Water Resources Impact Assessment

4631 Sideroad 20 North, Puslinch Township, Ontario

Puslinch Development GP Inc.

January 31, 2025

→ **The Power of Commitment**

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1. Introduction

The following report presents the results of a water resources impact assessment for a proposed large subsurface sewage disposal system. The assessment was completed in support of a proposed industrial development at 4631 Sideroad 20 North, Puslinch Township, Ontario (hereafter referred to as the 'Site'). The location of the property relative to local roads and nearby watercourses is depicted on the Site Location Plan, **Figure 1**.

The Site is in a rural area and does not have municipal water or sanitary services available. Therefore, an approved septic system is required and would need to conform to the Ontario Building Code (OBC). Under the OBC, the design flows for the entire Site would be over 10,000 L per day and require approval from the Ministry of the Environment, Conservation and Parks (MECP). This water resources impact assessment was conducted to evaluate the subsurface conditions at the subject property and assess suitable septic effluent treatment options.

The factual data, interpretations and recommendations contained in this report pertain to a specific project as described in the report and are not applicable to any other project or site location. This report should be read in conjunction with the Scope and Limitations in Section 1.1 of this report. The reader's attention is specifically drawn to this information, as it is essential for the proper use and interpretation of this report.

1.1 Scope and Limitations

This report: has been prepared by GHD for Puslinch Development GP Inc. and may only be used and relied on by Puslinch Development GP Inc. for the purpose agreed between GHD and Puslinch Development GP Inc. as set out in section 1 of this report.

GHD otherwise disclaims responsibility to any person other than Puslinch Development GP Inc. arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

The opinions, conclusions and any recommendations in this report are based on assumptions made by GHD described in this report. GHD disclaims liability arising from any of the assumptions being incorrect.

Accessibility of documents

If this report is required to be accessible in any other format, this can be provided by GHD upon request and at an additional cost if necessary.

2. Purpose and Scope

The purpose of this water resources impact assessment was to define the prevailing hydrogeological conditions and assess the impacts from a large subsurface disposal system for nitrate in groundwater and phosphorus to surface water. To accomplish the foregoing purpose, the following scope of work was conducted:

- A desktop review of groundwater information from existing monitoring wells and reports to assess the direction of groundwater flow. Reviewed soil stratigraphy from reports completed for the Site and local area;
- Reviewed available background information relevant to the Site such as geologic, water resource reports and maps;

- Completed a Reasonable Use Concept (RUC) assessment for nitrate and assessed the potential for phosphorus impacts;
- Summarized our findings within this report to meet the general requirements of the MECP's Chapter 22 for Large Subsurface Sewage Disposal Systems.

3. Site Conditions

3.1 Site Description

The Site is located at 4631 Sideroad 20 North in the Township of Puslinch, Ontario. The Site is currently vacant land, used for agricultural purposes. The Site is bounded by Provincial Highway 6 (Hanlon Parkway) to the east, Concession Road 4 to the south and Side Road 20 N to the west. The Site is approximately 25 hectares and has a triangular shape. A small wetland with a pond is located on the southwest portion of the Site.

The proposed development consists of three (3) industrial buildings, a daycare and a gym surrounded by a parking lot and paved aprons. The site occupancy consists of office, warehouse, manufacturing, retail, conference, food service, gym and daycare usage, as specified in the Site plan by Sweeny&Co Architects dated January 27, 2025.

3.2 Topography

The regional topography map is presented on **Figure 2**. The topography at the Site is undulating to rolling, with surficial elevations gradually sloping towards the south.

3.3 Geology and Soils

Surficial Geology mapping presented on **Figure 3** indicates that the Site is comprised of coarse textured ice-contact stratified deposits that consist of sand and gravel, minor silts and clays, and fine textured stone-poor, sandy silt to silty sand textured glacial till deposits.

The Quaternary geology is presented in **Figure 4** and indicates the majority of the Site is underlain by glaciofluvial outwash deposits consisting of gravel and sand. The south side of the Site is underlain by Wentworth Till with a sandy silt to silt matrix.

The bedrock of this area, as presented on **Figure 5**, is comprised of dolostone of the Upper Ordovician Guelph Formation.

3.4 Description of Surface Water Features

No areas of Natural or Scientific Interest (ANSI) are present on the Site as presented on **Figure 6,** however a small surface water feature (pond) and an evaluated Provincially Significant Wetland (PSW) is located on the southwest portion of the Site just north of Concession Road 4. Several more surface water features (ponds) and wetlands are located within a 500 m radius of the Site that are isolated or connected with streams.

Based on GHDs observations there was no defined inlet or outlet flow path or active flow observed within the wetland area. Based on the information collected during other GHD investigative work the shallow groundwater aquifer is contributing to the surface water in the wetland with occasional dry periods.

3.5 Local Groundwater Supplies

The information regarding the groundwater characteristics of the immediate area was obtained from an inventory of the well records on file with the MECP. The Site and surrounding area are privately serviced. Forty-three (43) water well records were identified within 500 metres of the Site. The data has been summarized in **Table 1**. The MECP well records and the approximate locations are provided in **Appendix A**. Twenty (20) well records were for monitoring wells or abandoned wells and are not included in the statistical summary. No dug wells were identified in the well records database.

Six (6) drilled overburden wells and seventeen (17) drilled bedrock wells were identified in the MECP records. The groundwater was generally described as "fresh" from the well records reviewed. The overburden was generally described as clay underlain by sand and gravel. Bedrock was encountered between 32.9 and 52.4 m. Water was reported to be generally encountered within the bedrock at an average depth of about 48 m. Based on the MECP well records reviewed, there are two aquifers beneath the site: a shallow overburden aquifer; and deeper bedrock complex that supplies groundwater to most wells in the area.

A summary of the MECP well record data is presented below in **Table 1**.

Table 1 Summary of MECP Water Well Records

Well Use	Well Type/Unit	No. Wells	Well Depth Min – Max (Avg) (mbgs)	Water Encountered Depth Min – Max (Avg) (mbgs)	Static WL Min – Max (mbgs)	Yield Min – Max (Avg) (L/min)
Water Supply	Overburden – Drilled	6 (26%)	20.4 – 74.4 (38.3)	20.4 – 74.4 (37.9)	12.2 – 29.0 (17.8)	15.1 – 75.6 (44.7)
Water Supply	Bedrock	17 (74%)	39.0 – 70.1 (51.8)	38.1 – 65.5 (48.1)	12.2 – 22.3 (18.2)	18.9 – 75.6 (40.7)
Total		**23**				
Abandoned	NA	6	15.0 – 81.7 (37.5)	NA	NA	NA
Monitoring	Drilled	13	10.7 – 91.4 (34.6)	9.4 – 36.6 (19.9)	9.4 – 13.7 (12.0)	3.8
Other	NA	1	47.2	--	15.2	--

4. Subsurface Exploration

A subsurface investigation was conducted by GHD between November 20 to November 23, 2023, as part of a geotechnical investigation for the proposed development at 4631 Sideroad 20 North. The geotechnical investigation consisted of advancing thirteen (13) boreholes across the Site, eight (8) of which were instrumented with monitoring wells. GHD's Geotechnical Investigation report for the Site, dated January 2025, was reviewed for this water resources impact assessment. The Hydrogeological Assessment Report by GHD, dated January 2025, was reviewed for groundwater conditions observations for the Site.

4.1 Soil Conditions

The stratigraphy at the Site generally consists of topsoil and disturbed native material, underlain by interlayered native granular deposits generally comprised of mixtures of silt, sand and gravel. Granular deposits consisting of mixed and interlayered sequences of silt, sand, and gravel are prevalent across the Site. Some layers are uniformly graded deposits of sand and silt, with little presence of one in the other. Native granular deposit was encountered in all boreholes below the disturbed native or topsoil to the termination depth.

The closest test holes to the proposed septic bed location are MW6-23 and BH9-23. The borehole log for MW6-23 indicates a 356 mm thick layer of topsoil over a 0.3 m layer of fill consisting of silt, and traces of clay, which is underlain by a 1.6 m thick native layer described as silt with trace clay and sand. The borehole log for BH9-23 shows a 127 mm layer of topsoil over a 0.4 m layer of fill described as sandy silt with traces to some gravel, which is underlain by a 3.5 m layer of native silty sand with trace sand and gravel. Groundwater was not observed in either test hole, which were terminated at a depth of 5.2 m.

4.2 Groundwater Levels and Flow Direction

Based upon the water levels collected by GHD between November 29, 2023 and October 29, 2024, the groundwater elevations indicate that the flow direction is towards the southeast. The groundwater elevations ranged between 337.5 masl at MW1-23 to 329.5 masl at MW7-23.

Continuous groundwater elevation monitoring was conducted at MW1-23, MW7-23 and MW10-23 using pressure transducers. The elevation data obtained from the pressure transducers show a rapid increase in groundwater elevation at MW1-23 and MW10-23 following a significant rain event on July 16, 2024, indicating a direct hydraulic connection between the ground surface and the gravelly sand aquifer at these locations. MW7-23 does not show the same rapid increase in elevation, likely because this monitoring well is screened in the till deposits and does not have the same direct hydraulic connection to the ground surface.

For additional information regarding groundwater conditions on site please refer to the Hydrogeological Assessment Report by GHD, dated January 2025.

5. Assessment of Impact on Water Resources

5.1 General

As the design sewage flow for the proposed development of the Site is anticipated to be over 10,000L/day, the Site would require an Environmental Compliance Approval (ECA) from the MECP. An ECA application requires a pre-consult with the MECP. As part of the pre-consultation, an assessment of potential surface water and groundwater impacts would be required as per Chapter 22: Large Subsurface Sewage Disposal Systems under the MECP document Design Guidelines for Sewage Works. Subsurface disposal systems with a design capacity in excess of 10,000L/d are referred to as large subsurface sewage disposal systems (LSSDS).

For LSSDS a water resources impact assessment is required by the MECP to evaluate potential impacts. The assessment is to evaluate, from the point where effluent enters the subsurface, it's effect on surrounding water bodies, water resources, and other users, including all groundwater and surface water that may be impacted. The assessment is to take into account the design of a sewage works, especially as the design would impact effluent quality. In turn, the design of the works would need to minimize the risk of undesirable environmental effects.

Groundwater is the initial medium to receive sewage effluent and is the main focus of initial investigative work. The degree of detail required for the assessment of surface water body effects is dependent on the distance and attributes of receiving water bodies.

5.2 Groundwater

In the case of groundwater, the critical contaminant is typically nitrate, particularly for downgradient groundwater users. Based on the work completed to date it is expected that the septic effluent will infiltrate the shallow overburden soils and would then flow along with the shallow groundwater in downgradient directions. No groundwater supply wells were identified within the projected effluent path.

As outlined in the MECP document Chapter 22 Large Subsurface Sewage Disposal Systems, the basic calculation of impact of effluent on groundwater quality at a receiver, either being a groundwater user, the property boundary, or a surface water body, using dilution.

The following assumptions were used for the calculations:

- The concentration of nitrate in the untreated sewage is estimated to be on the order of 40 mg/L;
- The dilution area was based on the proposed configuration of the future septic bed and the inferred downgradient flow path as presented on the **Dilution Plan Figure 7**.
- The estimated recharge rate is on the order of about 250 mm/year is based on the MECP Guidelines; and
- The design flow / daily effluent loading based upon calculations using the OBC sewage system design flows totalling 214,292 L/day as presented in GHD's Functional Servicing and Stormwater Management Report.

The following equations are used to predict the potential impact due to nitrate loading to the shallow groundwater:

- Equations: Eq'n #
- $V_A = A_D \times k$ (1)
- $V_T = V_A + V_S$ (2)
- $C_{PB} = (C_S \times V_S) / V_T$ (3)

Where:

- V_A = annual dilution volume [m^3]
- A_D = dilution area [m^2]
- V_T = total volume of water [m^3]
- V_S = annual sewage volume [m^3]
- C_{PB} = concentration at property boundary [mg/L]
- C_S = concentration in sewage [mg/L]
- k = 0.25 m Annual Dilution Precipitation Rate

The results of the calculations are included in **Appendix B** and indicate that based on dilution alone would result in a nitrate concentration of 39mg/L at the property boundary. To meet the reasonable use value of 2.5mg/L at the property boundary, a tertiary system would be required to reduce nitrates effectively to 2.5mg/L in the effluent discharging to the large subsurface disposal bed.

5.3 Surface Water

Phosphorous is of particular concern from a surface water perspective. The potential for surface water impact is dependent on the phosphorus retention capabilities of the soils, the depth of phosphorous retaining soils, the presence of a shallow water table, or the presence of shallow bedrock. The potential for impact decreases with separation distance. In most cases, a separation distance of 300 metres (980 feet) between the area of sewage infiltration and the surface water body should be sufficient to ensure that there are no appreciable effects to surface water quality. There is a Provincially significant wetland located onsite. The surface water body (pond) is not directly connected to any other surface water body and appears to be connected to the shallow groundwater regime. There is no other surface water within 300m downgradient of the proposed surface disposal bed.

As outlined in the MECP document Chapter 22 Large Subsurface Sewage Disposal Systems, the basic calculation of impact of effluent on groundwater quality at a receiver, either being a groundwater user, the property boundary, or a surface water body, using dilution. Typical effluent has values around 8mg/L of phosphorus. Due to the close proximity of the onsite surface water body very little reduction in phosphorous is anticipated through dilution. An assessment of the attenuation capabilities of the onsite soils can be completed however a more effective method to reduce phosphorus would be through the use of phosphorous retaining imported soils for the leaching bed. This can generally reduce the loading up to 97%. Alternatively additional phosphorous reduction treatment can be added to the tertiary treatment system. Typically a reduction to 1mg/L is accepted. It is recommended that the preferred method of addressing phosphorous loading be discussed with the MECP during the pre-consult process.

Traditionally nitrate was not considered as a contaminant of concern for surface water from a septic effluent perspective. More recently the MECP has started to identify the potential for Nitrate to degrade surface water quality and it is understood that discussions are underway within the MECP to develop water quality objectives for nitrates and related parameters. The CCME value of 13mg/L is generally discussed. Based on the proposed effluent treatment reduction, the nitrate value would be below 13mg/L and nitrate reduction for surface water impacts is not proposed.

6. Summary and Conclusions

The local geology at the Site generally consists of topsoil and disturbed native material, underlain by interlayered native granular deposits generally comprised of mixtures of silt, sand and gravel. Groundwater was encountered between 337.5 masl and 329.5 masl and the groundwater elevations indicate that the flow direction is towards the southeast.

