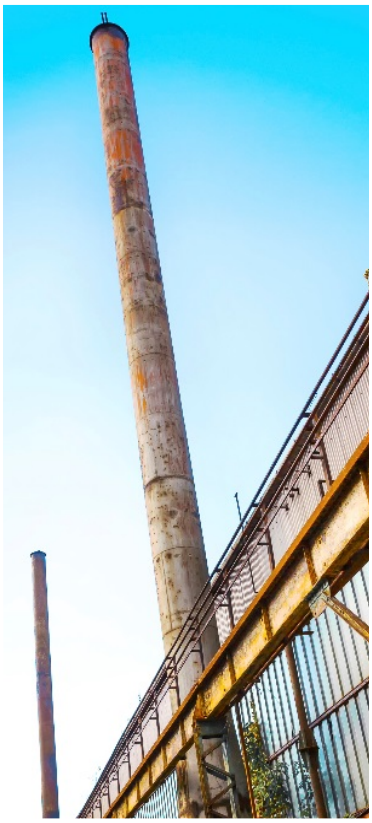
Geotechnical and Hydrogeologic Investigation Report

Proposed Residential Development
Centre Road Phase 2
Uxbridge, Ontario

Report for Mason Homes Limited



Executive Summary

This report presents the results of a geotechnical investigation that was conducted in support of a proposed residential development being considered for a site located along the east side of Centre Road approximately 0.2km north of Oakside Drive in Uxbridge, Ontario (herein referred to as “the Property” and “the Site”). The Property encompasses an area of approximately 13.1 hectares (32.4 acres) and is vacant of structures. The Property consists of agricultural and forested land. The planned development will consist of a mixture of houses, semi-detached dwellings, townhouses, and other residential units.

The development will be municipally serviced with piped potable water (water main) and sanitary sewer. GHD Limited (GHD) was retained by Mason Homes Limited (“the Client”) to complete this geotechnical and hydrogeologic investigation. The study has included a site inspection, advancement of four (4) boreholes, soil sampling, water level monitoring, a well survey (to compliment a review of available Ministry of the Environment, Conservation and Parks (MECP) well records), hydraulic conductivity testing and a water balance evaluation based upon current design information.

The Site is generally covered with topsoil underlain by a thin deposit of silty sand and then glacial till and/or clayey silt. A shallow groundwater table was not encountered. It is our opinion that there will not be significant constraints for the proposed residential development from the seasonal variations of groundwater as the water can be handled with appropriate engineering techniques. It is expected that groundwater will generally be below the depth of the future development, although seepage may be encountered in deeper excavations or foundations. Seepage is expected to be seasonal in nature. If short-term pumping of groundwater at volumes greater than 50,000 L/day and less than 400,000L/day is required during the construction stage, the Environmental Activity Sector Registry (EASR) must be completed.

There are minor impacts expected to groundwater and surface water as a result of the future development provided that appropriate planning (i.e. incorporation of LIDs as supported by the water balance calculations), mitigation measures and proper construction techniques are considered.

From a geotechnical perspective, the Site is suitable for construction of the proposed development including two to three-storey residential buildings, associated servicing, paved access roads and parking. Detailed recommendations are provided in subsequent sections of this report.

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1. Introduction

This report presents the results of a geotechnical investigation that was conducted in support of a proposed residential development being considered for land located along the east side of Centre Road approximately 0.2km north of Oakside Drive in Uxbridge, Ontario (herein referred to as "the Property" and "the Site"). The Property encompasses an area of approximately 13.1 hectares (32.4 acres). The majority of the Property consists of agricultural land used for cash crops. Some mixed trees and bush occur along the northern fenceline and at the east end of the Site. A detailed plan of the proposed development was not available at the time of the investigation. However, Mason Homes Limited ("the Client") has indicated that the planned development will consist of a mixture of houses and townhouses. The development will be municipally serviced with piped potable water (water main) and sanitary sewer. GHD Limited (GHD) was retained by the Client to complete this combined geotechnical and hydrogeologic investigation. Geographically, the Site is located on Part Lot 33, Concession 6, Township of Uxbridge, Regional Municipality of Durham.

The general location of the Site is illustrated on the Vicinity Plan, Figure 1. The location with respect to surrounding roads and land use is depicted on the Site Plan, Figure 2. Specific details of the Site and surrounding properties based on recent aerial photography is presented on the Plot Plan, Figure 3. A current design drawing (provided by the Client) depicting the general layout of the proposed development is presented on the Concept Plan, Figure 4. The borehole locations are illustrated on the Test Hole Plan, Figure 5. These plans and other figures can be reviewed in the Enclosures section.

2. Scope of Investigation

The purpose of the investigation was to define the prevailing geotechnical and hydrogeologic conditions at the Site. The hydrogeologic aspects of the study included the subsurface soil stratigraphy, groundwater movement, assessing groundwater supplies and evaluating potential impacts from the proposed development and related construction. The geotechnical investigation was conducted to provide recommendations relevant to earthwork construction, possible dewatering, foundation and slab on grade design, buried service installation and pavement structure. The following scope of work was performed to accomplish the foregoing purposes.

1. Reviewed available background information relevant to the Site such as geologic, physiographic and water resources reports and maps.
2. Carried out an inventory of available well record data on file with the Ministry of the Environment, Conservation and Parks (MECP) for the immediate area to evaluate the physical characteristics of the aquifer complexes that underlie the region. A field survey of the general area was carried out to supplement the MECP data.
3. A walkover inspection was conducted to review surficial ground characteristics.

4. The subsurface conditions were explored by advancing, sampling and logging a total of four (4) boreholes. The subsurface conditions were recorded and summarized in Appendix A. The boreholes were advanced to depths ranging from 6.2 to 6.7m. A monitoring well was installed in each of the four (4) boreholes to facilitate water level measurements.

5. Falling and/or rising head (slug) tests were completed at the four (4) monitoring well locations to evaluate hydraulic conductivity of the subsoils. The infiltration rate of the upper vadose zone was evaluated based on the soil type observed and grain size analyses.

6. Carried out laboratory analyses of materials encountered including grain size testing and moisture content determinations of representative soil samples.

7. Obtained a representative groundwater sample from three (3) of the monitoring wells and submitted the samples for chemical testing to determine background chemistry.

8. Completed a water balance that considers pre- and post-development conditions and evaluates groundwater baseflow conditions based on the current design.

9. Prepared a detailed report using engineering analyses of the acquired data outlining our conclusions and recommendations presented herein.

The boreholes were advanced using a track mounted drill rig equipped with continuous flight, solid stem power augers. Representative, disturbed samples of the strata penetrated were obtained using a split-barrel, 50mm outer-diameter (OD) sampler advanced by a 63.5 kg hammer dropping approximately 760 mm. The results of these standard penetration tests (SPT's) are reported as "N" values on the borehole logs at the corresponding depths. Samples were also obtained directly from augers cuttings.

Soil samples obtained from the test holes were inspected in the field immediately upon retrieval for type, texture, and colour. All test holes were backfilled following completion of the fieldwork. All samples were sealed in clean plastic containers and transported to the GHD laboratory for further visual-tactile examination, and to select appropriate samples for laboratory analysis.

3. Project Details

The preliminary conceptual plan is provided as Figure 4. The drawing (supplied by the Client) indicates that the area of the Site is 13.1 hectares (32.4 acres). It is GHD's understanding that the proposed development will consist of 2 to 3-storey residential buildings with a paved access roads and associated parking. The development will be municipally serviced for potable water and sanitary sewers. GHD has assumed that the buildings will have basements.

4. Site Conditions

4.1 General

The field program consisted of a site inspection, soils investigation, hydraulic conductivity testing, and measurement of water levels in the monitoring wells. The boreholes were drilled on March 1, 2021. Borehole records and physical test results of representative soil samples are presented in Appendix A. A site reconnaissance was conducted by GHD prior to the subsurface investigation to observe the general surficial characteristics of the Site.

The Property is bounded by Centre Road to the west. Neighbouring properties to the west and north generally support rural residential homes. Land to the south supports a perennial un-named stream that is a tributary to Uxbridge Brook. Residential homes occupy land to the east and further south. Access to the Site is from Centre Road to the west or Maple Brook Drive to the east. The Property is vacant of structures. The Property consists of agricultural and forested land. The ground surface is relatively flat lying with a gentle slope towards the southeast in the direction of the un-named stream.

4.2 Subsurface

4.2.1 Regional Physiography and Geology

The Property is situated in the physiographic region known as the Oak Ridges Moraine (Chapman and Putnam, 1984). As illustrated on the Figure 7, the majority of the Site exists within a sand plain. An exception is a small portion of the northwest corner of the Property which exists in a drumlinized till plain. Occasional drumlins occur in the local landscape approximately 1.4km north of the Site. A clay plain exists approximately 0.3km to the south. The surficial geology (Figure 8) is comprised of foreshore-basinal deposits. A deposit of stone-poor, carbonate derived silty to sandy till is present in an area near the east end of the Site. The Ontario Geological Survey information (Figure 9) indicates that the Quaternary geology for the area is glaciolacustrine deposits; sand, gravelly sand and gravel; nearshore and beach deposits.

A review of available MECP well information identified a total of twelve (12) records within 0.25km of the Site (some of which were either monitoring wells or abandonment records). The well records indicate the presence of clay and /or silty sand over glacial till with intermittent layers of sand and gravel in the area. The well records considered are provided and shown in Appendix B. Physical data are presented on some of the MECP well records. The water well information is discussed in Section 5.1.

4.2.2 Local Subsurface Soil Conditions

The subsurface stratigraphy was investigated by drilling four (4) boreholes on March 1, 2021. A monitoring well was installed in all four (4) of these boreholes to facilitate water level measurements and testing. The locations of the test holes are illustrated on the Test Hole Plan, Figure 5. The boreholes are labelled BH-1 through to BH-4.

Details of the subsurface conditions encountered are graphically presented in Appendix A. It should be noted that the boundaries between the strata have been inferred from the test hole observations and non-continuous samples. They generally represent a transition from one soil type to another and should not be inferred to represent an exact plane of geological change. Further, conditions may vary between and beyond the test holes. A summary of the grain size analyses conducted on five (5) representative samples of the sub-soil is presented in Table 4.1.

The soils encountered generally consisted of surficial topsoil, underlain by a layer of silty sand and then a basal deposit of either glacial till or clayey silt. A discontinuous layer of silty sand was found to exists in the till in two (2) of the boreholes. The surficial layer of topsoil ranged in thickness from 127mm to 178mm and averaged 159mm. This soil was observed to be in a damp, loose state, with a silty, highly organic content. As such, it is expected to be devoid of any structural engineering properties.

A thin layer of silty sand was found to exist beneath the topsoil in all four (4) boreholes. Thickness of the silty sand ranged from 0.60m (BH-2) to 2.20m (BH-4). The average thickness of the silty sand was 1.35m. The silty sand was described as light brown to dark brown in colour. Moisture content tests conducted on samples of the silty sand yielded values ranging from 8 to 35% moisture by weight indicating that it exists in a moist to wet state. The relative density of the silty sand is generally described as very loose to compact based on SPT N values that ranged from 3 to 22 blows /300mm. The average N-value was 9.9 blows /300mm. A grain size distribution analysis conducted on a representative sample of the silty sand suggests the following compositional range: 3% gravel, 41% sand, and 56% silt and clay-sized particles by weight (Unified Soil Classification System (USCS)).

Glacial till was encountered in three (3) of the four (4) boreholes. The till was not encountered in BH-4 which was targeted in the eastern portion of the Site. Where encountered, the till was found to exist at an average depth of 1.3m. The till was typically brown to light brown in colour. The texture varied throughout the Site but was generally described as silty sand containing varying amounts of gravel. The till exists in a generally moist condition with moisture contents ranging from 8 to 13% by weight. The average moisture content of the till was 10.4%. The relative density of the till is described as compact to very dense based on SPT N values that ranged from 13 to in excess of 100 blows /300mm. The average N-value was 53 blows /300mm. A grain size distribution analysis conducted on a representative sample of the till suggests the following compositional range: 17% gravel, 48% sand, and 35% silt and clay-sized particles (USCS) by weight. A hydrometer analysis conducted on a sample suggest that the till contains 27% particles between 5 and 75 μm in size.

An interbedded layer of sand was encountered at depth in two (2) of the boreholes, i.e. BH-1 and BH-2. The sand was encountered at depths of 6.1 and 3.0m, respectively. The soil was described as light brown to brown sand with varying amounts of silt. Moisture content tests conducted on samples of the sand yielded values ranging from 10 to 20% moisture by weight indicating that it exists in a moist to wet state. The relative density of the sand is generally described as compact to very dense based on SPT N values that ranged from 24 to in excess of 100 blows /300mm. A grain size distribution analysis conducted on a representative sample of the sand suggests the following compositional range: 9% gravel, 62% sand, and 29% silt and clay-sized particles by weight (USCS).

Clayey silt was encountered in two (2) boreholes in the eastern portion of the Site, i.e. BH-3 and BH-4. Where encountered, the clayey silt was found to exist at an average depth of 3.5m. The clayey silt was typically grey in colour and exists in a generally moist to wet condition with moisture contents ranging from 15 to 27% by weight. The average moisture content of the clayey silt was 22.6%. The relative consistency of the clayey silt is generally described as firm to hard based on SPT N values that ranged from 8 to 76 blows /300mm. The average N-value was 28.2 blows/300mm. Grain size distribution analyses conducted on two (2) representative samples of the clayey silt suggest the following compositional range: 3 to 6% gravel, 4 to 26% sand, and 68 to 93% silt and clay-sized particles (USCS) by weight. Hydrometer analyses conducted on these samples suggest that the clayey silt contains 56 to 58% particles between 5 and 75 μm in size. Atterberg Limits determinations were conducted on two (2) samples of the clayey silt indicated the Plasticity Index ranging from 6 to 14% and Liquid Limit ranging from 19 to 30%.

Table 4.1 Grain Size Distribution Summary

Location	Depth (m)	Grain Size Distribution				Observed Soil Unit
		%Gravel	%Sand	%Fines		
				%Silt	%Clay	
BH-1, SS-4	2.3 – 2.9	1	48	27	8	Silty Sand Till, Trace Gravel
BH-2, SS-5	3.0 – 3.7	9	62	29		Silty Sand, Trace Gravel
BH-3, SS-6	2.3 – 2.9	6	26	56	12	Sandy Silt, Trace Gravel
BH-4, SS-3	1.5 – 2.1	3	41	56		Sandy Silt
BH-4, SS-5	3.0 – 3.7	3	4	58	35	Clayey Silt

Notes: %Fines indicates silt and clay particles; grain size distribution based on Unified Soil Classification System.

4.2.3 Groundwater

Groundwater seepage was observed in all four (4) boreholes at depths ranging from 0.9m (BH-4) to 4.6m (BH-3) during the drilling operations. Monitoring wells were installed in all four (4) boreholes in order to facilitate monitoring of groundwater levels. A summary of the monitoring well details is provided below in Table 4.2.

Table 4.2 Summary of Monitoring Well Information

Location	Depth of Well (m)	Pipe Stick-Up (m)	Effective Well Screen Interval (m)	Water Seepage Depth (m)
BH-1	4.60	1.07	3.10 – 4.60	2.30
BH-2	3.70	0.73	2.20 – 3.70	3.00
BH-3	3.70	0.74	2.20 – 3.70	4.60
BH-4	4.60	1.08	1.60 – 4.60	0.91

Groundwater potentiometric levels were measured on March 10, 2021 in the installed monitoring wells. The data has been plotted on Figure 6 and summarized in Table 4.3.

Table 4.3 Potentiometric Water Level Summary

Location	Ground Elevation (m)*	Water Level (m) March 10, 2021	GW Elevation (m) March 10, 2021
BH-1	281.741	1.50	280.24
BH-2	278.420	3.30	275.12
BH-3	275.951	dry	--
BH-4	269.696	0.90	268.80

Notes: m = metres; GW = groundwater; (*) Elevations were surveyed for vertical control using a Leica GPS 1200 Global Navigation Satellite System. The elevations provided are for the purposes of evaluating groundwater elevation and flow direction and should not be relied upon as a legal survey or topographic elevation survey.

The potentiometric elevations range from 280.24 to 268.80m indicating a moderate horizontal gradient. Based on the water level data collected and the surrounding topography, the overall shallow groundwater flow direction is to the south towards to the small un-named tributary to Uxbridge Brook (<0.1km to the south).

The direction of shallow groundwater movement is illustrated on the Groundwater Elevations plan, Figure 6. It is expected that groundwater seepage will be encountered intermittently at depths ranging from 0.9 to 4.6m (similar to what encountered during the subsurface exploration). It should be noted that groundwater levels are transient and tend to fluctuate with the seasons, periods of precipitation and temperature.

4.2.4 Water Quality

A groundwater sample was collected from three (3) of the monitoring wells (BH-1, BH-2 and BH-4) for the purpose of determining background water quality. The certificate of chemical analysis is presented in Appendix D. The water quality data are summarized and compared with the Ontario Drinking Water Standards (ODWS) in Table 4.4.

Table 4.4 Water Quality Summary

PARAMETER	Monitoring Well			ODWS		
	BH-1	BH-2	BH-4	MAC	IMAC	AO/OG
Alkalinity (as $CaCO_3$)	255	357	177	--	--	30 to 500
Ammonia - Total	0.1	0.11	0.06	--	--	--
Calcium	157	166	86.9	--	--	--
Chloride	66.7	32.5	59.3	--	--	250
Colour (T.C.U.)	< 2	< 2	< 2	--	--	5
Conductivity (mS/cm)	926	1070	652	--	--	--
Copper	< 0.002	< 0.002	< 0.002	--	--	1.0
Fluoride	< 0.1	< 0.1	< 0.1	1.5	--	--
Hardness (as $CaCO_3$)	**456**	**482**	**309**	--	--	80 to 100
Iron	< 0.005	0.021	< 0.005	--	--	0.3
Magnesium	15.5	16.2	22.3	--	--	--
Manganese	0.208	0.155	0.024	--	--	0.05
Nitrite (N)	0.1	< 0.1	< 0.1	1.0	--	--
Nitrate (N)	**14.3**	**11.2**	9.8	10	--	--
pH (units)	7.81	7.61	7.92	--	--	6.5 to 8.5
Potassium	2.5	1.6	1.4	--	--	--
Sodium	22.9	81.2	14.3	--	--	200
Sulphate	69	122	22	--	--	500
Turbidity (N.T.U.)	**42.7**	**249**	**332**	1	--	5
Zinc	< 0.005	0.011	< 0.005	--	--	5.0

Notes: All units in mg/L (i.e. parts per million) unless otherwise noted. MAC = maximum acceptable concentration (health related); IMAC = Interim MAC (insufficient data to establish MAC or not feasible to establish MAC to desired level); AO/OG = aesthetic objective or operational guideline (not health related). **Bolded value** exceeds ODWS.

The groundwater beneath the Site is relatively hard which is common in Southern Ontario due to overburden materials containing calcium. The elevated turbidity is an indication that the monitoring wells require further development. In general, the water quality is relatively good.

4.2.5 Hydraulic Conductivity

Hydraulic conductivity (K) testing was completed at monitoring wells (BH-1, BH-2, BH-3 and BH-4) on March 10, 2021. The testing consisted of rising and/or falling head testing and was completed by introducing a one-metre long slug (or measured volume of water) within the well, and then measuring the water levels using a data logger programmed to record readings at three (3) second intervals. The data was analyzed using AQTESOLV and the Bouwer-Rice solution for each test (Appendix C).

The K values for the hydraulic conductivity testing ranged from on the order of 10^{-5} to 10^{-6} cm/sec. The K values from the test data indicate that the monitoring wells were screened within a low to moderate (glacial till) hydraulic conductivity unit. The hydraulic conductivity testing suggests that excavations within these soils are expected to yield little water. However, increased amounts of water may be expected when pockets, seams or layers of sand and/or gravel are intersected.

4.2.6 Infiltration Testing

For purposes of Low Impact Development strategies, infiltration data of the shallow site soils is presented in this section. In-situ constant head permeameter tests were attempted at various locations throughout the Site. However, the presence of frost prohibited the testing. Therefore, based on grain size analyses, the upper vadose zone is assessed to have a field saturated hydraulic conductivity on the order of 10^{-4} cm/sec. The saturated hydraulic conductivity is indicative of silty sand. Although LIDs can be applied to any soil type, additional testing should be considered at the detailed design stage when specific infiltration areas are known.

Based on the Supplementary Guidelines to the Ontario Building Code 2012, this correlates to an infiltration rate on the order of 50mm/hr. It is noted, however, that slight variations in the soil stratigraphy may cause variations in the permeability of the soil in both vertical and horizontal orientations. Based on the Low Impact Development Stormwater Management Planning and Design Guide, the infiltration rate used to design the infiltration facility must incorporate a safety correction factor that compensates for potential reductions in soil permeability due to compaction or smearing during construction, gradual accumulation of fine sediments over the lifespan of the infiltration facility and uncertainty in measured values when less permeable horizons exist within 1.5m below the bottom of the infiltration facility (whatever that may be).

5. Hydrogeology

The hydrogeology of the area is characterized by relatively flat lying to gently rolling topography of soils that generally consists of clay underlain with intermittent layers of sand and gravel at depth. Seasonal water is expected to flow within the sand and gravel layers. Limited vertical migration is expected within the clay (and till). Only a minor portion of the existing infiltration is expected to recharge the deeper aquifers that are confined below the clay and till. Information regarding groundwater characteristics of the immediate area was obtained from an inventory of well records.

A total of thirty-six (36) well records were found to be available within 0.25km of the Site. The information includes four (4) abandonment records which provided limited information. The well records indicate the presence of clayey soil in the area with layers of sand and gravel at depth. Bedrock was not encountered in any of the local well records. The well records considered are provided and shown in Appendix B. Physical and hydraulic data are presented on the MECP well records.

5.1 Existing Local Water Supplies

Nearby surrounding lands to the east and south are generally developed with individual residential lots that are municipally serviced for both potable water and sanitary sewers. In comparison, areas to the north and west support a mixture of rural residential and agricultural properties. These areas appear to be privately serviced with individual water wells and septic systems. GHD understands that the proposed development will be municipally serviced. The well records considered are provided and shown in Appendix B. Physical and hydraulic data are presented on some of the MECP well records. The well records indicate the presence of clay, sand, and gravel in the area. The information indicates the presence of two (2) principal aquifer systems:

1. An unconfined shallow water table system within the shallow clay tapped by the dug/bored wells; and
2. Deeper overburden (sand/gravel) within the clay/till tapped by deeper overburden wells.

To supplement the MECP well records reviewed, GHD staff conducted a well survey of the area to investigate where private wells may still be in use (Appendix B). Six (6) locations were surveyed and confirmed that the area to the south and east of the Site is municipally serviced for potable water. This was confirmed by the presence of fire hydrants along Oakside Drive, Apple Tree Crescent and Maple Brook Drive. Existing water wells were generally observed on land to the west and north.

GHD notes that the monitoring wells installed on the Site as part of this investigation and the existing water well will need to be properly abandoned by a licensed well drilling contractor in accordance with Regulation 903 of the Ontario Water Resources Act prior to development construction activities.

5.2 Source Water Protection Considerations

Where proposed developments are being planned, it is important to determine the presence of Significant Groundwater Recharge Areas (SGRAs), and Highly Vulnerable Aquifers (HVAs) in the area. These areas are protected under the Clean Water Act (2006). In general, SGRAs are defined as areas where water seeps into an aquifer from rain and melting snow, supplying water to the underlying aquifer. An HVA aquifer occurs where the subsurface material offers limited protection from contamination resulting from surface activities.

GHD considered the potential for SGRAs and HVAs by reviewing the “Source Protection Information Atlas” that is currently available through the MECP website. The published information is dated February 4, 2021 (see Figure 10). In general, a small area near the southwest corner of the Site is within an SGRA (score of 2 to 4). The score increases to 6 further south in this immediate area. The Site is also situated within an HVA. The subsurface investigation by GHD has indicated that the existing clayey silt and glacial till exhibits low hydraulic conductivity indicating that it has a relative lower contribution to underlying aquifer complexes. GHD also notes that the Site is situated within a Wellhead Protection Area (Q1 and Q2) with a defined stress classes as ‘moderate’. Again, the low hydraulic conductivity of the native clayey silt and till soils provides protection to the identified Wellhead Protection Area.

Nevertheless, the proposed residential development for the Site should consider the reduction of potential infiltration of contaminants to the shallow water table using best management practices. Clean stormwater from rooftops would not be a concern for infiltration. However, runoff from other sources should be evaluated and may require pre-treatment. For example, runoff from asphalt should consider the use of an oil-grit separator or the reduction of the use of deicing salts.

6. Conclusions and Recommendations

Supporting data upon which our recommendations are based have been presented in the foregoing sections of this report. The following recommendations are governed by the physical properties of the subsurface materials that were encountered at the Site and assume that they are representative of the overall Site conditions. It should be noted that these conclusions and recommendations are intended for use by the designers only. Contractors bidding on or undertaking any work at the Site should examine the factual results of the investigation, satisfy themselves as to the adequacy of the information for construction, and make their own interpretation of this factual data as it affects their proposed construction techniques, equipment capabilities, costs, sequencing, and the like.

Comments, techniques, or recommendations pertaining to construction should not be construed as instructions to the contractor. Based on the results of the geotechnical investigation, it is our professional opinion that the Site is suitable for the proposed residential development and there is low potential for groundwater impact as a result of developing the Site. It is recommended that good construction and mitigation techniques must be used to minimize the potential for impact. Detailed conclusions and recommendations are presented in the following sections regarding the water balance and potential impacts to groundwater and surface water resources.

6.1 Hydrogeology

6.1.1 Water Balance Evaluation

An evaluation of the water balance was completed to compute the potential impacts that may occur in the recharge/discharge characteristics related to the proposed development. This evaluation is based upon a preliminary conceptual plan. The objective of the water balance is to illustrate that post-development infiltration within the developable area can meet or be close to pre-development values. The computations have used detailed parameters such as precipitation (Udora weather station), regional evapotranspiration, infiltration and runoff. Weather data from the Udora station was selected as it was the closest weather station to the Site (~16.3km away). The detailed calculations can be reviewed in Appendix E. The evaluation considered only the portion of the planned development that corresponds to the Site (see Concept Plan, Figure 4) based on information provided. The following is a summary of the expected pre-development water balance values for the proposed residential development based on the current information.

Pre development Water Balance

The pre-development water balance incorporated the existing soils, slope and ground cover areas. The infiltration factor for the area was calculated from the table of values presented in the “Land Development Guidelines” (MOEE, 1995). It is based on three sub-factors which are:

- Topography sub-factor;
- Soil sub-factor; and
- Cover sub-factor.

The slope of the Site was considered between “rolling” (slope of 2.8 to 3.8m per km) to “flat” (average slope not exceeding 0.6m per km). The soils were conservatively considered ‘medium combinations of clay and loam’ as per the water balance calculations. The land cover factor considered the forested (wooded) area (estimated to be 2,060m^2). Table 6.1 summarizes the expected pre-development water balance values for the Site.

Table 6.1 Pre Development Summary

Total Precipitation (Udora):	- 886.2 mm/year
Regional Evapotranspiration:	- 571.8 mm/year
Recharge Available:	- 314.4 mm/year
Area of Recharge Available (Site):	- 131,000 m^2
Total Water Surplus:	- 41,484 m^3/year
Total Estimated Infiltration:	- 19,477 m^3/year
Total Estimated Runoff:	- 22,007 m^3/year

Based upon these values, the Site infiltrates on the order of 19,477m^3 per year (~150 mm/year).

Post Development Water Balance (No Enhancements)

The computation of the water budget was repeated for the proposed development assuming no mitigation techniques, that is, runoff from impervious surfaces is unrecoverable and not infiltrated into the ground. The anticipated impact of the development is related to increased runoff from imperious surfaces such as building rooftops and asphalt surfaces. These are assumed to be impervious surfaces with zero infiltration capacity in this model. A summary of the computations is provided in Table 6.2.

Table 6.2 Post Development Summary (No Enhancements)

Area of Site:	- 131,000 m^2
Impervious Surfaces:	- 103,107 m^2
Area Available for Infiltration:	- 27,893 m^2
Total Water Surplus:	- 81,867 m^3/year
Total Estimated Infiltration:	- 4,723 m^3/year
Infiltration % Difference (pre- vs. post-):	- (-76%) (decrease)
Total Estimated Runoff:	- 77,144 m^3/year
Runoff % Difference (pre- vs. post-):	- 251% (increase)

The impermeable surface area of proposed building areas (roof tops), driveways, laneways, and paved access roads area was estimated based on the concept drawing presented in Figure 4 provided by the Client. Under this scenario, the total infiltration volume decreased by 76% and runoff volume increased by 251%. Within the areas evaluated, the infiltration has reduced and the runoff increased versus the pre-development values. Groundwater base flow would be expected to decrease over time in this scenario. However, recharge via infiltration through the underlying till to the lower aquifer from the Site is expected to be minor.

Based upon this scenario, mitigative strategies are required to minimize infiltration losses and reduce storm water runoff. The following section discusses the water balance after considering enhanced infiltration options.

Post Development Water Balance (Enhanced Infiltration)

The post-construction water budget computations were repeated considering enhanced infiltration options which are also known as Low Impact Development (LID) technologies. These technologies include and are not restricted to rainwater harvesting, downspout disconnection, infiltration trenches, vegetated filter strips, bioretention, permeable pavement, enhanced grass swales, dry swales and perforated pipe systems in order to balance the water budget and maintain any features including nearby creeks. The shallow subsurface soils are silty sand/sandy silt underlain by glacial till (also described as sandy silt with clay material) and/or clayey silt. It is noted that LIDs can work in any soil type. The primary enhancement for this Site is to promote infiltration and to move water from impervious surfaces to areas where infiltration can occur.

The post-development water balance was modelled to include the disconnection of downspouts from storm sewers and directing water from the building roof tops to sodded areas or undeveloped grass areas which can be enhanced with increased topsoil depths. GHD notes that this was done soley for demonstration purposes and specific LID design criteria will be the responsibility of the stormwater engineer for the development. A summary of the post-construction water budget with enhancements for infiltration is presented in Table 6.3.

Table 6.3 Post Development Summary (With Enhanced Infiltration)

Area of Site:	- 131,000 m^2
Total Water Surplus:	- 81,867 m^3/year
Total Estimated Infiltration:	- 19,477 m^3/year
Infiltration % Difference (pre- vs. post-):	- (0%) (nil)
Total Estimated Runoff:	- 62,390 m^3/year
Runoff % Difference (pre- vs. post-):	- 184% (increase)

Under this scenario, the total infiltration volume is maintained and runoff volume increased by 184% compared to pre development conditions. Within the areas evaluated, the infiltration and runoff amounts have improved compared to post development (no mitigation) numbers. However, a runoff volume increase of 184% is still present. Any increase in runoff (and decrease in infiltration) compared with the pre-development conditions will need to be managed as per the storm water management plan.

It is expected that recharge via infiltration through the till and clayey silt to the lower aquifers is a small component and impacts to the groundwater aquifer are expected to be insignificant. It is our professional opinion that there would be minimal impact to the local groundwater regime and minimal impact to the down-gradient surface water regime from a quantity perspective.

6.1.2 Impact on Groundwater Baseflow

The importance of the groundwater baseflow is that it provides discharge to water bodies, wells and may have some hydraulic functionality with the on-site features. Water balance calculations suggest that the infiltration to the subsurface can be kept near pre-development values if appropriate LID technologies are used. It is GHD's professional opinion that there is not expected to be a significant impact to the shallow groundwater baseflow that may be supplying baseflow to the down-gradient un-named tributary to Uxbridge Brook.

6.1.3 Impact on Surface Water Bodies

The impacts to surface water bodies are related to the reduction of the groundwater baseflow and water quality concerns related to human activities such as salting of paved areas, minor fuel and oil leaks, fertilizer application, etc. It is expected that there will be minor impacts to groundwater and neighbouring surface water bodies. Runoff from the development will be collected by an internal storm sewer system and treated using some stormwater strategy. Further details will be provided within the stormwater management report.

6.1.4 Mitigation Measures

Several mitigative techniques have been recommended in order to address concerns relating to the potential for impact to the base flow. The impact and mitigation measures can be arranged into two (2) distinct categories: construction phase and operational phase. Prior to construction, storm water management techniques should be incorporated to control additional surface water runoff and permit enhanced infiltration into the surrounding ground. Storm water management techniques will minimize the potential for groundwater impact and also minimize the amount of silt or other fine-grained soil particles becoming mobile and entering into down-gradient areas. The installation of strategically placed silt fences will filter any excess storm water runoff prior to entering the infiltration areas.

During the operational phase of the development, it is expected that storm water excess will be controlled as indicated in the Stormwater Report. It is recommended that all roof leader drains of the future residential buildings be allowed to drain onto the ground surface for infiltration or other means recommended by the storm water report. Swales may be required in some areas to divert the runoff water where required. Other LIDs will be required to reduce storm water runoff and will be evaluated by the detailed design.

6.1.5 Servicing

Private services for water and septic disposal are not considered as the Site will be connected to municipal services.

6.1.6 Dewatering for Construction

Based on groundwater-related observations and the depth of excavations expected for this development, it is generally anticipated that groundwater seepage will not be encountered depending on the time of year at which the construction is conducted. However, if encountered, the seepage will be minor and should be handled with pumping from collection sumps to an acceptable outlet.

However, should any excavations require more intensive dewatering or groundwater control, the use of filtered sumps, or other suitable method of dewatering and/or sheet piling is recommended. For dewatering purposes, hydraulic conductivities on the order of about 10^{-4} to 10^{-6} cm/sec may be expected for the subgrade soils encountered in our boreholes. It should be noted that hydraulic conductivities can vary over a vertical and horizontal extent, and may be outside the stated range if pockets or seams of soils with different grain size (e.g. sand/gravel seams) are encountered.

If short-term pumping of groundwater at volumes greater than 50,000 L/day and less than 400,000 L/day is required during the construction stage, the Environmental Activity Sector Registry (EASR) must be completed. The EASR streamlines the process and water pumping may begin once the EASR registration is completed, the fee paid and supporting document prepared. If water taking in excess of 400,000 litres/day is required, a Permit to Take Water (PTTW) must be obtained in advance. PTTW applications may take up to 90 working days for the MECP to review and approve. The actual rate of groundwater taking performed during construction will be a function of the final design, time of year, and the contractor's schedule, equipment, and techniques.

6.2 Geotechnical

The soils encountered generally consisted of topsoil underlain by a thin layer of silty sand and then native glacial till and/or clayey silt. Groundwater seepage was observed in all four (4) boreholes at depths ranging from 0.9m (BH-4) to 4.6m (BH-3) during the drilling operations. Monitoring wells were installed in all four (4) boreholes in order to facilitate monitoring of groundwater levels. Groundwater level measurements obtained from the existing monitoring wells on March 10, 2021, ranged from 0.9 to dry.

6.2.1 Site Preparation and Excavation

Any and all topsoil, vegetation, fill, disturbed earth, organic and organic-bearing material is to be stripped and removed from the proposed pavement, sidewalk and building envelope areas (including floor slab areas) prior to commencing earthwork construction. Overly loose, organic, or otherwise deleterious materials will require removal and replacement with an approved backfill material. The subexcavated surface must be proof rolled and/or approved by a member of GHD prior to placement of fill or foundations. Excavations should be carried out to conform to the manner specified in Ontario Regulation 213/91 and the Occupational Health and Safety Act and Regulations for Construction Projects (OHSA). All excavations above the water table not exceeding 1.2m in depth may be constructed with vertical, unsupported slopes. The soils encountered during this investigation are generally classed by OHSA as Type 3. As such, unsupported / unshored walls of excavations in these soils must be sloped to the bottom of the excavation, with a slope having a gradient of 1 horizontal to 1 vertical (1H:1V) or flatter, or be retained using a suitably designed shoring system. The soils located beneath the groundwater table should be considered Type 4 soils, requiring unsupported / unshored walls of excavations to be sloped at 3H:1V or flatter to the base of the excavation.

It is expected that some of the excavation spoils may be suitable for reuse as trench and/or pavement subgrade backfill provided they are free of organics and at a moisture content that will permit adequate compaction (may require prior processing such as aeration to lower the moisture content). A final review and approval to reuse any soils should be made at the time of construction.

6.2.2 Service Installation

The materials encountered during this investigation at the anticipated service invert elevations (3m below existing ground surface) typically consists of glacial till (BH-1 and BH-3), silty sand (BH-2) and clayey silt (BH-4) material. As such, normal compacted bedding material, placed in the Class "B" or Class "C" arrangement, is recommended for all underground services. The recommended bedding material is Granular "A" or 19 mm crusher run (angular) stone, as per Ontario Provincial Standard Specifications (OPSS). The minimum recommended bedding thickness for the underground services is 150mm. All bedding materials should be compacted to 98% of their Standard Proctor Maximum Dry Density (SPMDD).

It is recommended that cover backfilling of the underground services be accomplished using Granular "A", sand, or other suitable material as allowed by the Municipality's standards, to a minimum of 300mm above the pipe. Compaction of this material should attain 100% SPMDD. It is expected that some of the excavated soils may be suitable for reuse as trench backfill, conditional upon suitable moisture content (within 2% of optimum), final review and approval by an experienced geotechnical engineer at the time of construction, and regular monitoring and inspection of such reuse throughout construction. Compaction of any native soil in service trenches is recommended to be a minimum of 98% of its SPMDD. The soils observed may require processing (such as aeration) to lower the moisture content to appropriate levels prior to being considered as backfill material.

It is recommended that trench plugs be installed at appropriate locations along the trench alignment to minimize and control any flow of groundwater along the trench bedding and backfill materials. It should be noted that concrete trench plugs for shallower watermain trench are susceptible to differential movement and heaving in relation to surrounding soils, particularly where plugs are located within the frost penetration depth (up to 1.5 to 1.6m). Clay plugs should be used in such instances, utilizing frost tapers to minimize movement within the frost zones.

6.2.3 Foundation Design

Relevant information for final design purposes including proposed final grades, finished floor elevations, and proposed underside of foundations were not available to GHD at the time of writing this report. As such, the recommendations contained in this Foundation Design section must be reviewed by GHD's geotechnical engineers once such development design parameters become available. Structural loading for the proposed residential dwellings may be supported on strip and spread footings. The footings should be placed on the undisturbed, compact to dense (or very stiff to hard) native soils or on engineered fill place directly on the undisturbed, compact to dense (or very stiff to hard) native soils. Table 6.4 summarizes the depths to suitably competent native soil encountered within each borehole.

Table 6.4 Depth to Competent Bearing Native Soil

Borehole	Depth (m) to Competent Native Soil	Borehole	Depth (m) to Competent Native Soil
BH-1	3.0	BH-3	1.6
BH-2	1.5	BH-4	2.4

GHD notes that if pockets of loose/soft soils are encountered at the foundation subgrade level during construction, they must be subexcavated and replaced with engineered fill. For preliminary design purposes, it is recommended that footings constructed on compact to dense native soils or engineered fill be proportioned and designed using the following bearing capacities presented in Table 6.5.

Table 6.5 Preliminary Bearing Pressures for Foundation Design

Parameter	Bearing Pressure			
	Compact to Dense (Very Stiff to Hard) Undisturbed Native Soils	Engineering Fill		
		Rock-based Fill(2)	Granular Fill(3)	Earth Borrow Fill(3)
Factored Bearing Capacity at ULS (1)	130 kPa	210 kPa	170 kPa	130 kPa
Bearing Capacity at SLS	90 kPa	150 kPa	120 kPa	90 kPa

Notes: (1) Resistance factor Φ =0.5 applied to the ULS bearing pressure for design purposes.
(2) At least 1m of Rock-based fill. Quality of material is to be approved prior to use as engineered fill.
(3) At least 0.3m of Granular or Earth Borrow fill. Quality of material is to be approved prior to use as engineered fill.

Any engineered fill upon which foundations are placed must be a minimum thickness corresponding to the notes that accompany the above table. Rock-based fill must be completely encapsulated with suitable filter fabric to minimize any migration of fine-grained particles from surrounding soils into the voids within the rock fill.

The following is recommended for the construction of any engineered fill for the foundations:

1. Remove any and all existing vegetation, topsoil, fill, organics, and organic-bearing soils to the competent, undisturbed native soil from within the area of the proposed engineered fill.
2. The area of the engineered fill should extend horizontally 1m beyond the outside edge of the building foundations and then extend downward at a 1:1 slope to the competent native soil.
3. The base of the engineered fill area must be approved by a member of GHD prior to placement of any fill, to ensure that all unsuitable materials have been removed, that the materials encountered are similar to those observed, and that the subgrade is suitable for the engineered fill.
4. All engineered fill material is to be approved by GHD at the time of construction. Place approved engineered fill, in maximum 300 mm lifts, compacted to 100% of its SPMDD. Any fill material placed under sufficiently wet conditions should consist of an approved, rock-based fill, with the inclusion of appropriate geotextile fabric around the rock-based fill should the rock fill contain enough voids to warrant.
5. Full time testing and inspection of the engineered fill will be required, to ensure compliance with material and compaction specifications.

All exterior foundations and/or foundations in unheated areas, should be founded at least 1.2 m below the final adjacent grade for frost protection. Foundations and walls exposed to frost action should be backfilled with non-frost susceptible granular material, and positive drainage away from the structure should be ensured.

Under no circumstances should the foundations be placed above organic materials, loose, frozen subgrade, construction debris, or within ponded water. Prior to forming, all foundation excavations must be inspected and approved by a member of GHD's geotechnical group. This will ensure that the foundation bearing material has been prepared properly at the foundation subgrade level and that the soils exposed are similar to those encountered during this investigation.

For design purposes this site is conservatively classed as Site Class D for Seismic Site Response, in accordance with the Ontario Building Code.

For drainage purposes, it is recommended that perimeter drains be installed about each structure. The subdrains would serve to drain seepage water that infiltrates the backfill, intersect the groundwater, and help relieve hydrostatic pressures due to high groundwater levels. The drains should consist of a perforated pipe, at least 150 mm in diameter, surrounded by clear, crushed stone and suitable filter protection. The drain should discharge to a positive sump or other permanent frost free outlet.

For foundations constructed in accordance with the foregoing manner, total and differential settlements are estimated to be less than 25mm.

6.2.4 Slab on Grade

GHD understands that the proposed buildings may have basements. The basement floor of the proposed buildings may be constructed as normal slabs-on-grade, on clear stone fill over native, inorganic subsoils, prepared in accordance with Section 6.2.1 of this report. The basements should be constructed with damp-proofing and sub-floor drainage systems. The subfloor drainage must be connected to a frost free outlet to permit water flow away from the buildings. The floor slabs should be formed over a base course consisting of at least 150mm of 19mm angular clear stone material, compacted to a minimum of 100% of its SPMDD. All grade increases or infilling below the clear stone should be constructed in accordance with the engineered fill steps. All clear stone must be surrounded on bottom and sides by appropriate filter fabric to control the migration of fine-grained particles from surrounding soils. All fill placed as engineered fill must be inspected, approved and compaction verified by GHD.

GHD also recommends that under floor drains consisting of 100mm diameter, perforated, filter-wrapped pipe at maximum 3m centres be installed below the clear stone. These pipes should be led into a header placed in the middle of the drainage system. The header should consist of a 150mm diameter, filter-wrapped, perforated pipe. The drainage system should appropriately drain into a positive sump or other permanent frost free outlet.

6.2.5 Basement Retaining Walls

It is recommended that free draining backfill to walls (basement) be provided. Such walls located above the groundwater table may be designed for lateral earth pressures using the following equation:

p = k (w h + q), where:

- the lateral earth pressure in kPa acting on the subsurface wall at depth h;
- k_a = the coefficient of active earth pressure;
  (= 0.3 for walls restrained from the bottom only);
  (= 0.5 for walls restrained at the top and bottom*);
- k_p = the coefficient of passive earth pressure, (= 3.0);
- w = the granular or native soil bulk density in kN/m^3;
  (= 21.0 kN/m^3 for well compacted, OPSS-approved Granular "B");
  (= 20.0 kN/m^3 for native soils);
- h = the depth (in metres) below the exterior grade at which the earth pressure is being calculated; and
- q = the equivalent value of any surcharge (in kN/m^3) acting adjacent to the walls.

(*) This value is recommended for rigid walls retaining compacted backfill.

The recommended value for the coefficient for sliding friction between the soil and the concrete is 0.4. In addition to the above, hydrostatic forces must be taken into account in the design where the walls extend below the groundwater table. Also, any additional surcharge loading that will influence the wall must be taken into account in its design.

