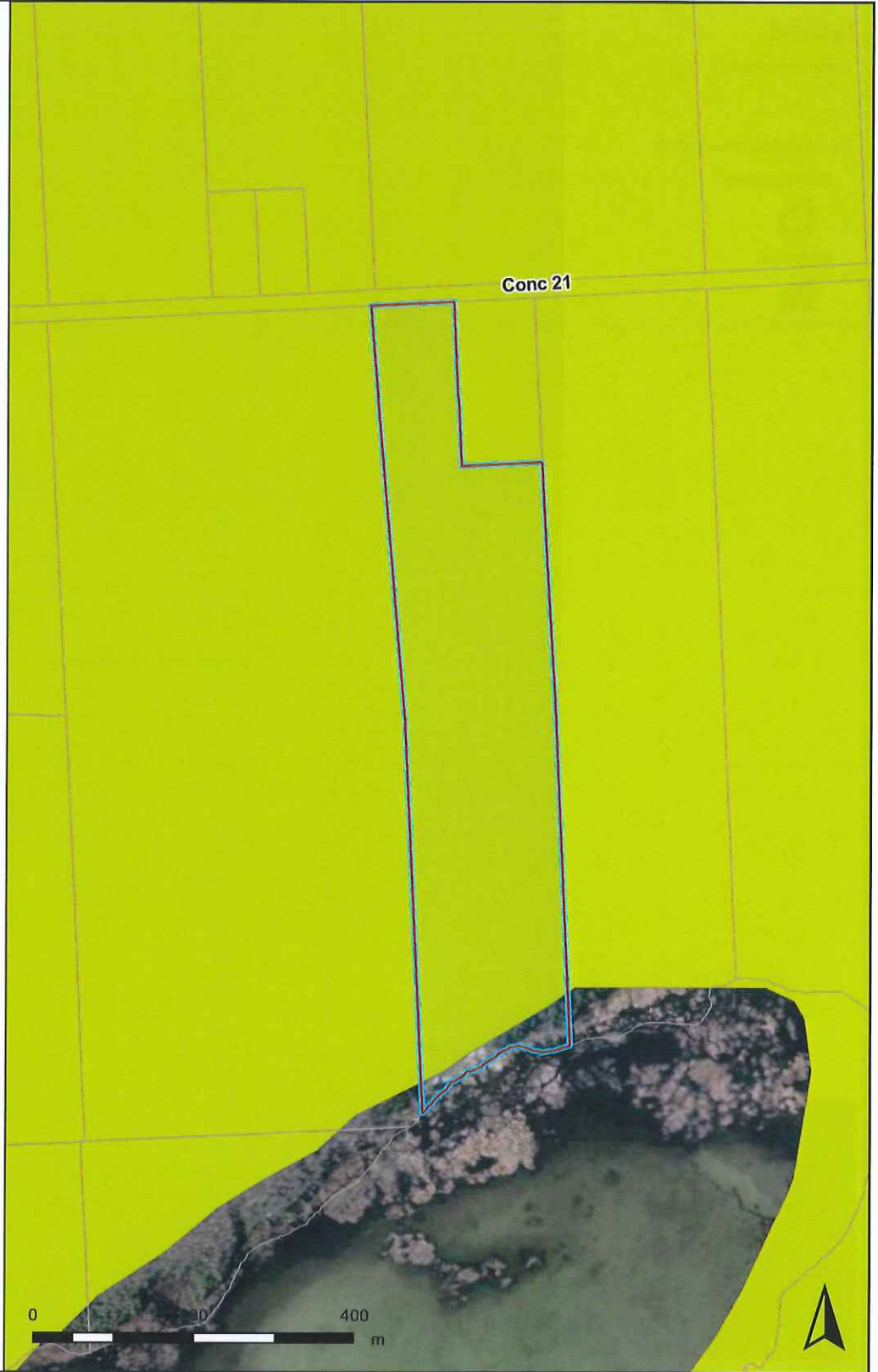
**Legend**

Assessment Parcel



County Official Plan (2018)

Karst Area



**Notes**

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**Legend**

Assessment Parcel



County Official Plan (2018)

