Preliminary Hydrogeological Assessment

Bloor and Dundas Development
Toronto, Ontario

Choice Properties LP

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1.0 Introduction

SLR Consulting (Canada) Ltd. (SLR) was retained by Choice Properties LP ("Choice" or "the Client") to complete a Hydrogeological Assessment of the property occupying 2238, 2252, 2264, 2280, 2288, 2290 Dundas Street West and 105 Ritchie Avenue, Toronto, Ontario (referred to as the "Site"). The proposed development is located south of the intersection of Bloor Street West and Dundas Street West in the Roncesvalles neighbourhood of Toronto (Figure 1).

The proposed development Site currently includes a retail plaza occupied by Loblaws and the LCBO, a large warehouse formerly occupied by Zellers, and a smaller retail area occupied by Kal-Tire. The south east corner of the proposed development Site, fronting Dundas Street West, includes a three storey office building and a three storey medical building, with multiple retail storefronts at grade.

The proposed development will consist of 6 developments blocks with a central park block (Block 3) which will be accessed by an interior street network. The development blocks will consist of the following:

- Block 1 – will consist of an 8 storey high podium with a 22 storey west tower and 32 storey eastern tower (building 1) and a 7 storey high podium with a 38 storey tower;
- Block 2 – will consist of a 2 storey high podium with 6 storey west office tower, 24 storey east tower, and 7 storey east tower
- Block 3 - Central Park Block
- Block 4 – will consist of a 7 storey high podium with 28 storey tower;
- Block 5 – will consist of three towers from west to east, 10 storeys in height, 7 storey in height, and 8 storeys in height
- Block 6 – Green Space

The currently plans allow for 2 parking levels beneath most of the proposed buildings, except for the western tower on Block 2, where 3 levels of underground parking are planned. A key plan of the Site is presented in Figure 1. The development concept plans are included in Appendix A.

It is anticipated that dewatering will be required to allow construction of below ground infrastructure. Water takings of more than 50,000 L/day is regulated by the Ontario Ministry of Environment, Conservation and Park (MECP). The MECP requires a Permit to Take Water (PTTW) to be completed for any temporary construction dewatering that is greater than 400,000 L/day and an Environmental Activity and Sector Registry (EASR) to be completed for any temporary construction dewatering that is between 50,000 L/day and 400,000 L/day.

The objective of the Hydrogeological Assessment is to examine the hydrogeological characteristics of the Site by reviewing available information on the geological and hydrogeological characteristics of the area, the MECP water well records (WWR), and soil and groundwater data collected from boreholes and monitoring wells on completed on Site.

The Hydrogeological Assessment will provide a dewatering assessment for temporary construction dewatering based on the current design details for the proposed development and the geotechnical assessment completed to support the building construction (GeoTerre, 2022). Additionally, an evaluation of groundwater discharge options will be provided based on groundwater quality data collected at the Site. A focus of this investigation includes an assessment of the potential impact the proposed development may have on the surrounding area, and provides recommendations and possible measures, where applicable, to mitigate the potential for impacts.

1.1 Study Objectives

This report presents the results of the Hydrogeological Assessment that was completed to support the Zoning and Site Plan application process with the City of Toronto, Ontario. The hydrogeological assessment has been carried out in accordance with the Ontario Water Resources Act, Ontario Regulation 387/04, and the City of Toronto's Terms of Reference (TOR) for Geotechnical and Hydrogeological Investigations (revised August 2018) and the City of Toronto Municipal Code Chapter 681. Specific report objectives include:

- Document the Site geology, hydrostratigraphy, groundwater flow and quality;
- Evaluate dewatering requirements and potential impacts on regional and local groundwater systems, existing well users, and regional aquifers from both short-term and long-term dewatering if required, including preliminary estimates of dewatering rates, anticipated water quality, and proposed discharge rates and locations.
- Provide a recommended discharge plan.

In addition to the Hydrogeological Assessment, the following investigation are being complete concurrently and in support of the overall Zoning and Site Plan application process with the City of Toronto:

- GeoTerre, 2022. Preliminary Geotechnical Investigation Report, Dundas/Bloor Proposed Development 2280 Dundas Street West, Toronto, Ontario. GeoTerre File Number: TG22-020. June 30, 2022
- SLR, 2022. Phase Two Environmental Site Assessment, Bloor and Dundas Development. SLR Project No: 209.30128.00000. Dated June 30, 2022.

1.2 Report Organization

This Hydrogeological Assessment has been organized into nine (9) sections, following this introduction. Section 2.0 provides an overview of background information related to the development, regional topography, physiography, geology and hydrogeology. Section 3.0 provides field methodologies utilized during the assessment. Section 4.0 presents a review of the Site geologic and hydrogeologic conditions. Section 5.0 provides an assessment of the dewatering requirements for construction. Section 6.0 provides an impact assessment as a result of dewatering activities. Section 7.0 provides a recommended discharge plan. Section 8.0 is a summary of conclusions and next steps. Section 9.0 provides the Statement of Limitation related to the report.

2.0 Background

2.1 Historical Investigations

The following environmental and geotechnical investigations have been completed at the Site:

- EXP (2018) Limited Phase II ESA, 2538 Dundas Street West, Toronto, Ontario. Property ID 0029, Project Number: BRM-00242805-C0. February 22, 2018.
- EXP (2017) Limited Phase II ESA, 2522 Dundas Street West, Toronto, Ontario. Property ID 0029, Project Number: BRM-00240124-C0. December 6, 2017.

- Toronto Inspection Ltd. (2007) Phase II ESA, 2290 Dundas Street West, Toronto, Ontario. Report No. 1629-06-E-LPL-D. January 23, 2007.
- Toronto Inspection Ltd. (2006) Draft Phase II ESA, 2288 Dundas Street West, Toronto, Ontario. Report No. 1629-06-E-TNGI-C. March 8, 2006.
- Trow Consulting Engineers Ltd. (2000) Limited Phase II ESA, 2288 Dundas Street West, Toronto, Ontario. Project No. Bren0010979E. December 2000.
- Toronto Inspection Ltd. (2018) Report on Hydrogeological Investigation – Revised. 2280 Dundas Street West. Toronto, Ontario. Report No. 2477-18-HG. July 10, 2018.
- Toronto Inspection Ltd. (2018) Report on Preliminary Geotechnical Investigation 2280 Dundas Street West, Toronto, Ontario. Report No. 2477-18-G-CPR-E(RR). October 22, 2018.

Information from the above reports have been incorporated into this report to supplement the specific field investigations completed by SLR and GeoTerre to document the site specific geology and hydrogeological conditions.

2.2 Topography and Drainage

The Site is located within the Humber River Watershed, within the jurisdiction of the Toronto and Region Conservation Authority (TRCA).

The ground surface elevation at the Site flat and ranges from approximately 111.6 m to 112.9 m above mean sea level (m AMSL). Regional topography is relatively flat and slopes gradually to the south and southeast towards Lake Ontario, which is located approximately 2 kilometres (km) south of the Site.

Based on the topography and previous investigations in the area, the regional groundwater flow direction is anticipated to be predominantly southward towards Lake Ontario, with local flow to creeks and surface water features. The closest surface water body is a small pond located 700 m to the west southwest in High Park (Wendigo Creek). In areas where the shallow groundwater table intersects underground utility lines, or building foundation drains, there may be local effects on flow.

According to the Ministry of Natural Resources and Forestry (MNRF) Natural Heritage Areas interactive mapping system (https://www.ontario.ca/page/make-natural-heritage-areamap), there are no areas of natural significance within 250 m of the Site.

2.3 Physiography and Geology

The surficial geology and physiography of the site was reviewed from the following publications:

- Chapman, L.J. and Putnam, D.F., 2007, "The Physiography of Southern Ontario", 4th Edition, Ontario Geological Survey; and,
- Sharpe, D.R., 1980. Quarternary Geology of Toronto and Surrounding Area; Ontario Geological Survey Preliminary Map P. 2204, Geological Series. Scale 1:100,000.

Based on the mapping reviewed, the Site is located in the Physiographic Region of the Iroquois Plain with the surficial geology characterized by coarse-textured glaciolacustrine deposits comprised of sand and gravel with minor occurrences of silt and clay (**Figure 2**). The coarse-textured deposits are underlain by till deposits with bedrock typically occurring at greater than 27 m in depth and consisting of the Georgian Bay Formation (consisting of shale and limestone) (**Figure 3**). The subsurface conditions encountered

during the drilling program are generally consistent with the regional physiographic and surficial geological mapping.

3.0 Methodology

The Hydrogeological Assessment involved completing several field components, including:

- Drilling of twenty-two boreholes and installation of thirteen monitoring wells;
- Groundwater level monitoring and water quality sampling;
- Hydraulic conductivity testing and analysis; and,
- Geodetic surveying of borehole and monitoring well locations.

The following sections present the detailed methodology for each of the above components.

3.1 Borehole Drilling and Monitoring Well Installation

A total of 22 boreholes were advanced to depths ranging from 1.4 to 34.8 m below ground surface (bgs) between April 19, 2022 and May 27, 2022. GeoTerre Ltd (GeoTerre) was retained by SLR to drill 5 (BH22-1 to BH22-5) of the 22 boreholes for geotechnical investigation purposes (GeoTerre, 2022).

Drilling activities were completed by Drill Tech Drilling located in Newmarket, Ontario and Profile Drilling Ltd. (Profile) located in Mississauga, Ontario, which are both MECP-licensed drillers. The drilling activities are summarized below.

Overburden boreholes were advanced with either a Hollow Stem Auger Drill or a Pionjar Direct Push Drill Rig. SLR staff completed borehole logging by collecting material from the 0.6 m split spoon sampling core or 1.2 m continuous sampling core at each of the desired sampling depths. SLR examined the samples and recorded soil type, moisture content, colour, appearance, discolouration and olfactory evidence or signs of impact and general soil properties in general accordance with the Unified Soil Classification System.

Boreholes and monitoring well locations are shown on **Figure 4** and the borehole logs are provided in **Appendix B.**

Eight monitoring wells were installed in the shallow sand/silty sand/sand and silt native unit (SLR-01, SLR-02, SLR-04, SLR-06, SLR-08, SLR-09, SLR-10 and SLR-12), two monitoring wells were installed in the native sand and silt till unit (BH22-1D and BH22-3S) and three monitoring wells were installed across the sand and silt till and shale bedrock interphase (BH22-3D, BH22-4D and BH22-5). The remaining 4 monitoring wells (BH22-1, BH22-3D, BH22-4, BH22-5)were installed within the shale bedrock or across the bedrock/overburden interface by GeoTerre (2022)

Monitoring wells were constructed with a 50 mm ID polyvinyl chloride (PVC) pipe, with a 1.5 to 3.0 m length 10-slot screen at the bottom of the well depending on location and a flat end cap. Clean #2 silica sand pack was placed around each well screen to approximately 0.15 m above the screened interval with bentonite placed above the sand pack to approximately 0.3 mbgs and hydrated during installation. The well screens above the bedrock wells, including BH22-3D were 3.0 m long and the bedrock interphase wells, including BH22-3S overburden well screens were 1.5 m long. Details of boreholes and monitoring well construction can be found in **Table B-1** in **Appendix B**.

Monitoring wells were completed with a flush mount protective aluminium casing that was cemented into place at the surface. The inner diameter of the flush mount casing was filled with approximately 0.15 m of sand to allow for drainage. All the wells were fitted with lockable j-plugs to prevent the infiltration of surface water to the well.

3.2 Monitoring Well Development

Prior to groundwater sampling, SLR purged each newly installed monitoring well as well as all historical monitoring wells that were sampled for groundwater analysis. Development was completed to remove any drilling fluids, stagnant water, and fine-grained sediment from the monitoring well and sand pack to improve the hydraulic connection between the well and geologic materials.

This was achieved via the use of dedicated polyethylene tubing with a dedicated Waterra downhole inertial check-valve. Well development was complete when they were purged a minimum of 3 times with water levels allowed to recover between each purging event. The groundwater elevation was left to recover and reach near static water level conditions in the event the monitoring well went dry during purging and had a slow recovery in the order of days or weeks.

3.3 Groundwater Level Monitoring

Groundwater levels were manually collected in 41 monitoring wells using a Solinst water level meter on May 18, May 19, June 3, June 10 and June 16, 2022. The 41 monitoring wells consisted of wells from the current and historical investigations at the Site.

To support a more comprehensive understanding of the Site, select monitoring wells (BH22-3D, BH22-3S, BH-7, SLR-01, SLR-06 and SLR-08) were instrumented with automated Diver dataloggers to obtain continuous groundwater level readings at 12-hour intervals. A barologger was also deployed coincident with the Diver dataloggers to measure changes in atmospheric pressure and used to correct the water level data for barometric pressure. Continuous water level measurements provide additional insight into how the groundwater levels within the various unite response to precipitation events and establish seasonal variations in water level to help define high-water level conditions. The dataloggers were downloaded while completing manual water level measurements on-Site. The water level data is summarized in Table C1 and Table C2 and Figure C1 and Figure C2 of Appendix C.

3.4 Hydraulic Conductivity Testing

In-situ hydraulic conductivity tests were completed in monitoring wells (SLR-01, SLR-06, SLR-08, BH22-3D, BH22-3S, and BH33-5) to establish the permeability (hydraulic conductivity) of the formation in which the wells are screened.

The testing involved the slug test method, whereby a slug of known volume was removed (rising head test) from each well. In cases where the hydraulic conductivity was expected to be low, the well was purged dry and allowed to recover. The water levels were recorded during the removal, and recovery stages of the slug test using a Diver datalogger temporarily installed in the monitor. The in-situ hydraulic conductivity test was considered complete once the water level recovered to 90% of static conditions. The slug tests were analyzed in AQTESOLV using the Hvorslev method (1951) with the results presented in Appendix D.

3.5 Groundwater Sampling

Groundwater samples were collected on April 21, 2022 from monitors BH-6 and BH-203 screened within the Silty Sand/Clayey Silt and Sand deposits respectively. Samples were collected, unfiltered, using a low flow groundwater sampling method and submitted for analysis at Bureau Veritas (BV) Laboratories. The groundwater samples were collected and analyzed against the parameters listed in the Toronto Municipal Code Chapter 681, Sewers, Table 1 Limits for Sanitary and Combined Sewers Discharge, and Table 2 – Limits for Storm Sewer Discharge (City Sewer By-Law). Laboratory Certificates of Analysis are provided in Appendix E.

3.6 Elevation Survey

The newly completed boreholes and monitoring wells were surveyed for UTM coordinates, as well as adjacent ground surface and top of pipe elevations by Speight, Van Nostrand and Gibson Ltd on June 3, 2022. GPS coordinates and elevations were measured using a Leica GS14 GNSS GPS Speight, Van Nostrand and Gibson Ltd with a horizontal and vertical accuracy of 10 millimeters (mm) and 20 mm respectively. This accuracy is considered acceptable as per Section 14(2) of O.Reg. 216/10 of the Surveyor's Act. Elevations were measured relative to a Geodetic Datum derived from published benchmark No. 12219741515 located at 1515 Bloor Street West on a three-story brick building north end of west wall. Elevations are included in the borehole logs in Appendix B and in Table B-1 and Table B-2.

4.0 Site Geology and Hydrogeology

4.1 Geology and Hydrostratigraphy

Subsurface conditions on the Site were determined from boreholes completed as part of this investigation and historical boreholes completed as part of previous investigations (Figure 4). Details of the boreholes and monitoring well completions are summarized in Table B-1 and Table B-2 in Appendix B. Monitoring well details are also shown on the borehole logs in Appendix B. Conceptual Cross Sections are included in Figure 5 to Figure 8.

A thin layer of fill materials overlying native soils were encountered during the subsurface investigation. The drilling locations were completed in asphalt areas, with the exception of SLR-02 and BH22-5 which was grass. In the grassed area at SLR-02 and BH22-5, topsoil was observed to extend to approximately 0.4 m bgs and underlain by a medium sand to a depth of approximately 3.8 m bgs. The boreholes in asphalt areas typically contained approximately 50 mm thick asphalt which was underlain by granular fill that ranged in thickness from 0.6 m to 0.9 m.

A sand to silty sand was observed to underlie the upper fill and topsoil units and extended to a depth of 8.6 m bgs to 10.1 m bgs, or elevation of 103.9 m AMSL to 102.0 m AMSL. The sand to silty sand is interpreted to correspond to an unconfined aquifer, referred to in this report as the Upper Aquifer. The sand to silty sand was underlain by a low plasticity silty clay to clayey silt that extends to a depth of 14.7 m bgs to 17.8 m bgs or 97.4 m AMSL to 94.7 m AMSL. The silty clay to clayey silt was underlain by a sandy silt till at a depth of 29.8 m bgs to 34.4 m bgs or 82.6 m AMSL to 78.4 m AMSL. These units are interpreted to correspond to the main aquitard units at the Site and are referred to as the Middle and

Lower Aquitard units. The sandy silt till was only encountered in the deeper boreholes that were completed across the Site.

The bedrock was encountered at BH22-1, BH22-2, BH22-3D, BH22-4, and BH22-5 at a depth of 29.8 to 34.4 m bgs with the bedrock surface ranging in elevation from 82.6 m AMSL to 78.4 m AMSL across the Site. The bedrock was highly weathered grey shale and interpreted to correspond to the Georgian Bay Formation.

4.2 Groundwater Level and Interpreted Flow

The upper sandy silt to silty sand unit across the Site is interpreted to represent the Upper Aquifer is unconfined.

The interpreted shallow groundwater contours for June 3, 2022, are presented in **Figure 9**. Groundwater elevations measured within the monitoring wells are provided in **Table C-1** and **Table C-2** of **Appendix C**, and hydrographs are provided in **Figure C-1** and **Figure C-2** of **Appendix C**. As per the City of Toronto Terms of Reference, groundwater levels are required to be collected biweekly for a period of 3 months. Therefore, the groundwater program is on going and a full record of water levels will be submitted upon finalization of monitoring period.

Groundwater elevations from shallow monitoring wells screened in the Upper Aquifer across the Site, ranged from 108.5 m AMSL (BH-1S) to 109.9 m AMSL (MW405) with groundwater flow primarily to the south-west (Figure 9). Groundwater levels in monitoring wells screened in the deeper clayey silt to sandy silt till Aquitard unit, ranged from 95.0 m AMSL (BH22-5) to 108.7 m AMSL (BH22-1D).

Monitoring wells BH22-1, BH22-3D to BH22-5 installed within the weathered bedrock/sandy silt to silty sand till interface were interpreted to be still recovering in June 2022.

Horizontal hydraulic gradients were calculated from the shallow groundwater elevations across the Site using the observed highest and lowest shallow groundwater elevations and values in between, at six different locations.

Horizontal hydraulic gradient is calculated as follows:

$$\iota = \frac{\Delta h}{L}$$

Where;

$\iota =$ Horizontal Hydraulic Gradient (m/m);

$\Delta h =$ the difference in hydraulic head between two points (m AMSL); and,

$L =$ the distance (m) between two points.

The horizontal hydraulic gradients raged between 0.004 and 0.005 and averaged at approximately 0.004, which is typical of a gradient in a moderate to relatively permeable unconfined aquifer.

Monitoring wells BH22-3D, BH22-3S, BH-7, SLR-01, SLR-06 and SLR-08 were instrumented with automated Diver dataloggers with water levels currently available over the monitoring period between May 24, 2022, and June 16, 2022. Shallow groundwater elevations (SLR-01, SLR-06 and SLR-08) remained relatively consistent between 109 m AMSL and 110 m AMSL.

Deep groundwater elevations at BH-7 and BH22-3D located in the lower aquitard/bedrock are interpreted to be recovering since their development at the beginning of the field program. Groundwater elevations are currently observed between 97.8 m AMSL and 105.9 m AMSL. Further measurements will be needed to determine a static groundwater elevation.

Vertical hydraulic gradients between the Upper Aquifer and the Middle Aquitard were calculated at BH1S/D and BH11S/D. Downward vertical gradients ranged between 0.02 to 0.1. Vertical hydraulic gradients between the Upper Aquifer and Lower Aquitard/Bedrock could not be determined at the Site as the deeper wells are still recovering.

Seasonal groundwater level fluctuations are to be expected at the Site throughout the year. Due to limited data, it is not possible to comment on seasonal trends at this time. However, generally, groundwater levels are expected to be at their highest elevation in the spring and fall following snowmelt and increases precipitation events with lower evapotranspiration.

4.3 Hydraulic Conductivity

The results of the hydraulic conductivity tests are provided in Table 1 and the AQTESOLV analysis are provided in **Appendix D**.

Table 1: Hydraulic Conductivity

Monitor ID	Hydraulic Conductivity (m/s)	Aquifer / Aquitard	Screened Strata
SLR-01	1.9×10^{-4}	Upper Aquifer	Sand, Silty Sand
SLR-06	5.6×10^{-5}	Upper Aquifer	Sand, Silty Sand
SLR-08	4.1×10^{-4}	Upper Aquifer	Sand, Silty Sand, Sand and Silt
BH22-3S	1.1×10^{-8}	Middle Aquitard	Sand and Silt Till
BH22-3D	2.0×10^{-8}	Lower Aquitard	Sand and Silt Till, Shale Bedrock
BH22-5	7.0×10^{-10}	Lower Aquitard	Sand and Silty Till to Silty Sand, Shale Bedrock

The hydraulic conductivity across the Site ranged between 7.0×10^{-10} and 4.1×10^{-4} m/s with the Upper Aquifer materials having the highest hydraulic conductivity, ranging from 2×10^{-4} to 6×10^{-5} m/s . The hydraulic conductivity at BH22-5 is estimated at 7.0×10^{-10} , however, the well was observed to only have recovered to about 30% and therefore the hydraulic conductivity is an early estimate.

A review of hydraulic conductivities measured by Toronto Inspection (2018) was conducted and compared to the current Hydrogeological Assessment. A representative hydraulic conductivity for each hydrostratigraphic unit was selected based on a geometric mean or a conservative estimate of the available hydraulic conductivity data. As summary is presented in the table below.

Table 2: Hydraulic Conductivity Summary

Aquifer / Aquitard	Hydraulic Conductivity (m/s)	Screened Strata
Upper Aquifer	9.0×10^{-6}	Sand to Silty Sand Unit
Middle Aquitard	2.0×10^{-8}	Clayey Silt Unit / Sandy Silt Till Unit
Lower Aquitard/Bedrock	7.0×10^{-10}	Upper Bedrock Unit (Georgian Bay Shale, highly weathered)

4.4 Groundwater Quality

A full Certificate of Analysis is provided in **Appendix E**.

A Phase Two Environmental Site Assessment (ESA) was conducted by SLR on the Site and the results are presented in SLR (2022). The groundwater from the Upper Aquifer met the O.Reg.153/04 Table 3 non potable groundwater Standard for coarse grained soils for all parameters except the following:

- SLR-04: PHC F2 and F3
- BH107: Tetrachloroethylene and Vinyl Chloride
- BH211: Tetrachloroethylene
- BH213: Tetrachloroethylene and Trichloroethylene
- MW405: Tetrachloroethylene
- SLR-10: Tetrachloroethylene

All of the above noted exceedances met the Combined Sewer Discharge with the exception of BH211, where Tetrachloroethylene (4.6 ug/L) slightly exceeded the Storm Sewer Discharge Criteria of 4.4 ug/L.

To specifically assess the quality of groundwater for dewatering, BH-6 and BH-203 were sampled and the results compared to the Combined Sewer Discharge criteria and are provided in **Table E-1** in **Appendix E** and the **Hydrological Review Summary** accompanying this report.

The Lab inadvertently did not analyze for Fluoride, Total Kjeldahl Nitrogen (TKN), Animal Vegetable Oil & Grease, Mineral/Synthetic Oil & Grease in the samples collected from BH-6 and BH-203. Based on previous sampling conducted by Toronto Inspection (2018), the above noted parameters did not exceed the Combined or Storm Sewer Discharge Criteria and are not expected to represent parameters of concern at the Site. Based on the current stage of design, it is recommended that further groundwater sampling for the City of Toronto Sewer Bylaw be completed once the detailed design for the proposed development is completed.

All water quality met the Combined Sewer Discharge criteria with the exception of Manganese at BH-6 which was 72 ug/L and above the criteria of 50 ug/L. The samples from both BH-6 and BH-203 were just below the Storm Sewer Discharge criteria limit of 15 m/L for Total Suspended Solids (TSS), which was a function of well performance as monitoring wells are not designed to provide sediment free water. The elevated manganese concentration in BH-6 is interpreted to be the result of elevated sediment concentrations and not reflective of dissolved phase groundwater conditions.

5.0 Dewatering Program

Detailed designs for the building construction are still being developed and as a result the dewatering assessment will need to be confirmed. For the purposes of this preliminary assessment, the following assumptions have been made:

- Only construction dewatering will occur with the final designs for the building incorporating water proofing to prevent the inflow of water as water level elevations equilibrate over time. This is consistent with the City of Toronto's Foundation Drainage Policy dated November 1, 2021 which does not support long term dewatering.
- Construction of the 4 development blocks as presented in the Site Plans in Appendix A will be completed with an interlocking caisson retaining wall designed to maintain vertical excavation faces and reduce dewatering requirements with each block dewatered separately. The caisson retaining wall will need to be designed to be watertight with grouting of leaky portions of the wall completed to reduce infiltration to the excavation.
- Base elevations for the lower parking garages are assumed to be as follows:
    - Block 1 (North): 2 Levels of underground parking (7.5 m or about 104.5 m AMSL);
    - Block 2 (West): 3 Levels of underground parking (10.5 m or about 101.5 m AMSL);
    - Block 4 (East): 2 Levels of underground parking (7.5 m or about 104.5 m AMSL);
    - Block 5 (South): 2 Levels of underground parking (7.5 m or about 104.5 m AMSL);
- The caisson retaining wall will be situated a minimum of 1.5 m in the sand and silt till unit to an elevation of about 94 m AMSL.
- Groundwater will be controlled at 1 m below the base of excavation with local scale dewatering in the area of the elevator pits which are assumed to extend up to 3 m below the lower parking garage floor slab; and,
- Surface water runoff will be directed away from open excavation.

Once final design details are completed and a construction plan has been developed, the dewatering requirements will need to be verified and assessed.

5.1 Groundwater Level Lowering

To estimate the required dewatering at the Site, Table 3 below provides a summary of groundwater lowering during construction dewatering. Construction dewatering will be within the Sand to Silty Sand of the Upper Aquifer and the Clayey Silt of the Middle Aquitard based on the elevations presented below.

Table 3: Summary of Groundwater Lowering

Dewatering Area	Representative Groundwater Elevation (m AMSL)	Lowest Point of Excavation (m AMSL)	Dewatering Elevation (m AMSL)	Drawdown (m)
Block 1 (North)	109.9	104.7	103.7	6.2
Block 2 (West)	109.9	101.7	100.7	9.2
Block 4 (East)	109.9	104.7	103.7	6.2
Block 5 (South	109.9	104.7	103.7	6.2

5.2 Dewatering Zone of Influence

The dewatering Zone of Influence (ZOI) represents the lateral extent of groundwater drawdown in response to dewatering. It is expected that the Zone of Influence will be restricted to the boundaries of the cut-off barrier and waterproofing the excavation floor, with only local drawdown effects outside of the sheet pile / barrier wall due to leakage across the barrier.

Without this low permeable barrier in place, the lateral extent of groundwater drawdown in response construction dewatering could extend hundreds of meters in the highly permeable surficial sand units.

5.3 Dewatering Rates for Groundwater Storage Removal

Before excavation can begin, initial pumping must occur to remove the groundwater from storage. Given the approximate areas from the concept drawings and an assumed effective porosity of 0.3 for the Upper Aquifer, Table 4 below shows an estimate of the groundwater dewatering required to remove water from storage for each development Block. If we assume this is dewatered over 14 days which is likely an aggressive timeline, then 1,500 m^3/day to 2,000 m^3/day is the estimated pumping volume.

Table 4: Groundwater Storage Removal

Dewatering Area	Approximate Area (m^2)	Drawdown (m)	Total Volume (m^3)	Dewatering Rate for Groundwater Storage Removal over 14 Days (m^3/day)	Preliminary Design Dewatering Rate for Storage Removal (14 Days) with 1.5 factor of safety (m^3/day)
Block 1 (North)	8,100	6.2	15,120	1,080	1,620
Block 2 (West)	5,700	9.2	15,820	1,130	1,695
Block 4 (East)	1,800	6.2	3,360	240	360
Block 5 (South)	9,800	6.2	18,200	1,300	1,950

The total water volumes removed from groundwater storage, per Block, are expected to range 5,040 m^3 to 27,300 m^3 with the 1.5 factor of safety included.

5.4 Dewatering Rates for Precipitation Events

In addition to the groundwater storage removal, any precipitation occurring during construction would need to be pumped to maintain a dry excavation. Assuming a 25 mm rainfall event, Table 5 below provides the additional volume that would have to be pumped out assuming all precipitation from the event is pumped out within a 24-hour period.

Table 5: Precipitation Removal

Dewatering Area	Approximate Area (m^2)	Precipitation (m)	Precipitation Volume (m^3)	Dewatering Rate for Precipitation Removal (m^3/day)
Block 1 (North)	8,100	0.025	203	203
Block 2 (West)	5,700	0.025	143	143
Block 4 (East)	1,800	0.025	45	45
Block 5 (South)	9,800	0.025	245	245

5.5 Construction Dewatering Summary

The table below summarized the short-term dewatering rates required for the construction of the various Blocks of excavation.

Table 6: Summary of Construction Dewatering

Dewatering Area	Storage Removal (14 Days) with 1.5 factor of safety (m^3/day)	Lateral Leakage through Sheet Pile / Barrier Wall (m^3/day)	Groundwater Inflow to Excavation Base (m^3/day)	Precipitation (m^3/day)	Maximum Dewatering Rate (m^3/day)
Block 1 (North)	1,620	180	15	200	2,015
Block 2 (West)	1,695	120	10	145	1,970
Block 4 (East)	360	100	5	45	510
Block 5 (South)	1,950	180	15	245	2,390

The total groundwater dewatering rates per Block would be highest during the initial dewatering when water is being removed from storage of the Upper Aquifer within the excavation, there is minor upward groundwater flow to the base of the excavation, potential leakage through the caisson barrier wall and a 25 mm precipitation event. These rates range from 510 m^3/day to 2,390 m^3/day, which are greater than the 400 m^3/day threshold stipulated by the MECP for an EASR and therefore a PTTW would therefore be

required. During non-precipitation events and when the initial dewatering is complete these flows would be reduced to any lateral leakage through the caisson barrier wall and upward flow from the base of the excavation and range from 105 to 195 m^3/day.

The upward flow from the base of the excavation is calculated based on the representative hydraulic conductivity of the middle aquitard ($2x10^{-8}$ m/s). These values are derived from the conservative assumption that the caisson barrier wall would have a permeability in the order $1x10^{-7}$ m/s and that the walls would be design to this minimum specification. This design will require localized grouting of any areas on the exposed face of the interlocking walls that display elevated seepage. A continuous waterproofing system will be applied to the full height of the perimeter basement walls and lower-level basement floor slab to maintain a watertight conditions. Therefore, the lateral and excavation floor leakage would only be dealt with at the construction phase as the building designs would be to provide continuous waterproofing.

Implementing a caisson barrier cut off wall could have minor impacts on the shallow groundwater flow regime. Potential issues can include groundwater mounding in the upgradient direction and groundwater depression to the downgradient direction. The severity of this impact is dependant on the hydraulic conductivity and thickness of surrounding hydrogeologic layers. Given the permeability and current designs these variations in groundwater levels are expected to be very local and will quickly equilibrate over the development area. It is recommended that this be verified once the final design and dewatering plans are confirmed.

6.0 Impact Assessment

The following sections assess the potential impacts of the proposed dewatering program to surrounding receptors including impacts to groundwater resources, surrounding surface water, surrounding structures and groundwater quality.

6.1 Mobilization of Contaminants

As summarized in Section 4.4, groundwater results from the Phase Two ESA that were in exceedance of O.Reg.153/04 for Table 3 non potable groundwater Standard for coarse grained soils included the following:

- SLR-04: PHC F2 and F3
- BH107: Tetrachloroethylene and Vinyl Chloride
- BH211: Tetrachloroethylene
- BH213: Tetrachloroethylene and Trichloroethylene
- MW405: Tetrachloroethylene
- SLR-10: Tetrachloroethylene

As the development is expected to remove impacted soils during the excavations for the building construction, mobilization of potential contaminants is expected to be minimum and will be restricted to the initial dewatering phases. All of the above noted exceedances met the Combined Sewer Discharge with the exception of BH211, where Tetrachloroethylene (4.6 ug/L) exceeded the Storm Sewer Discharge Criteria of 4.4 ug/L. Groundwater sample results, in comparison to the City of Toronto Sewer Discharge

criteria, were found to generally meet criteria except for Manganese that failed to meet the Storm Sewer Discharge criteria.

Considering the proposed engineering controls recommended, contaminant migration across and off site are not anticipated due to the impermeable nature of the cut off walls.

Elevated metal concentrations can be linked to high TSS concentrations, where metals concentrations are divided between dissolved, and particle bound phase. In some cases, metal concentrations can be lowered through filtering, removing the particle bound phase. Additionally, due to the presence of organic compounds in the groundwater, the pumped groundwater may have to be treated before being discharged. This will need to be confirmed during the final dewatering design.

It is recommended that a City of Toronto Sanitary Sewer Discharge permit be obtained. The quality of the pumped groundwater, during storage removal, should be monitored and compared to the City of Toronto Sewer Discharge criteria at minimum.

6.2 Groundwater Use

Well records from the MECP WWR database were reviewed to assess the stratigraphy and water use of wells located within a 500 m radius of the Site. The available MECP water wells are shown in **Figure 10**, a summary of the MECP wells is provided in **Appendix F**.

444 MECP water well records (and 475 individual wells) were identified within 500 m of the property. The wells were constructed between 2005 and 2021 and ranged in depth from 0 mbgs to 21 mbgs. Groundwater levels were observed (where available) between 7.9 mbgs and 0 mbgs.

283 of the identified wells were observation/monitoring/test wells, 52 wells were noted to be abandoned, and the remaining 140 records did not specify a use. Where information was available, the wells were screened within the overburden sands, silts or clays.

No water supply wells were identified within 500 m of the Site. It is assumed that the general area surrounding the Site is municipally serviced and therefore, there would be no impacts to private water supply wells as a result of dewatering activities.

6.3 Natural Heritage Features

Based on a review of existing mapping, the nearest surface water body is 700 m west of the site, an unnamed water body in High Park. Assuming cut off walls are considered as part of the construction dewatering plan, no off-site impact is expected.

6.4 Geotechnical Assessment

A full geotechnical assessment of the Site is provided by (Geoterre, 2022). In general, it is anticipated that full Site dewatering will not be required due to the recommended use of engineered cut off walls and waterproofing of the excavation floor. The low permeable walls will be used to support surrounding soils and reduce groundwater inflow to the excavation. GeoTerre (2022) concluded that there would be no settlement impacts anticipated as a result of these construction dewatering activities.

7.0 Discharge Plan

It is recommended that, for purposes of temporary groundwater discharge management, a City of Toronto Sanitary Sewer Discharge permit be obtained. The proposed layout of the construction dewatering and discharge method should be determined by the dewatering contractor and/or supervising contractor. This will need to consider the development sequencing and overlapping timing for the construction within each development block.

7.1 Discharge Water Quality Management

As presented in Section 6.1, groundwater at the Site has been characterized as meeting the City of Toronto Sewer Use Bylaw limits for sanitary sewer but certain parameters exceeded the limits for stormwater sewers. The City of Toronto Sewer Use By-Law requires a TSS limit of 350 mg/L for discharged water to the sanitary sewer and a TSS limit of 15 mg/L for the storm sewer. It will be important that the dewatering contractor incorporates appropriate sediment removal processes to ensure that the TSS limit can be met.

The frequency of sampling for discharge quality will be determined as per the requirements of the Private Water Discharge permit and the City of Toronto Sewer Use Bylaw. If discharged groundwater quality exceeds Sewer Use Bylaw limits, the water may require pre-treatment to be discharged to the City's storm or sanitary sewer system.

7.2 Discharge Quantity Management

As described in Section 5.5, the total groundwater dewatering rates, are expected to range 510 m^3/day to 2,3905 m^3/day, which is greater than the 400 m^3/day threshold for a PTTW as stipulated by the MECP and would therefore be required. As per the requirements of the PTTW and Private Water Discharge Permit, the contractor is required to provide measurement controls suitable to measure and record the daily volume of water discharged (e.g., totalizer) and flow rate (e.g., flow meter) to confirm that discharge rates remain below the maximum permitted discharge rate.

8.0 Conclusions

The following conclusions have been made following the Hydrogeological Assessment:

- The measured groundwater elevations collect on June 3, 2022 ranged 108.5 m AMSL to 109.9 m AMSL in the Upper Aquifer unit. Groundwater levels in monitors screened in the deeper clayey silt to sandy silt till unit, ranged from 95.0 m AMSL to 108.7 m AMSL;
- Shallow groundwater flow on the Site is generally to the southwest, although there are localized influences on groundwater flow directs potentially caused by the presence of infrastructure and associated backfill;
- Manganese and Tetrachloroethylene was detected on the Site in exceedance of the City of Toronto Storm Sewer criteria. TSS was detected at 14 mg/L, which is close to the Storm Sewer limit. All parameters met the City of Toronto Sanitary Sewer criteria. This would suggest some pre-treatment would be required if groundwater discharge was directed towards the storm sewer;

- The dewatering assessment indicated that PTTW (water takings greater than 400 m^3/day) would be required for the construction dewatering of underground parking. total groundwater dewatering rates, are expected to range 510 m^3/day to 2,390 m^3/day and are primary driven by the initial groundwater storage removal. The dewatering rates are based on limited site-specific groundwater elevations measurements and should be further refined at the detailed design stage. Additionally, the dewatering estimates assume the use of engineered cut off walls to prevent drawdown outside of the Site footprint;

8.1 Next Steps

Additional Sewer Use Bylaw samples from monitoring wells within the areas of the underground parking footprint may be collected to further support the City of Toronto's Private Water Discharge Approval Application and may be required closer to construction to meet City timing requirements.

Biweekly water level measurement from the installed wells will continue to be collected during the summer of 2022 up until the end of August 2022 and may continue beyond this date if justified to assess seasonal variations. Construction dewatering estimates should be revisited at the detailed design stage to include any new data collected. Discharge options should be discussed with the Site contractor and any data collection required for applicable discharge permits collected accordingly.

9.0 Statement of Limitations

The Hydrogeological Assessment has been prepared and the work referred to in this report has been undertaken by SLR Consulting (Canada) Ltd. (SLR) for Choice Properties REIT (Choice), hereafter referred to as the "Client". It is intended for the sole and exclusive use of the Client. The report has been prepared in accordance with the Scope of Work and agreement between SLR and the Client. Other than by the Client and as set out herein, copying or distribution of this report or use of or reliance on the information contained herein, in whole or in part, is not permitted unless payment for the work has been made in full and express written permission has been obtained from SLR.

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10.0 Closure

We trust that this report provides the information requested for your present requirements. Please do not hesitate to contact the undersigned should there be any questions.

Sincerely,

SLR Consulting (Canada) Ltd.

Amanda Malatesta, M.Sc., P.Geo.
Hydrogeologist

Craig Johnston, M.Sc., P.Geo.
Principal Hydrogeologist

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Figures

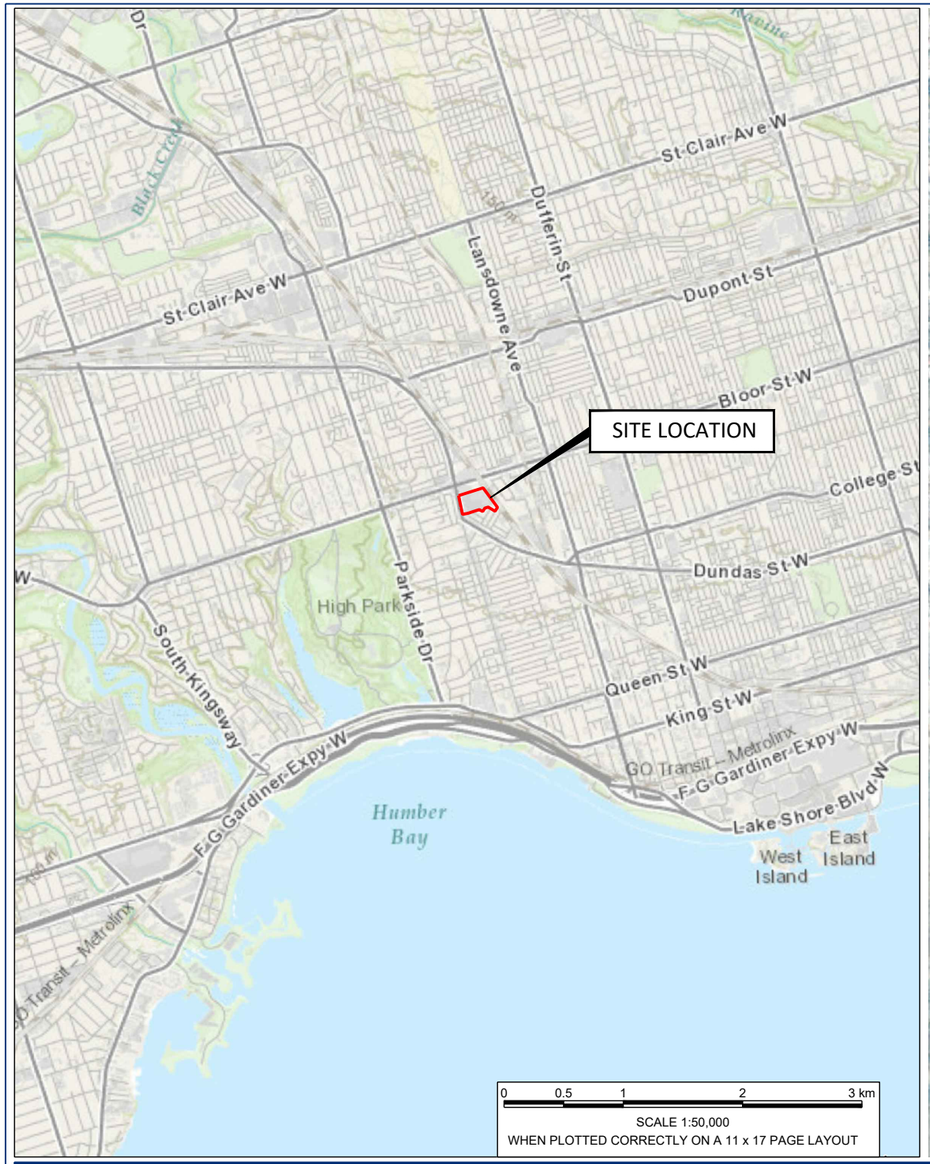
Preliminary Hydrogeological Assessment

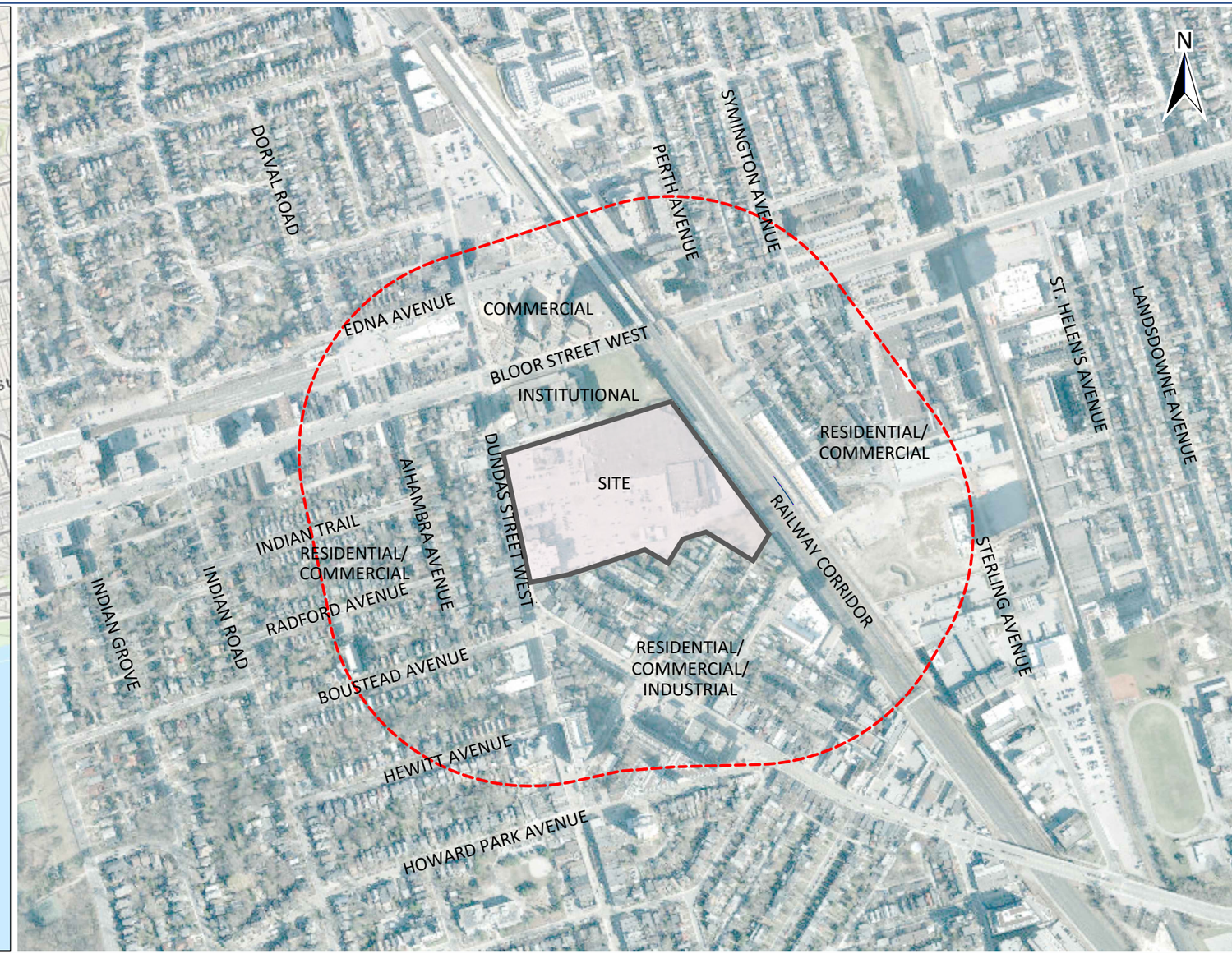
Bloor and Dundas Development
Toronto, Ontario

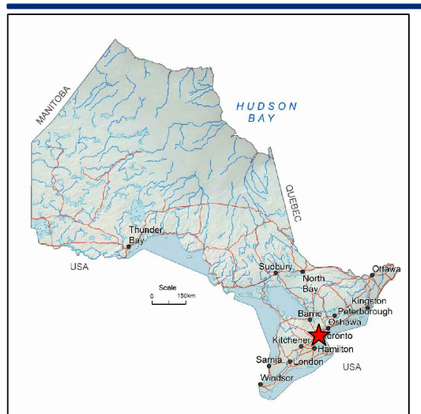
Choice Properties LP

SLR Project No. 209.30128.00000

June 30, 2022







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BASEDATA:
ESRI, DELORME, HERE, TOMTOM, INTERMAP, INCREMENT P CORP., GEBCO, USGS, FAO, NPS, NRCAN, GEOBASE, IGN, KADASTER NL, ORDNANCE SURVEY, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), SWISSTOPO, MAPMYINDIA, AND THE GIS USER COMMUNITY

LEGEND:

PHASE ONE PROPERTY

PHASE ONE STUDY AREA

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CHOICE PROPERTIES LP
2280 DUNDAS STREET WEST
TORONTO, ON

HYDROGEOLOGICAL ASSESSMENT

SITE LOCATION AND SURROUNDING LAND USE

SLR

FIGURE NO:
1

DATE: June 28, 2022

PROJECT NO: 209.30128.00000

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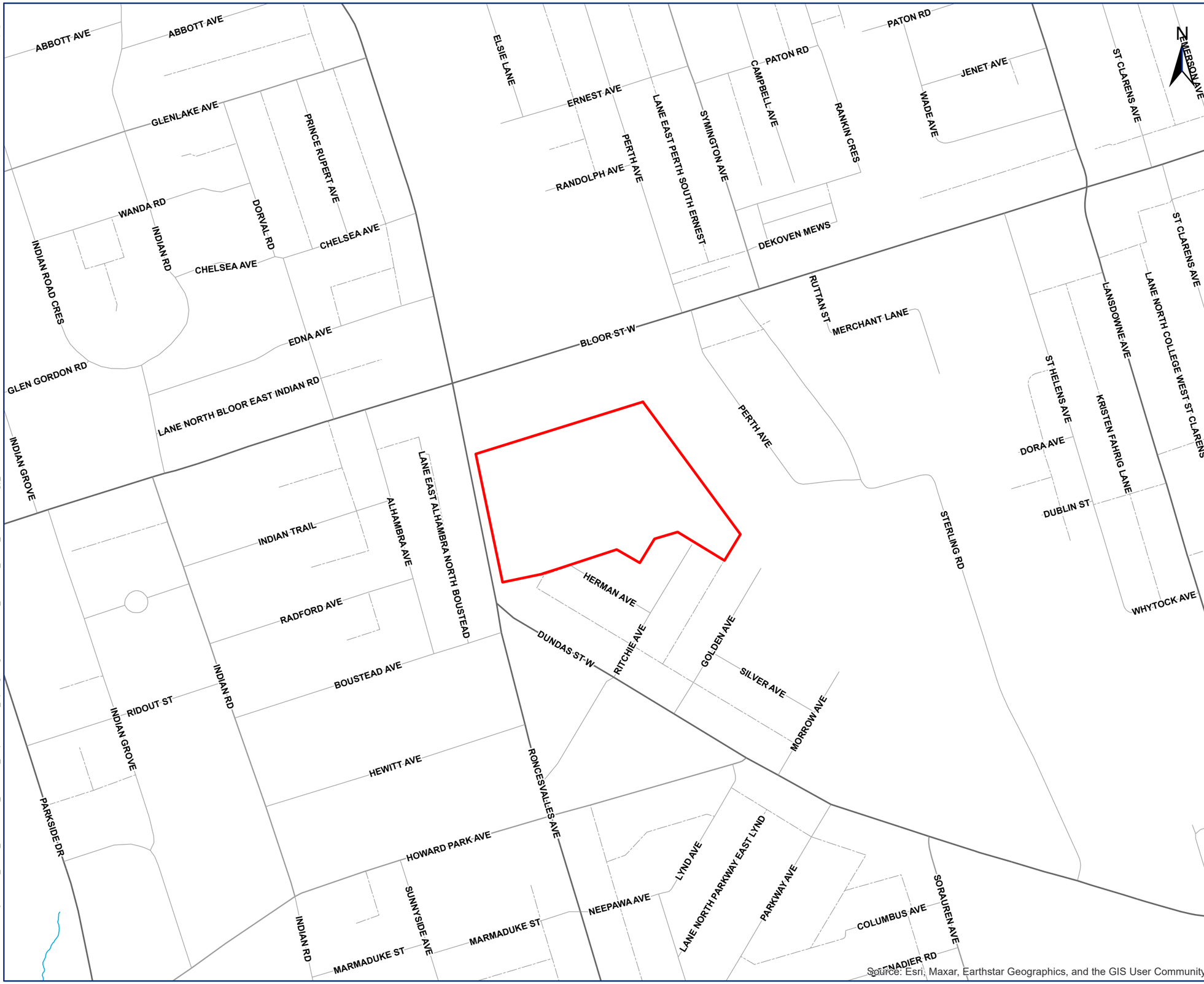

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

LEGEND

- PROPERTY BOUNDARY
- 5E: UNDIFFERENTIATED OLDER TILL AND STRATIFIED SEDIMENT
- 9C: COARSE-TEXTURED LITTORAL-BASED FORESHORE GLACIOLACUSTRINE DEPOSITS UF SAND AND GRAVEL, MINOR SILT AND CLAY

NOTES:

THIS MAP IS FOR CONCEPTUAL PURPOSES ONLY AND SHOULD NOT BE USED FOR NAVIGATIONAL PURPOSES.

BASEDATA SOURCES:

ONTARIO MINISTRY OF NATURAL RESOURCES AND FORESTRY

SURFICIAL GEOLOGY OF SOUTHERN ONTARIO; ONTARIO GEOLOGICAL SURVEY

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Scale 1:4,500

PAGE SIZE 11 x 17

NAD 1983 UTM Zone 17N

CHOICE PROPERTIES LP
BLOOR AND DUNDAS DEVELOPMENT,
2280 DUNDAS STREET WEST,
TORONTO, ONTARIO.

HYDROGEOLOGICAL ASSESSMENT

SURFICIAL GEOLOGY

FIGURE NO:

2

DATE: June 23, 2022

PROJECT NO: 209.30128.00000

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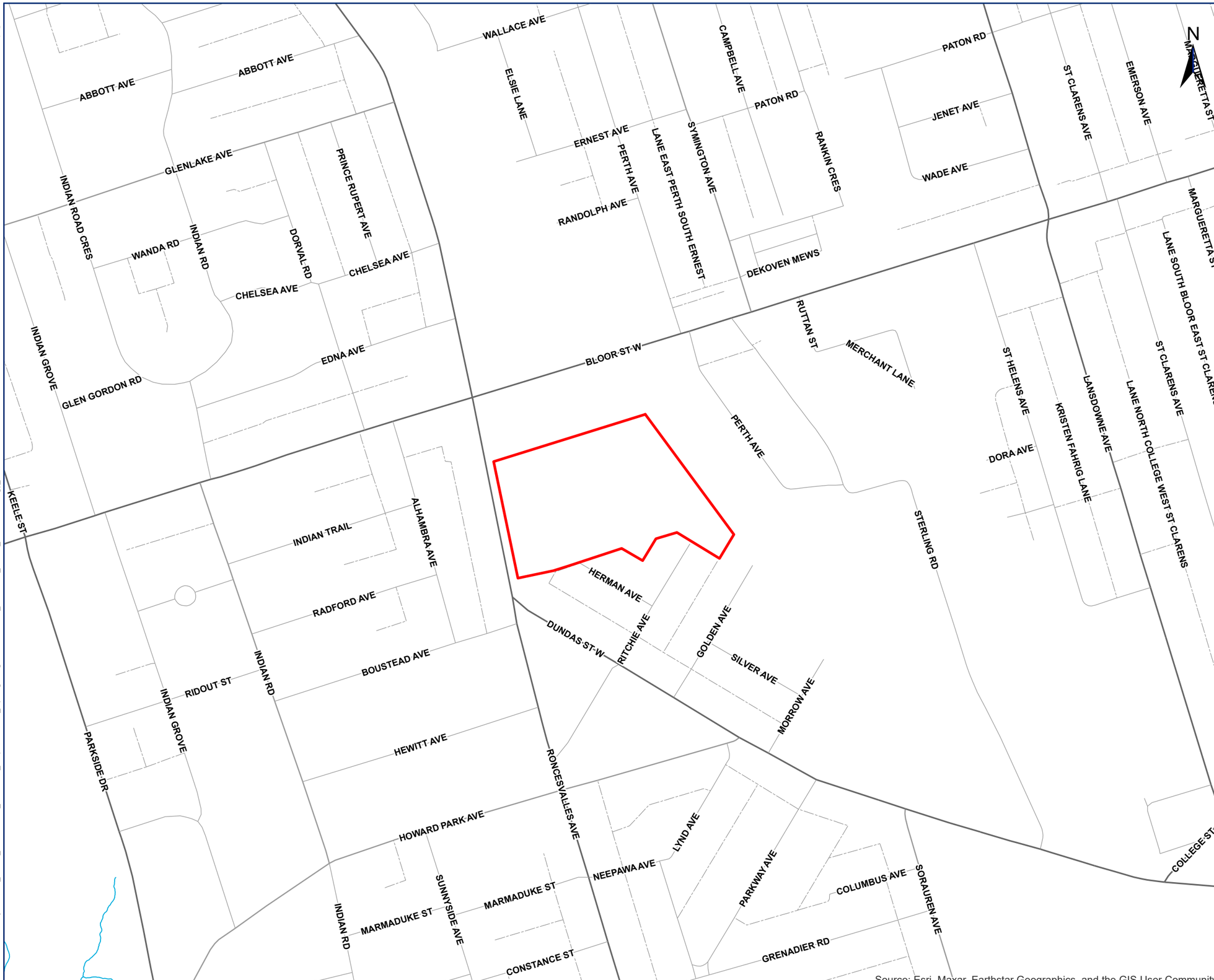

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

LEGEND

PROPERTY BOUNDARY

55B GEORGIAN BAY FM.; BLUE MOUNTAIN FM.; BILLINGS FM.; COLLINGWOOD MB.; EASTVIEW MB.

NOTES:

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BASEDATA SOURCES:

ONTARIO MINISTRY OF NATURAL RESOURCES AND FORESTRY

1:250 000 SCALE BEDROCK GEOLOGY OF ONTARIO;

ONTARIO GEOLOGICAL SURVEY

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Scale 1:5,000

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CHOICE PROPERTIES LP
BLOOR AND DUNDAS DEVELOPMENT,
2280 DUNDAS STREET WEST,
TORONTO, ONTARIO.

HYDROGEOLOGICAL ASSESSMENT

BEDROCK GEOLOGY

FIGURE NO:

3

DATE: June 23, 2022

PROJECT NO: 209.30128.00000

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- BOREHOLE (NOT COMPLETED) (CURRENT PROGRAM)
- BOREHOLE (GEOTERRE) (CURRENT PROGRAM)
- BOREHOLE COMPLETED AS A MONITORING WELL (CURRENT PROGRAM)
- BOREHOLE COMPLETED AS A MONITORING WELL (GEOTERRE) (CURRENT PROGRAM)
- BOREHOLE COMPLETED AS A MONITORING WELL (OTHERS)
- BOREHOLE COMPLETED AS A MONITORING WELL (OTHERS) (DECOMMISSIONED)
- A A' CROSS SECTION A-A' (REFER TO DRAWING 5)
  CROSS SECTION B-B' (REFER TO DRAWING 6)
  CROSS SECTION C-C' (REFER TO DRAWING 7)
  CROSS SECTION D-D' (REFER TO DRAWING 8)

NOTES:

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CHOICE PROPERTIES LP
2280 DUNDAS STREET WEST
TORONTO, ON

HYDROGEOLOGICAL ASSESSMENT

SITE PLAN

SLR

FIGURE NO:
4

DATE: June 28, 2022

PROJECT NO: 209.30128.00000

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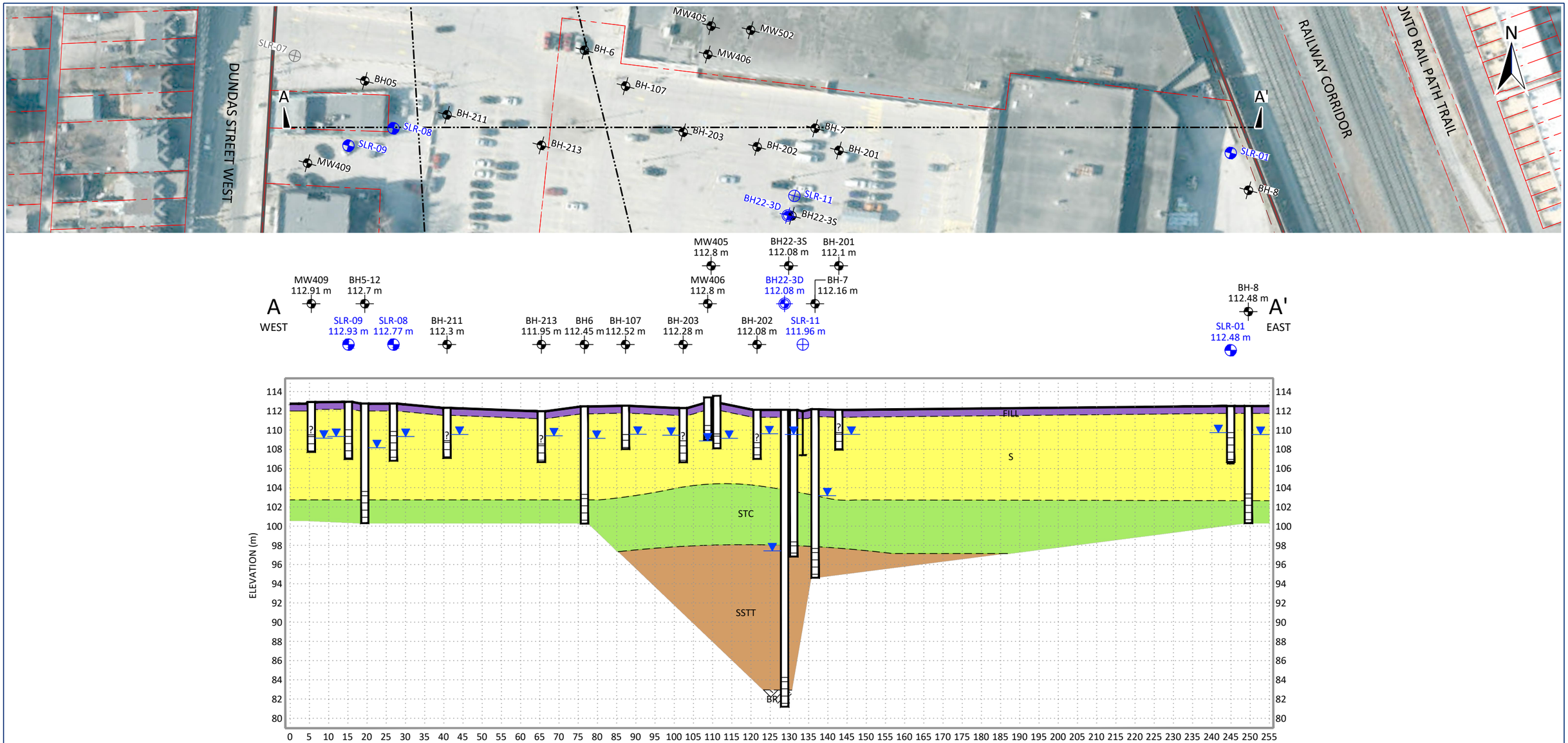

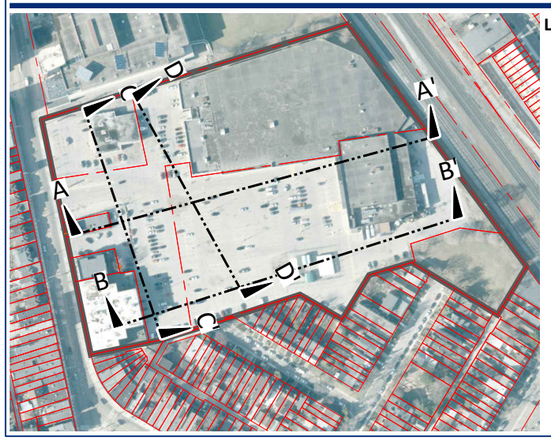

LEGEND:

- BOREHOLE (CURRENT PROGRAM)
- BOREHOLE COMPLETED AS A MONITORING WELL
- BOREHOLE COMPLETED AS A MONITORING WELL (GEOTERRE) (CURRENT PROGRAM)
- BOREHOLE COMPLETED AS A MONITORING WELL (OTHERS)
- WATER LEVEL (JUNE 3, 2022)
- FILL — FILL
- S — SAND/SILTY SAND
- STC — SILT/SILTY CLAY/CLAYEY SILT TILL
- SSTT — SANDY SILT TILL
- BR — BEDROCK
- WELL
- SCREENED INTERVAL
- BOREHOLE OR TESTPIT
- END OF HOLE
- ? — SCREENED INTERVAL IS UNKNOWN

NOTES:

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STRATIGRAPHY IS INFERRED AND MAY DIFFER BETWEEN SAMPLING LOCATIONS

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VERTICAL SCALE 1:400
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NAD 1983 UTM Zone 17 T

CHOICE PROPERTIES LP
2280 DUNDAS STREET WEST
TORONTO, ON

HYDROGEOLOGICAL ASSESSMENT

GEOLOGICAL CROSS SECTION A-A'

SLR

FIGURE NO:
5

DATE: June 28, 2022

PROJECT NO: 209.30128.00000

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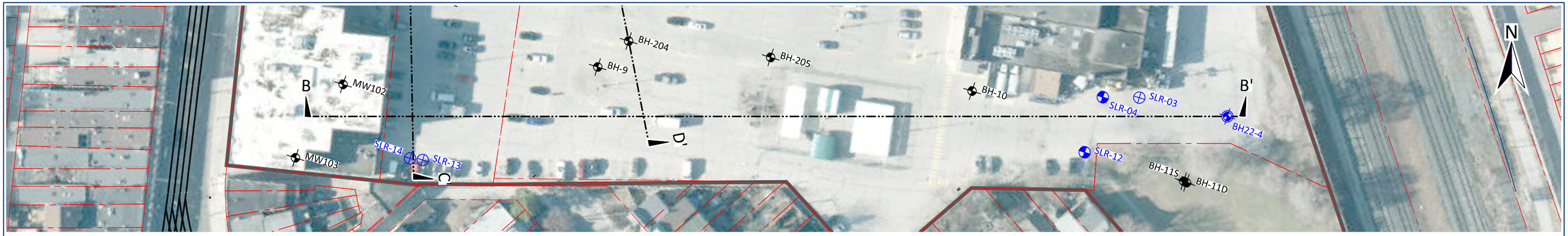
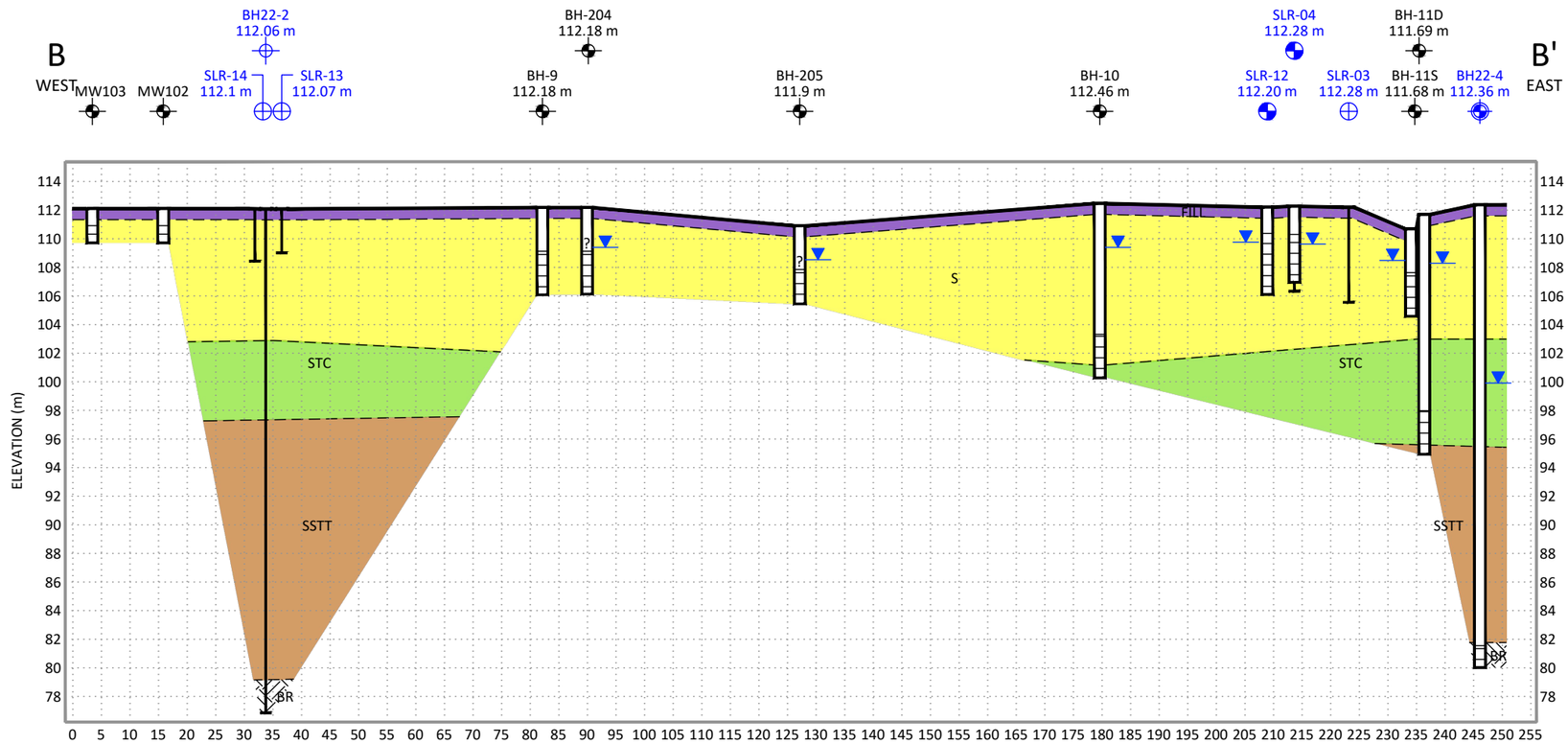
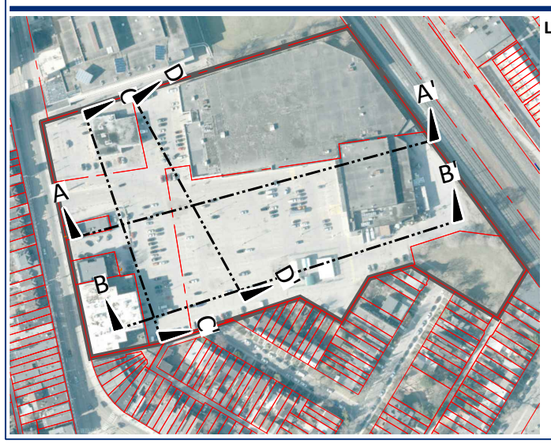






LEGEND:

- BOREHOLE (CURRENT PROGRAM)
- BOREHOLE COMPLETED AS A MONITORING WELL
- BOREHOLE COMPLETED AS A MONITORING WELL (GEOTERRE) (CURRENT PROGRAM)
- BOREHOLE COMPLETED AS A MONITORING WELL (OTHERS)
- WATER LEVEL (JUNE 3, 2022)
- FILL — FILL
- S — SAND/SILTY SAND
- STC — SILT/SILTY CLAY/CLAYEY SILT TILL
- SSTT — SANDY SILT TILL
- BR — BEDROCK
- WELL
- SCREENED INTERVAL
- BOREHOLE OR TESTPIT
- END OF HOLE
- ? — SCREENED INTERVAL IS UNKNOWN

NOTES:

NOT A LEGAL SURVEY. DO NOT USE FOR CONSTRUCTION.

REFERENCED FROM: CITY OF TORONTO OPEN DATA AND SITE RECONNAISSANCE INFORMATION. IMAGERY: ESRI, DIGITALGLOBE, GEOEYE, EARTHSTAR GEOGRAPHICS, CNES/AIRBUS DS, USDA, USGS, AEROGRID, IGN, AND THE GIS USER COMMUNITY

STRATIGRAPHY IS INFERRED AND MAY DIFFER BETWEEN SAMPLING LOCATIONS

THERE IS A 0.05 m ASPHALT LAYER ON TOP OF THE FILL

0 2.5 5 10 15 20 25 m
VERTICAL SCALE 1:400
0 10 20 40 60 m
SCALE 1:1,000
WHEN PLOTTED CORRECTLY ON A 11 x 17 PAGE LAYOUT
NAD 1983 UTM Zone 17 T

CHOICE PROPERTIES LP
2280 DUNDAS STREET WEST
TORONTO, ON

HYDROGEOLOGICAL ASSESSMENT

GEOLOGICAL CROSS SECTION B-B'

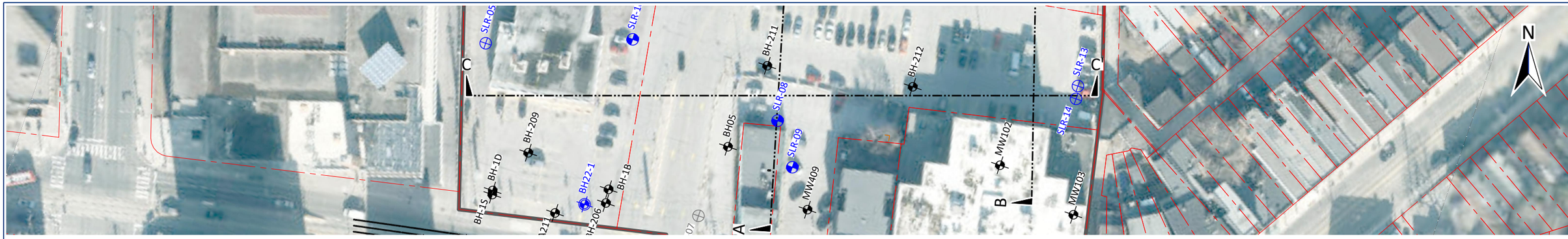
SLR

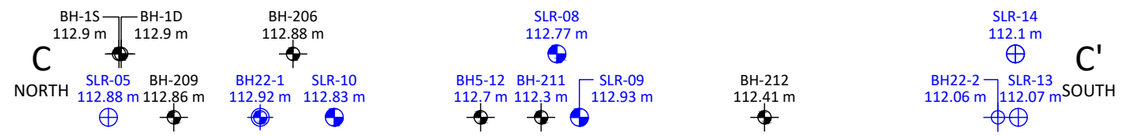
FIGURE NO:
6

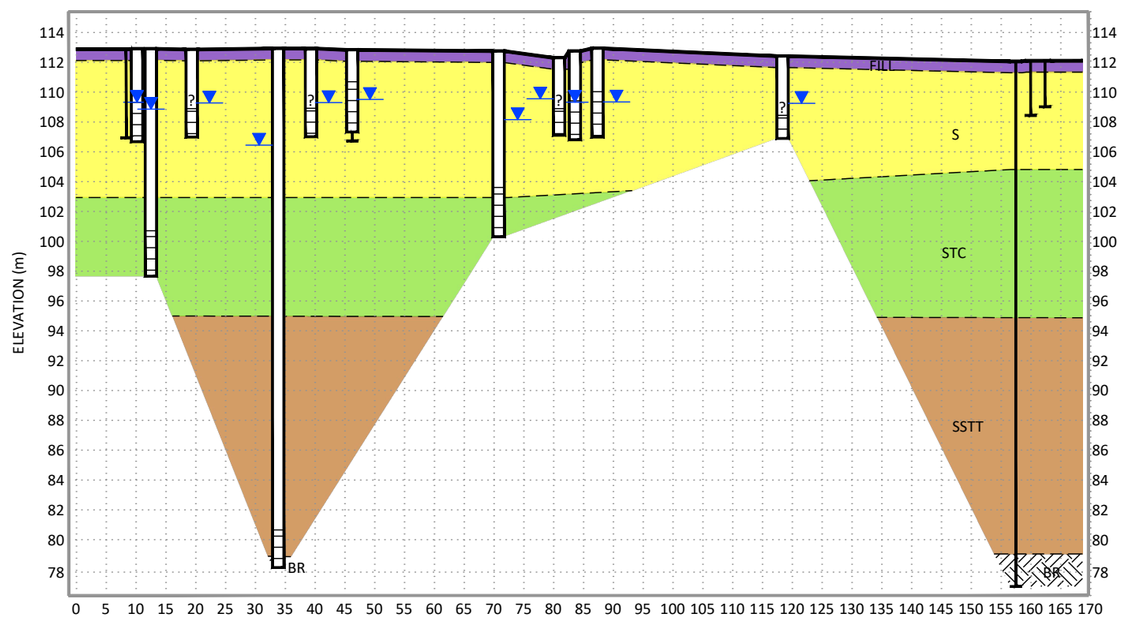
DATE: June 28, 2022

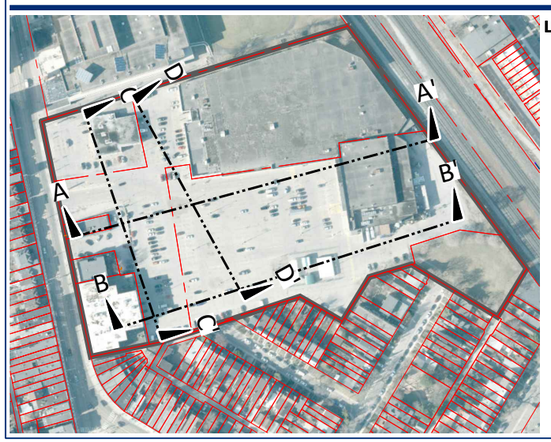
PROJECT NO: 209.30128.00000

Cadfile name: N:\Vancouver\CAD\Project Drawings\209\209.30128\209.30128.00000\S-209-30128-00000-A3.dwg









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VERTICAL SCALE 1:400
0 10 20 40 60 m
SCALE 1:1,000
WHEN PLOTTED CORRECTLY ON A 11 x 17 PAGE LAYOUT
NAD 1983 UTM Zone 17 T

CHOICE PROPERTIES LP
2280 DUNDAS STREET WEST
TORONTO, ON

HYDROGEOLOGICAL ASSESSMENT

GEOLOGICAL CROSS SECTION C-C'

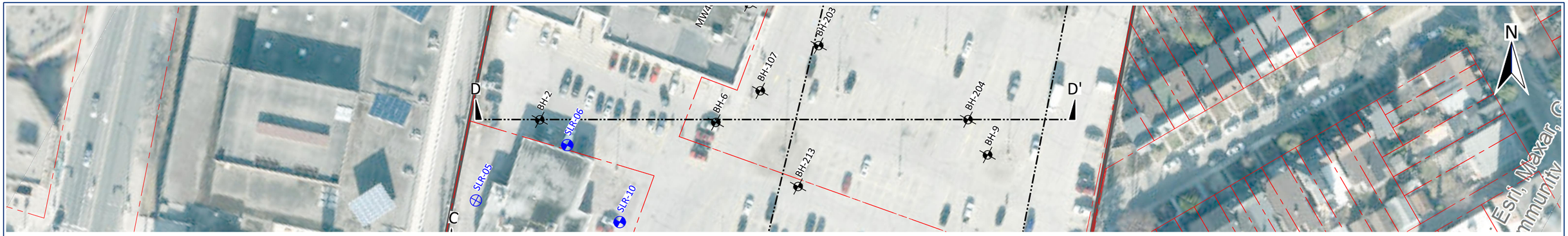
SLR

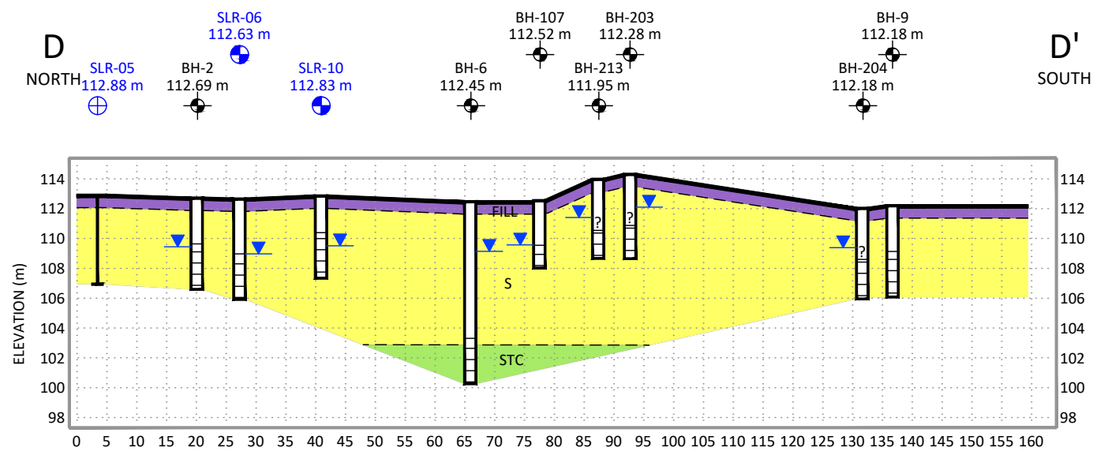
FIGURE NO:
7

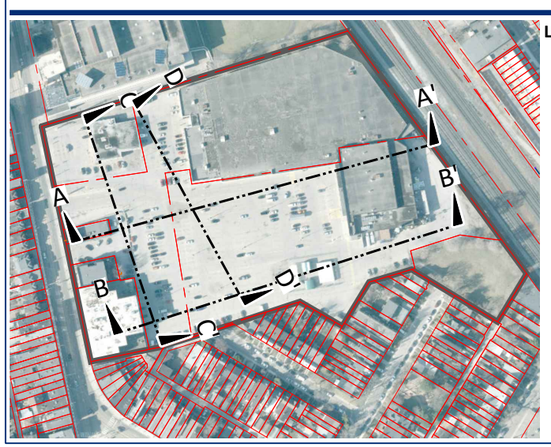
DATE: June 28, 2022

PROJECT NO: 209.30128.00000

Cadfile name: N:\Vancouver\CAD\Project Drawings\209\209.30128\209.30128.00000\S-209-30128-00000-A3.dwg







LEGEND:

- BOREHOLE
- BOREHOLE COMPLETED AS A MONITORING WELL
- BOREHOLE COMPLETED AS A MONITORING WELL (OTHERS)
- WATER LEVEL (JUNE 3, 2022)
- FILL — FILL
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- WELL
- SCREENED INTERVAL
- BOREHOLE OR TESTPIT
- END OF HOLE
- ? SCREENED INTERVAL IS UNKNOWN

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0 10 20 40 60 m
SCALE 1:1,000
WHEN PLOTTED CORRECTLY ON A 11 x 17 PAGE LAYOUT
NAD 1983 UTM Zone 17 T

CHOICE PROPERTIES LP
2280 DUNDAS STREET WEST
TORONTO, ON

HYDROGEOLOGICAL ASSESSMENT

GEOLOGICAL CROSS SECTION D-D'

SLR

FIGURE NO:
8

DATE: June 28, 2022

PROJECT NO: 209.30128.00000

Cadfile name: N:\Vancouver\CAD\Project Drawings\209\209.30128\209.30128.00000\S-209-30128-00000-A3.dwg

LEGEND:

- PROPERTY BOUNDARY
- PHASE ONE PROPERTY
- BOREHOLE COMPLETED AS A MONITORING WELL
- BOREHOLE COMPLETED AS A MONITORING WELL (OTHERS)
- **GROUNDWATER MONITORING RESULTS**
  - 109.91 GROUNDWATER ELEVATION (m)
- 109.25 INFERRED GROUNDWATER ELEVATION CONTOUR (INTERVAL 0.25 m)
- INFERRED GROUNDWATER FLOW DIRECTION
- MONITORING WELL NOT MONITORED OR DATA NOT INCLUDED IN INFERRED GROUNDWATER FLOW DIRECTION CALCULATION DUE TO REASON(S) PROVIDED BELOW
- WELL COMPLETED IN DIFFERENT HYDROGEOLOGIC UNIT

NOTES:

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REFERENCED FROM: CITY OF TORONTO OPEN DATA AND SITE RECONNAISSANCE INFORMATION. IMAGERY: ESRI, DIGITALGLOBE, GEOEYE, EARTHSTAR GEOGRAPHICS, CNES/AIRBUS DS, USDA, USGS, AEROGRID, IGN, AND THE GIS USER COMMUNITY

ALL GROUNDWATER ELEVATIONS RELATIVE TO [AN ARBITRARY DATUM OF 100.00 m] OR [GEODETIC DATUM (MEAN SEA LEVEL)] OR [OTHER DATUM]

0 10 20 40 60 80 m

SCALE 1:1,250
WHEN PLOTTED CORRECTLY ON A 11 x 17 PAGE LAYOUT
NAD 1983 UTM Zone 17 T

CHOICE PROPERTIES LP
2280 DUNDAS STREET WEST
TORONTO, ON

HYDROGEOLOGICAL ASSESSMENT

INTERPRETED GROUNDWATER FLOW DIRECTION - JUNE 3, 2022

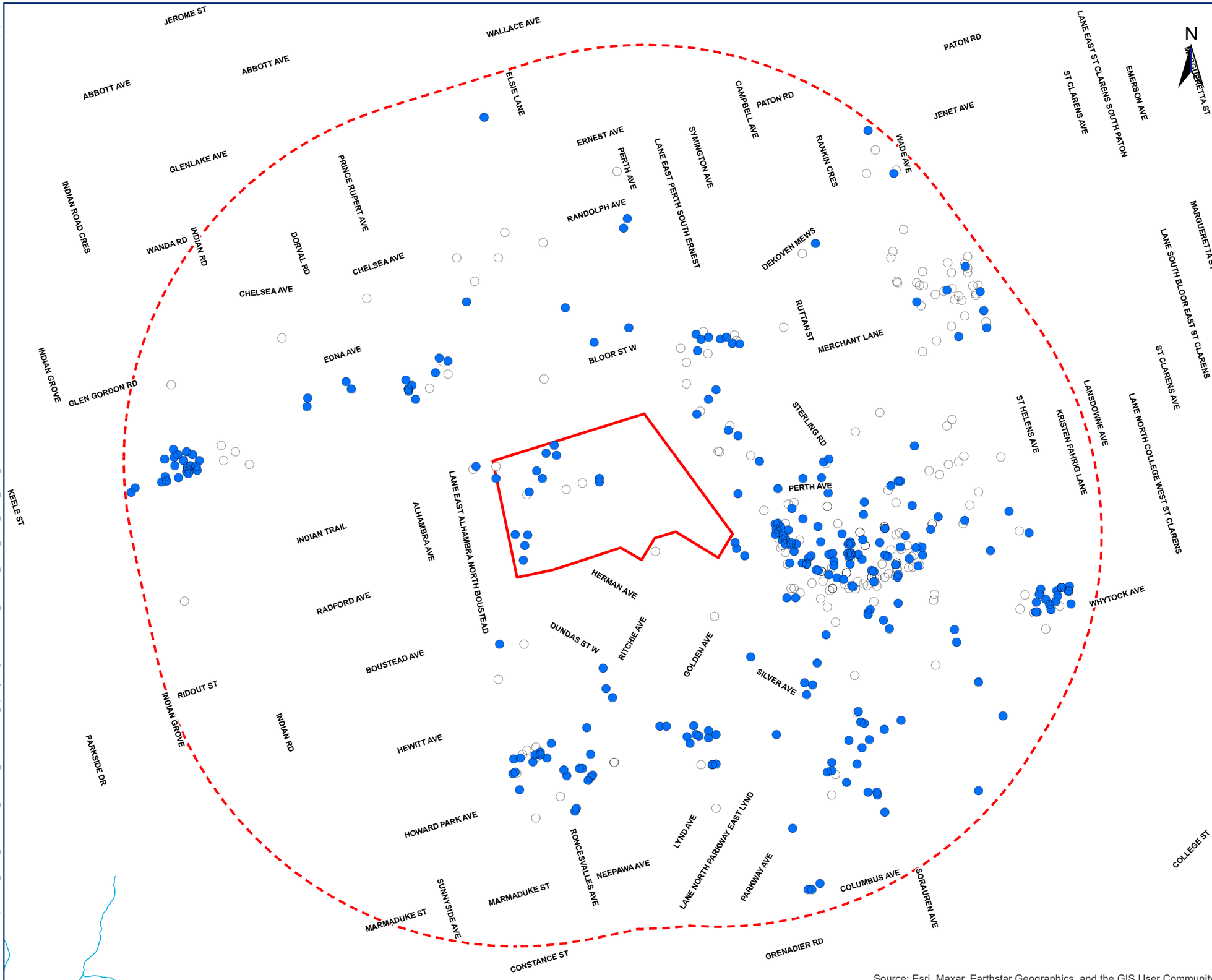
SLR

FIGURE NO:
9

DATE: June 28, 2022

PROJECT NO: 209.30128.00000

CADFILE NAME: N:\Vancouver\CAD\Project Drawings\209\209.30128\209.30128.00000\S-209-30128-00000-A3.dwg



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

NOTES:
THIS MAP IS FOR CONCEPTUAL PURPOSES ONLY AND SHOULD NOT BE USED FOR NAVIGATIONAL PURPOSES.
BASEDATA SOURCES:
ONTARIO MINISTRY OF NATURAL RESOURCES AND FORESTRY
SURFICIAL GEOLOGY OF SOUTHERN ONTARIO; ONTARIO GEOLOGICAL SURVEY
CONTOURS:
LIDAR DTM GTA 2015 PACKAGE D;
ONTARIO MINISTRY OF NATURAL RESOURCES
AND FORESTRY)

0 25 50 100 150 m

Scale 1:5,000
PAGE SIZE 11 x 17
NAD 1983 UTM Zone 17N

CHOICE PROPERTIES LP
BLOOR AND DUNDAS DEVELOPMENT,
2280 DUNDAS STREET WEST,
TORONTO, ONTARIO.

HYDROGEOLOGICAL ASSESSMENT

MECP WATER WELL RECORDS

FIGURE NO:
10

DATE: June 23, 2022
PROJECT NO: 209.30128.00000

GIS PATH: D:\GIS\Projects\209_30128_ChoiceBloor_Dundas\1_Maps\RPT\RPT_HydrogeologicalAssessment_2022\209_30128_MECP_Wells_500m_rev8.mxd

Last Saved: June 23, 2022 7:05:44 AM by tgraham

Appendix A Development Plan

Preliminary Hydrogeological Assessment

Bloor and Dundas Development
Toronto, Ontario

Choice Properties LP

SLR Project No. 209.30128.00000

June 30, 2022

General Notes:

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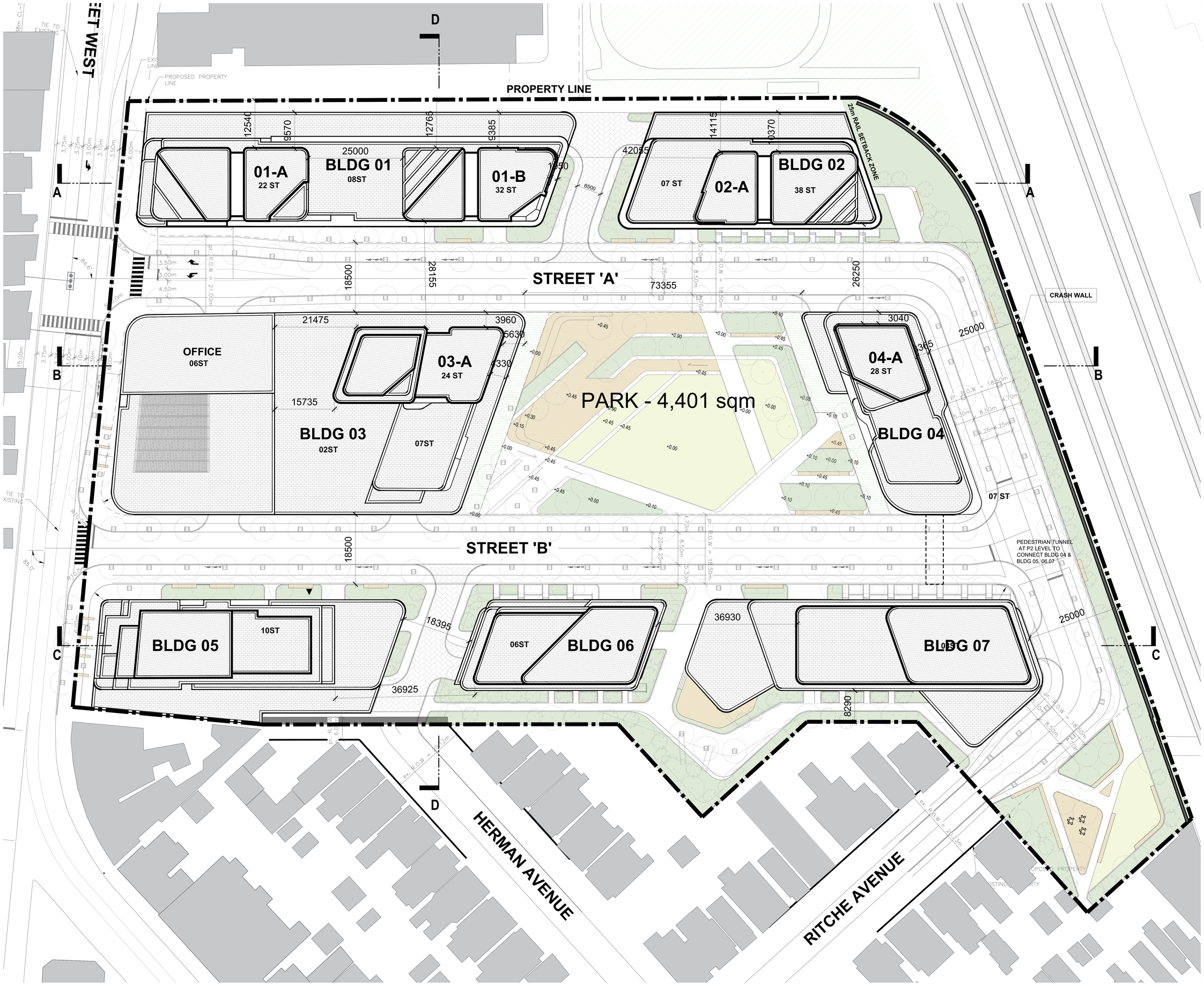
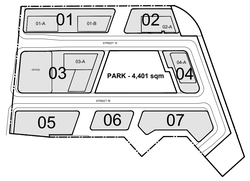
3. Positions of exposed or finished mechanical or electrical devices, fittings, and fixtures are indicated on the Architectural drawings. The locations shown on the Architectural drawings govern over the Mechanical and Electrical drawings. Those items not clearly located will be located as directed by the Architect.