6.2.6 Stormwater Management Pond Design

Recommendations provided in this report are for preliminary design purposes and do not include an analysis of the proposed SWM pond berm's stability. GHD can perform such stability analyses once overall grading plans for the Site are finalized. GHD understands that a SWM pond is proposed for this development and is to be located in the area of BH-4, as shown on Figure 4. The native soils encountered in borehole BH-4 consisted of layers of silty sand and then clayey silt. The hydraulic conductivity of the clayey silt is expected to be on the order of 10^{-5} to 10^{-6} cm/sec based on hydraulic conductivity testing and gradation results of representative samples. It is noted, however, that slight variations in the soil stratigraphy may cause variations in the permeability of the soil in both vertical and horizontal orientations.

Based on the soils observed, and the anticipated base elevations, it appears that construction of the SWM pond in this area is feasible. In general, excavation of the soils for the SWM pond are expected to be straightforward, provided that appropriate measures are taken during construction to minimize any overland or near-surficial flow of water into the area. Groundwater seepage and surficial water inflow into the open SWM pond excavation is expected. However, this is generally expected to be controlled by pumping from within the excavation, along with further measures if required, including up-gradient cutoff trenching with appropriate drainage out-letting.

It is recommended that the SWM pond subgrade surfaces be proof rolled, and a representative of GHD approve the subgrade prior to construction of the berms. Construction of the berms may utilize excess site till or clayey silt soils having a hydraulic conductivity of 10^{-5} cm/sec or lower. Such operations should place with soil in lifts no thicker than 150mm prior to compaction, and compacted to at least 95% SPMDD.

It is our professional opinion that the base of the SWM pond be protected with an appropriate liner consisting of the native, clayey silt soils in a re-compacted state. An inspection of the excavated and exposed SWM pond surfaces should be performed at the time of construction, to assess where areas of increased hydraulic conductivity are present within the exposed soils, so that such areas may be lined with a more suitable (i.e. less hydraulically conductive) material. It is expected that this can be accomplished using the clayey silt soil (as encountered in boreholes BH-3 and BH-4), coordinated with geotechnical inspection and final approval of materials. It is recommended that construction of such approved material be at least 600mm thick and must be placed under full time geotechnical inspections.

For the purpose of the proposed SWM pond, the soils observed should be stable from slip circle failure if sloped at 3 horizontal to 1 vertical (3H:1V) or flatter in the long term both above and below the water table. Between the stable water level and the expected high water level, it is recommended that the slopes be lessened to 4H:1V (or flatter) to guard against erosion by wavelet action. The till material will require vegetative root mass (or otherwise suitable erosion protection) to minimize erosional forces on exposed slopes.

Slopes and berms of the SWM pond should be constructed so as to reduce or eliminate the effects of surficial erosion. Features to do so may include slope vegetation, installation of erosion or gabion mats, rip rap, and/or other acceptable stabilizing features. It is recommended that a regular maintenance program for the SWM pond include monitoring of it for any potential slope erosion, degradation, or otherwise undesirable structural conditions. Should any such conditions become evident, immediate mitigative actions must be performed.

6.2.7 Pavement Design

Based on the results of this investigation, GHD recommends the following procedures be implemented to prepare the proposed asphalt paved areas for construction.

1. Remove all asphalt, topsoil, fill, organics, organic-bearing materials and other deleterious materials from the planned pavement areas full depth.
2. Inspect and proof roll the subgrade for the purpose of detecting possible zones of overly wet or soft subgrade. Any deleterious areas thus delineated should be replaced with approved granular material compacted to a minimum of 98 % of its SPMDD.
3. If further stabilization of the pavement subgrade is deemed necessary, either subexcavate to suitable soils and backfill with approved granular material compacted to 98% SPMDD, or place woven geotextile such as Terrafix 200W or Mirafi HP270 on the exposed pavement subgrade surface, after its approval and prior to placement of any subsequent fill.
4. Contour the subgrade surface to prevent ponding of water during the construction and to promote rapid drainage of the sub-base and base course materials.
5. To maximize drainage potential, 150 mm diameter perforated pipe subdrains should be installed below any curb lines. The pipe should be encased in filter fabric and surrounded by clear stone aggregate. It is recommended that the subdrains discharge to a suitable, frost-free outlet.
6. Construct transitions between varying depths of granular base materials at a rate of 1:25 minimum.

The subgrade materials in the proposed pavement areas will generally consist of silty sand, depending on the proposed grading. The frost susceptibility of this soil is assessed as being generally moderate to high. The following minimum flexible pavement structure is recommended for the paved access roads and laneways.

Table 6.6 Pavement Structure

Profile	Material	Thickness (mm)		In Conformance with OPSS Form
		Light Duty	Heavy Duty	
Asphalt Surface	H.L.3	40	40	1150
Asphalt Base	H.L.8	50	50	
Granular Base	Granular "A"	150	150	1010
Granular Subbase	Granular "B"	300	450	

The following steps are recommended for optimum construction of the paved areas.

1. The Granular "A" and "B" courses should be compacted to a minimum 100 percent of their respective SPMDD's.
2. All asphaltic concrete courses should be placed, spread and compacted conforming to OPSS Form 310 or equivalent. All asphaltic concrete should be compacted to a minimum 92.0 percent of their respective laboratory Maximum Relative Densities (MRD's).
3. Adequate drainage should be provided to ensure satisfactory pavement performance.

It is recommended that all fill material be placed in uniform lifts not exceeding 200mm in thickness before compaction. It is suggested that all granular material used as fill should have an in-situ moisture content within 2 percent of their optimum moisture content. All granular materials should be compacted to 100 percent SPMDD. Granular materials should consist of Granular "A" and "B" conforming to the requirements of OPSS Form 1010 or equivalent. The performance of the pavement structure is highly dependent upon the subgrade support conditions. Stringent construction control procedures should be maintained to ensure that uniform subgrade moisture and density conditions are achieved as much as practically possible.

GHD notes that the recommended pavement structures are for the end use of the project. The most severe loading conditions on pavement areas and the subgrade may occur during construction. As such, during construction of the project the recommended granular depths may not be sufficient to support loadings encountered. Consequently, special provisions such as restricted lanes, half-loads during paving, etc. may be required, especially if construction is carried out during unfavorable weather.

6.2.8 General Recommendations

Test Pit During Tendering

It is strongly recommended that test pits be excavated at representative locations of this Site during the tendering phase, with mandatory attendance of interested contractors. This will allow them to make their own assessments of the groundwater and soil conditions at the Site and how these will affect their proposed construction methods, techniques and schedules.

Subsoil Sensitivity

The native subsoils are susceptible to strength loss or deformation if saturated or disturbed by construction traffic. Therefore, where the subgrade consists of approved soil, care must be taken to protect the exposed subgrade from excess moisture and from construction traffic.

Winter Construction

The subsoils encountered across the site are frost-susceptible and freezing conditions could cause problems for the following reasons.

1. During winter construction, exposed surfaces intended to support foundations must be protected against freezing by means of loose straw and tarpaulins, heating, etc.
2. Care must be exercised so that any sidewalks and/or asphalt pavements do not interfere with the opening of doors during the winter when the soils are subject to frost heave. This problem may be minimized by any one of several means, such as keeping the doors well above outside grade, installing structural slabs at the doors, and by using well-graded backfill and positive drainage, etc.
3. Because of the frost heave potential of the soils during winter, it is recommended that the trenches for exterior underground services be excavated with shallow transition slopes in order to minimize the abrupt change in density between the granular backfill, which is relatively non-frost susceptible, and the more frost-susceptible native soils.

Design Review and Inspection

Due to the preliminary nature of the design details at the time of this report, we recommend that our firm be retained to review the foundation design and grading proposals when they are available. Geotechnical inspection and compaction testing must be carried out to ensure compliance with our recommendations.

6.3 Summary Conclusions

In summary, the proposed development area is generally comprised of topsoil underlain by a thin layer of silty sand and then native glacial till and/or clayey silt. Groundwater seepage was observed in all four (4) boreholes at depths ranging from 0.9m (BH-4) to 4.6m (BH-3) during the drilling operations. There will not be significant constraints for the proposed residential development from the seasonal variations of groundwater as any seepage water should be handled with appropriate engineering techniques. It is expected that groundwater will generally be below the depth of the future development, although seepage may be encountered in deeper excavations or foundations. If short-term pumping of groundwater at volumes greater than 50,000 L/day and less than 400,000L/day is required during the construction stage, the EASR must be completed.

There are minor impacts expected to groundwater and surface water as a result of the future development provided that appropriate planning (i.e. incorporation of LIDs as supported by the water balance calculations), mitigation measures and proper construction techniques are considered. From a geotechnical perspective, the Site is suitable for construction of the proposed development including the planned two to three-storey residential buildings, associated servicing and paved access road. Detailed recommendations are provided in previous sections of this report.

In summary, the proposed residential development is suitable from both a hydrogeologic and geotechnical perspective.

The following Statement of Limitations should be read carefully and is an integral part of this report. Should any questions arise regarding any aspect of our report, please contact our office.

Sincerely,

David Workman, P.Geo.

Nyle McIlveen, P.Eng.

/dw/nm

7. References

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8. Statement of Limitations

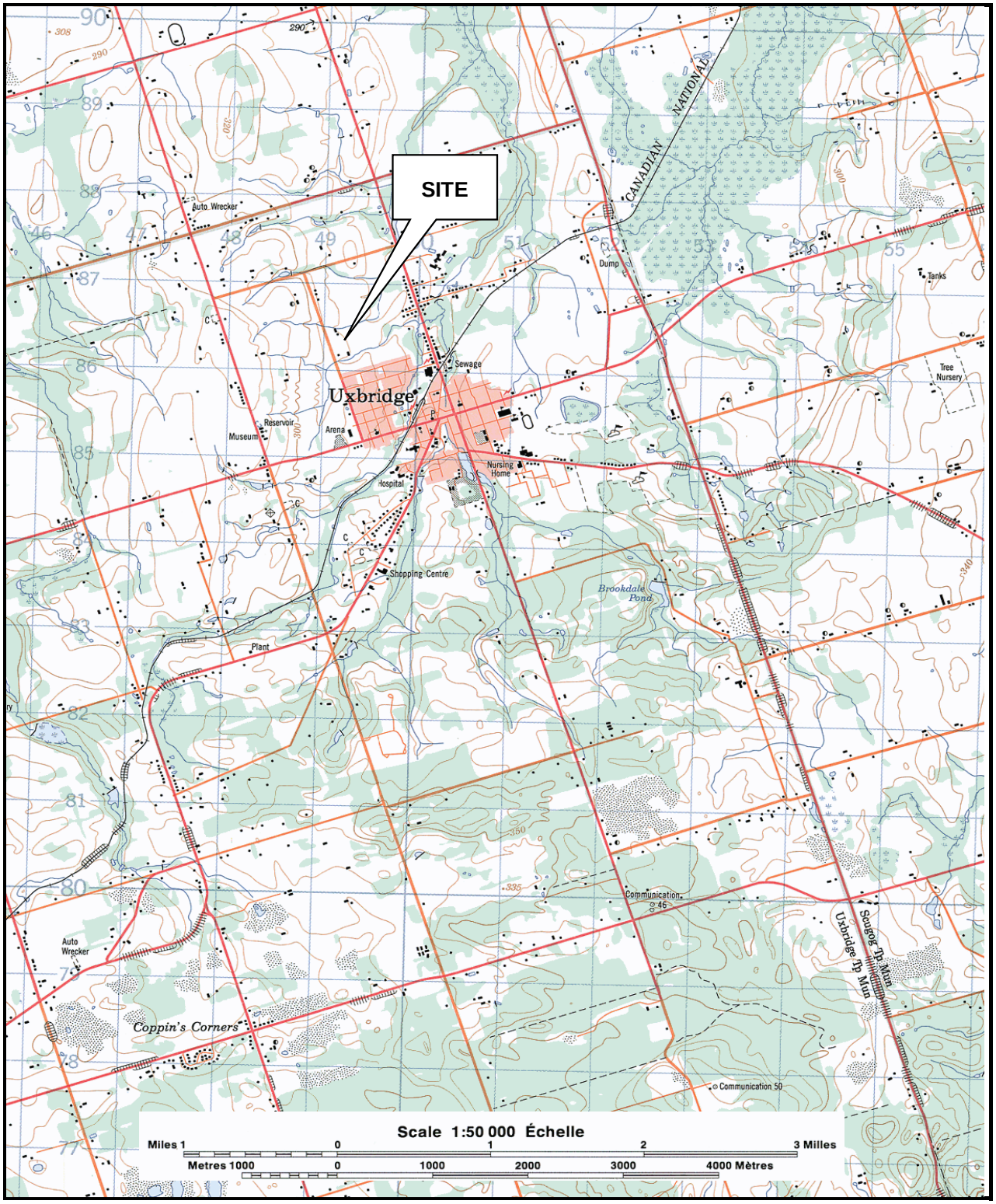
This report is intended solely for Mason Homes Limited in assessing the geotechnical and hydrogeologic aspects of land located along the east side of Centre Road approximately 0.2km north of Oakside Drive in Uxbridge, Ontario and is prohibited for use by others without GHD's prior written consent. This report is considered GHD's professional work product and shall remain the sole property of GHD. Any unauthorized reuse, redistribution of or reliance on the report shall be at the Client and recipient's sole risk, without liability to GHD. Client shall defend, indemnify and hold GHD harmless from any liability arising from or related to Client's unauthorized distribution of the report. No portion of this report may be used as a separate entity; it is to be read in its entirety and shall include all supporting drawings and appendices.

The recommendations made in this report are in accordance with our present understanding of the project, the current site use, ground surface elevations and conditions, and are based on the work scope approved by the Client and described in the report. The services were performed in a manner consistent with that level of care and skill ordinarily exercised by members of geotechnical and hydrogeological engineering professions currently practicing under similar conditions in the same locality. No other representations, and no warranties or representations of any kind, either expressed or implied, are made. Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties.

All details of design and construction are rarely known at the time of completion of a geotechnical or hydrogeological study. The recommendations and comments made in the study report are based on our subsurface investigation and resulting understanding of the project, as defined at the time of the study. We should be retained to review our recommendations when the drawings and specifications are complete. Without this review, GHD will not be liable for any misunderstanding of our recommendations or their application and adaptation into the final design.

It is important to emphasize that a soil investigation is, in fact, a random sampling of a site and the comments included in this report are based on the results obtained at the test hole locations only. The subsurface conditions confirmed at the test hole locations may vary at other locations. The subsurface conditions can also be significantly modified by the construction activities on site (ex. excavation, dewatering and drainage, blasting, pile driving, etc.). These conditions can also be modified by exposure of soils or bedrock to humidity, dry periods or frost. Soil and groundwater conditions between and beyond the test locations may differ both horizontally and vertically from those encountered at the test locations and conditions may become apparent during construction which could not be detected or anticipated at the time of our assessment. Should any conditions at the site be encountered which differ from those found at the test locations, we request that we be notified immediately in order to permit a reassessment of our recommendations. If changed conditions are identified during construction, no matter how minor, the recommendations in this report shall be considered invalid until sufficient review and written assessment of said conditions by GHD is completed.

Enclosures



Base map compiled from Energy, Mines and Resources Canada Map 31 D/03 published 1994. Information current as of 1989.

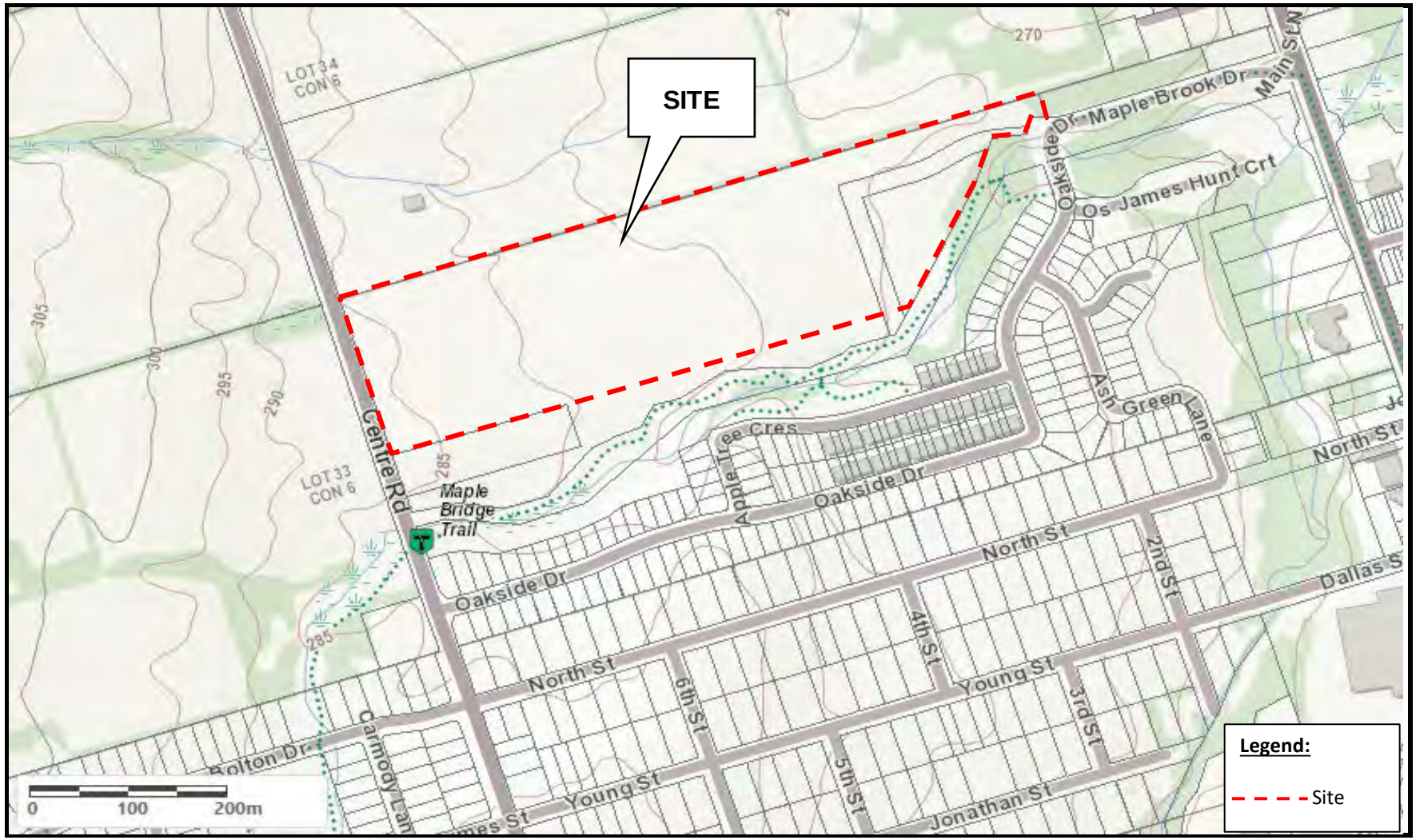
Scale:
1:50000
Coordinate System
NAD 1983 UTM
Zone 17

Geotechnical and Hydrogeologic Investigation
Mason Homes Limited
Proposed Residential Development
Centre Road Phase 2, Uxbridge

11223795-01
March, 2021

Vicinity Plan

FIGURE 1



Source: Ministry of Natural Resources and Forestry. © Queen's Printer for Ontario, 2020.

Scale:
Refer to Scale Bar
Coordinate System:
NAD 1983 UTM Zone 17

Geotechnical and Hydrogeologic Investigation
Mason Homes Limited
Proposed Residential Development
Centre Road Phase 2, Uxbridge

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Site Plan

FIGURE 2

Source: Ministry of Natural Resources and Forestry. © Queen's Printer for Ontario, 2020.

Scale:
Refer to Scale Bar
Coordinate System:
NAD 1983 UTM Zone 17

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Mason Homes Limited
Proposed Residential Development
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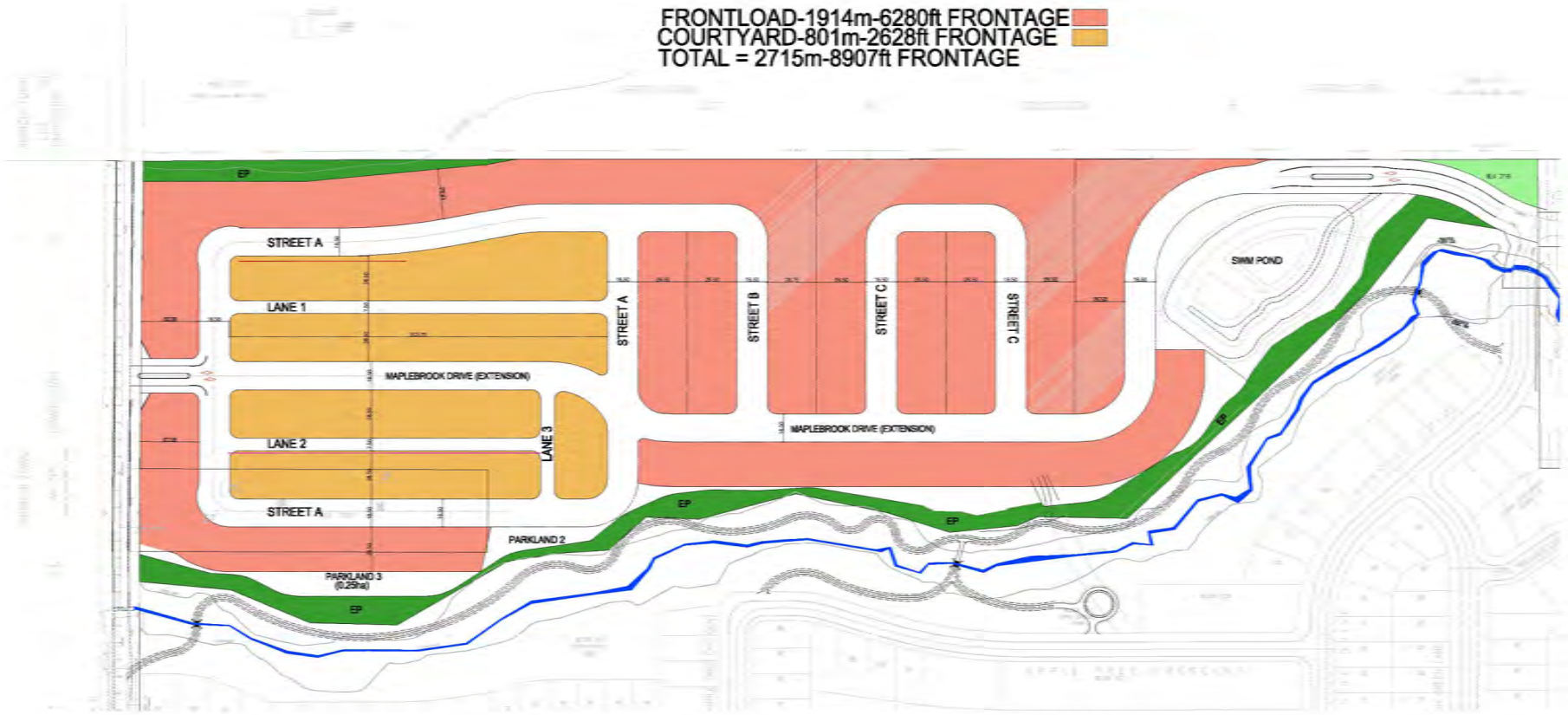
Plot Plan

FIGURE 3



Source: Concept Plan provided by Mason Homes

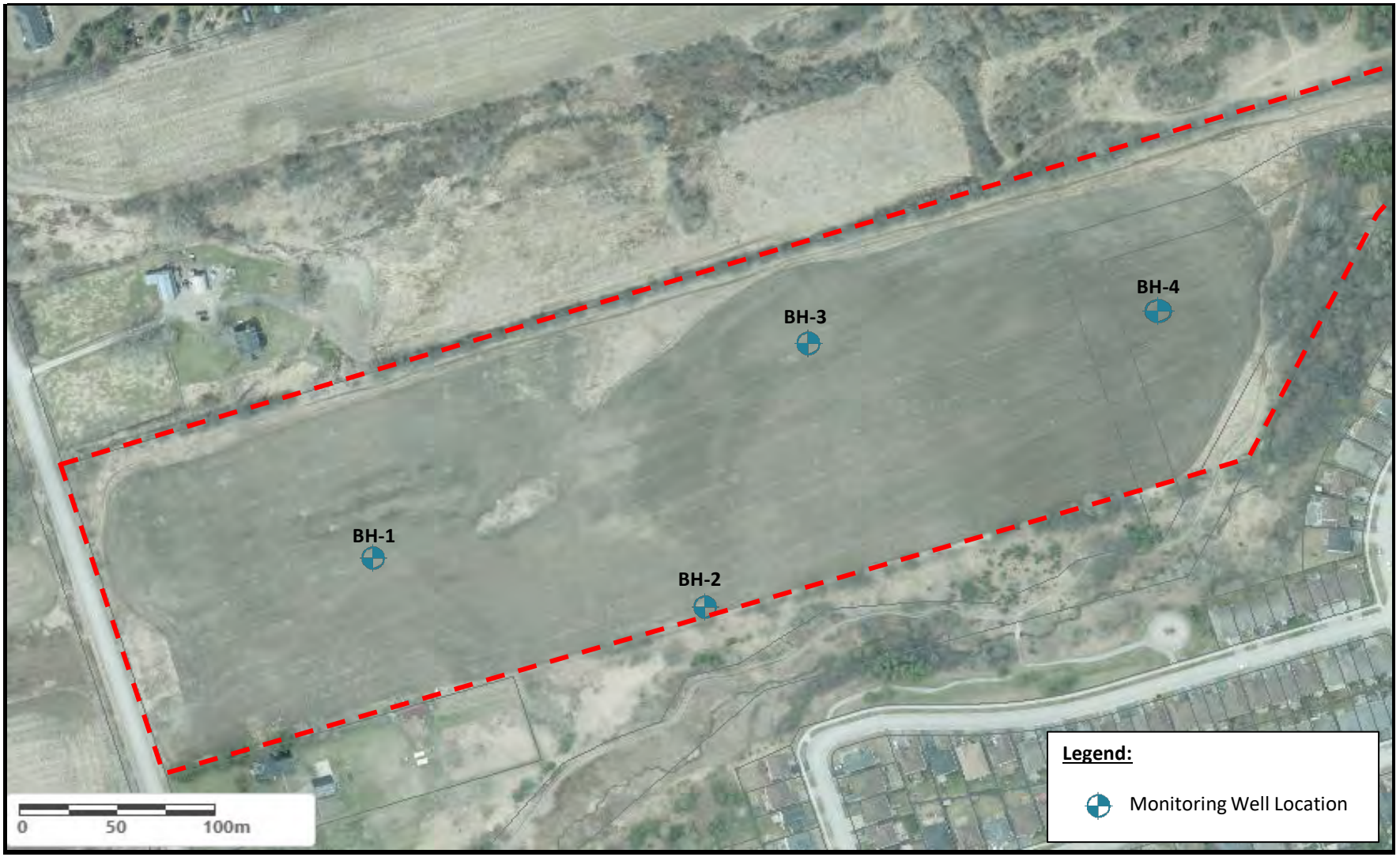
Scale:
Not Available

Geotechnical and Hydrogeologic Investigation
Mason Homes Limited
Proposed Residential Development
Centre Road Phase 2, Uxbridge

11223795-01
March, 2021

Concept Plan

FIGURE 4



Source: Ministry of Natural Resources and Forestry. © Queen's Printer for Ontario, 2020.

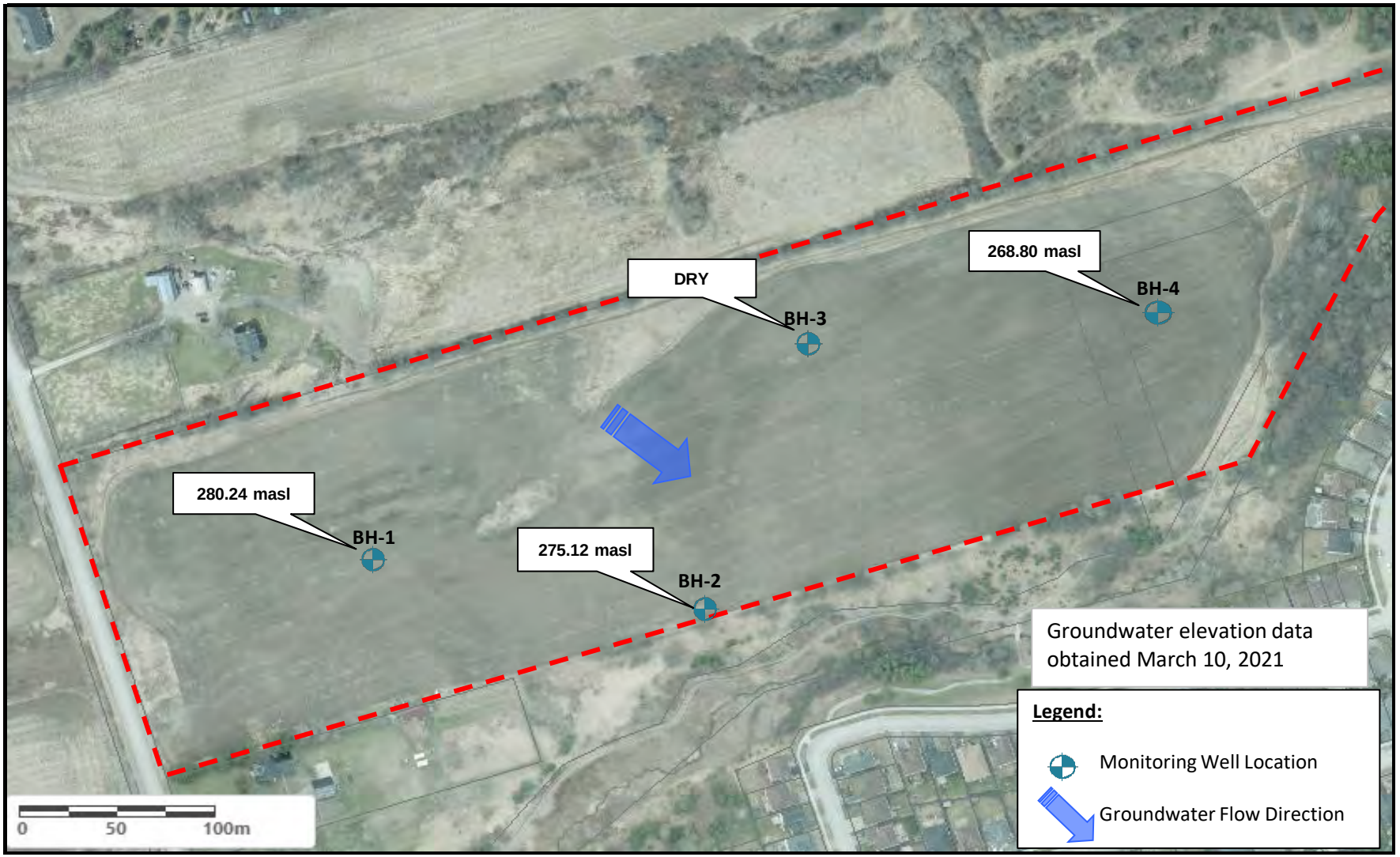
Scale:
Refer to Scale Bar
Coordinate System:
NAD 1983 UTM Zone 17

Geotechnical and Hydrogeologic Investigation
Mason Homes Limited
Proposed Residential Development
Centre Road Phase 2, Uxbridge

11223795-01
March, 2021

Test Hole Plan

FIGURE 5



Source: Ministry of Natural Resources and Forestry. © Queen's Printer for Ontario, 2020. Elevation Data obtained by GHD using Leica RTX1250X GPS unit.

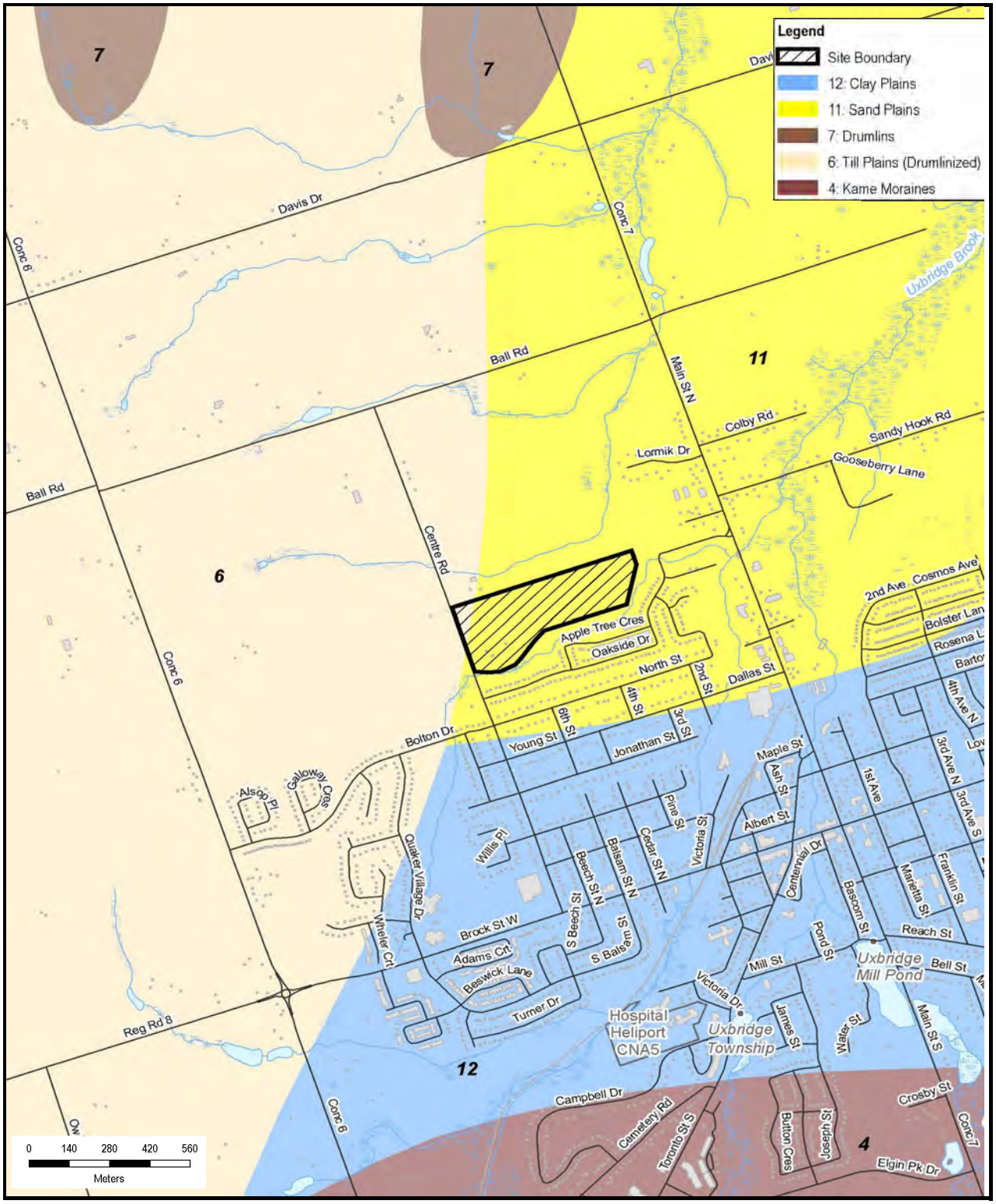
Scale:
Refer to Scale Bar
Coordinate System:
NAD 1983 UTM Zone 17

Geotechnical and Hydrogeologic Investigation
Mason Homes Limited
Proposed Residential Development
Centre Road Phase 2, Uxbridge

11223795-01
March, 2021

Groundwater Elevations

FIGURE 6



Data source: MNRF NRVIS, 2018. From Ontario Ministry of Natural Resources and Forestyry, © Queen's Printer 2020; Ontario Geological Survey

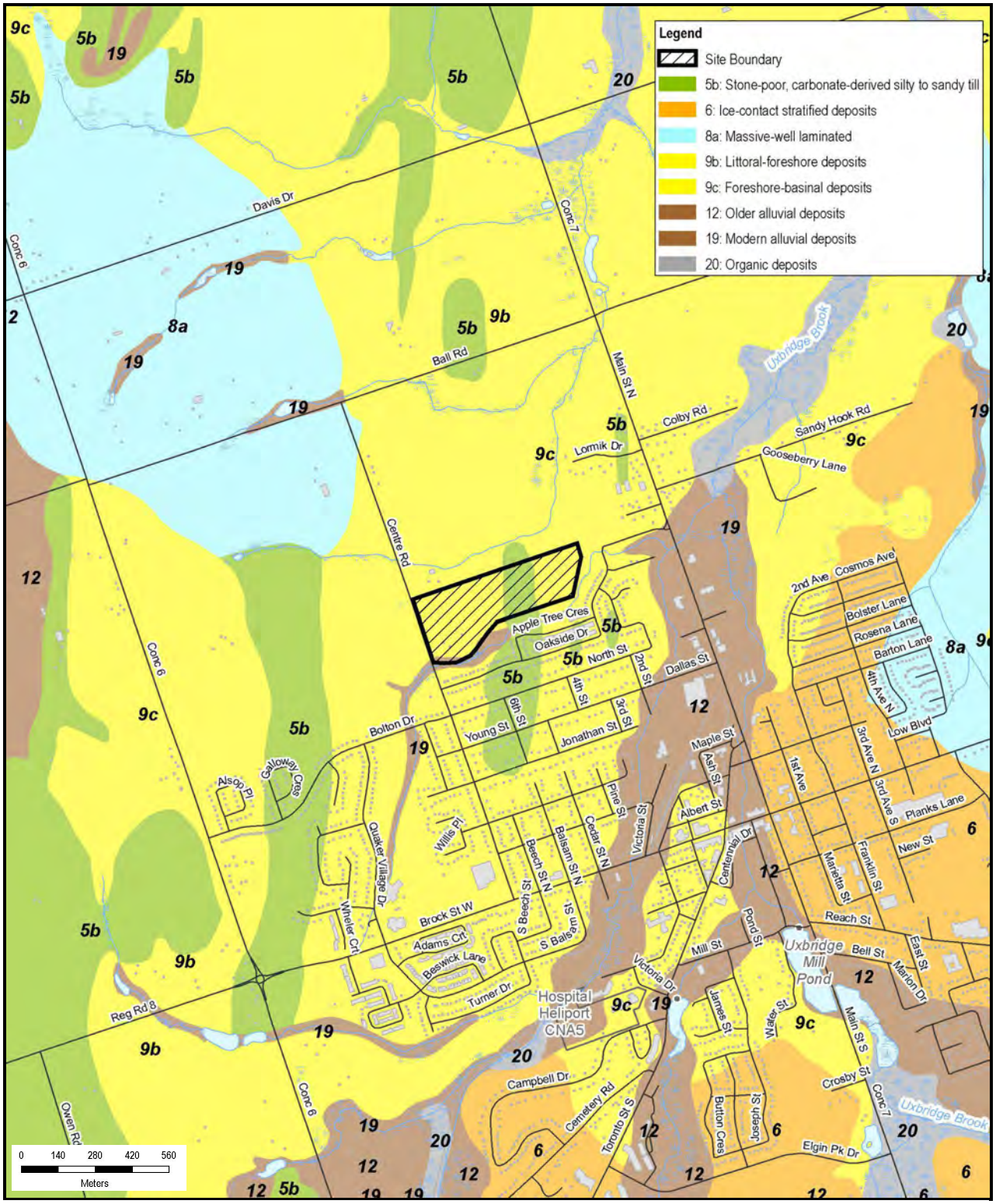
Scale:
Refer to Scale Bar
Coordinate System:
NAD 1983 UTM Zone 17

Geotechnical and Hydrogeologic Investigation
Mason Homes Limited
Proposed Residential Development
Centre Road Phase 2, Uxbridge

11223795-01
March, 2021

Physiography

FIGURE 7



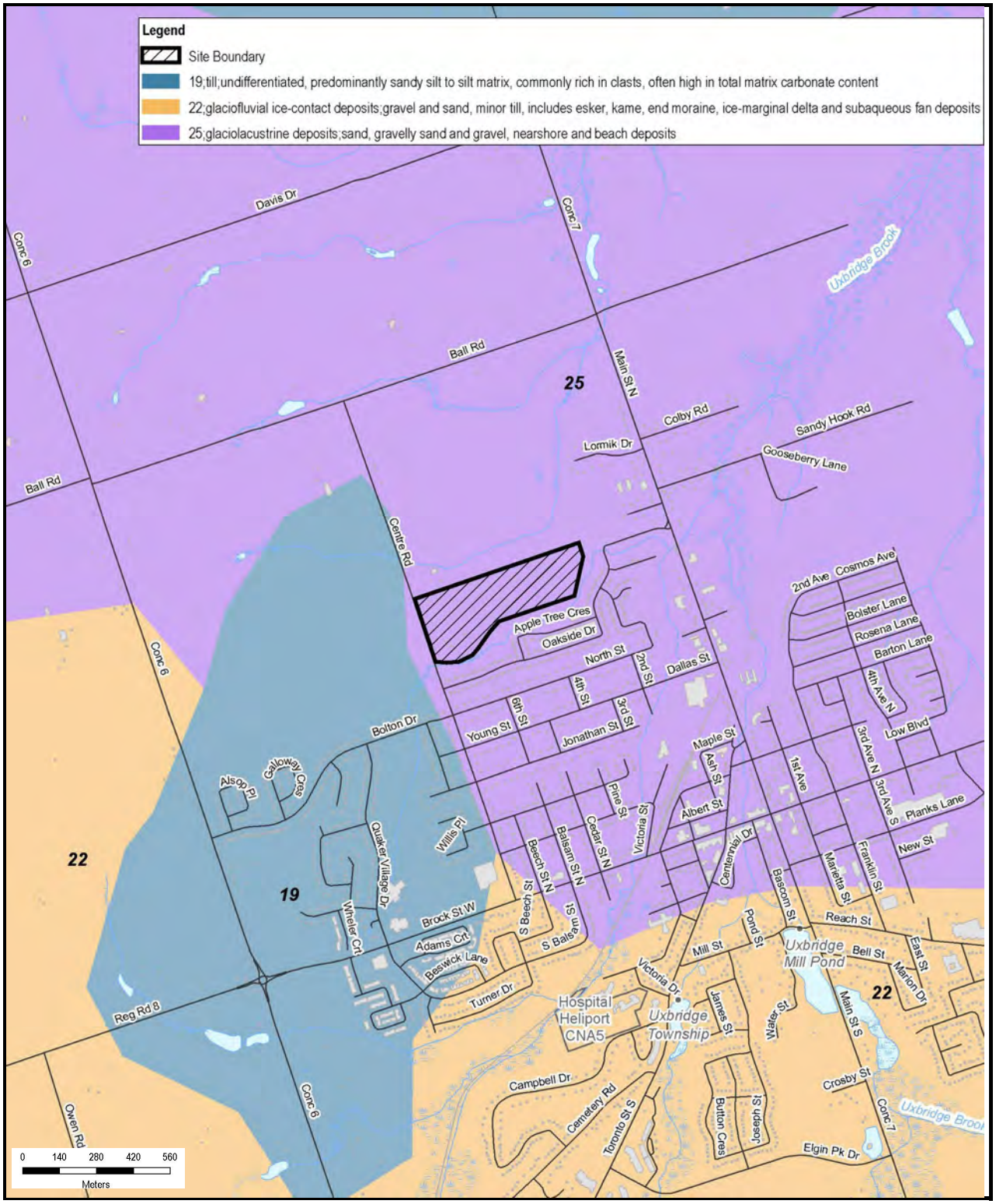
Data source: MNRF NRVIS, 2018. From Ontario Ministry of Natural Resources and Forestyry, © Queen's Printer 2020; Ontario Geological Survey

Scale:
Refer to Scale Bar
Coordinate System:
NAD 1983 UTM Zone 17

Geotechnical and Hydrogeologic Investigation
Mason Homes Limited
Proposed Residential Development
Centre Road Phase 2, Uxbridge

11223795-01
March, 2021

Surficial Geology FIGURE 8



Data source: MNRF NRVIS, 2018. From Ontario Ministry of Natural Resources and Forestyry, © Queen's Printer 2020; Ontario Geological Survey

Scale:
Refer to Scale Bar
Coordinate System:
NAD 1983 UTM Zone 17

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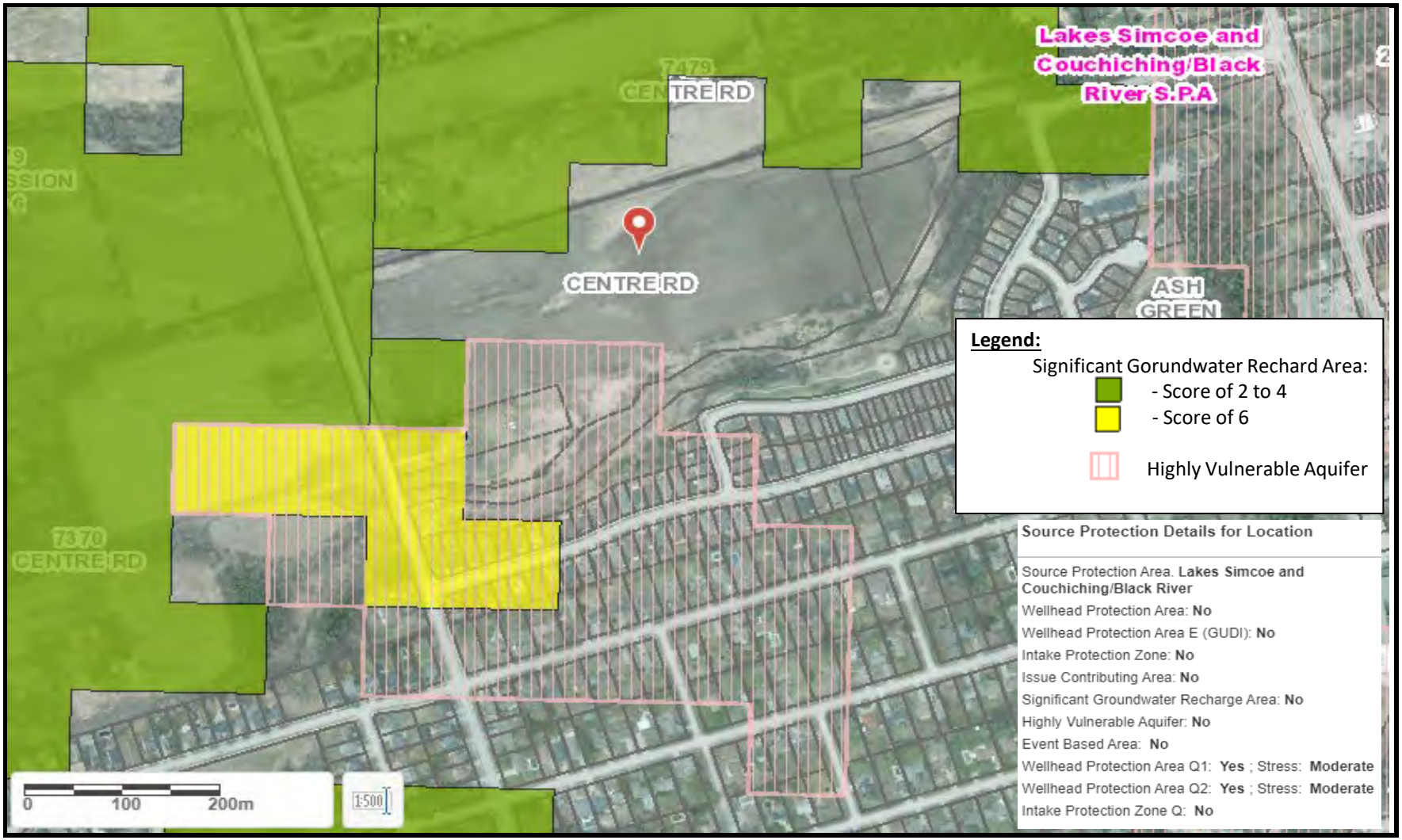
Mason Homes Limited
Proposed Residential Development
Centre Road Phase 2, Uxbridge

11223795-01
March, 2021

Quaternary Geology

FIGURE 9



Source: Ministry of the Environment, Conservation and Parks. Source Protection Information Atlas, February 4, 2021. © Queen's Printer for Ontario, 2021.

