



Phase I Environmental Site Assessment

780 & 788 Tenth Line

Collingwood, Ontario

Prepared for:
Linksview Development Corporation

Prepared by:
Azimuth Environmental
Consulting, Inc.

September 2014

AEC 14-300

September 23, 2014

AEC 14-300

Linksview Development Corporation
c/o Landex Capital Corporation
Harbour Edge Centre
40 Huron Street, Suite 300
Collingwood, Ontario
L9Y 4R3

Attention: Mr. Ken Hale,
Manager, Land Development and Acquisitions

Re: **Phase I Environmental Site Assessment Critique
780 & 788 Tenth Line, Collingwood, Ontario**

Dear Mr. Hale:

Azimuth Environmental Consulting, Inc. (Azimuth) is pleased to present the results of our critique of the Phase I Environmental Site Assessment (ESA) which was conducted in August and September of 2014 at the properties located at 780 and 788 Tenth Line in Collingwood, Ontario ("Phase I Property").

The original Phase I ESA was conducted for the Phase I Property by Peto MacCallum Ltd ("PML") in March of 2014. The purpose of this critique of the Phase I ESA is critically assess the findings of the Phase I Property based on the background information collected within the PML (2014) report. Based on this assessment and our supplemental field inspection of the Phase I Property; it is our interpretation that the potential concerns raised during the original Phase I ESA now have been sufficiently studied and determined to be inconsequential to this assessment. In our opinion, no further evaluation of the Phase I Property is required.



We trust this report is sufficient for your current requirements, and would like to thank you for the opportunity to work with you on this project. Please do not hesitate to contact us if you have any questions.

Yours truly,
AZIMUTH ENVIRONMENTAL CONSULTING, INC.

Jennifer Thompson, M.A.Sc.
Hydrogeologist

David Ketcheson, M.A.Sc., P.Eng.
Senior Environmental Engineer

Attach:

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1.0 EXECUTIVE SUMMARY

Azimuth Environmental Consulting, Inc. (Azimuth) conducted a Phase I Environmental Site Assessment (ESA) at 780 and 788 Tenth Line in Collingwood Ontario (the “Phase I Property”). The Phase I Property is a rectangle property approximately 40.7 hectare (ha) in size. The property is located approximately 300 meters (m) north of the Sixth Street intersection (Figures 1 & 2).

The Phase I Property is located within the Black Ash Creek catchment area, which is a part of the Georgian Bay watershed. The geology of the Phase I Property reportedly consists of sandy silt and till overburden overlying limestone and dolostone of the Simcoe Group. Site elevation ranged from 200 to 215 meters above sea level (masl) and slopes north east toward Georgian Bay.

The Phase I Property was purchased from the Crown in 1836 by William Clenderin for agricultural use. Other than the name of ownership, the Phase I Property did not change significantly until the 1950s, at which point the two barns and two residences were built. The Collingwood horse show began in 1986 and occurred for two weeks every year at both the Phase I Property and adjoining Fisher Field until 2007. According to the Peto (2014) report, the Phase I Property was vacant with no residents living on site between June of 1993 and May of 1998. Sometime between 1995 and 2004 the berms were created on Phase I Property. It is expected that this is the same time that the hydro and irrigation hook ups were installed for use. The barns and adjacent residence were demolished in 2010.

Potentially contaminating activities (PCAs) identified for the Phase I Property include petroleum hydrocarbon (PHC) storage (gasoline) used in farming equipment as needed. In addition, there was a surficial soil stain found beneath one of the tractors stored next to the barn foundation. This stain was confined to the top 10 cm of surficial material and is not expected to be a significant environmental concern. A second PCA identified for the Phase I Property is the importation of fill of unknown quality from the adjacent Georgian Meadows subdivision and stockpiled into berm features. The Georgian Meadows property was previously evaluated and found to be absent of contaminants (ref). Some of this fill material is also topsoil that has been scraped from the Phase I Property. There does not appear to be any surficial staining or discoloration in the area of fill stockpiling, so this should not represent a significant environmental concern given the knowledge about the source(s) of these materials. At the time of site reconnaissance visit, there were numerous waste piles including paint cans, wood, cement, household garbage, scrap metal, and the roof of a silo present. This debris material should be removed from the



Phase I Property and disposed of at a relevant waste facility. One final PCA identified for the Phase I ESA is the use and storage of pesticide. Since the Phase I Property has been used for agricultural applications since 1836, the application and storage of pesticides may have occurred. In addition, pesticides are used to maintain the putting green within the driving range operated by the Blue Mountain Golf Club. Although pesticides are listed as a PCA, there has been no evidence of any pesticide manufacturing or spills throughout the current investigation and are therefore not expected to represent a significant environmental concern.

A review of the land uses in the Phase I Study Area has also been conducted. The Phase I Study Area map shows that the land to the north (706 Tenth Line) is the current location of the Blue Mountain Golf and Country Club. The parcel to the north east (200 Mountain Road) is currently undeveloped forest land. The parcel to the north west of the Phase I Property (PIN No.: 582540206) is currently in use for aggregate extraction. Land to the west and south west (492 Mountain Road, 1045 and 1133 6th Street, PIN No.: 58254019) is composed of rural residential and/or agricultural. The Bygone Days Heritage Museum is located immediately adjacent to the Phase I Property to the south at 879 6th Street. Another parcel south of the Phase I Property is currently in use as Fisher Field, a community sports park (51 6th Line). Land to the east is composed of the Georgian Meadows residential subdivision. Two PCAs were identified for the Phase I Study Area within the Blue Mountain Golf and Country Club. This facility generates petroleum distillates, waste oils, and lubricants from equipment and cart maintenance. This activity likely occurs at the maintenance shed, which is within 5 m of the Phase I Property boundary. In addition, the golf course stores and applies pesticides to maintain course appearance. Although there is potential for these activities to contaminate the Phase I Property, there is no evidence of past spills or subsurface staining adjacent to the Phase I Property boundary to cause significant environmental concern.

Based on the information collected as part of the Phase I ESA, it is our opinion that no further site work is warranted at this location.

2.0 INTRODUCTION

2.1 Phase I Property Information

The Phase I Property is composed of 780 and 788 Tenth Line in the Town of Collingwood, Ontario. The legal description of the Phase I Property is: North half of Lot 43, Concession 11, Nottawasaga, Collingwood. The property identification number is 582540032.



The Phase I Property encompasses a land area of approximately 40.7 hectares (ha) (~100 acres) and is oriented in a rectangle shape (Figure 2). The property is located on the west side of Tenth Line and is approximately 300 m north of the Sixth Street intersection (Figure 1).

The Phase I Property currently contains an abandoned residence building at the south east corner of the property adjacent to Tenth Line. This parcel was originally identified as 788 Tenth Line, while the remaining area within the Phase I Property was identified as 780 Tenth Line. The foundations of two demolished barn structures are also located on the eastern side of the Phase I Property along a gravel access path. The north east corner is currently rented out to the adjacent golf course for use as a driving range. The remaining property is composed of agricultural or naturalized land.

2.2 Contact Information

The current legal owner of the Phase I Property is Linksview Development Corporation, represented by Ken Hale, Manager, Land Development and Acquisitions at Landex Capital Corporation. Contact for Mr. Hale is provided in Appendix B.

3.0 SCOPE OF INVESTIGATION

This site evaluation follows traditional studies where information regarding the Phase I Property is collected and evaluated. Canadian Standards Association (CSA) Z768-01 Phase I ESA stipulated the minimum requirements necessary for such a study. The four principal components of a Phase I ESA are:

- A record review;
- An interview process;
- A site reconnaissance visit; and
- Evaluation of information and reporting.

The “Phase I Study Area” includes all properties located wholly or partially within 250 m of the nearest point on the boundary of the Phase I Property (Figure 2). Our evaluation did not identify properties, (in whole or in part) that were situated beyond 250 m of the Phase I Property boundary which might warrant consideration.

4.0 RECORDS REVIEW

The purpose of the review of historical records is to obtain information on the current and past uses of the Phase I Property and Phase I Study Area and identify activities at or in the vicinity of the Phase I Property that could create a potential environmental concern.



As noted in Section 4.1.2, a Phase I ESA was completed in March 2014 by Peto MacCallum Ltd. for the Phase I Property (Appendix C). The records review process will therefore rely heavily on this report as it was completed under the supervision of a Qualified Person (QP) as defined in Ontario Regulation 153/04, (O.Reg. 153/04) as amended and is assumed to be accurate and complete; however all information was still reviewed prior to inclusion in the current report.

4.1 General

4.1.1 Phase I Study Area Determination

The Phase I Property is located at 780 and 788 Tenth Line, Collingwood, Ontario. The current layout of the Phase I Property is shown on Figure 2. The "Phase I Study Area" includes the Phase I Property and all other properties located wholly or in part within 250 m of the nearest point of the boundary of the Phase I Property (Figure 2).

The Phase I Study Area map shows that the land to the north (706 Tenth Line) is the current location of the Blue Mountain Golf and Country Club. The parcel to the north east (200 Mountain Road) is currently undeveloped forest land. The parcel to the north west of the Phase I Property (PIN No.: 582540206) is currently in use for aggregate extraction. Land to the west and south west (492 Mountain Road, 1045 and 1133 6th Street, PIN No.: 58254019) is composed of rural residential and/or agricultural. The Bygone Days Heritage Museum is located immediately adjacent to the Phase I Property to the south at 879 6th Street. Another parcel south of the Phase I Property is currently in use as Fisher Field, a community sports park (51 6th Line). Land to the east is composed of a residential subdivision.

4.1.2 Environmental Report Summary

In 2014 a Phase I ESA was completed by Peto MacCallum Ltd. (PML) for the Phase I Property. This work was completed in accordance with O.Reg. 153/04 for the purpose of obtaining a record of site condition (RSC).

The PML (2014a) Phase I ESA report reviewed the following information sources as part of the background records review for the Phase I Study Area. Relevant findings are indicated below each information source in italics:

- Catalogue of Canadian Fire Insurance Plans;



No fire insurance plan was found to cover the Phase I Study Area. Given the rural nature of the Phase I Property, this absence in documentation was anticipated. Fire insurance mapping was concentrated on urban centres.

- Chain of Title from the Simcoe Land Registry Office;

A chain of title for the Phase I Property was determined to date back to 1836 when it was purchased from the Crown. The complete chain of title can be found in Appendix C and is summarized in Table 2 of the PML (2014a) report.

- Street Directory for the Town of Collingwood for 1857, 1864, 1866, 1869, 1873, 1875, 1882, 1884, 1910, 1912, 1914, 1923, and 1935;

As anticipated, the Phase I Property was not listed in any of the above directories.

- Terraprobe (2004) geotechnical report;

According to the PML (2014a) report a geotechnical investigation was completed by Terraprobe Consulting Geotechnical & Environmental Engineering (Terraprobe) in 2004. This investigation advanced twenty (20) boreholes to a depth of 5 m across the Phase I Property. The results reportedly indicated a subsurface of topsoil over native sand, silty sand, and silty sand till deposits.

- Ontario Ministry of the Environment (MOE) Freedom of Information request;

The FOI response dated January 24th noted that no records were found relating to 780 Tenth Line, Collingwood.

- MOE Brownfields Environmental Site Registry;

No RSCs were found within the Phase I Study Area. This is not unexpected given the rural nature of the surrounding lands.

- Town of Collingwood Official City Plan;

According to the Town of Collingwood, the Phase I Property is zoned as REC-6, Recreation. The north west corner is zoned as EP, Environmental Protection. The Phase I Study Area is not serviced (sewer and water) by the Town of



Collingwood and therefore there are no utility trenches that could act as preferential contaminant pathways.

- Nottawasaga Valley Conservation Authority (NVCA) website;

The NVCA website indicated that the west portion of the Phase I Property is a regulated area due to the watercourse running through the site. The Phase I Property is part of a Significant Groundwater Recharge Area in addition to a Highly Vulnerable Aquifer.

- Technical Standards and Safety Authority (TSSA) Fuel Safety Division inquiry;

No TSSA records were found for the Phase I Property. While this is not necessarily conclusive information, it remains important since there was concern about the potential for abandoned underground storage tanks to be present on the Phase I Property.

- EcoLog ERIS report dated January 27, 2014;

The EcoLog ERIS search of the environmental databases identified two (2) records on the Phase I Property for water wells. The first record corresponds to a 11.5 m well constructed on October 21, 1971 in the vicinity of the former barns. The second well record corresponded to a 17 m well constructed on May 23, 1960 near the abandoned residence. The EcoLog ERIS identified ten (10) records for the Phase I Study Area: five (5) Ontario Regulation 347 Waste Generator records, three (3) Permit To Take Water (PTTW) records, one (1) pesticide register record, and one (1) TSSA pipeline incident record. The entire EcoLog ERIS report can be found in Appendix C. Records from the Phase I Study Area related to the current evaluation are discussed in Section 7.2.2.

- Aerial photographs for 1969, 1976, 1981, 1987, 1995, and 2012 in addition to a 1881 historical atlas, 1993 topographic map, and 2004 Ontario Base Map; and

The historical aerial photography indicates that the Phase I Property has been in use for a rural residence and agricultural production since at least the 1950s. On-line historical aerial photography was reviewed and showed that the agricultural setting illustrated in the PML report was essentially unchanged in the 1954 aerial photography. In the 1969 aerial photography, the current structures were present at this time, in addition to a second residence and two



barn structures located approximately 150 m west of Tenth Line. Adjacent land use appears to also be used for residential and agricultural purposes with the Blue Mountain Golf and Country Club present by 1987. The additional residence and barn structures on the Phase I Property were demolished by 2012. The on-site berms are also present in the 2012 aerial image.

- Various geologic maps illustrating Physiography, Palaeozoic and Quaternary geology, and bedrock topography from the Ontario Geological Survey.

At the Phase I Property, the underlying bedrock is reportedly limestone with minor dolostone components of the Simcoe Group of the Lindsey Formation. The drift thickness is approximately 15 m thick. The Phase I Property contains surface elevations ranging between 200 to 215 meters above sea level (masl) and slopes to the north east. Regional ground water flow is expected to be north toward Nottawasaga Bay. A tributary of Black Ash Creek runs through the north west corner of the Phase I Property and flows toward Nottawasaga Bay.

The above records review completed within the PML (2014a) Phase I ESA was reviewed and determined to be sufficient in detail and scope to rely upon for the current Phase I ESA.

Two additional reports were provided to Azimuth as part of this Phase I ESA: a Geotechnical Investigation completed by Peto MacCallum Ltd in August of 2014 (PML 2014b), and a memo dated September 18th, 2014 from Crozier & Associates summarizing a test pit program which occurred in September of 2014 (Crozier, 2014). According to the PML (2014b) report, the underlying sediment is composed of a thin layer of topsoil (0.5 to 2 cm thick) overlying a silty sand to silt layer until to depths of between 5.5 and 6.5 mbgs. In most boreholes a dense till layer was found beneath the sandy silt/silt layer until borehole completion which was a maximum of 6.6 mbgs. Ground water elevations were measured to be between 1.1 to 1.9 mbgs during February and March and between 0.2 to 0.8 mbgs in April 2014. These water levels then dropped every month until they were measured to be between 1.8 to 3.8 mbgs in August. The PML (2014b) report mentions that since water levels were within 0.5 m of the ground surface this is indicative of artesian ground water conditions. To investigate this statement, the Crozier (2014) report conducted a test pit program in September of 2014. The program concluded that a confining layer is present in two out of the three test pits surveyed, which were advanced in the central part of the Phase I Property adjacent to the north property boundary.



A previous geotechnical report issued by Terraprobe in 2004 was mentioned in the PML (2014a) report; however it was not available for review for the current Phase I ESA.

5.0 INTERVIEWS

An interview was conducted on September 16, 2014 with Mr. Ken Hale who has been involved with the Phase I Property since approximately January of 2014. Information was also obtained from the interview component of the PML (2014) Phase I ESA. Mr. Ken Hale confirmed in September 2014 that the information included in the PML (2014) report is still correct and can be relied upon for the current investigation. The complete record of information obtained through the site interview process can be found in Appendix D. The following points summarize the key information derived from these discussions (in no particular order of importance):

- The site currently contains one abandoned residence at the south east corner of the Phase I Property. This residence was reportedly constructed in the 1950s and has been abandoned for at least ten years. Two barn structures and an additional residence were also construction on the Phase I Property in the 1950s; however they were demolished in 2010. The barn foundations and some building material are still present at the Phase I Property;
- The north east corner of the Phase I Property has been leased to the Blue Mountain Golf and Country Club for use as their driving range;
- There is currently one tenant at the Phase I Property: Geoffrey Timpson, a tenant farmer who maintains three agricultural plots across the Site. Mr. Timpson has occupied this role since June of 2014. There are no other current tenants;
- The Phase I Property was originally used for agricultural purposes and was owned by the Van Der Vechte family. The Van Der Vechte family then sold the Phase I Property to Bayridge Inc. in 1998 which then sold it to Landex in 2004;
- The property was rented out to the Collingwood Horse Show for a few weeks every year by the previous property owners. This land use was the reason why the Phase I Property contains numerous berm structures and hydro hook ups. There is a small irrigation system in place to provide horses with water;
- There are currently 6 monitoring wells at the Phase I Property. These wells are currently used to monitor long term trends in the water table elevation;
- The existing residence contains one dug well on the Phase I Property. No information is known on the depth or construction date of this well. The presence or location of any additional wells on the Phase I Property is not known. There is a municipal well on the Fisher Field property to the south of the Phase I Property within the Phase I Study Area.



According to the South Georgian Bay Lake Simcoe Assessment Report (SGBLS 2014), there are no municipal supply wells within the Town of Collingwood. The Fisher Field Well use is not known at this time, but suspected to have been for the recreational use of the fields.

- One hydro line previously came into the Phase I Property from Tenth Line for the residence and barn structures along the gravel access path. This hydro line continues west toward the berm features and was connected to numerous hook ups for use in the annual horse show. This line has since been disconnected;
- There is no information available on private sewage or heating equipment used at the Phase I Property. No evidence of ASTs/USTs were found within the former residential dwelling and barn area prior to demolition. The location of former septic systems, wells, or potential AST/USTs inferred in the PML (2014) report on the Phase I Property is not known;
- A designated substance survey has not been completed for the existing or former buildings on the Phase I Property;
- Soils were brought into the site to create multiple berms features around the Phase I Property. Some of this material is topsoil scraped off of the Phase I Property and some is topsoil from the Georgian Meadows Subdivision, a Landex property located immediately east of the Phase I Property within the Phase I Study Area. No quantity or quality data is available for these materials. According to Mr. Hale, an ESA evaluation was conducted on this property prior to its development which did not show any evidence of contamination.

No other supplementary information was provided, and no other individuals as knowledgeable about the Phase I Property were identified throughout the course of this investigation. It is important to note that the source(s) of the mounded earth present at the Phase I Property can be traced to their origins and were not associated with indiscriminate dumping of wastes or imported from some distance "brownfield" location / operation.

6.0 SITE RECONNAISSANCE

6.1 General Requirements

A site reconnaissance visit was conducted on September 10th, 2014 between the hours of 1:00 pm and 3:00 pm by Ms. Jennifer Thompson of Azimuth. This site reconnaissance included a visual inspection of the interior and exterior of all the structures and the



ground surface of the Phase I Property. Weather during the site investigation was overcast, and the temperature was approximately 15°C.

Photographs taken during the Phase I Property investigation are attached and include various views of the property (Appendix E). The complete record of information obtained through the site reconnaissance process can be found in Appendix D. The following section is therefore a summary of information relating to potential areas of environmental concern.

6.2 Specific Observations at Phase I Property

6.2.1 General Observations and Site Layout

The Phase I Property consists of a rectangle shaped property which is accessible from two driveways off of Tenth Line. The Phase I Property contains an abandoned residence building at the south east corner of the property adjacent to Tenth Line. The foundations of two demolished barn structures are also located on the eastern side of the Phase I Property along a gravel access path. There are also numerous piles of wood, concrete, and garbage piled adjacent to the barn foundations. The north east corner is currently a leased driving range area. The remaining Phase I Property is composed of agricultural or naturalized land and contains numerous berm features throughout the naturalized area.

6.2.2 Site Infrastructure

The permanent structure currently located at the Phase I Property is an abandoned residence on the south east corner (Photograph 10). The abandoned residence is a one storey structure which is rectangle in shape and approximately 19 m long and 9 m wide. The residence contains a basement, kitchen washrooms, living room, and bedrooms. The foundation is poured cement with brick walls. Baseboard heaters were noted along the interior walls. No evidence of any ASTs/USTs was found during the site visit. Although the residence is abandoned, it contained miscellaneous household garbage and construction material (wood, cement, etc.). This residence is accessed by an overgrown driveway from Tenth Line. It is currently boarded up and locked. A wooden shed measuring ~ 4 m by 6 m is present in the backyard; however it was locked during the site reconnaissance.

The Phase I Property also contains remnants of two barn structures at the end of a second gravel driveway off of Tenth Line. Within this localized area of the Phase I Property two cement foundations remain in addition to numerous piles of wood, cement, household garbage, scrap metal, a small quantity of 4 L old / empty paint cans, and the roof of a silo (Photographs 6, 8, and 9). It appears that the barns were semi demolished and that some



of the building materials have been left on the Phase I Property in this general area of the lands. Some illegal dumping has also occurred, as household garbage piles are present; but this was seen to be inconsequential.

6.2.3 Site Servicing

Tenth Line is not currently municipally serviced. The EcoLog Report (Section 4.0) identified two well records on the Phase I Property. The first record corresponds to an 11.5 m deep bored well constructed on October 21, 1971. This well was found during the site reconnaissance adjacent to the abandoned residence and appears to be a dug well construction (Photograph 11). The second well record corresponded to a 17 m deep drilled well constructed on May 23, 1960. This well was not identified during the site reconnaissance. The EcoLog Report listed this well as abandoned, so it is likely that this well ran dry and was decommissioned. It is assumed that each well is connected to its designated use (house, barn, etc.) through underground water lines, however their precise location have not be identified as part of this ESA.

No information was available on the location of any current or former septic holding tanks or tile beds, and no evidence was encountered during the site reconnaissance to suggest their use or location. The abandoned residence currently contains base board heaters, and no evidence of ASTs/USTs were found to indicate the presence of furnace heating oil. According to the interview (Section 5.0) no ASTs/USTs were found within the former residential dwelling and barn area prior to demolition.

Electricity was supplied to the Phase I Property through overhead wires from Tenth Line for the residence and barn structures along the gravel access path. This hydro line continues west toward the berm features and was connected to numerous hydro hook ups for use during the annual horse show. This line has since been disconnected at the property boundary.

No storm water collection exists for the Phase I Property. Surface runoff is expected to follow the local topography, going from the south west to the north east toward Black Ash Creek and eventually Georgian Bay.

6.2.4 Designated Substance Survey of the Phase I Property

A designated substance survey (DSS) was not completed for the Phase I ESA Property. Designated substances include acrylonitrile, asbestos, arsenic, benzene, coke oven emissions, ethylene oxide, isocyanates, lead, mercury, silica, and vinyl chloride. Though not a designated substance, polychlorinated biphenyls (PCBs) are often included in this list.



According to information obtained through the interview (Section 5.0) a DSS survey has not been completed for the Phase I Property. Based upon the age of the residence, (1950s) there is a possibility that DSS material is present within the structure materials. Mercury used in thermostats and florescent lighting may also be present within the building. Historic linoleum flooring as is present in the house could contain asbestos fibre and lead-based paints from the 1950s are likely present on the interior walls of the residence. These issues can be easily addressed when the residence is demolished.

6.2.5 Exterior Activities and Observations

Three areas of the Phase I Property are currently in use for agricultural production (Figure 2). Multiple hay bales are found in rows across the Phase I Property. It is assumed that these bales were harvested from the agricultural operations currently occurring. One large trailer containing hay bales was parked within the gravel driveway.

The central portion of the Phase I Property contains numerous berms which run parallel to each other in a north to south direction. These berms are reportedly stockpiled topsoil from local development sources (Section 5.0) and were used during the annual horse show. One pile of sod and some miscellaneous debris (Photograph 4) were also found adjacent to the berms.

The north east corner of the Phase I Property is occupied by the Blue Mountain Golf and Country Club and is currently in use as a driving range (Photograph 12). There is also a small storage shed present adjacent to the putting green. Access to the storage shed was not permitted during the site reconnaissance as it was locked. Information obtained through the interview (Section 5.0) implies that the shed is used to store golf course tools.

Farming equipment is stored next to the barn foundations and within the north agricultural field at the Phase I Property (Photographs 5 and 7). Two cars (one on the ground and one on a trailer) were also stored here. One empty jerry can was found adjacent to the equipment and is assumed to store gasoline for equipment operation. Some surficial soil staining was found beneath one of the tractors stored next to the barn foundation; however this stain was confined to the upper 10 cm of surficial material.

The north west corner of the site contains forest vegetation and a tributary of Black Ash Creek. A small quantity of miscellaneous garbage and debris were located in this area.



6.3 Phase I Study Area Investigations

The Phase I Study Area map shows that the land to the north (706 Tenth Line) is the current location of the Blue Mountain Golf and Country Club. The parcel to the north east (200 Mountain Road) is currently undeveloped forest land. The parcel to the north west of the Phase I Property (PIN No.: 582540206) is currently in use for aggregate extraction. Land to the west and south west (492 Mountain Road, 1045 and 1133 6th Street, PIN 58254019) is composed of rural residential and/or agricultural. The Bygone Days Heritage Museum is located immediately adjacent to the Phase I Property to the south at 879 6th Street. Another parcel south of the Phase I Property is currently in use as Fisher Field, a community sports park (51 6th Line). Land to the east is composed of a new residential subdivision (i.e., Georgian Meadows).

7.0 REVIEW AND EVALUATION OF INFORMATION

This section of the report discusses the findings and conclusions of the Phase I ESA. The report is presented in this manner so the reader can understand the basis of the interpretation of the Phase I ESA and how the final conclusions were derived.

7.1 Current and Past Uses

The following Table 1 summarizes the historical uses of the Phase I Property. Based on information obtained as part of the current investigation, the Phase I Property was purchased from the Crown in 1836 by William Clenderin presumably for agricultural use. Other than the name of ownership, the Phase I Property did not change from agricultural use until the 1950s, at which point the two barns and two residences were built. The Collingwood horse show began in 1986 and occurred for two weeks every year at both the Phase I Property and adjoining Fisher Field until 2007. According to the PML (2014) report, the Phase I Property was vacant with no residents living on site between June of 1993 and May of 1998. Sometime between 1995 and 2002 the soil berms were created on the Phase I Property. It is expected that this is the same time that the hydro and irrigation hook ups were installed for use. The barns and adjacent residence were demolished in ~2010.

Table 1: Current and Past Uses of the Phase I Property

Year	Name of Owner	Description of Property Use	Property Use	Information Sources
1836 to 1904	Various	Agricultural	Farming	• Chain of title (Section 4.0)
1904 to 1929	George Schell	Agricultural	Farming	• Chain of title (Section 4.0)



Table 1 (continued): Current and Past Uses of the Phase I Property

Year	Name of Owner	Description of Property Use	Property Use	Information Sources
1929 to 1957	Frederic Schell	Rural residential / Agricultural	Farming	- Chain of title (Section 4.0) - Aerial Photography (Section (4.1.2))
1957 to 1993	Van Der Vechte Family	Rural residential / Agricultural.	Farming	- Chain of title (Section 4.0) - Interview (Section 5.0)
1993 to 1998	Van Der Vechte Family	vacant	Farming	- Chain of title (Section 4.0) - Environmental Reports (Section 4.1.2)
1998 to 2004	Bay Ridge Inc.	North east corner rented out to adjacent golf course for use as driving range	N/A	- Chain of title (Section 4.0) - Interview (Section 5.0)
2004 to current	Landex	North east corner rented out to adjacent golf course for use as driving range	Commercial	- Chain of title (Section 4.0) - Interview (Section 5.0)

7.2 Potentially Contaminating Activity

7.2.1 On-site Activities

Table 2 (overleaf) represents the identified PCAs on, in, or under the Phase I Property. It is acknowledged that other items beyond those listed in O.Reg. 153/04 (Sch. D – Table 2) could be identified for the on-site PCAs.

Table 2: Potentially Contaminating Activities – Phase I Property

Potentially Contaminating Activity (O.Reg. 153/04 – Schedule D – Table 2)	Description of Activity	Information Source(s) (Section No.)
30. Importation of fill of unknown quality	Soil was imported from Georgian Meadows subdivision for berm features	- Interview (Section 5) - Site Reconnaissance (Section 6)
40. Pesticides (including herbicides, fungicides and anti-fouling agents) manufacturing, processing, bulk storage and large scale applications	Long time agricultural property use may infer the storage and use of pesticides. Potentially used on driving range portion of site.	- Site Reconnaissance (Section 6) - Chain of title (Section 4.0)



Table 2 (continued): Potentially Contaminating Activities – Phase I Property

Potentially Contaminating Activity (O.Reg. 153/04 – Schedule D – Table 2)		Description of Activity	Information Source(s) (Section No.)
58.	Waste disposal and waste management, including thermal treating, landfilling and transfer of waste other than use of biosolids as soil conditioners	Illegal dumping at the Phase I Property. Household garbage, cement, scrap metal, wood stored in piles across site and other miscellaneous debris (i.e., discarded 1 L paint cans)	• Interview (Section 5) • Site Reconnaissance (Section 6)
N/A	Soil staining from tractor storage	Small area of soil staining beneath a tractor stored adjacent to the barn footprint	• Site Reconnaissance (Section 6)

One empty jerry can of gasoline was found next to some farm equipment during the site reconnaissance visit. This gasoline fuel is used in farming equipment as needed. The MOE (2011) Guidance document for Phase I ESAs states "... storage of several 44 gallon drums of fuel oil would be considered 'bulk storage'; however, a typical jerrycan of fuel stored in a residential garage would not be considered 'bulk' storage ...". Based on our site visit there was no evidence of liquid bulk storage.

In addition, there was a surficial soil stain found beneath one of the tractors stored next to the barn foundation. This stain was confined to the upper 10 cm of surficial material and is not considered to be a significant environmental concern.

The PML (2014) report had indicated that "... [t]here is the potential for the presence of above ground storage tanks (ASTs) and/or underground storage tanks (USTs) used to store fuel or oil associated with historical heating at the former residential/agricultural buildings as well farm equipment/machinery used on Site, including potential spills during re-fueling and maintenance of the equipment. It is understood that no ASTs or USTs were noted during demolition of the buildings in 2010. However, historical waste management practices related to the residential use and farming are unknown and it would be prudent to check if this PCA has impacted the Site from a geoenvironmental perspective ...".

It is speculated that this PCA was noted in part due to the fact that the Phase I Property was snow-covered during the site visit and therefore evidence of surface staining or other similar evidence could not be assessed. During our site evaluation it was noted that the existing dwelling is electrically heated and there was no evidence of forced-air heating. Similarly, the barn compound area was inspected to detect any evidence of soil staining or potential fuel dump locations (i.e., vent pipes). No significant soil stained area was in



evidence. Finally, several on-line and higher definition historical aerial photography sources were used to assess the site from 2002 to present. There was no evidence of former ASTs associated with the barn compound area based on this photography. In our opinion, the potential concern(s) raised by PML were not in evidence for the Phase I Property.

According to information obtained in the interview process (Section 5.0) excess soils were imported into the Phase I Property from the adjacent Georgian Meadows subdivision and stockpiled into berm features. Some of this fill material is also topsoil that has been scraped from the Phase I Property. The PML (2014) report indicated that "... [t]he presence of fill of unknown quality is located in approximately fourteen berms. It is understood the fill material originated from the nearby Georgian Meadows development, however no reports were available regarding the chemical quality of the material and it would be prudent to check if this PCA has impacted the Site from a geoenvironmental perspective ...". Based on strict adherence to the O.Reg. 153/04 requirements; this PCA is justified. However, it is our understanding that the Phase I ESA does not have to conform to the prescriptive RSC standards and that professional interpretation of the site condition can be considered. In our opinion, the source(s) of the material are well established and come from "greenfield" sites that were in themselves previously evaluated under the CSA standards. The soils were from agricultural lands being both on-site and those lands located directly east of the Phase I Property. Neither of these source locations contained questionable "brownfield" materials. There does not appear to be any surficial staining or discoloration in the area of fill stockpiling, so it is our opinion that this should not represent a significant environmental concern.

At the time of site reconnaissance visit, there were numerous rusty 1 L paint cans stored in a corner of the former barn foundation at the Phase I Property (Photograph 9). It is not known if these are from the original barn structure or are the result of illegal dumping, however some paint material did remain within the cans. There did not appear to be any paint which had leaked into the cement foundation. Due to the limited quantity of paint within the cans and the lack of any evidence of surficial contamination, the paint cans are not expected to represent a significant environmental concern. The presence of a secondary containment area (i.e., the poured cement barn foundation) would prevent the leakage of any liquid paint into the subsurface soils. Other debris such as wood, cement, household garbage, scrap metal, and the roof of a silo is also present at the Phase I Property. There was no ability to inspect under these debris piles; but the nature of the materials would suggest it is relatively inert. This debris material should be removed from the Phase I Property and properly disposed.



Since the Phase I Property has been used for agricultural applications since 1836, the application and storage of commercial pesticides has occurred. In general, potential contaminants of concerns tend to be associated with post 1940s chemical products (ex., organochlorinated pesticides). The MOE (2011) Guidance document for Phase I ESAs states "... 'bulk storage', in terms of scale or volume of material can include large numbers, amounts or volumes of material for commercial or industrial use, even if the material is packaged in smaller consumer-sized containers ...". Our interpretation of this guidance is that there is no reference to agricultural use. The guidance appears to reference the manufacturing or distribution side of the process.

Proper use of herbicides, fungicides and pesticides on agricultural lands do not result in unacceptable soil contamination. This has been evaluated on numerous occasions throughout the Province and in general there is no evidence to suggest that this is a systemic and wide spread issue with the re-development of agricultural property. While there was little site specific information on past agricultural practices related to the Phase I Property it is noted that feedstock production continues on these lands today. There was no evidence (i.e., vegetation stress / die-off) to suggest over-application of such products and it is recognized that over time biodegradation will occur. It is suggested that since the 1970s and 1980s that most chemicals of concern have been replaced by acceptable chemical substitutes. It is acknowledged that some environmental firms will conduct soil testing for residual pesticide contamination. Detection of these types of compounds has occurred; but in our experience proper application of such products rarely results in any subsequent detection. This type of confirmatory testing can be conducted on requested; but it will be assumed that such compounds were properly applied and therefore are not of consequence to this site evaluation.

