



Terraprobe

Consulting Geotechnical & Environmental Engineering
Construction Materials Inspection & Testing

August 9, 2018

File No. 7-18-0101-46

Nextnine Limited
c/o Brutto Consulting
Edgeley Blvd., Unit 6
Vaughan, ON L4K 5Z4

Attention: Mr. Patrick Mulqueen, President

**RE: PRELIMINARY HYDROGEOLOGICAL FEASIBILITY REVIEW
PROPOSED BIG BAY POINT GOLF CLUB EXPANSION
173, 201 AND 225 BIG BAY POINT ROAD
TOWN OF INNISFIL, ONTARIO**

Dear Mr. Mulqueen;

Terraprobe Inc. was retained by Nextnine Limited c/o Brutto Consulting to provide a preliminary hydrogeological feasibility review for the proposed golf course expansion at properties located at 173, 201 and 225 Big Bay Point Road, in the Town of Innisfil.

1.0 INTRODUCTION

The project site is located in the southwest quadrant of the intersection of Big Bay Point Road and West Street as indicated on the attached site location plan (Figure 1). The site consists of three vacant parcels of land totalling approximately 16.2 hectares (40.03 acres) in area.

It is proposed to develop the site as a nine-hole golf course to complement the existing golf course across Big Bay Point Road operated by Big Point Golf Club. The preliminary design concept indicates that no structures and/or paved surface area would be constructed.

The preliminary hydrogeological feasibility review provides the results of the desktop study reviewing available geological and hydrogeological information available for the site and surrounding vicinity. Recommendations are also provided with regards to the feasibility of the subject site for the proposed development.

2.0 SITE CONDITIONS

2.1 Geologic Conditions

Based on geologic mapping for the area the project site is expected to consist of sandy silt to silty sand glacial till and coarse grained sand and gravel deposits. Geologic conditions were further investigated through a review of the Ministry of the Environment Conservation and Parks (MOECP) well record database. A plan showing locations of wells reported in the MOECP database is provided in the attached

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Figure 2. Based on the information reviewed two geologic cross sections were compiled with well record stratigraphy reported at the time of well drilling attached as Figure 3 and 4.

Cross section A (Figure 3) runs from west to east along Big Bay Point Road. Geology generally consists of sand shallow sand deposits underlain by cohesive clayey silt to clay glacial till to various depths of approximately 20 m below grade. Deeper sand deposits were encountered underlying glacial till at depth (including conditions expected for the subject site). Soils to the eastern extents of the cross section consisted predominately of sandy soils.

Cross section B (Figure 4) runs from south from the shoreline of Lake Simcoe, north along West Street. Based on this cross section the site generally consists of a thin layer surficial deposits of sand and gravel (approximately 1.0 m) followed by cohesive clayey silt to clay glacial till. Sand deposits were encountered underlying glacial till at a depth of approximately 30 m below existing grades.

2.2 Hydrogeologic Conditions

The hydrogeologic conditions at the site and surrounding vicinity were evaluated through a review of ground water information contained within the MOECP well record database. The area surrounding the site is not municipally serviced, and residential homes are serviced through septic tank and tile beds and private ground water supply wells. Based on the completed review of the MOECP well record database approximately 132 wells were identified within a 500 m radius of the subject site. A summary of the private ground water supply wells is provided in the table below:

Summary of MOECP Well Records

Well Construction

- Wells finished in bedrock 0
- Wells finished in overburden 132
- **Total** **132**

Well Uses

- Domestic 130
- Monitoring 2
- **Total** **132**

Well Depth

- Less than 15 m 40
- 15 to 30 m 58
- 30 to 45 m 17
- Greater than 45 m 17
- **Total** **61**

Pumping Rate

- 0 to 5 GPM 50
- 6 to 10 GPM 57
- 11 to 20 GPM 19
- Greater than 20 GPM 3
- Unknown 3
- **Total** **132**

In summary wells in the vicinity of the site are completed within overburden deposits to depths generally less than 30 metres below grade (a maximum depth of wells was observed at a depth of approximately 80 m). Wells are used for domestic purposes and generally yield 10 gallons per minute or less with a maximum reported yield of 25 gallons per minute.

Water levels within surrounding wells are typically within 3 m of ground surface in the immediate vicinity of the site. Ground water flow is expected to the south to Lake Simcoe. A detailed summary of well records within 500 m of the subject site is provided in the attached Table 1.

The MOECP Permit to Take Water (PTTW) database was also reviewed to assess large water consumers in the vicinity of the subject site (i.e. PTTW is required for all water taking in excess of 50,000 L/day). The table below summarizes PTTWs noted within a 500 m radius of the subject site:

Summary of Permit to Take Water

Permit Number	Permit Holder	Purpose	Specific Purpose	Maximum Litres Per Day	Source Type
6354-9M8JSR	Big Bay Point Golf and Country Club Limited	Commercial	Golf Course Irrigation	474,500	Surface Water
2765-A3BNCN	Friday Harbour Resort Inc.	Commercial	Golf Course Irrigation	1,988,875	Surface Water

The above information was obtained from the online database of PTTW from the MOECP. Water taking for both the Big Bay Point Golf Course and the Friday Harbour Golf Course are sourced from surface water (Lake Simcoe). Surface water taking for the purposes of golf course irrigation is regulated under the PTTW obtained for water taking and impacts surface water levels within Lake Simcoe are not expected at the maximum rates of water taking. Ground water was not identified as a source of irrigation water, and is used primarily for potable drinking water for individual drinking water supply wells as summarized in the attached Table 1. Ground water taking requiring a PTTW (i.e. rates in excess of 50,000 L/day) was not identified in the vicinity of the site. Soils underlying the subject site consist of a thin layer of sand and gravel followed by low permeability glacial till. Wells in the vicinity of the site are completed through glacial till deposits into underlying sand deposits.