Scale:
Refer to Scale Bar
Coordinate System:
NAD 1983 UTM Zone 17

Geotechnical and Hydrogeologic Investigation
Mason Homes Limited
Proposed Residential Development
Centre Road Phase 2, Uxbridge

11223795-01
March, 2021

Sourcewater Protection Map

FIGURE 10

Appendix A
Soil Exploration Data

REFERENCE No.: 11223795-01 ENCLOSURE No.: A-1

BOREHOLE REPORT

BOREHOLE No.: BH-1
ELEVATION: 281.741 m
Page: 1 of 1

CLIENT: Mason Homes Limited
PROJECT: Geotechnical and Hydrogeologic Investigation, Centre Road, Uxbridge, ON
LOGGED BY: W. Moore DATE: 1 March 2021
DRILLING COMPANY: Landshark Drilling METHOD: Solid Stem Auger and Split Spoons
NOTES: Elevation data obtained using Leica RTX1250X GPS unit.

LEGEND
- SS - SPLIT SPOON
- AS - AUGER SAMPLE
- ST - SHELBY TUBE
- CS - CORE SAMPLE
- ▼ - WATER LEVEL

Depth ft	Depth m	m Below Existing Grade	Stratigraphy	DESCRIPTION OF SOIL AND BEDROCK	Type and Number	Recovery %	Moisture Content %	Blows per 6 in. / 15 cm	Penetration Index N	COMMENTS
		0.0		GROUND SURFACE						
		0.2		**TOPSOIL** (178mm)						
1				**SILTY SAND** - Light Brown Silty Sand, trace Gravel, Moist, Compact	SS-1	75	8	5 13 9 10	22	
2										
3	1.0				SS-2	100	11	10 9 6 5	15	
4										
5		1.5		**TILL** - Brown Silty Sand, little Gravel, Moist, Compact	SS-3	100	10	7 16 7 7	23	WL - 1.5 m 3/10/2021
6	2.0									
7		2.3		Trace Clay, Slight Seepage	SS-4	100	9	7 5 8 10	13	Groundwater first encoutered at 2.3m Grain Size Analysis: SS-4 17% Gravel 48% Sand 35% Silt and Clay 27% Between 5-75um
8										
9										
10	3.0	3.0		Dense	SS-5	30	10	10 16 14 10	30	
11										
12										
13	4.0									
14										
15		4.6		Very Dense	SS-6	50	12	34 50=150mm	100+	51mm diameter monitoring well installed to 4.6m
16	5.0									
17										
18										
19										
20	6.0	6.1			SS-7	20	16	50=76mm	100+	Borehole open to 6.1m upon completion
		6.2		**SAND** - Brown Coarse Sand, trace Gravel, Wet, Very Dense						
21				END OF BOREHOLE						
22										
23	7.0									
24										

Shear test (Cu) △ Field
Sensitivity (S) □ Lab
○ Water content (%)
W_p W_l Atterberg limits (%)
× "N" Value (blows / 0.3 m)
◆ RQD
◎ CONE
10 20 30 40 50 60 70 80 90

— 1.10 m
— 1.07 m

BOREHOLE LOG GEOTECH 11223795-01-FLD-21-03-01; BH LOGS.GPJ GEOLOGIC.GDT 16/3/21

REFERENCE No.: 11223795-01 ENCLOSURE No.: A-2

BOREHOLE No.: BH-2
ELEVATION: 278.420 m

BOREHOLE REPORT

Page: 1 of 1

CLIENT: Mason Homes Limited
PROJECT: Geotechnical and Hydrogeologic Investigation, Centre Road, Uxbridge, ON
LOGGED BY: W. Moore DATE: 1 March 2021
DRILLING COMPANY: Landshark Drilling METHOD: Solid Stem Auger and Split Spoons
NOTES: Elevation data obtained using Leica RTX1250X GPS unit.

LEGEND

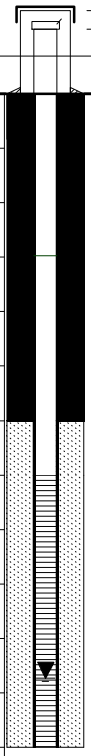
- SS - SPLIT SPOON
- AS - AUGER SAMPLE
- ST - SHELBY TUBE
- CS - CORE SAMPLE
- ▼ - WATER LEVEL

Depth (ft)	Depth (m)	m Below Existing Grade	Stratigraphy	DESCRIPTION OF SOIL AND BEDROCK	Type and Number	Recovery %	Moisture Content %	Blows per 6 in. / 15 cm	Penetration Index N
		0.0		GROUND SURFACE					
		0.2		**TOPSOIL** (178mm)					
1				**SILTY SAND** - Brown Silty Sand, trace Organics, Moist, Loose	SS-1	60	22	1 2 6 22	8
2		0.8							
3	1.0			**TILL** - Brown Silty Sand, little Gravel, Moist, Compact	SS-2	80	10	17 12 12 16	24
4									
5		1.5		Dense					
6	2.0				SS-3	100	9	18 20 12 13	32
7									
8					SS-4	80	8	32 20 22	42
9									
10	3.0	3.0		**SAND** - Light Brown Sand, some Silt, trace Gravel, Wet, Compact	SS-5	100	10	18 12 12 14	24
11									
12									
13	4.0								
14									
15		4.6		Very dense	SS-6	50	13	36 50=152mm	100+
16		4.9		**TILL** - Light Brown SIlty Sand, little Gravel, Moist, Very Dense					
17	5.0								
18									
19									
20	6.0				SS-7	100	11	50=152mm	100+
21		6.2		END OF BOREHOLE					
22									
23	7.0								
24									

Shear test (Cu) △ Field
Sensitivity (S) □ Lab
○ Water content (%)
W_p W_l Atterberg limits (%)
× "N" Value (blows / 0.3 m) ◆ RQD ◎ CONE

10 20 30 40 50 60 70 80 90

COMMENTS



Groundwater first encountered at 3.0m

WL - 3.3 m 3/10/2021

Grain Size Analysis: SS-5
9% Gravel
62% Sand
29% Clay & SIlt

51mm diameter monitoring well installed to 3.7m

Borehole open to 6.1m upon completion

BOREHOLE LOG GEOTECH 11223795-01-FLD-21-03-01; BH LOGS.GPJ GEOLOGIC.GDT 16/3/21

REFERENCE No.: 11223795-01 ENCLOSURE No.: A-3

BOREHOLE No.: BH-3
ELEVATION: 275.951 m

BOREHOLE REPORT

Page: 1 of 1

CLIENT: Mason Homes Limited
PROJECT: Geotechnical and Hydrogeologic Investigation, Centre Road, Uxbridge, ON
LOGGED BY: W. Moore DATE: 1 March 2021
DRILLING COMPANY: Landshark Drilling METHOD: Solid Stem Auger and Split Spoons
NOTES: Elevation data obtained using Leica RTX1250X GPS unit.

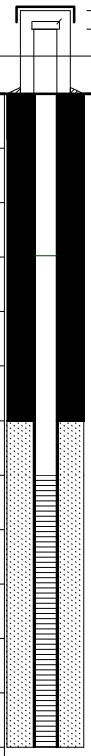
LEGEND

- SS - SPLIT SPOON
- AS - AUGER SAMPLE
- ST - SHELBY TUBE
- CS - CORE SAMPLE
- ▼ - WATER LEVEL

Depth (ft)	Depth (m)	m Below Existing Grade	Stratigraphy	DESCRIPTION OF SOIL AND BEDROCK	Type and Number	Recovery %	Moisture Content %	Blows per 6 in. / 15 cm	Penetration Index N
		0.0		GROUND SURFACE					
		0.2		**TOPSOIL** (152mm)					
1				**SILTY SAND** - Brown Silty Sand, Moist, Loose	SS-1	50	20	4 2 2 2	4
2									
3	1.0				SS-2	50	27	1 2 7 8	9
4									
5		1.5		**TILL** - Brown Silty Sand, little Gravel, Moist, Dense					
6					SS-3	25	13	9 19 24 20	43
7	2.0								
		2.3		Compact					
8					SS-4	75	10	12 11 7	18
9									
10	3.0								
11					SS-5	80	10	7 9 10 10	19
12									
13	4.0								
14									
15		4.6		**CLAYEY SILT** - Grey Clayey Silt, some Sand, trace Gravel, Wet, Hard	SS-6	25	15	11 28 48	76
16									
	5.0								
17									
18									
19									
	6.0								
20		6.1		**TILL** - Light Brown Silty Sand, little Gravel, Moist, Very Dense					
21					SS-7	50	8	33 36 50=102mm	100+
22		6.7		END OF BOREHOLE					
23	7.0								
24									

Shear test (Cu) △ Field
Sensitivity (S) □ Lab
○ Water content (%)
W_p W_l Atterberg limits (%)
× "N" Value (blows / 0.3 m) ◆ RQD ◎ CONE

10 20 30 40 50 60 70 80 90



COMMENTS

WL - dry
3/10/2021

51mm diameter monitoring well installed to 3.7m

Groundwater first encountered at 4.6m
Grain Size Analysis: SS-6
6% Gravel
26% Sand
68% Silt and Clay
56% Between 5-75um
Atterberg Limits SS-6:
LL = 19%
PI = 6%

Borehole open to 6.1m upon completion

REFERENCE No.: 11223795-01 ENCLOSURE No.: A-4

BOREHOLE No.: BH-4
ELEVATION: 269.696 m

BOREHOLE REPORT

Page: 1 of 1

CLIENT: Mason Homes Limited
PROJECT: Geotechnical and Hydrogeologic Investigation, Centre Road, Uxbridge, ON
LOGGED BY: W. Moore DATE: 1 March 2021
DRILLING COMPANY: Landshark Drilling METHOD: Solid Stem Auger and Split Spoons
NOTES: Elevation data obtained using Leica RTX1250X GPS unit.

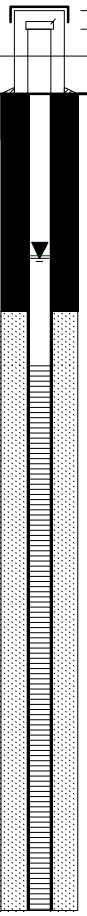
LEGEND

- SS - SPLIT SPOON
- AS - AUGER SAMPLE
- ST - SHELBY TUBE
- CS - CORE SAMPLE
- ▼ - WATER LEVEL

Depth (ft)	Depth (m)	m Below Existing Grade	Stratigraphy	DESCRIPTION OF SOIL AND BEDROCK	Type and Number	Recovery %	Moisture Content %	Blows per 6 in. / 15 cm	Penetration Index N
		0.0		GROUND SURFACE					
		0.1		**TOPSOIL** (127mm)					
1				**SILTY SAND** - Dark Brown Silty Sand, trace Organics, Moist, Very Loose	SS-1A	60	35	1 1 2 4	3
2		0.5		Brown, Inorganic, Trace Gravel, Compact	SS-1B		25		
3	1.0	0.9		Seepage	SS-2	75	20	5 6 4 10	10
5		1.5		Loose	SS-3	80	29	7 2 6 8	8
6	2.0								
7		2.3		**CLAYEY SILT** - Grey Clayey Silt trace Sand, trace Gravel, Wet, Very Stiff	SS-4	50	25	4 10 11 12	21
10	3.0				SS-5	60	22	6 10 14 14	24
15	4.6			Stiff	SS-6	100	24	3 5 7 6	12
16	5.0								
20	6.0	6.1		Firm	SS-7	100	27	4 4 4 6	8
22		6.7		END OF BOREHOLE					
23	7.0								

Shear test (Cu) △ Field
Sensitivity (S) □ Lab
○ Water content (%)
Atterberg limits (%) W_p W_l
× "N" Value (blows / 0.3 m)
◆ RQD
◎ CONE

10 20 30 40 50 60 70 80 90



COMMENTS

WL - 0.9 m 3/10/2021

Groundwater first encountered at 0.91m
Borehole caving at 1.5m
Grain Size Analysis: SS-3
3% Gravel
41% Sand
56% Clay and Silt

Grain Size Analysis: SS-5
3% Gravel
4% Sand
93% Silt and Clay
58% Between 5-75um
Atterberg Limits SS-5:
LL = 30%
PI = 14%

51mm diameter monitoring well installed to 4.6m

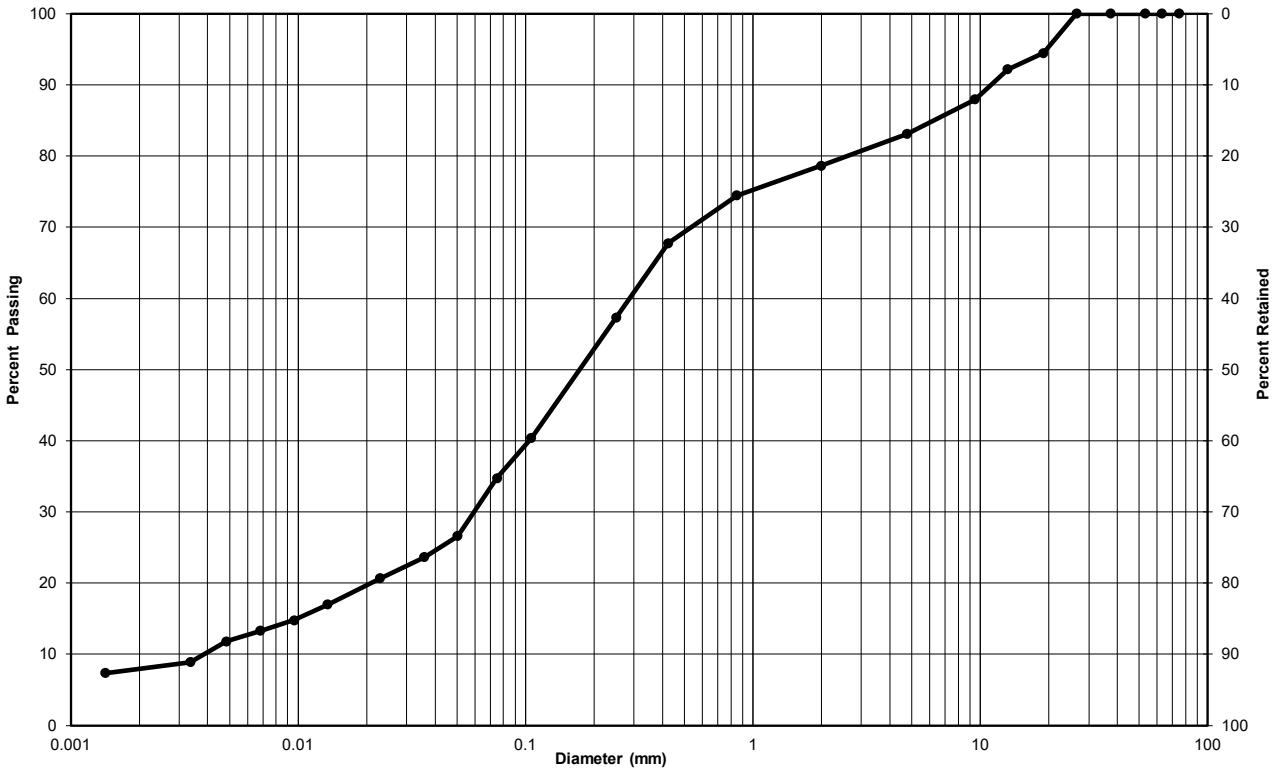
Borehole open to 5.2m upon completion

BOREHOLE LOG GEOTECH 11223795-01-FLD-21-03-01; BH LOGS.GPJ GEOLOGIC.GDT 16/3/21

Particle-Size Analysis of Soils (Geotechnical) (USCS) (ASTM D422)

Client:	Mason Homes	**Lab no.:**	SS-21-13
Project/Site:	Centre Road, Uxbridge, ON	**Project no.:**	11223795-01

Borehole no.:	BH1	Sample no.:	SS4
Depth:	2.29 - 2.90 m	Enclosure:	A-5



Clay & Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse
Unified Soil Classification System					

Soil Description	Gravel (%)	Sand (%)	Clay & Silt (%)
	17	48	35
Silt-size particles (%):	27		
Clay-size particles (%) (<0.002mm):	8		

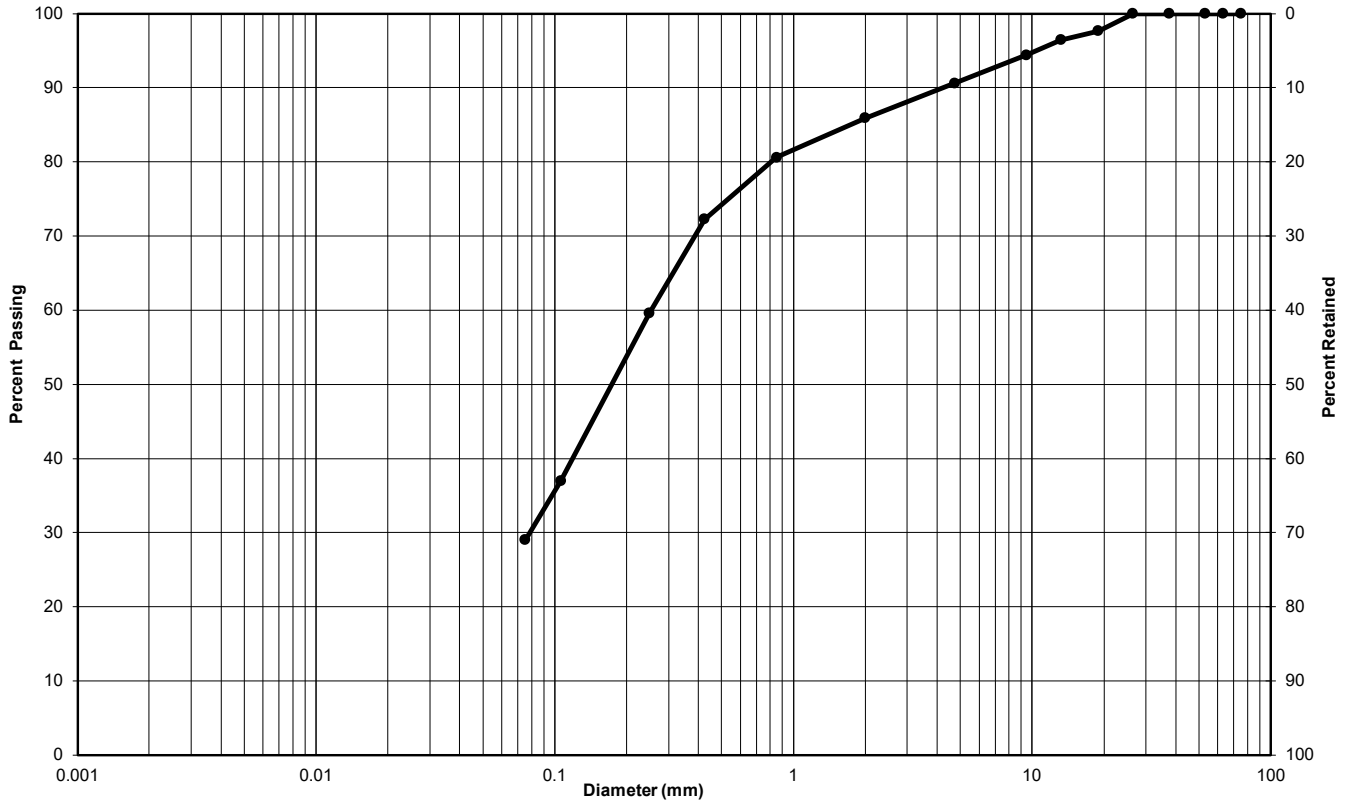
Remarks: More information is available upon request.

Performed by:	A. Fawcett	**Date:**	March 4, 2021
Verified by:	Joe Sullivan	**Date:**	March 8, 2021

Particle-Size Analysis of Soils (Geotechnical) (USCS) (ASTM D422)

Client:	Mason Homes	**Lab no.:**	SS-21-13
Project/Site:	Centre Road, Uxbridge, ON	**Project no.:**	11223795-01

Borehole no.:	BH2	Sample no.:	SS5
Depth:	3.05 - 3.66 m	Enclosure:	A-6



Clay & Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse
Unified Soil Classification System					

Soil Description	Gravel (%)	Sand (%)	Clay & Silt (%)
	9	62	29

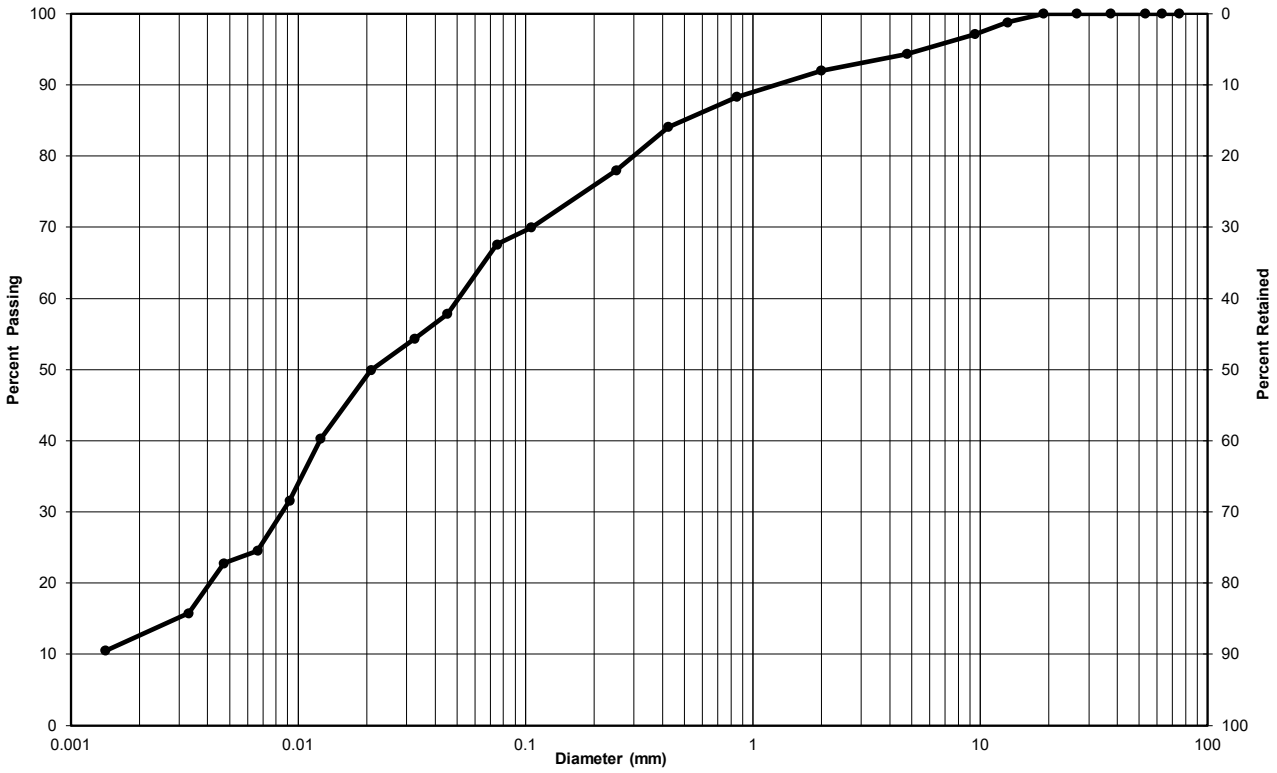
Remarks:

Performed by:	Josh Sullivan	**Date:**	March 5, 2021
Verified by:	Joe Sullivan	**Date:**	March 8, 2021

Particle-Size Analysis of Soils (Geotechnical) (USCS) (ASTM D422)

Client:	Mason Homes	**Lab no.:**	SS-21-13
Project/Site:	Centre Road, Uxbridge, ON	**Project no.:**	11223795-01

Borehole no.:	BH3	Sample no.:	SS6
Depth:	2.29 - 2.90 m	Enclosure:	A-7



Clay & Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse
Unified Soil Classification System					

Soil Description	Gravel (%)	Sand (%)	Clay & Silt (%)
	6	26	68
Silt-size particles (%):	56		
Clay-size particles (%) (<0.002mm):	12		

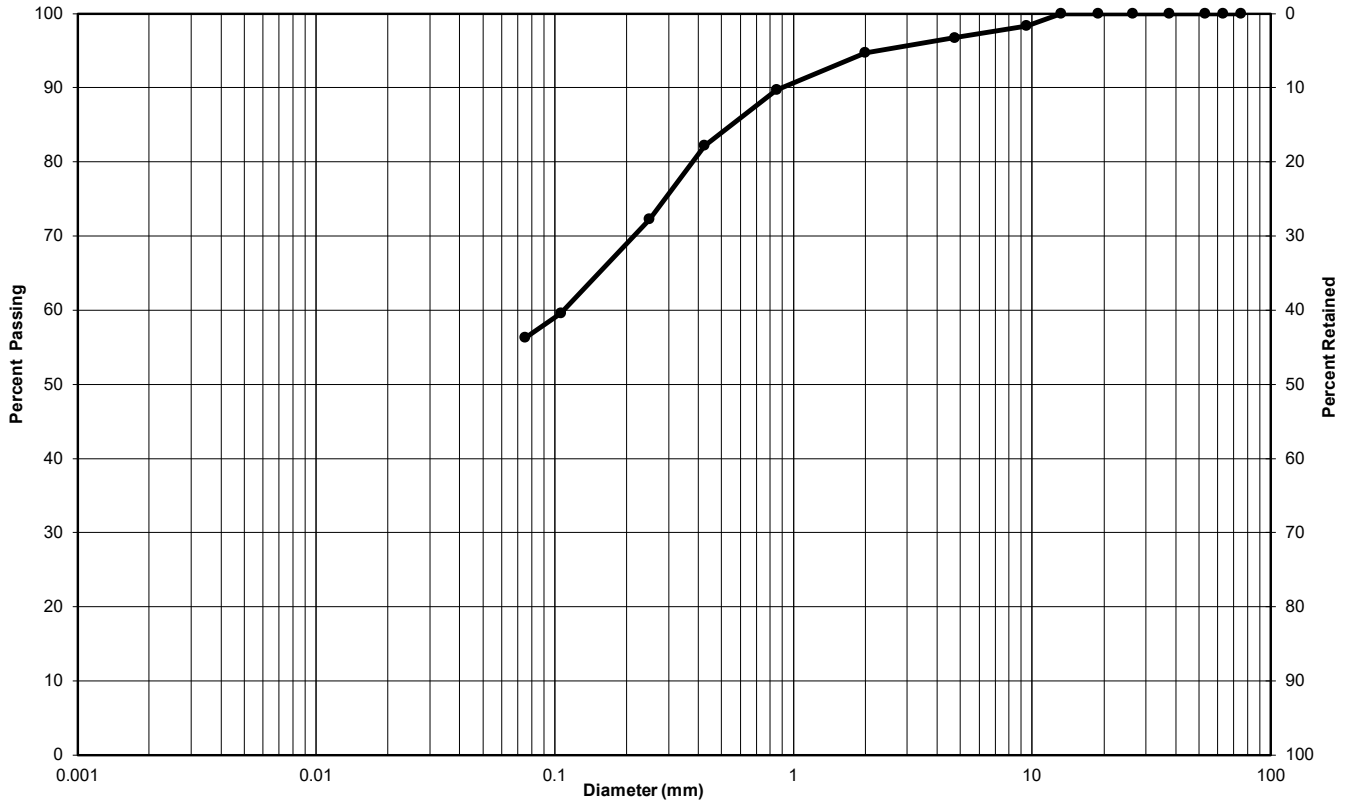
Remarks:

Performed by:	A. Fawcett	**Date:**	March 4, 2021
Verified by:	Joe Sullivan	**Date:**	March 8, 2021

Particle-Size Analysis of Soils (Geotechnical) (USCS) (ASTM D422)

Client:	Mason Homes	**Lab no.:**	SS-21-13
Project/Site:	Centre Road, Uxbridge, ON	**Project no.:**	11223795-01

Borehole no.:	BH4	Sample no.:	SS3
Depth:	1.52 - 2.13 m	Enclosure:	A-8



Clay & Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse
Unified Soil Classification System					

Soil Description	Gravel (%)	Sand (%)	Clay & Silt (%)
	3	41	56

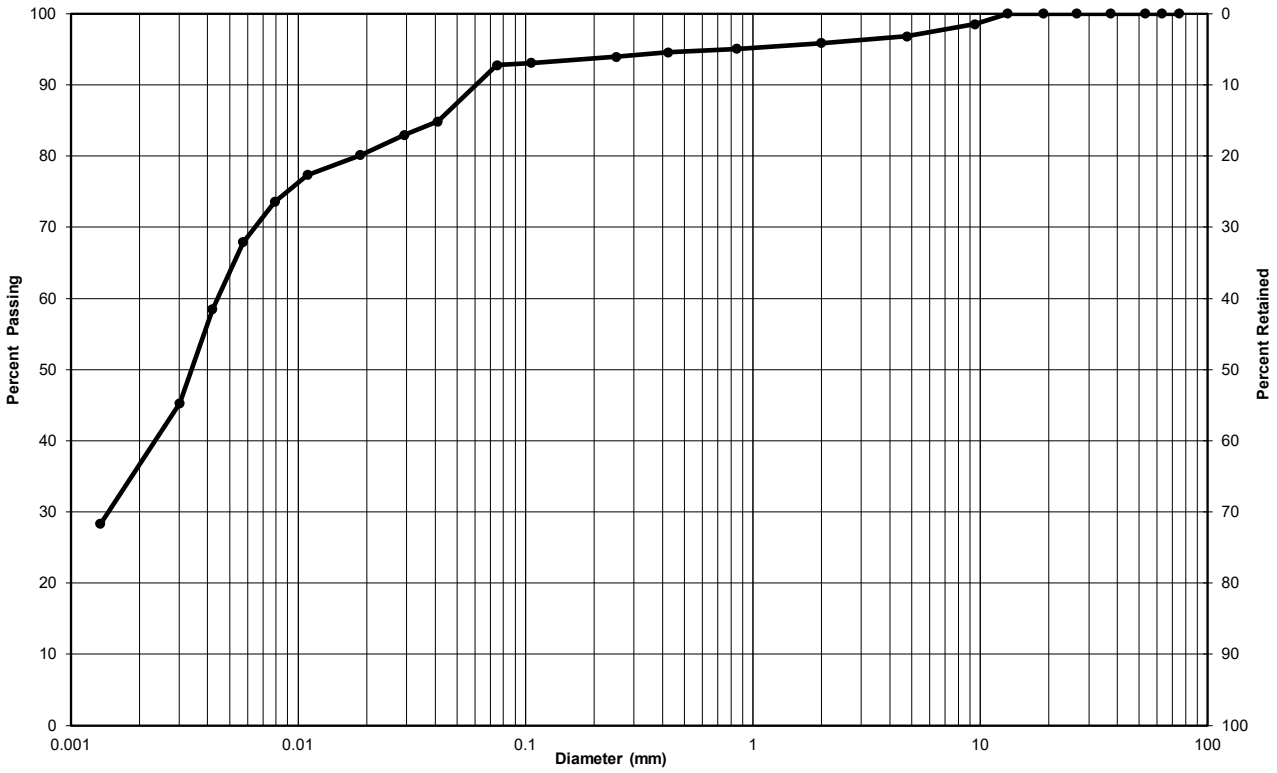
Remarks:

Performed by:	Josh Sullivan	**Date:**	March 5, 2021
Verified by:	Joe Sullivan	**Date:**	March 8, 2021

Particle-Size Analysis of Soils (Geotechnical) (USCS) (ASTM D422)

Client:	Mason Homes	**Lab no.:**	SS-21-13
Project/Site:	Centre Road, Uxbridge, ON	**Project no.:**	11223795-01

Borehole no.:	BH4	Sample no.:	SS5
Depth:	3.05 - 3.66 m	Enclosure:	A-9



Clay & Silt	Sand			Gravel	
	Fine	Medium	Coarse	Fine	Coarse
Unified Soil Classification System					

Soil Description	Gravel (%)	Sand (%)	Clay & Silt (%)
	3	4	93
Silt-size particles (%):	58		
Clay-size particles (%) (<0.002mm):	35		

Remarks:

Performed by:	A. Fawcett	**Date:**	March 4, 2021
Verified by:	Joe Sullivan	**Date:**	March 8, 2021

Liquid Limit, Plastic Limit and Plasticity Index of Soils (ASTM D4318)

Client:	Mason Homes	**Lab No.:**	SS-21-13
Project/Site:	Centre Road, Uxbridge, ON	**Project No.:**	11223795-01

Borehole no.:	BH3	Sample no.:	SS6	Depth:	4.57 - 5.18 m
Soil description:	CL-ML, Low compressibility Inorganic Silt			Date sampled:	n/a

Apparatus:	Hand Crank	Balance no.:	7	Porcelain bowl no.:	1
Liquid limit device no.:	1	Oven no.:	B23-02667	Spatula no.:	1
Sieve no.:	n/a	Glass plate no.:	1		

Liquid Limit (LL):

	Test No. 1	Test No. 2	Test No. 3
Number of blows	33	25	17
Water Content:			
Tare no.	11	18	24
Wet soil+tare, g	29.91	33.30	30.70
Dry soil+tare, g	28.61	31.37	29.11
Mass of water, g	1.30	1.93	1.59
Tare, g	21.46	21.51	21.43
Mass of soil, g	7.15	9.86	7.68
Water content %	18.2%	19.6%	20.7%

Plastic Limit (PL) - Water Content:

Tare no.	19	21
Wet soil+tare, g	29.04	28.38
Dry soil+tare, g	28.18	27.58
Mass of water, g	0.86	0.80
Tare, g	21.62	21.52
Mass of soil, g	6.56	6.06
Water content %	13.1%	13.2%
Average water content %	13.2%	

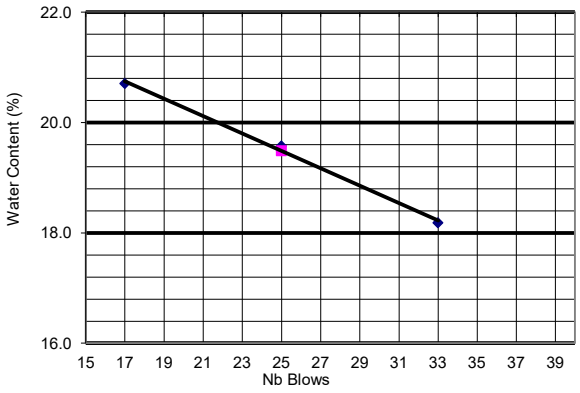
Natural Water Content (W^n):

Tare no.	Bowl	
Wet soil+tare, g	636.74	
Dry soil+tare, g	578.57	
Mass of water, g	58.17	
Tare, g	201.85	
Mass of soil, g	376.72	
Water content %	15.4%	

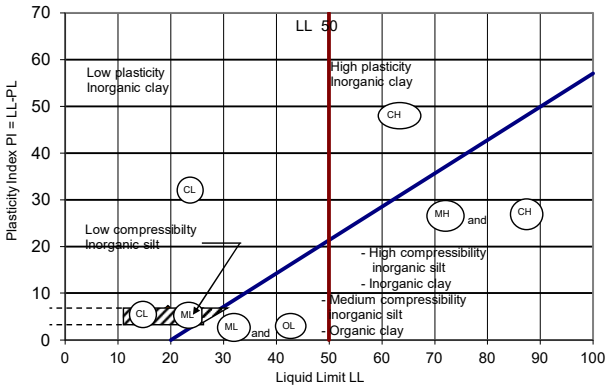
Soil Preparation:

- ☐ Cohesive <425 µm
- ☐ Cohesive >425 µm
- ☐ Non-cohesive
- ☑ Dry preparation
- ☐ Wet preparation

Results



Soil Plasticity Chart



Liquid Limit (LL)	Plastic Limit (PL)	Plasticity Index (PI)	Natural Water Content W^n
19	13	6	15

Remarks:

Performed by:	Josh Sullivan	**Date:**	March 5, 2021
Verified by:	Joe Sullivan	**Date:**	March 8, 2021

Liquid Limit, Plastic Limit and Plasticity Index of Soils (ASTM D4318)

Client:	Mason Homes	**Lab No.:**	SS-21-13
Project/Site:	Centre Road, Uxbridge, ON	**Project No.:**	11223795-01
Borehole no.:	BH4	Sample no.:	SS5
Depth:	3.05 - 3.66 m		
Soil description:	CL, Low plasticity Inorganic Clay	Date sampled:	n/a
Apparatus:	Hand Crank	Balance no.:	7
Porcelain bowl no.:	1		
Liquid limit device no.:	1	Oven no.:	B23-02667
Spatula no.:	1		
Sieve no.:	n/a	Glass plate no.:	1

Liquid Limit (LL):

	Test No. 1	Test No. 2	Test No. 3
Number of blows	30	25	16
Water Content:			
Tare no.	4	7	9
Wet soil+tare, g	30.92	30.36	32.04
Dry soil+tare, g	28.83	28.40	29.62
Mass of water, g	2.09	1.96	2.42
Tare, g	21.74	21.92	21.93
Mass of soil, g	7.09	6.48	7.69
Water content %	29.5%	30.2%	31.5%

Plastic Limit (PL) - Water Content:

Tare no.	2	3
Wet soil+tare, g	28.92	28.91
Dry soil+tare, g	27.89	27.92
Mass of water, g	1.03	0.99
Tare, g	21.47	21.77
Mass of soil, g	6.42	6.15
Water content %	16.0%	16.1%
Average water content %	16.1%	

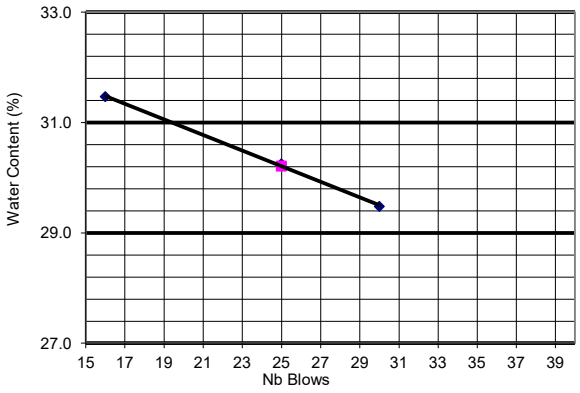
Natural Water Content (W^n):

Tare no.	Bowl	
Wet soil+tare, g	821.79	
Dry soil+tare, g	710.18	
Mass of water, g	111.61	
Tare, g	209.32	
Mass of soil, g	500.86	
Water content %	22.3%	

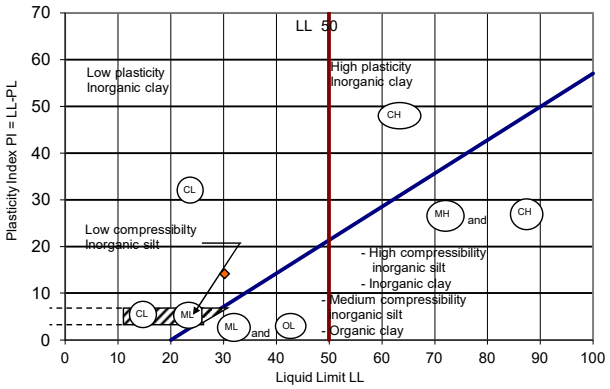
Soil Preparation:

- ☐ Cohesive <425 µm
- ☑ Dry preparation
- ☐ Cohesive >425 µm
- ☐ Wet preparation
- ☐ Non-cohesive

Results



Soil Plasticity Chart

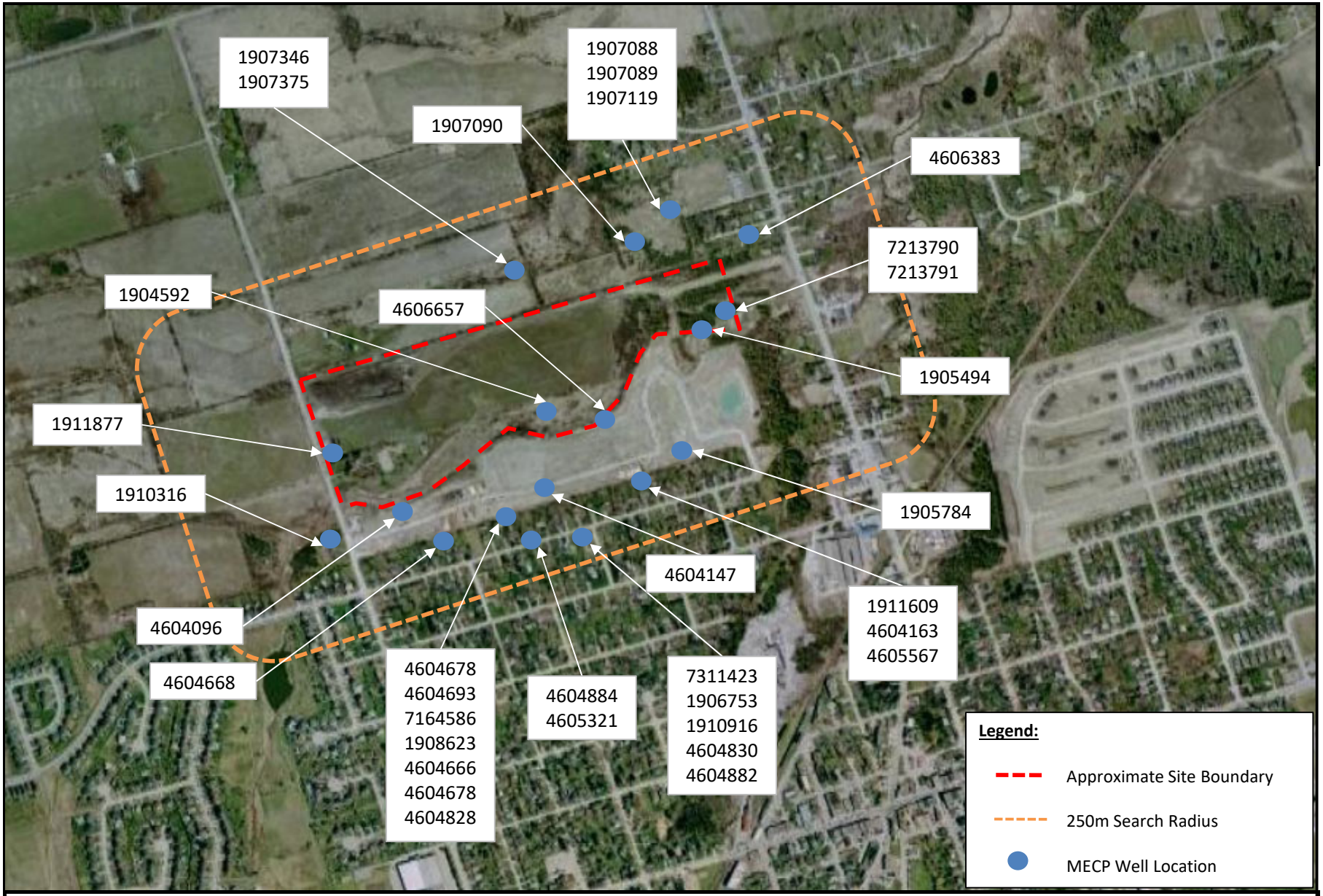


Liquid Limit (LL)	Plastic Limit (PL)	Plasticity Index (PI)	Natural Water Content W^n
30	16	14	22

