CAMBIUM

Environmental

Geotechnical

Building Sciences

Construction Testing & Inspection

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(866) 217.7900
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Website
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Mailing Address
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Canada, K9J 6Z3

Locations
Peterborough
Kingston
Barrie
Whitby
Ottawa

Laboratory
Peterborough

Professional Engineers Ontario

APGO

July 7, 2025

Justin and Nicola Flowerday
150 McCrae Drive
Toronto, Ontario
M4G 1S7

Attn: Joan Philips (Client Agent)

Re: Slope Stability Assessment – Proposed Residential Redevelopment, 115 Rangers Road, Highland Grove, ON
Cambium Reference: 22370-001

Dear Ms. Philips,

Cambium Inc. (Cambium) was retained by Justin and Nicola Flowerday (Client) to complete an erosion hazard / slope stability assessment in support of the proposed redevelopment at 115 Rangers Road, Highland Grove, Ontario (Site). The purpose of this study and summary letter is to determine the erosion hazard limits associated with Baptiste Lake and comment on implications for the redevelopment on the site.

SITE DESCRIPTION AND PROPOSAL FOR REDEVELOPMENT

The subject property is bounded by Baptiste Lake to the north, Rangers Road to the south, and existing residential homes to the east and west. A site location plan is appended as Figure 1 of this report.

The entirety of the site exhibits sloping topography associated with Baptiste Lake. The total slope height is approximately 16 m, with steepest approaching about 1.6H:1V (Horizontal: Vertical) in the upper portion, although the lower portion of the slope is mild (flatter than 3H:1V). A site plan is appended as Figure 2 of this report.

The proposed redevelopment contemplates a new primary dwelling to replace the existing cottage, a new garage structure, as well as new septic tank and bed.

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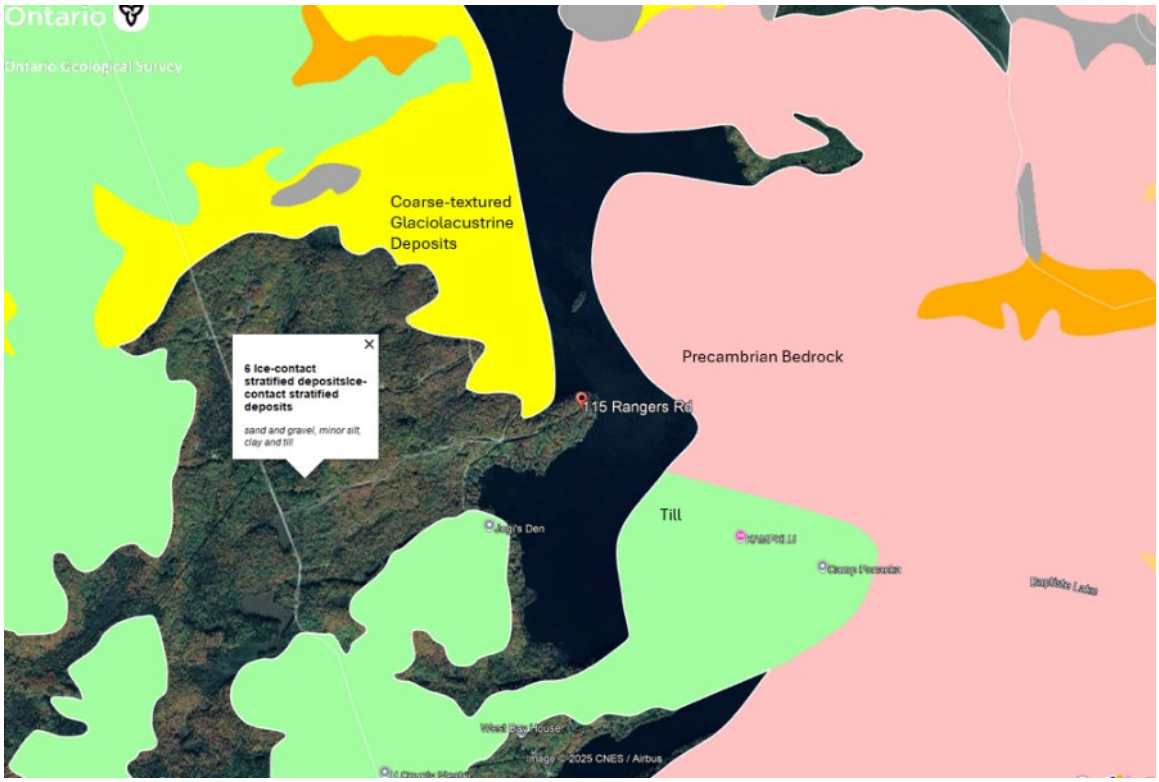
DESKTOP STUDY - SURFICIAL GEOLOGY

Based on MRD128-REV: Surficial Geology of Southern Ontario, the site is underlain by Ice-contact stratified deposits: sand and gravel, minor silt, clay and till on Precambrian terrain, Till: Silty sand to sand-textured till on Precambrain terrain, and Bedrock drift complex in Precambrian terrain as shown below.