3.0 PRELIMINARY HYDROGEOLOGICAL CONSIDERATIONS

The following preliminary hydrogeological considerations were developed based on the above noted information pertaining to the site and surrounding vicinity. It should be noted that site specific studies including a subsurface investigation, installation of ground water monitoring wells and ground water monitoring has not been conducted. Therefore, the discussion presented below is generalized and preliminary in nature and is only intended to identify the potential for hydrogeological constraints with regards to the proposed development of a nine-hole golf course at the subject site.

Ground water levels across the site are expected to be within 3 to 4 m of ground surface within glacial till deposits. Shallow ground water levels are expected to fluctuate seasonally, the magnitude of seasonal changes in shallow ground water levels were not assessed as part of this investigation. Shallow ground water levels within sand deposits in close proximity to Lake Simcoe are expected to be influenced by surface water and near surface ground water levels are anticipated.

It is expected that glacial till deposits for an aquitard limiting the downward migration of ground water and potential ground water contaminants related to individual septic systems for residential dwellings and fertilizers related to commercial golf course land use. Site grading should maintain the general runoff direction of precipitation as locally enhanced zones of infiltration for runoff may be present across the site (i.e. low lying areas). We are of the understanding that as part of the preliminary design for the development a dry pond to maintain the site water balance following development to the northeast of the site. Further investigation (subsurface investigation, infiltration testing and shallow ground water levels) with regards to potential impacts to private wells in the vicinity of the proposed dry pond is recommended if this feature is to be incorporated into the site design.

Terraprobe is of the understanding that irrigation for the proposed golf course expansion is not proposed at this time. If necessary irrigation water is to be obtained from surface water, ground water is not proposed to be utilized for golf course irrigation. We are of the understanding that water taking for the proposed golf course expansion (if required) will be completed under the existing PTTW for the Big Bay Point Golf Course. Further investigations will be required in the event that additional irrigation water is required for the proposed land use to assess both the irrigation water demand and impact assessment of surface water taking in support of a Category 3 PTTW application with the MOECP. Such assessments are beyond the scope of the preliminary hydrogeological feasibility review. The requirement for monitoring, mitigation and contingency plans is expected to form part of the review for additional studies completed in support of amendments to the PTTW for the existing Big Bay Point Golf Course.

Impacts to private ground water supply wells in the vicinity of the site are not expected. Surface water taking under the current maximum water taking permitted under the PTTW for the Big Bay Golf Course is not expected to influence local ground water levels. If additional water taking is required above rates permitted in the existing PTTW further investigations will be required. Low permeability glacial till is expected to limit the downward migration of potential contaminants. Wells in the vicinity of the site are typically completed within sand deposits at depth (i.e. underlying glacial till at depths of 20 to 30 m below grade) ground water impacts as a result of land use practices are not expected.

4.0 SUMMARY AND CONCLUSIONS

The results of or preliminary hydrogeological feasibility review indicates that the site is underlain by a thin layer of sand and gravel followed by low permeability glacial till. Ground water supply wells are typically completed within sand deposits underlying glacial till at depths of 20 to 30 m below grade.

Terraprobe is of the understanding that currently irrigation water for the Big Bay Point Golf Club is sourced from surface water resources (Lake Simcoe). It is proposed that the proposed golf course expansion will not be irrigated, and if necessary it is anticipated that irrigation for the proposed development would be taken under the existing Permit to Take Water for the Big Bay Point Golf Course. In the event that additional water taking is required further studies would be needed in support of the Permit application as to the potential impacts of surface water taking including monitoring, mitigation and contingency planning for water taking activities.

As part of the preliminary design we are of the understanding that a dry pond infiltration feature is proposed for storm water management and to maintain the post-development water balance for the site. Further investigations for the dry pond are recommended, including a subsurface investigation, infiltration testing and shallow ground water level monitoring.

Impacts to ground water as a result of site development are not anticipated under the current maximum permitted rates of surface water taking for the Big Bay Point Golf Course. We are of the understanding that ground water is not expected to be used as a source of irrigation water. A further assessment of the post development water balance is recommended such that rates infiltration is maintained following site development.

We trust that this letter is sufficient for your present requirements. If there is any point requiring further clarification, please contact the undersigned.

Yours truly,

Terraprobe Inc.



Paul L. Raeppe, P. Geo.
Project Manager



R. Baker Wohayeb, M.A.Sc., P.Eng.,
QP_{RA}
Principal

Enclosures

Figure 1 - Site Location Plan

Figure 2 – Well Location Plan

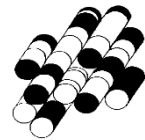
Figure 3 – Cross-Section A-A'

Figure 4 – Cross Section B – B'

Table 1 – Summary of MOECP Well Records

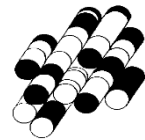
ENCLOSURES

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FIGURES

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Terraprobe

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Title:

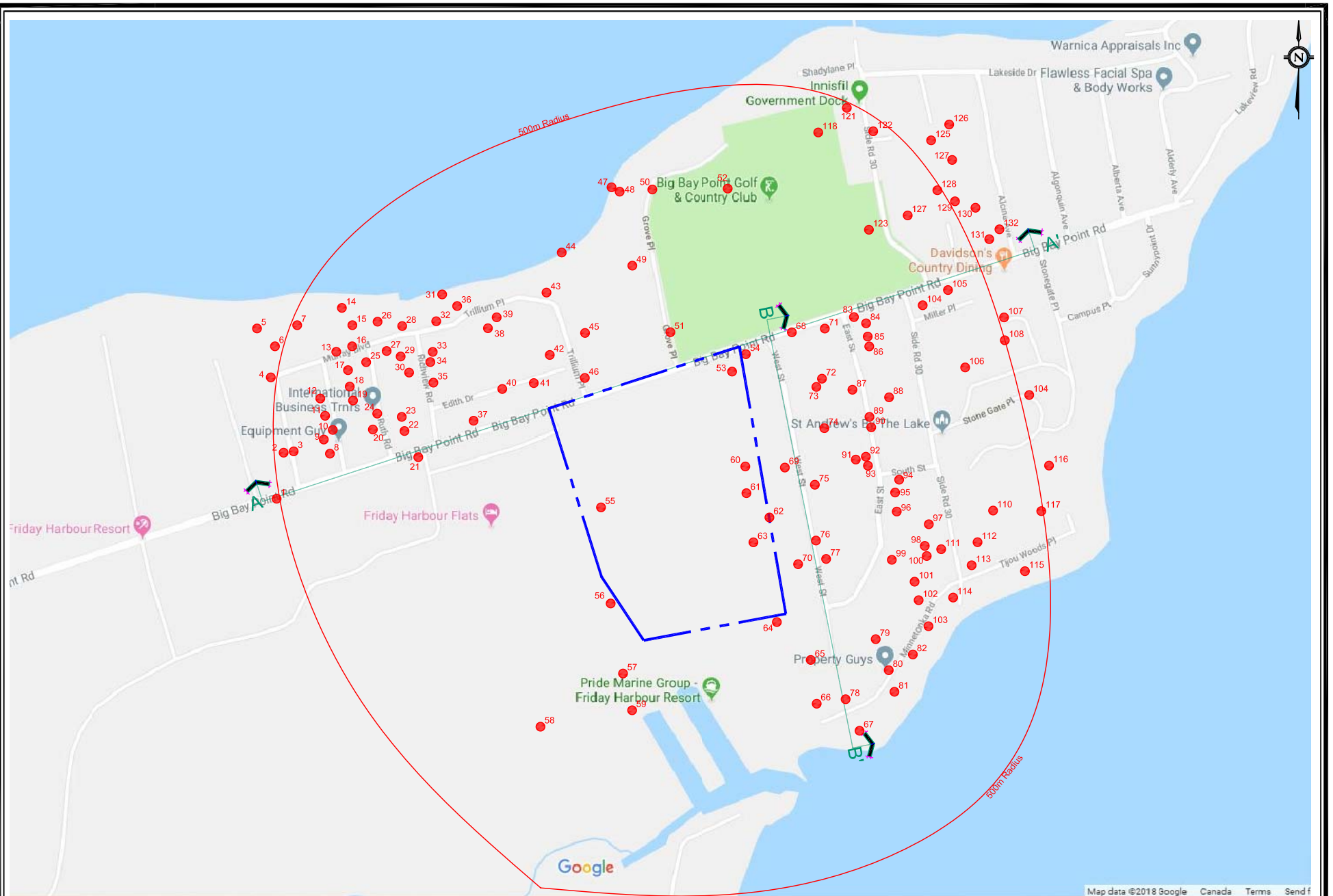
SITE LOCATION PLAN

File No.

7-18-0101-46

FIGURE :