North





Key Plan: N.T.S

Rev.	Issue/Description	Date
01	Issued for Rezoning	June 30th 2022

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Toronto, Canada M4M2S1
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FAX 416 929 8924
info@hp-arch.com
www.hariripontarini.com

ONTARIO ASSOCIATION OF ARCHITECTS
DAVID PONTARINI
LICENCE
4466

2280 Dundas Street West, Toronto

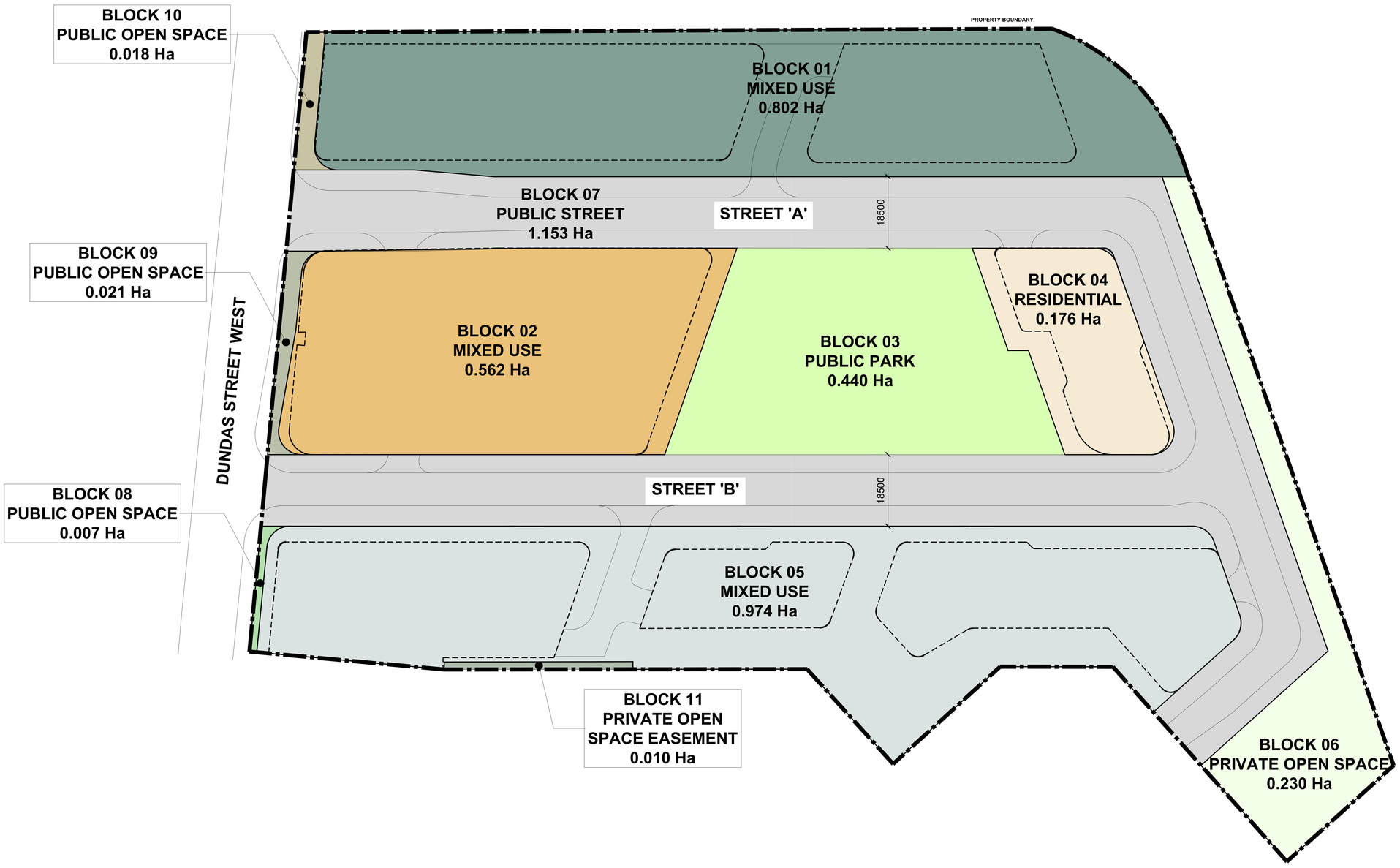
ADDRESS

SITE PLAN

Project No.: 2206
Scale: 1:300
Date: 04 JULY 2022
Drawn by: HPA

Drawing No.:

A202



LEGEND

- BLOCK 01
- BLOCK 02
- BLOCK 03
- BLOCK 04
- BLOCK 05
- BLOCK 06
- BLOCK 07
- BLOCK 08
- BLOCK 09
- BLOCK 10
- BLOCK 11
- BUILDING FOOT PRINT

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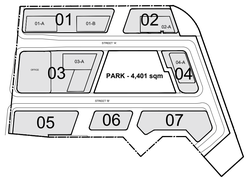

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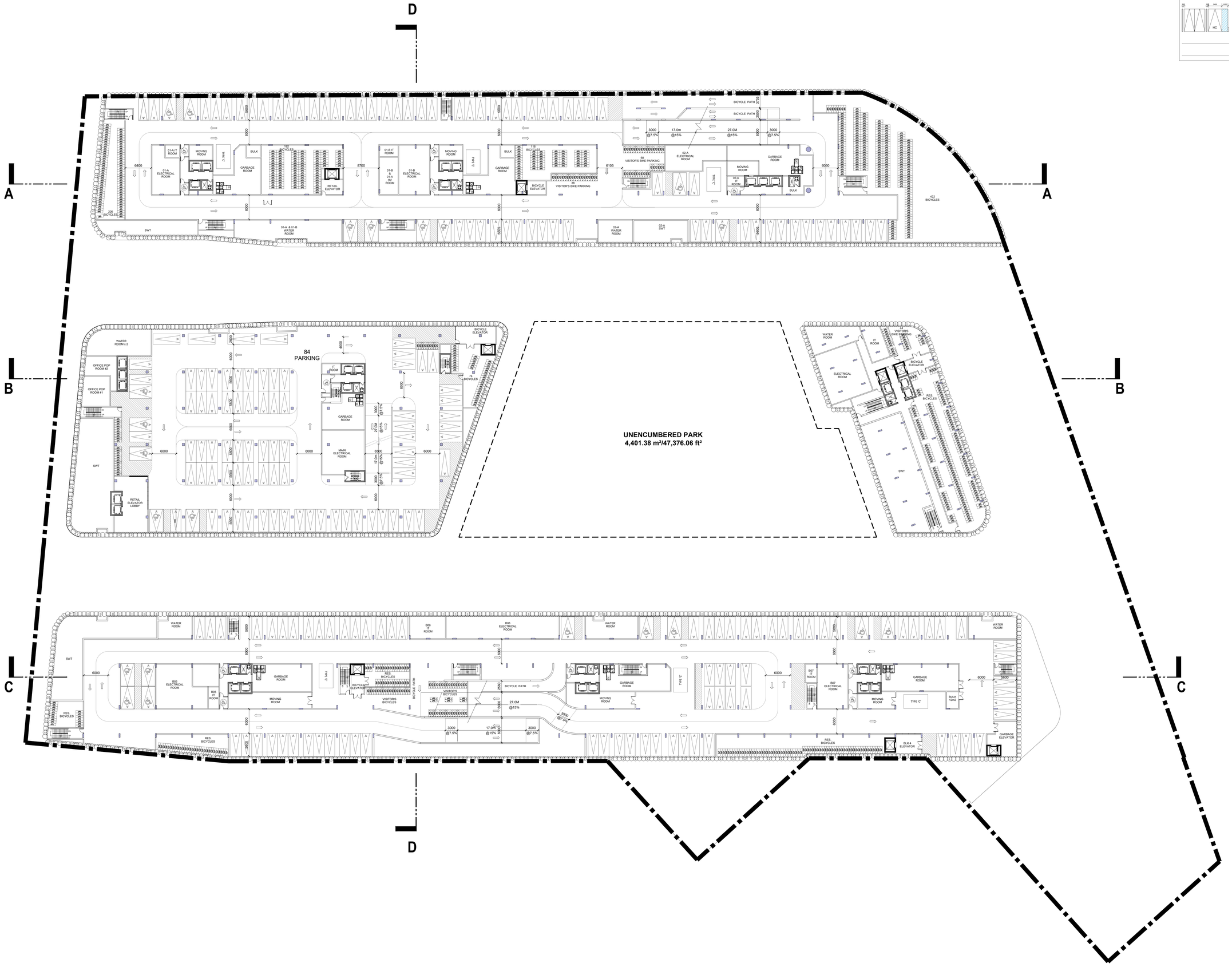
APPENDIX A

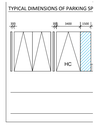
SITE AREAS

Project No.: 2206
Scale: 1:300
Date: 04 JULY 2022
Drawn by: HPA

Drawing No.:



TYPICAL DIMENSIONS OF PARKING SP



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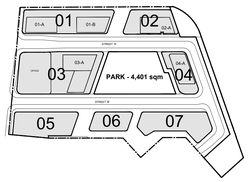

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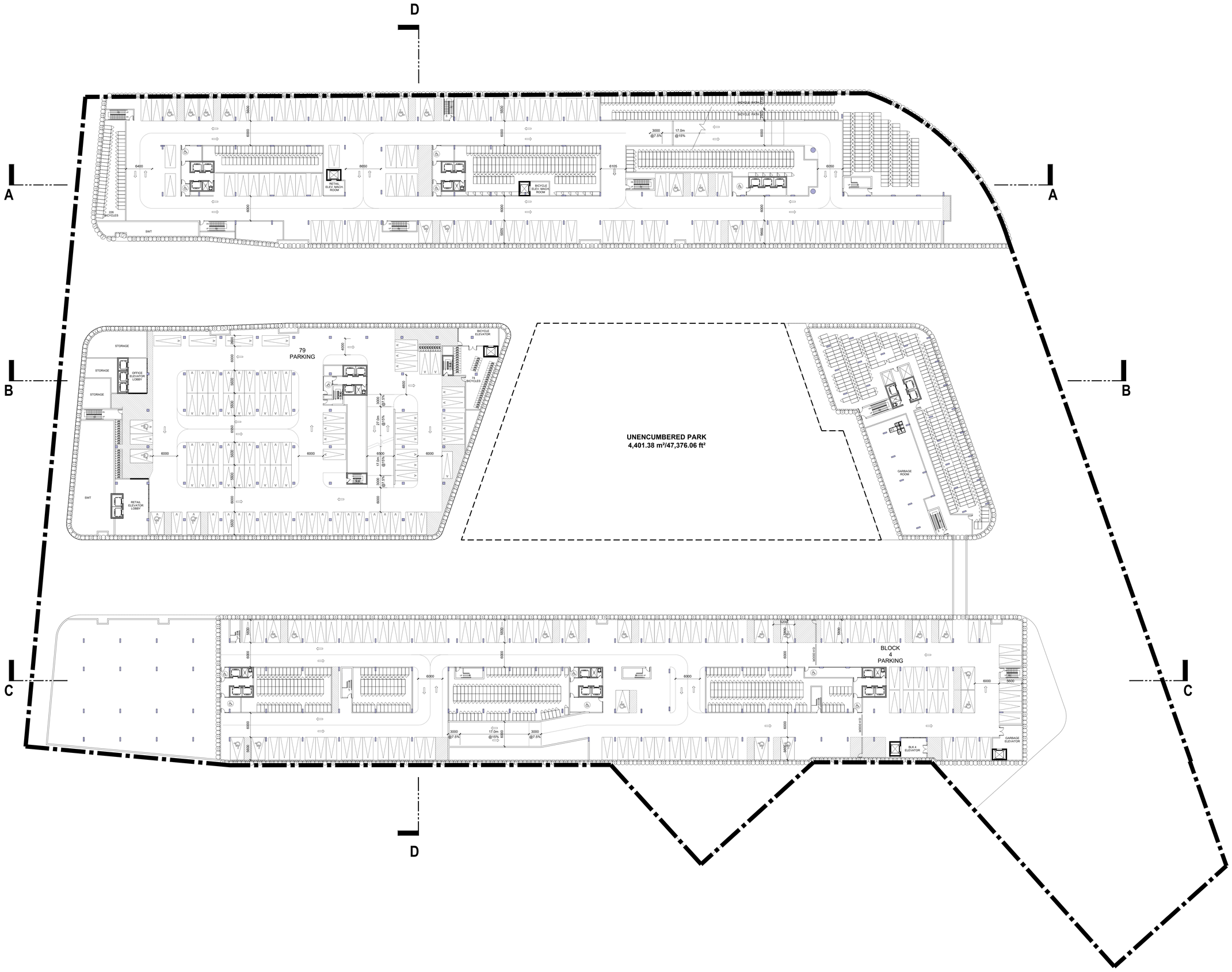
P1 PARKING LEVEL

Project No.: 2206
Scale: 1:300
Date: 04 JULY 2022
Drawn by: HPA

Drawing No.:

A205



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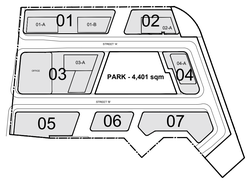

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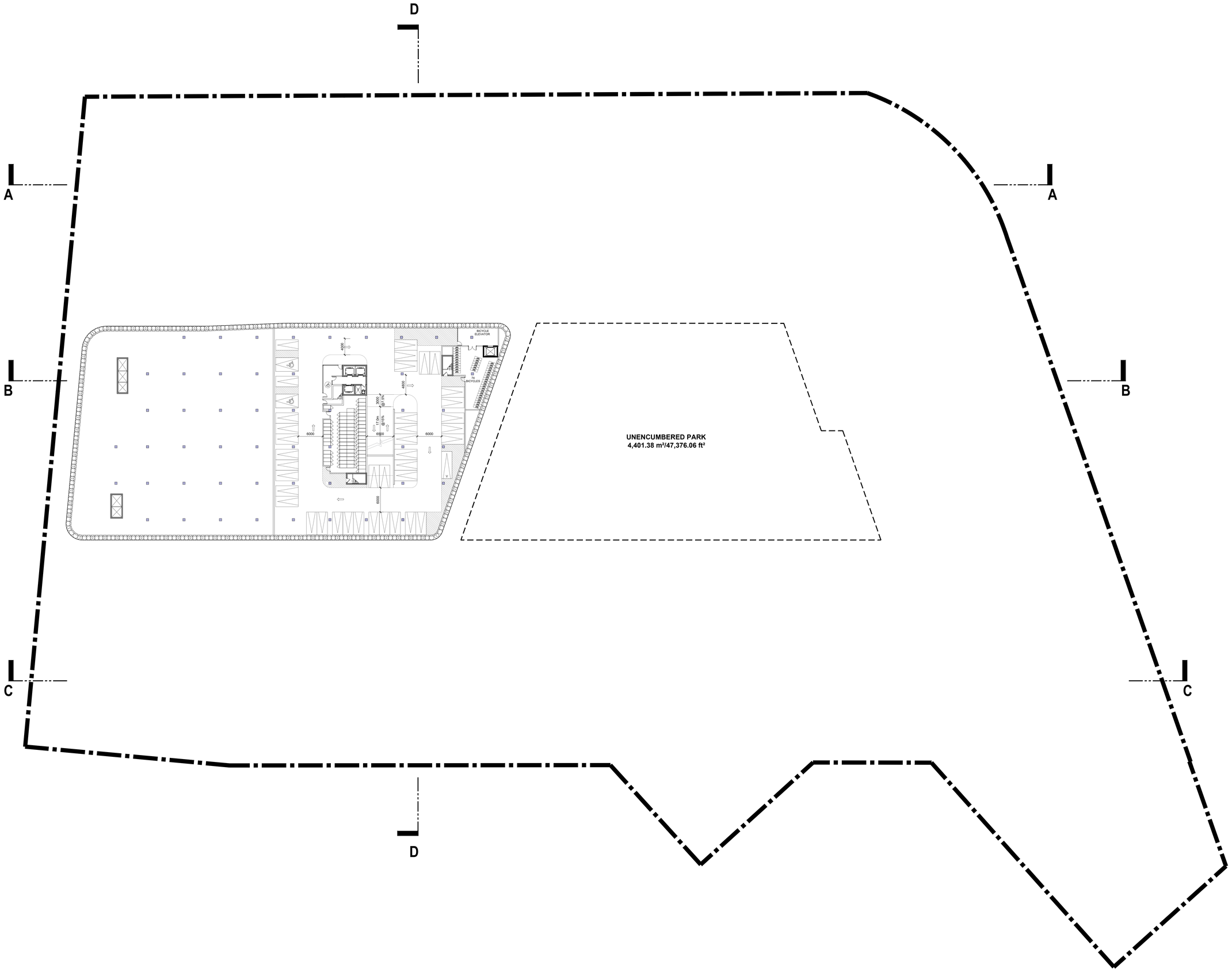
P2 PARKING LEVEL

Project No.: 2206
Scale: 1:300
Date: 04 JULY 2022
Drawn by: HPA

Drawing No.:

A204



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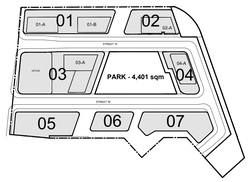

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P3 PARKING LEVEL

Project No.: 2206
Scale: 1:300
Date: 04 JULY 2022
Drawn by: HPA

Drawing No.:

A203

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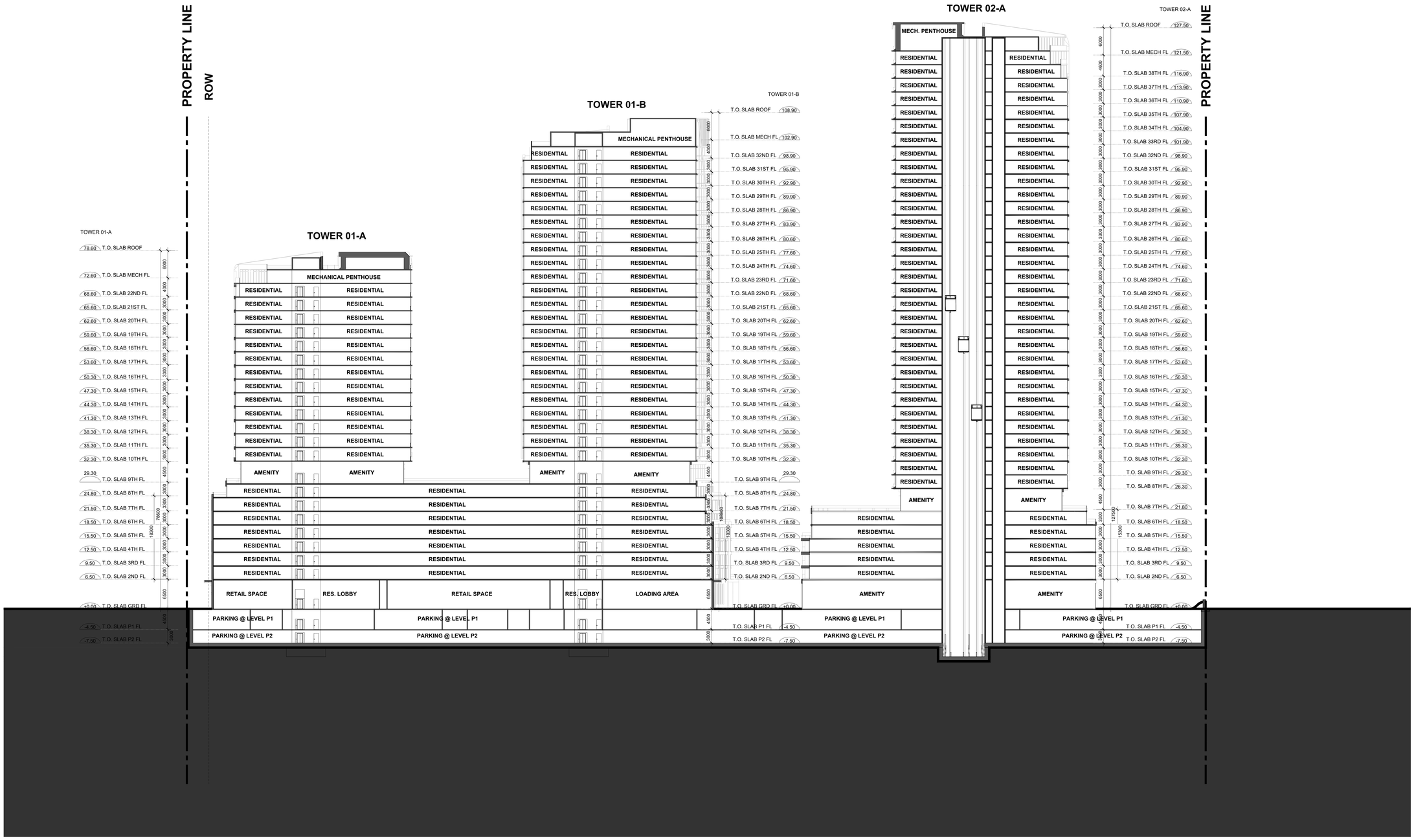
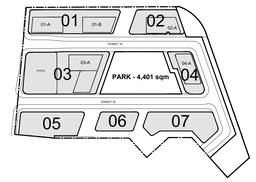
North





Key Plan: N.T.S

Rev.	Issue/Description	Date
01	Issued for Rezoning	June 30th 2022

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2280 Dundas Street West, Toronto

ADDRESS

SECTIONS
SECTION AA

Project No.: 2206
Scale: 1:300
Date: 04 JULY 2022
Drawn by: HPA

Drawing No.:

A301

General Notes:

1. These Contract Documents are the property of the Architect. The Architect bears no responsibility for the interpretations of these documents by the contractor. Upon written request, the Architect will provide written/graph clarification or supplementary information regarding the intent of the Contract Documents. The Architect will review Shop Drawings submitted by the Contractor for design conformance only.
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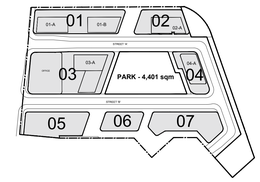
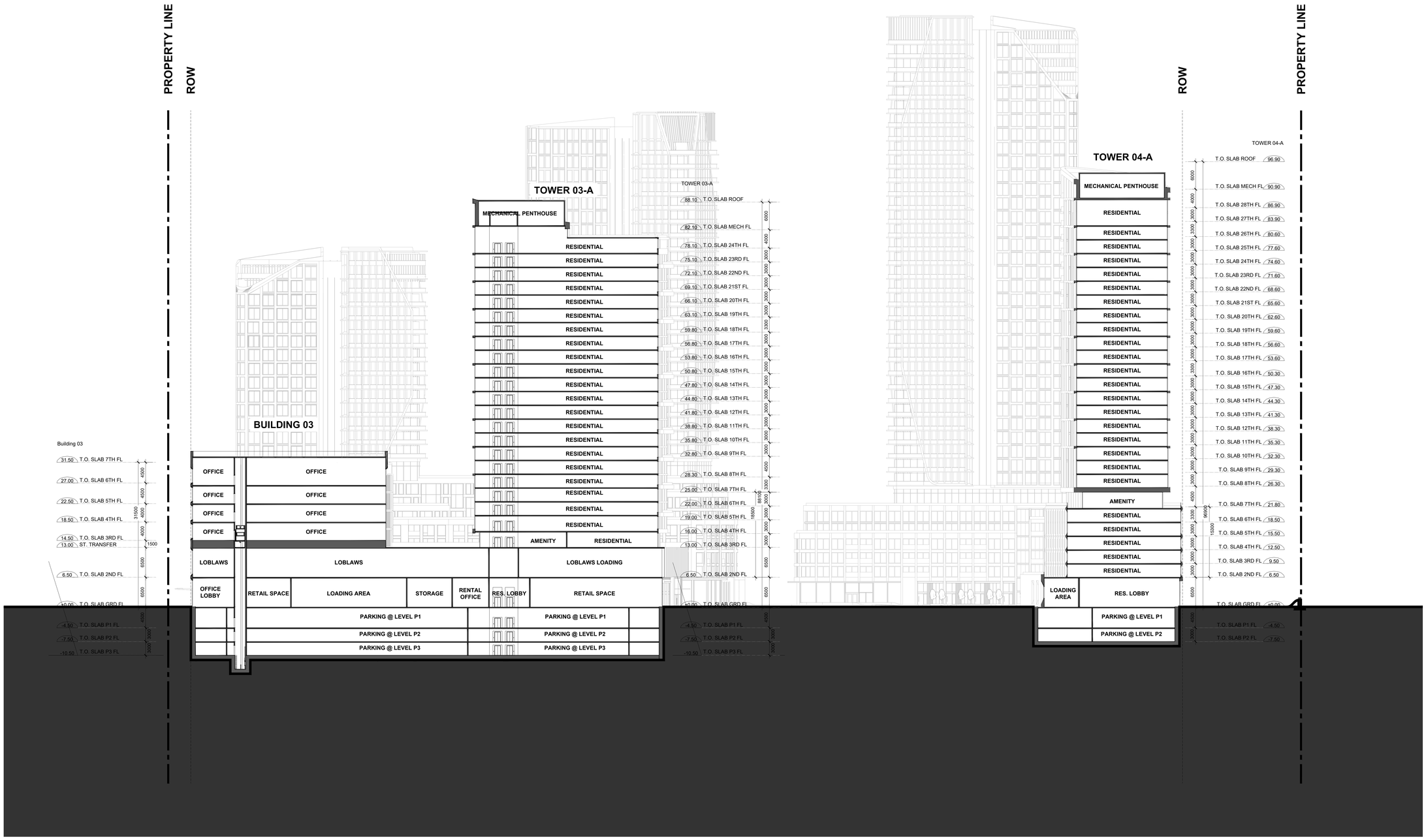
3. Positions of exposed or finished mechanical or electrical devices, fittings, and fixtures are indicated on the Architectural drawings. The locations shown on the Architectural drawings govern over the Mechanical and Electrical drawings. Those items not clearly located will be located as directed by the Architect.

North



Key Plan: N.T.S



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SECTIONS
SECTION BB

Project No.: 2206
Scale: 1:100
Date: 04 JULY 2022
Drawn by: HPA

Drawing No.:

A302

General Notes:

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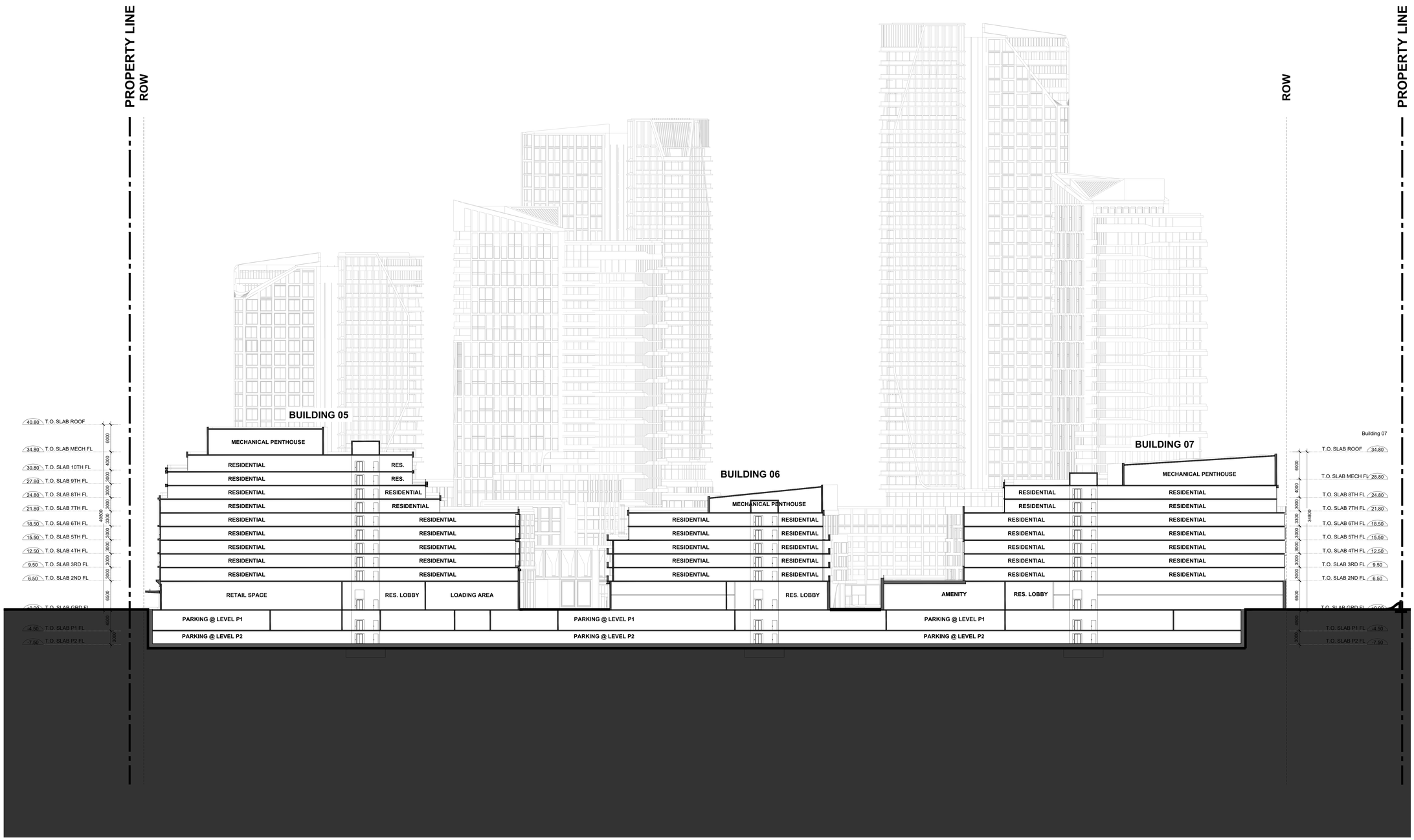
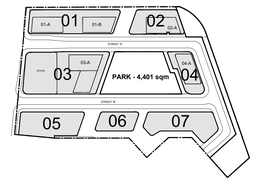
North





Key Plan: N.T.S

Rev.	Issue/Description	Date
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SECTIONS
SECTION CC

Project No.: 2206
Scale: 1:300
Date: 04 JULY 2022
Drawn by: HPA

Drawing No.:

A303

General Notes:

1. These Contract Documents are the property of the Architect. The Architect bears no responsibility for the interpretations of these documents by the contractor. Upon written request, the Architect will provide written/graph clarification or supplement information regarding the intent of the Contract Documents. The Architect will review Shop Drawings submitted by the Contractor for design conformance only.
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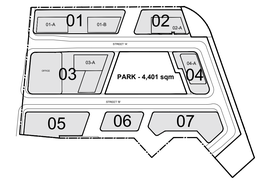
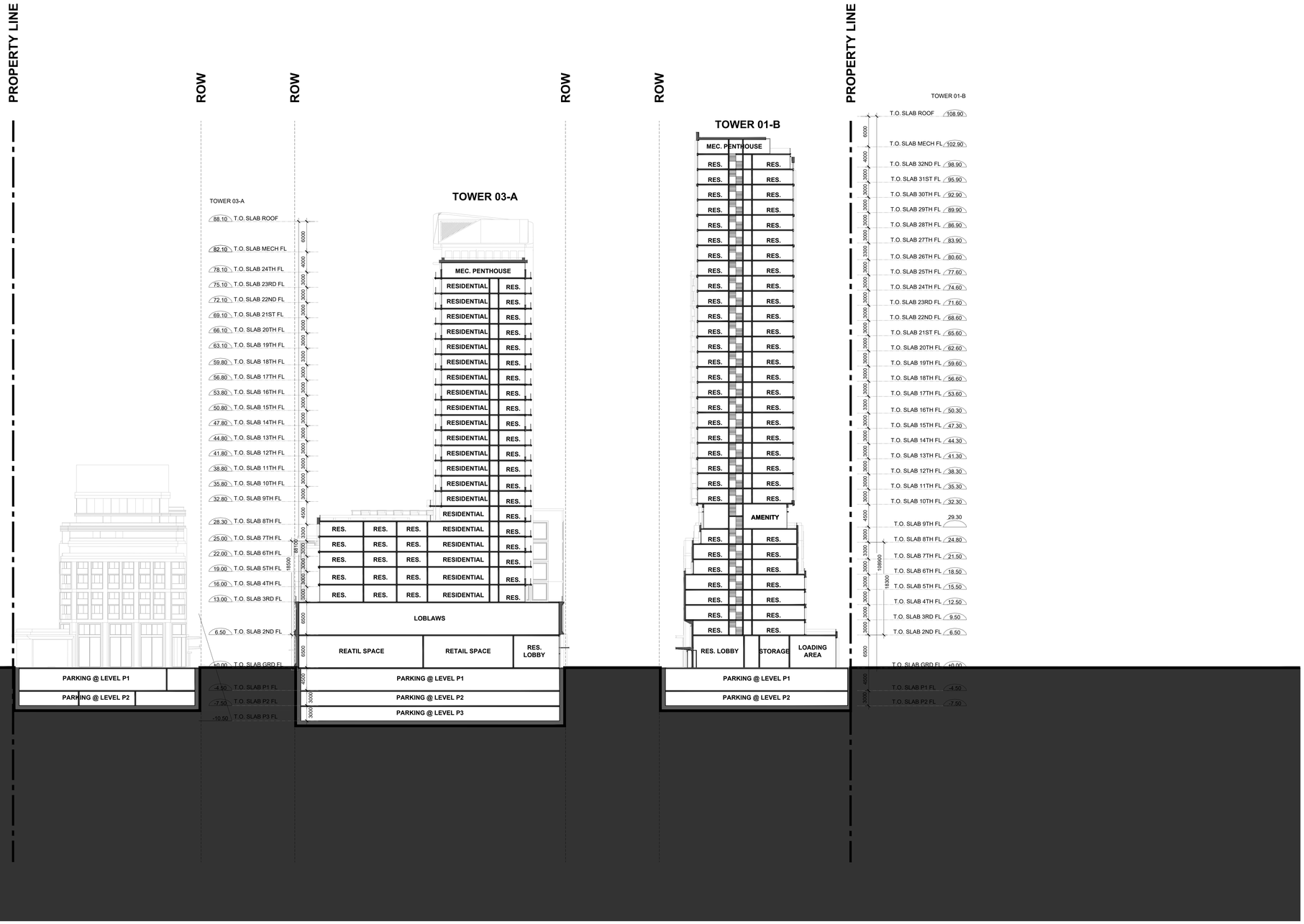
North



Key Plan: N.T.S



Rev.	Issue/Description	Date
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SECTIONS
SECTION DD

Project No.: 2206
Scale: 1:200
Date: 04 JULY 2022
Drawn by: HPA

Drawing No.:

A304

Appendix B Borehole Logs

Preliminary Hydrogeological Assessment

Bloor and Dundas Development
Toronto, Ontario

Choice Properties LP

SLR Project No. 209.30128.00000

June 30, 2022

Table B-1. Borehole and Monitoring Well Installation

Monitoring Well ID	Install Date	UTM Coordinates		Ground Surface Elevation	Top of Pipe Elevation	Top of Screen	Bottom of Screen	Screened Geology
		Northing	*Easting*	*mAD**	*mAD**	*mAD**	*mAD**	
BH22-1D**	April 22, 2022	4834748.10	624829.15	112.92	112.86	80.65	78.13	Sand & Silt Till
BH22-1S	May 04, 2022	4834748.10	624829.15	112.92	n/a	n/a	n/a	n/a
BH22-2**	April 28, 2022	4834639.90	624895.05	112.06	n/a	n/a	n/a	n/a
BH22-3D**	May 09, 2022	4834712.97	624970.52	112.08	111.99	84.19	81.14	Sand & Silt Till / Shale Bedrock
BH22-3S	May 06, 2022	4834713.18	624971.58	112.08	112	98.36	96.84	Sand & Silt Till
BH22-4D**	April 26, 2022	4834712.01	625094.93	112.36	112.3	81.54	80.02	Sand & Silt Till / Shale Bedrock
BH22-4S	April 25, 2022	4834712.01	625094.93	112.36	n/a	n/a	n/a	n/a
BH22-5**	May 13, 2022	4834831.36	625026.66	112.45	112.28	82.93	81.42	Sand & Silt Till / Shale Bedrock
SLR-01	April 19, 2022	4834758.94	625077.57	112.48	112.42	109.74	106.69	Sand/Silty Sand
SLR-02	April 25, 2022	4834672.71	625109.93	111.62	111.47	109.49	106.44	Sand/Silty Sand
SLR-03	April 19, 2022	4834709.69	625071.60	112.28	n/a	n/a	n/a	n/a
SLR-04	April 20, 2022	4834706.94	625062.50	112.28	112.21	109.99	106.95	Sand/Silty Sand
SLR-05	April 25, 2022	4834785.52	624860.23	112.88	n/a	n/a	n/a	n/a
SLR-06	April 20, 2022	4834771.62	624884.30	112.63	112.5	108.97	105.92	Sand/Silty Sand
SLR-07	April 26, 2022	nm	nm	nm	n/a	n/a	n/a	n/a
SLR-08	April 20, 2022	4834707.92	624865.49	112.77	112.69	109.87	106.83	Sand/Silty Sand/ Sand and Silt
SLR-09	April 22, 2022	4834700.49	624855.36	112.93	112.82	110.03	106.99	Sand/ Sand and Silt
SLR-10	May 27, 2022	4834749.99	624873.33	112.83	112.68	110.39	107.34	Sand/ Sand and Silt
SLR-11	May 27, 2022	4834718.35	624970.84	111.96	n/a	n/a	n/a	n/a
SLR-12	May 27, 2022	4834691.81	625062.35	112.20	112.12	110.37	106.10	Sand/ Silty Sand
SLR-13	May 27, 2022	4834637.52	624898.74	112.07	n/a	n/a	n/a	n/a
SLR-14	May 27, 2022	4834636.93	624895.47	112.10	n/a	n/a	n/a	n/a

Notes:

mAD - metres above datum

nm - not measured

n/a - not applicable, borehole not completed as monitoring well

*Elevations are related to Geodetic Datum, derived from the City of Toronto Bench Mark No. CT-1515 (published benchmark no. 12219741515).

**Borehole/well completed by GeoTerre Ltd on behalf of SLR Consulting Ltd in 2022

Table B-2. Historic Monitoring Well Installation

Monitoring Well ID	Reference Report	UTM Coordinates		Ground Surface Elevation	Top of Pipe Elevation	Top of Screen	Bottom of Screen	Screened Geology
		Northing	*Easting*	*mAD**	*mAD**	*mAD**	*mAD**	
BH-1S	Toronto Inspection 2018	4834771.66	624824.91	112.16	112.06	109.11	106.06	Sand
BH-1D	Toronto Inspection 2018	4834771.41	624823.90	112.9	112.75	100.71	97.66	Clayey Silt Till
BH-2	Toronto Inspection 2018	4834781.06	624886.64	112.69	112.6	109.64	106.59	Sand/Silty Sand
BH-4	Toronto Inspection 2018	4834832.75	625026.89	112.48	112.35	109.95	106.39	Sand/Silty Sand
BH-5	Toronto Inspection 2018	4834717.87	624855.04	112.70	112.61	103.56	100.51	Silty Sand/ Clayey Silt Till
BH-6	Toronto Inspection 2018	4834740.58	624908.15	112.45	112.28	103.31	100.26	Silty Sand/ Clayey Silt Till
BH-7	Toronto Inspection 2018	4834736.75	624971.44	112.16	112.06	97.68	94.63	Clayey Silt Till/ Sandy Silt Till
BH-8	Toronto Inspection 2018	4834750.79	625084.56	112.48	112.35	103.34	100.29	Sand/ Clayey Silt Till
BH-9**	Toronto Inspection 2018	4834674.46	624934.81	112.18	n/a	n/a	n/a	n/a
BH-10	Toronto Inspection 2018	4834698.11	625029.58	112.46	112.36	103.32	100.27	Sand/ Sandy Silt/Clayey Silt Till
BH-11S	Toronto Inspection 2018	4834692.46	625089.23	111.69	111.51	108.64	105.59	Sand/ Sandy Silt
BH-11D	Toronto Inspection 2018	4834771.41	624823.90	111.68	111.57	97.97	94.92	Clayey Silt Till/ Sandy Silt Till
MW405	EXP 2014	4834755.33	624938.33	112.8	113.57	109.60	108.10	Sand
MW406	EXP 2014	4834747.95	624939.42	112.8	113.48	110.50	109.00	Sand
MW409	EXP 2014	4834693.29	624846.26	112.91	112.86	110.50	107.50	Sand
MW501	EXP 2014	4834766.51	624946.23	112.79	112.81	109.49	108.48	Sandy Silt/Silt
MW502	EXP 2014	4834756.98	624948.54	112.8	112.92	110.20	108.81	Sandy Silt
BH-107	Toronto Inspection 2007	4834734.39	624920.93	112.52	112.45	109.54	108.02	Sandy Silt
BH-201	Toronto Inspection 2012	4834732.80	624978.93	112.1	112.03	-	107.96	-
BH-202	Toronto Inspection 2012	4834728.12	624958.14	112.08	112.01	-	106.99	-
BH-203	Toronto Inspection 2012	4834726.73	624938.57	112.28	112.23	-	106.65	-
BH-204	Toronto Inspection 2012	4834683.35	624940.41	112.18	112.05	-	106.13	-
BH-205	Toronto Inspection 2012	4834690.54	624976.93	111.9	111.84	-	106.45	-
BH-206	Toronto Inspection 2012	4834742.99	624831.23	112.88	112.83	-	106.98	-
BH-209	Toronto Inspection 2012	4834766.09	624837.07	112.86	112.8	-	106.99	-
BH-211	Toronto Inspection 2012	4834714.97	624878.03	112.3	112.13	-	107.12	-
BH-212	Toronto Inspection 2012	4834677.75	624884.91	112.41	112.34	-	106.90	-
BH-213	Toronto Inspection 2012	4834713.75	624903.83	111.95	111.87	-	106.67	-
A211625	EXP 2016	4834754.59	624824.61	112.92	112.8	102.25	100.73	Clay
MW102**	EXP 2017	4834650.00	624873.00	97.81	-	96.61	95.41	Sand
MW103**	EXP 2017	4834628.00	624867.00	97.75	-	96.55	95.35	Sand

Notes:

mAD - metres above datum

- - borehole log not provided

n/a - not applicable, borehole not completed as monitoring well

*Elevations are related to Geodetic Datum, derived from the City of Toronto Bench Mark No. CT-1515 (published benchmark no. 12219741515).

**UTM coordinates and elevations acquired from reference reports. MW102 and MW103 elevations are related to a reference benchmark with an arbitrary elevation of 100 m.

SLR CONSULTING (CANADA) LTD.

CLIENT: **Choice Properties LP**
PROJECT: **Bloor and Dundas**
ADDRESS: **2280 Dundas St. W Toronto, Ontario**
SLR JOB NO: **209.30128.00000**

BOREHOLE LOG

BOREHOLE NO: BH22-1S
SURFACE ELEVATION: 112.92 m
UTM COORDINATES 4834748.102 N 624829.151 E

DEPTH (m)	SAMPLE TYPE	SAMPLE ID	SPT COUNT	SOIL TYPE	SOIL DESCRIPTION	FIELD TEST DATA: ORGANIC VAPOUR LEVEL (ppmv) 1 – 10 – 100	BOREHOLE COMPLETION	WATER LEVEL	WELL COMPLETION NOTES	ELEVATION (m)
					ASPHALT					
					GRAVELLY FILL Gravel fill and asphalt, dry.					
1					**SAND** Sand, trace gravel, light brown/grey, low plasticity, dry.	0				112
					At 1.60 m change to some red.	0				
2										111
					Between 2.59 m and 2.64 m change to some silt and clay, grey, medium to high plasticity, dry.	0				
3					**SILTY SAND** Silty sand, light brown/grey, low plasticity, dry.	0			backfilled with bentonite	110
					Between 3.35 m and 3.63 m, trace grey/black gravel fragments. At 3.81 m change to some angular gravel, brown, wet.					
4						0				109
					At 4.60 m change to silty sand, light brown/grey, low plasticity.					
5		BH22-1 (4.6-5.2)			**SAND AND SILT** Sand and silt, some clay, grey, moist to wet.	0				108
					At 5.33 m change to some gravel, wet.	0				
					End of borehole at 5.9 m					107

Groundwater Information:
Depth to groundwater from TOC = 6.47 m (6/2/2022)

DRILLING METHOD: Hollow Stem Auger Drilling + Solid Stem Auger Drilling

Notes: SPLIT SPOON

DRILL DATE: April 22, 2022
LOGGED BY: JN
DRILLED BY: Drill Tech Drilling

SLR CANADA V6.1 BLOOR&DUNDAS_UPDATED_MW_FINAL.GPJ SLR_CAN V5.2.GDT 6/23/22

SLR CONSULTING (CANADA) LTD.

CLIENT: **Choice Properties LP**
PROJECT: **Bloor and Dundas**
ADDRESS: **2280 Dundas St. W Toronto, Ontario**
SLR JOB NO: **209.30128.00000**

BOREHOLE LOG

BOREHOLE NO: BH22-3S
SURFACE ELEVATION: 112.08 m
UTM COORDINATES 4834713.175 N 624971.582 E

DEPTH (m)	SAMPLE TYPE	SAMPLE ID	SPT COUNT	SOIL TYPE	SOIL DESCRIPTION	FIELD TEST DATA: ORGANIC VAPOUR LEVEL (ppmv) 1 – 10 – 100	WELL COMPLETION	WATER LEVEL	WELL COMPLETION NOTES	ELEVATION (m)
					ASPHALT				roadbox, jplug, cement	112
					GRAVELLY FILL Gravel fill and asphalt, dry					
1					**SAND** Medium sand, some gravel, black, dry. At 1.23 m change to fine sand, brown, moist.					111
2										110
								▼	GW = 2.61 mbg (6/2/2022)	
3					At 3.05 m change to wet.					109
4										108
					At 4.57 m change to some silt, grey.					
5										107
6										106
					At 6.10 m switch to mud rotary, refer to BH22-3 log completed by GeoTerre.					
									bentonite seal	
7										105
8										104
9										103

DRILLING METHOD: Hollow Stem Auger Drilling + Mud Rotary

DRILL DATE: May 9, 2022
LOGGED BY: MJ
DRILLED BY: Drill Tech Drilling

Notes: ⧗ SPLIT SPOON

SLR CANADA V6.1 BLOOR&DUNDAS_UPDATED_MW_FINAL.GPJ SLR_CAN V5.2.GDT 6/23/22

SLR CONSULTING (CANADA) LTD.

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PROJECT: **Bloor and Dundas**
ADDRESS: **2280 Dundas St. W Toronto, Ontario**
SLR JOB NO: **209.30128.00000**

BOREHOLE LOG

BOREHOLE NO: BH22-3S
SURFACE ELEVATION: 112.08 m
UTM COORDINATES 4834713.175 N 624971.582 E

DEPTH (m)	SAMPLE TYPE	SAMPLE ID	SPT COUNT	SOIL TYPE	SOIL DESCRIPTION	FIELD TEST DATA: ORGANIC VAPOUR LEVEL (ppmv) 1 10 100	WELL COMPLETION	WATER LEVEL	WELL COMPLETION NOTES	ELEVATION (m)
										102
11										101
12										100
13										99
14					**SAND AND SILT TILL** Fine sand and silt till, trace gravel, grey, wet.				silica sand 50 mm 010 slot PVC pipe	98
15										97
									end cap	

End of borehole at 15.2 m

Well Completion Details:
Screened interval from 13.7 m to 15.2 m below surface
Elevation at top of casing (TOC) = 112.000 m

Groundwater Information:
Depth to groundwater from TOC = 2.53 m (6/2/2022)

DRILLING METHOD: Hollow Stem Auger Drilling + Mud Rotary

DRILL DATE: May 9, 2022
LOGGED BY: MJ
DRILLED BY: Drill Tech Drilling

Notes: SPLIT SPOON

SLR CANADA V6.1 BLOOR&DUNDAS_UPDATED_MW_FINAL.GPJ SLR_CAN V5.2.GDT 6/23/22

SLR CONSULTING (CANADA) LTD.

CLIENT: **Choice Properties LP**
PROJECT: **Bloor and Dundas**
ADDRESS: **2280 Dundas St. W Toronto, Ontario**
SLR JOB NO: **209.30128.00000**

BOREHOLE LOG

BOREHOLE NO: BH22-4S
SURFACE ELEVATION: 112.36 m
UTM COORDINATES 4834712.013 N 625094.934 E

DEPTH (m)	SAMPLE TYPE	SAMPLE ID	SPT COUNT	SOIL TYPE	SOIL DESCRIPTION	FIELD TEST DATA: ORGANIC VAPOUR LEVEL (ppmv) 1 – 10 – 100	BOREHOLE COMPLETION	WATER LEVEL	WELL COMPLETION NOTES	ELEVATION (m)
					ASPHALT					
					GRAVELLY FILL Gravel fill and asphalt, dry.					112
1					**SAND** Sand, trace gravel, trace asphalt pieces, dark brown/black, dry. At 0.84 m change to trace silt, brown/orange. At 1.14 m change to grey/brown.	0			backfilled with bentonite	111
2		BH22-4 (1.5-2.1)			At 1.72 m trace red staining.	0				
		BH22-4 (2.3-2.9)			At 2.3 m change to grey.	0				110
					End of borehole at 2.9 m Groundwater Information: Depth to groundwater from TOC = 12.45 m (6/2/2022)					

DRILLING METHOD: Hollow Stem Auger Drilling + Solid Stem Auger Drilling

Notes: SPLIT SPOON

DRILL DATE: April 26, 2022
LOGGED BY: JN
DRILLED BY: Drill Tech Drilling

SLR CANADA V6.1 BLOOR&DUNDAS_UPDATED_MW_FINAL.GPJ SLR_CAN V5.2.GDT 6/23/22

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CLIENT: **Choice Properties LP**
PROJECT: **Bloor and Dundas**
ADDRESS: **2280 Dundas St. W Toronto, Ontario**
SLR JOB NO: **209.30128.00000**

BOREHOLE LOG

BOREHOLE NO: SLR-01
SURFACE ELEVATION: 112.48 m
UTM COORDINATES 4834758.935 N 625077.565 E

DEPTH (m)	SAMPLE TYPE	SAMPLE ID	SPT COUNT	SOIL TYPE	SOIL DESCRIPTION	FIELD TEST DATA: ORGANIC VAPOUR LEVEL (ppmv) 1 – 10 – 100	WELL COMPLETION	WATER LEVEL	WELL COMPLETION NOTES	ELEVATION (m)
					ASPHALT				roadbox, jplug, cement	
					GRAVELLY FILL Gravel fill and asphalt, dry					112
1					**SAND** Sand, trace gravel, dark black, low plasticity, dry. At 0.89 m change to sand, brown, moist.					
					At 1.37 m change to light grey/brown, dry.				bentonite seal	111
2		SLR-01 (1.5-2.1)								
					At 2.13 m change to moist.					110
		SLR-01 (2.3-2.9)							GW = 2.73 mbg (6/2/2022)	
3					**SILTY SAND** Silty sand, light grey, medium plasticity, wet.					109
4									silica sand 50 mm 010 slot PVC pipe	108
					At 4.67 m change to dry.					
5										107
									end cap	

End of borehole at 5.9 m

Well Completion Details:
Screened interval from 2.7 m to 5.8 m below surface
Elevation at top of casing (TOC) = 112.420 m

Groundwater Information:
Depth to groundwater from TOC = 2.67 m (6/2/2022)

DRILLING METHOD: Hollow Stem Auger Drilling

Notes: SPLIT SPOON

DRILL DATE: April 19, 2022
LOGGED BY: JN
DRILLED BY: Drill Tech Drilling

SLR CANADA V6.1 BLOOR&DUNDAS_UPDATED_MW_FINAL.GPJ SLR_CAN V5.2.GDT 6/23/22

SLR CONSULTING (CANADA) LTD.

CLIENT: **Choice Properties LP**
PROJECT: **Bloor and Dundas**
ADDRESS: **2280 Dundas St. W Toronto, Ontario**
SLR JOB NO: **209.30128.00000**

BOREHOLE LOG

BOREHOLE NO: SLR-02
SURFACE ELEVATION: 111.62 m

UTM COORDINATES
4834672.709 N
625109.927 E

DEPTH (m)	SAMPLE TYPE	SAMPLE ID	SPT COUNT	SOIL TYPE	SOIL DESCRIPTION	FIELD TEST DATA: ORGANIC VAPOUR LEVEL (ppmv) 1 – 10 – 100	WELL COMPLETION	WATER LEVEL	WELL COMPLETION NOTES	ELEVATION (m)
					TOPSOIL Topsoil, trace organics, dry.				roadbox, jplug, cement	
					SAND Sand, light brown/orange, low plasticity, layering throughout, dry.					111
1		SLR-02 (0.75-1.3), DUP-1							bentonite seal	
										110
2		SLR-02 (1.5-2.1)			At 1.78 m change to trace silt, grey/brown, no visible layering, moist.					
					At 2.29 m change to grey, wet.				GW = 2.28 mbg (6/2/2022)	109
3					At 3.05 m change to trace brown sand.				silica sand 50 mm 010 slot PVC pipe	108
4					**SILTY SAND** Silty sand, grey, medium plasticity, wet.					107
5									end cap	

End of borehole at 5.2 m

Well Completion Details:
Screened interval from 2.1 m to 5.2 m below surface
Elevation at top of casing (TOC) = 111.470 m

Groundwater Information:
Depth to groundwater from TOC = 2.13 m (6/2/2022)

DRILLING METHOD: Hollow Stem Auger Drilling

DRILL DATE: April 25, 2022
LOGGED BY: JN
DRILLED BY: Drill Tech Drilling

Notes: SPLIT SPOON

SLR CANADA V6.1 BLOOR&DUNDAS_UPDATED_MW_FINAL.GPJ SLR_CAN V5.2.GDT 6/23/22

SLR CONSULTING (CANADA) LTD.

CLIENT: **Choice Properties LP**
PROJECT: **Bloor and Dundas**
ADDRESS: **2280 Dundas St. W Toronto, Ontario**
SLR JOB NO: **209.30128.00000**

BOREHOLE LOG

BOREHOLE NO: SLR-03
SURFACE ELEVATION: 112.28 m
UTM COORDINATES 4834709.691 N 625071.595 E

DEPTH (m)	SAMPLE TYPE	SAMPLE ID	SPT COUNT	SOIL TYPE	SOIL DESCRIPTION	FIELD TEST DATA: ORGANIC VAPOUR LEVEL (ppmv) 1 – 10 – 100	BOREHOLE COMPLETION	WATER LEVEL	WELL COMPLETION NOTES	ELEVATION (m)
					ASPHALT					
					GRAVELLY FILL Gravel fill and asphalt, dry					112
1		SLR-03 (0.75-1.3)			**SAND** Sand, dark brown, low plasticity, dry. At 1.07 m change to light brown. At 0.97 m change to dark brown/black. At 1.07 m change to light brown.	0				111
					At 1.52 m change to dark brown. At 1.57 m change to light brown/grey.	0				
2										110
		SLR-03 (2.3-2.9)			At 2.29 m change to wet.	0				
3					At 3.00 m change to grey.	0			backfilled with bentonite	109
4					**SILTY SAND** Silty sand, grey, medium plasticity, wet.	0				108
5						0				107
6						0				106
					SAND AND SILT Sand and Silt, some clay, grey, medium plasticity, moist.	0				
					End of borehole at 6.7 m					

DRILLING METHOD: Hollow Stem Auger Drilling
DRILL DATE: April 19, 2022
LOGGED BY: JN
DRILLED BY: Drill Tech Drilling

Notes: SPLIT SPOON

SLR CANADA V6.1 BLOOR&DUNDAS_UPDATED_MW_FINAL.GPJ SLR_CAN V5.2.GDT 6/23/22

SLR CONSULTING (CANADA) LTD.

CLIENT: **Choice Properties LP**
PROJECT: **Bloor and Dundas**
ADDRESS: **2280 Dundas St. W Toronto, Ontario**
SLR JOB NO: **209.30128.00000**

BOREHOLE LOG

BOREHOLE NO: SLR-04
SURFACE ELEVATION: 112.28 m
UTM COORDINATES 4834706.935 N 625062.499 E

DEPTH (m)	SAMPLE TYPE	SAMPLE ID	SPT COUNT	SOIL TYPE	SOIL DESCRIPTION	FIELD TEST DATA: ORGANIC VAPOUR LEVEL (ppmv) 1 – 10 – 100	BOREHOLE COMPLETION	WATER LEVEL	WELL COMPLETION NOTES	ELEVATION (m)
					ASPHALT				roadbox, jplug, cement	112
					GRAVELLY FILL Gravel fill and asphalt, dry					
1					**SAND** Sand, trace gravel, dark brown, low plasticity, dry. At 1.01 m change to light brown. At 1.01 m change to trace black/brown subangular gravel.	0			bentonite seal	111
2		SLR-04 (1.5-2.1)				0				
					At 2.29 m change to light grey, medium plasticity, wet. At 2.49 m change to light brown.	3			GW = 2.71 mbg (6/2/2022)	110
3		SLR-04 (3.0-3.6)			**SILTY SAND** Silty sand, light brown/grey, medium plasticity, wet.	1				109
4					At 3.81 m change to moist.	0			silica sand 50 mm 010 slot PVC pipe	108
5					At 4.57 m change to wet.	0				
					SAND AND SILT Sand and silt, some clay, grey, medium to high plasticity, wet.	0			end cap	107

End of borehole at 5.9 m

Well Completion Details:
Screened interval from 2.3 m to 5.3 m below surface
Elevation at top of casing (TOC) = 112.210 m

Groundwater Information:
Depth to groundwater from TOC = 2.64 m (6/2/2022)

DRILLING METHOD: Hollow Stem Auger Drilling

Notes: SPLIT SPOON

DRILL DATE: April 20, 2022
LOGGED BY: JN
DRILLED BY: Drill Tech Drilling

SLR CANADA V6.1 BLOOR&DUNDAS_UPDATED_MW_FINAL.GPJ SLR_CAN V5.2.GDT 6/23/22

SLR CONSULTING (CANADA) LTD.

CLIENT: **Choice Properties LP**
PROJECT: **Bloor and Dundas**
ADDRESS: **2280 Dundas St. W Toronto, Ontario**
SLR JOB NO: **209.30128.00000**

BOREHOLE LOG

BOREHOLE NO: SLR-05
SURFACE ELEVATION: 112.88 m
UTM COORDINATES 4834785.523 N 624860.225 E

DEPTH (m)	SAMPLE TYPE	SAMPLE ID	SPT COUNT	SOIL TYPE	SOIL DESCRIPTION	FIELD TEST DATA: ORGANIC VAPOUR LEVEL (ppmv) 1 10 100	BOREHOLE COMPLETION	WATER LEVEL	WELL COMPLETION NOTES	ELEVATION (m)
					ASPHALT					
					GRAVELLY FILL Gravel fill and asphalt, dry					
1		SLR-05 (0.75-1.3)			**SAND** Sand, trace gravel, dark brown, dry. At 0.81 m change to sand, light orange. At 0.89 m change to trace silt, trace clay, light brown/grey, slightly moist.	0				112
2						0				111
3					At 3.05 m change to moist. At 3.35 m change to wet, grey.	0			backfilled with bentonite	110
4						0				109
5					**SAND AND SILT** Sand and silt, some clay, grey, medium plasticity, moist to wet.	0				108
						0				107
					End of borehole at 5.9 m					

DRILLING METHOD: Solid Stem Auger Drilling
DRILL DATE: April 25, 2022
LOGGED BY: JN
DRILLED BY: Drill Tech Drilling

Notes: SPLIT SPOON

Sheet 1 of 1

SLR CANADA V6.1 BLOOR&DUNDAS_UPDATED_MW_FINAL.GPJ SLR_CAN V5.2.GDT 6/23/22

SLR CONSULTING (CANADA) LTD.

CLIENT: **Choice Properties LP**
PROJECT: **Bloor and Dundas**
ADDRESS: **2280 Dundas St. W Toronto, Ontario**
SLR JOB NO: **209.30128.00000**

BOREHOLE LOG

BOREHOLE NO: SLR-06
SURFACE ELEVATION: 112.63 m

UTM COORDINATES
4834771.62 N
624884.302 E

DEPTH (m)	SAMPLE TYPE	SAMPLE ID	SPT COUNT	SOIL TYPE	SOIL DESCRIPTION	FIELD TEST DATA: ORGANIC VAPOUR LEVEL (ppmv) 1 – 10 – 100	WELL COMPLETION	WATER LEVEL	WELL COMPLETION NOTES	ELEVATION (m)
					ASPHALT				roadbox, jplug, cement	
					ASPHALT AND SAND Asphalt and sand, trace gravel, black/brown.					112
1					**GRAVEL FILL** Gravel fill, trace sand, light grey.					
					SAND Sand, trace gravel, light brown, low plasticity, dry.					111
2		SLR-06 (1.5-2.1)			At 1.65 m change to light brown/grey, dry to slightly moist.				bentonite seal	
					Between 1.98 m and 2.29 m change to some silt, some clay, medium plasticity, dry.					110
3					At 3.15 m change to wet.				GW = 3.29 mbg (6/2/2022)	109
4					**SILTY SAND** Silty sand, light grey/brown, low to medium plasticity, wet.					108
5									silica sand 50 mm 010 slot PVC pipe	107
6					At 6.40 m change to dry. At 6.60 change to wet.				end cap	106

End of borehole at 6.7 m

Well Completion Details:
Screened interval from 3.7 m to 6.7 m below surface
Elevation at top of casing (TOC) = 112.500 m

Groundwater Information:
Depth to groundwater from TOC = 3.16 m (6/2/2022)

Well installed on 4/27/2022.

DRILLING METHOD: Hollow Stem Auger Drilling + Solid Stem Auger Drilling

Notes: SPLIT SPOON

DRILL DATE: April 20, 2022
LOGGED BY: JN
DRILLED BY: Drill Tech Drilling

SLR CANADA V6.1 BLOOR&DUNDAS_UPDATED_MW_FINAL.GPJ SLR_CAN V5.2.GDT 6/23/22

SLR CONSULTING (CANADA) LTD.

CLIENT: **Choice Properties LP**
PROJECT: **Bloor and Dundas**
ADDRESS: **2280 Dundas St. W Toronto, Ontario**
SLR JOB NO: **209.30128.00000**

BOREHOLE LOG

BOREHOLE NO: SLR-07
SURFACE ELEVATION:

DEPTH (m)	SAMPLE TYPE	SAMPLE ID	SPT COUNT	SOIL TYPE	SOIL DESCRIPTION	FIELD TEST DATA: ORGANIC VAPOUR LEVEL (ppmv) 1 – 10 – 100	BOREHOLE COMPLETION	WATER LEVEL	WELL COMPLETION NOTES	DEPTH (m)
					ASPHALT					
					GRAVEL FILL Gravelly sandy fill, dry.					
1										1.0
					End of borehole at 1.4 m Borehole abandoned due to refusal at three locations. End of Borehole at 1.37 mbgs.					

DRILLING METHOD: Solid Stem Auger Drilling

DRILL DATE: April 26, 2022

LOGGED BY: JN
DRILLED BY: Drill Tech Drilling

Notes: SPLIT SPOON

SLR CANADA V6.1 BLOOR&DUNDAS_UPDATED_MW_FINAL.GPJ SLR_CAN V5.2.GDT 6/23/22

SLR CONSULTING (CANADA) LTD.

CLIENT: **Choice Properties LP**
PROJECT: **Bloor and Dundas**
ADDRESS: **2280 Dundas St. W Toronto, Ontario**
SLR JOB NO: **209.30128.00000**

BOREHOLE LOG

BOREHOLE NO: SLR-08
SURFACE ELEVATION: 112.77 m

UTM COORDINATES
4834707.923 N
624865.486 E

DEPTH (m)	SAMPLE TYPE	SAMPLE ID	SPT COUNT	SOIL TYPE	SOIL DESCRIPTION	FIELD TEST DATA: ORGANIC VAPOUR LEVEL (ppmv) 1 – 10 – 100	WELL COMPLETION	WATER LEVEL	WELL COMPLETION NOTES	ELEVATION (m)
					ASPHALT				roadbox, jplug, cement	
					GRAVELLY FILL Gravel fill and asphalt, dry.					
					SAND Sand, brown/orange, low plasticity, dry.					112
1		SLR-08 (0.75-1.3)			At 1.27 m change to light brown/grey.				bentonite seal	
2					At 2.36 m change to light grey.					111
3					At 3.63 m change to moist.			GW = 3.51 mbg (6/2/2022)		110
					SILTY SAND Silty sand light grey/brown, low to medium plasticity, wet.					109
4									silica sand 50 mm 010 slot PVC pipe	
5					At 5.12 m change to grey, medium plasticity, moist to wet. At 5.33 m change to low to medium plasticity, wet.					108
					SAND AND SILT Sand and silt, some clay, grey, medium to high plasticity, moist to dry.				end cap	107

End of borehole at 5.9 m

Well Completion Details:
Screened interval from 2.9 m to 5.9 m below surface
Elevation at top of casing (TOC) = 112.690 m

Groundwater Information:
Depth to groundwater from TOC = 3.43 m (6/2/2022)

DRILLING METHOD: Hollow Stem Auger Drilling + Solid Stem Auger Drilling

Notes: SPLIT SPOON

DRILL DATE: April 20, 2022
LOGGED BY: JN
DRILLED BY: Drill Tech Drilling

SLR CANADA V6.1 BLOOR&DUNDAS_UPDATED_MW_FINAL.GPJ SLR_CAN V5.2.GDT 6/23/22

SLR CONSULTING (CANADA) LTD.

CLIENT: **Choice Properties LP**
PROJECT: **Bloor and Dundas**
ADDRESS: **2280 Dundas St. W Toronto, Ontario**
SLR JOB NO: **209.30128.00000**

BOREHOLE LOG

BOREHOLE NO: SLR-09
SURFACE ELEVATION: 112.93 m

UTM COORDINATES
4834700.491 N
624855.362 E

DEPTH (m)	SAMPLE TYPE	SAMPLE ID	SPT COUNT	SOIL TYPE	SOIL DESCRIPTION	FIELD TEST DATA: ORGANIC VAPOUR LEVEL (ppmv) 1 – 10 – 100	WELL COMPLETION	WATER LEVEL	WELL COMPLETION NOTES	ELEVATION (m)
					ASPHALT				roadbox, jplug, cement	
					GRAVELLY FILL Gravel fill and asphalt, dry.					
					GRAVEL FILL Gravelly sand fill, trace asphalt peices, black/brown, dry.					
1					**SAND** Sand, brown/orange, low plasticity, dry.				bentonite seal	112
		SLR-09 (1.5-2.1)			At 1.60 m change to trace silt, trace gravel/asphalt pieces, light brown/grey					
2					At 2.29 m change to trace silt.					111
3					At 3.35 m change to slightly moist.			GW = 3.70 mbg (6/2/2022)		110
4					**SAND AND SILT** Sand and silt, some clay, light grey/brown, low to medium plasticity, wet.				silica sand 50 mm 010 slot PVC pipe	109
					Between 4.57 to 4.72 m, trace brown mottling.					
5					At 5.62 m change to grey, medium to high plasticity, dry to moist.					108
					End of borehole at 5.9 m				end cap	107

Well Completion Details:
Screened interval from 2.9 m to 5.9 m below surface
Elevation at top of casing (TOC) = 112.820 m

Groundwater Information:
Depth to groundwater from TOC = 3.59 m (6/2/2022)

DRILLING METHOD: Hollow Stem Auger Drilling + Solid Stem Auger Drilling

Notes: SPLIT SPOON

DRILL DATE: April 22, 2022
LOGGED BY: JN
DRILLED BY: Drill Tech Drilling

SLR CANADA V6.1 BLOOR&DUNDAS_UPDATED_MW_FINAL.GPJ SLR_CAN V5.2.GDT 6/23/22

SLR CONSULTING (CANADA) LTD.

CLIENT: **Choice Properties LP**
PROJECT: **Bloor and Dundas**
ADDRESS: **2280 Dundas St. W Toronto, Ontario**
SLR JOB NO: **209.30128.00000**

BOREHOLE LOG

BOREHOLE NO: SLR-10
SURFACE ELEVATION: 112.83 m

UTM COORDINATES
4834749.991 N
624873.334 E

DEPTH (m)	SAMPLE TYPE	SAMPLE ID	SPT COUNT	SOIL TYPE	SOIL DESCRIPTION	FIELD TEST DATA: ORGANIC VAPOUR LEVEL (ppmv)	WELL COMPLETION	WATER LEVEL	WELL COMPLETION NOTES	ELEVATION (m)
					ASPHALT				roadbox, jplug, cement	
					GRAVEL FILL Gravel fill, some sand, brown/grey, dry.					
		SLR-10 _1-3			**SAND** Fine sand, trace silt, occassional gravel, brown with orange/dark brown streaks, dry.					112
1					At 1.22 m change to moist.				bentonite seal	
		SLR-10 _4-6			At 1.72 m change to fine sand, trace clay, grey with orange mottling, laminated, moist. At 1.83m change to grey/brown with some orange mottling.	6				111
2					At 2.43 m change to dark brown/grey. Grain Size Percentages: 96.7% Sand, 3.3% Clay					110
3					At 3.35 m change to grey, wet.				GW = 3.47 mbg (6/2/2022)	
					At 3.66 m change to trace orange mottling.				silica sand 50 mm 010 slot PVC pipe	109
4		SLR-10 _12-14, DUP_5			At 4.27m, change to trace silt. Grain Size Percentages: 87.1% Sand, 8.5% Silt, 4.5% Clay					108
5					NO RECOVERY				end cap	107
6										

End of borehole at 6.1 m

Well Completion Details:
Screened interval from 2.4 m to 5.5 m below surface
Elevation at top of casing (TOC) = 112.680 m

Groundwater Information:
Depth to groundwater from TOC = 3.32 m (6/2/2022)

DRILLING METHOD: Direct Push Drilling

DRILL DATE: May 27, 2022
LOGGED BY: AW
DRILLED BY: Profile Drilling

Notes: CORE SAMPLE
NO RECOVERY

SLR CANADA V6.1 BLOOR&DUNDAS_UPDATED_MW_FINAL.GPJ SLR_CAN V5.2.GDT 6/23/22

SLR CONSULTING (CANADA) LTD.

CLIENT: **Choice Properties LP**
PROJECT: **Bloor and Dundas**
ADDRESS: **2280 Dundas St. W Toronto, Ontario**
SLR JOB NO: **209.30128.00000**

BOREHOLE LOG

BOREHOLE NO: SLR-11
SURFACE ELEVATION: 111.96 m
UTM COORDINATES 4834718.35 N 624970.844 E

DEPTH (m)	SAMPLE TYPE	SAMPLE ID	SPT COUNT	SOIL TYPE	SOIL DESCRIPTION	FIELD TEST DATA: ORGANIC VAPOUR LEVEL (ppmv) 1 10 100	BOREHOLE COMPLETION	WATER LEVEL	WELL COMPLETION NOTES	ELEVATION (m)
					ASPHALT				cement	
					GRAVEL FILL Gravel fill, some sand, white/black, dry.					
		SLR-11 _1-3			**SAND** Fine to medium sand, brown/orange, moist. At 0.69 m change to trace to some silt, grey/brown with orange/brown mottling.	2				
1					At 1.22 m change to grey/brown.					111
2					At 2.29 m change to fine sand, trace silt, grey with orange mottling. At 2.44 m change to medium sand, trace fine sand, trace silt, grey with dark brown/orange mottling. At 2.59 m change to wet.				backfilled with bentonite	110
3										109
					SAND AND SILT Fine sand and silt, trace medium sand, grey, wet.					
4										108
					End of borehole at 4.6 m					

DRILLING METHOD: Direct Push Drilling

DRILL DATE: May 27, 2022
LOGGED BY: AW
DRILLED BY: Profile Drilling

Notes: CORE SAMPLE

Sheet 1 of 1

SLR CANADA V6.1 BLOOR&DUNDAS_UPDATED_MW_FINAL.GPJ SLR_CAN V5.2.GDT 6/23/22

BOREHOLE LOG

SLR CONSULTING (CANADA) LTD.

CLIENT: **Choice Properties LP**
PROJECT: **Bloor and Dundas**
ADDRESS: **2280 Dundas St. W Toronto, Ontario**
SLR JOB NO: **209.30128.00000**

BOREHOLE NO: SLR-12
SURFACE ELEVATION: 112.20 m

UTM COORDINATES
4834691.805 N
625062.346 E

DEPTH (m)	SAMPLE TYPE	SAMPLE ID	SPT COUNT	SOIL TYPE	SOIL DESCRIPTION	FIELD TEST DATA: ORGANIC VAPOUR LEVEL (ppmv)	WELL COMPLETION	WATER LEVEL	WELL COMPLETION NOTES	ELEVATION (m)
					ASPHALT				roadbox, jplug, cement	112
					GRAVEL FILL Gravel fill and asphalt, dry.					
		SLR-12 2-3			**SILTY SAND** Silty fine sand, dark brown with orange mottling, dry. At 0.81 m change to moist.	2			bentonite seal	
1										111
		SLR12 _4-6, DUP_6, SLR12 _7-8			**SAND** Fine sand, trace silt, trace clay, grey/brown, laminated, moist.	4				
2										
					Grain Size Percentages: 95.2% Sand, 1.6% Silt, 3.2% Clay					110
					SILTY SAND Silty fine sand, grey with orange mottling, laminated, moist.				GW = 2.64 mbg (6/2/2022)	
					SAND Fine sand, trace silt, trace clay, grey, laminations, moist. At 2.59 m change to wet.					
3									silica sand 50 mm 010 slot PVC pipe	109
4										
					Grain Size Percentages: 87.1% Sand, 7.5% Silt, 5.3% Clay					108
5									end cap	107
6					**SILTY SAND** Silty sand, grey, wet.					

End of borehole at 6.1 m

Well Completion Details:
Screened interval from 1.8 m to 4.9 m below surface
Elevation at top of casing (TOC) = 112.120 m

Groundwater Information:
Depth to groundwater from TOC = 2.56 m (6/2/2022)

DRILLING METHOD: Direct Push Drilling

DRILL DATE: May 27, 2022
LOGGED BY: AW
DRILLED BY: Profile Drilling

Notes: CORE SAMPLE

SLR CANADA V6.1 BLOOR&DUNDAS_UPDATED_MW_FINAL.GPJ SLR_CAN V5.2.GDT 6/23/22

BOREHOLE LOG

SLR CONSULTING (CANADA) LTD.

CLIENT: **Choice Properties LP**
PROJECT: **Bloor and Dundas**
ADDRESS: **2280 Dundas St. W Toronto, Ontario**
SLR JOB NO: **209.30128.00000**

BOREHOLE NO: SLR-13
SURFACE ELEVATION: 112.07 m

UTM COORDINATES
4834637.523 N
624898.74 E

DEPTH (m)	SAMPLE TYPE	SAMPLE ID	SPT COUNT	SOIL TYPE	SOIL DESCRIPTION	FIELD TEST DATA: ORGANIC VAPOUR LEVEL (ppmv) 1 – 10 – 100	BOREHOLE COMPLETION	WATER LEVEL	WELL COMPLETION NOTES	ELEVATION (m)
					ASPHALT				cement	112
					GRAVEL FILL Sandy gravel fill, brown, dry.					
1		SLR-13_5-7, SLR-13_7-9, DUP-7			**SAND** Sand, some gravel, light brown with dark brown/black gravel. At 0.36 m change to dark brown. At 0.43 m change to orange. At 0.61 m change to trace gravel, moist. At 1.22 m change to trace gravel, brown/orange.				backfilled with bentonite	111
2					**SILTY SAND** Silty fine to medium sand. brown, laminated, moist.					110
3					**SAND** Medium to fine sand, trace to some silt, grey/brown, moist. At 2.46 m change to wet.					
					End of borehole at 3.1 m					

DRILLING METHOD: Direct Push Drilling

DRILL DATE: May 27, 2022

LOGGED BY: AW
DRILLED BY: Profile Drilling

Notes: CORE SAMPLE

SLR CANADA V6.1 BLOOR&DUNDAS_UPDATED_MW_FINAL.GPJ SLR_CAN V5.2.GDT 6/23/22

SLR CONSULTING (CANADA) LTD.

CLIENT: **Choice Properties LP**
PROJECT: **Bloor and Dundas**
ADDRESS: **2280 Dundas St. W Toronto, Ontario**
SLR JOB NO: **209.30128.00000**

BOREHOLE LOG

BOREHOLE NO: SLR-14
SURFACE ELEVATION: 112.10 m

UTM COORDINATES
4834636.931 N
624895.467 E

DEPTH (m)	SAMPLE TYPE	SAMPLE ID	SPT COUNT	SOIL TYPE	SOIL DESCRIPTION	FIELD TEST DATA: ORGANIC VAPOUR LEVEL (ppmv) 1 – 10 – 100	BOREHOLE COMPLETION	WATER LEVEL	WELL COMPLETION NOTES	ELEVATION (m)
					ASPHALT				cement	112
					GRAVEL FILL Sandy gravel fill, trace silt, light brown to dark brown/black to white/grey, dry.					
					SAND Fine sand, trace silt, trace clay, dark brown/orange, dry to moist.					
1										111
		SLR-14 _5-7, SLR-14 _7-9			Grain Size Percentages: 81.1% Sand, 9.4% Silt, 9.4% Clay	6				
2					**SILTY SAND** Silty fine sand, trace clay, brown with orange mottling, moist.				backfilled with bentonite	110
					At 2.44 m change to grey.					
					At 2.73 m change to wet. Grain Size Percentages: 64.7% Sand, 25.5% Silt, 9.8% Clay					
3		SLR-14 _9-11				6				109
					End of borehole at 3.7 m					

DRILLING METHOD: Direct Push Drilling

DRILL DATE: May 27, 2022

LOGGED BY: AW
DRILLED BY: Profile Drilling

Notes: CORE SAMPLE

Sheet 1 of 1

SYMBOLS AND TERMS FOR BOREHOLE LOG SOIL DESCRIPTION

BASIC SOIL SYMBOLS

Gravel | Sand | Silt | Clay

Fill | Topsoil | Bedrock

EXAMPLE SOIL REPRESENTATIONS

Sandy Gravel | Sand and Silt | Silty Clay | Silty Clay Till

Sand and Gravel | Silty Sand | Clayey Silt | Sand and Silt Till

Gravelly Sand | Sandy Silt | Sandy Silt Till

CLASIFICATION BY PARTICLE SIZE (UNIFIED SOIL CLASSIFICATION SYSTEM)

Name		Particle Size Range		
		mm	U. S. Standard Sieve Size	
			Retained	Passing
Boulders		>200	8 inch	-
Cobbles		75 to 200	3 inch	8 inch
Gravel	**coarse**	19 to 75	0.75 inch	3 inch
	fine	4.75 to 19	No. 4	0.75 inch
Sand	**coarse**	2 to 4.75	No. 10	No. 4
	medium	0.425 to 2	No. 40	No. 10
	fine	0.075 to 0.425	No. 200	No. 40
Fines (Silt and Clay Particles)		<0.075	-	No. 200

PROPORTION OF MINOR COMPONENTS BY WEIGHT

noun	gravel, sand, silt, clay	>35 % and main fraction
"and"	and gravel, and silt, etc.	35 to 50 %
adjective	gravelly, sandy, silty, clayey, etc.	20 to 35 %
"some"	some sand, some silt, etc.	10 to 20 %
"trace"	trace sand, trace silt, etc.	0 to 10%

DEGREE OF PLASTICITY

Definition	Category
$W_L<30$	Low
$30<W_L<50$	Medium
$W_L>50$	High

COMPACTNESS OF GRANULAR SOILS BASE ON SPT

Compactness Condition	Uncorrected Field SPT N-Values (blows/300 mm)
Very Loose	0 to 4
Loose	4 to 10
Compact	10 to 30
Dense	30 to 50
Very Dense	>50

CONSISTENCY AND UNDRAINED SHEAR STRENGTH OF COHESIVE SOILS

Consistency of Cohesive Soils	Undrained Shear Strength (kPa)	Uncorrected Field SPT N-Values (blows/300 mm)
Very Soft	<12	<2
Soft	12 to 25	2 to 4
Firm	25 to 50	5 to 8
Stiff	50 to 100	9 to 15
Very Stiff	100 to 200	16 to 30
Hard	>200	>30

LOG OF BOREHOLE BH22-1

PROJECT No.: **TG22-020**
CLIENT: **SLR**
PROJECT: **Dundas/Bloor Proposed Development**
LOCATION: **2280 Dundas Street West, Toronto, Ontario**
SURFACE ELEV.: **112.85 metres (Geodetic)**

Drilling Data
METHOD: **See Note 1**
DIAMETER:
PREP. BY: **PS** APPR. BY: **IC**
DATE: **May 4 2022**

ELEV. (m) DEPTH (m)	Water/Backfill Data	% MOISTURE (W_P W W_L) 10 20 30 40	Symbol	MATERIAL DESCRIPTION	SAMPLE NUMBER	SAMPLE TYPE	'N' VALUE	VANE (kPa) ✖ Pocket Pen (kPa) + 20 40 60 80; SPT (N) ● DCPT ◆ Blows/0.3m 20 40 60 80	GRAIN SIZE DISTRIBUTION (%) Gr Sa Si Cl
112.8				ASPHALT (55mm)					
0.1				NOT SAMPLED					

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SAMPLE TYPE
- Auger Sample
- Split Spoon Sample
- Bulk Sample
- Thin Wall Tube Sampler
- Pionjar Sample
- Soil Core (PQ)

BACKFILL LEGEND
- Concrete
- Drill Cuttings
- Asphalt
- Bentonite
- Filter Sand
- Slotted Pipe
- Grout
- Slough

LOG OF BOREHOLE BH22-1

PROJECT No.: **TG22-020**
CLIENT: **SLR**
PROJECT: **Dundas/Bloor Proposed Development**
LOCATION: **2280 Dundas Street West, Toronto, Ontario**
SURFACE ELEV.: **112.85 metres (Geodetic)**

Drilling Data
METHOD: **See Note 1**
DIAMETER:
PREP. BY: **PS** APPR. BY: **IC**
DATE: **May 4 2022**

ELEV. (m) / DEPTH (m)	Water/Backfill Data	% MOISTURE (W_P W W_L)	Symbol	MATERIAL DESCRIPTION	SAMPLE NUMBER	SAMPLE TYPE	'N' VALUE	VANE (kPa) / Pocket Pen (kPa) / SPT (N) / DCPT (Blows/0.3m)	GRAIN SIZE DISTRIBUTION (%) Gr	Sa	Si	Cl
				NOT SAMPLED								
94.6 / 18.3				START OF SOIL SAMPLING AT 18.3 M								
				SAND AND SILT TILL TO SANDY SILT TILL, some clay, trace gravel, dense to very dense, grey	1		73					
					2		66		6	38	39	17
					3		63					
					4		47					
					5		50					
					6		64		7	35	42	16
					7		55					
84.4 / 28.4				SILTY CLAY (low plasticity), some sand, trace gravel, very stiff, grey	8		21		2	12	57	29
82.9												

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SAMPLE TYPE: Auger Sample; Split Spoon Sample; Bulk Sample; Thin Wall Tube Sampler; Pionjar Sample; Soil Core (PQ)

BACKFILL LEGEND: Concrete; Drill Cuttings; Asphalt; Bentonite; Filter Sand; Slotted Pipe; Grout; Slough

LOG OF BOREHOLE SLR-DUNDAS-BLOORDEVELOPMENT.GPJ GEOTERRE.GDT 6/17/22

LOG OF BOREHOLE BH22-1

PROJECT No.: **TG22-020**
CLIENT: **SLR**
PROJECT: **Dundas/Bloor Proposed Development**
LOCATION: **2280 Dundas Street West, Toronto, Ontario**
SURFACE ELEV.: **112.85 metres (Geodetic)**

Drilling Data
METHOD: **See Note 1**
DIAMETER:
PREP. BY: **PS** APPR. BY: **IC**
DATE: **May 4 2022**

ELEV. (m) / DEPTH (m)	Water/Backfill Data	% MOISTURE (W_P W W_L)	Symbol	MATERIAL DESCRIPTION	SAMPLE NUMBER	SAMPLE TYPE	'N' VALUE	VANE (kPa) ✖ Pocket Pen (kPa) + / SPT (N) ● Blows/0.3m / DCPT ◆	GRAIN SIZE DISTRIBUTION (%) Gr	Sa	Si	Cl
29.9				SILTY SAND TILL, some gravel, trace clay, very dense, grey	9		50/ 10cm	> 99	13	51	29	8
81.5 / 31.4				SAND AND SILT TILL, some gravel, some clay, frequent pieces of shale, very dense, grey	10		50/ 13cm	> 99				
					11		50/ 10cm	> 99	14	37	37	12
78.4 / 34.4				PRESUMED SHALE BEDROCK, totally weathered, extremely weak, grey [GEORGIAN BAY FORMATION]	12		50/ 7.5cm	> 99				
77.7 / 35.1												
77.7 / 35.1												

END OF BOREHOLE IN PRESUMED SHALE BEDROCK AT A DEPTH OF 35.13 M.

MONITORING WELL (50 mm diameter) INSTALLED TO A TIP DEPTH OF 34.80 M (1.5 M LONG SCREEN) UPON COMPLETION OF DRILLING.

MONITORING WELL WATER LEVEL READINGS

DATE	Depth (m)	Elevation (m)
May 18'22	6.78	106.07
June 10'22	6.72	106.13

REPORTED SPT 'N' VALUES OBTAINED USING AN AUTOMATIC DROP HAMMER.

NOTES:
1) HOLLOW STEM AUGERS (200 mm diameter) TO 3 M, FOLLOWED BY WASHBORING IN CONJUCTION WITH 96 mm DIAMETER TRI-CONE FOR REMAINDER OF BOREHOLE.

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SAMPLE TYPE: Auger Sample; Split Spoon Sample; Bulk Sample; Thin Wall Tube Sampler; Pionjar Sample; Soil Core (PQ)

BACKFILL LEGEND: Concrete; Drill Cuttings; Asphalt; Bentonite; Filter Sand; Slotted Pipe; Grout; Slough

LOG OF BOREHOLE SLR-DUNDAS-BLOORDEVELOPMENT.GPJ GEOTERRE.GDT 6/17/22

LOG OF BOREHOLE BH22-2

PROJECT No.: **TG22-020**
CLIENT: **SLR**
PROJECT: **Dundas/Bloor Proposed Development**
LOCATION: **2280 Dundas Street West, Toronto, Ontario**
SURFACE ELEV.: **112.06 metres (Geodetic)**

Drilling Data
METHOD: **See Note 1**
DIAMETER:
PREP. BY: **PS** APPR. BY: **IC**
DATE: **April 28 2022**

ELEV. (m) / DEPTH (m)	MATERIAL DESCRIPTION	SAMPLE NUMBER	'N' VALUE	Gr	Sa	Si	Cl
112.0 / 0.1	ASPHALT (55 mm)						
	PAVEMENT GRANULARS, brown						
111.2 / 0.9	SILTY FINE SAND, trace gravel, trace organics, compact, brown	1A					
		1B	18				
		2A	18				
		2B					
109.9 / 2.2	SAND AND SILT, trace clay, occasional piece of gravel, compact to dense, light grey	3	17				
		4	27	1	60	35	4
		5	29				
		6	40				
106.5 / 5.6	SAND AND SILT, occasional clayey layers, compact, grey	7	15				
105.0 / 7.1	SILT, some clay, trace sand, loose to compact, grey	8	26	0	8	74	17
		9	9	0	9	76	15
101.9 / 10.1	SILTY CLAY (low plasticity), sandy, trace gravel, firm, grey	10	7				
		11	8	1	24	50	25
		12	8				
97.4 / 14.7							

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SAMPLE TYPE: Auger Sample, Split Spoon Sample, Bulk Sample, Thin Wall Tube Sampler, Pionjar Sample, Soil Core (PQ)

BACKFILL LEGEND: Concrete, Drill Cuttings, Asphalt, Bentonite, Filter Sand, Slotted Pipe, Grout, Slough

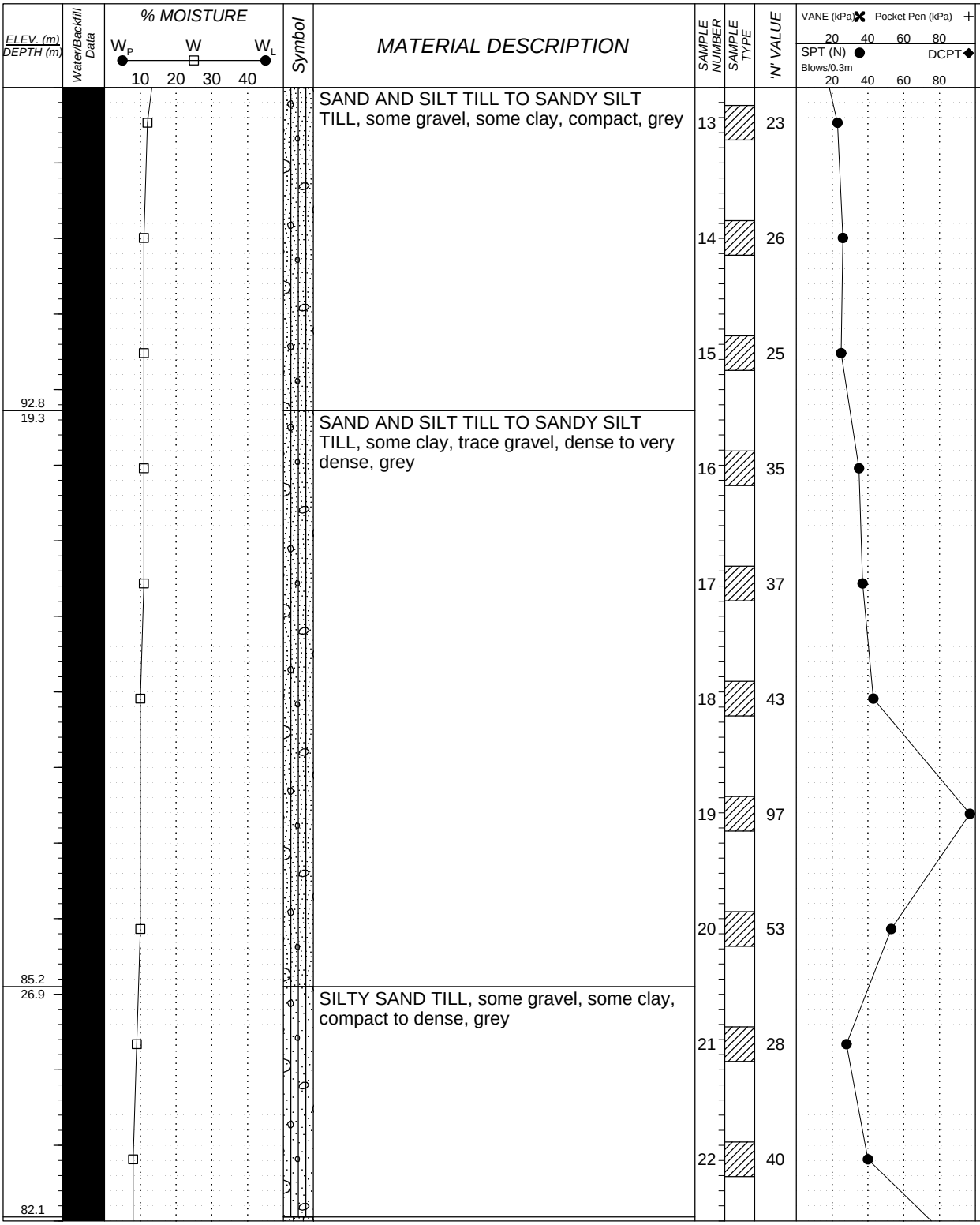
LOG OF BOREHOLE SLR-DUNDAS-BLOORDEVELOPMENT.GPJ GEOTERRE.GDT 6/17/22

LOG OF BOREHOLE BH22-2

PROJECT No.: **TG22-020**
CLIENT: **SLR**
PROJECT: **Dundas/Bloor Proposed Development**
LOCATION: **2280 Dundas Street West, Toronto, Ontario**
SURFACE ELEV.: **112.06 metres (Geodetic)**

Drilling Data
METHOD: **See Note 1**
DIAMETER:
PREP. BY: **PS** APPR. BY: **IC**
DATE: **April 28 2022**

ELEV. (m) / DEPTH (m)	MATERIAL DESCRIPTION	SAMPLE NUMBER	'N' VALUE	GRAIN SIZE DISTRIBUTION (%) Gr	Sa	Si	Cl
	SAND AND SILT TILL TO SANDY SILT TILL, some gravel, some clay, compact, grey	13	23				
		14	26	12	34	36	18
		15	25				
92.8 / 19.3	SAND AND SILT TILL TO SANDY SILT TILL, some clay, trace gravel, dense to very dense, grey	16	35				
		17	37				
		18	43	8	34	41	17
		19	97				
		20	53				
85.2 / 26.9	SILTY SAND TILL, some gravel, some clay, compact to dense, grey	21	28				
		22	40	13	41	33	13
82.1							



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SAMPLE TYPE: Auger Sample, Split Spoon Sample, Bulk Sample, Thin Wall Tube Sampler, Pionjar Sample, Soil Core (PQ)

BACKFILL LEGEND: Concrete, Drill Cuttings, Asphalt, Bentonite, Filter Sand, Slotted Pipe, Grout, Slough

LOG OF BOREHOLE SLR-DUNDAS-BLOORDEVELOPMENT.GPJ GEOTERRE.GDT 6/17/22

LOG OF BOREHOLE BH22-2

PROJECT No.: **TG22-020**
CLIENT: **SLR**
PROJECT: **Dundas/Bloor Proposed Development**
LOCATION: **2280 Dundas Street West, Toronto, Ontario**
SURFACE ELEV.: **112.06 metres (Geodetic)**

Drilling Data
METHOD: **See Note 1**
DIAMETER:
PREP. BY: **PS** APPR. BY: **IC**
DATE: **April 28 2022**

ELEV. (m) / DEPTH (m)	Water/Backfill Data	% MOISTURE (W_P W W_L)	Symbol	MATERIAL DESCRIPTION	SAMPLE NUMBER	SAMPLE TYPE	'N' VALUE	VANE (kPa) / Pocket Pen (kPa) / SPT (N) / DCPT (Blows/0.3m)	GRAIN SIZE DISTRIBUTION (%) Gr	Sa	Si	Cl
29.9				SILTY SAND TILL, trace to some gravel, trace to some clay, frequent small pieces of shale, very dense, grey	23		83/ 25cm	> 99	11	48	31	10
					24		50/ 13cm	> 99				
79.1 / 32.9				PRESUMED SHALE BEDROCK, highly to totally weathered, extremely weak to very weak, grey [GEORGIAN BAY FORMATION]	25		50/ 10cm	> 99				
					26		50/ 0cm	> 99				
76.8 / 35.3				END OF BOREHOLE AT DEPTH OF 35.28 M IN PRESUMED SHALE BEDROCK.	27		50/ 7.5cm	> 99				

PROPOSED MONITORING WELL INSTALLATION FAILED TO RESULT IN A FUNCTIONING WELL.

REPORTED SPT 'N' VALUES OBTAINED USING AN AUTOMATIC DROP HAMMER.

NOTES:
1) HOLLOW STEM AUGERS (200 mm diameter) TO 3 M, FOLLOWED BY WASHBORING IN CONJUCTION WITH 96 mm DIAMETER TRI-CONE FOR REMAINDER OF BOREHOLE.