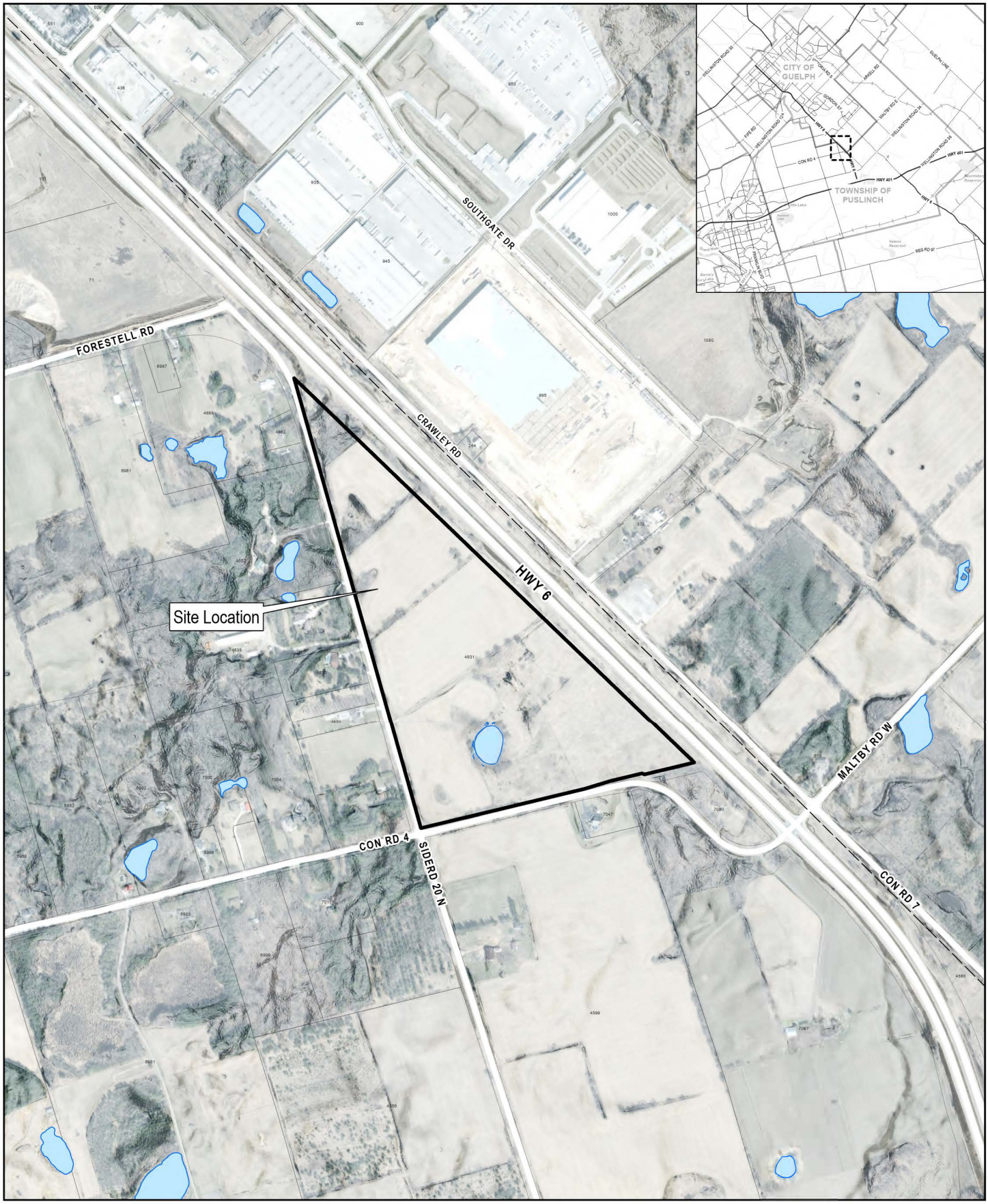
Based on the flow direction data, the effluent plume would be towards the southeast. The proposed placement of the sewage bed will have the effluent received by groundwater that discharges to the onsite provincial significant wetland and pond. The wetland and pond are not connected to any other surface water features. No groundwater receptors were identified downgradient of the disposal bed that would be impacted by nitrate loading. Using the requirements of Chapter 22, a tertiary system would need to reduce the nitrate concentration in the septic effluent effectively to 2.5 mg/L in order to meet 2.5 mg/L at the property boundary.

We trust that this report has been completed within our terms of reference and is suitable for your present requirements. Please contact our office if you have any questions or require further consultation.

Regards,

Steven Gagne, H.S.Bc.

Andy Fawcett, P.Eng.



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Grid: NAD 1983 UTM Zone 17N

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GHD

Puslinch Development Limited Partnership
4631 Sideroad 20 North, Puslinch Township, Ontario

Water Resources Impact Assessment

Site Location Plan

Project No. 12618927
Revision No.
Date Jan 14, 2025

Figure 1

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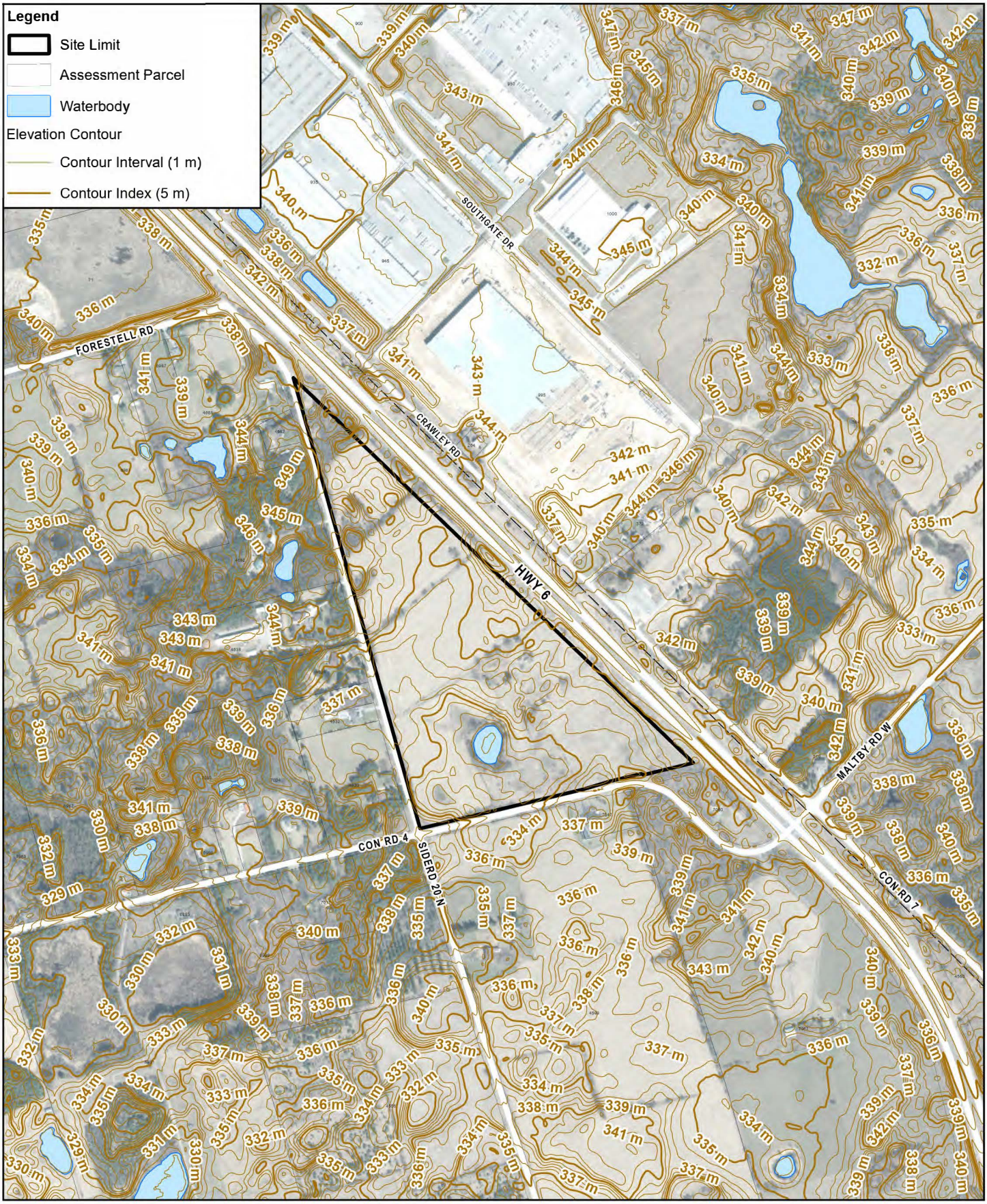

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Puslinch Development GP Inc.
4631 Sideroad 20 North, Puslinch Township, Ontario

Water Resources Impact Assessment

Regional Topography

Project No. 12618927
Revision No.
Date Jan 14, 2025

Figure 2

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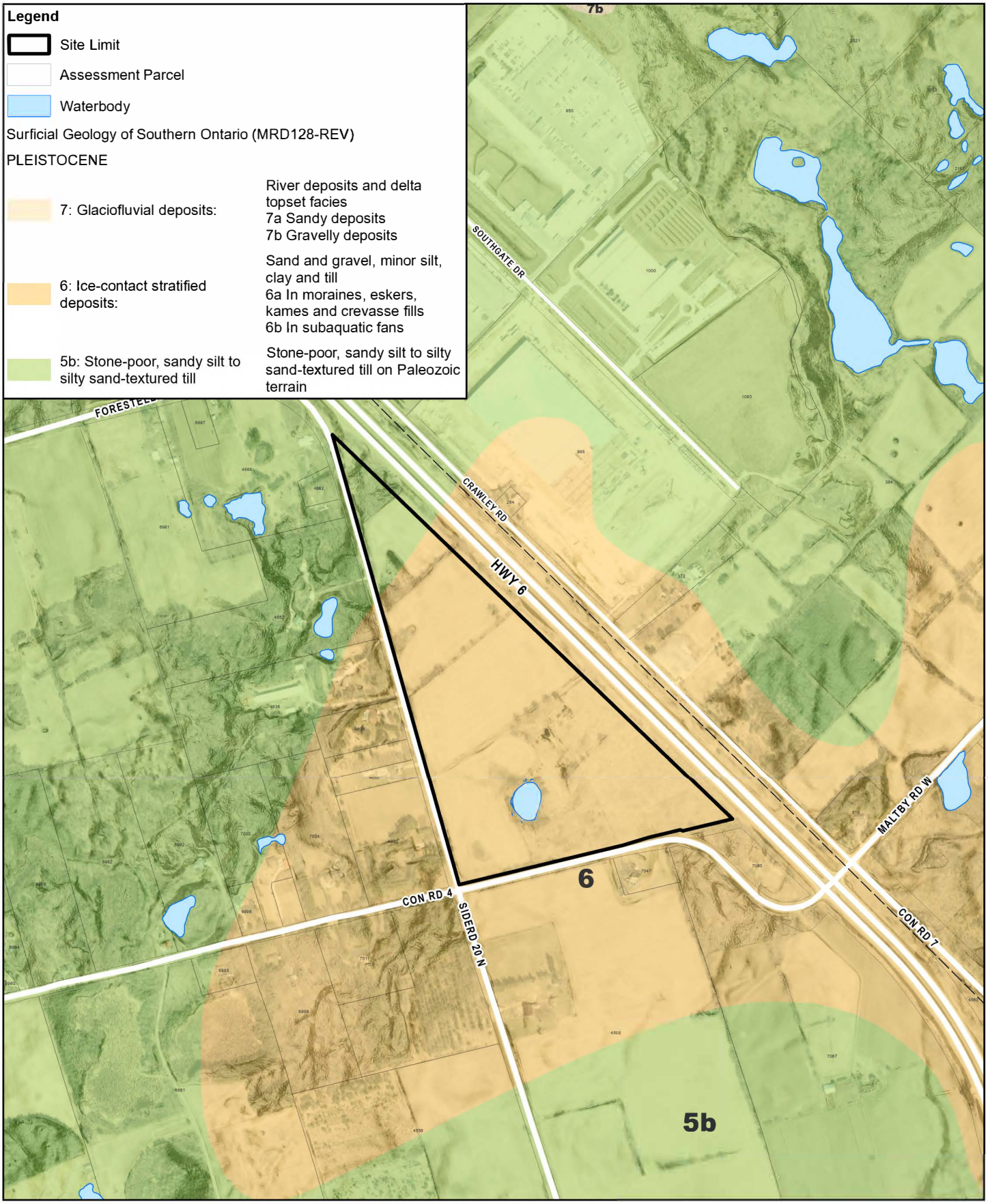

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Puslinch Development GP Inc.
4631 Sideroad 20 North, Puslinch Township, Ontario