As part of this study, we have also reviewed and compiled MOE well record data for recorded wells surrounding the subject site. Two well records have been incorporated, representing conditions in the site area (Appendix B). The records indicate that the site consists of gravel or sand, and boulders overlaying the granite which is 1.5 to 2.7 m below the ground surface.

SITE VISIT

The stability of the slope was assessed by the observational method. Cambium staff attended the subject property on April 16, 2025, to undertake field observation of the site and the slope characteristics. Two separate portions were discussed: lower portion with mild inclination and an upper portion with steeper inclination. The slopes are generally vegetated with a mixture of mature

deciduous and coniferous trees and there is no evidence of active erosion near the lake. Some large boulders were observed along the existing shoreline. Bedrock outcrop was observed along the upper steeper portion.

Pertinent details of the slope configuration and related factors to be considered during the stability assessment are documented on Appendix A: Site Photos, Inspection Record & Slope Rating Chart. The slope stability rating values for lower and upper portion were assessed to be 16 and 24, both are classed as “Low Potential”. It should be noted that the major contribution to the rating (16 points) for the upper portion of slope was the inclination.

Cambium was also provided with the CAD file for a topographic survey conducted by P.A. Miller Surveying Ltd. dated October 16, 2024. The data from the topographic survey was used to illustrate cross sections (as shown on Figure 3) of the existing slope for discussion.

REGULATORY REQUIREMENTS

We understand that the site is not within regulated area of any conservation authorities. This study describes the erosion assessment conducted generally in accordance with the methodology outlined in the *Ministry of Natural Resources Technical Guideline River and Stream Systems: Erosion Hazard Limit (MNR, 2002)*.

EROSION HAZARD ASSESSMENT

The property is classified as a "confined system" according to the MNR Guideline, which defines a confined system as those systems where a valley corridor with discernable slopes and is confined by valley walls. Accordingly, the erosion hazard limit associated with confined systems should be defined by the toe erosion allowance, stable slope allowance and erosion access allowance.

Cross Section – Lower Portion of the Slope

This part of the property is found to have a mild inclination of approximately 1V: 4.3H. The lower section of land is generally covered with grass, as well as

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mature trees (refer to appended photographs). There was no evidence of significant tree root or trunk creep. Boulders were evident along the shoreline.

The toe erosion allowance is defined by the recession of the toe of the valley slope (MNR, 2002). Based on site observation, the type of material of the toe can be described as " Hard Rock (granite)". No active erosion was observed at slope across the entire site. As per Table 3 of the MNR Technical Guidelines, the toe erosion allowance is considered to be 0 m.

Based on the inclination of the existing slope (flatter than 3H:1V), the existing slope is considered to be long term stable, i.e. the existing top of slope line will be the same as long term stable top of slope line.

Considering there is no active erosion along the toe of the slope at Baptiste Lake, and it appears access can be provided through the east edge of the property line instead of the existing slope crest, we do not foresee the requirement for Erosion Access Allowance. The existing top of slope line will be the defined erosion hazard limit line.

Cross Section – Upper Portion of the Slope

For the upper portion of the slope, based on the surficial geology and subsurface condition as investigated, we do not foresee the requirement for a standard 3H:1V stable slope allowance. In Ontario, for hard rock condition (granite), it is quite common to see design slope inclinations steeper than 1H:1V. Therefore, the existing slope is considered to be long term stable, i.e. the existing top of slope line will be the same as long term stable top of slope line.

However, since the proposed residential building will be at the toe of this slope instead of the crest, the erosion hazard limit associated with this section will not be further discussed.

DISCUSSION

Based on the results of the erosion hazard assessment, the condition of the slope subgrade, and the specific site conditions present, the envelope of the proposed residential dwelling will be outside of the erosion hazard limit

associated with Baptiste Lake, therefore the location of the proposed house should be considered acceptable.

The proposed garage may be with the erosion hazard limits. However, the footprint is relatively small, and the foundation of this structure will likely be supported on bedrock. As such, should any surficial erosion occur, the bedrock upon which the footing is proposed to rest would remain undisturbed.

CONCLUSIONS

Due to constraints associated with erosion hazard limits, and space on the site for the new building is limited. It is our understanding that the client has endeavored to design a residence that is tailored to make use of the least hazardous areas on the property, in summary, it is Cambium's opinion that the development of the property will not have an adverse impact on the future performance of the slope or Baptiste Lake.

Site development and construction activities should be conducted in a manner without resulting in surface erosion of the slope. Additional comments related to any future construction at this property, and in terms of slope stability at the site are as follows:

1. To reduce the risks of soil erosion on the slope surface, care must be taken to minimize damage to the existing vegetation in and adjacent to the slope (trees, tree roots, grass cover).
2. A sediment control fence must be erected and maintained during construction to isolate work area from the adjoining slope and lake shore.
3. The configuration of the slope should not be altered without prior consultation with a geotechnical engineer.
4. The slope must not be steepened.
5. Any construction materials must not be stockpiled on the slope.