In addition, pesticides are used to maintain the putting green within the driving range operated by the Blue Mountain Golf Club. This localized area on the Phase I Property is not considered to represent a significant large-scale application scenario and therefore is not expected to represent a significant environmental concern. The turf superintendant for the Blue Mountain Golf Club indicated that there is no application of fertilizers / pesticides on the driving range.

7.2.2 Off-Site Activities

Table 3 represents the identified PCAs on, in, or under the Phase I Study Area. It is acknowledged that other items beyond those listed in O.Reg. 153/04 (Sch. D – Table 2) could be identified for the on-site PCAs.



Table 3: Potentially Contaminating Activities – Phase I Study Area

Potentially Contaminating Activity (O.Reg. 153/04 – Schedule D – Table 2)		Description of Activity	Information Source(s) (Section No.)
28.	Gasoline and associated products storage in fixed tanks	Waste oil generated and stored at the Blue Mountain Golf and Country Club since 2000	EcoLog ERIS (Section 4.1.2)
40.	Pesticides (including herbicides, fungicides and anti-fouling agents) manufacturing, processing, bulk storage and large scale applications	It is likely that the Blue Mountain Golf and Country Club stores and applies pesticides to the course	Site Reconnaissance (Section 6)

The EcoLog ERIS report summarized in Section 4.1.2 indicated that the Blue Mountain Golf and Country Club has obtained a waste generator number for petroleum distillates, waste oils, and lubricants since 2000. This waste oil is expected from equipment and cart maintenance. This activity likely occurs at the maintenance shed, which is within 5 m of the Phase I Property boundary. The PML (2014) report indicated that "... [t]he historical and current use of the adjacent property to the north for use as a golf course, in particular a maintenance shed is located within the southeast corner of the golf course property which is used to store equipment and perform maintenance work. The golf course generates petroleum distillates and waste oils and lubricants as noted in the in the Ontario Regulation 347 Waste Generators Summary. Three, 205 L drums are used to store waste oil (one on the building interior and two on the building exterior). In the event of any spills, leaks or discharges, the potential for significant off Site contamination is considered low since the release of waste oil would be visually identified and likely cleaned up within a short time period ...". Azimuth would agree with this assessment. There is no evidence of past spills or subsurface staining adjacent to the Phase I Property boundary based on our site visit and this operation is not considered to be a significant environmental concern.

As noted in Section 7.2.1, the Blue Mountain Gold Course stores and applies pesticides to maintain course appearance. The PML (2014) report noted that "... [t]he historical use of the property to the north of the Site for agricultural purposes and the current use for commercial purposes as a golf course. There is potential for contamination from pesticide residue ...". The potential pathway for this impact would seem to be inferred. Several points associated with this situation need to be considered. First, it is assumed that PML is suggesting that air-borne spray drift could result in on-site impact(s) as opposed to suggesting that there could be ground water migration of pesticide impacted waters. Since the shallow ground water flow direction is toward Nottawasaga Bay there would be little opportunity for ground water flow from the golf course to move



upgradient towards the Phase I Property. The spray-drift issue would also seem remote for the following reasons. Any and all spray applications on the golf course are completed by licenced applicators. A key aspect to the licencing process is understanding issue(s) such as spray drift. Pesticide applications supposedly can only occur when winds are less than 8 km/hour so to minimize spray drift. Spray equipment is intentional oriented close to the ground in order to further minimize spray drift. Beyond these standard application factors, it should be noted that pesticide applications tend to be focused on the manured fairways as opposed to the "ruff" for golf course applications. This further limits the likelihood of the sprayed products travelling off the fairway, across both the fringe and then the ruff and beyond past the property boundary such that a significant impact is created on the Phase I Property. It is our opinion that this scenario is sufficiently remote that it is not expected to represent a significant environmental concern.

8.0 CONCLUSIONS

Through analysis of the supplemental information collected during this assessment, it was determined that the earliest identified land use of the Phase I Property was for agricultural production commencing in 1836 when it was purchased from the Crown. Two residences and two barns were then constructed in the 1950s. The Phase I Property was a partial host of the Collingwood Horse Show between 1986 and 2007. There are traditionally few environmental concerns with the type of land use encountered at the Phase I Property. The site investigation did not reveal any new information that would warrant further consideration, or represent a significant concern to the overall environmental health of the property. The potential concerns identified in the PML (2014) report also have been evaluated. In our opinion, none of these issues warrant further consideration for the reasons that have been provided.

As noted in the PML (2014) report, it is recommended that the onsite well(s) be properly decommissioned prior to site development.



9.0 AUTHORSHIP

This report was completed by Ms. Jennifer Thompson and Mr. David Ketcheson from Azimuth Environmental Consulting, Inc. Mr. Ketcheson is a senior environmental engineer with over 30 years of experience and is a partner with Azimuth, who possesses knowledge in porous media and fractured rock contaminant migration of miscible phase and NAPL contaminants. Mr. Ketcheson is a qualified person and has completed numerous Phase I and Phase II ESAs.

Ms. Jennifer Thompson is currently hydrogeologist at Azimuth. She received relevant training in the form of a Bachelor of Science Degree in Environmental Science from McMaster University and a Masters in Applied Science in Water Resource Engineering from the University of Guelph.

10.0 LIMITATIONS AND USE OF THIS REPORT

This report has been prepared for the sole benefit of Landex Capital Corporation (the 'Client'). Azimuth Environmental Consulting, Inc. (the 'Consultant') understands that this report may be provided to and relied upon by others. Any other person or entity without the express written consent of the Consultant and the Client may not rely upon the report. Any use that a party makes of this report, or any reliance on decisions made based on it, is the responsibility of such parties. The Consultant accepts no responsibility for damages, if any, suffered by any party as a result of decisions made or actions based on this report.

The information and conclusions contained in this report are based upon work undertaken by trained professional and technical staff in accordance with generally accepted engineering and scientific practices current at the time the work was performed. This report should in no way be construed as a definitive representation of any or all environmental impacts on the site resulting from past or current practices. The information contained within this report should be evaluated, interpreted, and implemented only in light of this assignment.

The Consultant makes no other representation whatsoever, including those concerning the legal significance of its findings, or as to the other legal matters addressed incidentally in this report, including but not limited to the application of any law to the facts set forth herein. With respect to regulatory compliance issues, regulatory statutes are subject to interpretation. These interpretations may change over time, thus the Client should review such issues with appropriate legal counsel.



11.0 REFERENCES

Crozier & Associates Consulting Engineers (Crozier), 2014. Linksview Development – Testpit Observations.

Peto MacCallum Ltd. (PML), 2014a. Phase I Environmental Site Assessment, Proposed Linksview Subdivision, 780 and 788 Tenth Line, Collingwood, Ontario.

Peto MacCallum Ltd. (PML), 2014b. Geotechnical Investigation, Proposed Linksview Subdivision, 780 and 788 Tenth Line, Collingwood, Ontario.

South Georgian Bay Lake Simcoe Source Protection Committee (SGBLS), 2014. Nottawasaga Valley Source Protection Area 2014 Updated Assessment Report.

DRAFT



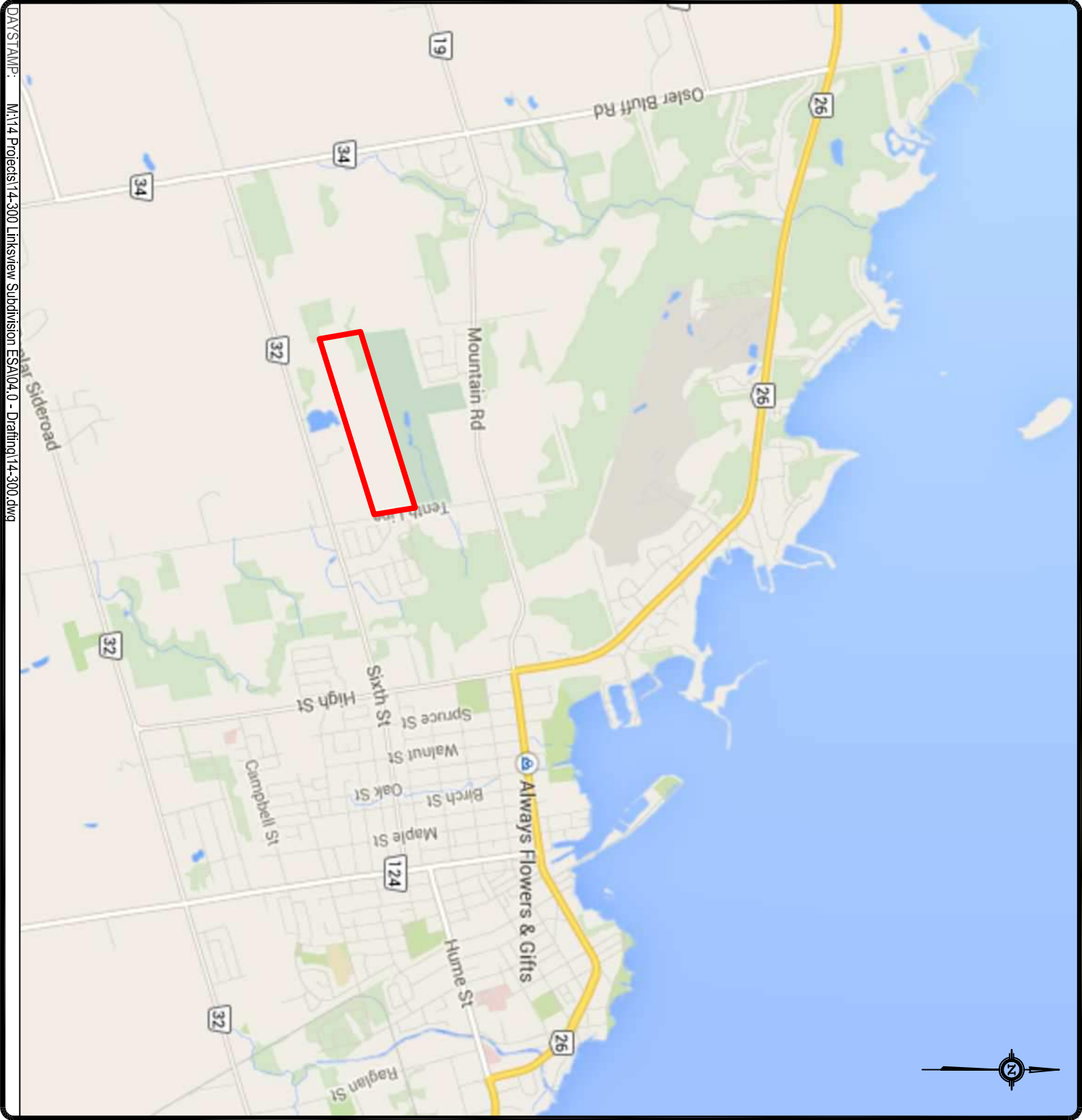
APPENDICES

Appendix A:	Figures
Appendix B:	Contact Information
Appendix C:	Environmental Reports
Appendix D:	Site Reconnaissance and Interview Notes
Appendix E:	Site Photographs



APPENDIX A

Figures



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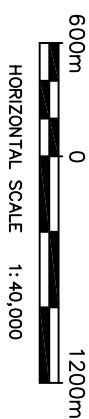
— Approx. Property Boundary



Study Area Location

Linkview Subdivision
10th Line, Collingwood, ON

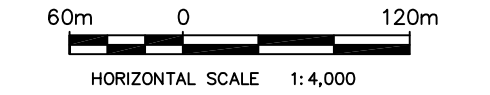
DATE ISSUED: September 2014	Figure No.
CREATED BY: JLM	
PROJECT NO.: 14-300	
REFERENCE: Google Maps	1





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- Approx. Property Boundary
- Watercourse
- Berm
- Overhead Hydro Line



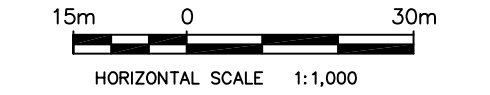
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Linksvue Subdivision 10th Line, Collingwood, ON		
DATE ISSUED:	September 2014	Figure No. 2a
CREATED BY:	JLM	
PROJECT NO.:	14-300	
REFERENCE:	First Base Solutions	

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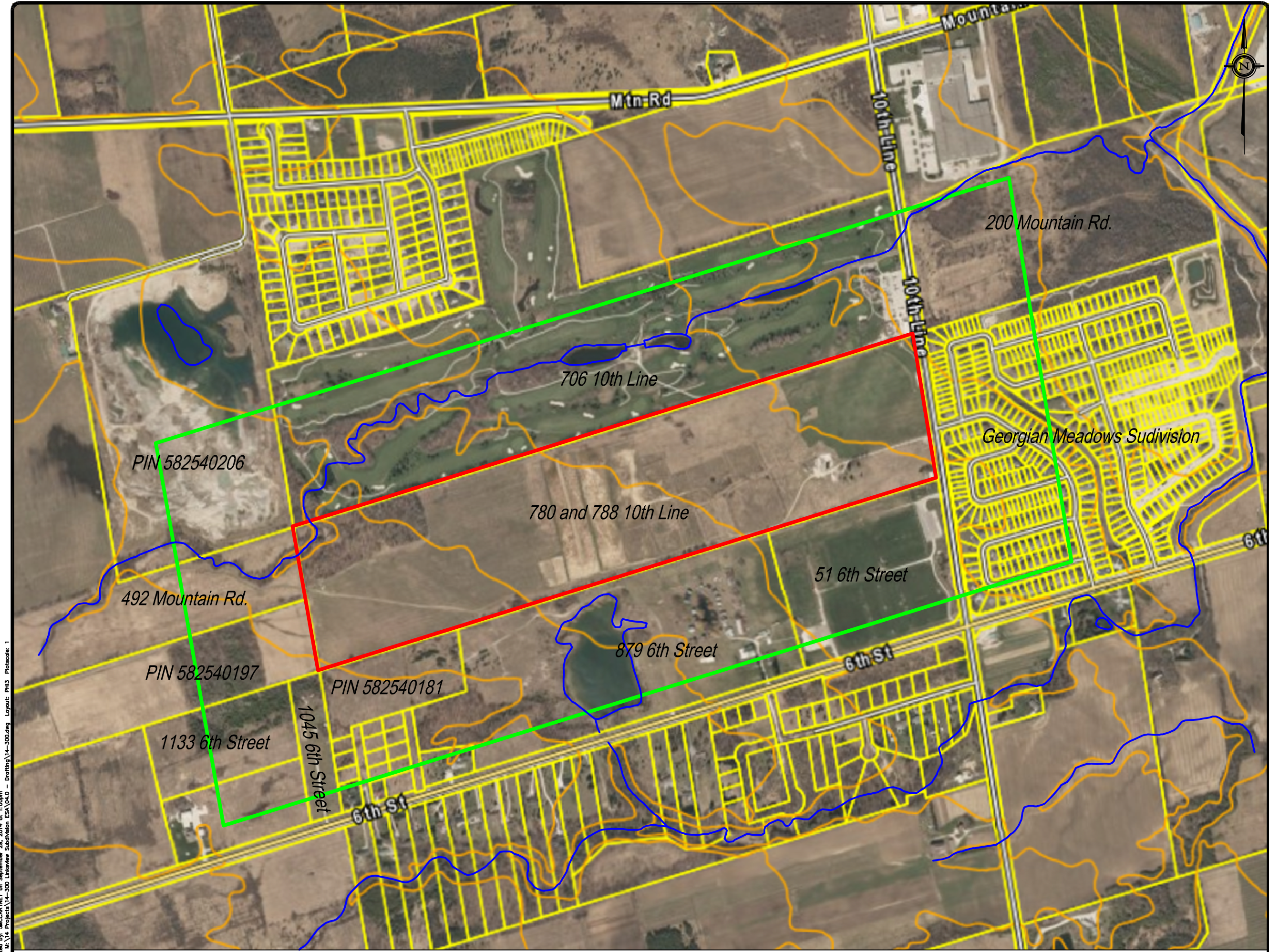


LEGEND:

- Approx. Property Boundary
- Watercourse
- Overhead Hydro Line

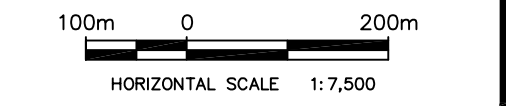


Site Layout		
Linksview Subdivision 10th Line, Collingwood, ON		
DATE ISSUED:	September 2014	Figure No. 2
CREATED BY:	JLM	
PROJECT NO.:	14-300	
REFERENCE:	First Base Solutions	



LEGEND:

- Approx. Property Boundary
- 250m Phase I Study Area
- Watercourse



Phase I Study Area		
Linksview Subdivision 10th Line, Collingwood, ON		
DATE ISSUED:	September 2014	Figure No. 3
CREATED BY:	JLM	
PROJECT NO.:	14-300	
REFERENCE:	First Base Solutions	

Plotted by: JMCARTNEY on September 29, 2014 at 1:00pm
File: M:\14 Projects\14-300 Linksview Subdivision ESA\04.0 - Drafting\14-300.dwg Layout: PH3 PlotScale: 1



APPENDIX B

Contact Information

Contact Information:

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Manager, Land Development and Acquisitions

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APPENDIX C

Environmental Reports



**PHASE ONE ENVIRONMENTAL SITE ASSESSMENT
PROPOSED LINKSVIEW SUBDIVISION
780 AND 788 TENTH LINE
COLLINGWOOD, ONTARIO
for
LANDEX CAPITAL CORPORATION**

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1 cc: PML Barrie
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PML Ref.: 14BF001
Report: 1
March 2014

March 20, 2014

PML Ref.: 14BF001
Report: 1

Mr. Ken Hale
Landex Capital Corporation
Harbour Edge Building
40 Huron Street
Suite 300
Collingwood, Ontario
L9Y 4R3

Dear Mr. Hale

**Phase One Environmental Site Assessment
Proposed Linksvew Subdivision
780 and 788 Tenth Line
Collingwood, Ontario**

This report presents the results of a Phase One Environmental Site Assessment (ESA) completed for a parcel of land located at 780 and 788 Tenth Line, Collingwood. Authorization to proceed with this project was provided by Mr. Kevin Morris on behalf of Landex Capital Corporation in an email dated December 20, 2013 with an Engineering Services Agreement signed January 13, 2014.

Included in this report are the findings of the Phase One ESA and our conclusions and recommendations together with the appendices.

We trust the information presented in this report is complete within our terms of reference. If you have any questions, please do not hesitate to contact our office.

Sincerely

Peto MacCallum Ltd.



Melissa King, P.Geo., QP_{ESA}
Associate
Manager, Geoenvironmental Services

MAK/TP:jlb



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Table 6 – Potentially Contaminating Activities (PCAs)

Table 7 – Areas of Potential Environmental Concern (APEC)

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Appendix B – RMS Historical Environmental Information Reporting System (HEIRS)

Appendix C – Chain of Title

Appendix D – Environmental Source Information Requests and Responses

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Appendix F – Aerial Photographs and Other Maps

Appendix G – Interview Correspondence

Appendix H – Site Photographs

Appendix I – Statement of Limitations



1. EXECUTIVE SUMMARY

This report presents the results of a Phase One Environmental Site Assessment (ESA) completed for the parcel of land located at 780 and 788 Tenth Line, Collingwood, Ontario. The Phase One ESA property (referred to herein as the 'Site') comprises a 40 hectare (100 acre) parcel that is to be developed for residential purposes comprising five apartment buildings (three stories in height) in the southeast portion, a Storm Water Management Pond (SWM) in the east, and a network of streets to provide access to both single dwelling and townhouse type housing in the central and west portions of the Site. Basements are planned in all buildings as well as full utility service and paved roads. Authorization to proceed with this project was provided by Mr. Kevin Morris of C.F. Crozier & Associates Inc. on behalf of Landex Capital Corporation (the 'Client') in an email dated December 20, 2013 with an Engineering Services Agreement signed January 13, 2014.

The Site is currently vacant with a one storey, brick bungalow and frame shed in the southeast corner. The property has historically been used for agricultural and residential purposes and more recently a golf driving range in the northeast corner (commercial use).

The appended Drawing 1-1 (Site Plan) illustrates the location of the Site involved in the study.

The Client required this Phase One ESA for due diligence purposes. Cognizant of the proposed change of land use for residential purposes, a Record of Site Condition (RSC) will be required.

This Phase One ESA was conducted to:

1. Develop a preliminary determination of the likelihood that one or more contaminants have affected any land or water on, in or under the Phase One ESA property;
2. Determine the need for a Phase Two ESA; and
3. Provide a basis for carrying out any Phase Two ESA required.

This report is subject to the Statement of Limitations that is included with this report (Appendix I) and which must be read in conjunction with the report.



The Site is situated within a rural area of mixed land use comprising commercial, residential, parkland and agricultural. Our research indicates that historically the Site was first developed in 1836 for agricultural purposes and the existing dwelling and shed, as well as a previous dwelling, shed and barn were constructed prior to 1969. The former barn, shed and residential building in the center portion of the Site were demolished in 2010 and the existing dwelling has been vacant since at least 2004. The golf course to the north of the Site has been renting the northeast corner of the Site for use as a driving range since about 2002. The central portion of the Site was more recently used for the Collingwood Horse show where berms of fill material were constructed.

Based on the findings of the Site records review, reconnaissance, interviews and our previous experience, four on Site potentially contaminating activities (PCAs), and two off Site potentially contaminating activities have been identified. Based on the review and evaluation of the information compiled, four of the PCAs are considered to have contributed to the following three Areas of Potential Environmental Concern (APEC). Refer to Tables 6 and 7, appended for a more detailed summary.

1. Central portion of the Site within the berms (Importation of Fill Material of Unknown Quality).
2. Near the former dwelling and/or farm buildings on Site (Gasoline and associated products storage in fixed tanks).
3. Entire Site (Historical agricultural use related to Pesticides (including Herbicides, Fungicides and Anti-Fouling Agents) use/storage).

Based on the above findings, a Phase Two ESA consisting of a program of soil and ground water sampling and chemical testing is recommended to address the potential for contaminants to exist at the APECs described above.

It is recommended that a Designated Substances Survey (DSS) be completed for any buildings or structures prior to demolition or renovations in order to ensure appropriate handling and disposal of the demolition debris and for the safety of workers and building occupants.

Decommissioning of the water wells reported to be on Site will be required by the Owner in accordance with the Ontario Water Resources Act, O. Reg. 903/90, as amended.



2. INTRODUCTION

Peto MacCallum Ltd. (PML) was retained by C.F. Crozier & Associates on behalf of Landex Capital Corporation (the 'Client') to conduct a Phase One ESA for the property located at 780 and 788 Tenth Line, between Mountain Road and Sixth Street in Collingwood, Ontario. The Phase One ESA property (referred to herein as the 'Site') covers an approximate plan area of 40 ha (100 ac).

The Site is currently vacant with a one storey, brick bungalow and frame shed in the southeast corner. The property has historically been used for agricultural and residential purposes and more recently a golf driving range in the northeast corner (commercial use).

The appended Drawing 1-1 (Site Plan) illustrates the location of the Site involved in the study.

PML understands the Client is planning to redevelop the agricultural/commercial property for residential use and a Phase One ESA is required for due diligence purposes. Due to the proposed change in land use to a more sensitive use, a Record of Site Condition (RSC) will be required.

The residential development will comprise five apartment buildings (three stories in height) in the southeast portion, a Storm Water Management Pond (SWM) in the east, and a network of streets to provide access to both single dwelling and townhouse type housing in the central and west portions of the Site. Basements are planned in all buildings as well as full utility service and paved roads.

2.1 Regulatory Requirements

Ontario Regulation 153/04 (O. Reg. 153/04), as amended is a provincial regulation enacted to provide detailed requirements that property owners must meet in order to file a Record of Site Condition (RSC). An RSC is a legal document filed on the Environmental Site Registry that certifies the environmental condition of the property meets the regulatory standards applicable for the proposed land use and contains information relating to the environmental status or condition



of the property. The RSC regulation (O. Reg. 153/04, as amended) details the requirements related to environmental site assessment, report contents and Site remediation/clean up measures with or without risk assessment and risk management provisions. RSCs may be requested under a number of circumstances such as a condition of financing, or as a condition by the Municipality for the proposed development. An RSC is required as a condition of O. Reg. 153/04, as amended, when changing from a less sensitive land use to a more sensitive land use.

Due to a change in land use to a more sensitive use, an RSC will be required. In this regard, a Phase One ESA completed in accordance with the O. Reg. 153/04, as amended and Schedule D of the regulation was required.

In accordance with the current regulatory requirements, all environmental site assessment work was carried out under the supervision of a Qualified Person (QP) as defined in O. Reg. 153/04, as amended.

2.2 Phase One ESA Property and Owner Contact Information

The Site is a rectangular shaped parcel of land that is approximately 40 ha (100 ac) in size, as shown on Drawing 1-1. The Site is currently accessible from Tenth Line, and has a frontage of about 300 m along Tenth Line and is about 1,350 m deep along the west Site limit. The Site is occupied by a one storey brick bungalow in the southeast corner of the Site.

The Site municipal address is currently 780 and 788 Tenth Line and PIN number 58254-0031 (LT). A survey plan prepared by Ronald J. Emo, O.L.S. of Collingwood, Plan 51R-2098, dated August 13, 1973 showing the southeast portion of the Site only was provided to PML and is included in Appendix A. It is noted that a survey plan for the entire Phase One ESA property, signed and sealed by an OLS will be required in order to file an RSC.



PML's contact information for the Site Owner/Client is as follows:

Mr. Ken Hale
Landex Capital Corporation
Harbour Edge Building
40 Huron Street
Suite 300
Collingwood, Ontario
L9Y 4R3
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PML's contact information for the Authorized Representative of the client is as follows:

Mr. Kevin Morris, P.Eng.
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2.3 Definitions

Phase One ESA Property - means the property that is the subject of a Phase One ESA.

Phase One ESA Study Area - means the area that includes a Phase One ESA Property, any other property that is located, wholly or partly, within 250 m from the nearest point on a boundary of the Phase One ESA Property and any property that the Qualified Person (QP) determines should be included as a part of the Phase One ESA Study Area.

Potentially Contaminating Activity (PCA) - means a use or activity set out in Column A of Table 2 of Schedule D that is occurring or has occurred in a Phase One ESA Study Area.

Areas of Potential Environmental Concern (APEC) - means the area on, in or under a Phase One ESA property where one or more contaminants are potentially present, as determined through the Phase One ESA, including through identification of past or present uses on, in or under the Phase One ESA property, and identification of potentially contaminating activities.



The above definitions are in accordance with O. Reg. 153/04, as amended.

2.4 Terms of Reference

This Phase One ESA was conducted to:

- i) Develop a preliminary determination of the likelihood that one or more contaminants have affected any land or water on, in or under the Phase One ESA property;
- ii) Determine the need for a Phase Two ESA; and
- iii) Provide a basis for carrying out any Phase Two ESA required.

The assessment was performed in accordance with the Phase One ESA protocols outlined in O. Reg. 153/04, as amended and meets the requirements of Schedule D of the regulation.

3. SCOPE OF INVESTIGATION

This assessment was performed in accordance with the Phase One ESA protocols and included the following tasks. It is subject to the Statement of Limitations that is included as part of this report, and must be read in conjunction with the report (Appendix I).

1. Records review.
2. Interviews with pertinent Site contacts.
3. A Site reconnaissance to assess current Site and Study Area conditions and the presence of any visual indications or olfactory evidence of potential contamination. A detailed review of regulatory compliance issues was not within the terms of reference for this assignment.
4. An evaluation of the information gathered from the records review, interviews and Site reconnaissance.
5. Preparation of this report discussing the information compiled and the corresponding conclusions and recommendations.



4. RECORDS REVIEW

4.1 General

4.1.1 Phase One ESA Study Area Determination

In accordance with O. Reg. 153/04, as amended, the Phase One ESA must include, at a minimum the Site and any other property that is located within 250 m of the Site boundaries. This is referred to as the Phase One ESA Study Area (Study Area) as depicted on Drawing 1-2 (Current Land Uses in the Phase One ESA Study Area), appended.

This Study Area was used since lands adjacent to the Site (within and outside of the 250 m radius) were historically used for agricultural and residential purposes and it was considered unlikely that potential impacts to the Site from a geoenvironmental viewpoint would be present from properties located outside the Study Area.

4.1.2 First Developed Use Determination

Based on information from the chain of title, aerial photographs and historical atlases, the first developed use of the Site was for agricultural purposes in the late 1830s.

4.1.3 Fire Insurance Plans

PML reviewed the Catalogue of Canadian Fire Insurance Plans (FIPs), 1875 to 1975, which listed FIPs for Collingwood, Simcoe County dated 1904 (revised 1917) and 1955. The 1904/1917 FIP is held at the University of Western Ontario in London and was not deemed to be reasonably accessible. The 1955 FIP is held at Simcoe County Archives and they indicated it did not extend as far west as our Site.

Risk Management Services (RMS) was contacted on January 20, 2014 regarding available historical information; namely FIPs and fire risk inspection reports/site plans related to the Site. The response from RMS on January 29, 2014 indicated that there were no records in their files available for the Site.



4.1.4 Chain of Title

In order to determine past land uses, historical data including land registry information was obtained by Ms. Kathy E. Hewitt, a freelance title searcher at the Simcoe Land Registry Office. The information obtained from Ms. Hewitt indicated there is one chain of title for the Site. Site ownership information was provided dating back to 1836.

For ease of reference, the sequence of Site ownership information with reference to first developed use is included in Appendix C.

Table 1, appended summarizes the sequence of Site ownership information.

4.1.5 Directories

PML visited the Collingwood Public Library for the Site and Study Area occupancy information in the form of Street Directories. PML reviewed the directories for 1857, 1864, 1866, 1869, 1873, 1875, 1882, 1884, 1910, 1912, 1914, 1923 and 1935. The Site was not listed in any of the directories reviewed.

4.1.6 Environmental Reports

The Client was not aware of any previous environmental reports completed for the Site or Study Area. A previous Geotechnical Investigation (dated August 13, 2004) was completed by Terraprobe Consulting Geotechnical & Environmental Engineering (Terraprobe) and provided to PML by the Client. Terraprobe's investigation consisted of twenty boreholes advanced to a depth of 5.0 m. The subsurface conditions revealed topsoil underlain by native sand, silty sand, and silty sand till deposits. Stabilized water levels varied from 0.2 m to 2.6 m, which suggested a variation in elevation that approximately mirrored surface topography/elevation.

PML recently completed a geotechnical investigation for the Site, the findings of which will be reported under separate cover. PML's field work findings were very similar to those noted in the above 2004 geotechnical report by others.



4.2 Environmental Source Information

In order to collect Environmental Source Information related to the Site and Study Area the following inquiries were made:

- i) A Freedom of Information (FOI) request for the Site was sent on January 16, 2014 to the MOE. It is noted the MOE request involves a search of their records since 1985 and information filed with the MOE prior to 1985 is not included in the FOI request. Records prior to 1985 require a manual search initiated by specific request and is subject to additional fees.
- ii) The MOE on-line Brownfields Environmental Site Registry was searched for the Site on February 14, 2014 to determine if any RSCs have been filed under Part XV.1 under the Environmental Protection Act for the Site or adjacent properties.
- iii) The Town of Collingwood Official City Plan was reviewed online on February 14, 2014.
- iv) The Nottawasaga Valley Conservation Authority (NVAC) website was reviewed on February 14, 2014 for information related to Areas of Natural Significance.
- v) An inquiry was made to the Technical Standards and Safety Authority (TSSA) Fuels Safety Division for the Site on February 21, 2014. The TSSA has been licensing fuel distribution systems, bulk transporters, retail outlets as well as storage tanks under the Gasoline Handling Act / Liquid Fuels Handling Code since about 1990.
- vi) An EcoLog ERIS (Environmental Risk Information Services Ltd.) report was obtained for the Site on January 27, 2014. An EcoLog ERIS report provides environmental and historical information compiled from over 45 government and private source records covering various time periods. The report is used to aid in the identification of possible environmental concerns or risks for commercial, industrial and residential sites.



Copies of the above regulatory requests and / or responses (where applicable) are included in Appendix D. A copy of the EcoLog ERIS report is provided in Appendix E.

Details of pertinent information revealed in the documents are further discussed in Table 2.

4.3 Physical Setting Sources

4.3.1 Aerial Photographs

Aerial photographs were reviewed for the years 1969, 1976, 1981, 1987, 1995, and 2012. These photos were reviewed (in conjunction with available Street Directories) in order to assess the evolution and development on and around the Site.

The aerial photographs that were reviewed were chosen based on availability and to best illustrate the timeline of development within the Study Area while attempting to provide a photograph for every ten year period along with depicting any major changes within the Study Area.

A discussion of the information depicted in the photographs is provided in Table 3 (1), attached.

Appendix F contains a copy of the 1969, 1976, 1981, 1987, 1995, and 2012 aerial photographs depicting the approximate location of the Site (included as Figures 1 through 6, respectively).

4.3.2 Topography, Hydrology and Geology

Geologic maps and publications illustrating physiography, Palaeozoic and Quaternary geology, as well as bedrock topography were available in our files for review. In addition, a review of historical and topographic maps available from the Ontario Base Maps (OBM) ArcIMS Service available at the Geography Network Canada website and the Canadian County Atlas Digital Project website was completed. The information collected is listed on Table 3 (2) and summarized in the Conceptual Site Model, Section 7.4 of this report.

Appendix F contains copies of a copy of the Circa 1881 Historical Atlas, 1993 topographic map and the 2004 OBM, depicting the approximate location of the Site (Figures 7 to 9, respectively).



4.3.3 Water Well Records

The EcoLog ERIS report indicated that the Water Well Information System (WWIS) database had two records for the Site (WWIS 2, 3) and four records within the Study Area. The wells were classified as domestic water supply wells and three of the six wells were abandoned supply wells. The wells were drilled to depths of 10.7 to 23.2 m. The static ground water level was not listed for two of the wells but the remaining four wells had static ground water levels between 0.9 and 7.9 m. Copies of the well records are included in the EcoLog ERIS report in Appendix E.

The client informed PML that there is currently an active well located within the Study Area that was not included in the well records in the EcoLog ERIS report. The well is located directly south of the Site at Fisher Field (820 Tenth Line).

4.3.4 Fill Materials

Reference is made to Table 3 (3), appended, and to Section 6.2.16 of this report for details of fill materials.

4.3.5 Water Bodies and Areas of Natural Significance

A tributary of Black Ash Creek crosses the northwest corner of the Site. An area of ponded water was noted along the central south property limit of the Site.

According to the Town of Collingwood Zoning By-Law 2010-040 (Schedule 'A' – Map 9), the Site was zoned as REC (Recreation) with the northwest corner of the Site wooded area/creek crossing being considered Environment Protection (EP).

4.4 Site Operating Records

The Site is currently vacant; no operating records were available for review.