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SAMPLE TYPE: Auger Sample; Split Spoon Sample; Bulk Sample; Thin Wall Tube Sampler; Pionjar Sample; Soil Core (PQ)

BACKFILL LEGEND: Concrete; Drill Cuttings; Asphalt; Bentonite; Filter Sand; Slotted Pipe; Grout; Slough

LOG OF BOREHOLE BH22-3

PROJECT No.: **TG22-020**
CLIENT: **SLR**
PROJECT: **Dundas/Bloor Proposed Development**
LOCATION: **2280 Dundas Street West, Toronto, Ontario**
SURFACE ELEV.: **112.08 metres (Geodetic)**

Drilling Data
METHOD: **See Note 1**
DIAMETER:
PREP. BY: **PS** APPR. BY: **IC**
DATE: **May 6 2022**

ELEV. (m) / DEPTH (m)	Water/Backfill Data	% MOISTURE (W_P W W_L) 10 20 30 40	Symbol	MATERIAL DESCRIPTION	SAMPLE NUMBER	SAMPLE TYPE	'N' VALUE	VANE (kPa) ✖ Pocket Pen (kPa) + 20 40 60 80; SPT (N) ● DCPT ◆ Blows/0.3m 20 40 60 80	GRAIN SIZE DISTRIBUTION (%) Gr Sa Si Cl
112.0				ASPHALT (95mm)					
0.1				NOT SAMPLED					

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SAMPLE TYPE
- Auger Sample
- Split Spoon Sample
- Bulk Sample
- Thin Wall Tube Sampler
- Pionjar Sample
- Soil Core (PQ)

BACKFILL LEGEND
- Concrete
- Drill Cuttings
- Asphalt
- Bentonite
- Filter Sand
- Slotted Pipe
- Grout
- Slough

LOG OF BOREHOLE BH22-3

PROJECT No.: **TG22-020**
CLIENT: **SLR**
PROJECT: **Dundas/Bloor Proposed Development**
LOCATION: **2280 Dundas Street West, Toronto, Ontario**
SURFACE ELEV.: **112.08 metres (Geodetic)**

Drilling Data
METHOD: **See Note 1**
DIAMETER:
PREP. BY: **PS** APPR. BY: **IC**
DATE: **May 6 2022**

ELEV. (m) / DEPTH (m)	Water/Backfill Data	% MOISTURE (W_P W W_L)	Symbol	MATERIAL DESCRIPTION	SAMPLE NUMBER	SAMPLE TYPE	'N' VALUE	VANE (kPa) / Pocket Pen (kPa) / SPT (N) Blows/0.3m / DCPT	GRAIN SIZE DISTRIBUTION (%) Gr	Sa	Si	Cl
				NOT SAMPLED								
93.8 / 18.3				START OF SOIL SAMPLING AT 18.3 M								
				SAND AND SILT TILL TO SANDY SILT TILL, some clay, trace gravel, very dense, grey	1		53					
					2		70		4	33	47	16
					3		57					
					4		53					
88.2 / 23.9				SAND AND SILT TILL, some clay, trace gravel, very dense, grey								
					5		91		9	38	38	15
					6		53					
					7		50/ 10cm	> 99				
					8		50/ 7.5cm	> 99				
82.3 / 29.8												

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SAMPLE TYPE: Auger Sample; Split Spoon Sample; Bulk Sample; Thin Wall Tube Sampler; Pionjar Sample; Soil Core (PQ)

BACKFILL LEGEND: Concrete; Drill Cuttings; Asphalt; Bentonite; Filter Sand; Slotted Pipe; Grout; Slough

LOG OF BOREHOLE SLR-DUNDAS-BLOORDEVELOPMENT.GPJ GEOTERRE.GDT 6/17/22

LOG OF BOREHOLE BH22-3

PROJECT No.: **TG22-020**
CLIENT: **SLR**
PROJECT: **Dundas/Bloor Proposed Development**
LOCATION: **2280 Dundas Street West, Toronto, Ontario**
SURFACE ELEV.: **112.08 metres (Geodetic)**

Drilling Data
METHOD: **See Note 1**
DIAMETER:
PREP. BY: **PS** APPR. BY: **IC**
DATE: **May 6 2022**

ELEV. (m) / DEPTH (m)	Water/Backfill Data	% MOISTURE (W_P W W_L) 10 20 30 40	Symbol	MATERIAL DESCRIPTION	SAMPLE NUMBER	SAMPLE TYPE	'N' VALUE	VANE (kPa) ✖ Pocket Pen (kPa) + 20 40 60 80; SPT (N) ● DCPT ◆ Blows/0.3m 20 40 60 80	GRAIN SIZE DISTRIBUTION (%) Gr Sa Si Cl
				SHALE BEDROCK, totally weathered, extremely weak, grey [GEORGIAN BAY FORMATION]	9		50/ 7.5cm	> 99●	
80.7 / 31.4				SHALE BEDROCK, highly weathered, very weak, grey [GEORGIAN BAY FORMATION]	10		50/ 2.5cm	> 99●	
79.3 / 32.8					11		50/ 2.5cm	> 99●	

END OF BOREHOLE IN PRESUMED SHALE BEDROCK AT A DEPTH OF 32.79 M.

MONITORING WELL (50 mm diameter) INSTALLED TO A TIP DEPTH OF 30.94 M (3.0 M LONG SCREEN) UPON COMPLETION OF DRILLING.

MONITORING WELL WATER LEVEL READINGS

DATE	Depth (m)	Elevation (m)
May 18'22	11.57	100.51
June 3'22	14.76	97.32
June 10'22	14.48	97.60

REPORTED SPT 'N' VALUES OBTAINED USING AN AUTOMATIC DROP HAMMER.

NOTES:
1) HOLLOW STEM AUGERS (200 mm diameter) TO 6 M, FOLLOWED BY WASHBORING IN CONJUCTION WITH 96 mm DIAMETER TRI-CONE FOR REMAINDER OF BOREHOLE.

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SAMPLE TYPE: Auger Sample; Split Spoon Sample; Bulk Sample; Thin Wall Tube Sampler; Pionjar Sample; Soil Core (PQ)

BACKFILL LEGEND: Concrete; Drill Cuttings; Asphalt; Bentonite; Filter Sand; Slotted Pipe; Grout; Slough

LOG OF BOREHOLE BH22-4

PROJECT No.: **TG22-020**
CLIENT: **SLR**
PROJECT: **Dundas/Bloor Proposed Development**
LOCATION: **2280 Dundas Street West, Toronto, Ontario**
SURFACE ELEV.: **112.30 metres (Geodetic)**

Drilling Data
METHOD: **See Note 1**
DIAMETER:
PREP. BY: **PS** APPR. BY: **IC**
DATE: **April 25 2022**

ELEV. (m) / DEPTH (m)	Water/Backfill Data	% MOISTURE (W_P W W_L) 10 20 30 40	Symbol	MATERIAL DESCRIPTION	SAMPLE NUMBER	SAMPLE TYPE	'N' VALUE	VANE (kPa) ✖ Pocket Pen (kPa) + 20 40 60 80; SPT (N) ● Blows/0.3m DCPT ◆ 20 40 60 80	GRAIN SIZE DISTRIBUTION (%) Gr Sa Si Cl
112.2 / 0.1				ASPHALT (135mm)					
				NOT SAMPLED					

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SAMPLE TYPE
Auger Sample
Split Spoon Sample
Bulk Sample
Thin Wall Tube Sampler
Pionjar Sample
Soil Core (PQ)

BACKFILL LEGEND
Concrete
Drill Cuttings
Asphalt
Bentonite
Filter Sand
Slotted Pipe
Grout
Slough

LOG OF BOREHOLE SLR-DUNDAS-BLOORDEVELOPMENT.GPJ GEOTERRE.GDT 6/17/22

LOG OF BOREHOLE BH22-4

PROJECT No.: **TG22-020**
CLIENT: **SLR**
PROJECT: **Dundas/Bloor Proposed Development**
LOCATION: **2280 Dundas Street West, Toronto, Ontario**
SURFACE ELEV.: **112.30 metres (Geodetic)**

Drilling Data
METHOD: **See Note 1**
DIAMETER:
PREP. BY: **PS** APPR. BY: **IC**
DATE: **April 25 2022**

ELEV. (m) / DEPTH (m)	Water/Backfill Data	% MOISTURE (W_P W W_L)	Symbol	MATERIAL DESCRIPTION	SAMPLE NUMBER	SAMPLE TYPE	'N' VALUE	VANE (kPa) / Pocket Pen (kPa) / SPT (N) Blows/0.3m / DCPT	GRAIN SIZE DISTRIBUTION (%) Gr	Sa	Si	Cl
				NOT SAMPLED								
94.0 / 18.3				START OF SOIL SAMPLING AT 18.3 M.								
				SAND AND SILT TILL TO SANDY SILT TILL, some clay, trace gravel, dense to very dense, grey	1		61					
					2		43		5	34	42	19
					3		33					
90.0 / 22.3				SAND AND SILT TILL TO SANDY SILT TILL, some gravel, trace clay, very dense, grey	4		85/ 28cm	> 99				
					5		50/ 10cm	> 99				
					6		88		15	28	39	18
					7		50/ 10cm	> 99				
					8		50/ 12.5cm	> 99				

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SAMPLE TYPE: Auger Sample; Split Spoon Sample; Bulk Sample; Thin Wall Tube Sampler; Pionjar Sample; Soil Core (PQ)

BACKFILL LEGEND: Concrete; Drill Cuttings; Asphalt; Bentonite; Filter Sand; Slotted Pipe; Grout; Slough

LOG OF BOREHOLE SLR-DUNDAS-BLOORDEVELOPMENT.GPJ GEOTERRE.GDT 6/17/22

LOG OF BOREHOLE BH22-4

PROJECT No.: **TG22-020**
CLIENT: **SLR**
PROJECT: **Dundas/Bloor Proposed Development**
LOCATION: **2280 Dundas Street West, Toronto, Ontario**
SURFACE ELEV.: **112.30 metres (Geodetic)**

Drilling Data
METHOD: **See Note 1**
DIAMETER:
PREP. BY: **PS** APPR. BY: **IC**
DATE: **April 25 2022**

ELEV. (m) / DEPTH (m)	Water/Backfill Data	% MOISTURE (W_P W W_L) 10 20 30 40	Symbol	MATERIAL DESCRIPTION	SAMPLE NUMBER	SAMPLE TYPE	'N' VALUE	VANE (kPa) ✖ Pocket Pen (kPa) + 20 40 60 80; SPT (N) ● DCPT ◆ Blows/0.3m 20 40 60 80	GRAIN SIZE DISTRIBUTION (%) Gr Sa Si Cl
81.8 / 30.5				START OF ROCK CORING AT 30.5 M (see Note 2).	9		50/ 2.5cm	> 99●	
				PRESUMED SHALE BEDROCK, totally to highly weathered, extremely weak to very weak, grey [GEORGIAN BAY FORMATION]	1				
					2				
					3				
77.6 / 34.7				END OF BOREHOLE IN PRESUMED SHALE BEDROCK AT A DEPTH OF 34.75 M.					

MONITORING WELL (50 mm diameter) INSTALLED TO A TIP DEPTH OF 32.34 M (1.5 M LONG SCREEN) UPON COMPLETION OF DRILLING.

MONITORING WELL WATER LEVEL READINGS

DATE	Depth (m)	Elevation (m)
May18'22	12.40	99.90
June 3'22	12.55	99.75
June 10'22	12.53	99.77

REPORTED SPT 'N' VALUES OBTAINED USING AN AUTOMATIC DROP HAMMER.

Notes:
1) WASHBORING INSIDE 105 mm DIAMETER CASING TO 30.52 M FOLLOWED BY ROCK CORING WITH 96 mm OUTSIDE DIAMETER CORE BARREL FROM 30.52 M TO 34.75 M..

2)THREE (3) ROCK CORE RUNS(30.5 m to 32.0 m; 32.0 m to 33.2 m; 33.2 m to 34.75 m) RESULTED IN 50 mm OF STRONG LIMESTONE BEING RECOVERED FROM WITHIN THE ROCK CORING BIT AFTER COMPLETION OF THE 3RD CORE RUN.

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SAMPLE TYPE: Auger Sample; Split Spoon Sample; Bulk Sample; Thin Wall Tube Sampler; Pionjar Sample; Soil Core (PQ)

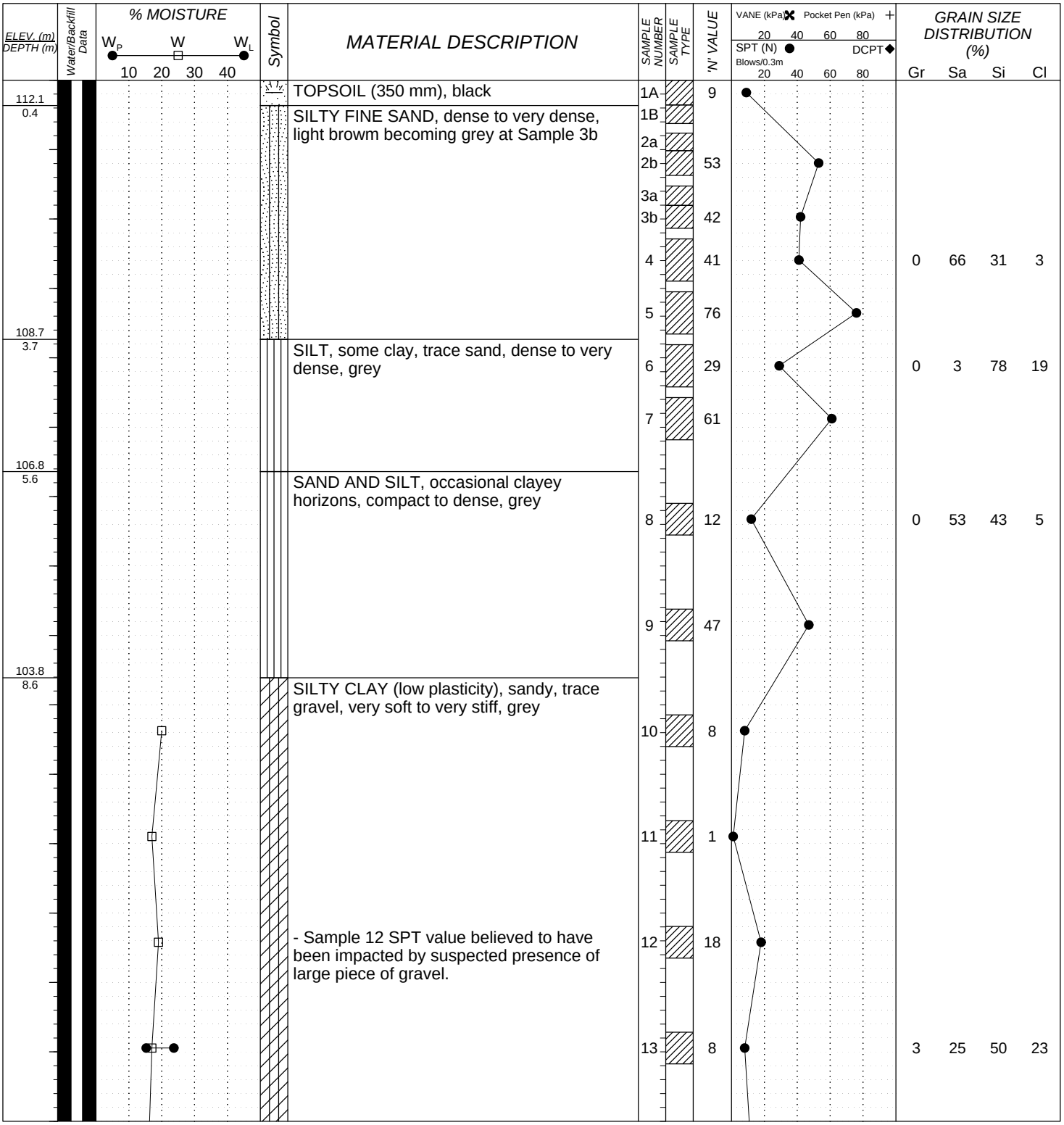
BACKFILL LEGEND: Concrete; Drill Cuttings; Asphalt; Bentonite; Filter Sand; Slotted Pipe; Grout; Slough

LOG OF BOREHOLE BH22-5

PROJECT No.: **TG22-020**
CLIENT: **SLR**
PROJECT: **Dundas/Bloor Proposed Development**
LOCATION: **2280 Dundas Street West, Toronto, Ontario**
SURFACE ELEV.: **112.45 metres (Geodetic)**

Drilling Data
METHOD: **See Note 1**
DIAMETER:
PREP. BY: **PS** APPR. BY: **IC**
DATE: **May 13 2022**

ELEV. (m) / DEPTH (m)	MATERIAL DESCRIPTION	SAMPLE NUMBER	'N' VALUE	Gr	Sa	Si	Cl
112.1 / 0.4	TOPSOIL (350 mm), black	1A	9				
	SILTY FINE SAND, dense to very dense, light browm becoming grey at Sample 3b	1B					
		2a					
		2b	53				
		3a					
		3b	42				
		4	41	0	66	31	3
		5	76				
108.7 / 3.7	SILT, some clay, trace sand, dense to very dense, grey	6	29	0	3	78	19
		7	61				
106.8 / 5.6	SAND AND SILT, occasional clayey horizons, compact to dense, grey	8	12	0	53	43	5
		9	47				
103.8 / 8.6	SILTY CLAY (low plasticity), sandy, trace gravel, very soft to very stiff, grey	10	8				
		11	1				
	- Sample 12 SPT value believed to have been impacted by suspected presence of large piece of gravel.	12	18				
		13	8	3	25	50	23



GRAIN SIZE DISTRIBUTION (%)

GEOTERRE LIMITED
215 Advance Blvd. - Unit 5/6
Brampton, Ontario L6T 4V9
Phone: (905) 455-5666
Fax: (905) 455-5639
e-mail: toronto@geoterre.ca

SAMPLE TYPE: Auger Sample, Split Spoon Sample, Bulk Sample, Thin Wall Tube Sampler, Pionjar Sample, Soil Core (PQ)

BACKFILL LEGEND: Concrete, Drill Cuttings, Asphalt, Bentonite, Filter Sand, Slotted Pipe, Grout, Slough

LOG OF BOREHOLE SLR-DUNDAS-BLOORDEVELOPMENT.GPJ GEOTERRE.GDT 6/28/22

LOG OF BOREHOLE BH22-5

PROJECT No.: **TG22-020**
CLIENT: **SLR**
PROJECT: **Dundas/Bloor Proposed Development**
LOCATION: **2280 Dundas Street West, Toronto, Ontario**
SURFACE ELEV.: **112.45 metres (Geodetic)**

Drilling Data
METHOD: **See Note 1**
DIAMETER:
PREP. BY: **PS** APPR. BY: **IC**
DATE: **May 13 2022**

ELEV. (m) / DEPTH (m)	MATERIAL DESCRIPTION	SAMPLE NUMBER	'N' VALUE	GRAIN SIZE DISTRIBUTION (%) Gr	Sa	Si	Cl
	SILTY CLAY (low plasticity), sandy, trace gravel, very soft to very stiff, grey	14	12				
		15	13				
94.7 / 17.8	SAND AND SILT TILL TO SILTY SAND TILL, some clay, trace to some gravel, dense to very dense, grey	16	36				
		17	48	4	36	43	17
		18	77				
		19	93/ 28cm				
		20	71				
		21	84	11	40	33	16
		22	84/ 28cm				
		23	50/ 10cm				
82.6 / 29.8							

Water/Backfill Data

% MOISTURE: W_P W W_L; 10 20 30 40

Symbol

VANE (kPa) ✖ Pocket Pen (kPa) +; 20 40 60 80

SPT (N) ● DCPT ◆ Blows/0.3m; 20 40 60 80

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Fax: (905) 455-5639
e-mail: toronto@geoterre.ca

SAMPLE TYPE: Auger Sample; Split Spoon Sample; Bulk Sample; Thin Wall Tube Sampler; Pionjar Sample; Soil Core (PQ)

BACKFILL LEGEND: Concrete; Drill Cuttings; Asphalt; Bentonite; Filter Sand; Slotted Pipe; Grout; Slough

LOG OF BOREHOLE BH22-5

PROJECT No.: **TG22-020**
CLIENT: **SLR**
PROJECT: **Dundas/Bloor Proposed Development**
LOCATION: **2280 Dundas Street West, Toronto, Ontario**
SURFACE ELEV.: **112.45 metres (Geodetic)**

Drilling Data
METHOD: **See Note 1**
DIAMETER:
PREP. BY: **PS** APPR. BY: **IC**
DATE: **May 13 2022**

ELEV. (m) / DEPTH (m)	Water/Backfill Data	% MOISTURE (W_P W W_L) 10 20 30 40	Symbol	MATERIAL DESCRIPTION	SAMPLE NUMBER	SAMPLE TYPE	'N' VALUE	VANE (kPa) ✖ Pocket Pen (kPa) + 20 40 60 80; SPT (N) ● DCPT ◆ Blows/0.3m 20 40 60 80	GRAIN SIZE DISTRIBUTION (%) Gr Sa Si Cl
				SHALE BEDROCK, grey [GEORGIAN BAY FORMATION]	24		50/ 2.5cm	> 99●	
81.9 / 30.6				START OF CORING AT 30.58 M REFER TO ROCK LOG FOR DETAILS	1				
81.3 / 31.2				END OF BOREHOLE IN SHALE BEDROCK AT DEPTH OF 31.2 M					

MONITORING WELL (50 mm diameter) INSTALLED TO A TIP DEPTH OF 31.0 M (1.5 M LONG SCREEN) UPON COMPLETION OF DRILLING.

MONITORING WELL WATER LEVEL READINGS

DATE	Depth (m)	Elevation (m)
May 18'22	0.96	111.49
June 3'22	17.44	95.01
June 10'22	15.11	97.36

REPORTED SPT 'N' VALUES OBTAINED USING AN AUTOMATIC DROP HAMMER.

Notes:
1) HOLLOW STEM AUGERS (200mm diameter) TO 6 M; WASHBORING IN CONJUNCTION WITH 96 mm DIAMETER TRI-CONE TO 30.48 M; ADVANCE CASING (106 mm diameter) TO 30.58 M; ROCK CORING WITH HQ SIZE CORE BIT (96 mm diameter) 30.58 M TO 31.19 M.

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SAMPLE TYPE: Auger Sample; Split Spoon Sample; Bulk Sample; Thin Wall Tube Sampler; Pionjar Sample; Soil Core (PQ)

BACKFILL LEGEND: Concrete; Drill Cuttings; Asphalt; Bentonite; Filter Sand; Slotted Pipe; Grout; Slough

ROCK CORE LOG OF BOREHOLE BH22-5-ROCK

PROJECT No.: **TG22-020**
CLIENT: **SLR**
PROJECT: **Dundas/Bloor Proposed Development**
LOCATION: **2280 Dundas Street West, Toronto, Ontario**
SURFACE ELEV.: **87.45 metres (Geodetic)**

Coring Data
METHOD: **Refer To Log**
CORE SIZE: **NQ**
PREP. BY: **PS** APPR. BY: **IC**
DATE: **May 13 2022**

ELEV. (m) DEPTH (m)	Core Run Number	Core Run Limits	TCR %	SCR %	RQD %	Symbol	MATERIAL DESCRIPTION AND REMARKS	FRACTURE INDEX (fractures/0.3 m) 2 4 6 8
							START OF ROCK CORE LOG AT DEPTH OF 25 M (Elevation 87.45 m). REFER TO SOIL LOG FOR OVERBURDEN STRATIGRAPHIC FROM GROUND SURFACE TO DEPTH OF 30.58 M.	
							START OF ROCK CORING USING HQ CORE (96 mm diameter) at 30.58 M.	
81.9 5.6 81.3 6.2	1		100	71	58		SHALE BEDROCK, interlayered horizons of strong limestone and totally to highly weathered layers of shale (see Note 1 below for details), grey [GEORGIAN BAY FORMATION]	
							END OF ROCK CORING IN SHALE BEDROCK AT DEPTH OF 31.19 M DUE TO INABILITY TO CORE THE INTERLAYERED NATURE OF THE SHALE BEDROCK. Note 1) Strong Limestone - 30.58 m to 30.78 m Totally Weathered Shale - 30.78 m to 30.91 m (essentially clay) Strong Limestone - 30.91 m to 30.96 m Highly Weathered Shale - 30.96 m to 31.09 m Totally Weathered Shale - 31.09 m to 31.11 m (essentially clay) Highly Weathered Shale - 31.11 m to 31.19 m	

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E-Mail: geoterre@geoterre.ca

SAMPLE TYPE LEGEND

Auger Sample
Rock Core
Pionjar Sample
Split Spoon Sample
Side Sampler
Bulk Sample
70mm Thin Wall Tube
75mm Split Spoon Sample

LOG OF ROCKCORE SLR-DUNDAS-BLOORDEVELOPMENT.GPJ GEOTERRE.GDT 6/28/22

SLR
2280 DUNDAS STREET WEST
BH22-5
Box 1
100' 4" to 102' 4" (30.60 m to 31.21 m)
ELEVATION – 82.05 m to 81.44 m
100'4"
102'4"

Appendix C Groundwater Level Data

Preliminary Hydrogeological Assessment

Bloor and Dundas Development
Toronto, Ontario

Choice Properties LP

SLR Project No. 209.30128.00000

June 30, 2022

Table C-1: Groundwater Elevations

MW ID	X	Y	Ground Surface Elevation	Top of Pipe Elevation	Top Screen	Bottom Screen	Screened Strata	3-Jun-22		10-Jun-22		16-Jun-22	
	Northing	*Easting*	*m AMSL**	*m AMSL**	*m AMSL**	*m AMSL**		*mbgs*	*m AMSL**	*mbgs*	*m AMSL**	*mbgs*	*m AMSL**
Current Investigation Monitoring Wells													
BH22-1	4834748.10	624829.15	112.92	112.86	80.65	78.13	Sandy Silt Till	6.53	106.39	6.74	106.18	6.84	106.08
BH22-3D	4834712.97	624970.52	112.08	111.99	84.19	81.14	Sandy Silt Till to Shale Bedrock	14.76	97.32	14.46	97.62	14.30	97.78
BH22-3S	4834713.18	624971.58	112.08	112.00	98.36	96.84	Sandy Silt Till	2.61	109.47	2.37	109.72	2.66	109.42
BH22-4	4834712.01	625094.93	112.36	112.30	81.54	80.02	Shale Bedrock	12.51	99.85	12.52	99.85	12.60	99.76
BH22-5	4834831.36	625026.66	112.45	112.28	82.93	81.42	Sandy Silt Till to Shale Bedrock	17.44	95.01	15.05	97.40	13.71	98.75
SLR-01	4834758.94	625077.57	112.48	112.42	109.74	106.69	Sand to Silty Sand	2.73	109.75	2.86	109.62	2.91	109.57
SLR-02	4834672.71	625109.93	111.62	111.47	109.49	106.44	Sand to Silty Sand	2.28	109.34	2.27	109.36	2.38	109.24
SLR-04	4834706.94	625062.50	112.28	112.21	109.99	106.95	Sand to Silty Sand	2.71	109.57	2.55	109.74	2.73	109.55
SLR-06	4834771.62	624884.30	112.63	112.50	108.97	105.92	Sand to Silty Sand	3.29	109.34	3.26	109.37	3.25	109.38
SLR-08	4834707.92	624865.49	112.77	112.69	109.87	106.83	Sand to Silty Sand	3.51	109.26	3.54	109.23	3.64	109.13
SLR-09	4834700.49	624855.36	112.93	112.82	110.03	106.99	Sand to Sand and Silt	3.70	109.23	3.77	109.16	3.78	109.16
SLR-10	4834749.99	624873.33	112.83	112.68	110.39	107.34	Sand	3.47	109.36	3.40	109.43	3.49	109.34
SLR-12	4834691.81	625062.35	112.20	112.12	110.37	106.10	Sand to Silty Sand	2.64	109.56	2.54	109.67	2.67	109.54

Notes:

m - metres

mbgs - meters below ground surface

m AMSL - metres above mean sea level

TOP - top of pipe

nm - not measured

n/a - not applicable, borehole not completed as monitoring well

*Elevations are related to Geodetic Datum, derived from the City of Toronto Bench Mark No. CT-1515 (published benchmark no. 12219741515).

Table C-2: Groundwater Elevations - Historical Wells

MW ID	X	Y	Ground Surface Elevation	Top of Pipe Elevation	Top Screen	Bottom Screen	3-Jun-22	
	Northing	*Easting*	*mAMSL*	*mAMSL*	*mAMSL*	*mAMSL*	*mbgs*	*mAMSL**
Current Investigation Monitoring Wells								
BH-1S	4834771.66	624824.91	112.16	112.06	109.108	106.06	3.57	108.49
BH-1D	4834771.41	624823.90	112.9	112.75	100.708	97.66	4.07	108.69
BH-2	4834781.06	624886.64	112.69	112.6	109.638	106.59	3.25	109.35
BH-4	4834832.75	625026.89	112.48	112.35	109.95	106.39	3.39	108.96
BH-5	4834717.87	624855.04	112.7	112.61	103.56	100.51	4.54	108.07
BH-6	4834740.58	624908.15	112.45	112.28	103.308	100.26	3.31	108.97
BH-7	4834736.75	624971.44	112.16	112.06	97.678	94.63	8.99	103.07
BH-8	4834750.79	625084.56	112.48	112.35	103.338	100.29	2.94	109.42
BH-10	4834698.11	625029.58	112.46	112.36	103.318	100.27	3.06	109.30
BH-11S	4834692.46	625089.23	111.69	111.51	108.638	105.59	2.19	109.32
BH-11D	4834771.41	624823.90	111.68	111.57	97.968	94.92	3.40	108.17
MW405	4834755.33	624938.33	112.8	113.57	109.6	108.1	3.66	109.91
MW406	4834747.95	624939.42	112.8	113.48	110.5	109	3.93	109.55
MW409	4834693.29	624846.26	112.91	112.86	110.5	107.5	3.75	109.11
MW501	4834766.51	624946.23	112.79	112.81	109.49	108.48	3.21	109.60
MW502	4834756.98	624948.54	112.8	112.92	110.2	108.81	3.45	109.47
BH-107	4834734.39	624920.93	112.52	112.45	109.544	108.02	2.95	109.50
BH-201	4834732.80	624978.93	112.1	112.03	-	107.96	2.54	109.49
BH-202	4834728.12	624958.14	112.08	112.01	-	106.985	2.48	109.53
BH-203	4834726.73	624938.57	112.28	112.23	-	106.648	2.71	109.52
BH-204	4834683.35	624940.41	112.18	112.05	-	106.129	2.65	109.40
BH-205	4834690.54	624976.93	111.9	111.84	-	106.445	2.37	109.48
BH-206	4834742.99	624831.23	112.88	112.83	-	106.979	3.67	109.16
BH-209	4834766.09	624837.07	112.86	112.8	-	106.99	3.55	109.25
BH-211	4834714.97	624878.03	112.3	112.13	-	107.118	2.75	109.38
BH-212	4834677.75	624884.91	112.41	112.34	-	106.897	3.16	109.18
BH-213	4834713.75	624903.83	111.95	111.87	-	106.665	2.54	109.33
A211625	4834754.59	624824.61	112.92	112.8	102.252	100.728	4.28	108.52

Notes:

m - metres

mbgs - meters below ground surface

m AMSL - metres above mean sea level

TOP - top of pipe

nm - not measured

n/a - not applicable, borehole not completed as monitoring well

*Elevations are related to Geodetic Datum, derived from the City of Toronto Bench Mark No. CT-1515 (published benchmark no. 1221

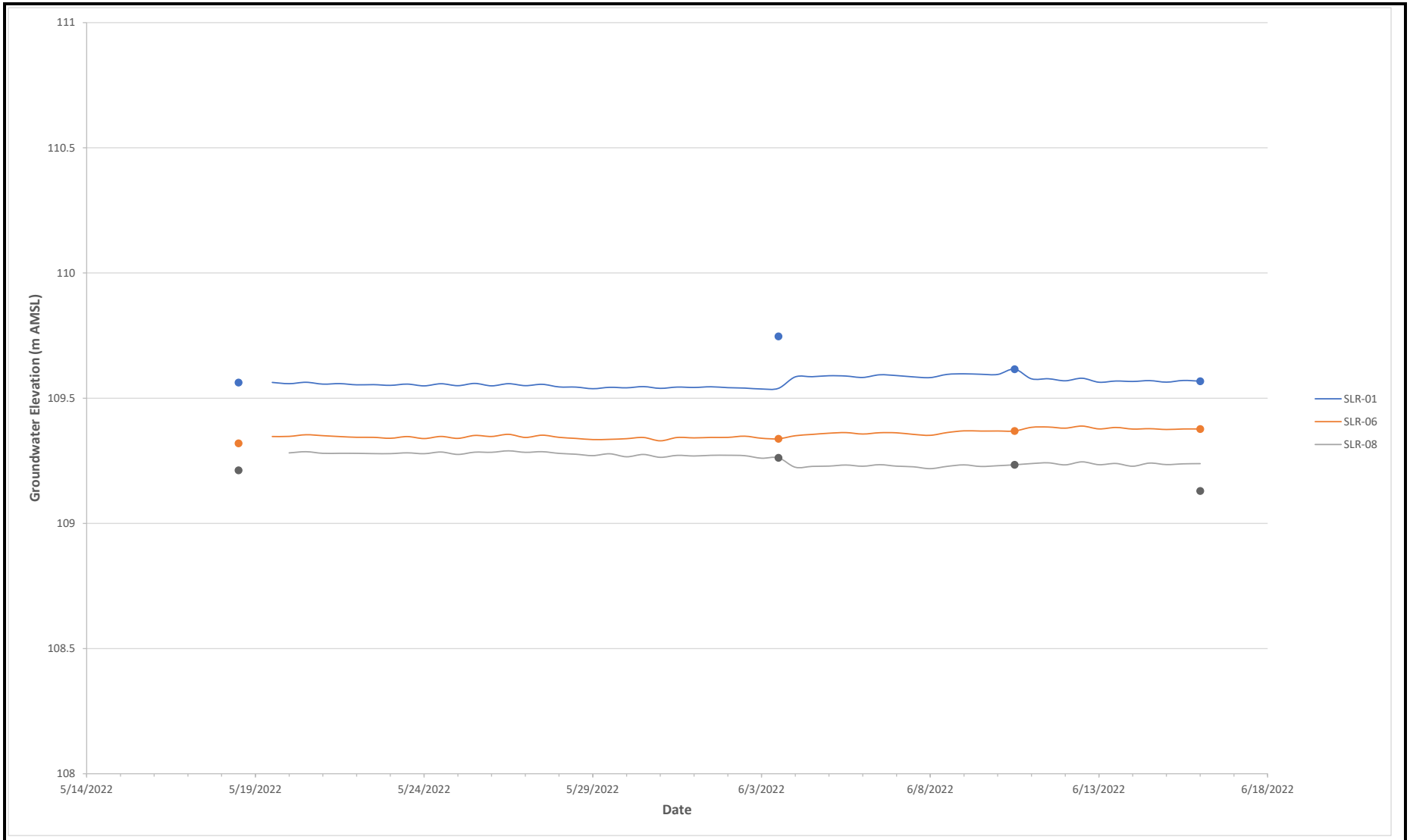


Figure C-1	Hydrograph - Shallow Monitoring Wells Choice Properties LP	SLR

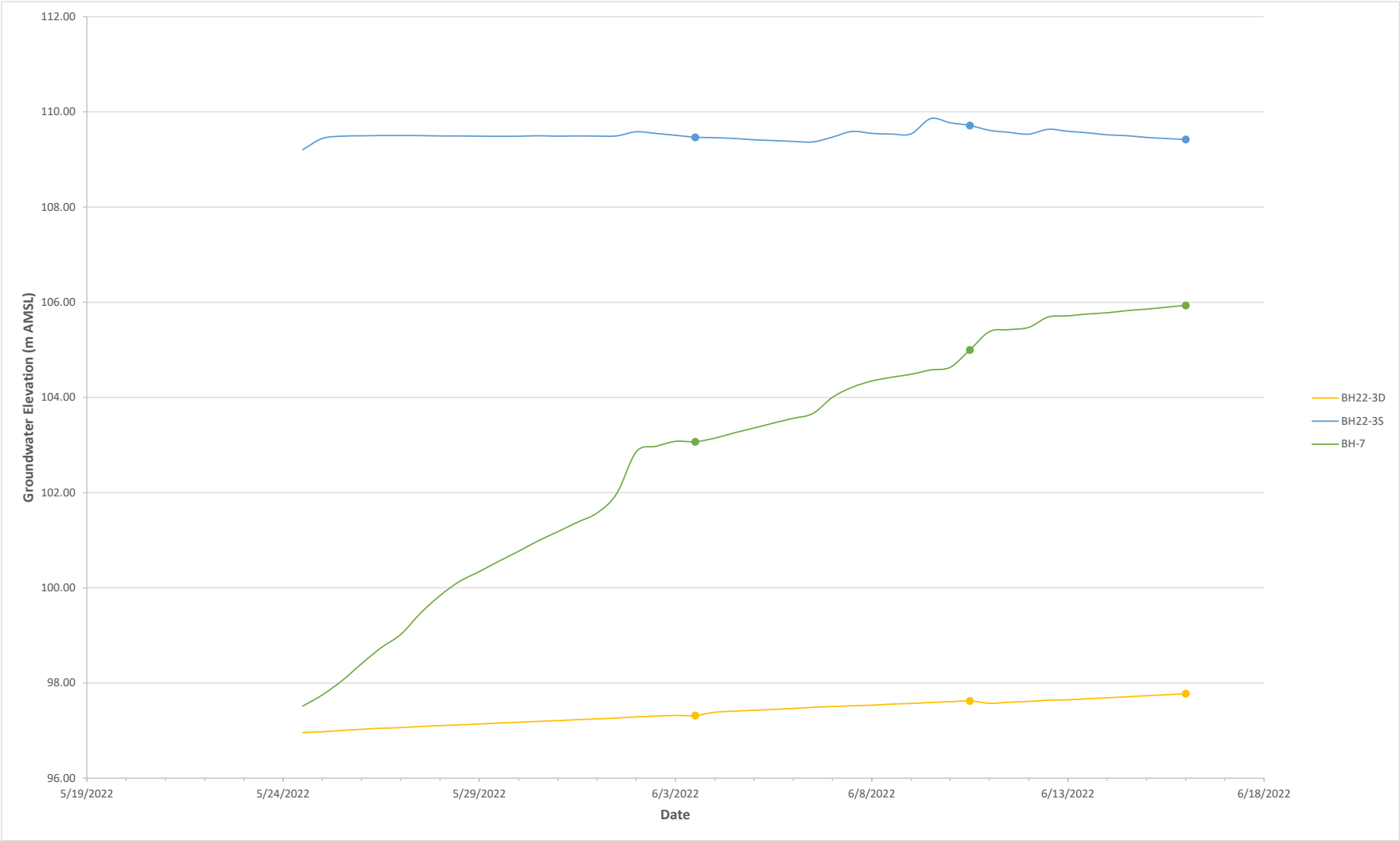


Figure C-2	Hydrograph - Deep Monitoring Wells Choice Properties LP	SLR

Appendix D Hydraulic Conductivity Testing

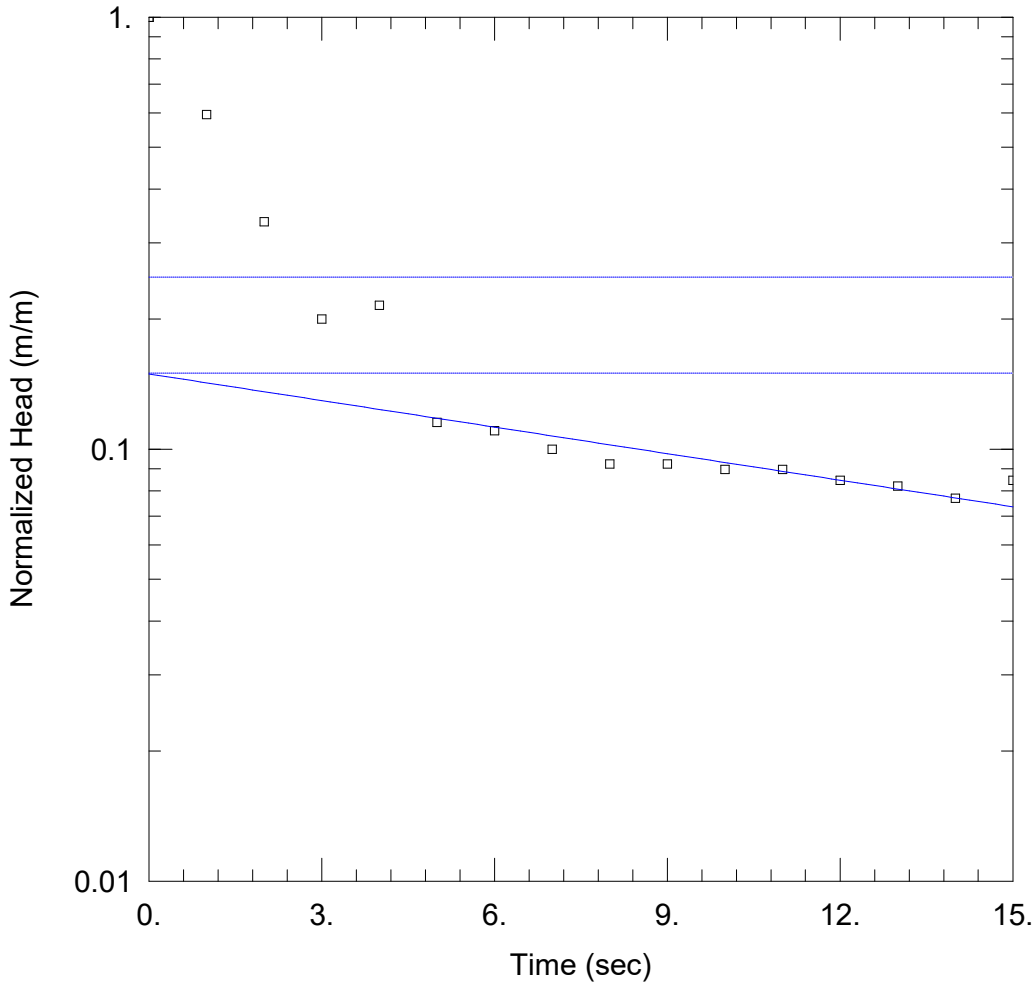
Preliminary Hydrogeological Assessment

Bloor and Dundas Development
Toronto, Ontario

Choice Properties LP

SLR Project No. 209.30128.00000

June 30, 2022



WELL TEST ANALYSIS

Data Set: N:\...\SLR-01.aqt
Date: 06/23/22 Time: 09:58:44

PROJECT INFORMATION

Company: SLR Consulting
Client: Choice Properties REIT
Project: 209.30128
Location: Bloor/Dundas
Test Well: SLR-01
Test Date: May 18, 2022

AQUIFER DATA

Saturated Thickness: 2.95 m
Anisotropy Ratio (Kz/Kr): 1.

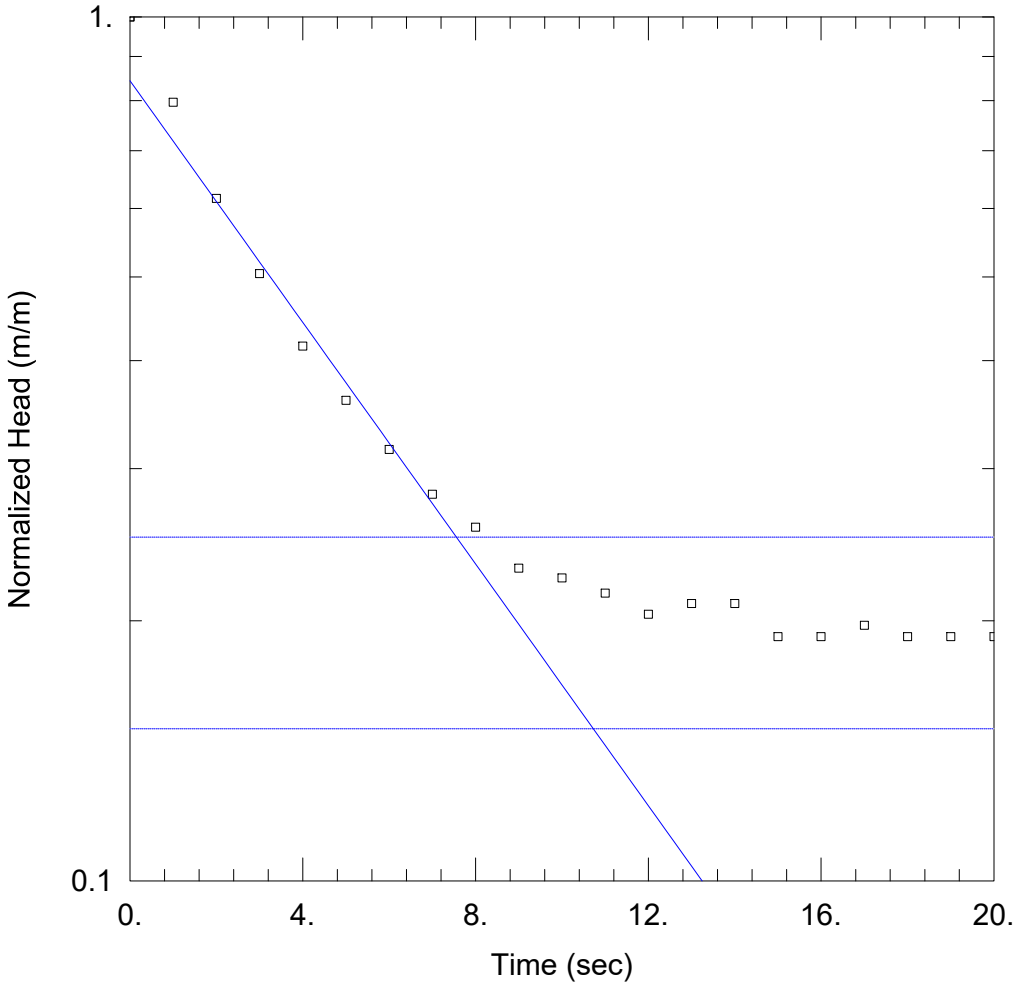
WELL DATA (SLR-01)

Initial Displacement: 0.39 m
Total Well Penetration Depth: 2.95 m
Casing Radius: 0.0254 m
Static Water Column Height: 2.95 m
Screen Length: 2.95 m
Well Radius: 0.1143 m
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Hvorslev

K = 0.0001852 m/sec
y0 = 0.05821 m



WELL TEST ANALYSIS

Data Set: C:\Users\amalatesta\Documents\Choice BloorDundas\SLR-06.aqt
Date: 06/07/22 Time: 17:44:55

PROJECT INFORMATION

Company: SLR Consulting
Client: Choice Properties
Project: 209.30128
Location: Bloor/Dundas
Test Well: SLR-06
Test Date: May 18, 2022

AQUIFER DATA

Saturated Thickness: 3.56 m
Anisotropy Ratio (Kz/Kr): 1.

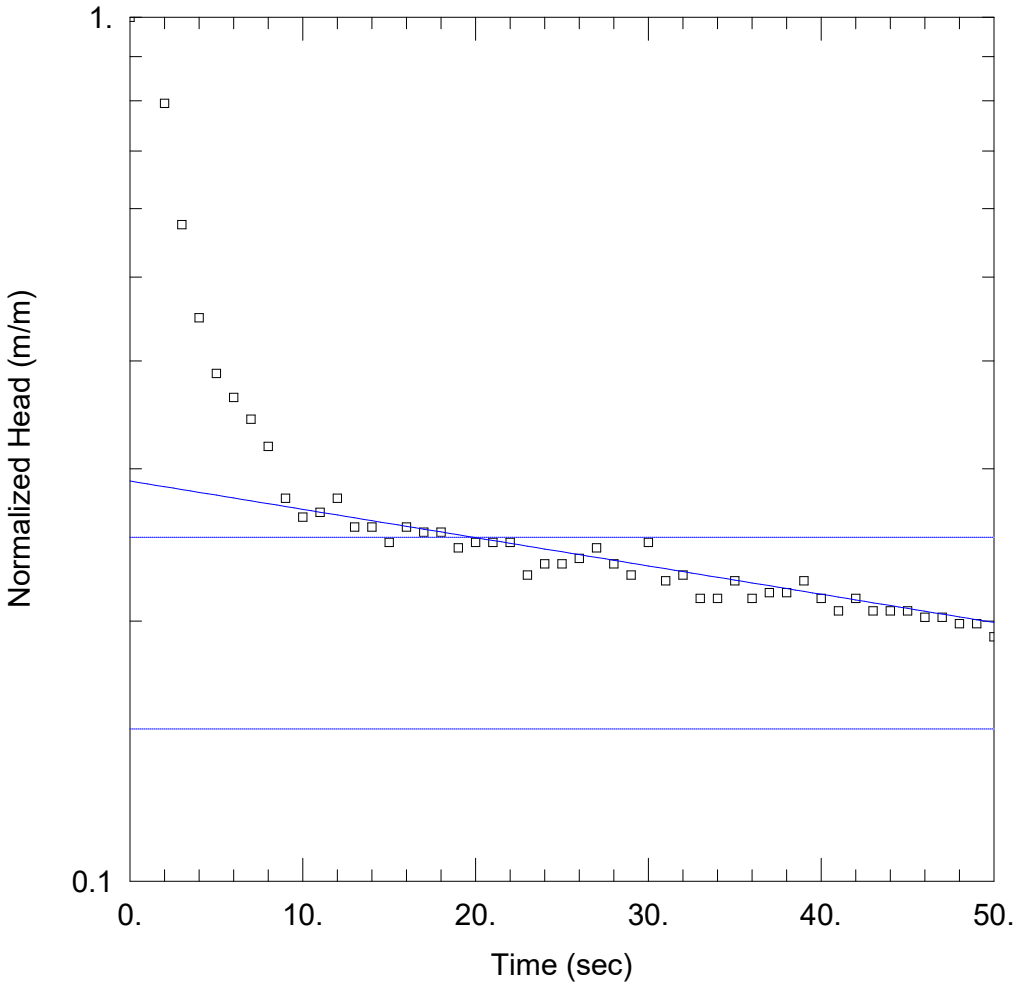
WELL DATA (SLR-06)

Initial Displacement: 0.339 m
Total Well Penetration Depth: 3.56 m
Casing Radius: 0.0254 m
Static Water Column Height: 3.56 m
Screen Length: 3.05 m
Well Radius: 0.1143 m

SOLUTION

Aquifer Model: Unconfined
Solution Method: Hvorslev

K = 5.593E-5 m/sec
y0 = 0.2859 m



WELL TEST ANALYSIS

Data Set: N:\...\SLR-08.aqt
Date: 06/23/22 Time: 10:08:16

PROJECT INFORMATION

Company: SLR Consulting
Client: Choice Properties REIT
Project: 209.30128
Location: Bloor/Dundas
Test Well: SLR-08
Test Date: May 19, 2022

AQUIFER DATA

Saturated Thickness: 2.39 m
Anisotropy Ratio (Kz/Kr): 1.

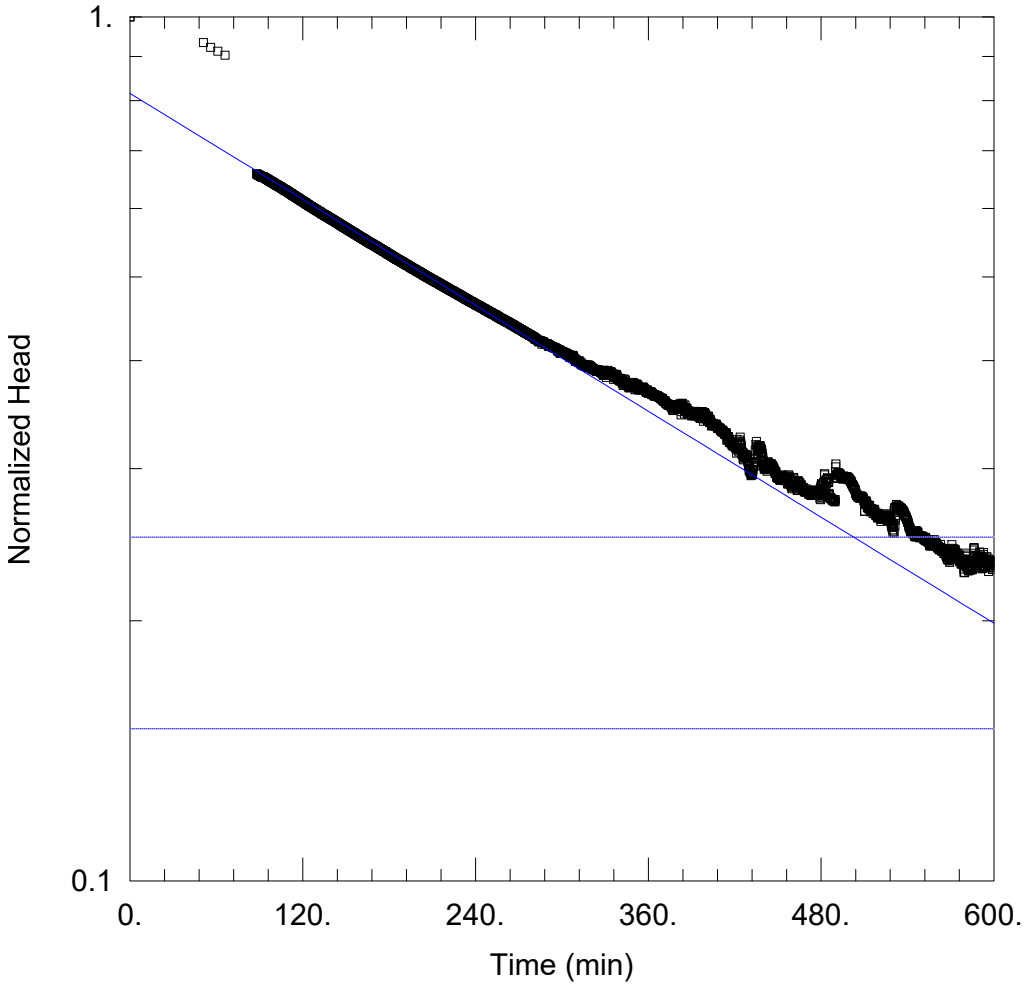
WELL DATA (SLR-08)

Initial Displacement: 0.2677 m
Total Well Penetration Depth: 2.39 m
Casing Radius: 0.254 m
Static Water Column Height: 2.39 m
Screen Length: 2.39 m
Well Radius: 0.1143 m
Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined
Solution Method: Hvorslev

K = 0.0004103 m/sec
y0 = 0.07774 m



WELL TEST ANALYSIS

Data Set: N:\...\BH22-3D.aqt
Date: 06/15/22 Time: 12:55:23

PROJECT INFORMATION

Company: SLR Consulting (Canada)
Client: Choice Properties
Project: 209.30128.00000
Test Well: BH22-3D
Test Date: May 18, 2022

AQUIFER DATA

Saturated Thickness: 3.05 m Anisotropy Ratio (Kz/Kr): 1.

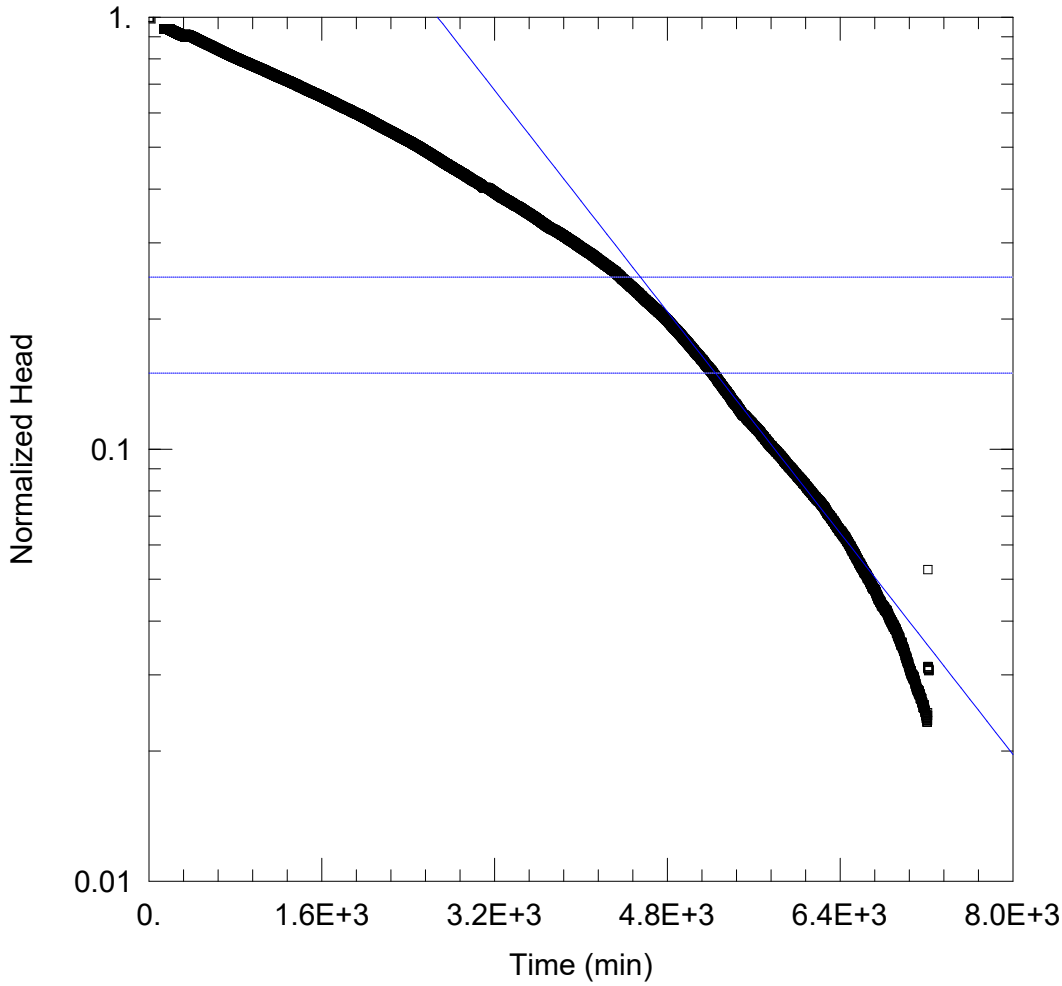
WELL DATA (BH22-3D)

Initial Displacement: 10.81 m Static Water Column Height: 15.88 m
Total Well Penetration Depth: 15.88 m Screen Length: 3.05 m
Casing Radius: 0.0254 m Well Radius: 0.048 m

SOLUTION

Aquifer Model: Confined Solution Method: Hvorslev

K = 2.01E-8 m/sec y0 = 8.815 m



WELL TEST ANALYSIS

Data Set: N:\...\BH22-3S.aqt
Date: 06/23/22 Time: 09:48:05

PROJECT INFORMATION

Company: SLR Consulting
Client: Choice Properties REIT
Location: Vive
Test Well: BH22-3S
Test Date: May 19, 2022

AQUIFER DATA

Saturated Thickness: 1.52 m Anisotropy Ratio (Kz/Kr): 1.

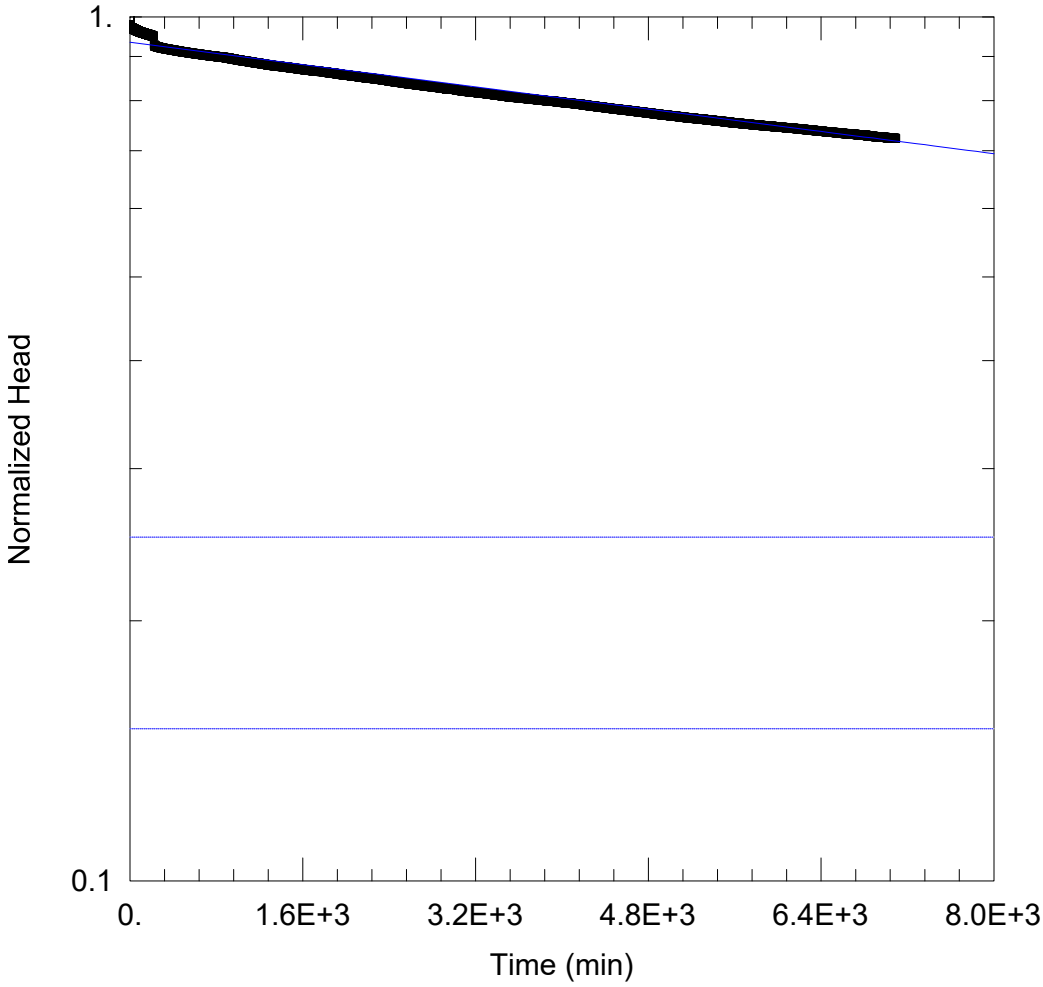
WELL DATA (BH22-3S)

Initial Displacement: 12.05 m Static Water Column Height: 12.69 m
Total Well Penetration Depth: 12.69 m Screen Length: 1.52 m
Casing Radius: 0.0254 m Well Radius: 0.048 m

SOLUTION

Aquifer Model: Confined Solution Method: Hvorslev

K = 1.082E-8 m/sec y0 = 86.48 m



WELL TEST ANALYSIS

Data Set:
Date: 06/13/22 Time: 12:43:44

PROJECT INFORMATION

Company: SLR Consulting (Canada)
Client: Choice Properties
Project: 209.30128.00000
Test Well: BH22-5
Test Date: May 19, 2022

AQUIFER DATA

Saturated Thickness: 1.51 m
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (BH22-5)

Initial Displacement: 28.69 m
Static Water Column Height: 29.6 m
Total Well Penetration Depth: 29.6 m
Screen Length: 1.51 m
Casing Radius: 0.0254 m
Well Radius: 0.048 m

SOLUTION

Aquifer Model: Confined
Solution Method: Hvorslev
K = 7.004E-10 m/sec
y0 = 26.81 m

Appendix E Groundwater Quality

Preliminary Hydrogeological Assessment

Bloor and Dundas Development
Toronto, Ontario

Choice Properties LP

SLR Project No. 209.30128.00000

June 30, 2022

Table E-1: Groundwater Quality Summary

	UNITS	Sanitary Sewer Criteria	Storm Sewer Criteria	BH 6	BH 203	18BH-5	18BH-9	18BH-11S
Sampling Date				2022/04/21 10:55	2022/04/21 15:55	2018/03/19	2018/04/20	2018/04/20
Sampling Completed By:				**SLR**		**Toronto Inspection**		
Well ID:				**BH 6**	**BH 203**	**BH-5**	**BH-9**	**BH-11S**
Inorganics								
Total BOD	mg/L	**300**	15	<2	2	6	<2	<2
Fluoride	mg/L	**10**		*	*	0.12	<0.06	<0.06
TKN	mg/L	**100**		*	*	2.1	<0.5	<0.5
pH	pH	**6.0:11.5**	6.0:9.5	7.86	7.99	7.54	6.93	7.41
Phenols-4AAP	mg/L	**1.0**	0.008	<0.0010	<0.0010	0.008	0.002	<0.002
Total Suspended Solids	mg/L	**350**	15	14	14	8	9	32
Total Cyanide (CN)	mg/L	**2**	0.02	<0.0050	0.011	<0.01	<0.01	<0.01
Metals								
Chromium (VI)	mg/L	**2**	0.4	<0.00050	0.00	<0.0002	<0.0002	<0.0002
Mercury (Hg)	mg/L	**0.01**	0.0004	<0.00010	<0.00010	<0.00001	<0.00001	<0.00001
Total Aluminum	mg/L	**50**		0.32	0.28	0.076	0.019	0.291
Total Antimony	mg/L	**5**		<0.0005	0.00062	<0.0002	<0.0002	<0.0002
Total Arsenic (As)	mg/L	**1**	0.02	0.01	<0.001	0.0061	0.0003	0.0007
Total Cadmium (Cd)	mg/L	**7**	0.008	<0.000090	<0.000090	0.000056	0.000071	0.000019
Total Chromium (Cr)	mg/L	**4**	0.08	<0.0050	<0.0050	0.00068	0.0002	0.00074
Total Cobalt	mg/L	**5**		<0.0050	0.0062	0.00269	0.00209	0.00175
Total Copper (Cu)	mg/L	**2**	0.04	0.0011	0.0048	0.00305	0.00129	0.00244
Total Lead (Pb)	mg/L	**1**	0.12	0.0071	0.0031	0.00235	0.00009	0.00066
Total Manganese (Mn)	mg/L	**5**	0.05	0.072	0.031	0.198	1.02	0.56
Total Molybdenum	mg/L	**5**		*	*	0.00347	0.00238	0.00134
Total Nickel (Ni)	mg/L	**2**	0.08	<0.0010	0.0013	0.212	0.0039	0.0073
Total Phosphorus (P)	mg/L	**10**	0.4	0.16	<0.1	0.018	0.013	0.026
Total Selenium (Se)	mg/L	**1**	0.02	<0.002	<0.002	0.0001	0.00136	0.00007
Total Silver (Ag)	mg/L	**5**	0.12	<0.00009	<0.00009	<0.00005	0.00005	<0.00005
Total Tin	mg/L	**5**		<0.001	<0.001	0.00042	0.00011	0.00028
Total Titanium	mg/L	**5**		0.011	0.012	0.00352	0.0009	0.0149
Total Zinc (Zn)	mg/L	**2**	0.04	<0.005	0.026	0.008	<0.002	0.003
Petroleum Hydrocarbons								
Animal/Vegetable Oil & Grease	**mg/L**	**150**		*	*	<4	<4	<4
Mineral/Synthetic Oil & Grease	**mg/L**	**15**		*	*	<4	<4	<4
Volatile Organics								
Benzene	mg/L	**0.01**	0.002	<0.0004	<0.0004	<0.0005	<0.0005	<0.0005
Chloroform	mg/L	**0.040**	0.002	<0.0004	<0.0004	<0.0005	<0.0005	<0.0005
1,2-Dichlorobenzene	mg/L	**0.050**	0.006	<0.0008	<0.0008	<0.0005	<0.0005	<0.0005
1,4-Dichlorobenzene	mg/L	**0.08**	0.0068	<0.0008	<0.0008	<0.0005	<0.0005	<0.0005
cis-1,2-Dichloroethylene	mg/L	**4**	0.0056	<0.001	<0.001	<0.0005	<0.0005	<0.0005
trans-1,3-Dichloropropene	mg/L	**0.14**	0.0056	<0.0008	<0.0008	<0.0005	<0.0005	<0.0005
Ethylbenzene	mg/L	**0.16**	0.002	<0.0004	<0.0004	<0.0005	<0.0005	<0.0005
Methylene Chloride(Dichloromethane)	mg/L	**2**	0.0052	<0.004	<0.004	<0.0005	<0.0005	<0.0005
1,1,2,2-Tetrachloroethane	mg/L	**1.4**	0.017	<0.0008	<0.0008	<0.0005	<0.0005	<0.0005
Tetrachloroethylene	mg/L	**1**	0.0044	<0.0004	<0.0004	<0.0005	<0.0005	<0.0005
Toluene	mg/L	**0.016**	0.002	<0.0004	<0.0004	<0.0005	<0.0005	<0.0005
Trichloroethylene	mg/L	**0.4**	0.0076	<0.0004	<0.0004	<0.0005	<0.0005	<0.0005
Total Xylenes	mg/L	**1**	0.0044	<0.0004	<0.0004	<0.0005	<0.0005	<0.0005
Semivolatile Organics								
Di-N-butyl phthalate	mg/L	**0.08**	0.015	<0.002	<0.002	<0.002	<0.002	<0.002
Bis(2-ethylhexyl)phthalate	mg/L	**0.012**	0.0088	<0.002	<0.002	<0.002	<0.002	<0.002
3,3'-Dichlorobenzidine	mg/L	**0.002**	0.0008	<0.0008	<0.0008	<0.0005	<0.0005	<0.0005
Pentachlorophenol	mg/L	**0.005**	0.002	<0.001	<0.001	<0.0005	<0.0005	<0.0005
Total PAHs (18 PAHs)	mg/L	**0.005**	0.002	<0.001	<0.001	<0.001	<0.001	<0.001
Total PCB	mg/L	**0.00100**	0.0004	<0.00005	<0.00005	<0.0001	<0.0001	<0.0001
Miscellaneous Parameters								
Nonylphenol (Total)	mg/L	**0.02**	0.001	<0.001	<0.001	<0.01	<0.01	<0.01
Nonylphenol Ethoxylate (Total)	mg/L	**0.2**	0.01	<0.005	<0.005	<0.001	<0.001	<0.001
Microbiological								
Escherichia coli	CFU/100mL	**10**	200	<10	30	<2	<2	<2

Notes:

* Parameter unavailable

Your P.O. #: MAR3755
Your Project #: 209.30128.00000
Site Location: CP REIT
Your C.O.C. #: 875233-02-01

Attention: Alicia Dibben

SLR Consulting (Canada) Ltd
200-300 Town Centre Blvd.
Markham, ON
CANADA L3R 5Z6

Report Date: 2022/06/28
Report #: R7189229
Version: 3 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BUREAU VERITAS JOB #: C2A6315
Received: 2022/04/21, 18:31

Sample Matrix: Water
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Sewer Use By-Law Semivolatile Organics	2	2022/04/24	2022/04/25	CAM SOP 00301	EPA 8270 m
Biochemical Oxygen Demand (BOD)	2	2022/04/22	2022/04/27	CAM SOP-00427	SM 23 5210B m
Chromium (VI) in Water	2	N/A	2022/04/22	CAM SOP-00436	EPA 7199 m
Total Cyanide	2	2022/04/22	2022/04/22	CAM SOP-00457	OMOE E3015 5 m
Mercury in Water by CVAA	2	2022/04/22	2022/04/22	CAM SOP-00453	EPA 7470A m
Total Metals Analysis by ICPMS	2	N/A	2022/04/25	CAM SOP-00447	EPA 6020B m
E.coli, (CFU/100mL)	2	N/A	2022/04/21	CAM SOP-00552	MOE LSB E3371
Total Nonylphenol in Liquids by HPLC	2	2022/04/22	2022/04/23	CAM SOP-00313	In-house Method
Nonylphenol Ethoxylates in Liquids: HPLC	2	2022/04/22	2022/04/23	CAM SOP-00313	In-house Method
Polychlorinated Biphenyl in Water	2	2022/04/23	2022/04/24	CAM SOP-00309	EPA 8082A m
pH	2	2022/04/22	2022/04/22	CAM SOP-00413	SM 4500H+ B m
Phenols (4AAP)	2	N/A	2022/04/22	CAM SOP-00444	OMOE E3179 m
Total PAHs (1)	2	N/A	2022/04/25	CAM SOP - 00301	
Total Suspended Solids	2	2022/04/22	2022/04/25	CAM SOP-00428	SM 23 2540D m
Volatile Organic Compounds in Water	2	N/A	2022/04/24	CAM SOP-00228	EPA 8260C m

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvlabs.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Your P.O. #: MAR3755
Your Project #: 209.30128.00000
Site Location: CP REIT
Your C.O.C. #: 875233-02-01

Attention: Alicia Dibben

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200-300 Town Centre Blvd.
Markham, ON
CANADA L3R 5Z6

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CERTIFICATE OF ANALYSIS – REVISED REPORT

BUREAU VERITAS JOB #: C2A6315
Received: 2022/04/21, 18:31

dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) Total PAHs include only those PAHs specified in the sewer use by-by-law.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Ronklin Gracian, Project Manager
Email: Ronklin.Gracian@bureauveritas.com
Phone# (905)817-5752
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Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports.
For Service Group specific validation please refer to the Validation Signature Page.

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Bureau Veritas Job #: C2A6315
Report Date: 2022/06/28

SLR Consulting (Canada) Ltd
Client Project #: 209.30128.00000
Site Location: CP REIT
Your P.O. #: MAR3755
Sampler Initials: JN

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID				SKP070			SKP070		
Sampling Date				2022/04/21 10:55			2022/04/21 10:55		
COC Number				875233-02-01			875233-02-01		
	UNITS	**San**	**Stm**	**BH 6**	**RDL**	**QC Batch**	**BH 6 Lab-Dup**	**RDL**	**QC Batch**
Inorganics									
Total BOD	mg/L	**300**	15	<2	2	7953683			
pH	pH	**6.0:11.5**	6.0:9.5	7.86		7953669	7.85		7953669
Phenols-4AAP	mg/L	**1.0**	0.008	<0.0010	0.0010	7953384			
Total Suspended Solids	mg/L	**350**	15	14	10	7953734			
Total Cyanide (CN)	mg/L	**2**	0.02	<0.0050	0.0050	7954522	<0.0050	0.0050	7954522

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
San,Stm: Toronto Sanitary and Storm Sewer Use By Law Guidelines, respectively. Referenced to Chapter 681

Bureau Veritas ID				SKP071		
Sampling Date				2022/04/21 15:55		
COC Number				875233-02-01		
	UNITS	**San**	**Stm**	**BH 203**	**RDL**	**QC Batch**
Inorganics						
Total BOD	mg/L	**300**	15	<2	2	7953683
pH	pH	**6.0:11.5**	6.0:9.5	7.99		7953669
Phenols-4AAP	mg/L	**1.0**	0.008	<0.0010	0.0010	7953384
Total Suspended Solids	mg/L	**350**	15	14	10	7953734
Total Cyanide (CN)	mg/L	**2**	0.02	0.011	0.0050	7954522

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
San,Stm: Toronto Sanitary and Storm Sewer Use By Law Guidelines, respectively. Referenced to Chapter 681

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Bureau Veritas Job #: C2A6315
Report Date: 2022/06/28

SLR Consulting (Canada) Ltd
Client Project #: 209.30128.00000
Site Location: CP REIT
Your P.O. #: MAR3755
Sampler Initials: JN

NONYL PHENOL AND NONYL PHENOL ETHOXYLATE (WATER)

Bureau Veritas ID				SKP070	SKP070	SKP071		
Sampling Date				2022/04/21 10:55	2022/04/21 10:55	2022/04/21 15:55		
COC Number				875233-02-01	875233-02-01	875233-02-01		
	UNITS	**San**	**Stm**	**BH 6**	**BH 6 Lab-Dup**	**BH 203**	**RDL**	**QC Batch**
Miscellaneous Parameters								
Nonylphenol Ethoxylate (Total)	mg/L	**0.2**	0.01	<0.005	<0.005	<0.005	0.005	7954594
Nonylphenol (Total)	mg/L	**0.02**	0.001	<0.001	<0.001	<0.001	0.001	7954537

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
San,Stm: Toronto Sanitary and Storm Sewer Use By Law Guidelines, respectively. Referenced to Chapter 681

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Bureau Veritas Job #: C2A6315
Report Date: 2022/06/28

SLR Consulting (Canada) Ltd
Client Project #: 209.30128.00000
Site Location: CP REIT
Your P.O. #: MAR3755
Sampler Initials: JN

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID				SKP070	SKP071		
Sampling Date				2022/04/21 10:55	2022/04/21 15:55		
COC Number				875233-02-01	875233-02-01		
	UNITS	**San**	**Stm**	**BH 6**	**BH 203**	**RDL**	**QC Batch**
Metals							
Chromium (VI)	ug/L	**2000**	40	<0.50	0.57	0.50	7952021
Mercury (Hg)	mg/L	**0.01**	0.0004	<0.00010	<0.00010	0.00010	7953590
Total Aluminum (Al)	ug/L	**50000**	-	320	280	4.9	7955886
Total Antimony (Sb)	ug/L	**5000**	-	<0.50	0.62	0.50	7955886
Total Arsenic (As)	ug/L	**1000**	20	10	<1.0	1.0	7955886
Total Cadmium (Cd)	ug/L	**700**	8	<0.090	<0.090	0.090	7955886
Total Chromium (Cr)	ug/L	**4000**	80	<5.0	<5.0	5.0	7955886
Total Cobalt (Co)	ug/L	**5000**	-	<0.50	0.62	0.50	7955886
Total Copper (Cu)	ug/L	**2000**	40	1.1	4.8	0.90	7955886
Total Lead (Pb)	ug/L	**1000**	120	0.71	3.1	0.50	7955886
Total Manganese (Mn)	ug/L	**5000**	50	72	31	2.0	7955886
Total Nickel (Ni)	ug/L	**2000**	80	<1.0	1.3	1.0	7955886
Total Phosphorus (P)	ug/L	**10000**	400	160	<100	100	7955886
Total Selenium (Se)	ug/L	**1000**	20	<2.0	<2.0	2.0	7955886
Total Silver (Ag)	ug/L	**5000**	120	<0.090	<0.090	0.090	7955886
Total Tin (Sn)	ug/L	**5000**	-	<1.0	<1.0	1.0	7955886
Total Titanium (Ti)	ug/L	**5000**	-	11	12	5.0	7955886
Total Zinc (Zn)	ug/L	**2000**	40	<5.0	26	5.0	7955886

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
San,Stm: Toronto Sanitary and Storm Sewer Use By Law Guidelines, respectively. Referenced to Chapter 681

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Bureau Veritas Job #: C2A6315
Report Date: 2022/06/28

SLR Consulting (Canada) Ltd
Client Project #: 209.30128.00000
Site Location: CP REIT
Your P.O. #: MAR3755
Sampler Initials: JN

SEMI-VOLATILE ORGANICS BY GC-MS (WATER)

Bureau Veritas ID				SKP070	SKP071		
Sampling Date				2022/04/21 10:55	2022/04/21 15:55		
COC Number				875233-02-01	875233-02-01		
	UNITS	**San**	**Stm**	**BH 6**	**BH 203**	**RDL**	**QC Batch**
Semivolatile Organics							
Di-N-butyl phthalate	ug/L	**80**	15	<2	<2	2	7956425
Bis(2-ethylhexyl)phthalate	ug/L	**12**	8.8	<2	<2	2	7956425
3,3'-Dichlorobenzidine	ug/L	**2**	0.8	<0.8	<0.8	0.8	7956425
Pentachlorophenol	ug/L	**5**	2	<1	<1	1	7956425
Phenanthrene	ug/L	-	-	<0.2	<0.2	0.2	7956425
Anthracene	ug/L	-	-	<0.2	<0.2	0.2	7956425
Fluoranthene	ug/L	-	-	<0.2	<0.2	0.2	7956425
Pyrene	ug/L	-	-	<0.2	<0.2	0.2	7956425
Benzo(a)anthracene	ug/L	-	-	<0.2	<0.2	0.2	7956425
Chrysene	ug/L	-	-	<0.2	<0.2	0.2	7956425
Benzo(b/j)fluoranthene	ug/L	-	-	<0.2	<0.2	0.2	7956425
Benzo(k)fluoranthene	ug/L	-	-	<0.2	<0.2	0.2	7956425
Benzo(a)pyrene	ug/L	-	-	<0.2	<0.2	0.2	7956425
Indeno(1,2,3-cd)pyrene	ug/L	-	-	<0.2	<0.2	0.2	7956425
Dibenzo(a,h)anthracene	ug/L	-	-	<0.2	<0.2	0.2	7956425
Benzo(g,h,i)perylene	ug/L	-	-	<0.2	<0.2	0.2	7956425
Dibenzo(a,i)pyrene	ug/L	-	-	<0.2	<0.2	0.2	7956425
Benzo(e)pyrene	ug/L	-	-	<0.2	<0.2	0.2	7956425
Perylene	ug/L	-	-	<0.2	<0.2	0.2	7956425
Dibenzo(a,j) acridine	ug/L	-	-	<0.4	<0.4	0.4	7956425
7H-Dibenzo(c,g) Carbazole	ug/L	-	-	<0.4	<0.4	0.4	7956425
1,6-Dinitropyrene	ug/L	-	-	<0.4	<0.4	0.4	7956425
1,3-Dinitropyrene	ug/L	-	-	<0.4	<0.4	0.4	7956425
1,8-Dinitropyrene	ug/L	-	-	<0.4	<0.4	0.4	7956425
Calculated Parameters							
Total PAHs (18 PAHs)	ug/L	**5**	2	<1	<1	1	7951721
Surrogate Recovery (%)							
2,4,6-Tribromophenol	%	-	-	69	106		7956425
2-Fluorobiphenyl	%	-	-	44	56		7956425
D14-Terphenyl (FS)	%	-	-	96	93		7956425
D5-Nitrobenzene	%	-	-	54	69		7956425

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
San,Stm: Toronto Sanitary and Storm Sewer Use By Law Guidelines, respectively. Referenced to Chapter 681

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Bureau Veritas Job #: C2A6315
Report Date: 2022/06/28

SLR Consulting (Canada) Ltd
Client Project #: 209.30128.00000
Site Location: CP REIT
Your P.O. #: MAR3755
Sampler Initials: JN

SEMI-VOLATILE ORGANICS BY GC-MS (WATER)

Bureau Veritas ID				SKP070	SKP071		
Sampling Date				2022/04/21 10:55	2022/04/21 15:55		
COC Number				875233-02-01	875233-02-01		
	UNITS	**San**	**Stm**	**BH 6**	**BH 203**	**RDL**	**QC Batch**
D8-Acenaphthylene	%	-	-	53	70		7956425

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
San,Stm: Toronto Sanitary and Storm Sewer Use By Law Guidelines, respectively. Referenced to Chapter 681

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Bureau Veritas Job #: C2A6315
Report Date: 2022/06/28

SLR Consulting (Canada) Ltd
Client Project #: 209.30128.00000
Site Location: CP REIT
Your P.O. #: MAR3755
Sampler Initials: JN

VOLATILE ORGANICS BY GC/MS (WATER)

Bureau Veritas ID				SKP070	SKP071		
Sampling Date				2022/04/21 10:55	2022/04/21 15:55		
COC Number				875233-02-01	875233-02-01		
	UNITS	**San**	**Stm**	**BH 6**	**BH 203**	**RDL**	**QC Batch**
Volatile Organics							
Benzene	ug/L	**10**	2	<0.40	<0.40	0.40	7953515
Chloroform	ug/L	**40**	2	<0.40	<0.40	0.40	7953515
1,2-Dichlorobenzene	ug/L	**50**	5.6	<0.80	<0.80	0.80	7953515
1,4-Dichlorobenzene	ug/L	**80**	6.8	<0.80	<0.80	0.80	7953515
cis-1,2-Dichloroethylene	ug/L	**4000**	5.6	<1.0	<1.0	1.0	7953515
trans-1,3-Dichloropropene	ug/L	**140**	5.6	<0.80	<0.80	0.80	7953515
Ethylbenzene	ug/L	**160**	2	<0.40	<0.40	0.40	7953515
Methylene Chloride(Dichloromethane)	ug/L	**2000**	5.2	<4.0	<4.0	4.0	7953515
1,1,2,2-Tetrachloroethane	ug/L	**1400**	17	<0.80	<0.80	0.80	7953515
Tetrachloroethylene	ug/L	**1000**	4.4	<0.40	<0.40	0.40	7953515
Toluene	ug/L	**16**	2	<0.40	<0.40	0.40	7953515
Trichloroethylene	ug/L	**400**	7.6	<0.40	<0.40	0.40	7953515
p+m-Xylene	ug/L	**1400**	4.4	<0.40	<0.40	0.40	7953515
o-Xylene	ug/L	**1400**	4.4	<0.40	<0.40	0.40	7953515
Total Xylenes	ug/L	**1400**	4.4	<0.40	<0.40	0.40	7953515
Surrogate Recovery (%)							
4-Bromofluorobenzene	%	**-**	-	95	94		7953515
D4-1,2-Dichloroethane	%	**-**	-	109	113		7953515
D8-Toluene	%	**-**	-	91	90		7953515

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
San,Stm: Toronto Sanitary and Storm Sewer Use By Law Guidelines, respectively. Referenced to Chapter 681

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C2A6315
Report Date: 2022/06/28

SLR Consulting (Canada) Ltd
Client Project #: 209.30128.00000
Site Location: CP REIT
Your P.O. #: MAR3755
Sampler Initials: JN

POLYCHLORINATED BIPHENYLS BY GC-ECD (WATER)

Bureau Veritas ID				SKP070	SKP071		
Sampling Date				2022/04/21 10:55	2022/04/21 15:55		
COC Number				875233-02-01	875233-02-01		
	UNITS	**San**	**Stm**	**BH 6**	**BH 203**	**RDL**	**QC Batch**
PCBs							
Total PCB	ug/L	**1**	0.4	<0.05	<0.05	0.05	7955760
Surrogate Recovery (%)							
Decachlorobiphenyl	%	**-**	-	103	94		7955760

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
San,Stm: Toronto Sanitary and Storm Sewer Use By Law Guidelines, respectively. Referenced to Chapter 681

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Your P.O. #: MAR3755
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MICROBIOLOGY (WATER)

Bureau Veritas ID			SKP070	SKP071		
Sampling Date			2022/04/21 10:55	2022/04/21 15:55		
COC Number			875233-02-01	875233-02-01		
	UNITS	**Stm**	**BH 6**	**BH 203**	**RDL**	**QC Batch**
Microbiological						
Escherichia coli	CFU/100mL	200	<10	30	10	7953179

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Stm: Toronto Sanitary and Storm Sewer Use By Law Guidelines, respectively. Referenced to Chapter 681

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SLR Consulting (Canada) Ltd
Client Project #: 209.30128.00000
Site Location: CP REIT
Your P.O. #: MAR3755
Sampler Initials: JN

TEST SUMMARY

Bureau Veritas ID: SKP070
Sample ID: BH 6
Matrix: Water

Collected: 2022/04/21
Shipped:
Received: 2022/04/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Sewer Use By-Law Semivolatile Organics	GC/MS	7956425	2022/04/24	2022/04/25	Milijana Avramovic
Biochemical Oxygen Demand (BOD)	DO	7953683	2022/04/22	2022/04/27	Nusrat Naz
Chromium (VI) in Water	IC	7952021	N/A	2022/04/22	Theodora Luck
Total Cyanide	SKAL/CN	7954522	2022/04/22	2022/04/22	Aditiben Patel
Mercury in Water by CVAA	CV/AA	7953590	2022/04/22	2022/04/22	Jaswinder Kaur
Total Metals Analysis by ICPMS	ICP/MS	7955886	N/A	2022/04/25	Arefa Dabhad
E.coli, (CFU/100mL)	PL	7953179	N/A	2022/04/21	Sonja Elavinamannil
Total Nonylphenol in Liquids by HPLC	LC/FLU	7954537	2022/04/22	2022/04/23	Furneesh Kumar
Nonylphenol Ethoxylates in Liquids: HPLC	LC/FLU	7954594	2022/04/22	2022/04/23	Furneesh Kumar
Polychlorinated Biphenyl in Water	GC/ECD	7955760	2022/04/23	2022/04/24	Dawn Howard
pH	AT	7953669	2022/04/22	2022/04/22	Taslima Aktar
Phenols (4AAP)	TECH/PHEN	7953384	N/A	2022/04/22	Louise Harding
Total PAHs	CALC	7951721	N/A	2022/04/25	Automated Statchk
Total Suspended Solids	BAL	7953734	2022/04/22	2022/04/25	Shaneil Hall
Volatile Organic Compounds in Water	GC/MS	7953515	N/A	2022/04/24	Narayan Ghimire

Bureau Veritas ID: SKP070 Dup
Sample ID: BH 6
Matrix: Water

Collected: 2022/04/21
Shipped:
Received: 2022/04/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Cyanide	SKAL/CN	7954522	2022/04/22	2022/04/22	Aditiben Patel
Total Nonylphenol in Liquids by HPLC	LC/FLU	7954537	2022/04/22	2022/04/23	Furneesh Kumar
Nonylphenol Ethoxylates in Liquids: HPLC	LC/FLU	7954594	2022/04/22	2022/04/23	Furneesh Kumar
pH	AT	7953669	2022/04/22	2022/04/22	Taslima Aktar

Bureau Veritas ID: SKP071
Sample ID: BH 203
Matrix: Water

Collected: 2022/04/21
Shipped:
Received: 2022/04/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Sewer Use By-Law Semivolatile Organics	GC/MS	7956425	2022/04/24	2022/04/25	Milijana Avramovic
Biochemical Oxygen Demand (BOD)	DO	7953683	2022/04/22	2022/04/27	Nusrat Naz
Chromium (VI) in Water	IC	7952021	N/A	2022/04/22	Theodora Luck
Total Cyanide	SKAL/CN	7954522	2022/04/22	2022/04/22	Aditiben Patel
Mercury in Water by CVAA	CV/AA	7953590	2022/04/22	2022/04/22	Jaswinder Kaur
Total Metals Analysis by ICPMS	ICP/MS	7955886	N/A	2022/04/25	Arefa Dabhad
E.coli, (CFU/100mL)	PL	7953179	N/A	2022/04/21	Sonja Elavinamannil
Total Nonylphenol in Liquids by HPLC	LC/FLU	7954537	2022/04/22	2022/04/23	Furneesh Kumar
Nonylphenol Ethoxylates in Liquids: HPLC	LC/FLU	7954594	2022/04/22	2022/04/23	Furneesh Kumar
Polychlorinated Biphenyl in Water	GC/ECD	7955760	2022/04/23	2022/04/24	Dawn Howard
pH	AT	7953669	2022/04/22	2022/04/22	Taslima Aktar
Phenols (4AAP)	TECH/PHEN	7953384	N/A	2022/04/22	Louise Harding

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SLR Consulting (Canada) Ltd
Client Project #: 209.30128.00000
Site Location: CP REIT
Your P.O. #: MAR3755
Sampler Initials: JN

TEST SUMMARY

Bureau Veritas ID: SKP071
Sample ID: BH 203
Matrix: Water

Collected: 2022/04/21
Shipped:
Received: 2022/04/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total PAHs	CALC	7951721	N/A	2022/04/25	Automated Statchk
Total Suspended Solids	BAL	7953734	2022/04/22	2022/04/25	Shaneil Hall
Volatile Organic Compounds in Water	GC/MS	7953515	N/A	2022/04/24	Narayan Ghimire

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GENERAL COMMENTS

Revised Report [2022/06/28]: Additional metal parameters included for samples BH6 & BH203 as per client request.

VOC Analysis: Due to the sample matrix, sample required dilution. Detection limits were adjusted accordingly.

Results relate only to the items tested.