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July 7, 2025

CLOSING

Cambium trusts that this report meets with your expectations. If you have any questions or require clarification of any aspect of this submission, please do not hesitate to contact the undersigned.

Best regards,

Cambium Inc.

DocuSigned by:
7EDE31DDD18E4AA...

Josh Riseling, EIT.
Coordinator

Signed by:

DocuSigned by:
34555E00ED064E9...

Zhaochang Luo, M.Eng., P.Eng.
Senior Project Manager – Team Lead

LICENSED PROFESSIONAL ENGINEER
Z.LUO
100230770
PROVINCE OF ONTARIO
2025-07-07

Encl. *Cambium Qualifications and Limitations*
Figure 1 – Site Location Plan
Figure 2 – Site Plan
Figure 3 – Cross Sections
Appendix A – Site Photos, Inspection Record & Slope Rating Chart
Appendix B – Well records

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July 7, 2025

CAMBIUM QUALIFICATIONS AND LIMITATIONS

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In performing work on behalf of a client, Cambium relies on its client to provide instructions on the scope of its retainer and, on that basis, Cambium determines the precise nature of the work to be performed. Cambium undertakes all work in accordance with applicable accepted industry practices and standards. Unless required under local laws, other than as expressly stated herein, no other warranties or conditions, either expressed or implied, are made regarding the services, work or reports provided.

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Site Assessments

A site assessment is created using data and information collected during the investigation of a site and based on conditions encountered at the time and particular locations at which fieldwork is conducted. The information, sample results and data collected represent the conditions only at the specific times at which and at those specific locations from which the information, samples and data were obtained and the information, sample results and data may vary at other locations and times. To the extent that Cambium's work or report considers any locations or times other than those from which information, sample results and data was specifically received, the work or report is based on a reasonable extrapolation from such information, sample results and data but the actual conditions encountered may vary from those extrapolations.

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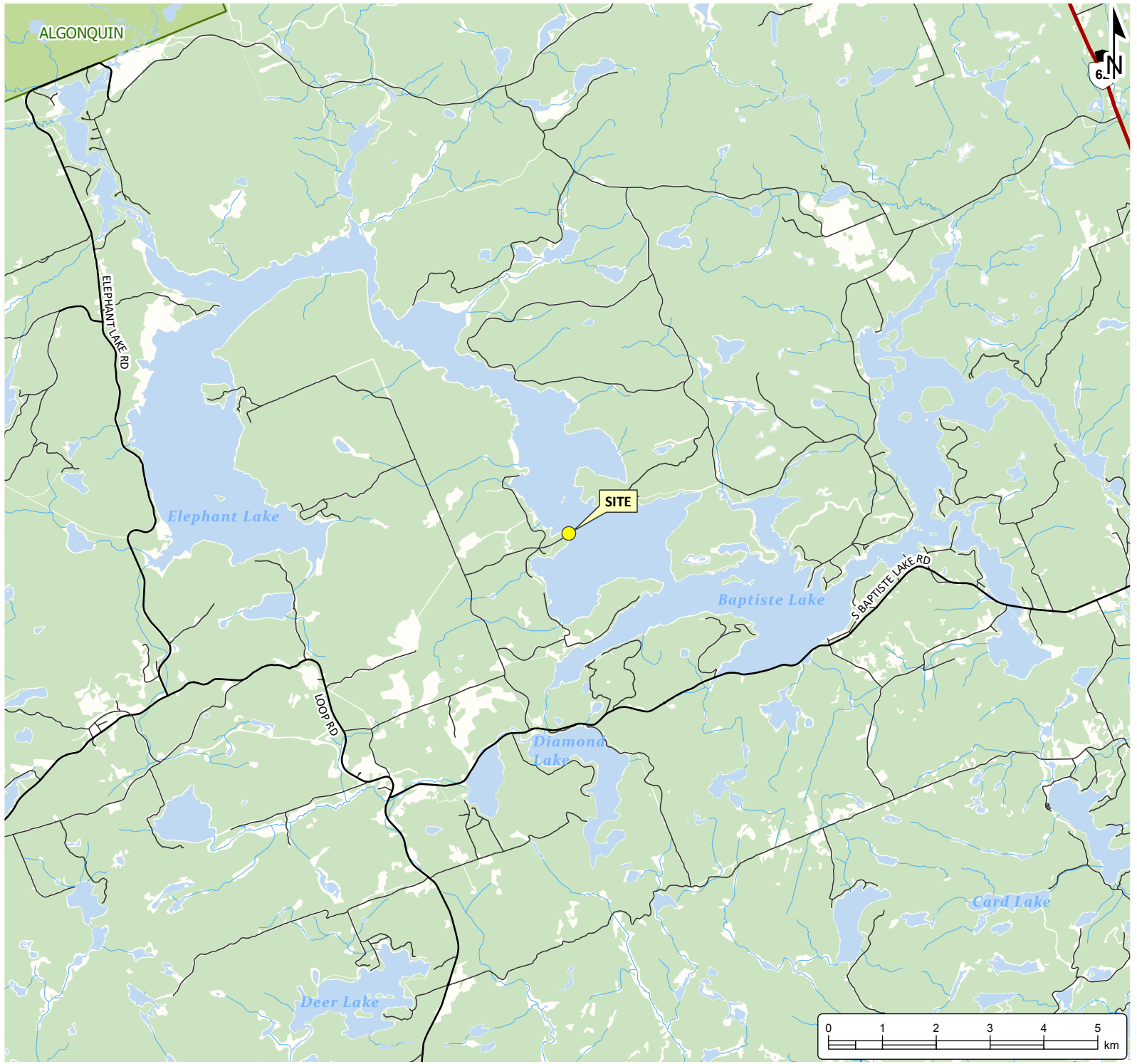
The client expressly agrees that Cambium employees shall have no personal liability to the client with respect to a claim, whether in contract, tort and/or other cause of action in law. Furthermore, the client agrees that it will bring no proceedings nor take any action in any court of law against Cambium employees in their personal capacity.