1



LEGEND

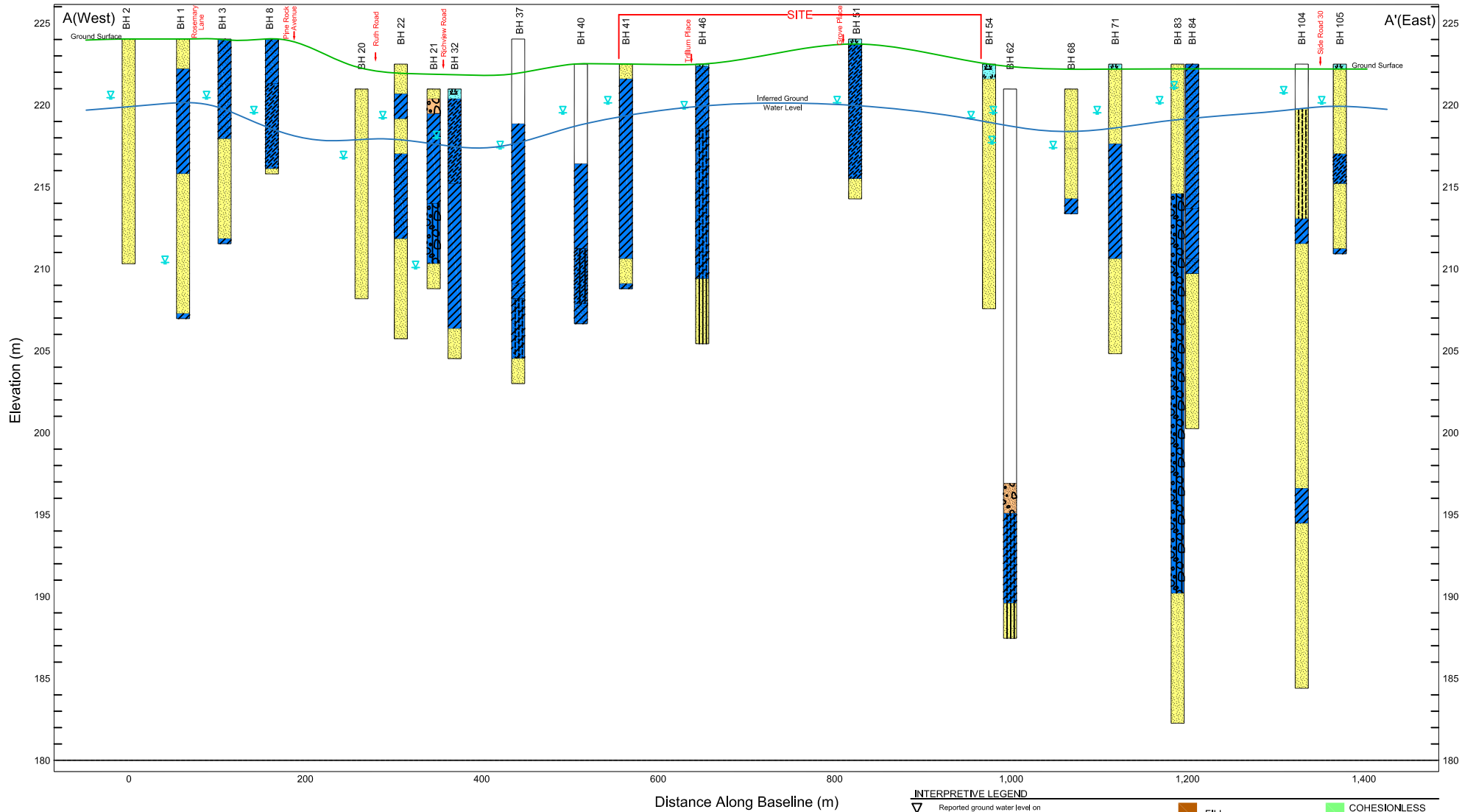
Well Location
Section Location

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Title: WELL LOCATION PLAN

File No.: 7-18-0101-46

FIGURE :
2



LITHOLOGY GRAPHIC LEGEND

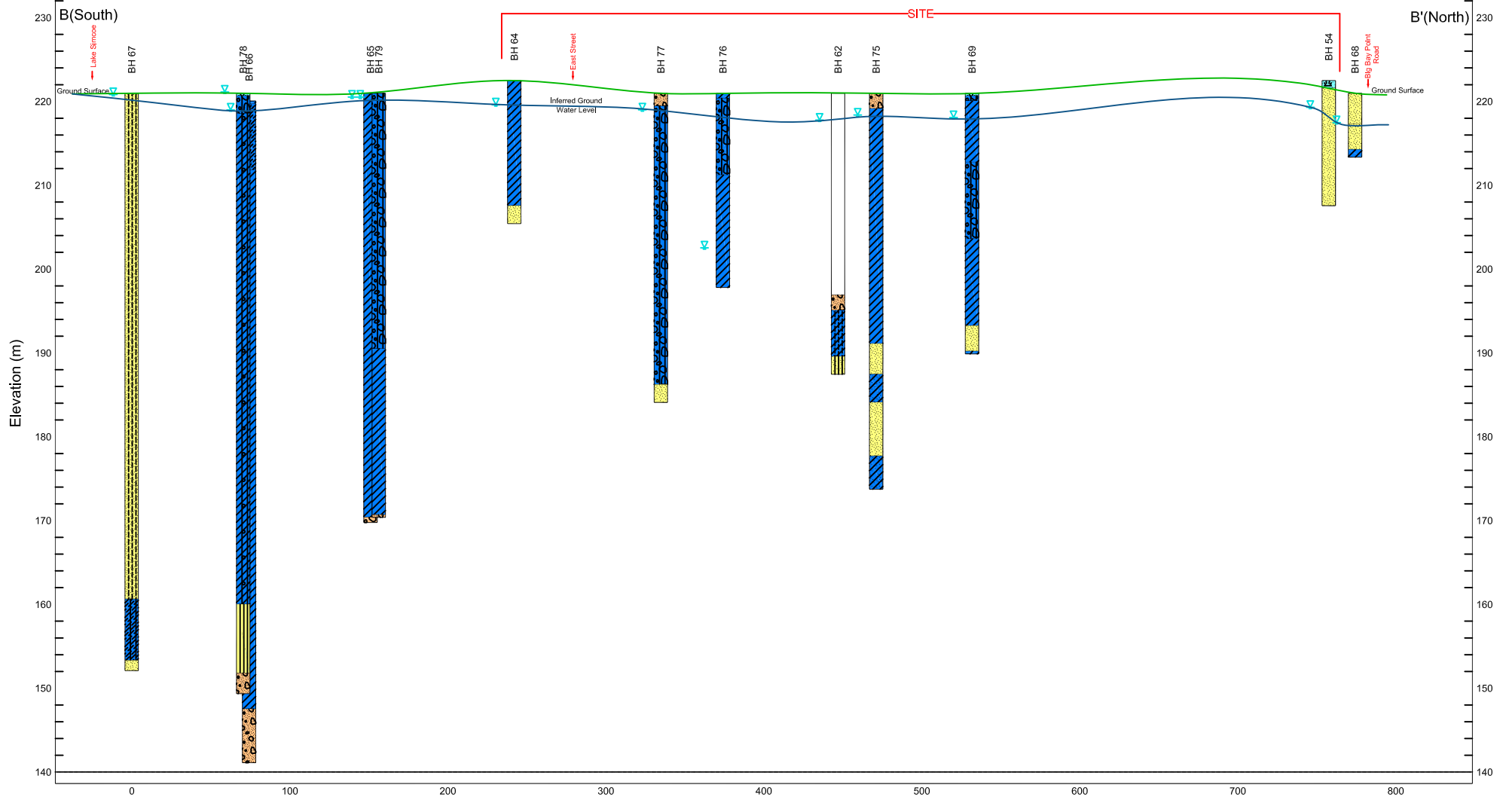
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INTERPRETIVE LEGEND