Bureau Veritas Job #: C2A6315
Report Date: 2022/06/28

SLR Consulting (Canada) Ltd
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Sampler Initials: JN

QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
7952021	TL2	Matrix Spike	Chromium (VI)	2022/04/22		99	%	80 - 120
7952021	TL2	Spiked Blank	Chromium (VI)	2022/04/22		100	%	80 - 120
7952021	TL2	Method Blank	Chromium (VI)	2022/04/22	<0.50		ug/L	
7952021	TL2	RPD	Chromium (VI)	2022/04/22	NC		%	20
7953384	LHA	Matrix Spike	Phenols-4AAP	2022/04/22		103	%	80 - 120
7953384	LHA	Spiked Blank	Phenols-4AAP	2022/04/22		106	%	80 - 120
7953384	LHA	Method Blank	Phenols-4AAP	2022/04/22	<0.0010		mg/L	
7953384	LHA	RPD	Phenols-4AAP	2022/04/22	NC		%	20
7953515	NGH	Matrix Spike	4-Bromofluorobenzene	2022/04/24		105	%	70 - 130
			D4-1,2-Dichloroethane	2022/04/24		106	%	70 - 130
			D8-Toluene	2022/04/24		98	%	70 - 130
			Benzene	2022/04/24		90	%	70 - 130
			Chloroform	2022/04/24		96	%	70 - 130
			1,2-Dichlorobenzene	2022/04/24		94	%	70 - 130
			1,4-Dichlorobenzene	2022/04/24		106	%	70 - 130
			cis-1,2-Dichloroethylene	2022/04/24		99	%	70 - 130
			trans-1,3-Dichloropropene	2022/04/24		102	%	70 - 130
			Ethylbenzene	2022/04/24		87	%	70 - 130
			Methylene Chloride(Dichloromethane)	2022/04/24		113	%	70 - 130
			1,1,2,2-Tetrachloroethane	2022/04/24		101	%	70 - 130
			Tetrachloroethylene	2022/04/24		89	%	70 - 130
			Toluene	2022/04/24		92	%	70 - 130
			Trichloroethylene	2022/04/24		103	%	70 - 130
			p+m-Xylene	2022/04/24		91	%	70 - 130
			o-Xylene	2022/04/24		87	%	70 - 130
7953515	NGH	Spiked Blank	4-Bromofluorobenzene	2022/04/24		103	%	70 - 130
			D4-1,2-Dichloroethane	2022/04/24		103	%	70 - 130
			D8-Toluene	2022/04/24		99	%	70 - 130
			Benzene	2022/04/24		98	%	70 - 130
			Chloroform	2022/04/24		105	%	70 - 130
			1,2-Dichlorobenzene	2022/04/24		111	%	70 - 130
			1,4-Dichlorobenzene	2022/04/24		126	%	70 - 130
			cis-1,2-Dichloroethylene	2022/04/24		107	%	70 - 130
			trans-1,3-Dichloropropene	2022/04/24		124	%	70 - 130
			Ethylbenzene	2022/04/24		99	%	70 - 130
			Methylene Chloride(Dichloromethane)	2022/04/24		121	%	70 - 130
			1,1,2,2-Tetrachloroethane	2022/04/24		116	%	70 - 130
			Tetrachloroethylene	2022/04/24		99	%	70 - 130
			Toluene	2022/04/24		101	%	70 - 130
			Trichloroethylene	2022/04/24		113	%	70 - 130
			p+m-Xylene	2022/04/24		104	%	70 - 130
			o-Xylene	2022/04/24		102	%	70 - 130
7953515	NGH	Method Blank	4-Bromofluorobenzene	2022/04/24		98	%	70 - 130
			D4-1,2-Dichloroethane	2022/04/24		106	%	70 - 130
			D8-Toluene	2022/04/24		92	%	70 - 130
			Benzene	2022/04/24	<0.20		ug/L	
			Chloroform	2022/04/24	<0.20		ug/L	
			1,2-Dichlorobenzene	2022/04/24	<0.40		ug/L	
			1,4-Dichlorobenzene	2022/04/24	<0.40		ug/L	
			cis-1,2-Dichloroethylene	2022/04/24	<0.50		ug/L	

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Client Project #: 209.30128.00000
Site Location: CP REIT
Your P.O. #: MAR3755
Sampler Initials: JN

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			trans-1,3-Dichloropropene	2022/04/24	<0.40		ug/L	
			Ethylbenzene	2022/04/24	<0.20		ug/L	
			Methylene Chloride(Dichloromethane)	2022/04/24	<2.0		ug/L	
			1,1,2,2-Tetrachloroethane	2022/04/24	<0.40		ug/L	
			Tetrachloroethylene	2022/04/24	<0.20		ug/L	
			Toluene	2022/04/24	<0.20		ug/L	
			Trichloroethylene	2022/04/24	<0.20		ug/L	
			p+m-Xylene	2022/04/24	<0.20		ug/L	
			o-Xylene	2022/04/24	<0.20		ug/L	
			Total Xylenes	2022/04/24	<0.20		ug/L	
7953515	NGH	RPD	Benzene	2022/04/24	2.5		%	30
			Chloroform	2022/04/24	NC		%	30
			1,2-Dichlorobenzene	2022/04/24	NC		%	30
			1,4-Dichlorobenzene	2022/04/24	NC		%	30
			cis-1,2-Dichloroethylene	2022/04/24	NC		%	30
			trans-1,3-Dichloropropene	2022/04/24	NC		%	30
			Ethylbenzene	2022/04/24	NC		%	30
			Methylene Chloride(Dichloromethane)	2022/04/24	NC		%	30
			1,1,2,2-Tetrachloroethane	2022/04/24	NC		%	30
			Tetrachloroethylene	2022/04/24	NC		%	30
			Toluene	2022/04/24	3.5		%	30
			Trichloroethylene	2022/04/24	NC		%	30
			p+m-Xylene	2022/04/24	4.6		%	30
			o-Xylene	2022/04/24	3.1		%	30
			Total Xylenes	2022/04/24	4.0		%	30
7953590	JWK	Matrix Spike	Mercury (Hg)	2022/04/22		95	%	75 - 125
7953590	JWK	Spiked Blank	Mercury (Hg)	2022/04/22		95	%	80 - 120
7953590	JWK	Method Blank	Mercury (Hg)	2022/04/22	<0.00010		mg/L	
7953590	JWK	RPD	Mercury (Hg)	2022/04/22	NC		%	20
			Mercury (Hg)	2022/04/22	NC		%	20
			Mercury (Hg)	2022/04/22	NC		%	20
			Mercury (Hg)	2022/04/22	NC		%	20
			Mercury (Hg)	2022/04/22	NC		%	20
7953669	TAK	Spiked Blank	pH	2022/04/22		102	%	98 - 103
7953669	TAK	RPD [SKP070-04]	pH	2022/04/22	0.11		%	N/A
7953683	NNA	QC Standard	Total BOD	2022/04/27		93	%	80 - 120
7953683	NNA	Method Blank	Total BOD	2022/04/27	<2		mg/L	
7953683	NNA	RPD	Total BOD	2022/04/27	1.1		%	30
7953734	SHD	QC Standard	Total Suspended Solids	2022/04/25		99	%	85 - 115
7953734	SHD	Method Blank	Total Suspended Solids	2022/04/25	<10		mg/L	
7953734	SHD	RPD	Total Suspended Solids	2022/04/25	NC		%	25
7954522	ABP	Matrix Spike [SKP070-08]	Total Cyanide (CN)	2022/04/22		95	%	80 - 120
7954522	ABP	Spiked Blank	Total Cyanide (CN)	2022/04/22		95	%	80 - 120
7954522	ABP	Method Blank	Total Cyanide (CN)	2022/04/22	<0.0050		mg/L	
7954522	ABP	RPD [SKP070-08]	Total Cyanide (CN)	2022/04/22	NC		%	20
7954537	FKU	Matrix Spike	Nonylphenol (Total)	2022/04/23		94	%	50 - 130
7954537	FKU	Spiked Blank	Nonylphenol (Total)	2022/04/23		100	%	50 - 130
7954537	FKU	Method Blank	Nonylphenol (Total)	2022/04/23	<0.001		mg/L	
7954537	FKU	RPD [SKP070-01]	Nonylphenol (Total)	2022/04/23	NC		%	40
7954594	FKU	Matrix Spike	Nonylphenol Ethoxylate (Total)	2022/04/23		85	%	50 - 130

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Bureau Veritas Job #: C2A6315
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Client Project #: 209.30128.00000
Site Location: CP REIT
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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
7954594	FKU	Spiked Blank	Nonylphenol Ethoxylate (Total)	2022/04/23		82	%	50 - 130
7954594	FKU	Method Blank	Nonylphenol Ethoxylate (Total)	2022/04/23	<0.005		mg/L	
7954594	FKU	RPD [SKP070-01]	Nonylphenol Ethoxylate (Total)	2022/04/23	NC		%	40
7955760	DH	Matrix Spike	Decachlorobiphenyl	2022/04/24		98	%	60 - 130
			Total PCB	2022/04/24		82	%	60 - 130
7955760	DH	Spiked Blank	Decachlorobiphenyl	2022/04/24		90	%	60 - 130
			Total PCB	2022/04/24		72	%	60 - 130
7955760	DH	Method Blank	Decachlorobiphenyl	2022/04/24		96	%	60 - 130
			Total PCB	2022/04/24	<0.05		ug/L	
7955760	DH	RPD	Total PCB	2022/04/24	NC		%	40
7955886	ADA	Matrix Spike	Total Aluminum (Al)	2022/04/25		110	%	80 - 120
			Total Antimony (Sb)	2022/04/25		110	%	80 - 120
			Total Arsenic (As)	2022/04/25		102	%	80 - 120
			Total Cadmium (Cd)	2022/04/25		102	%	80 - 120
			Total Chromium (Cr)	2022/04/25		97	%	80 - 120
			Total Cobalt (Co)	2022/04/25		100	%	80 - 120
			Total Copper (Cu)	2022/04/25		100	%	80 - 120
			Total Lead (Pb)	2022/04/25		98	%	80 - 120
			Total Manganese (Mn)	2022/04/25		100	%	80 - 120
			Total Nickel (Ni)	2022/04/25		98	%	80 - 120
			Total Phosphorus (P)	2022/04/25		101	%	80 - 120
			Total Selenium (Se)	2022/04/25		104	%	80 - 120
			Total Silver (Ag)	2022/04/25		96	%	80 - 120
			Total Tin (Sn)	2022/04/25		103	%	80 - 120
			Total Titanium (Ti)	2022/04/25		102	%	80 - 120
			Total Zinc (Zn)	2022/04/25		101	%	80 - 120
7955886	ADA	Spiked Blank	Total Aluminum (Al)	2022/04/25		99	%	80 - 120
			Total Antimony (Sb)	2022/04/25		107	%	80 - 120
			Total Arsenic (As)	2022/04/25		100	%	80 - 120
			Total Cadmium (Cd)	2022/04/25		102	%	80 - 120
			Total Chromium (Cr)	2022/04/25		96	%	80 - 120
			Total Cobalt (Co)	2022/04/25		100	%	80 - 120
			Total Copper (Cu)	2022/04/25		95	%	80 - 120
			Total Lead (Pb)	2022/04/25		98	%	80 - 120
			Total Manganese (Mn)	2022/04/25		98	%	80 - 120
			Total Nickel (Ni)	2022/04/25		96	%	80 - 120
			Total Phosphorus (P)	2022/04/25		111	%	80 - 120
			Total Selenium (Se)	2022/04/25		104	%	80 - 120
			Total Silver (Ag)	2022/04/25		97	%	80 - 120
			Total Tin (Sn)	2022/04/25		102	%	80 - 120
			Total Titanium (Ti)	2022/04/25		98	%	80 - 120
			Total Zinc (Zn)	2022/04/25		99	%	80 - 120
7955886	ADA	Method Blank	Total Aluminum (Al)	2022/04/25	<4.9		ug/L	
			Total Antimony (Sb)	2022/04/25	<0.50		ug/L	
			Total Arsenic (As)	2022/04/25	<1.0		ug/L	
			Total Cadmium (Cd)	2022/04/25	<0.090		ug/L	
			Total Chromium (Cr)	2022/04/25	<5.0		ug/L	
			Total Cobalt (Co)	2022/04/25	<0.50		ug/L	
			Total Copper (Cu)	2022/04/25	<0.90		ug/L	
			Total Lead (Pb)	2022/04/25	<0.50		ug/L	

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Bureau Veritas Job #: C2A6315
Report Date: 2022/06/28

SLR Consulting (Canada) Ltd
Client Project #: 209.30128.00000
Site Location: CP REIT
Your P.O. #: MAR3755
Sampler Initials: JN

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Total Manganese (Mn)	2022/04/25	<2.0		ug/L	
			Total Nickel (Ni)	2022/04/25	<1.0		ug/L	
			Total Phosphorus (P)	2022/04/25	<100		ug/L	
			Total Selenium (Se)	2022/04/25	<2.0		ug/L	
			Total Silver (Ag)	2022/04/25	<0.090		ug/L	
			Total Tin (Sn)	2022/04/25	<1.0		ug/L	
			Total Titanium (Ti)	2022/04/25	<5.0		ug/L	
			Total Zinc (Zn)	2022/04/25	<5.0		ug/L	
7955886	ADA	RPD	Total Aluminum (Al)	2022/04/25	6.8		%	20
			Total Cadmium (Cd)	2022/04/25	NC		%	20
			Total Chromium (Cr)	2022/04/25	NC		%	20
			Total Cobalt (Co)	2022/04/25	2.4		%	20
			Total Copper (Cu)	2022/04/25	2.1		%	20
			Total Lead (Pb)	2022/04/25	1.3		%	20
			Total Manganese (Mn)	2022/04/25	2.6		%	20
			Total Nickel (Ni)	2022/04/25	2.5		%	20
			Total Phosphorus (P)	2022/04/25	NC		%	20
			Total Silver (Ag)	2022/04/25	NC		%	20
			Total Zinc (Zn)	2022/04/25	2.2		%	20
7956425	MA	Matrix Spike	2,4,6-Tribromophenol	2022/04/25		72	%	10 - 130
			2-Fluorobiphenyl	2022/04/25		66	%	30 - 130
			D14-Terphenyl (FS)	2022/04/25		82	%	30 - 130
			D5-Nitrobenzene	2022/04/25		103	%	30 - 130
			D8-Acenaphthylene	2022/04/25		75	%	30 - 130
			Di-N-butyl phthalate	2022/04/25		105	%	30 - 130
			Bis(2-ethylhexyl)phthalate	2022/04/25		118	%	30 - 130
			3,3'-Dichlorobenzidine	2022/04/25		25 (1)	%	30 - 130
			Pentachlorophenol	2022/04/25		50	%	30 - 130
			Phenanthrene	2022/04/25		99	%	30 - 130
			Anthracene	2022/04/25		97	%	30 - 130
			Fluoranthene	2022/04/25		101	%	30 - 130
			Pyrene	2022/04/25		104	%	30 - 130
			Benzo(a)anthracene	2022/04/25		88	%	30 - 130
			Chrysene	2022/04/25		111	%	30 - 130
			Benzo(b/j)fluoranthene	2022/04/25		104	%	30 - 130
			Benzo(k)fluoranthene	2022/04/25		113	%	30 - 130
			Benzo(a)pyrene	2022/04/25		108	%	30 - 130
			Indeno(1,2,3-cd)pyrene	2022/04/25		118	%	30 - 130
			Dibenzo(a,h)anthracene	2022/04/25		110	%	30 - 130
			Benzo(g,h,i)perylene	2022/04/25		112	%	30 - 130
			Dibenzo(a,i)pyrene	2022/04/25		102	%	30 - 130
			Benzo(e)pyrene	2022/04/25		106	%	30 - 130
			Perylene	2022/04/25		111	%	30 - 130
			Dibenzo(a,j) acridine	2022/04/25		124	%	30 - 130
			7H-Dibenzo(c,g) Carbazole	2022/04/25		106	%	30 - 130
			1,6-Dinitropyrene	2022/04/25		98	%	30 - 130
			1,3-Dinitropyrene	2022/04/25		91	%	30 - 130
			1,8-Dinitropyrene	2022/04/25		100	%	30 - 130
7956425	MA	Spiked Blank	2,4,6-Tribromophenol	2022/04/25		67	%	10 - 130
			2-Fluorobiphenyl	2022/04/25		59	%	30 - 130

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SLR Consulting (Canada) Ltd
Client Project #: 209.30128.00000
Site Location: CP REIT
Your P.O. #: MAR3755
Sampler Initials: JN

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			D14-Terphenyl (FS)	2022/04/25		80	%	30 - 130
			D5-Nitrobenzene	2022/04/25		94	%	30 - 130
			D8-Acenaphthylene	2022/04/25		66	%	30 - 130
			Di-N-butyl phthalate	2022/04/25		104	%	30 - 130
			Bis(2-ethylhexyl)phthalate	2022/04/25		106	%	30 - 130
			3,3'-Dichlorobenzidine	2022/04/25		76	%	30 - 130
			Pentachlorophenol	2022/04/25		55	%	30 - 130
			Phenanthrene	2022/04/25		96	%	30 - 130
			Anthracene	2022/04/25		95	%	30 - 130
			Fluoranthene	2022/04/25		98	%	30 - 130
			Pyrene	2022/04/25		100	%	30 - 130
			Benzo(a)anthracene	2022/04/25		85	%	30 - 130
			Chrysene	2022/04/25		110	%	30 - 130
			Benzo(b/j)fluoranthene	2022/04/25		103	%	30 - 130
			Benzo(k)fluoranthene	2022/04/25		96	%	30 - 130
			Benzo(a)pyrene	2022/04/25		107	%	30 - 130
			Indeno(1,2,3-cd)pyrene	2022/04/25		118	%	30 - 130
			Dibenzo(a,h)anthracene	2022/04/25		111	%	30 - 130
			Benzo(g,h,i)perylene	2022/04/25		114	%	30 - 130
			Dibenzo(a,i)pyrene	2022/04/25		125	%	30 - 130
			Benzo(e)pyrene	2022/04/25		105	%	30 - 130
			Perylene	2022/04/25		110	%	30 - 130
			Dibenzo(a,j) acridine	2022/04/25		122	%	30 - 130
			7H-Dibenzo(c,g) Carbazole	2022/04/25		121	%	30 - 130
			1,6-Dinitropyrene	2022/04/25		125	%	30 - 130
			1,3-Dinitropyrene	2022/04/25		122	%	30 - 130
			1,8-Dinitropyrene	2022/04/25		129	%	30 - 130
7956425	MA	Method Blank	2,4,6-Tribromophenol	2022/04/25		59	%	10 - 130
			2-Fluorobiphenyl	2022/04/25		58	%	30 - 130
			D14-Terphenyl (FS)	2022/04/25		79	%	30 - 130
			D5-Nitrobenzene	2022/04/25		92	%	30 - 130
			D8-Acenaphthylene	2022/04/25		63	%	30 - 130
			Di-N-butyl phthalate	2022/04/25	<2		ug/L	
			Bis(2-ethylhexyl)phthalate	2022/04/25	<2		ug/L	
			3,3'-Dichlorobenzidine	2022/04/25	<0.8		ug/L	
			Pentachlorophenol	2022/04/25	<1		ug/L	
			Phenanthrene	2022/04/25	<0.2		ug/L	
			Anthracene	2022/04/25	<0.2		ug/L	
			Fluoranthene	2022/04/25	<0.2		ug/L	
			Pyrene	2022/04/25	<0.2		ug/L	
			Benzo(a)anthracene	2022/04/25	<0.2		ug/L	
			Chrysene	2022/04/25	<0.2		ug/L	
			Benzo(b/j)fluoranthene	2022/04/25	<0.2		ug/L	
			Benzo(k)fluoranthene	2022/04/25	<0.2		ug/L	
			Benzo(a)pyrene	2022/04/25	<0.2		ug/L	
			Indeno(1,2,3-cd)pyrene	2022/04/25	<0.2		ug/L	
			Dibenzo(a,h)anthracene	2022/04/25	<0.2		ug/L	
			Benzo(g,h,i)perylene	2022/04/25	<0.2		ug/L	
			Dibenzo(a,i)pyrene	2022/04/25	<0.2		ug/L	
			Benzo(e)pyrene	2022/04/25	<0.2		ug/L	

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SLR Consulting (Canada) Ltd
Client Project #: 209.30128.00000
Site Location: CP REIT
Your P.O. #: MAR3755
Sampler Initials: JN

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Perylene	2022/04/25	<0.2		ug/L	
			Dibenzo(a,j) acridine	2022/04/25	<0.4		ug/L	
			7H-Dibenzo(c,g) Carbazole	2022/04/25	<0.4		ug/L	
			1,6-Dinitropyrene	2022/04/25	<0.4		ug/L	
			1,3-Dinitropyrene	2022/04/25	<0.4		ug/L	
			1,8-Dinitropyrene	2022/04/25	<0.4		ug/L	
7956425	MA	RPD	Di-N-butyl phthalate	2022/04/25	NC		%	40
			Bis(2-ethylhexyl)phthalate	2022/04/25	NC		%	40
			3,3'-Dichlorobenzidine	2022/04/25	NC		%	40
			Pentachlorophenol	2022/04/25	NC		%	40
			Phenanthrene	2022/04/25	NC		%	40
			Anthracene	2022/04/25	NC		%	40
			Fluoranthene	2022/04/25	NC		%	40
			Pyrene	2022/04/25	NC		%	40
			Benzo(a)anthracene	2022/04/25	NC		%	40
			Chrysene	2022/04/25	NC		%	40
			Benzo(b/j)fluoranthene	2022/04/25	NC		%	40
			Benzo(k)fluoranthene	2022/04/25	NC		%	40
			Benzo(a)pyrene	2022/04/25	NC		%	40
			Indeno(1,2,3-cd)pyrene	2022/04/25	NC		%	40
			Dibenzo(a,h)anthracene	2022/04/25	NC		%	40
			Benzo(g,h,i)perylene	2022/04/25	NC		%	40
			Dibenzo(a,i)pyrene	2022/04/25	NC		%	40
			Benzo(e)pyrene	2022/04/25	NC		%	40
			Perylene	2022/04/25	NC		%	40
			Dibenzo(a,j) acridine	2022/04/25	NC		%	40
			7H-Dibenzo(c,g) Carbazole	2022/04/25	NC		%	40
			1,6-Dinitropyrene	2022/04/25	NC		%	40
			1,3-Dinitropyrene	2022/04/25	NC		%	40
			1,8-Dinitropyrene	2022/04/25	NC		%	40

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

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VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Brad Newman, B.Sc., C.Chem., Scientific Service Specialist

Cristina Carriere, Senior Scientific Specialist

Sonja Elavinamannil, Master of Biochemistry, Team Lead

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

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RUSH!

Bureau Veritas
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Page 1 of 1

21-Apr-22 18:31
Ronklin Gracian
C2A6315
NP4 ENV-1709

INVOICE TO:		REPORT TO:		PROJECT INFORMATION:	
Company Name:	#74250 SLR Consulting (Canada) Ltd	Company Name:	#11889 SLR Consulting (Canada) Ltd	Quotation #:	C21779
Attention:	Accounts Payable	Attention:	Alicia Dibben	P.O. #:	MAR3755
Address:	200 - 1620 West 8th Ave	Address:	200-300 Town Centre Blvd.	Project:	209.30128 , 00000
	Vancouver BC V6J 1V4		Markham ON L3R 5Z6	Project Name:	CP REIT
Tel:	(604) 738-2500 Fax: (604) 738-2508	Tel:	(905) 415-7248 Fax:	Site #:	
Email:	accountspayableca@slrconsulting.com;adang@slrcons	Email:	adibben@slrconsulting.com	Sampled By:	

Bottle Order #: 875233

Project Manager: Ronklin Gracian

C#875233-02-01

MOE REGULATED DRINKING WATER OR WATER INTENDED FOR HUMAN CONSUMPTION MUST BE SUBMITTED ON THE BUREAU VERITAS DRINKING WATER CHAIN OF CUSTODY

Regulation 153 (2011): ☐ Table 1 ☐ Res/Park ☐ Medium/Fine ☐ Table 2 ☐ Ind/Comm ☐ Coarse ☐ Table 3 ☐ Agri/Other ☐ For RSC ☐ Table ___

Other Regulations: ☐ CCME ☑ Sanitary Sewer Bylaw ☐ Reg 558. ☑ Storm Sewer Bylaw ☐ MISA Municipality Toronto ☐ PWQO ☐ Reg 406 Table ☐ Other

Special Instructions

Include Criteria on Certificate of Analysis (Y/N)? Y

ANALYSIS REQUESTED (PLEASE BE SPECIFIC)

Field Filtered (please circle): Metals / Hg / Cr VI

Turnaround Time (TAT) Required: Please provide advance notice for rush projects

Regular (Standard) TAT: ☐
(will be applied if Rush TAT is not specified):
Standard TAT = 5-7 Working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission)
Date Required: 48 hrs Time Required: ☒
Rush Confirmation Number: RGN0421-01 (call lab for #)

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Field Filtered (please circle): Metals / Hg / Cr VI	Toronto Storm Sewer Bylaw (100-2016)	# of Bottles	Comments
1		BH6	2022/04/21	1055	GW		X	17	please ensure VOCs meet O.Reg T3 detection limits.
2		BH203	↓	1555	↓		X	17	
3									
4									
5									
6									
7									
8									
9									
10									

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted
Joshua Nguyen	22/04/21	18:30	Ashitha Reikema / Ashitha Sreekumar	2022/04/21	18:31	

Laboratory Use Only: Time Sensitive; Temperature (°C) on Recei 9/9/4; Custody Seal Present ✓ Intact ✓ Yes No

* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS'S STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVNA.COM/TERMS-AND-CONDITIONS.

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

** SAMPLE CONTAINER, PRESERVATION, HOLD TIME AND PACKAGE INFORMATION CAN BE VIEWED AT WWW.BVNA.COM/RESOURCES/CHAIN-OF-CUSTODY-FORMS.

SAMPLES MUST BE KEPT COOL (< 10° C) FROM TIME OF SAMPLING UNTIL DELIVERY TO BUREAU VERITAS

White: Bureau Veritas Yellow: Client
10/10/11 on ice

Bureau Veritas Canada (2019) Inc.

Appendix F MECP Water Well Records

Preliminary Hydrogeological Assessment

Bloor and Dundas Development
Toronto, Ontario

Choice Properties LP

SLR Project No. 209.30128.00000

June 30, 2022

Table F-1: MECP Water Well Summary

WELL ID	TAG	DATE COMPLETED	DEPTH (M)	BOTTOM LITHOLOGY	STATUS	WATER USE	DEPTH WATER FOUND (M)	STATIC LEVEL (M)	PUMPING RATE (LPS)
6928770	A011176	2/28/2005	10.3	TILL	Test Hole				
6928879	A022445	4/4/2005	4.7	SAND	Observation Wells		2.0		
6929043	A026594	5/26/2005	5	SAND	Observation Wells		3.0		
6929365	A027919	8/17/2005	6.1	CLAY	Abandoned-Other				
6929420	A031702	8/20/2005	9.1	SILT	Observation Wells		3.0		
6929491	A034525	9/21/2005	8.8	SILT	Observation Wells		1.7		
6929537	A027666	6/8/2005	4.5	SAND	Observation Wells		2.7		
6930088	A039311	3/15/2006	6.1	CLAY	Observation Wells				
6930515	A043919	6/22/2006	7.6	SILT			2.1		
6930722	A043891	7/20/2006	6.6	SAND	Observation Wells		3.0		
6930758	A045779	9/19/2006	6	SAND	Test Hole	Not Used	4.6		
6930764	A046412	9/20/2006	6	SILT	Observation Wells		4.0		
6930780	A044369	10/2/2006	3	SAND	Observation Wells	Not Used	1.5		
6931105	A052301	11/17/2006	3.7	SILT	Observation Wells	Not Used			
7040697	A048912	1/31/2007	5.5	SAND	Observation Wells	Not Used			
7043241	A050296	3/21/2007	7.3	SAND	Observation Wells				
7043663	A054642	4/9/2007	13.6	CLAY	Observation Wells		7.5		
7044741	A054758	5/3/2007	9	CLAY	Observation Wells		3.0		
7050788	A048895	10/5/2007	5.8	SILT	Observation Wells	Not Used	4.6		
7102860	A070267	2/19/2008	8.5	CLAY	Test Hole	Test Hole			
7104289	A070180	3/14/2008	5.2	SILT	Monitoring and Test Hole	Monitoring and Test Hole			
7104294	A070179	3/14/2008	4.9	SILT	Monitoring and Test Hole	Monitoring and Test Hole			
7104295	A070236	3/14/2008	4.9	SILT	Monitoring and Test Hole	Monitoring and Test Hole			
7104296	A070181	3/14/2008	5.2	SILT	Monitoring and Test Hole	Monitoring and Test Hole			
7104559	A063276	12/5/2007	0	SILT	Monitoring and Test Hole	Monitoring and Test Hole			
	A063276	12/5/2007	8.8	SILT	Monitoring and Test Hole	Monitoring and Test Hole			
7107937	A056728	6/4/2008	0	SILT	Test Hole	Monitoring			
	A056728	6/4/2008	6.7	SILT	Test Hole	Monitoring			
7108601	A069342	7/18/2008	5.3	SAND	Observation Wells	Monitoring	3.5		
7112132	A072946	9/11/2008	1.4	SILT	Monitoring and Test Hole	Monitoring and Test Hole			
7112133	A072951	9/11/2008	4.5	FINE SAND	Monitoring and Test Hole	Monitoring and Test Hole			
7112134	A067603	9/11/2008	4	SILT	Monitoring and Test Hole	Monitoring and Test Hole			
7112527		9/5/2008	0		Abandoned-Other	Test Hole			
7113903	A069669	5/29/2008	0	CLAY	Test Hole	Monitoring		0.9	
	A069669	5/29/2008	0	CLAY	Test Hole	Monitoring		1.4	
	A069669	5/29/2008	0	CLAY	Test Hole	Monitoring		2.6	
	A069669	5/29/2008	9.4	CLAY	Test Hole	Monitoring		0.9	
	A069669	5/29/2008	9.4	CLAY	Test Hole	Monitoring		1.4	
	A069669	5/29/2008	9.4	CLAY	Test Hole	Monitoring		2.6	
7113904	A069721	6/10/2008	0	SILT	Test Hole	Not Used	6.0	0.9	
	A069721	6/10/2008	0	SILT	Test Hole	Not Used	6.0	1.4	
	A069721	6/10/2008	0	SILT	Test Hole	Not Used	6.0	1.8	
	A069721	6/10/2008	0	SILT	Test Hole	Not Used	6.0	2	
	A069721	6/10/2008	0	SILT	Test Hole	Not Used	6.0	2.3	
	A069721	6/10/2008	8.8	SILT	Test Hole	Not Used	6.0	0.9	
	A069721	6/10/2008	8.8	SILT	Test Hole	Not Used	6.0	1.4	
	A069721	6/10/2008	8.8	SILT	Test Hole	Not Used	6.0	1.8	
	A069721	6/10/2008	8.8	SILT	Test Hole	Not Used	6.0	2	
	A069721	6/10/2008	8.8	SILT	Test Hole	Not Used	6.0	2.3	
7113905	A069725	6/6/2008	0	CLAY	Test Hole	Monitoring	4.0	0.9	
	A069725	6/6/2008	0	CLAY	Test Hole	Monitoring	4.0	1.4	
	A069725	6/6/2008	0	CLAY	Test Hole	Monitoring	4.0	1.8	
	A069725	6/6/2008	8.5	CLAY	Test Hole	Monitoring	4.0	0.9	
	A069725	6/6/2008	8.5	CLAY	Test Hole	Monitoring	4.0	1.4	
	A069725	6/6/2008	8.5	CLAY	Test Hole	Monitoring	4.0	1.8	
7114222	A078862	10/22/2008	6.1	SAND	Observation Wells				
7115665	A072877		0		Monitoring and Test Hole	Monitoring and Test Hole			
7116147	A070179		0			Monitoring			
7120177	A075210	2/4/2009	4.6	SAND	Test Hole	Test Hole			
7122872	A085129	4/29/2009	4.6		Observation Wells	Test Hole	0.3		
7122873	A085129	4/29/2009	4.6		Observation Wells	Test Hole	0.3		
7124443	A086758	6/1/2009	4.9			Monitoring and Test Hole			
7124444	A086658	6/2/2009	4.6	SAND	Monitoring and Test Hole	Monitoring and Test Hole			
7124445	A086659	6/2/2009	4.3	SAND	Monitoring and Test Hole	Monitoring and Test Hole			
7124446	A086660	6/2/2009	4.6	SAND	Monitoring and Test Hole	Monitoring and Test Hole			
7127688		4/26/2009	0		Abandoned-Other	Monitoring			
7129053	A062425	1/4/2008	0	SILT	Test Hole	Monitoring and Test Hole	2.3	0.7	
	A062425	1/4/2008	0	SILT	Test Hole	Monitoring and Test Hole	2.3	0.8	
	A062425	1/4/2008	7.4	SILT	Test Hole	Monitoring and Test Hole	2.3	0.7	
	A062425	1/4/2008	7.4	SILT	Test Hole	Monitoring and Test Hole	2.3	0.8	
7130091	A072946	7/30/2009	0						
7133591	A092279	10/13/2009	0	SAND	Observation Wells	Monitoring			
	A092279	10/13/2009	4.5	SAND	Observation Wells	Monitoring			
7134551	A079798	9/1/2009	10.7	CLAY	Test Hole	Monitoring and Test Hole			
7136019	A083826	11/11/2009	6.1	SILT	Observation Wells	Monitoring			
7136657	A090954	11/11/2009	0	SILT	Observation Wells	Monitoring and Test Hole			
	A090954	11/11/2009	7.5	SILT	Observation Wells	Monitoring and Test Hole			
7140008	A068984	10/8/2009	0	SILT	Test Hole	Monitoring and Test Hole	4.6	2.4	
	A068984	10/8/2009	0	SILT	Test Hole	Monitoring and Test Hole	4.6	3.7	
	A068984	10/8/2009	0	SILT	Test Hole	Monitoring and Test Hole	4.6	4.6	
	A068984	10/8/2009	8.8	SILT	Test Hole	Monitoring and Test Hole	4.6	2.4	
	A068984	10/8/2009	8.8	SILT	Test Hole	Monitoring and Test Hole	4.6	3.7	
	A068984	10/8/2009	8.8	SILT	Test Hole	Monitoring and Test Hole	4.6	4.6	
7144744	A093131	12/23/2009	8.2	CLAY	Test Hole	Test Hole			

Table F-1: MECP Water Well Summary

WELL ID	TAG	DATE COMPLETED	DEPTH (M)	BOTTOM LITHOLOGY	STATUS	WATER USE	DEPTH WATER FOUND (M)	STATIC LEVEL (M)	PUMPING RATE (LPS)
7149491	A102984	7/14/2012	5	SILT	Test Hole	Monitoring			
7150077	_NO_TAG	8/8/2010	0						
7153354		10/15/2008	0						
7155583	A100949	8/10/2010	6.7	SILT	Test Hole	Monitoring			
7155870	A102957	10/30/2010	15	SAND	Test Hole	Monitoring			
7156402	A094877	6/9/2010	7	SILT	Test Hole	Monitoring			
7157738	A111572	12/4/2010	20	SAND		Test Hole			
7160553	A072877	5/31/2010	0		Abandoned-Other	Monitoring		1.4	
7162496	A106885	2/25/2011	6.2	CLAY	Observation Wells	Monitoring and Test Hole	3.0		
7162781	A110394	3/14/2011	0						
7163280	A100924	10/22/2010	0						
7164250	A108783	6/2/2011	4.6	SAND		Monitoring and Test Hole			
7164251	A111589	6/2/2011	4.6	SAND		Monitoring and Test Hole			
7164252	A108655	6/2/2011	4.6	SAND		Monitoring and Test Hole			
7164253	A108656	6/2/2011	4.6	SAND		Monitoring and Test Hole			
7164254	A108621	6/2/2011	3	SAND		Monitoring and Test Hole			
7166578	A118821	6/14/2011	3.2	SAND	Test Hole	Monitoring and Test Hole			
7166579	A118824	6/15/2011	0	SAND	Test Hole	Monitoring and Test Hole			
7166580	A118660	6/15/2011	3.4		Test Hole	Monitoring and Test Hole			
7166866	A118849	6/14/2011	4.6	SAND	Test Hole	Monitoring and Test Hole			
7166964	A111967	6/20/2011	4.6	SAND	Test Hole	Test Hole			
7167063	A106832	6/20/2011	6.1	SAND	Observation Wells	Monitoring			
7167068	A116459	5/26/2011	15.2	SILT	Observation Wells	Monitoring and Test Hole	2.0		
7167654	A115668	8/16/2011	4.6	SAND	Test Hole	Monitoring and Test Hole			
7172366	A111967	9/2/2011	0		Abandoned-Other				
7172385		7/8/2011	0		Abandoned-Other				
7173284	A115204	11/10/2011	0						
7173973	_NO_TAG	7/8/2011	0						
7177602	A124297	1/9/2012	0						
7179297	A115237	1/26/2012	0						
7179298	A126241	1/20/2012	0						
7179746			0		Abandoned-Other	Monitoring			
7182746	A118854	5/10/2012	8.1	CLAY	Observation Wells	Monitoring			
7182747	A131127	5/11/2012	8.1	SILT	Observation Wells	Monitoring			
7182748	A132307	5/11/2012	7	CLAY	Observation Wells	Monitoring			
7182749	A118662	5/11/2012	7	CLAY	Observation Wells	Monitoring			
7183441	A108342	5/16/2011	0						
7187966	A131098	8/24/2012	6.1	CLAY	Test Hole	Monitoring and Test Hole			
7188465		6/1/2012	0						
7188957	A054758	3/30/2012	0						
7188958	A054758	3/30/2012	0						
7188959	A054758	3/30/2012	0						
7188962	A090954	3/30/2012	0						
7190852	A137356	10/22/2012	4.6		Observation Wells	Monitoring	2.1		
7191897	A134096	10/19/2012	0						
7192782	A137039	11/9/2012	3	SILT	Observation Wells	Monitoring and Test Hole			
7192783	A137038	11/9/2012	4.6	SAND	Observation Wells	Monitoring and Test Hole			
7192784	A140026	11/9/2012	4.6	SAND	Test Hole	Monitoring and Test Hole			
7192785	A140030	11/8/2012	5.3	SAND	Observation Wells	Monitoring and Test Hole			
7192786	A140025	11/9/2012	8.4	CLAY	Observation Wells	Monitoring and Test Hole			
7192787	A140031	11/8/2012	7.6	SAND	Monitoring and Test Hole	Monitoring and Test Hole			
7193390	A137357	12/4/2012	0						
7200395	A145890	4/1/2013	6.1	SILT	Monitoring and Test Hole	Monitoring and Test Hole			
7200396	A145889	4/7/2013	6.1	SILT	Monitoring and Test Hole	Monitoring and Test Hole			
7200397	A145888	4/1/2013	6.1	SILT	Monitoring and Test Hole	Monitoring and Test Hole			
7200398	A145885	4/1/2013	9.1	CLAY	Monitoring and Test Hole	Monitoring and Test Hole			
7200478	A142435	1/15/2013	0						
7201600	A146523	4/15/2013	4.3	SILT	Test Hole	Monitoring and Test Hole			
7201602	A098614	4/12/2013	4.6	SAND	Test Hole	Monitoring and Test Hole			
7201603	A098675	4/12/2013	4.6	SAND	Test Hole	Monitoring and Test Hole			
7201604	A146520	4/12/2013	10.1	CLAY	Test Hole	Monitoring and Test Hole			
7202158		8/28/2012	0						
7203750	A141486	3/18/2013	4.9	SAND	Test Hole	Monitoring	1.8		
7203751	A141628	3/23/2013	4.6	SAND	Test Hole	Monitoring	2.0		
7211887	A156152	11/6/2013	6.1	SAND	Monitoring and Test Hole	Monitoring and Test Hole			
7211888	A156153	11/6/2013	6.1	SAND	Monitoring and Test Hole	Monitoring and Test Hole			
7212979		10/11/2013	0						
7213476	A155709	11/28/2013	8.8	SILT	Test Hole	Monitoring and Test Hole			
7213477	A155618	11/27/2013	8.5	SILT	Test Hole	Monitoring and Test Hole			
7213478	A155708	11/28/2013	7.3	SILT	Test Hole	Monitoring and Test Hole			
7215213	A100924	12/2/2013	0		Abandoned-Other				
7217438	A159232	2/12/2014	4.6	SAND	Test Hole	Monitoring and Test Hole			
7222845	A165005	5/13/2014	6.7	SILT	Test Hole	Monitoring and Test Hole			
7222846	A165004	5/13/2014	6.9	SILT	Test Hole	Monitoring and Test Hole			
7222847	A165003	5/13/2014	7	SAND	Test Hole	Monitoring and Test Hole			
7222848	A165002	5/13/2014	7	SILT	Test Hole	Monitoring and Test Hole			
7222849	A165001	5/13/2014	6.7	SILT	Test Hole	Monitoring and Test Hole			
7223351	A149672	4/8/2014	0						
7226140	A162692	4/8/2014	0						
7227806	A169665	7/25/2014	6.7	SILT	Monitoring and Test Hole	Monitoring and Test Hole			
7227807	A169668	7/25/2014	7	SILT	Monitoring and Test Hole	Monitoring and Test Hole			
7228359	A167820	8/27/2014	4.3	SILT	Monitoring and Test Hole	Monitoring and Test Hole			
7228360	A166968	8/27/2014	4.6	SILT	Monitoring and Test Hole	Monitoring and Test Hole			
7228449		9/11/2014	0		Abandoned-Other				

Table F-1: MECP Water Well Summary

WELL ID	TAG	DATE COMPLETED	DEPTH (M)	BOTTOM LITHOLOGY	STATUS	WATER USE	DEPTH WATER FOUND (M)	STATIC LEVEL (M)	PUMPING RATE (LPS)
7228450		9/11/2014	0		Abandoned-Other				
7228451		9/11/2014	0		Abandoned-Other				
7228452		9/11/2014	0		Abandoned-Other				
7228453		9/11/2014	0		Abandoned-Other				
7228454		9/11/2014	0		Abandoned-Other				
7234126	A175827	12/4/2014	0						
7238174	A167230	9/30/2014	8.8	CLAY	Observation Wells	Monitoring and Test Hole	3.0		
7238175	A167232	9/29/2014	8.9	SILT	Observation Wells	Monitoring and Test Hole	3.0		
7239675	A174049	1/23/2015	12.6	SILT	Monitoring and Test Hole	Monitoring and Test Hole	6.4		
7241100		6/1/2012	0						
7241206	A179916	4/21/2015	8	CLAY	Test Hole	Monitoring	5.1		
7244496	A181450	6/20/2015	4.9	SAND	Observation Wells	Monitoring and Test Hole	3.2		
7245849	A184721	5/5/2015	0						
7248640	A086758	8/24/2015	0		Monitoring and Test Hole	Monitoring and Test Hole			
7248641	A086660	8/24/2015	0		Monitoring and Test Hole	Monitoring and Test Hole			
7248642	A086659	8/24/2015	0		Monitoring and Test Hole	Monitoring and Test Hole			
7248643	A086658	8/24/2015	0		Monitoring and Test Hole	Monitoring and Test Hole			
7248967	A189642	9/8/2015	0						
7249820	A179781	8/13/2015	0						
7262044	A188748	9/21/2015	0						
7263893	A196730	4/8/2016	0						
7268937	A202769	7/21/2016	6.9		Test Hole	Monitoring	2.0		
7268938	A202770	7/21/2016	6.9	SAND	Test Hole	Monitoring	2.0		
7269342	A190499	6/13/2016	0						
7274670	A209733	8/25/2016	12.7	SILT	Observation Wells	Monitoring			
7274716	A209729	8/29/2016	11.6	SILT	Observation Wells	Monitoring			
7274717	A209730	8/30/2016	6.4	SILT	Observation Wells	Monitoring			
7274732	A209734	8/26/2016	3.7	SILT	Observation Wells	Monitoring			
7274733	A209732	8/26/2016	5.4	SILT	Observation Wells	Monitoring			
7274734	A209731	8/25/2016	6.6	SILT	Observation Wells	Monitoring			
7276706	A190499	11/8/2016	0						
7277850	A211620	11/24/2016	6.1	SILT	Monitoring and Test Hole	Monitoring and Test Hole			
7277851	A211622	11/24/2016	6.1	SILT	Monitoring and Test Hole	Monitoring and Test Hole			
7277852	A211623	11/24/2016	6.1	SILT	Monitoring and Test Hole	Monitoring and Test Hole			
7277853	A211624	11/24/2016	6.1	SILT	Monitoring and Test Hole	Monitoring and Test Hole			
7277854	A211625	11/25/2016	12.2	CLAY	Monitoring and Test Hole	Monitoring and Test Hole			
7277855	A211626	11/25/2016	12.2	CLAY	Monitoring and Test Hole	Monitoring and Test Hole			
7278838	A209872	9/22/2016	0						
7278839	A209872	9/22/2016	0						
7279019	A213510	12/9/2016	15.2	CLAY	Observation Wells	Monitoring			
7279020	A213509	12/8/2016	15.2	CLAY	Observation Wells	Monitoring			
7279021	A213508	12/7/2016	9.1	CLAY	Observation Wells	Monitoring			
7279022	A213512	12/9/2016	6.1	SAND	Observation Wells	Monitoring			
7279023	A213507	12/7/2016	9.1	CLAY	Observation Wells	Monitoring			
7279024	A213511	12/9/2016	6.1	SAND	Observation Wells	Monitoring			
7280055	A211517	12/15/2016	6.1	SILT	Monitoring and Test Hole	Monitoring and Test Hole			
7281065		10/14/2016	0						
7281066	A209800	10/13/2016	0						
7281566		1/27/2017	0		Abandoned-Other				
7281567		9/12/2016	0		Abandoned-Other	Monitoring			
7282066	A214732	1/4/2017	6.1	SAND	Observation Wells	Monitoring			
7283305	A220765	12/22/2016	0						
7285527	A198627		0						
7288740		4/26/2017	0		Abandoned-Other				
7288744		4/27/2017	0		Abandoned-Other				
7289190	A216324		0						
7290050	A106885	5/18/2017	0		Abandoned-Other				
7290051		5/18/2017	0		Abandoned-Other				
7290052		5/18/2017	0		Abandoned-Other				
7290053		5/18/2017	0		Abandoned-Other				
7291150	A208749	6/30/2017	5.8	SAND	Monitoring and Test Hole	Test Hole			
7292326	A227423	6/21/2017	6.1	SAND	Observation Wells	Monitoring			
7292327	A227422	6/21/2017	6.1	SAND	Observation Wells	Monitoring			
7292328	A227421	6/21/2017	6.1	SAND	Observation Wells	Monitoring			
7301217	A208235	3/6/2017	4.6	SAND	Observation Wells	Monitoring			
7301222	A208215	3/6/2017	0						
7302037	A223419		0						
7302219	A217588	11/25/2017	2.4	SAND	Observation Wells	Test Hole			
7302220	A217589	11/25/2017	2.3	SAND	Observation Wells	Test Hole			
7302221	A217590	11/25/2017	2.4	SAND	Observation Wells	Test Hole			
7303878	A220462	12/20/2017	8.8	SILT	Monitoring and Test Hole	Test Hole			
7303945	A220463	12/20/2017	6.1	SAND	Monitoring and Test Hole	Test Hole			
7303946	A220464	12/20/2017	6.1	SAND	Monitoring and Test Hole	Test Hole			
7303947	A220465	12/21/2017	6.1	SAND	Monitoring and Test Hole	Test Hole			
7303948	A220467	12/21/2017	6.1	SAND	Monitoring and Test Hole	Test Hole			
7303949	A220466	12/21/2017	9.1	SILT	Monitoring and Test Hole	Test Hole			
7304247	A239151	11/22/2017	7.6	SAND	Monitoring and Test Hole	Test Hole	4.6		
7305777	A220502	1/10/2018	6.1	SAND	Observation Wells	Test Hole			
7305778	A220355	1/10/2018	6.1	SAND	Observation Wells	Test Hole			
7306684	A201432	11/20/2017	7.6	SAND	Monitoring and Test Hole	Test Hole	4.6		
7307941	A199820	2/5/2018	18	CLAY	Monitoring and Test Hole		17.9		
7307942	A199819	2/5/2018	21	CLAY	Monitoring and Test Hole		17.6		
7307943	A199818	2/5/2018	9	CLAY	Monitoring and Test Hole		5.1		
7309108	A202393	9/15/2017	0						

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WELL ID	TAG	DATE COMPLETED	DEPTH (M)	BOTTOM LITHOLOGY	STATUS	WATER USE	DEPTH WATER FOUND (M)	STATIC LEVEL (M)	PUMPING RATE (LPS)
7309634	A242973	3/1/2018	5.5	SAND	Monitoring and Test Hole	Test Hole			
7310296	A175774	3/7/2017	0						
7310515	A241452	3/29/2018	4.6	SAND		Monitoring			
7310516	A241454	3/29/2018	4.6	SAND	Observation Wells	Monitoring			
7310517	A241453	3/29/2018	4.6	SAND	Observation Wells	Monitoring			
7310665	A238663	3/6/2018	0						
7311337	A246450	4/19/2018	7.6	SAND	Monitoring and Test Hole	Test Hole			
7311338	A246451	4/19/2018	7.6	SAND	Monitoring and Test Hole	Monitoring			
7311339	A246452	4/19/2018	7.6	SAND	Monitoring and Test Hole	Test Hole			
7311340	A246453	4/19/2018	7.6	SAND	Monitoring and Test Hole	Test Hole			
7314662	A244889	4/20/2018	0						
7319824	A250426	6/7/2018	19.8	CLAY	Observation Wells	Monitoring			
7320468	A250042	6/13/2018	0		Observation Wells	Test Hole			
7320469	A250030	6/13/2018	0		Observation Wells	Test Hole			
7320470	A249654	6/12/2018	0		Observation Wells	Test Hole	3.0		
7320471	A249655	6/14/2018	0		Observation Wells	Test Hole			
7320472	A245058	6/15/2018	0		Observation Wells	Test Hole			
7320473	A250031	6/15/2018	0		Observation Wells	Test Hole			
7320474	A249653	6/8/2018	4	SAND	Observation Wells	Test Hole	2.1		
7320475	A250037	6/4/2018	0		Observation Wells	Test Hole			
7320476	A249701	6/20/2018	0		Observation Wells	Test Hole			
7320477	A235275	6/8/2018	7.6	SAND	Observation Wells	Test Hole	2.4		
7320478	A245009	6/8/2018	4.6	SAND	Observation Wells	Test Hole	2.4		
7320479	A249656	6/20/2018	0		Test Hole	Test Hole	3.0		
7320480	A239399	6/8/2018	4.6	SAND	Observation Wells	Test Hole	2.4		
7320481	A238837	6/18/2018	0		Observation Wells	Test Hole	3.0		
7320482	A245008	6/8/2018	4.6	SAND	Observation Wells	Test Hole	2.4		
7322227	A202486	3/27/2018	0						
7322912		10/26/2018	0						
7322913		10/26/2018	0						
7322914		10/26/2018	0						
7322915		10/26/2018	0						
7322916		10/26/2018	0						
7322917		10/26/2018	0						
7322918		10/26/2018	0						
7322919		10/26/2018	0						
7322920		10/26/2018	0						
7322921		10/26/2018	0						
7322922		10/26/2018	0						
7322923		10/25/2018	0						
7322924		10/26/2018	0						
7322925		10/25/2018	0						
7322926		10/25/2018	0						
7322927		10/25/2018	0						
7322928		10/25/2018	0						
7322929		10/25/2018	0						
7322930		10/25/2018	0						
7322931		10/25/2018	0						
7322932		10/25/2018	0						
7322933		10/25/2018	0						
7322934		10/25/2018	0						
7322935		10/25/2018	0						
7322936		10/25/2018	0						
7322937		10/25/2018	0						
7322938		10/25/2018	0						
7322939		10/25/2018	0						
7322940		10/25/2018	0						
7322941		10/25/2018	0						
7323954	A254578	8/9/2018	4.6	SAND	Monitoring and Test Hole	Test Hole			
7323955	A254575	8/8/2018	4.3	SAND	Monitoring and Test Hole	Test Hole			
7323956	A254576	8/8/2018	5.5	CLAY	Monitoring and Test Hole	Test Hole			
7323957	A254577	8/8/2018	4.3	SAND	Monitoring and Test Hole	Test Hole			
7324056	A254579	8/9/2018	3	SAND	Monitoring and Test Hole	Test Hole			
7324367		11/12/2018	0		Abandoned-Other				
7324368		11/12/2018	0		Abandoned-Other				
7324369		11/12/2018	0		Abandoned-Other				
7324370		11/12/2018	0		Abandoned-Other				
7324371		11/12/2018	0		Abandoned-Other				
7324372		11/13/2018	0		Abandoned-Other				
7324373		11/13/2018	0		Abandoned-Other				
7324374		11/13/2018	0		Abandoned-Other				
7324375		11/12/2018	0		Abandoned-Other				
7324376		11/13/2018	0		Abandoned-Other				
7325266	A239402	5/17/2018	0						
7326326	A260166	11/30/2018	0	SAND	Test Hole	Test Hole	2.4		
7326327	A260167	11/28/2018	0	SAND	Test Hole	Test Hole			
7326328	A260164	11/23/2018	0	SAND	Test Hole		2.4		
7327127	A247299	1/10/2019	0						
7328185	A259469	11/28/2018	5.5	SAND	Observation Wells	Test Hole			
7328200	A259422	1/11/2019	0						
7328491	A246703	10/15/2018	5.5	CLAY	Test Hole	Test Hole			
7328492	A257329	10/17/2018	4.3	CLAY	Test Hole	Test Hole			
7328493	A257591	10/15/2018	5.5	CLAY	Test Hole	Test Hole			
7329857	A209729	2/20/2019	0		Abandoned-Other		0.0		

Table F-1: MECP Water Well Summary

WELL ID	TAG	DATE COMPLETED	DEPTH (M)	BOTTOM LITHOLOGY	STATUS	WATER USE	DEPTH WATER FOUND (M)	STATIC LEVEL (M)	PUMPING RATE (LPS)
7329858	A209731	2/20/2019	0		Abandoned-Other		0.0		
7329859	A209734	2/20/2019	0		Abandoned-Other		0.0		
7329860	A209732	2/20/2019	0		Abandoned-Other		0.0		
7329861	A209733	2/20/2019	0		Abandoned-Other		0.0		
7329862	A209730	2/20/2019	0		Abandoned-Other		0.0		
7329863		2/20/2019	0		Abandoned-Other		0.0		
7329864		2/20/2019	0		Abandoned-Other		0.0		
7329865		2/20/2019	0		Abandoned-Other		0.0		
7329866		2/20/2019	0		Abandoned-Other		0.0		
7329867		2/20/2019	0		Abandoned-Other		0.0		
7329868		2/20/2019	0		Abandoned-Other		0.0		
7330031	A263292	2/10/2019	4.6	SILT	Monitoring and Test Hole	Monitoring and Test Hole			
7330032	A263275	2/10/2019	4.6	SILT	Monitoring and Test Hole	Monitoring and Test Hole			
7330033	A263274	2/10/2019	4.6	SILT	Monitoring and Test Hole	Monitoring and Test Hole			
7330034	A263273	2/10/2019	4.6	SILT	Monitoring and Test Hole	Monitoring and Test Hole			
7330035	A263272	2/10/2019	4.6	SILT	Monitoring and Test Hole	Monitoring and Test Hole			
7330036	A263294	2/10/2019	4.3	SAND	Monitoring and Test Hole	Monitoring and Test Hole			
7330037	A263293	2/10/2019	4.6	SAND	Monitoring and Test Hole	Monitoring and Test Hole			
7330038	A263295	2/10/2019	4.6	SAND	Monitoring and Test Hole	Monitoring and Test Hole			
7331272	A252513	3/25/2019	4.6	FINE SAND	Monitoring and Test Hole		2.1		
7331273	A252511	3/25/2019	4.6		Monitoring and Test Hole	Monitoring	2.1		
7331274	A252512	3/25/2019	4.6		Monitoring and Test Hole	Monitoring	2.1		
7331585	A267039	4/3/2019	17.7	SILT	Observation Wells	Monitoring	3.0		
7331588	A264580	4/5/2019	16.7	SILT	Observation Wells	Monitoring	3.0		
7331600	A267047	4/2/2019	16.8	SILT	Observation Wells	Monitoring	3.0		
7332207	A264716	3/27/2019	6	SAND	Monitoring and Test Hole	Monitoring and Test Hole	3.0		
7332213	A264719	3/27/2019	6	SAND	Monitoring and Test Hole	Monitoring and Test Hole	3.0		
7333089	A267052	3/28/2019	6	SAND	Observation Wells	Monitoring and Test Hole	3.0		
7333090	A264715	3/27/2019	6	SAND	Monitoring and Test Hole	Monitoring and Test Hole	3.0		
7333094	A267054	3/28/2019	9.1	SAND	Observation Wells	Monitoring and Test Hole			
7333098	A267055	3/28/2019	6	SAND	Observation Wells	Monitoring and Test Hole			
7333124	A267053	3/27/2019	6	SAND	Observation Wells	Monitoring and Test Hole	3.0		
7333149	A267051	3/28/2019	6	SAND	Observation Wells	Monitoring and Test Hole	3.0		
7333392	A247688	4/10/2019	0		Abandoned-Other				
7333393	A250724	4/10/2019	0		Abandoned-Other				
7333394	A238340	4/10/2019	0		Abandoned-Other				
7333395	A238341	4/10/2019	0		Abandoned-Other				
7333396	A238339	4/10/2019	0		Abandoned-Other				
7333397	A238338	4/10/2019	0		Abandoned-Other				
7333398	A247667	4/10/2019	0		Abandoned-Other				
7333909	A261509	3/1/2019	6.1	CLAY	Monitoring and Test Hole	Monitoring and Test Hole			
7333910	A261439	3/1/2019	6.7	CLAY	Monitoring and Test Hole	Monitoring and Test Hole			
7337505	A267879	5/4/2019	4.6	SAND	Monitoring and Test Hole	Monitoring and Test Hole			
7342109	A270771	6/19/2019	5.5	SILT	Monitoring and Test Hole	Monitoring and Test Hole			
7342110	A270765	6/19/2019	5.5	SILT	Monitoring and Test Hole	Monitoring and Test Hole			
7342111	A270762	6/19/2019	9.8	SILT	Monitoring and Test Hole	Monitoring and Test Hole			
7342112	A270764	6/19/2019	5.5	SILT	Monitoring and Test Hole	Not Used			
7342113	A267766	5/23/2019	7.9	SILT	Monitoring and Test Hole	Monitoring and Test Hole			
7342114	A267765	5/22/2019	7.9	SILT	Monitoring and Test Hole	Monitoring and Test Hole			
7342115	A267762	5/21/2019	7.9	SILT	Monitoring and Test Hole	Monitoring and Test Hole			
7342116	A267763	5/22/2019	12.2	SILT	Monitoring and Test Hole	Monitoring and Test Hole			
7342117	A267764	5/25/2019	7.6	SILT	Monitoring and Test Hole	Monitoring and Test Hole			
7342373	A265725	5/24/2019	12.2	CLAY		Monitoring and Test Hole			
7342374	A265726	5/24/2019	12.2	CLAY		Monitoring and Test Hole			
7342375	A265727	5/24/2019	19.8	CLAY		Monitoring and Test Hole			
7342376	A265728	5/24/2019	12.2	CLAY		Monitoring and Test Hole			
7342377	A265729	5/24/2019	7.6	CLAY		Monitoring and Test Hole			
7342378	A265712	5/27/2019	12.2	CLAY		Monitoring and Test Hole			
7342379	A265730	5/27/2019	7.6	SAND		Monitoring and Test Hole			
7342380	A267781	5/27/2019	7.9	SAND	Monitoring and Test Hole	Monitoring and Test Hole			
7348069	A281810	10/31/2019	5.2	SILT	Monitoring and Test Hole	Monitoring and Test Hole			
7348070	A281811	10/31/2019	4.6	SILT	Monitoring and Test Hole	Monitoring and Test Hole			
7348071	A281812	10/31/2019	4.6	SILT	Monitoring and Test Hole	Monitoring and Test Hole			
7348072	A281813	11/1/2019	4.6		Monitoring and Test Hole	Monitoring and Test Hole			
7348074	A281815	11/1/2019	4.6	SILT	Monitoring and Test Hole	Monitoring and Test Hole			
7348076	A283925	11/6/2019	5.2	CLAY		Monitoring and Test Hole			
7348077	A283926	11/5/2019	18.3	CLAY		Monitoring and Test Hole			
7349708	A285700	11/14/2019	6.1	SAND	Observation Wells	Monitoring and Test Hole	2.4		
7349709	A285701	11/12/2019	12.2	CLAY	Observation Wells	Monitoring and Test Hole	3.7		
7349710	A278148	11/14/2019	6.1	SAND	Observation Wells	Monitoring and Test Hole			
7349711	A285637	11/11/2019	6.1	CLAY	Observation Wells	Monitoring and Test Hole	3.7		
7349712	A285698	11/11/2019	6.1	CLAY	Observation Wells	Monitoring and Test Hole	3.0		
7349713	A285699	11/13/2019	6.1	SAND	Observation Wells	Monitoring and Test Hole	3.0		
7351846	A284437	11/14/2019	0						
7352040	A277854	1/8/2020	4.6	SILT	Observation Wells	Monitoring	2.1		
7352041	A277855	1/8/2020	5.2	SILT	Observation Wells	Monitoring	2.1		
7352042	A277856	1/8/2020	4.6	SILT	Observation Wells	Monitoring	2.1		
7354123	A288537	12/6/2019	4.6	SAND	Monitoring and Test Hole	Test Hole			
7356051	A244509	4/26/2018	12.5	SILT	Observation Wells	Monitoring			
7356173	A280697		9.1	SILT		Monitoring and Test Hole	7.9		
7356174	A280698		16.8	SAND		Monitoring and Test Hole	11.6		
7356868	A289507	3/3/2020	4.6	SAND	Observation Wells	Monitoring			
7357180	A267233	8/27/2019	19.8	CLAY	Observation Wells	Monitoring			
7358369	A291768	2/20/2020	0						

Table F-1: MECP Water Well Summary

WELL ID	TAG	DATE COMPLETED	DEPTH (M)	BOTTOM LITHOLOGY	STATUS	WATER USE	DEPTH WATER FOUND (M)	STATIC LEVEL (M)	PUMPING RATE (LPS)
7358779	A291964	4/13/2020	0						
7358780	A291965	4/14/2020	0						
7358781	A291966	4/14/2020	0						
7358782	A291967	4/14/2020	0						
7358783	A291968	4/15/2020	0						
7358784	A291969	4/15/2020	0						
7358785	A291970	4/16/2020	0						
7358786	A291971	4/16/2020	0						
7358787	A291952	4/16/2020	0						
7358788	A291953	4/17/2020	0						
7358789	A291963	4/13/2020	0						
7358791	A294727	4/17/2020	0						
7358792	A294728	4/17/2020	0						
7359141	A286398	3/20/2020	0						
7362235	A284232	3/20/2020	0						
7364000	A296435	6/17/2020	0						
7364001	A296436	6/17/2020	0						
7365222	A115001	6/18/2020	4.3	SAND	Monitoring and Test Hole	Monitoring and Test Hole			
7365223	A114982	6/18/2020	4.6	SAND	Monitoring and Test Hole	Monitoring and Test Hole			
7365224	A114983	6/18/2020	4.6	SAND	Monitoring and Test Hole	Monitoring and Test Hole			
7365522	A295950	5/28/2020	0						
7365523	A295951	5/25/2020	0						
7365524	A280268	5/8/2020	0						
7365525	A280267	5/8/2020	0						
7365526	A280266	5/8/2020	0						
7365558	A267715	5/7/2020	0						
7367284		8/7/2020	0						
7368052	A303294	8/11/2020	18.3	SAND	Observation Wells	Monitoring			
7371420	A304114	10/1/2020	0						
7371421	A304109	10/1/2020	0						
7371422	A304111	10/2/2020	0						
7371423	A304108	10/1/2020	0						
7374662	A281255	7/18/2020	0						
7375637	A283925	10/30/2020	0						
7378050	A308694	1/13/2021	0						
7378051	A308693	1/13/2021	0						
7378052	A308691	1/13/2021	0						
7378053	A308683	1/13/2021	0						
7378054	A308644	1/13/2021	0						
7378055	A308643	1/13/2021	0						
7379014	A312121	12/4/2020	0						
7379536	A366296	11/18/2020	0						
7379578	A306295	11/18/2020	0						
7379579	A306297	11/18/2020	0						
7381219	A311825	1/6/2021	0						
7381220	A311843	1/8/2021	0						
7381221	A311842	1/7/2021	0						
7383188	_NO_TAG	2/19/2021	0		Abandoned-Other				
7383962	A308707	2/24/2021	0						
7383963	A308708	2/24/2021	0						
7383964	A308709	2/24/2021	0						
7383965	A308710	2/24/2021	0						
7383966	A308711	2/24/2021	0						
7384215	A308453	1/14/2021	10.7	CLAY	Observation Wells	Monitoring			
7384216	A308458	1/14/2021	7.6	CLAY	Observation Wells	Monitoring			

Table F-2: MECP Water Well Geology Summary

WELL ID	LAYER	FORMATION	FORMATION END DEPTH (M)
6928770	1	SAND	1.52
	2	SILT	9.14
	3	TILL	10.30
6928879	1	SAND	0.50
	2	SAND	4.70
6929043	1	SAND	2.00
	2	SAND	5.00
6929365	1	SAND	2.44
	2	SILT	5.79
	3	CLAY	6.10
6929420	1	FINE SAND	3.60
	2	SAND	6.50
	3	SILT	9.10
6929491	1	SAND	4.00
	2	SAND	7.00
	3	SILT	8.80
6929537	1	SAND	1.80
	2	SAND	2.70
	3	SAND	4.50
6930088	1	GRAVEL	0.40
	2	SILT	2.40
	3	SILT	5.49
	4	CLAY	6.10
6930515	1	SAND	3.00
	2	SAND	6.00
	3	SILT	7.00
	4	SILT	7.60
6930722	1	FILL	1.50
	2	SAND	6.60
6930758	1		0.18
	2	SAND	4.60
	3	SAND	6.00
6930764	1	SAND	2.40
	2	SAND	4.00
	3	SAND	5.00
	4	SILT	6.00
6930780	1		0.20
	2	FILL	0.30
	3	SAND	3.00
6931105	1		0.20
	2	FILL	1.50
	3	SILT	3.70
7040697	1		0.20
	2	FILL	0.30
	3	SAND	5.50

Table F-2: MECP Water Well Geology Summary

WELL ID	LAYER	FORMATION	FORMATION END DEPTH (M)
7043241	1	FILL	0.91
	2	SAND	5.49
	3	SAND	7.32
7043663	1	FILL	1.50
	2	SAND	7.50
	3	CLAY	13.60
7044741	1	SAND	3.00
	2	SAND	7.20
	3	SILT	8.00
	4	CLAY	9.00
7050788	1	FILL	4.60
	2	SILT	5.80
7102860	1	SAND	2.44
	2	SAND	6.40
	3	SILT	7.62
	4	CLAY	8.53
7104289	1	SAND	3.10
	2	SAND	4.50
	3	SILT	5.18
7104294	1	SAND	2.44
	2	SAND	3.66
	3	SILT	4.88
7104295	1	SAND	2.44
	2	SAND	3.66
	3	SILT	4.88
7104296	1	SAND	3.10
	2	SAND	4.57
	3	SILT	5.18
7104559	1	FILL	0.61
	2	SILT	2.44
	3	CLAY	3.66
	4	SAND	5.18
	5	SAND	6.71
	6	SILT	8.84
7107937	1	SAND	0.91
	2	SAND	5.79
	3	SAND	6.40
	4	SILT	6.71
7108601	1	SAND	0.80
	2	SAND	1.50
	3	SAND	2.50
	4	SAND	3.10
	5	SAND	3.80
	6	SAND	5.30

Table F-2: MECP Water Well Geology Summary

WELL ID	LAYER	FORMATION	FORMATION END DEPTH (M)
7112132	1	SAND	0.91
	2	SILT	1.37
7112133	1	SAND	3.00
	2	FINE SAND	4.50
7112134	1	SAND	3.00
	2	SILT	4.00
7112527			
7113903	1	FILL	1.50
	2	SAND	4.50
	3	SAND	6.00
	4	SILT	7.60
	5	CLAY	9.40
7113904	1	SAND	1.50
	2	SAND	6.00
	3	SAND	6.80
	4	SILT	8.80
7113905	1	GRAVEL	1.50
	2	SAND	6.00
	3	SAND	7.60
	4	CLAY	8.50
7114222	1	OTHER	0.20
	2	FILL	0.30
	3	SAND	4.60
	4	SAND	6.10
7115665			
7116147			
7120177	1	SAND	2.44
	2	SAND	4.27
	3	SAND	4.57
7122872	1		4.60
7122873	1		4.60
7124443	1	SAND	3.66
	2	SAND	4.88
	3		
7124444	1	SAND	3.05
	2	SAND	4.57
7124445	1	SAND	3.05
	2	SAND	4.27
7124446	1	SAND	3.05
	2	SAND	4.57
7127688			
7129053	1	SAND	3.50
	2	SILT	7.40
7130091			

Table F-2: MECP Water Well Geology Summary

WELL ID	LAYER	FORMATION	FORMATION END DEPTH (M)
7133591	1	SAND	3.00
	2	SAND	4.50
7134551	1	SAND	3.05
	2	SAND	7.92
	3	CLAY	10.67
7136019	1	SILT	6.10
7136657	1	OTHER	0.20
	2	SAND	1.00
	3	SAND	3.50
	4	SAND	6.20
	5	SILT	7.50
7140008	1	SAND	3.05
	2	SAND	4.57
	3	SILT	8.84
7144744	1	FILL	0.61
	2	SILT	2.44
	3	MEDIUM SAND	7.62
	4	CLAY	8.23
7149491	1	FILL	0.60
	2	SAND	3.00
	3	SILT	5.00
7150077			
7153354			
7155583	1	SAND	3.70
	2	SAND	6.60
	3	SILT	6.70
7155870	1	FILL	2.00
	2	SAND	4.00
	3	SAND	15.00
7156402	1	SAND	1.50
	2	SAND	4.50
	3	SILT	7.00
7157738	1	TOPSOIL	2.50
	2	SILT	12.00
	3	SAND	20.00
7160553			
7162496	1	SAND	2.00
	2	SAND	5.00
	3	CLAY	6.20
7162781			
7163280			
7164250	1	TOPSOIL	0.15
	2	SAND	3.66
	3	SAND	4.57

Table F-2: MECP Water Well Geology Summary

WELL ID	LAYER	FORMATION	FORMATION END DEPTH (M)
7164251	1	TOPSOIL	0.15
	2	SAND	3.66
	3	SAND	4.57
7164252	1	TOPSOIL	0.15
	2	SAND	3.66
	3	SAND	4.57
7164253	1		0.15
	2	SAND	0.30
	3	SAND	3.66
	4	SAND	4.57
7164254	1		0.15
	2	SAND	0.30
	3	SAND	2.13
	4	SAND	3.05
7166578	1	SAND	3.20
7166579	1	SAND	
7166580	1	SAND	3.35
	2		
7166866	1	FILL	0.91
	2	SAND	4.57
7166964	1	FILL	0.91
	2	SAND	3.05
	3	SAND	4.57
7167063	1	FILL	1.52
	2	SAND	6.10
7167068	1	SAND	2.00
	2	SAND	5.00
	3	SILT	15.20
7167654	1	FILL	0.61
	2	SAND	1.50
	3	SAND	4.57
7172366	1		
7172385			
7173284			
7173973			
7177602			
7179297			
7179298			
7179746			
7182746	1	SAND	1.52
	2	SAND	6.10
	3	CLAY	8.08
7182747	1	FILL	2.13
	2	SAND	5.49
	3	SILT	8.08

Table F-2: MECP Water Well Geology Summary

WELL ID	LAYER	FORMATION	FORMATION END DEPTH (M)
7182748	1	FILL	1.52
	2	SAND	5.49
	3	CLAY	7.01
7182749	1	FILL	0.91
	2	SAND	5.49
	3	CLAY	7.01
7183441			
7187966	1	FILL	1.22
	2	SILT	3.10
	3	SILT	4.57
	4	CLAY	6.10
7188465			
7188957			
7188958			
7188959			
7188962			
7190852	1	SAND	4.60
	2		
7191897			
7192782	1	OTHER	0.15
	2	SILT	3.05
7192783	1	OTHER	0.30
	2	SAND	4.57
7192784	1	SAND	3.81
	2	SAND	4.57
7192785	1	SAND	3.81
	2	SAND	5.33
7192786	1	SAND	3.81
	2	SAND	6.86
	3	CLAY	8.38
7192787	1	SAND	3.81
	2	SAND	7.62
7193390			
7200395	1	FILL	1.52
	2	SAND	3.35
	3	SILT	6.10
7200396	1	FILL	1.52
	2	SAND	3.05
	3	SILT	6.10
7200397	1	FILL	1.52
	2	SAND	3.05
	3	SILT	6.10
7200398	1	FILL	1.52
	2	SAND	3.35
	3	SILT	6.71

Table F-2: MECP Water Well Geology Summary

WELL ID	LAYER	FORMATION	FORMATION END DEPTH (M)
	4	CLAY	9.14
7200478			
7201600	1	FILL	0.61
	2	SAND	2.44
	3	SAND	3.66
	4	SILT	4.27
7201602	1	SAND	1.22
	2	SAND	4.27
	3	SAND	4.57
7201603	1	SAND	1.22
	2	SAND	4.27
	3	SAND	4.57
7201604	1	SAND	1.22
	2	SAND	5.79
	3	CLAY	7.62
	4	CLAY	10.06
7202158			
7203750	1	SAND	3.90
	2	SAND	4.90
7203751	1	SAND	3.40
	2	SAND	4.60
7211887	1	FILL	1.83
	2	SAND	3.35
	3	SAND	6.10
7211888	1	SAND	1.83
	2	SAND	3.35
	3	SAND	6.10
7212979			
7213476	1	FILL	7.32
	2	SILT	8.84
7213477	1	FILL	7.92
	2	SILT	8.53
7213478	1	FILL	6.71
	2	SILT	7.32
7215213			
7217438	1	FILL	1.52
	2	SAND	4.57
7222845	1	SAND	4.27
	2	SILT	6.71
7222846	1	SAND	4.27
	2	SILT	6.86
7222847	1	SAND	4.27
	2	SAND	7.01
7222848	1	SAND	4.27
	2	SILT	7.01

Table F-2: MECP Water Well Geology Summary

WELL ID	LAYER	FORMATION	FORMATION END DEPTH (M)
7222849	1	SAND	4.27
	2	SILT	6.71
7223351			
7226140			
7227806	1	SAND	1.50
	2	SAND	3.10
	3	SAND	4.57
	4	SILT	6.71
7227807	1	SAND	1.50
	2	SAND	3.40
	3	SAND	4.57
	4	SILT	7.01
7228359	1		0.15
	2	FILL	0.61
	3	SAND	3.05
	4	SILT	4.27
7228360	1		0.15
	2	FILL	0.61
	3	SAND	3.05
	4	SILT	4.57
7228449			
7228450			
7228451			
7228452			
7228453			
7228454			
7234126			
7238174	1	SAND	0.70
	2	FINE SAND	6.70
	3	CLAY	8.80
7238175	1	SAND	0.70
	2	FINE SAND	4.40
	3	CLAY	6.70
	4	SILT	8.90
7239675	1	SAND	1.50
	2	FINE SAND	3.00
	3	SAND	12.20
	4	SILT	12.60
7241100			
7241206	1	SAND	4.60
	2	SAND	7.40
	3	CLAY	8.00
7244496	1		1.50
	2	SAND	3.00
	3	SAND	4.90

Table F-2: MECP Water Well Geology Summary

WELL ID	LAYER	FORMATION	FORMATION END DEPTH (M)
7245849			
7248640			
7248641			
7248642			
7248643			
7248967			
7249820			
7262044			
7263893			
7268937	1	SAND	1.50
	2	SAND	6.90
	3		
7268938	1	SAND	1.50
	2	SAND	6.90
7269342			
7274670	1	SAND	3.10
	2	SILT	7.30
	3	SILT	12.70
7274716	1	SAND	2.70
	2	SILT	7.10
	3	SILT	11.60
7274717	1	SAND	1.20
	2	SILT	5.20
	3	SILT	6.40
7274732	1	SAND	1.80
	2	SILT	3.70
7274733	1	SAND	2.80
	2	SILT	5.40
7274734	1	SAND	3.10
	2	SILT	5.20
	3	SILT	6.60
7276706			
7277850	1	FINE SAND	3.96
	2	SILT	6.10
7277851	1	FINE SAND	3.66
	2	SILT	6.10
7277852	1	FINE SAND	3.96
	2	SILT	6.10
7277853	1	FINE SAND	3.96
	2	SILT	6.10
7277854	1	FINE SAND	3.66
	2	FINE SAND	9.75
	3	CLAY	12.19
7277855	1	FINE SAND	4.27
	2	FINE SAND	9.75

Table F-2: MECP Water Well Geology Summary

WELL ID	LAYER	FORMATION	FORMATION END DEPTH (M)
	3	CLAY	12.19
7278838			
7278839			
7279019	1	FILL	3.05
	2	SAND	4.57
	3	SAND	6.86
	4	CLAY	12.19
	5	CLAY	13.72
	6	CLAY	15.24
7279020	1	FILL	1.52
	2	SAND	5.33
	3	SAND	6.86
	4	CLAY	13.72
	5	CLAY	15.24
7279021	1	SAND	1.52
	2	SAND	5.33
	3	SAND	7.62
	4	CLAY	9.14
7279022	1	FILL	1.52
	2	SAND	4.57
	3	SAND	6.10
7279023	1	SAND	1.52
	2	SAND	4.57
	3	SAND	6.86
	4	CLAY	9.14
7279024	1	FILL	1.52
	2	SAND	4.57
	3	SAND	6.10
7280055	1		0.15
	2	SAND	3.96
	3	SILT	6.10
7281065			
7281066			
7281566			
7281567			
7282066	1	TOPSOIL	0.61
	2	SAND	3.05
	3	SAND	6.10
7283305			
7285527			
7288740			
7288744			
7289190			
7290050			
7290051			

Table F-2: MECP Water Well Geology Summary

WELL ID	LAYER	FORMATION	FORMATION END DEPTH (M)
7290052			
7290053			
7291150	1		0.15
	2	FILL	0.61
	3	SAND	4.27
	4	SAND	5.79
7292326	1	FILL	1.52
	2	SAND	6.10
7292327	1	FILL	1.52
	2	SAND	6.10
7292328	1	FILL	1.52
	2	SAND	6.10
7301217	1	FILL	0.61
	2	CLAY	1.52
	3	CLAY	3.05
	4	SAND	4.57
7301222			
7302037			
7302219	1	GRAVEL	0.15
	2	GRAVEL	0.61
	3	SAND	2.44
7302220	1	GRAVEL	0.61
	2	SAND	2.29
7302221	1	GRAVEL	0.15
	2	SAND	2.44
7303878	1	FILL	1.22
	2	SAND	4.27
	3	SAND	6.10
	4	SILT	8.84
7303945	1	FILL	1.22
	2	SAND	4.27
	3	SAND	6.10
7303946	1	FILL	1.22
	2	SAND	4.27
	3	SAND	6.10
7303947	1	FILL	1.22
	2	SAND	4.27
	3	SAND	6.10
7303948	1	FILL	1.22
	2	SAND	4.27
	3	SAND	6.10
7303949	1	FILL	1.22
	2	SAND	4.27
	3	SAND	6.10
	4	SILT	9.14

Table F-2: MECP Water Well Geology Summary

WELL ID	LAYER	FORMATION	FORMATION END DEPTH (M)
7304247	1	SAND	7.62
7305777	1	FILL	1.83
	2	SAND	4.27
	3	SAND	6.10
7305778	1	FILL	1.83
	2	SAND	4.27
	3	SAND	6.10
7306684	1	SAND	0.76
	2	FILL	2.74
	3	SAND	6.55
	4	SAND	7.62
7307941	1	TOPSOIL	0.30
	2	CLAY	4.80
	3	SILT	7.90
	4	CLAY	18.00
7307942	1	TOPSOIL	0.30
	2	CLAY	4.80
	3	SILT	7.90
	4	CLAY	21.00
7307943	1	TOPSOIL	0.30
	2	CLAY	4.80
	3	SILT	7.90
	4	CLAY	9.00
7309108			
7309634	1	TOPSOIL	0.15
	2	SAND	5.49
7310296			
7310515	1	SAND	2.13
	2	SAND	4.57
7310516	1	SAND	2.13
	2	SAND	4.57
7310517	1	SAND	2.13
	2	SAND	4.57
7310665			
7311337	1	OTHER	0.30
	2	FILL	6.10
	3	SAND	7.62
7311338	1	OTHER	0.15
	2	FILL	0.46
	3	SAND	7.01
	4	SAND	7.62
7311339	1	OTHER	0.15
	2	FILL	4.57
	3	SAND	7.01
	4	SAND	7.62

Table F-2: MECP Water Well Geology Summary

WELL ID	LAYER	FORMATION	FORMATION END DEPTH (M)
7311340	1	OTHER	0.15
	2	FILL	4.57
	3	SAND	7.01
	4	SAND	7.62
7314662			
7319824	1	CLAY	4.57
	2	CLAY	19.81
7320468			
7320469			
7320470			
7320471			
7320472			
7320473			
7320474	1	SAND	3.96
7320475			
7320476			
7320477	1	SAND	7.62
7320478	1	SAND	4.57
7320479			
7320480	1	SAND	4.57
7320481			
7320482	1	SAND	4.57
7322227			
7322912			
7322913			
7322914			
7322915			
7322916			
7322917			
7322918			
7322919			
7322920			
7322921			
7322922			
7322923			
7322924			
7322925			
7322926			
7322927			
7322928			
7322929			
7322930			
7322931			
7322932			
7322933			

Table F-2: MECP Water Well Geology Summary

WELL ID	LAYER	FORMATION	FORMATION END DEPTH (M)
7322934			
7322935			
7322936			
7322937			
7322938			
7322939			
7322940			
7322941			
7323954	1	OTHER	0.15
	2	FILL	0.91
	3	SAND	4.57
7323955	1	GRAVEL	0.30
	2	FILL	0.91
	3	SAND	4.27
7323956	1	TOPSOIL	0.30
	2	FILL	0.91
	3	SAND	4.57
	4	CLAY	5.49
7323957	1	OTHER	0.15
	2	FILL	0.91
	3	SAND	4.27
7324056	1	OTHER	0.09
	2	FILL	0.91
	3	SAND	3.05
7324367			
7324368			
7324369			
7324370			
7324371			
7324372			
7324373			
7324374			
7324375			
7324376			
7325266			
7326326	1	SAND	
	2	SAND	
7326327	1	SAND	
	2	SAND	
7326328	1	SAND	
	2	SAND	
7327127			
7328185	1	FILL	0.61
	2	SAND	1.83
	3	SAND	3.35

Table F-2: MECP Water Well Geology Summary

WELL ID	LAYER	FORMATION	FORMATION END DEPTH (M)
	4	SAND	5.49
7328200			
7328491	1	GRAVEL	0.61
	2	SAND	3.05
	3	CLAY	5.49
7328492	1	GRAVEL	0.61
	2	SAND	3.05
	3	CLAY	4.27
7328493	1	GRAVEL	0.61
	2	SAND	4.88
	3	CLAY	5.49
7329857			
7329858			
7329859			
7329860			
7329861			
7329862			
7329863			
7329864			
7329865			
7329866			
7329867			
7329868			
7330031	1	OTHER	0.13
	2	SAND	0.61
	3	SAND	3.96
	4	SILT	4.57
7330032	1	OTHER	0.13
	2	SAND	0.61
	3	SAND	3.96
	4	SILT	4.57
7330033	1	OTHER	0.13
	2	SAND	0.61
	3	SAND	3.96
	4	SILT	4.57
7330034	1	OTHER	0.13
	2	SAND	0.61
	3	SAND	3.96
	4	SILT	4.57
7330035	1	OTHER	0.13
	2	SAND	0.61
	3	SAND	3.96
	4	SILT	4.57
7330036	1	OTHER	1.83
	2	SAND	3.66

Table F-2: MECP Water Well Geology Summary

WELL ID	LAYER	FORMATION	FORMATION END DEPTH (M)
	3	SAND	4.27
7330037	1	OTHER	1.83
	2	SAND	3.66
	3	SAND	4.57
7330038	1	OTHER	0.15
	2	SAND	3.66
	3	SAND	4.57
7331272	1	OTHER	0.20
	2	FINE SAND	2.13
	3	FINE SAND	4.57
7331273	1	OTHER	1.83
	2	FINE SAND	4.57
	3		
7331274	1	OTHER	0.15
	2	FINE SAND	4.57
	3		
7331585	1	FILL	4.50
	2	SAND	9.10
	3	SILT	13.70
	4	SILT	17.70
7331588	1	FILL	4.50
	2	SAND	9.10
	3	CLAY	13.70
	4	SILT	16.70
7331600	1	FILL	4.57
	2	SAND	9.14
	3	SILT	13.72
	4	SILT	16.76
7332207	1	SAND	3.00
	2	SILT	4.50
	3	SAND	6.00
7332213	1	SAND	3.00
	2	SAND	4.50
	3	SAND	6.00
7333089	1	SAND	3.00
	2	SILT	4.50
	3	SAND	6.00
7333090	1	SAND	3.00
	2	SILT	4.50
	3	SAND	6.00
7333094	1	SAND	3.00
	2	SILT	4.50
	3	SAND	7.20
	4	SAND	9.10

Table F-2: MECP Water Well Geology Summary

WELL ID	LAYER	FORMATION	FORMATION END DEPTH (M)
7333098	1	SAND	3.00
	2	SILT	4.50
	3	SAND	6.00
7333124	1	SAND	3.00
	2	SILT	4.50
	3	SAND	6.00
7333149	1	SAND	3.00
	2	SILT	4.50
	3	SAND	6.00
7333392			
7333393			
7333394			
7333395			
7333396			
7333397			
7333398			
7333909	1	OTHER	1.83
	2	SAND	5.49
	3	CLAY	6.10
7333910	1	OTHER	1.83
	2	SAND	4.88
	3	CLAY	6.71
7337505	1	OTHER	0.08
	2	SAND	3.66
	3	SAND	4.57
7342109	1	OTHER	0.10
	2	SILT	3.66
	3	SILT	5.49
7342110	1	OTHER	0.10
	2	SILT	3.66
	3	SILT	5.49
7342111	1	OTHER	0.10
	2	SILT	6.10
	3	SILT	9.75
7342112	1	OTHER	0.10
	2	SILT	3.05
	3	SILT	5.49
7342113	1	OTHER	0.08
	2	FILL	3.05
	3	SILT	6.10
	4	SILT	7.92
7342114	1	OTHER	0.15
	2	FILL	6.10
	3	SILT	7.92

Table F-2: MECP Water Well Geology Summary

WELL ID	LAYER	FORMATION	FORMATION END DEPTH (M)
7342115	1	OTHER	0.15
	2	FILL	6.10
	3	SILT	7.92
7342116	1	OTHER	0.15
	2	FILL	6.10
	3	SILT	12.19
7342117	1	OTHER	0.15
	2	FILL	6.10
	3	SILT	7.62
7342373	1	SAND	8.84
	2	CLAY	12.19
7342374	1	SAND	8.84
	2	CLAY	12.19
7342375	1	SAND	9.14
	2	CLAY	19.81
7342376	1	SAND	8.84
	2	CLAY	12.19
7342377	1	SAND	7.62
	2	CLAY	
7342378	1	SAND	9.14
	2	CLAY	12.19
7342379	1	SAND	7.62
7342380	1	OTHER	0.15
	2	OTHER	3.35
	3	SAND	3.66
	4	SAND	5.18
	5	SAND	7.92
7348069	1	OTHER	0.15
	2	FILL	0.91
	3	SILT	1.52
	4	SILT	5.18
7348070	1	OTHER	0.15
	2	FILL	0.61
	3	SILT	1.22
	4	SILT	4.57
7348071	1	OTHER	0.15
	2	OTHER	0.30
	3	FILL	0.61
	4	SILT	1.22
	5	SILT	4.57
7348072	1	OTHER	0.15
	2	FILL	0.61
	3	SILT	1.22
	4	SILT	4.57
	5		

Table F-2: MECP Water Well Geology Summary

WELL ID	LAYER	FORMATION	FORMATION END DEPTH (M)
7348074	1	OTHER	0.15
	2	OTHER	0.30
	3	FILL	0.61
	4	SILT	1.22
	5	SILT	4.57
7348076	1	SAND	1.52
	2	SAND	3.66
	3	CLAY	5.18
7348077	1	SAND	1.83
	2	CLAY	7.62
	3	SILT	15.85
	4	CLAY	18.29
7349708	1	OTHER	0.30
	2	FILL	1.52
	3	SAND	5.49
	4	SAND	6.10
7349709	1	OTHER	0.30
	2	FILL	0.91
	3	SAND	3.66
	4	SAND	9.14
	5	CLAY	12.19
7349710	1	OTHER	0.30
	2	SAND	1.52
	3	SAND	5.49
	4	SAND	6.10
7349711	1	OTHER	0.30
	2	FILL	0.91
	3	SAND	3.66
	4	SAND	5.49
	5	CLAY	6.10
7349712	1	OTHER	0.30
	2	FILL	0.91
	3	SAND	3.66
	4	SAND	5.49
	5	CLAY	6.10
7349713	1	OTHER	0.30
	2	SAND	1.52
	3	SAND	5.49
	4	SAND	6.10
7351846			
7352040	1	SILT	4.60
7352041	1	SILT	5.20
7352042	1	SILT	4.60
7354123	1	OTHER	0.15
	2	FILL	2.44

Table F-2: MECP Water Well Geology Summary

WELL ID	LAYER	FORMATION	FORMATION END DEPTH (M)
	3	SAND	4.57
7356051	1	STONES	0.12
	2	FILL	3.05
	3	SILT	5.18
	4	SAND	7.62
	5	CLAY	10.67
	6	SILT	12.50
7356173	1	SAND	3.05
	2	SILT	6.10
	3	SILT	9.14
7356174	1	SAND	1.52
	2	SILT	3.05
	3	SILT	9.14
	4	SAND	16.76
7356868	1		0.20
	2	SAND	4.60
7357180	1	SAND	3.05
	2	SAND	6.10
	3	CLAY	19.81
7358369			
7358779			
7358780			
7358781			
7358782			
7358783			
7358784			
7358785			
7358786			
7358787			
7358788			
7358789			
7358791			
7358792			
7359141			
7362235			
7364000			
7364001			
7365222	1	SAND	0.91
	2	SAND	2.74
	3	SAND	4.27
7365223	1	SAND	2.74
	2	SAND	4.57
7365224	1	SAND	2.74
	2	SAND	4.57
7365522			

Table F-2: MECP Water Well Geology Summary

WELL ID	LAYER	FORMATION	FORMATION END DEPTH (M)
7365523			
7365524			
7365525			
7365526			
7365558			
7367284			
7368052	1	FILL	6.10
	2	SAND	12.19
	3	SAND	18.29
7371420			
7371421			
7371422			
7371423			
7374662			
7375637			
7378050			
7378051			
7378052			
7378053			
7378054			
7378055			
7379014			
7379536			
7379578			
7379579			
7381219			
7381220			
7381221			
7383188	1		
7383962			
7383963			
7383964			
7383965			
7383966			
7384215	1	FILL	3.05
	2	SAND	4.57
	3	CLAY	10.67
7384216	1	FILL	3.05
	2	SAND	4.57
	3	CLAY	7.62

Appendix G Toronto Inspection Hydrogeologic Investigation Report

Preliminary Hydrogeological Assessment

Bloor and Dundas Development
Toronto, Ontario

Choice Properties LP

SLR Project No. 209.30128.00000

June 30, 2022

REPORT ON
HYDROGEOLOGICAL INVESTIGATION - REVISED
2280 DUNDAS STREET WEST
TORONTO, ONTARIO

REPORT NO.: 2477-18-HG
REPORT DATE: JULY 10, 2018

PREPARED FOR:
CHOICE PROPERTIES REIT
22 ST. CLAIR EAST, SUITE 500
TORONTO, ONTARIO
M4T 2S5

110 KONRAD CRESCENT, UNIT 16, MARKHAM, ONTARIO L3R 9X2
TEL.: 905-940-8509 FAX: 905-940-8192

Executive Summary

Toronto Inspection Ltd. (TIL) was retained by Choice Properties REIT (the client) to conduct a hydrogeological investigation at 2280 Dundas Street West, Toronto, ON (the Site). The proposed development includes a number of mixed-use high-rise towers and mid-rise units, a school, and parkland. The buildings will have a 2-level underground parking garage extending to approximately 8.5 meters below ground surface (mbgs) with foundations extending approximately 9.5 mbgs.

The Site is located partially within the Humber River Watershed and the Lake Ontario Watershed, under the jurisdiction of the Toronto and Region Conservation Authority (TRCA). The Site is not located within a TRCA regulated area.

A series of twelve (12) boreholes (BH-1 (s/d) to BH-11 (s/d)) were installed across the Site in February and March 2018. BH-1 and BH-11 both have deep (d) and shallow (s) boreholes. Twelve (12) boreholes were instrumented as monitoring wells as part of this hydrogeological investigation. The subsurface geology consists mainly of fill underlain by deposits of Sand, Silty Sand, Sandy Silt, and Clayey Silt. Beneath the Clayey Silt is a Sandy Silt unit.

Groundwater levels ranged between 109.92 masl and 108.49 masl, with an average level of 109.09 masl in the shallow aquifer and flowing in a southwesterly direction. The static groundwater condition in the deeper aquifer unit was found to have an average level of 99.40 masl.

Hydraulic conductivity results within the shallow overburden ranged between 5.92 x 10^{-8} and 4.88 x 10^{-6} m/s. As a result of the heterogeneity of the overburden, a geometric mean of the results was calculated and determined to be 6.99 x 10^{-7} m/s.

A total of three (3) water quality sample were collected from 18BH-5, 18BH-9, and 18BH-11s and analyzed for the City of Toronto sewer discharge parameters. Based on laboratory analyses, the parameter Manganese (total) failed the Table 2 – Limits for Storm Sewer Discharge criteria for all the samples. Additionally, exceedances for the Table 2 – Limits for Storm Sewer Discharge criteria for Nickle (total) were found in 18BH-5 and TSS were found in 18BH-11s. All other parameters met the criteria for *Toronto Municipal Code 681, for Table 1 – Limits for Sanitary/Combined Sewer Discharge and Table 2 – Limits for Storm Sewer Discharge*.

Based on the MOECC well records search, one domestic well was found within a 1 km radius of the Site; however, it is unlikely remains as the area is municipally serviced. One active permitted groundwater takings were identified within 1 km of the Site.

The Site is not located within any significant groundwater recharge area (SGRA), Wellhead Protection Area (WHPA), or Intake Protection Zone (IPZ); however, it is located within a Highly Vulnerable Aquifer Area (HVA). As a result of being within an HVA, a salt management plan is encouraged to reduce impacts to the shallow aquifer.

Dewatering will be necessary during construction to control the groundwater level and maintain a dry working condition. Two dewatering scenarios were considered for the underground parking levels. The calculated dewatering rate for 2 Levels of underground parking during construction is 286 m^3/day. It will be necessary to register the taking on the Ministry of Environment and Climate Change Environmental Activity and Sector Registry (MOECC EASR). It is suggested the max rate

of 400 m^3/day be applied to account for temporary variability in dewatering rates due to the range of heterogeneity in the material observed.

The post construction dewatering rates are approximately 1/3rd the rates calculated for during construction. The calculated dewatering rate for 2 Levels of underground parking during construction is 95 m^3/day. The water taking will require a Permit to Take Water. Since the foundation drain will be discharging to the municipal sanitary system, a Private Discharge Application for Long Term Discharge will need to be submitted to the City of Toronto. It is recommended that design options to minimize the permanent dewatering be considered.

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1 Introduction

1.1 Project Background

Toronto Inspection Ltd. (TIL) was retained by Choice Properties REIT (the client) to conduct a hydrogeological investigation at 2280 Dundas Street West, Toronto, ON, M6R 1X3 (the Site). The location of the Site is shown in **Figure 1**. The proposed development includes a number of mixed-use high-rise towers and mid-rise units, a school, and parkland. The buildings will have a 2-level underground parking garage extending to approximately 8.5 meters below ground surface (mbgs) with foundations extending approximately 9.5 mbgs. A Site Plan and Architectural Drawings are provided in **Appendix A**.

1.2 Objectives of the Hydrogeological Investigation

This hydrogeological investigation was conducted to characterize the existing geological and hydrogeological conditions at the Site, determine the need for dewatering, quantify potential impacts to the local aquifer, and identify regulations applicable to the development of the Site.

1.3 Scope of Work

1.3.1 Conceptual Understanding

A conceptual understanding of the regional and local geological and hydrogeological system was developed through the review of existing reports and available geological information. This included:

- Mapping and reports by Toronto and Region Conservation Authority (TRCA);
- Geological and Hydrogeological Information from Ontario Geological Survey (OGS);
- Geological and Hydrogeological Information from Ontario Ministry of Natural Resources and Forestry (MNRF); and
- Ministry of the Environment and Climate Change (MOECC) Wells Records Database.

1.3.2 Field Investigation

The local scale hydrogeological system was assessed using a network of twelve (12) on-site monitoring wells installed as part of this hydrogeological investigation. Monitoring wells were used to measure water levels and conduct in-situ hydraulic conductivity tests.

1.3.3 Data Analysis

Based on the current understanding of the proposed development and the existing groundwater conditions, the field information was evaluated to ascertain potential dewatering requirements.

2 Relevant Regulations and Policies

Environmental regulations and policies which may be relevant for this hydrogeological investigation are listed below and discussed briefly:

- City of Toronto Official Plan (2015);
- City of Toronto Discharge Permits for Private Water;
- Toronto and Region Conservation Authority (TRCA) Policies and Ontario Regulations (O.Reg. 166/06);
- Permit to Take Water (PTTW), Section 34 of the Ontario Water Resource Act (1990); and
- The Clean Water Act (2006).

City of Toronto Official Plan

The City of Toronto Official Plan identifies development and land-use objectives. Based on a review of the Official Plan maps, the Site is located within a Mixed Uses Area. The Site is also outside of Environmentally Significant Areas, Natural Heritage Systems or Ravines, and Natural Feature Protection By-Law areas.

City of Toronto Discharge Permits for Private Water

The City of Toronto's (the City) Water Department is responsible for managing sewer discharges which enter the City's system. Should any private water on the Site require discharge to the City system, a permit will be required. The City will review short term and long-term discharge plans, water quality, and estimated volumes to determine if the sewers can accommodate the discharge flows.