Water Resources Impact Assessment

Surficial Geology

Project No. 12618927
Revision No.
Date Jan 14, 2025

Figure 3

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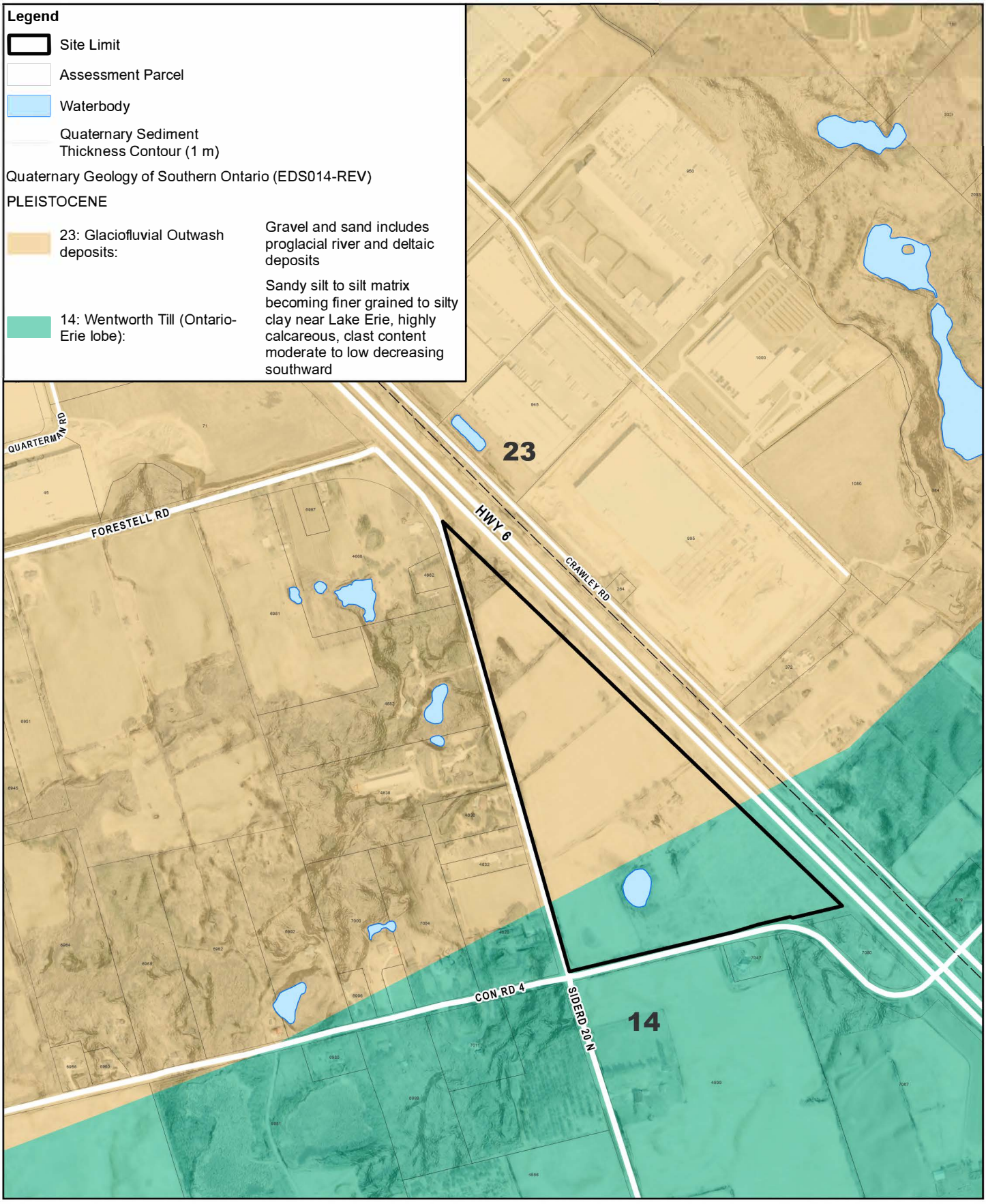

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Grid: NAD 1983 UTM Zone 17N

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Puslinch Development Limited Partnership
4631 Sideroad 20 North, Puslinch Township, Ontario

Water Resources Impact Assessment

Quaternary Geology

Project No. 12618927
Revision No.
Date Jan 14, 2025

Figure 4

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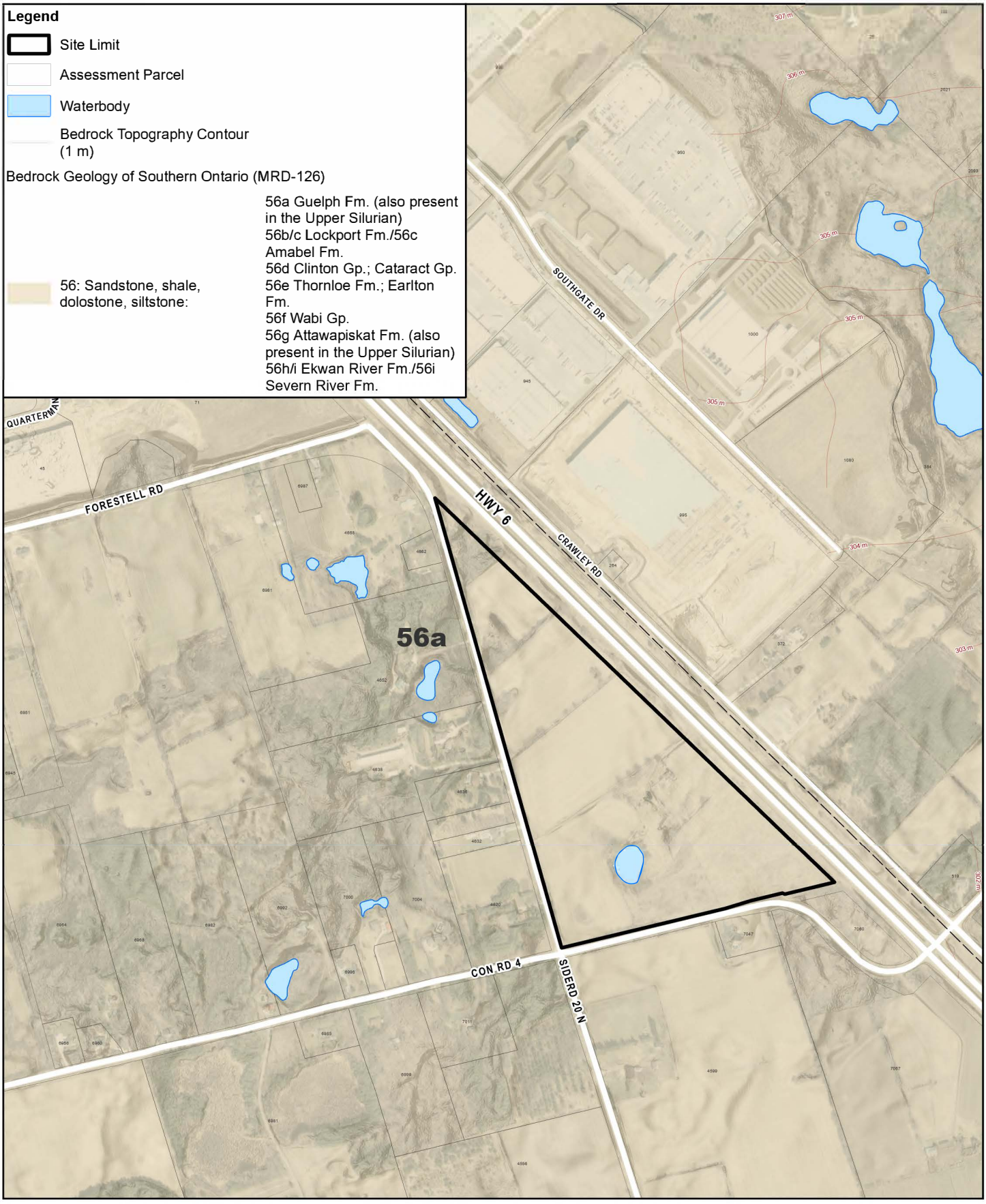

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Grid: NAD 1983 UTM Zone 17N

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4631 Sideroad 20 North, Puslinch Township, Ontario

Water Resources Impact Assessment

Bedrock Geology

Project No. 12618927
Revision No.
Date Jan 14, 2025

Figure 5

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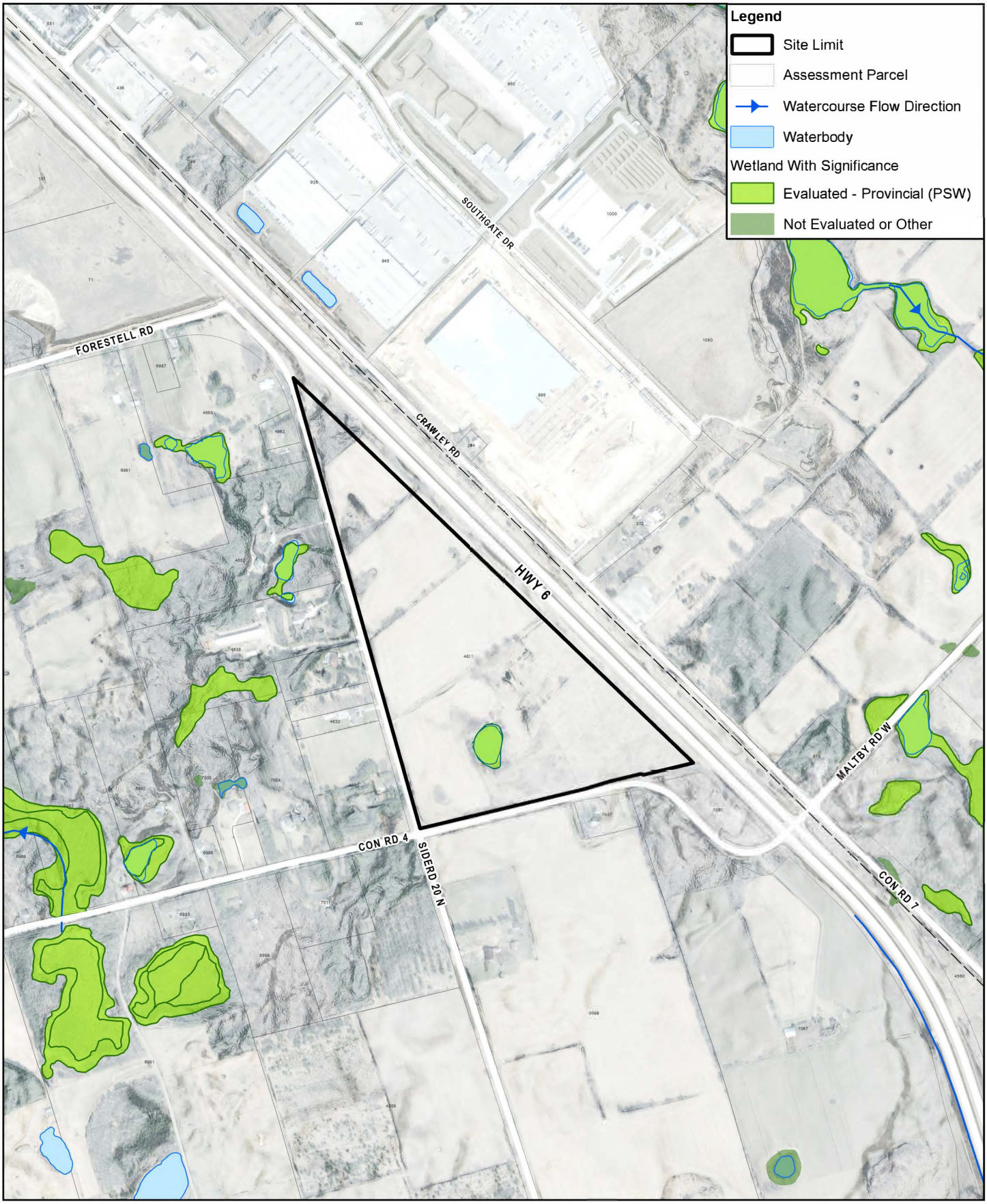

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Grid: NAD 1983 UTM Zone 17N

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4631 Sideroad 20 North, Puslinch Township, Ontario

Water Resources Impact Assessment

ANSI, Wetlands, and Drainage

Project No. 12618927
Revision No.
Date Jan 14, 2025

Figure 6

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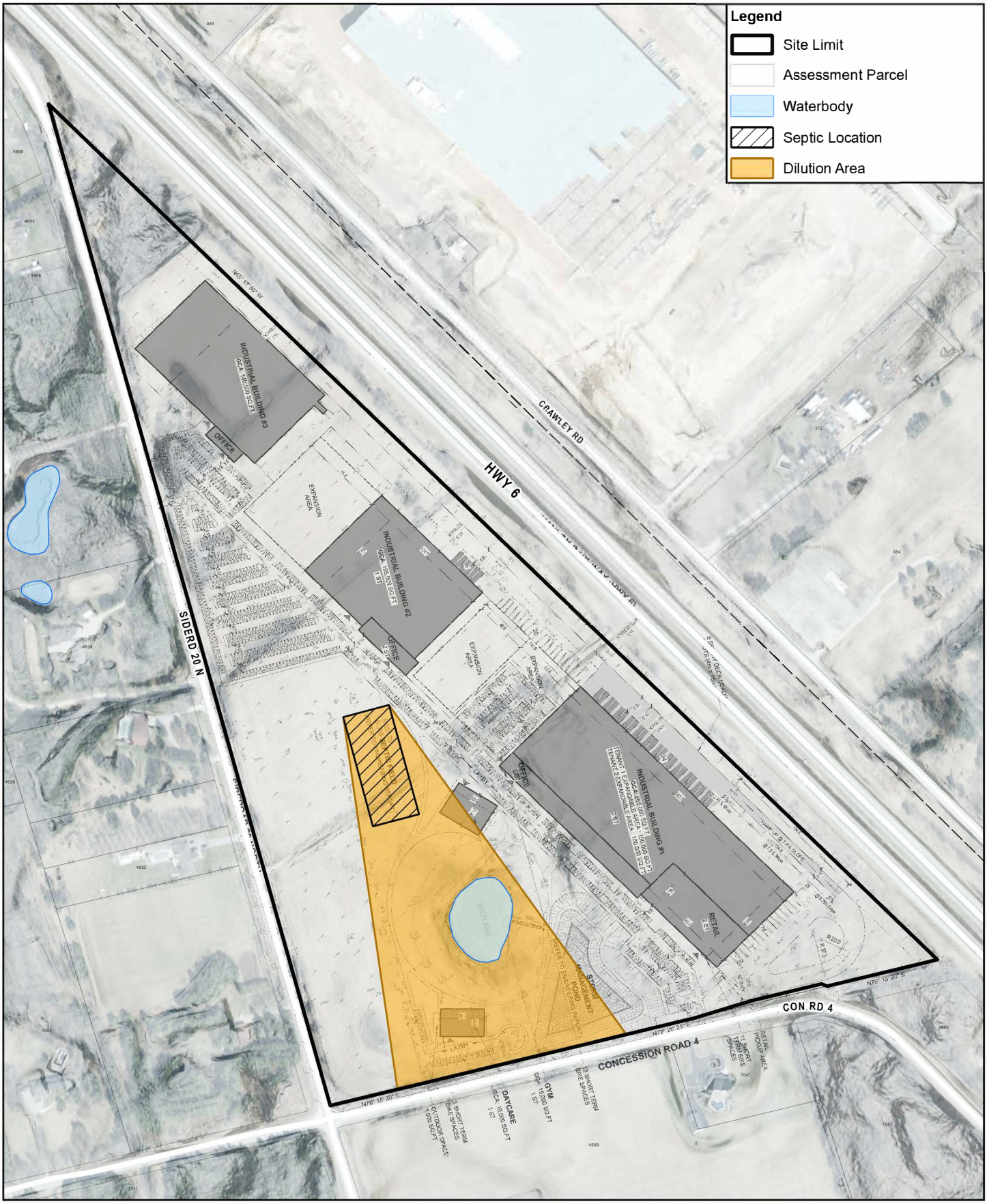

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Puslinch Development Limited Partnership
4631 Sideroad 20 North, Puslinch Township, Ontario