Remarks:

Performed by:	Josh Sullivan	**Date:**	March 5, 2021
Verified by:	Joe Sullivan	**Date:**	March 8, 2021

Appendix B
MECP Well Records and Well Survey



Source: MECP Water Well Record Mapping, accessed online (https://www.ontario.ca/environment-and-energy/map-well-records)

Scale:
Refer to Scale Bar
Coordinate System:
NAD 1983 UTM Zone 17

Geotechnical and Hydrogeologic Investigation
Mason Homes Limited
Proposed Residential Development
Centre Road Phase 2, Uxbridge

11223795-01
March, 2021

Well Location Plan

FIGURE B.1

APPENDIX B.2: WELL SUMMARY - DUG OVERBURDEN WELLS

Well Record Summary
Project No.: 11223795-01
Phase 2 Mason Homes Subdivision, Centre Road, Uxbridge, ON

MECP	Well	Water Found		Static Level		Test Rate		Well Depth		Comments
Well No.	Use	Feet	Metres	Feet	Metres	Igpm	L/min	Feet	Metres	
4604096	Domestic	20.0	6.1	5.0	1.5	2.0	9.1	25.0	7.6	Sandy topsoil to 1', sand to 18', clay and gravel to 25'
4604678	Domestic	14.0	4.3	3.0	0.9	2.0	9.1	18.0	5.5	Topsoil to 1', clay with stones to 10', clay and sand to 18'
4604693	Domestic	14.0	4.3	5.0	1.5	2.0	9.1	21.0	6.4	Topsoil to 1', clay with stones to 12', clay with sand to 21'

Number of wells: 3

	Water Found		Static Level		Pump Rates		Well Depth	
	Feet	Metres	Feet	Metres	gpm	L/min	Feet	Metres
AVERAGE	16.0	4.9	4.3	1.3	2.0	9.1	21.3	6.5
MAXIMUM	20.0	6.1	5.0	1.5	2.0	9.1	25.0	7.6
MINIMUM	14.0	4.3	3.0	0.9	2.0	9.1	18.0	5.5

APPENDIX B.3: WELL SUMMARY - DRILLED OVERBURDEN WELLS

Well Record Summary
Project No.: 11223795-01
Phase 2 Mason Homes Subdivision, Centre Road, Uxbridge, ON

MECP	Well	Water Found		Static Level		Test Rate		Well Depth		Comments
Well No.	Use	Feet	Metres	Feet	Metres	Igpm	L/min	Feet	Metres	
1904592	Domestic	61.0	18.6	21.0	6.4	6.0	27.2	61.0	18.6	Clay to 6', clayey sand to 18', clay with pebbles and boulders to 48', gravelly sand to 61'
1905494	Domestic	45.0	13.7	3.0	0.9	15.0	68.1	58.0	17.7	Clay with stones to 19', clay to 45', gravelly clay to 54', gravel to 58'
1905784	Domestic	81.0	24.7	23.0	7.0	5.0	22.7	81.0	24.7	Clay to 9', sandy clay to 19', clay with gravel to 74', sand with clay and gravel to 77', sand to 81'
1906753	Domestic	74.0	22.6	25.0	7.6	3.0	13.6	74.0	22.6	Clay to 45', clay with stones to 68', sand with pebles to 74'
1907088	Domestic	41.0	12.5	9.0	2.7	7.0	31.8	51.0	15.5	Sandy clay to 16', clay with pebbles to 41', sand with clay to 48', sand to 51'
1907089	Domestic	45.0	13.7	10.0	3.0	8.0	36.3	54.0	16.5	Clay with sand to 18', clay with pebbles to 45', sand with clay to 50', sand to 54'
1907090	Domestic	46.0	14.0	11.0	3.4	7.0	31.8	50.0	15.2	Sandy clay to 18', clay with pebbles to 46', sand with gravel to 50'
1907119	Domestic	51.0	15.5	22.0	6.7	8.0	36.3	58.0	17.7	Sandy clay to 5', sand to 13', clay to 35', clay with gravel to 51', sand with gravel to 58'
1907294	Domestic	49.0	14.9	12.0	3.7	8.0	36.3	52.0	15.8	Topsoil to 2', sand with clay to 12', clay to 49', sand to 52'
1907346	Domestic	44.0	13.4	9.0	2.7	7.0	31.8	47.0	14.3	Sandy clay to 18', clay to 44', sand to 47'
1907375	Domestic	55.0	16.8	21.0	6.4	8.0	36.3	66.0	20.1	Topsoil to 1', sandy clay to 21', clay to 55', sand with clay to 62', sand to 66'
1908623	Domestic	84.0	25.6	40.0	12.2	10.0	45.4	84.0	25.6	Clay with pebbles to 70', sand to 84'
1910316	Domestic	104.0	31.7	15.0	4.6	6.0	27.2	104.0	31.7	Clay with sand and gravel to 21', clay to 80', silty sand to 98', sand with gravel to 104'
1910916	Domestic	73.0	22.3	24.0	7.3	10.0	45.4	74.0	22.6	Clay with stones to 14', gravel with stones to 49', clay with stones to 56', sand with gravel to 74'
1911609	Domestic	51.0	15.5	25.0	7.6	15.0	68.1	62.0	18.9	Topsoil to 2', sandy clay to 18', clay with sand and gravel to 51', sand and gravel to 62'
1911877	Domestic	83.0	25.3	27.0	8.2	8.0	36.3	86.0	26.2	Clay with sand to 20', clay with stones to 58', sand to 60', clay with stones to 83' gravel with sand to 86'
4604147	Domestic	76.0	23.2	37.0	11.3	5.0	22.7	76.0	23.2	Clay with stones to 12', sand with gravel and clay to 27', clay with boulders to 68', sand and gravel to 76'
4604163	Domestic	50.0	15.2	10.0	3.0	5.0	22.7	56.0	17.1	Clay with gravel and boulders to 50' sand to 56'
4604666	Domestic	84.0	25.6	35.0	10.7	4.0	18.2	103.0	31.4	Clay with stones to 27', gravel to 46', hardpan to 94', sand and gravel to 97', silt to 101', gravel and sand to 103'
4604668	Domestic	85.0	25.9	23.0	7.0	6.0	27.2	89.0	27.1	Fill to 2', Clay with boudlers to 55', clay to 70', clay with gravel to 85', sand to 89'
4604678	Domestic	46.0	14.0	11.0	3.4	7.0	31.8	50.0	15.2	Sandy clay to 18', clay with pebbles to 46', sand with gravel to 50'
4604828	Domestic	100.0	30.5	39.0	11.9	5.0	22.7	108.0	32.9	Topsoil to 2', sand with gravel to 58', clay with boudlers to 90', clay some silt to 100', sand with silt yo 105', gravel with sand and silt'
4604830	Domestic	92.0	28.0	30.0	9.1	3.0	13.6	94.0	28.7	Topsoil to 1', clay with boulders to 25', gravel to 45', sand to 50', clay with boulders to 85', silt to 92', sand to 94'
4604882	Domestic	63.0	19.2	22.0	6.7	8.0	36.3	70.0	21.3	Topsoil to 2', clay with stones to 45', sand with gravel to 55', clay to 63', sand to 70'
4604884	Domestic	95.0	29.0	35.0	10.7	4.0	18.2	105.0	32.0	Sand and clay to 18', clay with boulders to 90', clay with silt to 95', sand with silt to 101' sand with gravel and silt to 105'
4605321	Domestic	72.0	21.9	25.0	7.6	5.0	22.7	76.0	23.2	Clay with stones to 45', clay with sand to 72', sand to 76'
4605567	Domestic	65.0	19.8	21.0	6.4	8.0	36.3	70.0	21.3	Clay to 22', clay with stones to 40', sand with boulders to 63', clay to 65', sand and gravel to 70'
4606383	Domestic	49.0	14.9	1.0	0.3	20.0	90.8	52.0	15.8	Clay to 20', clay with gravel to 46', gravel to 52'
4606657	Domestic	49.0	14.9	2.0	0.6	8.0	36.3	52.0	15.8	Topsoil to 2', clay with stones to 35', gravel to 52'

Number of wells: 29

	Water Found		Static Level		Pump Rates		Well Depth	
	Feet	Metres	Feet	Metres	gpm	L/min	Feet	Metres
AVERAGE	66.0	20.1	20.3	6.2	7.6	34.3	71.1	21.7
MAXIMUM	104.0	31.7	40.0	12.2	20.0	90.8	108.0	32.9
MINIMUM	41.0	12.5	1.0	0.3	3.0	13.6	47.0	14.3

APPENDIX B.4: WELL SUMMARY - ABANDONED AND OTHER WELLS

Well Record Summary
Project No.: 11223795-01
Phase 2 Mason Homes Subdivision, Centre Road, Uxbridge, ON

MECP	Well	Water Found		Static Level		Test Rate		Well Depth		Comments
Well No.	Use	Feet	Metres	Feet	Metres	lgpm	L/min	Feet	Metres	
7164586	Abandonment	--	--	--	--	--	--	94.0	28.7	No Information Provided
7213790	Abandonment	--	--	--	--	--	--	81.0	24.7	Decommisioned 6" drilled well
7213791	Abandonment	--	--	--	--	--	--	17.0	5.2	Decommisioned 6" drilled well
7311423	Abandonment	--	--	--	--	--	--	74.0	22.6	No Information Provided

Number of wells: 4

	Water Found		Static Level		Pump Rates		Well Depth	
	Feet	Metres	Feet	Metres	gpm	L/min	Feet	Metres
AVERAGE	--	--	--	--	--	--	66.5	20.3
MAXIMUM	--	--	--	--	--	--	94.0	28.7
MINIMUM	--	--	--	--	--	--	17.0	5.2

MINISTRY OF THE ENVIRONMENT
The Ontario Water Resources Act

Ontario

WATER WELL RECORD

S.P.M.

31D3E

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

11 | 1904592 | MUNICIP. 19608 | CON.

COUNTY OR DISTRICT	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	CON., BLOCK, TRACT, SURVEY, ETC.	LOT	DATE COMPLETED
ONTARIO DURHAM	UXBRIDGE	6 GR	33 GR	DAY 29 MO APRIL YR 77

[redacted] T 34 NORTH ST UXBRIDGE

UTM ZONE | 286260 | RC 5 | ELEVATION 0925 | RC 5 | BASIN CODE 22

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET FROM	DEPTH - FEET TO
BLUE	CLAY		FILL	0	6
BROWN	SAND	CLAY	SOFT	6	18
GREY	CLAY	PEBBLES	HARD	18	34
GREY	CLAY	BOULDERS	HARD	34	48
BROWN	SAND	GRAVEL	LOOSE	48	61

31 | 0006305 01 | 0018628058 5 | 0034205 273 | 0048205 373 | 0061628 1177

32

41 WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
0061	1 ☒ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL

51 CASING & OPEN HOLE RECORD

INSIDE DIAM INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET FROM	DEPTH - FEET TO
6¼	1 ☒ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE	188	0	57
06				0057
	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
025	05.000	04

MATERIAL AND TYPE: JOHNSON STAINLESS

DEPTH TO TOP OF SCREEN: 0057 FEET

61 PLUGGING & SEALING RECORD

DEPTH SET AT - FEET FROM	TO	MATERIAL AND TYPE (CEMENT GROUT LEAD PACKER, ETC.)
0	52	K. PACKER TOP
	57	S' SCREEN
		NIPPLE

71 PUMPING TEST

PUMPING TEST METHOD: 1 ☒ PUMP 2 ☐ BAILER

PUMPING RATE: 0010 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
021 FEET	035 FEET	035 FEET	FEET	FEET	035 FEET

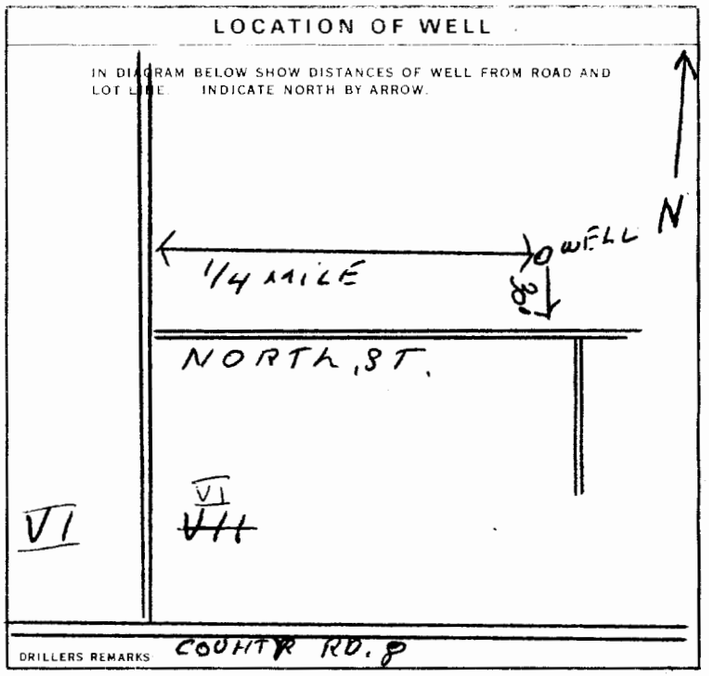
IF FLOWING GIVE RATE: GPM | PUMP INTAKE SET AT: 45 FEET | WATER AT END OF TEST: 1 ☒ CLEAR 2 ☐ CLOUDY

RECOMMENDED PUMP TYPE: ☐ SHALLOW ☒ DEEP | RECOMMENDED PUMP SETTING: 045 FEET | RECOMMENDED PUMPING RATE: 0006 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: COUNTY RD. 8

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: ROGER BOADWAY ENT. LTD | LICENCE NUMBER: 1413

ADDRESS: BOX 397 SUTTON WEST ONT

NAME OF DRILLER OR BORER: ROGER BOADWAY | LICENCE NUMBER:

SIGNATURE OF CONTRACTOR: Roger Boadway | SUBMISSION DATE: DAY 29 MO APRIL YR 77

OFFICE USE ONLY

DATA SOURCE 58: 1 | CONTRACTOR 59-62: 1413 | DATE RECEIVED 63-68: 100577

DATE OF INSPECTION | INSPECTOR

REMARKS: CSS.S8 | P Aug 16/77 AR | WI

MINISTRY OF THE ENVIRONMENT COPY

FORM 7 MOE 07-091

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) 1905494 MUNICIP 19012 CON. CON 36038 06

COUNTY OR DISTRICT	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	CON., BLOCK, TRACT, SURVEY, ETC	LOT
Ontario	Uxbridge	VI	033

OWNER (SURNAME FIRST)	ADDRESS	DATE COMPLETED
Ortom Homes Ltd.	146 Weldrick Road Thornhill, Ontario Homes=k	DAY 13 MO 08 YR 79

(21) UTM ZONE 17 EASTING 649850 NORTHING 4886450 RC 5T ELEVATION 0870 RC 5 BASIN CODE 22

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET FROM	DEPTH - FEET TO
Brown	Clay	Stones		0	19
Blue	Clay		Soft	19	45
Gray	Clay	Gravel	Layers	45	54
Gray	Gravel		Clean	54	58

(31) 0019605/2 0045305/85 0054205/174 0058211/62

(32)

(41) WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
45-50 0045	1 ☐ FRESH 3 ☐ SULPHUR 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR 2 ☐ SALTY 4 ☐ MINERAL

(51) CASING & OPEN HOLE RECORD

INSIDE DIAM INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET FROM	DEPTH - FEET TO
04 06	1 ☒ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE	188 1 'a.g.	~~55~~	0055
	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	LENGTH
025	06000 INCHES	03 FEET

MATERIAL AND TYPE	DEPTH TO TOP OF SCREEN
Stainless Steel	0055 FEET

(61) PLUGGING & SEALING RECORD

DEPTH SET AT - FEET FROM	TO	MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER ETC.)

(71) PUMPING TEST

PUMPING TEST METHOD	PUMPING RATE	DURATION OF PUMPING
1 ☐ PUMP 2 ☒ BAILER	0020 GPM	02 HOURS 00 MINS

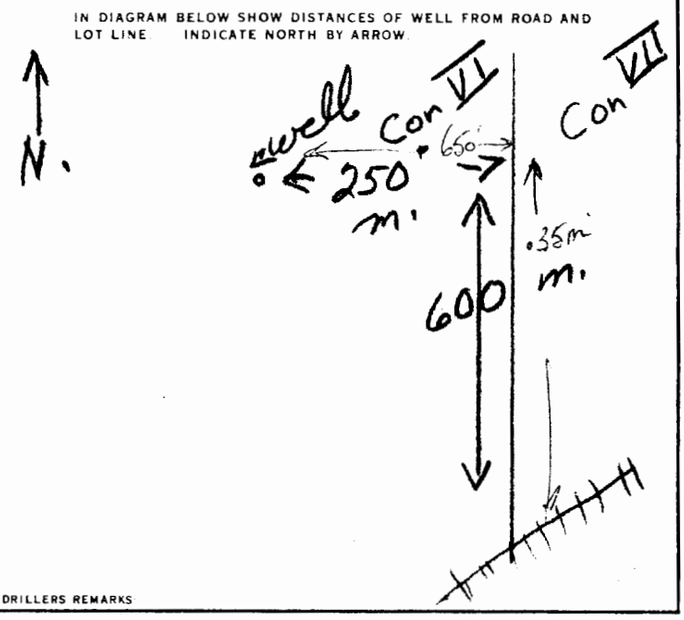
STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING	15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
003 FEET	025 FEET	1 ☐ PUMPING 2 ☒ RECOVERY	003 FEET	FEET	FEET	FEET

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

RECOMMENDED PUMP TYPE	RECOMMENDED PUMP SETTING	RECOMMENDED PUMPING RATE
☒ SHALLOW ☐ DEEP	024 FEET	0015 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 5 ☐ COMMERCIAL 6 ☐ MUNICIPAL 7 ☐ PUBLIC SUPPLY 8 ☐ COOLING OR AIR CONDITIONING 9 ☐ NOT USED ☐ OTHER
METHOD OF DRILLING (57) 1	1 ☐ CABLE TOOL 2 ☐ ROTARY (CONVENTIONAL) 3 ☐ ROTARY (REVERSE) 4 ☐ ROTARY (AIR) ☐ PERCUSSION 6 ☐ BORING 7 ☐ DIAMOND 8 ☐ JETTING 9 ☐ DRIVING

CONTRACTOR

NAME OF WELL CONTRACTOR	LICENCE NUMBER
Sauder Well Drilling Ltd.	4743

ADDRESS
R.R.# 4 Uxbridge, Ontario LOC 1M0

NAME OF DRILLER OR BORER	LICENCE NUMBER
Ab Sauder	4743

SIGNATURE OF CONTRACTOR	SUBMISSION DATE
Ab. Sauder	DAY 20 MO. 9 YR. 79

OFFICE USE ONLY

DATA SOURCE (58)	CONTRACTOR (59-62)	DATE RECEIVED (63-66)
1	4743	250979

DATE OF INSPECTION	INSPECTOR

REMARKS: for only 08/4/80 CSS.

MINISTRY OF THE ENVIRONMENT COPY

FORM NO. 0506—4—77

Ministry of the Environment
Ontario

The Ontario Water Resources Act

WATER WELL RECORD

3103

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

(11) 1905784 MUNICIP 19012 CON CON 06

COUNTY OR DISTRICT	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	CON. BLOCK, TRACT, SURVEY, ETC	LOT
Ontario	Uxbridge	VI	033

OWNER (SURNAME FIRST) [redacted]

ADDRESS Uxbridge P.O.

DATE COMPLETED DAY 27 MO 06 YR 80

(21) UTM ZONE 17 EASTING 649800 NORTHING 4886200 RC 5 ELEVATION 0900 RC 5 BASIN CODE 22

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET FROM	DEPTH - FEET TO
brown	clay			0'	9'
yellow	clay	sand		9'	19'
blue	clay	stones	firm	19'	65'
grey	clay	gravel	layers	65'	74'
brown	sand	gravel & clay	clay	74'	78'
brown	sand		fine	77'	81'

(31) 0009605 0019505528 0065305 1279 0074205 1174 0078628 1105 0081608

32

(41) WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
65' - 81' 0065	1 ✓ FRESH 3 ☐ SULPHUR 2 ☐ SALTY 4 ☐ MINERAL
0081	1 ✓ FRESH 3 ☐ SULPHUR 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR 2 ☐ SALTY 4 ☐ MINERAL

(51) CASING & OPEN HOLE RECORD

INSIDE DIAM INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET FROM	DEPTH - FEET TO
6¼ 06	1 ✓ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE	.188'	2'AG.	77' 0077
	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	LENGTH	DEPTH TO TOP OF SCREEN
014	6.000 INCHES	04 FEET	0077 FEET

MATERIAL AND TYPE: Stainless Steel

61 PLUGGING & SEALING RECORD

DEPTH SET AT - FEET FROM	TO	MATERIAL AND TYPE (CEMENT GROUT LEAD PACKER, ETC.)

PUMPING TEST

PUMPING TEST METHOD	PUMPING RATE	DURATION OF PUMPING
1 ☐ PUMP 2 ✓ BAILER	0012 GPM	01 HOURS 00 MINS

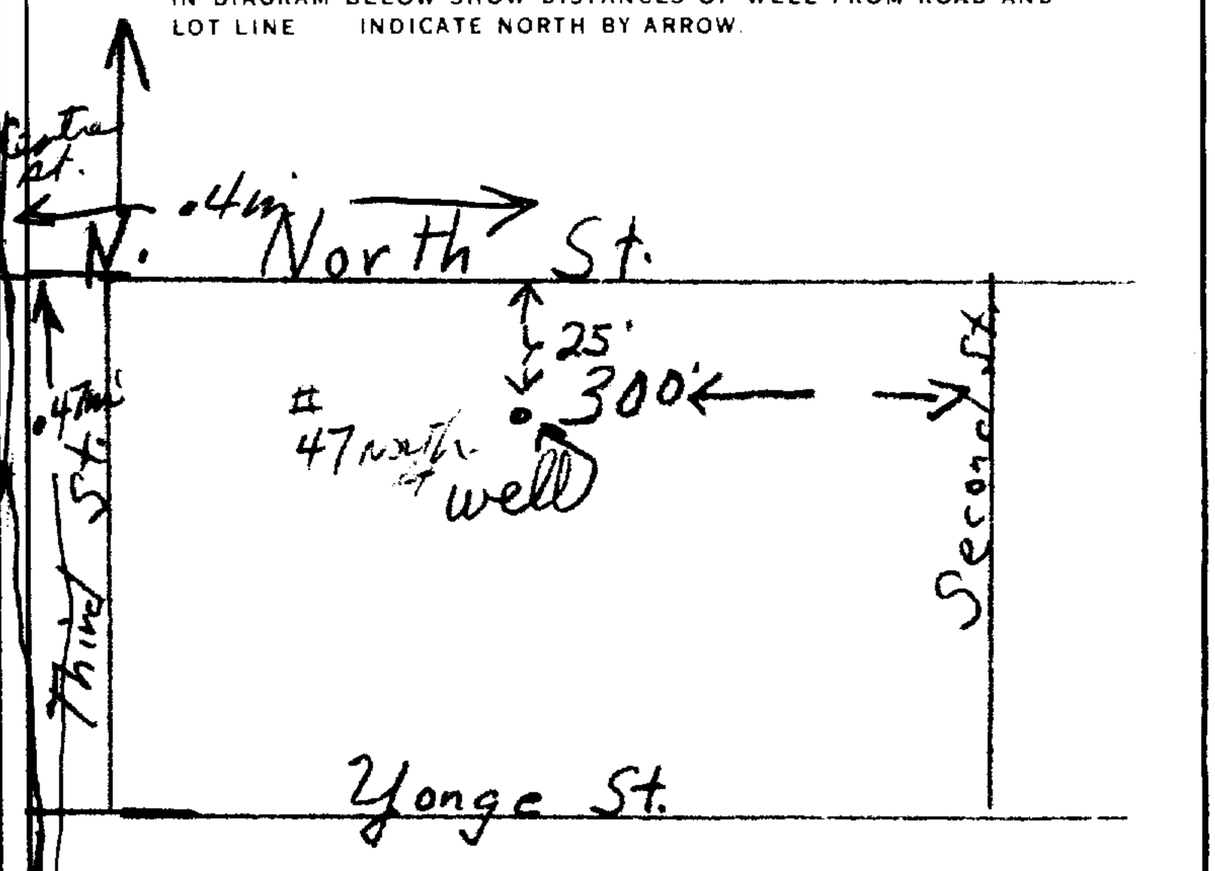
STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING	15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
023 FEET	040 FEET	1 ☐ PUMPING 2 ✓ RECOVERY	023 FEET	FEET	FEET	FEET

IF FLOWING GIVE RATE	PUMP INTAKE SET AT	WATER AT END OF TEST
GPM	— FEET	1 ✓ CLEAR 2 ☐ CLOUDY

RECOMMENDED PUMP TYPE	RECOMMENDED PUMP SETTING	RECOMMENDED PUMPING RATE
✓ SHALLOW ☐ DEEP	028 FEET	0005 GPM

LOCATION OF WELL

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



DRILLERS REMARKS: (8) 31 30

FINAL STATUS OF WELL 1

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

WATER USE 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 1

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: Lauder Well Drilling Ltd LICENCE NUMBER 4743

ADDRESS: R.R.#4 Uxbridge

NAME OF DRILLER OR BORER: A.B. Lauder LICENCE NUMBER 4743

SIGNATURE OF CONTRACTOR: A.B. Lauder SUBMISSION DATE: DAY 7 MO. 2 YR 80

OFFICE USE ONLY

DATA SOURCE 1 | CONTRACTOR 4743 | DATE RECEIVED 030780

DATE OF INSPECTION | INSPECTOR

REMARKS: owned by [redacted] Loc'd by 03/2/82

MINISTRY OF THE ENVIRONMENT COPY

FORM NO. 0506—4—77 FORM 7

Ministry of the Environment
Ontario

The Ontario Water Resources Act

WATER WELL RECORD

5103E

1906753

1. PRINT ONLY IN SPACES PROVIDED
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11

MUNICIP 19012 CON CON 06

COUNTY OR DISTRICT: DURHAM
TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE: UXBRIDGE (UX)
CON: 6
BLOCK, TRACT, SURVEY, ETC:
LOT: ~~3~~ 032
DATE COMPLETED: DAY 17 MO ~~OCT~~ 10 YR 83
[redacted] RTH ST UXBRIDGE # 33
UTM ZONE 17 NORTHING 4986000 RC 5 ELEVATION 0925 RC 5 BASIN CODE 22

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET FROM	DEPTH - FEET TO
BROWN	CLAY		DENSE	0	45
GREY	CLAY	STONE	HARD	45	68
GREY	SAND	PEBBLES	CEMENTED	68	74

MOE VF-18

31 00945 0566 | 00682 0512 73 | 00742 2812 60
32

41 WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
074	1 ☒ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL

51 CASING & OPEN HOLE RECORD

INSIDE DIAM INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET FROM	DEPTH - FEET TO
~~48~~ 05	1 ☒ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE	188	0	070
	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	LENGTH
018	05000 INCHES	04 FEET

MATERIAL AND TYPE: JOHNSON S/S
DEPTH TO TOP OF SCREEN: 070 FEET

61 PLUGGING & SEALING RECORD

DEPTH SET AT - FEET FROM	DEPTH SET AT - FEET TO	MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)
65	70	K. PACKER TOP
		4 FT SCREEN
		NIPPLE

71 PUMPING TEST

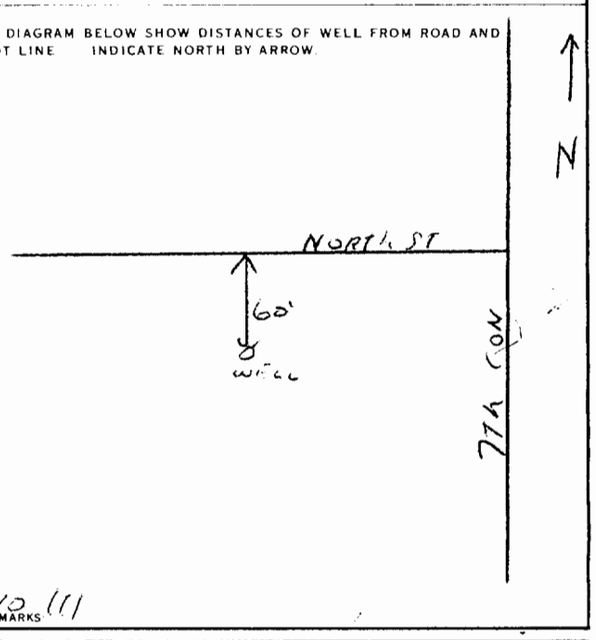
PUMPING TEST METHOD: 1 ☐ PUMP 2 ☒ BAILER
PUMPING RATE: 0005 GPM
DURATION OF PUMPING: 03 HOURS 30 MINS
WATER LEVELS DURING: 1 ☒ PUMPING 2 ☐ RECOVERY

STATIC LEVEL	WATER LEVEL END OF PUMPING	15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
025 FEET	055 FEET	038 FEET	050 FEET	055 FEET	055 FEET

IF FLOWING, GIVE RATE: GPM
PUMP INTAKE SET AT: FEET
WATER AT END OF TEST: 1 ☐ CLEAR 2 ☒ CLOUDY
RECOMMENDED PUMP TYPE: ☐ SHALLOW ☒ DEEP
RECOMMENDED PUMP SETTING: 055 FEET
RECOMMENDED PUMPING RATE: 0003 GPM

LOCATION OF WELL

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



DRILLERS REMARKS: 5-10 III

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

WATER USE 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 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: ROGER BOADWAY ENT LTD
LICENCE NUMBER: 1413
ADDRESS: P.O. BOX 397 SUTTON WEST ONT
NAME OF DRILLER OR BORER: BARRY INGHAM
LICENCE NUMBER:
SIGNATURE OF CONTRACTOR: Roger Boadway
SUBMISSION DATE: DAY 17 MO OCT YR 83

OFFICE USE ONLY

DATA SOURCE: 1
CONTRACTOR: 1413
DATE RECEIVED: 08 11 83
DATE OF INSPECTION:
INSPECTOR:
REMARKS:

CSS.88

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Ministry of the Environment
Ontario

The Ontario Water Resources Act

WATER WELL RECORD

31D/3e

1. PRINT ONLY IN SPACES PROVIDED
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(11) 1907088 MUNICIP 19012 CON ON 06

COUNTY OR DISTRICT	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	CON. BLOCK, TRACT, SURVEY, ETC.	LOT
Ontario DURHAM	Uxbridge	~~6~~ Plan M40 Lot # 2	034

OWNER (SURNAME FIRST)	ADDRESS	DATE COMPLETED
Splonick Const.	19 Harvey St. Uxbridge LOC 1KO	DAY 18 MO 06 YR 84

(21) ZONE 17 | UTM EASTING 649750 | UTM NORTHING 4886750 | PR 5 | ELEVATION 0875 | SC 5 | BASIN CODE 22

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET FROM	DEPTH - FEET TO
Brown	Clay	Sandy		0	16
Blue	Clay	Pebbles		16	41
Grey	Sand	Clay	Layers	41	48
Grey	Sand		Course	48	51

JAN 06 1987

(31) 0016405811 | 0041305121 | 0048228057 | 0051210

(32)

(41) WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
0041	1 ☒ FRESH 3 ☐ SULPHUR / 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR / 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR / 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR / 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR / 2 ☐ SALTY 4 ☐ MINERAL

(51) CASING & OPEN HOLE RECORD

INSIDE DIAM INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET FROM	DEPTH - FEET TO
~~6~~ 06	1 ☒ STEEL / 2 ☐ GALVANIZED / 3 ☐ CONCRETE / 4 ☐ OPEN HOLE	.188	2a.g.	-48 0048
	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	LENGTH
020	06.000 INCHES	03 FEET

MATERIAL AND TYPE: Stainless Steel
DEPTH TO TOP OF SCREEN: 0048 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	
26-29	30-33	

(71) PUMPING TEST

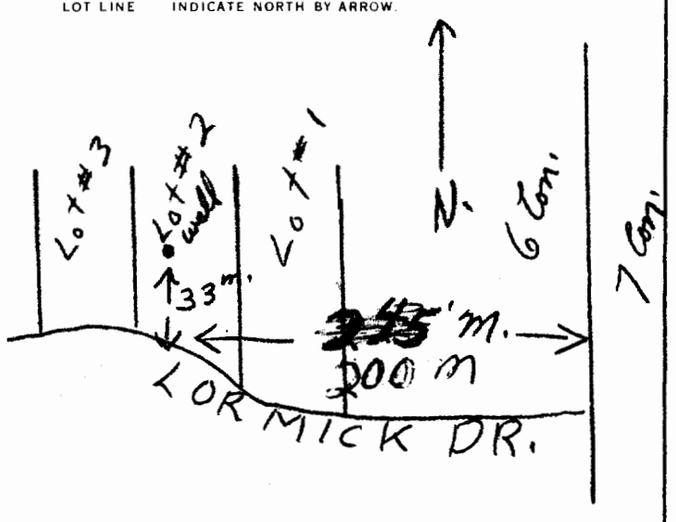
PUMPING TEST METHOD: 1 ☐ PUMP 2 ☒ BAILER
PUMPING RATE: 0010 GPM
DURATION OF PUMPING: 01 HOURS 30 MINS

STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING: 1 ☐ PUMPING 2 ☒ RECOVERY			
		15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
009 FEET	032 FEET	009 FEET	FEET	FEET	FEET

IF FLOWING, GIVE RATE: GPM
PUMP INTAKE SET AT: FEET
WATER AT END OF TEST: 1 ☒ CLEAR 2 ☐ CLOUDY
RECOMMENDED PUMP TYPE: ☒ SHALLOW ☐ DEEP
RECOMMENDED PUMP SETTING: 025 FEET
RECOMMENDED PUMPING RATE: 0007 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	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) 1	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: Sauder Well Drilling Ltd.
LICENCE NUMBER:
ADDRESS: R.R. # 4 Uxbridge, Ont. LOC 1KO
NAME OF DRILLER OR BORER: Ab Sauder
LICENCE NUMBER: 4743
SIGNATURE OF CONTRACTOR: ab. Sauder
SUBMISSION DATE: DAY 26 MO 6 YR 84

OFFICE USE ONLY

DATA SOURCE (58): 1
CONTRACTOR (59-62): 4743
RECEIVED (63-68): 05 10 84
DATE OF INSPECTION:
INSPECTOR:
REMARKS:

MINISTRY OF THE ENVIRONMENT COPY

FORM NO. 0506—4—77 FORM 7

Ministry of the Environment
Ontario

The Ontario Water Resources Act

WATER WELL RECORD

31 D/3e

1. PRINT ONLY IN SPACES PROVIDED
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(11) 1907089 MUNICIPALITY 19012 CON. CON 06

COUNTY OR DISTRICT	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	CON., BLOCK, TRACT, SURVEY, ETC.	LOT
Ontario DURHAM	Uxbridge	~~6 Plan M40 Lot # 4~~ (11x)	034

OWNER (SURNAME FIRST)	ADDRESS	DATE COMPLETED
Splonick Const.	19 Harvey St. Uxbridge, Loc 1K0	DAY 06 MO June YR 84

(21) UTM ZONE 17 EASTING 649750 NORTHING 4886750 BC 5 ELEVATION 0875 BC 5 BASIN CODE 22

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET FROM	DEPTH - FEET TO
Brown	Clay	Sand	Layers	0	18
Blue	Clay	Pebbles		18	45
Grey	Sand	Clay	Layers	45	50
Grey	Sand		Course	50	54

JAN 06 1987

(31) 00186052874 00455305 12 00502280574 00542350

(32)

(41) WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
0045'	1 ☒ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL

(51) CASING & OPEN HOLE RECORD

INSIDE DIAM INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET FROM	DEPTH - FEET TO
6 1/4 06	1 ☒ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE	.188	2a.g-	51 0051
	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
025	06000	03

MATERIAL AND TYPE: Stainless Steel

DEPTH TO TOP OF SCREEN: 0051 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	
26-29	30-33	

(71) PUMPING TEST

PUMPING TEST METHOD: 1 ☐ PUMP 2 ☒ BAILER

PUMPING RATE: 0012 GPM

DURATION OF PUMPING: 01 HOURS 30 MINS

STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING: 1 ☐ PUMPING 2 ☒ RECOVERY			
		15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
010 FEET	030 FEET	010 FEET	FEET	FEET	FEET

IF FLOWING, GIVE RATE: GPM

PUMP INTAKE SET AT: FEET

WATER AT END OF TEST: 1 ☒ CLEAR 2 ☐ CLOUDY

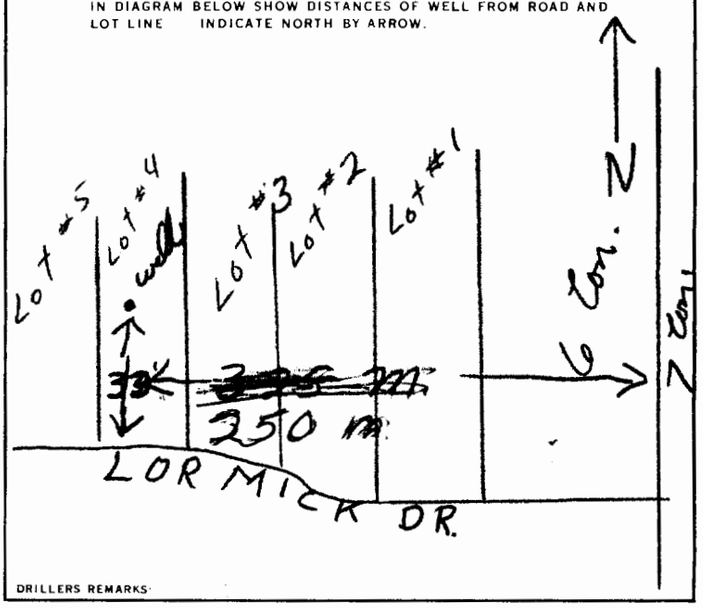
RECOMMENDED PUMP TYPE: ☒ SHALLOW ☐ DEEP

RECOMMENDED PUMP SETTING: 025 FEET

RECOMMENDED PUMPING RATE: 0008 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 1 (56)
1 ☒ WATER SUPPLY; 2 ☐ OBSERVATION WELL; 3 ☐ TEST HOLE; 4 ☐ RECHARGE WELL; 5 ☐ ABANDONED, INSUFFICIENT SUPPLY; 6 ☐ ABANDONED, POOR QUALITY; 7 ☐ UNFINISHED

WATER USE 01 (55-56)
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 C 1 (57)
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: Sauder Well Drilling Ltd. LICENCE NUMBER:

ADDRESS: R.R. # 4 Uxbridge, Ontario L0C 1K0

NAME OF DRILLER OR BORER: Ab Sauder LICENCE NUMBER: 4743

SIGNATURE OF CONTRACTOR: Ab. Sauder SUBMISSION DATE: DAY 26 MO 6 YR 84

OFFICE USE ONLY

DATA SOURCE 1 (58) CONTRACTOR 4743 (59-62) DATE RECEIVED 05 10 84 (63-66) (80)

DATE OF INSPECTION: INSPECTOR:

REMARKS:

FORM NO. 0506—4—77 FORM 7

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Ministry of the Environment
Ontario

The Ontario Water Resources Act

WATER WELL RECORD

31D/3e

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(11) 1907090 MUN 9012 CON CON 06

COUNTY OR DISTRICT	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	CON/BLOCK, TRACT, SURVEY, ETC	LOT
Ontario DURHAM	Uxbridge ? (UX)	~~6 (plan M40) Lot # 7~~	034

OWNER (SURNAME FIRST)	ADDRESS	DATE COMPLETED
Splonick Const.	19 Harvey St. Uxbridge, Ont. LOC 1KO	DAY 19 MO 09 YR 84

(21) UTM ZONE 17 EASTING 649700 NORTHING 4886650 RC 5 ELEVATION 0875 RC 5 BASIN CODE 22

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET FROM	DEPTH - FEET TO
Brown	Clay	Sandy		0	18
Blue	Clay	Pebbles		18	46
Grey	Sand	Gravel		46	50

JAN 06 1987

(31) 0018605812 0046305712 0050228111

(32)

(41) WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
0046'	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

INSIDE DIAM INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET FROM	DEPTH - FEET TO
6 1/4 06	1 ☒ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE	.188	2a.g.	47' 0047
	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
025	06 000	03

MATERIAL AND TYPE: Stainless Steal
DEPTH TO TOP OF SCREEN: 0047 FEET

61 PLUGGING & SEALING RECORD

DEPTH SET AT - FEET FROM	TO	MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)

(71) PUMPING TEST

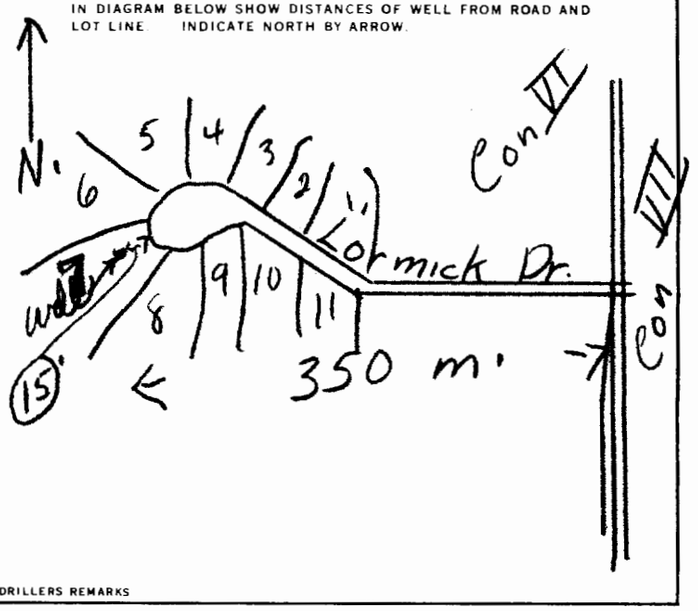
PUMPING TEST METHOD	PUMPING RATE	DURATION OF PUMPING
1 ☐ PUMP 2 ☒ BAILER	0010 GPM	02 HOURS 00 MINS

STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING: 1 ☐ PUMPING 2 ☒ RECOVERY	15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
011 FEET	028 FEET		011 FEET	FEET	FEET	FEET

IF FLOWING GIVE RATE	PUMP INTAKE SET AT	WATER AT END OF TEST	RECOMMENDED PUMP TYPE	RECOMMENDED PUMP SETTING	RECOMMENDED PUMPING RATE
GPM	FEET	1 ☐ CLEAR 2 ☐ CLOUDY	☒ SHALLOW ☐ DEEP	025 FEET	0007 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

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): 1

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: Sauder Well Drilling Ltd.
LICENCE NUMBER:
ADDRESS: R.R. # 4 Uxbridge, Ontario LOC 1KO
NAME OF DRILLER OR BORER: Ab Sauder
LICENCE NUMBER: 4743
SIGNATURE OF CONTRACTOR: Ab. Sauder
SUBMISSION DATE: DAY 2 MO. 10 YR. 84