SLOPE STABILITY ASSESSMENT

JUSTIN AND NICOLE FLOWERDAY
115 Rangers Road
Highland Grove

LEGEND

- Highway
- Major Road
- Minor Road
- Watercourse
- Provincial Park
- Water Area
- Wooded Area

Notes:
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- Distances on this plan are in metres and can be converted to feet by dividing by 0.3048.
- Cambium Inc. makes every effort to ensure this map is free from errors but cannot be held responsible for any damages due to error or omissions. This map should not be used for navigation or legal purposes. It is intended for general reference use only.

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SITE LOCATION PLAN

Project No.:	22370-001	Date:	May 2025
Scale:	1:100,000	Projection:	NAD 1983 UTM Zone 17N
Created by:	MAT	Checked by:	ZL
Figure:	1		

O:\GIS\MXDs\22300-22399\22370-001 J&N Flowerday -GEO- 115 Rngrs Rd\2025-05-14 Slope Stability.aprx

SLOPE STABILITY ASSESSMENT

JUSTIN AND NICOLE FLOWERDAY
115 Rangers Road
Highland Grove

LEGEND

- Contours (1m intervals)
- Waters Edge
- Cross Section
- Existing Structure
- Proposed Structure
- Site (approximate)

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SITE PLAN

Project No.: 22370-001		Date: May 2025	
Scale: 1:500		Projection: NAD 1983 UTM Zone 17N	
Created by: MAT	Checked by: ZL	Figure: 2	

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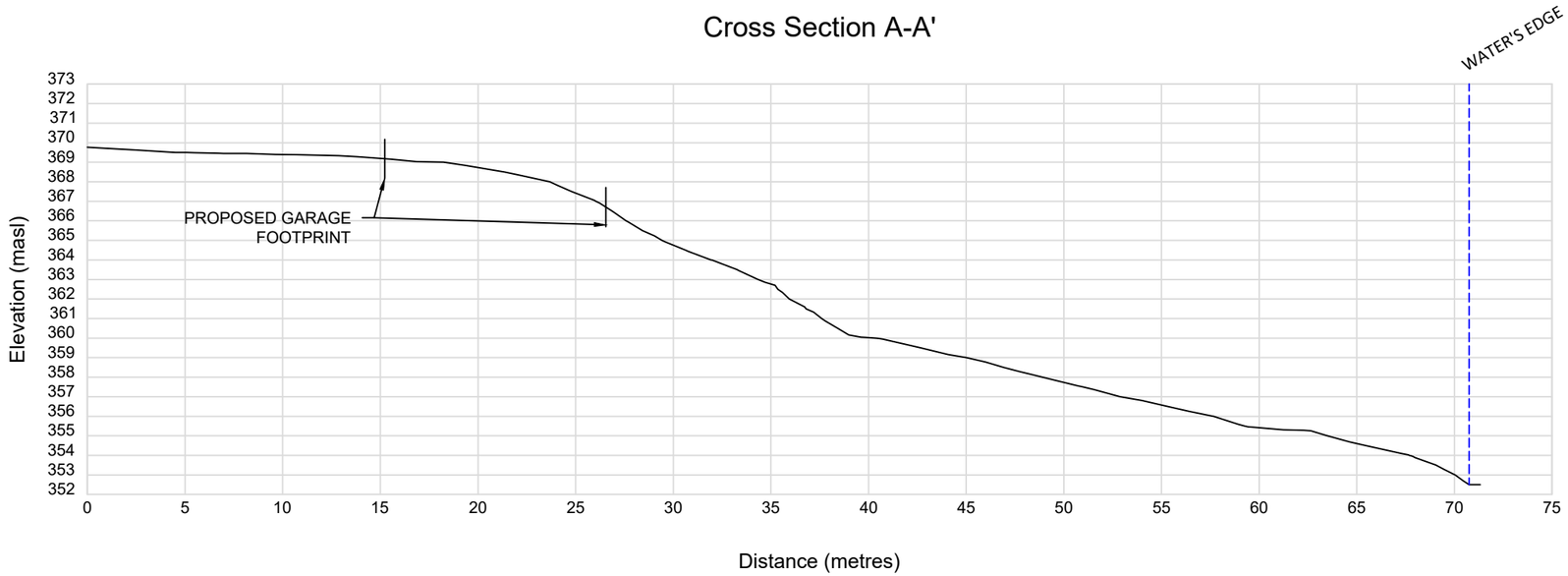