TRCA Policies and Regulations (O.Reg. 166/06)

Under Section 28 of the Conservation Authorities Act, the local conservation authorities are mandated to protect the health and integrity of the regional greenspace system and to maintain or improve the hydrological and ecological functions performed by valley and stream corridors. The Toronto and Region Conservation Authority, through its regulatory mandate, is responsible for issuing permits under O.Reg. 166/06, Development, Interference with Wetlands and Alterations to Shorelines and Watercourses for development proposal or site alteration work within the regulated areas.

A preliminary review indicates that the Site is not within TRCA regulated areas. As such, a permit under O.Reg. 166/06 may not be required for the proposed development, however a pre-consultation meeting with the TRCA is recommended to verify any requirements.

Permit to Take Water

A PTTW under Section 34 of the Ontario Water Resources Act (OWRA) is required from the MOECC for any water taking that is greater than 50,000 L/day. For water takings related to construction site dewatering, water takings of more than 50,000 L/day but less than 400,000 L/day may be registered on the Environmental Activity and Sector Registry (EASR), while water takings of more than 400,000 L/day will require a PTTW issued by the MOECC. A detailed review of Site conditions and proposed infrastructure design will need to be undertaken to assess the need for dewatering during construction. This additional study typically includes a comprehensive characterization of the geological and hydrogeological setting of the Site, assessment of the required dewatering rate and delineation of the associated zone of influence, assessment of the

potential impact associated with the construction dewatering and establish a set of mitigation measures to address the potential impacts.

The Clean Water Act, 2006

The MOECC mandates the protection of existing and future sources of drinking water under the Clean Water Act, 2006 (CWA). Initiatives undertaken under the CWA include the delineation of Wellhead Protection Areas (WHPAs), significant groundwater recharge areas (SGRAs), Intake Protection Zones (IPZs), and Highly Vulnerable Aquifer areas (HVAs) as well as the assessment of drinking water quality and quantity threats within Source Protection Regions. Source Protection Plans are developed under the CWA which include the restriction and prohibition of certain types of activities and land uses within WHPAs.

Based on reviewing the Source Water Protection Report mapping of Credit Valley, Toronto and Region, and Central Lake Ontario (CTC), the Site is not located within a WHPA, SGRA, or IPZ, however the Site is located within a HVA. Therefore, the CWA may be applicable.

3 Regional Geological and Hydrogeological Understanding

3.1 Topography and Physiography

The Site is located partially within the Humber River Watershed and the Lake Ontario Waterfront Watershed, under the jurisdiction of the Toronto and Region Conservation Authority (TRCA).

The regional topography slopes southward towards Lake Ontario. The Site slopes to the south towards Lake Ontario and has an approximate average elevation of 112 masl. The nearest surface water features to the Site are a series of ponds and streams located in High Park, approximately 900m west of the Site.

The Site is situated within the physiographic region known as the Iroquois Plain. The Iroquois Plain is the low land that borders Lake Ontario which was inundated in late Pleistocene times by Iroquois Lake and stretches from the Niagara River to the Trent River. It was formed when the last glacier receded from Iroquois Lake and Iroquois Lake was drained. Iroquois Lake was a proglacial lake which existed 13,000 years ago and was a body of water slightly larger than present day Lake Ontario. Shoreline cliffs, sand bars and beaches extend about 3 kilometers (km) inland and mark the edge of the former lake. Typically, the plain is covered in layers of fine silty sands that formed the former lake bottom and beaches (Chapman and Putnam, 1984). A physiography map of the Site and surrounding area is shown in **Figure 2**.

3.2 Regional Geology and Hydrogeology

The current understanding of the geological and hydrogeological environment was based on scientific work conducted by and information available from York, Peel, Durham, Toronto and The Conservation Authorities Moraine Coalition (YPDT-CAMC) and work conducted for the construction of the Bloor Street subway line.

Based on regional geological mapping presented by YPDT-CAMC, the following units overlie the bedrock (from youngest to oldest):

A. Recent Deposits
B. Halton Till
C. Oak Ridges Moraine
D. Newmarket Till
E. Thorncliffe Formation
F. Sunnybrook Drift
G. Scarborough Formation

A regional hydrostratigraphgic cross-section produced by YPDT-CAMC is provided as **Figure 3**. The figure represents the hydrostratigraphy running north south along the main branch of the Humber River. **Figure 3** also illustrates a cross-section prepared for the Bloor Street Subway.

The following provides a description of the underlying hydrostratigraphic units:

Recent Deposits – The uppermost surficial geologic unit consists of glaciolacustrine deposits consisting of sandy materials.

Halton Till – The Halton Till was deposited approximately 13,000 years before present (B.P.) during the last glacial advance in the area. Based on the geologic cross-section presented by YPDT-CAMC, the Halton Till is not present in the area.

Oak Ridges Moraine – The Oak Ridges Moraine (ORM) was deposited approximately 12,000 to 13,000 years B.P. Regionally, the ORM is approximately 160 km long and 5 to 20 km wide. The deposits consist of fine sands and silt materials, with coarse sand and gravel occurring locally. Based on the geologic cross-section presented by YPDT-CAMC, the ORM is not present in the area.

Newmarket Till – The Newmarket Till was deposited by the Laurentide ice sheet approximately 18,000 to 20,000 years B.P. It consists of mainly sandy silt to silty sand. The Newmarket Till can reach up to 60 m in thickness. Based on the geologic cross-section by the YPDT-CAMC, the Newmarket Till is not present in the area.

Thorncliffe Formation – The Thorncliffe Formation was deposited approximately 45,000 years B.P. and consists of glaciofluvial deposits containing silt, sand and clay. Regionally, it acts as an aquifer with variable grain size and thickness. Based on the geologic cross-section by the YPDT-CAMC, the Thorncliffe Formation maybe present in the area.

Sunnybrook Drift – The Sunnybrook Drift was deposited approximately 45,000 years B.P. It is interpreted to be a silt and clay formation with a thickness of 10 m to 20 m regionally. Based on the geologic cross-section by the YPDT-CAMC, the Sunnybrook Drift maybe present in the area.

Scarborough Formation – The Scarborough Formation was deposited during the Wisconsin glaciation approximately 70,000 years to 90,000 years B.P. It is interpreted as a fluvial-deltaic system consisting of sand, silt and clay deposits. The Scarborough Formation is an aquifer of regional extent. It is expected that the Scarborough Formation is present in the area.

Laurentian River Valley – The Laurentian River Valley is part of a large network of river channels, known as the Laurentian Channels comprised of a broad bedrock depression extending from Georgian Bay to Lake Ontario. It is believed to have an influence on groundwater movement over a large part of southern Ontario. It is expected that the Laurentian River Valley is present in the area.

Bedrock – Underlying the overburden units is the Georgian Bay Formation, Blue Mountain Formation, Billings Formation, Collingwood Member and the Eastview Member. The rocks are approximately 438 to 505 million years in age from the Upper Ordovician period. The main materials of these rocks are shale and limestone.

4 Local Geology and Hydrogeology

The current understanding of the local geological and hydrogeological environment at the Site is based on available regional information and the investigations conducted as part of this hydrogeological investigation.

4.1 Quaternary Geology

Mapping from the Ontario Geological Survey (OGS) indicates that the quaternary geology across the Site is composed of Glaciolacustrine deposits, which consist of mainly sand, gravelly sand, and gravel which are consistent with nearshore and beach deposit materials. The quaternary geology of the Site area is illustrated in **Figure 4**.

4.2 Bedrock Geology

The bedrock units underlying the Site are the Georgian Bay Formation, Blue Mountain Formation, Billings Formation, Collingwood Member and the Eastview Member. A bedrock geology map is presented as **Figure 5**.

4.3 Overburden

Based on the borehole logs produced as part of this hydrogeological investigation, the overburden material at the Site consists mainly of fill underlain by deposits of Sand, Silty Sand, Sandy Silt, and Clayey Silt. Bedrock was not encountered during drilling. Borehole logs are provided in **Appendix B**. Monitoring locations are illustrated in **Figure 6**. East-West and North-South cross-sections are illustrated in **Figure 7** and **Figure 8**, respectively.

4.4 Groundwater Conditions

4.4.1 On Site Monitoring Network

A monitoring network consisting of twelve (12) on-site monitoring wells was established as part of this hydrogeological investigation. Borehole 3 was attempted on the northern portion of the Site; however, could not be installed due to utility conflicts and a deep well could not be installed at BH-4 due to presence of wet caving sands. Monitoring locations are illustrated in **Figure 6**. A summary of the monitoring well details is provided in **Table 4-1**.

Table 4-1 Summary of Monitoring Well Details

Well ID	Relative Ground Elevation (masl)	Depth to bottom of well (mbgs)	Well Diameter (m)	Screen Length (m)	Screened Unit
BH-1s	112.91	6.1	0.051	3.048	Sand
BH-1d	112.91	15.24	0.051	3.048	Clayey Silt
BH-2	112.75	6.1	0.051	3.048	Sand/Silty Sand
BH-4	112.65	6.1	0.051	3.048	No Sample
BH-5	112.75	12.19	0.051	3.048	Silty Sand/Clayey Silt
BH-6	112.47	12.19	0.051	3.048	Silty Sand/Clayey Silt
BH-7	112.14	17.53	0.051	3.048	Clayey Silt Till/Sandy Silt

Table 4-1 Summary of Monitoring Well Details

Well ID	Relative Ground Elevation (masl)	Depth to bottom of well (mbgs)	Well Diameter (m)	Screen Length (m)	Screened Unit
BH-8	112.43	12.19	0.051	3.048	Sand/Clayey Silt
BH-9	112.18	6.10	0.051	3.048	Sand
BH-10	112.53	12.19	0.051	3.048	Sand/Sandy Silt/Clayey Silt
BH-11s	111.63	6.10	0.051	3.048	Sand/Sandy Silt
BH-11d	111.63	16.76	0.051	3.048	Clayey Silt /Sandy Silt

4.4.2 Groundwater Levels

Groundwater level measurements were collected over a 3 month period from April 2018 to June 2018. A summary of manual water level readings is presented in **Table 4-2**and **Table 4-3** in meters below ground surface (mbgs) and in meters above sea level (masl), respectively.

Table 4-2 Water Level Measurements (mbgs)

Well ID	Water Level Measurements (mbgs)						
	02-Apr	16-Apr	19-Apr	03-May	30-May	12-Jun	26-Jun
18BH-1s	3.83		3.73	3.71	3.69	3.72	3.71
18BH-1d	4.42		4.31	4.25	4.17	4.20	4.19
18BH-2	3.48		3.40	3.28	N/A	3.32	3.33
18BH-4	2.73		2.48	2.30	2.44	2.48	2.53
18BH-5	4.09		4.02	3.94	3.85	3.92	4.03
18BH-6	3.61	3.54	3.51	3.73	3.42	3.45	3.49
18BH-7	12.81	8.51	8.05	6.46	5.25	4.99	4.81
18BH-8	3.25		3.18	3.04	3.05	3.11	3.16
18BH-9	3.04	2.98	2.99	2.81	2.79	2.82	2.87
18BH-10	3.32		N/A	3.26	3.12	3.15	3.19
18BH-11s	2.54		2.17	2.02	2.36	2.30	2.36
18BH-11d	12.16		7.86	5.92	4.48	4.18	4.03

Note: N/A denotes location was not accessible.

Table 4-3 Water Level Elevation (masl)

Well ID	Water Level Measurements (mbgs)						
	02-Apr	16-Apr	19-Apr	03-May	30-May	12-Jun	26-Jun
18BH-1s	109.08		109.18	109.20	109.22	109.19	109.20
18BH-1d	108.49		108.60	108.66	108.74	108.71	108.72
18BH-2	109.27		109.35	109.47	N/A	109.43	109.42
18BH-4	109.92		110.17	110.35	110.21	110.17	110.12
18BH-5	108.66		108.73	108.81	108.90	108.83	108.72
18BH-6	108.86	108.93	108.96	108.74	109.05	109.02	108.98
18BH-7	99.33	103.63	104.09	105.68	106.89	107.15	107.33
18BH-8	109.18		109.25	109.39	109.38	109.32	109.27
18BH-9	109.14	109.20	109.19	109.37	109.39	109.36	109.31
18BH-10	109.24		N/A	109.30	109.44	109.41	109.37
18BH-11s	109.09		109.46	109.61	109.27	109.33	109.27
18BH-11d	99.47		103.77	105.71	107.15	107.45	107.60

Note: N/A denotes location was not accessible.

In addition to manual measurements, level loggers were placed in four wells (BH-1d, BH-4, BH-5, and BH-9) to record continuous water level measurements at regularly timed intervals. Water levels were monitored for a period of three months. A hydrograph of the above data along with level loggers is presented in **Appendix C**.

Upon installation, most wells returned to static water levels after development, prior to performing the rising-head (K) tests, except for 18BH-7 and 18BH-11d. Monitoring well 18BH-7 and 18BH-11d were likely screened within materials with a higher clay content and as such recovery in the monitoring wells were very slow.

Seasonal fluctuations are observed in the monitoring wells with the highest levels observed in mid May. The range of fluctuation varies from each monitoring but is generally 0.35m. Groundwater levels observed in the various shallow overburden wells ranged between 108.49 masl and 110.42 masl, with an average level of 109.24 masl.

4.4.3 Hydraulic Conductivity

Rising head tests were conducted in March 2018 at select monitoring wells to measure the in-situ hydraulic conductivity (K) of the screened overburden materials. During the rising head test, a known volume of water was removed from the well using a manual inertial pump. A level logger was left suspended in the well to record the water level stabilization at regularly timed intervals. The level logger was removed once the well had recovered to at least 85% of pre-test levels. However, it was discovered during the long-term monitoring that static was not initially reached at

two locations (18BH-7 and 18BH-11d) and had continued to recover months after the test. The data of these two wells recovering during the long-term monitoring was appended to the hydraulic conductivity analysis. The corresponding analyses are presented in **Appendix D**.

Where applicable for rising-head tests, the K values were estimated using the Hvorslev (1951) method with stabilization data recovered from the dataloggers. Where available, K values were calculated using data from grainsize analyses with the Hazen (1911) method. A summary of K values calculated these two methods is presented in **Table 4-4**.

Table 4-4 Summary of K Analysis Tests

Well ID	Screen Interval or Depth of Sample (mbgs)	Screened Unit or Soil Sample Type	Hvorslev Method K (m/s)	Hazen Method (m/s)
BH-1s	3.05 – 6.10	Sand	3.15×10^{-7} – 1.22×10^{-6}	
BH-1d	12.19 – 15.24	Clayey Silt	2.60×10^{-9}	
	10.7	Clayey Silt		4.59×10^{-8}
BH-2	3.05 – 6.10	Sand/Silty Sand	7.81×10^{-7}	
	3.0	Sand		3.56×10^{-5}
BH-4	3.05 – 6.10	No Sample	3.12×10^{-7}	
BH-5	9.14 – 12.19	Silty Sand/Clayey Silt	1.12×10^{-6}	
	12.2	Clayey Silt		8.16×10^{-8}
BH-6	9.14 -12.19	Silty Sand/Clayey Silt	5.21×10^{-7}	
BH-7	14.48 -17.53	Clayey Silt Till/Sandy Silt	$1.63E \times 10^{-10}$	
	16.8	Sandy Silt		3.01×10^{-8}
BH-8	9.14 – 12.19	Sand/Clayey Silt Till	5.92×10^{-8}	
	10.7	Clayey Silt		1.04×10^{-8}
BH-9	3.05 – 6.10	Sand	4.88×10^{-7} – 4.88×10^{-6}	
	7.6	Silty Sand		2.22×10^{-6}
BH-10	9.14 – 12.19	Sand/Sandy Silt/Clayey Silt	4.34×10^{-8} – 1.30×10^{-6}	
BH-11s	3.05 – 6.10	Sand/Sandy Silt	4.88×10^{-6}	
BH-11d	13.72 – 16.76	Clayey Silt Till/Sandy Silt	1.45×10^{-10}	

Hydraulic conductivity results within the shallow overburden ranged between 1.04×10^{-8} m/s and 3.56×10^{-5} m/s. The wide range of results is due to the heterogeneous nature of the overburden underlying the Site. The higher end of the range would be more representative of the coarse-grained Sands and Silty Sands, while the lower end would be more representative of the fine grained Clayey Silt and Sandy Silts. As a result of the heterogeneity, a geometric mean of the results was calculated and determined to be 4.34×10^{-7} m/s. The hydraulic conductivity of deeper materials including clayey silts, and silty clays were observed to average at 1.54×10^{-10} m/s.

4.4.4 Groundwater Flow

At a regional scale, groundwater flows southerly from the topographic highs associated with the Oak Ridges Moraine to the topographic lows associated with Lake Ontario

Using the network of monitoring wells on site, it is anticipated that local groundwater flow is generally to the southwest towards Lake Ontario.

4.4.5 Groundwater Quality

Groundwater samples were collected on March 19, 2018 at 18BH-5, April 20, 2018 at 18BH-9 and 18BH-11s. The collected samples were sent to SGS Environmental Services in Lakefield, Ontario, for analysis of various parameters such as physical, metal and volatile organic compounds (VOCs). Analytical results were compared to Toronto Municipal Code 681, Sanitary/Combined and Storm Sewer Discharge. Results are summarized below as **Table 4-5**. The laboratory analytical results and Certificate of Analysis are included in **Appendix E**.

Table 4-5 Groundwater Quality Results

Sample ID	Units	Toronto Sanitary By-law Limit	Toronto Storm By-law Limit	RL	18BH-5	18BH-9	18BH-11S
					19-MAR-18	20-APR-18	20-APR-18
E. Coli	cfu/100mL	---	200	---	< 2	< 2	< 2
pH	no unit	6.0-11.5	6.0-9.5	0	7.54	6.93	7.41
Biochemical Oxygen Demand (BOD5)	mg/L	300	15	2	6	< 2	< 2
Total Suspended Solids	mg/L	350	15	2	8	9	32
Oil & Grease (total)	mg/L	---	---	2	< 2	< 2	< 2
Oil & Grease (animal/vegetable)	mg/L	150	---	4	< 4	< 4	< 4
Oil & Grease (mineral/synthetic)	mg/L	15	---	4	< 4	< 4	< 4
4AAP-Phenolics	mg/L	1	0.008	0.002	0.008	0.002	< 0.002
Total Kjeldahl Nitrogen	as N mg/L	100	---	0.5	2.1	< 0.5	< 0.5
Cyanide (total)	mg/L	2	0.02	0.01	< 0.01	< 0.01	< 0.01
Fluoride	mg/L	10	---	0.06	0.12	< 0.06	< 0.06
Chromium VI	mg/L	2	0.04	0.0002	< 0.0002	< 0.0002	< 0.0002
Mercury (total)	mg/L	0.01	0.0004	0.00001	< 0.00001	< 0.00001	< 0.00001
Aluminum (total)	mg/L	50	---	0.001	0.076	0.019	0.291
Antimony (total)	mg/L	5	---	0.0002	< 0.0002	< 0.0002	< 0.0002
Arsenic (total)	mg/L	1	0.02	0.0002	0.0061	0.0003	0.0007
Cadmium (total)	mg/L	0.7	0.008	0.000003	0.000056	0.000071	0.000019
Chromium (total)	mg/L	4	0.08	0.00003	0.00068	0.0002	0.00074
Cobalt (total)	mg/L	5	---	0.000004	0.00269	0.00209	0.00175
Copper (total)	mg/L	2	0.04	0.00002	0.00305	0.00129	0.00244
Lead (total)	mg/L	1	0.12	0.00001	0.00235	0.00009	0.00066
Manganese (total)	mg/L	5	0.05	0.00001	0.198	1.02	0.56
Molybdenum (total)	mg/L	5	---	0.00001	0.00347	0.00238	0.00134
Nickel (total)	mg/L	2	0.08	0.0001	0.212	0.0039	0.0073
Phosphorus (total)	mg/L	10	0.4	0.003	0.018	0.013	0.026
Selenium (total)	mg/L	1	0.02	0.00004	0.0001	0.00136	0.00007
Silver (total)	mg/L	5	0.12	0.0005	< 0.00005	0.00005	< 0.00005
Tin (total)	mg/L	5	---	0.00001	0.00042	0.00011	0.00028
Titanium (total)	mg/L	5	---	0.00005	0.00352	0.0009	0.0149
Zinc (total)	mg/L	2	0.04	0.002	0.008	< 0.002	0.003
PCBs (total)	mg/L	0.001	0.0004	0.0001	< 0.0001	< 0.0001	< 0.0001

Table 4-5 Groundwater Quality Results

Sample ID	Units	Toronto Sanitary By-law Limit	Toronto Storm By-law Limit	RL	18BH-5	18BH-9	18BH-11S
					19-MAR-18	20-APR-18	20-APR-18
PAHs (Total)	mg/L	0.005	0.002	---	< 0.001	< 0.001	< 0.001
Benzene	mg/L	0.01	0.002	0.0005	< 0.0005	< 0.0005	< 0.0005
Chloroform	mg/L	0.04	0.002	0.0005	< 0.0005	< 0.0005	< 0.0005
1,2-Dichlorobenzene	mg/L	0.05	0.0056	0.0005	< 0.0005	< 0.0005	< 0.0005
1,4-Dichlorobenzene	mg/L	0.08	0.0068	0.0005	< 0.0005	< 0.0005	< 0.0005
cis-1,2-Dichloroethene	mg/L	4	0.0056	0.0005	< 0.0005	< 0.0005	< 0.0005
trans-1,3-Dichloropropene	mg/L	0.14	0.0056	0.0005	< 0.0005	< 0.0005	< 0.0005
Ethylbenzene	mg/L	0.16	0.002	0.0005	< 0.0005	< 0.0005	< 0.0005
Methylene Chloride	mg/L	2	0.0052	0.0005	< 0.0005	< 0.0005	< 0.0005
1,1,2,2-Tetrachloroethane	mg/L	1.4	0.017	0.0005	< 0.0005	< 0.0005	< 0.0005
Tetrachloroethylene (perchloroethylene)	mg/L	1	0.0044	0.0005	< 0.0005	< 0.0005	< 0.0005
Toluene	mg/L	0.016	0.002	0.0005	< 0.0005	< 0.0005	< 0.0005
Trichloroethylene	mg/L	0.4	0.0076	0.0005	< 0.0005	< 0.0005	< 0.0005
Xylene (total)	mg/L	1.4	0.0044	0.0005	< 0.0005	< 0.0005	< 0.0005
Nonylphenol	mg/L	0.02	0.001	0.001	< 0.001	< 0.001	< 0.001
Nonylphenol Ethoxylates	mg/L	0.2	0.01	0.01	< 0.01	< 0.01	< 0.01
di-n-Butyl Phthalate	mg/L	0.08	0.015	0.002	< 0.002	< 0.002	< 0.002
Bis(2-ethylhexyl) phthalate	mg/L	0.012	0.0088	0.002	< 0.002	< 0.002	< 0.002
3,3-Dichlorobenzidine	mg/L	0.002	0.0008	0.0005	< 0.0005	< 0.0005	< 0.0005
Pentachlorophenol	mg/L	0.005	0.002	0.001	< 0.0005	< 0.0005	< 0.0005

Note: Highlighted indicate exceedance of the Toronto Storm Sewer By-law criteria.

Based on laboratory analyses, the parameter Manganese (total) failed the Table 2 – Limits for Storm Sewer Discharge criteria for all the samples. Additionally, exceedances for the Table 2 – Limits for Storm Sewer Discharge criteria for Nickle (total) were found in 18BH-5 and TSS were found in 18BH-11s. All other parameters met the criteria for *Toronto Municipal Code 681, for Table 1 – Limits for Sanitary/Combined Sewer Discharge and Table 2 – Limits for Storm Sewer Discharge*.

5 Calculation of Dewatering Rates and Estimation of Zone of Influence

Dewatering rates were estimated based on TIL's interpretation of the hydrogeological conditions of the Site. Estimates are based on water levels observed during monitoring events. This section does not provide a design of dewatering operations, but provides an estimate of the expected dewatering rates to obtain the desired drawdown. The most effective dewatering measures for the prevalent ground conditions and the design of the dewatering operations are the sole responsibility of the dewatering contractor on Site.

5.1 Dewatering Scenario

The proposed development includes a number of mixed-use high-rise towers and mid-rise units, a school, and parkland. The buildings will have a 2-level underground parking garage extending to approximately 8.5 meters below ground surface (mbgs) with foundations extending approximately 9.5 mbgs. Groundwater levels from shallow overburden wells were observed to be at depths ranging between 108.49 masl and 110.42 masl.

A lower aquifer unit was not encountered during the advancement of the boreholes. Based on regional cross sections it is possible that an underlying aquifer unit is present at depths of 20 mbgs. Considering the depth of the underlying aquifer unit is more than 10m below the base of the excavation and measured water levels from the deepest monitoring wells show piezometer pressures of 4 mbgs, it is unlikely that the excavation will require additional groundwater control of the underlying aquifer.

5.2 Required Drawdown

The footprint of the underground parking which will be dewatered is assumed to cover the majority of the property and have a width of 210 m and a length 235 m. The highest observed water level measured was approximately 110.42 masl. Dewatering will be required to draw down the water table to below the excavation depth. 1 m of additional water will be added as factor of safety since it is expected that the water levels can fluctuate. Dewatering requirements are summarized in Error! Reference source not found. below.

Table 5-1 Summary of Dewatering Requirements

Scenario	Relative Ground Elevation (m)	Relative Depth of Excavation (m)	Width of Excavation (m)	Length of Excavation (m)	Depth of Water Table (mbgs)	Maximum Required Drawdown (m)
2 Levels	112.4	102.9	210	235	110.42	7.5

As construction work will be most prevalent at shallow depths in the fill and silty sand/sandy silt overburden, it is expected that the aquifer properties will be characteristic of an unconfined unit. It is believed that depressurization is not be required based on current observations.

5.3 Zone of Influence

An estimate of the Zone of Influence (ZOI) for dewatering trenches in unconfined aquifers can be calculated using the following equation (Bear, 1979):

$$R_0 = 2.45\sqrt{\frac{HK}{S_y}t}$$

where,

R_0	=	Zone of Influence (m), beyond which there is negligible drawdown
H	=	Distance from initial static water level to bottom of saturated aquifer (m)
S_y	=	Specific yield of the aquifer formation (based on Johnson (1967))
t	=	Time, in seconds, required to draw the static groundwater level to the desired level (assumed to be equivalent to 14 days)
K	=	Hydraulic Conductivity (m/s)

A summary of the ZOI estimations for the dewatering calculations is presented in **Table 5.2** below.

Table 5-2 ZOI Estimate

H (m)	Sy	K (m/s)	t (s)	Zone of Influence (m)
10.42	0.20	4.3×10^{-7}	1209600	12.8

5.4 Dewatering Rate Calculations

The calculations were based on equations of radial flow (the system as a well with equivalent radius) provided in Construction Dewatering and Groundwater Control: New Methods and Applications – Third Edition. New York, New York: John Wiley & Sons (Powers et. al., 2007). For the purposes of this analysis, the analytical assessment assumes steady state flow into an open excavation. Additionally, the equations of radial flow have the following assumptions:

- Ideal aquifer conditions (homogeneous, isotropic, uniform thickness and has infinite areal extent)
- Fully penetrating pumping well
- Only lateral flow to the pumping well
- Constant pumping rate with the flow to the pumping well reaching steady state

The following equation was used for open trenches and is based on unconfined aquifer conditions (Powers et. al., 2007):

$$Q = \frac{\pi K(H^2 - h^2)}{\ln(R_0 / r_s)}$$

Where:

Q	=	Anticipated pumping Rate (m^3/day)
K	=	Hydraulic Conductivity (m/day)
H	=	Distance from the static water level to the bottom of the saturated aquifer (m)
h	=	Depth of water in the well while pumping (m)
R_0	=	Distance from a point of greatest drawdown to a point where there is zero drawdown (radius of influence) (m)
r_s	=	Distance to the wellpoints from the centre of the trench, assumed to be half of the trench width (m)

A summary of the dewatering rates is presented in Table 5-3 below.

Table 5-3 Dewatering Rate Summary

Scenarios	H (m)	h (m)	K (m/s)	r_s (m)	Zone of Influence R_0 (m)	Pumping Rate (m^3/day)	Pumping Rate (L/s)
2 Levels	10.42	1.9	4.3×10^{-7}	141.6	12.8	286	3.31

**** Pumping rates include a factor of safety of 2.**

The complete analysis for dewatering calculations can be found in **Appendix F**.

To account for uncertainties and natural variability in the range of hydraulic conductivity and water levels, as well as incident precipitation contribution, the calculated pumping rates were multiplied by a factor of safety of 2. Incorporating the factor of safety in the dewatering calculations also provides flexibility to the dewatering contractor in meeting project schedules and helps to account for the initial pumping period under transient conditions when dewatering volumes are expected to be higher.

It is suggested the max rate of 400 m^3/day be applied to account for temporary variability in dewatering rates due to the range of heterogeneity in the material observed. It should be noted that this dewatering estimation has been prepared for permitting requirements only. As such, the dewatering rate for the Site is not meant to be considered in the design of the dewatering system, which should be carried out by a dewatering contractor on-site.

The post construction phase dewatering rates will likely be approximately 1/3rd the rates calculated for during construction as such estimated rates for a 2 Level underground parking garage are 95 m^3/day.

6 Potential Receptors

As part of this program, potential groundwater receptors including domestic or permitted water supply were identified. An understanding of typical groundwater usage in the area was obtained by:

- Querying MOECC water well records within 1 km radius of the Site;
- Identifying permitted water takers within 1 km radius of the Site;

6.1 MOECC Water Well Record Search

A search of the MOECC well records database was conducted within the study area. The search results showed a total of 317 drilled or dug wells within the study area. Well usage details are summarized in **Table 6-1Error! Reference source not found.**. **Appendix G** provides a list of MOECC Water Well Records.

Table 6-1 Water Well Records within 1 km Buffer

Primary Well Use	Number of Wells within 1 km Buffer of Study Area	Percentage of Total
Monitoring Well or Test Hole	206	65.0
Other or Unknown	72	22.7
Abandoned	32	10.1
Dewatering	6	1.9
Water Supply	1	0.3
Total	317	100%

The primary well usage in this area is for observation/test well purposes (65%). One domestic supply well was identified; however, it is unknown if this well still exists as the area is municipally serviced. **Figure 9** shows the location of MOECC water well records within the 1 km buffer.

6.2 Permitted Water Users

A search was conducted to identify the permitted groundwater users within 1 km of the study area. One permit to take water (PTTW) was identified within the study area located at the northern most extent of the 1 km boundary as illustrated in **Figure 9**. The permit is held by a numbered company for construction dewatering purposes.

6.3 Natural Heritage Features

No environmental features are identified surrounding the Site. Environmental features are illustrated in **Figure 10**.

7 Potential Impacts and Proposed Mitigation

7.1 Identification and Mitigation of Short-Term Impacts

7.1.1 Potential Short-Term Impacts to the Groundwater System

Dewatering can result in a decline in the groundwater level in the shallow unconfined aquifer, reducing the available groundwater for nearby groundwater takers. However, the impacts are typically short term and localized, and recovery of the groundwater system is expected once the dewatering operation ceases.

7.1.2 Potential Short-Term Impacts to Other Groundwater Users

Dewatering may result in a reduction in the available groundwater supply for the private wells around the Site. However, no domestic well users are located within a 1 km radius of the Site and impacts to other groundwater users are not expected.

7.1.3 Mitigation of Short-Term Impacts

The zone of influence due to dewatering is expected to be localized. As construction dewatering is anticipated to be greater than 50,000 L/day, an EASR will be required. It will be necessary to obtain a Permit with the City of Toronto for discharges of private water to the sewer system.

7.2 Identification and Mitigation of Long-Term Impacts

7.2.1 Potential Long-Term Impacts to the Groundwater System

The Site is not located within a WHPA or a SGRA. However, the Site is located within an HVA, as such, impact to a sensitive groundwater system may be expected from surficial contamination infiltrating into the shallow aquifer.

7.2.2 Potential Long-Term Impacts to Other Groundwater Users

The reduction in groundwater level could potentially reduce the quantity and degrade the quality of groundwater available to nearby groundwater users. However, based on the results from the MOECC private well records search, there are no domestic wells within a 1 km radius of the Site. Furthermore, the areas around the Site are mainly developed and municipal servicing is available. As such, impacts to other groundwater users are not expected.

7.2.3 Mitigation of Long-Term Impacts

As a result of being within an HVA, a salt management plan is encouraged to reduce impacts to the shallow aquifer.

To reduce potential long-term discharges from the foundation drains, the building design should consider various potential mitigation measures including but not limited to water proofing barriers. It will be necessary to consider discharge options for the groundwater collected as the City of Toronto requires approval for sewer discharges of private water. Consultation with the City is recommended. It will be necessary to obtain a Permit with the City of Toronto for discharges of private water to the sewer system.

8 Summary

A summary of the hydrogeological investigation is provided below:

- The Site is located partially within the Humber River Watershed and the Lake Ontario Waterfront Watershed, under the jurisdiction of the Toronto and Region Conservation Authority (TRCA). It is not located within a regulated area.
- The Site is within the Iroquois Lake physiographic region. The Site slopes to the south with an approximate elevation of 110 masl.
- The subsurface geology consists mainly of fill underlain by deposits of Sand, Silty Sand, Sandy Silt, and Clayey Silt. Beneath the Clayey Silt is a Sandy Silt unit.
- Groundwater levels ranged between 109.92 masl and 108.49 masl, with an average level of 109.09 masl in the shallow aquifer and flowing in a southwesterly direction. The static groundwater condition in the deeper aquifer unit was found to have an average level of 99.40 masl.
- Hydraulic conductivity results within the shallow overburden ranged between 5.92×10^{-8} and 4.88×10^{-6} m/s. As a result of the heterogeneity of the overburden, a geometric mean of the results was calculated and determined to be 6.99×10^{-7} m/s.
- A total of three (3) water quality sample were collected from 18BH-5, 18BH-9, and 18BH-11s and analyzed for the City of Toronto sewer discharge parameters. Based on laboratory analyses, the parameter Manganese (total) failed the Table 2 – Limits for Storm Sewer Discharge criteria for all the samples. Additionally, exceedances for the Table 2 – Limits for Storm Sewer Discharge criteria for Nickle (total) were found in 18BH-5 and TSS were found in 18BH-11s. All other parameters met the criteria for *Toronto Municipal Code 681, for Table 1 – Limits for Sanitary/Combined Sewer Discharge and Table 2 – Limits for Storm Sewer Discharge*.
- Dewatering will be necessary during construction to control the groundwater level and maintain a dry working condition. Two dewatering scenarios were considered for the underground parking levels. The calculated dewatering rate for 2 Levels of underground parking during construction is 286 m^3/day. It will be necessary to register the taking on the Ministry of Environment and Climate Change Environmental Activity and Sector Registry (MOECC EASR). It is suggested the max rate of 400 m^3/day be applied to account for temporary variability in dewatering rates due to the range of heterogeneity in the material observed.
- The post construction dewatering rates are approximately 1/3rd the rates calculated for during construction. The calculated dewatering rate for 2 Levels of underground parking during construction is 95 m^3/day. The water taking will require a Permit to Take Water. Since the foundation drain will be discharging to the municipal sanitary system, a Private Discharge Application for Long Term Discharge will need to be submitted to the City of Toronto. It is recommended that design options to minimize the permanent dewatering be considered.
- Based on the MOECC well records search, one domestic well was found within a 1 km radius of the Site; however, it is unlikely remains as the area is municipally serviced. One active permitted groundwater takings were identified within 1 km of the Site.
- The Site is not located within any significant groundwater recharge area (SGRA), Wellhead Protection Area (WHPA), or Intake Protection Zone (IPZ); however, it is located within a Highly Vulnerable Aquifer Area (HVA). As a result of being within an HVA, a salt management plan is encouraged to reduce impacts to the shallow aquifer.

9 References

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10 General Statement of Limitation

The comments presented in this report are based on the soil and groundwater samples gathered from the borehole/monitoring well locations indicated on the plan of this report. There is no warranty expressed or implied or representations made by Toronto Inspection Ltd. that this program has discovered all potential environmental risks or liabilities associated with the subject site.

Although we consider this report to be representative of the subsurface conditions at the subject property in the areas investigated, any interpretation of factual data or unexpected soil conditions which exhibit noticeable discolouration, odour, etc. in areas not investigated in this report, should be discussed in consultation with us prior to any initiation of activity. Our responsibility is limited to an accurate assessment of the soil condition prevailing at the locations investigated at the time of the study.

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Yours truly,

Toronto Inspection Ltd.

LICENSED PROFESSIONAL ENGINEER
T. LEE
100042393
July 10, 2018
PROVINCE OF ONTARIO

per

Sanjay Goel, B.E.S.
Environmental Scientist
Vice-President

Tabitha Lee, M.A.Sc., P.Eng.
Senior Hydrogeologist

FIGURES

Legend

- Highway
- Arterial Road
- Local Road
- Railway
- Site Location
- Wooded Area

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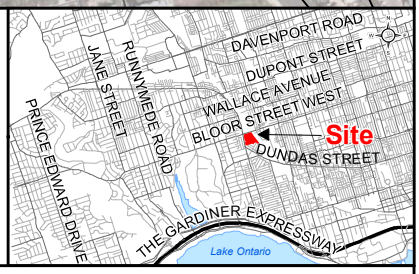

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TITLE:	Site Location	
LOCATION:	2280 Dundas Street West, Toronto, Ontario	
PROJECT NO. 2477-18-HG	DATE: July 2018	FIGURE NO. 1

REFERENCE
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Legend

- Highway
- Arterial Road
- Local Road
- Railway
- Site Location

Physiography

- Iroquois Plain

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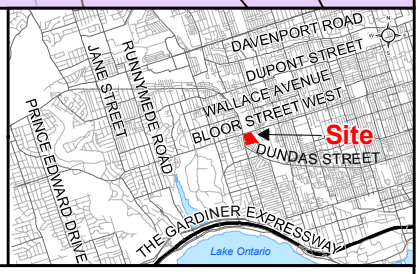

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TITLE:	Physiography
LOCATION:	2280 Dundas Street West, Toronto, Ontario

PROJECT NO.	DATE:	FIGURE NO.
2477-18-HG	July 2018	2

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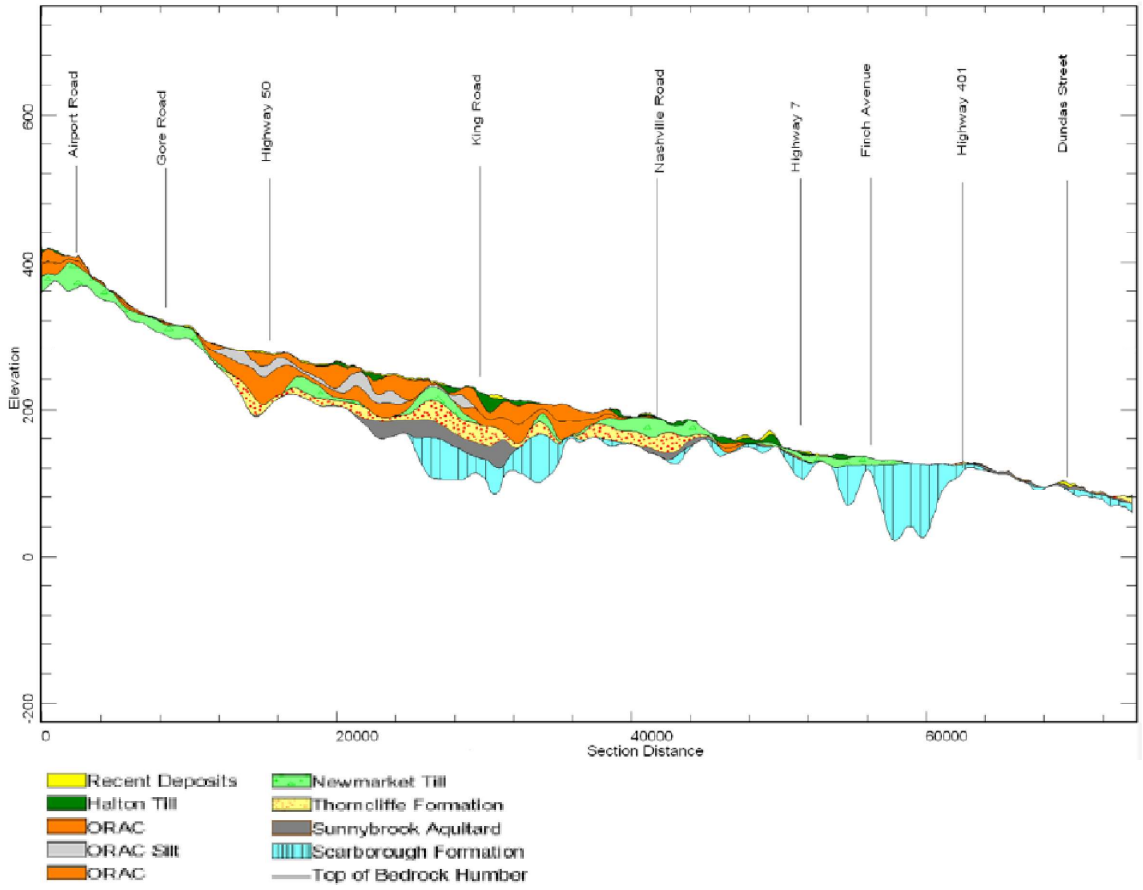
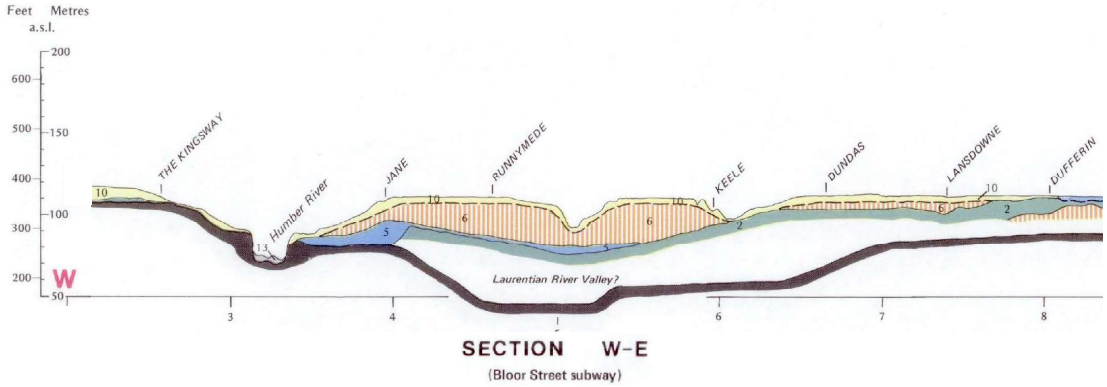
Main and Lower Humber River





ICE-AGE DEPOSITS

RIVER DEPOSITS

- 1 Older river deposits[a]: *sand, gravel in terrace remnants.*

GLACIAL LAKE DEPOSITS

- 11 Lake Iroquois[b], beach or bar deposits: *gravel, sand.*
- 10 Lake Iroquois, shallow-water deposits: *sand, silty sand.*
- 9 Lake Iroquois, deeper-water deposits: *silt, clay.*
- 8 Peel ponds; shallow-water deposits: *sand.*
- 7 Peel ponds; deeper-water deposits: *silt, clay.*
- 6 Older lakes[c]; shallow-water deposits: *sand* (Formations: 6a, Thorncliffe; 6b, Scarborough; 6c, Don).
- 5 Older lakes; deeper-water deposits: *silt, clay.* (Formations: 5a, Thorncliffe; 5b, Scarborough; 5c, Don).

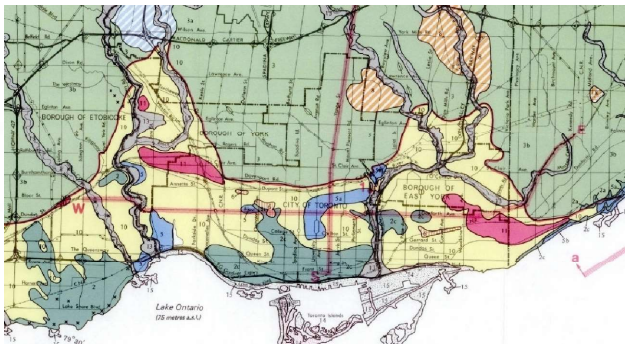
GLACIAL ICE DEPOSITS

- 4 Ice-contact deposits: *sand, gravel, silt in eskers and morainic ridges.*
- 3 Young tills[b]: *clayey silt till* (Wildfield, 3a; Halton, 3b) *and sandy silt till* (Wentworth, 3c; Leaside, 3d).
- 2 Older tills[c]: *silty clay to silt till* (Meadowcliffe, 2a; Seminary, 2b; Sunnybrook, 2c) *to clayey sand till* (York, 2d).

EOZOIC
RDOVICIAN

BEDROCK

- Shale, interbedded siltstone, and minor limestone, (Georgian Bay Formation).



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TITLE: Regional Hydrostratigraphic Cross Section		
LOCATION: 2280 Dundas Street West,Toronto, Ontario		
PROJECT NO. 2477-18-HG	DATE: July 2018	FIGURE NO. 3

REFERENCE
Toronto and Region Conservation Authority, 2008. Humber River Watershed Scenario Analysis and Modeling Report
Quaternary Geology of Toronto and Surrounding Area; Ontario Geological Survey Preliminary Map P. 2204, Sharpe, D.R., 1980

Legend

- Highway
- Arterial Road
- Local Road
- Railway
- Site Location

Quaternary Geology

- Glaciolacustrine deposits

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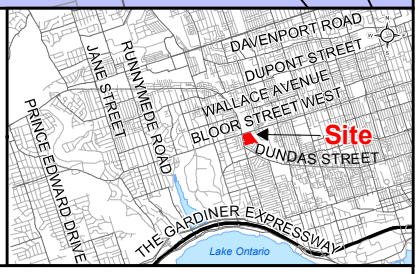

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TITLE:	Quaternary Geology	
LOCATION:	2280 Dundas Street West, Toronto, Ontario	
PROJECT NO. 2477-18-HG	DATE: July 2018	FIGURE NO. 4

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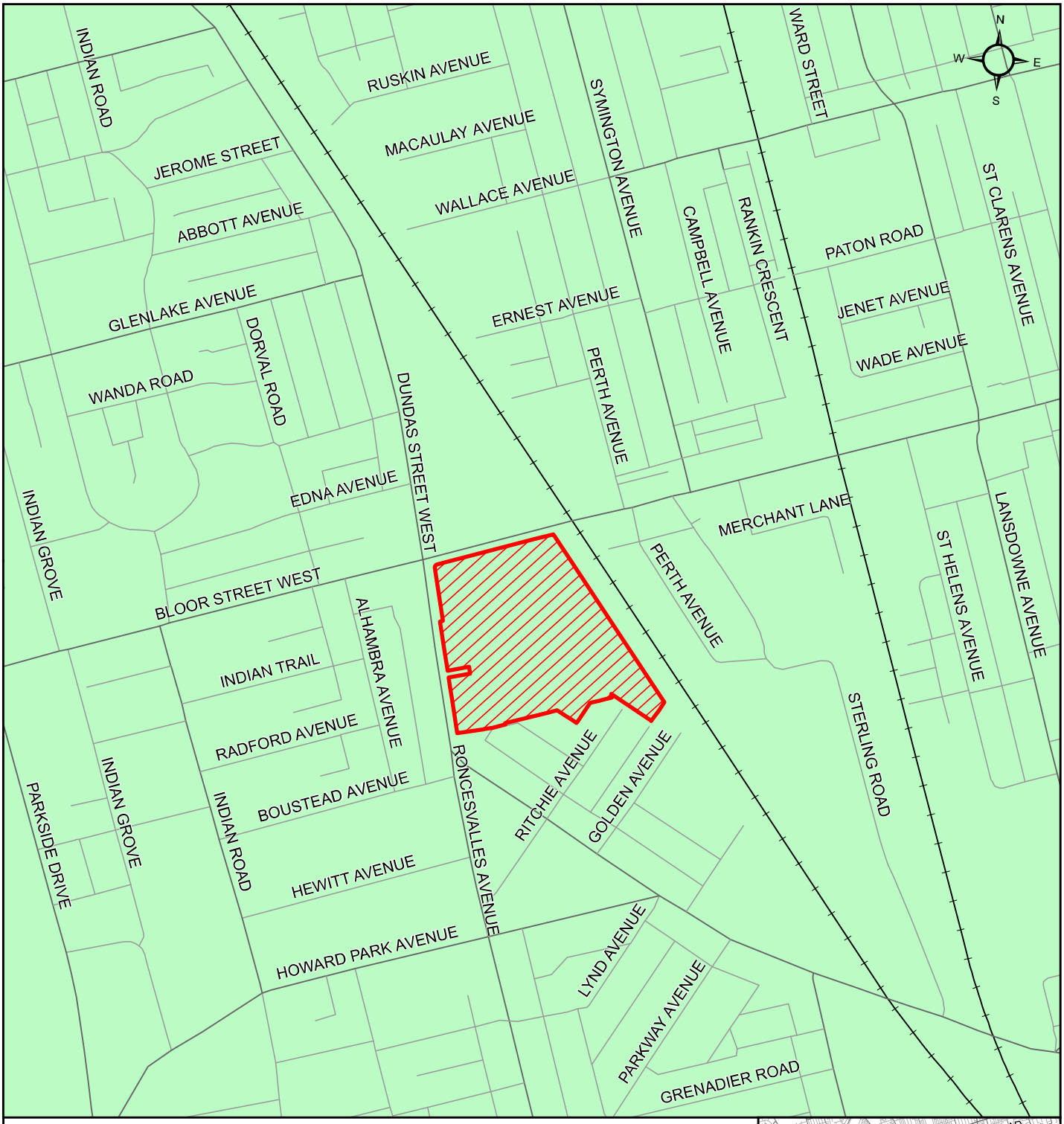

Legend

- Highway
- Arterial Road
- Local Road
- Railway
- Site Location

Bedrock Geology

Georgian bay Fm.; Blue Mountain Fm.; Billings Fm.; Collingwood Mb.; Eastview Mb.

0 50 100 200 300 m

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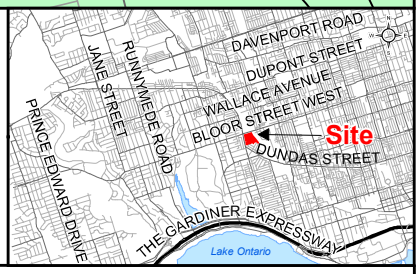

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TITLE:	Bedrock Geology	
LOCATION:	2280 Dundas Street West, Toronto, Ontario	
PROJECT NO. 2477-18-HG	DATE: July 2018	FIGURE NO. 5

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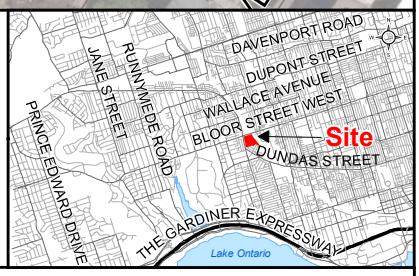
Legend

- Borehole Location
- Railway
- Highway
- Site Location
- Arterial Road
- Groundwater Flow Direction
- Local Road
- Cross Section

0 25 50 100 m

1:2,000



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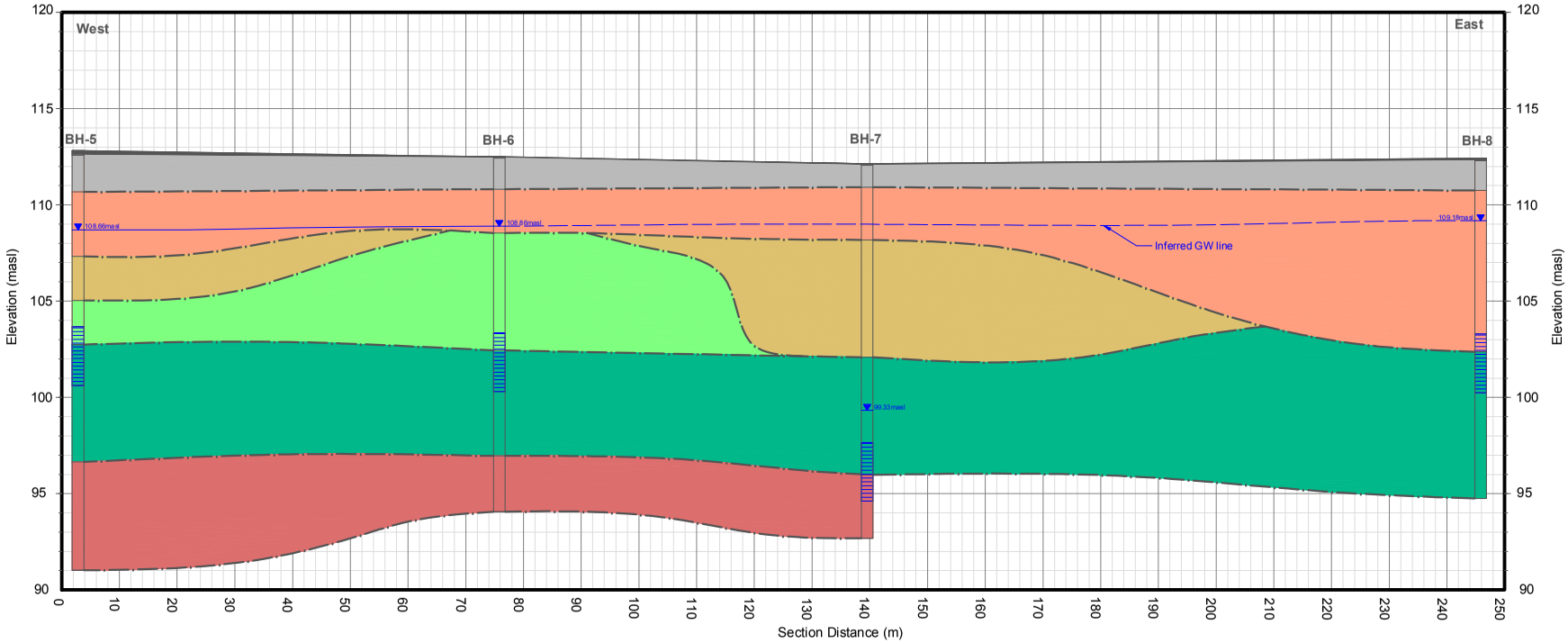
TITLE: Borehole/Monitoring Well Locations		
LOCATION: 2280 Dundas Street West, Toronto, Ontario		
PROJECT NO. 2477-18-HG	DATE: July 2018	FIGURE NO. 6

REFERENCE
Service Layer Credits: Source: ESRI, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User.



LEGEND

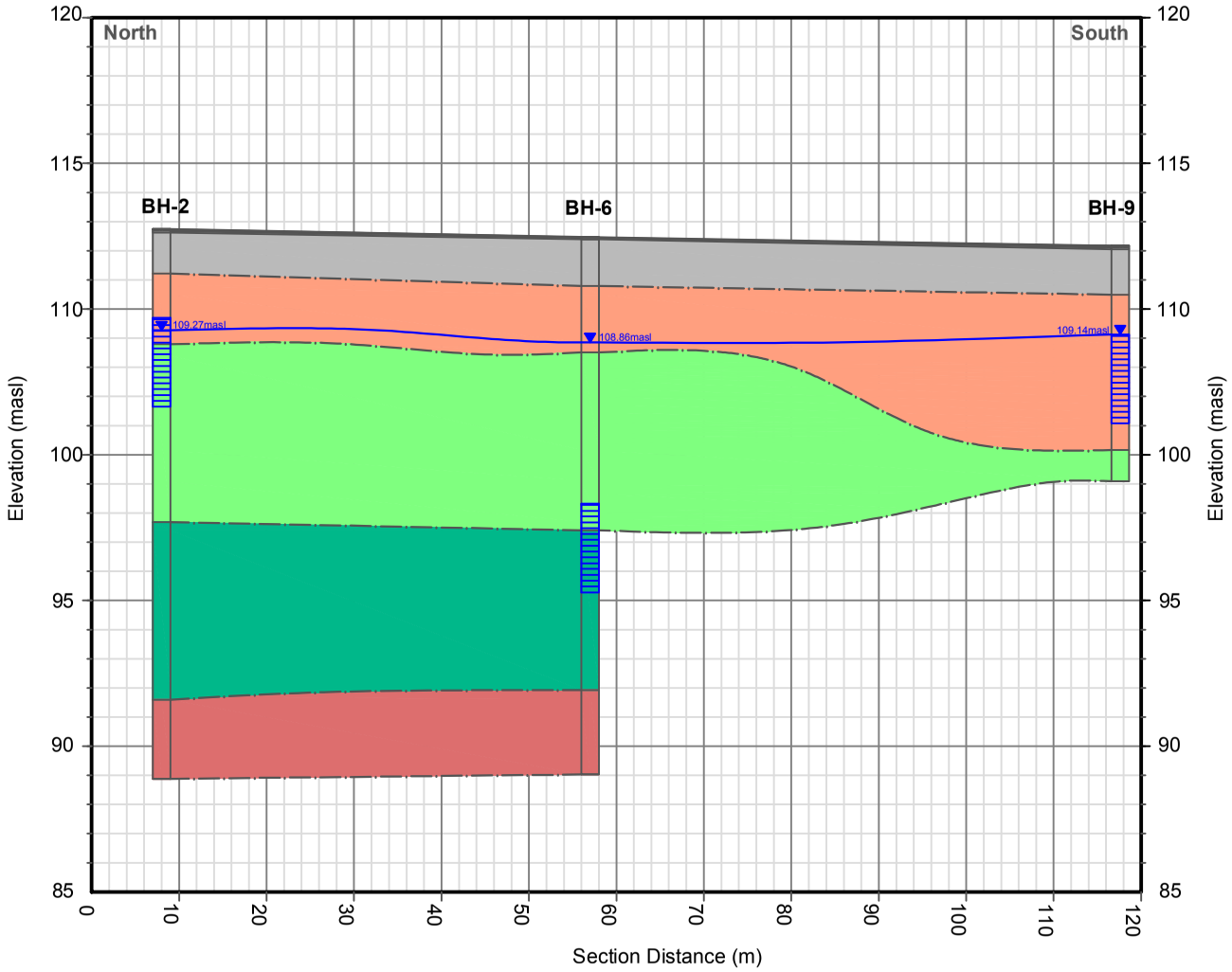
- Asphalt/Granular Base
- Fill
- Sand
- Sandy Silt
- Silty Sand
- Clayey Silt Till
- Sandy Silt Till
- Water Level
- Monitoring Well Screen
- Inferred Geological Boundary

TorontoInspection LTD
GEO-ENVIRONMENTAL CONSULTANTS
110 Konrad Crescent, Unit 16, Markham, Ontario L3R 9X2
Tel: 905-940 8509 Fax: 905-940 8192

TITLE: Local Geological Cross-Section A-A' (East - West)

LOCATION: 2280 Dundas Street West Toronto, Ontario

PROJECT NO.:	DATE:	FIGURE NO.:
2477-18-HG	July 2018	7



LEGEND

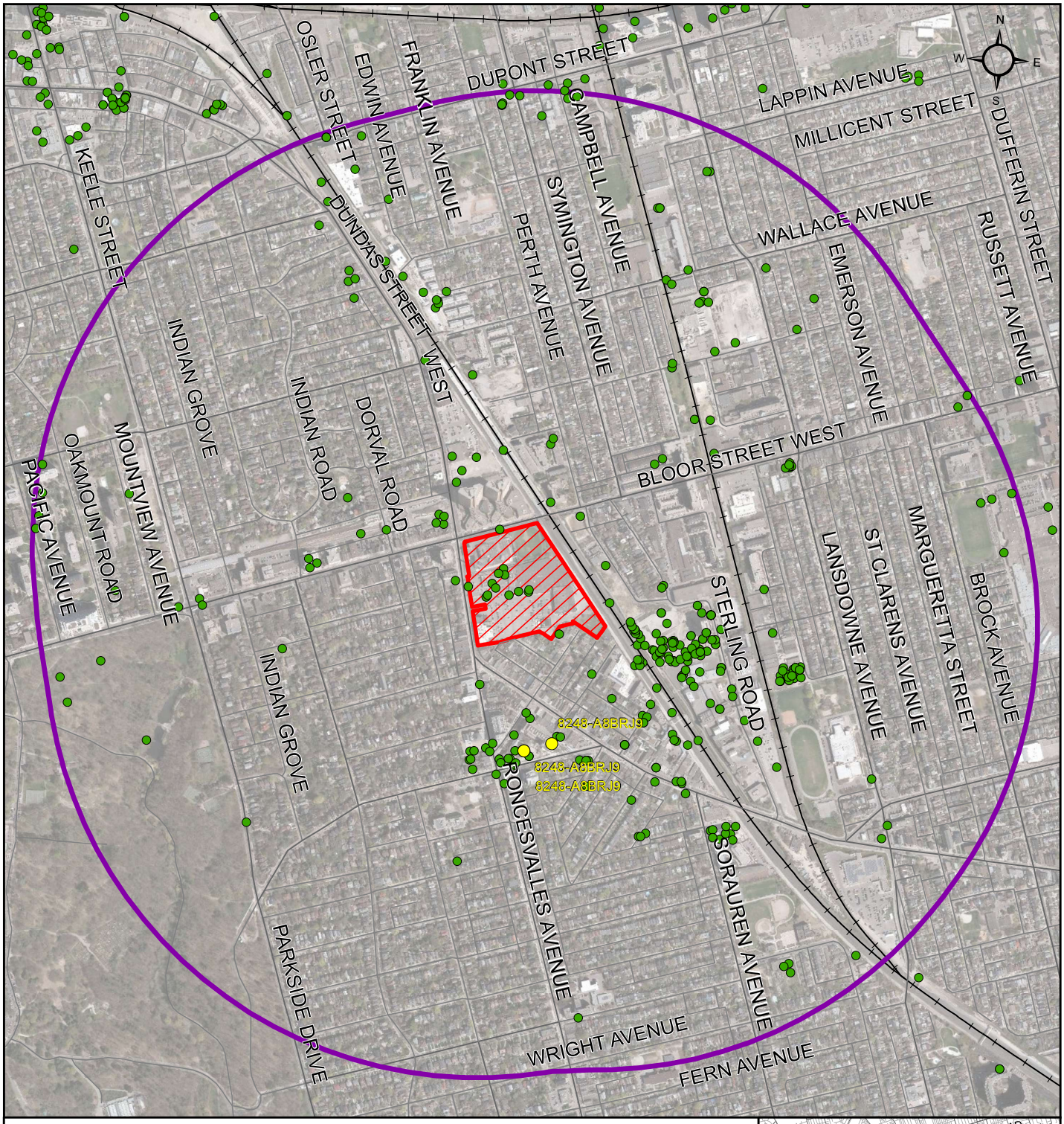
- Asphalt/Granular Base
- Fill
- Sand
- Silty Sand
- Clayey Silt Till
- Sandy Silt Till
- Water Level
- Monitoring Well Screen
- Inferred Geological Boundary

Toronto Inspection Ltd.
GEO-ENVIRONMENTAL CONSULTANTS
110 Konrad Crescent, Unit 16, Markham, Ontario L3R 9X2
Tel: 905-940 8509 Fax: 905-940 8192

TITLE: Local Geological Cross-Section B-B' (North - South)

LOCATION: 2280 Dundas Street West Toronto, Ontario

PROJECT NO.:	DATE:	FIGURE NO.:
2477-18-HG	July 2018	8

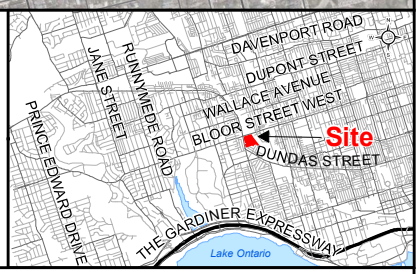


Legend

- Permit to Take Water
- MOECC Water Well
- Highway
- Arterial Road
- Local Road
- Railway
- 1km Buffer of Site Location
- Site Location

0 75 150 300 450 m

1:13,000

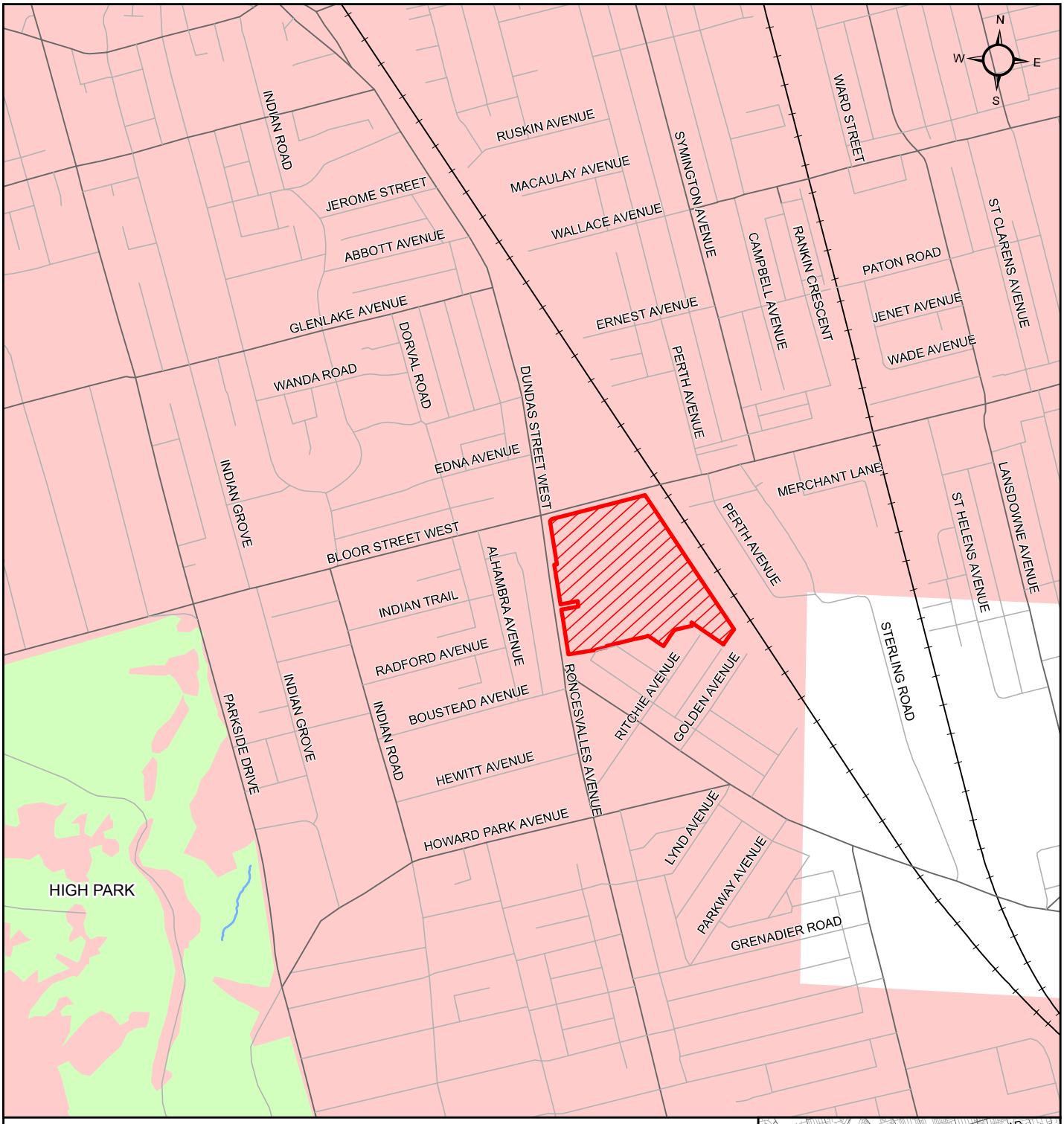


TorontoInspection LTD
GEO-ENVIRONMENTAL CONSULTANTS
110 Konrad Crescent, Unit 16, Markham, On L3R 9X2
Tel: 905-940 8509 Fax: 905-940 8192

TITLE:	MOECC Water Wells and Permits to Take Water
LOCATION:	2280 Dundas Street West, Toronto, Ontario

PROJECT NO.	DATE:	FIGURE NO.
2477-18-HG	July 2018	9

REFERENCE
Service Layer Credits: Source: ESRI, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User.

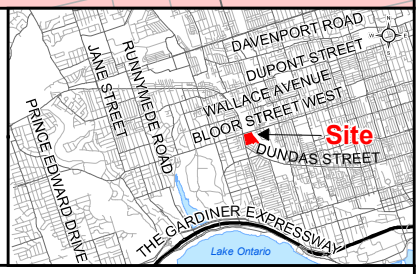


Legend

- Highway
- Arterial Road
- Local Road
- Railway
- Watercourse
- Site Location
- Wooded Area
- Highly Vulnerable Aquifer

0 50 100 200 300 m

1:10,000



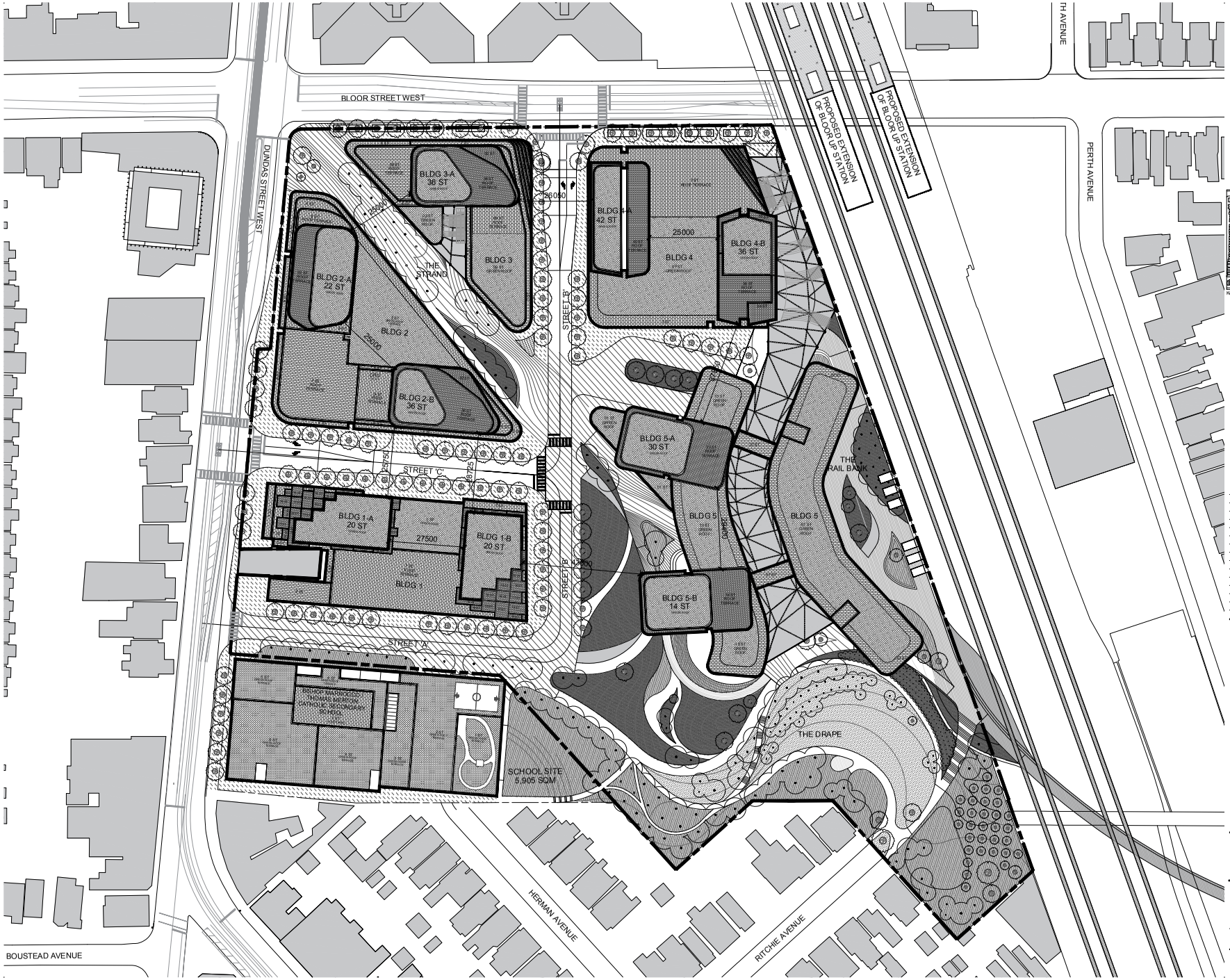
TorontoInspection LTD
GEO-ENVIRONMENTAL CONSULTANTS
110 Konrad Crescent, Unit 16, Markham, On L3R 9X2
Tel: 905-940 8509 Fax: 905-940 8192

TITLE:	Environmental Features	
LOCATION:	2280 Dundas Street West, Toronto, Ontario	
PROJECT NO. 2477-18-HG	DATE: July 2018	FIGURE NO. 10

REFERENCE
Source Water Protection Information Atlas from the Ministry of Environment and Climate Change
Produced Under License from the Ontario Ministry of Natural Resources and Forestry. Copyright (c) Queen's Printer, 2016

APPENDIX A

Site Plan and Architectural Drawings



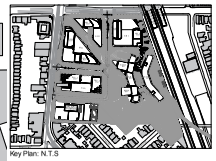
General Notes:

1/ These Contract Documents are the property of the Architect. The Architect bears no responsibility for the interpretations of these documents by the Contractor. Upon written application the Architect will provide written/graphic clarification or supplementary information regarding the intent of the Contract Documents. The Architect will review Shop Drawings submitted by the Contractor for design conformance only.

2/ Drawings are not to be scaled for construction. Contractor to verify all existing conditions and dimensions required to perform the Work and report any discrepancies with the Contract Documents to the Architect before commencing work.

3/ Positions of exposed or finished mechanical or electrical devices, fittings, and fixtures are indicated on the Architectural drawings. The locations shown on the Architectural drawings govern over the Mechanical and Electrical drawings. These items not clearly located will be located as directed by the Architect.

TRUE NORTH



Key Plan: N.T.S

Change	Date

ONTARIO ASSOCIATION OF ARCHITECTS
DAVID PONTARINI
LICENCE
4466

HARIRI PONTARINI ARCHITECTS
600 King Street West
Toronto, Canada M6V 3M6
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info@hp-arch.com
www.hariripontarini.com

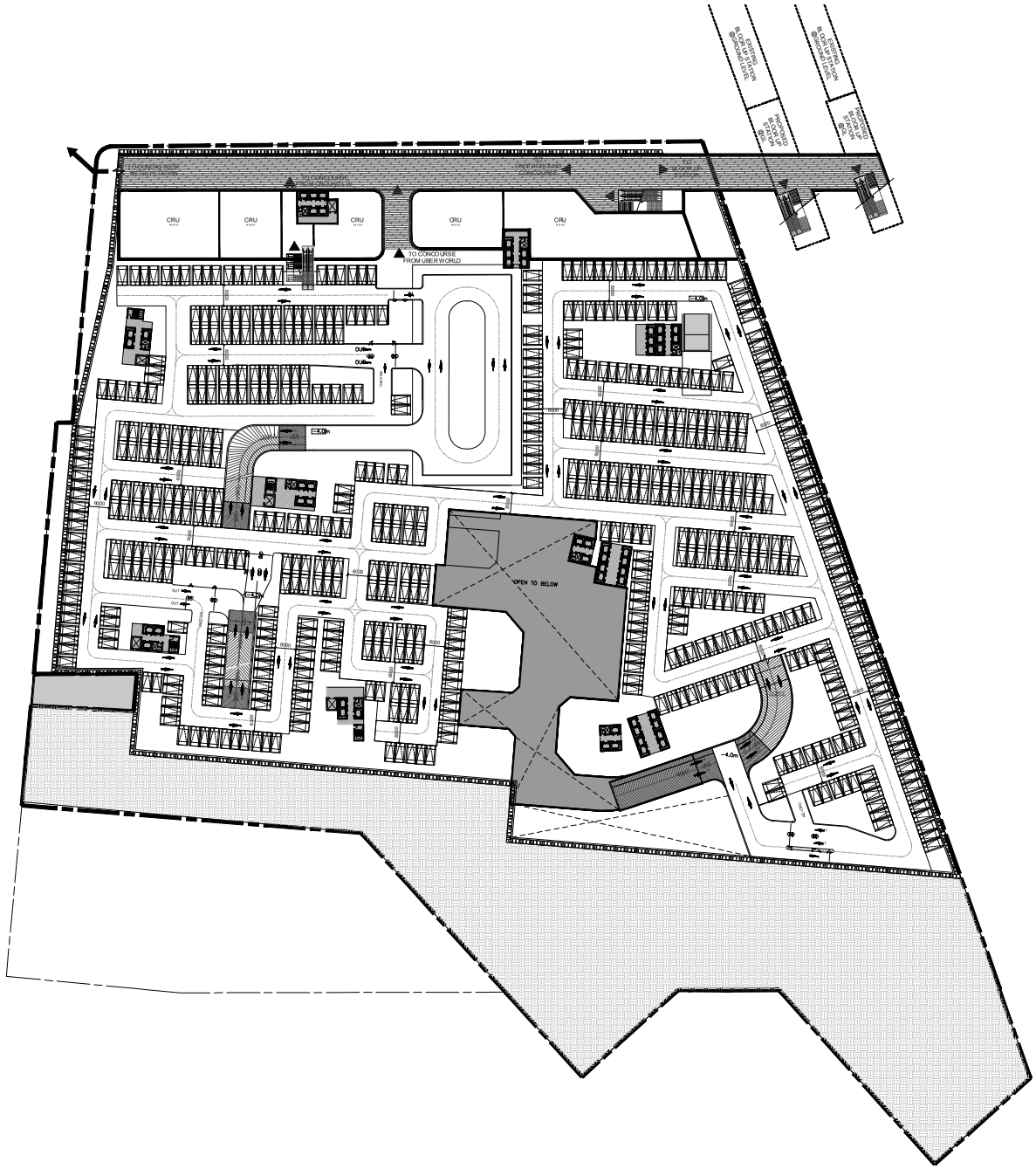
BLOOR AND DUNDAS STREET WEST
2280 Dundas St West, Toronto

Site Plan

Project No: 0739
Scale: 1:600
Date:
Drawn By: HPA

Drawing No:

A1.03



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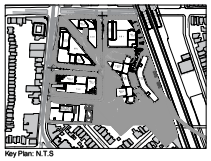

Key Plan: N.T.S

Change	Date

ONTARIO ASSOCIATION OF ARCHITECTS
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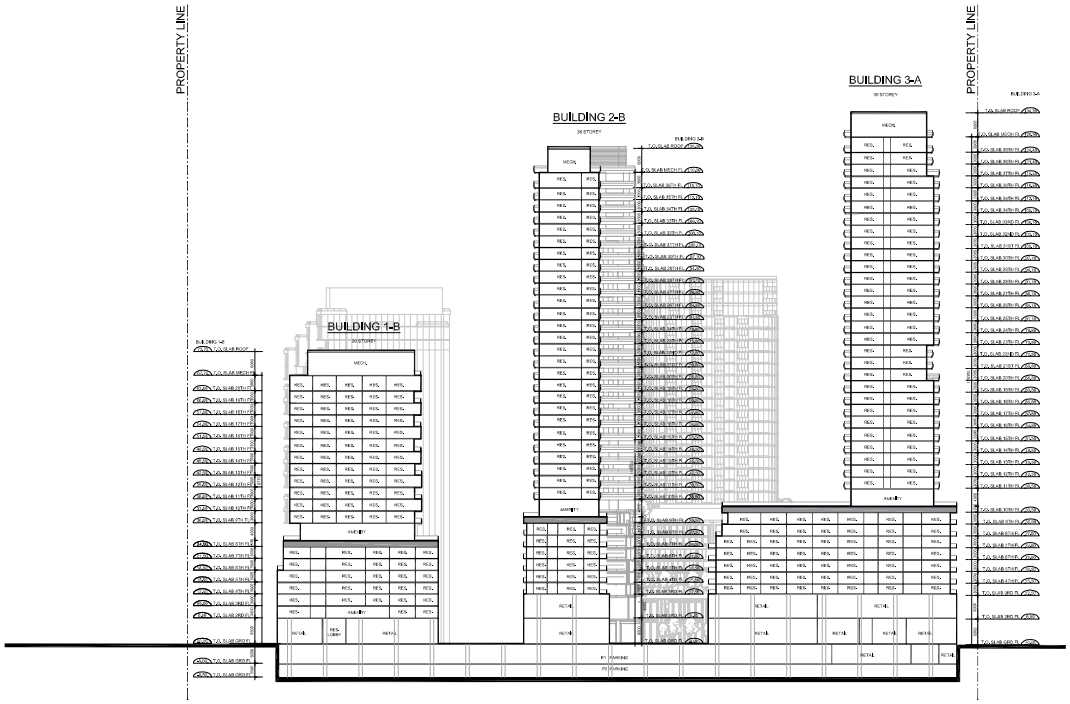
BLOOR AND DUNDAS STREET WEST
2280 Dundas St West, Toronto

P1 Parking Plan

Project No.: 1739
Scale: 1:500
Date:
Drawn by: HPA

Drawing No.:

A2.01



General Notes:

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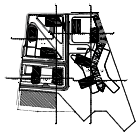
TRUE NORTH



Key Plan NTS

NOTE:
All retail uses and locations are conceptual.

Change	Date

ONTARIO ASSOCIATION OF ARCHITECTS
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BLOOR AND DUNDAS STREET WEST
2280 Dundas St West, Toronto

Section C-C

Project No:	1729
Scale:	1:500
Date:	
Drawn by:	HPA

Drawing No:

A4.03

APPENDIX B

Borehole Logs

Project No. 2477-18-G-CPR-E

Log of Borehole 1

Dwg No. 2

Project: Geotechnical Investigation

Sheet No. 1 of 1

Location: 2280 Dundas Street West, Toronto, Ontario

Date Drilled: 2/20/18

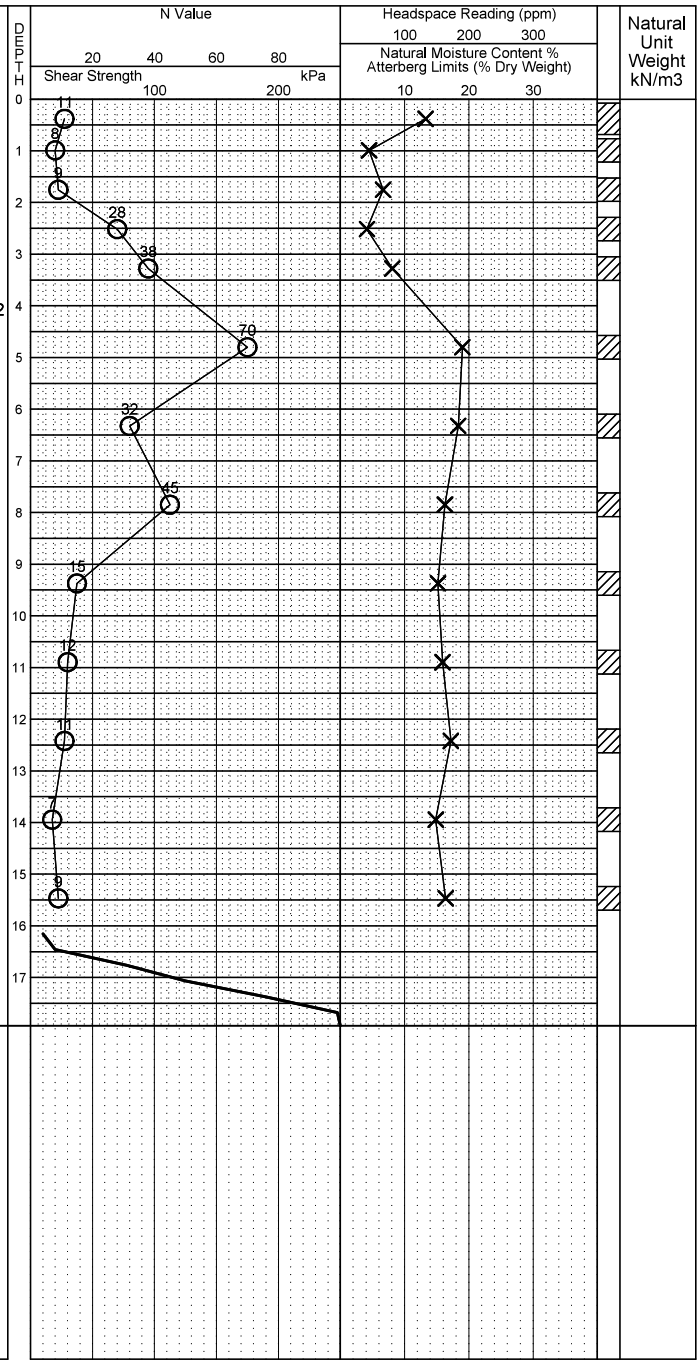
Drill Type: Truck Mounted Drill Rig

Datum: Geodetic

Auger Sample
SPT (N) Value
Dynamic Cone Test
Shelby Tube
Field Vane Test

Headspace Reading (ppm)
Natural Moisture
Plastic and Liquid Limit
Unconfined Compression % Strain at Failure
Penetrometer

Soil Description	ELEV. m
Ground Surface	112.91
ASPHALT PAVEMENT	112.83
- 75mm asphalt over granular bases	112.76
FILL	
- brown sand	111.08
- dark silty sand at 0.15m to 0.3m	
- trace to some silt	
- moist	
SAND	
- compact to very dense	
- brown, grey below 6.0m	108.72
- fine to medium grained	
- trace silt	
- a layer of clayey silt at 6.3m to 6.5m	
- trace to some silt below 6.5m	
- occasional layers of silty sand below 6.5m	
- moist to very moist, wet below 6.0m	
	102.85
CLAYEY SILT TILL	
- stiff to firm, grey	
- some gravel, some sandy silt	
- some silty clay	
- very moist	
	97.06
(Dynamic Cone Test)	
	94.98
END OF BOREHOLE	
NOTE:	
Upon completion of drilling:	
- water level at 4.5m	



NOTE: THE BOREHOLE DATA NEEDS INTERPRETATION ASSISTANCE BY TORONTO INSPECTION LTD. BEFORE USE BY OTHERS

Toronto Inspection Ltd.

Time	Water Level (m)	Depth to Cave (m)
April 19, 2018	4.31m	
May 3, 2018	4.25m	
May 30, 2018	4.17m	
June 12, 2018	4.20m	
Jun 26, 21018	4.19m	

LGBE3 2477-18-G-CPR-F.GPJ 7/10/18

Project No. 2477-18-G-CPR-E

Log of Borehole 1S

Dwg No. 13

Project: Geotechnical Investigation

Sheet No. 1 of 1

Location: 2280 Dundas Street West, Toronto, Ontario

Date Drilled: 2/20/18

Drill Type: Truck Mounted Drill Rig

Datum: Geodetic

Auger Sample
SPT (N) Value
Dynamic Cone Test
Shelby Tube
Field Vane Test

Headspace Reading (ppm)
Natural Moisture
Plastic and Liquid Limit
Unconfined Compression % Strain at Failure
Penetrometer

GWL	SYMBOL	Soil Description	ELEV. m	DEPTH	N Value / Shear Strength (20 40 60 80 / 100 200 kPa)	Headspace Reading (ppm) / Natural Moisture Content % / Atterberg Limits (% Dry Weight) (100 200 300 / 10 20 30)	Natural Unit Weight kN/m3
		Ground Surface	112.91	0			
		NOT SAMPLED		1			
				2			
				3			
			109.20	4			
				5			
			106.81	6			
		END OF BOREHOLE					

LGBE3 2477-18-G-CPR-F.GPJ 7/10/18

NOTE: THE BOREHOLE DATA NEEDS INTERPRETATION ASSISTANCE BY TORONTO INSPECTION LTD. BEFORE USE BY OTHERS

Toronto Inspection Ltd.

Time	Water Level (m)	Depth to Cave (m)
April 19, 2018	3.73m	
May 3, 2018	3.71m	
May 30, 2018	3.69m	
June 12, 2018	3.72m	
Jun 26, 21018	3.71m	

Project No. 2477-18-G-CPR-E

Log of Borehole 2

Dwg No. 3

Project: Geotechnical Investigation

Sheet No. 1 of 1

Location: 2280 Dundas Street West, Toronto, Ontario

Date Drilled: 2/21/18

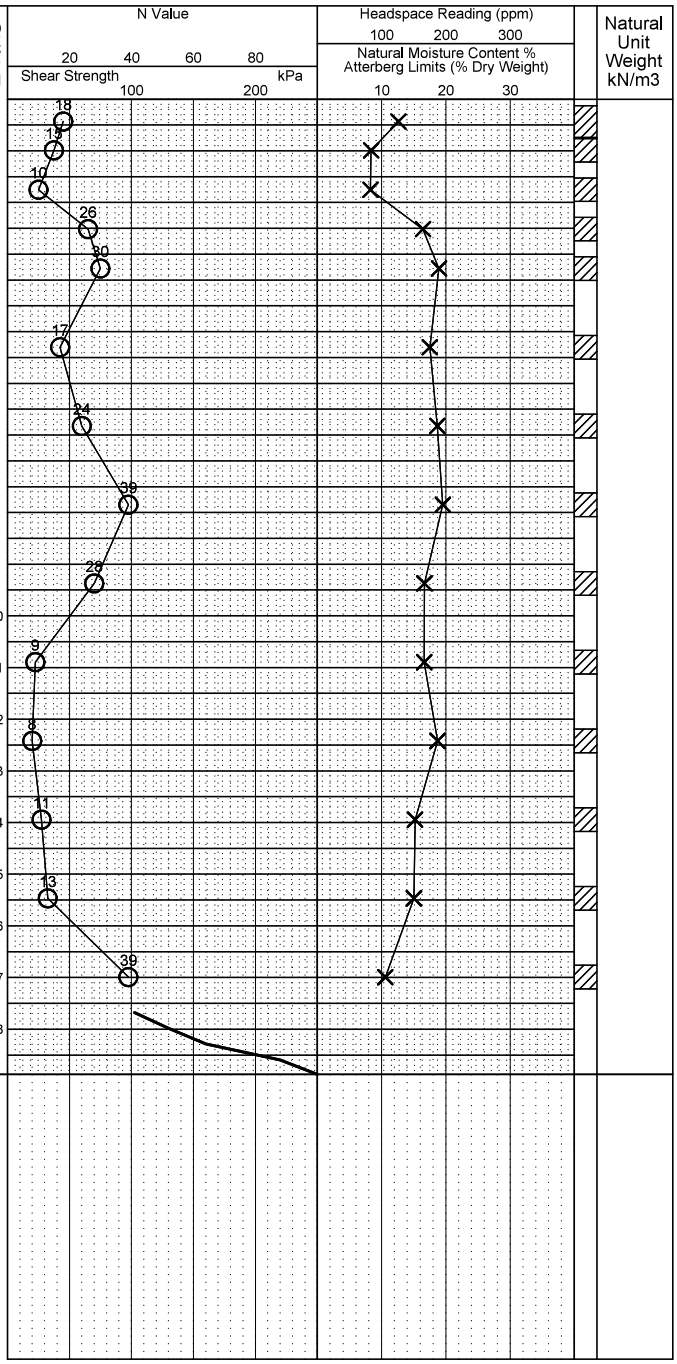
Drill Type: Truck Mounted Drill Rig

Datum: Geodetic

Auger Sample
SPT (N) Value
Dynamic Cone Test
Shelby Tube
Field Vane Test

Headspace Reading (ppm)
Natural Moisture
Plastic and Liquid Limit
Unconfined Compression % Strain at Failure
Penetrometer

Soil Description	ELEV. m
Ground Surface	112.75
ASPHALT PAVEMENT - 125mm asphalt over granular bases	112.62 / 112.37
FILL - brown sand - dark brown silty sand to sandy silt to 0.9m - trace to some silt - moist	111.22 / 109.42
SAND - compact to dense, brown - fine to medium grained - a layer of sandy silt at 2.3m - trace to some silt - moist to very moist, wet pockets	108.79
SILTY SAND - compact to dense - brown, grey below 4.5m - fine to medium grained - occasional layers of fine sand - some sandy silt - very moist to wet	102.69
CLAYEY SILT TILL - stiff to firm, grey - some gravel, some sandy silt - some silty clay - very moist	96.59
SANDY SILT TILL - dense, grey - some gravel, some clayey silt - seams of fine sand - moist	95.37
(Dynamic Cone Test)	93.88
END OF BOREHOLE **NOTE:** Upon completion of drilling: -	



Natural Unit Weight kN/m3

NOTE: THE BOREHOLE DATA NEEDS INTERPRETATION ASSISTANCE BY TORONTO INSPECTION LTD. BEFORE USE BY OTHERS

Toronto Inspection Ltd.

Time	Water Level (m)	Depth to Cave (m)
April 19, 2018	3.40m	
May 3, 2018	3.28m	
June 12, 2018	3.32m	
Jun 26, 21018	3.33m	

LGBE3 2477-18-G-CPR-F.GPJ 7/10/18

Project No. 2477-18-G-CPR-E

Log of Borehole 3

Dwg No. 4

Project: Geotechnical Investigation

Sheet No. 1 of 1

Location: 2280 Dundas Street West, Toronto, Ontario

Date Drilled:

Drill Type:

Datum: Geodetic

Auger Sample
SPT (N) Value
Dynamic Cone Test
Shelby Tube
Field Vane Test

Headspace Reading (ppm)
Natural Moisture
Plastic and Liquid Limit
Unconfined Compression % Strain at Failure
Penetrometer

GWL	SYMBOL	Soil Description	ELEV. m	DEPTH	N Value 20 40 60 80 / Shear Strength kPa 100 200	Headspace Reading (ppm) 100 200 300 / Natural Moisture Content % Atterberg Limits (% Dry Weight) 10 20 30		Natural Unit Weight kN/m3
		Ground Surface	112.58	0				
		COULD NOT BE DRILLED DUE TO PRESENCE OF UNDERGROUND UTILITIES						

LGBE3 2477-18-G-CPR-F.GPJ 7/10/18

NOTE: THE BOREHOLE DATA NEEDS INTERPRETATION ASSISTANCE BY TORONTO INSPECTION LTD. BEFORE USE BY OTHERS

Toronto Inspection Ltd.

Time	Water Level (m)	Depth to Cave (m)

Project No. 2477-18-G-CPR-E

Log of Borehole 4

Dwg No. 5

Project: Geotechnical Investigation

Sheet No. 1 of 1

Location: 2280 Dundas Street West, Toronto, Ontario

Date Drilled: 3/1/18

Drill Type: Truck Mounted Drill Rig

Datum: Geodetic

Auger Sample
SPT (N) Value
Dynamic Cone Test
Shelby Tube
Field Vane Test

Headspace Reading (ppm)
Natural Moisture
Plastic and Liquid Limit
Unconfined Compression % Strain at Failure
Penetrometer

GWL	SYMBOL	Soil Description	ELEV. m	DEPTH	N Value / Shear Strength (kPa)	Headspace Reading (ppm) / Natural Moisture Content % / Atterberg Limits (% Dry Weight)	Natural Unit Weight kN/m3
		Ground Surface	112.65	0			
		NOT SAMPLED		1			
			110.12	2			
				3			
				4			
				5			
			106.56	6			
		END OF BOREHOLE **NOTE:** Upon completion of drilling: - no free water					

NOTE: THE BOREHOLE DATA NEEDS INTERPRETATION ASSISTANCE BY TORONTO INSPECTION LTD. BEFORE USE BY OTHERS

Toronto Inspection Ltd.