- | | | | | | |
|--|-------------------------------------------------------|--|-----------------------------------|--|---------------------------------------------------|
| | Reported ground water level on completion of drilling | | FILL | | COHESIONLESS TILLS |
| | Stabilized water level, most recent | | GRAVELS (gravel to gravelly sand) | | COHESIVE SOILS (clayey silt to clay, incl. tills) |
| | 30 SPT N-Value | | SILT TO SAND (not till) | | |

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Title: SUBSURFACE PROFILE CROSS-SECTION A-A	
File No.:	7-18-0101-46
No.:	3



LITHOLOGY GRAPHIC LEGEND

Topsoil	Sandy Silty Clay	Clayey Sand	Sandy Clay
Sand	Sandy Silt	Silty Sand	Clay and Silt Till
Blank	Clay	Clayey Silt	Silt
Sand and Gravel	Gravel	Clay and Gravel	

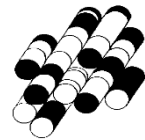
INTERPRETIVE LEGEND

Reported ground water level on completion of drilling	FILL	COHESIONLESS TILLS
Stabilized water level, most recent	GRAVELS (gravel to gravelly sand)	COHESIVE SOILS (clayey silt to clay, incl. tills)
30 SPT N-Value	SILT TO SAND (not till)	

<p>903 Barton Street, Unit 22 Stoney Creek, Ontario L8E 5P5 (905) 643-7560</p>	<p>Title: SUBSURFACE PROFILE CROSS-SECTION B-B</p>	
	<p>File No.: 7-18-0101-46</p>	<p>No.: 4</p>

TABLES

Terraprobe Inc.



**Table 1: Summary Of MOECP Well Records
Preliminary Hydrogeological Feasibility Review
173, 201 and 225 Big Bay Point Road
Innisfil, Ontario**

Map ID	Well ID	Easting	Northing	Year Constructed	Water Level (feet)	Ground Elevation (feet)	Pumping Rate (GPM)	Type	Stratigraphy (depth in feet)
1	7149293	616574	4916794	2010	45	—	5	Domestic	Sand/Stones(6), Clay/Stones(27), Fine Sand (55), Clay (56)
2	5736526	616507	4916888	2001	12	—	6	Domestic	Sand(45)
3	5729620	616616	4916886	1992	12	—	6	Domestic	Sand/Clay (20), Sand (41), Clay (from 41)
4	5733210	616561	4917019	1997	22	—	10	Domestic	Sand/Gravel/Clay (6), Clay (50), Sand/Silt (76), Sand (79).
5	5720328	616564	4917122	1985	20	—	10	Domestic	Sand (12), Clay (29), Sand (51), Clay (68).
6	5701787	616568	4916862	1964	13	—	2	Domestic	Clay (6), Sand (17.5)
7	5720315	616612	4917124	1984	20	—	10	Domestic	Top Soil (1), Sand/Clay (14), Clay (51), Sand (67), Clay(from 67).
8	5737239	616670	4916882	2002	15	—	5	Domestic	Sand/Clay (9), Clay/Sand (27), Fine Sand (from 27)
9	5701784	616655	4916914	1959	12	735	14	Domestic	Loam(2), Clay (24), Sand (46)
10	5701786	616677	4916935	1962	15	735	2	Domestic	Sand (26)
11	5701783	616663	4916953	1959	18	735	12	Domestic	Sand/Clay (8), Sandy Clay (37), Harold Pin (51), Sand (62)
12	5720101	616664	4916974	1985	20	725	12	Domestic	Top Soil (1), Clay (10), Clay (74), Sand (78)
13	5714167	616684	4917070	1976	30	730	5	Domestic	Clay (39), Sand (51)
14	7275565	616699	4917158	2016	20	—	10	Domestic	Sand/Clay (22), Fine Sand/Clay (65), Sand (79)
15	5716759	616714	4917124	1980	17	725	20	Domestic	Sand (27), Clay (30), Clay/Gravel (41), Sand/Clay (50), Sand (56).