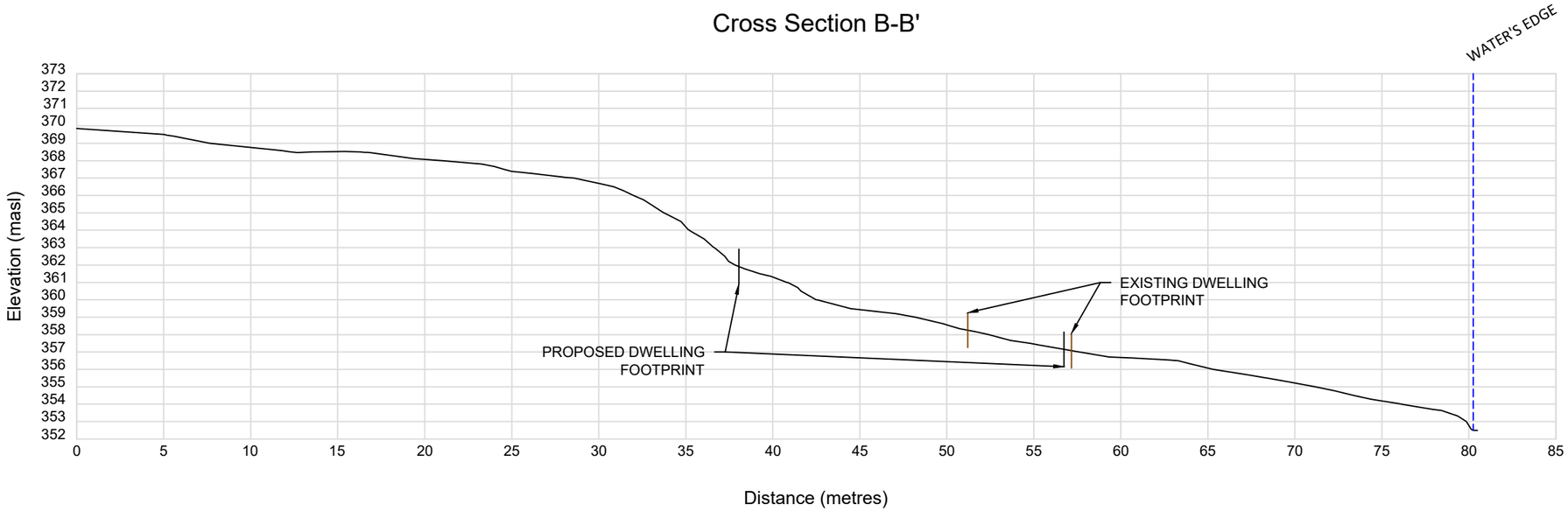

SLOPE STABILITY ASSESSMENT

JUSTIN AND NICOLA FLOWERDAY
115 Rangers Road
Highland Grove, Ontario

LEGEND

Notes:
1. Distances on this plan are in metres and can be converted to feet by dividing by 0.3048.

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CROSS SECTION PROFILES A-A' AND B-B'

Project No.: 22370-001		Date: May 2025	Rev.:
Horizontal Scale: 1:300		Vertical Scale: 1:300	
Drawn By: MAT	Checked By: ZL	Figure: 3	

Photo 1 Site overview, looking north, from Rangers Road, showing mixed mature trees across the top of the upper slope area.

Photo 2 View of the table land for the slope at the top of the upper slope area, looking west, showing mixed mature trees, and Rangers Road.

Photo 3 View of slope face for the upper steep section, looking east, showing an outhouse structure, with mixed mature trees and exposed bedrock.

Photo 4 View of slope face for the upper steep section, looking west, showing mixed mature trees and exposed bedrock.

Photo 5 View of slope face near the bottom of the upper steep section and the top of lower less steep section, looking east, showing the existing residential structure, an outhouse structure, neighbouring residential structure, mixed mature trees, and exposed bedrock.

Photo 6 Site overview, looking up the lower and upper slope sections, looking south, showing an outhouse structure. Mixed mature trees and bedrock are seen.

Photo 7 View of slope face near the top of the lower less steep section, looking east, showing the existing residential structure and neighbouring residential structure. Mixed mature trees are observed around a grassy cleared area.

Photo 8 View of slope face near the base of the lower less steep section, looking west, showing mixed mature trees around a grassy cleared area. Baptiste Lake is observed north of the property.

Photo 9 View of the base of the slope, looking east, showing Baptiste Lake and mixed mature trees and boulders along the shoreline.

Photo 10 View of the base of the slope, looking west, showing Baptiste Lake and mixed mature trees and boulders along the shoreline.