Time	Water Level (m)	Depth to Cave (m)
April 19, 2018	2.48m	
May 3, 2018	2.30m	
May 30, 2018	2.44m	
June 12, 2018	2.48m	
Jun 26, 21018	2.53m	

Project No. 2477-18-G-CPR-E

Log of Borehole 5

Dwg No. 6

Project: Geotechnical Investigation

Sheet No. 1 of 1

Location: 2280 Dundas Street West, Toronto, Ontario

Date Drilled: 3/6/18

Drill Type: Truck Mounted Drill Rig

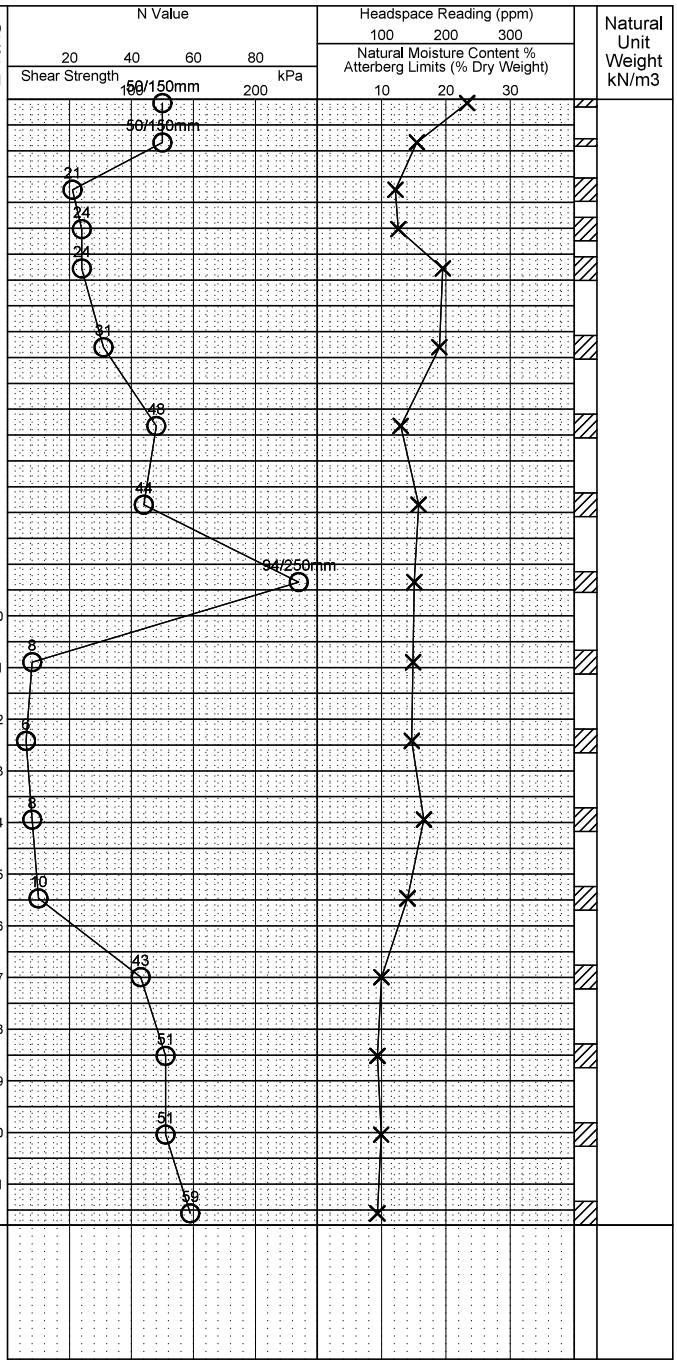
Datum: Geodetic

Auger Sample
SPT (N) Value
Dynamic Cone Test
Shelby Tube
Field Vane Test

Headspace Reading (ppm)
Natural Moisture
Plastic and Liquid Limit
Unconfined Compression % Strain at Failure
Penetrometer

Soil Description	ELEV. m
Ground Surface	112.75
ASPHALT PAVEMENT - 75mm asphalt pavement	112.67
FILL - brown mix of sand and silt - some glass, concrete & asphalt pieces - some gravel - large concrete pieces and bricks - moist, frozen to 0.9m	110.61
SAND - compact to dense, brown - fine to medium grained - layers of sandy silt - moist, wet below 3.1m	108.72
SANDY SILT - dense, grey - some clayey silt - moist	107.26
SILTY SAND - dense to very dense, grey - fine to medium grained - layers of fine sand below 7.7m - moist to very moist, wet pockets	104.98
CLAYEY SILT TILL - firm to stiff, grey - low to medium plasticity - some silty clay, trace sandy silt - a layer of sandy silt at 12.2m - some gravel - very moist, wet pockets	102.69
SANDY SILT TILL - dense to very dense - grey - some gravel, some clayey silt - seams of fine sand - moist	96.59
END OF BOREHOLE	90.96

NOTE:
Upon completion of drilling:
-
- (Mud rotary drilling)



NOTE: THE BOREHOLE DATA NEEDS INTERPRETATION ASSISTANCE BY TORONTO INSPECTION LTD. BEFORE USE BY OTHERS

Toronto Inspection Ltd.

Time	Water Level (m)	Depth to Cave (m)
April 19, 2018	4.02m	
May 3, 2018	3.94m	
May 30, 2018	3.85m	
June 12, 2018	3.92m	
Jun 26, 21018	4.03m	

LGBE3 2477-18-G-CPR-F.GPJ 7/10/18

Project No. 2477-18-G-CPR-E

Log of Borehole 6

Dwg No. 7

Project: Geotechnical Investigation

Sheet No. 1 of 1

Location: 2280 Dundas Street West, Toronto, Ontario

Date Drilled: 2/22/18

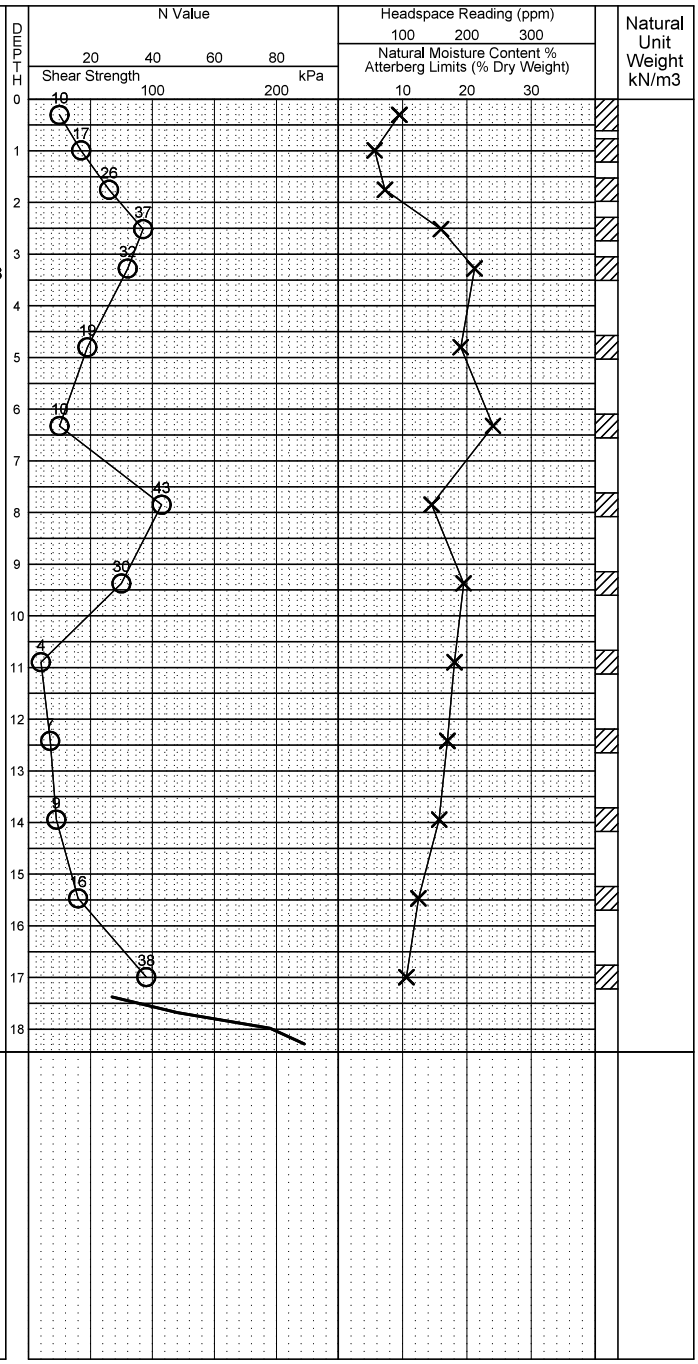
Drill Type: Truck Mounted Drill Rig

Datum: Geodetic

Auger Sample
SPT (N) Value
Dynamic Cone Test
Shelby Tube
Field Vane Test

Headspace Reading (ppm)
Natural Moisture
Plastic and Liquid Limit
Unconfined Compression % Strain at Failure
Penetrometer

GWL	SYMBOL	Soil Description	ELEV. m
		Ground Surface	112.47
		ASPHALT PAVEMENT	112.40
		- 75mm asphalt over granular bases	112.32
		FILL	
		- brown sand	110.79
		- pockets of sandy silt at 0.3m	
		- trace silt	
		- moist	
		SAND	108.98
		- compact to dense, brown	108.51
		- fine to medium grained	
		- trace sandy silt	
		-moist to very moist	
		SILTY SAND	
		- compact to dense	
		- brown, grey below 4.5m	
		- fine to medium grained	
		- occasional layers of fine sand or sandy silt	
		- very moist to wet	
			102.41
		CLAYEY SILT TILL	
		- firm to stiff	
		- grey	
		- some gravel	
		- some sandy silt	
		- a layer of silty sand at 10.8m	
		- very moist, wet pockets at 10.5m	
			96.93
		SANDY SILT TILL	
		- compact to dense, grey	
		- some gravel, some clayey silt	
		- seams of fine sand	95.25
		- moist	
		(Dynamic Cone Test)	94.03
		END OF BOREHOLE	
		NOTE:	
		Upon completion of drilling:	
		-	



LGBE3 2477-18-G-CPR-F.GPJ 7/10/18

NOTE: THE BOREHOLE DATA NEEDS INTERPRETATION ASSISTANCE BY TORONTO INSPECTION LTD. BEFORE USE BY OTHERS

Toronto Inspection Ltd.

Time	Water Level (m)	Depth to Cave (m)
April 19, 2018	3.51m	
May 3, 2018	3.73m	
May 30, 2018	3.42m	
June 12, 2018	3.45m	
Jun 26, 21018	3.49m	

Project No. 2477-18-G-CPR-E

Log of Borehole 7

Dwg No. 8

Project: Geotechnical Investigation

Sheet No. 1 of 1

Location: 2280 Dundas Street West, Toronto, Ontario

Date Drilled: 2/26/18

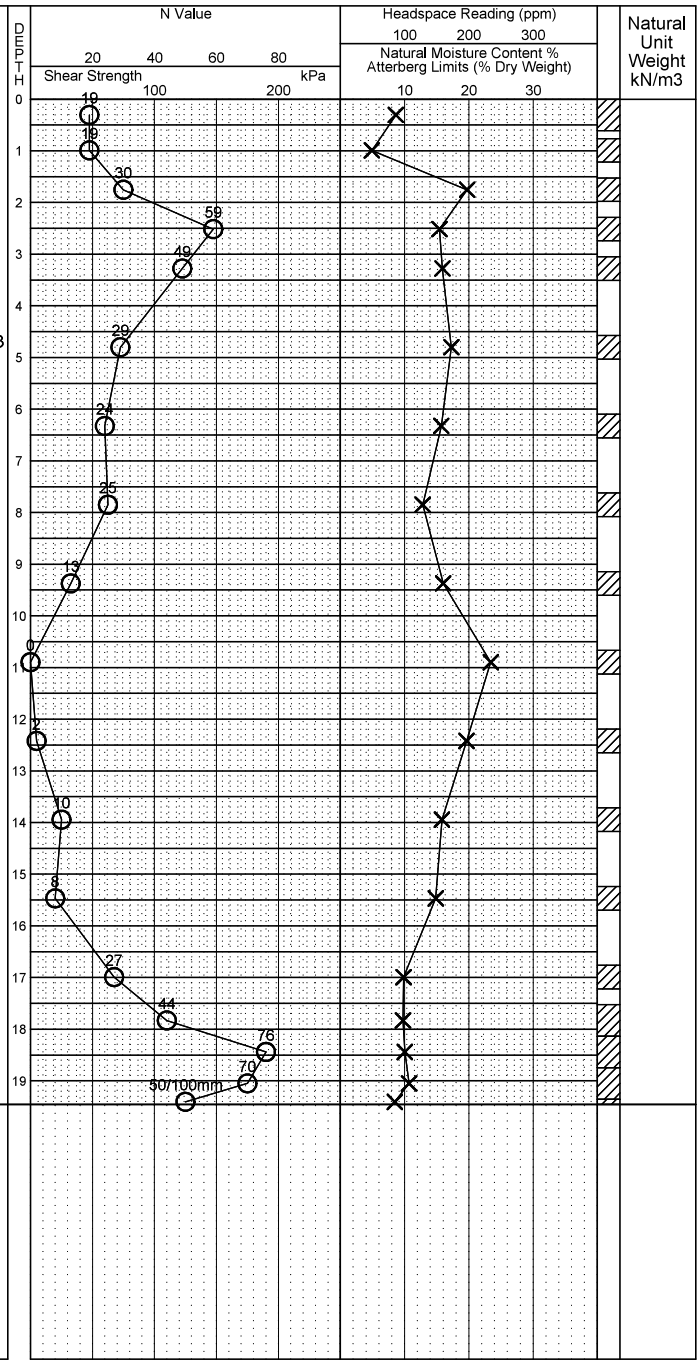
Drill Type: Truck Mounted Drill Rig

Datum: Geodetic

Auger Sample
SPT (N) Value
Dynamic Cone Test
Shelby Tube
Field Vane Test

Headspace Reading (ppm)
Natural Moisture
Plastic and Liquid Limit
Unconfined Compression % Strain at Failure
Penetrometer

Soil Description	ELEV. m
Ground Surface	112.14
ASPHALT PAVEMENT - 75mm asphalt over granular bases	112.06
FILL - brown sand - minor slag and cinders at 0.4m - trace gravel, trace silt - moist	111.76
SAND - dense to very dense, brown - fine to medium grained - trace to some silt - moist to very moist	110.92
SANDY SILT - compact - brown, grey below 4.5m - some silty sand - silty sand layer at 9.0m - moist to very moist, wet at 9.0m	108.18
CLAYEY SILT TILL - very soft to stiff, grey - some gravel - some silty clay - trace sandy silt - very moist to wet	107.33
SANDY SILT TILL - compact to very dense - some gravel - some clayey silt - layers of clayey silt till - moist	102.08
END OF BOREHOLE	95.98
NOTE: Upon completion of drilling: -	92.68



Natural Unit Weight kN/m3

NOTE: THE BOREHOLE DATA NEEDS INTERPRETATION ASSISTANCE BY TORONTO INSPECTION LTD. BEFORE USE BY OTHERS

Toronto Inspection Ltd.

Time	Water Level (m)	Depth to Cave (m)
April 19, 2018	8.05m	
May 3, 2018	6.46m	
May 30, 2018	5.25m	
June 12, 2018	4.99m	
Jun 26, 21018	4.81m	

Project No. 2477-18-G-CPR-E

Log of Borehole 8

Dwg No. 9

Project: Geotechnical Investigation

Sheet No. 1 of 1

Location: 2280 Dundas Street West, Toronto, Ontario

Date Drilled: 2/24/18

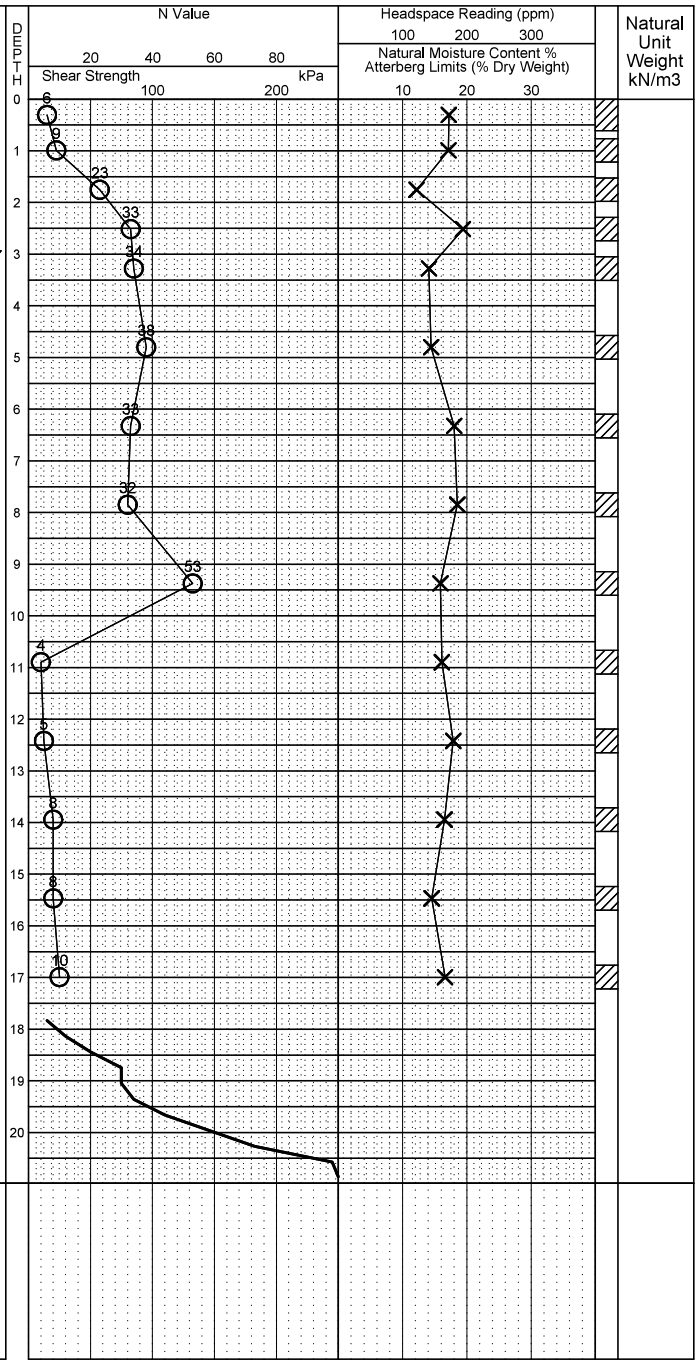
Drill Type: Truck Mounted Drill Rig

Datum: Geodetic

Auger Sample
SPT (N) Value
Dynamic Cone Test
Shelby Tube
Field Vane Test

Headspace Reading (ppm)
Natural Moisture
Plastic and Liquid Limit
Unconfined Compression % Strain at Failure
Penetrometer

Soil Description	ELEV. m
Ground Surface	112.43
ASPHALT PAVEMENT	112.30
- 125mm asphalt over granular bases	112.05
FILL	110.75
- brown silty sand	
- a layer of slag and cinder at 0.35m to 0.55m	
- some silt	109.27
- moist	
SAND	
- compact to very dense	
- brown, grey below 3.0m	
- fine to medium grained	
- thin layers of sandy silt at 3.3m & 6.3m	
- a very thin layer of clayey silt at 3.4m	
- a layer of sandy silt at 3.3m	
- moist to very moist	102.37
CLAYEY SILT TILL	
- soft to stiff	
- grey	
- some gravel	
- some clayey silt	
- some sandy silt	
- very moist	94.75
(Dynamic Cone Test)	91.45
END OF BOREHOLE	
NOTE:	
Upon completion of drilling:	
-	



Natural Unit Weight kN/m3

NOTE: THE BOREHOLE DATA NEEDS INTERPRETATION ASSISTANCE BY TORONTO INSPECTION LTD. BEFORE USE BY OTHERS

Toronto Inspection Ltd.

Time	Water Level (m)	Depth to Cave (m)
April 19, 2018	3.18m	
May 3, 2018	3.04m	
May 30, 2018	3.05m	
June 12, 2018	3.11m	
Jun 26, 21018	3.16m	

LGBE3 2477-18-G-CPR-F.GPJ 7/10/18

Project No. 2477-18-G-CPR-E

Log of Borehole 9

Dwg No. 10

Project: Geotechnical Investigation

Sheet No. 1 of 1

Location: 2280 Dundas Street West, Toronto, Ontario

Date Drilled: 2/20/18

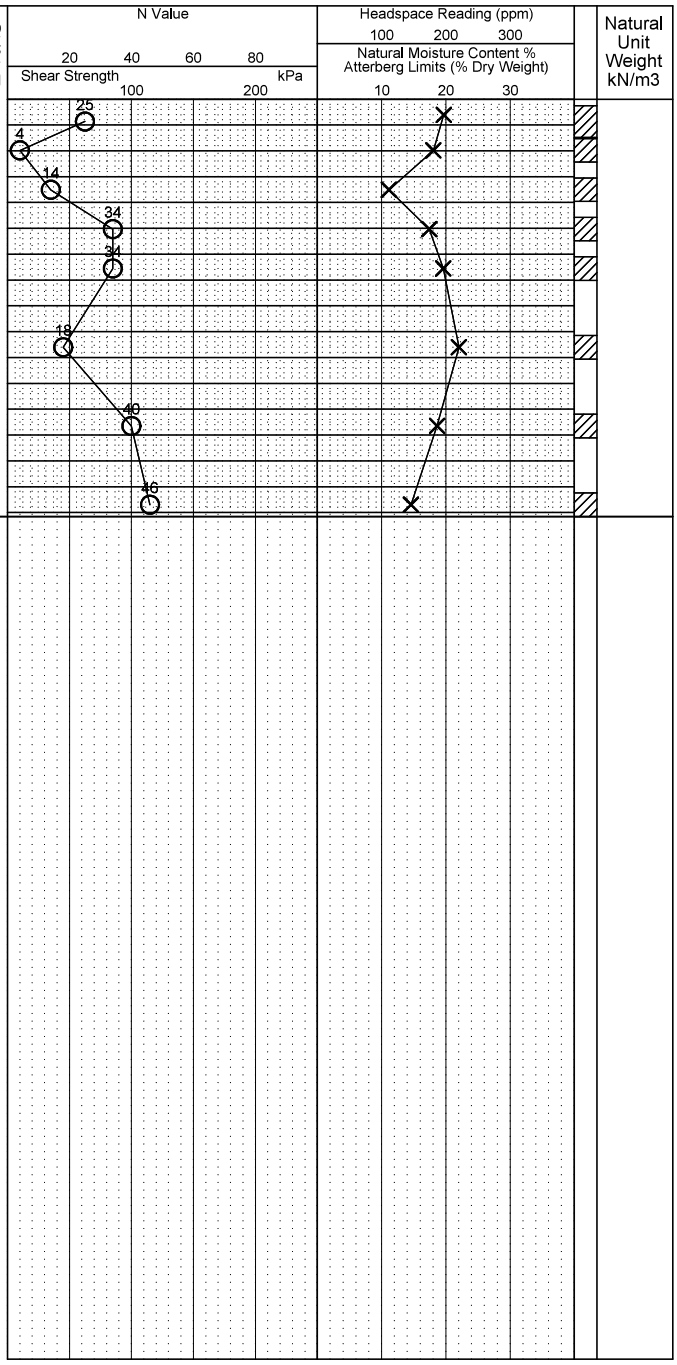
Drill Type: Truck Mounted Drill Rig

Datum: Geodetic

Auger Sample
SPT (N) Value
Dynamic Cone Test
Shelby Tube
Field Vane Test

Headspace Reading (ppm)
Natural Moisture
Plastic and Liquid Limit
Unconfined Compression % Strain at Failure
Penetrometer

Soil Description	ELEV. m
Ground Surface	112.18
ASPHALT PAVEMENT	112.05
- 125mm asphalt over granular bases	111.75
FILL	110.50
- dark brown sandy silt to brown sand	
- a layer of slag and cinder at 0.45m	
- trace gravel, an organic layer at 0.8m	109.31
- moist to very moist	
SAND	
- compact to dense	
- brown, grey below 4.5m	
- fine to medium grained	
- some silty sand	
- occasional layers of sandy silt	
- moist to wet	105.17
SILTY SAND	
- dense, grey	104.10
- some sandy silt	
- moist to very moist	
END OF BOREHOLE	
NOTE:	
Upon completion of drilling:	
- water level at 6.3m	



Natural Unit Weight kN/m3

LGBE3 2477-18-G-CPR-F.GPJ 7/10/18

NOTE: THE BOREHOLE DATA NEEDS INTERPRETATION ASSISTANCE BY TORONTO INSPECTION LTD. BEFORE USE BY OTHERS

Toronto Inspection Ltd.

Time	Water Level (m)	Depth to Cave (m)
April 19, 2018	2.99m	
May 3, 2018	2.81m	
May 30, 2018	2.79m	
June 12, 2018	2.82m	
Jun 26, 21018	2.87m	

Project No. 2477-18-G-CPR-E

Log of Borehole 10

Dwg No. 11

Project: Geotechnical Investigation

Sheet No. 1 of 1

Location: 2280 Dundas Street West, Toronto, Ontario

Date Drilled: 2/23/18

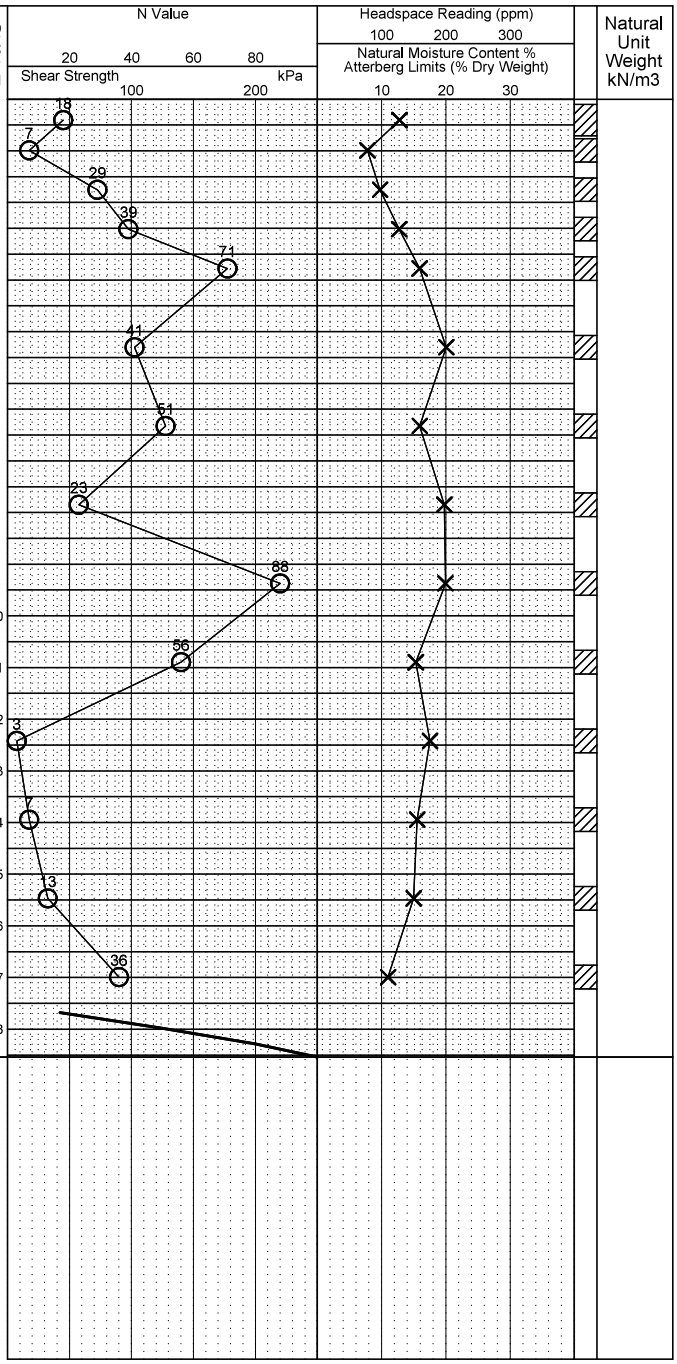
Drill Type: Truck Mounted Drill Rig

Datum: Geodetic

Auger Sample
SPT (N) Value
Dynamic Cone Test
Shelby Tube
Field Vane Test

Headspace Reading (ppm)
Natural Moisture
Plastic and Liquid Limit
Unconfined Compression % Strain at Failure
Penetrometer

Soil Description	ELEV. m
Ground Surface	112.56
ASPHALT PAVEMENT	112.46
- 100m asphalt over granular bases	112.31
FILL	
- brown sand	110.88
- some slag pieces, some silty sand	
- moist	
SAND	109.37
- compact to very dense	
- brown, grey below 2.3m	
- fine to medium grained	
- some silty sand	
- layers of silty sand at 6.0m & 9.0m	
- moist to wet	
	102.50
SANDY SILT	
- very dense, grey	
- some silty sand, some gravel	100.98
- very moist	
CLAYEY SILT TILL	
- soft to stiff, grey	
- some gravel	
- some silty clay	
- some sandy silt	
- very moist	
	96.41
SANDY SILT TILL	
- dense, grey	
- some gravel, some clayey silt	95.19
- moist	
(Dynamic Cone Test)	94.02
END OF BOREHOLE	
NOTE:	
Upon completion of drilling:	
-	



Natural Unit Weight kN/m3

LGBE3 2477-18-G-CPR-F.GPJ 7/10/18

NOTE: THE BOREHOLE DATA NEEDS INTERPRETATION ASSISTANCE BY TORONTO INSPECTION LTD. BEFORE USE BY OTHERS

Toronto Inspection Ltd.

Time	Water Level (m)	Depth to Cave (m)
May 3, 2018	3.26m	
May 30, 2018	3.12m	
June 12, 2018	3.15m	
Jun 26, 21018	3.19m	

Project No. 2477-18-G-CPR-E

Log of Borehole 11

Dwg No. 12

Project: Geotechnical Investigation

Sheet No. 1 of 1

Location: 2280 Dundas Street West, Toronto, Ontario

Date Drilled: 3/2/18

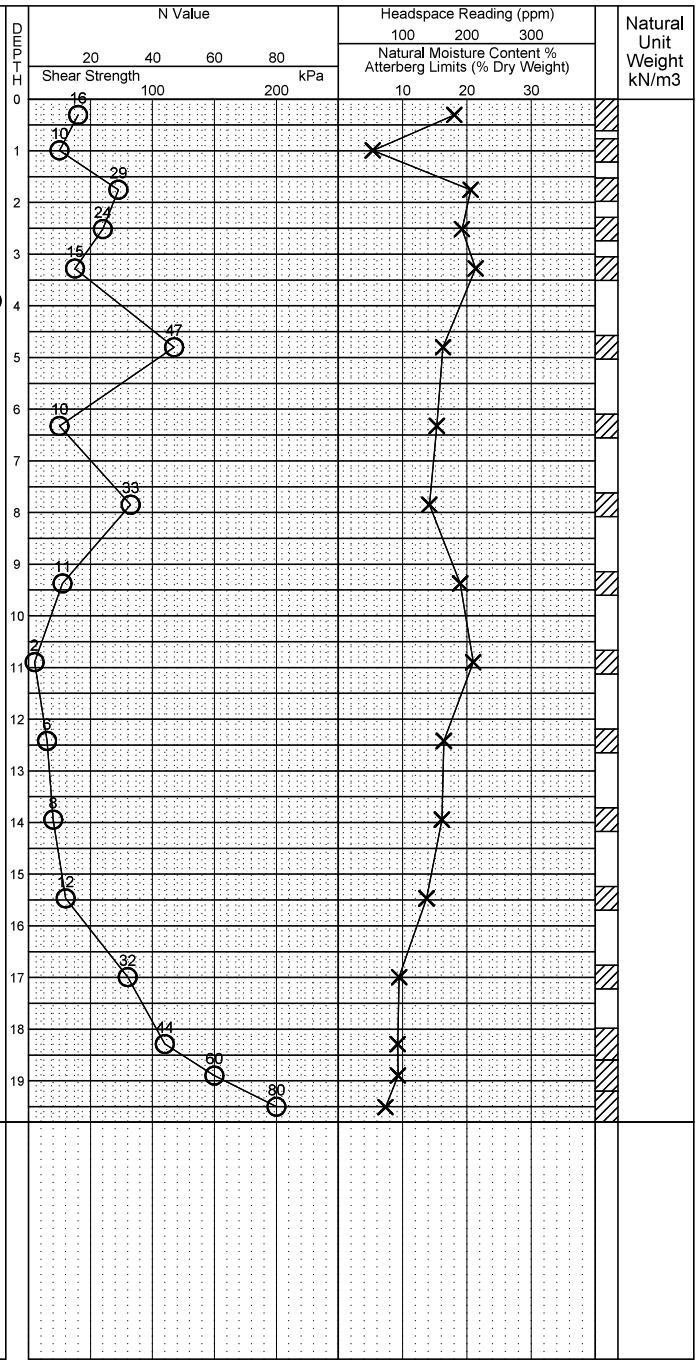
Drill Type: Truck Mounted Drill Rig

Datum: Geodetic

Auger Sample
SPT (N) Value
Dynamic Cone Test
Shelby Tube
Field Vane Test

Headspace Reading (ppm)
Natural Moisture
Plastic and Liquid Limit
Unconfined Compression % Strain at Failure
Penetrometer

GWL	SYMBOL	Soil Description	ELEV. m
		Ground Surface	111.63
		TOPSOIL	111.48
		FILL - brown silty sand to sand - some asphalt pieces at 0.2m - some rootlets to 0.8m - pockets of topsoil at 0.8m - moist	109.95
		SAND - compact to dense - brown, grey below 3.0m - fine to medium grained - some silty sand - moist to wet	107.60 106.14
		SANDY SILT - compact to dense, grey - a layer of clayey silt at 6.0m - silty sand at 7.7m to 8.0m - moist to very moist	103.10
		CLAYEY SILT TILL - very soft to stiff, grey - low to medium plasticity - some gravel - some silty clay - some sandy silt - very moist, wet pockets	95.48
		SANDY SILT TILL - dense to very dense, grey - some gravel - some clayey silt - seams of fine sand - moist	91.83
		END OF BOREHOLE **NOTE:** Upon completion of drilling: -	



NOTE: THE BOREHOLE DATA NEEDS INTERPRETATION ASSISTANCE BY TORONTO INSPECTION LTD. BEFORE USE BY OTHERS

Toronto Inspection Ltd.

Time	Water Level (m)	Depth to Cave (m)
April 19, 2018	7.86m	
May 3, 2018	5.92m	
May 30, 2018	4.48m	
June 12, 2018	4.18m	
Jun 26, 21018	4.03m	

Project No. 2477-18-G-CPR-E

Log of Borehole 11S

Dwg No. 14

Project: Geotechnical Investigation

Sheet No. 1 of 1

Location: 2280 Dundas Street West, Toronto, Ontario

Date Drilled: 3/2/18

Drill Type: Truck Mounted Drill Rig

Datum: Geodetic

Auger Sample
SPT (N) Value
Dynamic Cone Test
Shelby Tube
Field Vane Test

Headspace Reading (ppm)
Natural Moisture
Plastic and Liquid Limit
Unconfined Compression % Strain at Failure
Penetrometer

GWL	SYMBOL	Soil Description	ELEV. m	DEPTH	N Value / Shear Strength (kPa)	Headspace Reading (ppm) / Natural Moisture Content % / Atterberg Limits (% Dry Weight)	Natural Unit Weight kN/m3
		Ground Surface	111.63	0			
		NOT SAMPLED		1			
			109.27	2			
				3			
				4			
				5			
			105.53	6			
		END OF BOREHOLE					

LGBE3 2477-18-G-CPR-F.GPJ 7/10/18

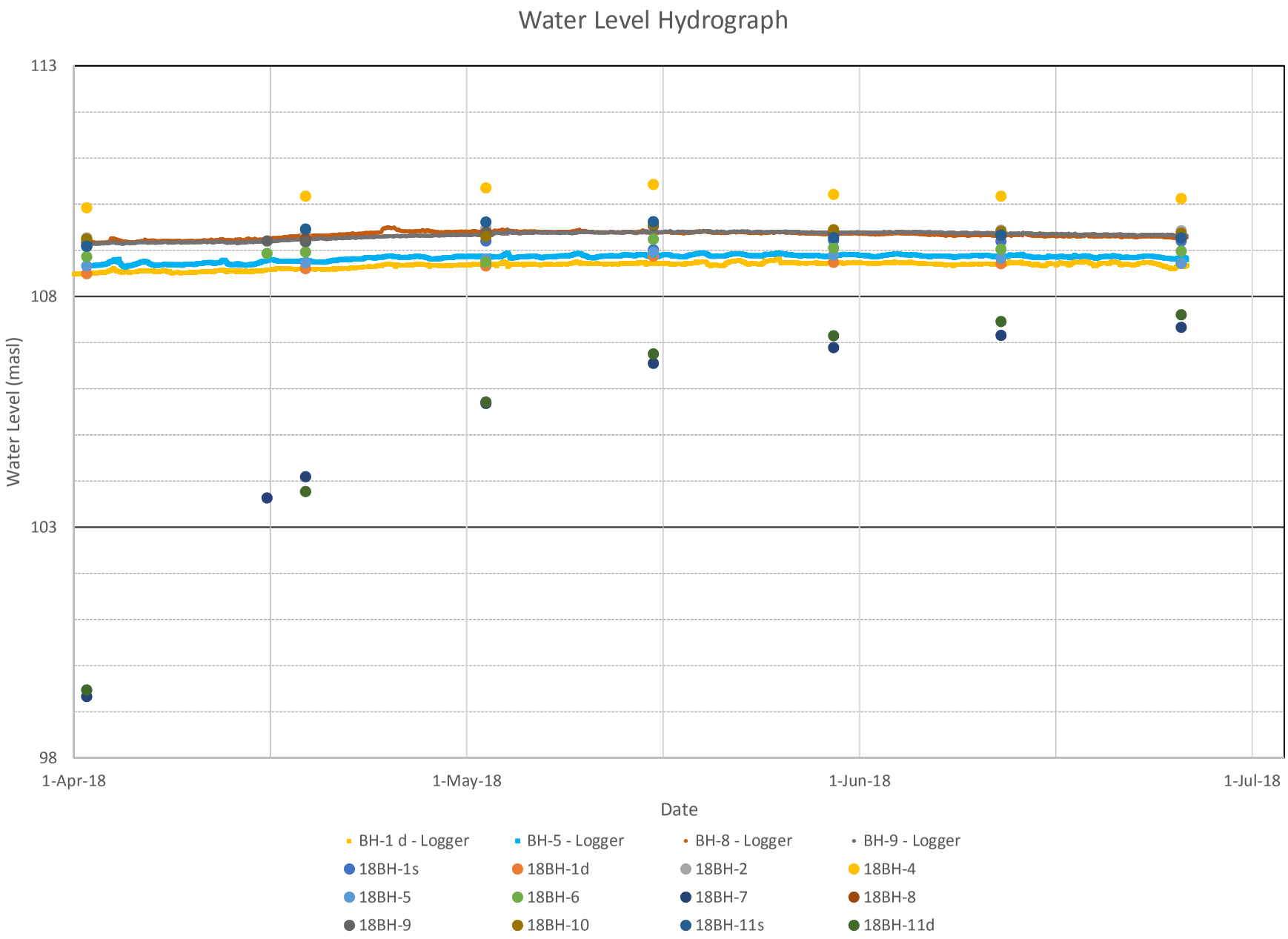
NOTE: THE BOREHOLE DATA NEEDS INTERPRETATION ASSISTANCE BY TORONTO INSPECTION LTD. BEFORE USE BY OTHERS

Toronto Inspection Ltd.

Time	Water Level (m)	Depth to Cave (m)
April 19, 2018	2.17m	
May 3, 2018	3.26m	
May 30, 2018	2.36m	
June 12, 2018	2.30m	
Jun 26, 21018	2.36m	

APPENDIX C

Water Level Monitoring


Water Level Hydrograph
113
108
103
98
Water Level (masl)
1-Apr-18
1-May-18
1-Jun-18
1-Jul-18
Date
BH-1 d - Logger
BH-5 - Logger
BH-8 - Logger
BH-9 - Logger
18BH-1s
18BH-1d
18BH-2
18BH-4
18BH-5
18BH-6
18BH-7
18BH-8
18BH-9
18BH-10
18BH-11s
18BH-11d

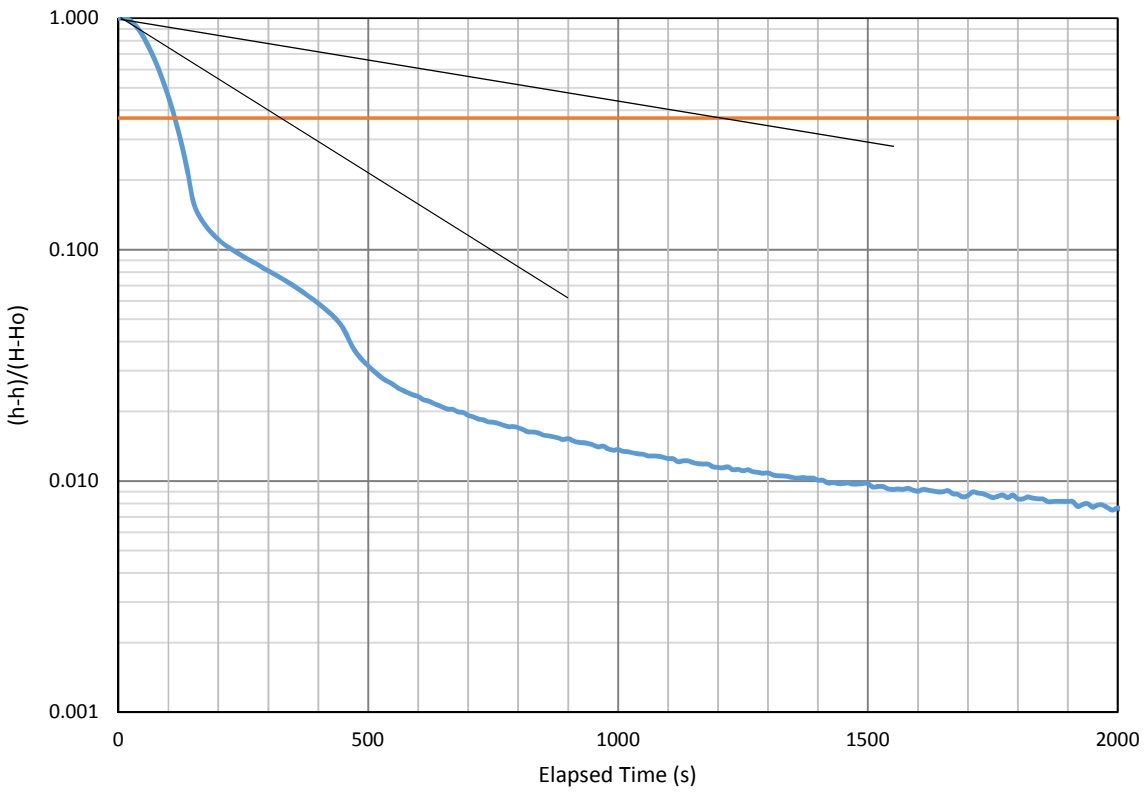
APPENDIX D

Hydraulic Conductivity Analysis

In-Situ Hydraulic Conductivity Analyses: BH-1s

Appendix C

Company:	Toronto Inspection Ltd.
Client:	Choice Properties REIT
Project:	2477-18-HG
Location:	2280 Dundas Street West
Test Well:	BH-1s
Test Date:	16-Mar-18
Test conducted by:	IG, TS

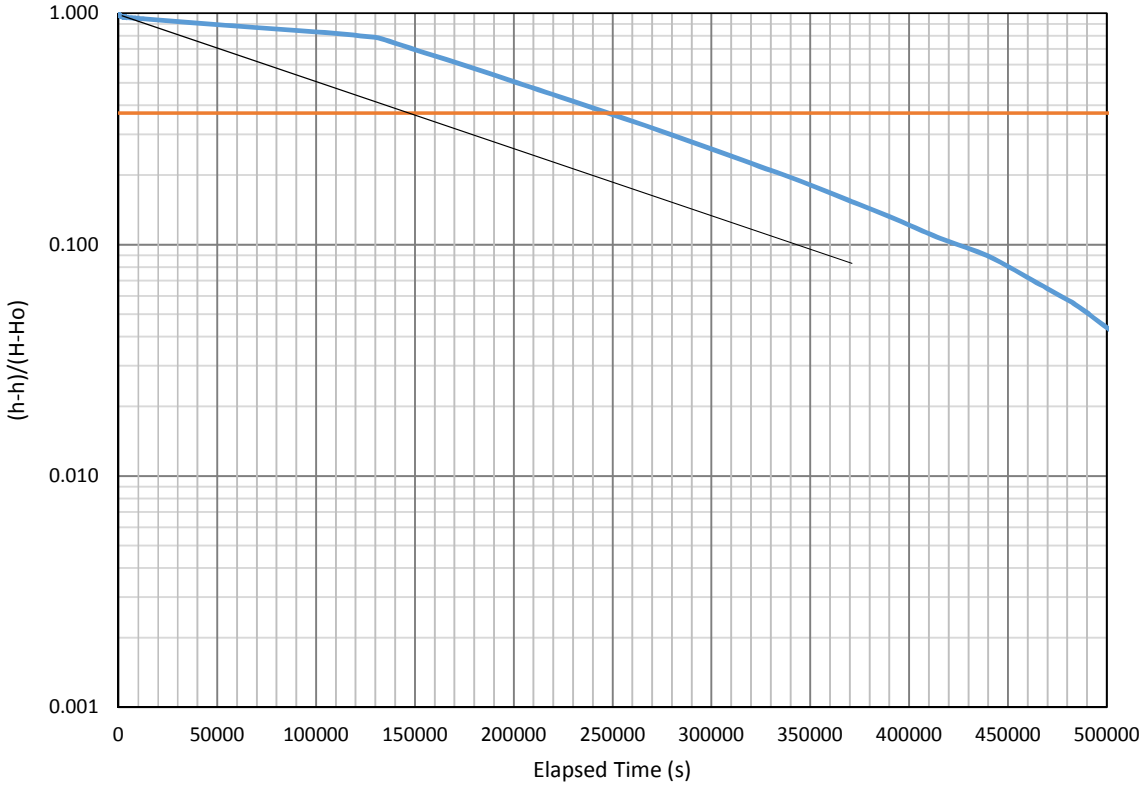


Well Depth:	6.10	**Screened Unit:**	Sand
Initial Water Level:	3.82	**Screen Length (L_e):**	3.048
Available Drawdown (H):	2.28	**Head at Time = 0 (H_o):**	0.5
Borehole Radius (R_b):	0.0762	**Monitoring Well Radius (R_c):**	0.025
Solution Method:	Hvorslev (1951)	**Recovery (%):**	100%
Early K (m/s)	1.22E-06	**Early To (s):**	320
Mid K (m/s)	NA	**Mid To (s):**	NA
Late K (m/s)	3.15E-07	**Late To (s):**	1240

In-Situ Hydraulic Conductivity Analyses: BH-1d

Appendix C

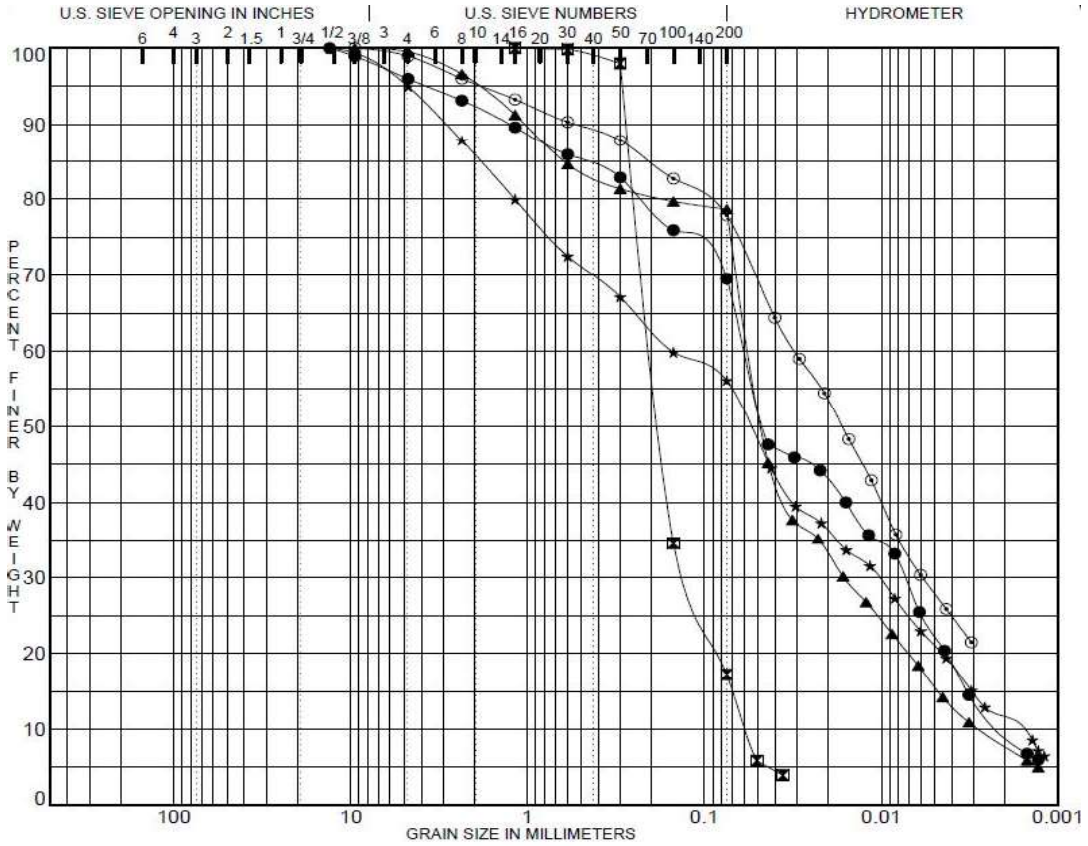
Company:	Toronto Inspection Ltd.
Client:	Choice Properties REIT
Project:	2477-18-HG
Location:	2280 Dundas Street West
Test Well:	BH-1d
Test Date:	19-Mar-18
Test conducted by:	TS, IG



Well Depth:	15.24	**Screened Unit:**	Clayey Silt
Initial Water Level:	4.40	**Screen Length (L_e):**	3.048
Available Drawdown (H):	10.84	**Head at Time = 0 (H_o):**	0.2
Borehole Radius (R_b):	0.0762	**Monitoring Well Radius (R_c):**	0.025
Solution Method:	Hvorslev (1951)	**To (s):**	150000
K (m/s)	2.60E-09	**Recovery (%):**	98%

In-Situ Hydraulic Conductivity Analyses: BH-1 **Appendix C**

Company:	Toronto Inspection Ltd.
Client:	Choice Properties REIT
Project:	2477-18-HG
Location:	2280 Dundas Street West
Test Well:	BH-1
Test Date:	9/Apr/18
Test conducted by:	Toronto Inspection Ltd.

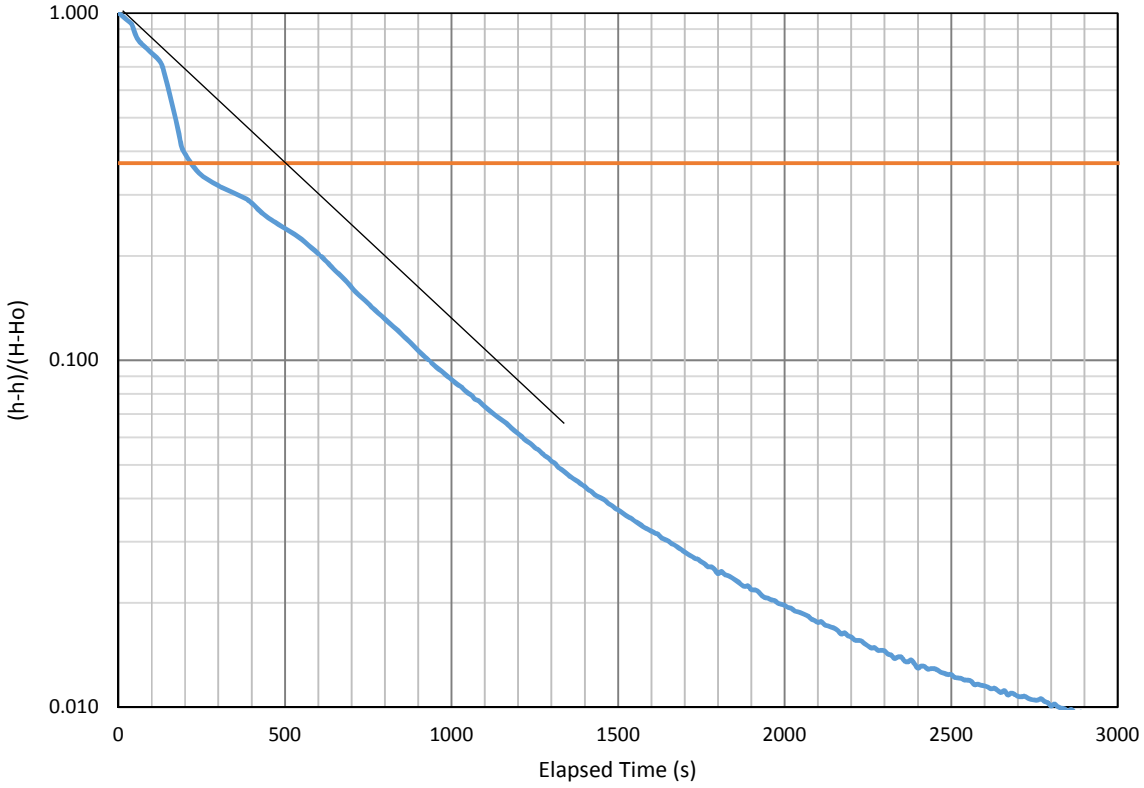


Sampled Unit:	Clayey Silt	**Sampled Depth (mbgs):**	10.7
% Gravel	4.0	**D100:**	13.200
% Sand	26.4	**D60**	0.060
% Silt	47.2	**D30:**	0.007
% Clay	22.4	**D10:**	0.0021
K (m/s)	4.59E-08	**Temperature (°C):**	7

In-Situ Hydraulic Conductivity Analyses: BH-2

Appendix C

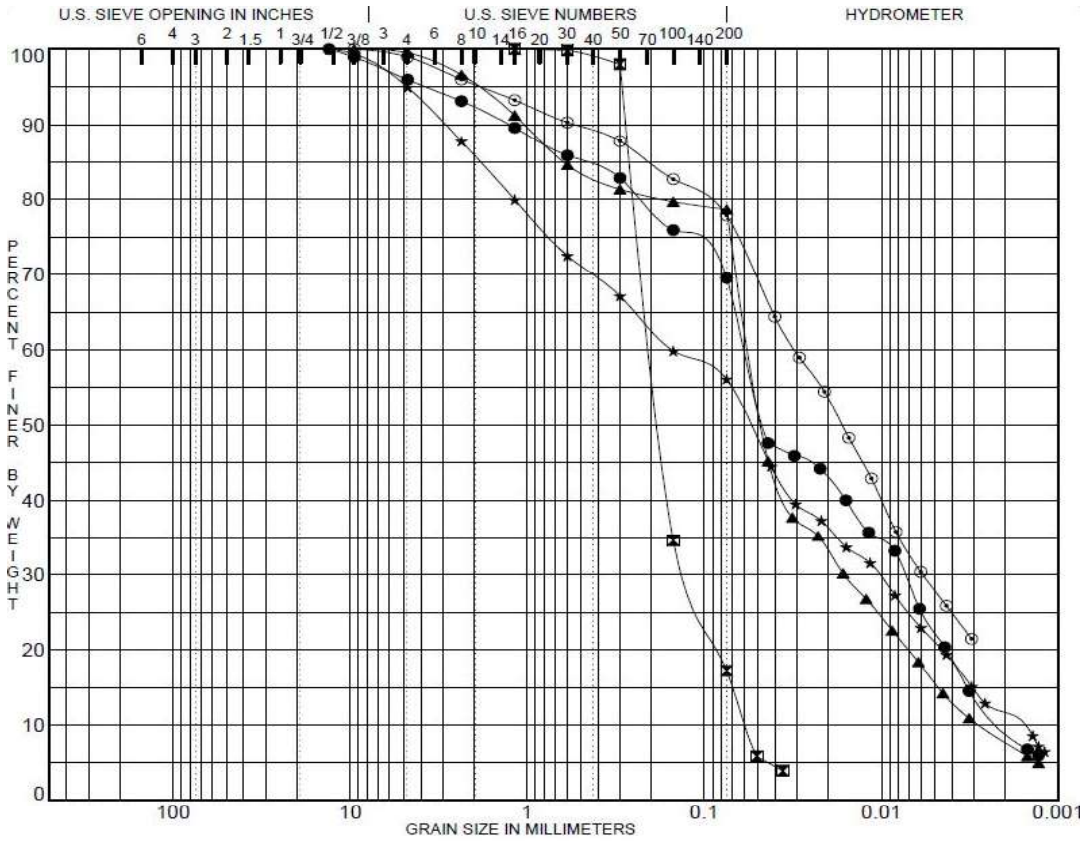
Company:	Toronto Inspection Ltd.
Client:	Choice Properties REIT
Project:	2477-18-HG
Location:	2280 Dundas Street West
Test Well:	BH-2
Test Date:	16-Mar-18
Test conducted by:	IG, TS



Well Depth:	6.10	**Screened Unit:**	Sand/Silty Sand
Initial Water Level:	3.45	**Screen Length (L_e):**	3.048
Available Drawdown (H):	2.65	**Head at Time = 0 (H_o):**	0.4
Borehole Radius (R_b):	0.0762	**Monitoring Well Radius (R_c):**	0.025
Solution Method:	Hvorslev (1951)	**To (s):**	500
K (m/s)	7.81E-07	**Recovery (%):**	100%

In-Situ Hydraulic Conductivity Analyses: BH-2 **Appendix C**

Company:	Toronto Inspection Ltd.
Client:	Choice Properties REIT
Project:	2477-18-HG
Location:	2280 Dundas Street West
Test Well:	BH-2
Test Date:	9/Apr/18
Test conducted by:	Toronto Inspection Ltd.



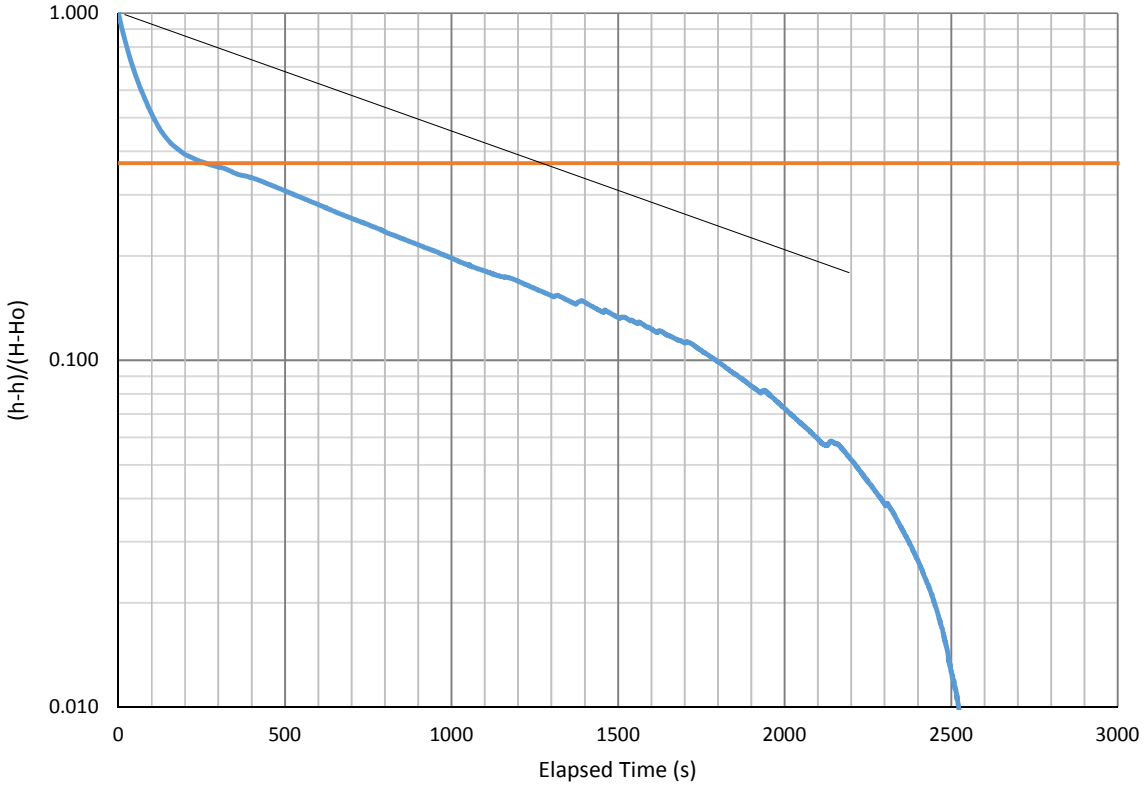
BH-2

Sampled Unit:	Sand	**Sampled Depth (mbgs):**	3
% Gravel	0.0	**D100:**	1.180
% Sand	82.8	**D60**	0.200
% Silt	17.2	**D30:**	0.125
% Clay		**D10:**	0.0585
K (m/s)	3.56E-05	**Temperature (°C):**	7

In-Situ Hydraulic Conductivity Analyses: BH-4

Appendix C

Company:	Toronto Inspection Ltd.
Client:	Choice Properties REIT
Project:	2477-18-HG
Location:	2280 Dundas Street West
Test Well:	BH-4
Test Date:	16-Mar-18
Test conducted by:	IG, TS

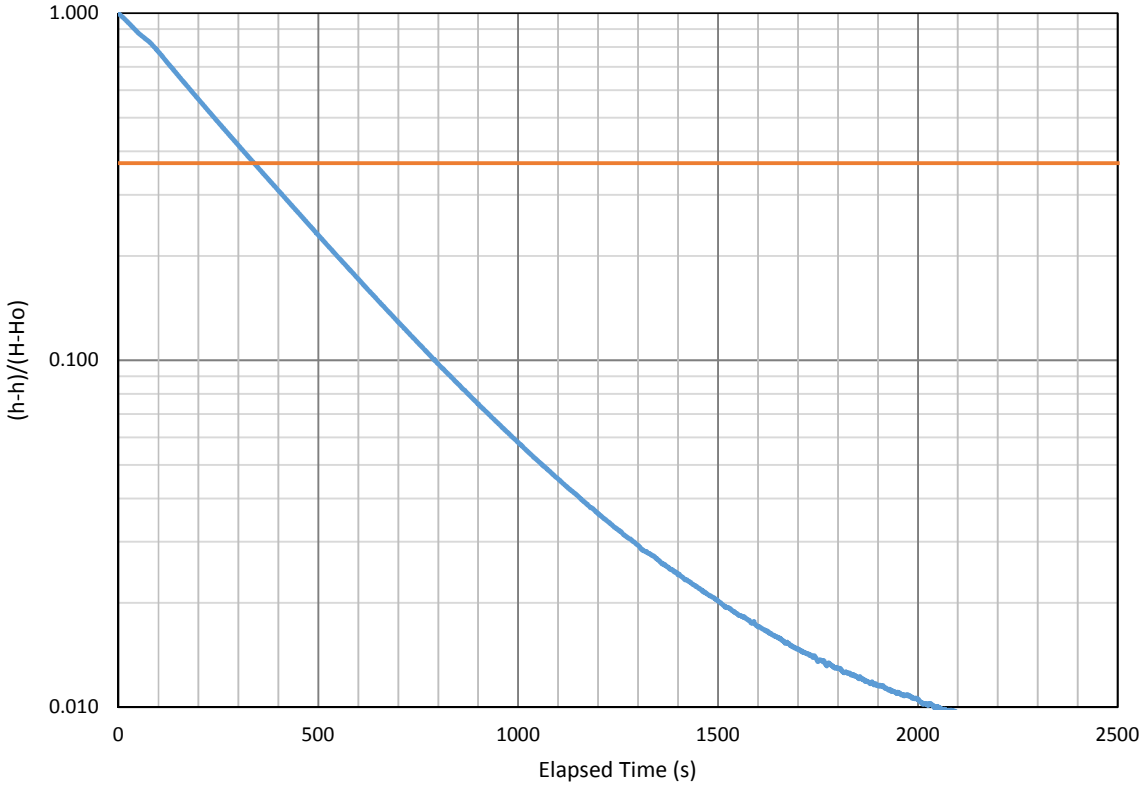


Well Depth:	6.10	**Screened Unit:**	No Sample
Initial Water Level:	3.01	**Screen Length (L_e):**	3.048
Available Drawdown (H):	3.09	**Head at Time = 0 (H_o):**	0.6
Borehole Radius (R_b):	0.0762	**Monitoring Well Radius (R_c):**	0.025
Solution Method:	Hvorslev (1951)	**To (s):**	1250
K (m/s)	3.12E-07	**Recovery (%):**	100%

In-Situ Hydraulic Conductivity Analyses: BH-5

Appendix C

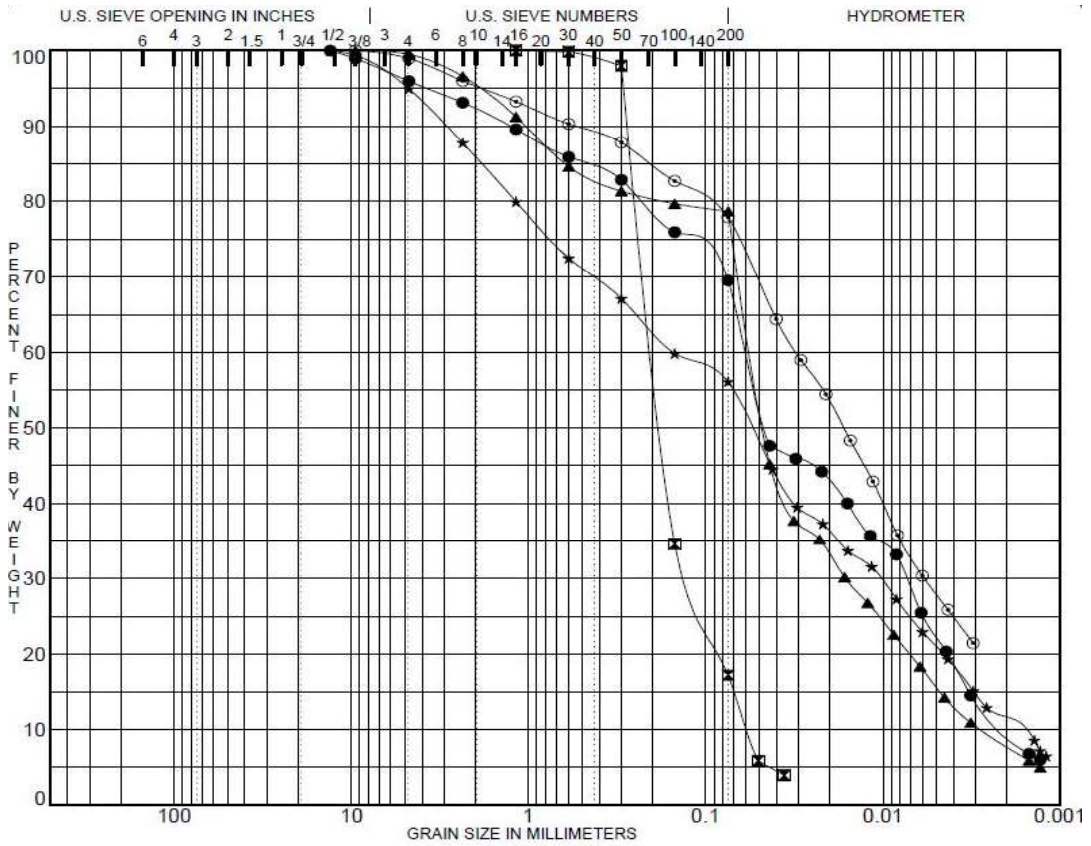
Company:	Toronto Inspection Ltd.
Client:	Choice Properties REIT
Project:	2477-18-HG
Location:	2280 Dundas Street West
Test Well:	BH-5
Test Date:	16-Mar-18
Test conducted by:	IG, TS



Well Depth:	12.19	**Screened Unit:**	Silty Sand/Clayey Silt
Initial Water Level:	4.13	**Screen Length (L_e):**	3.048
Available Drawdown (H):	8.06	**Head at Time = 0 (H_o):**	0.7
Borehole Radius (R_b):	0.0762	**Monitoring Well Radius (R_c):**	0.025
Solution Method:	Hvorslev (1951)	**To (s):**	350
K (m/s)	1.12E-06	**Recovery (%):**	100%

In-Situ Hydraulic Conductivity Analyses: BH-5 **Appendix C**

Company:	Toronto Inspection Ltd.
Client:	Choice Properties REIT
Project:	2477-18-HG
Location:	2280 Dundas Street West
Test Well:	BH-5
Test Date:	9/Apr/18
Test conducted by:	Toronto Inspection Ltd.

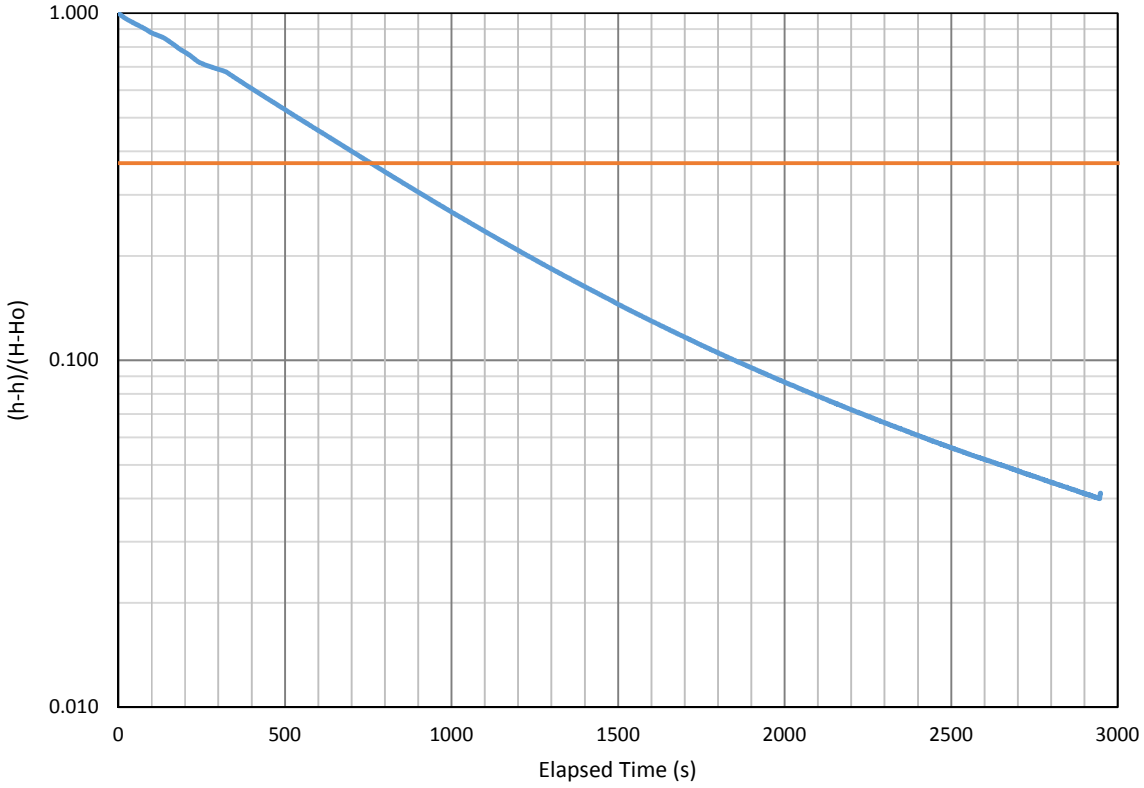


Sampled Unit:	Clayey Silt	**Sampled Depth (mbgs):**	12.2
% Gravel	0.5	**D100:**	9.500
% Sand	20.8	**D60**	0.060
% Silt	63.1	**D30:**	0.016
% Clay	15.6	**D10:**	0.0028
K (m/s)	8.16E-08	**Temperature (°C):**	7

In-Situ Hydraulic Conductivity Analyses: BH-6

Appendix C

Company:	Toronto Inspection Ltd.
Client:	Choice Properties REIT
Project:	2477-18-HG
Location:	2280 Dundas Street West
Test Well:	BH-6
Test Date:	16-Mar-18
Test conducted by:	TS, IG

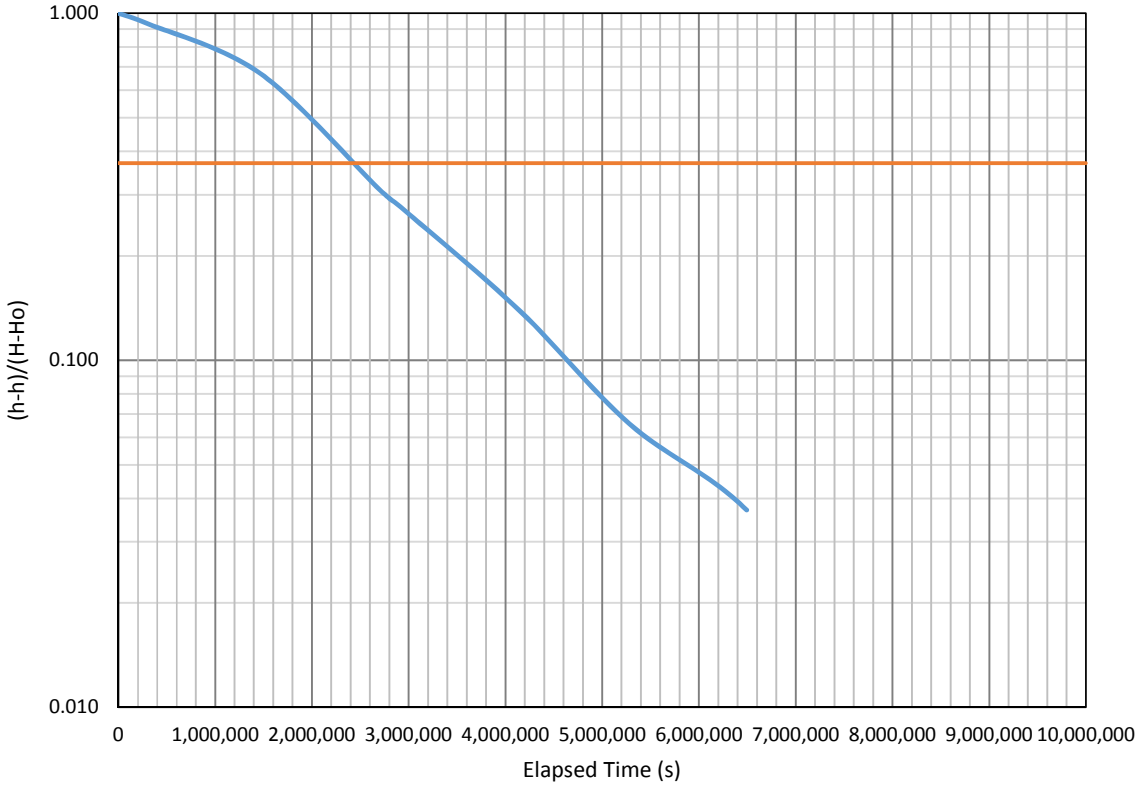


Well Depth:	12.19	**Screened Unit:**	Silty Sand/Clayey Silt
Initial Water Level:	3.62	**Screen Length (L_e):**	3.048
Available Drawdown (H):	8.57	**Head at Time = 0 (H_o):**	0.8
Borehole Radius (R_b):	0.0762	**Monitoring Well Radius (R_c):**	0.025
Solution Method:	Hvorslev (1951)	**To (s):**	750
K (m/s)	5.21E-07	**Recovery (%):**	92%

In-Situ Hydraulic Conductivity Analyses: BH-7

Appendix C

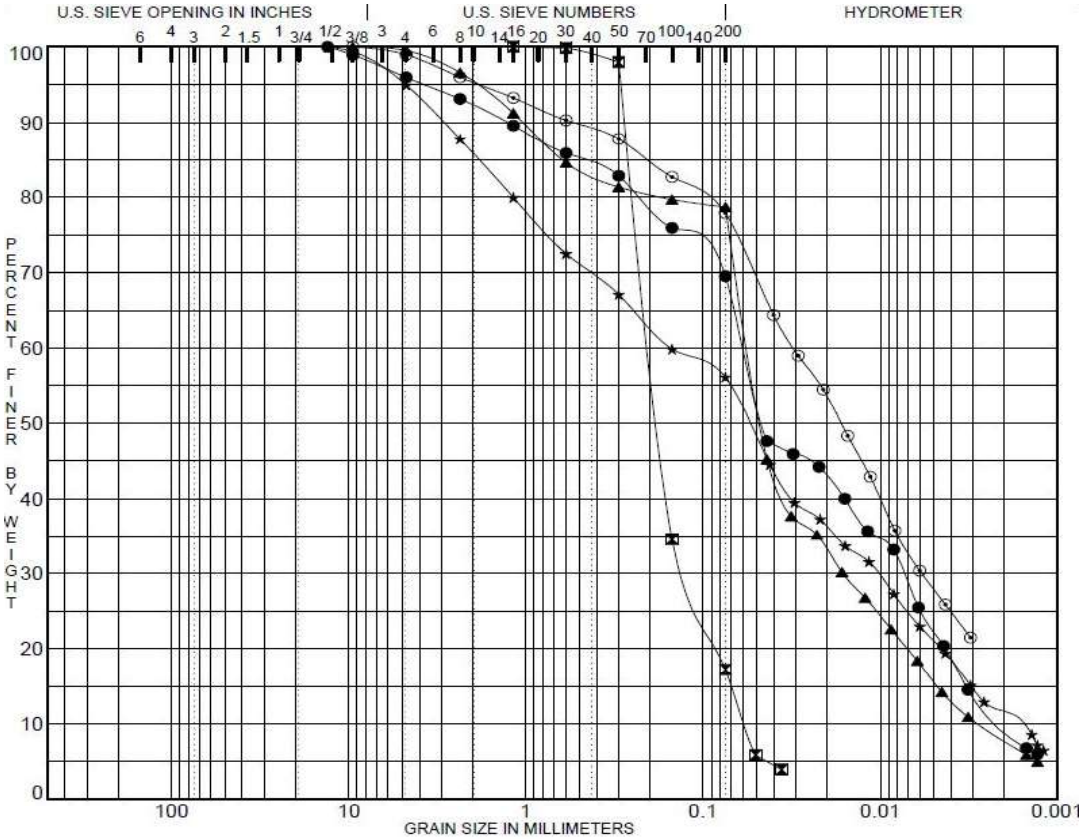
Company:	Toronto Inspection Ltd.
Client:	Choice Properties REIT
Project:	2477-18-HG
Location:	2280 Dundas Street West
Test Well:	BH-7
Test Date:	19-Mar-18
Test conducted by:	IG, TS



Well Depth:	17.53	**Screened Unit:**	Clayey Silt Till/Sandy Silt
Initial Water Level:	4.81	**Screen Length (L_e):**	3.048
Available Drawdown (H):	12.72	**Head at Time = 0 (H_o):**	0.8
Borehole Radius (R_b):	0.0762	**Monitoring Well Radius (R_c):**	0.025
Solution Method:	Hvorslev (1951)	**To (s):**	2400000
K (m/s)	1.63E-10	**Recovery (%):**	100%

In-Situ Hydraulic Conductivity Analyses: BH-7 **Appendix C**

Company:	Toronto Inspection Ltd.
Client:	Choice Properties REIT
Project:	2477-18-HG
Location:	2280 Dundas Street West
Test Well:	BH-7
Test Date:	9/Apr/18
Test conducted by:	Toronto Inspection Ltd.

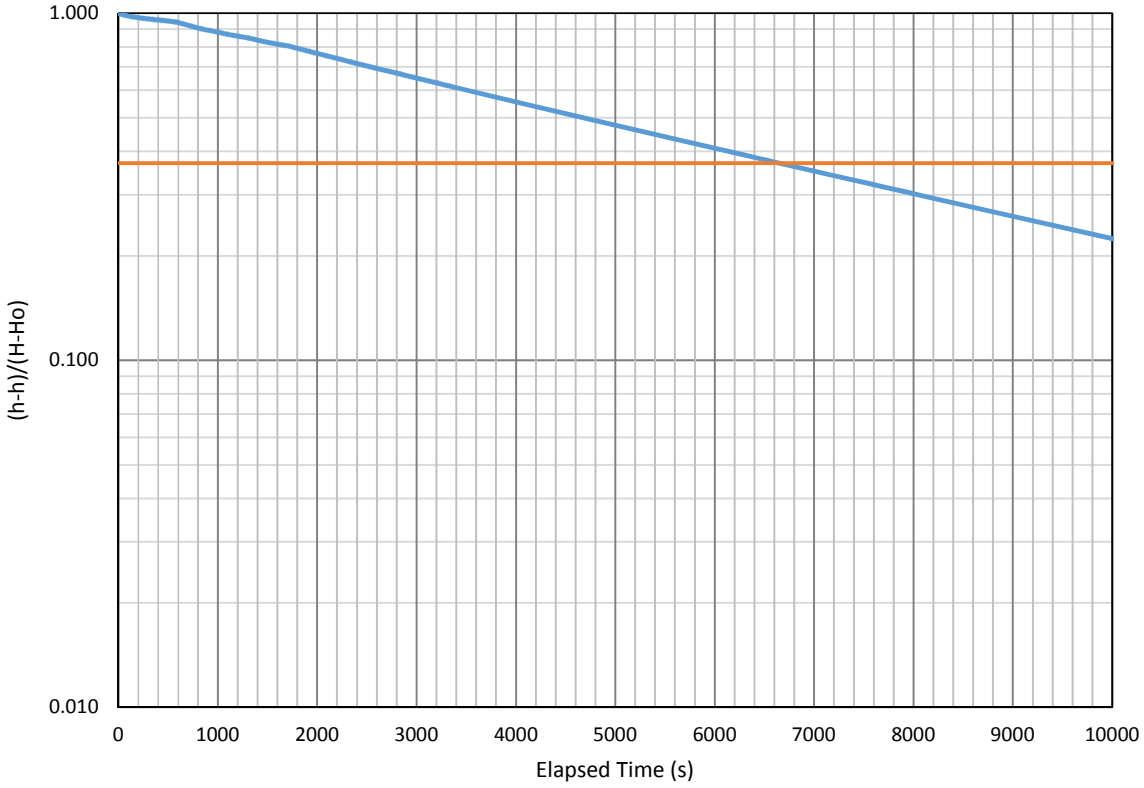


Sampled Unit:	Sandy Silt	**Sampled Depth (mbgs):**	16.8
% Gravel	5.0	**D100:**	13.200
% Sand	38.8	**D60**	0.150
% Silt	35.1	**D30:**	0.01
% Clay	21.0	**D10:**	0.0017
K (m/s)	3.01E-08	**Temperature (°C):**	7

In-Situ Hydraulic Conductivity Analyses: BH-8

Appendix C

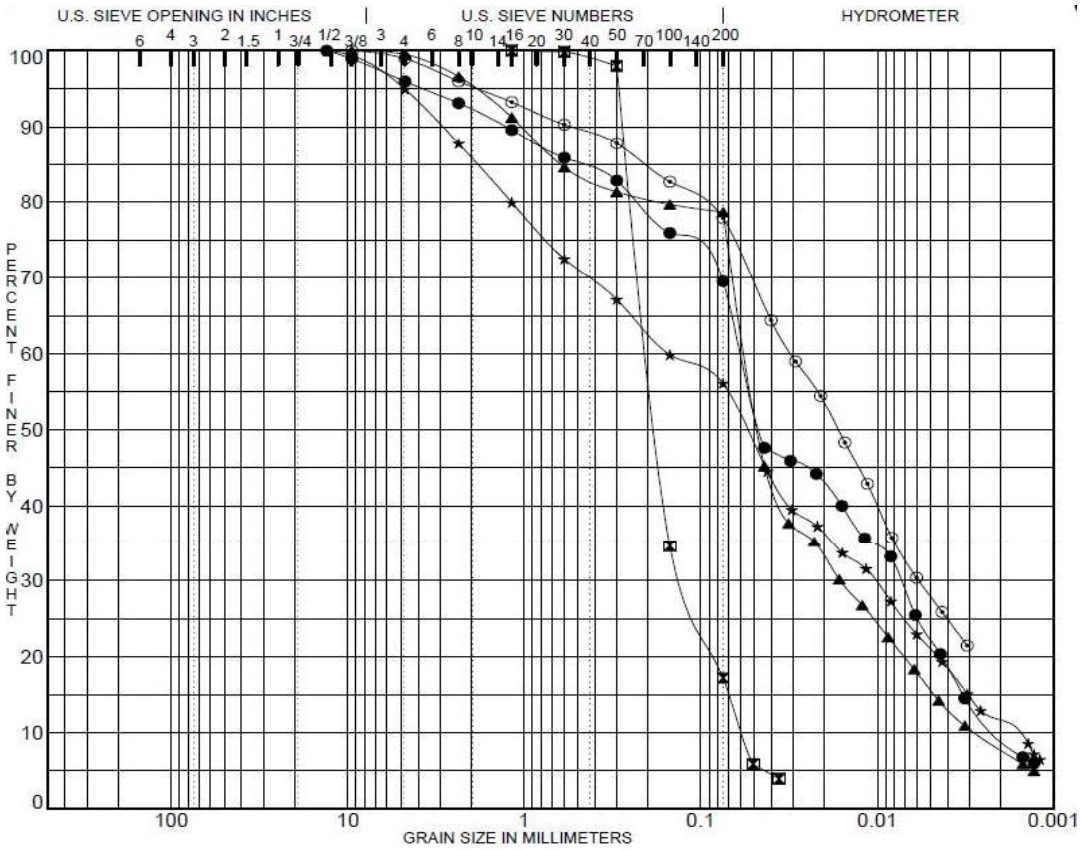
Company:	Toronto Inspection Ltd.
Client:	Choice Properties REIT
Project:	2477-18-HG
Location:	2280 Dundas Street West
Test Well:	BH-8
Test Date:	16-Mar-18
Test conducted by:	IG, TS



Well Depth:	12.19	**Screened Unit:**	Sand/Clayey Silt
Initial Water Level:	3.25	**Screen Length (L_e):**	3.048
Available Drawdown (H):	8.94	**Head at Time = 0 (H_o):**	1.0
Borehole Radius (R_b):	0.0762	**Monitoring Well Radius (R_c):**	0.025
Solution Method:	Hvorslev (1951)	**To (s):**	6600
K (m/s)	5.92E-08	**Recovery (%):**	100%

In-Situ Hydraulic Conductivity Analyses: BH-8 **Appendix C**

Company:	Toronto Inspection Ltd.
Client:	Choice Properties REIT
Project:	2477-18-HG
Location:	2280 Dundas Street West
Test Well:	BH-8
Test Date:	9/Apr/18
Test conducted by:	Toronto Inspection Ltd.



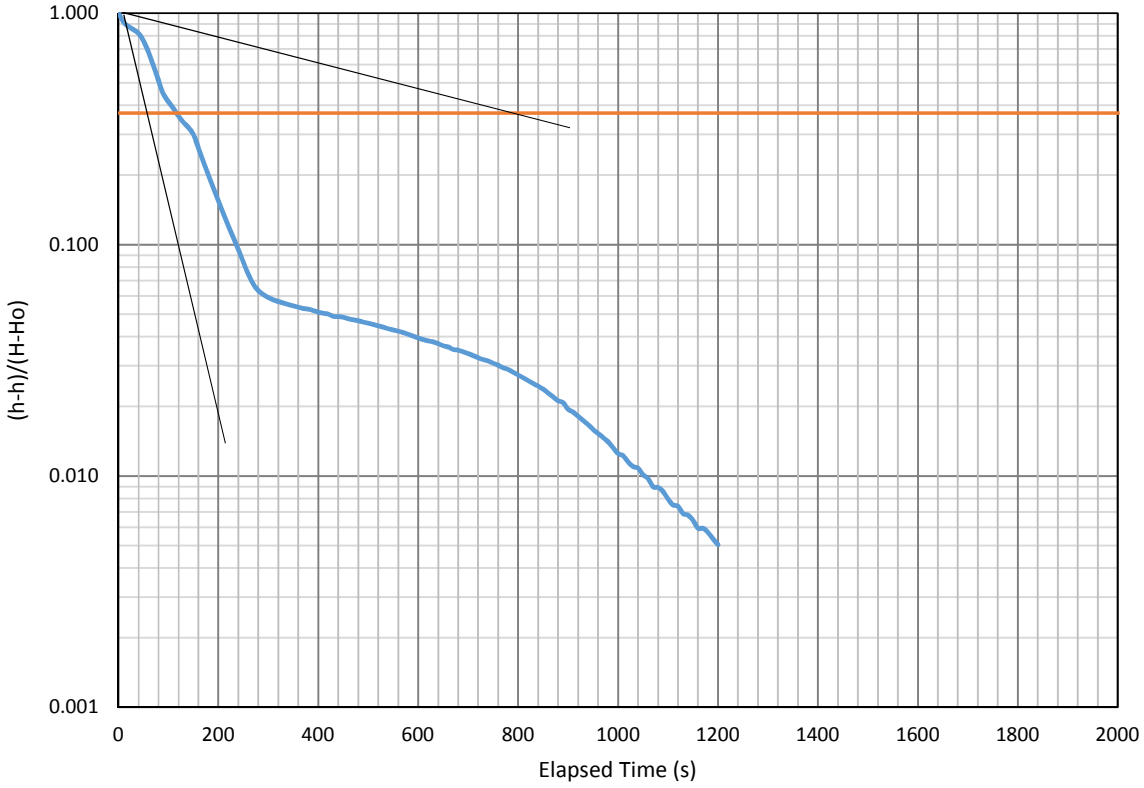
BH-8

Sampled Unit:	Clayey Silt	**Sampled Depth (mbgs):**	10.7
% Gravel	1.0	**D100:**	9.500
% Sand	21.1	**D60**	0.030
% Silt	50.0	**D30:**	0.006
% Clay	27.9	**D10:**	0.001
K (m/s)	1.04E-08	**Temperature (°C):**	7

In-Situ Hydraulic Conductivity Analyses: BH-9

Appendix C

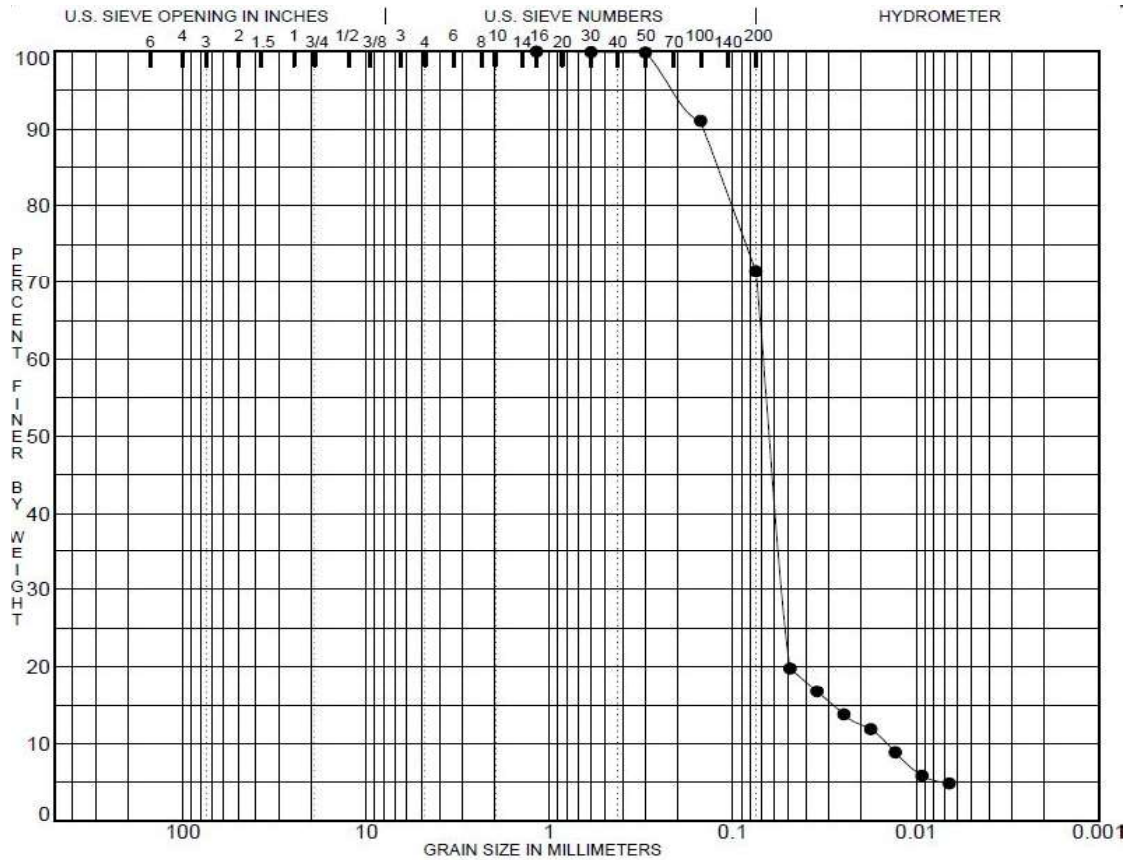
Company:	Toronto Inspection Ltd.
Client:	Choice Properties REIT
Project:	2477-18-HG
Location:	2280 Dundas Street West
Test Well:	BH-9
Test Date:	16-Mar-18
Test conducted by:	IG, TS



Well Depth:	6.10	**Screened Unit:**	Sand
Initial Water Level:	3.03	**Screen Length (L_e):**	3.048
Available Drawdown (H):	3.07	**Head at Time = 0 (H_o):**	0.2
Borehole Radius (R_b):	0.0762	**Monitoring Well Radius (R_c):**	0.025
Solution Method:	Hvorslev (1951)	**Recovery (%):**	100%
Early K (m/s)	4.88E-06	**Early To (s):**	80
Mid K (m/s)	4.88E-07	**Mid To (s):**	800
Late K (m/s)	NA	**Late To (s):**	NA

In-Situ Hydraulic Conductivity Analyses: BH-9 **Appendix C**

Company:	Toronto Inspection Ltd.
Client:	Choice Properties REIT
Project:	2477-18-HG
Location:	2280 Dundas Street West
Test Well:	BH-9
Test Date:	9/Apr/18
Test conducted by:	Toronto Inspection Ltd.