OFFICE USE ONLY

DATA SOURCE (58): 1
CONTRACTOR (59-62): 4743
DATE RECEIVED (63-68): 05 10 84
DATE OF INSPECTION:
INSPECTOR:
REMARKS:

MINISTRY OF THE ENVIRONMENT COPY

FORM NO. 0506—4—77 FORM 7

Ministry of the Environment
Ontario

The Ontario Water Resources Act

WATER WELL RECORD

31 D/3e

1907119

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

11

MUNICIP 19012 CON ØN 06

COUNTY OR DISTRICT	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	CON, BLOCK, TRACT, SURVEY, ETC	LOT
~~Ontario~~ Durham	Uxbridge (lx)	6 ~~(Plan M 40) Lot~~ # 8	034

[redacted]

ADDRESS: 19 Harvey St, Uxbridge Ont. LOC 1KO

DATE COMPLETED: DAY 13 MO 11 YR 84

21 UTM ZONE 17 EASTING 649800 NORTHING 4886700 ELEVATION 0875 BASIN CODE 22

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET FROM	DEPTH - FEET TO
Yellow	Clay	Sandy		0	5
Brown	Sand		Loose	5	13
Brown	Clay			13	19
Blue	Clay		Soft	19	35
Blue	Clay	Gravel	Layers	35	51
Brown	Sand	Gravel	Clean	51	58

31 000550581 0013628777 0019605 0035305851 0051305111/4 0058628111/21

32

41 WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
0051'	1 ☒ FRESH 3 ☐ SULPHUR 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR 2 ☐ SALTY 4 ☐ MINERAL

51 CASING & OPEN HOLE RECORD

INSIDE DIAM INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET FROM	DEPTH - FEET TO
6¼ 06	☒ STEEL ☐ GALVANIZED ☐ CONCRETE ☐ OPEN HOLE	.188	2'a.	0055'
	☐ STEEL ☐ GALVANIZED ☐ CONCRETE ☐ OPEN HOLE			
	☐ STEEL ☐ GALVANIZED ☐ CONCRETE ☐ OPEN HOLE			

SCREEN

SIZE(S) OF OPENING (SLOT NO.)	DIAMETER	LENGTH
30	06000 INCHES	03 FEET

MATERIAL AND TYPE: Stainless Steel

DEPTH TO TOP OF SCREEN: 0055 FEET

61 PLUGGING & SEALING RECORD

DEPTH SET AT - FEET FROM	DEPTH SET AT - FEET TO	MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)

71 PUMPING TEST

PUMPING TEST METHOD: 1 ☐ PUMP 2 ☒ BAILER

PUMPING RATE: 0020 GPM

DURATION OF PUMPING: 01 HOURS 00 MINS

STATIC LEVEL	WATER LEVEL END OF PUMPING
022 FEET	030 FEET

WATER LEVELS DURING: 1 ☐ PUMPING 2 ☒ RECOVERY

15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
022 FEET	— FEET	— FEET	— FEET

IF FLOWING, GIVE RATE: GPM

PUMP INTAKE SET AT: FEET

WATER AT END OF TEST: 1 ☒ CLEAR 2 ☐ CLOUDY

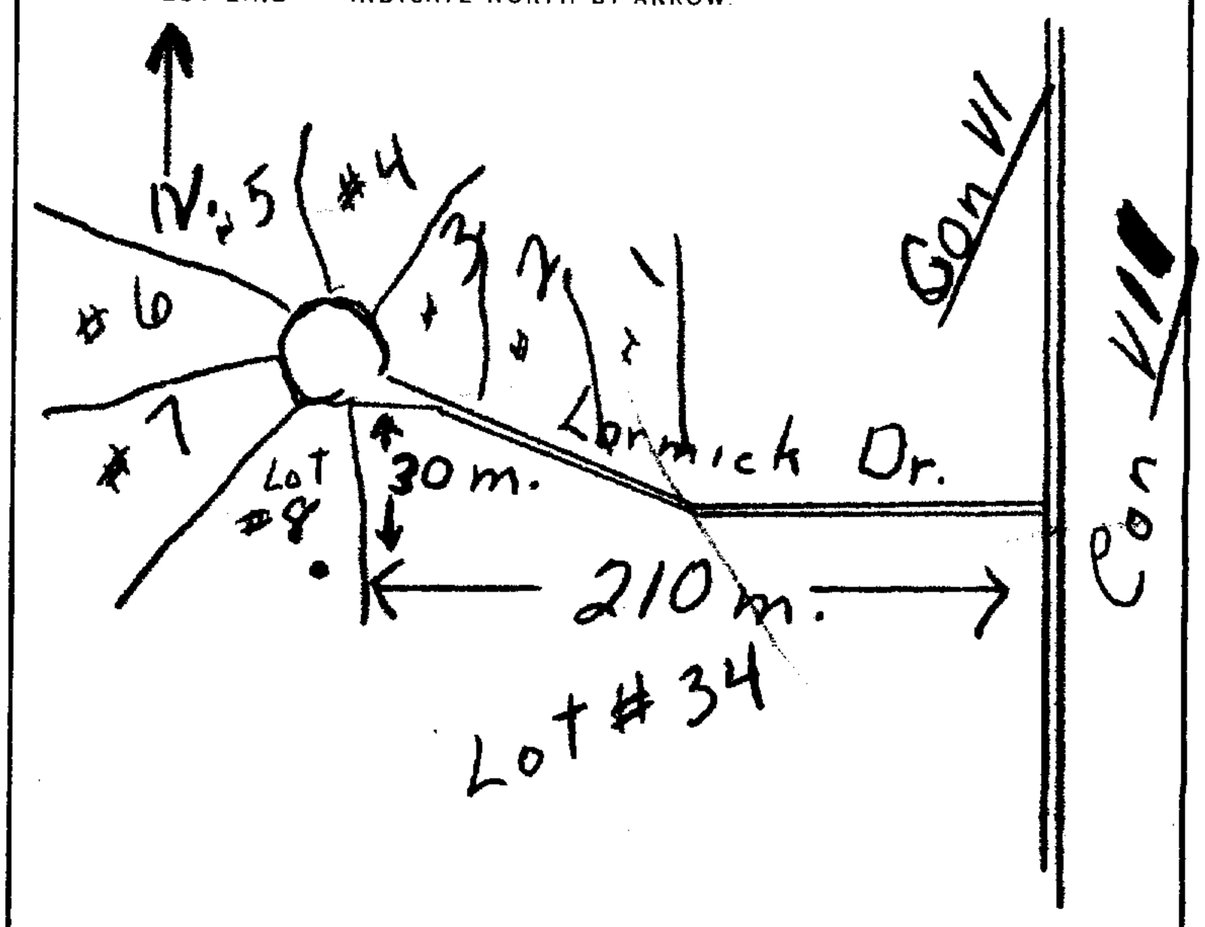
RECOMMENDED PUMP TYPE: ☒ SHALLOW ☐ DEEP

RECOMMENDED PUMP SETTING: 025 FEET

RECOMMENDED PUMPING RATE: 0008 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: 1

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

WATER USE: 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: 1

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: Sauder Well Drilling Ltd. LICENCE NUMBER:

ADDRESS: R.R. # 4 Uxbridge, Ontario LOC 1KO

NAME OF DRILLER OR BORER: Ab Sauder LICENCE NUMBER: 4743

SIGNATURE OF CONTRACTOR: Ab. Sauder SUBMISSION DATE: DAY 15 MO 11 YR 84

OFFICE USE ONLY

DATA SOURCE: 1 CONTRACTOR: 4743 DATE RECEIVED: 19 11 84

DATE OF INSPECTION: INSPECTOR:

REMARKS:

MINISTRY OF THE ENVIRONMENT COPY

FORM NO. 0506—4—77 FORM 7

31 D/3e

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) 1907294 MUNICIPALITY 19012 CON. CON 06

COUNTY OR DISTRICT	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	CON., BLOCK, TRACT, SURVEY, ETC.	LOT
Ontario DURHAM	Uxbridge (1x1)	6 VI ~~Plan M-40 Lot~~ 3	034

OWNER (SURNAME FIRST)	ADDRESS	DATE COMPLETED
Splonick Const. Ltd.	P.O. Box 1066 Uxbridge, Ont. L0C 1K0	DAY 10 MO 04 YR 85

(21) UTM ZONE 17 EASTING 649700 NORTHING 4886750 RC 5 ELEVATION 0875 RC 5 BASIN CODE 22

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET FROM	DEPTH - FEET TO
Black	Top soil			0	2
Brown	Sand	Clay	Soft	2	12
Blue	Clay		Soft	12	49
Grey	Sand			49	52

JAN 06 1987

(31) 00028202 00126280585 00493058S 00522208

(32)

(41) WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
0049-52'	1 ☒ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL

(51) CASING & OPEN HOLE RECORD

INSIDE DIAM INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET FROM	DEPTH - FEET TO
~~6~~ 06	1 ☒ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE	.188	2'a.g.	49 0049
	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	LENGTH
020	06 000 INCHES	03 FEET

MATERIAL AND TYPE	DEPTH TO TOP OF SCREEN
Stainless Steel	0049 FEET

(61) PLUGGING & SEALING RECORD

DEPTH SET AT - FEET FROM	TO	MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)

(71) PUMPING TEST

PUMPING TEST METHOD	PUMPING RATE	DURATION OF PUMPING
1 ☐ PUMP 2 ☒ BAILER	0010 GPM	02 HOURS 00 MINS

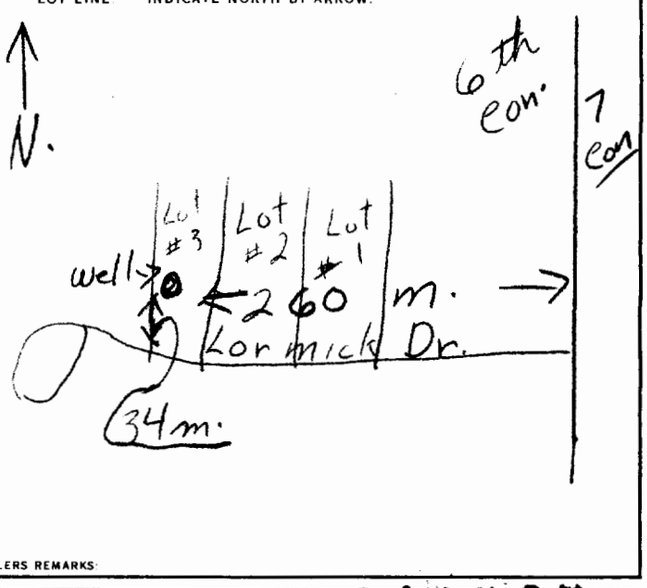
STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING (1 ☒ PUMPING 2 ☐ RECOVERY)	15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
012 FEET	030 FEET		030 FEET	030 FEET	030 FEET	030 FEET

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

RECOMMENDED PUMP TYPE	RECOMMENDED PUMP SETTING	RECOMMENDED PUMPING RATE
☒ SHALLOW ☐ DEEP	030 FEET	0008 GPM

7870 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 1	1 ☒ WATER SUPPLY 2 ☐ OBSERVATION WELL 3 ☐ TEST HOLE 4 ☐ RECHARGE WELL 5 ☐ ABANDONED, INSUFFICIENT SUPPLY 6 ☐ ABANDONED, POOR QUALITY 7 ☐ UNFINISHED
WATER USE 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 1	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	LICENCE NUMBER
Sauder Well Drilling Ltd.	4743

ADDRESS
R.R. # 4 Uxbridge, Ontario L0E 1K0

NAME OF DRILLER OR BORER	LICENCE NUMBER

SIGNATURE OF CONTRACTOR	SUBMISSION DATE
Ab. Sauder	DAY 21 MO. 5 YR 85

OFFICE USE ONLY

DATA SOURCE	CONTRACTOR	DATE RECEIVED
1	4743	24 05 85

DATE OF INSPECTION | INSPECTOR

REMARKS

MINISTRY OF THE ENVIRONMENT COPY

FORM NO. 0506—4—77 FORM 7

Ministry of the Environment
Ontario

The Ontario Water Resources Act

WATER WELL RECORD

31 D/3e

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

(11) 1907346 NUMBER 19012 CON CON 06

COUNTY OR DISTRICT	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	CON., BLOCK, TRACT, SURVEY, ETC.	LOT
Ontario DURHAM	Uxbridge (Un)	~~6~~ VI ~~Plan "M" 40 Lot 6~~	~~34~~ 034

OWNER (SURNAME FIRST)	ADDRESS	DATE COMPLETED
Splonick Const.	P.O. Box 1066 Uxbridge, Ont. L0C 1K0	DAY 31 MO 05 YR 85

(21) UTM ZONE 17 EASTING 649450 NORTHING 4886600 RC 5 ELEVATION 0900 RC 5 BASIN CODE 22

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET FROM	DEPTH - FEET TO
Brown	Clay	Sandy	Loose	0	18
Blue	Clay		Soft	18	44
Brown	Sand		Clean	44	47

Plan M40 lot 6 JAN 06 1987

(31) 0018605817 7 0044305 8 5 0047638 6 2

(32)

(41) WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
0044'	1 ☒ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL

(51) CASING & OPEN HOLE RECORD

INSIDE DIAM INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET FROM	DEPTH - FEET TO
6 1/4 06	1 ☒ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE	188	4' a.g.	44' 0044'
	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	LENGTH
030	06000 INCHES	03 FEET

MATERIAL AND TYPE: Stainless Steel
DEPTH TO TOP OF SCREEN: 0044 FEET

(61) PLUGGING & SEALING RECORD

DEPTH SET AT - FEET FROM	TO	MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)

(71) PUMPING TEST

PUMPING TEST METHOD	PUMPING RATE	DURATION OF PUMPING
1 ☐ PUMP 2 ☒ BAILER	0008 GPM	02 HOURS 30 MINS

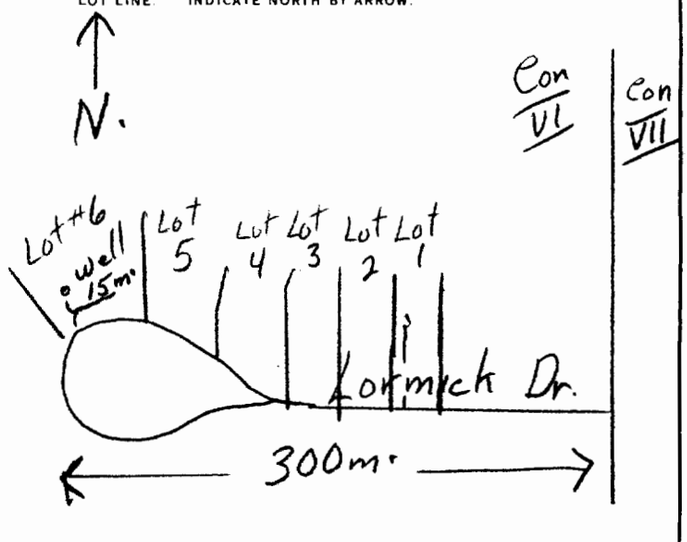
STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING: 1 ☐ PUMPING 2 ☒ RECOVERY	15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
009 FEET	030 FEET		009 FEET	-- FEET	-- FEET	-- FEET

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

RECOMMENDED PUMP TYPE	RECOMMENDED PUMP SETTING	RECOMMENDED PUMPING RATE
☒ SHALLOW ☐ DEEP	028 FEET	0007 GPM

7874 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 1	1 ☒ WATER SUPPLY 2 ☐ OBSERVATION WELL 3 ☐ TEST HOLE 4 ☐ RECHARGE WELL 5 ☐ ABANDONED, INSUFFICIENT SUPPLY 6 ☐ ABANDONED, POOR QUALITY 7 ☐ UNFINISHED
WATER USE 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 1	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	LICENCE NUMBER
Sauder Well Drilling Ltd.	

ADDRESS: R.R. # 4 Uxbridge, Ontario L0C 1K0

NAME OF DRILLER OR BORER	LICENCE NUMBER
Ab Sauder	4743

SIGNATURE OF CONTRACTOR: Ab. Sauder
SUBMISSION DATE: DAY 2 MO. 7 YR. 85

OFFICE USE ONLY

DATA SOURCE 1 | CONTRACTOR 4743 | DATE RECEIVED 05 07 85
DATE OF INSPECTION | INSPECTOR
REMARKS

MINISTRY OF THE ENVIRONMENT COPY

FORM NO. 0506—4—77 FORM 7

31 D/3 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) 1907375 MUNICIPALITY 19012 CON CON 06

COUNTY OR DISTRICT: Ontario (DURHAM)
TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE: Uxbridge (Ux)
CON., BLOCK, TRACT, SURVEY, ETC: ~~6 VI~~ Plan ~~M 40 Lot 10~~
LOT: ~~10~~ 034

[redacted]
ADDRESS: Box 1066 Uxbridge, Ontario L0C 1K0
DATE COMPLETED: DAY 31 MO 07 YR 85

(21) UTM ZONE 17 EASTING 649500 NORTHING 4886550 BC 5 ELEVATION 0900 BC 5 BASIN CODE 22

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET FROM	DEPTH - FEET TO
Black	Top soil			0	1
Brown	Clay	Sandy	Loose	1	21
Blue	Clay		Soft	21	55
Brown	Sand	Clay	Dirty	55	62
Brown	Sand		Clean	62	66
		Plan	M-40 sub lot		

JAN 06 1987

(31) 0001802 0021605817 7 0055305 85 0062628056 7 0066428 62

(32)

(41) WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
0055'	1 ☒ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL

(51) CASING & OPEN HOLE RECORD

INSIDE DIAM INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET FROM	DEPTH - FEET TO
6 1/4 06	1 ☒ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE	.188	1'a.g.	-63' 0063
	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	LENGTH
016	06000 INCHES	03 FEET

MATERIAL AND TYPE: Stainless Steel
DEPTH TO TOP OF SCREEN: 0063 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	
18-21	22-25	
26-29	30-33	

(71) PUMPING TEST

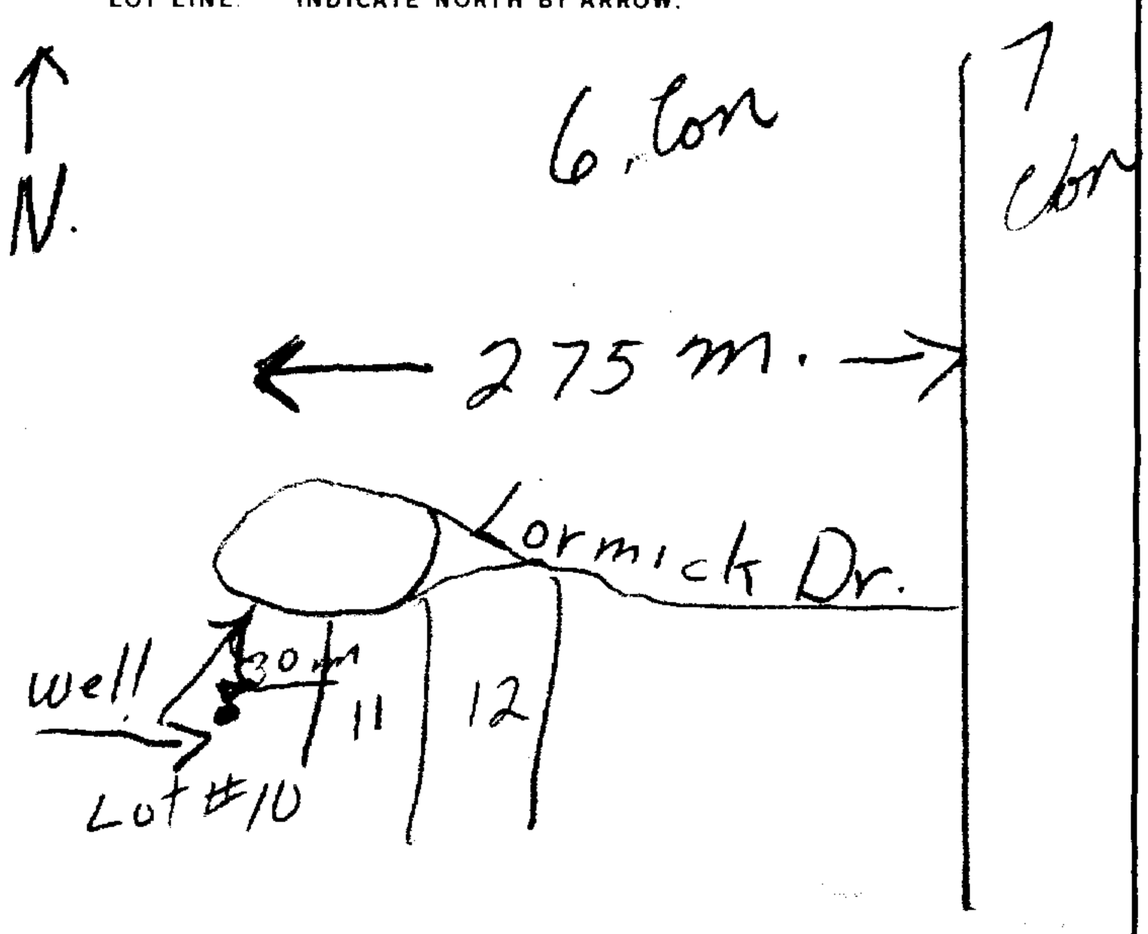
PUMPING TEST METHOD: 1 ☐ PUMP 2 ☒ BAILER
PUMPING RATE: 0010 GPM
DURATION OF PUMPING: 01 HOURS 30 MINS

STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING: 1 ☐ PUMPING 2 ☒ RECOVERY			
		15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
021 FEET	045 FEET	021 FEET	021 FEET	021 FEET	021 FEET

IF FLOWING, GIVE RATE: GPM
PUMP INTAKE SET AT: FEET
WATER AT END OF TEST: 1 ☒ CLEAR 2 ☐ CLOUDY
RECOMMENDED PUMP TYPE: ☐ SHALLOW ☒ DEEP
RECOMMENDED PUMP SETTING: 045 FEET
RECOMMENDED PUMPING RATE: 0008 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

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; 5 ☐ COMMERCIAL; 6 ☐ MUNICIPAL; 7 ☐ PUBLIC SUPPLY; 8 ☐ COOLING OR AIR CONDITIONING; ☐ OTHER; 9 ☐ NOT USED

METHOD OF DRILLING (57): 1

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: Sauder Well Drilling Ltd.
LICENCE NUMBER:
ADDRESS: R.R. # 4 Uxbridge, Ontario L0C 1K0
NAME OF DRILLER OR BORER: Ab Sauder
LICENCE NUMBER: 4743
SIGNATURE OF CONTRACTOR: Ab. Sauder
SUBMISSION DATE: DAY 6 MO. 7 YR. 85

OFFICE USE ONLY

DATA SOURCE (58): 1
CONTRACTOR (59-62): 4743
DATE RECEIVED (63-68): 280885
DATE OF INSPECTION:
INSPECTOR:
REMARKS:

MINISTRY OF THE ENVIRONMENT COPY

FORM NO. 0506—4—77 FORM 7

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 — 1908623

MUNICIP | CON

COUNTY OR DISTRICT	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	CON. BLOCK, TRACT, SURVEY, ETC.	LOT
[redacted]	Uxbridge	6	26 32

DATE COMPLETED: DAY 21 MO 09 YR 87

[redacted] North St. Uxbridge, ON

UTM ZONE | UTM NORTHING 8186055 | UTM EASTING | ELEVATION 279 | BASIN CODE

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET FROM	DEPTH - FEET TO
Brown	Clay	Pebbles	Soft	0	40
Grey	Clay	Few Boulders	Hard	40	70
Red	Sand	Gravel	Cemented	70	84

31

32

41 WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
84	1 ☒ FRESH 2 ☐ SALTY; 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS
	1 ☐ FRESH 2 ☐ SALTY; 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS
	1 ☐ FRESH 2 ☐ SALTY; 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS
	1 ☐ FRESH 2 ☐ SALTY; 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS
	1 ☐ FRESH 2 ☐ SALTY; 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS

51 CASING & OPEN HOLE RECORD

INSIDE DIAM INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET FROM	DEPTH - FEET TO
5½	1 ☒ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE 5 ☐ PLASTIC	188	0	80
	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE 5 ☐ PLASTIC			
	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE 5 ☐ PLASTIC			

SCREEN

SIZE(S) OF OPENING (SLOT NO.)	DIAMETER	LENGTH
14	5 INCHES	4 FEET

MATERIAL AND TYPE: Johnson S/S

DEPTH TO TOP OF SCREEN: 80 FEET

61 PLUGGING & SEALING RECORD

DEPTH SET AT - FEET FROM	DEPTH SET AT - FEET TO	MATERIAL AND TYPE (CEMENT GROUT LEAD PACKER, ETC.)
0	76	K. Packer top 4'
		screen nipple

71 PUMPING TEST

PUMPING TEST METHOD: 1 ☐ PUMP 2 ☒ BAILER

PUMPING RATE: 12 GPM

DURATION OF PUMPING: 1 HOURS 30 MINS

STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING (1 ☒ PUMPING 2 ☐ RECOVERY) 15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
40 FEET	50 FEET	45 FEET	50 FEET	50 FEET	50 FEET

IF FLOWING, GIVE RATE: GPM

PUMP INTAKE SET AT: 73 FEET

WATER AT END OF TEST: 1 ☒ CLEAR 2 ☐ CLOUDY

RECOMMENDED PUMP TYPE: ☐ SHALLOW ☒ DEEP

RECOMMENDED PUMP SETTING: 73 FEET

RECOMMENDED PUMPING RATE: 10 GPM

LOCATION OF WELL

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

050 D/O (38?

50' ↕ owell

North St.

Sd. St.

Younge St.

N

DRILLERS REMARKS: 13694

FINAL STATUS OF WELL

1 ☒ WATER SUPPLY; 2 ☐ OBSERVATION WELL; 3 ☐ TEST HOLE; 4 ☐ RECHARGE WELL; 5 ☐ ABANDONED, INSUFFICIENT SUPPLY; 6 ☐ ABANDONED, POOR QUALITY; 7 ☐ UNFINISHED; 9 ☐ DEWATERING

WATER USE

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

METHOD OF CONSTRUCTION

1 ☐ CABLE TOOL; 2 ☒ ROTARY (CONVENTIONAL); 3 ☐ ROTARY (REVERSE); 4 ☐ ROTARY (AIR); 5 ☐ AIR PERCUSSION; 6 ☐ BORING; 7 ☐ DIAMOND; 8 ☐ JETTING; 9 ☐ DRIVING; ☐ DIGGING; ☐ OTHER

CONTRACTOR

NAME OF WELL CONTRACTOR: Roger Boadway Ent., Ltd.

WELL CONTRACTOR'S LICENCE NUMBER: 1413

ADDRESS: Box 397 Sutton West, ON L0E 1R0

NAME OF WELL TECHNICIAN: Grant Boadway

WELL TECHNICIAN'S LICENCE NUMBER: T0029

SIGNATURE OF TECHNICIAN/CONTRACTOR: Roger Boadway

SUBMISSION DATE: DAY 21 MO 09 YR 87

OFFICE USE ONLY

DATA SOURCE | CONTRACTOR | DATE RECEIVED: OCT 15 1987

DATE OF INSPECTION | INSPECTOR

REMARKS

MINISTRY OF THE ENVIRONMENT COPY

FORM NO. 0506 (11/86) FORM 9

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 — 1910316 — MUNICIP 19012 — CON. CON — 06

COUNTY OR DISTRICT	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	CON., BLOCK, TRACT, SURVEY, ETC.	LOT
Durham	Uxbridge	6	33

[redacted] 7300
entre St. Uxbridge, ON

DATE COMPLETED: DAY 29 MO 11 YR 89

UTM 18 5988 — RC. — ELEVATION 283 — RC. — BASIN CODE

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET FROM	DEPTH - FEET TO
Brown	Clay	Sand, Gravel	Loose	0	21
Grey	Clay		Hard	21	80
Grey	Sand	Silt	Fine, Cemented	80	98
Grey	Sand	Gravel	Mixed	98	104

31
32

41 WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
104	1 ☒ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS

51 CASING & OPEN HOLE RECORD

INSIDE DIAM INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET FROM	DEPTH - FEET TO
6¼	1 ☒ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE 5 ☐ PLASTIC	188	0	101
	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE 5 ☐ PLASTIC			
	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE 5 ☐ PLASTIC			

SCREEN

SIZE(S) OF OPENING (SLOT NO.)	DIAMETER	LENGTH
25	6 INCHES	3 FEET

MATERIAL AND TYPE: Johnson S/S
DEPTH TO TOP OF SCREEN: 101 FEET

61 PLUGGING & SEALING RECORD

DEPTH SET AT - FEET FROM	DEPTH SET AT - FEET TO	MATERIAL AND TYPE (CEMENT GROUT LEAD PACKER ETC.)
97	101	K. Packer top 4' screen nipple

71 PUMPING TEST

PUMPING TEST METHOD	PUMPING RATE	DURATION OF PUMPING
1 ☐ PUMP 2 ☒ BAILER	7 GPM	2 HOURS ____ MINS

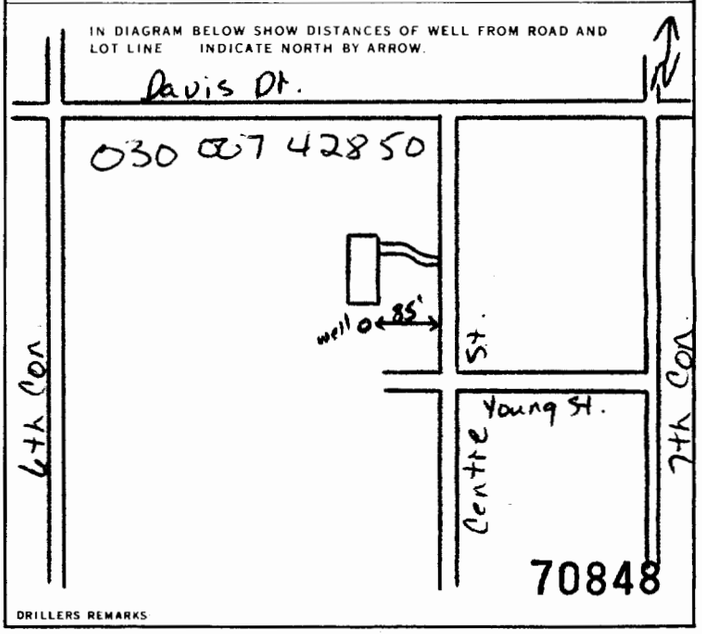
STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING	15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
15 FEET	90 FEET	1 ☒ PUMPING 2 ☐ RECOVERY	73 FEET	81 FEET	88 FEET	90 FEET

IF FLOWING, GIVE RATE	PUMP INTAKE SET AT	WATER AT END OF TEST
GPM	95 FEET	1 ☒ CLEAR 2 ☐ CLOUDY

RECOMMENDED PUMP TYPE	RECOMMENDED PUMP SETTING	RECOMMENDED PUMPING RATE
☐ SHALLOW ☒ DEEP	95 FEET	6 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

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

WATER USE

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 CONSTRUCTION

1 ☐ CABLE TOOL 2 ☒ ROTARY (CONVENTIONAL) 3 ☐ ROTARY (REVERSE) 4 ☐ ROTARY (AIR) 5 ☐ AIR PERCUSSION 6 ☐ BORING 7 ☐ DIAMOND 8 ☐ JETTING 9 ☐ DRIVING ☐ DIGGING ☐ OTHER

CONTRACTOR

NAME OF WELL CONTRACTOR: Roger Boadway Ent., Ltd.
WELL CONTRACTOR'S LICENCE NUMBER: 1413
ADDRESS: Box 397 Sutton West, ON L0E 1R0
NAME OF WELL TECHNICIAN: Jim O'Neill
WELL TECHNICIAN'S LICENCE NUMBER: T0030
SIGNATURE OF TECHNICIAN/CONTRACTOR: Roger Boadway
SUBMISSION DATE: DAY 29 MO 11 YR 89

OFFICE USE ONLY

DATA SOURCE
CONTRACTOR: 1413
DATE RECEIVED: DEC 08 1989
DATE OF INSPECTION
INSPECTOR
REMARKS

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FORM NO. 0506 (11/86) FORM 9

Ministry of the Environment
Ontario

The Ontario Water Resources Act

WATER WELL RECORD

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11 1910916 MUNICIP 19012 CON. 06

COUNTY OR DISTRICT	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	CON. BLOCK, TRACT, SURVEY, ETC	LOT
Durham	Uxbridge (Uxbridge)	~~16?~~ 6	~~32~~ 555&554

[redacted] North St. Uxbridge, ON

DATE COMPLETED: DAY 06 MO 11 YR 90

UTM ZONE 17 18 8 6 0 5 2 RC. ELEVATION 276 RC. BASIN CODE

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET FROM	DEPTH - FEET TO
Brown	Clay	Stones	Packed	0	14
Brown	Gravel	Sand	Coarse	14	49
Grey	Clay	Stones	Packed	49	56
Brown	Sand	Gravel	Clean	56	74

31
32

41 WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
73	1 ☒ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS

51 CASING & OPEN HOLE RECORD

INSIDE DIAM INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET FROM	DEPTH - FEET TO
6¼	1 ☒ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE 5 ☐ PLASTIC	188	0	69
	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE 5 ☐ PLASTIC			
	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE 5 ☐ PLASTIC			

SCREEN

SIZE(S) OF OPENING (SLOT NO.)	DIAMETER	LENGTH
14	6 INCHES	3 FEET

MATERIAL AND TYPE: Johnson S/S
DEPTH TO TOP OF SCREEN: 70 FEET

61 PLUGGING & SEALING RECORD

DEPTH SET AT - FEET FROM	DEPTH SET AT - FEET TO	MATERIAL AND TYPE (CEMENT GROUT LEAD PACKER, ETC.)
65	69	K. Packer top 4'
		screen nipple

71 PUMPING TEST

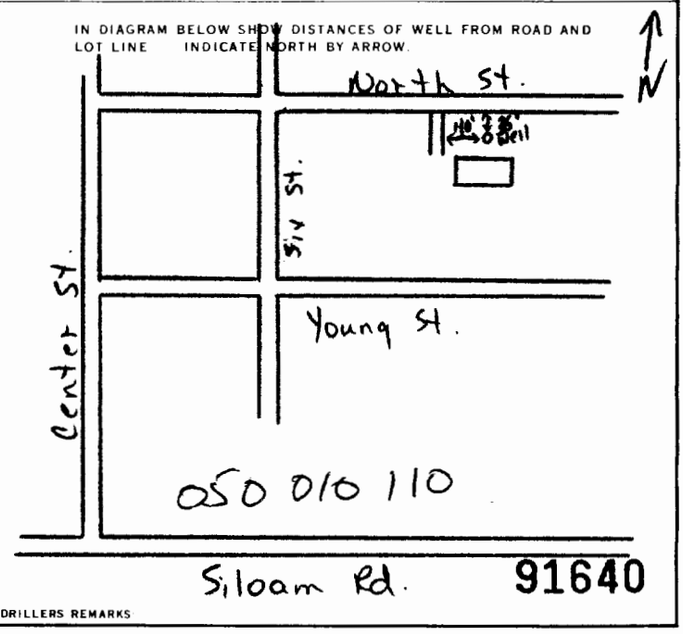
PUMPING TEST METHOD: 1 ☐ PUMP 2 ☐ BAILER — AIR
PUMPING RATE: 25 GPM
DURATION OF PUMPING: 2 HOURS ____ MINS

STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING: 1 ☒ PUMPING 2 ☐ RECOVERY	15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
24 FEET	46 FEET		FEET	FEET	FEET	FEET

IF FLOWING, GIVE RATE: GPM
PUMP INTAKE SET AT: FEET
WATER AT END OF TEST: 1 ☒ CLEAR 2 ☐ CLOUDY
RECOMMENDED PUMP TYPE: ☐ SHALLOW ☒ DEEP
RECOMMENDED PUMP SETTING: 50 FEET
RECOMMENDED PUMPING RATE: 10 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

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

WATER USE

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 CONSTRUCTION

1 ☐ CABLE TOOL 2 ☒ ROTARY (CONVENTIONAL) 3 ☐ ROTARY (REVERSE) 4 ☐ ROTARY (AIR) 5 ☐ AIR PERCUSSION 6 ☐ BORING 7 ☐ DIAMOND 8 ☐ JETTING 9 ☐ DRIVING ☐ DIGGING ☐ OTHER

CONTRACTOR

NAME OF WELL CONTRACTOR: Roger Boadway Ent., Ltd.
WELL CONTRACTOR'S LICENCE NUMBER: 1413
ADDRESS: Box 397 Sutton West, ON L0E 1R0
NAME OF WELL TECHNICIAN: Hank Detkavich
WELL TECHNICIAN'S LICENCE NUMBER: T0487
SIGNATURE OF TECHNICIAN/CONTRACTOR: Roger Boadway
SUBMISSION DATE: DAY 06 MO 11 YR 90

OFFICE USE ONLY

DATA SOURCE
CONTRACTOR: 1413
DATE RECEIVED: DEC 10 1990
DATE OF INSPECTION
INSPECTOR
REMARKS

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Ministry of the Environment
Ontario

The Ontario Water Resources Act

WATER WELL RECORD

1911609

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11

MUNICIP 19608 CON. CON 106

COUNTY OR DISTRICT	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	CON., BLOCK, TRACT, SURVEY, ETC.	LOT
Durham	Uxbridge Twp	Con 6	32

OWNER (SURNAME FIRST) 28-47

ADDRESS 46 North Street

DATE COMPLETED 48-53 DAY 28 MO 07 YR 92 92

21

UTM ZONE 17 EASTING 649722 NORTHING 4886128 RC ELEVATION 273 RC BASIN CODE

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET FROM	DEPTH - FEET TO
	Top Soil			0	2
Brown	Clay	Sandy		2	18
Brown	Clay	Sand + Gravel		18	51
Brown	Sand + Gravel			51	62

31

32

41 WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
51	1 ☒ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS
	1 ☐ FRESH 2 ☐ SALTY 3 ☒ SULPHUR 4 ☐ MINERALS 6 ☐ GAS

51 CASING & OPEN HOLE RECORD

INSIDE DIAM INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET FROM	DEPTH - FEET TO
6 1/4	1 ☒ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE 5 ☐ PLASTIC	188	0	56
	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE 5 ☐ PLASTIC			
	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE 5 ☐ PLASTIC			

SCREEN

SIZE(S) OF OPENING (SLOT NO.)	DIAMETER	LENGTH
16T - 14T	6 INCHES	2.43 FEET
MATERIAL AND TYPE: S.S.	DEPTH TO TOP OF SCREEN: 56 FEET	

61 PLUGGING & SEALING RECORD

DEPTH SET AT - FEET FROM	DEPTH SET AT - FEET TO	MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)

71 PUMPING TEST

PUMPING TEST METHOD	PUMPING RATE	DURATION OF PUMPING
1 ☐ PUMP 2 ☒ BAILER	20 GPM	1 HOURS ___ MINS

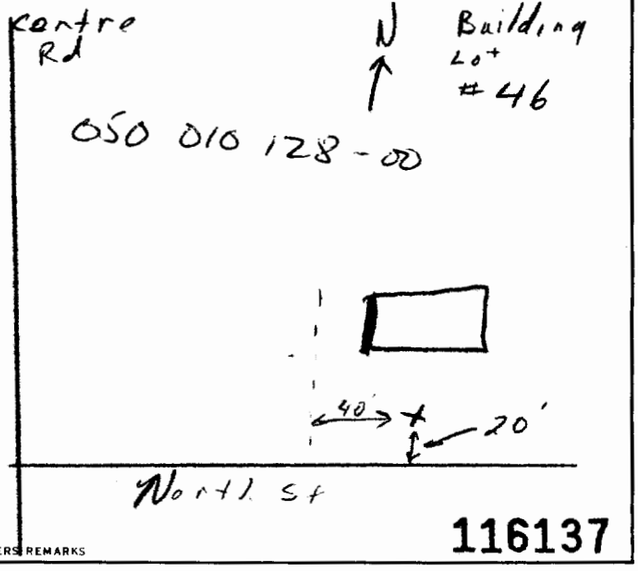
STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING	15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
25 FEET	50 FEET	1 ☐ PUMPING 2 ☐ RECOVERY	50 FEET	50 FEET	50 FEET	50 FEET

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

RECOMMENDED PUMP TYPE	RECOMMENDED PUMP SETTING	RECOMMENDED PUMPING RATE
☐ SHALLOW ☒ DEEP	50 FEET	15 GPM

LOCATION OF WELL

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



DRILLERS REMARKS 116137

FINAL STATUS OF WELL	WATER USE	METHOD OF CONSTRUCTION
1 ☒ WATER SUPPLY	1 ☒ DOMESTIC	1 ☒ CABLE TOOL
2 ☐ OBSERVATION WELL	2 ☐ STOCK	2 ☐ ROTARY (CONVENTIONAL)
3 ☐ TEST HOLE	3 ☐ IRRIGATION	3 ☐ ROTARY (REVERSE)
4 ☐ RECHARGE WELL	4 ☐ INDUSTRIAL	4 ☐ ROTARY (AIR)
5 ☐ ABANDONED, INSUFFICIENT SUPPLY	5 ☐ COMMERCIAL	5 ☐ AIR PERCUSSION
6 ☐ ABANDONED, POOR QUALITY	6 ☐ MUNICIPAL	6 ☐ BORING
7 ☐ UNFINISHED	7 ☐ PUBLIC SUPPLY	7 ☐ DIAMOND
☐ DEWATERING	8 ☐ COOLING OR AIR CONDITIONING	8 ☐ JETTING
	9 ☐ NOT USED	9 ☐ DRIVING
	☐ OTHER	☐ DIGGING ☐ OTHER

CONTRACTOR

NAME OF WELL CONTRACTOR: Wilson Water Wells (4 P) — WELL CONTRACTOR'S LICENCE NUMBER: 5459

ADDRESS: R.R. 1 Stouffville Ont.

NAME OF WELL TECHNICIAN: Peter Wilson — WELL TECHNICIAN'S LICENCE NUMBER: 88-083

SIGNATURE OF TECHNICIAN/CONTRACTOR: Peter Wilson — SUBMISSION DATE: DAY 29 MO. 7 YR. 92

OFFICE USE ONLY

DATA SOURCE 58 — CONTRACTOR 59-62: 5459 — DATE RECEIVED 63-68: OCT 13 1992

DATE OF INSPECTION — INSPECTOR

REMARKS

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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 1911877 MUNICIP 19 CON. CON 106

COUNTY OR DISTRICT	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	CON., BLOCK, TRACT, SURVEY, ETC.	LOT
[redacted]	BRIDGE TWP. (Uxbridge)	CON.6	PT. L33
	7307 CENTRE RD.	DATE COMPLETED DAY 30 SEP MO 9 YR 93	

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET FROM	DEPTH - FEET TO
BROWN	CLAY	SAND		0	20
GRAY	CLAY	STONES	MED.	20	58
GRAY	SAND		LOOSE	58	60
GRAY	CLAY	STONES	MED.	60	83
GRAY	GRAVEL	SAND	LOOSE	83	86

31
32

41 WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
83-86	1 ☒ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS

51 CASING & OPEN HOLE RECORD

INSIDE DIAM INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET FROM	DEPTH - FEET TO
6¼	☒ 1 STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE 5 ☐ PLASTIC	.188	0	83
	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE 5 ☐ PLASTIC			
	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE 5 ☐ PLASTIC			

SCREEN

SIZE(S) OF OPENING (SLOT NO.)	DIAMETER	LENGTH
# 16	6 INCHES	3 FEET

MATERIAL AND TYPE: STAINLESS STEEL
DEPTH TO TOP OF SCREEN: 83 FEET

61 PLUGGING & SEALING RECORD

DEPTH SET AT - FEET FROM	DEPTH SET AT - FEET TO	MATERIAL AND TYPE (CEMENT GROUT LEAD PACKER ETC.)