Lakes and Rivers



Other Wetlands



Significant Woodlands



**Notes**

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## Legend

Assessment Parcel



Conservation Authorities

CA Boundaries



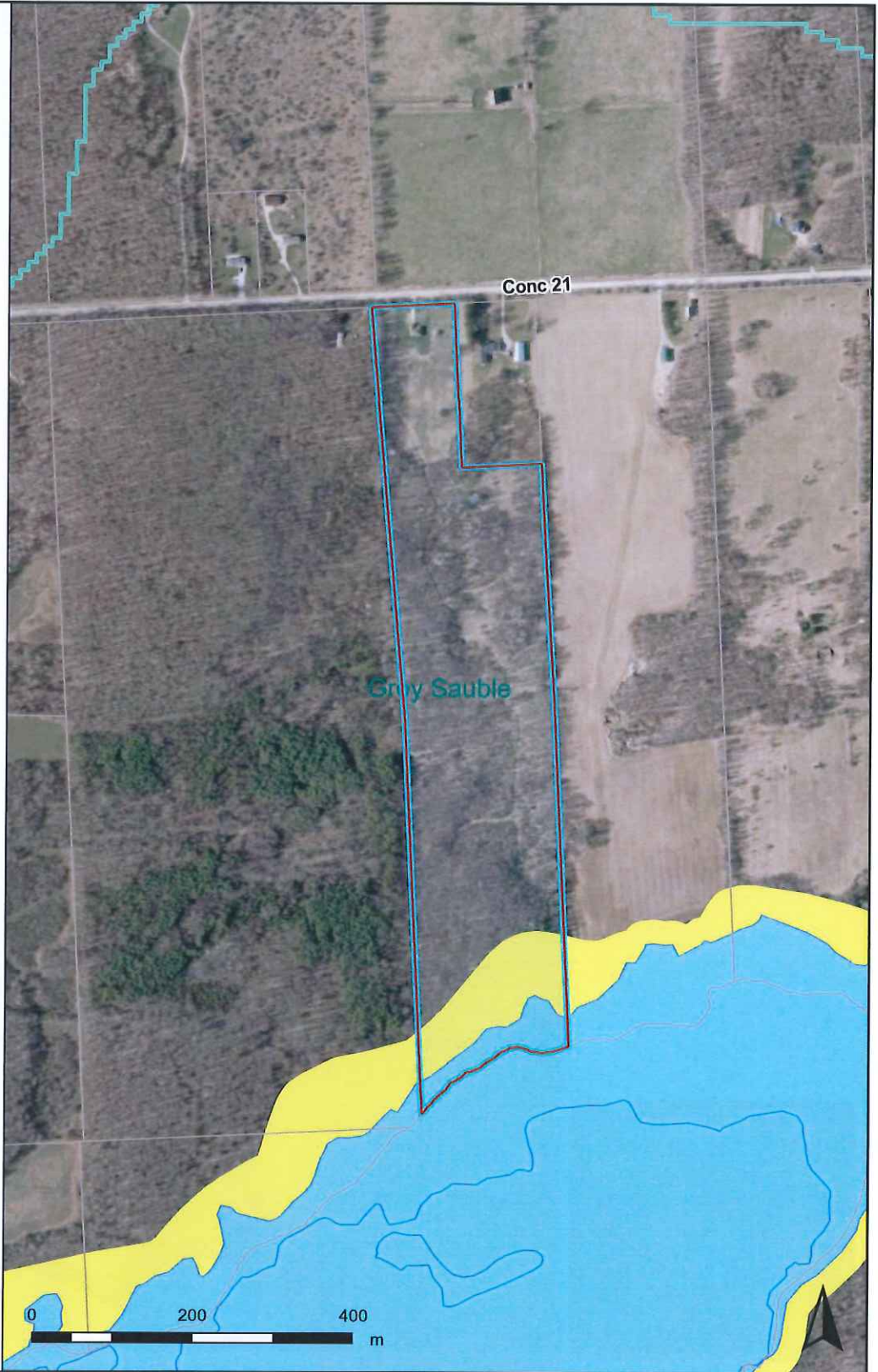
Sub-Watershed Boundary



Wet Areas - GSCA



Regulations - GSCA



## Notes

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County of Grey, Township of Southgate, Township of Georgian Bluffs, Municipality of Grey Highlands, Municipality of West Grey, Grey Sauble Conservation Authority, Nottawasaga Valley Conservation Authority, Saugeen Valley Conservation Authority, Grand River Conservation Authority