5. INTERVIEWS

5.1 Summarized Interview Information

Mr. Ken Hale of Landex Capital Corporation (Manager, Land Development and Acquisitions) was contacted regarding the Site and overall property. Reference is made to Table 4 for pertinent information and Appendix G for copies of the interview correspondence. PML presumes that information provided through persons interviewed or contacted is factual and accurate.

5.2 Comparison and Evaluation of Interview Information

The information provided by the persons interviewed was generally consistent with other information sources.

6. SITE RECONNAISSANCE

6.1 General Requirements

The Site and Study Area reconnaissance was carried out by Ms. Tennille Pegg, B.Sc., and Ms. Danika Durish, B.Sc., C.E.T., EP, on January 22, 2014 between 9:00 a.m. and 1:30 p.m. Weather at the time of Site reconnaissance was sunny but cold with approximately 30 to 110 cm of snow cover on the ground surface. The temperature was approximately -25°C. PML recommends a Site reconnaissance in the spring once the snow cover has melted.

Selected photographs taken at the time of Site reconnaissance are included with descriptions in Appendix H.



6.2 Specific Observations at the Phase One ESA Property

6.2.1 General Description of Structures

The Site is occupied by four structures as follows:

Residential Dwelling

The southeast portion of the Site was occupied by a vacant one storey, brick dwelling with a basement. The construction materials of the dwelling consisted of a shingled roof, concrete block with brick veneer.

Shed

A wood frame shed was located directly west of the dwelling. Due to snow cover however, the shed could not be entered during the time of the Site reconnaissance.

Golf Driving Range Shed

A wood frame shed associated with the on Site golf driving range was located at the northeast corner of the Site. The shed was locked at the time of the Site reconnaissance.

Wood Shack

A wood shack structure was located near the northwest corner of the Site at the edge of the wooded area. The shack was constructed with wood and tarps. There was some debris surrounding the shack that included a barbeque, wood and furniture.

A barn, one storey steel shed and a two storey frame dwelling previously existed in the central-east portion of the Site. The foundations of the former buildings were visible at the time of the Site reconnaissance.



6.2.2 Description of Below-Ground Structures

The basement area of the existing residential dwelling consisted of five rooms. Inspection of the rooms revealed storage areas, freezers, tables, chairs, electrical panel, hot water tank, toys, garbage and leftover debris from previous tenants.

6.2.3 Storage Tanks and Bulk Containers

Evidence of existing underground storage tanks (USTs), above ground storage tanks (ASTs) or bulk storage facilities was not observed during our Site visit. According to the interview with Mr. Ken Hale, he is not aware of any tanks that were or are present on the property.

6.2.4 Potable and Non-Potable Water Sources

The buildings were serviced by private water wells as discussed in section 4.3.3.

6.2.5 Underground Utility and Service Corridors

Overhead hydro and telephone/cable is located along Tenth Line and run into the central portion of the Site. PML was informed that the hydro and water utilities that run into the center of the property were disconnected in 2007. Based on observations made during the Site reconnaissance, a natural gas pipeline runs along the east side of Tenth Line.

6.2.6 Exit and Entry Points

Vehicular access to the Site was provided by two driveways from Tenth Line.

6.2.7 Existing and Former Heating and Cooling Systems

Electric baseboard heaters were observed in the existing residential dwelling. No cooling systems were observed.

No vent pipes or chimneys were observed to confirm any former heating systems.



6.2.8 Special Attention Items and Hazardous Materials

Due to the age of the existing building (1960s), it is likely that designated substances and/or hazardous materials may be present. Asbestos containing materials such as floor and ceiling tiles, roofing, insulation and other construction materials may be present on the Site, as well as lead based paints.

Two pole mounted transformers were located along Tenth Line at the northeast and southeast corners of the Site, which may contain polychlorinated biphenyls (PCBs).

6.2.9 Drains, Pits and Sumps

No drains, pits or sumps were noted at the Site.

6.2.10 Water Wells

Visual inspection of the Site did not reveal the presence of any water wells. According to the MOE Water Well Records Interactive Mapping website, there are two wells on the Site near the existing and former dwellings, and four wells located with the Study Area. The Client could not confirm the location of these wells.

6.2.11 Sewage Works

Due to the rural location, the Site is not serviced by municipal sanitary sewers. A septic system was not observed at the time of the Site reconnaissance and the Client could not confirm its location.

6.2.12 Ground Surface

The Site is generally flat with a gentle slope up to the west towards Blue Mountain. There are fill piles and berms located in the central portion of the Site that were brought from off-site. The ground surface consists of a gravel drive way with the remainder of the Site being covered with crops, grass, shrubs and trees.



6.2.13 Railway Lines or Spurs

No current or former railway lines or spurs were noted at the Site.

6.2.14 Stained Soil, Vegetation, Flooring or Pavement

No staining was noted during PML's Site reconnaissance.

6.2.15 Stressed Vegetation

Due to snow cover at the time of the Site reconnaissance, the condition of the vegetation could not be ascertained. However, there was no obvious evidence of distress on trees, bushes and shrubs on the Site.

6.2.16 Fill and Debris Materials

Debris material was noted in the former location of the frame barn and included concrete, wood and metal scrap. Debris piles were also noted as a result of illegal dumping in the wooded areas in the northwest corner of the Site. The piles contained discarded wood, furniture, toys, and mattresses.

Based on the Site observations and interviews, it is known that fill material is present in stockpiles and berms in the center of the property. According to the Client, the fill was brought from the construction of Georgian Meadows subdivision located directly east of the Site on the east side of Tenth Line. There are approximately 14 berms on the Site that range from approximately 70 to 260 m in length and approximately 6 m in width. PML could not confirm the height of the berms due to the presence of deep snow, but they are likely to be less than 3.0 m high.

Based on the previous geotechnical investigation by others in 2004 and PML's recent geotechnical investigation, no fill was identified in the boreholes on the Site at the time of the investigations.



6.2.17 Potentially Contaminating Activities (PCAs)

The following PCAs listed in Table 2 of Schedule D in O. Reg. 153/04, as amended were observed on Site and/or are likely to have occurred on Site:

- Importation of fill material of unknown quality;
- Gasoline and associated products storage in fixed tanks;
- Use of Pesticides (including Herbicides, Fungicides and Anti-Fouling Agents)
Manufacturing, Processing, Bulk Storage and Large-Scale Applications.

6.2.18 Unidentified Substances

No unidentified substances were noted at the Site.

6.2.19 Pits and Lagoons

No lagoons were observed on Site. An area of ponded water was observed along the south property limit of the Site.

6.2.20 Waste Disposal

The Site is currently vacant and does not produce any waste or recycling. However, domestic waste and recycling generated at the Site in the past was collected by the municipality.

6.2.21 Roads, Parking Facilities and Rights of Way

The Site bounded by Tenth Line to the east. A driveway is located on the Site to the existing residential dwelling as well as to the areas where the former barn, shed and residential dwelling existed.

6.2.22 Noises, Odours or Vibrations

No unusual noises, odours or vibrations were noted during PML's Site reconnaissance; other than vehicular traffic.



6.2.23 Observations of Adjacent Land Uses

During the Site reconnaissance, a brief visual inspection of the Study Area was completed from the limits of the Site and publicly accessible areas to check for PCAs, water bodies and areas of natural significance. Refer to Drawing 1-2 for a depiction of the uses identified within the Study Area. The following is a summary of the land used adjacent to the Site.

North

- Blue Mountain Golf and Country Club (706 Tenth Line).

East

- Tenth Line Right of Way (ROW) followed by residential dwellings of Georgian Meadows Subdivision and agricultural lands.

South

- Fisher Field sports park (820 Tenth Line), Bygone Days Heritage Park (879 Sixth Street) and residential dwellings at 999 to 1035 Sixth Street followed by Sixth Street ROW.

West

- Vacant, agricultural lands (no addresses found).

7. **REVIEW AND EVALUATION OF INFORMATION**

7.1 **Current and Past Uses**

Reference is made to Table 5, which provides a summary of the current and past uses of the Site and Phase One ESA Study Area.



7.2 Potentially Contaminating Activities (PCAs)

7.2.1 Phase One ESA Property (Site)

Four on Site potentially contaminating activities, PCA 1 to PCA 4, were identified at the time of this assessment as listed in Table 6, attached.

7.2.2 Phase One ESA Study Area

Two off Site potentially contaminating activities, PCA 5 and PCA 6, were identified within the Study Area and are summarized in Table 6.

7.3 Areas of Potential Environmental Concern (APEC)

Based on the findings of the Site records review and reconnaissance, interviews and our previous experience, the above PCAs have been evaluated to determine the Site's Areas of Potential Environmental Concern (APECs).

PCAs 1, 2, 3, and 5 are considered to have contributed to three APECs, which are summarized in Table 7, appended.

Regarding PCA 4, the presence of debris was viewed as an aesthetically objectionable waste and should be collected and disposed of off-site at appropriate recycling or disposal facilities. Regarding PCA 6, the AST's are located above ground and are of limited volume, located on the building interior and/or east side of the maintenance building. In the event of any spills, leaks or discharges, the potential for significant off Site contamination is considered low since the release of waste oil would be visually identified and likely cleaned up within a short time period.

7.4 Phase One ESA Conceptual Site Model

Based on the review, interpretation and evaluation of the data compiled, a Phase One ESA Conceptual Site Model (CSM) of the Phase One ESA property was prepared.



The Site is a rectangular shaped parcel of land that is approximately 40 ha (100 ac) in size. The Site is currently accessible from Tenth Line, and has a frontage of about 300 m along Tenth Line and is about 1,350 m deep to the west limit. The Site is occupied by a one storey brick bungalow and wood frame shed in the southeast corner of the Site. There are berms located in the central portion of the Site that were constructed of fill brought from off-site. The ground surface consists of a gravel drive way with the remainder of the Site being covered with crops, grass, shrubs and trees.

The topographic elevation of the Site is between about 195.3 and 215.0 (metric, geodetic) and is sloping gradually up to the west towards Blue Mountain. The Site grades generally match the grades of adjacent properties, or are within 1 m. Bedrock comprises grey sublithographic limestone with minor dolostone, at an elevation of about 182.0 (metric, geodetic). Local and regional ground water flow is anticipated to be generally toward the northeast, toward Nottawasaga Bay. Surface drainage can be expected to flow east due to the ground surface elevations and into the ditches that run along Tenth Line. Local variations in ground water flow patterns however can be expected. A small tributary of Black Ash Creek crosses the northwest corner of the site through the wooded section, which is considered to be and Environmental Protection area under the Official Plan.

Based on the findings of the Site records review, reconnaissance, and interviews, Drawing 1-3 appended presents a graphical representation of the PCAs identified as part of this Phase One ESA identified in Section 7.2.

Contaminants of potential concern at the Site include metals and inorganic parameters, petroleum hydrocarbons (PHCs), volatile organic compounds (VOCs), and pesticides.

8. CONCLUSIONS AND RECOMMENDATIONS

This Phase One ESA was conducted to:

- i) develop a preliminary determination of the likelihood that one or more contaminants have affected any land or water on, in or under the Phase One ESA property;



- ii) determine the need for a Phase Two ESA; and
- iii) provide a basis for carrying out any Phase Two ESA required.

The assessment was performed in accordance with the Phase One ESA protocols outlined in O. Reg. 153/04, as amended, which came into force on July 1, 2011 and meets the requirements of Schedule D.

Cognizant of our findings, and evaluation of the PCAs, three APECs were identified for the Site. Refer to Tables 6 and 7, appended for a more detailed summary. A Phase Two ESA consisting of a program of soil and ground water sampling and chemical testing is recommended to address the potential for contaminants to exist at the APECs described in the preceding sections.

It is recommended that a Designated Substances Survey (DSS) be completed for any buildings or structures prior to demolition or renovations in order to ensure appropriate handling and disposal of the demolition debris and for the safety of workers and building occupants.

Decommissioning of the water wells reported to be on Site will be required by the Owner in accordance with the Ontario Water Resources Act, O. Reg. 903/90, amended to O. Reg. 372/07.

The assignment is subject to the Statement of Limitations that is included in Appendix I and must be read in conjunction with this report.

8.1 Whether a Phase Two ESA is Required For a Record of Site Condition

Ontario Regulation 153/04 (O. Reg. 153/04) is a provincial regulation enacted to provide detailed requirements that property owners must meet in order to file a Record of Site Condition (RSC). An RSC is a legal document filed on the Environmental Site Registry that certifies the environmental condition of the property meets the regulatory standards applicable for the proposed land use.

It is the opinion of PML that a Phase Two ESA is required before a RSC can be submitted for the Site.



8.2 Record of Site Condition Based On Phase One ESA Alone

It is the opinion of PML that an RSC cannot be submitted for the Site based on a Phase One ESA alone; a Phase Two ESA is required before a RSC can be submitted for the Site.

8.3 Signatures

This report was completed by Tennille Pegg, B.Sc., who has been trained to conduct Phase One ESAs in accordance with O. Reg. 153/04, as amended.

This report was reviewed by Melissa King, P.Geo., a Professional Geoscientist registered with the Association of Professional Geoscientists of Ontario. Ms. King is Manager of Geoenvironmental Services in PML's Hamilton branch office and is a Qualified Person (QP) registered with the MOE. She has over 15 years of interdisciplinary professional experience specializing in geoenvironmental and hydrogeologic investigations and project management. Her main areas of expertise include Phase One and Phase Two ESAs, site cleanup/remediation planning and supervision, waste management, UST and AST removals, site remediation, Risk Assessment, Records of Site Condition and hydrogeologic investigations. She has completed hundreds of Phase One ESAs for commercial, industrial, and residential clients for a wide variety of project types (industrial complexes, commercial developments, entertainment and institutional buildings, and residential development).

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We trust the information presented in this report is sufficient for your present purposes. If you have any questions, please do not hesitate to contact our office.

Sincerely

Peto MacCallum Ltd.

A handwritten signature in purple ink, reading "Tennille Pegg", is positioned above the printed name.

Tennille Pegg, B.Sc.
Project Supervisor, Geoenvironmental Services



Melissa King, P.Geo. QP_{ESA}
Associate
Manager, Geoenvironmental Services

TP/MAK:jlb



9. REFERENCES

Refer to Table 8 for a list of documents/data cited in this report.

10. APPENDICES

The following are Appendices A to I which must be read in conjunction with this report.



TABLE 1
Chain Of Title

CHAIN	PARCEL DESCRIPTION	LOT NUMBER	CURRENT OWNER	PREVIOUS OWNERSHIP
Site: 780 Tenth Line (PIN: 58254-0031 (LT))				
1	PIN 58254-0031 (LT)	North Half of Lot 43	August 2004 – Linksview Development Corporation	Pre 1836 – Crown 1836 to 1837 – William Clenderin 1837 to 1861 – David Thompson 1861 to 1863 – John Currie 1863 to 1880 – Donald Currie 1880 to 1883 – Peter Currie 1883 to 1892 – James Lindsay 1892 to 1904 – James Malcolm 1904 to 1929 – George W. Schell 1929 to 1957 – Frederic Schell 1957 to 1984 – Antonius J. Van Der Vechte and Antonia Van Der Vechte 1984 to 1996 – Hendrikus Johannes Van Der Vechte 1996 to 1998 – Hendrikus Johannes Van Der Vechte and Mary Elinore Van Der Vechte 1998 to 2004 – Bay Ridge Inc. *For a term of 5 years from June 1993 to May 1998 the property was vacant with no residents living on the site.



TABLE 2
Environmental Source Information

ITEM	ISSUED BY	TITLE	DATE	PERTINENT INFORMATION
1.	Ministry of the Environment (MOE)	MOE Freedom of Information	January 16, 2014	- No response had been received from the MOE at the time of issuing this report. In the event environmental concerns are noted, a written response will be forwarded upon receipt of the information.
2.	MOE	Brownfields Environmental Site Registry	February 14, 2014	- A search of the registry website did not find any RSCs filed between October 1, 2004 and June 30, 2011 for the Site or within the Phase One Study Area. - No RSCs have been filed after July 1, 2011.



TABLE 2
Environmental Source Information

ITEM	ISSUED BY	TITLE	DATE	PERTINENT INFORMATION
3.	Town of Collingwood	Collingwood Zoning By – Law 2010-040 Schedule ‘A’ Map 5 Official Plan: Schedule A: Land Use Plan Schedule B: Environmental Protection – Natural Heritage Resource Areas Schedule B1: Black Ash Creek Special Policy Area Schedule C: Residential Density Plan Schedule E: Municipal Services Area Map Schedule E1: Municipal Water and Sewage Services Map	February 14, 2014	- According to the Collingwood Zoning By-Law Schedule ‘A’ – Map 9, the Site is zoned as REC-6, Recreation. The northwest corner of the site is zoned as EP, Environmental Protection. - According to the Land Use Map (Schedule ‘A’), the Site is located within a recreation portion of Collingwood west of the downtown commercial core. - According to the Environmental Protection – Natural Heritage Resource Areas (Schedule ‘B’), the Site and Study Area are not part of any valleylands, wetlands, woodlands or fish spawning and nursery habitat. - According to the Black Ash Creek Special Policy Area map (Schedule ‘B1’), the Site and Study Area are not part of the Black Ash Creek Special Policy Area. - According to the Residential Density Plan (Schedule ‘C’), the Site and Study Area are considered rural residential. - According to the Municipal Service Plan (Schedule ‘E1’) and the Municipal Services Area Map (Schedule ‘E’), the Site and Study Area are not part of the existing Town of Collingwood services, which includes existing sewer and water lines and are a part of the Municipal Service Area.



TABLE 2
Environmental Source Information

ITEM	ISSUED BY	TITLE	DATE	PERTINENT INFORMATION
4.	Nottawasaga Valley Conservation Authority (NVCA)	Online Mapping	February 14, 2014	- The Site has a wooded area in the northwest portion as well as a watercourse running through the northwest corner. - The west portion of the Site is a NVCA Regulated Area. - The Site and Study Area are part of a Significant Groundwater Recharge Area. - The Study Area is a part of a Highly Vulnerable Aquifer.
5.	Technical Standards and Safety Authority	Underground storage tanks (USTs) and aboveground storage tanks (ASTs)	February 21, 2014	- The TSSA indicated that no records were found for the Site.



TABLE 2
Environmental Source Information

ITEM	ISSUED BY	TITLE	DATE	PERTINENT INFORMATION
6.	EcoLog ERIS Ltd.	Proposed Linksview Subdivision 780 Tenth Line, Collingwood, Ontario	January 27, 2014	- Of the databases searched as part of the EcoLog ERIS report, the following had records for the Site and/or Study Area: - <u>Ontario Regulation 347 Waste Generators Summary:</u> No records were found for the Site and five records were found within the Study Area for Blue Mountain Golf and Country Club (maintenance shop) located at 706 Tenth Line. Wastes generated included; petroleum distillates and waste oils and lubricants. - <u>Permit to Take Water:</u> No records were found for the Site and three records were found within the Study Area for Blue Mountain Golf and Country Club located at 706 Tenth Line (Lot 44, Concession 9). - <u>Pesticide Register:</u> No records were found for the Site and one record was found within the Study Area for Havens Home Building Centre a Division of Brian Caron Holdings Ltd. located at 63 Highlands Crescent. - <u>TSSA Pipeline Incidents:</u> No records were found for the Site and one record was found within the Study Area. A heating fuel pipe line strike was reported by a home owner at 60 Connor Avenue, with no health or environmental impacts. - <u>Water Well Information System:</u> Two records were found for the Site and four records were found within the Study Area, as discussed in section 4.3.3.



TABLE 3

Physical Setting Sources
Aerial Photographs, OBM, Water Well Records, And Fill Presence/Absence Records

1. Aerial Photographs		
TIME PERIOD	SUMMARIZED INFORMATION	
	SITE	STUDY AREA
1969	- The Site was used for agricultural purposes. - The house at 788 Tenth Line was located in the southeast corner. - The house and barns at 780 Tenth Line were located in the central portion of the Site. - Wooded area in the northwest corner of the Site.	North – Wooded area and agricultural land followed by Mountain Road. East – Tenth Line followed by agricultural land. South – Agricultural land with some rural residential dwellings followed by Sixth Street. West – Agricultural land.
1976	- Similar to the 1969 photograph.	North – Wooded area and agricultural land followed by Mountain Road. East – Tenth Line followed by agricultural land. South – Agricultural land with some rural residential dwellings followed by Sixth Street. West – Agricultural land.



TABLE 3

Physical Setting Sources
Aerial Photographs, OBM, Water Well Records, And Fill Presence/Absence Records

1. Aerial Photographs		
TIME PERIOD	SUMMARIZED INFORMATION	
	SITE	STUDY AREA
1981	- Similar to the 1976 photograph	North – Wooded area and agricultural land followed by Mountain Road. Some clearing of trees in the wooded area. East – Tenth Line followed by agricultural land. South – Agricultural land with some rural residential dwellings followed by Sixth Street. West – Agricultural land.
1987	- Similar to the 1981 photograph	North – Blue Mountain Golf and Country Club was constructed directly to the north of the Site followed by agricultural land and Mountain Road. East – Tenth Line followed by agricultural land. South – Agricultural land with some rural residential dwellings followed by Sixth Street. West – Agricultural land.



TABLE 3
Physical Setting Sources
Aerial Photographs, OBM, Water Well Records, And Fill Presence/Absence Records

1. Aerial Photographs		
TIME PERIOD	SUMMARIZED INFORMATION	
	SITE	STUDY AREA
1995	- Similar to the 1987 photograph	North – Blue Mountain Golf and Country Club followed by agricultural land and Mountain Road. East – Tenth Line followed by agricultural land. South – Agricultural land with some rural residential dwellings followed by Sixth Street. West – Agricultural land.
2012	- Similar to the 1995 photograph - Barns and residential building in the central section of the Site have been demolished - Berms are located in the central portion of the Site	North – Blue Mountain Golf and Country Club followed by agricultural land, residential dwellings and Mountain Road. East – Tenth Line followed by residential dwellings. South – Agricultural land with some rural residential dwellings followed by Sixth Street. West – Agricultural land.



TABLE 3

Physical Setting Sources
Aerial Photographs, OBM, Water Well Records, And Fill Presence/Absence Records

2. OBM / Topographic / Geologic Maps			
ITEM	TIME PERIOD	RATIONALE	SUMMARIZED INFORMATION (Physiography and Geology)
Historical Atlas	1881	First developed use	- The Site and Study Area were located within the town limits of Collingwood, Ontario. - Nottawasaga Bay was located approximately 2.8 km north/northeast of the Site. - Pretty River was located approximately 4.1 km southeast of the Site with three smaller tributaries noted close to the Site.
Paleozoic Bedrock Geology Map P0954	1974	Bedrock formation	- The bedrock underlying the Site comprises grey sublithographic limestone with minor dolostone of the Lindsey Formation from the Ordovician period.
Bedrock Topography Map P0924	1974	Bedrock elevation	- The bedrock elevation is expected to be approximately 182.0 (metric, geodetic) at/near the Site (15 m below grade).
Drift Thickness Map P0925	1974	Drift thickness	- The drift thickness is expected to be approximately 15.0 m at/near the Site.
Bedrock Geology Map 2544	1991	Bedrock formation	- The bedrock underlying the Site comprises limestone, dolostone, shale, arkose and sandstone of the Simcoe Group, Lindsey Formation from the Middle Ordovician Period.



TABLE 3

Physical Setting Sources
Aerial Photographs, OBM, Water Well Records, And Fill Presence/Absence Records

2. OBM / Topographic / Geologic Maps			
ITEM	TIME PERIOD	RATIONALE	SUMMARIZED INFORMATION (Physiography and Geology)
Federal Topographic Map	1993	Topography, buildings on Site and water courses	- The barns and house are located in the central portion of the Site. - The existing house is located at the southeast corner of the Site. - The Blue Mountain Golf and Country Club is located to the north of the Site. - A tributary to Black Ash Creek Runs through the northwest corner of the Site.
Ontario Base Map (OBM)	2004	Topography, buildings on Site and water courses	- Topographic contours indicate that the Site was at an elevation of 200 to 215 (metric, geodetic). - Topography of the region/study area slopes up to the west towards Blue Mountain and down to the northeast towards Nottawasaga Bay. - The existing building on Site is located in the southeast corner of the Site and the demolished house is located in the central portion of the Site. - Regional ground water flow is expected to be to the north towards Nottawasaga Bay. Local variations in ground water flow patterns should be expected. - A tributary of Black Ask Creek runs through the northwest corner of the Site flowing into Nottawasaga Bay.
3. Fill Presence / Absence			
Based on review of historical data, the Site visit and interviews with the current owner of the Site, fill is present on the Site. The fill was transported to the Site from Georgian Meadows subdivision located directly east of the Site. The fill is in the form of berms and stockpiles in the central section of the Site.			



TABLE 4
Interview(s) Summarized Information

DATE	PLACE	PERSON(S) INTERVIEWED	RATIONALE	METHOD	INFORMATION PROVIDED
February 18, 2014	Not Applicable	Mr. Ken Hale	Manager, Land Development and Acquisitions at Landex Capital Corporation	Electronic Mail	- Mr. Hale indicated the Site is not the subject of environmental litigation, regulatory citations or enforcement action. - Mr. Hale indicated that there has been no adverse press reports or complaints on file concerning the Site. - Mr. Hale indicated that the Site has never been used for industrial, dry cleaning, a garage or bulk liquid dispensing facility, including a gasoline service station. - Mr. Hale was not aware of any environmental issues with the Site such as waste disposal, landfilling, chemical use, chemical storage, spills or leaks, above ground storage tanks (ASTs)/ underground storage tanks (USTs), adverse press reports or contamination. - Mr. Hale indicated that the site is currently zoned as recreation. - Mr. Hale indicated that there has never been a designated substances survey (DSS) completed for the existing or former buildings on Site. - Mr. Hale indicated that the former buildings were demolished in 2010. - Mr. Hale indicated that there have not been any ASTs/USTs located within the former residential dwelling and barn area prior to demolition. - Mr. Hale indicated that he was not aware if the farmer used pesticides and/or herbicides on the Site. - Mr. Hale indicated that the hydro and water running



TABLE 4
Interview(s) Summarized Information

DATE	PLACE	PERSON(S) INTERVIEWED	RATIONALE	METHOD	INFORMATION PROVIDED
Cont'd.					through the center of the Site was used for watering horses for the Collingwood Horse Show. - Mr. Hale states that he cannot confirm the locations of any septic systems or well locations on the Site. - Mr. Hale indicated that the fill piles running north-south in the center of the property originated from Georgian Meadows topsoil stockpile. - Mr. Hale indicated that the barn area fill is general debris and will be removed. - Mr. Hale indicated he was not aware of the structures or general debris in the woods in the northwest portion of the Site and it is the result of illegal dumping. - Mr. Hale indicated that the tributary running through the site along the northwest portion of the site is Taylor's Creek, a tributary to Black Ash Creek. - Mr. Hale indicated that the northeast corner of the Site is leased by the golf course to the north on an annual basis for use as a driving range. - Mr. Hale indicated the posts in the ground were in conjunction with temporary R/V hookups during the horse show events under the previous owner and that they have all since been disconnected. - Mr. Hale indicated that the existing house and shed were constructed about 50 years ago.



TABLE 5
Current And Past Uses
Phase One ESA Property

Year	Name of Owner	Description of Property Use	Property Use ¹	Other Observations from Aerial Photographs, Fire Insurance Plans (FIP), Etc.
780 & 788 Tenth Line				
Pre 1836	Crown	Vacant	Agriculture or other use	-
May 1836 to May 1837	William Clenderin	Rural property in the Town of Collingwood, vacant	Agriculture or other use	- Circa 1881 Historical Atlas for Simcoe County indicates the Site comprises a property in the southwest portion of the Town of Collingwood and is vacant
May 1837 to October 1861	David Thompson	Vacant, undeveloped property in the Town of Collingwood	Agricultural or other use	- The 1857 Street Directory indicated the Site was not listed.
October 1861 to March 1863	John Currie	Vacant, undeveloped property in the Town of Collingwood	Agriculture or other use	-



TABLE 5
Current And Past Uses
Phase One ESA Property

Year	Name of Owner	Description of Property Use	Property Use ¹	Other Observations from Aerial Photographs, Fire Insurance Plans (FIP), Etc.
March 1963 to March 1880	Donald Currie	Vacant, undeveloped property in the Town of Collingwood	Agriculture or other use	-
March 1880 to April 1883	Peter Currie	Vacant, undeveloped property in the Town of Collingwood	Agriculture or other use	-
April 1883 to July 1892	James Lindsay	Vacant, undeveloped property in the Town of Collingwood	Agriculture or other use	-
July 1892 to December 1904	James Malcom	Vacant, undeveloped property in the Town of Collingwood	Agriculture or other use	-
December 1904 to March 1929	George W. Schell	Vacant, undeveloped property in the Town of Collingwood	Agriculture or other use	- The 1910, 1912, 1914 and 1923 Street Directories indicated the Site was not listed.
March 1929 to April 1957	Frederic Schell	Vacant, undeveloped property in the Town of Collingwood	Agriculture or other use	- The 1938 Street Directory indicated the Site was not listed.
April 1957 to October 1984	Antonius J. Van Der Vechte and Antonia Van Der Vechte	Vacant, undeveloped property in the Town of Collingwood	Agriculture or other use	- The 1969, 1976, and 1981 aerial photographs depict buildings in the southeast portion of the site with driveway access.



TABLE 5
Current And Past Uses
Phase One ESA Property

Year	Name of Owner	Description of Property Use	Property Use ¹	Other Observations from Aerial Photographs, Fire Insurance Plans (FIP), Etc.
October 1984 to November 1998	Hendrikus Johannes Van Der Vechte In 1996 Mary Elinore Van Der Vechte was included as a joint tenant.	Vacant, undeveloped property in the Town of Collingwood	Agriculture or other use	- The 1987 and 1985 aerial photographs depict buildings in the southeast portion of the site with driveway access.
November 1998 to August 2004	Bay Ridge Inc.	Vacant, undeveloped property in the Town of Collingwood	Agriculture or other use	-
August 2004 to Present	Linksview Development Corporation	Vacant, undeveloped property in the Town of Collingwood	Agriculture or other use	- The 2012 aerial photograph depicts the house in the southeast portion of the site.

Notes:

1 – for each owner, specify one of the following types of property use (as defined in O. Reg. 153/04) that applies:

- Agriculture or other use
- Commercial use
- Community use
- Industrial use
- Institutional use
- Parkland use
- Residential use

2 - when submitting a record of Site condition for filing, a copy of this table must be attached

**Cette publication hautement spécialisée n'est disponible qu'en anglais en vertu du règlement 671/92, qui an exempte l'application de la Loi sur les services en français. Pour obtenir de l'aide en francais, veuillez communiquer avec le ministère de l'Environnement au 1-800-461-6290



TABLE 6
Potentially Contaminating Activities (PCAs)
On / In / Under Phase One ESA Property And Study Area

PCA NO.	LOCATION	DESCRIPTION	PCA, TABLE 2 OF SCHEDULE D, O. REG. 153/04, AS AMENDED
ON / IN / UNDER PHASE ONE ESA PROPERTY			
1	Central portion of the Site.	- The presence of fill of unknown quality located in approximately fourteen berms. It is understood the fill material originated from the nearby Georgian Meadows development, however no reports were available regarding the chemical quality of the material and it would be prudent to check if this PCA has impacted the Site from a geoenvironmental perspective.	PCA Item No. 30 – Importation of Fill Material of Unknown Quality
2	Central - east portion of the Site	- Former presence of a residential dwelling and two barns in the central - east portion of the Site. There is the potential for the presence of above ground storage tanks (ASTs) and/or underground storage tanks (USTs) used to store fuel or oil associated with historical heating at the former residential/agricultural buildings as well farm equipment/machinery used on Site, including potential spills during re-fueling and maintenance of the equipment. It is understood that no ASTs or USTs were noted during demolition of the buildings in 2010. However, historical waste management practices related to the residential use and farming are unknown and it would be prudent to check if this PCA has impacted the Site from a geoenvironmental perspective.	PCA Item No. 28 – Gasoline and Associated Products Storage in Fixed Tanks



TABLE 6
Potentially Contaminating Activities (PCAs)
On / In / Under Phase One ESA Property And Study Area

PCA NO.	LOCATION	DESCRIPTION	PCA, TABLE 2 OF SCHEDULE D, O. REG. 153/04, AS AMENDED
ON / IN / UNDER PHASE ONE ESA PROPERTY			
3	Across the Site	- The historical and current use of the Site for agricultural purposes; there is potential for contamination from pesticide residue.	PCA Item No. 40 – Pesticides (including Herbicides, Fungicides and Anti-Fouling Agents) Manufacturing, Processing, Bulk Storage and Large-Scale Applications
4	-Northwest portion of the Site -Central portion of the Site	- The presence of aesthetic impacts and miscellaneous debris located in the area of the former residential dwelling and barns and in the forested area in the northwest corner of the Site which included concrete piles, concrete foundations, a scrap metal pile, wood pieces, furniture, mattresses, toys, etc.	Other PCAs the QP is aware of: - The presence of debris was viewed as an aesthetically objectionable waste and should be collected and disposed of off-site at appropriate recycling or disposal facilities.



TABLE 6
Potentially Contaminating Activities (PCAs)
On / In / Under Phase One ESA Property And Study Area

PCA NO.	LOCATION	DESCRIPTION	PCA, TABLE 2 OF SCHEDULE D, O. REG. 153/04, AS AMENDED
ON / IN / UNDER PHASE ONE ESA STUDY AREA			
5	North of the Site	- The historical use of the property to the north of the Site for agricultural purposes and the current use for commercial purposes as a golf course. There is potential for contamination from pesticide residue.	PCA Item No. 40 – Pesticides (including Herbicides, Fungicides and Anti-Fouling Agents) Manufacturing, Processing, Bulk Storage and Large-Scale Applications
6	Southeast portion of adjacent property north of the Site	- The historical and current use of the adjacent property to the north for use as a golf course, in particular a maintenance shed is located within the southeast corner of the golf course property which is used to store equipment and perform maintenance work. The golf course generates petroleum distillates and waste oils and lubricants as noted in the in the Ontario Regulation 347 Waste Generators Summary. Three, 205 L drums are used to store waste oil (one on the building interior and two on the building exterior). In the event of any spills, leaks or discharges, the potential for significant off Site contamination is considered low since the release of waste oil would be visually identified and likely cleaned up within a short time period.	PCA Item No. 28 – Gasoline and Associated Products Storage in Fixed Tanks



<u>TABLE 7</u> Areas Of Potential Environmental Concern (APEC) Phase One ESA Property					
Area of Potential Environmental Concern ¹	Location of Area of Potential Environmental Concern on Phase One Property	Potentially Contaminating Activity (PCA) ²	Location of PCA (on-site or off-site)	Contaminants of Potential Concern ³	Media Potentially Impacted (Ground water, soil and/or sediment)
1	Central portion of the Site within the berms.	PCA Item No. 30 – Importation of Fill Material of Unknown Quality	On Site	Metals and inorganic parameters (M&I), petroleum hydrocarbons (PHCs), volatile organic compounds (VOCs) and Organochlorine (OC) Pesticides	Soil
2	Near the former dwelling and/or farm buildings on Site.	PCA Item No. 28 - Gasoline and associated products storage in fixed tanks	On Site	M&I, PHCs, and VOCs	Soil and ground water
3	Entire Site	PCA Item No. 40 – Pesticides (including Herbicides, Fungicides and Anti-Fouling Agents) Manufacturing, Processing, Bulk Storage and Large-Scale Applications	On Site and Off-Site	M&I and OC Pesticides	Soil



Notes:

1 - Area of Potential Environmental Concern means the area on, in or under a phase one property where one or more contaminants are potentially present, as determined through the phase one environmental site assessment, including through,

(a) identification of past or present uses on, in or under the phase one property, and

(b) identification of potentially contaminating activity.