71 PUMPING TEST

PUMPING TEST METHOD	PUMPING RATE	DURATION OF PUMPING
1 ☒ PUMP 2 ☐ BAILER	8 GPM	2 HOURS ____ MINS

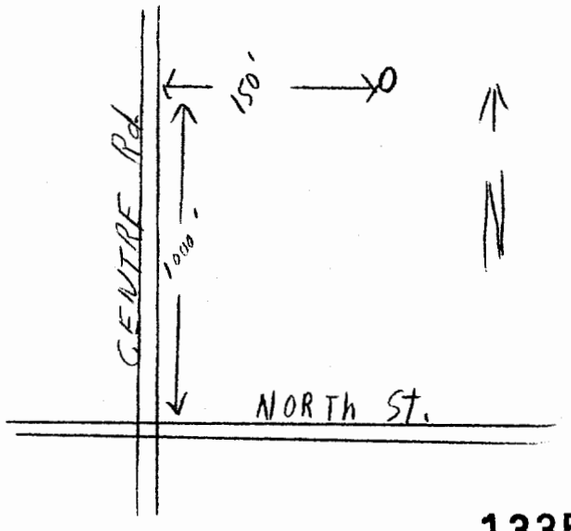
STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING (1 ☐ PUMPING 2 ☐ RECOVERY)	15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
27 FEET	81 FEET		77 FEET	81 FEET	81 FEET	81 FEET

IF FLOWING GIVE RATE	PUMP INTAKE SET AT	WATER AT END OF TEST
GPM	84 FEET	1 ☒ CLEAR 2 ☐ CLOUDY

RECOMMENDED PUMP TYPE	RECOMMENDED PUMP SETTING	RECOMMENDED PUMPING RATE
☐ SHALLOW ☒ DEEP	75 FEET	8 GPM

LOCATION OF WELL

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



DRILLERS REMARKS: 133578

FINAL STATUS OF WELL	WATER USE	METHOD OF CONSTRUCTION
1 ☐ WATER SUPPLY	1 ☒ DOMESTIC	1 ☐ CABLE TOOL
2 ☒ OBSERVATION WELL	2 ☐ STOCK	2 ☒ ROTARY (CONVENTIONAL)
3 ☐ TEST HOLE	3 ☐ IRRIGATION	3 ☐ ROTARY (REVERSE)
4 ☐ RECHARGE WELL	4 ☐ INDUSTRIAL	4 ☐ ROTARY (AIR)
5 ☐ ABANDONED, INSUFFICIENT SUPPLY	5 ☐ COMMERCIAL	5 ☐ AIR PERCUSSION
6 ☐ ABANDONED, POOR QUALITY	6 ☐ MUNICIPAL	6 ☐ BORING
7 ☐ UNFINISHED	7 ☐ PUBLIC SUPPLY	7 ☐ DIAMOND
☐ DEWATERING	8 ☐ COOLING OR AIR CONDITIONING	8 ☐ JETTING
	9 ☐ NOT USED	9 ☐ DRIVING
	☐ OTHER	☐ DIGGING ☐ OTHER

CONTRACTOR

NAME OF WELL CONTRACTOR	WELL CONTRACTOR'S LICENCE NUMBER
E.S. WELL DRILLING	4738
ADDRESS: GOODWOOD ONT.	
NAME OF WELL TECHNICIAN: EARL SAUDER	WELL TECHNICIAN'S LICENCE NUMBER: T-0016
SIGNATURE OF TECHNICIAN/CONTRACTOR: Earl Sauder	SUBMISSION DATE: DAY 30 MO 9 YR 93

OFFICE USE ONLY

DATA SOURCE	CONTRACTOR	DATE RECEIVED
	4738	FEB 01 1994
DATE OF INSPECTION	INSPECTOR	
REMARKS: CSS. FS		

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FORM NO. 0506 (11/86) FORM 9

J.B.

UTM 17 649250 Con VI Lot 33

CODED

4R 486950

Elev. 5R 9925

Basin 22

Water management in Ontario

The Ontario Water Resources Commission Act

4604096

WATER WELL RECORD

County or District Ontario

Township, Village, Town or City Uxbridge

Con. 6 Lot 33

Date completed 29 (day) Mar (month) 69 (year)

[redacted]

Address Uxbridge R.R.

Casing and Screen Record

Inside diameter of casing 34"

Total length of casing 25'

Type of screen —

Length of screen —

Depth to top of screen —

Diameter of finished hole 34"

DIVISION OF WATER RESOURCES
JUL 14 1969
ONTARIO WATER RESOURCES COMMISSION

Pumping Test

Static level 5'

Recovery ~~Test pumping~~ rate 2' per hr G.P.M.

Pumping level —

Duration of test pumping

Water clear or cloudy at end of test clear

Recommended pumping rate 2 G.P.M.

with pump setting of 23' feet below ground surface

Well Log

Overburden and Bedrock Record	From ft.	To ft.	Water Record: Depth(s) at which water(s) found	Water Record: Kind of water (fresh, salty, sulphur)
Sandy Topsoil	0	1		
fine sand	1~~8~~	18		
blue clay & gravel	18	25	20'	fresh

For what purpose(s) is the water to be used? Domestic

Is well on upland, in valley, or on hillside? uplands

Drilling or Boring Firm Wilson Water Wells Ltd

Address RR #2 Bromley Ont.

Licence Number 3439

Name of Driller or Borer W G Wilson

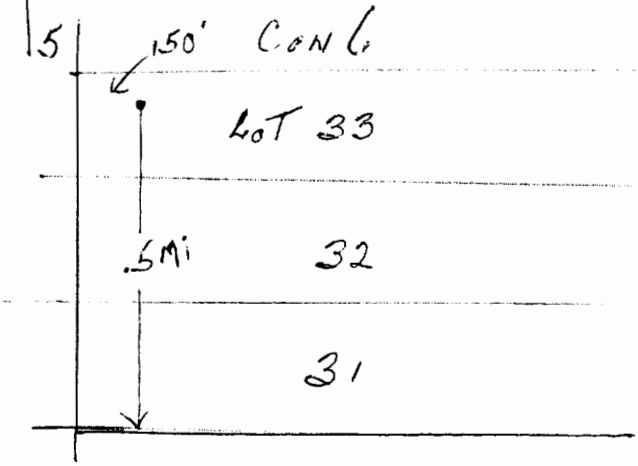
Address RR #2 Bromley

Date Apr 3/69

William Wilson
(Signature of Licensed Drilling or Boring Contractor)

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



Form 7

OWRC COPY

37

CSS.88

The Ontario Water Resources Commission Act

WATER WELL RECORD

Water management in Ontario

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

11 | 4604147 | MUNICIP. 46019 | CON. 16

COUNTY OR DISTRICT	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	CON., BLOCK, TRACT, SURVEY, ETC.	LOT
ONTARIO	UXBRIDGE	6	32

OWNER (SURNAME FIRST) [redacted] | ADDRESS [redacted] RTH ST UXBRIDGE ONT | DATE COMPLETED DAY 14 MO 08 YR 69

ING 8861100 | RC. 4 | ELEVATION 09215T | RC. 5T | BASIN CODE 22

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH – FEET FROM	DEPTH – FEET TO
BLUE	CLAY	STONE	HARd	0	12
REd	SANd	GRAUEL & CLAY	LOOSE	12	27
BLUE	CLAY	BOULDERS	HARd	27	68
~~BLUE~~ RED	SAND	GRAUEL	LOOSE	68	76

31 00123ast12 | 00277091/10st | 00683ast13 | 00262491V

32

41 WATER RECORD

WATER FOUND AT – FEET	KIND OF WATER
0076	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

INSIDE DIAM. INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH – FEET FROM	DEPTH – FEET TO
5 1/16 05	1 ☒ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE	177	0	~~76~~ 0076
	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	DEPTH SET AT – FEET TO	MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)

71 PUMPING TEST

PUMPING TEST METHOD	PUMPING RATE	DURATION OF PUMPING
1 ☒ PUMP 2 ☐ BAILER	0007 GPM.	03 HOURS 00 MINS.

STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING: 1 ☐ PUMPING 2 ☒ RECOVERY			
		5 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
037 FEET	040 FEET	~~037~~ 037 FEET	~~034~~ FEET	~~034~~ FEET	037 FEET

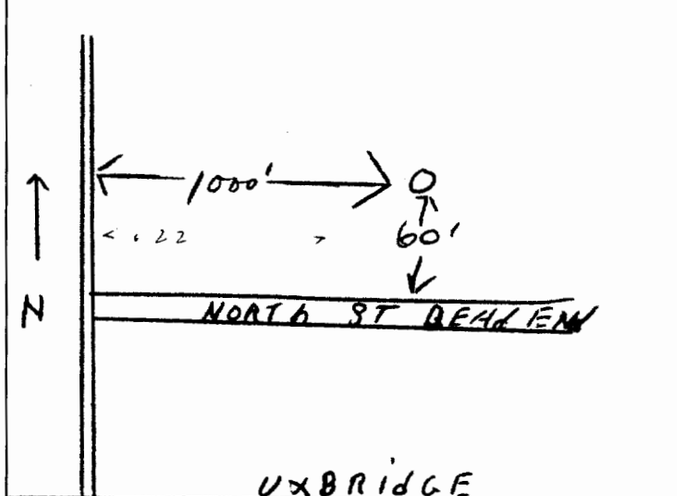
IF FLOWING, GIVE RATE	PUMP INTAKE SET AT	WATER AT END OF TEST
GPM.	65 FEET	1 ☒ CLEAR 2 ☐ CLOUDY

RECOMMENDED PUMP TYPE	RECOMMENDED PUMP SETTING	RECOMMENDED PUMPING RATE
☐ SHALLOW ☒ DEEP	060 FEET	0005 GPM.

50-53 0002.3 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

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: R. F. Boadway | LICENCE NUMBER

ADDRESS: Box 397 Sutton West ont

NAME OF DRILLER OR BORER: R. F. Boadway | LICENCE NUMBER

SIGNATURE OF CONTRACTOR: R. F. Boadway | SUBMISSION DATE: DAY 14 MO Aug YR 69

OFFICE USE ONLY

DATA SOURCE 58: 1 | CONTRACTOR 59-62: 1413 | DATE RECEIVED 63-68: 160969

DATE OF INSPECTION | INSPECTOR: P/F

REMARKS:

CSS.88 JB

OWRC COPY

J.B.

.M 17Z 6491720 CODED

4R 4818615TO Con VI Lot 35

:ev. 5R 09901

:sin 212

4604163

3 9

The Ontario Water Resources Commission Act

WATER WELL RECORD

County or District Ontario Township, Village, Town or City Uxbridge

Con. 6 Lot 32 33 Date completed 20 (day) Aug (month) 1969 (year)

[redacted] dress Uxbridge

SB

Casing and Screen Record

Inside diameter of casing 5"

Total length of casing 52'

Type of screen Johnson # 25

Length of screen 4'

Depth to top of screen 52'

Diameter of finished hole 5"

Pumping Test

Static level 10'

Test-pumping rate 5 G.P.M.

Pumping level 56'

Duration of test pumping 5 hrs

Water clear or cloudy at end of test clear

Recommended pumping rate 5 G.P.M.

Well pump setting of 55' feet below ground surface

DIVISION OF WATER RESOURCES OCT 6 1969 ONTARIO WATER RESOURCES COMMISSION

Well Log

Overburden and Bedrock Record	From ft.	To ft.	Water Record: Depth(s) at which water(s) found	Water Record: Kind of water (fresh, salty, sulphur)
Boulders - Gravel - clay.	0	50	50-56	fresh
Water bearing sand	50	56		

For what purpose(s) is the water to be used? House

Is well on upland, in valley, or on hillside? upland

Drilling or Boring Firm Wilson Water Wells Ltd

Address R.R. # 2 Gormley

Licence Number 3439

Name of Driller or Borer Earl Sauder

Address 487 Elm Rd Stouffville

Date Sept 30/69

William Wilson

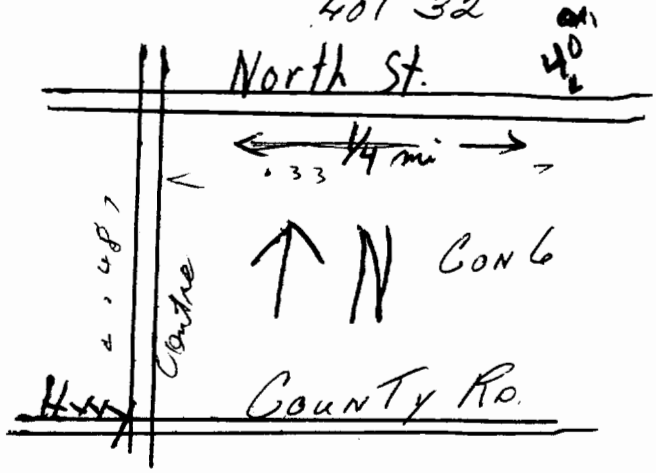
(Signature of Licensed Drilling or Boring Contractor)

Form 7 5M 60-20912

OWRC COPY

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



The Ontario Water Resources Commission Act

WATER WELL RECORD

3D 3E

Water management in Ontario

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

11 | 4604666 | MUNICIP. 46009 | CON. CON 06

COUNTY OR DISTRICT	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	CON., BLOCK, TRACT, SURVEY, ETC.	LOT
Ontario	Uxbridge	Con 6	032

[redacted] UxBRIDGE

DATE COMPLETED 12 DAY 30 MO. ~~Dec~~ YR. 70

85980 | RC. 4 | ELEVATION 0925 | RC. 5 | BASIN CODE 22

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH – FEET FROM	DEPTH – FEET TO
Brown	Clay	stones	hard	0'	27'
	Gravel	Boulders	loose	27'	46'
Brown	hardpan	Boulders	hard	46'	94'
	Sand	Gravel	loose	94'	97'
Blue	Silt		soft	97'	101'
Grey	Gravel	sand	Loose	101'	103'

31 | 0027605/2 | 0046611/3 | 0094614/3 | 0097609/1 | 0101306 | 0103211/9

32

41 WATER RECORD

WATER FOUND AT – FEET	KIND OF WATER
~~74-88~~ 0084	1 ☒ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
101-103'	
	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
~~6~~ 06	1 ☒ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE	.188	6'	~~0101~~ 0099
	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	LENGTH
025	06.000 INCHES	04 FEET

MATERIAL AND TYPE: Stainless Steel

DEPTH TO TOP OF SCREEN: ~~100~~ 0099 FEET

61 PLUGGING & SEALING RECORD

DEPTH SET AT – FEET FROM	DEPTH SET AT – FEET TO	MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)

71 PUMPING TEST

PUMPING TEST METHOD: 1 ☒ PUMP 2 ☐ BAILER

PUMPING RATE: 0004 GPM. DURATION OF PUMPING: 10 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
035 FEET	095 FEET	065 FEET	050 FEET	040 FEET	035 FEET

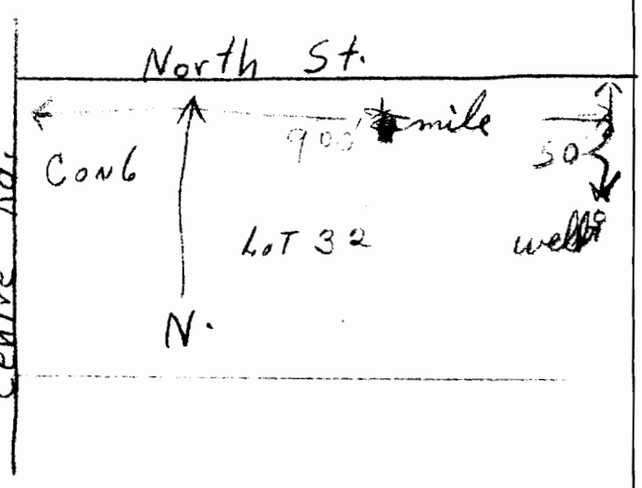
IF FLOWING, GIVE RATE	PUMP INTAKE SET AT	WATER AT END OF TEST
GPM.	93 FEET	1 ☒ CLEAR 2 ☐ CLOUDY

RECOMMENDED PUMP TYPE	RECOMMENDED PUMP SETTING	RECOMMENDED PUMPING RATE
☐ SHALLOW ☑ DEEP	095 FEET	0004 GPM.

000.1 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

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

WATER USE 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

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: Wilson Water Wells Ltd. LICENCE NUMBER: 5459

ADDRESS: R.R. #2 Gormley

NAME OF DRILLER OR BORER: Abner Saunders LICENCE NUMBER:

SIGNATURE OF CONTRACTOR: William Wilson SUBMISSION DATE: DAY 19 MO 12 YR. 71

OFFICE USE ONLY

DATA SOURCE: 1 | CONTRACTOR: 5459 | DATE RECEIVED: 020371

DATE OF INSPECTION: | INSPECTOR: P/F

REMARKS: CSS.S8 J.B.

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The Ontario Water Resources Commission Act

WATER WELL RECORD

31D 3E

Water management in Ontario

1. PRINT ONLY IN SPACES PROVIDED
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11 | 4604668 | MUNICIP. 46009 | CON. CON 06

COUNTY OR DISTRICT	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	CON., BLOCK, TRACT, SURVEY, ETC.	LOT
Ontario	Uxbridge	6	33

OWNER (SURNAME FIRST) [redacted] | ADDRESS Uxbridge | DATE COMPLETED DAY 22 MO Oct YR 70

ELEVATION	RC.	ELEVATION	RC.	BASIN CODE
8600	4	0930	5	22

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH FROM	DEPTH TO
brown	fill			0'	2'
brown	boulders	clay	hardpan	2'	55'
blue	clay		soft.	55'	70'
grey	clay	gravel	firm	70'	85'
grey	sand		fine	85'	89'

31 0002601 | 0055613051 4 | 0070305 | 0085205 11 | 0089209

32

41 WATER RECORD

WATER FOUND AT – FEET	KIND OF WATER
0085 (85-89)	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

INSIDE DIAM. INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH FROM	DEPTH TO
6" (6 4/4")	1 ☒ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE	.188	5'	85 / 0085
	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	LENGTH	MATERIAL AND TYPE	DEPTH TO TOP OF SCREEN
008	06.000 INCHES	04 FEET	Stainless Steel	0085 FEET

61 PLUGGING & SEALING RECORD

DEPTH SET AT – FEET FROM	TO	MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)

71 PUMPING TEST

PUMPING TEST METHOD	PUMPING RATE	DURATION OF PUMPING
1 ☒ PUMP 2 ☐ BAILER	0006 GPM.	05 HOURS 00 MINS.

STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING	15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
023 FEET	070 FEET	1 ☐ PUMPING 2 ☒ RECOVERY	040 FEET	027 FEET	023 FEET	023 FEET

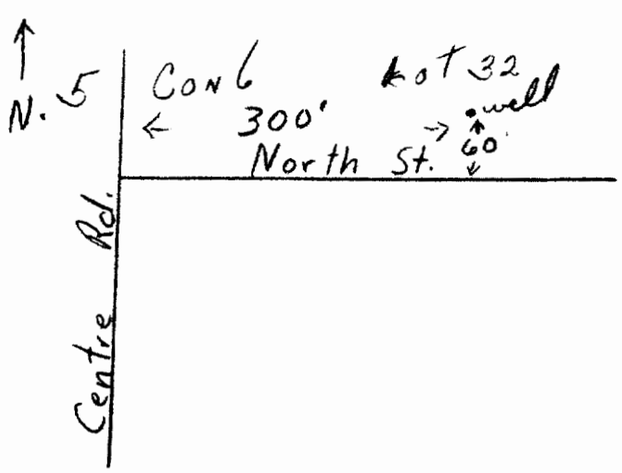
IF FLOWING, GIVE RATE	PUMP INTAKE SET AT	WATER AT END OF TEST
GPM.	75 FEET	1 ☒ CLEAR 2 ☐ CLOUDY

RECOMMENDED PUMP TYPE	RECOMMENDED PUMP SETTING	RECOMMENDED PUMPING RATE
☐ SHALLOW ☒ DEEP	075 FEET	0006 GPM.

50-53 0001 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 01

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

METHOD OF DRILLING

57 — 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: Wilson Water Wells Ltd. | LICENCE NUMBER: 5459

ADDRESS: R. R. #2 Goomley

NAME OF DRILLER OR BORER: Abner Saucer | LICENCE NUMBER:

SIGNATURE OF CONTRACTOR: William Wilson | SUBMISSION DATE DAY 19 MO 02 YR 71

OFFICE USE ONLY

DATA SOURCE 58: 1 | CONTRACTOR 59-62: 5459 | DATE RECEIVED 63-68: 020371

DATE OF INSPECTION | INSPECTOR: F/F

REMARKS: CSS.Se J.B.

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The Ontario Water Resources Commission Act

WATER WELL RECORD

31D 3E

Water management in Ontario

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11 | 4604678 | MUNICIP. 46009 | CON. CON | 06

COUNTY OR DISTRICT	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	CON., BLOCK, TRACT, SURVEY, ETC.	LOT
Ontario	Uxbridge	6	~~033~~ ~~040~~

OWNER (SURNAME FIRST)	ADDRESS	DATE COMPLETED
Artesian Develop.	Uxbridge	DAY 15 MO. ~~Dec~~ 12 YR. 70

21 | UTM ZONE 17 | EASTING 649460 | NORTHING 4860~~50~~60 | RC. 4 | ELEVATION 0925 | RC. 5 | BASIN CODE 22

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH – FEET FROM	DEPTH – FEET TO
Dark	topsoil			0	1
Brown	clay	stones		1	10
Blue	clay &	sand	soft	10	18

31 | aaa1 | 02 | aa1966s12 | aa1833s09

32

41 WATER RECORD

WATER FOUND AT – FEET	KIND OF WATER
0014	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

INSIDE DIAM. INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH – FEET FROM	DEPTH – FEET TO
30"	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☒ CONCRETE 4 ☐ OPEN HOLE	2.5	0	~~18~~ 0018
	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	DEPTH SET AT – FEET TO	MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)

71 PUMPING TEST

PUMPING TEST METHOD	PUMPING RATE	DURATION OF PUMPING
1 ☐ PUMP 2 ☐ BAILER	~~1 Spoon~~ GPM.	HOURS MINS.

STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING	15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
003 FEET	FEET	1 ☐ PUMPING 2 ☐ ~~RECOVERY~~	FEET	FEET	FEET	FEET

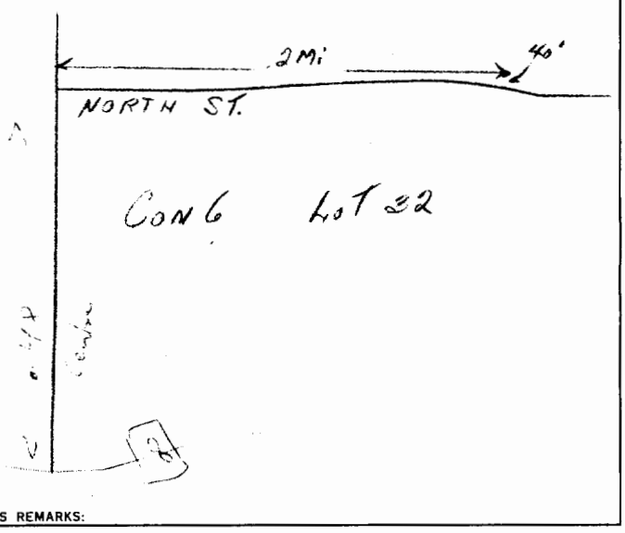
IF FLOWING, GIVE RATE	PUMP INTAKE SET AT	WATER AT END OF TEST
GPM.	FEET	~~1 ☐ CLEAR~~ 2 ☐ CLOUDY

RECOMMENDED PUMP TYPE	RECOMMENDED PUMP SETTING	RECOMMENDED PUMPING RATE
☒ SHALLOW ☐ DEEP	017 FEET	0002 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
1 ☒ WATER SUPPLY 2 ☐ OBSERVATION WELL 3 ☐ TEST HOLE 4 ☐ RECHARGE WELL 5 ☐ ABANDONED, INSUFFICIENT SUPPLY 6 ☐ ABANDONED, POOR QUALITY 7 ☐ UNFINISHED

WATER USE 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
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	LICENCE NUMBER
Wilson Water Wells Ltd.	5459

ADDRESS RR#2 Stormley

NAME OF DRILLER OR BORER	LICENCE NUMBER
S Kennedy	

SIGNATURE OF CONTRACTOR	SUBMISSION DATE
William Wilson	DAY 25 MO. 02 YR. 71

OFFICE USE ONLY

DATA SOURCE	CONTRACTOR	DATE RECEIVED
1	5459	020371

DATE OF INSPECTION | INSPECTOR

REMARKS: P F WI

J.B.

OWRC COPY

The Ontario Water Resources Commission Act

WATER WELL RECORD

31D 3E

Water management in Ontario

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

11 | 4604693 | MUNICIP. 46009 | CON. C,ϕN | 06

COUNTY OR DISTRICT	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	CON., BLOCK, TRACT, SURVEY, ETC.	LOT
Ontario	Uxbridge	Con 6	~~32~~ 33

OWNER (SURNAME FIRST)	ADDRESS	DATE COMPLETED
Wilson Develop.	Uxbridge	DAY 15 MO ~~Dec~~ 12 YR 70

21 | UTM ZONE 17 | EASTING 649460 | NORTHING 4881650 | RC. 4 | ELEVATION 0925 | RC. 5 | BASIN CODE 22

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH – FEET FROM	DEPTH – FEET TO
Dark	Topsoil			0	1
Brown	Clay	stones		1	12
Blue	clay	+ sand		12	21

31 | aaa1 | a2 | aa12ast12 | ba21ast29

32

41 WATER RECORD

WATER FOUND AT – FEET	KIND OF WATER
0014 ft³	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

INSIDE DIAM. INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH – FEET FROM	DEPTH – FEET TO
30	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☒ CONCRETE 4 ☐ OPEN HOLE	2.5	0	~~21~~ 0021
	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	DEPTH SET AT – FEET TO	MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)

71 PUMPING TEST

PUMPING TEST METHOD	PUMPING RATE	DURATION OF PUMPING
1 ☐ PUMP 2 ☐ BAILER	~~1~~ GPM	HOURS MINS.

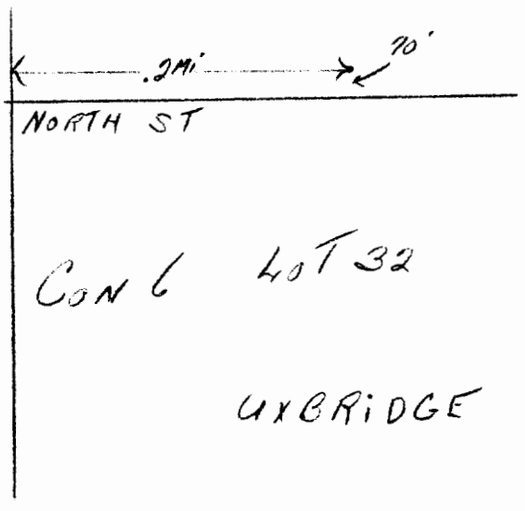
STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING	15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
025 ft		1 ☐ PUMPING 2 ☒ ~~RECOVERY~~	FEET	FEET	FEET	FEET

IF FLOWING, GIVE RATE	PUMP INTAKE SET AT	WATER AT END OF TEST	RECOMMENDED PUMP TYPE	RECOMMENDED PUMP SETTING	RECOMMENDED PUMPING RATE
GPM.	FEET	1 ☒ ~~CLEAR~~ 2 ☐ CLOUDY	☒ SHALLOW ☐ DEEP	020 FEET	0002 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)
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	LICENCE NUMBER
Wilson Water Wells Ltd.	5459
ADDRESS: R R # 2 Stormy	
NAME OF DRILLER OR BORER: S. Kennedy	LICENCE NUMBER
SIGNATURE OF CONTRACTOR: William Wilson	SUBMISSION DATE: DAY 25 MO 02 YR 71

OFFICE USE ONLY

DATA SOURCE (58)	CONTRACTOR (59-62)	DATE RECEIVED (63-68)
1	5459	020371

DATE OF INSPECTION | INSPECTOR

REMARKS: OSS 55 J.B.

P

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The Ontario Water Resources Commission Act

WATER WELL RECORD

Water management in Ontario

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

11 | 4604828 | MUNICIP. 46 09 09 | CON. CON | 96

COUNTY OR ~~DISTRICT~~: Ontario

TOWNSHIP, ~~BOROUGH, CITY, TOWN, VILLAGE~~: Uxbridge

CON., ~~BLOCK, TRACT, SURVEY, ETC.~~: ~~Conc~~ VI

LOT: 032

[redacted]

UXBRIDGE

DATE COMPLETED: DAY 02 MO ~~June~~ 06 YR 71

UTM ZONE | RC. 4 | ELEVATION 0965 | RC. 5 | BASIN CODE 22

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH – FEET FROM	DEPTH – FEET TO
D. Brown	topsoil		soft	0'	2'
Brown	Sand	Gravel & Boulders	Loose	2'	58'
Blue	Clay	Boulders	hard	58'	90'
Blue	Clay	some silt	soft	90'	100'
grey	Sand	silt	fine	100'	105'
grey	gravel	sand & silt	packed	105'	108'

31 | 32

41 WATER RECORD

WATER FOUND AT – FEET	KIND OF WATER
~~100~~ 106 0100	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

INSIDE DIAM. INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH – FEET FROM	DEPTH – FEET TO
~~6~~ 06	1 ☒ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE	.188	0'	~~100~~ 0100
	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.): ~~008~~ ~~4-8~~ ~~4-14~~ | DIAMETER: 06.000 INCHES | LENGTH: ~~08~~ 04 FEET

MATERIAL AND TYPE: Stainless Steel | DEPTH TO TOP OF SCREEN: 0100' FEET

61 PLUGGING & SEALING RECORD

DEPTH SET AT – FEET FROM	DEPTH SET AT – FEET TO	MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)

71 PUMPING TEST

PUMPING TEST METHOD: 1 ☒ PUMP 2 ☐ BAILER

PUMPING RATE: 5 GPM | DURATION OF PUMPING: 5 HOURS ___ MINS.

STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING: 1 ☐ PUMPING 2 ☒ RECOVERY			
		15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
39' FEET	100' FEET	65' FEET	50' FEET	39' FEET	39' FEET

IF FLOWING, GIVE RATE: ___ GPM.

PUMP INTAKE SET AT: 100' FEET

WATER AT END OF TEST: 1 ☒ CLEAR 2 ☐ CLOUDY

RECOMMENDED PUMP TYPE: ☐ SHALLOW ☒ DEEP

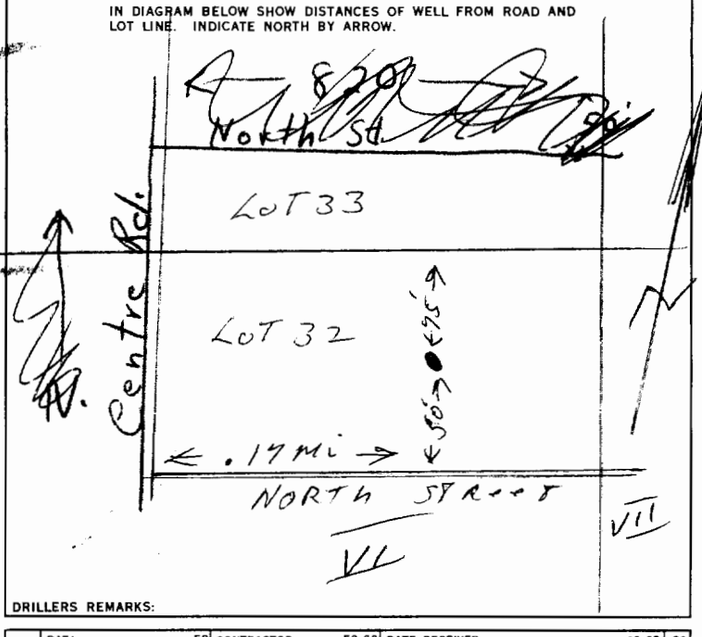
RECOMMENDED PUMP SETTING: 105' FEET

RECOMMENDED PUMPING RATE: 5' 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

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

WATER USE

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

METHOD OF DRILLING

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: Wilson Water Wells Ltd | LICENCE NUMBER

ADDRESS: R. R. #2 Goomley

NAME OF DRILLER OR BORER: Abner Snyder | LICENCE NUMBER

SIGNATURE OF CONTRACTOR: William Wilson | SUBMISSION DATE: DAY 2 MO 09 YR 71

OFFICE USE ONLY

DATA SOURCE | CONTRACTOR | DATE RECEIVED: 140971

DATE OF INSPECTION: Nov. 23/71 | INSPECTOR: P/J.B.

REMARKS: J.B.

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The Ontario Water Resources Commission Act

WATER WELL RECORD

Water management in Ontario

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

4604830

11 | MUNICIP. 4600.9 | CON. C&N | 06

COUNTY OR ~~DISTRICT~~: Ontario
TOWNSHIP, ~~BOROUGH, CITY, TOWN, VILLAGE~~: Uxbridge
CON., ~~BLOCK, TRACT, SURVEY, ETC.~~: ~~Centre~~ VI
LOT: 032
OWNER (SURNAME FIRST): [redacted]
ADDRESS: Uxbridge
DATE COMPLETED: DAY 04 MO ~~11~~ 05 YR 71
UTM: 388040 | RC 4 | ELEVATION 0920 | RC 5 | BASIN CODE 22

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH – FEET FROM	DEPTH – FEET TO
D. Brown	Topsoil		dense	0'	1'
Brown	Clay	Boulders		1'	25'
~~Grey~~					
Yellow	Gravel	Boulders	loose	25'	45'
Brown	Sand		packed	45'	50'
Blue	Clay	Boulders	very hard	50'	85'
D. Grey	Silt		very soft	85'	92'
grey	Sand		very fine	92'	94'

31: 0001002 | 0025160S13 | 0045511113 | 0051009 | 0085130S13 | 0092206
32: 0094208

41 WATER RECORD

WATER FOUND AT – FEET	KIND OF WATER
~~92~~ ~~94~~ 0092	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

INSIDE DIAM. INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH – FEET FROM	DEPTH – FEET TO
~~64~~ 06	1 ☒ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE	.188	6	~~92~~ 0090
	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
008	06 ~~000~~	04

MATERIAL AND TYPE: Stainless Steel
DEPTH TO TOP OF SCREEN: 0090' FEET

61 PLUGGING & SEALING RECORD

DEPTH SET AT – FEET FROM	DEPTH SET AT – FEET TO	MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)

71 PUMPING TEST

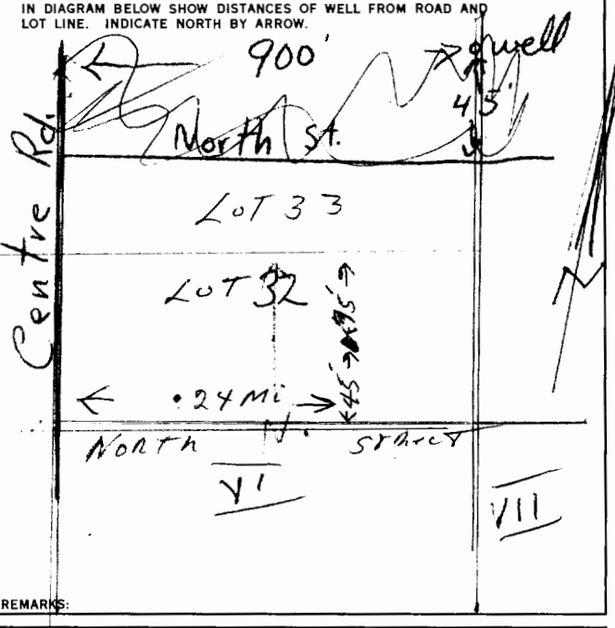
PUMPING TEST METHOD: 1 ☐ PUMP 2 ☒ ~~BAILER~~
PUMPING RATE: 0003 GPM.
DURATION OF PUMPING: 04 HOURS 00 MINS.

STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING (1 ☐ PUMPING 2 ☒ ~~RECOVERY~~) 15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
030 FEET	090 FEET	070 FEET	055 FEET	048 FEET	040 FEET

IF FLOWING, GIVE RATE: GPM.
PUMP INTAKE SET AT: 90' FEET
WATER AT END OF TEST: 1 ☒ ~~CLEAR~~ 2 ☐ CLOUDY
RECOMMENDED PUMP TYPE: ☐ SHALLOW ☒ ~~DEEP~~
RECOMMENDED PUMP SETTING: 093' FEET
RECOMMENDED PUMPING RATE: 0003 GPM.
0001 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

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

WATER USE 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

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: Wilson Water Wells Ltd. | LICENCE NUMBER
ADDRESS: R. R. #2 Gormley
NAME OF DRILLER OR BORER: Abner Sauder | LICENCE NUMBER
SIGNATURE OF CONTRACTOR: William Wilson | SUBMISSION DATE DAY 2 MO 09 YR 71

OFFICE USE ONLY

DATA SOURCE: 1 | CONTRACTOR: 5420 | DATE RECEIVED: 140971
DATE OF INSPECTION: Nov-23/71 | INSPECTOR: P/J.B.
REMARKS: S.C/J.B.
CSS.S8
J.B.

OWRC COPY

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The Ontario Water Resources Commission Act

WATER WELL RECORD

Water management in Ontario

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

11 | 4604882 | MUNICIP. 46009 | CON. CON | 06

COUNTY OR ~~DISTRICT~~: Ontario
TOWNSHIP, BOROUGH, ~~CITY, TOWN, VILLAGE~~: Uxbridge
CON., ~~BLOCK, TRACT, SURVEY, ETC.~~: VI
LOT: 033
[redacted] South St. Uxbridge P.O.
DATE COMPLETED: DAY 24 MO. ~~Sept~~ YR. 71
UTM ZONE | EASTING 886050 | NORTHING | RC. 4 | ELEVATION 0918 | DC. 5 | BASIN CODE 22

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH – FEET FROM	DEPTH – FEET TO
black	Topsoil			0	2
brown	clay	stones	Loose	2	16
yellow	clay	boulders	hard	16	45
brown	sand	gravel	Loose	45	55
yellow	clay		soft	55	63
brown	sand		coarse	63	70

31 | 32

41 WATER RECORD

WATER FOUND AT – FEET	KIND OF WATER
~~70~~ 0063	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

INSIDE DIAM. INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH – FEET FROM	DEPTH – FEET TO
~~6~~ 4 " 06	1 ☒ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE	.188	5	~~61~~ 3066
	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.) ~~030~~ 020 | DIAMETER 06.000 INCHES | LENGTH 04 FEET
MATERIAL AND TYPE: Stainless Steel | DEPTH TO TOP OF SCREEN ~~62~~ 0066 FEET

61 PLUGGING & SEALING RECORD

DEPTH SET AT – FEET FROM	DEPTH SET AT – FEET TO	MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)

71 PUMPING TEST

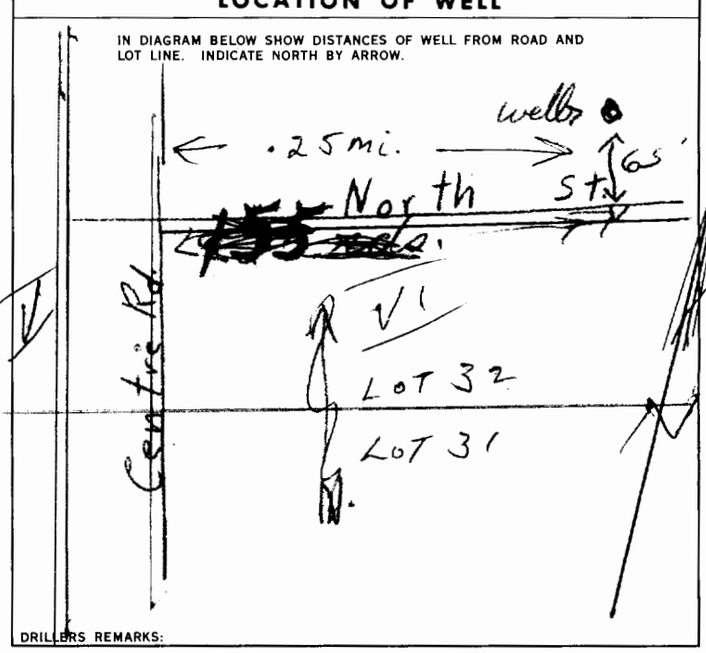
PUMPING TEST METHOD: 1 ☐ PUMP 2 ☒ BAILER
PUMPING RATE: 0009 GPM.
DURATION OF PUMPING: 03 HOURS 00 MINS.

STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING: 1 ☐ PUMPING 2 ☒ RECOVERY			
		15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
022 FEET	060 FEET	035 FEET	022 FEET	022 FEET	022 FEET

IF FLOWING, GIVE RATE: GPM.
PUMP INTAKE SET AT: 60 FEET
WATER AT END OF TEST: 1 ☒ CLEAR 2 ☐ CLOUDY
RECOMMENDED PUMP TYPE: ☐ SHALLOW ☒ DEEP
RECOMMENDED PUMP SETTING: 055 FEET
RECOMMENDED PUMPING RATE: 0008 GPM.
0002 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)
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: Ab Sauder Well Drilling | LICENCE NUMBER: 4743
ADDRESS: Box 854 Uxbridge Ontario
NAME OF DRILLER OR BORER: Ab Sauder | LICENCE NUMBER: 4743
SIGNATURE OF CONTRACTOR: Ab Sauder | SUBMISSION DATE: DAY 1 MO. Nov. YR. 71

OFFICE USE ONLY

DATA SOURCE (58): 1 | CONTRACTOR (59-62): 4743 | DATE RECEIVED (63-68): 301171
DATE OF INSPECTION: Feb. 7/71 | INSPECTOR: J.B.
REMARKS: P/J.B.
WI

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31D/3E

WATER WELL RECORD

Water management in Ontario

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

11

14604884 - B | MUNICIP. 46009 | CON. Con VI | 06

COUNTY OR DISTRICT: Ontario | TOWNSHIP, ~~BOROUGH, CITY, TOWN, VILLAGE~~: Uxbridge | CON., BLOCK, TRACT, ~~SURVEY, ETC.~~: Con VI | LOT: ~~30~~ 32

[redacted] th St. Uxbridge P.O

DATE COMPLETED: DAY 17 MO. ~~Aug~~ 08 YR 71

86010 | RC. 4 | ELEVATION 0924 | RC. 5 | BASIN CODE 22

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH – FEET FROM	DEPTH – FEET TO
Brown	boulders	sand & clay	very hard	0'	18'
yellow	Clay	boulders	moderate	18'	40'
Grey	boulders	clay & sand	very hard	40'	70'
brown	boulders	clay & stones	hard pan	70'	90'
blue	clay	silt	soft	90'	95'
grey	Sand	silt	" "	95	101'
" "	Sand	gravel & silt	very silty	101	105'

31 GG1861309001 | 00404001 | 00702130501 | 00901130501 | 00951300106 | 01012090601 | 1

32 01001 2991106

41 WATER RECORD

WATER FOUND AT – FEET	KIND OF WATER
0095 ~~75~~ ~~105~~	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

INSIDE DIAM. INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH – FEET FROM	DEPTH – FEET TO
~~6~~ 6	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE	.188	5'	~~96~~ 0097
	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	LENGTH
~~020~~ ~~4 20~~	~~4 12~~ 06.000 INCHES	~~8~~ 04 FEET

MATERIAL AND TYPE: Stainless Steel | DEPTH TO TOP OF SCREEN: ~~0097~~ FEET

61 PLUGGING & SEALING RECORD

DEPTH SET AT – FEET FROM	DEPTH SET AT – FEET TO	MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)

71 PUMPING TEST

PUMPING TEST METHOD: 1 ☐ PUMP 2 ☒ BAILER | PUMPING RATE 4½ GPM. | DURATION OF PUMPING 5 HOURS 30 MINS.

STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING: 15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
35' FEET	100' FEET	80' FEET	65' FEET	55' FEET	46' FEET

1 ☐ PUMPING 2 ☒ RECOVERY

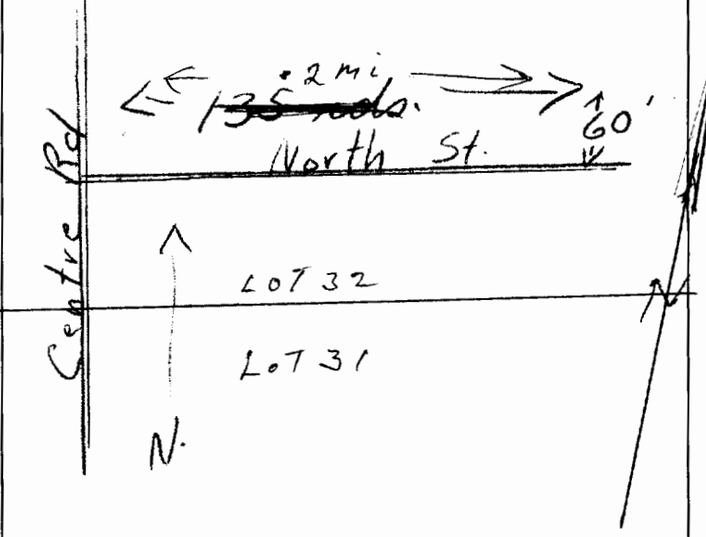
IF FLOWING, GIVE RATE: GPM. | PUMP INTAKE SET AT 100' FEET | WATER AT END OF TEST: 1 ☒ CLEAR 2 ☐ CLOUDY

RECOMMENDED PUMP TYPE: ☐ SHALLOW ☒ DEEP | RECOMMENDED PUMP SETTING 100 FEET | RECOMMENDED PUMPING RATE 4 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

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

WATER USE

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

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: Ab. Sauder Well Drilling | LICENCE NUMBER 4347

ADDRESS: Box 854 Uxbridge

NAME OF DRILLER OR BORER: Abner Sauder | LICENCE NUMBER 4347

SIGNATURE OF CONTRACTOR: Abner Sauder | SUBMISSION DATE DAY 23 MO. Nov. YR 71

OFFICE USE ONLY

DATA SOURCE | CONTRACTOR | DATE RECEIVED 301171

DATE OF INSPECTION: Feb. 4/72 | INSPECTOR: J.B.