Measurements recorded in:  Metric  Imperial

Page \_\_\_\_\_ of \_\_\_\_\_

*A 327988*

Address of Well Location (Street Number/Name) *442533 Con 21* Township *Huron Bluffs* Lot \_\_\_\_\_ Concession \_\_\_\_\_  
 County/District/Municipality \_\_\_\_\_ City/Town/Village \_\_\_\_\_ Province **Ontario** Postal Code **N0M1A0**  
 UTM Coordinates Zone \_\_\_\_\_ Easting \_\_\_\_\_ Northing \_\_\_\_\_ Municipal Plan and Sublot Number \_\_\_\_\_ Other \_\_\_\_\_  
 NAD *83* *1749777* *4954300*

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From To
			<i>shale stone</i>	<i>0 5</i>
			<i>limestone</i>	<i>5 111</i>
			<i>ash rock</i>	<i>111 125</i>

Annular Space		
Depth Set at (m/ft) From To	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
<i>0 206</i>	<i>bestonite</i>	

Results					
After test of well yield, water was:		Draw Down		Recovery	
<input checked="" type="checkbox"/> Clear and sand free <input type="checkbox"/> Other, specify _____		Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:		Static Level	<i>38</i>		
Pump Intake set at (m/ft)		1		1	
Pumping rate (l/min / GPM)		2		2	
Duration of pumping		3		3	
<i>10+</i>		4		4	
Final water level end of pumping (m/ft)		5		5	
<i>125</i>		10		10	
If flowing give rate (l/min/GPM)		15		15	
Recommended pump depth (m/ft)		20		20	
<i>100</i>		25		25	
Recommended pump rate (l/min/GPM)		30		30	
<i>5+</i>		40		40	<i>38</i>
Well production (l/min/GPM)		50		50	<input checked="" type="checkbox"/>
Disinfected?		60		60	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No					

Method of Construction

Cable Tool  Diamond  Public  Commercial  Not used  
 Rotary (Conventional)  Jetting  Domestic  Municipal  Dewatering  
 Rotary (Reverse)  Driving  Livestock  Test Hole  Monitoring  
 Boring  Digging  Irrigation  Cooling & Air Conditioning  
 Air percussion  Industrial  Other, specify \_\_\_\_\_  
 Other, specify \_\_\_\_\_

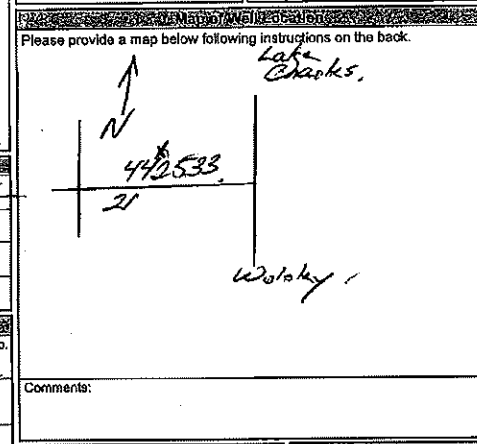
Construction Record - Casing		Status of Well	
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Well Thickness (cm/in)	Depth (m/ft) From To
<i>64</i>	<i>steel</i>	<i>188</i>	<i>78 206</i>

Construction Record - Screen			
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From To

Water Details		Well Diameter	
Water found at Depth (m/ft)	Kind of Water: <input checked="" type="checkbox"/> Fresh <input type="checkbox"/> Untested <input type="checkbox"/> Gas <input type="checkbox"/> Other, specify _____	Depth (m/ft) From To	Diameter (cm/in)
<i>107</i>		<i>0 206</i>	<i>10</i>
		<i>206 125</i>	<i>6</i>

Business Name of Well Contractor *Imperial Well Drilling Ltd* Well Contractor's Licence No. *55107*  
 Business Address (Street Number/Name) *Box 167 Huron Bluffs* Municipality *S.B.R.*  
 Province *Ont* Postal Code *N0M1A0* Business E-mail Address \_\_\_\_\_