Water Resources Impact Assessment

Dilution Plan

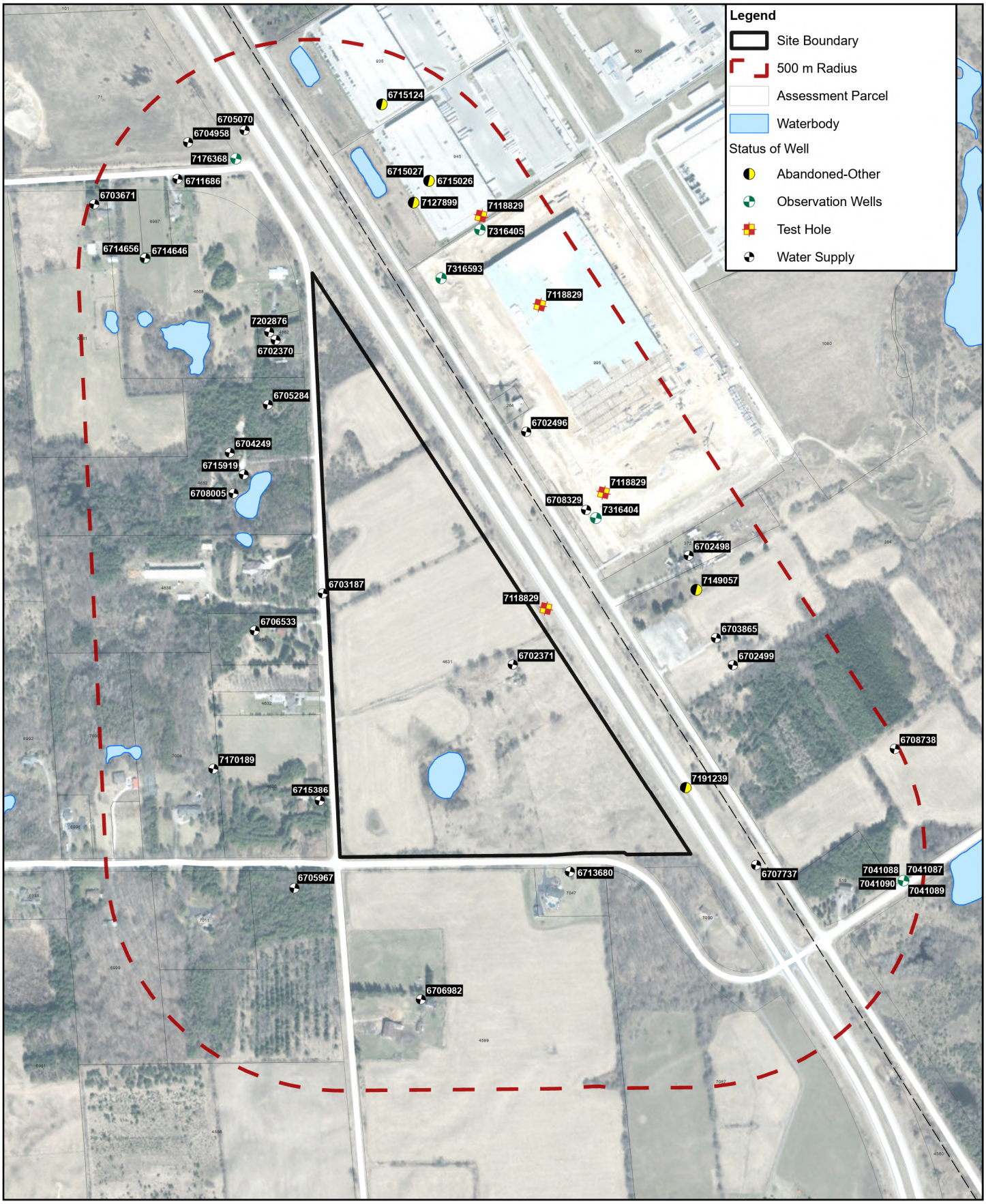
Project No. 12618927
Revision No.
Date Feb 3, 2025

Figure 7

Appendices

Appendix A

MECP Well Records



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Danby Products Limited
4631 Sideroad 20 North, Puslinch Township, Ontario

Water Resources Impact Assessment

MECP Well Records

Project No. 12618927
Revision No.
Date Jan 14, 2025

Figure 1

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MECP WELL RECORD LISTINGS

Ministry of the Environment, Conservation & Parks (MECP)

17

Easting:	570251.30
Northing:	4826772.00
Elev (masl):	347.88

Latitude: 43.480355
Longitude: -80.201883

Well ID: **6702370**

LOCATION

Lot:	020	Tag:	
Con:	04	Audit No:	
Municipality:	WELLINGTON	Contractor License:	2414
Township:	PUSLINCH TOWNSHIP	Well Completion Date:	04-30-1959
Street:		Received Date:	05-04-1959
City:	n/a		

WELL

Well Status:	Water Supply	Well Depth (m):	48.768
Prim. Use:	n/a	Depth to Bedrock (m):	133
Sec. Use:	n/a	Depth to Water:	ft
Boring Method:	Cable Tool	Water Kind:	FRESH

PUMP TEST

Test Method:	CLEAR	Pipe ID:	11015084
Pump Set (m):	n/a	Pump Test ID	996702370
SWL (ft)	70	Flowing:	N
Final Level:	80 ft	Pump Duration (hr):	2
Pump Rate:	8 GPM	Pump Duration (m):	0
Recom. Rate:	6 GPM		

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	930758636	4	inch	STEEL	n/a	138 ft
2	930758637	4	inch	OPEN HOLE	n/a	160 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	TOPSOIL	n/a	n/a	n/a	0	2 ft
2	CLAY	STONES	n/a	BROWN	2	25 ft
3	CLAY	GRAVEL	n/a	BROWN	25	52 ft
4	GRAVEL	n/a	n/a	n/a	52	70 ft
5	FINE SAND	n/a	n/a	n/a	70	87 ft
6	CLAY	FINE SAND	n/a	GREY	87	104 ft
7	COARSE SAND	n/a	n/a	n/a	104	112 ft
8	CLAY	COARSE SAND	n/a	GREY	112	128 ft
9	COARSE SAND	GRAVEL	n/a	n/a	128	133 ft
10	LIMESTONE	n/a	n/a	BROWN	133	160 ft

End of Record

17

Easting:	569479.30
Northing:	4825786.00
Elev (masl):	340.11

Latitude: 43.47665
Longitude: -80.196095

Well ID: **6702371**

LOCATION

Lot:	021	Tag:	
Con:	04	Audit No:	
Municipality:	WELLINGTON	Contractor License:	2414
Township:	PUSLINCH TOWNSHIP	Well Completion Date:	02-06-1962
Street:		Received Date:	02-19-1962
City:	n/a		

WELL

Well Status:	Water Supply	Well Depth (m):	70.104
Prim. Use:	n/a	Depth to Bedrock (m):	125
Sec. Use:	Domestic	Depth to Water:	ft
Boring Method:	Cable Tool	Water Kind:	FRESH

PUMP TEST

Test Method:	CLEAR	**Pipe ID:**	11015085
Pump Set (m):	n/a	**Pump Test ID**	996702371
SWL (ft)	60	**Flowing:**	N
Final Level:	115 ft	**Pump Duration (hr):**	3
Pump Rate:	8 GPM	**Pump Duration (m):**	0
Recom. Rate:	8 GPM		

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	930758638	4	inch	STEEL	n/a	129 ft
2	930758639	4	inch	OPEN HOLE	n/a	230 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	BOULDERS	CLAY	n/a	n/a	0	10 ft
2	CLAY	STONES	n/a	n/a	10	45 ft
3	CLAY	n/a	n/a	GREY	45	70 ft
4	CLAY	n/a	n/a	BROWN	70	82 ft
5	CLAY	n/a	n/a	GREY	82	100 ft
6	STONES	n/a	n/a	n/a	100	110 ft
7	HARDPAN	n/a	n/a	n/a	110	125 ft
8	LIMESTONE	n/a	n/a	BROWN	125	190 ft
9	LIMESTONE	n/a	n/a	BLACK	190	205 ft
10	LIMESTONE	n/a	n/a	GREY	205	230 ft

End of Record

17

Easting:	570646.30
Northing:	4828479.00
Elev (masl):	347.01

Latitude: 43.47986
Longitude: -80.196807

Well ID: 6702496

LOCATION

Lot:	013	**Tag:**	
Con:	07	**Audit No:**	
Municipality:	WELLINGTON	**Contractor License:**	2414
Township:	PUSLINCH TOWNSHIP	**Well Completion Date:**	10-22-1957
Street:		**Received Date:**	12-30-1957
City:	n/a		

WELL

Well Status:	Water Supply	**Well Depth (m):**	39.0144
Prim. Use:	n/a	**Depth to Bedrock (m):**	125
Sec. Use:	Domestic	**Depth to Water:**	ft
Boring Method:	Cable Tool	**Water Kind:**	FRESH

PUMP TEST

Test Method:	CLEAR	**Pipe ID:**	11015209
Pump Set (m):	n/a	**Pump Test ID**	996702496
SWL (ft)	50	**Flowing:**	N
Final Level:	53 ft	**Pump Duration (hr):**	2
Pump Rate:	15 GPM	**Pump Duration (m):**	30
Recom. Rate:	n/a GPM		

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	930758888	5	inch	STEEL	n/a	125 ft
2	930758889	5	inch	OPEN HOLE	n/a	128 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	BOULDERS	n/a	n/a	n/a	0	28 ft
2	MEDIUM SAND	GRAVEL	n/a	n/a	28	57 ft
3	SILT	MEDIUM SAND	n/a	n/a	57	69 ft
4	CLAY	n/a	n/a	BROWN	69	80 ft
5	SILT	MEDIUM SAND	n/a	n/a	80	95 ft
6	SILT	STONES	n/a	n/a	95	108 ft
7	MEDIUM SAND	GRAVEL	n/a	n/a	108	120 ft
8	GRAVEL	n/a	n/a	n/a	120	122 ft

9	SILT	n/a	n/a	n/a	122	125	ft
10	LIMESTONE	n/a	n/a	BROWN	125	128	ft

End of Record

17

Easting:	570465.30
Northing:	4829589.00
Elev (masl):	345.58

Latitude: 43.478665
Longitude: -80.193249

Well ID: **6702498**

LOCATION

Lot: 014
Con: 07
Municipality: WELLINGTON
Township: PUSLINCH TOWNSHIP
Street:
City: n/a

Tag:
Audit No:
Contractor License: 2414
Well Completion Date: 01-26-1959
Received Date: 02-09-1959

WELL

Well Status: Water Supply
Prim. Use: n/a
Sec. Use: Domestic
Boring Method: Cable Tool

Well Depth (m): 46.3296
Depth to Bedrock (m): 137
Depth to Water: ft
Water Kind: FRESH

PUMP TEST

Test Method: CLEAR
Pump Set (m): n/a
SWL (ft) 70
Final Level: 70 ft
Pump Rate: 10 GPM
Recom. Rate: n/a GPM

Pipe ID: 11015211
Pump Test ID 996702498
Flowing: N
Pump Duration (hr): 2
Pump Duration (m): 30

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth	
1	930758892	4	inch	STEEL	n/a	144	ft
2	930758893	4	inch	OPEN HOLE	n/a	152	ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth	
1	CLAY	GRAVEL	BOULDERS	n/a	0	10	ft
2	MEDIUM SAND	BOULDERS	n/a	n/a	10	22	ft
3	FINE SAND	n/a	n/a	n/a	22	45	ft
4	GRAVEL	n/a	n/a	n/a	45	67	ft
5	MEDIUM SAND	n/a	n/a	n/a	67	81	ft
6	CLAY	n/a	n/a	BROWN	81	93	ft
7	HARDPAN	n/a	n/a	n/a	93	97	ft
8	CLAY	SILT	n/a	n/a	97	133	ft
9	HARDPAN	n/a	n/a	n/a	133	137	ft
10	LIMESTONE	n/a	n/a	BROWN	137	152	ft

End of Record

17

Easting:	570017.30
Northing:	4829364.00
Elev (masl):	340.82

Latitude: 43.477305
Longitude: -80.191969

Well ID: **6702499**

LOCATION

Lot: 014
Con: 07
Municipality: WELLINGTON
Township: PUSLINCH TOWNSHIP
Street:
City: n/a

Tag:
Audit No:
Contractor License: 1906
Well Completion Date: 09-01-1967
Received Date: 09-07-1967

WELL

Well Status: Water Supply
Prim. Use: n/a
Sec. Use: n/a
Boring Method: Cable Tool

Well Depth (m): 20.4216
Depth to Bedrock (m): n/a
Depth to Water: ft
Water Kind: FRESH

PUMP TEST

Test Method: CLEAR
Pump Set (m): n/a
SWL (ft) 50
Final Level: 56 ft
Pump Rate: 12 GPM
Recom. Rate: n/a GPM

Pipe ID: 11015212
Pump Test ID 996702499
Flowing: N
Pump Duration (hr): 2
Pump Duration (m): 0

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	930758894	5	inch	STEEL	n/a	67 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	STONES	CLAY	GRAVEL	n/a	0	40 ft
2	MEDIUM SAND	n/a	n/a	n/a	40	45 ft
3	GRAVEL	n/a	n/a	n/a	45	51 ft
4	MEDIUM SAND	n/a	n/a	n/a	51	60 ft
5	STONES	GRAVEL	n/a	n/a	60	67 ft

End of Record

17

Easting:	563221.30
Northing:	4824257.00
Elev (masl):	344.26

Latitude: 43.477046
Longitude: -80.199948

Well ID: **6703187**

LOCATION

Lot: 020
Con: 04
Municipality: WELLINGTON
Township: PUSLINCH TOWNSHIP
Street:
City: n/a

Tag:
Audit No:
Contractor License: 2406
Well Completion Date: 07-31-1968
Received Date: 09-09-1968

WELL

Well Status: Water Supply
Prim. Use: n/a
Sec. Use: n/a
Boring Method: Cable Tool

Well Depth (m): 57.912
Depth to Bedrock (m): 140
Depth to Water: ft
Water Kind: FRESH

PUMP TEST

Test Method: CLEAR
Pump Set (m): n/a
SWL (ft) 69
Final Level: 100 ft
Pump Rate: 6 GPM
Recom. Rate: 6 GPM

Pipe ID: 11015899
Pump Test ID 996703187
Flowing: N
Pump Duration (hr): 0
Pump Duration (m): 45