REMARKS: P/J.B.

CSS.S8 | WI

OWRC COPY

The Ontario Water Resources Commission Act

WATER WELL RECORD

310/3E

Water management in Ontario

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

11 | 4605321 | MUNICIP. 46009 | CON. GPN | 06

COUNTY OR DISTRICT: Ontario

TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE: Uxbridge

CON., BLOCK, TRACT, SURVEY, ETC.: ~~Con 6~~ VI

LOT: 032

[redacted]
P.O Box 1058
Uxbridge
NORTH ST. - Ont.

DATE COMPLETED: DAY 18 MO. ~~09~~ 10 YR. 72

86000 | RC. 4 | ELEVATION 0925 | RC. 5 | BASIN CODE 22

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH – FEET FROM	DEPTH – FEET TO
	clay	stones		0	45
	clay	sand		45	72
	sand		water bearing	72	76

31 | 0045 05 12 | 0072 05 28 | 0076 28

32

41 WATER RECORD

WATER FOUND AT – FEET	KIND OF WATER
~~76~~ 0072	1 ☒ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL

51 CASING & OPEN HOLE RECORD

INSIDE DIAM. INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH – FEET FROM	DEPTH – FEET TO
~~6~~ 06	1 ☒ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE	188	0	0072
	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	LENGTH
018	06.000 INCHES	04 FEET

MATERIAL AND TYPE: ~~55~~

DEPTH TO TOP OF SCREEN: 0072 FEET

61 PLUGGING & SEALING RECORD

DEPTH SET AT – FEET FROM	DEPTH SET AT – FEET TO	MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)

71 PUMPING TEST

PUMPING TEST METHOD: 1 ☒ PUMP 2 ☐ BAILER

PUMPING RATE: 0005 GPM.

DURATION OF PUMPING: 05 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	060 FEET	060 FEET	060 FEET	060 FEET	060 FEET

IF FLOWING, GIVE RATE: GPM.

PUMP INTAKE SET AT: FEET

WATER AT END OF TEST: 1 ☒ CLEAR 2 ☐ CLOUDY

RECOMMENDED PUMP TYPE: ☐ SHALLOW ☒ DEEP

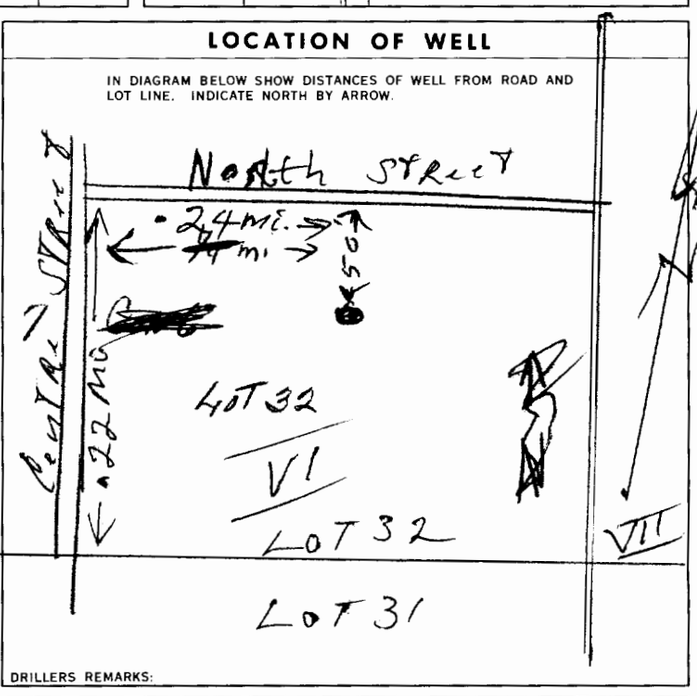
RECOMMENDED PUMP SETTING: 060 FEET

RECOMMENDED PUMPING RATE: 0005 GPM.

000.1 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: 1 ☒ WATER SUPPLY; 2 ☐ OBSERVATION WELL; 3 ☐ TEST HOLE; 4 ☐ RECHARGE WELL; 5 ☐ ABANDONED, INSUFFICIENT SUPPLY; 6 ☐ ABANDONED, POOR QUALITY; 7 ☐ UNFINISHED

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

METHOD OF DRILLING: 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: Wilson Water Well Ltd. — LICENCE NUMBER: 5459

ADDRESS: R.R#2 Bornley

NAME OF DRILLER OR BORER: Earl Lauder — LICENCE NUMBER:

SIGNATURE OF CONTRACTOR: William Wilson — SUBMISSION DATE: DAY 12 MO. 01 YR. 73

OWRC COPY

OFFICE USE ONLY

DATA SOURCE: 1 | CONTRACTOR: 5459 | DATE RECEIVED: 130173

DATE OF INSPECTION: MAR. 16/73 | INSPECTOR: J.B.

REMARKS: LOT 556 CSS.S8

P/J.B.

WI/J.B.

MINISTRY OF THE ENVIRONMENT
The Ontario Water Resources Act

WATER WELL RECORD

Ontario

31D/3E

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

11 | 4605567 | MUNICIP. 460091 | CON. GON | LOT 06

COUNTY OR DISTRICT: Ontario Durham | TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE: Uxbridge | CON., BLOCK, TRACT, SURVEY, ETC.: VII B. Plan #30 (Lot 534) | LOT: 32

[redacted] P.O. Box 801 Uxbridge Ont | DATE COMPLETED: DAY 01 MO. Aug YR. 73

BEARING | RC. | ELEVATION 09100 | BC. | BASIN CODE 22

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET FROM	DEPTH - FEET TO
brown	clay		sticky	0'	22'
blue	clay	stones	hard	22'	40'
grey	boulders	sand	cemented	40'	63'
red	clay		soft	63'	65'
grey	sand	gravel	loose	65'	70'

31 | 0012261st | 0040303rd1/2 | 0063213218 | 0165719st | 0071222811/1

32

41 WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
0065 - 70	1 ☑ FRESH 3 ☐ SULPHUR 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR 2 ☐ SALTY 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'	0068'
	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	LENGTH
025	06.00 INCHES	04' FEET

MATERIAL AND TYPE: Stainless Steel | DEPTH TO TOP OF SCREEN: 0066' FEET

61 PLUGGING & SEALING RECORD

DEPTH SET AT - FEET FROM	DEPTH SET AT - FEET TO	MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)

71 PUMPING TEST

PUMPING TEST METHOD: 1 ☐ PUMP 2 ☑ BAILER | PUMPING RATE: 0008 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
021 FEET	045 FEET		021 FEET	021 FEET	021 FEET	021 FEET

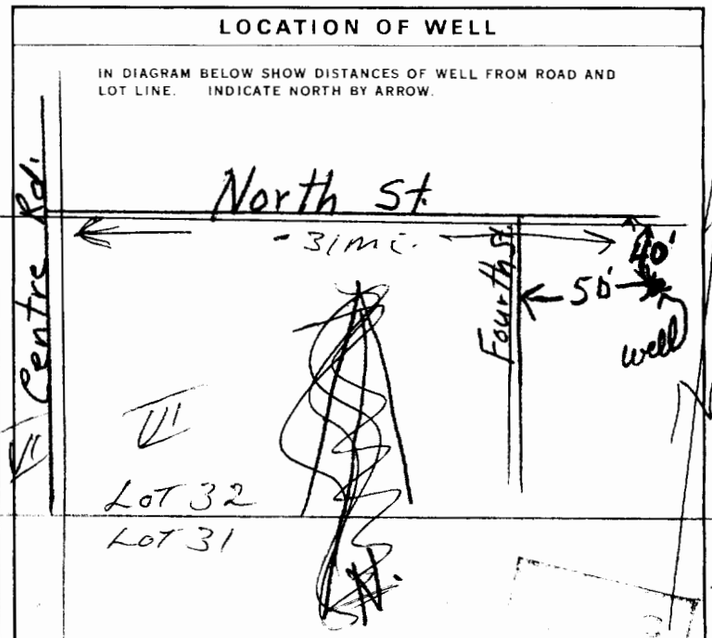
IF FLOWING, GIVE RATE: GPM | PUMP INTAKE SET AT: FEET | WATER AT END OF TEST: 1 ☑ CLEAR 2 ☐ CLOUDY

RECOMMENDED PUMP TYPE: ☐ SHALLOW ☑ DEEP | RECOMMENDED PUMP SETTING: 050 FEET | RECOMMENDED PUMPING RATE: 0008 GPM

000.3

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

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

WATER USE

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

METHOD OF DRILLING

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: Ab Sauder Well Drilling | LICENCE NUMBER: 4743

ADDRESS: Box 854. Uxbridge Ont

NAME OF DRILLER OR BORER: Ab. Sauder | LICENCE NUMBER: 4743

SIGNATURE OF CONTRACTOR: Ab. Sauder | SUBMISSION DATE: DAY 2 MO. Oct YR. 73

OFFICE USE ONLY

DATA SOURCE 1 | CONTRACTOR 4743 | DATE RECEIVED 09 10 73

DATE OF INSPECTION: MAR. 4/74 | INSPECTOR: J.B.

REMARKS: R.P. #30 - Lot 534 | P/J.B. S.C./J.B.

MINISTRY OF THE ENVIRONMENT COPY

FORM 7 07-091

MINISTRY OF THE ENVIRONMENT

The Ontario Water Resources Act

WATER WELL RECORD

Ontario

310/.3E

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

11 | 4606383 | MUNICIP 46009 | CON. CON | 06

COUNTY OR DISTRICT: Ontario

TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE: Uxbridge

CON., BLOCK, TRACT, SURVEY, ETC.: VI

LOT: 034

DATE COMPLETED: DAY 18 MO 11 YR 75

[redacted] 247 Uxbridge Ont

UTM | 8663 | RC 4 | ELEVATION 0870 | RC 5 | BASIN CODE 22

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET FROM	DEPTH - FEET TO
grey	clay		gumbo	0'	20'
blue	clay	gravel layers		20'	46'
grey	gravel			46'	50'

31: 0020205 | 0046305 11 | 0052211

32:

41 WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
0049	1 ☐ FRESH 3 ☐ SULPHUR / 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR / 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR / 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR / 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR / 2 ☐ SALTY 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	IAG.	47 / 0047
	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.): #050 | DIAMETER: 06.000 INCHES | LENGTH: 03 FEET

MATERIAL AND TYPE: Stainless Steel | DEPTH TO TOP OF SCREEN: 0049 FEET

61 PLUGGING & SEALING RECORD

DEPTH SET AT - FEET FROM	DEPTH SET AT - FEET TO	MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)

71 PUMPING TEST

PUMPING TEST METHOD: 1 ☐ PUMP 2 ☒ BAILER

PUMPING RATE: 0020 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
001 FEET	010 FEET	001 FEET	— FEET	— FEET	001 FEET

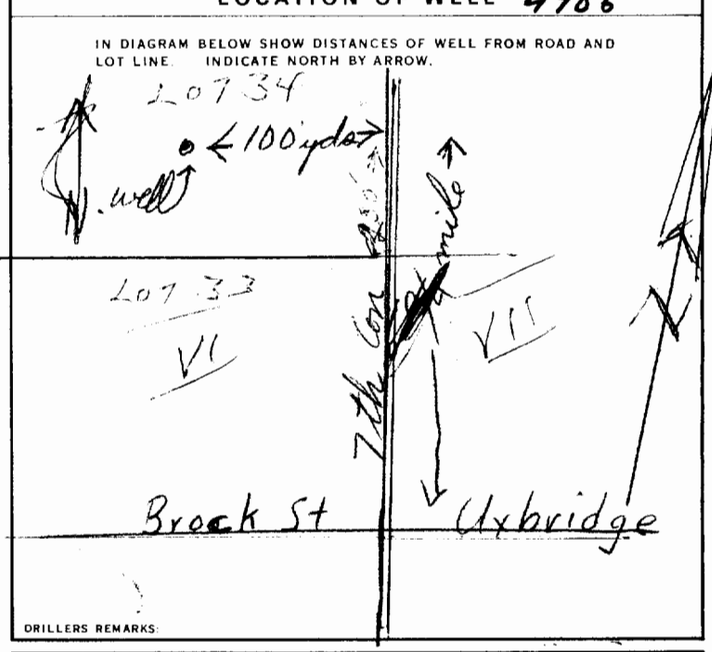
IF FLOWING, GIVE RATE: GPM | PUMP INTAKE SET AT: — FEET | WATER AT END OF TEST: 1 ☒ CLEAR 2 ☐ CLOUDY

RECOMMENDED PUMP TYPE: 1 ☒ SHALLOW ☐ DEEP | RECOMMENDED PUMP SETTING: 020 FEET | RECOMMENDED PUMPING RATE: 0020 GPM

002.1 GPM./FT. SPECIFIC CAPACITY

LOCATION OF WELL 4986

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



DRILLERS REMARKS:

FINAL STATUS OF WELL: 1

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

WATER USE: 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: 1

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: A.B. Sauder Well Drilling | LICENCE NUMBER: 4743

ADDRESS: Box 854 Uxbridge

NAME OF DRILLER OR BORER: A.B. Sauder | LICENCE NUMBER: 4743

SIGNATURE OF CONTRACTOR: A.B. Sauder | SUBMISSION DATE: DAY 29 MO 12 YR 75

OFFICE USE ONLY

DATA SOURCE: 1 | CONTRACTOR: 4743 | DATE RECEIVED: 3 11 27 5

DATE OF INSPECTION: 5 25 / 76 | INSPECTOR:

REMARKS:

P 1 3

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MINISTRY OF THE ENVIRONMENT COPY

FORM 7 MOE 07-091

MINISTRY OF THE ENVIRONMENT
The Ontario Water Resources Act

WATER WELL RECORD

31036

Ontario

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

11 | 4606657 | MUNICIP. 19608 | CON.

COUNTY OR DISTRICT	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	CON., BLOCK, TRACT, SURVEY, ETC.	LOT
Ontario Durham	Uxbridge	Con 6 UR	33

OWNER (SURNAME FIRST)	ADDRESS	DATE COMPLETED
Splonick Const.	Uxbridge	DAY 31 MO 08 YR 76

21 | UTM ZONE 17 | E 19640 | NORTHING 488 50 | RC 5 | ELEVATION 0900 | RC 5 | BASIN CODE 22

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET FROM	DEPTH - FEET TO
Dark	topsoil			0	2
Brown	clay	& stones		2	35
grey	gravel			35	52

OWRC 2-9

31 | 0002 02 | 00356 0512 | 0052211

32

41 WATER RECORD

WATER FOUND (FEET)	KIND OF WATER			
0049	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

INSIDE DIAM. (INCHES)	MATERIAL	WALL THICKNESS (INCHES)	DEPTH - FEET FROM	DEPTH - FEET TO
06 6¼	1 ☒ STEEL	.177	0	0049
	2 ☐ GALVANIZED			
	3 ☐ CONCRETE			
	4 ☐ OPEN HOLE			
	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	LENGTH
#020	06.000 INCHES	05 FEET

MATERIAL AND TYPE: [illegible]

DEPTH TO TOP OF SCREEN: 0049 FEET

61 PLUGGING & SEALING RECORD

DEPTH SET AT - FEET FROM	TO	MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)

71 PUMPING TEST

PUMPING TEST METHOD: 1 ☐ PUMP 2 ☒ BAILER

PUMPING RATE: 0007 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
002 FEET	045 FEET	045 FEET	045 FEET	045 FEET	045 FEET

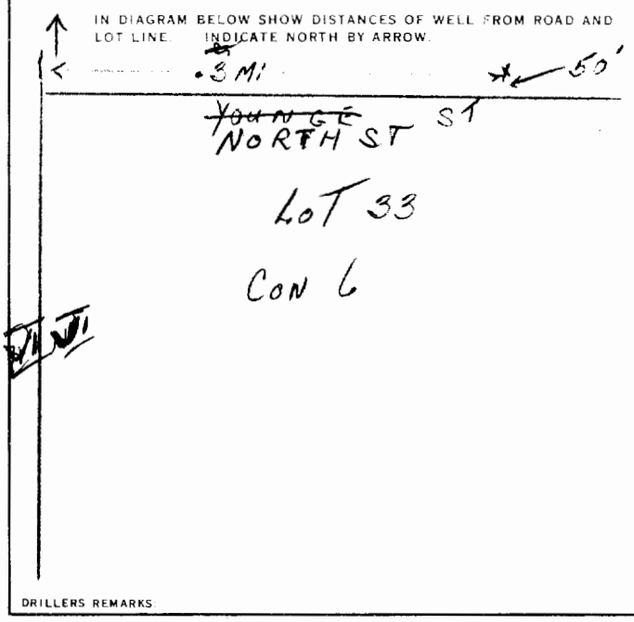
IF FLOWING GIVE RATE	PUMP INTAKE SET AT	WATER AT END OF TEST
GPM	FEET	1 ☐ CLEAR 2 ☐ CLOUDY

RECOMMENDED PUMP TYPE	RECOMMENDED PUMP SETTING	RECOMMENDED PUMPING RATE
☐ SHALLOW ☒ DEEP	050 FEET	0007 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	1 ☒ WATER SUPPLY; 2 ☐ OBSERVATION WELL; 3 ☐ TEST HOLE; 4 ☐ RECHARGE WELL; 5 ☐ ABANDONED, INSUFFICIENT SUPPLY; 6 ☐ ABANDONED, POOR QUALITY; 7 ☐ UNFINISHED
WATER USE 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 1	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	LICENCE NUMBER
Wilson Water Wells Ltd.	5459
ADDRESS: RR#2 Sunderland	
NAME OF DRILLER OR BORER: ~~Peter~~ W. Renchie	LICENCE NUMBER
SIGNATURE OF CONTRACTOR: William Wilson	SUBMISSION DATE DAY ____ MO. ____ YR. ____

OFFICE USE ONLY

DATA SOURCE	CONTRACTOR	DATE RECEIVED
1	5459	231176

DATE OF INSPECTION: | INSPECTOR:

REMARKS: CSS.S8

P May 11/77 AR

WI

MINISTRY OF THE ENVIRONMENT COPY

FORM 7 MOE 07-091

Ontario Ministry of the Environment

Measurements recorded in: ☑ Metric ☐ Imperial

We[illegible] int Below)
A 091436

Well Record

Regulation 903 Ontario Water Resources Act

Page 1 of 1

[redacted]

Address of Well Location (Street Number/Name)	Township	Lot	Concession
26 NORTH ST.	UXBRIDGE	699	6

County/District/Municipality	City/Town/Village	Province	Postal Code
DURHAM	UXBRIDGE	Ontario	L9P 1C1

UTM Coordinates	Zone	Easting	Northing	Municipal Plan and Sublot Number	Other
NAD 83	17	649508	4886242	699 PART OF 698	

Overburden and Bedrock Materials/Abandonment Sealing Record *(see instructions on the back of this form)*

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From	Depth (m/ft) To
	NATIVE FILL			0	2
	BENTONITE SLURRY			2	27.4
	CLEAN SAND			27.4	28.6

Annular Space

Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)

Method of Construction

☐ Cable Tool ☐ Diamond ☐ Rotary (Conventional) ☐ Jetting ☐ Rotary (Reverse) ☐ Driving ☐ Boring ☐ Digging ☐ Air percussion ☐ Other, specify

Well Use

☐ Public ☐ Commercial ☐ Not used ☐ Domestic ☐ Municipal ☐ Dewatering ☐ Livestock ☐ Test Hole ☐ Monitoring ☐ Irrigation ☐ Cooling & Air Conditioning ☐ Industrial ☐ Other, specify

Construction Record - Casing

Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From	To
15.9	STEEL	.635	2	28.6

Construction Record - Screen

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

Status of Well

☐ Water Supply ☐ Replacement Well ☐ Test Hole ☐ Recharge Well ☐ Dewatering Well ☐ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☐ Abandoned, Insufficient Supply ☐ Abandoned, Poor Water Quality ☑ Abandoned, other, specify NOT IN USE ☐ Other, specify

Water Details

Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify
Water found at Depth (m/ft)	Kind of Water: ☐ Fresh ☐ Untested ☐ Gas ☐ Other, specify

Hole Diameter

Depth (m/ft) From	To	Diameter (cm/in)

Results of Well Yield Testing

After test of well yield, water was: ☐ Clear and sand free ☐ Other, specify

If pumping discontinued, give reason:

Pump intake set at (m/ft)

Pumping rate (l/min / GPM)

Duration of pumping ____ hrs + ____ min

Final water level end of pumping (m/ft)

If flowing give rate (l/min / GPM)

Recommended pump depth (m/ft)

Recommended pump rate (l/min / GPM)

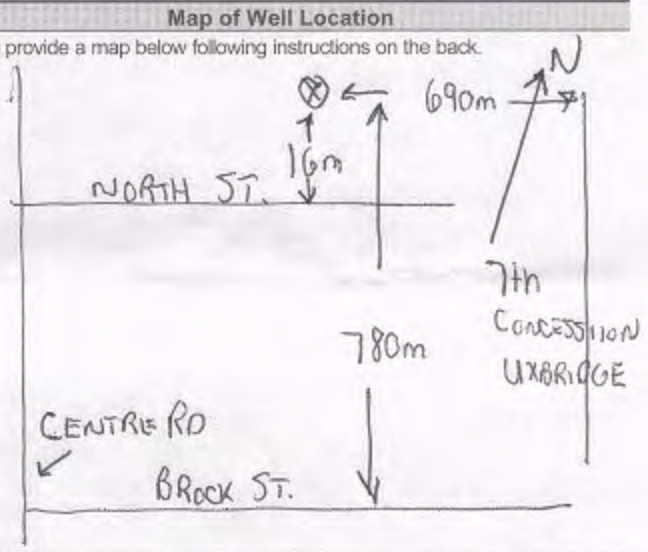
Well production (l/min / GPM)

Disinfected? ☐ Yes ☐ No

	Draw Down Time (min)	Draw Down Water Level (m/ft)	Recovery Time (min)	Recovery Water Level (m/ft)
Static Level				
1			1	
2			2	
3			3	
4			4	
5			5	
10			10	
15			15	
20			20	
25			25	
30			30	
40			40	
50			50	
60			60	

Map of Well Location

Please provide a map below following instructions on the back.



Comments:

Well Contractor and Well Technician Information

Business Name of Well Contractor	Well Contractor's Licence No.
D & S WATER WELL SERVICE	7186

Business Address (Street Number/Name)	Municipality
330 DAVIS DRIVE	DURHAM

Province	Postal Code	Business E-mail Address
ON	L9P 1R1	

Bus. Telephone No. (inc. area code)	Name of Well Technician (Last Name, First Name)
905 852 3888	ARMSTRONG Scott

Well Technician's Licence No.	Signature of Technician and/or Contractor	Date Submitted
T748	Scott Armstrong	2011 06 10

Well owner's information package delivered	Date Package Delivered	Date Work Completed
☐ Yes ☑ No		2011 06 10

Ministry Use Only

Audit No. Z105317

JUN 28 2011 Received

0506E (12/2007)

Ministry's Copy

Ontario — Ministry of the Environment

Well Tag No. *(Place Sticker and/or Print Below)*

Well Record

Regulation 903 Ontario Water Resources Act

Measurements recorded in: ☐ Metric ☑ Imperial

Page _____ of _____

Well Owner's Information Customer

First Name	Last Name / Organization	E-mail Address	☐ Well Constructed by Well Owner
Homeland	Development Group Ltd.		

Mailing Address (Street Number/Name)	Municipality	Province	Postal Code	Telephone No. *(inc. area code)*
15 Wyldewood Court	Port Perry	ON	L9L2B4	905 985 3157

Well Location

Address of Well Location (Street Number/Name)	Township	Lot	Concession
246 Main St NORTH	Uxbridge	33	6

County/District/Municipality	City/Town/Village	Province	Postal Code
Durham	Uxbridge	Ontario	

UTM Coordinates	Zone	Easting	Northing	Municipal Plan and Sublot Number	Other
NAD 83	17	649898	4867719		

Overburden and Bedrock Materials/Abandonment Sealing Record *(see instructions on the back of this form)*

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From	Depth (m/ft) To
			Decomm. a 6in. Steel Cased drilled Well 81 FT. deep		
	Washed Pea Gravel			81	70
	Bentonite Hole Plug/GROUT MIX			70	10
	clean Clay Fill			10	0

Note: Static 4FT. Chlorinate and Pump Standing Water. Remove Pump, Lines and 3 m. OF Casing. Cap with hole Plug.

Annular Space

Depth Set at (m/ft) From	Depth Set at (m/ft) To	Type of Sealant Used (Material and Type)	Volume Placed (m^3/ft^3)
		See above	

Method of Construction

☐ Cable Tool ☐ Diamond
☐ Rotary (Conventional) ☐ Jetting
☐ Rotary (Reverse) ☐ Driving
☐ Boring ☐ Digging
☐ Air percussion
☐ Other, *specify* _____

Well Use

☐ Public ☐ Commercial ☐ Not used
☐ Domestic ☐ Municipal ☐ Dewatering
☐ Livestock ☐ Test Hole ☐ Monitoring
☐ Irrigation ☐ Cooling & Air Conditioning
☐ Industrial
☐ Other, *specify* _____

Construction Record - Casing

Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From	Depth (m/ft) To

Construction Record - Screen

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

Status of Well

☐ Water Supply
☐ Replacement Well
☐ Test Hole
☐ Recharge Well
☐ Dewatering Well
☐ Observation and/or Monitoring Hole
☐ Alteration (Construction)
☐ Abandoned, Insufficient Supply
☐ Abandoned, Poor Water Quality
☑ Abandoned, other, *specify* not in use.
☐ Other, *specify* _____

Water Details

Water found at Depth (m/ft)	Gas	Kind of Water: Fresh	Untested	Other, specify
	☐	☐	☐	☐
	☐	☐	☐	☐
	☐	☐	☐	☐

Hole Diameter

Depth (m/ft) From	Depth (m/ft) To	Diameter (cm/in)

Results of Well Yield Testing

After test of well yield, water was:
☐ Clear and sand free
☐ Other, *specify* _____

If pumping discontinued, give reason:

Pump intake set at *(m/ft)*

Pumping rate *(l/min / GPM)*

Duration of pumping _____ hrs + _____ min

Final water level end of pumping *(m/ft)*

If flowing give rate *(l/min / GPM)*

Recommended pump depth *(m/ft)*

Recommended pump rate *(l/min / GPM)*

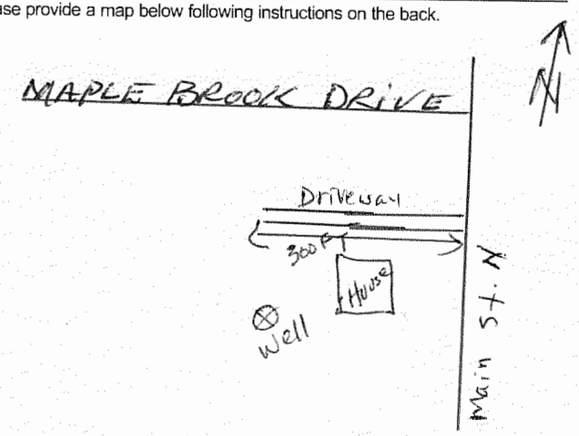
Well production *(l/min / GPM)*

Disinfected? ☐ Yes ☐ No

	Draw Down Time (min)	Draw Down Water Level (m/ft)	Recovery Time (min)	Recovery Water Level (m/ft)
Static Level				
1			1	
2			2	
3			3	
4			4	
5			5	
10			10	
15			15	
20			20	
25			25	
30			30	
40			40	
50			50	
60			60	

Map of Well Location

Please provide a map below following instructions on the back.



Comments:

Well Contractor and Well Technician Information

Business Name of Well Contractor	Well Contractor's Licence No.
2024257 Ontario Ltd.	4102

Business Address (Street Number/Name)	Municipality
3661 Mt. Albert Rd	Sharon

Province	Postal Code	Business E-mail Address
ON	L0G1V0	sales@ontariodrilling.com

Bus. Telephone No. *(inc. area code)*	Name of Well Technician (Last Name, First Name)
9054781643	Moore, David

Well Technician's Licence No.	Signature of Technician and/or Contractor	Date Submitted
2199	David Moore	2013/11/30

Well owner's information package delivered	Date Package Delivered	Date Work Completed
☐ Yes ☑ No		2013/11/14

Ministry Use Only

Audit No. Z154846

Received DEC 27 2013

Ministry's Copy

Ontario — Ministry of the Environment

Well Tag No. *(Place Sticker and/or Print Below)*

Well Record

Regulation 903 Ontario Water Resources Act

Measurements recorded in: ☐ Metric ☑ Imperial

Page ____ of ____

Well Owner's Information

Customer

First Name	Last Name / Organization	E-mail Address	☐ Well Constructed by Well Owner
Homeland	Development Group LTd.		

Mailing Address (Street Number/Name)	Municipality	Province	Postal Code	Telephone No. (inc. area code)
15 Wyldewood Court	Port Perry	ON	L9L2B4	9057985317

Well Location

Address of Well Location (Street Number/Name)	Township	Lot	Concession
246 Main st North	Uxbridge	33	6

County/District/Municipality	City/Town/Village	Province	Postal Code
Durham	Uxbridge.	Ontario	

UTM Coordinates	Zone	Easting	Northing	Municipal Plan and Sublot Number	Other
NAD 83	17	649897	4886723		

Overburden and Bedrock Materials/Abandonment Sealing Record *(see instructions on the back of this form)*

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From	Depth (m/ft) To
DECOMM 5in STEEL CASED DRILLED WELL 17Ft DEEP					
WASHED PEA GRAVEL				17	14
BENTONITE HOLE PLUG/GROUT MIX				14	7
CLEAN CLAY FILL				7	0

NOTE: STATIC 3FT. CHLORINATE AND PUMP STANDING WATER, REMOVE PUMP LINES AND UPPER CASING. CAP WITH HOLE PLUG.

Annular Space

Depth Set at (m/ft) From	Depth Set at (m/ft) To	Type of Sealant Used (Material and Type)	Volume Placed (m^3/ft^3)
		See above.	

Method of Construction

☐ Cable Tool ☐ Diamond
☐ Rotary (Conventional) ☐ Jetting
☐ Rotary (Reverse) ☐ Driving
☐ Boring ☐ Digging
☐ Air percussion
☐ Other, specify

Well Use

☐ Public ☐ Commercial ☐ Not used
☐ Domestic ☐ Municipal ☐ Dewatering
☐ Livestock ☐ Test Hole ☐ Monitoring
☐ Irrigation ☐ Cooling & Air Conditioning
☐ Industrial
☐ Other, specify

Construction Record - Casing

Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From	Depth (m/ft) To

Construction Record - Screen

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

Status of Well

☐ Water Supply
☐ Replacement Well
☐ Test Hole
☐ Recharge Well
☐ Dewatering Well
☐ Observation and/or Monitoring Hole
☐ Alteration (Construction)
☐ Abandoned, Insufficient Supply
☐ Abandoned, Poor Water Quality
☑ Abandoned, other, specify: not in use
☐ Other, specify

Water Details

Water found at Depth (m/ft)	Gas	Kind of Water: ☐ Fresh ☐ Untested	Other, specify

Hole Diameter

Depth (m/ft) From	Depth (m/ft) To	Diameter (cm/in)

Well Contractor and Well Technician Information

Business Name of Well Contractor	Well Contractor's Licence No.
2024257 ONTARIO LTD.	4102

Business Address (Street Number/Name)	Municipality	Province	Postal Code	Business E-mail Address
3661 Mt Albert Rd	Sharon	ON	L4G1V0	Sales@ontariodrilling.com

Bus. Telephone No. (inc. area code)	Name of Well Technician (Last Name, First Name)	Well Technician's Licence No.	Signature of Technician and/or Contractor	Date Submitted
9054718643	Moore, David	2299	David Moore	2013/11/30

Results of Well Yield Testing

After test of well yield, water was:
☐ Clear and sand free
☐ Other, specify

If pumping discontinued, give reason:

Pump intake set at (m/ft)

Pumping rate (l/min / GPM)

Duration of pumping ____ hrs + ____ min

Final water level end of pumping (m/ft)

If flowing give rate (l/min / GPM)

Recommended pump depth (m/ft)

Recommended pump rate (l/min / GPM)

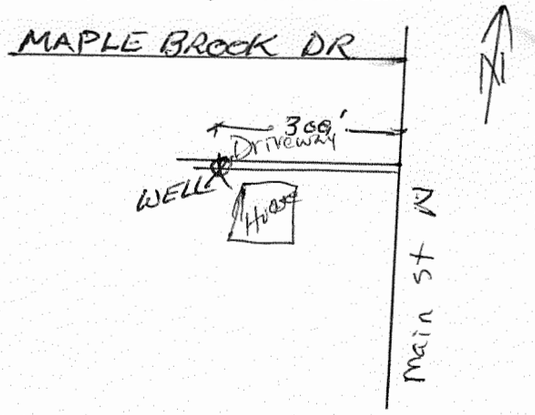
Well production (l/min / GPM)

Disinfected? ☐ Yes ☐ No

	Draw Down Time (min)	Draw Down Water Level (m/ft)	Recovery Time (min)	Recovery Water Level (m/ft)
Static Level				
1			1	
2			2	
3			3	
4			4	
5			5	
10			10	
15			15	
20			20	
25			25	
30			30	
40			40	
50			50	
60			60	

Map of Well Location

Please provide a map below following instructions on the back.



Comments:

Well owner's information package delivered	Date Package Delivered	Date Work Completed
☐ Yes ☑ No		2013/11/15

Ministry Use Only

Audit No. Z154845

Received DEC 27 2013

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Ontario

Ministry of the Environment and Climate Change

Measurements recorded in: ☑ Metric ☐ Imperial

Well Tag No. *(Place Sticker and/or Print Below)*

Tag#: A 228051

Well Record

Regulation 903 Ontario Water Resources Act

Page 1 of 1

[redacted]

Address of Well Location (Street Number/Name)	Township	Lot	Concession
33 NORTH ST	UXBRIDGE	554	6

County/District/Municipality	City/Town/Village	Province	Postal Code
		Ontario	L9P 1C7

UTM Coordinates	Zone	Easting	Northing	Municipal Plan and Sublot Number	Other
NAD 83	17	649622	4886238	30 BLK 46 LOT 553	

Overburden and Bedrock Materials/Abandonment Sealing Record *(see instructions on the back of this form)*

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From	Depth (m/ft) To
			BASEMENT.	0	2.4
	BENTONITE			2.4	21.3
	SAND			21.3	22.5

Annular Space

Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)	Volume Placed (m^3/ft^3)

Method of Construction

☐ Cable Tool ☐ Diamond
☐ Rotary (Conventional) ☐ Jetting
☐ Rotary (Reverse) ☐ Driving
☐ Boring ☐ Digging
☐ Air percussion
☐ Other, *specify* _____

Well Use

☐ Public ☐ Commercial ☐ Not used
☐ Domestic ☐ Municipal ☐ Dewatering
☐ Livestock ☐ Test Hole ☐ Monitoring
☐ Irrigation ☐ Cooling & Air Conditioning
☐ Industrial
☐ Other, *specify* _____

Construction Record - Casing

Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From	To
	BASEMENT		0	2.4
13.3	STEEL	.635	2.4	22.5

Construction Record - Screen

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

Status of Well

☐ Water Supply
☐ Replacement Well
☐ Test Hole
☐ Recharge Well
☐ Dewatering Well
☐ Observation and/or Monitoring Hole
☐ Alteration (Construction)
☐ Abandoned, Insufficient Supply
☐ Abandoned, Poor Water Quality
☑ Abandoned, other, *specify* NOT USED
☐ Other, *specify*

Water Details

Water found at Depth (m/ft)	Kind of Water	
☐ Gas	☐ Fresh ☐ Untested	☐ Other, *specify*
☐ Gas	☐ Fresh ☐ Untested	☐ Other, *specify*
☐ Gas	☐ Fresh ☐ Untested	☐ Other, *specify*

Hole Diameter

Depth (m/ft) From	To	Diameter (cm/in)

Results of Well Yield Testing

After test of well yield, water was:
☐ Clear and sand free
☐ Other, *specify* _____

If pumping discontinued, give reason:

Pump intake set at *(m/ft)*

Pumping rate *(l/min / GPM)*

Duration of pumping _____ hrs + _____ min

Final water level end of pumping *(m/ft)*

If flowing give rate *(l/min / GPM)*

Recommended pump depth *(m/ft)*

Recommended pump rate *(l/min / GPM)*

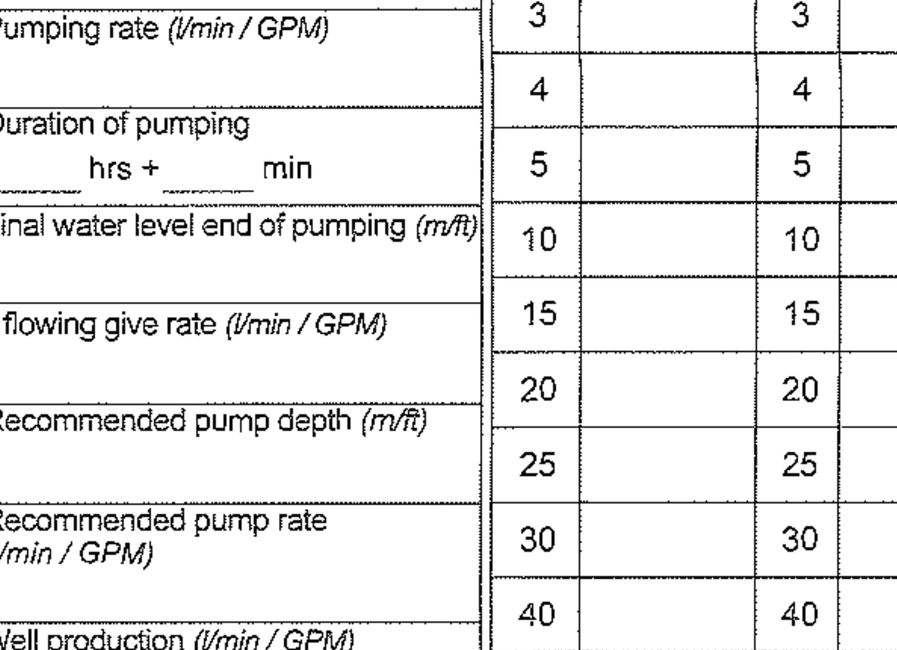
Well production *(l/min / GPM)*

Disinfected? ☐ Yes ☐ No

Draw Down Time (min)	Draw Down Water Level (m/ft)	Recovery Time (min)	Recovery Water Level (m/ft)
Static Level			
1		1	
2		2	
3		3	
4		4	
5		5	
10		10	
15		15	
20		20	
25		25	
30		30	
40		40	
50		50	
60		60	

Map of Well Location

Please provide a map below following instructions on the back.



Comments:
WELL WAS DECOMMISSIONED TO BUILD ADDITION OVER TOP OF WELL

Well Contractor and Well Technician Information

Business Name of Well Contractor	Well Contractor's Licence No.
DYS WATER WELL SERVICE	7316

Business Address (Street Number/Name)	Municipality
330 DAVIS DRIVE	DURHAM

Province	Postal Code	Business E-mail Address
ON	L9P 1R7	

Bus. Telephone No. *(inc. area code)*	Name of Well Technician (Last Name, First Name)
905 852 3888	ARMSTRONG Scott

Well Technician's Licence No.	Signature of Technician and/or Contractor	Date Submitted
T748	Scott Armstrong	2018 03 09

Well owner's information package delivered	Date Package Delivered	Date Work Completed
☐ Yes ☑ No	2018 03 09	2018 03 09

Ministry Use Only

Audit No. Z261257

Received MAY 15 2018

Source: Compiled from Google Earth. Aerial photo dated October, 2019

Scale:
Refer to Scale Bar
Coordinate System:
NAD 1983 UTM Zone 17

Geotechnical and Hydrogeologic Investigation
Mason Homes Limited
Proposed Residential Development
Centre Road Phase 2, Uxbridge

11223795-01
March, 2021

Well Survey Locations

Appendix B.5

APPENDIX B.6: WATER WELL INFORMATION SURVEY

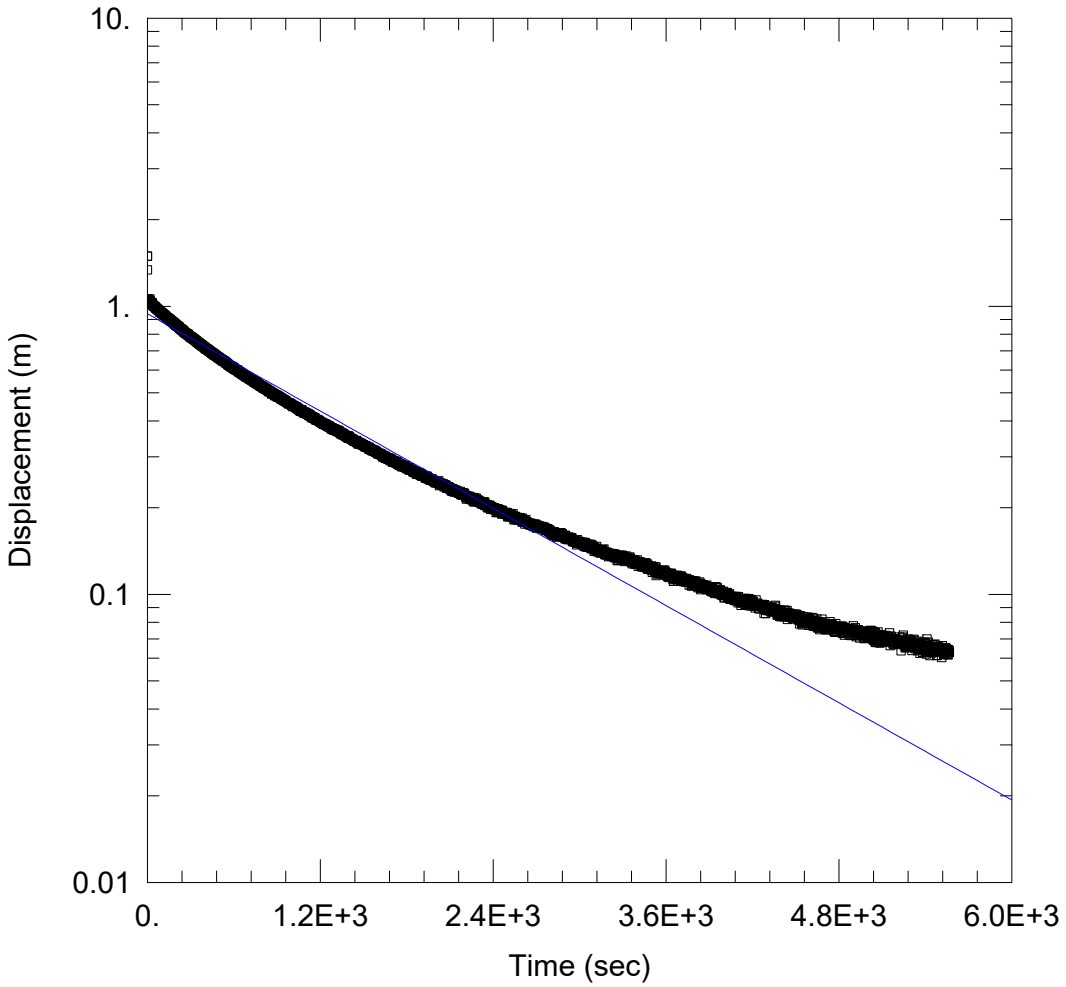
PROJECT: 11223795-01

LOCATION: Centre Road Phase 2, Uxbridge, ON

March 10, 2021

Address	Well ID for Map	Easting (m)	Northing (m)	Well Type	Top of Well (m)	Water Level (m)	Depth (m)	Quality	Quantity	Comments
7609 Centre Road	L-1	648903.8	4887001.2	Drilled	--	--	--	--	--	Resident not home, steel drilled well casing observed.
7639 Centre Road	L-2	648867.32	4887118.81	Dug	--	--	--	--	--	Resident not home. Concrete dug well casing observed.
7555 Centre Road	L-3	649019.48	4886414.83	Drilled	--	--	--	--	--	Redsident not home, steel drilled well casing observed.
39 Oakside Drive	L-4	649466.25	4886330.08	--	--	--	--	--	--	Resident not home. No well observed. Fire hydrant observed outside home.
45 Oakside Drive	L-5	649525.87	4886359.11	--	--	--	--	--	--	Resident not home. No well observed. Fire hydrant observed outside home.
623 Ball Road	L-6	648304.48	4887227.73	Dug	--	--	10.5	No known issues	No known issues	Homeowner stated the dug well is located on site. No Access to well.