SLOPE STABILITY RATING CHART

Site Location:	115 Rangers Road, Highland Grove, ON (Lower Slope)	File No.	22370-001
Property Owner:	Justin and Nicola Flowerday	Inspection Date:	2025-04-10
Inspected By:	Josh Riseling	Weather:	Cloudy, 0°C

Inspection Task		Rating Value
1. SLOPE INCLINATION		
Degrees	**Horizontal:Vertical**	
a) 18 or less	3:1 or flatter	0
b) 18 to 26	2:1 to more than 3:1	6
c) more than 26	Steeper than 2:1	16
2. SOIL STRATIGRAPHY		
a) Shale, Limestone, Granite (Bedrock)		0
b) Sand, Gravel		6
c) Glacial Till		9
d) Clay, Silt		12
e) Fill		16
f) Leda Clay		24
3. SEEPAGE FROM SLOPE FACE		
a) None or near bottom only		0
b) Near mid-slope only		6
c) Near crest only or from several levels		12
4. SLOPE HEIGHT		
a) 2 m or less		0
b) 2.1 to 5 m		2
c) 5.1 to 10 m		4
d) more than 10 m		8
5. VEGETATION COVER ON SLOPE FACE		
a) Well vegetated, heavy shrubs or forested with mature trees		0
b) Light Vegetation; Mostly grass, weeds, occasional trees, shrubs		4
c) No vegetation, bare		8
6. TABLE LAND DRAINAGE		
a) Table land flat, no apparent drainage over slope		0
b) Minor drainage over slope, no active erosion		2
c) Drainage over slope, active erosion, gullies		4
7. PROXIMITY OF WATERCOURSE TO SLOPE TOE		
a) 15 m or more from slope toe		0
b) Less than 15 m from slope toe		6
8. PREVIOUS LANDSLIDE ACTIVITY		
a) No		0
b) Yes		6
	RATING VALUES TOTAL	**16**

SLOPE INSTABILITY RATING		INVESTIGATION REQUIREMENTS
1. Low Potential	<24	Site inspection only, confirmation, report letter
2. Slight Potential	25 - 35	Site inspection and surveying, preliminary study, detailed report
3. Moderate Potential	>35	Boreholes, piezometers, lab tests, surveying detailed report

Source: Table 8.1 Geotechnical Principles for Stable Slopes (June 1998), Ontario Ministry of Natural Resources

SLOPE STABILITY RATING CHART

Site Location:	115 Rangers Road, Highland Grove, ON (Upper Slope)	File No.	22370-001
Property Owner:	Justin and Nicola Flowerday	Inspection Date:	2025-04-10
Inspected By:	Josh Riseling	Weather:	Cloudy, 0°C

Inspection Task		Rating Value
1. SLOPE INCLINATION		
Degrees	**Horizontal:Vertical**	
a) 18 or less	3:1 or flatter	0
b) 18 to 26	2:1 to more than 3:1	6
c) more than 26	Steeper than 2:1	16
2. SOIL STRATIGRAPHY		
a) Shale, Limestone, Granite (Bedrock)		0
b) Sand, Gravel		6
c) Glacial Till		9
d) Clay, Silt		12
e) Fill		16
f) Leda Clay		24
3. SEEPAGE FROM SLOPE FACE		
a) None or near bottom only		0
b) Near mid-slope only		6
c) Near crest only or from several levels		12
4. SLOPE HEIGHT		
a) 2 m or less		0
b) 2.1 to 5 m		2
c) 5.1 to 10 m		4
d) more than 10 m		8
5. VEGETATION COVER ON SLOPE FACE		
a) Well vegetated, heavy shrubs or forested with mature trees		0
b) Light Vegetation; Mostly grass, weeds, occasional trees, shrubs		4
c) No vegetation, bare		8
6. TABLE LAND DRAINAGE		
a) Table land flat, no apparent drainage over slope		0
b) Minor drainage over slope, no active erosion		2
c) Drainage over slope, active erosion, gullies		4
7. PROXIMITY OF WATERCOURSE TO SLOPE TOE		
a) 15 m or more from slope toe		0
b) Less than 15 m from slope toe		6
8. PREVIOUS LANDSLIDE ACTIVITY		
a) No		0
b) Yes		6
	RATING VALUES TOTAL	**24**

SLOPE INSTABILITY RATING		INVESTIGATION REQUIREMENTS
1. Low Potential	<24	Site inspection only, confirmation, report letter
2. Slight Potential	25 - 35	Site inspection and surveying, preliminary study, detailed report
3. Moderate Potential	>35	Boreholes, piezometers, lab tests, surveying detailed report

Source: Table 8.1 Geotechnical Principles for Stable Slopes (June 1998), Ontario Ministry of Natural Resources

31E/E

Ministry of the Environment
Ontario

The Ontario Water Resources Act

WATER WELL RECORD

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

(11) 2909869 MUNICIP 29008 CON. GDN 07

COUNTY OR DISTRICT: Hastings
TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE: Bancroft
CON. BLOCK, TRACT, SURVEY, ETC: 7
LOT: 031
[redacted] Mayfair Ave Oshawa, Ont
DATE COMPLETED: DAY 14 MO 04 YR 81
99499 RC 5 ELEVATION 1200 RC 6 BASIN CODE 26