16	7223376	616719	4917082	2014	23	—	25	Domestic	Sand (6), Clay (38), Sand (48), Clay (56), Sand (94), Clay (97)
17	5701785	616708	4917037	1962	6	730	10	Domestic	Sand (38), Clay (60), Sand (97), Sand (115), Silt (120), Coarse Sand (128)
18	7269693	616714	4917001	2015	22	—	5	Domestic	Sand (6), Clay (56), Sand (64)
19	5718696	616714	4916974	1983	20	725	10	Domestic	Top Soil (2), Sand (40), Clay (55), Sand (62)
20	5731558	616769	4916931	1985	14	—	3	Domestic	Medium Sand (29), Fine Sand (42)
21	7149294	616854	4916875	2010	36	—	6	Domestic	Loam(2), Gravel (5), Clay (23), Clay/Gravel (35), Sand (40)
22	5718606	616814	4916924	1983	11	—	5	Domestic	Sand (6), Clay (11), Sand (18), Sand/Clay (35), Sand (55)
23	5713560	616814	4916944	1976	13	730	7	Domestic	Sand/Clay (6), Sand (55)
24	5741036	616773	4916957	2006	18	—	7	Domestic	Sand/Clay (37), Sand (48)
25	5731557	616740	4917061	1995	20	—	5	Domestic	Sand (22), Sand/Clay (37), Fine Sand (70)
26	5707296	5707296	4917124	1970	18	725	5	Domestic	Sand (30)
27	5735725	616831	4917043	2000	25	—	16	Domestic	Sand (19), Clay (40), Sand (58), Clay (from 58).
28	5716760	616814	4917124	1980	18	725	20	Domestic	Sand(30), Clay/Sand (36), Clay (49), Sand (59).
29	5708931	616814	4917074	1972	16	730	5	Domestic	Sand (45)
30	5735725	616831	4917043	2000	25	—	16	Domestic	Sand (19), Clay (40), Sand (58), Clay (from 58).
31	5732592	616887	4917195	1996	10	—	6	Domestic	Sand (23), Sand/Clay (42) Sand (54)
32	5716486	616864	4917124	1979	10	725	7	Domestic	Top Soil (2), Clay/Sand (19), Clay (48), Sand (54)
33	5712053	616864	4917074	1974	15	730	3	Domestic	Sand (17), Clay (39)
34	5713559	616864	4917064	1976	20	730	12	Domestic	Sand (38), Clay (49), Sand (64)
35	5710992	616864	4917024	1974	20	730	2	Domestic	Sand (27), Sand/Silt (40), Clay/Sand(48), Clay(55), Clay/Sand (92), Fine Sand/ Silt (98)
36	5741041	616910	4917172	2006	20	—	12	Domestic	Sand/Clay (43), Sand (60)
37	5722080	616946	4916947	1986	22	—	8	Domestic	Previously Dug (17), Clay (49), Sand/Clay (52), Clay/Sand/Silt (64), Sand (69).
38	5709404	616984	4917124	1972	13	735	—	Domestic	Fill/Clay(2), Fine Sand (8), Coarse Sand/gravel(21)
39	5723080	616997	4917148	1987	5	—	5	Domestic	Topsoil (1), Sand (20), Sand/ Clay (35), Clay (39), Clay/Sand (46), Sand (51).
40	5707589	617014	4917004	1970	10	730	10	Domestic	Previously Dug (20), Clay (37), Clay/Silt(52), Sand(48), Sand/Clay (from 48).
41	5709938	617064	4917024	1973	8	730	4	Domestic	Sand/Fill(3), Clay (39), Sand(45), Sand Clay (from 45)
42	7240538	617100	4917061	2015	13	—	10	Domestic	Clay/Stones (25), Sand (56)
43	5722077	617089	4917200	1986	7	—	10	Domestic	Sand (9), Sand (30).
44	5715107	617117	4917275	1977	11	725	10	Domestic	Topsoil (1), Sand/Clay (18), Clay/Sand (49),Sand/Clay (54), Sand (60).
45	5713445	617164	4917124	1975	10	730	5	Domestic	Previously Dug (13), Sand (38)