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	930760192	4	inch	STEEL	n/a	148 ft
2	930760193	4	inch	OPEN HOLE	n/a	190 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	CLAY	STONES	n/a	BROWN	0	60 ft
2	CLAY	GRAVEL	n/a	BROWN	60	105 ft
3	CLAY	MEDIUM SAND	n/a	GREY	105	123 ft
4	CLAY	GRAVEL	n/a	GREY	123	140 ft
5	LIMESTONE	n/a	n/a	BROWN	140	180 ft
6	LIMESTONE	n/a	n/a	BLACK	180	190 ft

End of Record

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n/a

Easting:	<null>
Northing:	<null>
Elev (masl):	

Latitude: 43.481661
Longitude: -80.205838

Well ID: **6703671**

LOCATION

Lot: 020
Con: 04
Municipality: WELLINGTON
Township: PUSLINCH TOWNSHIP
Street:
City: n/a

Tag:
Audit No:
Contractor License: 5417
Well Completion Date: 04-18-1970
Received Date: 06-18-1970

WELL

Well Status: Water Supply
Prim. Use: n/a
Sec. Use:

Well Depth (m): 47.8536
Depth to Bedrock (m): 144
Depth to Water:

WELL

Boring Method: Cable Tool | Water Kind: FRESH ft

PUMP TEST

Test Method: CLEAR | Pipe ID: 11016375
Pump Set (m): n/a | Pump Test ID 996703671
SWL (ft) 54 | Flowing: N
Final Level: 125 ft | Pump Duration (hr): 1
Pump Rate: 18 GPM | Pump Duration (m): 30
Recom. Rate: 10 GPM

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	930761073	6	inch	STEEL	n/a	145 ft
2	930761074	n/a	inch	OPEN HOLE	n/a	157 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	GRAVEL	STONES	CLAY	BROWN	0	35 ft
2	MEDIUM SAND	n/a	n/a	BROWN	35	85 ft
3	CLAY	n/a	n/a	GREY	85	106 ft
4	CLAY	GRAVEL	n/a	GREY	106	144 ft
5	LIMESTONE	n/a	n/a	BROWN	144	157 ft

End of Record

17

Easting:	506293.00
Northing:	4869191.00
Elev (masl):	343.65

Latitude: 43.477623
Longitude: -80.192398

Well ID: **6703865**

LOCATION

Lot: 014 | Tag:
Con: 07 | Audit No:
Municipality: WELLINGTON | Contractor License: 1906
Township: PUSLINCH TOWNSHIP | Well Completion Date: 10-28-1970
Street: | Received Date: 01-08-1971
City: n/a

WELL

Well Status: Water Supply | Well Depth (m): 50.292
Prim. Use: n/a | Depth to Bedrock (m): 140
Sec. Use: n/a | Depth to Water: ft
Boring Method: Cable Tool | Water Kind: FRESH

PUMP TEST

Test Method: CLEAR | Pipe ID: 11016565
Pump Set (m): n/a | Pump Test ID 996703865
SWL (ft) 70 | Flowing: N
Final Level: 100 ft | Pump Duration (hr): 2
Pump Rate: 8 GPM | Pump Duration (m): 0
Recom. Rate: 7 GPM

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	930761414	4	inch	STEEL	n/a	141 ft
2	930761415	n/a	inch	OPEN HOLE	n/a	165 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	TOPSOIL	n/a	n/a	n/a	0	1 ft
2	CLAY	GRAVEL	STONES	n/a	1	22 ft
3	CLAY	GRAVEL	n/a	n/a	22	45 ft
4	GRAVEL	MEDIUM SAND	n/a	n/a	45	70 ft
5	MEDIUM SAND	CLAY	n/a	n/a	70	99 ft
6	CLAY	n/a	n/a	GREY	99	118 ft
7	GRAVEL	CLAY	MEDIUM SAND	n/a	118	136 ft
8	GRAVEL	n/a	n/a	n/a	136	140 ft
9	LIMESTONE	n/a	n/a	n/a	140	165 ft

End of Record

17

Easting:	537632.20
Northing:	4837675.00
Elev (masl):	345.47

Latitude: 43.478683
Longitude: -80.202276

Well ID: **6704249**

LOCATION

Lot: 020
Con: 04
Municipality: WELLINGTON
Township: PUSLINCH TOWNSHIP
Street:
City: n/a

Tag:
Audit No:
Contractor License: 2406
Well Completion Date: 06-03-1972
Received Date: 06-22-1972

WELL

Well Status: Water Supply
Prim. Use: n/a
Sec. Use: n/a
Boring Method: Cable Tool

Well Depth (m): 65.2272
Depth to Bedrock (m): 172
Depth to Water: ft
Water Kind: FRESH

PUMP TEST

Test Method: CLEAR
Pump Set (m): n/a
SWL (ft) 72
Final Level: 145 ft
Pump Rate: 8 GPM
Recom. Rate: 8 GPM

Pipe ID: 11016932
Pump Test ID 996704249
Flowing: N
Pump Duration (hr): 1
Pump Duration (m): 0

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	930762094	4	inch	STEEL	n/a	142 ft
2	930762095	n/a	inch	OPEN HOLE	n/a	214 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	CLAY	STONES	n/a	BROWN	0	50 ft
2	CLAY	GRAVEL	n/a	BROWN	50	80 ft
3	CLAY	SAND	n/a	BROWN	80	132 ft
4	CLAY	SAND	GRAVEL	BROWN	132	172 ft
5	ROCK	n/a	n/a	BROWN	172	203 ft
6	ROCK	n/a	n/a	GREY	203	214 ft

End of Record

17

Easting:	551546.20
Northing:	4840805.00
Elev (masl):	341.78

Latitude: 43.482785
Longitude: -80.204336

Well ID: **6704958**

LOCATION

Lot: 020
Con: 04
Municipality: WELLINGTON
Township: PUSLINCH TOWNSHIP
Street:
City: n/a

Tag:
Audit No:
Contractor License: 4208
Well Completion Date: 09-25-1973
Received Date: 01-29-1974

WELL

Well Status: Water Supply
Prim. Use: n/a
Sec. Use: n/a
Boring Method: Rotary (Convent.)

Well Depth (m): 24.384
Depth to Bedrock (m): n/a
Depth to Water: ft
Water Kind: FRESH

PUMP TEST

Test Method: CLEAR
Pump Set (m): n/a
SWL (ft) 40
Final Level: 60 ft
Pump Rate: 20 GPM
Recom. Rate: 10 GPM

Pipe ID: 11017631
Pump Test ID 996704958
Flowing: N
Pump Duration (hr): 1
Pump Duration (m): 0

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	930763291	6	inch	STEEL	n/a	80 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	CLAY	SAND	n/a	BROWN	0	20 ft
2	CLAY	STONES	n/a	GREY	20	78 ft
3	GRAVEL	n/a	n/a	GREY	78	80 ft

End of Record

17

Easting:	553653.20
Northing:	4842363.00
Elev (masl):	338.98

Latitude: 43.48312
Longitude: -80.20333

Well ID: **6705070**

LOCATION

Lot: 020
Con: 04
Municipality: WELLINGTON
Township: PUSLINCH TOWNSHIP
Street:
City: n/a

Tag:
Audit No:
Contractor License: 2336
Well Completion Date: 04-26-1974
Received Date: 06-01-1974

WELL

Well Status: Water Supply
Prim. Use: n/a
Sec. Use: n/a
Boring Method: Cable Tool

Well Depth (m): 55.7784
Depth to Bedrock (m): 132
Depth to Water: ft
Water Kind: FRESH

PUMP TEST

Test Method: CLEAR
Pump Set (m): n/a
SWL (ft) 40
Final Level: 56 ft
Pump Rate: 10 GPM
Recom. Rate: 10 GPM

Pipe ID: 11017739
Pump Test ID 996705070
Flowing: N
Pump Duration (hr): 1
Pump Duration (m): 0

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	930763461	5	inch	STEEL	n/a	133 ft
2	930763462	5	inch	OPEN HOLE	n/a	183 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	CLAY	STONES	n/a	BROWN	0	45 ft
2	CLAY	GRAVEL	SAND	BROWN	45	90 ft
3	GRAVEL	n/a	n/a	n/a	90	95 ft
4	CLAY	SAND	n/a	BROWN	95	132 ft
5	ROCK	n/a	n/a	BROWN	132	165 ft
6	ROCK	n/a	n/a	BROWN	165	183 ft

End of Record

17

Easting:	529764.10
Northing:	4827453.00
Elev (masl):	350.57

Latitude: 43.479454
Longitude: -80.201758

Well ID: **6705284**

LOCATION

Lot: 020
Con: 04
Municipality: WELLINGTON
Township: PUSLINCH TOWNSHIP
Street:
City: n/a

Tag:
Audit No:
Contractor License: 2336
Well Completion Date: 09-26-1974
Received Date: 10-07-1974

WELL

Well Status: Water Supply
Prim. Use: n/a
Sec. Use: n/a
Boring Method: Rotary (Convent.)

Well Depth (m): 44.8056
Depth to Bedrock (m): 130
Depth to Water: ft
Water Kind: FRESH

PUMP TEST

Test Method: CLEAR
Pump Set (m): n/a
SWL (ft) 66
Final Level: 89 ft
Pump Rate: 20 GPM
Recom. Rate: 15 GPM

Pipe ID: 11017949
Pump Test ID 996705284
Flowing: N
Pump Duration (hr): 1
Pump Duration (m): 0

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	930763795	5	inch	STEEL	n/a	130 ft
2	930763796	5	inch	OPEN HOLE	n/a	147 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	TOPSOIL	n/a	n/a	n/a	0	1 ft
2	CLAY	SAND	STONES	BROWN	1	67 ft
3	CLAY	STONES	n/a	GREY	67	130 ft
4	ROCK	n/a	n/a	BROWN	130	147 ft

End of Record

17

Easting:	577414.30
Northing:	4840753.00
Elev (masl):	339.81

Latitude: 43.472935
Longitude: -80.19926

Well ID: **6705967**

LOCATION

Lot: 020
Con: 03
Municipality: WELLINGTON
Township: PUSLINCH TOWNSHIP
Street:
City: n/a

Tag:
Audit No:
Contractor License: 1906
Well Completion Date: 01-16-1976
Received Date: 04-05-1976

WELL

Well Status: Water Supply
Prim. Use: n/a
Sec. Use: n/a
Boring Method: Cable Tool

Well Depth (m): 60.96
Depth to Bedrock (m): 130
Depth to Water: ft
Water Kind: Not stated

PUMP TEST

Test Method: CLEAR
Pump Set (m): n/a
SWL (ft) 56
Final Level: 56 ft
Pump Rate: 11 GPM
Recom. Rate: 11 GPM

Pipe ID: 11018619
Pump Test ID 996705967
Flowing: N
Pump Duration (hr): 3
Pump Duration (m): 0

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	930764871	5	inch	STEEL	n/a	140 ft
2	930764872	n/a	inch	OPEN HOLE	n/a	200 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	SAND	GRAVEL	BOULDERS	BROWN	0	50 ft
2	FINE SAND	n/a	n/a	BROWN	50	110 ft
3	SAND	GRAVEL	n/a	n/a	110	130 ft
4	SHALE	LIMESTONE	n/a	BROWN	130	140 ft
5	ROCK	n/a	n/a	GREY	140	180 ft
6	ROCK	n/a	n/a	WHITE	180	200 ft

End of Record

17

Easting:	563974.30
Northing:	4813563.00
Elev (masl):	344.85

Latitude: 43.476333
Longitude: -80.20107

Well ID: **6706533**

LOCATION

Lot: 020
Con: 04
Municipality: WELLINGTON
Township: PUSLINCH TOWNSHIP
Street:
City: n/a

Tag:
Audit No:
Contractor License: 5469
Well Completion Date: 09-06-1977
Received Date: 10-17-1977

WELL

Well Status: Water Supply
Prim. Use: n/a
Sec. Use:

Well Depth (m): 48.768
Depth to Bedrock (m): 154
Depth to Water: ft

V

Boring Method: Rotary (Convent.) **Water Kind:** FRESH

PUMP TEST

Test Method:	CLEAR	**Pipe ID:**	11019180
Pump Set (m):	n/a	**Pump Test ID**	996706533
SWL (ft)	70	**Flowing:**	N
Final Level:	82 ft	**Pump Duration (hr):**	1
Pump Rate:	20 GPM	**Pump Duration (m):**	30
Recom. Rate:	10 GPM		

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	930765772	5	inch	STEEL	n/a	155 ft
2	930765773	5	inch	OPEN HOLE	n/a	160 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	TOPSOIL	n/a	n/a	n/a	0	1 ft
2	SAND	GRAVEL	n/a	BROWN	1	73 ft
3	SAND	GRAVEL	CLAY	GREY	73	147 ft
4	CLAY	HARDPAN	n/a	GREY	147	154 ft
5	LIMESTONE	n/a	n/a	BROWN	154	160 ft

End of Record

17

Easting:	559154.20
Northing:	4818283.00
Elev (masl):	335.02

Latitude: 43.471799
Longitude: -80.196432

Well ID: 6706982

LOCATION

Lot:	021	**Tag:**	
Con:	03	**Audit No:**	
Municipality:	WELLINGTON	**Contractor License:**	2336
Township:	PUSLINCH TOWNSHIP	**Well Completion Date:**	04-17-1979
Street:		**Received Date:**	06-01-1979
City:	n/a		

WELL

Well Status:	Water Supply	**Well Depth (m):**	52.1208
Prim. Use:	n/a	**Depth to Bedrock (m):**	n/a
Sec. Use:	n/a	**Depth to Water:**	ft
Boring Method:	Cable Tool	**Water Kind:**	FRESH

PUMP TEST

Test Method:	CLEAR	**Pipe ID:**	11019618
Pump Set (m):	n/a	**Pump Test ID**	996706982
SWL (ft)	60	**Flowing:**	N
Final Level:	75 ft	**Pump Duration (hr):**	1
Pump Rate:	10 GPM	**Pump Duration (m):**	0
Recom. Rate:	10 GPM		

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	930766499	5	inch	STEEL	n/a	128 ft
2	930766500	5	inch	OPEN HOLE	n/a	171 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	TOPSOIL	n/a	n/a	n/a	0	1 ft
2	CLAY	STONES	n/a	BROWN	1	47 ft
3	CLAY	GRAVEL	n/a	BROWN	47	75 ft
4	CLAY	GRAVEL	n/a	GREY	75	128 ft
5	STONES	LIGHT-COLOURED	n/a	BROWN	128	158 ft
6	STONES	DARK-COLOURED	n/a	BROWN	158	171 ft