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET FROM	DEPTH - FEET TO
Brown	gravel	stones		0	9
Grey + red	granite		hard	9	122

(31) 0009611112 01222221173

(32)

(41) WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
073	1 ☒ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
0118	1 ☒ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL

(51) CASING & OPEN HOLE RECORD

INSIDE DIAM INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET FROM	DEPTH - FEET TO
06	1 ☒ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE	.188	0	0015
4	4 OPEN HOLE			0122
06	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☒ OPEN HOLE			
4	4 OPEN HOLE		15	122
	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE			

SCREEN

SIZE(S) OF OPENING (SLOT NO.)	DIAMETER (INCHES)	LENGTH (FEET)
MATERIAL AND TYPE	DEPTH TO TOP OF SCREEN (FEET)	

(61) PLUGGING & SEALING RECORD

DEPTH SET AT - FEET FROM	DEPTH SET AT - FEET TO	MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)
10-13	14-17	Drive shoe
18-21	22-25	
26-29	30-33	

(71) PUMPING TEST

PUMPING TEST METHOD: 1 ☒ PUMP 2 ☐ BAILER
PUMPING RATE: 0003 ~~2 4~~ GPM
DURATION OF PUMPING: 02 HOURS 00 MINS

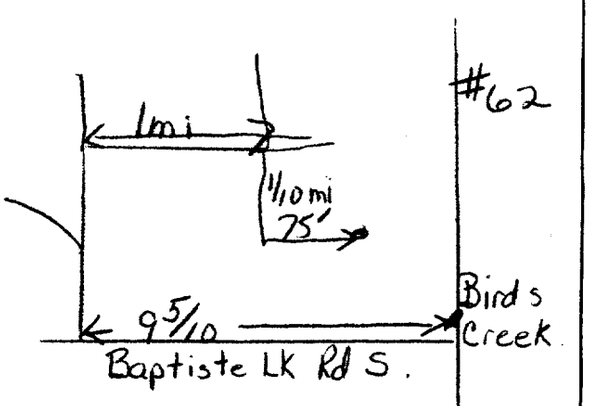
STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING: 1 [redacted] 2 ☐ RECOVERY			
		15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
014 FEET	122 FEET	— FEET	— FEET	— FEET	— FEET

IF FLOWING, GIVE RATE	PUMP INTAKE SET AT	WATER AT END OF TEST
GPM	122 FEET	1 ☒ CLEAR 2 ☐ CLOUDY

RECOMMENDED PUMP TYPE	RECOMMENDED PUMP SETTING	RECOMMENDED PUMPING RATE
☐ SHALLOW ☒ DEEP	115 FEET	0003 ~~2 4~~ GPM

LOCATION OF WELL

IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE. INDICATE NORTH BY ARROW.



DRILLERS REMARKS:

FINAL STATUS OF WELL (54): 1 ☒ WATER SUPPLY 2 ☐ OBSERVATION WELL 3 ☐ TEST HOLE 4 ☐ RECHARGE WELL 5 ☐ ABANDONED, INSUFFICIENT SUPPLY 6 ☐ ABANDONED, POOR QUALITY 7 ☐ UNFINISHED

WATER USE (55-56) 01: 1 ☒ DOMESTIC 2 ☐ STOCK 3 ☐ IRRIGATION 4 ☐ INDUSTRIAL ☐ OTHER 5 ☐ COMMERCIAL 6 ☐ MUNICIPAL 7 ☐ PUBLIC SUPPLY 8 ☐ COOLING OR AIR CONDITIONING 9 ☐ NOT USED

METHOD OF DRILLING (57) 4: 1 ☐ CABLE TOOL 2 ☐ ROTARY (CONVENTIONAL) 3 ☐ ROTARY (REVERSE) 4 ☒ ROTARY (AIR) 5 ☐ AIR PERCUSSION 6 ☐ BORING 7 ☐ DIAMOND 8 ☐ JETTING 9 ☐ DRIVING

CONTRACTOR

NAME OF WELL CONTRACTOR: Marquardt Well Drilling — LICENCE NUMBER: 3668
ADDRESS: Palmer Rapids Ontario
NAME OF DRILLER OR BORER: Wayne Terry Marquardt — LICENCE NUMBER: 3651
SIGNATURE OF CONTRACTOR: Wayne Marquardt
SUBMISSION DATE: DAY 8 MO 9 YR 81

OFFICE USE ONLY

DATA SOURCE (58): 1 — CONTRACTOR (59-62): 3668 — DATE RECEIVED (63-68): 10 09 81
DATE OF INSPECTION — INSPECTOR
REMARKS

CSS.ES

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FORM NO. 0506—4—77 FORM 7

THE ENVIRONMENT

The Ontario Water Resources Act

WATER WELL RECORD

Ontario

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

11 | 2907804 | UNIQUE 29008 | CON 07

COUNTY OR DISTRICT: [redacted] | TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE: HERSHEL HIGHLAND GROVE ONT | CON 7 | BLOCK, TRACT, SURVEY, ETC. | LOT 030