**Table 1: Summary Of MOECP Well Records
Preliminary Hydrogeological Feasibility Review
173, 201 and 225 Big Bay Point Road
Innisfil, Ontario**

Map ID	Well ID	Easting	Northing	Year Constructed	Water Level (feet)	Ground Elevation (feet)	Pumping Rate (GPM)	Type	Stratigraphy (depth in feet)
46	5732206	617150	4917036	1996	9	—	10	Domestic	Topsoil (0.5), Sand/ Clay (13), Clay/Silt/Sand/Boulders (43), Sand/Silt (56).
47	5715216	617214	4917424	1977	12	—	10	Domestic	Sand (34), Clay (55), Sand (61)
48	7050718	617204	4917385	2007	8	—	8	Domestic	Sand (36), Sand (38)
49	5701792	617253	4917256	1966	6	730	3	Domestic	Topsoil (1), Sand/Clay (20), Sand/Clay (34), Clay (45), Silt (51), Sand (53), Fine Sand (63).
50	5729212	617285	4917406	1992	9	—	8	Domestic	Sand (20), Fine Sand (30)
51	5701789	617319	4917119	1958	13	735	4	Domestic	Topsoil (1), Clay/Sand (28), Sand(32)
52	5725478	617426	4917392	1989	10	—	10	Domestic	Sand/Boulders(12), Sand/Silt(24), Clay/Sand(48), Fine Sand(62)
53	5701676	617447	4917055	1963	11	730	5	Domestic	Previously Dug (12), Clay/Gravel (20), Clay(28), Gravel/Sand(38)
54	5701672	617473	4917084	1953	29	—	2	Domestic	Topsoil (3), Sand(49)
55	5714357	617214	4916774	1977	39	735	8	Domestic	Sand (7), Sand/Gravel (46), Sand (69)
56	7149292	617238	4916592	2010	Dry	—	—	Monitoring	Sand/Gravel(2), Clay/gravel/Till (50)
57	7270443	617239	4916463	2016	—	—	—	Monitoring	Sand/Silt(5), Silt/Clay(25)
60	5708043	617464	4916874	1971	34	730	4	Domestic	Clay/Stones (25), Clay (46)
61	5711594	617464	4916814	1974	6	730	7	Domestic	Clay (43), Sand (57), Clay(from 57)
62	5716691	617514	4916774	1979	11	725	10	Domestic	Previously Dug (79), Sand/Gravel/Silt (85), Sand/Silt/Clay(103), Sand/Silt(110)
63	5713558	617504	4916724	1976	9	730	12	Domestic	Sand/Clay (5), Clay (105), Sand/Clay(111), Sand (116)
64	5721264	617527	4916566	1986	10	—	10	Domestic	Loam (1), Clay (49), Sand (56).
	5733571	617527	4916566	1998	6	—	4	Domestic	Topsoil(1), Sand(17), Clay(19), Sand (35), Clay (from 35)
	5731221	617527	4916566	1994	18	—	20	Domestic	Fill(3), Clay/Silt/Sand(10), Clay/Stones(21), Sand(33), Sand/Gravel(42)
65	5701674	617606	4916492	1959	2	725	10	Domestic	Clay(166), Gravel(168
66	5701678	617603	4916412	1966	4	722	2	Domestic	Loam(1), Clay/M.Sand(27), Clay (238), Sand/Gravel/Silt (259)
67	5735823	617721	4916365	2000	1	—	20	Domestic	Sand/Silt(21), Clay/Sand/Silt (41), Silt/sand(59), Sand/Silt/Gravel(120), Clay/Silt(185), Sand/Silt(185), Silt/Sand(198), Clay/Silt(222), Sand(226).
68	5712904	617564	4917124	1975	12	—	2	Domestic	Sand(12), Coarse Sand(22), Clay (25).
69	5720326	617564	4916874	1985	10	725	10	Domestic	Topsoil(1), Clay/Gravel(3), Clay (27), Clay/Gravel/Till(57), Clay (91), Sand (102), Clay (from 102)
70	5740903	617583	4916683	2006	4	—	8	Domestic	Previously Dug (198)
71	5708975	617614	4917124	1972	10	730	5	Domestic	Topsoil(1), Sand(16), Clay(39), Sand(58).
72	5701677	617632	4917037	1965	10	730	10	Domestic	Previously Dug (10), Sand/Clay (38), Sand(51), Medium Sand(65)
73	5713906	617624	4917024	1976	8	730	8	Domestic	Sand/Clay(15), Silt/Sand(32), Clay/Sand(43), Silt(74), Clay(116), Sand(120).
74	5708261	617634	4916934	1971	5	—	5	Domestic	Previously Dug (10), Sand/Clay (38), Sand(51), Medium Sand(65)
75	5718189	617614	4916824	1982	9	725	15	Domestic	Sand/Gravel(6), Clay (98), Sand (110), Sand/Clay(121), Sand (142), Sand/Clay(155)
76	5711997	617614	4916724	1974	61	725	2	Domestic	Loam(2), Clay/Boulders (32), Clay (76)
77	7268474	617644	4916691	2016	7	—	5	Domestic	Sand/Gravel/Fill(5), Clay/Stones(114), Sand(121)
78	7128189	617678	4916427	2009	0	—	10	Domestic	Topsoil(1), Clay/Stones(8), Clay/Stones/Silt(200), Silt(227), Gravel/sand(235)
79	7295585	617732	4916529	2017	2	—	13	Domestic	Clay/Stones(100), Clay(165), Gravel/Sand(166)
80	5719756	617764	4916474	1984	0	—	10	Domestic	Clay/Boulder/Sandy(10), Clay/Boulder(38), Silt/sand/Gravel(120), Clay(217), Silt/sand(226), Sand/Silt(229)
81	5701675	617767	4916457	1961	0	—	4	Domestic	Previously Dug (13), Clay (223), MediumSand/Stones(226)
82	5740592	617813	4916517	2006	0	—	5	Domestic	Clay/Gravel/Stones(64), Clay/Gravel/Sand(75), Clay/Sand(142), Sand(144), Clay/Sand(170), Coarse Sand(175)
83	7213762	617683	4917159	2013	8	—	25	Domestic	Sand(26), Clay/Sand(006), Sand(132).
84	5701673	617700	4917148	1958	5	730	4	Domestic	Sand/Clay(29), Clay(39), Sand/Clay(42), Sand(73)
85	5715835	617714	4917124	1978	6	730	3	Domestic	Clay/Sand(10), Sand(22).
86	5733646	617714	4917113	1998	8	—	5	Domestic	Loam(1), Clay/Silt(10), Clay (18), Sand/Silt (30), Silt(37)
87	5706571	617684	4917024	1969	6	735	4	Domestic	Clay(6), Sand(25)

**Table 1: Summary Of MOECP Well Records
Preliminary Hydrogeological Feasibility Review
173, 201 and 225 Big Bay Point Road
Innisfil, Ontario**