2 - Potentially Contaminating Activity means a use or activity set out in Column A of Table 2 of Schedule D that is occurring or has occurred in a phase one study area

3 - when completing this column, identify all contaminants of potential concern using the Method Groups as identified in the

"Protocol for in the Assessment of Properties under Part XV.1 of the Environmental Protection Act, March 9, 2004, amended as of July 1, 2011, as specified below:

ABNs	PCBs	Metals	Electrical Conductivity	SAR
CPs	PAHs	As, Sb, Se	Cr (VI)	
1,4-Dioxane	THMs	Na	Hg	
Dioxins/Furans, PCDDs/PCDFs	VOCs	B-HWS	Methyl Mercury	
OCs	BTEX	Cl	high pH	
PHCs	Ca, Mg	CN-	low pH	

4 - when submitting a record of site condition for filing, a copy of this table must be attached

****Cette publication hautement spécialisée n'est disponible qu'en anglais en vertu du règlement 671/92, qui an exempte l'application de la Loi sur les services en français. Pour obtenir de l'aide en francais, veuillez communiquer avec le ministère de l'Environnement au 1-800-461-6290**



TABLE 8
Documents / Data References In
Phase One ESA Report

DOCUMENT / DATA	DATE	AUTHOR / SOURCE
The MOE on-line Brownfields Environmental Site Registry	2013	Ontario Ministry of the Environment (MOE) (http://www.environet.ene.gov.on.ca/besr-public/generalSearch.do?action=redisplay)
The Town of Collingwood Official Plan	January 2014	The Town of Collingwood (http://www.collingwood.ca/official_plan)
Nottawasaga Valley Conservation Authority Interactive Map	2012	Nottawasaga Valley Conservation Authority (http://maps.simcoe.ca/NVCA/)
Natural Heritage Information Centre (NHIC)	2013	Ontario Ministry of Natural Resources (MNR) (http://nhic.mnr.gov.on.ca/)
MOE Water Well Records Interactive Map	2013	Ministry of the Environment (MOE) Water Well Records Interactive Mapping (http://www.ene.gov.on.ca/environment/en/mapping/wells/)
Aerial Photograph	1969	National Air Photo Library, Ottawa, Scale 1:40,000
Aerial Photograph	1976	National Air Photo Library, Ottawa, Scale 1:50,000
Aerial Photograph	1981	National Air Photo Library, Ottawa, Scale 1:50,000
Aerial Photograph	1987	National Air Photo Library, Ottawa, Scale 1:50,000
Aerial Photograph	1995	National Air Photo Library, Ottawa, Scale 1:50,000
Aerial Photograph	2012	Simcoe County Interactive Mapping website http://maps.simcoe.ca/Public/
Historical Atlas Map of Nottawasaga, Approximate	1881	McGill University Canadian County Atlas Digital Project,



TABLE 8
Documents / Data References In
Phase One ESA Report

DOCUMENT / DATA	DATE	AUTHOR / SOURCE
Scale: 1:21,000		http://digital.library.mcgill.ca/countyatlas/
Federal Topographic Map, Collingwood 41A/8 Edition 5 Scale: 1:50,000	1993	Natural Resources Canada, PML In House
Ontario Base Map, Scale: 1:10,000	2004	Ontario Basic Maps ArcIMS Service, Environmental Systems Research Institute Canada (http://www.geographynetwork.ca)
Map P. 954, Paleozoic Geology, Collingwood- Nottawasaga Area, Southern Ontario, Scale: 1:50,000	1974	Ontario Division of Mines
Map P. 924, Bedrock Topography Series, Collingwood-Nottawasaga Area, Southern Ontario, 41 G/8, 41 G/9, Scale: 1:50,000	1974	Ontario Division of Mines
Map P. 925, Drift Thickness Series, Collingwood – Nottawasaga Area, Southern Ontario, 41 G/8, 41 G/9, Scale: 1:50,000	1974	Ontario Division of Mines
Map 2544, Bedrock Geology of Ontario, Southern Sheet, Scale: 1:1,000,000	1991	Ministry of Northern Development and Mines
Guidance for Environmental Site Assessments under Ontario Regulation 153/04 (as amended by Ontario Regulation 511/09)	2010	Association of Professional Geoscientists of Ontario
Guide for Completing Phase One Environmental Site Assessments Under Ontario Regulation 153/04	2011	Ministry of the Environment, Environmental Assessment and Approvals Branch



TABLE 8
Documents / Data References In
Phase One ESA Report

DOCUMENT / DATA	DATE	AUTHOR / SOURCE
O. Reg. 153/04 as amended, Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act	2011	Queen's Printer for Ontario
O. Reg. 153/04 as amended, Records of Site Condition – Part XV.1 of the Environmental Protection Act	2011	Queen's Printer for Ontario
O. Reg. 511/09, Records of Site Condition – Part XV.1 of the Environmental Protection Act	2011	Queen's Printer for Ontario



KEY PLAN
COLLINGWOOD, ONTARIO

LEGEND:

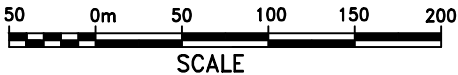
- SITE LIMITS
- UNDEGROUND GAS UTILITY (APPROX. LOCATION)
- OVERHEAD HYDRO UTILITY (APPROX. LOCATION)
- HP HYDRO POLE
- PMT POLE MOUNTED TRANSFORMER
- AST ABOVEGROUND STORAGE TANK
- O APPROXIMATE LOCATION OF WATER WELLS BASED ON ECOLOG ERIS REPORT AND MOE WELL RECORDS

NOTES:

1. EXISTING SITE FEATURES OBSERVED ON JANUARY 22, 2014.

REFERENCE:

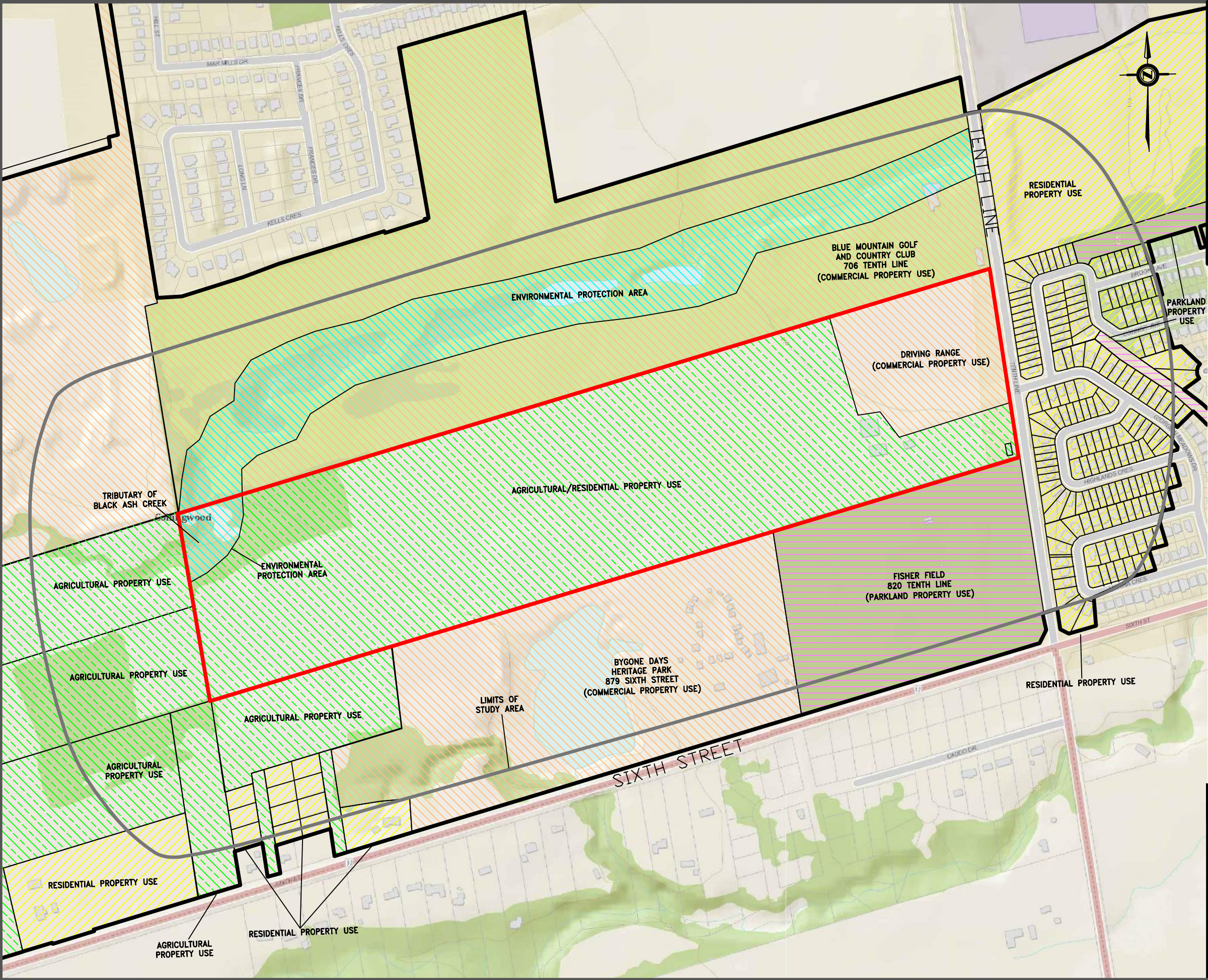
PLAN PRODUCED FROM THE COUNTY OF SIMCOE WEBSITE.



LANDEX CAPITAL CORPORATION
PHASE ONE ENVIRONMENTAL SITE ASSESSMENT
PROPOSED LINKSVIEW SUBDIVISION
780 AND 788 TENTH LINE, COLLINGWOOD, ONTARIO
SITE PLAN



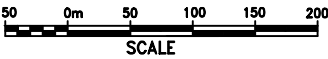
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CHECKED	DD	MAR. 2014	AS SHOWN	14BF001	1-1
APPROVED	MAK				



KEY PLAN
COLLINGWOOD, ONTARIO

- LEGEND:**
- SITE LIMITS
 - 250 m FROM SITE BOUNDARIES
 - LIMITS OF PHASE ONE ESA STUDY AREA

REFERENCE:
PLAN PRODUCED FROM GIS INFORMATION FROM THE
COUNTY OF SIMCOE ONLINE INTERACTIVE MAPPING
SERVICE.

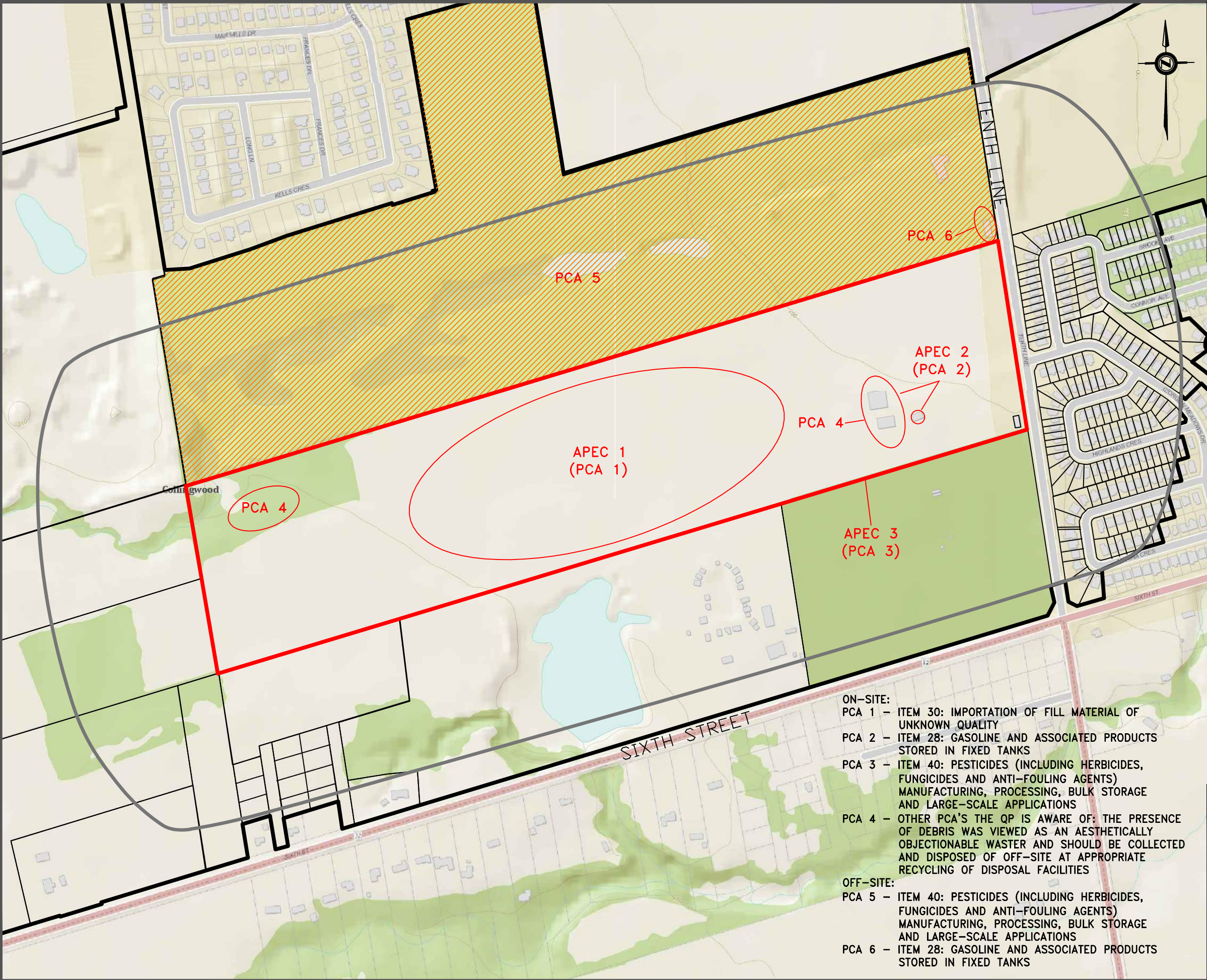


LANDEX CAPITAL CORPORATION

PHASE ONE ENVIRONMENTAL SITE ASSESSMENT
PROPOSED LINKSVIEW SUBDIVISION
780 AND 788 TENTH LINE, COLLINGWOOD, ONTARIO
CURRENT LAND USES IN THE PHASE ONE ESA STUDY AREA

 **Peto MacCallum Ltd.**
CONSULTING ENGINEERS

DRAWN	TP	DATE	SCALE	PML REF.	DRAWING NO.
CHECKED	DD	MAR. 2014	AS SHOWN	14BF001	1-2
APPROVED	MAK				



KEY PLAN
COLLINGWOOD, ONTARIO

- LEGEND:**
- SITE LIMITS
 - 250 m FROM SITE BOUNDARIES
 - LIMITS OF PHASE ONE ESA STUDY AREA
 - PROPERTY WITH POTENTIALLY CONTAMINATING ACTIVITY (PCA)
 - APPROXIMATE BOUNDARY OF AREA OF POTENTIAL ENVIRONMENTAL CONCERN (APEC)

REFERENCE:
PLAN PRODUCED FROM GIS INFORMATION FROM THE
COUNTY OF SIMCOE ONLINE INTERACTIVE MAPPING
SERVICE.



- ON-SITE:**
- PCA 1 – ITEM 30: IMPORTATION OF FILL MATERIAL OF UNKNOWN QUALITY
 - PCA 2 – ITEM 28: GASOLINE AND ASSOCIATED PRODUCTS STORED IN FIXED TANKS
 - PCA 3 – ITEM 40: PESTICIDES (INCLUDING HERBICIDES, FUNGICIDES AND ANTI-FOULING AGENTS) MANUFACTURING, PROCESSING, BULK STORAGE AND LARGE-SCALE APPLICATIONS
 - PCA 4 – OTHER PCA'S THE QP IS AWARE OF: THE PRESENCE OF DEBRIS WAS VIEWED AS AN AESTHETICALLY OBJECTIONABLE WASTER AND SHOULD BE COLLECTED AND DISPOSED OF OFF-SITE AT APPROPRIATE RECYCLING OF DISPOSAL FACILITIES
- OFF-SITE:**
- PCA 5 – ITEM 40: PESTICIDES (INCLUDING HERBICIDES, FUNGICIDES AND ANTI-FOULING AGENTS) MANUFACTURING, PROCESSING, BULK STORAGE AND LARGE-SCALE APPLICATIONS
 - PCA 6 – ITEM 28: GASOLINE AND ASSOCIATED PRODUCTS STORED IN FIXED TANKS

LANDEX CAPITAL CORPORATION

PHASE ONE ENVIRONMENTAL SITE ASSESSMENT
PROPOSED LINKSVIEW SUBDIVISION
780 AND 788 TENTH LINE, COLLINGWOOD, ONTARIO

SUMMARY OF PCAs AND APECs

PML Peto MacCallum Ltd.
CONSULTING ENGINEERS

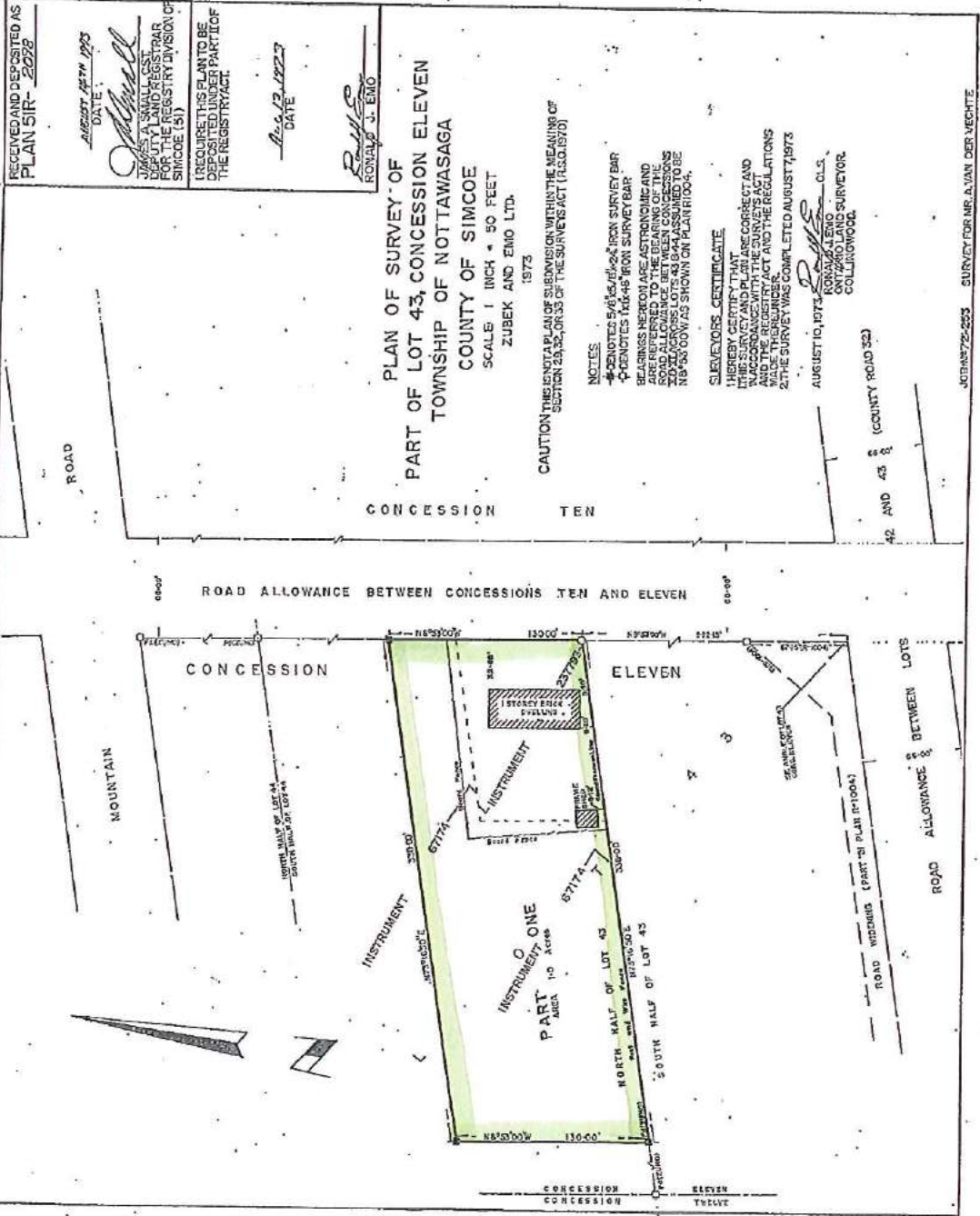
DRAWN	TP	DATE	SCALE	PML REF.	DRAWING NO.
CHECKED	DD	MAR. 2014	AS SHOWN	14BF001	1-3
APPROVED	MAK				



APPENDIX A

Survey Plan

51R-2098



JUTING 72-203 SURVEY FOR MR. A. VAN DER VECHT

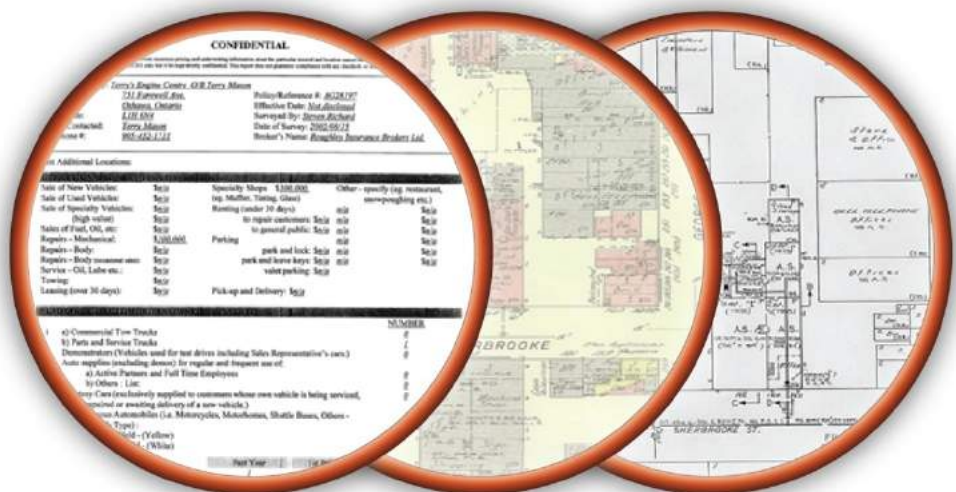


APPENDIX B

RMS Historical Environmental Information Reporting System (HEIRS)

HEIRS™

Historical Environmental Information Reporting System



An **SCM** Company

150 Commerce Valley Drive W
8th Floor
Markham, Ontario L3T 7Z3
T: 905-882-6300
www.optaintel.ca

Report Completed By:
Devon Mallay

Site Address:
780 Tenth Line,
Collingwood, ON

Project No:
14BF001

Opta Order ID:
21458

Requested by:
Tennille Pegg
Peto MacCallum Ltd

Date Completed:
January 29, 2014

Opta Environmental Services
Historical Environmental Information Reporting System (HEIRS™)

January 29, 2014

Tennille Pegg
Peto MacCallum Ltd
19 Churchill Drive
Barrie, ON
L4N 8Z5
Dear Eleanor,

Re: **Your Site Address: "780 Tenth Line, Collingwood"**
Your Project No.: 14BF001

As requested, we have searched our records regarding the above site and the following information was found:

Information	Date(s)	Comment	Cost
Research Fee per street address		\$50.00 flat fee per street address.	\$50.00
Fire Insurance Plans	No Records Found	\$100.00 for each Fire Insurance Plan.	
Reports: All Risk/Multi-Risk: Inspection: COPE: Other:	No Records Found	\$55.00 for each Inspection/Survey report	
Site Plan(s)	No Records Found	\$70.00 for each Site plan	
Subtotal			\$50.00
Minimum order fee of \$155.00			N/A
2 (two)/4 (four) Day Rush Service			N/A
Total			\$50.00

NRF: No Records Found. NO: Not Ordered.

The total cost for this report is \$50.00 plus courier charges (if applicable) and HST. Please see the Terms and Conditions for our search on page two of this report.

Thank you for employing the services of Opta Information Intelligence.

Devon Mallay
Opta Environmental Services



150 Commerce Valley Drive W
Markham, Ontario
L3T 7Z3

T: 905.882.6300
Toll Free: 1.800.268.8080
F: 905.695.6543

An SCM Company
www.optaintel.ca

Opta Environmental Services

Historical Environmental Information Reporting System (HEIRS™)

Terms and Conditions

Report

The documents (hereinafter referred to as the "Documents") to be released as part of the report (hereinafter referred to as the "Report") to be delivered to the purchaser as set out above are documents in Opta's records relating to the described property (hereinafter referred to as the "Property"). Opta makes no representations or warranties respecting the Documents whatsoever, including, without limitation, with respect to the completeness, accuracy or usefulness of the Documents, and does not represent or warrant that these are the only plans and reports prepared in association with the Property. The Documents are current as of the date(s) indicated on them. Interpretation of the Documents, if any, is by inference based upon the information which is apparent and obvious on the face of the Documents only. Opta does not represent, warrant or guarantee that interpretations other than those referred to do not exist from other sources. The Report will be prepared for use by the purchaser of the services as shown above hereof only.

Disclaimer

Opta disclaims responsibility for any losses or damages of any kind whatsoever, whether consequential or other, however caused, incurred or suffered, arising directly or indirectly as a result of the services (which services include, but are not limited to, the preparation of the Report provided hereunder), including but not limited to, any losses or damages arising directly or indirectly from any breach of contract, fundamental or otherwise, from reliance on Opta Reports or from any tortious acts or omissions of Opta's agents, employees or representatives.

Entire Agreement

The parties hereto acknowledge and agree to be bound by the terms and conditions hereof. The request form constitutes the entire agreement between the parties pertaining to the subject matter hereof and supersedes all prior and contemporaneous agreements, negotiations and discussions, whether oral or written, and there are no representations or warranties, or other agreements between the parties in connection with the subject matter hereof except as specifically set forth herein. No supplement, modification, waiver, or termination of the request shall be binding, unless confirmed in writing by the parties hereto.

Governing Document

In the event of any conflicts or inconsistencies between the provisions hereof and the Reports, the rights and obligations of the parties shall be deemed to be governed by the request form, which shall be the paramount document.

Law

This agreement shall be governed by and construed in accordance with the laws of the Province of Ontario and the laws of Canada applicable therein.



APPENDIX C

Chain of Title

	Chain of title	- 17th half of 4th 43	Concession 11				P.I.N. = 58254-0031 (LT)
		Journal of 17th concession	(now known as Chillingwood)				
	Patent	26 Apr. 1836	known	William Hamilton			along 4th 43, Concession 11 (2nd 1836)
(O.S. 2172)	David Thompson			- 17th 5, 1837			
(O.S. 31177)	David Thompson			- 2nd 26, 1861			- died from receiving disease & fracture of David Thompson, deceased
(O.S. 32049)	John Lurie			- 2nd 24, 1861			
(O.S. 35385)	David Lurie			- 17th 27, 1863			- quit claim from John Lurie of 17th half of 4th 43
(NOT 1972)	John Lurie			- 17th 27, 1880			

(NOT 3371)	Donald Lurie				- April 18, 1883	- died from Ruben Lurie
(NOT 3372)	James Lindsay				- April 18, 1883	
(NOT 4766)	James Lindsay				- June 2, 1886	- quite close from Annie Lurie, wife of Donald Lurie & the said Donald Lurie of 7 acres $\frac{1}{2}$ of the southeast corner of the north half of Spt 43 (having a frontage of 300 ft. along the westerly line of lot, by an area depth of 1,000 ft.; SE $\frac{1}{4}$ of this parcel being the SE $\frac{1}{4}$ of N $\frac{1}{2}$ of said Spt 43)
(NOT 7157)	James Middleton				- July 14, 1892	
(NOT 10814)	George W. Wells				- December 3, 1908	
(NOT 17348)	Frederick Hall				- March 23, 1929	

	Chain of title	- 17th half of 4th 43	Concession 11				P.I.N. = 58254-0031 (LT)
		Journal of 17th concession	(now known as Chillingwood)				
	Patent	26 Apr. 1836	known	William Hamilton			along 4th 43, Concession 11 (2nd 1836)
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(O.S. 31177)	David Thompson			- 2nd 26, 1861			- died from receiving disease & fracture of David Thompson, deceased
(O.S. 32049)	John Lurie			- 2nd 24, 1861			
(O.S. 35385)	David Lurie			- 17th 27, 1863			- quit claim from John Lurie of 17th half of 4th 43
(NOT 1972)	John Lurie			- 17th 27, 1880			

(NOT 3371)	Donald Lurie				- April 18, 1883	- died from Ruben Lurie
(NOT 3372)	James Lindsay				- April 18, 1883	
(NOT 4766)	James Lindsay				- June 2, 1886	- quite close from Annie Lurie, wife of Donald Lurie & the said Donald Lurie of 7 acres $\frac{1}{2}$ of the southeast corner of the north half of Spt 43 (having a frontage of 300 ft. along the westerly line of lot, by an area depth of 1,000 ft.; SE $\frac{1}{4}$ of this parcel being the SE $\frac{1}{4}$ of N $\frac{1}{2}$ of said Spt 43)
(NOT 7157)	James Middleton				- July 14, 1892	
(NOT 10814)	George W. Wells				- December 3, 1908	
(NOT 17348)	Frederick Hall				- March 23, 1929	

[illegible]

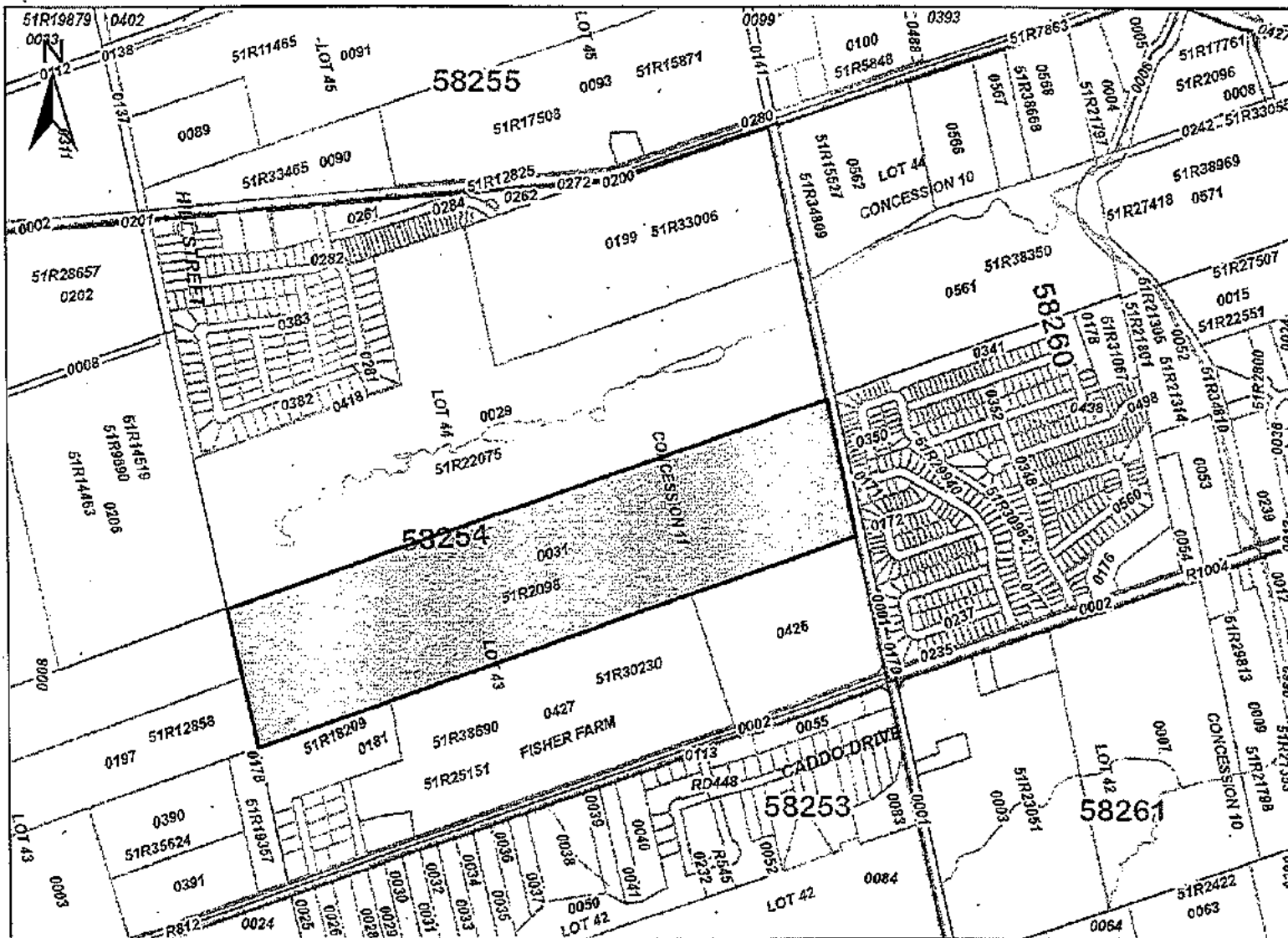
[illegible]

(Ro 257798)	Antoniou (Van der Vliet)				- February 8, 1965		- seed from Antonius J. Van der Vliet + part of the north half of 3rd 45 described by meter + bounds, having a frontage of 85 ft along the eastern limit of lot, by an even depth of 120 ft; SE 1/4 of this parcel being the SE corner of north half of said lot
(Ro 344591)	Antonius J. Van der Vliet + his wife, Antonia Van der Vliet, as joint tenants				- October 6, 1934		- lands in Ro 237793