End of Record

17

Easting:	552953.10
Northing:	4823044.00
Elev (masl):	340.69

Latitude: 43.47464
Longitude: -80.190706

Well ID: 6707737

LOCATION

Lot:	022
Con:	03
Municipality:	WELLINGTON
Township:	PUSLINCH TOWNSHIP
Street:	
City:	n/a

Tag:	
Audit No:	
Contractor License:	4208
Well Completion Date:	11-13-1982
Received Date:	02-01-1983

WELL

Well Status:	Water Supply
Prim. Use:	n/a
Sec. Use:	n/a
Boring Method:	Rotary (Air)

Well Depth (m):	47.8536
Depth to Bedrock (m):	127
Depth to Water:	ft
Water Kind:	FRESH

PUMP TEST

Test Method:	CLEAR
Pump Set (m):	n/a
SWL (ft)	73
Final Level:	150 ft
Pump Rate:	5 GPM
Recom. Rate:	n/a GPM

Pipe ID:	11020326
Pump Test ID	996707737
Flowing:	N
Pump Duration (hr):	1
Pump Duration (m):	0

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	930767719	6	inch	STEEL	n/a	127 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	CLAY	TOPSOIL	STONES	BROWN	0	30 ft
2	CLAY	n/a	n/a	GREY	30	80 ft
3	CLAY	GRAVEL	HARDPAN	GREY	80	127 ft
4	LIMESTONE	n/a	n/a	GREY	127	157 ft

End of Record

17

Easting:	549114.10
Northing:	4837773.00
Elev (masl):	345.04

Latitude: 43.478141
Longitude: -80.202035

Well ID: **6708005**

LOCATION

Lot:	020
Con:	04
Municipality:	WELLINGTON
Township:	PUSLINCH TOWNSHIP
Street:	
City:	n/a

Tag:	
Audit No:	
Contractor License:	2336
Well Completion Date:	08-05-1982
Received Date:	07-04-1983

WELL

Well Status:	Water Supply
Prim. Use:	n/a
Sec. Use:	n/a
Boring Method:	Rotary (Air)

Well Depth (m):	74.3712
Depth to Bedrock (m):	n/a
Depth to Water:	ft
Water Kind:	FRESH

PUMP TEST

Test Method:	CLEAR
Pump Set (m):	n/a
SWL (ft)	95
Final Level:	160 ft
Pump Rate:	5 GPM
Recom. Rate:	4 GPM

Pipe ID:	11020539
Pump Test ID	996708005
Flowing:	N
Pump Duration (hr):	1
Pump Duration (m):	0

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	930768113	4	inch	OPEN HOLE	n/a	244 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	PREV. DRILLED	n/a	n/a	n/a	0	214 ft
2	STONES	n/a	n/a	GREY	214	244 ft

End of Record

17		
	Easting:	556464.20
	Northing:	4833523.00
	Elev (masl):	343.61

Latitude: 43.478977
Longitude: -80.19536

Well ID: **6708329**

LOCATION

Lot:	014	Tag:	
Con:	07	Audit No:	
Municipality:	WELLINGTON	Contractor License:	4207
Township:	PUSLINCH TOWNSHIP	Well Completion Date:	09-18-1985
Street:		Received Date:	01-09-1986
City:	n/a		

WELL

Well Status:	Water Supply	Well Depth (m):	35.3568
Prim. Use:	n/a	Depth to Bedrock (m):	n/a
Sec. Use:	n/a	Depth to Water:	ft
Boring Method:	Rotary (Air)	Water Kind:	FRESH

PUMP TEST

Test Method:	CLEAR	Pipe ID:	11020808
Pump Set (m):	n/a	Pump Test ID	996708329
SWL (ft)	55	Flowing:	N
Final Level:	110 ft	Pump Duration (hr):	1
Pump Rate:	50 GPM	Pump Duration (m):	0
Recom. Rate:	20 GPM		

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	930768573	6	inch	STEEL	n/a	116 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	CLAY	GRAVEL	n/a	BROWN	0	20 ft
2	GRAVEL	CLAY	n/a	GREY	20	80 ft
3	CLAY	n/a	n/a	GREY	80	105 ft
4	GRAVEL	SAND	CLAY	GREY	105	114 ft
5	GRAVEL	n/a	n/a	n/a	114	116 ft

End of Record

17		
	Easting:	528613.10
	Northing:	4831373.00
	Elev (masl):	339.74

Latitude: 43.476651
Longitude: -80.18859

Well ID: **6708738**

LOCATION

Lot:	015	Tag:	
Con:	07	Audit No:	NA
Municipality:	WELLINGTON	Contractor License:	4207
Township:	PUSLINCH TOWNSHIP	Well Completion Date:	11-18-1986
Street:		Received Date:	04-02-1987
City:	n/a		

WELL

Well Status:	Water Supply	Well Depth (m):	22.86
Prim. Use:	n/a	Depth to Bedrock (m):	n/a
Sec. Use:	n/a	Depth to Water:	ft
Boring Method:	Rotary (Air)	Water Kind:	FRESH

PUMP TEST

Test Method:	CLEAR	Pipe ID:	11021198
Pump Set (m):	n/a	Pump Test ID	996708738
SWL (ft)	51	Flowing:	N
Final Level:	72 ft	Pump Duration (hr):	1
Pump Rate:	30 GPM	Pump Duration (m):	n/a
Recom. Rate:	15 GPM		

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	930769271	6	inch	STEEL	n/a	75 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	CLAY	STONES	n/a	BROWN	0	22 ft
2	CLAY	GRAVEL	SAND	BROWN	22	70 ft

3	GRAVEL	n/a	n/a	n/a	70	75	ft

End of Record

17

Easting:	561698.20
Northing:	4812783.00
Elev (masl):	341.19

Latitude: 43.482254
Longitude: -80.20438

Well ID: **6711686**

LOCATION

Lot: 020
Con: 04
Municipality: WELLINGTON
Township: PUSLINCH TOWNSHIP
Street:
City: n/a

Tag:
Audit No: 154161
Contractor License: 2336
Well Completion Date: 01-27-1995
Received Date: 03-13-1995

WELL

Well Status: Water Supply
Prim. Use: n/a
Sec. Use: n/a
Boring Method: Rotary (Air)

Well Depth (m): 48.1584
Depth to Bedrock (m): 130
Depth to Water: ft
Water Kind: FRESH

PUMP TEST

Test Method: CLEAR
Pump Set (m): n/a
SWL (ft) 48
Final Level: 58 ft
Pump Rate: 10 GPM
Recom. Rate: 10 GPM

Pipe ID: 11024089
Pump Test ID 996711686
Flowing: N
Pump Duration (hr): 3
Pump Duration (m): n/a

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	930774548	6	inch	STEEL	n/a	131 ft
2	930774549	6	inch	OPEN HOLE	n/a	158 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	CLAY	STONES	n/a	BROWN	0	25 ft
2	SAND	GRAVEL	n/a	BROWN	25	50 ft
3	SAND	n/a	n/a	BROWN	50	70 ft
4	CLAY	GRAVEL	n/a	GREY	70	85 ft
5	CLAY	n/a	n/a	GREY	85	130 ft
6	ROCK	n/a	n/a	BROWN	130	145 ft
7	ROCK	n/a	n/a	BROWN	145	158 ft

End of Record

n/a

Easting:	<null>
Northing:	<null>
Elev (masl):	337.56

Latitude: 43.473989
Longitude: -80.194168

Well ID: **6713680**

LOCATION

Lot: 021
Con: 03
Municipality: WELLINGTON
Township: PUSLINCH TOWNSHIP
Street:
City: n/a

Tag:
Audit No: 224159
Contractor License: 2336
Well Completion Date: 05-16-2001
Received Date: 06-11-2001

WELL

Well Status: Water Supply
Prim. Use: n/a
Sec. Use: n/a
Boring Method: Rotary (Air)

Well Depth (m): 42.672
Depth to Bedrock (m): 121
Depth to Water: ft
Water Kind: FRESH

PUMP TEST

Test Method: CLEAR
Pump Set (m): n/a
SWL (ft) 49
Final Level: 52 ft
Pump Rate: 16 GPM
Recom. Rate: 15 GPM

Pipe ID: 11026083
Pump Test ID 996713680
Flowing: N
Pump Duration (hr): 1
Pump Duration (m): n/a

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth

1	930778060	6	inch	STEEL	n/a	n/a	ft
2	930778061	6	inch	OPEN HOLE	n/a	n/a	ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	CLAY	STONES	n/a	BROWN	0	18 ft
2	SAND	GRAVEL	BOULDERS	BROWN	18	65 ft
3	CLAY	SAND	n/a	GREY	65	105 ft
4	CLAY	GRAVEL	n/a	GREY	105	121 ft
5	ROCK	n/a	n/a	BROWN	121	140 ft

End of Record

17

Easting:	550204.20
Northing:	4843774.00
Elev (masl):	338.14

Latitude: 43.481077
Longitude: -80.204664

Well ID: **6714646**

LOCATION

Lot: 020
Con: 04
Municipality: WELLINGTON
Township: PUSLINCH TOWNSHIP
Street:
City: n/a

Tag:
Audit No: 257970
Contractor License: 2663
Well Completion Date: 10-08-2003
Received Date: 10-28-2003

WELL

Well Status: Water Supply
Prim. Use: n/a
Sec. Use: n/a
Boring Method: Rotary (Air)

Well Depth (m): 60.96
Depth to Bedrock (m): 122
Depth to Water: ft
Water Kind: FRESH

PUMP TEST

Test Method: CLEAR
Pump Set (m): n/a
SWL (ft) 52
Final Level: 110 ft
Pump Rate: 20 GPM
Recom. Rate: 20 GPM

Pipe ID: 11096767
Pump Test ID 996714646
Flowing: N
Pump Duration (hr): 1
Pump Duration (m): 0

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	930779408	6	inch	STEEL	n/a	n/a ft
2	930779409	6	inch	OPEN HOLE	n/a	n/a ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	TOPSOIL	n/a	n/a	n/a	0	1 ft
2	CLAY	SAND	STONES	BROWN	1	15 ft
3	CLAY	GRAVEL	n/a	BROWN	15	35 ft
4	GRAVEL	SAND	n/a	BROWN	35	65 ft
5	CLAY	STONES	GRAVEL	BROWN	65	122 ft
6	LIMESTONE	SOFT	FRACTURED	BROWN	122	140 ft
7	LIMESTONE	n/a	n/a	BROWN	140	180 ft
8	LIMESTONE	n/a	n/a	GREY	180	200 ft

End of Record

17

Easting:	542321.00
Northing:	4832586.00
Elev (masl):	338.14

Latitude: 43.481077
Longitude: -80.204664

Well ID: **6714656**

LOCATION

Lot: 020
Con: 04
Municipality: WELLINGTON
Township: PUSLINCH TOWNSHIP
Street:
City: n/a

Tag:
Audit No: 257059
Contractor License: 2644
Well Completion Date: 07-25-2003
Received Date: 10-15-2003

WELL

Well Status: Observation Wells
Prim. Use: n/a
Sec. Use:

Well Depth (m): 39.0144
Depth to Bedrock (m): 108
Depth to Water: ft

V

Boring Method: Rotary (Convent.)

Water Kind: FRESH

PUMP TEST

Test Method: CLEAR
Pump Set (m): n/a
SWL (ft) 42
Final Level: 120 ft
Pump Rate: 1 GPM
Recom. Rate: 1 GPM

Pipe ID: 11096777
Pump Test ID 996714656
Flowing: N
Pump Duration (hr): 1
Pump Duration (m): 0

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	930779430	6	inch	STEEL	n/a	n/a ft
2	930779431	2	inch	PLASTIC	n/a	n/a ft
3	930779432	2	inch	PLASTIC	n/a	n/a ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	TOPSOIL	n/a	n/a	n/a	0	2 ft
2	SILT	GRAVEL	n/a	RED	2	18 ft
3	SILT	SAND	n/a	BROWN	18	23 ft
4	SILT	GRAVEL	UNKNOWN TYPE	BROWN	23	44 ft
5	SILT	SAND	n/a	BROWN	44	56 ft
6	SILT	SAND	n/a	BROWN	56	72 ft
7	SILT	SAND	n/a	GREY	72	79 ft
8	SAND	CLAY	STONES	GREY	79	93 ft
9	CLAY	SAND	STONES	GREY	93	108 ft
10	LIMESTONE	n/a	n/a	BROWN	108	128 ft

End of Record

17

Easting:	562705.30
Northing:	4813809.00
Elev (masl):	341.59

Latitude: 43.482987
Longitude: -80.199663

Well ID: **6715026**

LOCATION

Lot: 012
Con: 07
Municipality: WELLINGTON
Township: PUSLINCH TOWNSHIP
Street: CRAWLEY RD & CLAIR RD WEST
City: GUELPH

Tag:
Audit No: Z10330
Contractor License: 2336
Well Completion Date: 08-13-2004
Received Date: 09-10-2004

WELL

Well Status: Abandoned-Other
Prim. Use: n/a
Sec. Use: n/a
Boring Method: Other Method

Well Depth (m): 0
Depth to Bedrock (m): n/a
Depth to Water:
Water Kind:

PUMP TEST

Test Method:
Pump Set (m):
SWL (ft)
Final Level:
Pump Rate:
Recom. Rate:

Pipe ID:
Pump Test ID
Flowing:
Pump Duration (hr):
Pump Duration (m):

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	930852869	2	cm	PLASTIC	0	15 m

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth

End of Record

17		
	Easting:	567550.20
	Northing:	4807862.00
	Elev (masl):	341.59

Latitude: 43.482987
Longitude: -80.199663

Well ID: **6715027**

LOCATION

Lot: 012
Con: 07
Municipality: WELLINGTON
Township: PUSLINCH TOWNSHIP
Street: CRAWLEY RD AND CLAIR RD WEST
City: GUELPH

Tag:
Audit No: Z10331
Contractor License: 2336
Well Completion Date: 08-13-2004
Received Date: 09-10-2004

WELL

Well Status: Abandoned-Other
Prim. Use: n/a
Sec. Use: n/a
Boring Method: Other Method

Well Depth (m): 0
Depth to Bedrock (m): n/a
Depth to Water:
Water Kind:

PUMP TEST

Test Method:
Pump Set (m):
SWL (ft)
Final Level:
Pump Rate:
Recom. Rate:

Pipe ID:
Pump Test ID
Flowing:
Pump Duration (hr):
Pump Duration (m):

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	930852870	2	inch	PLASTIC	0	23 m