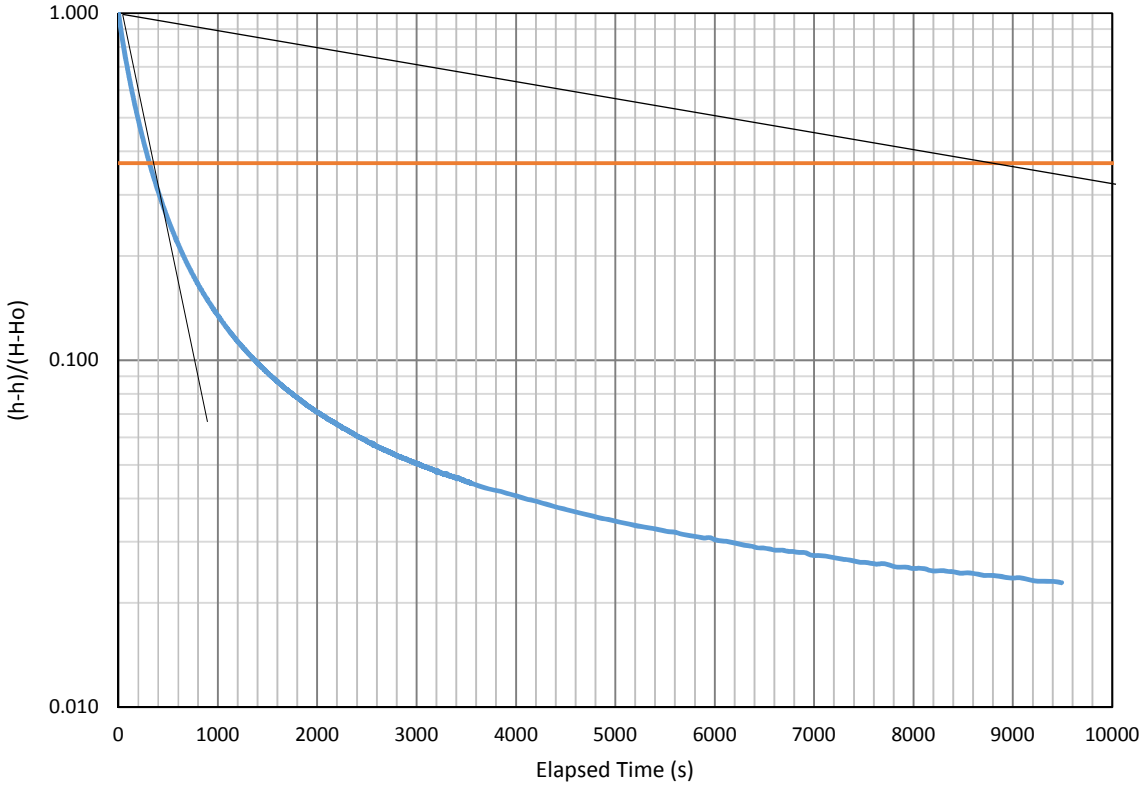


Sampled Unit:	Silty Sand	**Sampled Depth (mbgs):**	7.6
% Gravel	0.00	**D100:**	1.180
% Sand	28.4	**D60**	0.070
% Silt	71.6	**D30:**	0.053
% Clay		**D10:**	0.0146
K (m/s)	2.22E-06	**Temperature (°C):**	7

In-Situ Hydraulic Conductivity Analyses: BH-10

Appendix C

Company:	Toronto Inspection Ltd.
Client:	Choice Properties REIT
Project:	2477-18-HG
Location:	2280 Dundas Street West
Test Well:	BH-10
Test Date:	16-Mar-18
Test conducted by:	TS, IG

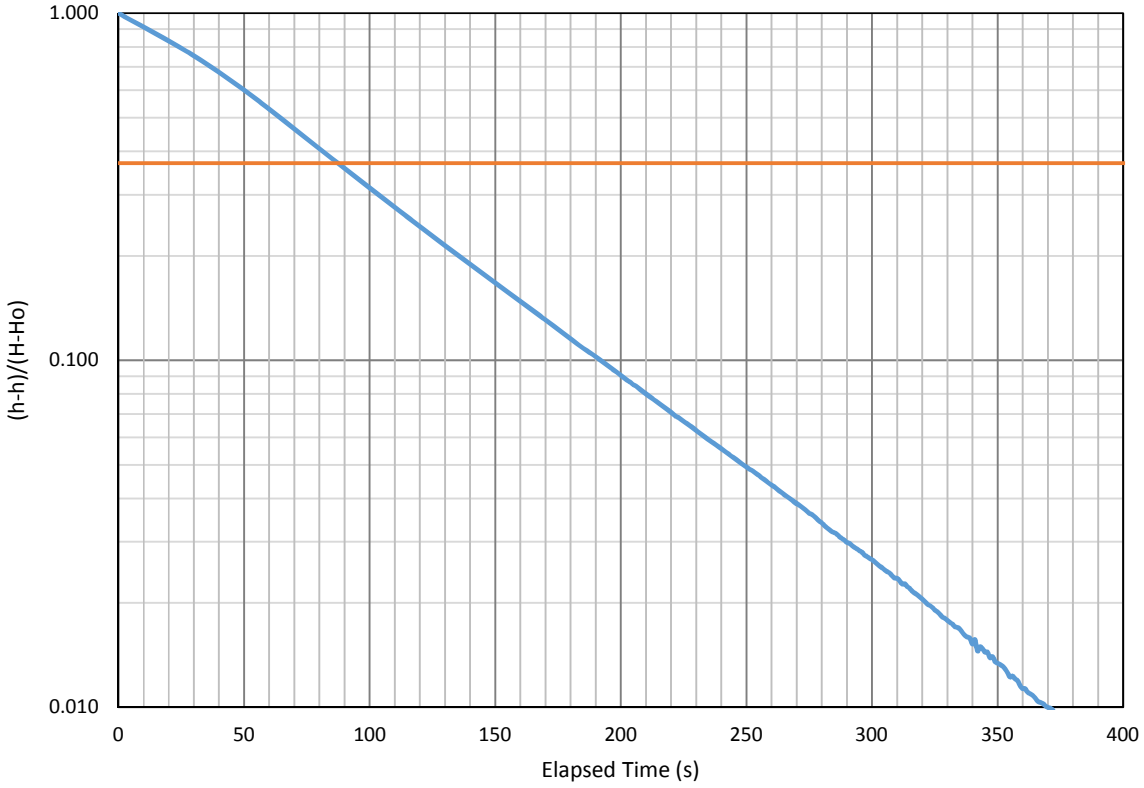


Well Depth:	12.19	**Screened Unit:**	Sand/Sandy Silt/Clayey Silt
Initial Water Level:	3.30	**Screen Length (L_e):**	3.048
Available Drawdown (H):	8.89	**Head at Time = 0 (H_o):**	4.4
Borehole Radius (R_b):	0.0762	**Monitoring Well Radius (R_c):**	0.025
Solution Method:	Hvorslev (1951)	**Recovery (%):**	100%
Early K (m/s)	1.30E-06	**Early To (s):**	300
Mid K (m/s)	NA	**Mid To (s):**	NA
Late K (m/s)	4.34E-08	**Late To (s):**	9000

In-Situ Hydraulic Conductivity Analyses: BH-11s

Appendix C

Company:	Toronto Inspection Ltd.
Client:	Choice Properties REIT
Project:	2477-18-HG
Location:	2280 Dundas Street West
Test Well:	BH-11s
Test Date:	16-Mar-18
Test conducted by:	TS, IG

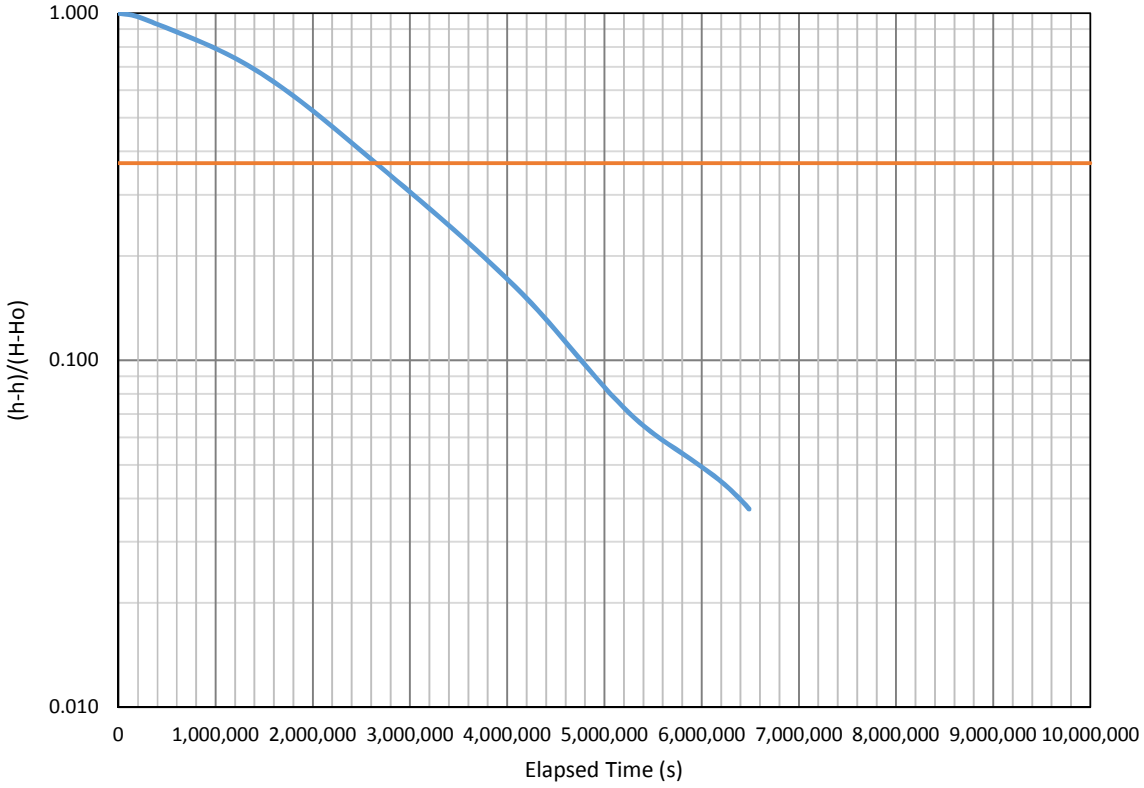


Well Depth:	6.10	**Screened Unit:**	Sand/Sandy Silt
Initial Water Level:	2.41	**Screen Length (L_e):**	3.048
Available Drawdown (H):	3.69	**Head at Time = 0 (H_o):**	1.0
Borehole Radius (R_b):	0.0762	**Monitoring Well Radius (R_c):**	0.025
Solution Method:	Hvorslev (1951)	**To (s):**	80
K (m/s)	4.88E-06	**Recovery (%):**	100%

In-Situ Hydraulic Conductivity Analyses: BH-11d

Appendix C

Company:	Toronto Inspection Ltd.
Client:	Choice Properties REIT
Project:	2477-18-HG
Location:	2280 Dundas Street West
Test Well:	BH-11d
Test Date:	16-Mar-18
Test conducted by:	TS, IG



Well Depth:	16.76	**Screened Unit:**	Clayey Silt Till/Sandy Silt
Initial Water Level:	4.03	**Screen Length (L_e):**	3.048
Available Drawdown (H):	12.73	**Head at Time = 0 (H_o):**	0.6
Borehole Radius (R_b):	0.0762	**Monitoring Well Radius (R_c):**	0.025
Solution Method:	Hvorslev (1951)	**To (s):**	2700000
K (m/s)	1.45E-10	**Recovery (%):**	100%

APPENDIX E

Certificate of Analysis

FINAL REPORT

CA14406-MAR18 R

2477

Prepared for

Toronto Inspection Ltd.

FINAL REPORT

CA14406-MAR18 R

First Page

CLIENT DETAILS		LABORATORY DETAILS	
Client	Toronto Inspection Ltd.	Project Specialist	Deanna Edwards, B.Sc, C.Chem
		Laboratory	SGS Canada Inc.
Address	110 Konrad Crescent, Unit 16 Markham, ON L3R 9X2.	Address	185 Concession St., Lakefield ON, K0L 2H0
Contact	Tabitha Lee	Telephone	705-652-2000
Telephone	416-996-3214	Facsimile	705-652-6365
Facsimile	905 940 8192	Email	deanna.edwards@sgs.com
Email	lab@torontoinspection.com; tabitha@torontoinspection.com	SGS Reference	CA14406-MAR18
Project	2477	Received	03/19/2018
Order Number		Approved	03/27/2018
Samples	Solution (1)	Report Number	CA14406-MAR18 R
		Date Reported	03/27/2018

COMMENTS

RL - SGS Reporting Limit

Nonylphenol Ethoxylates is the sum of nonylphenol monoethoxylate and nonylphenol diethoxylate.

Total PAH is the sum of anthracene, benzo(a)pyrene, benzo(a)anthracene, benzo(e)pyrene, benzo(b,j)fluoranthene, benzo(k)fluoranthene, benzo(g,h,i)perylene, chrysene, dibenzo(a,h)anthracene, dibenzo(a,i)pyrene, dibenzo(a,j)acridine, 7H-dibenzo(c,g)carbazole, fluoranthene, indeno(1,2,3-c,d)pyrene, perylene, phenanthrene and pyrene..

Temperature of Sample upon Receipt 10 degrees C
Cooling Agent Present
Custody Seal Present and Intact

Chain of Custody Number: 00953

SIGNATORIES

Deanna Edwards, B.Sc, C.Chem

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FINAL REPORT

CA14406-MAR18 R

Client: Toronto Inspection Ltd.
Project: 2477
Project Manager: Tabitha Lee
Samplers: Tim

PACKAGE: **SANSEW - General Chemistry** (WATER)

L1 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 1 - Sanitary and Combined Sewer Discharge - BL_100_2016

L2 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 2 - Storm Sewer Discharge - BL_100_2016

Sample Number	8
Sample Name	18 BH-5
Sample Matrix	Solution
Sample Date	19/03/2018

General Chemistry

Parameter	Units	RL	L1	L2	Result
Biochemical Oxygen Demand (BOD5)	mg/L	2	300	15	6
Total Suspended Solids	mg/L	2	350	15	8
Total Kjeldahl Nitrogen	as N mg/L	0.5	100		2.1

PACKAGE: **SANSEW - Metals and Inorganics** (WATER)

L1 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 1 - Sanitary and Combined Sewer Discharge - BL_100_2016

L2 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 2 - Storm Sewer Discharge - BL_100_2016

Sample Number	8
Sample Name	18 BH-5
Sample Matrix	Solution
Sample Date	19/03/2018

Metals and Inorganics

Parameter	Units	RL	L1	L2	Result
Cyanide (total)	mg/L	0.01	2	0.02	< 0.01
Fluoride	mg/L	0.06	10		0.12
Aluminum (total)	mg/L	0.001	50		0.076
Antimony (total)	mg/L	0.0002	5		< 0.0002
Arsenic (total)	mg/L	0.0002	1	0.02	0.0061
Cadmium (total)	mg/L	0.000003	0.7	0.008	0.000056
Chromium (total)	mg/L	0.00003	4	0.08	0.00068
Cobalt (total)	mg/L	0.000004	5		0.00269

FINAL REPORT

CA14406-MAR18 R

Client: Toronto Inspection Ltd.
Project: 2477
Project Manager: Tabitha Lee
Samplers: Tim

PACKAGE: **SANSEW - Metals and Inorganics** (WATER)

L1 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 1 - Sanitary and Combined Sewer Discharge - BL_100_2016

L2 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 2 - Storm Sewer Discharge - BL_100_2016

Sample Number	8
Sample Name	18 BH-5
Sample Matrix	Solution
Sample Date	19/03/2018

Parameter	Units	RL	L1	L2	Result
Metals and Inorganics (continued)					
Copper (total)	mg/L	0.00002	2	0.04	0.00305
Lead (total)	mg/L	0.00001	1	0.12	0.00235
Manganese (total)	mg/L	0.00001	5	0.05	0.198
Molybdenum (total)	mg/L	0.00001	5		0.00347
Nickel (total)	mg/L	0.0001	2	0.08	0.212
Phosphorus (total)	mg/L	0.003	10	0.4	0.018
Selenium (total)	mg/L	0.00004	1	0.02	0.00010
Silver (total)	mg/L	0.00005	5	0.12	< 0.00005
Tin (total)	mg/L	0.00001	5		0.00042
Titanium (total)	mg/L	0.00005	5		0.00352
Zinc (total)	mg/L	0.002	2	0.04	0.008

Client: Toronto Inspection Ltd.
Project: 2477
Project Manager: Tabitha Lee
Samplers: Tim

PACKAGE: **SANSEW - Microbiology** (WATER)

L1 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 1 - Sanitary and Combined Sewer Discharge - BL_100_2016

L2 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 2 - Storm Sewer Discharge - BL_100_2016

Sample Number	8
Sample Name	18 BH-5
Sample Matrix	Solution
Sample Date	19/03/2018

Parameter	Units	RL	L1	L2	Result
Microbiology					
E. Coli	cfu/100mL	-		200	< 2 ↑

PACKAGE: **SANSEW - Nonylphenol and Ethoxylates** (WATER)

L1 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 1 - Sanitary and Combined Sewer Discharge - BL_100_2016

L2 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 2 - Storm Sewer Discharge - BL_100_2016

Sample Number	8
Sample Name	18 BH-5
Sample Matrix	Solution
Sample Date	19/03/2018

Parameter	Units	RL	L1	L2	Result
Nonylphenol and Ethoxylates					
Nonylphenol	mg/L	0.001	0.02	0.001	< 0.001
Nonylphenol Ethoxylates	mg/L	0.01	0.2	0.01	< 0.01
Nonylphenol diethoxylate	mg/L	0.01			< 0.01
Nonylphenol monoethoxylate	mg/L	0.01			< 0.01

PACKAGE: **SANSEW - Oil and Grease** (WATER)

L1 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 1 - Sanitary and Combined Sewer Discharge - BL_100_2016

L2 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 2 - Storm Sewer Discharge - BL_100_2016

Sample Number	8
Sample Name	18 BH-5
Sample Matrix	Solution
Sample Date	19/03/2018

Parameter	Units	RL	L1	L2	Result

Client: Toronto Inspection Ltd.
Project: 2477
Project Manager: Tabitha Lee
Samplers: Tim

PACKAGE: **SANSEW - Oil and Grease** (WATER)

Sample Number	8
Sample Name	18 BH-5
Sample Matrix	Solution
Sample Date	19/03/2018

L1 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 1 - Sanitary and Combined Sewer Discharge - BL_100_2016

L2 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 2 - Storm Sewer Discharge - BL_100_2016

Parameter	Units	RL	L1	L2	Result
Oil and Grease					
Oil & Grease (total)	mg/L	2			< 2
Oil & Grease (animal/vegetable)	mg/L	4	150		< 4
Oil & Grease (mineral/synthetic)	mg/L	4	15		< 4

PACKAGE: **SANSEW - Other (ORP)** (WATER)

Sample Number	8
Sample Name	18 BH-5
Sample Matrix	Solution
Sample Date	19/03/2018

L1 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 1 - Sanitary and Combined Sewer Discharge - BL_100_2016

L2 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 2 - Storm Sewer Discharge - BL_100_2016

Parameter	Units	RL	L1	L2	Result
Other (ORP)					
pH	no unit	0.05	11.5	9.5	7.54
Chromium VI	mg/L	0.0002	2	0.04	< 0.0002
Mercury (total)	mg/L	0.00001	0.01	0.0004	< 0.00001

PACKAGE: **SANSEW - PCBs** (WATER)

Sample Number	8
Sample Name	18 BH-5
Sample Matrix	Solution
Sample Date	19/03/2018

L1 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 1 - Sanitary and Combined Sewer Discharge - BL_100_2016

L2 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 2 - Storm Sewer Discharge - BL_100_2016

Parameter	Units	RL	L1	L2	Result

Client: Toronto Inspection Ltd.
Project: 2477
Project Manager: Tabitha Lee
Samplers: Tim

PACKAGE: **SANSEW - PCBs** (WATER)

Sample Number	8
Sample Name	18 BH-5
Sample Matrix	Solution
Sample Date	19/03/2018

L1 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 1 - Sanitary and Combined Sewer Discharge - BL_100_2016

L2 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 2 - Storm Sewer Discharge - BL_100_2016

Parameter	Units	RL	L1	L2	Result
PCBs					
Polychlorinated Biphenyls (PCBs) - Total	mg/L	0.0001	0.001	0.0004	< 0.0001

PACKAGE: **SANSEW - Phenols** (WATER)

Sample Number	8
Sample Name	18 BH-5
Sample Matrix	Solution
Sample Date	19/03/2018

L1 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 1 - Sanitary and Combined Sewer Discharge - BL_100_2016

L2 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 2 - Storm Sewer Discharge - BL_100_2016

Parameter	Units	RL	L1	L2	Result
Phenols					
4AAP-Phenolics	mg/L	0.002	1	0.008	0.008

PACKAGE: **SANSEW - SVOCs** (WATER)

Sample Number	8
Sample Name	18 BH-5
Sample Matrix	Solution
Sample Date	19/03/2018

L1 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 1 - Sanitary and Combined Sewer Discharge - BL_100_2016

L2 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 2 - Storm Sewer Discharge - BL_100_2016

Parameter	Units	RL	L1	L2	Result
SVOCs					
PAHs (Total)	mg/L	-	0.005	0.002	< 0.001
Perylene	mg/L	0.0005			< 0.0005
di-n-Butyl Phthalate	mg/L	0.002	0.08	0.015	< 0.002

Client: Toronto Inspection Ltd.
Project: 2477
Project Manager: Tabitha Lee
Samplers: Tim

PACKAGE: **SANSEW - SVOCs** (WATER)

L1 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 1 - Sanitary and Combined Sewer Discharge - BL_100_2016

L2 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 2 - Storm Sewer Discharge - BL_100_2016

Sample Number	8
Sample Name	18 BH-5
Sample Matrix	Solution
Sample Date	19/03/2018

Parameter	Units	RL	L1	L2	Result
SVOCs (continued)					
Bis(2-ethylhexyl)phthalate	mg/L	0.002	0.012	0.0088	< 0.002
3,3-Dichlorobenzidine	mg/L	0.0005	0.002	0.0008	< 0.0005
Pentachlorophenol	mg/L	0.0005	0.005	0.002	< 0.0005

PACKAGE: **SANSEW - SVOCs - PAHs** (WATER)

L1 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 1 - Sanitary and Combined Sewer Discharge - BL_100_2016

L2 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 2 - Storm Sewer Discharge - BL_100_2016

Sample Number	8
Sample Name	18 BH-5
Sample Matrix	Solution
Sample Date	19/03/2018

Parameter	Units	RL	L1	L2	Result
SVOCs - PAHs					
7Hdibenzo(c,g)carbazole	mg/L	0.0001			< 0.0001
Anthracene	mg/L	0.0001			< 0.0001
Benzo(a)anthracene	mg/L	0.0001			< 0.0001
Benzo(a)pyrene	mg/L	0.0001			< 0.0001
Benzo(b,j)fluoranthene	mg/L	0.0001			< 0.0001
Benzo[e]pyrene	mg/L	0.0001			< 0.0001
Benzo(ghi)perylene	mg/L	0.0002			< 0.0002
Benzo(k)fluoranthene	mg/L	0.0001			< 0.0001
Chrysene	mg/L	0.0001			< 0.0001
Dibenzo(a,h)anthracene	mg/L	0.0001			< 0.0001
Dibenzo(a,i)pyrene	mg/L	0.0001			< 0.0001

Client: Toronto Inspection Ltd.
Project: 2477
Project Manager: Tabitha Lee
Samplers: Tim

PACKAGE: **SANSEW - SVOCs - PAHs** (WATER)

Sample Number 8
Sample Name 18 BH-5
Sample Matrix Solution
Sample Date 19/03/2018

L1 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 1 - Sanitary and Combined Sewer Discharge - BL_100_2016

L2 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 2 - Storm Sewer Discharge - BL_100_2016

Parameter	Units	RL	L1	L2	Result
SVOCs - PAHs (continued)					
Dibenzo(a,j)acridine	mg/L	0.0001			< 0.0001
Fluroanthene	mg/L	0.0001			< 0.0001
Indeno(1,2,3-cd)pyrene	mg/L	0.0002			< 0.0002
Phenanthrene	mg/L	0.0001			< 0.0001
Pyrene	mg/L	0.0001			< 0.0001

PACKAGE: **SANSEW - VOCs** (WATER)

Sample Number 8
Sample Name 18 BH-5
Sample Matrix Solution
Sample Date 19/03/2018

L1 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 1 - Sanitary and Combined Sewer Discharge - BL_100_2016

L2 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 2 - Storm Sewer Discharge - BL_100_2016

Parameter	Units	RL	L1	L2	Result
VOCs					
Chloroform	mg/L	0.0005	0.04	0.002	< 0.0005
1,2-Dichlorobenzene	mg/L	0.0005	0.05	0.0056	< 0.0005
1,4-Dichlorobenzene	mg/L	0.0005	0.08	0.0068	< 0.0005
cis-1,2-Dichloroethene	mg/L	0.0005	4	0.0056	< 0.0005
trans-1,3-Dichloropropene	mg/L	0.0005			< 0.0005
Methylene Chloride	mg/L	0.0005	2	0.0052	< 0.0005
1,1,2,2-Tetrachloroethane	mg/L	0.0005	1.4	0.017	< 0.0005
Tetrachloroethylene (perchloroethylene)	mg/L	0.0005	1	0.0044	< 0.0005
Trichloroethylene	mg/L	0.0005	0.4	0.0076	< 0.0005

FINAL REPORT

CA14406-MAR18 R

Client: Toronto Inspection Ltd.
Project: 2477
Project Manager: Tabitha Lee
Samplers: Tim

PACKAGE: **SANSEW - VOCs - BTEX** (WATER)

L1 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 1 - Sanitary and Combined Sewer Discharge - BL_100_2016

L2 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 2 - Storm Sewer Discharge - BL_100_2016

Sample Number	8
Sample Name	18 BH-5
Sample Matrix	Solution
Sample Date	19/03/2018

Parameter	Units	RL	L1	L2	Result
VOCs - BTEX					
Benzene	mg/L	0.0005	0.01	0.002	< 0.0005
Ethylbenzene	mg/L	0.0005	0.16	0.002	< 0.0005
Toluene	mg/L	0.0005	0.016	0.002	< 0.0005
Xylene (total)	mg/L	0.0005	1.4	0.0044	< 0.0005
m-p-xylene	mg/L	0.0005			< 0.0005
o-xylene	mg/L	0.0005			< 0.0005

EXCEEDANCE SUMMARY

Parameter	Method	Units	Result	SANSEW / WATER / - - Toronto Sewer Use By Law Table 1 - Sanitary and Combined Sewer Discharge - BL_100_2016 L1	SANSEW / WATER / - - Toronto Sewer Use By Law Table 2 - Storm Sewer Discharge - BL_100_2016 L2
18 BH-5					
Manganese	SM 3030/EPA 200.8	mg/L	0.198		0.05
Nickel	SM 3030/EPA 200.8	mg/L	0.212		0.08

QC SUMMARY

Biochemical Oxygen Demand

Method: SM 5210 I Internal ref.: ME-CA-IENVIEWL-LAK-AN-007

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Biochemical Oxygen Demand (BOD5)	BOD0033-MAR18	mg/L	2	< 2	7	30	97	70	130	58	70	130

Cyanide by SFA

Method: SM 4500 I Internal ref.: ME-CA-IENVISFA-LAK-AN-005

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Cyanide (total)	SKA0143-MAR18	mg/L	0.01	<0.01	ND	10	92	90	110	104	75	125

Fluoride by Specific Ion Electrode

Method: SM 4500 I Internal ref.: ME-CA-IENVIEWL-LAK-AN-014

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Fluoride	EWL0289-MAR18	mg/L	0.06	<0.06	ND	10	100	90	110	102	75	125

QC SUMMARY

Hexavalent Chromium by IC

Method: EPA218.6/EPA3060A | Internal ref.: ME-CA-IENVIIC-LAK-AN-008

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Chromium VI	DIO0253-MAR18	mg/L	0.0002	<0.0002	1		92			99		

Mercury by CVAAS

Method: EPA 7471A/SM 3112B | Internal ref.: ME-CA-IENVISPE-LAK-AN-004

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Mercury (total)	EHG0023-MAR18	mg/L	0.00001	< 0.00001	ND	20	103	80	120	100	70	130

QC SUMMARY

Metals in aqueous samples - ICP-MS

Method: SM 3030/EPA 200.8 | Internal ref.: ME-CA-[ENV]SPE-LAK-AN-006

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Silver (total)	EMS0108-MAR18	mg/L	0.00005	<0.00005	ND	20	100	90	110	100	70	130
Aluminum (total)	EMS0108-MAR18	mg/L	0.001	<0.001	ND	20	100	90	110	86	70	130
Arsenic (total)	EMS0108-MAR18	mg/L	0.0002	<0.0002	ND	20	104	90	110	104	70	130
Cadmium (total)	EMS0108-MAR18	mg/L	0.000003	<0.000003	ND	20	97	90	110	120	70	130
Cobalt (total)	EMS0108-MAR18	mg/L	0.000004	<0.000004	9	20	101	90	110	103	70	130
Chromium (total)	EMS0108-MAR18	mg/L	0.00003	<0.00003	17	20	102	90	110	92	70	130
Copper (total)	EMS0108-MAR18	mg/L	0.00002	<0.00002	6	20	102	90	110	96	70	130
Manganese (total)	EMS0108-MAR18	mg/L	0.00001	<0.00001	9	20	98	90	110	95	70	130
Molybdenum (total)	EMS0108-MAR18	mg/L	0.00001	<0.00001	ND	20	101	90	110	100	70	130
Nickel (total)	EMS0108-MAR18	mg/L	0.0001	<0.0001	5	20	101	90	110	107	70	130
Lead (total)	EMS0108-MAR18	mg/L	0.00001	<0.00001	ND	20	100	90	110	99	70	130
Antimony (total)	EMS0108-MAR18	mg/L	0.0002	<0.0002	ND	20	92	90	110	93	70	130
Selenium (total)	EMS0108-MAR18	mg/L	0.00004	<0.00004	ND	20	101	90	110	97	70	130
Tin (total)	EMS0108-MAR18	mg/L	0.00001	<0.00001	15	20	101	90	110	NV	70	130
Titanium (total)	EMS0108-MAR18	mg/L	0.00005	<0.00005	ND	20	99	90	110	NV	70	130
Zinc (total)	EMS0108-MAR18	mg/L	0.002	<0.002	ND	20	102	90	110	73	70	130

QC SUMMARY

Metals in aqueous samples - ICP-OES

Method: SM 3030/EPA 200.8 | Internal ref.: ME-CA-[ENV]SPE-LAK-AN-003

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Phosphorus (total)	EMS0108-MAR18	mg/L	0.003	<0.003	3	20	98	90	110	NV	70	130

Microbiology

Method: SM 9222D | Internal ref.: ME-CA-[ENV]MIC-LAK-AN-006

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
E. Coli	BAC9256-MAR18	cfu/100mL	-	ACCEPTED	ACCEPTED							

QC SUMMARY

Nonylphenol and Ethoxylates

Method: ASTM D7065-06 | Internal ref.: ME-CA-IENVIGC-LAK-AN-015

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Nonylphenol diethoxylate	GCM0236-MAR18	mg/L	0.01	< 0.01			103	55	120			
Nonylphenol Ethoxylates	GCM0236-MAR18	mg/L	0.01	< 0.01								
Nonylphenol monoethoxylate	GCM0236-MAR18	mg/L	0.01	< 0.01			100	55	120			
Nonylphenol	GCM0236-MAR18	mg/L	0.001	< 0.001			77	55	120			

Oil & Grease

Method: MOE E3401 | Internal ref.: ME-CA-IENVIGC-LAK-AN-019

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Oil & Grease (total)	GCM0259-MAR18	mg/L	2	<2			97	75	125			

QC SUMMARY

Oil & Grease-AV/MS

Method: MOE E3401/SM 5520F | Internal ref.: ME-CA-IENVIGC-LAK-AN-019

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Oil & Grease (animal/vegetable)	GCM0259-MAR18	mg/L	4	< 4			NA	70	130			
Oil & Grease (mineral/synthetic)	GCM0259-MAR18	mg/L	4	< 4			NA	70	130			

pH

Method: SM 4500 | Internal ref.: ME-CA-IENVIEWL-LAK-AN-006

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
pH	EWL0268-MAR18	no unit	0.05	NA	0		101			NA		

Phenols by SFA

Method: SM 5530B-D | Internal ref.: ME-CA-IENVISFA-LAK-AN-006

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
4AAP-Phenolics	SKA0158-MAR18	mg/L	0.002	<0.002	ND	10	102	90	110	Error!	75	125

QC SUMMARY

Polychlorinated Biphenyls

Method: MOE E3400/EPA 8082A | Internal ref.: ME-CA-IENVIGC-LAK-AN-001

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Polychlorinated Biphenyls (PCBs) - Total	GCM0252-MAR18	mg/L	0.0001	<0.0001	NSS	30	121	60	140	121	60	140

QC SUMMARY

Semi-Volatile Organics

Method: EPA 3510C/8270D | Internal ref.: ME-CA-[ENV]GC-LAK-AN-005

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
3,3-Dichlorobenzidine	GCM0255-MAR18	mg/L	0.0005	< 0.0005	NSS	30	69	30	130	NSS	30	130
7Hdibenzo(c,g)carbazole	GCM0274-MAR18	mg/L	0.0001	< 0.0001	NSS	30	98	50	140	NSS	50	140
Anthracene	GCM0274-MAR18	mg/L	0.0001	< 0.0001	NSS	30	93	50	140	NSS	50	140
Benzo(a)anthracene	GCM0274-MAR18	mg/L	0.0001	< 0.0001	NSS	30	95	50	140	NSS	50	140
Benzo(a)pyrene	GCM0274-MAR18	mg/L	0.0001	< 0.0001	NSS	30	95	50	140	NSS	50	140
Benzo(b,j)fluoranthene	GCM0274-MAR18	mg/L	0.0001	< 0.0001	NSS	30	98	50	140	NSS	50	140
Benzo[e]pyrene	GCM0274-MAR18	mg/L	0.0001	< 0.0001	NSS	30	94	50	140	NSS	50	140
Benzo(ghi)perylene	GCM0274-MAR18	mg/L	0.0002	< 0.0002	NSS	30	99	50	140	NSS	50	140
Benzo(k)fluoranthene	GCM0274-MAR18	mg/L	0.0001	< 0.0001	NSS	30	90	50	140	NSS	50	140
Bis(2-ethylhexyl)phthalate	GCM0274-MAR18	mg/L	0.002	< 0.002	NSS	30	102	50	140	NSS	50	140
Chrysene	GCM0274-MAR18	mg/L	0.0001	< 0.0001	NSS	30	95	50	140	NSS	50	140
di-n-Butyl Phthalate	GCM0274-MAR18	mg/L	0.002	< 0.002	NSS	30	105	50	140	NSS	50	140
Dibenzo(a,h)anthracene	GCM0274-MAR18	mg/L	0.0001	< 0.0001	NSS	30	96	50	140	NSS	50	140
Dibenzo(a,i)pyrene	GCM0274-MAR18	mg/L	0.0001	< 0.0001	NSS	30	105	50	140	NSS	50	140
Dibenzo(a,j)acridine	GCM0274-MAR18	mg/L	0.0001	< 0.0001	NSS	30	94	50	140	NSS	50	140
Fluroanthene	GCM0274-MAR18	mg/L	0.0001	< 0.0001	NSS	30	97	50	140	NSS	50	140
Indeno(1,2,3-cd)pyrene	GCM0274-MAR18	mg/L	0.0002	< 0.0002	NSS	30	97	50	140	NSS	50	140
Pentachlorophenol	GCM0274-MAR18	mg/L	0.0005	< 0.0005	NSS	30	97	50	140	NSS	50	140
Perylene	GCM0274-MAR18	mg/L	0.0005	< 0.0005	NSS	30	97	50	140	NSS	50	140
Phenanthrene	GCM0274-MAR18	mg/L	0.0001	< 0.0001	NSS	30	95	50	140	NSS	50	140

QC SUMMARY

Semi-Volatile Organics (continued)

Method: EPA 3510C/8270D | Internal ref.: ME-CA-[ENV]GC-LAK-AN-005

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Pyrene	GCM0274-MAR18	mg/L	0.0001	< 0.0001	NSS	30	95	50	140	NSS	50	140

Suspended Solids

Method: SM 2540D | Internal ref.: ME-CA-[ENV]EWL-LAK-AN-004

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Total Suspended Solids	EWL0287-MAR18	mg/L	2	< 2	3	10	85	90	110	NA		

Total Nitrogen

Method: SM 4500-N C/4500-NO3- F | Internal ref.: ME-CA-[ENV]SFA-LAK-AN-002

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Total Kjeldahl Nitrogen	SKA0151-MAR18	as N mg/L	0.5	<0.5	ND	10	104	90	110	95	75	125

QC SUMMARY

Volatile Organics

Method: EPA 5030B/8260C | Internal ref.: ME-CA-[ENV]GC-LAK-AN-004

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
1,1,2,2-Tetrachloroethane	GCM0243-MAR18	mg/L	0.0005	<0.0005	NSS	30	99	60	130	NSS	50	140
1,2-Dichlorobenzene	GCM0243-MAR18	mg/L	0.0005	<0.0005	NSS	30	104	60	130	NSS	50	140
1,4-Dichlorobenzene	GCM0243-MAR18	mg/L	0.0005	<0.0005	NSS	30	102	60	130	NSS	50	140
Benzene	GCM0243-MAR18	mg/L	0.0005	<0.0005	NSS	30	104	60	130	NSS	50	140
Chloroform	GCM0243-MAR18	mg/L	0.0005	<0.0005	NSS	30	103	60	130	NSS	50	140
cis-1,2-Dichloroethene	GCM0243-MAR18	mg/L	0.0005	<0.0005	NSS	30	99	60	130	NSS	50	140
Ethylbenzene	GCM0243-MAR18	mg/L	0.0005	<0.0005	NSS	30	102	60	130	NSS	50	140
m-p-xylene	GCM0243-MAR18	mg/L	0.0005	<0.0005	NSS	30	104	60	130	NSS	50	140
Methylene Chloride	GCM0243-MAR18	mg/L	0.0005	<0.0005	NSS	30	100	60	130	NSS	50	140
o-xylene	GCM0243-MAR18	mg/L	0.0005	<0.0005	NSS	30	104	60	130	NSS	50	140
Tetrachloroethylene (perchloroethylene)	GCM0243-MAR18	mg/L	0.0005	<0.0005	NSS	30	103	60	130	NSS	50	140
Toluene	GCM0243-MAR18	mg/L	0.0005	<0.0005	NSS	30	101	60	130	NSS	50	140
trans-1,3-Dichloropropene	GCM0243-MAR18	mg/L	0.0005	<0.0005	NSS	30	107	60	130	NSS	50	140
Trichloroethylene	GCM0243-MAR18	mg/L	0.0005	<0.0005	NSS	30	101	60	130	NSS	50	140

QC SUMMARY

Method Blank: a blank matrix that is carried through the entire analytical procedure. Used to assess laboratory contamination.

Duplicate: Paired analysis of a separate portion of the same sample that is carried through the entire analytical procedure. Used to evaluate measurement precision.

LCS/Spike Blank: Laboratory control sample or spike blank refer to a blank matrix to which a known amount of analyte has been added. Used to evaluate analyte recovery and laboratory accuracy without sample matrix effects.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate laboratory accuracy with sample matrix effects.

Reference Material: a material or substance matrix matched to the samples that contains a known amount of the analyte of interest. A reference material may be used in place of a matrix spike.

RL: Reporting limit

RPD: Relative percent difference

AC: Acceptance criteria

Multielement Scan Qualifier: as the number of analytes in a scan increases, so does the chance of a limit exceedance by random chance as opposed to a real method problem. Thus, in multielement scans, for the LCS and matrix spike, up to 10% of the analytes may exceed the quoted limits by up to 10% absolute and the spike is considered acceptable.

Duplicate Qualifier: for duplicates as the measured result approaches the RL, the uncertainty associated with the value increases dramatically, thus duplicate acceptance limits apply only where the average of the two duplicates is greater than five times the RL.

Matrix Spike Qualifier: for matrix spikes, as the concentration of the native analyte increases, the uncertainty of the matrix spike recovery increases. Thus, the matrix spike acceptance limits apply only when the concentration of the matrix spike is greater than or equal to the concentration of the native analyte.

LEGEND

FOOTNOTES

NSS Insufficient sample for analysis.
RL Reporting Limit.
↑ Reporting limit raised.
↓ Reporting limit lowered.
NA The sample was not analysed for this analyte
ND Non Detect

Samples analysed as received. Solid samples expressed on a dry weight basis. "Temperature Upon Receipt" is representative of the whole shipment and may not reflect the temperature of individual samples.

Analysis conducted on samples submitted pursuant to or as part of Reg. 153/04, are in accordance to the Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act" published by the Ministry and dated March 9, 2004 as amended.

SGS provides criteria information (such as regulatory or guideline limits and summary of limit exceedances) as a service. Every attempt is made to ensure the criteria information in this report is accurate and current, however, it is not guaranteed. Comparison to the most current criteria is the responsibility of the client and SGS assumes no responsibility for the accuracy of the criteria levels indicated. This document is issued, on the Client's behalf, by the Company under its General Conditions of Service available on request and accessible at http://www.sgs.com/terms_and_conditions.htm. The Client's attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any other holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents.

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-- End of Analytical Report --

SGS

SGS Environment, Health and Safety

Request for Laboratory Services and CHAIN OF CUSTODY

No: 00953

Page 1 of 1

- Lakefield: 185 Concession St., Lakefield, ON K0L 2H0 Phone: 705-652-2000 Toll Free: 877-747-7658 Fax: 705-652-6365
- London: 657 Consortium Court, London, ON, N6E 2S8 Phone: 519-672-4500 Toll Free: 877-848-8060 Fax: 519-672-0361 Web: www.ca.sgs.com

Laboratory Information Section - Lab use only

Received By: D Reid @ SGS Sheppard

Received Date: 03\19\18 (mm\dd\yy)

Received Time: 05:40 am / pm (circle)

Received By (signature):

Custody Seal Present: Y / N (circle)

Custody Seal Intact: Y / N

Cooling Agent Present: Y / N Type: ice

Temperature Upon Receipt (°C) 14.1 – 16.1

CA 14406-Mar18

LAB LIMS #: 10 x 3

REPORT INFORMATION

Company: Toronto Inspection Ltd.

Contact: Tabitha / Tim

Address: 110 Konrad Cres.

Markham, ON

Phone:

Fax:

Email: lab@torontoinspection.com

INVOICE INFORMATION

☑ (same as Report Information)

Company:

Contact: Shannon

Address:

Phone:

Email: shannon@torontoinspection.com

PROJECT INFORMATION

Quotation #:

P.O. #:

Project #: 2477

Site Location/ID:

TURNAROUND TIME (TAT) REQUIRED

☑ Regular TAT (5-7days)

TAT's are quoted in business days (exclude statutory holidays & weekends). Samples received after 3pm or on weekends : TAT begins the next business day

RUSH TAT (Additional Charges May Apply) ☐ 1 Day ☐ 2 Days ☐ 3-4 Days

PLEASE CONFIRM RUSH FEASIBILITY WITH SGS REPRESENTATIVE PRIOR TO SUBMISSION

Specify Due Date:

Rush Confirmation ID:

DRINKING WATER SAMPLES (POTABLE WATER FOR HUMAN CONSUMPTION) MUST BE SUBMITTED WITH SGS DRINKING WATER CHAIN OF CUSTODY

REGULATIONS

Regulation 153 (2011):

☐ Table 1 ☐ Res/Park Soil Texture:

☐ Table 2 ☐ Ind/Com ☐ Coarse

☐ Table 3 ☐ Agri/Other ☐ Medium

☐ Table ____ ☐ Fine

Other Regulations:

☐ Reg 347/558 (3 Day min TAT)

☐ PWQO ☐ MMER

☐ CCME ☐ Other:

☐ MISA

Sewer By-Law:

☑ Sanitary

☑ Storm

Municipality: Toronto

RECORD OF SITE CONDITION (RSC) ☐ YES ☐ NO

ANALYSIS REQUESTED

	SAMPLE IDENTIFICATION	DATE SAMPLED	TIME SAMPLED	# OF BOTTLES	MATRIX	Storm and Sanitary Sweep.	COMMENTS: Field Filtered (F) Preserved (P)
1	18 BH-5	03/19/18	1:00p	17	GW	✓	
2							
3							
4							
5							
6							
7							
8							
9							
10							

Observations/Comments/Special Instructions

Sampled By (NAME): Tim **Signature:** Date: 03 / 19 / 18 (mm/dd/yy)

Relinquished by (NAME): Tim **Signature:** Date: 03 / 19 / 18 (mm/dd/yy)

Pink Copy - Client

Yellow & White Copy - SGS

Revision #: 1.1

Date of Issue: 25 July, 2016

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SGS

SAMPLE INTEGRITY REPORT

Project Number: 2477

ONTARIO REGULATION 153/04

SGS Sample ID CA14406-Mar18

Date / Time Sampled 03/19/18 13:00

Client Sample ID 18BH-5

	ALL
Sample Submission General Sample Integrity Violations	
Temperature >10 C upon receipt if not sampled same day	☐
No evidence of cooling trend initiated if sampled same day	☐
Chain of Custody not submitted	☐
Chain of Custody incomplete	☐
Chain of Custody not signed / dated	☐
Chain of Custody not a current version	☐
Bottles / Samples listed on CoC but not received	☐
Bottles / Samples received but not listed on the CoC	☐
Sample container received empty	☐

Sample Specific Sample Integrity Violations							
Sample received past hold time	☐	☐	☐	☐	☐	☐	☐
Incorrect preservation (including no preservation where required)	☐	☐	☐	☐	☐	☐	☐
Headspace present in VOC vial (aqueous)	☐	☐	☐	☐	☐	☐	☐
Sample(s) received frozen	☐	☐	☐	☐	☐	☐	☐
Bottle(s) broken or damaged in transport	☐	☐	☐	☐	☐	☐	☐
Discrepancy between sample label and chain of custody	☐	☐	☐	☐	☐	☐	☐
Analysis requirements absent / unclear	☐	☐	☐	☐	☐	☐	☐
Missing or incorrect sample label(s)	☐	☐	☐	☐	☐	☐	☐
Inappropriate sample container used	☐	☐	☐	☐	☐	☐	☐
Insufficient number of bottles received	☐	☐	☐	☐	☐	☐	☐
Limited sample volume	☐	☐	☐	☐	☐	☐	☐
Insufficient sample volume	☐	☐	☐	☐	☐	☐	☐
Sample contains multiple phases	☐	☐	☐	☐	☐	☐	☐
Sediment Log							
Groundwater samples contain visible sediment / particulate	☐	☐	☐	☐	☐	☐	☐
Groundwater contains greater than 1cm of sediment / particulate matter in bottle	☐	☐	☐	☐	☐	☐	☐

Additional Comments/Remarks:

No issues upon receipt ☑ Initials: BM

FINAL REPORT

CA14429-APR18 R1

2477 Dundas West

Prepared for

Toronto Inspection Ltd.

FINAL REPORT

First Page

CLIENT DETAILS		LABORATORY DETAILS	
Client	Toronto Inspection Ltd.	Project Specialist	Deanna Edwards, B.Sc, C.Chem
		Laboratory	SGS Canada Inc.
Address	110 Konrad Crescent, Unit 16 Markham, ON L3R 9X2.	Address	185 Concession St., Lakefield ON, K0L 2H0
Contact	Tabitha Lee	Telephone	705-652-2000
Telephone	416-996-3214	Facsimile	705-652-6365
Facsimile	905 940 8192	Email	deanna.edwards@sgs.com
Email	lab@torontoinspection.com; tabitha@torontoinspection.com	SGS Reference	CA14429-APR18
Project	2477 Dundas West	Received	04/20/2018
Order Number		Approved	04/27/2018
Samples	Solution (1)	Report Number	CA14429-APR18 R1
		Date Reported	04/27/2018

COMMENTS

RL - SGS Reporting Limit

Nonylphenol Ethoxylates is the sum of nonylphenol monoethoxylate and nonylphenol diethoxylate.

Total PAH is the sum of anthracene, benzo(a)pyrene, benzo(a)anthracene, benzo(e)pyrene, benzo(b,j)fluoranthene, benzo(k)fluoranthene, benzo(g,h,i)perylene, chrysene, dibenzo(a,h)anthracene, dibenzo(a,i)pyrene, dibenzo(a,j)acridine, 7H-dibenzo(c,g)carbazole, fluoranthene, indeno(1,2,3-c,d)pyrene, perylene, phenanthrene and pyrene..

Temperature of Sample upon Receipt: 5 degrees C
Cooling Agent Present: Yes
Custody Seal Present: Yes

SIGNATORIES

Deanna Edwards, B.Sc, C.Chem

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FINAL REPORT

CA14429-APR18 R1

Client: Toronto Inspection Ltd.
Project: 2477 Dundas West
Project Manager: Tabitha Lee
Samplers: Tim/Sonia

PACKAGE: **SANSEW - General Chemistry** (WATER)

L1 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 1 - Sanitary and Combined Sewer Discharge - BL_100_2016

L2 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 2 - Storm Sewer Discharge - BL_100_2016

Sample Number	8
Sample Name	18BH-9
Sample Matrix	Solution
Sample Date	20/04/2018

Parameter	Units	RL	L1	L2	Result
General Chemistry					
Biochemical Oxygen Demand (BOD5)	mg/L	2	300	15	< 2
Total Kjeldahl Nitrogen	as N mg/L	0.5	100		< 0.5
Total Suspended Solids	mg/L	2	350	15	9

PACKAGE: **SANSEW - Metals and Inorganics** (WATER)

L1 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 1 - Sanitary and Combined Sewer Discharge - BL_100_2016

L2 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 2 - Storm Sewer Discharge - BL_100_2016

Sample Number	8
Sample Name	18BH-9
Sample Matrix	Solution
Sample Date	20/04/2018

Parameter	Units	RL	L1	L2	Result
Metals and Inorganics					
Fluoride	mg/L	0.06	10		< 0.06
Cyanide (total)	mg/L	0.01	2	0.02	< 0.01
Aluminum (total)	mg/L	0.001	50		0.019
Antimony (total)	mg/L	0.0002	5		< 0.0002
Arsenic (total)	mg/L	0.0002	1	0.02	0.0003
Cadmium (total)	mg/L	0.000003	0.7	0.008	0.000071
Chromium (total)	mg/L	0.00003	4	0.08	0.00020
Cobalt (total)	mg/L	0.000004	5		0.00209

FINAL REPORT

CA14429-APR18 R1

Client: Toronto Inspection Ltd.
Project: 2477 Dundas West
Project Manager: Tabitha Lee
Samplers: Tim/Sonia

PACKAGE: **SANSEW - Metals and Inorganics** (WATER)

L1 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 1 - Sanitary and Combined Sewer Discharge - BL_100_2016

L2 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 2 - Storm Sewer Discharge - BL_100_2016

Sample Number	8
Sample Name	18BH-9
Sample Matrix	Solution
Sample Date	20/04/2018

Parameter	Units	RL	L1	L2	Result
Metals and Inorganics (continued)					
Copper (total)	mg/L	0.00002	2	0.04	0.00129
Lead (total)	mg/L	0.00001	1	0.12	0.00009
Manganese (total)	mg/L	0.00001	5	0.05	1.02
Molybdenum (total)	mg/L	0.00001	5		0.00238
Nickel (total)	mg/L	0.0001	2	0.08	0.0039
Phosphorus (total)	mg/L	0.003	10	0.4	0.013
Selenium (total)	mg/L	0.00004	1	0.02	0.00136
Silver (total)	mg/L	0.00005	5	0.12	0.00005
Tin (total)	mg/L	0.00001	5		0.00011
Titanium (total)	mg/L	0.00005	5		0.00090
Zinc (total)	mg/L	0.002	2	0.04	< 0.002

Client: Toronto Inspection Ltd.
Project: 2477 Dundas West
Project Manager: Tabitha Lee
Samplers: Tim/Sonia

PACKAGE: **SANSEW - Microbiology** (WATER)

L1 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 1 - Sanitary and Combined Sewer Discharge - BL_100_2016

L2 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 2 - Storm Sewer Discharge - BL_100_2016

Sample Number	8
Sample Name	18BH-9
Sample Matrix	Solution
Sample Date	20/04/2018

Parameter	Units	RL	L1	L2	Result
Microbiology					
E. Coli	cfu/100mL	-		200	< 2 ↑

PACKAGE: **SANSEW - Nonylphenol and Ethoxylates** (WATER)

L1 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 1 - Sanitary and Combined Sewer Discharge - BL_100_2016

L2 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 2 - Storm Sewer Discharge - BL_100_2016

Sample Number	8
Sample Name	18BH-9
Sample Matrix	Solution
Sample Date	20/04/2018

Parameter	Units	RL	L1	L2	Result
Nonylphenol and Ethoxylates					
Nonylphenol	mg/L	0.001	0.02	0.001	< 0.001
Nonylphenol Ethoxylates	mg/L	0.01	0.2	0.01	< 0.01
Nonylphenol diethoxylate	mg/L	0.01			< 0.01
Nonylphenol monoethoxylate	mg/L	0.01			< 0.01

PACKAGE: **SANSEW - Oil and Grease** (WATER)

L1 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 1 - Sanitary and Combined Sewer Discharge - BL_100_2016

L2 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 2 - Storm Sewer Discharge - BL_100_2016

Sample Number	8
Sample Name	18BH-9
Sample Matrix	Solution
Sample Date	20/04/2018

Parameter	Units	RL	L1	L2	Result

Client: Toronto Inspection Ltd.
Project: 2477 Dundas West
Project Manager: Tabitha Lee
Samplers: Tim/Sonia

PACKAGE: **SANSEW - Oil and Grease** (WATER)

L1 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 1 - Sanitary and Combined Sewer Discharge - BL_100_2016

L2 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 2 - Storm Sewer Discharge - BL_100_2016

Sample Number	8
Sample Name	18BH-9
Sample Matrix	Solution
Sample Date	20/04/2018

Parameter	Units	RL	L1	L2	Result
Oil and Grease					
Oil & Grease (total)	mg/L	2			< 2
Oil & Grease (animal/vegetable)	mg/L	4	150		< 4
Oil & Grease (mineral/synthetic)	mg/L	4	15		< 4

PACKAGE: **SANSEW - Other (ORP)** (WATER)

L1 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 1 - Sanitary and Combined Sewer Discharge - BL_100_2016

L2 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 2 - Storm Sewer Discharge - BL_100_2016

Sample Number	8
Sample Name	18BH-9
Sample Matrix	Solution
Sample Date	20/04/2018

Parameter	Units	RL	L1	L2	Result
Other (ORP)					
pH	no unit	0.05	11.5	9.5	6.93
Chromium VI	mg/L	0.0002	2	0.04	< 0.0002
Mercury (total)	mg/L	0.00001	0.01	0.0004	< 0.00001

PACKAGE: **SANSEW - PCBs** (WATER)

L1 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 1 - Sanitary and Combined Sewer Discharge - BL_100_2016

L2 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 2 - Storm Sewer Discharge - BL_100_2016

Sample Number	8
Sample Name	18BH-9
Sample Matrix	Solution
Sample Date	20/04/2018

Parameter	Units	RL	L1	L2	Result

FINAL REPORT

CA14429-APR18 R1

Client: Toronto Inspection Ltd.
Project: 2477 Dundas West
Project Manager: Tabitha Lee
Samplers: Tim/Sonia

PACKAGE: **SANSEW - PCBs** (WATER)

L1 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 1 - Sanitary and Combined Sewer Discharge - BL_100_2016

L2 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 2 - Storm Sewer Discharge - BL_100_2016

Sample Number	8
Sample Name	18BH-9
Sample Matrix	Solution
Sample Date	20/04/2018

Parameter	Units	RL	L1	L2	Result
PCBs					
Polychlorinated Biphenyls (PCBs) - Total	mg/L	0.0001	0.001	0.0004	< 0.0001

PACKAGE: **SANSEW - Phenols** (WATER)

L1 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 1 - Sanitary and Combined Sewer Discharge - BL_100_2016

L2 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 2 - Storm Sewer Discharge - BL_100_2016

Sample Number	8
Sample Name	18BH-9
Sample Matrix	Solution
Sample Date	20/04/2018

Parameter	Units	RL	L1	L2	Result
Phenols					
4AAP-Phenolics	mg/L	0.002	1	0.008	0.002

PACKAGE: **SANSEW - SVOCs** (WATER)

L1 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 1 - Sanitary and Combined Sewer Discharge - BL_100_2016

L2 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 2 - Storm Sewer Discharge - BL_100_2016

Sample Number	8
Sample Name	18BH-9
Sample Matrix	Solution
Sample Date	20/04/2018

Parameter	Units	RL	L1	L2	Result
SVOCs					
di-n-Butyl Phthalate	mg/L	0.002	0.08	0.015	< 0.002
Bis(2-ethylhexyl)phthalate	mg/L	0.002	0.012	0.0088	< 0.002
3,3-Dichlorobenzidine	mg/L	0.0005	0.002	0.0008	< 0.0005

Client: Toronto Inspection Ltd.
Project: 2477 Dundas West
Project Manager: Tabitha Lee
Samplers: Tim/Sonia

PACKAGE: **SANSEW - SVOCs** (WATER)

L1 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 1 - Sanitary and Combined Sewer Discharge - BL_100_2016

L2 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 2 - Storm Sewer Discharge - BL_100_2016

Sample Number	8
Sample Name	18BH-9
Sample Matrix	Solution
Sample Date	20/04/2018

Parameter	Units	RL	L1	L2	Result
SVOCs (continued)					
Pentachlorophenol	mg/L	0.0005	0.005	0.002	< 0.0005
PAHs (Total)	mg/L	-	0.005	0.002	< 0.001
Perylene	mg/L	0.0005			< 0.0005

PACKAGE: **SANSEW - SVOCs - PAHs** (WATER)

L1 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 1 - Sanitary and Combined Sewer Discharge - BL_100_2016

L2 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 2 - Storm Sewer Discharge - BL_100_2016

Sample Number	8
Sample Name	18BH-9
Sample Matrix	Solution
Sample Date	20/04/2018

Parameter	Units	RL	L1	L2	Result
SVOCs - PAHs					
7Hdibenzo(c,g)carbazole	mg/L	0.0001			< 0.0001
Anthracene	mg/L	0.0001			< 0.0001
Benzo(a)anthracene	mg/L	0.0001			< 0.0001
Benzo(a)pyrene	mg/L	0.0001			< 0.0001
Benzo(b,j)fluoranthene	mg/L	0.0001			< 0.0001
Benzo[e]pyrene	mg/L	0.0001			< 0.0001
Benzo(ghi)perylene	mg/L	0.0002			< 0.0002
Benzo(k)fluoranthene	mg/L	0.0001			< 0.0001
Chrysene	mg/L	0.0001			< 0.0001
Dibenzo(a,h)anthracene	mg/L	0.0001			< 0.0001
Dibenzo(a,i)pyrene	mg/L	0.0001			< 0.0001

Client: Toronto Inspection Ltd.
Project: 2477 Dundas West
Project Manager: Tabitha Lee
Samplers: Tim/Sonia

PACKAGE: **SANSEW - SVOCs - PAHs** (WATER)

L1 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 1 - Sanitary and Combined Sewer Discharge - BL_100_2016

L2 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 2 - Storm Sewer Discharge - BL_100_2016

Sample Number	8
Sample Name	18BH-9
Sample Matrix	Solution
Sample Date	20/04/2018

Parameter	Units	RL	L1	L2	Result
SVOCs - PAHs (continued)					
Dibenzo(a,j)acridine	mg/L	0.0001			< 0.0001
Fluroanthene	mg/L	0.0001			< 0.0001
Indeno(1,2,3-cd)pyrene	mg/L	0.0002			< 0.0002
Phenanthrene	mg/L	0.0001			< 0.0001
Pyrene	mg/L	0.0001			< 0.0001

PACKAGE: **SANSEW - VOCs** (WATER)

L1 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 1 - Sanitary and Combined Sewer Discharge - BL_100_2016

L2 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 2 - Storm Sewer Discharge - BL_100_2016

Sample Number	8
Sample Name	18BH-9
Sample Matrix	Solution
Sample Date	20/04/2018

Parameter	Units	RL	L1	L2	Result
VOCs					
Chloroform	mg/L	0.0005	0.04	0.002	< 0.0005
1,2-Dichlorobenzene	mg/L	0.0005	0.05	0.0056	< 0.0005
1,4-Dichlorobenzene	mg/L	0.0005	0.08	0.0068	< 0.0005
cis-1,2-Dichloroethene	mg/L	0.0005	4	0.0056	< 0.0005
trans-1,3-Dichloropropene	mg/L	0.0005			< 0.0005
Methylene Chloride	mg/L	0.0005	2	0.0052	< 0.0005
1,1,2,2-Tetrachloroethane	mg/L	0.0005	1.4	0.017	< 0.0005
Tetrachloroethylene (perchloroethylene)	mg/L	0.0005	1	0.0044	< 0.0005
Trichloroethylene	mg/L	0.0005	0.4	0.0076	< 0.0005

FINAL REPORT

CA14429-APR18 R1

Client: Toronto Inspection Ltd.
Project: 2477 Dundas West
Project Manager: Tabitha Lee
Samplers: Tim/Sonia

PACKAGE: **SANSEW - VOCs - BTEX** (WATER)

L1 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 1 - Sanitary and Combined Sewer Discharge - BL_100_2016

L2 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 2 - Storm Sewer Discharge - BL_100_2016

Sample Number	8
Sample Name	18BH-9
Sample Matrix	Solution
Sample Date	20/04/2018

Parameter	Units	RL	L1	L2	Result
VOCs - BTEX					
Benzene	mg/L	0.0005	0.01	0.002	< 0.0005
Ethylbenzene	mg/L	0.0005	0.16	0.002	< 0.0005
Toluene	mg/L	0.0005	0.016	0.002	< 0.0005
Xylene (total)	mg/L	0.0005	1.4	0.0044	< 0.0005
m-p-xylene	mg/L	0.0005			< 0.0005
o-xylene	mg/L	0.0005			< 0.0005

EXCEEDANCE SUMMARY

Parameter	Method	Units	Result	SANSEW / WATER / - - Toronto Sewer Use By Law Table 1 - Sanitary and Combined Sewer Discharge - BL_100_2016 L1	SANSEW / WATER / - - Toronto Sewer Use By Law Table 2 - Storm Sewer Discharge - BL_100_2016 L2
18BH-9					
Manganese	SM 3030/EPA 200.8	mg/L	1.02		0.05

QC SUMMARY

Biochemical Oxygen Demand

Method: SM 5210 | Internal ref.: ME-CA-IENVIEWL-LAK-AN-007

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Biochemical Oxygen Demand (BOD5)	BOD0038-APR18	mg/L	2	< 2	28	30	95	70	130	NV	70	130

Cyanide by SFA

Method: SM 4500 | Internal ref.: ME-CA-IENVISFA-LAK-AN-005

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Cyanide (total)	SKA0157-APR18	mg/L	0.01	<0.01	ND	10	99	90	110	NV	75	125

Fluoride by Specific Ion Electrode

Method: SM 4500 | Internal ref.: ME-CA-IENVIEWL-LAK-AN-014

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Fluoride	EWL0381-APR18	mg/L	0.06	<0.06	1	10	98	90	110	nv	75	125

QC SUMMARY

Hexavalent Chromium by IC

Method: EPA218.6/EPA3060A | Internal ref.: ME-CA-IENVIIC-LAK-AN-008

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Chromium VI	DIO0379-APR18	mg/L	0.0002	<0.0002	8		95			92		

Mercury by CVAAS

Method: EPA 7471A/SM 3112B | Internal ref.: ME-CA-IENVISPE-LAK-AN-004

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Mercury (total)	EHG0023-APR18	mg/L	0.00001	< 0.00001	ND	20	104	80	120	109	70	130

QC SUMMARY

Metals in aqueous samples - ICP-MS

Method: SM 3030/EPA 200.8 | Internal ref.: ME-CA-[ENV]SPE-LAK-AN-006

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Silver (total)	EMS0149-APR18	mg/L	0.00005	<0.00005	ND	20	101	90	110	96	70	130
Aluminum (total)	EMS0149-APR18	mg/L	0.001	<0.001	0	20	107	90	110	98	70	130
Arsenic (total)	EMS0149-APR18	mg/L	0.0002	<0.0002	5	20	103	90	110	109	70	130
Cadmium (total)	EMS0149-APR18	mg/L	0.000003	<0.000003	ND	20	100	90	110	97	70	130
Cobalt (total)	EMS0149-APR18	mg/L	0.000004	<0.000004	10	20	101	90	110	106	70	130
Chromium (total)	EMS0149-APR18	mg/L	0.00003	<0.00003	2	20	102	90	110	108	70	130
Copper (total)	EMS0149-APR18	mg/L	0.00002	<0.00002	1	20	101	90	110	99	70	130
Manganese (total)	EMS0149-APR18	mg/L	0.00001	<0.00001	1	20	103	90	110	78	70	130
Molybdenum (total)	EMS0149-APR18	mg/L	0.00001	<0.00001	12	20	103	90	110	104	70	130
Nickel (total)	EMS0149-APR18	mg/L	0.0001	<0.0001	6	20	101	90	110	102	70	130
Lead (total)	EMS0149-APR18	mg/L	0.00001	<0.00001	0	20	101	90	110	100	70	130
Antimony (total)	EMS0149-APR18	mg/L	0.0002	<0.0002	ND	20	94	90	110	94	70	130
Selenium (total)	EMS0149-APR18	mg/L	0.00004	<0.00004	4	20	103	90	110	113	70	130
Tin (total)	EMS0149-APR18	mg/L	0.00001	<0.00001	5	20	102	90	110	NV	70	130
Titanium (total)	EMS0149-APR18	mg/L	0.00005	<0.00005	2	20	103	90	110	NV	70	130
Zinc (total)	EMS0149-APR18	mg/L	0.002	<0.002	3	20	102	90	110	102	70	130

QC SUMMARY

Metals in aqueous samples - ICP-OES

Method: SM 3030/EPA 200.8 | Internal ref.: ME-CA-[ENV]SPE-LAK-AN-003

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Phosphorus (total)	EMS0149-APR18	mg/L	0.003	<0.003	8	20	101	90	110	NV	70	130

Microbiology

Method: SM 9222D | Internal ref.: ME-CA-[ENV]MIC-LAK-AN-006

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
E. Coli	BAC9323-APR18	cfu/100mL	-	ACCEPTED	SEE NOTE							

QC SUMMARY

Nonylphenol and Ethoxylates

Method: ASTM D7065-06 | Internal ref.: ME-CA-IENVIGC-LAK-AN-015

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Nonylphenol diethoxylate	GCM0327-APR18	mg/L	0.01	< 0.01			117	55	120			
Nonylphenol Ethoxylates	GCM0327-APR18	mg/L	0.01	< 0.01								
Nonylphenol monoethoxylate	GCM0327-APR18	mg/L	0.01	< 0.01			110	55	120			
Nonylphenol	GCM0327-APR18	mg/L	0.001	< 0.001			89	55	120			

Oil & Grease

Method: MOE E3401 | Internal ref.: ME-CA-IENVIGC-LAK-AN-019

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Oil & Grease (total)	GCM0332-APR18	mg/L	2	<2			102	75	125			

QC SUMMARY

Oil & Grease-AV/MS

Method: MOE E3401/SM 5520F | Internal ref.: ME-CA-IENVIGC-LAK-AN-019

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Oil & Grease (animal/vegetable)	GCM0332-APR18	mg/L	4	< 4			NA	70	130			
Oil & Grease (mineral/synthetic)	GCM0332-APR18	mg/L	4	< 4			NA	70	130			

pH

Method: SM 4500 | Internal ref.: ME-CA-IENVIEWL-LAK-AN-006

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
pH	EWL0387-APR18	no unit	0.05	NA	1		100			NA		

QC SUMMARY

Phenols by SFA

Method: SM 5530B-D | Internal ref.: ME-CA-IENVISFA-LAK-AN-006

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
4AAP-Phenolics	SKA0163-APR18	mg/L	0.002	<0.002	18	10	107	90	110	115	75	125
4AAP-Phenolics	SKA0202-APR18	mg/L	0.002	<0.002	0	10	119	90	110	110	75	125

Polychlorinated Biphenyls

Method: MOE E3400/EPA 8082A | Internal ref.: ME-CA-IENVIGC-LAK-AN-001

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Polychlorinated Biphenyls (PCBs) - Total	GCM0314-APR18	mg/L	0.0001	<0.0001	NSS	30	106	60	140	NSS	60	140

QC SUMMARY

Semi-Volatile Organics

Method: EPA 3510C/8270D | Internal ref.: ME-CA-[ENV]GC-LAK-AN-005

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
3,3-Dichlorobenzidine	GCM0323-APR18	mg/L	0.0005	< 0.0005	NSS	30	93	30	130	NSS	30	130
7Hdibenzo(c,g)carbazole	GCM0324-APR18	mg/L	0.0001	< 0.0001	NSS	30	109	50	140	NSS	50	140
Anthracene	GCM0324-APR18	mg/L	0.0001	< 0.0001	NSS	30	81	50	140	NSS	50	140
Benzo(a)anthracene	GCM0324-APR18	mg/L	0.0001	< 0.0001	NSS	30	83	50	140	NSS	50	140
Benzo(a)pyrene	GCM0324-APR18	mg/L	0.0001	< 0.0001	NSS	30	83	50	140	NSS	50	140
Benzo(b,j)fluoranthene	GCM0324-APR18	mg/L	0.0001	< 0.0001	NSS	30	92	50	140	NSS	50	140
Benzo[e]pyrene	GCM0324-APR18	mg/L	0.0001	< 0.0001	NSS	30	104	50	140	NSS	50	140
Benzo(ghi)perylene	GCM0324-APR18	mg/L	0.0002	< 0.0002	NSS	30	88	50	140	NSS	50	140
Benzo(k)fluoranthene	GCM0324-APR18	mg/L	0.0001	< 0.0001	NSS	30	96	50	140	NSS	50	140
Bis(2-ethylhexyl)phthalate	GCM0324-APR18	mg/L	0.002	< 0.002	NSS	30	85	50	140	NSS	50	140
Chrysene	GCM0324-APR18	mg/L	0.0001	< 0.0001	NSS	30	87	50	140	NSS	50	140
di-n-Butyl Phthalate	GCM0324-APR18	mg/L	0.002	< 0.002	NSS	30	90	50	140	NSS	50	140
Dibenzo(a,h)anthracene	GCM0324-APR18	mg/L	0.0001	< 0.0001	NSS	30	87	50	140	NSS	50	140
Dibenzo(a,i)pyrene	GCM0324-APR18	mg/L	0.0001	< 0.0001	NSS	30	118	50	140	NSS	50	140
Dibenzo(a,j)acridine	GCM0324-APR18	mg/L	0.0001	< 0.0001	NSS	30	106	50	140	NSS	50	140
Fluroanthene	GCM0324-APR18	mg/L	0.0001	< 0.0001	NSS	30	85	50	140	NSS	50	140
Indeno(1,2,3-cd)pyrene	GCM0324-APR18	mg/L	0.0002	< 0.0002	NSS	30	87	50	140	NSS	50	140
Pentachlorophenol	GCM0324-APR18	mg/L	0.0005	< 0.0005	NSS	30	84	50	140	NSS	50	140
Perylene	GCM0324-APR18	mg/L	0.0005	< 0.0005	NSS	30	106	50	140	NSS	50	140
Phenanthrene	GCM0324-APR18	mg/L	0.0001	< 0.0001	NSS	30	82	50	140	NSS	50	140

QC SUMMARY

Semi-Volatile Organics (continued)

Method: EPA 3510C/8270D | Internal ref.: ME-CA-[ENV]GC-LAK-AN-005

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Pyrene	GCM0324-APR18	mg/L	0.0001	< 0.0001	NSS	30	83	50	140	NSS	50	140

Suspended Solids

Method: SM 2540D | Internal ref.: ME-CA-[ENV]EWL-LAK-AN-004

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Total Suspended Solids	EWL0445-APR18	mg/L	2	< 2	21	10	96	90	110	NA		

Total Nitrogen

Method: SM 4500-N C/4500-NO3- F | Internal ref.: ME-CA-[ENV]SFA-LAK-AN-002

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Total Kjeldahl Nitrogen	SKA0160-APR18	as N mg/L	0.5	<0.5	0	10	99	90	110	110	75	125
Total Kjeldahl Nitrogen	SKA0172-APR18	as N mg/L	0.5	<0.5	0	10	105	90	110	100	75	125

QC SUMMARY

Volatile Organics

Method: EPA 5030B/8260C | Internal ref.: ME-CA-[ENV]GC-LAK-AN-004

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
1,1,2,2-Tetrachloroethane	GCM0303-APR18	mg/L	0.0005	<0.0005	NSS	30	97	60	130	NSS	50	140
1,2-Dichlorobenzene	GCM0303-APR18	mg/L	0.0005	<0.0005	NSS	30	95	60	130	NSS	50	140
1,4-Dichlorobenzene	GCM0303-APR18	mg/L	0.0005	<0.0005	NSS	30	94	60	130	NSS	50	140
Benzene	GCM0303-APR18	mg/L	0.0005	<0.0005	NSS	30	93	60	130	NSS	50	140
Chloroform	GCM0303-APR18	mg/L	0.0005	<0.0005	NSS	30	94	60	130	NSS	50	140
cis-1,2-Dichloroethene	GCM0303-APR18	mg/L	0.0005	<0.0005	NSS	30	93	60	130	NSS	50	140
Ethylbenzene	GCM0303-APR18	mg/L	0.0005	<0.0005	NSS	30	92	60	130	NSS	50	140
m-p-xylene	GCM0303-APR18	mg/L	0.0005	<0.0005	NSS	30	93	60	130	NSS	50	140
Methylene Chloride	GCM0303-APR18	mg/L	0.0005	<0.0005	NSS	30	91	60	130	NSS	50	140
o-xylene	GCM0303-APR18	mg/L	0.0005	<0.0005	NSS	30	92	60	130	NSS	50	140
Tetrachloroethylene (perchloroethylene)	GCM0303-APR18	mg/L	0.0005	<0.0005	NSS	30	95	60	130	NSS	50	140
Toluene	GCM0303-APR18	mg/L	0.0005	<0.0005	NSS	30	93	60	130	NSS	50	140
trans-1,3-Dichloropropene	GCM0303-APR18	mg/L	0.0005	<0.0005	NSS	30	96	60	130	NSS	50	140
Trichloroethylene	GCM0303-APR18	mg/L	0.0005	<0.0005	NSS	30	93	60	130	NSS	50	140

QC SUMMARY

Method Blank: a blank matrix that is carried through the entire analytical procedure. Used to assess laboratory contamination.

Duplicate: Paired analysis of a separate portion of the same sample that is carried through the entire analytical procedure. Used to evaluate measurement precision.

LCS/Spike Blank: Laboratory control sample or spike blank refer to a blank matrix to which a known amount of analyte has been added. Used to evaluate analyte recovery and laboratory accuracy without sample matrix effects.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate laboratory accuracy with sample matrix effects.

Reference Material: a material or substance matrix matched to the samples that contains a known amount of the analyte of interest. A reference material may be used in place of a matrix spike.

RL: Reporting limit

RPD: Relative percent difference

AC: Acceptance criteria

Multielement Scan Qualifier: as the number of analytes in a scan increases, so does the chance of a limit exceedance by random chance as opposed to a real method problem. Thus, in multielement scans, for the LCS and matrix spike, up to 10% of the analytes may exceed the quoted limits by up to 10% absolute and the spike is considered acceptable.

Duplicate Qualifier: for duplicates as the measured result approaches the RL, the uncertainty associated with the value increases dramatically, thus duplicate acceptance limits apply only where the average of the two duplicates is greater than five times the RL.

Matrix Spike Qualifier: for matrix spikes, as the concentration of the native analyte increases, the uncertainty of the matrix spike recovery increases. Thus, the matrix spike acceptance limits apply only when the concentration of the matrix spike is greater than or equal to the concentration of the native analyte.

LEGEND

FOOTNOTES

NSS Insufficient sample for analysis.
RL Reporting Limit.
↑ Reporting limit raised.
↓ Reporting limit lowered.
NA The sample was not analysed for this analyte
ND Non Detect

Samples analysed as received. Solid samples expressed on a dry weight basis. "Temperature Upon Receipt" is representative of the whole shipment and may not reflect the temperature of individual samples.

Analysis conducted on samples submitted pursuant to or as part of Reg. 153/04, are in accordance to the Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act" published by the Ministry and dated March 9, 2004 as amended.

SGS provides criteria information (such as regulatory or guideline limits and summary of limit exceedances) as a service. Every attempt is made to ensure the criteria information in this report is accurate and current, however, it is not guaranteed. Comparison to the most current criteria is the responsibility of the client and SGS assumes no responsibility for the accuracy of the criteria levels indicated. This document is issued, on the Client's behalf, by the Company under its General Conditions of Service available on request and accessible at http://www.sgs.com/terms_and_conditions.htm. The Client's attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any other holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents.

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-- End of Analytical Report --

SGS

Request for Laboratory Services and CHAIN OF CUSTODY

No:

Page 1 of 1

SGS Environment, Health and Safety

- Lakefield: 185 Concession St., Lakefield, ON K0L 2H0 Phone: 705-652-2000 Toll Free: 877-747-7658 Fax: 705-652-6365
- London: 657 Consortium Court, London, ON, N6E 2S8 Phone: 519-672-4500 Toll Free: 877-848-8060 Fax: 519-672-0361 Web: www.ca.sgs.com

CA 14429-APR18

Laboratory Information Section - Lab use only

Received By: D. Reid

Received Date: 04 \ 20 \ 18 (mm\dd\yy)

Received Time: 06 : 35 am / pm (circle)

Received By (signature): D Reid

Custody Seal Present: Y N (circle)

Custody Seal Intact: Y N

Cooling Agent Present: Y N Type: 16

Temperature Upon Receipt (°C) 5x3

LAB LIMS #:

REPORT INFORMATION

Company: Toronto Inspection Ltd.

Contact: Tabitha / Tim

Address: 110 Konrad Cres., Unit 16, Markham, ON

Phone:

Fax:

Email: lab@torontoinspection.com

INVOICE INFORMATION

☑ (same as Report Information)

Company:

Contact: Shannon

Address:

Phone:

Email: shannon@torontoinspection.com

PROJECT INFORMATION

Quotation #:

P.O. #:

Project #: 2477

Site Location/ID: Dundas West

TURNAROUND TIME (TAT) REQUIRED

☑ Regular TAT (5-7days)

TAT's are quoted in business days (exclude statutory holidays & weekends). Samples received after 3pm or on weekends : TAT begins the next business day

RUSH TAT (Additional Charges May Apply) ☐ 1 Day ☐ 2 Days ☐ 3-4 Days

PLEASE CONFIRM RUSH FEASIBILITY WITH SGS REPRESENTATIVE PRIOR TO SUBMISSION

Specify Due Date:

Rush Confirmation ID:

DRINKING WATER SAMPLES (POTABLE WATER FOR HUMAN CONSUMPTION) MUST BE SUBMITTED WITH SGS DRINKING WATER CHAIN OF CUSTODY

REGULATIONS

Regulation 153 (2011):

☐ Table 1 ☐ Res/Park Soil Texture:
☐ Table 2 ☐ Ind/Com ☐ Coarse
☐ Table 3 ☐ Agri/Other ☐ Medium
☐ Table ____ ☐ Fine

Other Regulations:

☐ Reg 347/558 (3 Day min TAT)
☐ PWQO ☐ MMER
☐ CCME ☐ Other:
☐ MISA

Sewer By-Law:

☑ Sanitary
☑ Storm

Municipality: Toronto

RECORD OF SITE CONDITION (RSC) ☐ YES ☑ NO

ANALYSIS REQUESTED

	SAMPLE IDENTIFICATION	DATE SAMPLED	TIME SAMPLED	# OF BOTTLES	MATRIX	STORM & SANI GW Sweep												COMMENTS: Field Filtered (F) Preserved (P)
1	18BH-9	Apr 20, 18	12:00p	17	GW	✓												
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		

Observations/Comments/Special Instructions

Sampled By (NAME): Tim / Sonia	Signature: [signature]	Date: 04 / 20 / 18 (mm/dd/yy)	Pink Copy - Client
Relinquished by (NAME): Tim	Signature: [signature]	Date: 04 / 20 / 18 (mm/dd/yy)	Yellow & White Copy - SGS

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SGS

SAMPLE INTEGRITY REPORT

Project Number: 2477

ONTARIO REGULATION 153/04

SGS Sample ID CA 14429 - APR18

Date / Time Sampled Apr 20/18

Client Sample ID 18BH-9

	ALL
Sample Submission General Sample Integrity Violations	
Temperature >10 C upon receipt if not sampled same day	☐
No evidence of cooling trend initiated if sampled same day	☐
Chain of Custody not submitted	☐
Chain of Custody incomplete	☐
Chain of Custody not signed / dated	☐
Chain of Custody not a current version	☐
Bottles / Samples listed on CoC but not received	☐
Bottles / Samples received but not listed on the CoC	☐
Sample container received empty	☐

Sample Specific Sample Integrity Violations							
Sample received past hold time	☐	☐	☐	☐	☐	☐	☐
Incorrect preservation (including no preservation where required)	☐	☐	☐	☐	☐	☐	☐
Headspace present in VOC vial (aqueous)	☐	☐	☐	☐	☐	☐	☐
Sample(s) received frozen	☐	☐	☐	☐	☐	☐	☐
Bottle(s) broken or damaged in transport	☐	☐	☐	☐	☐	☐	☐
Discrepancy between sample label and chain of custody	☐	☐	☐	☐	☐	☐	☐
Analysis requirements absent / unclear	☐	☐	☐	☐	☐	☐	☐
Missing or incorrect sample label(s)	☐	☐	☐	☐	☐	☐	☐
Inappropriate sample container used	☐	☐	☐	☐	☐	☐	☐
Insufficient number of bottles received	☐	☐	☐	☐	☐	☐	☐
Limited sample volume	☐	☐	☐	☐	☐	☐	☐
Insufficient sample volume	☐	☐	☐	☐	☐	☐	☐
Sample contains multiple phases	☐	☐	☐	☐	☐	☐	☐
Sediment Log							
Groundwater samples contain visible sediment / particulate	☐	☐	☐	☐	☐	☐	☐
Groundwater contains greater than 1cm of sediment / particulate matter in bottle	☐	☐	☐	☐	☐	☐	☐

Additional Comments/Remarks:

No issues upon receipt ☑ Initials: KW

FINAL REPORT

CA14430-APR18 R1

2477 Dundas West

Prepared for

Toronto Inspection Ltd.

FINAL REPORT

First Page

CLIENT DETAILS		LABORATORY DETAILS	
Client	Toronto Inspection Ltd.	Project Specialist	Deanna Edwards, B.Sc, C.Chem
		Laboratory	SGS Canada Inc.
Address	110 Konrad Crescent, Unit 16 Markham, ON L3R 9X2.	Address	185 Concession St., Lakefield ON, K0L 2H0
Contact	Tabitha Lee	Telephone	705-652-2000
Telephone	416-996-3214	Facsimile	705-652-6365
Facsimile	905 940 8192	Email	deanna.edwards@sgs.com
Email	lab@torontoinspection.com; tabitha@torontoinspection.com	SGS Reference	CA14430-APR18
Project	2477 Dundas West	Received	04/20/2018
Order Number		Approved	04/27/2018
Samples	Solution (1)	Report Number	CA14430-APR18 R1
		Date Reported	04/27/2018

COMMENTS

RL - SGS Reporting Limit

Nonylphenol Ethoxylates is the sum of nonylphenol monoethoxylate and nonylphenol diethoxylate.

Total PAH is the sum of anthracene, benzo(a)pyrene, benzo(a)anthracene, benzo(e)pyrene, benzo(b,j)fluoranthene, benzo(k)fluoranthene, benzo(g,h,i)perylene, chrysene, dibenzo(a,h)anthracene, dibenzo(a,i)pyrene, dibenzo(a,j)acridine, 7H-dibenzo(c,g)carbazole, fluoranthene, indeno(1,2,3-c,d)pyrene, perylene, phenanthrene and pyrene..