(R0944592)	Hendrikus Johannes (Nicks) Van Der Vochter	-	Rebber 5. 1984	reeds half of Sept 45, discussions 11 have a report back 1. Plan 515-2098 a land divisional committee's consent was given April 17, 1984 (dead from Antonius J. Van Der Vochter + his spouse, Antonia Van Der Vochter)
(R0944593)	Hendrikus Johannes (Nicks) Van Der Vochter	-	Rebber 5. 1984	Part 1, Plan 515-2098 (dead from Antonius J. Van Der Vochter + his spouse, Antonia Van Der Vochter)
(R01318627)	Hendrikus Johannes (Nicks) Van Der Vochter + Mary Elmore Van Der Vochter no joint estate	-	July 26, 1986	- leads in R0944592 + R0944593

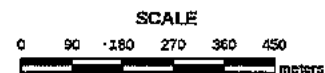
(R013983228)	Notice of lease Article 17 May 31, 1973	26 Apr. 1973	26 Apr. 1978	Alendrius Johannes Van der Venter, as lessor Joseph Van der Venter & expected heirs (as co the practice law) - for a term of 5 years computed from Jan 1, 1973 & ending on May 31, 1978. - lease contains a right of first refusal & a right to renew for 2 further terms of 5 years each	- part of the north half of Apt 43. Location is described by notes & bounded having a frontage of 720 ft along the westerly boundary of lots 44 & an area depth of 720 ft; NE 1/4 of this parcel being the NE 1/4 of said Apt 43
				* determination & surrender of this lease registered November 30, 1978 as R01398730	

(No. 1578771)	Bay Bridge, Inc.				November 20, 1998		- as to No. 1578771 (transferred from Henderson Johnson (Duke) (New York Vehicles & Heavy Equipment (New York Vehicles))
(50258336)	Yorkshire Development Corporation				August 31, 2004	- to date	



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FOR HEWITT



PROPERTY INDEX MAP SIMCOE(No. 51)

LEGEND

FREEMOLD PROPERTY		
LEASEHOLD PROPERTY		
UNITED INTEREST PROPERTY		
CO-HOLDING PROPERTY		
RETIRED PIN (MAP UPDATE PENDING)		
PROPERTY NUMBER		0449
BLOCK NUMBER		08050
GEOGRAPHIC FABRIC		
EASEMENT		

THIS IS NOT A PLAN OF SURVEY

NOTES

REVIEW THE TITLE RECORDS FOR COMPLETE
PROPERTY INFORMATION AS THIS MAP MAY
NOT REFLECT RECENT REGISTRATIONS

THIS MAP WAS COMPILED FROM PLANS AND
DOCUMENTS RECORDED IN THE LAND
REGISTRATION SYSTEM AND HAS BEEN PREPARED
FOR PROPERTY INDEXING PURPOSES ONLY

FOR DIMENSIONS OF PROPERTIES BOUNDARIES SEE
RECORDED PLANS AND DOCUMENTS

ONLY MAJOR EASEMENTS ARE SHOWN

REFERENCE PLANS UNDERLYING MORE RECENT
REFERENCE PLANS ARE NOT ILLUSTRATED





Ontario

ServiceOntario

PARCEL REGISTER (ABBREVIATED) FOR PROPERTY IDENTIFIER

LAND
REGISTRY
OFFICE #51

58254-0031 (LT)

PAGE 1 OF 2
PREPARED FOR HEWITT
ON 2014/01/16 AT 13:52:45

* CERTIFIED IN ACCORDANCE WITH THE LAND TITLES ACT * SUBJECT TO RESERVATIONS IN CROWN GRANT *

PROPERTY DESCRIPTION: N1/2 LT 43 CON 11 NOTTAWASAGA; COLLINGWOOD

PROPERTY REMARKS:

ESTATE/QUALIFIER:

FEE SIMPLE

LT CONVERSION QUALIFIED

OWNERS' NAMES

LINKSVIEW DEVELOPMENT CORPORATION

RECENTLY:

FIRST CONVERSION FROM BOOK

CAPACITY SHARE

BENO

PIN CREATION DATE:

2000/12/18

REG. NUM.	DATE	INSTRUMENT TYPE	AMOUNT	PARTIES FROM	PARTIES TO	CERT/ CHRD
** PRINTOUT INCLUDES ALL DOCUMENT TYPES AND DELETED INSTRUMENTS SINCE: 2000/12/18 **						
**SUBJECT, ON FIRST REGISTRATION UNDER THE LAND TITLES ACT, TO:						
** SUBSECTION 44(1) OF THE LAND TITLES ACT, EXCEPT PARAGRAPH 21, PARAGRAPH 14, PROVINCIAL SUCCESSION DUTIES *						
** AND ESCEATS OR FORFEITURE TO THE CROWN.						
** THE RIGHTS OF ANY PERSON WHO WOULD, BUT FOR THE LAND TITLES ACT, BE ENTITLED TO THE LAND OR ANY PART OF						
** IT THROUGH LENGTH OF ADVERSE POSSESSION, PRESCRIPTION, MISDESCRIPTION OR BOUNDARIES SETTLED BY						
** CONVENTION.						
** ANY LEASE TO WHICH THE SUBSECTION 70(2) OF THE REGISTRY ACT APPLIES.						
**DATE OF CONVERSION TO LAND TITLES: 2000/12/18 **						
RO294298	1969/04/02	ORDER				C
51R2098	1973/08/14	PLAN REFERENCE				C
RO1379890	1998/05/19	ASSIGNMENT GENERAL		*** COMPLETELY DELETED ***		
REMARKS: RO1155939						
RO1398781	1998/11/30	TRANSFER		*** COMPLETELY DELETED ***	BAY RIDGE INC.	
RO1398782	1998/11/30	CHARGE		*** COMPLETELY DELETED ***	VAN DER VECHTE, HENDRIKUS JOHANNES AKA VAN DER VECHTE, DICK VAN DER VECHTE, MARY ELINORE	
SC252278	2004/08/16	DISCH OF CHARGE		*** COMPLETELY DELETED ***		

NOTE: ADJOINING PROPERTIES SHOULD BE INVESTIGATED TO ASCERTAIN DESCRIPTIVE INCONSISTENCIES, IF ANY, WITH DESCRIPTION REPRESENTED FOR THIS PROPERTY.
NOTE: ENSURE THAT YOUR PRINTOUT STATES THE TOTAL NUMBER OF PAGES AND THAT YOU HAVE PICKED THEM ALL UP.



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PARCEL REGISTER (ABBREVIATED) FOR PROPERTY IDENTIFIER

LAND
REGISTRY
OFFICE #51

58254-0031 (LT)

PAGE 2 OF 2
PREPARED FOR HEWITT
ON 2014/01/16 AT 13:52:45

* CERTIFIED IN ACCORDANCE WITH THE LAND TITLES ACT * SUBJECT TO RESERVATIONS IN CROWN GRANT *

REG. NUM.	DATE	INSTRUMENT TYPE	AMOUNT	PARTIES FROM	PARTIES TO	CERT/ CHKD
				VAN DER VECHTE, HENDRIKUS JOHANNES AKA VAN DER VECHTE, DICK VAN DER VECHTE, MARY ELINORE		
SC258336	2004/08/31	TRANSFER REMARKS: PLANNING ACT STATEMENTS	\$2,000,000	BAY RIDGE INC.	LINKSVIEW DEVELOPMENT CORPORATION	C
SC275149	2004/10/25	CHARGE	\$2,000,000	LINKSVIEW DEVELOPMENT CORPORATION	CANADIAN IMPERIAL BANK OF COMMERCE	C

NOTE: ADJOINING PROPERTIES SHOULD BE INVESTIGATED TO ASCERTAIN DESCRIPTIVE INCONSISTENCIES, IF ANY, WITH DESCRIPTION REPRESENTED FOR THIS PROPERTY.
NOTE: ENSURE THAT YOUR PRINTOUT STATES THE TOTAL NUMBER OF PAGES AND THAT YOU HAVE PICKED THEM ALL UP.

The applicant(s) hereby applies to the Land Registrar.

Properties

PIN 58254 ~ 0031 LT Estate/Qualifier Fee Simple LI Conversion Qualified ☒ Redescription
 Description NORTH HALF LOT 43, CON 11, NOTTAWASAGA, COLLINGWOOD
 Address 780 TENTH LINE
 COLLINGWOOD

Consideration

Consideration \$2,000,000.00

Transferor(s)

The transferor(s) hereby transfers the land to the transferee(s).

Name BAY RIDGE INC.
 Address for Service Uplands Farm, 1100 Boston Mills Road,
 P.O. Box 125, Cheltenham, ON L0P
 1C0

I, Jennifer Rogers (President), have the authority to bind the corporation.

This document is not authorized under Power of Attorney by this party.

Transferee(s)**Capacity****Share**

Name LINKSVIEW DEVELOPMENT CORPORATION Beneficial Owner
 Address for Service 171 Osler Bluff Road, Collingwood, ON L9Y 3Z2

Statements

Schedule: The firstly and secondly described lands in Instrument No. RQ1398781 make up all of the North Half of Lot 43, Concession 11, Nottawasaga, Collingwood

STATEMENT OF THE TRANSFEROR(S): The transferor(s) verifies that to the best of the transferor's knowledge and belief, this transfer does not contravene the Planning Act.

STATEMENT OF THE SOLICITOR FOR THE TRANSFEROR(S): I have explained the effect of the Planning Act to the transferor(s) and I have made inquiries of the transferor(s) to determine that this transfer does not contravene that Act and based on the information supplied by the transferor(s), to the best of my knowledge and belief, this transfer does not contravene that Act. I am an Ontario solicitor in good standing.

STATEMENT OF THE SOLICITOR FOR THE TRANSFEE(S): I have investigated the title to this land and to adjoining land where relevant and I am satisfied that the title records reveal no contravention as set out in the Planning Act, and to the best of my knowledge and belief this transfer does not contravene the Planning Act. I act independently of the solicitor for the transferor(s) and I am an Ontario solicitor in good standing.

Signed By

Clinton Dwight Banbury	2-211 Guelph St. Georgetown L7G 5B5	acting for Transferor(s)	Signed	2004 08 31
Tel 9058775252				
Fax 9058774100				
Victor Louis Vandergust	11 Hurontario St. PO Box 39, Stn. Main Collingwood L9Y 3Z4	acting for Transferee(s)	Signed	2004 08 31
Tel 705-445-4544				
Fax 7054454180				

Submitted By

VICTOR L VANDERGUST LAW OFFICE	11 Hurontario St. PO Box 39, Stn. Main Collingwood L9Y 3Z4	2004 08 31
Tel 705-445-4544		
Fax 7054454180		

LRO # 51 Transfer

Registered as SC258336 on 2004 08 31 at 16:47

The applicant(s) hereby applies to the Land Registrar.

yyyy mm dd Page 2 of 3

Fees/Taxes/Payment

Statutory Registration Fee	\$60.00
Land Transfer Tax	\$29,457.89
Total Paid	\$29,517.89

File Number

Transferor Client File Number : 13512

LAND TRANSFER TAX STATEMENTS

In the matter of the conveyance of: 58254 - 0031 NORTH HALF LOT 43, CON 11, NOTTAWASAGA, COLLINGWOOD

BY: BAY RIDGE INC.

TO: LINKSVIEW DEVELOPMENT CORPORATION

Beneficial Owner

1. VICTOR L. VANDERGUST

I am

- ☐ (a) A person in trust for whom the land conveyed in the above-described conveyance is being conveyed;
- ☐ (b) A trustee named in the above-described conveyance to whom the land is being conveyed;
- ☐ (c) A transferee named in the above-described conveyance;
- ☒ (d) The authorized agent or solicitor acting in this transaction for LINKSVIEW DEVELOPMENT CORPORATION described in paragraph(s) (c) above.
- ☐ (e) The President, Vice-President, Manager, Secretary, Director, or Treasurer authorized to act for _____ described in paragraph(s) () above.
- ☐ (f) A transferee described in paragraph () and am making these statements on my own behalf and on behalf of _____ who is my spouse described in paragraph () and as such, I have personal knowledge of the facts herein deposed to.
- ☐ (g) A transferee described in paragraph () and am making these statements on my own behalf and on behalf of _____ who is my same-sex partner described above in paragraph(s) ().

2. I have read and considered the definition of "single family residence" set out in subsection 1(1) of the Act. The land being conveyed herein:

contains at least one and not more than two single family residences and the lands are used for other than just residential purposes. The transferee has accordingly apportioned the value of consideration on the basis that the consideration for the single family residence is 596577 and the remainder of the lands are used for Commercial and Farm purposes.

3. The total consideration for this transaction is allocated as follows:

(a) Monies paid or to be paid in cash	2,000,000.00
(b) Mortgages (i) assumed (show principal and interest to be credited against purchase price)	0.00
(ii) Given Back to Vendor	0.00
(c) Property transferred in exchange (detail below)	0.00
(d) Fair market value of the land(s)	0.00
(e) Liens, legacies, annuities and maintenance charges to which transfer is subject	0.00
(f) Other valuable consideration subject to land transfer tax (detail below)	0.00
(g) Value of land, building, fixtures and goodwill subject to land transfer tax (total of (a) to (f))	2,000,000.00
(h) VALUE OF ALL CHATTELS - items of tangible personal property	0.00
(i) Other considerations for transaction not included in (g) or (h) above	0.00
(j) Total consideration	2,000,000.00

PROPERTY Information Record

A. Nature of Instrument: Transfer
LRO 51 Registration No. SC258336 Date: 2004/06/31

B. Property(s): PIN: 58254 - 0031 Address 780 TENTH LINE COLLINGWOOD Assessment 4931080 - 01207600 Roll No

C. Address for Service: 171 Oster Bluff Road, Collingwood, ON L9Y 3Z2

D. (i) Last Conveyance(s): PIN 58254 - 0031 Registration No. RO1398781
(ii) Legal Description for Property Conveyed: Same as in last conveyance? Yes ☐ No ☒ Not known ☐

E. Tax Statements Prepared By: Victor Louis Vandergust
11 Hurontario St. PO Box 39, Sln. Main
Collingwood L9Y 3Z4

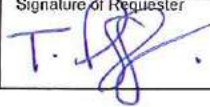


APPENDIX D

Environmental Source Information Requests and Responses

Freedom of Information Request

This form is for requesting documents, which are in the Ministry's files on environmental concerns related to properties. Please refer to the guide on the completion and use of this form. Our fax no. is (416) 314-4285.

Requester Data			For Ministry Use Only	
Name, Title, Company Name and Mailing Address of Requester Tennille Pegg Peto MacCallum Ltd. 19 Churchill Drive Barrie, Ontario L4N 8Z5 Email Address: tpegg@petomacallum.com			FOI Request No. 	Date Request Received
Telephone/Fax Nos. Tel : (705) 734-3900 Fax : (705) 734-9911			Fee Paid \$ ~ ACCT ~ CHQ ~ VISA/MC ~ CASH ☐ CNR ☐ ER ☐ NOR ☐ SWR ☐ WCR ☐ SAC ☐ IEB ☐ EAA ☐ EMR ☐ SWA	
Your Project/Reference No. 14BF001		Signature of Requester 		
Request Parameters				
Municipal Address / Lot, Concession, Geographic Township (Municipal address essential for cities, towns or regions)				
780 Tenth Line, Collingwood, Ontario Concession 11 North Half of Lot 43, Town of Collingwood, County of Simcoe				
Present Property Owner(s) and Date(s) of Ownership				
Landex Capitol Corporation				
Previous Property Owner(s) and Date(s) of Ownership				
N/A				
Present/Previous Tenant(s), (if applicable)				
N/A				
Search Parameters				Specify Year(s) Requested
Files older than 2 years may require \$60.00 retrieval cost. There is no guarantee that records responsive to your request will be located.				
Environmental concerns (General correspondence, occurrence reports, abatement)				All
Orders				All
Spills				All
Investigations/prosecutions ➤ <i>Owner and tenant information must be provided</i>				All
Waste Generator number/classes				All
Certificates of Approval ➤ Proponent information must be provided				
1987 and prior records are searched manually. Search fees in excess of \$300.00 could be incurred, depending on the types and years to be searched. Specify Certificates of Approval number (s) (if known). If supporting documents are also required, mark SD box and specify type e.g. maps, plans, reports, etc.				
				SD
				Specify Year(s) Requested
air - emissions				
water - mains, treatment, ground level, standpipes & elevated storage, pumping stations (local & booster)				
sewage - sanitary, storm, treatment, stormwater, leachate & leachate treatment & sewage pump stations				
waste water - industrial discharge				
waste sites - disposal, landfill sites, transfer stations, processing sites, incinerator sites				All
waste systems - haulers: sewage, non-hazardous & hazardous waste, mobile waste processing units, PCB destruction				
pesticides - licenses				

A \$5.00 non-refundable application fee, payable to the Minister of Finance, is mandatory. The cost of locating on-site and/or preparing any record is \$30.00/hour and 20 cents/page for photocopying and you will be contacted for approval for fees in excess of \$30.00.

Ministry of
the Environment

Freedom of Information and
Protection of Privacy Office

12th Floor
40 St. Clair Avenue West
Toronto ON M4V 1M2
Tel: (416) 314-4075
Fax: (416) 314-4285

Ministère de
l'Environnement

Bureau de l'accès à l'information
et de la protection de la vie privée

12^e étage
40, avenue St. Clair ouest
Toronto ON M4V 1M2
Tél. : (416) 314-4075
Télec. : (416) 314-4285



Ontario

RECEIVED

JAN 21 2014

January 17, 2014

Tennille Pegg
Peto MacCallum Ltd.
19 Churchill Drive,
Barrie, ON L4N 8Z5

Dear Tennille Pegg:

RE: ***Freedom of Information and Protection of Privacy Act Request***
Our File # A-2014-00295, Your Reference 14BF001

The Ministry is in receipt of your request made pursuant to the *Freedom of Information and Protection of Privacy Act* and has received your payment in the amount of \$5.00 (non-refundable application fee), along with your \$30.00 deposit.

**The search is being conducted on the following: 780 Tenth Line, Collingwood.
If there is any discrepancy please contact us immediately.**

You may expect a reply or additional communication as your request is processed. For your information, the Ministry charges for search and preparation time and photocopying.

If you have any questions regarding this matter, please contact Ayesha Kapadia at 416-212-8912.

Yours truly,


Heidi Ritscher
FOI Manager

Tennille Pegg

From: Prem Lal <plal@tssa.org>
Sent: February-21-14 2:42 PM
To: Tennille Pegg
Subject: Re: TSSA Search 780 & 788 Tenth Line

Hi Tennille:

Thank you for your inquiry.

We have no record in our database of any fuel storage tanks at the subject address (addresses).

For a further search in our archives please submit your request in writing to Public Information Services via e-mail (publicinformation@tssa.org) or through mail along with a fee of \$56.50 (including HST) per location. The fee is payable with credit card (Visa or MasterCard) or with a Cheque made payable to TSSA.

Thank you Tennille and you have a great week end.

Prem

On Thu, Feb 13, 2014 at 2:25 PM, Tennille Pegg <tpegg@petomacallum.com> wrote:

Good Afternoon Prem,

I am conducting a Phase One Environmental Site Assessment for a property located at 780 & 788 Tenth Line, Collingwood, Ontario. The Site is owned by Linksview Development Corporation.

Could you please check your records for the site and let me know what you have on file regarding above ground and underground storage tanks?

Thank you in advance.

Regards,

Tennille Pegg, BSc
Project Supervisor, Geotechnical Services



Peto MacCallum Ltd.
19 Churchill Drive
Barrie, Ontario L4N 8Z5
Tel: (705) 734-3900
Fax: (705) 734-9911
tpegg@petomacallum.com
www.petomacallum.com

--
Prem Lal
Coordinator Public Information
Tel: (416) 734-3570
Fax: (416) 734-3568
e-mail: plal@tssa.org

Technical Standards and Safety Authority
14th Floor, Centre Tower
3300 Bloor Street West
Toronto, ON M8X 2X4

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APPENDIX E

EcoLog ERIS Report

DATABASE REPORT



Project Property: *Proposed Linksvue Subdivision
780 Tenth Line
Collingwood ON L9Y3Y9
Custom-Build Your Own Report*

Report Type:

Order #: *20140120043*

Requested by: *Peto MacCallum Ltd.*

Date: *January 27, 2014*

Ecolog ERIS Ltd.
Environmental Risk Information
Service Ltd. (ERIS)
A division of Glacier Media Inc.
P: 1.866.517.5204
E: info@erisinfo.com
www.erisinfo.com

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Notice: IMPORTANT LIMITATIONS and YOUR LIABILITY

Reliance on information in Report: This report DOES NOT replace a full Phase I Environmental Site Assessment but is solely intended to be used as a database review on environmental records.

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Executive Summary

Property Information:

Project Property: *Proposed Linksview Subdivision
780 Tenth Line Collingwood ON L9Y3Y9*

Order Information:

Order No.: *20140120043*
Date Requested: *29/01/2014*
Requested by: *Peto MacCallum Ltd.*
Report Type: *Custom-Build Your Own Report*

Additional Products:

Aerial Photographs *National Collection - Digital (PDF)*
Topographic Map *Ontario Base Map (OBM)*

Executive Summary: Report Summary

Database	Name	Searched	Project Property	Boundary to 0.25km	Total
AAGR	Abandoned Aggregate Inventory	Y	0	0	0
AGR	Aggregate Inventory	Y	0	0	0
AMIS	Abandoned Mine Information System	Y	0	0	0
ANDR	Anderson's Waste Disposal Sites	Y	0	0	0
AUWR	Automobile Wrecking & Supplies	Y	0	0	0
BORE	Borehole	Y	0	0	0
CA	Certificates of Approval	Y	0	0	0
CFOT	Commercial Fuel Oil Tanks	Y	0	0	0
CHEM	Chemical Register	Y	0	0	0
COAL	Inventory of Coal Gasification Plants and Coal Tar Sites	Y	0	0	0
CONV	Compliance and Convictions	Y	0	0	0
CPU	Certificates of Property Use	Y	0	0	0
DRL	Drill Hole Database	Y	0	0	0
EASR	Environmental Activity and Sector Registry	Y	0	0	0
EBR	Environmental Registry	Y	0	0	0
ECA	Environmental Compliance Approval	Y	0	0	0
EEM	Environmental Effects Monitoring	Y	0	0	0
EHS	ERIS Historical Searches	Y	0	0	0
EIIS	Environmental Issues Inventory System	Y	0	0	0
EXP	List of TSSA Expired Facilities	Y	0	0	0
FCON	Federal Convictions	Y	0	0	0
FCS	Contaminated Sites on Federal Land	Y	0	0	0
FOFT	Fisheries & Oceans Fuel Tanks	Y	0	0	0
FST	Fuel Storage Tank	Y	0	0	0
ESTH	Fuel Storage Tank - Historic	Y	0	0	0
GEN	Ontario Regulation 347 Waste Generators Summary	Y	0	5	5
HINC	TSSA Historic Incidents	Y	0	0	0
IAFT	Indian & Northern Affairs Fuel Tanks	Y	0	0	0
INC	TSSA Incidents	Y	0	0	0
LIMO	Landfill Inventory Management Ontario	Y	0	0	0
MINE	Canadian Mine Locations	Y	0	0	0
MNR	Mineral Occurrences	Y	0	0	0
NATE	National Analysis of Trends in Emergencies System (NATES)	Y	0	0	0
NCPL	Non-Compliance Reports	Y	0	0	0
NDFT	National Defence & Canadian Forces Fuel Tanks	Y	0	0	0
NDSP	National Defence & Canadian Forces Spills	Y	0	0	0
NDWD	National Defence & Canadian Forces Waste Disposal Sites	Y	0	0	0

Database	Name	Searched	Project Property	Boundary to 0.25km	Total
NEES	National Environmental Emergencies System (NEES)	Y	0	0	0
NPCB	National PCB Inventory	Y	0	0	0
NPRI	National Pollutant Release Inventory	Y	0	0	0
OGW	Oil and Gas Wells	Y	0	0	0
OOGW	Ontario Oil and Gas Wells	Y	0	0	0
OPCB	Inventory of PCB Storage Sites	Y	0	0	0
ORD	Orders	Y	0	0	0
PAP	Canadian Pulp and Paper	Y	0	0	0
PCFT	Parks Canada Fuel Storage Tanks	Y	0	0	0
PES	Pesticide Register	Y	0	1	1
PINC	TSSA Pipeline Incidents	Y	0	1	1
PRT	Private and Retail Fuel Storage Tanks	Y	0	0	0
PTTW	Permit to Take Water	Y	0	3	3
REC	Ontario Regulation 347 Waste Receivers Summary	Y	0	0	0
RSC	Record of Site Condition	Y	0	0	0
RST	Retail Fuel Storage Tanks	Y	0	0	0
SCT	Scott's Manufacturing Directory	Y	0	0	0
SPL	Ontario Spills	Y	0	0	0
SRDS	Wastewater Discharger Registration Database	Y	0	0	0
TANK	Anderson's Storage Tanks	Y	0	0	0
TCFT	Transport Canada Fuel Storage Tanks	Y	0	0	0
VAR	TSSA Variances for Abandonment of Underground Storage Tanks	Y	0	0	0
WDS	Waste Disposal Sites - MOE CA Inventory	Y	0	0	0
WDSH	Waste Disposal Sites - MOE 1991 Historical Approval Inventory	Y	0	0	0
WWIS	Water Well Information System	Y	2	4	6
Total:			2	14	16

Executive Summary: Site Report Summary – Project Property

<i>Map Key</i>	<i>DB</i>	<i>Company/Site Name</i>	<i>Address</i>	<i>Page Number</i>
2	WWIS		ON	11
3	WWIS		ON	11

Executive Summary: Site Report Summary – Surrounding Properties

Map Key	DB	Company/Site Name	Address	Page Number
1	WWIS		ON	12
4	GEN	BLUE MOUNTAIN GOLF & COUNTRY CLUB	MAINT SHOP 706 10 CONCESSION COLLINGWOOD ON L9Y 3Z4	12
4	GEN	BLUE MOUNTAIN GOLF & COUNTRY CLUB	MAINT SHOP 706 10 CONCESSION COLLINGWOOD ON	12
4	GEN	BLUE MOUNTAIN GOLF & COUNTRY CLUB	MAINT SHOP 706 10 CONCESSION COLLINGWOOD ON	13
4	GEN	BLUE MOUNTAIN GOLF & COUNTRY CLUB	MAINT SHOP 706 10 CONCESSION COLLINGWOOD ON L9V 3Z4	13
4	GEN	BLUE MOUNTAIN GOLF & COUNTRY CLUB	MAINT SHOP 706 10 CONCESSION COLLINGWOOD ON	13
4	PTTW	Blue Mountain Golf & Country Club	Lot: 44, Concession: 11 Collingwood ON	13
4	PTTW	Blue Mountain Golf & Country Ir Club	Lot 45, Concession 9 Collingwood ON	14
4	PTTW	Blue Mountain Golf & Country Club	Lot 45, Concession 9 COLLINGWOOD ON	14
5	WWIS		ON	14
6	WWIS		lot 43 con 12 ON	15
7	PES	HAVENS HOME BUILDING CENTRE A DIV. OF BRIAN CARON HOLDINGS LTD.	63 HIGHLANDS CR COLLINGWOOD ON L9Y 5H3	15
8	WWIS		lot 43 con 12 ON	15
9	PINC		60 Conner Avenue, Collingwood ON	16

Executive Summary: Summary By Data Source

GEN - Ontario Regulation 347 Waste Generators Summary

A search of the GEN database, dated 1986-Jul 2013 has found that there are 5 GEN site(s) within approximately 0.25 Kilometers of the project property.

<u>Site</u>	<u>Address</u>	<u>Map Key</u>
BLUE MOUNTAIN GOLF & COUNTRY CLUB	MAINT SHOP 706 10 CONCESSION COLLINGWOOD ON	4
BLUE MOUNTAIN GOLF & COUNTRY CLUB	MAINT SHOP 706 10 CONCESSION COLLINGWOOD ON L9Y 3Z4	4
BLUE MOUNTAIN GOLF & COUNTRY CLUB	MAINT SHOP 706 10 CONCESSION COLLINGWOOD ON	4
BLUE MOUNTAIN GOLF & COUNTRY CLUB	MAINT SHOP 706 10 CONCESSION COLLINGWOOD ON	4
BLUE MOUNTAIN GOLF & COUNTRY CLUB	MAINT SHOP 706 10 CONCESSION COLLINGWOOD ON L9V 3Z4	4

PES - Pesticide Register

A search of the PES database, dated 1988-Jun 2013 has found that there are 1 PES site(s) within approximately 0.25 Kilometers of the project property.

<u>Site</u>	<u>Address</u>	<u>Map Key</u>
HAVENS HOME BUILDING CENTRE A DIV. OF BRIAN CARON HOLDINGS LTD.	63 HIGHLANDS CR COLLINGWOOD ON L9Y 5H3	7

PINC - TSSA Pipeline Incidents

A search of the PINC database, dated June 2009-Mar 2012 has found that there are 1 PINC site(s) within approximately 0.25 Kilometers of the project property.

<u>Site</u>	<u>Address</u>	<u>Map Key</u>
	60 Conner Avenue, Collingwood ON	9

PTTW - Permit to Take Water

A search of the PTTW database, dated 1994-Jul 2013 has found that there are 3 PTTW site(s) within approximately 0.25 Kilometers of the project property.

<u>Site</u>	<u>Address</u>	<u>Map Key</u>
Blue Mountain Golf & Country Club	Lot: 44, Concession: 11 Collingwood ON	4
Blue Mountain Golf & Country Ir Club	Lot 45, Concession 9 Collingwood ON	4
Blue Mountain Golf & Country Club	Lot 45, Concession 9 COLLINGWOOD ON	4

WWIS - Water Well Information System

A search of the WWIS database, dated 1955-May 2013 has found that there are 6 WWIS site(s) within approximately 0.25 Kilometers of the project property.