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth

End of Record

17		
	Easting:	518723.10
	Northing:	4836633.00
	Elev (masl):	344.33

Latitude: 43.483887
Longitude: -80.200863

Well ID: **6715124**

LOCATION

Lot: 012
Con: 07
Municipality: WELLINGTON
Township: PUSLINCH TOWNSHIP
Street: CRAWLEY RD
City: GUELPH

Tag:
Audit No: Z10350
Contractor License: 2336
Well Completion Date: 10-04-2004
Received Date: 11-04-2004

WELL

Well Status: Abandoned-Other
Prim. Use: n/a
Sec. Use: n/a
Boring Method: Other Method

Well Depth (m): 0
Depth to Bedrock (m): n/a
Depth to Water:
Water Kind:

PUMP TEST

Test Method:
Pump Set (m):
SWL (ft)
Final Level:
Pump Rate:
Recom. Rate:

Pipe ID:
Pump Test ID
Flowing:
Pump Duration (hr):
Pump Duration (m):

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth

End of Record

17

Easting:	528694.00
Northing:	4858445.00
Elev (masl):	338.32

Latitude: 43.474204
Longitude: -80.199148

Well ID: **6715386**

LOCATION

Lot: 020
Con: 04
Municipality: WELLINGTON
Township: PUSLINCH TOWNSHIP
Street: RR#6 4620-20TH SIDE ROAD
City: GUELPH

Tag: A017772
Audit No: Z28965
Contractor License: 2663
Well Completion Date: 06-20-2005
Received Date: 07-05-2005

WELL

Well Status: Water Supply
Prim. Use: n/a
Sec. Use: n/a
Boring Method: Rotary (Air)

Well Depth (m): 54.86
Depth to Bedrock (m): 125
Depth to Water: n5
Water Kind: FRESH

PUMP TEST

Test Method: CLEAR
Pump Set (m): 110
SWL (ft) 41
Final Level: 85.5ft
Pump Rate: 10 GPM
Recom. Rate: 18 GPM

Pipe ID: 11342027
Pump Test ID 11352991
Flowing: n/a
Pump Duration (hr): 1
Pump Duration (m): n/a

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	930871951	15.87	cm	STEEL	0.001	38.1 m
2	930871952	n/a	cm	OPEN HOLE	38.1	54.86 m

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	TOPSOIL	n/a	n/a	BLACK	0	0.61 m
2	SAND	n/a	n/a	BROWN	0.61	4.57 m
3	CLAY	STONES	GRAVEL	BROWN	4.57	19.81 m
4	SAND	n/a	n/a	BROWN	19.81	24.38 m
5	CLAY	GRAVEL	n/a	BROWN	24.38	27.43 m
6	GRAVEL	n/a	n/a	n/a	27.43	30.48 m
7	CLAY	SILT	n/a	BROWN	30.48	38.1 m
8	LIMESTONE	n/a	n/a	BROWN	38.1	42.67 m
9	LIMESTONE	n/a	n/a	BROWN	42.67	54.86 m
10	n/a	n/a	n/a	n/a	54.86	n/a m

End of Record

17

Easting:	566587.00
Northing:	4821581.00
Elev (masl):	345.18

Latitude: 43.478428
Longitude: -80.201924

Well ID: **6715919**

LOCATION

Lot: 020
Con: 04
Municipality: WELLINGTON
Township: PUSLINCH TOWNSHIP
Street: 4652 20TH SIDE ROAD, RR #6
City: GUELPH

Tag: A033313
Audit No: Z49310
Contractor License: 2336
Well Completion Date: 09-19-2006
Received Date: 10-17-2006

WELL

Well Status: Water Supply
Prim. Use: n/a
Sec. Use: Livestock
Boring Method: Rotary (Air)

Well Depth (m): 42.672
Depth to Bedrock (m): 132
Depth to Water: ft
Water Kind: FRESH

PUMP TEST

Test Method: CLEAR
Pump Set (m): 100
SWL (ft) 62
Final Level: 72 ft
Pump Rate: 10 GPM
Recom. Rate: 10 GPM

Pipe ID: 11700567
Pump Test ID 11704086
Flowing: n/a
Pump Duration (hr): 1
Pump Duration (m): n/a

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth	
1	930892124	6	inch	STEEL	-1.333	133	ft
2	930892125	n/a	inch	OPEN HOLE	133	140	ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth	
1	CLAY	STONES	n/a	BROWN	0	25	ft
2	GRAVEL	SAND	n/a	BROWN	25	78	ft
3	SAND	n/a	n/a	BROWN	78	85	ft
4	CLAY	SAND	n/a	GREY	85	128	ft
5	GRAVEL	SAND	GRAVEL	GREY	128	132	ft
6	ROCK	FRACTURED	n/a	BROWN	132	140	ft

End of Record

17

Easting:	623954.00
Northing:	4835866.00
Elev (masl):	339.83

Latitude: 43.474872
Longitude: -80.187876

Well ID: **7041087**

LOCATION

Lot: n/a
Con: n/a
Municipality: WELLINGTON
Township: GUELPH CITY
Street: 100M OF INTERSECTION OF MALTBY RD & CRAWLEY F
City: GUELPH

Tag: A049753
Audit No: Z64828
Contractor License: 6894
Well Completion Date: 03-27-2007
Received Date: 02-15-2007

WELL

Well Status: Observation Wells
Prim. Use: n/a
Sec. Use: n/a
Boring Method: Diamond

Well Depth (m): 99.92
Depth to Bedrock (m): n/a
Depth to Water:
Water Kind:

PUMP TEST

Test Method:
Pump Set (m):
SWL (ft)
Final Level:
Pump Rate:
Recom. Rate:

Pipe ID:
Pump Test ID
Flowing:
Pump Duration (hr):
Pump Duration (m):

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth	
1	930896236	2.54	cm	PLASTIC	0	85.33	m

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth	
1	SAND	SILTY	TILL	n/a	0	12.19	m
2	n/a	n/a	n/a	n/a	12.19	19.81	m
3	n/a	n/a	n/a	n/a	19.81	34.75	m
4	n/a	n/a	n/a	n/a	34.75	40.84	m
5	n/a	n/a	n/a	n/a	40.84	54.5	m
6	n/a	n/a	n/a	n/a	54.5	98.4	m
7	n/a	n/a	n/a	n/a	98.4	99.92	m

End of Record

17

Easting:	625628.00
Northing:	4940048.00
Elev (masl):	339.83

Latitude: 43.474872
Longitude: -80.187876

Well ID: **7041088**

LOCATION

Lot: n/a
Con: n/a
Municipality: WELLINGTON
Township: GUELPH CITY
Street: 100M OF INTERSECTION MALTBY RD & CRAWLEY RD
City: GUELPH

Tag: A049753
Audit No: Z64827
Contractor License: 6894
Well Completion Date: 03-27-2007
Received Date: 02-15-2007

WELL

Well Status: Observation Wells
Prim. Use: n/a
Sec. Use: n/a
Boring Method: Diamond

Well Depth (m): 64
Depth to Bedrock (m): n/a
Depth to Water:
Water Kind:

PUMP TEST

Test Method:
Pump Set (m):
SWL (ft)
Final Level:
Pump Rate:
Recom. Rate:

Pipe ID:
Pump Test ID
Flowing:
Pump Duration (hr):
Pump Duration (m):

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	930896237	2.54	cm	PLASTIC	0	60.95 m

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	SAND	SILTY	TILL	n/a	0	12.19 m
2	n/a	n/a	n/a	n/a	12.19	19.81 m
3	n/a	n/a	n/a	n/a	19.81	34.75 m
4	n/a	n/a	n/a	n/a	34.75	40.84 m
5	n/a	n/a	n/a	n/a	40.84	54.5 m
6	n/a	n/a	n/a	n/a	54.5	64 m

End of Record

17

Easting:	582964.00
Northing:	4957466.00
Elev (masl):	339.83

Latitude: 43.474872
Longitude: -80.187876

Well ID: **7041089**

LOCATION

Lot: n/a
Con: n/a
Municipality: WELLINGTON
Township: GUELPH CITY
Street: 100M OF INTERSECTION MALTBY RD AND CRAWLEY R
City: GUELPH

Tag: A049753
Audit No: Z64829
Contractor License: 6894
Well Completion Date: 03-27-2007
Received Date: 02-15-2007

WELL

Well Status: Observation Wells
Prim. Use: n/a
Sec. Use: n/a
Boring Method: Diamond

Well Depth (m): 39.62
Depth to Bedrock (m): n/a
Depth to Water:
Water Kind:

PUMP TEST

Test Method:
Pump Set (m):
SWL (ft)
Final Level:
Pump Rate:
Recom. Rate:

Pipe ID:
Pump Test ID
Flowing:
Pump Duration (hr):
Pump Duration (m):

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	930896238	2.54	cm	PLASTIC	0	36.57 m

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	SAND	SILTY	TILL	n/a	0	12.19 m
2	n/a	n/a	n/a	n/a	12.19	19.81 m
3	n/a	n/a	n/a	n/a	19.81	34.75 m
4	n/a	n/a	n/a	n/a	34.75	39.62 m

End of Record

17

Easting:	553128.00
Northing:	4804512.00
Elev (masl):	339.83

Latitude: 43.474872
Longitude: -80.187876

Well ID: **7041090**

LOCATION

Lot:		Tag:	A049753
Con:	n/a	Audit No:	Z64830
Municipality:	WELLINGTON	Contractor License:	6894
Township:	GUELPH CITY	Well Completion Date:	03-27-2007
Street:	100M OF INTERSECTION MALTBY RD AND CRAWLEY R	Received Date:	02-15-2007
City:	GUELPH		

WELL

Well Status:	Observation Wells	Well Depth (m):	19.81
Prim. Use:	n/a	Depth to Bedrock (m):	n/a
Sec. Use:	n/a	Depth to Water:	
Boring Method:	Diamond	Water Kind:	

PUMP TEST

Test Method:		Pipe ID:	
Pump Set (m):		Pump Test ID	
SWL (ft)		Flowing:	
Final Level:		Pump Duration (hr):	
Pump Rate:		Pump Duration (m):	
Recom. Rate:			

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth	
1	930896239	2.54	cm	PLASTIC	0	16.76	m

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth	
1	SAND	SILTY	TILL	n/a	0	12.19	m
2	n/a	n/a	n/a	n/a	12.19	19.81	m

End of Record

17

Easting:	481850.00
Northing:	4756998.00
Elev (masl):	343.57

Latitude: 43.482664
Longitude: -80.198542

Well ID: **7118829**

LOCATION

Lot:	013	Tag:	A062521
Con:	07	Audit No:	M01231
Municipality:	WELLINGTON	Contractor License:	6607
Township:	PUSLINCH TOWNSHIP	Well Completion Date:	02-20-2008
Street:	SOUTHGATE DR.	Received Date:	02-02-2009
City:	Guelph		

WELL

Well Status:	Test Hole	Well Depth (m):	10.6
Prim. Use:	n/a	Depth to Bedrock (m):	n/a
Sec. Use:	n/a	Depth to Water:	
Boring Method:	n/a	Water Kind:	

PUMP TEST

Test Method:	n/a	Pipe ID:	1002741428
Pump Set (m):	n/a	Pump Test ID	1002741422
SWL (ft)	n/a	Flowing:	n/a
Final Level:	n/a	Pump Duration (hr):	n/a
Pump Rate:	n/a	Pump Duration (m):	n/a
Recom. Rate:	n/a		

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth	
0	1002741439	n/a	n/a	PLASTIC	n/a	5.1	m
0	1002741448	n/a	n/a	PLASTIC	n/a	5.4	m
0	1002741430	n/a	n/a	PLASTIC	n/a	4.8	m
0	1002741421	n/a	n/a	PLASTIC	n/a	4.8	m
1	1002741455	5.1	cm	PLASTIC	0	6	m

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth	
1	FINE SAND	n/a	n/a	BROWN	0	3	m
2	SILT	TILL	DRY	BROWN	3	10.6	m

End of Record

17		
	Easting:	558707.00
	Northing:	4833988.00
	Elev (masl):	343.57

Latitude: 43.481627
Longitude: -80.197072

Well ID: **7118829**

LOCATION

Lot:	013	Tag:	A062521
Con:	07	Audit No:	M01231
Municipality:	WELLINGTON	Contractor License:	6607
Township:	PUSLINCH TOWNSHIP	Well Completion Date:	02-21-2008
Street:	SOUTHGATE DR.	Received Date:	02-02-2009
City:	Guelph		

WELL

Well Status:	Test Hole	Well Depth (m):	0
Prim. Use:	n/a	Depth to Bedrock (m):	n/a
Sec. Use:	n/a	Depth to Water:	
Boring Method:	n/a	Water Kind:	

PUMP TEST

Test Method:	n/a	Pipe ID:	1002741419
Pump Set (m):	n/a	Pump Test ID	1002741431
SWL (ft)	n/a	Flowing:	n/a
Final Level:	n/a	Pump Duration (hr):	n/a
Pump Rate:	n/a	Pump Duration (m):	n/a
Recom. Rate:	n/a		

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth	
0	1002741421	n/a	n/a	PLASTIC	n/a	4.8	m
0	1002741430	n/a	n/a	PLASTIC	n/a	4.8	m
0	1002741448	n/a	n/a	PLASTIC	n/a	5.4	m
0	1002741439	n/a	n/a	PLASTIC	n/a	5.1	m
1	1002741455	5.1	cm	PLASTIC	0	6	m

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth	
1	FINE SAND	n/a	n/a	BROWN	0	3	m
2	SILT	TILL	DRY	BROWN	3	10.6	m

End of Record

17		
	Easting:	541514.00
	Northing:	4792596.00
	Elev (masl):	343.55

Latitude: 43.477511
Longitude: -80.195704

Well ID: **7118829**

LOCATION

Lot:	013	Tag:	A062521
Con:	07	Audit No:	M01231
Municipality:	WELLINGTON	Contractor License:	6607
Township:	PUSLINCH TOWNSHIP	Well Completion Date:	02-20-2008
Street:	SOUTHGATE DR.	Received Date:	02-02-2009
City:	Guelph		

WELL

Well Status:	Test Hole	Well Depth (m):	0
Prim. Use:	n/a	Depth to Bedrock (m):	n/a
Sec. Use:	n/a	Depth to Water:	
Boring Method:	n/a	Water Kind:	

PUMP TEST

Test Method:	n/a	Pipe ID:	1002741446
Pump Set (m):	n/a	Pump Test ID	1002741422
SWL (ft)	n/a	Flowing:	n/a
Final Level:	n/a	Pump Duration (hr):	n/a
Pump Rate:	n/a	Pump Duration (m):	n/a
Recom. Rate:	n/a		