Temperature of Sample upon Receipt: 6 degrees C
Cooling Agent Present: Yes
Custody Seal Present: Yes

SIGNATORIES

Deanna Edwards, B.Sc, C.Chem

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Client: Toronto Inspection Ltd.
Project: 2477 Dundas West
Project Manager: Tabitha Lee
Samplers: Tim/Sonia

PACKAGE: **SANSEW - General Chemistry** (WATER)

L1 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 1 - Sanitary and Combined Sewer Discharge - BL_100_2016

L2 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 2 - Storm Sewer Discharge - BL_100_2016

Sample Number	8
Sample Name	18BH-11S
Sample Matrix	Solution
Sample Date	20/04/2018

Parameter	Units	RL	L1	L2	Result
General Chemistry					
Biochemical Oxygen Demand (BOD5)	mg/L	2	300	15	< 2
Total Kjeldahl Nitrogen	as N mg/L	0.5	100		< 0.5
Total Suspended Solids	mg/L	2	350	15	32

PACKAGE: **SANSEW - Metals and Inorganics** (WATER)

L1 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 1 - Sanitary and Combined Sewer Discharge - BL_100_2016

L2 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 2 - Storm Sewer Discharge - BL_100_2016

Sample Number	8
Sample Name	18BH-11S
Sample Matrix	Solution
Sample Date	20/04/2018

Parameter	Units	RL	L1	L2	Result
Metals and Inorganics					
Fluoride	mg/L	0.06	10		< 0.06
Cyanide (total)	mg/L	0.01	2	0.02	< 0.01
Aluminum (total)	mg/L	0.001	50		0.291
Antimony (total)	mg/L	0.0002	5		< 0.0002
Arsenic (total)	mg/L	0.0002	1	0.02	0.0007
Cadmium (total)	mg/L	0.000003	0.7	0.008	0.000019
Chromium (total)	mg/L	0.00003	4	0.08	0.00074
Cobalt (total)	mg/L	0.000004	5		0.00175

FINAL REPORT

CA14430-APR18 R1

Client: Toronto Inspection Ltd.
Project: 2477 Dundas West
Project Manager: Tabitha Lee
Samplers: Tim/Sonia

PACKAGE: **SANSEW - Metals and Inorganics** (WATER)

L1 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 1 - Sanitary and Combined Sewer Discharge - BL_100_2016

L2 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 2 - Storm Sewer Discharge - BL_100_2016

Sample Number	8
Sample Name	18BH-11S
Sample Matrix	Solution
Sample Date	20/04/2018

Parameter	Units	RL	L1	L2	Result
Metals and Inorganics (continued)					
Copper (total)	mg/L	0.00002	2	0.04	0.00244
Lead (total)	mg/L	0.00001	1	0.12	0.00066
Manganese (total)	mg/L	0.00001	5	0.05	0.560
Molybdenum (total)	mg/L	0.00001	5		0.00134
Nickel (total)	mg/L	0.0001	2	0.08	0.0073
Phosphorus (total)	mg/L	0.003	10	0.4	0.026
Selenium (total)	mg/L	0.00004	1	0.02	0.00007
Silver (total)	mg/L	0.00005	5	0.12	< 0.00005
Tin (total)	mg/L	0.00001	5		0.00028
Titanium (total)	mg/L	0.00005	5		0.0149
Zinc (total)	mg/L	0.002	2	0.04	0.003

Client: Toronto Inspection Ltd.
Project: 2477 Dundas West
Project Manager: Tabitha Lee
Samplers: Tim/Sonia

PACKAGE: **SANSEW - Microbiology** (WATER)

L1 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 1 - Sanitary and Combined Sewer Discharge - BL_100_2016

L2 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 2 - Storm Sewer Discharge - BL_100_2016

Sample Number	8
Sample Name	18BH-11S
Sample Matrix	Solution
Sample Date	20/04/2018

Parameter	Units	RL	L1	L2	Result
Microbiology					
E. Coli	cfu/100mL	-		200	< 2 ↑

PACKAGE: **SANSEW - Nonylphenol and Ethoxylates** (WATER)

L1 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 1 - Sanitary and Combined Sewer Discharge - BL_100_2016

L2 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 2 - Storm Sewer Discharge - BL_100_2016

Sample Number	8
Sample Name	18BH-11S
Sample Matrix	Solution
Sample Date	20/04/2018

Parameter	Units	RL	L1	L2	Result
Nonylphenol and Ethoxylates					
Nonylphenol	mg/L	0.001	0.02	0.001	< 0.001
Nonylphenol Ethoxylates	mg/L	0.01	0.2	0.01	< 0.01
Nonylphenol diethoxylate	mg/L	0.01			< 0.01
Nonylphenol monoethoxylate	mg/L	0.01			< 0.01

PACKAGE: **SANSEW - Oil and Grease** (WATER)

L1 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 1 - Sanitary and Combined Sewer Discharge - BL_100_2016

L2 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 2 - Storm Sewer Discharge - BL_100_2016

Sample Number	8
Sample Name	18BH-11S
Sample Matrix	Solution
Sample Date	20/04/2018

Parameter	Units	RL	L1	L2	Result

Client: Toronto Inspection Ltd.
Project: 2477 Dundas West
Project Manager: Tabitha Lee
Samplers: Tim/Sonia

PACKAGE: **SANSEW - Oil and Grease** (WATER)

L1 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 1 - Sanitary and Combined Sewer Discharge - BL_100_2016

L2 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 2 - Storm Sewer Discharge - BL_100_2016

Sample Number	8
Sample Name	18BH-11S
Sample Matrix	Solution
Sample Date	20/04/2018

Parameter	Units	RL	L1	L2	Result
Oil and Grease					
Oil & Grease (total)	mg/L	2			< 2
Oil & Grease (animal/vegetable)	mg/L	4	150		< 4
Oil & Grease (mineral/synthetic)	mg/L	4	15		< 4

PACKAGE: **SANSEW - Other (ORP)** (WATER)

L1 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 1 - Sanitary and Combined Sewer Discharge - BL_100_2016

L2 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 2 - Storm Sewer Discharge - BL_100_2016

Sample Number	8
Sample Name	18BH-11S
Sample Matrix	Solution
Sample Date	20/04/2018

Parameter	Units	RL	L1	L2	Result
Other (ORP)					
pH	no unit	0.05	11.5	9.5	7.41
Chromium VI	mg/L	0.0002	2	0.04	< 0.0002
Mercury (total)	mg/L	0.00001	0.01	0.0004	< 0.00001

PACKAGE: **SANSEW - PCBs** (WATER)

L1 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 1 - Sanitary and Combined Sewer Discharge - BL_100_2016

L2 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 2 - Storm Sewer Discharge - BL_100_2016

Sample Number	8
Sample Name	18BH-11S
Sample Matrix	Solution
Sample Date	20/04/2018

Parameter	Units	RL	L1	L2	Result

Client: Toronto Inspection Ltd.
Project: 2477 Dundas West
Project Manager: Tabitha Lee
Samplers: Tim/Sonia

PACKAGE: **SANSEW - PCBs** (WATER)

L1 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 1 - Sanitary and Combined Sewer Discharge - BL_100_2016

L2 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 2 - Storm Sewer Discharge - BL_100_2016

Sample Number	8
Sample Name	18BH-11S
Sample Matrix	Solution
Sample Date	20/04/2018

Parameter	Units	RL	L1	L2	Result
PCBs					
Polychlorinated Biphenyls (PCBs) - Total	mg/L	0.0001	0.001	0.0004	< 0.0001

PACKAGE: **SANSEW - Phenols** (WATER)

L1 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 1 - Sanitary and Combined Sewer Discharge - BL_100_2016

L2 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 2 - Storm Sewer Discharge - BL_100_2016

Sample Number	8
Sample Name	18BH-11S
Sample Matrix	Solution
Sample Date	20/04/2018

Parameter	Units	RL	L1	L2	Result
Phenols					
4AAP-Phenolics	mg/L	0.002	1	0.008	< 0.002

PACKAGE: **SANSEW - SVOCs** (WATER)

L1 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 1 - Sanitary and Combined Sewer Discharge - BL_100_2016

L2 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 2 - Storm Sewer Discharge - BL_100_2016

Sample Number	8
Sample Name	18BH-11S
Sample Matrix	Solution
Sample Date	20/04/2018

Parameter	Units	RL	L1	L2	Result
SVOCs					
di-n-Butyl Phthalate	mg/L	0.002	0.08	0.015	< 0.002
Bis(2-ethylhexyl)phthalate	mg/L	0.002	0.012	0.0088	< 0.002
3,3-Dichlorobenzidine	mg/L	0.0005	0.002	0.0008	< 0.0005

Client: Toronto Inspection Ltd.
Project: 2477 Dundas West
Project Manager: Tabitha Lee
Samplers: Tim/Sonia

PACKAGE: **SANSEW - SVOCs** (WATER)

L1 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 1 - Sanitary and Combined Sewer Discharge - BL_100_2016

L2 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 2 - Storm Sewer Discharge - BL_100_2016

Sample Number	8
Sample Name	18BH-11S
Sample Matrix	Solution
Sample Date	20/04/2018

Parameter	Units	RL	L1	L2	Result
SVOCs (continued)					
Pentachlorophenol	mg/L	0.0005	0.005	0.002	< 0.0005
PAHs (Total)	mg/L	-	0.005	0.002	< 0.001
Perylene	mg/L	0.0005			< 0.0005

PACKAGE: **SANSEW - SVOCs - PAHs** (WATER)

L1 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 1 - Sanitary and Combined Sewer Discharge - BL_100_2016

L2 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 2 - Storm Sewer Discharge - BL_100_2016

Sample Number	8
Sample Name	18BH-11S
Sample Matrix	Solution
Sample Date	20/04/2018

Parameter	Units	RL	L1	L2	Result
SVOCs - PAHs					
7Hdibenzo(c,g)carbazole	mg/L	0.0001			< 0.0001
Anthracene	mg/L	0.0001			< 0.0001
Benzo(a)anthracene	mg/L	0.0001			< 0.0001
Benzo(a)pyrene	mg/L	0.0001			< 0.0001
Benzo(b,j)fluoranthene	mg/L	0.0001			< 0.0001
Benzo[e]pyrene	mg/L	0.0001			< 0.0001
Benzo(ghi)perylene	mg/L	0.0002			< 0.0002
Benzo(k)fluoranthene	mg/L	0.0001			< 0.0001
Chrysene	mg/L	0.0001			< 0.0001
Dibenzo(a,h)anthracene	mg/L	0.0001			< 0.0001
Dibenzo(a,i)pyrene	mg/L	0.0001			< 0.0001

Client: Toronto Inspection Ltd.
Project: 2477 Dundas West
Project Manager: Tabitha Lee
Samplers: Tim/Sonia

PACKAGE: **SANSEW - SVOCs - PAHs** (WATER)

L1 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 1 - Sanitary and Combined Sewer Discharge - BL_100_2016

L2 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 2 - Storm Sewer Discharge - BL_100_2016

Sample Number	8
Sample Name	18BH-11S
Sample Matrix	Solution
Sample Date	20/04/2018

Parameter	Units	RL	L1	L2	Result
SVOCs - PAHs (continued)					
Dibenzo(a,j)acridine	mg/L	0.0001			< 0.0001
Fluroanthene	mg/L	0.0001			< 0.0001
Indeno(1,2,3-cd)pyrene	mg/L	0.0002			< 0.0002
Phenanthrene	mg/L	0.0001			< 0.0001
Pyrene	mg/L	0.0001			< 0.0001

PACKAGE: **SANSEW - VOCs** (WATER)

L1 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 1 - Sanitary and Combined Sewer Discharge - BL_100_2016

L2 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 2 - Storm Sewer Discharge - BL_100_2016

Sample Number	8
Sample Name	18BH-11S
Sample Matrix	Solution
Sample Date	20/04/2018

Parameter	Units	RL	L1	L2	Result
VOCs					
Chloroform	mg/L	0.0005	0.04	0.002	< 0.0005
1,2-Dichlorobenzene	mg/L	0.0005	0.05	0.0056	< 0.0005
1,4-Dichlorobenzene	mg/L	0.0005	0.08	0.0068	< 0.0005
cis-1,2-Dichloroethene	mg/L	0.0005	4	0.0056	< 0.0005
trans-1,3-Dichloropropene	mg/L	0.0005			< 0.0005
Methylene Chloride	mg/L	0.0005	2	0.0052	< 0.0005
1,1,2,2-Tetrachloroethane	mg/L	0.0005	1.4	0.017	< 0.0005
Tetrachloroethylene (perchloroethylene)	mg/L	0.0005	1	0.0044	< 0.0005
Trichloroethylene	mg/L	0.0005	0.4	0.0076	< 0.0005

FINAL REPORT

CA14430-APR18 R1

Client: Toronto Inspection Ltd.
Project: 2477 Dundas West
Project Manager: Tabitha Lee
Samplers: Tim/Sonia

PACKAGE: **SANSEW - VOCs - BTEX** (WATER)

L1 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 1 - Sanitary and Combined Sewer Discharge - BL_100_2016

L2 = SANSEW / WATER / - - Toronto Sewer Use By Law Table 2 - Storm Sewer Discharge - BL_100_2016

Sample Number	8
Sample Name	18BH-11S
Sample Matrix	Solution
Sample Date	20/04/2018

Parameter	Units	RL	L1	L2	Result
VOCs - BTEX					
Benzene	mg/L	0.0005	0.01	0.002	< 0.0005
Ethylbenzene	mg/L	0.0005	0.16	0.002	< 0.0005
Toluene	mg/L	0.0005	0.016	0.002	< 0.0005
Xylene (total)	mg/L	0.0005	1.4	0.0044	< 0.0005
m-p-xylene	mg/L	0.0005			< 0.0005
o-xylene	mg/L	0.0005			< 0.0005

EXCEEDANCE SUMMARY

Parameter	Method	Units	Result	SANSEW / WATER / - - Toronto Sewer Use By Law Table 1 - Sanitary and Combined Sewer Discharge - BL_100_2016 L1	SANSEW / WATER / - - Toronto Sewer Use By Law Table 2 - Storm Sewer Discharge - BL_100_2016 L2
18BH-11S					
Total Suspended Solids	SM 2540D	mg/L	32		15
Manganese	SM 3030/EPA 200.8	mg/L	0.560		0.05

QC SUMMARY

Biochemical Oxygen Demand

Method: SM 5210 I Internal ref.: ME-CA-IENVIEWL-LAK-AN-007

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Biochemical Oxygen Demand (BOD5)	BOD0038-APR18	mg/L	2	< 2	28	30	95	70	130	NV	70	130

Cyanide by SFA

Method: SM 4500 I Internal ref.: ME-CA-IENVISFA-LAK-AN-005

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Cyanide (total)	SKA0157-APR18	mg/L	0.01	<0.01	ND	10	99	90	110	NV	75	125

Fluoride by Specific Ion Electrode

Method: SM 4500 I Internal ref.: ME-CA-IENVIEWL-LAK-AN-014

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Fluoride	EWL0381-APR18	mg/L	0.06	<0.06	1	10	98	90	110	nv	75	125

QC SUMMARY

Hexavalent Chromium by IC

Method: EPA218.6/EPA3060A | Internal ref.: ME-CA-IENVIIC-LAK-AN-008

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Chromium VI	DIO0379-APR18	mg/L	0.0002	<0.0002	8		95			92		

Mercury by CVAAS

Method: EPA 7471A/SM 3112B | Internal ref.: ME-CA-IENVISPE-LAK-AN-004

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Mercury (total)	EHG0023-APR18	mg/L	0.00001	< 0.00001	ND	20	104	80	120	109	70	130

QC SUMMARY

Metals in aqueous samples - ICP-MS

Method: SM 3030/EPA 200.8 | Internal ref.: ME-CA-[ENV]SPE-LAK-AN-006

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Silver (total)	EMS0149-APR18	mg/L	0.00005	<0.00005	ND	20	101	90	110	96	70	130
Aluminum (total)	EMS0149-APR18	mg/L	0.001	<0.001	0	20	107	90	110	98	70	130
Arsenic (total)	EMS0149-APR18	mg/L	0.0002	<0.0002	5	20	103	90	110	109	70	130
Cadmium (total)	EMS0149-APR18	mg/L	0.000003	<0.000003	ND	20	100	90	110	97	70	130
Cobalt (total)	EMS0149-APR18	mg/L	0.000004	<0.000004	10	20	101	90	110	106	70	130
Chromium (total)	EMS0149-APR18	mg/L	0.00003	<0.00003	2	20	102	90	110	108	70	130
Copper (total)	EMS0149-APR18	mg/L	0.00002	<0.00002	1	20	101	90	110	99	70	130
Manganese (total)	EMS0149-APR18	mg/L	0.00001	<0.00001	1	20	103	90	110	78	70	130
Molybdenum (total)	EMS0149-APR18	mg/L	0.00001	<0.00001	12	20	103	90	110	104	70	130
Nickel (total)	EMS0149-APR18	mg/L	0.0001	<0.0001	6	20	101	90	110	102	70	130
Lead (total)	EMS0149-APR18	mg/L	0.00001	<0.00001	0	20	101	90	110	100	70	130
Antimony (total)	EMS0149-APR18	mg/L	0.0002	<0.0002	ND	20	94	90	110	94	70	130
Selenium (total)	EMS0149-APR18	mg/L	0.00004	<0.00004	4	20	103	90	110	113	70	130
Tin (total)	EMS0149-APR18	mg/L	0.00001	<0.00001	5	20	102	90	110	NV	70	130
Titanium (total)	EMS0149-APR18	mg/L	0.00005	<0.00005	2	20	103	90	110	NV	70	130
Zinc (total)	EMS0149-APR18	mg/L	0.002	<0.002	3	20	102	90	110	102	70	130

QC SUMMARY

Metals in aqueous samples - ICP-OES

Method: SM 3030/EPA 200.8 | Internal ref.: ME-CA-[ENV]SPE-LAK-AN-003

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Phosphorus (total)	EMS0149-APR18	mg/L	0.003	<0.003	8	20	101	90	110	NV	70	130

Microbiology

Method: SM 9222D | Internal ref.: ME-CA-[ENV]MIC-LAK-AN-006

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
E. Coli	BAC9323-APR18	cfu/100mL	-	ACCEPTED	SEE NOTE							

QC SUMMARY

Nonylphenol and Ethoxylates

Method: ASTM D7065-06 | Internal ref.: ME-CA-IENVIGC-LAK-AN-015

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Nonylphenol diethoxylate	GCM0327-APR18	mg/L	0.01	< 0.01			117	55	120			
Nonylphenol Ethoxylates	GCM0327-APR18	mg/L	0.01	< 0.01								
Nonylphenol monoethoxylate	GCM0327-APR18	mg/L	0.01	< 0.01			110	55	120			
Nonylphenol	GCM0327-APR18	mg/L	0.001	< 0.001			89	55	120			

Oil & Grease

Method: MOE E3401 | Internal ref.: ME-CA-IENVIGC-LAK-AN-019

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Oil & Grease (total)	GCM0332-APR18	mg/L	2	<2			102	75	125			

QC SUMMARY

Oil & Grease-AV/MS

Method: MOE E3401/SM 5520F | Internal ref.: ME-CA-IENVIGC-LAK-AN-019

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Oil & Grease (animal/vegetable)	GCM0332-APR18	mg/L	4	< 4			NA	70	130			
Oil & Grease (mineral/synthetic)	GCM0332-APR18	mg/L	4	< 4			NA	70	130			

pH

Method: SM 4500 | Internal ref.: ME-CA-IENVIEWL-LAK-AN-006

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
pH	EWL0387-APR18	no unit	0.05	NA	1		100			NA		

QC SUMMARY

Phenols by SFA

Method: SM 5530B-D | Internal ref.: ME-CA-IENVISFA-LAK-AN-006

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
4AAP-Phenolics	SKA0181-APR18	mg/L	0.002	<0.002	NV	10	111	90	110	NV	75	125
4AAP-Phenolics	SKA0202-APR18	mg/L	0.002	<0.002	0	10	119	90	110	110	75	125

Polychlorinated Biphenyls

Method: MOE E3400/EPA 8082A | Internal ref.: ME-CA-IENVIGC-LAK-AN-001

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Polychlorinated Biphenyls (PCBs) - Total	GCM0314-APR18	mg/L	0.0001	<0.0001	NSS	30	106	60	140	NSS	60	140

QC SUMMARY

Semi-Volatile Organics

Method: EPA 3510C/8270D | Internal ref.: ME-CA-[ENV]GC-LAK-AN-005

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
3,3-Dichlorobenzidine	GCM0323-APR18	mg/L	0.0005	< 0.0005	NSS	30	93	30	130	NSS	30	130
7Hdibenzo(c,g)carbazole	GCM0324-APR18	mg/L	0.0001	< 0.0001	NSS	30	109	50	140	NSS	50	140
Anthracene	GCM0324-APR18	mg/L	0.0001	< 0.0001	NSS	30	81	50	140	NSS	50	140
Benzo(a)anthracene	GCM0324-APR18	mg/L	0.0001	< 0.0001	NSS	30	83	50	140	NSS	50	140
Benzo(a)pyrene	GCM0324-APR18	mg/L	0.0001	< 0.0001	NSS	30	83	50	140	NSS	50	140
Benzo(b,j)fluoranthene	GCM0324-APR18	mg/L	0.0001	< 0.0001	NSS	30	92	50	140	NSS	50	140
Benzo[e]pyrene	GCM0324-APR18	mg/L	0.0001	< 0.0001	NSS	30	104	50	140	NSS	50	140
Benzo(ghi)perylene	GCM0324-APR18	mg/L	0.0002	< 0.0002	NSS	30	88	50	140	NSS	50	140
Benzo(k)fluoranthene	GCM0324-APR18	mg/L	0.0001	< 0.0001	NSS	30	96	50	140	NSS	50	140
Bis(2-ethylhexyl)phthalate	GCM0324-APR18	mg/L	0.002	< 0.002	NSS	30	85	50	140	NSS	50	140
Chrysene	GCM0324-APR18	mg/L	0.0001	< 0.0001	NSS	30	87	50	140	NSS	50	140
di-n-Butyl Phthalate	GCM0324-APR18	mg/L	0.002	< 0.002	NSS	30	90	50	140	NSS	50	140
Dibenzo(a,h)anthracene	GCM0324-APR18	mg/L	0.0001	< 0.0001	NSS	30	87	50	140	NSS	50	140
Dibenzo(a,i)pyrene	GCM0324-APR18	mg/L	0.0001	< 0.0001	NSS	30	118	50	140	NSS	50	140
Dibenzo(a,j)acridine	GCM0324-APR18	mg/L	0.0001	< 0.0001	NSS	30	106	50	140	NSS	50	140
Fluroanthene	GCM0324-APR18	mg/L	0.0001	< 0.0001	NSS	30	85	50	140	NSS	50	140
Indeno(1,2,3-cd)pyrene	GCM0324-APR18	mg/L	0.0002	< 0.0002	NSS	30	87	50	140	NSS	50	140
Pentachlorophenol	GCM0324-APR18	mg/L	0.0005	< 0.0005	NSS	30	84	50	140	NSS	50	140
Perylene	GCM0324-APR18	mg/L	0.0005	< 0.0005	NSS	30	106	50	140	NSS	50	140
Phenanthrene	GCM0324-APR18	mg/L	0.0001	< 0.0001	NSS	30	82	50	140	NSS	50	140

QC SUMMARY

Semi-Volatile Organics (continued)

Method: EPA 3510C/8270D | Internal ref.: ME-CA-[ENV]GC-LAK-AN-005

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Pyrene	GCM0324-APR18	mg/L	0.0001	< 0.0001	NSS	30	83	50	140	NSS	50	140

Suspended Solids

Method: SM 2540D | Internal ref.: ME-CA-[ENV]EWL-LAK-AN-004

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Total Suspended Solids	EWL0418-APR18	mg/L	2	< 2	4	10	97	90	110	NA		

Total Nitrogen

Method: SM 4500-N C/4500-NO3- F | Internal ref.: ME-CA-[ENV]SFA-LAK-AN-002

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Total Kjeldahl Nitrogen	SKA0160-APR18	as N mg/L	0.5	<0.5	0	10	99	90	110	110	75	125

QC SUMMARY

Volatile Organics

Method: EPA 5030B/8260C | Internal ref.: ME-CA-[ENV]GC-LAK-AN-004

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
1,1,2,2-Tetrachloroethane	GCM0303-APR18	mg/L	0.0005	<0.0005	NSS	30	97	60	130	NSS	50	140
1,2-Dichlorobenzene	GCM0303-APR18	mg/L	0.0005	<0.0005	NSS	30	95	60	130	NSS	50	140
1,4-Dichlorobenzene	GCM0303-APR18	mg/L	0.0005	<0.0005	NSS	30	94	60	130	NSS	50	140
Benzene	GCM0303-APR18	mg/L	0.0005	<0.0005	NSS	30	93	60	130	NSS	50	140
Chloroform	GCM0303-APR18	mg/L	0.0005	<0.0005	NSS	30	94	60	130	NSS	50	140
cis-1,2-Dichloroethene	GCM0303-APR18	mg/L	0.0005	<0.0005	NSS	30	93	60	130	NSS	50	140
Ethylbenzene	GCM0303-APR18	mg/L	0.0005	<0.0005	NSS	30	92	60	130	NSS	50	140
m-p-xylene	GCM0303-APR18	mg/L	0.0005	<0.0005	NSS	30	93	60	130	NSS	50	140
Methylene Chloride	GCM0303-APR18	mg/L	0.0005	<0.0005	NSS	30	91	60	130	NSS	50	140
o-xylene	GCM0303-APR18	mg/L	0.0005	<0.0005	NSS	30	92	60	130	NSS	50	140
Tetrachloroethylene (perchloroethylene)	GCM0303-APR18	mg/L	0.0005	<0.0005	NSS	30	95	60	130	NSS	50	140
Toluene	GCM0303-APR18	mg/L	0.0005	<0.0005	NSS	30	93	60	130	NSS	50	140
trans-1,3-Dichloropropene	GCM0303-APR18	mg/L	0.0005	<0.0005	NSS	30	96	60	130	NSS	50	140
Trichloroethylene	GCM0303-APR18	mg/L	0.0005	<0.0005	NSS	30	93	60	130	NSS	50	140

QC SUMMARY

Method Blank: a blank matrix that is carried through the entire analytical procedure. Used to assess laboratory contamination.

Duplicate: Paired analysis of a separate portion of the same sample that is carried through the entire analytical procedure. Used to evaluate measurement precision.

LCS/Spike Blank: Laboratory control sample or spike blank refer to a blank matrix to which a known amount of analyte has been added. Used to evaluate analyte recovery and laboratory accuracy without sample matrix effects.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate laboratory accuracy with sample matrix effects.

Reference Material: a material or substance matrix matched to the samples that contains a known amount of the analyte of interest. A reference material may be used in place of a matrix spike.

RL: Reporting limit

RPD: Relative percent difference

AC: Acceptance criteria

Multielement Scan Qualifier: as the number of analytes in a scan increases, so does the chance of a limit exceedance by random chance as opposed to a real method problem. Thus, in multielement scans, for the LCS and matrix spike, up to 10% of the analytes may exceed the quoted limits by up to 10% absolute and the spike is considered acceptable.

Duplicate Qualifier: for duplicates as the measured result approaches the RL, the uncertainty associated with the value increases dramatically, thus duplicate acceptance limits apply only where the average of the two duplicates is greater than five times the RL.

Matrix Spike Qualifier: for matrix spikes, as the concentration of the native analyte increases, the uncertainty of the matrix spike recovery increases. Thus, the matrix spike acceptance limits apply only when the concentration of the matrix spike is greater than or equal to the concentration of the native analyte.

LEGEND

FOOTNOTES

NSS Insufficient sample for analysis.
RL Reporting Limit.
↑ Reporting limit raised.
↓ Reporting limit lowered.
NA The sample was not analysed for this analyte
ND Non Detect

Samples analysed as received. Solid samples expressed on a dry weight basis. "Temperature Upon Receipt" is representative of the whole shipment and may not reflect the temperature of individual samples.

Analysis conducted on samples submitted pursuant to or as part of Reg. 153/04, are in accordance to the Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act" published by the Ministry and dated March 9, 2004 as amended.

SGS provides criteria information (such as regulatory or guideline limits and summary of limit exceedances) as a service. Every attempt is made to ensure the criteria information in this report is accurate and current, however, it is not guaranteed. Comparison to the most current criteria is the responsibility of the client and SGS assumes no responsibility for the accuracy of the criteria levels indicated. This document is issued, on the Client's behalf, by the Company under its General Conditions of Service available on request and accessible at http:/ /www.sgs.com/ terms_and_conditions.htm. The Client's attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any other holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents.

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-- End of Analytical Report --

SGS

SGS Environment, Health and Safety

Request for Laboratory Services and CHAIN OF CUSTODY

No:

Page 1 of 1

- Lakefield: 185 Concession St., Lakefield, ON K0L 2H0 Phone: 705-652-2000 Toll Free: 877-747-7658 Fax: 705-652-6365
- London: 657 Consortium Court, London, ON, N6E 2S8 Phone: 519-672-4500 Toll Free: 877-848-8060 Fax: 519-672-0361 Web: www.ca.sgs.com

Laboratory Information Section - Lab use only

Received By: D. Reid
Received Date: 04 20 18 (mm\dd\yy)
Received Time: 06 : 35 am / pm (circle)

Received By (signature): D Reid
Custody Seal Present: (Y) / N (circle)
Custody Seal Intact: (Y) / N

Cooling Agent Present: (Y) N Type: ICE
Temperature Upon Receipt (°C)

LAB LIMS #: CA 14430-APR18
6x3

REPORT INFORMATION

Company: Toronto Inspection Ltd
Contact: Tabitha / Tim
Address: 110 Konrad Cres, Unit 16, Markham, ON
Phone:
Fax:
Email: lab@torontoinspection.com

INVOICE INFORMATION

☑ (same as Report Information)
Company:
Contact: Shannon
Address:
Phone:
Email: shannon@torontoinspection.com

PROJECT INFORMATION

Quotation #:
P.O. #:
Project #: 2477
Site Location/ID: Dundas West

TURNAROUND TIME (TAT) REQUIRED

☑ Regular TAT (5-7days) — TAT's are quoted in business days (exclude statutory holidays & weekends). Samples received after 3pm or on weekends : TAT begins the next business day

RUSH TAT (Additional Charges May Apply) ☐ 1 Day ☐ 2 Days ☐ 3-4 Days

PLEASE CONFIRM RUSH FEASIBILITY WITH SGS REPRESENTATIVE PRIOR TO SUBMISSION

Specify Due Date:
Rush Confirmation ID:

REGULATIONS

Regulation 153 (2011):
☐ Table 1 ☐ Res/Park Soil Texture: ☐ Coarse
☐ Table 2 ☐ Ind/Com ☐ Medium
☐ Table 3 ☐ Agri/Other ☐ Fine
☐ Table

Other Regulations:
☐ Reg 347/558 (3 Day min TAT)
☐ PWQO ☐ MMER
☐ CCME ☐ Other:
☐ MISA

Sewer By-Law:
☑ Sanitary
☑ Storm
Municipality: Toronto

DRINKING WATER SAMPLES (POTABLE WATER FOR HUMAN CONSUMPTION) MUST BE SUBMITTED WITH SGS DRINKING WATER CHAIN OF CUSTODY

RECORD OF SITE CONDITION (RSC) ☐ YES ☑ NO

ANALYSIS REQUESTED

	SAMPLE IDENTIFICATION	DATE SAMPLED	TIME SAMPLED	# OF BOTTLES	MATRIX	Storm & Sani (GW) Sweep											COMMENTS: Field Filtered (F) Preserved (P)
1	18BH - 11S	Apr 20, 18	12:30p	17	GW	✓											
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	

Observations/Comments/Special Instructions

Sampled By (NAME): Tim / Sonia	**Signature:**	Date: 04 / 20 / 18 (mm/dd/yy)	Pink Copy - Client
Relinquished by (NAME): Tim	**Signature:**	Date: 04 / 20 / 18 (mm/dd/yy)	Yellow & White Copy - SGS

Revision #: 1.1
Date of Issue: 25 July, 2016

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SGS

SAMPLE INTEGRITY REPORT

Project Number: 2477

ONTARIO REGULATION 153/04

SGS Sample ID CA 14430-APR18

Date / Time Sampled Apr 20/18

Client Sample ID 18BH-11S

	ALL
Sample Submission General Sample Integrity Violations	
Temperature >10 C upon receipt if not sampled same day	☐
No evidence of cooling trend initiated if sampled same day	☐
Chain of Custody not submitted	☐
Chain of Custody incomplete	☐
Chain of Custody not signed / dated	☐
Chain of Custody not a current version	☐
Bottles / Samples listed on CoC but not received	☐
Bottles / Samples received but not listed on the CoC	☐
Sample container received empty	☐

Sample Specific Sample Integrity Violations							
Sample received past hold time	☐	☐	☐	☐	☐	☐	☐
Incorrect preservation (including no preservation where required)	☐	☐	☐	☐	☐	☐	☐
Headspace present in VOC vial (aqueous)	☐	☐	☐	☐	☐	☐	☐
Sample(s) received frozen	☐	☐	☐	☐	☐	☐	☐
Bottle(s) broken or damaged in transport	☐	☐	☐	☐	☐	☐	☐
Discrepancy between sample label and chain of custody	☐	☐	☐	☐	☐	☐	☐
Analysis requirements absent / unclear	☐	☐	☐	☐	☐	☐	☐
Missing or incorrect sample label(s)	☐	☐	☐	☐	☐	☐	☐
Inappropriate sample container used	☐	☐	☐	☐	☐	☐	☐
Insufficient number of bottles received	☐	☐	☐	☐	☐	☐	☐
Limited sample volume	☐	☐	☐	☐	☐	☐	☐
Insufficient sample volume	☐	☐	☐	☐	☐	☐	☐
Sample contains multiple phases	☐	☐	☐	☐	☐	☐	☐
Sediment Log							
Groundwater samples contain visible sediment / particulate	☐	☐	☐	☐	☐	☐	☐
Groundwater contains greater than 1cm of sediment / particulate matter in bottle	☐	☐	☐	☐	☐	☐	☐

Additional Comments/Remarks:

No issues upon receipt ☑ Initials: KW

APPENDIX F

Dewatering Calculations

Dewatering Calculations - 2 Levels of Underground Parking

Dewatering Rate Formula for an Unconfined Aquifer (Powers et al., 2007):

$$Q = \frac{\pi K (H^2 - h^2)}{\ln(R_0 / r_s)}$$

Where:

	Parameter	Units	Value
Q = Anticipated pumping rate (m^3/day)	**Q**	**m^3/day**	142.8
K = Hydraulic Conductivity (m/day)	**K**	**m/day**	0.04
H = Distance from initial static water level to bottom of the saturated aquifer (m)	**H**	**m**	10.4
h = Depth of water in the well while pumping (m)	**h**	**m**	1.9
R_0 = Distance from a point of greatest drawdown to a point where there is no drawdown (Radius of influence) (m)	**R_0**	**m**	154.5
r_s = Distance to the wellpoints from the centre of the trench (m), assumed to be half of the trench width	**r_s**	**m**	141.6

Q (L/s) = 1.653

Considering a factor of safety of 2

Required Dewatering Rate:

Q = 286 m^3/day

Q = 3.31 L/s

Radius of Influence Formula (Bear, 1979):

$$R_0 = 2.45\sqrt{\frac{HK}{S_y}t}$$

Where:

	Parameter	Units	Value	
R_0 = Radius of Influence (m), beyond which there is negligible drawdown	**R_0**	**m**	12.8	
H = Distance from initial static water level to bottom of saturated aquifer (m)	**H**	**m**	10.4	
K = Hydraulic conductivity (m/s)	**K**	**m/s**	4.3E-07	
S_y = Specific yield of the aquifer formation	**S_y**		0.20	(Johnson, 1967)
t =Time (s) required to draw the static groundwater level to the desired level (assumed to be equivalent to 14 days)	**t**	**s**	1209600	

APPENDIX G

Water Well Records

Water Well Records

July-10-18

4:50:45 PM

TOWNSHIP CON LOT	UTM	DATE CNTR	CASING DIA	WATER	PUMP TEST	WELL USE	SCREEN	WELL	FORMATION
	17 625395 4834514 W	2005/09 6926					0007 40	6930420 (174653)	BRWN SAND FILL 0006 BRWN SAND SILT WBRG 0023 GREY TILL CLAY SILT 0028 GREY SAND SILT WBRG 0040
	17 625326 4834570 W	2008/03 7241	2.04			MT	0006 10	7104296 (Z92176) A070181	BRWN SAND LOOS 0010 BRWN SAND SILT HARD 0015 GREY SILT SAND WBRG 0017
	17 625347 4834563 W	2008/03 7241	1.99			MT	0006 10	7104295 (Z92172) A070236	BRWN SAND HARD 0008 BRWN SAND SILT LOOS 0012 GREY SILT SAND WBRG 0016
	17 625326 4834573 W	2008/03 7241	1.99			MT	0006 10	7104294 (Z92174) A070179	BRWN SAND HARD 0008 BRWN SAND SILT LOOS 0012 GREY SILT SAND WBRG 0016
	17 625329 4834577 W	2008/03 7241	1.99			MT	0006 10	7104289 (Z92177) A070180	BRWN SAND LOOS 0010 BRWN SAND SILT HARD 0015 GREY SILT SAND WBRG 0017
ETOBICOKE BOROUGH	17 624453 4834779 W	2007/03 7241	1.5				0014 10	7043241 (Z59450) A050296	BRWN FILL GRVL 0003 SAND SILT 0018 SAND SILT 0024
TORONTO CITY	17 625434 4834201 W	2011/11 7241	1.5			MT	0010 10	7174611 (Z143426) A126469	GREY 0000 BRWN SAND GRVL LOOS 0001 BRWN SAND SAND LOOS 0020
TORONTO CITY	17 625446 4834215 W	2011/11 7241	1.5			MT	0010 10	7174612 (Z143423) A126468	BLCK 0000 BRWN SAND GRVL LOOS 0001 BRWN SAND SILT LOOS 0020
TORONTO CITY	17 625446 4834232 W	2011/11 7241	1.5			MT	0008 10	7174613 (Z143428) A126654	BLCK 0000 BRWN SAND GRVL LOOS 0001 BRWN SAND SILT LOOS 0018
TORONTO CITY	17 625468 4834233 W	2011/11 7241	1.5			MT	0010 10	7174614 (Z143424) A126466	BLCK 0000 BRWN SAND GRVL LOOS 0001 BRWN SAND SILT LOOS 0020
TORONTO CITY	17 625411 4834220 W	2011/11 7241	1.5			MT	0010 10	7174615 (Z143427) A126467	BLCK 0000 BRWN SAND GRVL LOOS 0001 BRWN SAND SILT LOOS 0020
TORONTO CITY	17 624886 4835074 W	2012/01 7383						7177602 (M07887) A124297 P	
TORONTO CITY	17 625364 4834722 W	2012/01 6607						7179297 (C16725) A115237 P	

TOWNSHIP CON LOT	UTM	DATE CNTR	CASING DIA	WATER	PUMP TEST	WELL USE	SCREEN	WELL	FORMATION
TORONTO CITY	17 624712 4835395 W	2012/03 6032	1.79			MO	0004 10	7185178 (Z131713) A106887	BRWN SAND LOOS 0004 BLCK SAND SILT LOOS 0013 GREY CLAY SILT DNSE 0015
TORONTO CITY	17 625259 4834630 W	6875	2			MO		7179746 (Z134156) A	
TORONTO CITY	17 625334 4834588 W	2011/11 6607						7173284 (M10456) A115204 P	
TORONTO CITY	17 625261 4834206 W	2012/05 7241	2			MO	0022 5	7182746 (Z151101) A118854	BRWN SAND FILL LOOS 0005 BRWN SAND WBRG 0020 GREY CLAY SILT WBRG 0026
TORONTO CITY	17 625224 4834281 W	2012/05 7241	2			MO	0022 5	7182747 (Z151100) A131127	BRWN FILL GRVL SAND 0007 BRWN SAND WBRG 0018 GREY SILT CLAY WBRG 0026
TORONTO CITY	17 625245 4834198 W	2012/05 7241	2			MO	0018 5	7182748 (Z136695) A132307	BRWN FILL GRVL LOOS 0005 BRWN SAND SILT 0018 GREY CLAY SILT WBRG 0023
TORONTO CITY	17 625250 4834198 W	2012/05 7241	2			MO	0018 5	7182749 (Z136696) A118662	BRWN FILL GRVL SAND 0003 BRWN SAND SILT 0018 GREY CLAY SILT WBRG 0023
TORONTO CITY	17 625038 4834656 W	2011/05 6809						7183441 (M10287) A108342 P	
TORONTO CITY	17 625265 4834616 W	2012/01 6607						7179298 (C16722) A126241 P	
TORONTO CITY	17 625567 4834591 W	2011/06 7241	1.75			MT	0005 10	7166866 (Z134331) A118849	BRWN FILL SAND 0003 GREY SAND WBRG 0015
TORONTO CITY	17 625415 4834590 W	2011/03 6607						7162781 (M08466) A110394 P	
TORONTO CITY	17 625226 4834606 W	2010/10 6607						7163280 (M07373) A100924 P	
TORONTO CITY	17 624945 4834417 W	2011/06 7241	2			MT	0010 5	7164250 (Z134264) A108783	BLCK LOAM LOOS 0000 BRWN SAND SILT LOOS 0012 GREY SAND SILT LOOS 0015
TORONTO CITY	17 624971 4834470 W	2011/06 7241	2			MT	0010 5	7164251 (Z134270) A111589	BLCK LOAM LOOS 0000 BRWN SAND SILT LOOS 0012 GREY SAND SILT LOOS 0015

TOWNSHIP CON LOT	UTM	DATE CNTR	CASING DIA	WATER	PUMP TEST	WELL USE	SCREEN	WELL	FORMATION
TORONTO CITY	17 625044 4834419 W	2011/06 7241	2.08			MT	0010 5	7164252 (Z134271) A108655	BLCK LOAM LOOS 0000 BRWN SAND SILT LOOS 0012 GREY SAND SILT LOOS 0015
TORONTO CITY	17 625053 4834419 W	2011/06 7241	2.08			MT	0010 5	7164253 (Z134272) A108656	GREY 0000 BRWN SAND GRVL LOOS 0001 BRWN SAND SILT LOOS 0012 GREY SAND SILT LOOS 0015
TORONTO CITY	17 624950 4834381 W	2011/06 7241	2.08			MT	0005 5	7164254 (Z134273) A108621	BLCK 0000 BRWN SAND GRVL LOOS 0001 BRWN SAND SILT LOOS 0007 GREY SAND SILT LOOS 0010
TORONTO CITY	17 625574 4834577 W	2011/06 7241	1.25			MT	0006 5	7166578 (Z134339) A118821	GREY SAND SLTY 0010
TORONTO CITY	17 625458 4834215 W	2011/11 7241	1.5			MT	0010 10	7174610 (Z143425) A126652	GREY 0000 BRWN SAND GRVL LOOS 0001 BRWN SAND SILT LOOS 0020
TORONTO CITY	17 625560 4834605 W	2011/06 7241	1.25			MT	0006 5	7166580 (Z134336) A118660	GREY SAND SLTY 0011
TORONTO CITY	17 625271 4834717 W	2011/07 7215						7173973 (Z143112) _NO_TAG	
TORONTO CITY	17 624877 4834765 W	2011/06 7215	2			TH	0008 5	7166964 (Z133657) A111967	BRWN FILL DRY LOOS 0003 BRWN SAND DRY 0010 BRWN SAND WBRG 0015
TORONTO CITY	17 625273 4834781 W	2011/06 6032	1.79			MO	0010 10	7167063 (Z121299) A106832	BRWN FILL PCKD 0005 BRWN SAND GRVL SILT 0020
TORONTO CITY	17 625411 4834686 W	2011/05 6032	1.97	0007		MT	0040 10	7167068 (Z121214) A116459	BRWN SAND 0007 GREY SAND 0016 GREY SILT CLAY 0050
TORONTO CITY	17 625353 4834649 W	2011/08 7241	1.59			MT	0010 5	7167654 (Z134972) A115668	BRWN FILL GRVL LOOS 0002 BRWN SAND SILT SOFT 0005 GREY SAND SILT WBRG 0015
TORONTO CITY	17 625409 4835350 W	2011/08 7215	2			TH	0005 10	7170034 (Z136980) A113873	BRWN SAND FILL DRY 0007 BRWN SAND SILT WBRG 0013 GREY SAND CLAY WBRG 0015
TORONTO CITY	17 624887 4834890 W	2011/09 7215						7172366 (Z136999) A111967 A	
TORONTO CITY	17 625271 4834717 W	2011/07 7215						7172385 (Z133678) A	

TOWNSHIP CON LOT	UTM	DATE CNTR	CASING DIA	WATER	PUMP TEST	WELL USE	SCREEN	WELL	FORMATION
TORONTO CITY	17 625309 4834605 W	2012/03 7215						7188959 (C18100) A054758 P	
TORONTO CITY	17 625554 4834587 W	2011/06 7241	1.25			MT	0004 10	7166579 (Z134338) A118824	GREY SAND SLTY
TORONTO CITY	17 625338 4834609 W	2012/08 7215						7202158 (C19382) P	
TORONTO CITY	17 625274 4834603 W	2012/03 7215						7188957 (C18408) A054758 P	
TORONTO CITY	17 624717 4835411 W	2013/03 6875	3.94	UT 0010		MO	0020 10	7201384 (Z158761) A118618	BRWN FILL SAND GRVL 0003 BRWN SAND SILT WBRG 0030
TORONTO CITY	17 624718 4835405 W	2013/03 6875	3.94	UT 0010		MO	0020 10	7201385 (Z158762) A118619	BRWN FILL SAND GRVL 0003 BRWN SAND SILT WBRG 0030
TORONTO CITY	17 624714 4835413 W	2013/03 6875	3.94	UT 0010		MO	0010 10	7201386 (Z158760) A118617	BRWN FILL SAND GRVL 0003 BRWN SAND SILT WBRG 0030
TORONTO CITY	17 625583 4834596 W	2013/04 7241	1.25			MT	0004 10	7201600 (Z169809) A146523	BRWN FILL SAND LOOS 0002 BRWN SAND SILT LOOS 0008 BRWN SAND SILT DNSE 0012 GREY SILT SAND WBRG 0014
TORONTO CITY	17 625556 4834375 W	2013/04 7241	1			MT	0014 10	7201601 (Z169833) A146560	BRWN SAND GRVL FILL 0006 GREY SILT SAND DNSE 0024
TORONTO CITY	17 625588 4834607 W	2013/04 7241	2			MT	0005 10	7201602 (Z169841) A098614	BRWN SAND GRVL FILL 0004 BRWN SAND SILT SOFT 0014 GREY SAND SILT SOFT 0015
TORONTO CITY	17 625599 4834609 W	2013/04 7241	1.5			MT	0025 5	7200398 (Z167613) A145885	BRWN FILL 0005 BRWN SAND 0011 GREY SILT SAND 0022 GREY CLAY SILT 0030
TORONTO CITY	17 625588 4834607 W	2013/04 7241	2			MT	0028 5	7201604 (Z169840) A146520	BRWN SAND GRVL FILL 0004 BRWN SAND SILT SOFT 0019 GREY CLAY SILT SOFT 0025 GREY CLAY SOFT 0033
TORONTO CITY	17 625582 4834603 W	2013/04 7241	2			MT	0015 5	7200397 (Z167616) A145888	BRWN FILL 0005 BRWN SAND 0010 GREY SILT SAND 0020
TORONTO CITY	17 624626 4834876 W	2013/03 6607	2.00	0006		MO	0005 10	7203750 (Z147991) A141486	SAND GRVL LOOS 0013 GREY SAND GRVL LOOS 0016

TOWNSHIP CON LOT	UTM	DATE CNTR	CASING DIA	WATER	PUMP TEST	WELL USE	SCREEN	WELL	FORMATION
TORONTO CITY	17 624745 4834918 W	2013/03 6607	2.00	FR 0007		MO	0005 10	7203751 (Z147996) A141628	BRWN SAND GRVL LOOS 0011 GREY SAND SILT DNSE 0015
TORONTO CITY	17 624855 4834376 W	2013/11 7241	2			MT	0010 10	7211887 (Z181176) A156152	BRWN FILL GRVL SAND 0006 BRWN SAND 0011 BRWN SAND SILT WBRG 0020
TORONTO CITY	17 624848 4834357 W	2013/11 7241	2			MT	0010 10	7211888 (Z181174) A156153	BRWN SAND GRVL FILL 0006 BRWN SAND 0011 BRWN SAND SILT WBRG 0020
TORONTO CITY	17 625237 4835060 W	2013/10 7215						7212979 (C23539) P	
TORONTO CITY	17 625280 4834637 W	2013/11 7241	2			MT	0024 5	7213476 (Z181336) A155709	BRWN FILL WBRG 0024 GREY SILT SAND CLAY 0029
TORONTO CITY	17 624097 4834361 W	1959/01 4610	6	FR 0118	/150/150/12:0	PS	0118 9	6905492 ()	BLCK MUCK 0008 BLUE CLAY 0015 GRVL MSND CLAY 0050 BLUE CLAY 0118 MSND GRVL 0126
TORONTO CITY	17 625588 4834607 W	2013/04 7241	2			MT	0005 10	7201603 (Z169842) A098675	BRWN SAND GRVL FILL 0004 BRWN SAND SILT SOFT 0014 GREN SAND SILT SOFT 0015
TORONTO CITY	17 624845 4834355 W	2012/11 7241	1.5			MT	0005 10	7192784 (Z160524) A140026	BRWN SAND 0012 BRWN SAND 0015
TORONTO CITY	17 625345 4834639 W	2012/06 7215						7188465 (C18405) P	
TORONTO CITY	17 625137 4834820 W	2011/02 6032	1.97	0010		MT		7162496 (Z121227) A106885	BRWN SAND LOOS 0007 GREY SAND SILT DNSE 0016 GREY CLAY DNSE 0020
TORONTO CITY	17 625300 4834606 W	2012/03 7215						7188958 (C18407) A054758 P	
TORONTO CITY	17 625361 4835168 W	2010/10 7241	0.79			MO		7155870 (M07769) A102957	BRWN FILL 0007 BRWN SAND 0013 GREY SAND SILT 0049
TORONTO CITY	17 625365 4834632 W	2012/03 7215						7188962 (C18098) A090954 P	
TORONTO CITY	17 624567 4834864 W	2012/10 7147	1.97	FR 0007		MO	0005 0	7190852 (Z142280) A137356	BRWN SAND FILL 0015
TORONTO CITY	17 625269 4834775 W	2012/10 6607						7191897 (C19117) A134096 P	

TOWNSHIP CON LOT	UTM	DATE CNTR	CASING DIA	WATER	PUMP TEST	WELL USE	SCREEN	WELL	FORMATION
TORONTO CITY	17 624793 4835022 W	2013/01 7360						7200478 (C21191) A142435 P	
TORONTO CITY	17 624897 4834396 W	2012/11 7241	1.25			MT	0010 5	7192783 (Z160506) A137038	---- 0001 BRWN SAND SILT LOOS 0015
TORONTO CITY	17 624740 4834898 W	2012/08 7241	2.04			MT	0010 10	7187966 (Z157139) A131098	BRWN FILL SAND GRVL 0004 BRWN SILT CLAY DNSE 0010 GREY SILT CLAY SOFT 0015 GREY CLAY SILT SOFT 0020
TORONTO CITY	17 624846 4834375 W	2012/11 7241	2			MT	0008 10	7192785 (Z160526) A140030	BRWN SAND 0012 BRWN SAND 0018
TORONTO CITY	17 624854 4834333 W	2012/11 7241	1.5			MT	0018 10	7192786 (Z160525) A140025	BRWN SAND 0012 BRWN SAND 0022 GREY CLAY 0028
TORONTO CITY	17 624882 4834384 W	2012/11 7241	1.5			MT	0015 10	7192787 (Z160522) A140031	BRWN SAND 0012 BRWN SAND 0025
TORONTO CITY	17 624829 4834119 W	2012/11 7360	2	UT 0015		MO	0030 5	7193374 (Z163522) A142088	BRWN FILL 0005 BRWN SAND 0020 BRWN SAND WBRG 0025 GREY CLAY 0035
TORONTO CITY	17 625277 4834326 W	2012/12 7147						7193390 (C19639) A137357 P	
TORONTO CITY	17 625601 4834585 W	2013/04 7241	2			MT	0015 5	7200395 (Z167614) A145890	BRWN FILL 0005 BRWN SAND 0011 GREY SILT SAND 0020
TORONTO CITY	17 625572 4834584 W	2013/04 7241	2			MT	0015 5	7200396 (Z167615) A145889	BRWN FILL 0005 BRWN SAND 0010 GREY SILT SAND 0020
TORONTO CITY	17 624891 4834376 W	2012/11 7241	1.25			MT	0005 5	7192782 (Z160504) A137039	---- 0000 BRWN SILT SAND LOOS 0010
TORONTO CITY	17 625326 4835442 W	2007/11 6032	0.20			NU	0017 3	7054190 (Z66339) A041616	GREY SILT SAND WBRG 0020
TORONTO CITY	17 625120 4834368 W	2008/09 7241	1.59			MT	0005 10	7112133 (Z88761) A072951	BRWN SAND GRVL LOOS 0010 GREY FSND SILT SOFT 0015
TORONTO CITY	17 625471 4835526 W	2007/02 6032	1.97			NU	0018 3	7042157 (Z46564) A005124	BRWN SAND SILT GRVL 0006 GREY SAND SILT 0017 GREY CLAY SLTY SAND 0017 BRWN SAND 0021 GREY TILL SILT DNSE 0021

TOWNSHIP CON LOT	UTM	DATE CNTR	CASING DIA	WATER	PUMP TEST	WELL USE	SCREEN	WELL	FORMATION
TORONTO CITY	17 624682 4835429 W	2007/03 6032	1.97			NU		7042849 (Z66415) A	
TORONTO CITY	17 624346 4835820 W	2007/03 6926	3.15	0026		NU	0026 7	7042959 (Z70028) A050458	GREY FILL 0007 BRWN SILT SNDY DNSE 0010 BRWN SILT CLAY 0018 BRWN SAND SLTY CLAY 0027 BRWN SAND GRVL 0033
TORONTO CITY	17 624400 4834589 W	2007/04 6607	2.00	FR 0025			0035 10	7043663 (Z70461) A054642	BRWN FILL 0005 BRWN SAND SILT 0025 GREY CLAY SILT 0045
TORONTO CITY	17 624346 4835820 W	2007/05 6926				NU		7044361 (Z70040) A050458 A	GREY FILL 0007 BRWN SILT SNDY 0010 BRWN SILT CLAY 0018 BRWN SILT SNDY CLAY 0027 BRWN SAND GRVL 0033
TORONTO CITY	17 625300 4834648 W	2007/05 6607	2.13	FR 0010			0026 4	7044741 (Z70512) A054758	BRWN SAND 0010 GREY SAND SILT 0024 GREY SILT SAND 0026 GREY CLAY 0030
TORONTO CITY	17 625242 4835487 W	2006/11 6032						7041293 (Z46549) A005124 A	0015 0015
TORONTO CITY	17 625255 4835478 W	2007/10 7241	1.22		///:	MN		7052463 (Z63639) A063649	
TORONTO CITY	17 625311 4834438 W	2007/01 7147	1.25			NU	0008 10	7040697 (Z64321) A048912	GREY 0001 BRWN FILL 0001 BRWN SAND 0018
TORONTO CITY	17 624433 4835571 W	2007/09 6607	2.00	FR 0010		MO		7101083 (M00285) A059271	BRWN FILL 0005 BRWN SAND 0017
TORONTO CITY	17 625269 4834543 W	2008/02 7241	1.99		///:	TH		7102860 (Z62486) A070267	BRWN SAND SOFT 0008 GREY SAND SOFT 0021 GREY SILT FSND DNSE 0025 GREY CLAY SILT DNSE 0028
TORONTO CITY	17 625386 4834718 W	2007/12 7241	2			MT	0024 5	7104559 (M00461) A063276	BRWN FILL SAND LOOS 0002 BRWN SILT CLAY DNSE 0008 BRWN CLAY SILT DNSE 0012 BRWN SAND SILT DNSE 0017 GREY SAND SILT 0022 GREY SILT SAND 0029
TORONTO CITY	17 624510 4835705 W	2007/09 7147	1.25			NU		7105700 (Z65756) A048905	GREY 0001 BRWN FILL 0001 BRWN SAND SILT 0014
TORONTO CITY	17 625257 4834505 W	2008/06 7241	2.04			MO	0017 5	7107937 (M01532) A056728	BRWN SAND GRVL HARD 0003 BRWN SAND DNSE 0019 GREY SAND SILT SOFT 0021 GREY SILT CLAY SOFT 0022
TORONTO CITY	17 624980 4834458 W	2008/07 6946	2.04	FR 0011		MO	0006 9	7108601 (Z86669) A069342	BLCK SAND LOOS 0003 BRWN SAND LOOS 0005 BRWN SAND LOOS 0008 BRWN SAND LOOS 0010 BLCK SAND LOOS 0012 GREY SAND LOOS 0017

TOWNSHIP CON LOT	UTM	DATE CNTR	CASING DIA	WATER	PUMP TEST	WELL USE	SCREEN	WELL	FORMATION
TORONTO CITY	17 624695 4835272 W	2010/04 6988	2.00 2.00			TH		7157289 (M05377) A098120	BRWN FILL LOOS 0002 BRWN SAND LOOS 0007 BRWN SILT SAND DNSE 0021
TORONTO CITY	17 624532 4834945 W	2007/10 7147	1.25	FR 0015		NU		7050788 (Z65765) A048895	BRWN FILL 0015 BRWN SILT FSND 0019
TORONTO CITY	17 624450 4834800 W	2005/06 6607	2.00	0009			0005 10	6929537 (Z28262) A027666	BRWN SAND GRVL FILL 0006 BRWN SAND DRY 0009 BRWN SAND WBRG 0015
TORONTO CITY	17 625219 4835652 W	2004/09 6032	8.27 1.97			NU	0031 5	6928393 (Z05427) A005124	BRWN SAND GRVL HARD 0012 GREY SAND SILT HARD 0026 GREY SILT CLAY GRVL 0035
TORONTO CITY	17 625214 4835652 W	2004/09 6032	1.97			NU		6928394 (Z05410) A005124	BLUE SAND GRVL HARD 0012 GREY SAND SILT HARD 0015
TORONTO CITY	17 625219 4835652 W	2004/09 6032	1.97 1.97			NU	0021 5 0005 10	6928395 (Z05425) A005124	BRWN SAND GRVL HARD 0012 GREY SAND SILT HARD 0026
TORONTO CITY	17 624160 4835815 W	2004/12 7147	1.25			NU	0004 10	6928674 (Z19900) A019631	GREY 0001 BRWN SAND GRVL 0001 SAND 0013
TORONTO CITY	17 625506 4834784 W	2005/02 6809	2				0029 5	6928770 (Z11232) A011176	BRWN SAND FILL 0005 GREY SILT SAND 0030 BRWN TILL 0034
TORONTO CITY	17 625072 4834931 W	2005/05 6607	1.97	FR 0010			0007 10	6929043 (Z28214) A026594	BRWN SAND SILT 0007 GREY SAND SILT 0016
TORONTO CITY	17 625118 4834568 W	2005/08 7241	1.5				0015 5	6929365 (Z34271) A027919 A	BRWN SAND GRVL LOOS 0008 GREY SILT SAND 0019 GREY CLAY SILT SOFT 0020
TORONTO CITY	17 625291 4835513 W	2007/03 7215	0.49				0000 13	7041614 (Z64529) A049079	
TORONTO CITY	17 625381 4834634 W	2005/09 6607	4.92	FR 0006			0016 10	6929491 (Z38171) A034525	BRWN SAND 0013 GREY SAND SILT 0023 GREY SILT CLAY 0029
TORONTO CITY	17 625115 4834367 W	2008/09 7241	1.59			MT	0003 10	7112134 (Z88762) A067603	BRWN SAND GRVL LOOS 0010 GREY SILT FSND SOFT 0013
TORONTO CITY	17 625586 4834582 W	2006/03 7241	1.97				0010 10	6930088 (Z43719) A039311	BRWN GRVL SAND SILT 0001 BRWN SILT FSND WBRG 0008 GREY SILT CSND 0018 GREY CLAY SILT FSND 0020

TOWNSHIP CON LOT	UTM	DATE CNTR	CASING DIA	WATER	PUMP TEST	WELL USE	SCREEN	WELL	FORMATION
TORONTO CITY	17 625234 4834600 W	2006/06 6607	5.98	0007			0012 10	6930515 (Z49063) A043919	BRWN SAND 0010 GREY SAND SLTY WBRG 0020 GREY SILT SNDY 0023 GREY SILT DRY 0025
TORONTO CITY	17 624909 4834324 W	2006/07 6607	2.00	FR 0010			0007 15	6930722 (Z52267) A043891	BRWN FILL 0005 BRWN SAND 0022
TORONTO CITY	17 624469 4834791 W	2006/09 7230	1.97	FR 0015		NU	0009 8	6930758 (Z44342) A045779	BLCK 0001 BRWN SAND SILT DNSE 0015 GREY SAND SILT DNSE 0020
TORONTO CITY	17 624860 4834530 W	2006/09 6607	2.00	FR 0013			0005 15	6930764 (Z54916) A046412	BRWN SAND SILT 0008 BRWN SAND SLTY 0013 GREY SAND SLTY 0016 GREY SILT 0020
TORONTO CITY	17 624757 4834896 W	2006/10 7147	1.25	0005		NU	0001 9	6930780 (Z53724) A044369	GREY 0001 BRWN FILL 0001 BRWN SAND 0010
TORONTO CITY	17 624917 4834740 W	2006/11 7147	1.25			NU	0007 5	6931105 (Z53741) A052301	GREY 0001 FILL SNDY 0005 SILT SNDY 0012
TORONTO CITY	17 625308 4834488 W	2005/08 6607	1.97	FR 0010			0025 5	6929420 (Z34964) A031702	BRWN FSND SILT 0012 GREY SAND SILT 0021 GREY SILT CLAY 0030
TORONTO CITY	17 625330 4835464 W	2010/07 7241	1			MT	0018 2	7150415 (Z118872) A102872	BRWN LOAM LOAM 0001 BRWN SAND LOOS 0006 BRWN SAND WBRG 0013 GREY SAND 0020
TORONTO CITY	17 625115 4834367 W	2008/09 7241	4.03			MT	0001 3	7112132 (Z88763) A072946	BRWN SAND GRVL LOOS 0003 GREY SILT SILT SOFT 0004
TORONTO CITY	17 625363 4835327 W	2009/05 1663	1.25		///:	TH		7130813 (Z94090) A	BLCK LOAM 0004 BRWN SAND 0013 GREY CLAY SAND GRVL 0023 BRWN FSND 0027 GREY CLAY SILT 0056 GREY CLAY GRVL 0063 GREY CLAY 0076 GREY CLAY SAND GRVL 0092 GREY SHLE 0098
TORONTO CITY	17 625443 4834550 W	2009/10 6607	1.25			MO		7133591 (M06151) A092279	BRWN SAND 0010 BRWN SAND SILT 0015
TORONTO CITY	17 625306 4834608 W	2009/09 6809	9.61 2 2			MT		7134551 (M05864) A079798	BRWN SAND 0010 GREY SAND 0026 GREY CLAY 0035
TORONTO CITY	17 625167 4834513 W	2009/11 6032				MO	0005 15	7136019 (Z108623) A083826	BRWN SILT SAND 0020
TORONTO CITY	17 625302 4834639 W	2009/11 7241	2.04			MT		7136657 (M03377) A090954	WHIT ---- HARD 0001 BRWN SAND GRVL LOOS 0003 BRWN SAND SOFT 0011 GREY SAND SOFT 0020 GREY SILT FSND HARD 0025

TOWNSHIP CON LOT	UTM	DATE CNTR	CASING DIA	WATER	PUMP TEST	WELL USE	SCREEN	WELL	FORMATION
TORONTO CITY	17 625302 4834654 W	2009/10 7383	2 2	FR 0015		MT		7140008 (M02112) A068984	BRWN SAND 0010 GREY SAND 0015 GREY SILT SAND 0029
TORONTO CITY	W	2009/07 7241						7130091 (M05747) A072946	
TORONTO CITY	17 624806 4835244 W	2010/07 7241	1.25			MO		7149491 (M07734) A102984	BRWN FILL SAND FILL 0002 BRWN SAND GRVL LOOS 0010 BRWN SILT SAND DNSE 0016
TORONTO CITY	17 625371 4834427 W	2008/01 6607	2.00	UK 0008		MT		7129053 (M00782) A062425	GREY SAND FGRD 0011 GREY SILT CLAY 0024
TORONTO CITY	17 625330 4835464 W	2010/07 7241	1.5			MT	0002 10	7150416 (Z118871) A102887	BRWN LOAM LOAM 0001 BRWN SAND LOOS 0006 BRWN SAND WBRG 0012
TORONTO CITY	17 625285 4834694 W	2008/10 7383						7153354 (M02073) P	
TORONTO CITY	17 625256 4834631 W	2010/08 6607	2.00 2.00			MO		7155583 (M07304) A100949	BRWN SAND CLAY LOOS 0012 GREY SAND SILT DNSE 0022 GREY SILT CLAY DNSE 0022
TORONTO CITY	17 625222 4834606 W	2013/12 7148						7215213 (Z173408) A100924 A	
TORONTO CITY	17 625316 4834425 W	2010/06 6607	2.00			MO		7156402 (M06635) A094877	BRWN SAND FILL HARD 0005 GREY SAND SILT HARD 0015 GREY SILT SAND HARD 0023
TORONTO CITY	17 625273 4834624 W	2013/11 7241	2			MT	0019 5	7213478 (Z181337) A155708	BRWN FILL WBRG 0022 GREY SILT SAND CLAY 0024
TORONTO CITY	17 625255 4835073 W	2010/12 7241	0.58 0.58			TH		7157738 (M03282) A111572	BLCK LOAM LOOS 0008 BRWN SILT SAND LOOS 0039 BRWN SAND SILT LOOS 0066
TORONTO CITY	17 625509 4834433 W	2009/12 7215				TH	0022 5	7144744 (Z099669) A093131	BRWN FILL ---- 0002 BRWN SILT SAND ---- 0008 BRWN MSND WBRG ---- 0025 GREY CLAY ---- 0027
TORONTO CITY	17 625000 4835107 W	2009/04 7147	1.25	FR 0001		TH NU	0005 10	7122873 (Z097759) A085129	0015
TORONTO CITY	17 625220 4834640 W	2008/09 6607				TH		7112527 (M03098) A	

TOWNSHIP CON LOT	UTM	DATE CNTR	CASING DIA	WATER	PUMP TEST	WELL USE	SCREEN	WELL	FORMATION
TORONTO CITY	17 625277 4834359 W	2008/05 6607	2.00			MO		7113903 (M02441) A069669	BRWN FILL SAND 0005 BRWN SAND SILT 0015 GREY SAND SILT 0020 GREY SILT CLAY 0025 GREY CLAY 0031
TORONTO CITY	17 625418 4834502 W	2008/06 6607	2.00	UK 0020		NU		7113904 (M02421) A069721	BRWN SAND GRVL 0005 BRWN SAND 0020 GREY SAND SILT 0022 GREY SILT CLAY 0029
TORONTO CITY	17 625374 4835092 W	2008/10 7147	1.25				0010 10	7114222 (Z88585) A078862	BLCK ---- 0001 BRWN FILL 0001 BRWN SAND 0015 BRWN SAND SLTY WBRG 0020
TORONTO CITY	17 625339 4834326 W	7241	1.02			MT	0010 9	7115665 (Z89564) A072877 A	
TORONTO CITY	17 625355 4834551 W	7241				MO		7116147 (M01506) A070179	
TORONTO CITY	17 624736 4835433 W	2008/11 7215				TH	0004 10	7117830 (Z93474) A079263	BRWN SAND WBRG 0014
TORONTO CITY	17 625321 4835437 W	2009/05 1663	6.11		///:	TH		7130812 (Z94091) A	BRWN FSND 0010 GREY CLAY SAND LYRD 0019 GREY CLAY SILT LYRD 0058 GREY CLAY GRVL SAND 0070 GREY CLAY HARD 0077 GREY CLAY GRVL SAND 0082 GREY SHLE 0085
TORONTO CITY	17 624995 4835094 W	2009/04 7147	1.25	FR 0001		TH NU	0005 10	7122872 (Z097758) A085129	0015
TORONTO CITY	17 625326 4834330 W	2010/05 6607				MO		7160553 (M06628) A072877 A	
TORONTO CITY	17 624939 4834362 W	2009/06 7241	4.03			MT	0005 10	7124443 (Z096532) A086758	BRWN SAND LOOS 0012 GREY SAND SILT LOOS 0016
TORONTO CITY	17 624947 4834346 W	2009/06 7241	1.36			MT	0005 10	7124444 (Z099428) A086658	BRWN SAND SILT LOOS 0010 GREY SAND SILT DNSE 0015
TORONTO CITY	17 624950 4834350 W	2009/06 7241	1.36			MT	0004 10	7124445 (Z099429) A086659	BRWN SAND SILT LOOS 0010 GREY SAND SILT DNSE 0014
TORONTO CITY	17 624953 4834353 W	2009/06 7241	1.36			MT	0005 10	7124446 (Z099430) A086660	BRWN SAND SILT LOOS 0010 GREY SAND SILT DNSE 0015
TORONTO CITY	17 625266 4835285 W	2009/05 7215	2			TH	0004 8	7126912 (Z096268) A083676	BRWN GRVL SAND 0005 BRWN SAND SILT 0012

TOWNSHIP CON LOT	UTM	DATE CNTR	CASING DIA	WATER	PUMP TEST	WELL USE	SCREEN	WELL	FORMATION
TORONTO CITY	17 625002 4834959 W	2009/04 6607	2.00			MO		7127688 (M05156) A	
TORONTO CITY	17 623981 4834539 W	2008/01 6032	1.97			NU	0048 11	7128334 (Z66433) A062180	BRWN LOAM SAND SOFT 0003 BRWN SAND DRY DNSE 0048 BRWN SAND WBRG 0058
TORONTO CITY	17 625216 4834593 W	2009/02 7215				TH	0005 10	7120177 (Z93435) A075210	BRWN SAND DRY 0008 GREY SAND SLTY 0014 GREY SAND SLTY 0015
TORONTO CITY	17 624566 4834852 W	2016/12 7241	1.25			MT	0020 10	7280055 (Z247668) A211517	BLCK 0000 BRWN SAND FILL 0013 BRWN SILT 0020
TORONTO CITY	17 625449 4834777 W	2016/09 6607						7278839 (C28869) A209872 P	
TORONTO CITY	17 625141 4835759 W	2016/10 6607						7278840 (C28899) A209805 P	
TORONTO CITY	17 625313 4834439 W	2016/12 7238	2			MO	0045 5	7279019 (Z232742) A213510	BRWN FILL 0010 BRWN SAND 0015 BRWN SAND WBRG 0022 GREY CLAY SLTY SOFT 0040 GREY CLAY 0045 GREY CLAY HARD 0050
TORONTO CITY	17 625300 4834400 W	2016/12 7238	2			MO	0020 10	7279020 (Z232741) A213509	BLCK FILL 0005 BRWN SAND DRY 0018 BRWN SAND WBRG 0022 GREY CLAY SOFT 0045 GREY CLAY HARD 0050
TORONTO CITY	17 625311 4834368 W	2016/12 7238	2			MO	0010 10	7279021 (Z232740) A213508	BRWN SAND GRVL 0005 BRWN SAND DRY 0018 BRWN SAND WBRG 0025 GREY CLAY 0030
TORONTO CITY	17 625277 4834370 W	2016/12 7238	2			MO	0010 10	7279022 (Z232744) A213512	FILL 0005 BRWN SAND DRY 0015 BRWN SAND WBRG 0020
TORONTO CITY	17 625271 4834357 W	2016/12 7238	2			MO	0010 10	7279023 (Z232739) A213507	BRWN SAND GRVL 0005 BRWN SAND DRY 0015 BRWN SAND WBRG 0022 GREY CLAY 0030
TORONTO CITY	17 624986 4835171 W	2016/12 7230						7283305 (C36642) A220765 P	
TORONTO CITY	17 624154 4835832 W	2016/12 7241	1.25			MT	0015 10	7280053 (Z247662) A205756	GREY CLAY SAND SLTY 0025
TORONTO CITY	17 624822 4834755 W	2016/11 7241	2			MT	0035 5	7277854 (Z247504) A211625	BRWN FSND SILT 0012 GREY FSND SILT WBRG 0032 GREY CLAY 0040

TOWNSHIP CON LOT	UTM	DATE CNTR	CASING DIA	WATER	PUMP TEST	WELL USE	SCREEN	WELL	FORMATION
TORONTO CITY	17 625152 4835711 W	2017/01 7360	2			MO	0030 10	7280939 (Z251780) A	
TORONTO CITY	17 625129 4835769 W	2017/01 7360	2			MO	0025 10	7280940 (Z251779) A	
TORONTO CITY	17 625349 4834621 W	2016/10 6607						7281065 (C28909) P	
TORONTO CITY	17 625396 4834663 W	2016/10 6607						7281066 (C28906) A209800 P	
TORONTO CITY	17 624750 4834913 W	2017/01 6032						7281566 (Z229006) A	
TORONTO CITY	17 624619 4834886 W	2016/09 6032	2			MO	0005 10	7281567 (Z229064) A	
TORONTO CITY	17 625485 4835145 W	2017/08 7241	1				0003 7	7295922 (Z268000) A179451	GREY HARD 0000 BRWN SAND SILT SOFT 0004 BRWN SAND CLAY DNSE 0020
TORONTO CITY	17 625297 4834343 W	2016/12 7238	2			MO	0010 10	7279024 (Z232743) A213511	BLCK FILL 0005 BRWN SAND 0015 BRWN SAND WBRG 0020
TORONTO CITY	17 624982 4834370 W	2016/11 6926						7276706 (C36277) A190499 P	
TORONTO CITY	17 624591 4835640 W	2015/04 7215						7270779 (C29318) A178707 P	
TORONTO CITY	17 625293 4834618 W	2013/11 7241	2			MT	0023 5	7213477 (Z181338) A155618	BRWN FILL 0026 GREY SILT SAND 0028
TORONTO CITY	17 625555 4834574 W	2016/08 6607	2.00			MO	0028 10	7274716 (Z229241) A209729	BRWN SAND LOOS 0009 GREY SILT SAND DNSE 0023 GREY SILT CLAY SOFT 0038
TORONTO CITY	17 625580 4834588 W	2016/08 6607	2.00			MO	0011 10	7274717 (Z229242) A209730	BRWN SAND FILL 0004 GREY SILT SAND DNSE 0017 GREY SILT CLAY LOOS 0021
TORONTO CITY	17 625558 4834598 W	2016/08 6607	2.00			MO	0002 10	7274732 (Z229237) A209734	BRWN SAND FILL 0006 GREY SILT SAND DNSE 0012
TORONTO CITY	17 625553 4834574 W	2016/08 6607	2.00			MO	0008 10	7274733 (Z229238) A209732	BRWN SAND FILL 0009 GREY SILT SAND DNSE 0018

TOWNSHIP CON LOT	UTM	DATE CNTR	CASING DIA	WATER	PUMP TEST	WELL USE	SCREEN	WELL	FORMATION
TORONTO CITY	17 625597 4834603 W	2016/08 6607	2.00			MO	0012 10	7274734 (Z229239) A209731	BRWN SAND FILL 0010 GREY SILT SAND DNSE 0017 GREY SILT CLAY SOFT 0022
TORONTO CITY	17 625433 4834826 W	2016/09 6607						7278838 (C28882) A209872 P	
TORONTO CITY	17 625807 4834223 W	2016/11 7147						7275771 (C35659) A198606 P	
TORONTO CITY	17 624867 4834737 W	2016/11 7241	2			MT	0035 5	7277855 (Z247501) A211626	BRWN FSND 0014 GREY FSND SILT WBRG 0032 GREY CLAY 0040
TORONTO CITY	17 624195 4835836 W	2016/11 7241	1.5			MT	0015 10	7277787 (Z245693) A205757	GREY CLAY SLTY LOOS
TORONTO CITY	17 624175 4835825 W	2016/11 7241	1.5				0015 10	7277788 (Z245688) A211496	GREY CLAY SLTY LOOS
TORONTO CITY	17 624177 4835825 W	2016/11 7241	1.5			MT	0015 10	7277790 (Z245690) A211499	GREY CLAY SLTY LOOS 0025
TORONTO CITY	17 624901 4834800 W	2016/11 7241	2			MT	0010 10	7277850 (Z247493) A211620	BRWN FSND 0013 GREY SILT SAND WBRG 0020
TORONTO CITY	17 624904 4834786 W	2016/11 7241	2			MT	0010 10	7277851 (Z247492) A211622	BRWN FSND 0012 GREY SILT SAND WBRG 0020
TORONTO CITY	17 624885 4834755 W	2016/11 7241	2			MT	0010 10	7277852 (Z247506) A211623	BRWN FSND 0013 GREY SILT SAND WBRG 0020
TORONTO CITY	17 624890 4834789 W	2016/11 7241	2			MT	0010 10	7277853 (Z247505) A211624	BRWN FSND 0013 GREY SILT SAND WBRG 0020
TORONTO CITY	17 624169 4835821 W	2016/12 7383	2	0020			0014 10	7284285 (Z241890) A211806	SILT SNDY 0016 SAND 0024
TORONTO CITY	17 625550 4835388 W	2016/07 7558						7274928 (C34383) P	
TORONTO CITY	17 625417 4835507 W	2017/07 7241	1			TH MO	0005 10	7293091 (Z263310) A217468	BRWN SAND CLAY SOFT 0008 GREY SAND SILT HARD 0014 GREY SILT SAND HARD 0015

TOWNSHIP CON LOT	UTM	DATE CNTR	CASING DIA	WATER	PUMP TEST	WELL USE	SCREEN	WELL	FORMATION
TORONTO CITY	17 625238 4834755 W	2017/06 7472	2			MO	0010 10	7292326 (Z259511) A227423	BRWN FILL PCKD 0005 BRWN SAND GRVL SILT 0020
TORONTO CITY	17 625263 4834756 W	2017/06 7472	2			MO	0010 10	7292327 (Z259509) A227422	BRWN FILL PCKD 0005 BRWN SAND GRVL SILT 0020
TORONTO CITY	17 625266 4834777 W	2017/06 7472	2			MO	0010 10	7292328 (Z259510) A227421	BRWN FILL PCKD 0005 BRWN SAND GRVL SILT 0020
TORONTO CITY	17 624204 4835831 W	2017/07 7383	2			MN	0015 10	7292830 (Z257836) A226364	BLCK FILL SOFT 0005 BRWN SAND SOFT 0010 GREY SILT SAND SOFT 0020 GREY SAND SOFT 0025
TORONTO CITY	17 624212 4835810 W	2017/07 7241	1.25			TH MO	0023 10	7293004 (Z263316) A217490	GREY 0000 BRWN FILL LOOS 0005 BRWN SAND LOOS 0010 BRWN SILT CLAY LOOS 0015 BRWN SILT CLAY DNSE 0020 GREY SILT CLAY DNSE 0023
TORONTO CITY	17 624167 4835834 W	2017/07 7241	1			TH MO	0035 5	7293005 (Z263596) A221860	BRWN SAND SILT FSND 0020 BRWN CSND 0020 GREY SILT SAND 0040
TORONTO CITY	17 624158 4835825 W	2017/07 7241	2			TH MO	0015 10	7293006 (Z263598) A221776	BRWN SAND SILT FSND 0019 BRWN CSND 0025
TORONTO CITY	17 625321 4834723 W	2017/01 7472	0.75			MO	0015 5	7282066 (Z252488) A214732	BRWN LOAM 0002 BRWN SAND SILT PCKD 0010 GREY SAND SILT PCKD 0020
TORONTO CITY	17 625405 4835509 W	2017/07 7241	0.49			TH MO	0003 33	7293090 (Z263309) A217469	BRWN SAND CLAY SOFT 0023 GREY SAND SILT HARD 0046
TORONTO CITY	17 625218 4834720 W	2017/05 7241	2				0010	7290052 (Z258396) A	
TORONTO CITY	17 624218 4835831 W	2017/07 7383	2			TH MO	0085 10	7293918 (Z257799) A226248	
TORONTO CITY	17 624320 4835673 W	7215						7294571 (C33244) A230097 P	
TORONTO CITY	17 624221 4835824 W	2017/08 7241	2			TH MO	0015 10	7295912 (Z268112) A233942	BRWN SILT CLAY 0015 GREY SILT SAND 0025
TORONTO CITY	17 624211 4835828 W	2017/08 7241	2			TH MO	0043 10	7295913 (Z268113) A233943	BRWN SILT SAND 0015 GREY SILT SAND 0053

TOWNSHIP CON LOT	UTM	DATE CNTR	CASING DIA	WATER	PUMP TEST	WELL USE	SCREEN	WELL	FORMATION
TORONTO CITY	17 625480 4835162 W	2017/08 7241	1			TH MO	0003 7	7295919 (Z267985) A233939	GREY HARD 0000 BRWN SAND SOFT 0004 BRWN SAND CLAY DNSE 0010
TORONTO CITY	17 625472 4835166 W	2017/08 7241	1			TH MO	0003 7	7295920 (Z267984) A233940	GREY HARD 0000 BRWN SAND SILT SOFT 0004 BRWN SAND CLAY DNSE 0010
TORONTO CITY	17 625476 4835154 W	2017/08 7241	1			TH MO	0000 10	7295921 (Z267983) A233941	GREY HARD 0000 BRWN SAND SOFT 0004 BRWN SAND CLAY DNSE 0010
TORONTO CITY	17 624153 4835826 W	2017/07 7241	2			TH MO	0015 10	7293007 (Z263597) A217565	BRWN SAND SILT 0019 BRWN CSND 0025
TORONTO CITY	17 625123 4834792 W	2017/04 6607						7288740 (Z248309) A	
TORONTO CITY	17 624152 4835823 W	2016/12 7383	2	0020		MO	0014 10	7284286 (Z241889) A212812	SILT SNDY 0016 SAND
TORONTO CITY	17 625568 4835186 W	2016/12 7383	2			MO	0030 10	7284329 (Z241891) A212087	
TORONTO CITY	17 625568 4835187 W	2016/12 7383	2			TH	0010 5	7284330 (Z241892) A212088	
TORONTO CITY	17 625623 4835226 W	2016/12 7383	2			MN	0010 5	7284331 (Z241893) A212177	
TORONTO CITY	17 625622 4835221 W	2016/12 7383	2			MO	0068 10	7284332 (Z241894) A212178	
TORONTO CITY	17 625588 4835189 W	2016/12 7383	2			MO	0070 10	7284333 (Z241955) A212179	
TORONTO CITY	17 625588 4835189 W	2016/12 7383	2			MO	0010 5	7284334 (Z241957) A212181	
TORONTO CITY	17 624865 4834678 W	2017/06 7241	1.5			TH MO	0009 10	7291150 (Z261161) A208749	BRWN HARD 0000 BRWN FILL GRVL LOOS 0002 BRWN SAND HARD 0014 GREY SAND SILT HARD 0019
TORONTO CITY	17 624375 4834361 W	2016/11 6988	2.00				0020 10	7284471 (Z221773) A194659	BRWN SAND SILT 0030

TOWNSHIP CON LOT	UTM	DATE CNTR	CASING DIA	WATER	PUMP TEST	WELL USE	SCREEN	WELL	FORMATION
TORONTO CITY	17 625185 4834712 W	2017/05 7241	2				0015	7290053 (Z258398) A	
TORONTO CITY	17 625125 4834791 W	2017/04 6607						7288744 (Z248304) A	
TORONTO CITY	17 625364 4835173 W	7147						7289190 (C38298) A216324 P	
TORONTO CITY	17 624291 4835705 W	2017/05 7241	2			TH MO	0010 13	7289914 (Z258082) A209010	BLCK ---- 0000 BRWN SAND SILT 0016 GREY SAND SILT 0023
TORONTO CITY	17 624310 4835692 W	2017/05 7241	2			TH MO	0013 10	7289915 (Z258081) A208912	GREY ---- 0001 BRWN SAND SILT 0016 GREY SAND SILT 0023
TORONTO CITY	17 624326 4835687 W	2017/05 7241	2			TH MO	0015 10	7289916 (Z258080) A208914	BLCK ---- 0000 BRWN SAND SILT 0016 GREY SAND SILT 0025
TORONTO CITY	17 625139 4834826 W	2017/05 7241	1				0024	7290050 (Z258399) A106885 A	
TORONTO CITY	17 625167 4834786 W	2017/05 7241	2				0022	7290051 (Z258397) A	
TORONTO CITY	17 624982 4834370 W	2016/06 6926						7269342 (C32624) A190499 P	
TORONTO CITY	17 625588 4835189 W	2016/12 7383	2			MO	0030 10	7284335 (Z241956) A212180	
TORONTO CITY	17 625366 4834632 W	2014/09 7241						7228452 (Z195836) A	
TORONTO CITY	17 625391 4834661 W	2016/07 6607	2.00	UT 0007		MO	0018 5	7268938 (Z229133) A202770	BRWN SAND SILT LOOS 0005 GREY SAND SILT LOOS 0023
TORONTO CITY	17 624962 4834755 W	2014/08 7241	1.25			MT	0010 5	7228360 (Z194896) A166968	GREY 0000 BRWN FILL 0002 BRWN SAND SILT 0010 GREY SILT SAND 0015
TORONTO CITY	17 625550 4835068 W	2014/09 7241	2			MT	0005 10	7228387 (Z195852) A171049 A	BLCK 0004 BRWN SAND GRVL 0005 BRWN SILT SAND 0008 GREY SILT SAND 0015
TORONTO CITY	17 625550 4835079 W	2014/09 7241	2			MT	0010 10	7228388 (Z195849) A170586	BLCK 0004 BRWN SAND GRVL 0006 BRWN SILT SAND 0009 GREY SILT SAND 0020

TOWNSHIP CON LOT	UTM	DATE CNTR	CASING DIA	WATER	PUMP TEST	WELL USE	SCREEN	WELL	FORMATION
TORONTO CITY	17 625554 4835072 W	2014/09 7241	2			MT	0005 10	7228389 (Z195850) A171050	BLCK 0004 BRWN SAND GRVL 0005 BRWN SAND SILT 0009 GREY SILT SAND 0015
TORONTO CITY	17 625549 4835071 W	2014/09 7241	2			MT	0005 10	7228390 (Z195851) A171045	BLCK 0004 BRWN SAND GRVL 0005 BRWN SAND SILT 0009 GREY SILT SAND 0015
TORONTO CITY	17 625338 4834620 W	2014/09 7241						7228449 (Z195838) A	
TORONTO CITY	17 625273 4834652 W	2014/07 7241	2.04			MT	0018 5	7227807 (Z193737) A169668	BRWN SAND FILL DNSE 0005 BRWN SAND SILT DNSE 0011 BRWN SAND SILT LOOS 0015 BRWN SILT SAND LOOS 0023
TORONTO CITY	17 625354 4834626 W	2014/09 7241						7228451 (Z195837) A	
TORONTO CITY	17 625262 4834669 W	2014/07 7241	2.04			MT	0017 5	7227806 (Z193736) A169665	BRWN SAND FILL DNSE 0005 BRWN SAND SILT DNSE 0010 BRWN SAND SILT LOOS 0015 BRWN SILT SAND LOOS 0022
TORONTO CITY	17 625295 4834611 W	2014/09 7241						7228453 (Z195832) A	
TORONTO CITY	17 625272 4834626 W	2014/09 7241						7228454 (Z195953) A	
TORONTO CITY	17 625463 4834201 W	2014/08 7215						7229244 (C26784) A169215 P	
TORONTO CITY	17 623944 4835821 W	6490						7231827 (C08465) A058618 P	
TORONTO CITY	17 624439 4835775 W	2014/04 7360						7233000 (C25982) A158557 P	
TORONTO CITY	17 624791 4834767 W	2014/12 7147						7234126 (C26942) A175827 P	
TORONTO CITY	17 625598 4834602 W	2016/08 6607	2.00			MO	0032 10	7274670 (Z229240) A209733	BRWN SAND LOOS 0010 GREY SILT SAND DNSE 0024 GREY SILT CLAY SOFT 0042
TORONTO CITY	17 625330 4835742 W	2015/01 7147						7236598 (C26969) A175814 P	
TORONTO CITY	17 625320 4834612 W	2014/09 7241						7228450 (Z195839) A	

TOWNSHIP CON LOT	UTM	DATE CNTR	CASING DIA	WATER	PUMP TEST	WELL USE	SCREEN	WELL	FORMATION
TORONTO CITY	17 625303 4834653 W	2014/05 7241	2			MT	0018 5	7222847 (Z188071) A165003	BRWN SAND 0014 GREY SAND SILT 0023
TORONTO CITY	17 623942 4835823 W	2013/10 1663	2	UT	21///:	MO	0042 20	7215299 (Z170260) A147059	BRWN FILL 0005 BRWN FSND SILT 0025 BRWN CLAY SILT 0031 BRWN FSND 0060
TORONTO CITY	17 623968 4835818 W	2013/09 1663	6.25 5 5 5	UT	22/26/9/3:	DE	0024 110040 12	7215302 (Z170263) A147057	BRWN FILL 0006 BRWN CLAY 0008 BRWN FSND 0054 GREY SAND SLTY 0068
TORONTO CITY	17 625367 4834586 W	2014/02 7241	2			MT	0005 10	7217438 (Z165715) A159232	BRWN FILL 0005 BRWN SAND SILT 0015
TORONTO CITY	17 624007 4834703 W	7360						7217793 (C25217) A146872 P	
TORONTO CITY	17 624439 4835775 W	2013/11 7360						7219185 (C25227) A158557 P	
TORONTO CITY	17 624202 4834694 W	2013/08 7241	2			MT	0008 10	7221121 (Z178001) A154119	BLCK 0000 GREY 0001 BRWN SAND SILT LOOS 0018
TORONTO CITY	17 624155 4834673 W	2013/08 7241	2			MT	0008 10	7221122 (Z178002) A154109	BLCK 0000 GREY 0001 BRWN SAND SILT LOOS 0018
TORONTO CITY	17 624962 4834750 W	2014/08 7241	1.25			MT	0009 5	7228359 (Z194895) A167820	GREY 0000 BRWN FILL 0002 BRWN SAND SILT 0010 GREY SILT SAND 0014
TORONTO CITY	17 625298 4834653 W	2014/05 7241	2			MT	0018 5	7222846 (Z188072) A165004	BRWN SAND 0014 GREY SILT SAND 0022
TORONTO CITY	17 625150 4834734 W	2014/09 7247	0.75	UT 0010		MT	0015 5	7238174 (Z198492) A167230	BRWN SAND GRVL FILL 0002 BRWN FSND SLTY CLAY 0022 GREY CLAY SLTY SAND 0029
TORONTO CITY	17 625303 4834650 W	2014/05 7241	2			MT	0018 5	7222848 (Z188077) A165002	BRWN SAND 0014 GREY SILT SAND 0023
TORONTO CITY	17 625300 4834649 W	2014/05 7241	2			MT	0017 5	7222849 (Z188076) A165001	BRWN SAND 0014 GREY SILT SAND 0022
TORONTO CITY	17 624939 4834749 W	2014/04 7147						7223351 (C25024) A149672 P	

TOWNSHIP CON LOT	UTM	DATE CNTR	CASING DIA	WATER	PUMP TEST	WELL USE	SCREEN	WELL	FORMATION
TORONTO CITY	17 624337 4834184 W	2014/05 7360						7223425 (C22299) A163719 P	
TORONTO CITY	17 625819 4834254 W	2014/07 7215						7223751 (C26101) A163914 P	
TORONTO CITY	17 623944 4835833 W	2014/06 1663	5 5 5	UT	7/9/18/1:	DE	0023 4 0035 21	7225337 (Z185864) A147003	BRWN FILL 0002 BRWN CLAY SLTY 0017 BRWN FSND 0025 GREY CLAY SILT 0030 GREY SAND CLAY LYRD 0034 GREY SAND SILT 0036 GREY MSND 0044 GREY FSND SILT 0046 GREY SILT SAND CLAY 0059
TORONTO CITY	17 624210 4834680 W	2014/07 7360						7225733 (C20478) A163719 P	
TORONTO CITY	17 624864 4834733 W	2014/04 7215						7226140 (C25515) A162692 P	
TORONTO CITY	17 625278 4834653 W	2014/05 7241	2			MT	0017 5	7222845 (Z188078) A165005	BRWN SAND 0014 GREY SILT SAND 0022
TORONTO CITY	17 625540 4835067 W	2016/02 7241	2			MT	0005 10	7258682 (Z226139) A200976	BLCK 0003 BRWN SAND GRVL 0010 GREY SAND SILT 0025
TORONTO CITY	17 625416 4834223 W	2014/11 6926						7236312 (C28501) A162885 P	
TORONTO CITY	17 625324 4835168 W	2015/08 6607						7249820 (C27595) A179781 P	
TORONTO CITY	17 624521 4835782 W	2015/09 6902	2.00			MO	0015 10	7250645 (Z211035) A174871	BLCK HARD DNSE 0000 GREN SAND GRVL 0001 BRWN SAND LOAM LOOS 0003 BRWN SAND SLTY SOFT 0010 GREN SAND SILT WBRG 0015 GREN SILT SAND CLAY 0025
TORONTO CITY	17 625266 4835295 W	2015/02 7215						7253055 (C27864) A178661 P	
TORONTO CITY	17 623968 4835818 W	2015/11 1663	5	UT		NU		7254226 (Z185984) A147057 A	
TORONTO CITY	17 623944 4835833 W	2015/11 1663	5 5	UT		NU	0024 3 0035 21	7254230 (Z185988) A147003 A	
TORONTO CITY	17 623961 4835831 W	2015/11 1663	5 5	UT		NU	0013 18	7254232 (Z185990) A147038 A	

TOWNSHIP CON LOT	UTM	DATE CNTR	CASING DIA	WATER	PUMP TEST	WELL USE	SCREEN	WELL	FORMATION
TORONTO CITY	17 624918 4834352 W	2015/08 7241	1.25			MT		7248643 (Z216552) A086658	
TORONTO CITY	17 623942 4835823 W	2015/11 1663	2	UT		NU	0042 20	7254237 (Z185995) A147059 A	
TORONTO CITY	17 624914 4834360 W	2015/08 7241	1.25			MT		7248642 (Z216551) A086659	
TORONTO CITY	17 625548 4835075 W	2016/02 7241	2			MT	0008 10	7258683 (Z226140) A201084	BLCK 0003 BRWN SAND GRVL 0011 GREY SAND SILT 0018
TORONTO CITY	17 625342 4835440 W	2015/12 6607						7259423 (C27649) A192761 P	
TORONTO CITY	17 625608 4833923 W	2016/03 7472	2			MO	0010 10	7261463 (Z230570) A202622	BRWN CLAY PCKD 0010 GREY SAND LOOS 0020
TORONTO CITY	17 625597 4833916 W	2016/03 7472	2			MO	0012 10	7261464 (Z230569) A202623	BRWN CLAY PCKD 0010 GREY SAND PCKD 0022
TORONTO CITY	17 625613 4833902 W	2016/03 7472	2			MO		7261465 (Z230571) A202624	BRWN CLAY PCKD 0010 BRWN SAND PCKD 0020 BRWN SAND SILT PCKD 0032
TORONTO CITY	17 625335 4834620 W	2015/09 7241						7262044 (C17511) A188748 P	
TORONTO CITY	17 625353 4834739 W	2016/04 6607						7263893 (C27733) A196730 P	
TORONTO CITY	17 625399 4834662 W	2016/07 6607	2.00	UT 0007		MO	0018 5	7268937 (Z229131) A202769	BRWN SAND SILT LOOS 0005 GREY SAND SILT LOOS 0023
TORONTO CITY	17 623951 4835812 W	2015/11 1663	5 5	UT			0014 5	7254235 (Z185993) A147050 A	
TORONTO CITY	17 625338 4834330 W	2015/04 6607	2.00	UT 0017		MO	0020 5	7241206 (Z206033) A179916	BRWN SAND SILT LOOS 0015 GREY SAND SILT DNSE 0024 GREY CLAY SILT SOFT 0026
TORONTO CITY	17 625910 4833906 W	2014/09 7247	0.75			MT	0022 5	7238176 (Z198494) A167202	BRWN SAND GRVL CLAY 0002 BLCK SAND SLTY CLAY 0005 GREY FSND SLTY GRVL 0014 GREY SILT CLYY SAND 0029

TOWNSHIP CON LOT	UTM	DATE CNTR	CASING DIA	WATER	PUMP TEST	WELL USE	SCREEN	WELL	FORMATION
TORONTO CITY	17 624451 4835627 W	2014/09 7247	0.75	UT 0017		MT	0020 5	7238177 (Z198486) A167201	BRWN SAND GRVL FILL 0002 BRWN SILT SNDY FILL 0005 BRWN SAND SLTY DNSE 0017 GREY SILT SNDY CLAY 0029
TORONTO CITY	17 625762 4833950 W	2014/09 7247	0.75	UT 0005		MT	0005 5	7238180 (Z198489) A167229	BRWN SAND SLTY GRVL 0003 BRWN SAND SLTY 0010 GREY SILT SNDY CLAY 0019 GREY SILT CLYY GRVL 0029
TORONTO CITY	17 624591 4835496 W	2014/09 7247	0.75	UT 0015		MT	0020 5	7238181 (Z198490) A167228	BRWN LOAM LOOS 0003 BRWN SAND FILL CLAY 0010 BRWN SILT SNDY CLAY 0029
TORONTO CITY	17 625323 4835742 W	2015/03 7147						7238882 (C26982) A175813 P	
TORONTO CITY	17 624782 4834994 W	2015/01 7247	2	UT 0021		MT	0030 10	7239675 (Z198508) A174049	BRWN SAND GRVL FILL 0005 BRWN FSND SILT GRVL 0010 GREY SAND SILT CLAY 0040 GREY SILT SAND GRVL 0041
TORONTO CITY	17 625531 4834684 W	2015/09 6946						7248967 (C27516) A189642 P	
TORONTO CITY	17 625277 4834634 W	2012/06 7215						7241100 (C24747) P	
TORONTO CITY	17 625348 4834415 W	2014/09 7247	0.75	UT 0010		MT	0015 5	7238175 (Z198491) A167232	BLCK SAND SLTY FILL 0002 BRWN FSND SLTY LOOS 0014 GREY CLAY SLTY SAND 0022 GREY SILT SNDY TILL 0029
TORONTO CITY	17 624027 4834928 W	2015/05 7360						7241802 (C28389) A161284 P	
TORONTO CITY	17 623951 4835812 W	2015/04 1663	5 5	UT	///:	DE	0014 5	7244450 (Z185960) A147050	BRWN FILL 0006 BRWN CLAY SLTY 0007 BRWN FSND 0008 BRWN CLAY SLTY GRVL 0017 BRWN SAND GRVL 0020 BRWN CLAY 0022
TORONTO CITY	17 624757 4834914 W	2015/06 6032	1.97	UT 0010		MT	0006 10	7244496 (Z194263) A181450	BRWN FILL 0005 BRWN SAND SILT 0010 GREY SAND SILT 0016
TORONTO CITY	17 625586 4835462 W	2015/06 7241	2			MT	0010 10	7245121 (Z211660) A181165	BLCK 0000 BRWN SAND GRVL 0002 BRWN CLAY TILL 0011 GREY CLAY TILL 0020
TORONTO CITY	17 624825 4835054 W	2015/05 7230						7245849 (C29820) A184721 P	
TORONTO CITY	17 625417 4834205 W	2015/08 7147						7246816 (C28827) A175746 P	

TOWNSHIP CON LOT	UTM	DATE CNTR	CASING DIA	WATER	PUMP TEST	WELL USE	SCREEN	WELL	FORMATION
TORONTO CITY	17 624935 4834362 W	2015/08 7241	1.5			MT		7248640 (Z216554) A086758	
TORONTO CITY	17 624929 4834304 W	2015/08 7241	1.25			MT		7248641 (Z216553) A086660	
TORONTO CITY	17 623961 4835831 W	2015/03 1663	5 5	UT	10/15/13/1:30	DE	0013 18	7240247 (Z185938) A147038	BRWN FSND CLAY 0014 BRWN FSND MSND 0019 BRWN SAND SLTY CLAY 0024 BRWN SAND SLTY CLAY 0039
TORONTO CITY 02 002	17 625202 4834408 W	2008/06 6607	2.00	FR 0013		MO		7113905 (M02449) A069725	BRWN GRVL SAND FILL 0005 BRWN SAND 0020 GREY SAND SILT 0025 GREY CLAY SILT SOFT 0028
TORONTO CITY 22 006	17 624769 4835054 W	2005/04 7075	1.76	FR 0007	///:		0005 10	6928879 (Z22702) A022445	BRWN SAND GRVL FILL 0002 BRWN SAND 0015
YORK BOROUGH	17 625336 4835200 W	7147						7285527 (C37236) A198627 P	

TOWNSHIP	CON	LOT	UTM	DATE CNTR	CASING DIA	WATER	PUMP TEST	WELL USE	SCREEN	WELL	FORMATION

Notes:
UTM: UTM in Zone, Easting, Northing and Datum is NAD83; L: UTM estimated from Centroid of Lot; W: UTM not from Lot Centroid
DATE CNTR: Date Work Completedand Well Contractor Licence Number
CASING DIA: .Casing diameter in inches
WATER: Unit of Depth in Fee. See Table 4 for Meaning of Code

PUMP TEST: Static Water Level in Feet / Water Level After Pumping in Feet / Pump Test Rate in GPM / Pump Test Duration in Hour : Minutes
WELL USE: See Table 3 for Meaning of Code
SCREEN: Screen Depth and Length in feet
WELL: WEL (AUDIT #) Well Tag . A: Abandonment; P: Partial Data Entry Only
FORMATION: See Table 1 and 2 for Meaning of Code

1. Core Material and Descriptive terms

Code	Description	Code	Description	Code	Description	Code	Description	Code	Description
BLDR	BOULDERS	FCRD	FRACTURED	IRFM	IRON FORMATION	PORS	POROUS	SOFT	SOFT
BSLT	BASALT	FGRD	FINE-GRAINED	LIMY	LIMY	PRDG	PREVIOUSLY DUG	SPST	SOAPSTONE
CGRD	COARSE-GRAINED	FGVL	FINE GRAVEL	LMSN	LIMESTONE	PRDR	PREV. DRILLED	STKY	STICKY
CGVL	COARSE GRAVEL	FILL	FILL	LOAM	TOPSOIL	QRTZ	QUARTZITE	STNS	STONES
CHRT	CHERT	FLDS	FELDSPAR	LOOS	LOOSE	QSND	QUICKSAND	STNY	STONEY
CLAY	CLAY	FLNT	FLINT	LTCL	LIGHT-COLOURED	QTZ	QUARTZ	THIK	THICK
CLN	CLEAN	FOSS	FOSILIFEROUS	LYRD	LAYERED	ROCK	ROCK	THIN	THIN
CLYY	CLAYEY	FSND	FINE SAND	MARL	MARL	SAND	SAND	TILL	TILL
CMTD	CEMENTED	GNIS	GNEISS	MGRD	MEDIUM-GRAINED	SHLE	SHALE	UNKN	UNKNOWN TYPE
CONG	CONGLOMERATE	GRNT	GRANITE	MGVL	MEDIUM GRAVEL	SHLY	SHALY	VERY	VERY
CRYS	CRYSTALLINE	GRSN	GREENSTONE	MRBL	MARBLE	SHRP	SHARP	WBRG	WATER-BEARING
CSND	COARSE SAND	GRVL	GRAVEL	MSND	MEDIUM SAND	SHST	SCHIST	WDFR	WOOD FRAGMENTS
DKCL	DARK-COLOURED	GRWK	GREYWACKE	MUCK	MUCK	SILT	SILT	WTHD	WEATHERED
DLMT	DOLOMITE	GVLY	GRAVELLY	OBDN	OVERBURDEN	SLTE	SLATE		
DNSE	DENSE	GYPS	GYPSUM	PCKD	PACKED	SLTY	SILTY		
DRTY	DIRTY	HARD	HARD	PEAT	PEAT	SNDS	SANDSTONE		
DRY	DRY	HPAN	HARDPAN	PGVL	PEA GRAVEL	SNDY	SANDYOAPSTONE		

2. Core Color

Code	Description
WHIT	WHITE
GREY	GREY
BLUE	BLUE
GREN	GREEN
YLLW	YELLOW
BRWN	BROWN
RED	RED
BLCK	BLACK
BLGY	BLUE-GREY

3. Well Use

Code	Description	Code	Description
DO	Domestic	OT	Other
ST	Livestock	TH	Test Hole
IR	Irrigation	DE	Dewatering
IN	Industrial	MO	Monitoring
CO	Commercial	MT	Monitoring TestHole
MN	Municipal		
PS	Public		
AC	Cooling And A/C		
NU	Not Used		

4. Water Detail

Code	Description	Code	Description
FR	Fresh	GS	Gas
SA	Salty	IR	Iron
SU	Sulphur		
MN	Mineral		
UK	Unknown		

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