Map ID	Well ID	Easting	Northing	Year Constructed	Water Level (feet)	Ground Elevation (feet)	Pumping Rate (GPM)	Type	Stratigraphy (depth in feet)
88	5733145	617753	4917011	1997	8	—	5	Domestic	Sand(4), Clay/Sand(46), Fine Sand(51)
89	5720327	617714	4916974	1985	8	725	10	Domestic	Fill(3), Sand/Clay(6), Clay(49),Clay/ Sand(53), Sand(65), Clay(from 65)
90	5707334	617724	4916954	1970	10	730	3	Domestic	Clay(12), Coarse Sand(18)
91	7224248	617703	4916882	2014	10	—	15	Domestic	Fill(3), Clay/Stones(84), Sand(95)
92	5711612	617714	4916874	1974	10	725	6	Domestic	Clay/Gravel/Stones(7), Sand(45), Clay(57), Sand(68)
93	5705900	617714	4916874	1968	6	730	10	Domestic	Fill(2), Loam(15), Clay/Gravel(65), Sand(68), Clay(69)
94	5736955	617773	4916842	2002	9	—	9	Domestic	Sand/Gravel/Sand(2), Clay/Sand(7), Clay/Sand(80), Sand/Clay(89), Sand(94)
95	5712407	617764	4916824	1975	8	725	10	Domestic	Sand(3), Clay/Gravel(79), Sand(84).
96	5707394	617764	4916774	1970	25	—	8	Domestic	Clay(25), Clay/Stones(58), Coarse Sand(60).
97	5736273	617839	4916767	2001	3	—	5	Domestic	Clay/Sand/Boulders(19), Clay/Sand(33), Clay/Sand/Silt(83), Silt/Sand(85), Fine Sand(89.5), Silt(97).
98	7234709	617833	4916725	2014	0	—	10	Domestic	Loam/topsoil(3), Gravel/Clay(18), Clay/Gravel(77), Gravel/Clay/Sand(170), Gravel/Sand(177).
99	5733706	617758	4916684	1998	11	—	10	Domestic	Clay(8), Clay/Sand(106), Sand(109)
100	5737143	617826	4916702	2002	0	—	5	Domestic	Sand/Gravel(2), Sand/Clay(20), Clay(169), Sand(177).
101	7102403	617804	4916645	2007	4	—	5	Domestic	Sand/Clay(25), Clay/Sand(155), Clay/Gravel(181), Sand (188).
102	5719914	617814	4916624	1985	Flowing	—	4	Domestic	Loam(1), Clay (121), Fine Sand(125), Clay(130)
103	7047265	617830	4916570	2007	0	—	10	Domestic	Clay (155), Sand (176)
104	5701684	617822	4917192	1964	6	730	10	Domestic	Previously Dug(9), Silty Sand(31), Clay(36), Sand (85), Clay (92), Fine Sand (125).
105	5708501	617864	4917214	1971	8	730	5	Domestic	Topsoil/Stones(1), Sand(18), Clay/Sand(24), Sand(38), Clay (from 38)
106	5701687	617898	4917084	1965	0	725	6	Domestic	Topsoil(1.5), Sand (10), Sandy Clay(36), Coarse Sand (41), Sand (from 41)
107	5714693	617964	4917174	1977	8	720	4	Domestic	Clay (90).
108	5714694	617964	4917124	1977	8	720	4	Domestic	Clay (95)
109	5738110	618035	4917005	2003	1	—	10	Domestic	Loam(1), Sand/Silt/Clay(5), Clay/Boulders(100), Sand/Clay(117), Coarse Sand(122).
	5737343	618035	4917005	2002	3	—	5	Domestic	Sand/Loam(1), Sand/Gravel/Clay(25), Clay/Sand(162), Sand/Gravel(168).
110	5701680	617947	4916795	1957	2	722	20	Domestic	Previously Dug(48), Clay(105), Sand (111).
111	5701683	617867	4916710	1962	20	722	5	Domestic	Clay(110), Medium Sand/Gravel(115)
112	7140078	617922	4916735	2009	16	—	15	Domestic	Topsoil/Sand(3), Clay/Silt/Gravel/Boulders(103)
113	5706182	617914	4916674	1969	Flowing	705	10	Domestic	Previously Dug(58), Fill (115),Clay(163), Sand/Clay (189), Gravel/Clay(193), Clay/Gravel(194).
114	5701681	617883	4916637	1951	1	722	10	Domestic	Hardpan(130), Coarse Gravel(131).
116	5701682	618077	4916874	1961	0	722	10	Domestic	Clay/Loam(7), Medium Sand(22), Hardpan(81), Stones(82).
117	5739427	618053	4916794	2004	6	—	10	Domestic	Clay(100), Sand(112)
118	5701790	617611	4917508	1963	7	723	25	Domestic	Clay/Loam(18), Sand(36), Hardpan(48), Fine Sand(54), Medium Sand (58)
119	5709536	617644	4917644	1972	9	725	7	Domestic	Previously Dug(9), Sand/Stones(27), Clay/Sand/Stones(35), Sand (60)
120	5701804	617680	4917652	1962	4	722	10	Domestic	Loam(6), Medium sand/Clay(36), Clay(86), Gravel(94), Medium Sand(106).
121	5701805	617662	4917567	1963	9	—	6	Domestic	Sand/Loam(12), Clay (80), Sand/Clay(124), Clay(136), Sand(151)
122	5709604	617714	4917524	1983	7	—	3	Domestic	Clay(5), Sand(18)
123	5710499	617714	4917324	1973	22	725	4	Domestic	Top Soil(1), Clay/Stones(22), Sand(22.5)
124	5701803	617786	4917356	1962	8	725	8	Domestic	Sand/Boulders(7), Clay/Sand(19), Hardpan(35), Sand(44)
125	5739984	617821	4917499	2004	6	—	13	Domestic	Sand/Gravel(19), Sand/Clay(48), Sand(53)
126	5739991	617858	4917528	2005	6	—	4	Domestic	Gravel/Sand(13), Clay/Sand(37), Sand/Gravel(41)
127	5714177	617864	4917464	1976	4	730	5	Domestic	Clay/Stones(18), Clay(22), Clay/Sand(36), Sand(45)
128	5739416	617840	4917403	2004	13	—	6	Domestic	Clay/Sand(40), Sand(47), Clay(from 47)
129	5701794	617882	4917385	1957	12	725	12	Domestic	Clay/Stones(50), Gravel/Stones(52)
130	5719217	617914	4917374	1984	6	725	10	Domestic	Loam(9), Sand(18), Clay(39), Sand(54).
131	5728652	617938	4917302	1991	7	—	10	Domestic	Sand(3), Clay(20), Sand(34), Clay(35), Sand(39), Clay(49), Sand(57), Clay/Silt(67), Sand(71).
132	5707338	617954	4917324	1970	4	725	3	Domestic	Loam/Stones(3), Clay/Stones(7), Coarse Sand(18)