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth	
0	1002741439	n/a	n/a	PLASTIC	n/a	5.1	m
0	1002741421	n/a	n/a	PLASTIC	n/a	4.8	m
0	1002741448	n/a	n/a	PLASTIC	n/a	5.4	m
0	1002741430	n/a	n/a	PLASTIC	n/a	4.8	m

1	1002741455	5.1	cm	PLASTIC	0	6	m

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	FINE SAND	n/a	n/a	BROWN	0	3 m
2	SILT	TILL	DRY	BROWN	3	10.6 m

End of Record

17

Easting:	590464.00
Northing:	4892738.00
Elev (masl):	343.55

Latitude: 43.479263
Longitude: -80.1951

Well ID: **7118829**

LOCATION

Lot: 013
Con: 07
Municipality: WELLINGTON
Township: PUSLINCH TOWNSHIP
Street: SOUTHGATE DR.
City: Guelph

Tag: A062521
Audit No: M01231
Contractor License: 6607
Well Completion Date: 02-22-2008
Received Date: 02-02-2009

WELL

Well Status: Test Hole
Prim. Use: n/a
Sec. Use: n/a
Boring Method: n/a

Well Depth (m): 0
Depth to Bedrock (m): n/a
Depth to Water:
Water Kind:

PUMP TEST

Test Method: n/a
Pump Set (m): n/a
SWL (ft) n/a
Final Level: n/a
Pump Rate: n/a
Recom. Rate: n/a

Pipe ID: 1002741446
Pump Test ID 1002741431
Flowing: n/a
Pump Duration (hr): n/a
Pump Duration (m): n/a

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
0	1002741448	n/a	n/a	PLASTIC	n/a	5.4 m
0	1002741421	n/a	n/a	PLASTIC	n/a	4.8 m
0	1002741430	n/a	n/a	PLASTIC	n/a	4.8 m
0	1002741439	n/a	n/a	PLASTIC	n/a	5.1 m
1	1002741455	5.1	cm	PLASTIC	0	6 m

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	FINE SAND	n/a	n/a	BROWN	0	3 m
2	SILT	TILL	DRY	BROWN	3	10.6 m

End of Record

17

Easting:	449904.00
Northing:	4756504.00
Elev (masl):	339.53

Latitude: 43.482646
Longitude: -80.199865

Well ID: **7127899**

LOCATION

Lot: 013
Con: 07
Municipality: WELLINGTON
Township: PUSLINCH TOWNSHIP
Street: CRAWLEY ROAD
City: Guelph

Tag:
Audit No: Z75436
Contractor License: 1737
Well Completion Date: 12-11-2007
Received Date: 02-08-2008

WELL

Well Status: Abandoned-Other
Prim. Use: n/a
Sec. Use: n/a
Boring Method: n/a

Well Depth (m): 0
Depth to Bedrock (m): n/a
Depth to Water: m
Water Kind:

PUMP TEST

Test Method:
Pump Set (m):
SWL (ft)
Final Level:
Pump Rate:
Recom. Rate:

Pipe ID:
Pump Test ID
Flowing:
Pump Duration (hr):
Pump Duration (m):

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	n/a	n/a	n/a	n/a	0	n/a m

End of Record

---

n/a

Easting:	<null>
Northing:	<null>
Elev (masl):	345.23

Latitude: 43.478221
Longitude: -80.192962

Well ID: **7149057**

LOCATION

Lot: 014
Con: 07
Municipality: WELLINGTON
Township: PUSLINCH TOWNSHIP
Street: 384 CRAWLEY ROAD
City: Guelph

Tag:
Audit No: Z113986
Contractor License: 2663
Well Completion Date: 06-15-2010
Received Date: 07-29-2010

WELL

Well Status: Abandoned-Other
Prim. Use: n/a
Sec. Use: n/a
Boring Method: n/a

Well Depth (m): 0
Depth to Bedrock (m): n/a
Depth to Water: ft
Water Kind:

PUMP TEST

Test Method:
Pump Set (m):
SWL (ft)
Final Level:
Pump Rate:
Recom. Rate:

Pipe ID:
Pump Test ID
Flowing:
Pump Duration (hr):
Pump Duration (m):

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
0	1003252094	n/a	inch	<null>	n/a	n/a ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth

End of Record

---

n/a

Easting:	<null>
Northing:	<null>
Elev (masl):	339.22

Latitude: 43.474327
Longitude: -80.201273

Well ID: **7170189**

LOCATION

Lot: 020
Con: 04
Municipality: WELLINGTON
Township: PUSLINCH TOWNSHIP
Street: 4636 20 SIDE RD
City: Puslinch

Tag: A117282
Audit No: Z132870
Contractor License: 6013
Well Completion Date: 08-31-2011
Received Date: 10-18-2011

WELL

Well Status: Water Supply
Prim. Use: n/a
Sec. Use: n/a
Boring Method: n/a

Well Depth (m): 0
Depth to Bedrock (m): n/a
Depth to Water: ft
Water Kind:

TEST

Test Method: n/a
Pump Set (m): n/a
SWL (ft)

Pipe ID: 1004016432
Pump Test ID 1004016433
Flowing: n/a

PUMP

Final Level: 50 ft
Pump Rate: n/a GPM
Recom. Rate: n/a GPM

Pump Duration (hr): n/a
Pump Duration (m): n/a

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	1004016437	5	inch	STEEL	-1.5	6.5 ft
2	1004016438	5	inch	STEEL	0.6	155 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth

End of Record

---

n/a

Easting:	<null>
Northing:	<null>
Elev (masl):	339.93

Latitude: 43.482707
Longitude: -80.203376

Well ID: **7176368**

LOCATION

Lot: n/a
Con: n/a
Municipality: WELLINGTON
Township: PUSLINCH TOWNSHIP
Street:
City: GUELPH

Tag: A126034
Audit No: Z142933
Contractor License: 7238
Well Completion Date: 01-05-2012
Received Date: 02-09-2012

WELL

Well Status: Observation Wells
Prim. Use: n/a
Sec. Use: n/a
Boring Method: Boring

Well Depth (m): 16.7
Depth to Bedrock (m): n/a
Depth to Water: m
Water Kind:

PUMP TEST

Test Method:
Pump Set (m):
SWL (ft)
Final Level:
Pump Rate:
Recom. Rate:

Pipe ID:
Pump Test ID
Flowing:
Pump Duration (hr):
Pump Duration (m):

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	1004055249	5.1	cm	PLASTIC	0	13.1 m

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	SAND	TOPSOIL	SOFT	BROWN	0	1.5 m
2	GRAVEL	BOULDERS	HARD	BROWN	1.5	4.5 m
3	CLAY	GRAVEL	HARD	BROWN	4.5	12.1 m
4	SAND	n/a	SOFT	BROWN	12.1	16.7 m

End of Record

---

n/a

Easting:	<null>
Northing:	<null>
Elev (masl):	341.78

Latitude: 43.475489
Longitude: -80.192343

Well ID: **7191239**

LOCATION

Lot: n/a
Con: n/a
Municipality: WELLINGTON
Township: PUSLINCH TOWNSHIP
Street: 289 CRAWLEY RD
City: Guelph

Tag:
Audit No: Z152024
Contractor License: 2663
Well Completion Date: 10-25-2012
Received Date: 11-13-2012

WELL

Well Status: Abandoned-Other
Prim. Use: n/a
Sec. Use: n/a
Boring Method: n/a

Well Depth (m): 0
Depth to Bedrock (m): n/a
Depth to Water: ft
Water Kind:

PUMP TEST

Test Method:
Pump Set (m):
SWL (ft)
Final Level:
Pump Rate:
Recom. Rate:

Pipe ID:
Pump Test ID
Flowing:
Pump Duration (hr):
Pump Duration (m):

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
0	1004495915	n/a	inch	<null>	n/a	n/a ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth

End of Record

---

n/a

Easting:	<null>
Northing:	<null>
Elev (masl):	346.89

Latitude: 43.480446
Longitude: -80.202033

Well ID: 7202876

LOCATION

Lot: 020
Con: 04
Municipality: WELLINGTON
Township: PUSLINCH TOWNSHIP
Street: 4662 20 SIDE RD N RR# 6
City: Guelph

Tag: A141353
Audit No: Z162125
Contractor License: 6013
Well Completion Date: 05-16-2013
Received Date: 06-10-2013

WELL

Well Status: Water Supply
Prim. Use: n/a
Sec. Use: n/a
Boring Method: n/a

Well Depth (m): 0
Depth to Bedrock (m): n/a
Depth to Water: ft
Water Kind:

PUMP TEST

Test Method: n/a
Pump Set (m): 100
SWL (ft) 58
Final Level: n/a ft
Pump Rate: n/a GPM
Recom. Rate: 8 GPM

Pipe ID: 1004921097
Pump Test ID 1004921098
Flowing: n/a
Pump Duration (hr): n/a
Pump Duration (m): n/a

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	1004921103	5	inch	STEEL	-2.5	4 ft
2	1004921104	4	inch	STEEL	4	158 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth

End of Record

---

n/a

Easting:	<null>
Northing:	<null>
Elev (masl):	

Latitude: 43.478894
Longitude: -80.195142

Well ID: 7316404

LOCATION

Lot: n/a
Con: n/a
Municipality: WELLINGTON
Township: GUELPH CITY
Street: 995 SOUTHGATE DR
City: Guelph

Tag: A247476
Audit No: Z294670
Contractor License: 7190
Well Completion Date: 07-19-2018
Received Date: 08-13-2018

WELL

Well Status:	Observation Wells	**Well Depth (m):**	10.668
Prim. Use:	n/a	**Depth to Bedrock (m):**	n/a
Sec. Use:	n/a	**Depth to Water:**	ft
Boring Method:	Rotary (Convent.)	**Water Kind:**	

PUMP TEST

Test Method:	n/a	**Pipe ID:**	1007511902
Pump Set (m):	n/a	**Pump Test ID**	1007511903
SWL (ft)	31	**Flowing:**	n/a
Final Level:	n/a ft	**Pump Duration (hr):**	n/a
Pump Rate:	n/a GPM	**Pump Duration (m):**	n/a
Recom. Rate:	n/a GPM		

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	1007511909	2	inch	PLASTIC	0	25 ft
2	1007511910	4	inch	STEEL	-1	3 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	GRAVEL	SAND	n/a	BROWN	0	20 ft
2	SAND	STONES	n/a	BROWN	20	25 ft
3	GRAVEL	SAND	n/a	BROWN	25	35 ft

End of Record

---

n/a

Easting:	<null>
Northing:	<null>
Elev (masl):	

Latitude: 43.482474
Longitude: -80.198507

Well ID: 7316405

LOCATION

Lot:	n/a	**Tag:**	A237649
Con:	n/a	**Audit No:**	Z294669
Municipality:	WELLINGTON	**Contractor License:**	7190
Township:	GUELPH CITY	**Well Completion Date:**	07-19-2018
Street:	995 SOUTHGATE DR	**Received Date:**	08-13-2018
City:	Guelph		

WELL

Well Status:	Observation Wells	**Well Depth (m):**	16.764
Prim. Use:	n/a	**Depth to Bedrock (m):**	n/a
Sec. Use:	n/a	**Depth to Water:**	ft
Boring Method:	Auger	**Water Kind:**	

PUMP TEST

Test Method:	n/a	**Pipe ID:**	1007512007
Pump Set (m):	n/a	**Pump Test ID**	1007512008
SWL (ft)	45	**Flowing:**	n/a
Final Level:	n/a ft	**Pump Duration (hr):**	n/a
Pump Rate:	n/a GPM	**Pump Duration (m):**	n/a
Recom. Rate:	n/a GPM		

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	1007512014	2	inch	PLASTIC	0	45 ft
2	1007512015	4	inch	STEEL	-1	3 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	GRAVEL	SAND	DENSE	BROWN	0	20 ft
2	SAND	STONES	DENSE	BROWN	20	30 ft
3	SAND	GRAVEL	DENSE	BROWN	30	55 ft

End of Record

---

n/a

Easting:	<null>
Northing:	<null>
Elev (masl):	

Latitude: 43.481695
Longitude: -80.199037

Well ID: 7316593

TION

Lot:	n/a	**Tag:**	A247383
Con:	n/a	**Audit No:**	Z285276
Municipality:		**Contractor License:**	7190

LOCA

Township:	GUELPH CITY	Well Completion Date:	07-19-2018
Street:	795 SOUTHGATE DR	Received Date:	08-13-2018
City:	Guelph		

WELL

Well Status:	Observation Wells	Well Depth (m):	13.716
Prim. Use:	n/a	Depth to Bedrock (m):	n/a
Sec. Use:	n/a	Depth to Water:	ft
Boring Method:	Auger	Water Kind:	

PUMP TEST

Test Method:		Pipe ID:	
Pump Set (m):		Pump Test ID	
SWL (ft)		Flowing:	
Final Level:		Pump Duration (hr):	
Pump Rate:		Pump Duration (m):	
Recom. Rate:			

CASING DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Case ID	Casing Diamter	Diamter Units	Material	Top Depth	Bottom Depth
1	1007419782	2	inch	PLASTIC	35	-3 ft
2	1007419783	4	inch	STEEL	1	-3 ft

FORMATION DETAILS

Layer Value of "0" denotes a Null value and cannot be stratified and ordered.

Layer	Material	Material 2	Material 3	Colour	Top Depth	Bottom Depth
1	SAND	n/a	n/a	BROWN	0	1 ft
2	SAND	GRAVEL	n/a	BROWN	1	35 ft
3	COARSE SAND	n/a	n/a	BROWN	35	45 ft

End of Record

Appendix B

Impact Calculations

Appendix B
Prediction of Contaminant Attenuation

Recharge Calculations

Dilution Area (A_D)	4346	m2
Annual Dilution Precipitation rate based on Chapter 22 (k)	0.25	m
Effluent Design Flow	214292	L/day
Annual Sewage Volume (V_S)	78217	m3
Annual Dilution Volume (V_A)	1087	m3
Total Volume of Water (V_T)	79303	m3

Nitrate Assessment

Concentration in Sewage (C_S)	40	mg/L
Concentration at Property Boundary (C_{PB})	39	mg/L

Nitrate Assessment - Tertiary to meet RUP

Concentration in Sewage (C_S)	2.5	mg/L
Concentration at Property Boundary (C_{PB})	2.5	mg/L

Equations	**Eq'n #**
$V_A = A_D \times k$	(1)
$V_T = V_A + V_S$	(2)
$C_{PB} = (C_S \times V_S) / V_T$	(3)

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