<u>Site</u>	<u>Address</u>	<u>Map Key</u>
	ON	1
	ON	2
	ON	3
	ON	5
	lot 43 con 12 ON	6
	lot 43 con 12 ON	8

80°16'W

80°15'30"W

80°15'W

44°30'N

44°30'N

44°29'30"N

44°29'30"N

44°29'N

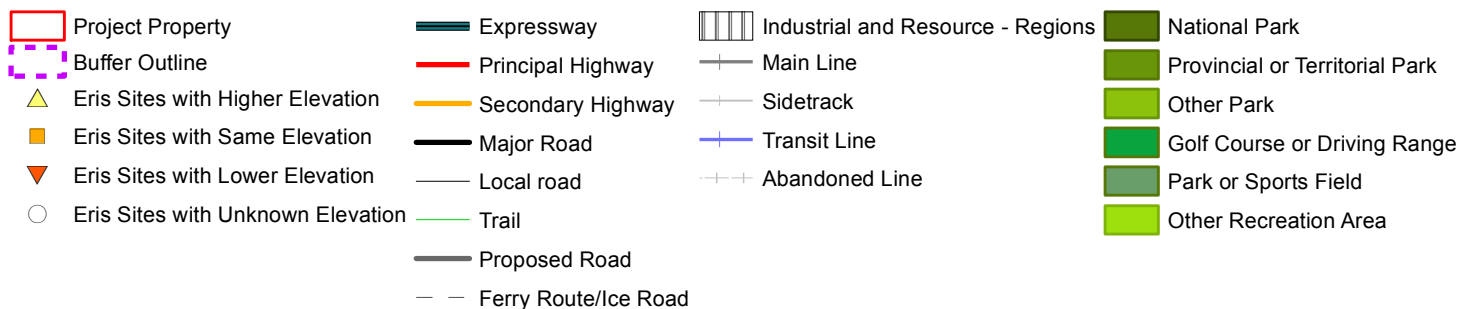
44°29'N



Map

Order No: 20140120043

Address: 780 Tenth Line, Collingwood, ON, L9Y3Y9



80°15'W

44°30'N

44°30'N

44°29'N

44°29'N

260 130 0 260 m

1:10300

Aerial

Order No: 20140120043

Address: 780 Tenth Line, Collingwood, ON, L9Y3Y9

Source: ESRI World Imagery, Updated December 2012

© Ecolog ERIS Ltd

Detail Report

Map Key	Number of Records	Elevation m	Site	DB
2	1 of 1	201.0	ON	WWIS
Well Id: 5708435 Concession: 11 County: SIMCOE Easting Nad83: 559464.3 Zone: 17 Primary Water Use: Domestic Sec. Water Use: Pump Rate: 2 GPM Flow Rate: Specific Capacity: Construction Method: Boring Elevation (m): 202.14 Depth to Bedrock: Water Type: FRESH Lot: 043 Concession Name: CON Municipality: NOTTAWASAGA Northing Nad83: 4926774 Utm Reliability: margin of error : 30 m - 100 m Construction Date: 21-OCT-71 Well Depth: 38 ft Static Water Level: 26 ft Clear/Cloudy: CLEAR Final Well Status: Water Supply Flowing (y/n): N Elevation Reliability: Overburden/Bedrock: Overburden Casing Material: CONCRETE				
--- Details ---				
Thickness: 25 ft Material Colour: BROWN + Original Depth: 25 ft Material: CLAY				
Thickness: 13 ft Material Colour: GREY Original Depth: 38 ft Material: SAND, STONES				
3	1 of 1	199.1	ON	WWIS
Well Id: 5702586 Concession: 11 County: SIMCOE Easting Nad83: 559653.3 Zone: 17 Primary Water Use: Sec. Water Use: Pump Rate: Flow Rate: Specific Capacity: Construction Method: Cable Tool Elevation (m): 199.61 Depth to Bedrock: Water Type: Lot: 043 Concession Name: CON Municipality: NOTTAWASAGA Northing Nad83: 4926817 Utm Reliability: margin of error : 100 m - 300 m Construction Date: 23-MAY-60 Well Depth: 57 ft Static Water Level: Clear/Cloudy: Final Well Status: Abandoned-Supply Flowing (y/n): Elevation Reliability: Overburden/Bedrock: Overburden Casing Material: STEEL				
--- Details ---				
Thickness: 1 ft Material Colour: Original Depth: 1 ft Material: TOPSOIL				
+ Thickness: 18 ft Material Colour: Original Depth: 19 ft Material: CLAY, MEDIUM SAND				
+ Thickness: 3 ft Material Colour: Original Depth: 22 ft Material: HARDPAN				

Map Key	Number of Records	Elevation m	Site	DB
+ Thickness: Material Colour: 35 ft Original Depth: Material: 57 ft CLAY, MEDIUM SAND, MUCK				
1	1 of 1	201.0	ON	WWIS
Well Id: Concession: County: Easting Nad83: Zone: Primary Water Use: Sec. Water Use: Pump Rate: Flow Rate: Specific Capacity: Construction Method: Elevation (m): Depth to Bedrock: Water Type: 5715258 11 SIMCOE 559014.3 17 Not Known 201.57 Lot: Concession Name: Municipality: Northing Nad83: Utm Reliability: Construction Date: Well Depth: Static Water Level: Clear/Cloudy: Final Well Status: Flowing (y/n): Elevation Reliability: Overburden/Bedrock: Casing Material: 044 CON NOTTAWASAGA 4927024 margin of error : 100 m - 300 m 05-MAY-78 35 ft 10 ft Abandoned-Supply N Unknown type in the lower layers(s) STEEL				
--- Details ---				
Thickness: Material Colour: + Thickness: Material Colour: + Thickness: Material Colour: 1 ft BROWN 34 ft BROWN 100 ft Original Depth: Material: Original Depth: Material: Original Depth: Material: 1 ft TOPSOIL 35 ft SAND, SILT 135 ft UNKNOWN TYPE				
4	1 of 8	194.0	BLUE MOUNTAIN GOLF & COUNTRY CLUB MAINT SHOP 706 10 CONCESSION COLLINGWOOD ON L9Y 3Z4	GEN
SIC Code: SIC Description: Generator #: Approval Yrs: ON2559200 As of July 2013				
--- Details ---				
Waste Code: Waste Description: + Waste Code: Waste Description: 213 Petroleum distillates 252 Waste crankcase oils and lubricants				
4	2 of 8	194.0	BLUE MOUNTAIN GOLF & COUNTRY CLUB MAINT SHOP 706 10 CONCESSION COLLINGWOOD ON	GEN
SIC Code: SIC Description: Generator #: Approval Yrs: 713910 Golf Courses and Country Clubs ON2559200 2010				
--- Details ---				

Map Key	Number of Records	Elevation m	Site	DB
Waste Code: 252 Waste Description: WASTE OILS & LUBRICANTS + Waste Code: 213 Waste Description: PETROLEUM DISTILLATES				
4	3 of 8	194.0	BLUE MOUNTAIN GOLF & COUNTRY CLUB MAINT SHOP 706 10 CONCESSION COLLINGWOOD ON	GEN
SIC Code: 713910 SIC Description: Golf Courses and Country Clubs Generator #: ON2559200 Approval Yrs: 2011 --- Details --- Waste Code: 213 Waste Description: PETROLEUM DISTILLATES + Waste Code: 252 Waste Description: WASTE OILS & LUBRICANTS				
4	4 of 8	194.0	BLUE MOUNTAIN GOLF & COUNTRY CLUB MAINT SHOP 706 10 CONCESSION COLLINGWOOD ON L9V 3Z4	GEN
SIC Code: 9651 SIC Description: GOLF COURSES Generator #: ON2559200 Approval Yrs: 00,01,02,03,04,05,06,07,08 --- Details --- Waste Code: 213 Waste Description: PETROLEUM DISTILLATES + Waste Code: 252 Waste Description: WASTE OILS & LUBRICANTS				
4	5 of 8	194.0	BLUE MOUNTAIN GOLF & COUNTRY CLUB MAINT SHOP 706 10 CONCESSION COLLINGWOOD ON	GEN
SIC Code: 713910 SIC Description: Golf Courses and Country Clubs Generator #: ON2559200 Approval Yrs: 2009 --- Details --- Waste Code: 213 Waste Description: PETROLEUM DISTILLATES + Waste Code: 252 Waste Description: WASTE OILS & LUBRICANTS				
4	6 of 8	194.0	Blue Mountain Golf & Country Club Lot: 44, Concession: 11 Collingwood ON	PTTW
Year: 2008				

Map Key	Number of Records	Elevation m	Site	DB
EBR Registry No.: Ministry Ref. No.: Type: Instrument Type: Proposal Date: Location: Proponent Address:		010-4271 2385-7GZNU7 Instrument Proposal (OWRA s. 34) - Permit to take water July 29, 2008 Lot: 44, Concession: 11, Town of Collingwood, County of Simcoe 706-10th Line Collingwood Ontario L9Y 3Z4		
4	7 of 8	194.0	Blue Mountain Golf & Country Ir Club Lot 45, Concession 9 Collingwood ON	<u>PTTW</u>
Year: EBR Registry No.: Ministry Ref. No.: Type: Instrument Type: Proposal Date: Location: Proponent Address:		2003 IA03E0657 03P1041 Instrument Decision Permit to take water - OWRA s. 34 5/14/03 Lot 45, Concession 9 TOWN OF COLLINGWOOD 706-10th Line Collingwood Ontario L9Y 3Z4		
4	8 of 8	194.0	Blue Mountain Golf & Country Club Lot 45, Concession 9 COLLINGWOOD ON	<u>PTTW</u>
Year: EBR Registry No.: Ministry Ref. No.: Type: Instrument Type: Proposal Date: Location: Proponent Address:		2004 IA04E0663 8576-5Y7HZZ Instrument Decision Permit to take water - OWRA s. 34 Lot 45, Concession 9 TOWN OF COLLINGWOOD 706-10th Line Collingwood Ontario L9Y 3Z4		
5	1 of 1	212.3	ON	<u>WWIS</u>
Well Id: Concession: County: Easting Nad83: Zone: Primary Water Use: Sec. Water Use: Pump Rate: Flow Rate: Specific Capacity: Construction Method: Elevation (m): Depth to Bedrock: Water Type:		5712648 12 SIMCOE 558314.3 17 Domestic Cable Tool 213.01 FRESH	Lot: Concession Name: Municipality: Northing Nad83: Utm Reliability: Construction Date: Well Depth: Static Water Level: Clear/Cloudy: Final Well Status: Flowing (y/n): Elevation Reliability: Overburden/Bedrock: Casing Material:	043 CON NOTTAWASAGA 4926474 margin of error : 100 m - 300 m 08-OCT-75 49 ft 3 ft CLEAR Water Supply N Overburden STEEL
--- Details ---				
Thickness: Material Colour:		2 ft BROWN	Original Depth: Material:	2 ft TOPSOIL, STONES
+				

Map Key	Number of Records	Elevation m	Site	DB
Thickness:	34 ft		Original Depth:	36 ft
Material Colour:	GREY		Material:	CLAY
+				
Thickness:	5 ft		Original Depth:	41 ft
Material Colour:	GREY		Material:	SAND, SILT
+				
Thickness:	8 ft		Original Depth:	49 ft
Material Colour:	BROWN		Material:	MEDIUM SAND
6	1 of 1	216.9	lot 43 con 12 ON	WWIS
Well Id:	7171429		Lot:	043
Concession:	12		Concession Name:	CON
County:	SIMCOE		Municipality:	COLLINGWOOD TOWN
Easting Nad83:	558429		Northing Nad83:	4926223
Zone:	17		Utm Reliability:	margin of error : 10 - 30 m
Primary Water Use:	Domestic		Construction Date:	15-JUL-11
Sec. Water Use:	Other		Well Depth:	75 ft
Pump Rate:			Static Water Level:	
Flow Rate:			Clear/Cloudy:	
Specific Capacity:			Final Well Status:	Abandoned-Supply
Construction Method:	Cable Tool		Flowing (y/n):	
Elevation (m):			Elevation Reliability:	
Depth to Bedrock:			Overburden/Bedrock:	
Water Type:			Casing Material:	OPEN HOLE,STEEL
--- Details ---				
Thickness:	1 ft		Original Depth:	1 ft
Material Colour:			Material:	TOPSOIL
+				
Thickness:	16 ft		Original Depth:	17 ft
Material Colour:	BROWN		Material:	CLAY, STONES
+				
Thickness:	17 ft		Original Depth:	34 ft
Material Colour:			Material:	GRAVEL, , LAYERED
+				
Thickness:	41 ft		Original Depth:	75 ft
Material Colour:	GREY		Material:	CLAY
+				
Thickness:	55 ft		Original Depth:	130 ft
Material Colour:	BROWN		Material:	SHALE
7	1 of 1	198.8	HAVENS HOME BUILDING CENTRE A DIV. OF BRIAN CARON HOLDINGS LTD. 63 HIGHLANDS CR COLLINGWOOD ON L9Y 5H3	PES
Licence No.:				
Licence Type:	Vendor			
8	1 of 1	217.0	lot 43 con 12 ON	WWIS

Map Key	Number of Records	Elevation m	Site	DB
Well Id:	7169657		Lot:	043
Concession:	12		Concession Name:	CON
County:	SIMCOE		Municipality:	COLLINGWOOD TOWN
Easting Nad83:	558408		Northing Nad83:	4926227
Zone:	17		Utm Reliability:	margin of error : 10 - 30 m
Primary Water Use:	Domestic		Construction Date:	21-SEP-11
Sec. Water Use:			Well Depth:	76 ft
Pump Rate:	10 GPM		Static Water Level:	4 ft
Flow Rate:			Clear/Cloudy:	CLEAR
Specific Capacity:			Final Well Status:	Water Supply
Construction Method:	Rotary (Air)		Flowing (y/n):	
Elevation (m):			Elevation Reliability:	
Depth to Bedrock:			Overburden/Bedrock:	
Water Type:	FRESH		Casing Material:	PLASTIC
--- Details ---				
Thickness:	14 ft		Original Depth:	14 ft
Material Colour:	BROWN		Material:	CLAY
+				
Thickness:	11 ft		Original Depth:	25 ft
Material Colour:	BROWN		Material:	GRAVEL
+				
Thickness:	49 ft		Original Depth:	74 ft
Material Colour:	GREY		Material:	CLAY
+				
Thickness:	2 ft		Original Depth:	76 ft
Material Colour:	BROWN		Material:	SHALE
9	1 of 1	191.4	60 Conner Avenue, Collingwood ON	PINC
Incident ID:	2634320			
Incident Number:	478032			
SR Type:	FS-Pipeline Incident			
Status Code:	Pipeline Damage Reason Est			
Summary:	60 Conner Avenue, Collingwood - 1/2" Pipeline Hit			
Spills Action Centre:				
Reported By:	Don Dempster - Enbridge			
Affiliation:	Industry Stakeholder (Licensee/Registration/Certificate Holder, Facility Owner, etc.)			
Method Details:	Utility damage			
Fuel Category:	Heating Fuel			
Fuel Occurrence Type:	Pipeline Strike			
Date of Occurrence:	8/6/2011 0:00			
Occurrence Start Date:	2/25/2011 0:00			
Health Impact:	No			
Occurrence Desc:				
Environment Impact:	No			
Property Damage:	No			
Service Interrupt:	Yes			
Fuel Type:	Natural Gas			
Enforce Policy:	Yes			
Operation Type:	Private Dwelling			
Damage Reason:	Excavation practices not sufficient			
Public Relation:	No			
Pipeline System:				
Pipeline Type:	Service / Riser Distribution Pipeline			
Depth:	20			
Pipe Material:	Plastic			

Map Key	Number of Records	Elevation m	Site	DB
<i>Regualtor Location:</i>		Outside		
<i>PSIG:</i>		60		
<i>Regulator Type:</i>		Service Regulator (up to 60 psi intake)		
<i>Notes:</i>				

Unplottable Summary

DB	Company Name/Site Name	Address	City	Zip
CA	Georgian Meadows	Part of Lot 43, Concession 10	Collingwood ON	

Unplottable Report

Site: **Georgian Meadows**
Part of Lot 43, Concession 10 Collingwood ON

Database:
[CA](#)

Certificate #: 4712-4ZSKSD
Application Year: 01
Issue Date: 9/21/01
Approval Type: Municipal & Private water
Status: Approved
Application Type: New Certificate of Approval
Client Name: Craigleith Land Corporation
Client Address: 171 Osler Bluff Road
Client City: Collingwood
Client Postal Code: L9Y 3Z2
Project Description: Construction of watermain and water booster station
Contaminants:
Emission Control:

Appendix: Database Descriptions

Ecolog Environmental Risk Information Services Ltd can search the following databases. The extent of Historical information varies with each database and current information is determined by what is publicly available to Ecolog ERIS at the time of update. **Note:** Databases denoted with " * " indicates that the database will no longer be updated. See the individual database description for more information.

Abandoned Aggregate Inventory: Sept 2002* Provincial [AAGR](#)
The MAAP Program maintains a database of all abandoned pits and quarries. Please note that the database is only referenced by lot and concession and city/town location. The database provides information regarding the location, type, size, land use, status and general comments.*

Aggregate Inventory: Up to Aug 2012 Provincial [AGR](#)
The Ontario Ministry of Natural Resources maintains a database of all active pits and quarries. Please note that the database is only referenced by lot/concession and city/town location. The database provides information regarding the registered owner/operator, location, status, licence type, and maximum tonnage.

Abandoned Mine Information System: 1800-Feb 2013 Provincial [AMIS](#)
The Abandoned Mines Information System contains data on known abandoned and inactive mines located on both Crown and privately held lands. The information was provided by the Ministry of Northern Development and Mines (MNDM), with the following disclaimer: "the database provided has been compiled from various sources, and the Ministry of Northern Development and Mines makes no representation and takes no responsibility that such information is accurate, current or complete". Reported information includes official mine name, status, background information, mine start/end date, primary commodity, mine features, hazards and remediation.

Anderson's Waste Disposal Sites: 1860s-Present Private [ANDR](#)
The information provided in this database was collected by examining various historical documents which aimed to characterize the likely position of former waste disposal sites from 1860 to present. The research initiative behind the creation of this database was to identify those sites that are missing from the Ontario MOE Waste Disposal Site Inventory, as well as to provide revisions and corrections to the positions and descriptions of sites currently listed in the MOE inventory. In addition to historic waste disposal facilities, the database also identifies certain auto wreckers and scrap yards that have been extrapolated from documentary sources. Please note that the data is not warranted to be complete, exhaustive or authoritative. The information was collected for research purposes only.

Automobile Wrecking & Supplies: 2001-Jun 2010 Private [AUWR](#)
This database provides an inventory of all known locations that are involved in the scrap metal, automobile wrecking/recycling, and automobile parts & supplies industry. Information is provided on the company name, location and business type.

Borehole: 1875-Aug 2011 Provincial [BORE](#)
A borehole is the generalized term for any narrow shaft drilled in the ground, either vertically or horizontally. The information here includes geotechnical investigations or environmental site assessments, mineral exploration, or as a pilot hole for installing piers or underground utilities. Information is from many sources such as the Ministry of Transportation (MTO) boreholes from engineering reports and projects from the 1950 to 1990's in Southern Ontario. Boreholes from the Ontario Geological Survey (OGS) including The Urban Geology Analysis Information System (UGAIS) and the York Peel Durham Toronto (YPDT) database of the Conservation Authority Moraine Coalition. This database will include fields such as location, stratigraphy, depth, elevation, year drilled, etc. For all water well data or oil and gas well data for Ontario please refer to WWIS and OOGW.

Certificates of Approval:

1985-Oct 30, 2011*

Provincial

[CA](#)

This database contains the following types of approvals: Air & Noise, Industrial Sewage, Municipal & Private Sewage, Waste Management Systems and Renewable Energy Approvals. The MOE in Ontario states that any facility that releases emissions to the atmosphere, discharges contaminants to ground or surface water, provides potable water supplies, or stores, transports or disposes of waste, must have a Certificate of Approval before it can operate lawfully. Fields include approval number, business name, address, approval date, approval type and status. This database will no longer be updated, as CoFA's have been replaced by either Environmental Activity and Sector Registry (EASR) or Environmental Compliance Approval (ECA). Please refer to those individual databases for any information after Oct.31, 2011.

Commercial Fuel Oil Tanks:

1948-Apr 2013

Provincial

[CFOT](#)

Since May 2002, Ontario developed a new act where it became mandatory for fuel oil tanks to be registered with Technical Standards & Safety Authority (TSSA). This data would include all commercial underground fuel oil tanks in Ontario with fields such as location, registration number, tank material, age of tank and tank size.

Chemical Register:

1992, 1999-Jun 2010

Private

[CHEM](#)

This database includes information from both a one time study conducted in 1992 and private source and is a listing of facilities that manufacture or distribute chemicals. The production of these chemical substances may involve one or more chemical reactions and/or chemical separation processes (i.e. fractionation, solvent extraction, crystallization, etc.).

Inventory of Coal Gasification Plants and Coal Tar Sites:

Apr 1987 and Nov 1988*

Provincial

[COAL](#)

This inventory includes both the "Inventory of Coal Gasification Plant Waste Sites in Ontario-April 1987" and the Inventory of Industrial Sites Producing or Using Coal Tar and Related Tars in Ontario-November 1988) collected by the MOE. It identifies industrial sites that produced and continue to produce or use coal tar and other related tars. Detailed information is available and includes: facility type, size, land use, information on adjoining properties, soil condition, site operators/occupants, site description, potential environmental impacts and historic maps available. This was a one-time inventory.*

Compliance and Convictions:

1989-Jun 2013

Provincial

[CONV](#)

This database summarizes the fines and convictions handed down by the Ontario courts beginning in 1989. Companies and individuals named here have been found guilty of environmental offenses in Ontario courts of law.

Certificates of Property Use:

1994-Jul 2013

Provincial

[CPU](#)

This is a subset taken from Ontario's Environmental Registry (EBR) database. It will include all CPU's on the registry such as (EPA s. 168.6) - Certificate of Property Use.

Drill Hole Database:

1886-Jun 2013

Provincial

[DRL](#)

The Ontario Drill Hole Database contains information on more than 113,000 percussion, overburden, sonic and diamond drill holes from assessment files on record with the department of Mines and Minerals. Please note that limited data is available for southern Ontario, as it was the last area to be completed. The database was created when surveys submitted to the Ministry were converted in the Assessment File Research Image Database (AFRI) project. However, the degree of accuracy (coordinates) as to the exact location of drill holes is dependent upon the source document submitted to the MNDM. Levels of accuracy used to locate holes are: centering on the mining claim; a sketch of the mining claim; a 1:50,000 map; a detailed company map; or from submitted a "Report of Work".

Environmental Activity and Sector Registry:

Oct 31 2011-Jul 2013

Provincial

[EASR](#)

On October 31, 2011, a smarter, faster environmental approvals system came into effect in Ontario. The EASR allows businesses to register certain activities with the ministry, rather than apply for an approval. The registry is available for common systems and processes, to which preset rules of operation can be applied. The EASR is currently available for: heating systems, standby power systems and automotive refinishing. Businesses whose activities aren't subject to the EASR may apply for an ECA (Environmental Compliance Approval), Please see our ECA database.

Environmental Registry:

1994-Jul 2013

Provincial

[EBR](#)

The Environmental Registry lists proposals, decisions and exceptions regarding policies, Acts, instruments, or regulations that could significantly affect the environment. Through the Registry, thirteen provincial ministries notify the public of upcoming proposals and invite their comments. For example, if a local business is requesting a permit, license, or certificate of approval to release substances into the air or water; these are notified on the registry. Data includes: Approval for discharge into the natural environment other than water (i.e. Air) - EPA s. 9, Approval for sewage works - OWRA s. 53(1), and EPA s. 27 - Approval for a waste disposal site. For information regarding Permit to Take Water (PTTW), Certificate of Property Use (CPU) and (ORD) Orders please refer to those individual databases.

Environmental Compliance Approval:

Oct 31, 2011-Jul 2013

Provincial

[ECA](#)

On October 31, 2011, a smarter, faster environmental approvals system came into effect in Ontario. In the past, a business had to apply for multiple approvals (known as certificates of approval) for individual processes and pieces of equipment. Today, a business either registers itself, or applies for a single approval, depending on the types of activities it conducts. Businesses whose activities aren't subject to the EASR may apply for an ECA. A single ECA addresses all of a business's emissions, discharges and wastes. Separate approvals for air, noise and waste are no longer required. This database will also include Renewable Energy Approvals. For CofA's prior to Nov 1st, 2011, please refer to the CA database. For all Waste Disposal Sites please refer to the WDS database.

Environmental Effects Monitoring:

1992-2007*

Federal

[EEM](#)

The Environmental Effects Monitoring program assesses the effects of effluent from industrial or other sources on fish, fish habitat and human usage of fisheries resources. Since 1992, pulp and paper mills have been required to conduct EEM studies under the Pulp and Paper Effluent Regulations. This database provides information on the mill name, geographical location and sub-lethal toxicity data.

ERIS Historical Searches:

1999-Mar 2013

Private

[EHS](#)

EcoLog ERIS has compiled a database of all environmental risk reports completed since March 1999. Available fields for this database include: site location, date of report, type of report, and search radius. As per all other databases, the ERIS database can be referenced on both the map and "Statistical Profile" page.

Environmental Issues Inventory System:

1992-2001*

Federal

[EIS](#)

The Environmental Issues Inventory System was developed through the implementation of the Environmental Issues and Remediation Plan. This plan was established to determine the location and severity of contaminated sites on inhabited First Nation reserves, and where necessary, to remediate those that posed a risk to health and safety; and to prevent future environmental problems. The EIS provides information on the reserve under investigation, inventory number, name of site, environmental issue, site action (Remediation, Site Assessment), and date investigation completed.

List of TSSA Expired Facilities:

Current to May 2013

Provincial

[EXP](#)

This is a list of all expired facilities that fall under the TSSA (TSSA Act & Safety Regulations), including the six regulations that exist under the Fuels Safety Division. It will include facilities such as private fuel outlets, bulk plants, fuel oil tanks, gasoline stations, marinas, propane filling stations, liquid fuel tanks, piping systems, etc. These tanks have been removed and automatically fall under the expired facilities inventory held by TSSA.

Federal Convictions:

1988-Jun 2007*

Federal

[FCON](#)

Environment Canada maintains a database referred to as the "Environmental Registry" that details prosecutions under the Canadian Environmental Protection Act (CEPA) and the Fisheries Act (FA). Information is provided on the company name, location, charge date, offence and penalty.

Contaminated Sites on Federal Land:

June 2000-Jan 2013

Federal

[FCS](#)

The Federal Contaminated Sites Inventory includes information on all known federal contaminated sites under the custodianship of departments, agencies and consolidated Crown corporations as well as those that are being or have been investigated to determine whether they have contamination arising from past use that could pose a risk to human health or the environment. The inventory also includes non-federal contaminated sites for which the Government of Canada has accepted some or all financial responsibility. It does not include sites where contamination has been caused by, and which are under the control of, enterprise Crown corporations, private individuals, firms or other levels of government.

Fisheries & Oceans Fuel Tanks:

1964-Sept 2003

Federal

[FOFT](#)

Fisheries & Oceans Canada maintains an inventory of all aboveground & underground fuel storage tanks located on Fisheries & Oceans property or controlled by DFO. Our inventory provides information on the site name, location, tank owner, tank operator, facility type, storage tank location, tank contents & capacity, and date of tank installation.

Fuel Storage Tank:

2010-May 2013

Provincial

[FST](#)

The Technical Standards & Safety Authority (TSSA), under the Technical Standards & Safety Act of 2000 maintains a database of registered private and retail fuel storage tanks in Ontario with fields such as location, tank status, license date, tank type, tank capacity, fuel type, installation year and facility type.

Fuel Storage Tank - Historic:

Pre-Jan 2010*

Provincial

[FSTH](#)

The Technical Standards & Safety Authority (TSSA), under the Technical Standards & Safety Act of 2000 maintains a database of registered private and retail fuel storage tanks in Ontario with fields such as location, tank status, license date, tank type, tank capacity, fuel type, installation year and facility type.

Ontario Regulation 347 Waste Generators Summary:

1986-Jul 2013

Provincial

[GEN](#)

Regulation 347 of the Ontario EPA defines a waste generation site as any site, equipment and/or operation involved in the production, collection, handling and/or storage of regulated wastes. A generator of regulated waste is required to register the waste generation site and each waste produced, collected, handled, or stored at the site. This database contains the registration number, company name and address of registered generators including the types of hazardous wastes generated. It includes data on waste generating facilities such as: drycleaners, waste treatment and disposal facilities, machine shops, electric power distribution etc. This information is a summary of all years from 1986 including the most currently available data. Some records may contain, within the company name, the phrase "See & Use..." followed by a series of letters and numbers. This occurs when one company is amalgamated with or taken over by another registered company. The number listed as "See & Use", refers to the new ownership and the other identification number refers to the original ownership. This phrase serves as a link between the 2 companies until operations have been fully transferred.

TSSA Historic Incidents:

2006-June 2009

Provincial

[HINC](#)

This database will cover all incidences recorded by TSSA with their older system, before they moved to their new management system. TSSA's Fuels Safety Program administers the Technical Standards & Safety Act 2000, providing fuel-related safety services associated with the safe transportation, storage, handling and use of fuels such as gasoline, diesel, propane, natural gas and hydrogen. Under this Act, TSSA regulates fuel suppliers, storage facilities, transport trucks, pipelines, contractors and equipment or appliances that use fuels. The TSSA works to protect the public, the environment and property from fuel-related hazards such as spills, fires and explosions. This database will include spills and leaks from pipelines, diesel, fuel oil, gasoline, natural gas, propane and hydrogen recorded by the TSSA.

Indian & Northern Affairs Fuel Tanks:

1950-Aug 2003*

Federal

[IAFT](#)

The Department of Indian & Northern Affairs Canada (INAC) maintains an inventory of all aboveground & underground fuel storage tanks located on both federal and crown land. Our inventory provides information on the reserve name, location, facility type, site/facility name, tank type, material & ID number, tank contents & capacity, and date of tank installation.

TSSA Incidents:

June 2009-Apr 2013

Provincial

[INC](#)

TSSA's Fuels Safety Program administers the Technical Standards & Safety Act 2000, providing fuel-related safety services associated with the safe transportation, storage, handling and use of fuels such as gasoline, diesel, propane, natural gas and hydrogen. Under this Act, TSSA regulates fuel suppliers, storage facilities, transport trucks, pipelines, contractors and equipment or appliances that use fuels. Includes incidents from fuel-related hazards such as spills, fires and explosions. This database will include spills and leaks from diesel, fuel oil, gasoline, natural gas, propane and hydrogen recorded by the TSSA.

Landfill Inventory Management Ontario:

2012

Provincial

[LIMO](#)

The Landfill Inventory Management Ontario (LIMO) database is updated every year, as the ministry compiles new and updated information. The inventory will include small and large landfills. Additionally, each year the ministry will request operators of the larger landfills complete a landfill data collection form that will be used to update LIMO and will include the following information from the previous operating year. This will include additional information such as estimated amount of total waste received, landfill capacity, estimated total remaining landfill capacity, fill rates, engineering designs, reporting and monitoring details, size of location, service area, approved waste types, leachate of site treatment, contaminant attenuation zone and more. The small landfills will include information such as site owner, site location and certificate of approval # and status.

Canadian Mine Locations:

1998-2009

Private

[MINE](#)

This information is collected from the Canadian & American Mines Handbook. The Mines database is a national database that provides over 290 listings on mines (listed as public companies) dealing primarily with precious metals and hard rocks. Listed are mines that are currently in operation, closed, suspended, or are still being developed (advanced projects). Their locations are provided as geographic coordinates (x, y and/or longitude, latitude). As of 2002, data pertaining to Canadian smelters and refineries has been appended to this database.

Mineral Occurrences:

1846-Apr 2013

Provincial

[MNR](#)

In the early 70's, the Ministry of Northern Development and Mines created an inventory of approximately 19,000 mineral occurrences in Ontario, in regard to metallic and industrial minerals, as well as some information on building stones and aggregate deposits. Please note that the "Horizontal Positional Accuracy" is approximately +/- 200 m. Many reference elements for each record were derived from field sketches using pace or chain/tape measurements against claim posts or topographic features in the area. The primary limiting factor for the level of positional accuracy is the scale of the source material. The testing of horizontal accuracy of the source materials was accomplished by comparing the planimetric (X and Y) coordinates of that point with the coordinates of the same point as defined from a source of higher accuracy.

National Analysis of Trends in Emergencies System (NATES):

1974-1994*

Federal

[NATE](#)

In 1974 Environment Canada established the National Analysis of Trends in Emergencies System (NATES) database, for the voluntary reporting of significant spill incidents. The data was to be used to assist in directing the work of the emergencies program. NATES ran from 1974 to 1994. Extensive information is available within this database including company names, place where the spill occurred, date of spill, cause, reason and source of spill, damage incurred, and amount, concentration, and volume of materials released.

Non-Compliance Reports:

1992(water only), 1994-2010

Provincial

[NCPL](#)

The Ministry of the Environment provides information about non-compliant discharges of contaminants to air and water that exceed legal allowable limits, from regulated industrial and municipal facilities. A reported non-compliance failure may be in regard to a Control Order, Certificate of Approval, Sectoral Regulation or specific regulation/act.

<u>National Defence & Canadian Forces Fuel Tanks:</u>	Up to May 2001*	Federal	NDFT
The Department of National Defence and the Canadian Forces maintains an inventory of all aboveground & underground fuel storage tanks located on DND lands. Our inventory provides information on the base name, location, tank type & capacity, tank contents, tank class, date of tank installation, date tank last used, and status of tank as of May 2001. This database will no longer be updated due to the new National Security protocols which have prohibited any release of this database.			
<u>National Defence & Canadian Forces Spills:</u>	Mar 1999-Aug 2010	Federal	NDSP
The Department of National Defence and the Canadian Forces maintains an inventory of spills to land and water. All spill sites have been classified under the "Transportation of Dangerous Goods Act - 1992". Our inventory provides information on the facility name, location, spill ID #, spill date, type of spill, as well as the quantity of substance spilled & recovered.			
<u>National Defence & Canadian Forces Waste Disposal Sites:</u>	2001-Apr 2007*	Federal	NDWD
The Department of National Defence and the Canadian Forces maintains an inventory of waste disposal sites located on DND lands. Where available, our inventory provides information on the base name, location, type of waste received, area of site, depth of site, year site opened/closed and status.			
<u>National Environmental Emergencies System (NEES):</u>	1974-2003*	Federal	NEES
In 2000, the Emergencies program implemented NEES, a reporting system for spills of hazardous substances. For the most part, this system only captured data from the Atlantic Provinces, some from Quebec and Ontario and a portion from British Columbia. Data for Alberta, Saskatchewan, Manitoba and the Territories was not captured. However, NEES is also a repository for all previous Environment Canada spill datasets. NEES is composed of the historic datasets 'or Trends ' which dates from approximately 1974 to present. NEES Trends is a compilation of historic databases, which were merged and includes data from NATES (National Analysis of Trends in Emergencies System), ARTS (Atlantic Regional Trends System), and NEES. In 2001, the Emergencies Program determined that variations in reporting regimes and requirements between federal and provincial agencies made national spill reporting and trend analysis difficult to achieve. As a consequence, the department has focused efforts on capturing data on spills of substances which fall under its legislative authority only (CEPA and FA). As such, the NEES database will be decommissioned in December 2004.			
<u>National PCB Inventory:</u>	1988-2008*	Federal	NPCB
Environment Canada's National PCB inventory includes information on in-use PCB containing equipment in Canada including federal, provincial and private facilities. All federal out-of-service PCB containing equipment and all PCB waste owned by the federal government or by federally regulated industries such as airlines, railway companies, broadcasting companies, telephone and telecommunications companies, pipeline companies, etc. are also listed. Although it is not Environment Canada's mandate to collect data on non-federal PCB waste, the National PCB inventory includes some information on provincial and private PCB waste and storage sites. Some addresses provided may be Head Office addresses and are not necessarily the location of where the waste is being used or stored.			
<u>National Pollutant Release Inventory:</u>	1993-2011	Federal	NPRI
Environment Canada has defined the National Pollutant Release Inventory ("NPRI") as a federal government initiative designed to collect comprehensive national data regarding releases to air, water, or land, and waste transfers for recycling for more than 300 listed substances.			
<u>Oil and Gas Wells:</u>	1988-Jun 2013	Private	OGW
The Nickle's Energy Group (publisher of the Daily Oil Bulletin) collects information on drilling activity including operator and well statistics. The well information database includes name, location, class, status and depth. The main Nickle's database is updated on a daily basis, however, this database is updated on a monthly basis. More information is available at www.nickles.com .			

Ontario Oil and Gas Wells: 1800-Jul 2013 Provincial [OOGW](#)
 In 1998, the MNR handed over to the Ontario Oil, Gas and Salt Resources Corporation, the responsibility of maintaining a database of oil and gas wells drilled in Ontario. The OGSR Library has over 20,000+ wells in their database. Information available for all wells in the ERIS database include well owner/operator, location, permit issue date, well cap date, licence no., status, depth and the primary target (rock unit) of the well being drilled. All geology/stratigraphy table information, plus all water table information is also provide for each well record.

Inventory of PCB Storage Sites: 1987-Oct 2004 Provincial [OPCB](#)
 The Ontario Ministry of Environment, Waste Management Branch, maintains an inventory of PCB storage sites within the province. Ontario Regulation 11/82 (Waste Management - PCB) and Regulation 347 (Generator Waste Management) under the Ontario EPA requires the registration of inactive PCB storage equipment and/or disposal sites of PCB waste with the Ontario Ministry of Environment. This database contains information on: 1) waste quantities; 2) major and minor sites storing liquid or solid waste; and 3) a waste storage inventory.

Orders: 1994-Jul 2013 Provincial [ORD](#)
 This is a subset taken from Ontario's Environmental Registry (EBR) database. It will include all Orders on the registry such as (EPA s. 17) - Order for remedial work, (EPA s. 18) - Order for preventative measures, (EPA s. 43) - Order for removal of waste and restoration of site, (EPA s. 44) - Order for conformity with Act for waste disposal sites, (EPA s. 136) - Order for performance of environmental measures.

Canadian Pulp and Paper: 1999, 2002, 2004, 2005, 2009 Private [PAP](#)
 This information is part of the Pulp and Paper Canada Directory. The Directory provides a comprehensive listing of the locations of pulp and paper mills and the products that they produce.

Parks Canada Fuel Storage Tanks: 1920-Jan 2005* Federal [PCFT](#)
 Canadian Heritage maintains an inventory of all known fuel storage tanks operated by Parks Canada, in both National Parks and at National Historic Sites. The database details information on site name, location, tank install/removal date, capacity, fuel type, facility type, tank design and owner/operator.

Pesticide Register: 1988-Jun 2013 Provincial [PES](#)
 The Ontario Ministry of Environment maintains a database of all manufacturers and vendors of registered pesticides.

TSSA Pipeline Incidents: June 2009-Mar 2012 Provincial [PINC](#)
 TSSA's Fuels Safety Program administers the Technical Standards & Safety Act 2000, providing fuel-related safety services associated with the safe transportation, storage, handling and use of fuels such as gasoline, diesel, propane, natural gas and hydrogen. Under this Act, TSSA regulates fuel suppliers, storage facilities, transport trucks, pipelines, contractors and equipment or appliances that use fuels. This database will include spills, strike and leaks from recorded by the TSSA.