Bus. Telephone No. (Inc. area code) *519 235 2130* Name of Well Technician (Last Name, First Name) *Wright Terry*  
 Well Technician's Licence No. *011415* Signature of Technician and/or Contractor *Terry Wright* Date Submitted *2012/10/8/66*



Comments: \_\_\_\_\_

Well owner's information package delivered <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Date Package Delivered <i>2012/10/8/66</i>	Date Work Completed <i>2012/10/8/66</i>
--	--	---

The Ontario Water Resources Act **WATER WELL RECORD** 41A/11

1. PRINT ONLY IN SPACES PROVIDED  
2. CHECK  CORRECT/BOX WHERE APPLICABLE

11 2507837    MUNICIPAL 25009    CON. CON. 21  
 COUNTY OR DISTRICT: [Redacted]    TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE: Kippel    EON, BLOCK, TRACT, SURVEY, ETC.: 21    LOT: 024  
 DATE COMPLETED: 17 05 82  
 ELEVATION: 538.00    RC: 51    ELEVATION: 087.5    RC: 51    BASIN CODE: 22

**LOG OF OVERBURDEN AND BEDROCK MATERIALS** (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET	
				FROM	TO
Clay				0	3
Limestone				3	90
Blue shale				90	96
Red shale				96	108

31 0003 05    0090 15    0096317    0108717  
 32

**41 WATER RECORD**

WATER FOUND AT - FEET	KIND OF WATER
0102	<input type="checkbox"/> FRESH <input type="checkbox"/> SULPHUR <input checked="" type="checkbox"/> SALTY <input type="checkbox"/> MINERAL
19-23	<input type="checkbox"/> FRESH <input type="checkbox"/> SULPHUR <input type="checkbox"/> SALTY <input type="checkbox"/> MINERAL
20-23	<input type="checkbox"/> FRESH <input type="checkbox"/> SULPHUR <input type="checkbox"/> SALTY <input type="checkbox"/> MINERAL
25-28	<input type="checkbox"/> FRESH <input type="checkbox"/> SULPHUR <input type="checkbox"/> SALTY <input type="checkbox"/> MINERAL
30-33	<input type="checkbox"/> FRESH <input type="checkbox"/> SULPHUR <input type="checkbox"/> SALTY <input type="checkbox"/> MINERAL

**51 CASING & OPEN HOLE RECORD**

DEPTH FEET	WATER AL.	PIPE INCHES	DEPTH FEET
0-19.6	STEEL	1.88	0-19.6
19.6-21	GALVANIZED		21-108
21-108	CONCRETE		0-108
21-108	STEEL		20-23
21-108	GALVANIZED		27-30
21-108	CONCRETE		
21-108	OPEN HOLE		

**52 SIZES OF OPENING SLOTTED NO. 1**

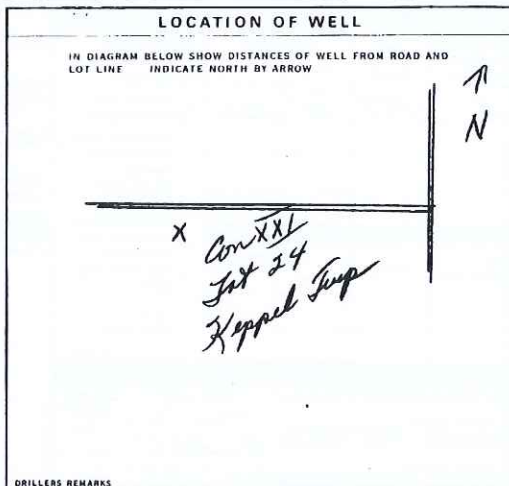
SIZE OF OPENING	DIAMETER	LENGTH
30-33	INCHES	FEET

**61 PLUGGING & SEALING RECORD**

DEPTH SET AT	MATERIAL AND TYPE	CEMENT GROUT LEAD PACKER ETC.
10-13		
18-21		
26-29		

**71 PUMPING TEST**

PUMPING TEST METHOD:  PUMP     BAILEY  
 PUMPING RATE: 0008 GPM    DURATION OF PUMPING: 15-18 HOURS    17-18 MINS.  
 WATER LEVELS DURING: 15 MINUTES: 108 FEET    30 MINUTES: 108 FEET    45 MINUTES: 108 FEET    60 MINUTES: 108 FEET  
 PUMP MAKE SET AT: 108 FEET    WATER AT END OF TEST: 108 FEET  
 RECOMMENDED PUMP TYPE:  SHALLOW     DEEP    RECOMMENDED PUMP SETTING: 108 FEET    RECOMMENDED PUMPING RATE: 0008 GPM