DATE COMPLETED: DAY 26TH MO 10 YR 76

UTM: 99330 5 | ELEVATION: 1230 6 | BASIN CODE: 26

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET FROM	DEPTH - FEET TO
BROWN	SAND	BOULDERS		0	9
GREY	GRANITE			9	172

31 | 0009628 1 3 | 01 72221

32

41 WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
0165	1 ☒ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL

51 CASING & OPEN HOLE RECORD

OUTSIDE DIAM. INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET FROM	DEPTH - FEET TO
6 6/4	1 ☒ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE	.188	0	0022 22'
	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE			
	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE			

SCREEN

SIZE(S) OF OPENING (SLOT NO.)	DIAMETER INCHES	LENGTH FEET
MATERIAL AND TYPE	DEPTH TO TOP OF SCREEN FEET	

61 PLUGGING & SEALING RECORD

DEPTH SET AT - FEET FROM	TO	MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)
10-13	14-17	
18-21	22-25	DRIVE SHOE
26-29	30-33	

71 PUMPING TEST

PUMPING TEST METHOD: 1 ☒ PUMP 2 ☐ BAILER

PUMPING RATE: 0001 GPM | DURATION OF PUMPING: 02 HOURS 00 MINS

STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING: 1 ☒ PUMPING 2 ☐ RECOVERY			
		15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
025 FEET	172 FEET	172 FEET	172 FEET	172 FEET	172 FEET

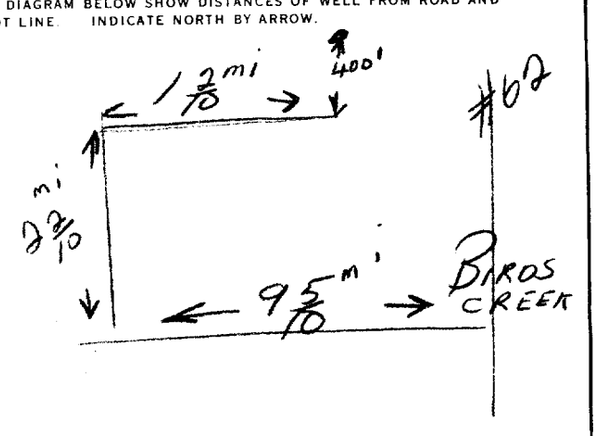
IF FLOWING, GIVE RATE: GPM | PUMP INTAKE SET AT: 172 FEET | WATER AT END OF TEST: 1 ☒ CLEAR 2 ☐ CLOUDY

RECOMMENDED PUMP TYPE: ☐ SHALLOW ☒ DEEP | RECOMMENDED PUMP SETTING: 160 FEET | RECOMMENDED PUMPING RATE: 0001 GPM

GPM./FT. SPECIFIC CAPACITY

LOCATION OF WELL

IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE. INDICATE NORTH BY ARROW.



DRILLERS REMARKS:

FINAL STATUS OF WELL 54: 1 ☒ WATER SUPPLY; 2 ☐ OBSERVATION WELL; 3 ☐ TEST HOLE; 4 ☐ RECHARGE WELL; 5 ☐ ABANDONED, INSUFFICIENT SUPPLY; 6 ☐ ABANDONED, POOR QUALITY; 7 ☐ UNFINISHED

WATER USE 55-56: 01 — 1 ☒ DOMESTIC; 2 ☐ STOCK; 3 ☐ IRRIGATION; 4 ☐ INDUSTRIAL; ☐ OTHER; 5 ☐ COMMERCIAL; 6 ☐ MUNICIPAL; 7 ☐ PUBLIC SUPPLY; 8 ☐ COOLING OR AIR CONDITIONING; 9 ☐ NOT USED

METHOD OF DRILLING 57: 2 — 1 ☐ CABLE TOOL; 2 ☒ ROTARY (CONVENTIONAL); 3 ☐ ROTARY (REVERSE); 4 ☐ ROTARY (AIR); 5 ☐ AIR PERCUSSION; 6 ☐ BORING; 7 ☐ DIAMOND; 8 ☐ JETTING; 9 ☐ DRIVING

CONTRACTOR

NAME OF WELL CONTRACTOR: MARQUARDT WELL DRILLING | LICENCE NUMBER: 3668

ADDRESS: PALMER RAPIDS ONT

NAME OF DRILLER OR BORER: WAYNE MARQUARDT | LICENCE NUMBER: 3651

SIGNATURE OF CONTRACTOR: Wayne Marquardt | SUBMISSION DATE: DAY 28 MO 12 YR 76

MINISTRY OF THE ENVIRONMENT COPY

OFFICE USE ONLY

DATA SOURCE 58: 1 | CONTRACTOR 59-62: 3668 | DATE RECEIVED 63-68: 060177

DATE OF INSPECTION | INSPECTOR: K

REMARKS: CSS.88

P M. WI

FORM 7 MOE 07-091