Private and Retail Fuel Storage Tanks: 1989-1996* Provincial [PRT](#)
 The Fuels Safety Branch of the Ontario Ministry of Consumer and Commercial Relations maintained a database of all registered private fuel storage tanks and licensed retail fuel outlets. This database includes an inventory of locations that have gasoline, oil, waste oil, natural gas and/or propane storage tanks on their property. The MCCR no longer collects this information. This information is now collected by the Technical Standards and Safety Authority (TSSA).

Permit to Take Water: 1994-Jul 2013 Provincial [PTTW](#)
 This is a subset taken from Ontario's Environmental Registry (EBR) database. It will include all PTTW's on the registry such as OWRA s. 34 - Permit to take water.

Ontario Regulation 347 Waste Receivers Summary: 1986-2011 Provincial [REC](#)
 Part V of the Ontario Environmental Protection Act ("EPA") regulates the disposal of regulated waste through an operating waste management system or a waste disposal site operated or used pursuant to the terms and conditions of a Certificate of Approval or a Provisional Certificate of Approval. Regulation 347 of the Ontario EPA defines a waste receiving site as any site or facility to which waste is transferred by a waste carrier. A receiver of regulated waste is required to register the waste receiving facility. This database represents registered receivers of regulated wastes, identified by registration number, company name and address, and includes receivers of waste such as: landfills, incinerators, transfer stations, PCB storage sites, sludge farms and water pollution control plants. This information is a summary of all years from 1986 including the most currently available data.

Record of Site Condition: 1997-Sept 2001, Oct 2004-Jun 2013 Provincial [RSC](#)
 The Record of Site Condition (RSC) is part of the Ministry of the Environment's Brownfields Environmental Site Registry. Protection from environmental cleanup orders for property owners is contingent upon documentation known as a record of site condition (RSC) being filed in the Environmental Site Registry. In order to file an RSC, the property must have been properly assessed and shown to meet the soil, sediment and groundwater standards appropriate for the use (such as residential) proposed to take place on the property. The Record of Site Condition Regulation (O. Reg. 153/04) details requirements related to site assessment and clean up. RSCs filed after July 1, 2011 will also be included as part of the new (O.Reg. 511/09).

Retail Fuel Storage Tanks: 1999-Jun 2010 Private [RST](#)
 This database includes an inventory of retail fuel outlet locations (including marinas) that have on their property gasoline, oil, waste oil, natural gas and / or propane storage tanks.

Scott's Manufacturing Directory: 1992-Mar 2011 Private [SCT](#)
 Scott's Directories is a data bank containing information on over 200,000 manufacturers across Canada. Even though Scott's listings are voluntary, it is the most comprehensive database of Canadian manufacturers available. Information concerning a company's address, plant size, and main products are included in this database.

Ontario Spills: 1988-Jun 2013 Provincial [SPL](#)
 This database identifies information such as location (approximate), type and quantity of contaminant, date of spill, environmental impact, cause, nature of impact, etc. Information from 1988-2002 was part of the ORIS (Occurrence Reporting Information System). The SAC (Spills Action Centre) handles all spills reported in Ontario. Regulations for spills in Ontario are part of the MOE's Environmental Protection Act, Part X.

Wastewater Discharger Registration Database: 1990-2011 Provincial [SRDS](#)
 Information under this heading is combination of the following 2 programs. The Municipal/Industrial Strategy for Abatement (MISA) division of the Ontario Ministry of Environment maintained a database of all direct dischargers of toxic pollutants within nine sectors including: Electric Power Generation; Mining; Petroleum Refining; Organic Chemicals; Inorganic Chemicals; Pulp & Paper; Metal Casting; Iron & Steel; and Quarries. All sampling information is now collected and stored within the Sample Result Data Store (SRDS).

Anderson's Storage Tanks: 1915-1953* Private [TANK](#)
 The information provided in this database was collected by examining various historical documents, which identified the location of former storage tanks, containing substances such as fuel, water, gas, oil, and other various types of miscellaneous products. Information is available in regard to business operating at tank site, tank location, permit year, permit & installation type, no. of tanks installed & configuration and tank capacity. Data contained within this database pertains only to the city of Toronto and is not warranted to be complete, exhaustive or authoritative. The information was collected for research purposes only.

Transport Canada Fuel Storage Tanks: 1970-Mar 2007 Federal [TCFT](#)
 With the provinces of BC, MB, NB, NF, ON, PE, and QC; Transport Canada currently owns and operates 90 fuel storage tanks. Our inventory provides information on the site name, location, tank age, capacity and fuel type.

TSSA Variances for Abandonment of Underground Storage Tanks:

Current to Jun 2013

Provincial

[VAR](#)

The TSSA, Under the Liquid Fuels Handling Code and the Fuel Oil Code, all underground storage tanks must be removed within two years of disuse. If removal of a tank is not feasible, you may apply to seek a variance from this code requirement. This is a list of all variances granted for abandoned tanks.

Waste Disposal Sites - MOE CA Inventory:

1970-Jul 2013

Provincial

[WDS](#)

The Ontario Ministry of Environment, Waste Management Branch, maintains an inventory of known open (active or inactive) and closed disposal sites in the Province of Ontario. Active sites maintain a Certificate of Approval, are approved to receive and are receiving waste. Inactive sites maintain Certificate(s) of Approval but are not receiving waste. Closed sites are not receiving waste. The data contained within this database was compiled from the MOE's Certificate of Approval database. Locations of these sites may be cross-referenced to the Anderson database described under ERIS's Private Source Database section, by the CA number. All new Environmental Compliance Approvals handed out after Oct 31, 2011 for Waste Disposal Sites will still be found in this database.

Waste Disposal Sites - MOE 1991 Historical Approval Inventory:

Up to Oct 1990*

Provincial

[WDSH](#)

In June 1991, the Ontario Ministry of Environment, Waste Management Branch, published the "June 1991 Waste Disposal Site Inventory", of all known active and closed waste disposal sites as of October 30st, 1990. For each "active" site as of October 31st 1990, information is provided on site location, site/CA number, waste type, site status and site classification. For each "closed" site as of October 31st 1990, information is provided on site location, site/CA number, closure date and site classification. Locations of these sites may be cross-referenced to the Anderson database described under ERIS's Private Source Database section, by the CA number.

Water Well Information System:

1955-May 2013

Provincial

[WWIS](#)

This database describes locations and characteristics of water wells found within Ontario in accordance with Regulation 903. It includes such information as coordinates, construction date, well depth, primary and secondary use, pump rate, static water level, well status, etc. Also included are detailed stratigraphy information, approximate depth to bedrock and the approximate depth to the water table.

Definitions

Database Descriptions: This section provides a detailed explanation for each database including: source, information available, time coverage, and acronyms used. They are listed in alphabetic order.

Detail Report: This is the section of the report which provides the most detail for each individual record. Records are summarized by location, starting with the project property followed by records in closest proximity.

Distance: The distance value is the distance between plotted points, not necessarily the distance between the sites' boundaries". All values are an approximation.

Direction: The direction value is the compass direction of the site in respect to the project property and/or center point of the report.

Elevation: The elevation value is taken from the location at which the records for the site address have been plotted. All values are an approximation. Source: Google Elevation API.

Executive Summary: This portion of the report is divided into 3 sections:

'Report Summary'- Displays a chart indicating how many records fall on the project property and, within the report search radii.

'Site Report Summary'-Project Property'- This section lists all the records which fall on the project property. For more details, see the 'Detail Report' section.

'Site Report Summary-Surrounding Properties'- This section summarizes all records on adjacent properties, listing them in order of proximity from the project property. For more details, see the 'Detail Report' section.

Map Key: The map key number is assigned according to closest proximity from the project property. Map Key numbers always start at #1. The project property will always have a map key of '1' if records are available. If there is a number in brackets beside the main number, this will indicate the number of records on that specific property. If there is no number in brackets, there is only one record for that property.

The symbol and colour used indicates 'elevation': the red inverted triangle will dictate 'ERIS Sites with Lower Elevation', the yellow triangle will dictate 'ERIS Sites with Higher Elevation' and the orange square will dictate 'ERIS Sites with Same Elevation.'

Unplottables: These are records that could not be mapped due to various reasons, including limited geographic information. These records may or may not be in your study area, and were included as reference.



APPENDIX F

Aerial Photographs and Other Maps



LANDEX CAPITAL CORPORATION

PHASE ONE ENVIRONMENTAL SITE ASSESSMENT
 PROPOSED LINKSVIEW SUBDIVISION
 780 AND 788 TENTH LINE
 COLLINGWOOD, ONTARIO

1969 AERIAL PHOTOGRAPH

Peto MacCallum Ltd.
 CONSULTING ENGINEERS

DATE	APPROX. SCALE	PML REF.	FIGURE
MAR. 2014	1:39,000	14BF001	1



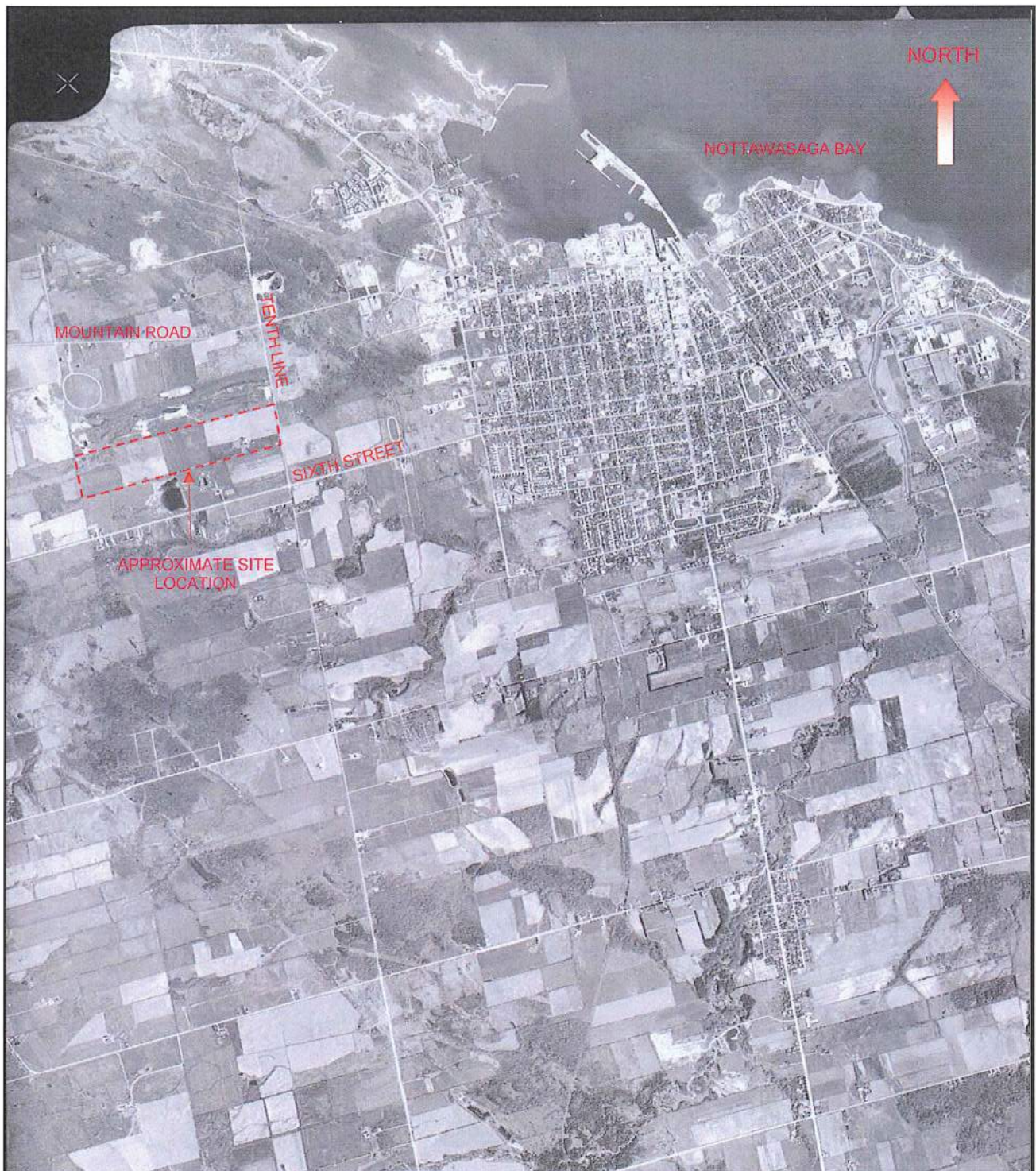
LANDEX CAPITAL CORPORATION

PHASE ONE ENVIRONMENTAL SITE ASSESSMENT
 PROPOSED LINKSVIEW SUBDIVISION
 780 AND 788 TENTH LINE
 COLLINGWOOD, ONTARIO

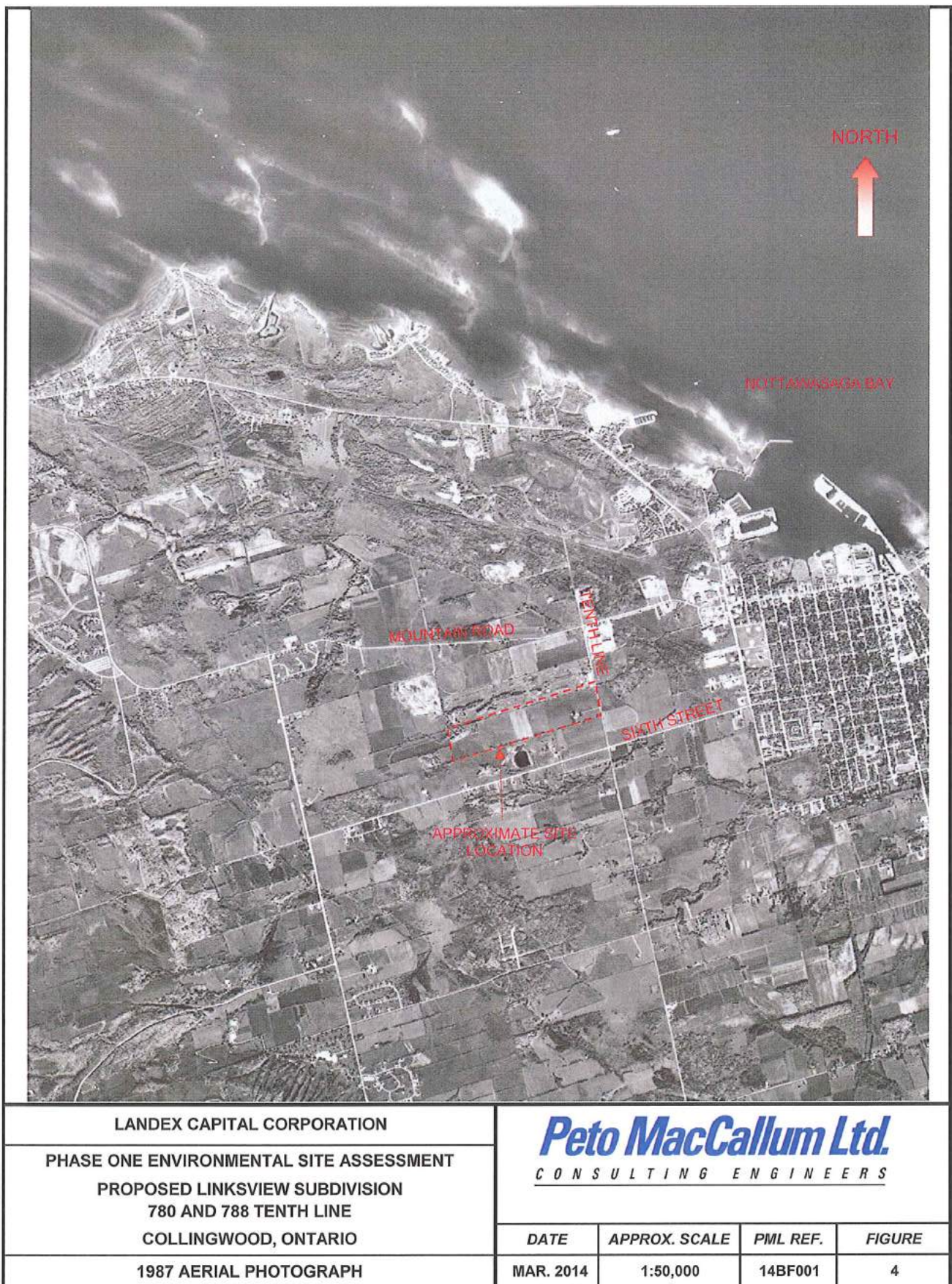
1976 AERIAL PHOTOGRAPH

Peto MacCallum Ltd.
 CONSULTING ENGINEERS

DATE	APPROX. SCALE	PML REF.	FIGURE
MAR. 2014	1:52,000	14BF001	2



LANDEX CAPITAL CORPORATION		<i>Peto MacCallum Ltd.</i> CONSULTING ENGINEERS			
PHASE ONE ENVIRONMENTAL SITE ASSESSMENT					
PROPOSED LINKSVIEW SUBDIVISION					
780 AND 788 TENTH LINE					
COLLINGWOOD, ONTARIO					
1981 AERIAL PHOTOGRAPH		DATE	APPROX. SCALE	PML REF.	FIGURE
		MAR. 2014	1:40,000	14BF001	3





LANDEX CAPITAL CORPORATION

PHASE ONE ENVIRONMENTAL SITE ASSESSMENT

PROPOSED LINKSVIEW SUBDIVISION

780 AND 788 TENTH LINE

COLLINGWOOD, ONTARIO

1995 AERIAL PHOTOGRAPH

Peto MacCallum Ltd.
CONSULTING ENGINEERS

DATE

APPROX. SCALE

PML REF.

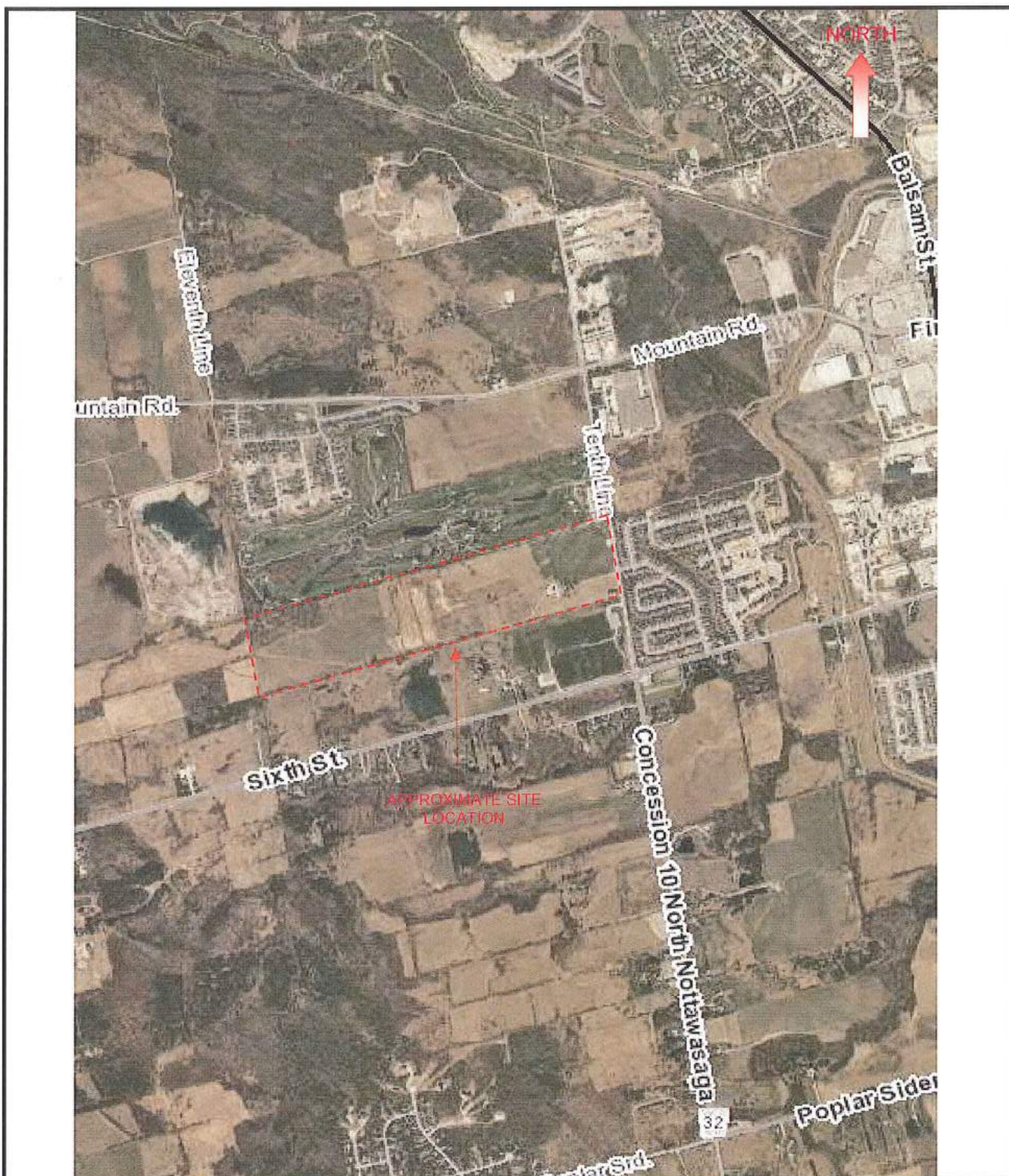
FIGURE

MAR. 2014

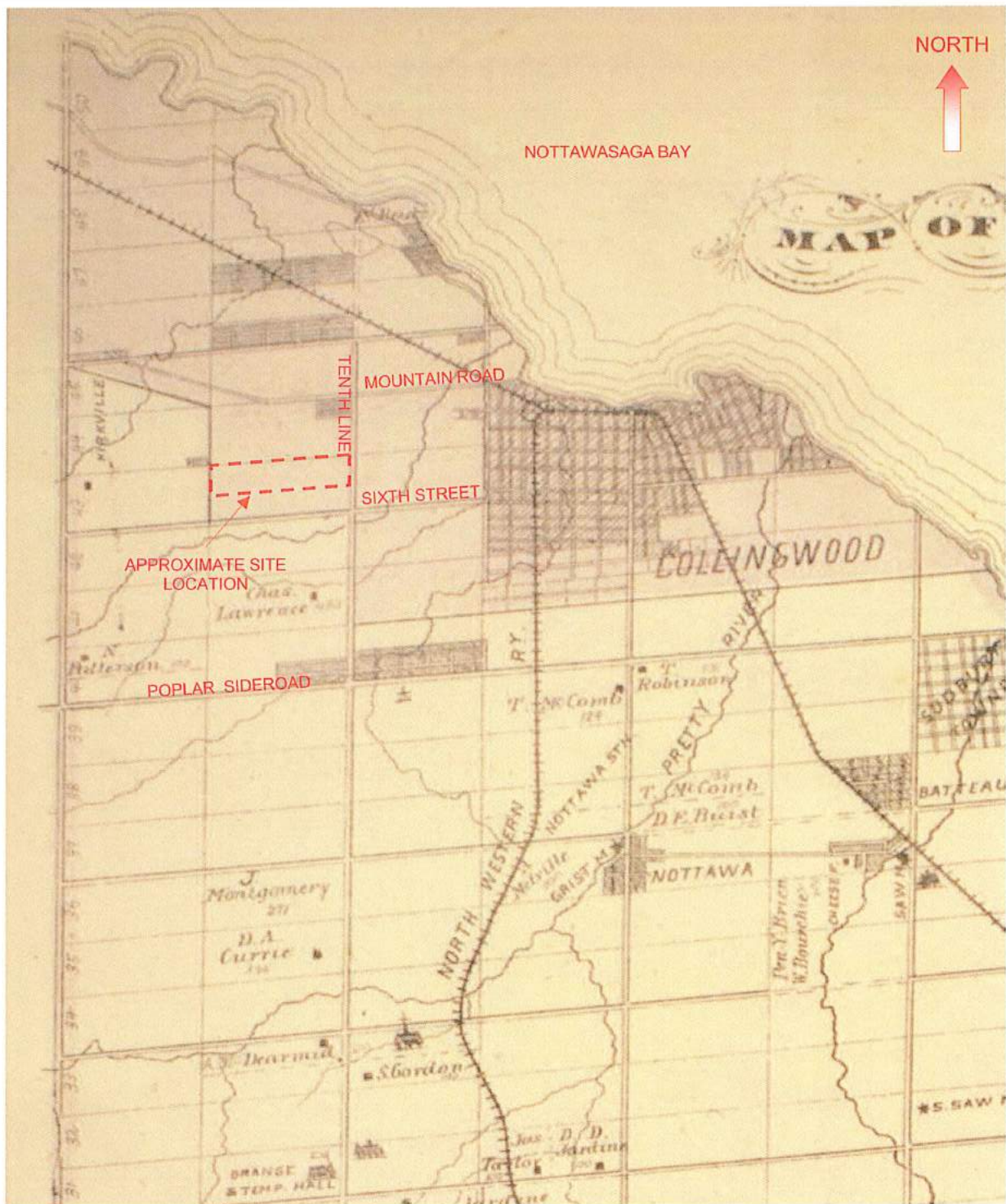
1:56,000

14BF001

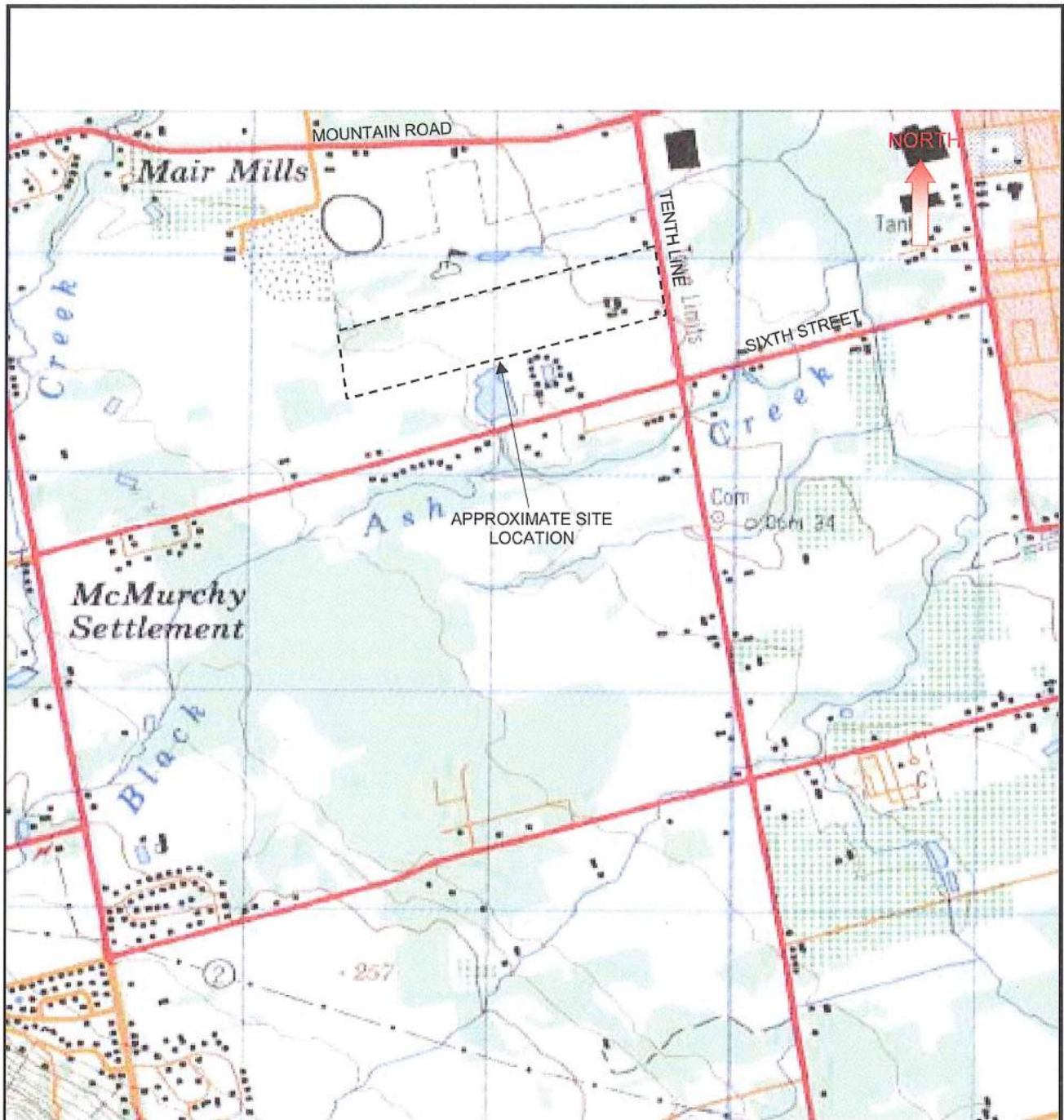
5



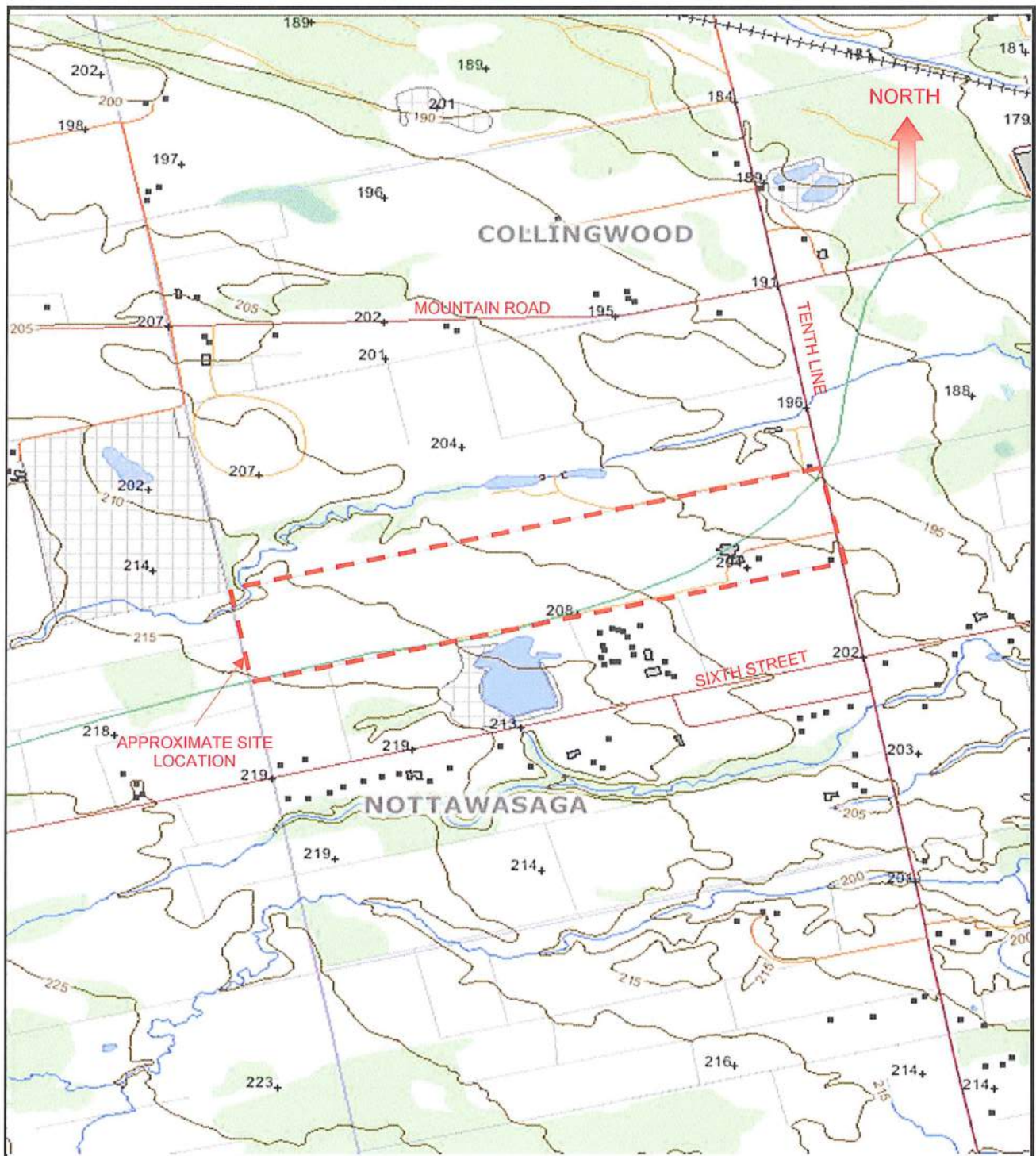
LANDEX CAPITAL CORPORATION	Peto MacCallum Ltd. CONSULTING ENGINEERS			
PHASE ONE ENVIRONMENTAL SITE ASSESSMENT PROPOSED LINKSVIEW SUBDIVISION 780 AND 788 TENTH LINE COLLINGWOOD, ONTARIO	DATE	APPROX. SCALE	PML REF.	FIGURE
2012 AERIAL PHOTOGRAPH	MAR. 2014	1:21,500	14BF001	6



LANDEX CAPITAL CORPORATION	Peto MacCallum Ltd. CONSULTING ENGINEERS			
PHASE ONE ENVIRONMENTAL SITE ASSESSMENT PROPOSED LINKSVIEW SUBDIVISION 780 AND 788 TENTH LINE COLLINGWOOD, ONTARIO	DATE	APPROX. SCALE	PML REF.	FIGURE
1881 HISTORICAL ATLAS	MAR. 2014	1:56,090	14BF001	7



LANDEX CAPITAL CORPORATION	Peto MacCallum Ltd. CONSULTING ENGINEERS			
PHASE ONE ENVIRONMENTAL SITE ASSESSMENT PROPOSED LINKVIEW SUBDIVISION 780 AND 788 TENTH LINE COLLINGWOOD, ONTARIO	DATE	APPROX. SCALE	PML REF.	FIGURE
1993 FEDERAL TOPOGRAPHIC MAP	MAR. 2014	1:25,925	14BF001	8



LANDEX CAPITAL CORPORATION		<i>Peto MacCallum Ltd.</i> <i>C O N S U L T I N G E N G I N E E R S</i>			
PHASE ONE ENVIRONMENTAL SITE ASSESSMENT					
PROPOSED LINKSVIEW SUBDIVISION					
780 AND 788 TENTH LINE					
COLLINGWOOD, ONTARIO					
2004 ONTARIO BASE MAP (OBM)		DATE	APPROX. SCALE	PML REF.	FIGURE
		MAR. 2014	1:13,860	14BF001	9



APPENDIX G

Interview Correspondence

14BF001- Interview Questions

As part of the Phase One Environmental Site Assessment (ESA), Peto MacCallum Ltd. (PML) must complete an interview section which must be summarized and documented in the report. At your earliest convenience, can please answer the following questions regarding the properties located at 780 and 788 Tenth Line (referred to herein as the 'Site')?