**FINAL STATUS OF WELL**

1 WATER SUPPLY     5 ABANDONED, INSUFFICIENT SUPPLY  
 2 OBSERVATION WELL     6 ABANDONED POOR QUALITY  
 3 TEST HOLE     7 UNFINISHED  
 4 RECHARGE WELL

**WATER USE**

1 DOMESTIC     5 COMMERCIAL  
 2 STOCK     6 MUNICIPAL  
 3 IRRIGATION     7 PUBLIC SUPPLY  
 4 INDUSTRIAL     8 COOLING OR AIR CONDITIONING  
 OTHER     9 NOT USED

**METHOD OF DRILLING**

1 CABLE TOOL     4 BORING  
 2 ROTARY (CONVENTIONAL)     5 DIAMOND  
 3 ROTARY (REVERSE)     6 JETTING  
 4 ROTARY (AIR)     7 DRIVING  
 5 AIR PERCUSSION

**CONTRACTOR**

NAME OF WELL CONTRACTOR: [Redacted]    LICENCE NUMBER: 5507  
 ADDRESS: Box 167 Spaworth Ont.  
 NAME OF DRILLER OR BORER: [Redacted]    LICENCE NUMBER:  
 SIGNATURE OF CONTRACTOR: [Redacted]    SUBMISSION DATE: \_\_\_\_\_  
 DAY \_\_\_\_\_ MO \_\_\_\_\_ YR \_\_\_\_\_

**OFFICE USE ONLY**

DATA SOURCE: 1    CONTRACTOR: 5507    DATE: 02 03 83  
 DATE OF INSPECTION: 18/10/83    INSPECTOR: [Redacted]  
 REMARKS: [Redacted]

CSS.S8



Ministry  
of the  
Environment

The Ontario Water Resources Act  
**WATER WELL RECORD**

41A/11

1. PRINT ONLY IN SPACES PROVIDED  
2. CHECK  CORRECT BOX WHERE APPLICABLE

11 2508747 25009 CON 12/1

COUNTY OR DISTRICT: [REDACTED] TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE: **P P P E L** CON. BLOCK, TRACT, SURVEY ETC: **CON 21**  
 R. # **I. WIARTON, ONT.** DATE COMPLETED: DAY **26** MO **June** YEAR **86**  
 ELEVATION: **53.900** BASIN CODE: **875**

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET	
				FROM	TO
Brown	Soil	& Stones		0	5 1/2
White	Limestone			5 1/2	26
Grey	Limestone			26	85
Blue	Limestone	Soft Layers Blue		85	90

31  
32

**41 WATER RECORD**

WATER FOUND AT - FEET	KIND OF WATER
71-75	<input checked="" type="checkbox"/> FRESH <input type="checkbox"/> SULPHUR <input type="checkbox"/> SALTY <input type="checkbox"/> MINERAL
11-15	<input type="checkbox"/> FRESH <input type="checkbox"/> SULPHUR <input type="checkbox"/> SALTY <input type="checkbox"/> MINERAL
19-23	<input type="checkbox"/> FRESH <input type="checkbox"/> SULPHUR <input type="checkbox"/> SALTY <input type="checkbox"/> MINERAL
23-28	<input type="checkbox"/> FRESH <input type="checkbox"/> SULPHUR <input type="checkbox"/> SALTY <input type="checkbox"/> MINERAL
30-33	<input type="checkbox"/> FRESH <input type="checkbox"/> SULPHUR <input type="checkbox"/> SALTY <input type="checkbox"/> MINERAL