Appendix C
Hydraulic Conductivity Data



BH-1 FALLING HEAD TEST

Data Set: G:\...\BH-1 Falling Head Test.aqt
Date: 03/11/21 Time: 14:13:44

PROJECT INFORMATION

Company: GHD
Client: Mason Homes Limited
Project: 11223795-01
Location: Centre Road Phase 2, Uxbridge
Test Well: BH-1
Test Date: March 10, 2021

AQUIFER DATA

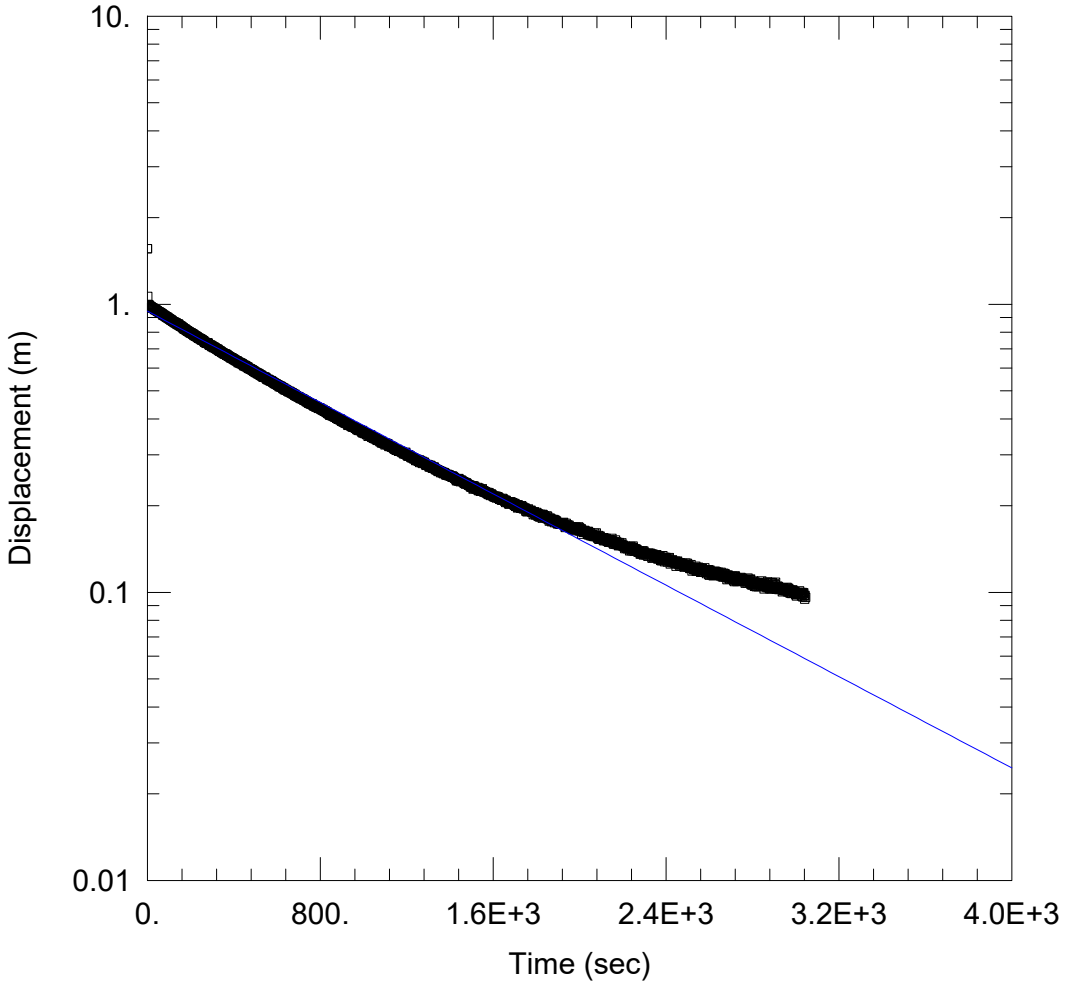
Saturated Thickness: 4.27 m Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (BH-1)

Initial Displacement: 1.492 m
Total Well Penetration Depth: 4.27 m
Casing Radius: 0.0254 m
Static Water Column Height: 4.27 m
Screen Length: 1.52 m
Well Radius: 0.0254 m

SOLUTION

Aquifer Model: Confined
Solution Method: Bouwer-Rice
K = 4.872E-5 cm/sec
y0 = 0.9409 m



BH-1 RISING HEAD TEST

Data Set: G:\...\BH-1 Rising Head Test.aqt
Date: 03/11/21 Time: 14:14:31

PROJECT INFORMATION

Company: GHD
Client: Mason Homes Limited
Project: 11223795-01
Location: Centre Road Phase 2, Uxbridge
Test Well: BH-1
Test Date: March 10, 2021

AQUIFER DATA

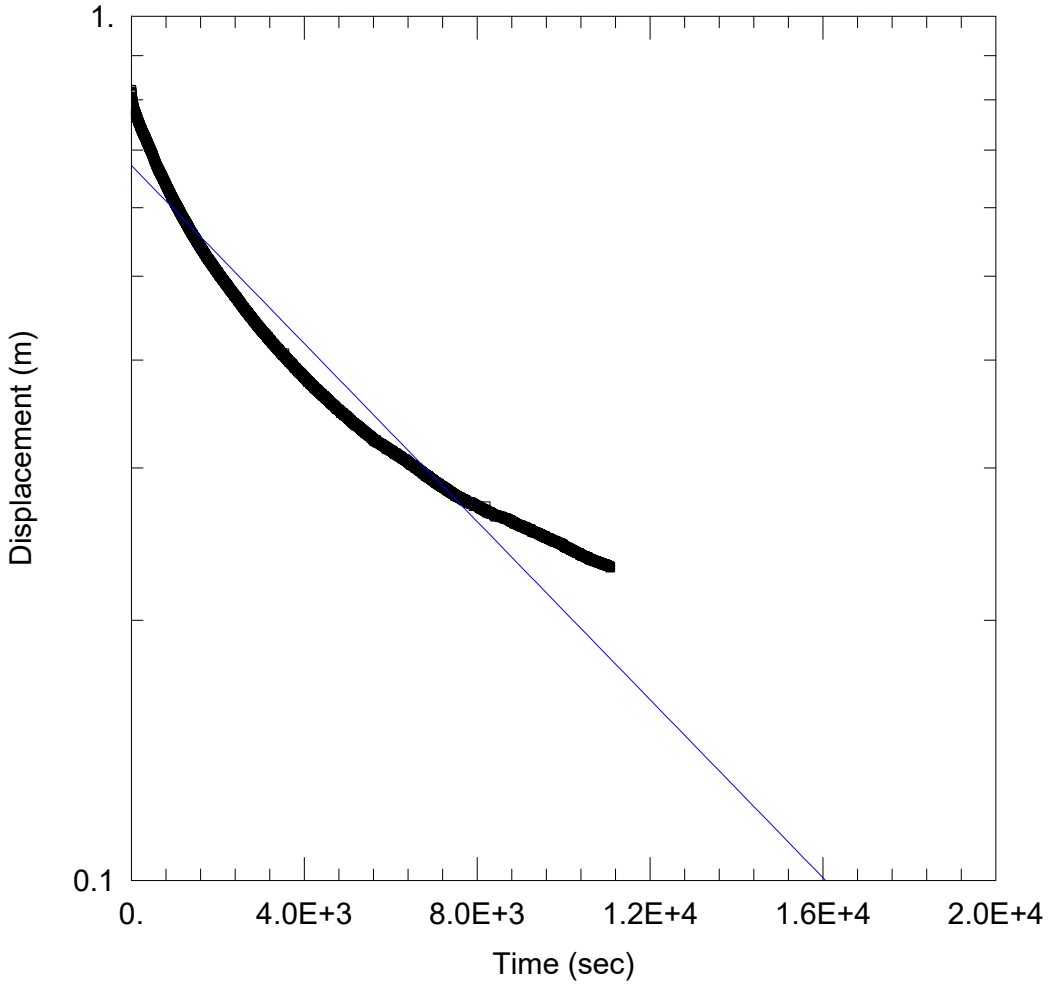
Saturated Thickness: 4.27 m Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (BH-1)

Initial Displacement: 1.558 m
Total Well Penetration Depth: 4.27 m
Casing Radius: 0.0254 m
Static Water Column Height: 4.27 m
Screen Length: 1.52 m
Well Radius: 0.0254 m

SOLUTION

Aquifer Model: Confined
Solution Method: Bouwer-Rice
K = 6.866E-5 cm/sec
y0 = 0.9464 m



BH-2 FALLING HEAD TEST

Data Set: G:\...\BH-2 Falling Head Test.aqt
Date: 03/11/21 Time: 14:07:19

PROJECT INFORMATION

Company: GHD
Client: Mason Homes Limited
Project: 11223795-01
Location: Centre Road Phase 2, Uxbridge
Test Well: BH-2
Test Date: March 10, 2021

AQUIFER DATA

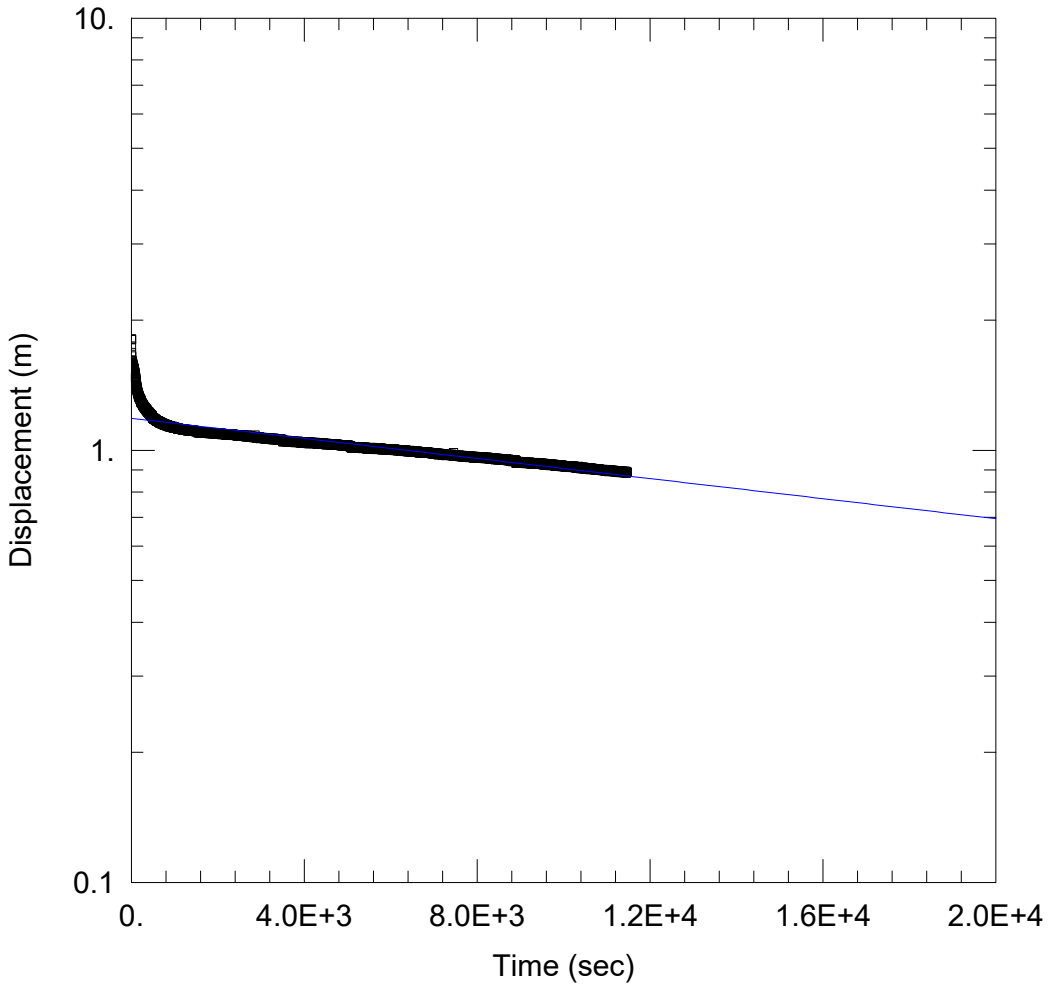
Saturated Thickness: 0.56 m
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (BH-2)

Initial Displacement: 0.8224 m
Total Well Penetration Depth: 1.52 m
Casing Radius: 0.0254 m
Static Water Column Height: 1. m
Screen Length: 1.52 m
Well Radius: 0.02654 m

SOLUTION

Aquifer Model: Confined
Solution Method: Bouwer-Rice
K = 1.819E-5 cm/sec
y0 = 0.6717 m



BH-3 FALLING HEAD TEST

Data Set: G:\...\BH-3 Falling Head Test.aqt
Date: 03/11/21 Time: 14:09:35

PROJECT INFORMATION

Company: GHD
Client: Mason Homes Limited
Project: 11223795-01
Location: Centre Road Phase 2, Uxbridge
Test Well: BH-3
Test Date: March 10, 2021

AQUIFER DATA

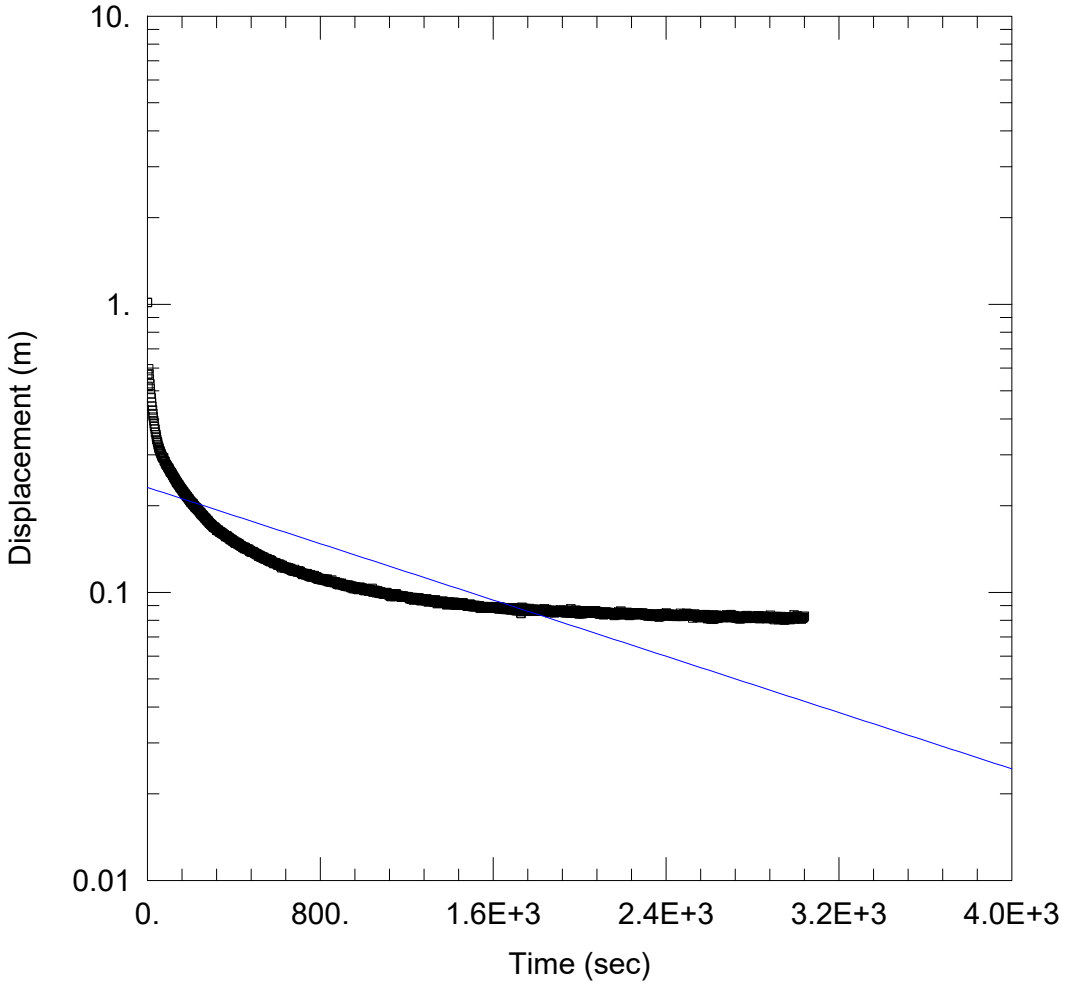
Saturated Thickness: 1.81 m Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (BH-3)

Initial Displacement: 1.81 m
Total Well Penetration Depth: 1.52 m
Casing Radius: 0.0254 m
Static Water Column Height: 0. m
Screen Length: 1.52 m
Well Radius: 0.0254 m

SOLUTION

Aquifer Model: Confined
Solution Method: Bouwer-Rice
K = 1.534E-6 cm/sec
y0 = 1.186 m



BH-4 FALLING HEAD TEST

Data Set: G:\...\BH-4 Falling Head Test.aqt
Date: 03/11/21 Time: 14:11:50

PROJECT INFORMATION

Company: GHD
Client: Mason Homes Limited
Project: 11223795-01
Location: Centre Road Phase 2, Uxbridge
Test Well: BH-4
Test Date: March 10, 2021

AQUIFER DATA

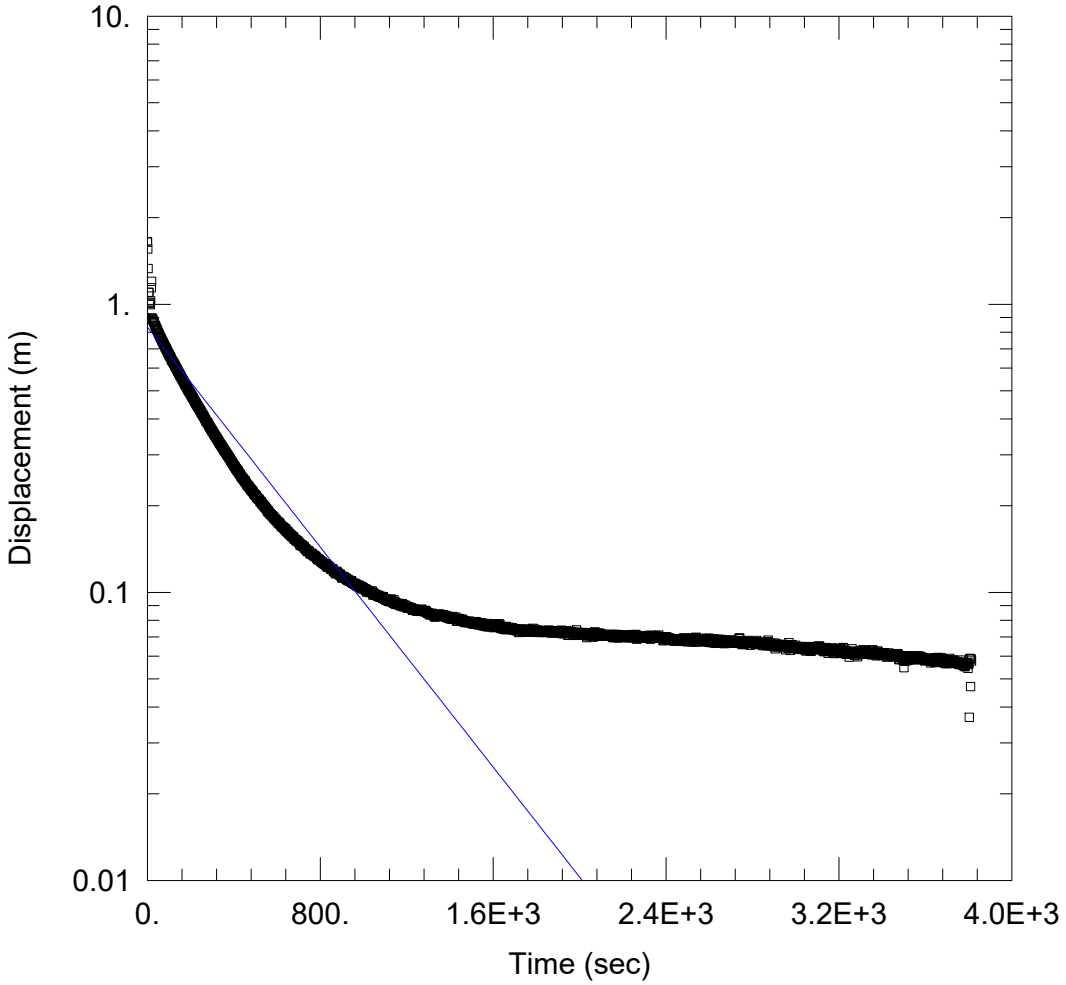
Saturated Thickness: 3.74 m Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (BH-4)

Initial Displacement: 1.014 m
Total Well Penetration Depth: 3.74 m
Casing Radius: 0.0254 m
Static Water Column Height: 3.74 m
Screen Length: 3.04 m
Well Radius: 0.0254 m

SOLUTION

Aquifer Model: Confined
Solution Method: Bouwer-Rice
K = 2.14E-5 cm/sec
y0 = 0.2313 m



BH-4 RISING HEAD TEST

Data Set: G:\...\BH-4 Rising Head Test.aqt
Date: 03/11/21 Time: 14:12:57

PROJECT INFORMATION

Company: GHD
Client: Mason Homes Limited
Project: 11223795-01
Location: Centre Road Phase 2, Uxbridge
Test Well: BH-4
Test Date: March 10, 2021

AQUIFER DATA

Saturated Thickness: 3.74 m Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (BH-4)

Initial Displacement: 1.644 m
Total Well Penetration Depth: 3.74 m
Casing Radius: 0.0254 m
Static Water Column Height: 3.74 m
Screen Length: 3.04 m
Well Radius: 0.0254 m

SOLUTION

Aquifer Model: Confined
Solution Method: Bouwer-Rice
K = 8.361E-5 cm/sec
y0 = 0.8326 m

Appendix D
Analytical Data

CADUCEON ENVIRONMENTAL LABORATORIES
Client committed. Quality assured.

CERTIFICATE OF ANALYSIS

Final Report

C.O.C.: G89204 **REPORT No. B21-06975**

Report To:

GHD Limited
455 Phillip Street,
Waterloo Ontario N2L 3X2 Canada
Attention: Wesley Moore

Caduceon Environmental Laboratories
110 West Beaver Creek Rd Unit 14
Richmond Hill ON L4B 1J9
Tel: 289-475-5442
Fax: 289-562-1963

DATE RECEIVED: 12-Mar-21
DATE REPORTED: 18-Mar-21
SAMPLE MATRIX: Groundwater

JOB/PROJECT NO.: 11223795-01
P.O. NUMBER: 73522789
WATERWORKS NO.

			Client I.D.		BH - 1	BH - 2	BH - 4	
			Sample I.D.		B21-06975-1	B21-06975-2	B21-06975-3	
			Date Collected		10-Mar-21	10-Mar-21	10-Mar-21	
Parameter	**Units**	**R.L.**	**Reference Method**	**Date/Site Analyzed**				
pH @25°C	pH Units		SM 4500H	15-Mar-21/O	7.81	7.61	7.92	
Conductivity @25°C	µmho/cm	1	SM 2510B	15-Mar-21/O	926	1070	652	
Alkalinity(CaCO3) to pH4.5	mg/L	5	SM 2320B	15-Mar-21/O	255	357	177	
Hardness (as CaCO3)	mg/L	1	SM 3120	16-Mar-21/O	456	482	309	
Chloride	mg/L	0.5	SM4110C	16-Mar-21/O	66.7	32.5	59.3	
Fluoride	mg/L	0.1	SM4110C	16-Mar-21/O	< 0.1	< 0.1	< 0.1	
Nitrite (N)	mg/L	0.1	SM4110C	16-Mar-21/O	0.1	< 0.1	< 0.1	
Nitrate (N)	mg/L	0.1	SM4110C	16-Mar-21/O	14.3	11.2	9.8	
Sulphate	mg/L	1	SM4110C	16-Mar-21/O	69	122	22	
Colour	TCU	2	SM 2120C	17-Mar-21/O	< 2	< 2	< 2	
Turbidity	NTU	0.1	SM 2130	17-Mar-21/O	42.7	249	332	
Ammonia (N)-Total	mg/L	0.01	SM4500-NH3-H	15-Mar-21/K	0.10	0.11	0.06	
o-Phosphate (P)	mg/L	0.002	PE4500-S	15-Mar-21/K	< 0.002	0.005	0.007	
Potassium	mg/L	0.1	SM 3120	16-Mar-21/O	2.5	1.6	1.4	
Sodium	mg/L	0.2	SM 3120	16-Mar-21/O	22.9	81.2	14.3	
Calcium	mg/L	0.02	SM 3120	16-Mar-21/O	157	166	86.9	
Magnesium	mg/L	0.02	SM 3120	16-Mar-21/O	15.5	16.2	22.3	
Iron	mg/L	0.005	SM 3120	16-Mar-21/O	< 0.005	0.021	< 0.005	
Copper	mg/L	0.002	SM 3120	16-Mar-21/O	< 0.002	< 0.002	< 0.002	
Manganese	mg/L	0.001	SM 3120	16-Mar-21/O	0.208	0.155	0.024	
Zinc	mg/L	0.005	SM 3120	16-Mar-21/O	< 0.005	0.011	< 0.005	
Anion Sum	meq/L		Calc.	18-Mar-21/O	9.44	11.4	6.38	
Cation Sum	meq/L		Calc.	18-Mar-21/O	10.2	13.2	6.83	
% Difference	%		Calc.	18-Mar-21/O	3.79	7.30	3.43	

Christine Burke
Lab Manager

R.L. = Reporting Limit
Test methods may be modified from specified reference method unless indicated by an *
Site Analyzed=K-Kingston,W-Windsor,O-Ottawa,R-Richmond Hill,B-Barrie

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Client committed. Quality assured.

CERTIFICATE OF ANALYSIS

Final Report

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DATE RECEIVED: 12-Mar-21
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SAMPLE MATRIX: Groundwater

JOB/PROJECT NO.: 11223795-01
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WATERWORKS NO.

			Client I.D.		BH - 1	BH - 2	BH - 4	
			Sample I.D.		B21-06975-1	B21-06975-2	B21-06975-3	
			Date Collected		10-Mar-21	10-Mar-21	10-Mar-21	
Parameter	**Units**	**R.L.**	**Reference Method**	**Date/Site Analyzed**				
Ion Ratio	AS/CS		Calc.	18-Mar-21/O	0.927	0.864	0.934	
Sodium Adsorption Ratio	-		Calc.	18-Mar-21/O	0.467	1.61	0.354	
TDS(ion sum calc.)	mg/L	1	Calc.	18-Mar-21/O	551	684	356	
Conductivity (calc.)	µmho/cm		Calc.	18-Mar-21/O	951	1116	664	
TDS(calc.)/EC(actual)	-		Calc.	18-Mar-21/O	0.595	0.637	0.547	
EC(calc.)/EC(actual)	-		Calc.	18-Mar-21/O	1.03	1.04	1.02	
Langelier Index(25°C)	S.I.		Calc.	18-Mar-21/O	0.939	0.901	0.655	

Christine Burke
Lab Manager

R.L. = Reporting Limit
Test methods may be modified from specified reference method unless indicated by an *
Site Analyzed=K-Kingston,W-Windsor,O-Ottawa,R-Richmond Hill,B-Barrie

Appendix E
Water Balance Calculations

Appendix E.1

Revised Water Budget (Thornthwaite Method) - Average Values*

Weather Station: Udora

Climate Station: 6119055 **Elevation:** 262 masl **Distance Away:** ~ 16.3 km

Month	Mean Temperature (^{o}C)	Heat Index	Unadjusted Potential ET (mm)	Daylight Correction Factor	Adjusted ET (mm)	Total Precipitation (mm)
January	-7	0	0	0.78	0	64.9
February	-6.6	0	0	0.88	0	45.9
March	-1.3	0	0	0.99	0	53.1
April	5.7	1.22	26.2	1.12	29.4	67.9
May	12.2	3.86	58.9	1.22	71.8	82.1
June	18	6.95	89.0	1.28	114.0	106.6
July	19.9	8.10	99.1	1.25	123.8	86.4
August	19.3	7.73	95.9	1.15	110.3	73.9
September	15.1	5.33	73.9	1.04	76.8	87.3
October	8.6	2.27	40.6	0.92	37.4	74.9
November	2.4	0.33	10.5	0.8	8.4	83.2
December	-4	0	0	0.76	0	60
TOTAL	6.9	35.8	494.0		571.8	886.2

TOTAL WATER SURPLUS: 314.4 mm

Notes:

*Average values of precipitation were used. Average values of temperature were also used.

Appendix E.2

Water Budget Pre-Development

Catchment Designation	PRE-DEVELOPMENT SITE						TOTAL
	Agricultural Area	Naturalized Areas	Forested Area	Existing Residential			
				Lawn	Rooftops	Gravel Drive	
Area (m^2)	89320	28140	2060	10715	430	335	131000
Pervious Area (m^2)	89320	28140	2060	10715	0	335	130570
% Pervious	68.2%	21.5%	1.6%	8.2%	0%	0.3%	99.7%
Impervious Area (m^2)	0	0	0	0	430	0	430
% Impervious	0%	0%	0%	0%	0.3%	0%	0.3%
INFILTRATION FACTORS							
Topography Infiltration Factor	0.15	0.15	0.15	0.2	0	0.2	
Soil Infiltration Factor	0.2	0.2	0.2	0.2	0	0.2	
Land Cover Infiltration Factor	0.1	0.15	0.2	0.15	0	0	
MECP Infiltration Factor	0.45	0.5	0.55	0.55	0	0.4	
Actual Infiltration Factor	0.45	0.5	0.55	0.55	0	0.4	
Runoff Coefficient	0.55	0.5	0.45	0.45	1	0.6	
Runoff from Impervious Surfaces*	0	0	0	0	0.8	0.8	
INPUTS (PER UNIT AREA)							
Precipitation (mm/yr)	886	886	886	886	886	886	886
Run On (mm/yr)	0	0	0	0	0	0	0
Other Inputs (mm/yr)	0	0	0	0	0	0	0
Total Inputs (mm/yr)	886	886	886	886	886	886	886
OUTPUTS (PER UNIT AREA)							
Precipitation Surplus (mm/yr)	314	314	314	314	709	709	317
Net Surplus (mm/yr)	314	314	314	314	709	709	317
Evaportranspiration (mm/yr)	572	572	572	572	177	177	570
Infiltration (mm/yr)	141	157	173	173	0	284	148
Rooftop Infiltration (mm/yr)	0	0	0	0	266	0	1
Total Infiltration (mm/yr)	141	157	173	173	266	284	149
Runoff Pervious Areas	173	157	141	141	0	425	167
Runoff Impervious Areas	0	0	0	0	443	0	1
Total Runoff (mm/yr)	173	157	141	141	443	425	168
Total Outputs (mm/yr)	886	886	886	886	886	886	886
Difference (Inputs - Outputs)	0	0	0	0	0	0	0
INPUTS (VOLUMES)							
Precipitation (m^3/yr)	79155	24938	1826	9496	381	297	116092
Run On (m^3/yr)	0	0	0	0	0	0	0
Other Inputs (m^3/yr)	0	0	0	0	0	0	0
Total Inputs (m^3/yr)	79155	24938	1826	9496	381	297	116092
OUTPUTS (VOLUMES)							
Precipitation Surplus (m^3/yr)	28079	8846	648	3368	305	238	41484
Net Surplus (m^3/yr)	28079	8846	648	3368	305	238	41484
Evaportranspiration (m^3/yr)	51076	16091	1178	6127	76	59	74608
Infiltration (m^3/yr)	12636	4423	356	1853	0	95	19363
Rooftop Infiltration (m^3/yr)	0	0	0	0	114	0	114
Total Infiltration (m^3/yr)	12636	4423	356	1853	114	95	19477
Runoff Pervious Areas (m^3/yr)	15444	4423	291	1516	0	143	21816
Runoff Impervious Areas (m^3/yr)	0	0	0	0	191	0	191
Total Runoff (m^3/yr)	15444	4423	291	1516	191	143	22007
Total Outputs (m^3/yr)	79155	24938	1826	9496	381	297	116092
Difference (Inputs - Outputs)	0	0	0	0	0	0	0

Notes:

Naturalized areas are open, vacant areas that are not used for agriculture and are not forested areas

Assume 37.5% of rooftop runoff infiltrates the ground in this scenario.

Downspout disconnection is indicated to result in the infiltration of 25-50% of rooftop runoff

Appendix E.3

Water Budget Post-Development - No Mitigation Strategies

Catchment Designation	POST-DEVELOPMENT SITE										TOTAL
	Low Density - Single Detached			Med. Density - Townhouses			EP	Roads & Laneways	Parkland	SWM Pond	
	Lawns	Rooftops	Driveways	Lawns	Rooftops	Driveways		Asphalt		Pond	
Area (m^2)	15126	36302	9076	4769	17883	1192	4499	37923	3500	730	131000
Pervious Area (m^2)	15126	0	0	4769	0	0	4499	0	3500	0	27893
% Pervious	11.5%	0%	0%	4%	0%	0%	3.4%	0%	2.7%	0%	21.3%
Impervious Area (m^2)	0	36302	9076	0	17883	1192	0	37923	0	730	103107
% Impervious	0%	27.7%	6.9%	0%	13.7%	0.9%	0%	28.9%	0%	0.6%	78.7%
	INFILTRATION FACTORS										
Topography Infiltration Factor	0.2	0	0	0.2	0	0.15	0.1	0.15	0.15	0	
Soil Infiltration Factor	0.2	0	0	0.2	0	0	0.2	0	0.2	0	
Land Cover Infiltration Factor	0.15	0	0	0.15	0	0	0.2	0	0.15	0	
MECP Infiltration Factor	0.55	0	0	0.55	0	0.15	0.5	0.15	0.5	0	
Actual Infiltration Factor	0.55	0	0	0.55	0	0	0.5	0	0.5	0.05	
Runoff Coefficient	0.45	1	1	0.45	1	1	0.5	1	0.5	0.95	
Runoff from Impervious Surfaces*	0	0.8	0.8	0	0.8	0.8	0	0.8	0.8	0.8	
	INPUTS (PER UNIT AREA)										
Precipitation (mm/yr)	886	886	886	886	886	886	886	886	886	886	886
Run On (mm/yr)	0	0	0	0	0	0	0	0	0	0	0
Other Inputs (mm/yr)	0	0	0	0	0	0	0	0	0	0	0
Total Inputs (mm/yr)	886	886	886	886	886	886	886	886	886	886	886
	OUTPUTS (PER UNIT AREA)										
Precipitation Surplus (mm/yr)	314	709	709	314	709	709	314	709	314	709	625
Net Surplus (mm/yr)	314	709	709	314	709	709	314	709	314	709	625
Evaportranspiration (mm/yr)	572	177	177	572	177	177	572	177	572	177	261
Infiltration (mm/yr)	173	0	0	173	0	0	157	0	157	35	36
Rooftop Infiltration (mm/yr)	0	0	0	0	0	0	0	0	0	0	0
Total Infiltration (mm/yr)	173	0	0	173	0	0	157	0	157	35	36
Runoff Pervious Areas	141	0	0	141	0	0	157	0	157	0	31
Runoff Impervious Areas	0	709	709	0	709	709	0	709	0	674	558
Total Runoff (mm/yr)	141	709	709	141	709	709	157	709	157	674	589
Total Outputs (mm/yr)	886	886	886	886	886	886	886	886	886	886	886
Difference (Inputs - Outputs)	0	0	0	0	0	0	0	0	0	0	0
	INPUTS (VOLUMES)										
Precipitation (m^3/yr)	13405	32171	8043	4226	15848	1057	3987	33608	3102	647	116092
Run On (m^3/yr)	0	0	0	0	0	0	0	0	0	0	0
Other Inputs (m^3/yr)	0	0	0	0	0	0	0	0	0	0	0
Total Inputs (m^3/yr)	13405	32171	8043	4226	15848	1057	3987	33608	3102	647	116092
	OUTPUTS (VOLUMES)										
Precipitation Surplus (m^3/yr)	4755	25737	6434	1499	12679	845	1414	26886	1100	518	81867
Net Surplus (m^3/yr)	4755	25737	6434	1499	12679	845	1414	26886	1100	518	81867
Evaportranspiration (m^3/yr)	8650	6434	1609	2727	3170	211	2572	6722	2001	129	34225
Infiltration (m^3/yr)	2615	0	0	825	0	0	707	0	550	26	4723
Rooftop Infiltration (m^3/yr)	0	0	0	0	0	0	0	0	0	0	0
Total Infiltration (m^3/yr)	2615	0	0	825	0	0	707	0	550	26	4723
Runoff Pervious Areas (m^3/yr)	2140	0	0	675	0	0	707	0	550	0	4072
Runoff Impervious Areas (m^3/yr)	0	25737	6434	0	12679	845	0	26886	0	492	73073
Total Runoff (m^3/yr)	2140	25737	6434	675	12679	845	707	26886	550	492	77144
Total Outputs (m^3/yr)	13405	32171	8043	4226	15848	1057	3987	33608	3102	647	116092
Difference (Inputs - Outputs)	0	0	0	0	0	0	0	0	0	0	0

Notes:

*Evaporation from impervious areas was assumed to be 20% of precipitation.

Asphalt has 0% infiltration capability

Low Density Single Lots: Assume rooftops cover about 60% of the lot. Driveways cover about 15% of the lot; Grass (lawns) cover about 25% of the lot.

Medium Density Townhouse Lots: Assume rooftops cover about 75% of the lot. Driveways cover about 5% of the lot; Grass (lawns) cover about 20% of the lot.

Appendix E.4

Water Budget Post-Development - With Downspout Disconnection Mitigation Strategies

Catchment Designation	POST-DEVELOPMENT SITE										TOTAL
	Low Density - Single Detached			Med. Density - Townhouses			EP	Roads & Laneways	Parkland	SWM Pond	
	Lawns	Rooftops	Driveways	Lawns	Rooftops	Driveways		Asphalt		Pond	
Area (m^2)	15126	36302	9076	4769	17883	1192	4499	37923	3500	730	131000
Pervious Area (m^2)	15126	0	0	4769	0	0	4499	0	3500	0	27893
% Pervious	11.5%	0%	0%	4%	0%	0%	3.4%	0%	2.7%	0%	21.3%
Impervious Area (m^2)	0	36302	9076	0	17883	1192	0	37923	0	730	103107
% Impervious	0%	27.7%	6.9%	0%	13.7%	0.9%	0%	28.9%	0%	0.6%	78.7%
	INFILTRATION FACTORS										
Topography Infiltration Factor	0.2	0	0	0.2	0	0.15	0.1	0.15	0.15	0	
Soil Infiltration Factor	0.2	0	0	0.2	0	0	0.2	0	0.2	0	
Land Cover Infiltration Factor	0.15	0	0	0.15	0	0	0.2	0	0.15	0	
MECP Infiltration Factor	0.55	0	0	0.55	0	0.15	0.5	0.15	0.5	0	
Actual Infiltration Factor	0.55	0	0	0.55	0	0	0.5	0	0.5	0.05	
Runoff Coefficient	0.45	1	1	0.45	1	1	0.5	1	0.5	0.95	
Runoff from Impervious Surfaces*	0	0.8	0.8	0	0.8	0.8	0	0.8	0.8	0.8	
	INPUTS (PER UNIT AREA)										
Precipitation (mm/yr)	886	886	886	886	886	886	886	886	886	886	886
Run On (mm/yr)	0	0	0	0	0	0	0	0	0	0	0
Other Inputs (mm/yr)	0	0	0	0	0	0	0	0	0	0	0
Total Inputs (mm/yr)	886	886	886	886	886	886	886	886	886	886	886
	OUTPUTS (PER UNIT AREA)										
Precipitation Surplus (mm/yr)	314	709	709	314	709	709	314	709	314	709	625
Net Surplus (mm/yr)	314	709	709	314	709	709	314	709	314	709	625
Evaportranspiration (mm/yr)	572	177	177	572	177	177	572	177	572	177	261
Infiltration (mm/yr)	173	0	0	173	0	0	157	0	157	35	36
%Rooftop Required to Meet Pre-Development	--	38%	--	--	38%	--	--	--	--	--	--
Rooftop Infiltration (mm/yr)	0	272	0	0	272	0	0	0	0	0	113
Total Infiltration (mm/yr)	173	272	0	173	272	0	157	0	157	35	149
Runoff Pervious Areas	141	0	0	141	0	0	157	0	157	0	31
Runoff Impervious Areas	0	437	709	0	437	709	0	709	0	674	445
Total Runoff (mm/yr)	141	437	709	141	437	709	157	709	157	674	476
Total Outputs (mm/yr)	886	886	886	886	886	886	886	886	886	886	886
Difference (Inputs - Outputs)	0	0	0	0	0	0	0	0	0	0	0
	INPUTS (VOLUMES)										
Precipitation (m^3/yr)	13405	32171	8043	4226	15848	1057	3987	33608	3102	647	116092
Run On (m^3/yr)	0	0	0	0	0	0	0	0	0	0	0
Other Inputs (m^3/yr)	0	0	0	0	0	0	0	0	0	0	0
Total Inputs (m^3/yr)	13405	32171	8043	4226	15848	1057	3987	33608	3102	647	116092
	OUTPUTS (VOLUMES)										
Precipitation Surplus (m^3/yr)	4755	25737	6434	1499	12679	845	1414	26886	1100	518	81867
Net Surplus (m^3/yr)	4755	25737	6434	1499	12679	845	1414	26886	1100	518	81867
Evaportranspiration (m^3/yr)	8650	6434	1609	2727	3170	211	2572	6722	2001	129	34225
Infiltration (m^3/yr)	2615	0	0	825	0	0	707	0	550	26	4723
Rooftop Infiltration (m^3/yr)	0	9885	0	0	4869	0	0	0	0	0	14754
Total Infiltration (m^3/yr)	2615	9885	0	825	4869	0	707	0	550	26	19477
Runoff Pervious Areas (m^3/yr)	2140	0	0	675	0	0	707	0	550	0	4072
Runoff Impervious Areas (m^3/yr)	0	15852	6434	0	7809	845	0	26886	0	492	58319
Total Runoff (m^3/yr)	2140	15852	6434	675	7809	845	707	26886	550	492	62390
Total Outputs (m^3/yr)	13405	32171	8043	4226	15848	1057	3987	33608	3102	647	116092
Difference (Inputs - Outputs)	0	0	0	0	0	0	0	0	0	0	0

Notes:

*Evaporation from impervious areas was assumed to be 20% of precipitation.

Asphalt has 0% infiltration capability

Low Density Single Lots: Assume rooftops cover about 60% of the lot. Driveways cover about 15% of the lot; Grass (lawns) cover about 25% of the lot.

Medium Density Townhouse Lots: Assume rooftops cover about 75% of the lot. Driveways cover about 5% of the lot; Grass (lawns) cover about 20% of the lot.

Appendix E.5

Water Budget Summary

PARAMETER	SITE				
	Pre-Development	*Post-Development No Mitigation*	*Difference Pre- vs. Post-*	*Post-Development With Mitigation*	*Difference Pre- vs. Post-*
INPUTS (VOLUMES)					
Precipitation (m^3/yr)	116092	116092	0%	116092	0%
Run On (m^3/yr)	0	0	0%	0	0%
Other Inputs (m^3/yr)	0	0	0%	0	0%
Total Inputs (m^3/yr)	116092	116092	0%	116092	0%
OUTPUTS (VOLUMES)					
Precipitation Surplus (m^3/yr)	41484	81867	97%	81867	97%
Net Surplus (m^3/yr)	41484	81867	97%	81867	97%
Evapotranspiration (m^3/yr)	74608	34225	-54%	34225	-54%
Infiltration (m^3/yr)	19363	4723	-76%	4723	-76%
% Rooftop Runoff to balance infiltration	--	--	--	38%	--
Rooftop Infiltration (m^3/yr)	114	0	0%	14754	--
Total Infiltration (m^3/yr)	19477	4723	-76%	19477	0%
Runoff Pervious Areas (m^3/yr)	21816	4072	-81%	4072	-81%
Runoff Impervious Areas (m^3/yr)	191	73073	--	58319	--
Total Runoff (m^3/yr)	22007	77144	251%	62390	184%
Total Outputs (m^3/yr)	116092	116092	0%	116092	0%

To maintain pre-development infiltration values; 38% of post-development rooftop runoff needs to be infiltrated.

about GHD

GHD is one of the world's leading professional services companies operating in the global markets of water, energy and resources, environment, property and buildings, and transportation. We provide engineering, environmental, and construction services to private and public sector clients.

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