**51 CASING & OPEN HOLE RECORD**

INSIDE DIAM INCHES	MATERIAL	WELL THICKNESS INCHES	DEPTH - FEET	
			FROM	TO
5	<input checked="" type="checkbox"/> STEEL <input type="checkbox"/> GALVANIZED <input type="checkbox"/> CONCRETE <input type="checkbox"/> OPEN HOLE	188	0	20
4 1/8	<input type="checkbox"/> STEEL <input type="checkbox"/> GALVANIZED <input type="checkbox"/> CONCRETE <input type="checkbox"/> OPEN HOLE		20	90
2 1/2	<input type="checkbox"/> STEEL <input type="checkbox"/> GALVANIZED <input type="checkbox"/> CONCRETE <input type="checkbox"/> OPEN HOLE			

**52 SIZES OF OPENING (SLOT NO.)**

SIZES OF OPENING (SLOT NO.)	DIAMETER INCHES	LENGTH FEET

**61 PLUGGING & SEALING RECORD**

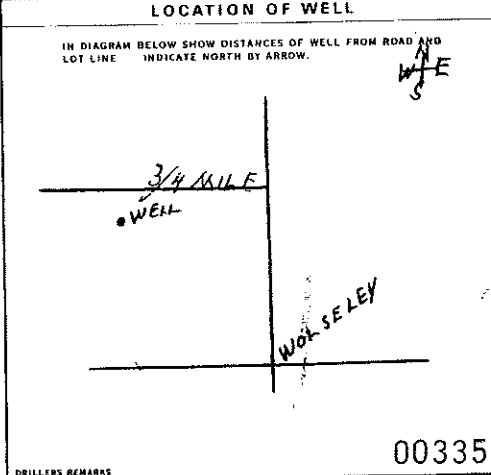
DEPTH SET AT - FEET	MATERIAL AND TYPE	CEMENT GROUT LEAD PACKER, ETC.
10-13		
18-21		
28-31		

**71 PUMPING TEST**

PUMPING TEST METHOD	PUMPING RATE GPM	DURATION OF PUMPING MINUTES
<input type="checkbox"/> PUMP <input checked="" type="checkbox"/> WELLER	5	2

STATIC LEVEL: 61 FEET  
 WATER LEVELS DURING PUMPING:  
 15 MINUTES: 80 FEET  
 30 MINUTES: 62 FEET  
 45 MINUTES: 61 FEET  
 60 MINUTES: 61 FEET

RECOMMENDED PUMP TYPE:  SHALLOW  DEEP  
 RECOMMENDED PUMP SETTING: 80 FEET  
 RECOMMENDED PUMPING RATE: 3 GPM



**FINAL STATUS OF WELL**

WATER SUPPLY  ABANDONED, INSUFFICIENT SUPPLY  
 OBSERVATION WELL  ABANDONED, POOR QUALITY  
 TEST HOLE  UNFINISHED  
 RECHARGE WELL

**WATER USE**

DOMESTIC  COMMERCIAL  
 STOCK  MUNICIPAL  
 IRRIGATION  PUBLIC SUPPLY  
 INDUSTRIAL  COOLING OR AIR CONDITIONING  
 OTHER  NOT USED

**METHOD OF DRILLING**

CABLE TOOL  BORING  
 ROTARY (CONVENTIONAL)  DIAMOND  
 ROTARY (REVERSE)  JETTING  
 ROTARY (AIR)  DRIVING  
 AIR PERCUSSION

**CONTRACTOR**

NAME OF WELL CONTRACTOR: **STAN WRIGHT & CO WELL DRILLERS** LICENCE NUMBER: **5505**  
 ADDRESS: **298 FRANK ST., WIARTON, ONT.**  
 NAME OF DRILLER OR OPERATOR: **MIKE WRIGHT** LICENCE NUMBER: **5519**  
 SIGNATURE OF CONTRACTOR: *Stan Wright* SUBMISSION DATE: **10** MO: **1** YEAR: **87**

**OFFICE USE ONLY**

DATE RECEIVED: **210187**  
 DATE OF INSPECTION: **12/8/87**  
 INSPECTOR: [Signature]  
 COMMENTS: [Signature]  
 CSS 58