General Questions for the overall Site:

1. Based on the information provided, the municipal address is 788 for the existing house and 780 for the former house and barn. Please confirm that these addresses are correct.
Yes, they are correct.
2. How long have you been with your company and how long have you been familiar with the Site?
10 years.
3. Is the Site the subject of environmental litigation, regulatory citations, or enforcement action?
No.
4. Are there any adverse press reports or complaints on file concerning the Site?
No.
5. Describe the land history. Was the Site ever used for industrial use, dry cleaning, a garage or bulk liquid dispensing facility, including a gasoline service station?
No. Residential and Farm.
6. Are you aware of any environmental issues with the Site such as waste disposal, landfilling, chemical use, chemical storage, spills or leaks, above ground storage tanks (ASTs) / underground storage tanks (USTs), adverse press reports, contamination, etc.?
No.
7. When did you purchase the Site? Do you know the previous owner(s) and/or do you have their contact information?
2004 – Bayridge.
8. What is the Site currently zoned as?
Recreation.
9. Are you aware of any previous environmental or geotechnical reports completed for the Site? If so, can we be provided with a copy?
Terraprobe 2004. Copy attached. Peto MacCallum completing Geotech Report Spring 2014.

10. Was a designated substances survey (DSS) ever completed for the existing and/or former buildings on Site?
No.

Property One – 780 Tenth Line (Former Residential Dwelling and Barns) – Existing Farm Field, Shed/Garage and Forested Area

11. Do you know approximately when the former dwelling and barns at 780 Tenth Line were constructed?
No – 1950's.
12. Do you know approximately when the buildings were demolished?
2010. –
13. Were there any ASTs/USTs located within the former residential dwelling and barn area prior to demolition?
No.
14. Is there a farmer leasing the agricultural lands at 780 Tenth Line? Do you have the farmer's contact information?
No.
15. Are you aware if the farmer used pesticides and/or herbicides?
Not aware.
16. The central portion of the property has hydro and water running to it that branches off into what looks like an irrigation system. What was that area used for? Is there a well located in that area?
Small irrigation system to water horses (Collingwood Horse Show). We are not aware of any onsite wells.
17. Can you confirm the location of the former septic system and/or well locations?
No.
18. There are linear piles of fill running north-south in the center of the property. Where does this soil originate from?
Georgian Meadows topsoil stockpile.
What are these berm-like piles for?
Stockpile.
19. Are you aware of any other areas of fill on the site?
No.
There was a snow covered pile of fill in the wooded area and two piles of fill adjacent to the former barn.

Do not know about fill in woods. Barn area fill is general debris to be removed.

Can you confirm where this soil originated from?

No.

20. Are you aware of the wooded lean-to structures located in the wooded area at the northwest corner of the property which appear to be hunting huts?

No.

Can you confirm their use?

No.

21. There were several small tributaries and a frozen ponded area in the forested area along the northeast portion of the Site. Is there water in this area all year long?

This is Taylor's Creek, a Tributary to the Black Ash Creek.

22. There was deleterious debris located around the former residential building and barns and in the forested area which included concrete, wood pieces, metal pieces including rebar, furniture including couches, tables, mattresses, toys, etc. Is this a result of illegal dumping on the property or is this debris related to the former building structures?

Illegal Dumping.

23. There is a shed/garage located at the northeast corner of the property which appears to be related to the golf course. What was it used for? Is there anything stored in it? We could not gain access into it during the Site reconnaissance.

Golf Course tools.

24. Is the northeast corner of the property used by the golf course?

It is leased to the Golf Course on an annual basis for use as Driving Range.

There were several posts in the ground in this area that may be used in conjunction with a possible parking area. Can you confirm what this area is used for since it was covered in a significant amount of snow at the time of PML's site reconnaissance?

Temporary R/V hookups used during Horse Show Events under previous ownership. All have been disconnected.

25. Were pesticides and/or herbicides used on Site by the golf course?

If they were, they would be in compliance with applicable legislation.

Property Two – 788 Tenth Line (Existing Residential Dwelling and Shed)

26. How long has the existing house at 788 Tenth Line been vacant?

10 years +

27. Do you know approximately when the house and shed was constructed?
50 years ago.

28. The existing residential dwelling at 788 Tenth Line had electric heat (baseboard heaters). Do you know if the dwelling was ever heated by fuel oil? If so, do you know when was it converted and where the AST/UST was located?
No.

29. Can you confirm the location of the septic system and well locations?
No.



APPENDIX H

Site Photographs



Photograph 1: View looking west at the east side of the existing residential dwelling located at the southeast corner of the Site (788 Tenth Line).



Photograph 2: Gravel driveway access to the central section of the Site from Tenth Line.



Photograph 3: View looking northwest at the concrete foundation and metal debris piles located in the central portion of the Site.



Photograph 4: View looking north at the foundation of former barn located at the central portion of the Site.



Photograph 5: View looking northwest at the berms of fill of unknown quality in the central section of the Site.



Photograph 6: View looking north at the Blue Mountain Golf and Country Club driving range in the northeast corner of the Site.



APPENDIX I

Statement of Limitations



STATEMENT OF LIMITATIONS

This report is prepared for and made available for the sole use of the client named. Peto MacCallum Ltd. (PML) hereby disclaims any liability or responsibility to any person or entity, other than those for whom this report is specifically issued, for any loss, damage, expenses, or penalties that may arise or result from the use of any information or recommendations contained in this report. The contents of this report may not be used or relied upon by any other person without the express written consent and authorization of PML.

This report shall not be relied upon for any purpose other than as agreed with the client named without the written consent of PML. It shall not be used to express or imply warranty as to the fitness of the property for a particular purpose. A portion of this report may not be used as a separate entity: that is to say the report is to be read in its entirety at all times.

The report is based solely on the scope of services which are specifically referred to in this report. No physical or intrusive testing has been performed, except as specifically referenced in this report. This report is not a certification of compliance with past or present regulations, codes, guidelines and policies.

The scope of services carried out by PML is based on details of the proposed development and land use to address certain issues, purposes and objectives with respect to the specific site as identified by the client. Services not expressly set forth in writing are expressly excluded from the services provided by PML. In other words, PML has not performed any observations, investigations, study analysis, engineering evaluation or testing that is not specifically listed in the scope of services in this report. PML assumes no responsibility or duty to the client for any such services and shall not be liable for failing to discover any condition, whose discovery would require the performance of services not specifically referred to in this report.



STATEMENT OF LIMITATIONS (continued)

The findings and comments made by PML in this report are based on the conditions observed at the time of PML's site reconnaissance. No assurances can be made and no assurances are given with respect to any potential changes in site conditions following the time of completion of PML's field work. Furthermore, regulations, codes and guidelines may change at any time subsequent to the date of this report and these changes may effect the validity of the findings and recommendations given in this report.

The results and conclusions with respect to site conditions are therefore in no way intended to be taken as a guarantee or representation, expressed or implied, that the site is free from any contaminants from past or current land use activities or that the conditions in all areas of the site and beneath or within structures are the same as those areas specifically sampled.

Any investigation, examination, measurements or sampling explorations at a particular location may not be representative of conditions between sampled locations. Soil, ground water, surface water, or building material conditions between and beyond the sampled locations may differ from those encountered at the sampling locations and conditions may become apparent during construction which could not be detected or anticipated at the time of the intrusive sampling investigation.

Budget estimates contained in this report are to be viewed as an engineering estimate of probable costs and provided solely for the purposes of assisting the client in its budgeting process. It is understood and agreed that PML will not in any way be held liable as a result of any budget figures provided by it.

The Client expressly waives its right to withhold PML's fees, either in whole or in part, or to make any claim or commence an action or bring any other proceedings, whether in contract, tort, or otherwise against PML in anyway connected with advice or information given by PML relating to the cost estimate or Environmental Remediation/Cleanup and Restoration or Soil and Ground Water Management Plan Cost Estimate.



**GEOTECHNICAL INVESTIGATION
PROPOSED LINKSVIEW SUBDIVISION
780 AND 788 TENTH LINE
COLLINGWOOD, ONTARIO**

for

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PML Ref.: 14BF001
Report 2
August 2014

August 15, 2014

PML Ref.: 14BF001
Report 2

Mr. Ken Hale
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Dear Mr. Hale

**Geotechnical Investigation
Proposed Linksvew Subdivision
780 and 788 Tenth Line
Collingwood, Ontario**

This report presents the results of a Geotechnical Investigation completed for a parcel of land located at 780 and 788 Tenth Line, Collingwood. Authorization for this assignment was provided by Mr. K. Hale in the signed Engineering Services Agreement, PML Ref.: 14BF001, dated January 6, 2014.

Report 1, dated March 20, 2014, provides the results of a Phase One Environmental Site Assessment.

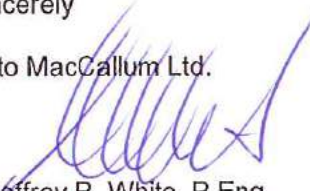
A residential subdivision is proposed for a 42 ha land parcel. The current concept plan involves five three storey apartment buildings in the east and single dwelling and townhouses in the central and west portions of the site. Full depth basements are planned. A Storm Water Management (SWM) pond, full site servicing and paved roads will be provided. The subdivisions final grading and drainage patterns were not yet determined at the time of this report. However, currently it is understood that existing grades will be raised an estimated 2 to 3 m.

Twenty boreholes were advanced across the site in order to determine subsurface conditions and this report provides geotechnical recommendations pertinent to the site development. The boreholes revealed relatively competent soils, however a relatively high ground water table exists, which will impact both design and construction.

We trust the report is complete within our terms of reference and the information presented is sufficient for your present purposes. If you have any questions or when we may be of further service, please do not hesitate to call our office.

Sincerely

Peto MacCallum Ltd.



Geoffrey R. White, P.Eng.
Associate
Manager, Geotechnical and Geoenvironmental Services

GRW:jlb



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1. INTRODUCTION

Peto MacCallum Ltd. (PML) is pleased to present the results of the geotechnical investigation recently completed at the above noted project site. Authorization for this assignment was provided by Mr. K. Hale in the signed Engineering Services Agreement, PML Ref.: 14BF001, dated January 6, 2014.

A residential subdivision is proposed for the 42 ha parcel of land at 780 and 788 Tenth Line (west side of the road), about 350 m north of Sixth Street, in the Town of Collingwood. The site is 300 m by 1400 m in plan, and is currently vacant in the western and central portions, with an abandoned residence in the east part, along with a seasonal golf driving range. Surrounding the site, a golf course is to the north, Georgian Meadows Subdivision is to the east, park/commercial areas are to the south, and vacant lands to the west. The site slopes down from west to east with relief of about 17 m.

The current concept plan involves five three storey apartment buildings in the east and single dwelling and townhouses in the central and west portions of the site. Full depth basements are planned for all buildings. A Storm Water Management (SWM) pond, full site servicing and paved roads will be provided.

The subdivisions final grading and drainage patterns were not yet determined at the time of this report. However, it is understood that the current concept will involve raising site grades about 2 to 3 m.

The purpose of this investigation was to determine the subsurface conditions at the site, and based on this information, provide comments and geotechnical engineering recommendations to assist in the planning and design of earthworks, building foundations, SWM pond, site servicing and pavements.

A Phase One Environmental Site Assessment was carried out concurrently with the geotechnical investigation and is presented under separate cover, as Report 1, dated March 20, 2014.



The comments and recommendations provided in this report are based on the site conditions revealed in the boreholes at the time of the investigation, and are applicable only to the proposed works as addressed in the report. Any changes in the proposed plans will require review by PML to assess the validity of the report, and may require modified recommendations, additional investigation and/or analysis.

2. INVESTIGATION PROCEDURES

The field work for the investigation was carried out on January 29 and 30 and February 3 and 4, 2014, and consisted of Boreholes 1 to 20, drilled to 6.2 to 6.6 m depth as shown on Drawing 1, appended. Boreholes 1 and 2 were advanced for the SWM pond, Boreholes 3 to 8 were put down for the five apartment buildings, and Boreholes 9 to 20 provided site coverage for the remainder of the subdivision.

Co-ordination for clearances of underground utilities was provided by PML.

The boreholes were advanced using continuous flight solid stem augers, powered by a track mounted CME-55 drill rig. The drill rig was supplied and operated by a specialist drilling contractor working under the full-time supervision of a member of PML's engineering staff.

Representative samples of the overburden were recovered at frequent depth intervals for identification purposes using a conventional split spoon sampler. Standard penetration tests were carried out simultaneously with the sampling operations to assess the strength characteristics of the subsoil. 50 mm diameter PVC wells were installed in six of the boreholes to permit long term monitoring of the ground water table. The monitoring wells were fitted with above grade protective casing. Ground water conditions in the boreholes were closely monitored during the course of the field work.

Boreholes without monitoring wells were backfilled in accordance with O.Reg. 903. As per O.Reg. 903 the monitoring wells become the property of the Owner and will have to be decommissioned when no longer required. PML would be pleased to assist in this regard.



The location of each borehole was established in the field by C.F. Crozier and Associates Inc. (CFC) based on a proposed borehole plan provided by PML. The ground surface elevations of each borehole were interpolated by PML based on a topographic plan provided by CFC.

All recovered soil samples were returned to our laboratory for moisture content determination and detailed examination to confirm field classification. Five soil samples from the boreholes were submitted for grain size analysis and the results are presented on Figures 1 to 5, appended. Atterberg Limits testing was also complete on all five samples.

3. SUMMARIZED SUBSURFACE CONDITIONS

Reference is made to the appended Log of Borehole sheets for details of the subsurface conditions, including soil classifications, inferred stratigraphy, standard penetration test N values, monitoring well installation details, ground water observations and the results of laboratory moisture content determinations and Atterberg Limits testing.

Due to the soil sampling procedures and limited sample size, the depth demarcations on the borehole logs must be viewed as "transitional" zones between layers, and cannot be construed as exact geologic boundaries between layers.

The site is characterized by surficial topsoil over several discontinuous layers of silty sand, sand, silt, sandy silt and till. A description of the distribution and characteristics of the various soil units and ground water observations encountered in the boreholes is presented below.

3.1 Boreholes 1 and 2 - Storm Water Management Pond (East Part of Site)

3.1.1 Topsoil

A 100 to 110 mm thick layer of topsoil was found at the surface of both boreholes.

3.1.2 Sandy Silt

A sandy silt layer was encountered below the topsoil in both boreholes to 0.7 m depth (elevation 196.3 to 198.4). The layer contained trace gravel and was frozen to wet with moisture contents of 15 to 20%.



3.1.3 Sandy Silt to Silt

A deposit of sandy silt to silt was encountered below the sandy silt, which extended to the 6.2 to 6.4 m depth of exploration. The N values showed the unit to be compact to very dense. The unit contained trace clay and gravel. Three samples from the boreholes were submitted for grain size analysis and Atterberg Limits testing. The results are presented in Figures 1 to 3, appended. All of the Atterberg Limits testing showed the samples to be non-plastic. The unit was moist to wet with moisture contents ranging from 3 to 19%.

3.1.4 Ground Water

Ground water is discussed in detail in Section 3.4.

3.2 Boreholes 3 to 8 – Three Storey Apartment Buildings (East Part of Site)

3.2.1 Topsoil

A 70 to 110 mm thick layer of topsoil was encountered at the surface of all boreholes.

3.2.2 Fill

A local fill layer was encountered below the topsoil in Borehole 8 to 0.7 m depth (elevation 202.15). The fill comprised sandy silt with trace organics. The layer was frozen to wet with a moisture content of 21%.

3.2.3 Upper Silty Sand/Sand and Silt/Sandy Silt

A thin upper layer of silty sand/sand and silt/sandy silt was encountered below the topsoil in Boreholes 3 to 7, extending to 0.7 to 1.4 m depth (elevation 197.4 to 201.5). Trace gravel and trace organics were noted locally. The material was compact, and frozen to wet with moisture contents ranging from 9 to 27%.



3.2.4 Sandy Silt to Silt

A major sandy silt to silt unit was encountered below the upper silty sand/sand and silt/sandy silt unit, extending to 4.0 to 5.5 m depth (elevation 194.7 to 197.7) in Boreholes 3 to 6 and 8, and to the 6.2 m depth of exploration in Borehole 7. The N values were in the compact to very dense range. The unit contained trace clay and trace gravel. The unit was moist to wet with moisture contents ranging from 6 to 19%.

3.2.5 Lower Sand/Silty Sand

A lower sand/silty sand deposit was unit was revealed at the base of Boreholes 5, 6 and 8. It extended from 4.0 to 5.5 m (elevation 193.3 to 194.8) in Borehole 5, and from 5.5 m depth (elevation 197.2 and 197.4) to the 6.6 m depth of exploration in Boreholes 6 and 8. The material was variable comprising gravelly sand, trace silt, in Borehole 5, silty fine sand in Borehole 6 and grading to sand, some gravel and trace silt, in Borehole 8. The material was compact to very dense and wet with moisture contents of 10 to 24%.

3.2.6 Lower Silt

A local lower silt unit was encountered in Borehole 5, below the sand from 5.5 m to the 6.2 m depth of exploration. The silt was very dense and moist with a moisture content of 8%.

3.2.7 Till

A sandy silt till deposit was encountered locally beneath the silt to the 6.3 to 6.5 m depth of exploration in Boreholes 3 and 4. The till contained trace gravel, and cobbles and boulders were noted. The deposit was very dense and moist with a moisture content of 8%.

3.2.8 Ground Water

Ground water is discussed in Section 3.4.



3.3 Boreholes 9 to 20 – Single Dwelling and Townhouses (Central and West Part of Site)

3.3.1 Topsoil

A 70 to 120 mm thick layer of topsoil was found at the surface of all boreholes.

3.3.2 Upper Silty Sand/Sand and Silt/Sandy Silt

A thin upper layer of silty sand/sand and silt/sandy silt was encountered below the topsoil in Boreholes 9, 10, 12, 13, 15, 17, 19 and 20 extending to 0.7 to 2.1 m below existing grade (elevation 200.4 to 211.9). Trace gravel and trace clay were noted locally. A sample of the material from Borehole 19 was submitted for grain size analysis, and the results are presented in Figure 4, appended. The accompanying Atterberg Limit test showed the material to be non-plastic. The layer was loose to compact, and frozen to wet with moisture contents of 11 to 25%.

3.3.3 Sandy Silt

A more significant sandy silt unit was encountered below the topsoil or upper thin layers in Boreholes 9, 10, 13 to 15, 18 and 19, extending to 2.1 to 4.5 m depth (elevation 202.3 to 210.4). Locally in Borehole 10, a second layer was encountered from 4.0 m depth (elevation 201.2) to the 6.6 m depth of exploration. The unit contained trace gravel or silty fine sand layers locally. The density was compact to very dense and the unit was moist to wet with moisture contents of 7 to 25%.

3.3.4 Sandy Silt to Silt

Underlying the topsoil and/or the upper silty sand/sand and silt/sandy silt, a sandy silt to silt unit was encountered in Boreholes 11, 12, 15, 16 and 17. The unit was penetrated at 1.4 to 5 m depth (elevations 198.2 to 207.2) and extended to the depth exploration in Borehole 17. The unit contained trace clay and gravel, and varied locally to clayey silt. A clayey silt sample of the unit from Borehole 11 was submitted for grain size analysis and Atterberg Limits. The results are presented on Figure 5, appended. The Atterberg Limits showed the material to have a liquid limit of 17% and a plastic limit of 14%. The unit was compact to very dense. The material ranged from frozen to moist to wet with moisture contents varying from 6 to 24%.



3.3.5 Sand/Silty Sand

Sand/silty sand layers were encountered in Boreholes 11, 14, 15, 16 and 20. In Boreholes 14 and 15 the layer was thin, occurring from 2.9 m to 4.0 m (elevation 208.7 to 209.8) and 1.4 m to 2.1 m depth (elevation 204.7 to 205.4), respectively, and comprised sand, trace to some silt. The sand was compact and wet with moisture contents of 20%. In Boreholes 11, 16 and 20, the sand was more extensive, occurring from 2.1 m to 2.9 m depth to the depth of exploration in Boreholes 11 and 16, and from 0.7 m to 4.0 m depth (elevation 201.4 to 204.7) in Borehole 20. The layer comprised sand, trace to some silt, in Borehole 16 and the upper part of Borehole 20, varying to silty sand in Borehole 11 and the base of Borehole 20. The sand was compact (locally loose) and wet with moisture contents of 11 to 24%.

3.3.6 Lower Silt

A local lower silt unit (trace to some sand, trace gravel) was encountered in Borehole 14 and 20, below the sand/silty sand from 5.5 m to the 6.2 m depth of exploration. The silt was dense and moist to very moist with moisture contents of 9 to 17%.

3.3.7 Till

A till deposit was encountered in Boreholes 9, 10, 12, 13 to 15, 18 and 19. The till was typically the basal deposit, underlying the upper soil units at 2.1 to 5.5 m depth (elevation 198.2 to 210.4) and extending down to the 6.2 to 6.6 m depth of exploration. Locally in Borehole 10, the till was penetrated, occurring from 2.1 to 4.0 m depth (elevation 201.1 to 203.1). The till matrix comprised silty sand to sandy silt, with trace to some gravel. Cobbles and boulders were noted. The till was dense to very dense (locally compact) and moist (locally wet) with moisture contents of 5 to 13% (locally 14 to 17%).

3.3.8 Ground Water

Ground water is discussed in Section 3.4.



3.4 Ground Water

Upon completion of augering water was observed all boreholes, except Borehole 2, as noted in the table below on a borehole by borehole basis. The water levels measured in the monitoring wells on February 12, 2014 and March 5, 2014, some 1 to 5 weeks after installation, are also included in the table. Table 1, appended, provides subsequent water level measurements for the year-long water leveling monitoring program to date (August 2014).

BOREHOLE	WATER LEVEL IN BOREHOLES UPON COMPLETION OF AUGERING JANUARY 29, 30, FEBRUARY 3, 4, 2014 (Depth m / Elevation)	WATER LEVEL IN WELLS FEBRUARY 12, 2014 (Depth m / Elevation)	WATER LEVEL IN WELLS MARCH 5, 2014 2014 (Depth m / Elevation)
1	3.0 / 194.0	Frozen at 0.5 / 196.5	Frozen at 0.5 / 196.5
2	No Water	N/A	N/A
3	3.4 / 198.8	1.7 / 200.5	1.7 / 200.5
4	2.4 / 199.7	N/A	N/A
5	4.3 / 194.5	N/A	N/A
6	0.9 / 201.8	N/A	N/A
7	1.5 / 201.8	N/A	N/A
8	4.9 / 198.0	N/A	N/A
9	2.7 / 205.0	1.1 / 206.6	1.2 / 206.5
10	1.5 / 203.7	N/A	N/A
11	3.0 / 200.7	1.5 / 202.2	1.5 / 202.2
12	5.8 / 195.3	N/A	N/A
13	3.1 / 210.2	1.3 / 212.0	1.2 / 212.1
14	2.4 / 210.3	N/A	N/A
15	1.5 / 205.3	N/A	N/A
16	3.0 / 202.4	N/A	N/A
17	5.8 / 197.3	N/A	N/A
18	3.0 / 209.2	N/A	N/A
19	3.4 / 204.0	1.7 / 205.7	1.9 / 205.5
20	0.9 / 204.5	N/A	N/A



Referring to the appended Table 1, with the except of Borehole 11, during February and March the ground water table was about 1.1 to 1.9 m below existing grade; in April the ground water table had risen to 0.2 to 0.8 m below existing grade; the ground water table then dropped in each successive month after April, being 0.9 to 1.4 m below existing grade in May, 1.2 to 1.8 m below existing grade in June, 1.5 to 2.5 m below existing grade in July, and 1.8 to 3.8 m below existing grade in August, with the hydraulic gradient trending down from west to east.

The monitoring well in Borehole 11 has shown the water level to be within 0.5 m of the existing grade since April, indicating artesian ground water in the underlying silty sand deposit.

Ground water levels are subject to seasonal fluctuations and in response to variations in precipitation.

4. GEOTECHNICAL ENGINEERING CONSIDERATIONS

4.1 General

A residential subdivision is proposed for the 42 ha parcel of land. The site is 300 m by 1400 m in plan, and is currently vacant in the western and central portions, with an abandoned residence in the east part, along with a seasonal golf driving range. The site slopes down from west to east with relief of about 17 m.

The current concept plan involves five three storey apartment buildings in the east and single dwelling and townhouses in the central and west portions of the site. Full depth basements are planned for all buildings. A Storm Water Management (SWM) pond, full site servicing and paved roads will be provided.

The subdivisions final grading and drainage patterns were not yet determined at the time of this report. However, it is understood that the current concept will involve raising site grades about 2 to 3 m.



The boreholes have revealed that the site is characterized by a topsoil mantle over discontinuous layers of silt, sandy silt, silty sand and sand over a glacial till deposit. Based on the water level monitoring from February to August of 2014, there is an upper aquifer with water table reflecting a subdued expression of the ground surface, being within 0.8 m of the existing ground surface in the Spring (April) and dropping to 1.8 to 3.8 m below the ground surface in the Summer (August).

4.2 Proposed Building Foundations

Five three-storey apartment buildings are planned for the southeast corner of the site and both single dwelling and townhouse type housing are proposed in the central and west portions of the site. Full depth basements are currently proposed for all buildings.

A geotechnical bearing resistance at Serviceability Limit State (SLS) of 200 kPa and a factored bearing resistance at Ultimate Limit State (ULS) of 300 kPa is available for design of footings founded on native soil a minimum 0.5 m below existing grade, in all areas for all buildings, except as follows:

BOREHOLE	GEOTECHNICAL BEARING RESISTANCE AT SLS (KPa)	FACTORED BEARING RESISTANCE AT ULS (KPa)
9	125	190
13	50	75
15	100	150
20	100	150

In general, geotechnical bearing resistances increase with depth. Specifics can be provided together with any requirement for additional boreholes when the grades are determined.

It is noted that the site will be raised some 2 to 3 m, and where building footings are supported by engineered fill, constructed as described in Section 4.4, the footings can be designed for a



geotechnical bearing resistance of 150 kPa at Serviceability Limit State (SLS) and a factored geotechnical bearing resistance at Ultimate Limit State (ULS) of 225 kPa.

The geotechnical bearing resistance at SLS is based on 25 mm of settlement in the bearing stratum with differential settlement not exceeding 75% of this value. The factored bearing resistance at ULS assumes a minimum footing width of 600 mm, with minimum 600 mm embedment.

Footings subject to frost action should be provided with a minimum 1.2 m of earth cover or equivalent.

Prior to placement of structural concrete, the footing subgrade surface must be examined by PML to verify that the design bearing capacity is available throughout.

Based on the soil profile revealed in the boreholes, Site Classification D is applicable for Seismic Site Response as set out in Table 4.1.8.4.A of the Ontario Building Code (2006).

Based on the type and relative density of the soil cover at the site, the soils have a low potential for liquefaction.

4.3 Basements and Floor Slabs

Based on the ground water table measurements to date, the stabilized ground water table ranges from 0.2 to 0.8 m below the existing ground surface in the Spring (April), to 1.8 to 3.8 m below the existing ground surface in the Summer (August). Ideally, basement floor slabs should be established at least of 0.5 m above the high ground water level (water levels measured in April), corresponding closely to or above the existing ground level. This would generally be accommodated by the current plan to raise the site grade 2 to 3 m. The use of conventional perimeter foundation drains in this instance is generally considered feasible. Drainage requirements must be reviewed when final grades are established.



A minimum 200 mm thick base layer of crushed stone (nominal 20 mm size) is recommended directly beneath the floor slab in conjunction with a underfloor drainage system. A polyethylene sheeting or similar means should be incorporated as a vapour barrier.

Exterior grades should be established to promote drainage away from the site.

Basement walls must be designed to resist the unbalanced lateral pressure due to the weight of the retained soil. The lateral earth pressure, p , may be computed using the following equation and assuming a triangular pressure distribution:

$$p = K (\gamma h + q)$$

Where K = lateral earth pressure coefficient
= 0.5, assuming level backfill

γ = unit weight of retained soil
= 20.0 kN/m³

h = depth at which pressure is computed

q = surcharge adjacent to the wall (kPa)

It is recommended that the exterior basement be damp proofed and the backfill behind the wall comprise free draining material in conjunction with perimeter weeping tile system to prevent the buildup of hydrostatic pressure behind the wall. The weeping tile should be surrounded by a minimum 150 mm thick layer of clear crushed stone (20 mm nominal size) or pea gravel, fully wrapped with synthetic filter fabric to prevent migration of fines which may otherwise clog the system. The weeping tile should be positively sloped to a frost free sump or outlet.

Imported material such as OPSS Granular B should be used as free draining wall backfill. Alternatively, a proprietary drainage board product could be provided in conjunction with reuse of site excavated soil as wall backfill.

Backfill should be placed in maximum 200 mm thick lifts and compacted to 95% Standard Proctor maximum dry density. Over compaction close to the wall should be avoided as this could



generate excessive pressure on the wall. Suitable bracing and/or precautions should be taken to ensure the wall is not damaged during backfill/compaction activities.

4.4 Site Grading and Engineered Fill

It is understood that grades will be raised 2 to 3 m across the site. Where grades need to be raised under structures (buildings, roads, and utilities) the fill shall be constructed as engineered fill.

General guidelines for engineered fill construction are provided in Appendix A. Highlights are as follows:

1. Strip existing topsoil and excavate other obvious deleterious materials down to native inorganic soil, as verified by geotechnical review during construction;
2. Following sub-excavation, proofroll exposed native subgrade using a heavy roller. The proofrolling should be witnessed by geotechnical personnel to identify any unstable areas that may require further excavation. Construction during the summer would be preferred to minimize ground water issues. Otherwise wet ground working conditions may be anticipated (in the spring) where construction methods and equipment must be modified accordingly;
3. Following geotechnical approval of the native subgrade, place select material in maximum 200 mm lifts and compact to minimum 100% Standard Proctor maximum dry density under buildings and 95% Standard Proctor maximum dry density under roads and services;
4. Imported fill for engineered fill construction should comprise inorganic soil, free of organics and other deleterious materials, at a moisture content suitable for compaction. Proposed borrow/imported material should be reviewed for geotechnical quality as well as environmental quality;
5. Site inorganic soil excavated during the summer should be generally suitable for reuse as engineered fill, subject to geotechnical field review during construction, to ensure topsoil, inorganics, or other deleterious materials are not incorporated in the engineered fill. If construction is carried out during the Spring, the high



ground water/wet conditions would limit the amount of excavated soil suitable for reuse as engineered fill;

6. Engineered fill should extend at least 1 m beyond the structure to be supported then down and outwards at no steeper than 45° to meet the approved native subgrade. Strict survey control by an OLS will be needed to ensure the extent of engineered fill incorporates all structures/facilities to be supported;
7. Engineered fill construction should be carried out under full time supervision of PML, to verify removal of existing topsoil and other deleterious materials, approve the native subgrade, approve backfill material and ensure satisfactory placement and compaction efforts.

4.5 Site Servicing

The location and invert of the proposed services were not available at the time of this report however with site grades being raised, it is assumed that site servicing will not have inverts more than 2 m below existing grade.

4.5.1 Bedding

It is anticipated that services, will generally be supported by native soils, where bearing capacity is not expected to be a concern. However, where poor subgrade soil is encountered at the design invert and it may be necessary to sub-excavate and provide an increased thickness of bedding, subject to geotechnical field review.

Standard granular bedding in accordance with OPSS compacted to 95% Standard Proctor maximum dry density should be satisfactory. For flexible pipes, bedding and cover material should comprise OPSS Granular A. For rigid pipes, bedding material should comprise OPSS Granular A, and cover material may comprise select trench backfill free of oversized (200 mm or less) or excessively wet material.



4.5.2 Backfill

Backfill in trenches should be placed in maximum 200 mm thick loose lifts compacted to at least 95% Standard Proctor maximum dry density to minimize post construction settlement in the backfill. Backfill for at least the upper 1 m of trench should be close to optimum moisture content to prevent subgrade instability issues.

It is noted that the ground water table fluctuates throughout the year. Inorganic site soil excavated from below the ground water table will be too wet to achieve high compaction. Wet soil will have to be mixed and/or allowed to "dry out" in order to render the material suitable for reuse. Construction during the dry time of the season is encouraged to optimize the reuse of any excavated site soil. Boulders, organics, frozen or otherwise deleterious soils should not be incorporated in the backfill.

Earthworks operations should be inspected by PML to approve the subgrade, backfill materials, placement and compaction procedures and to ensure the specified compaction standards are achieved throughout.

4.6 Excavation and Ground Water Control

Site grading and drainage patterns were not yet determined at the time of the report. However, it is understood that present concept plans call for filling the site to raise the grade up some 2 to 3 m, and constructing full basements and utility installation to an assumed maximum depth of about 2 m below existing grades.

Subject to effective ground water control as discussed below, the site soils should be considered as Type 3 soil requiring excavation sidewalls to be constructed at no steeper than one horizontal to one vertical (1H:1V) from the base of the excavation in accordance with the Occupational Health and Safety Act.

The boreholes and ground water level monitoring to date have revealed the stabilized ground water level to range from less than 1 m below existing grade in the Spring, to as much as 2 to 3 m



below the existing grade in the Summer. The site soils comprise pervious to semi pervious sands and silts, and excavation will be required below the ground water table, depending on the time of year.

Construction is recommended in the Summer months when ground water levels are lowest to reduce the amount of ground water to be handled. Ideally, the ground water level should be lowered 0.5 m below the deepest excavation. It is envisioned that dewatering would be achieved through the use of well points or the likes. The dewatering system should be designed and installed by specialists in the field.

Water taking in Ontario is governed by the Ontario Water Resources Act (OWRA) and the Water Taking and Transfer Regulation O.Reg. 387/040, Section 34 of the OWRA requires any one taking more than 50,000 L/d to obtain a Permit to Take Water (PTTW). This requirement applies to all withdrawals, whether for consumption, temporary construction dewatering or permanent drainage improvements.

The need for a PTTW should be reviewed when final grades have been established, which may require a site specific Hydrogeological Site Assessment to further assess dewatering requirements, and for support of an application for a PTTW.

4.7 Proposed Storm Water Management Pond

The SWM pond is proposed in the northeast corner of the property as shown of Drawing 1, attached. It is understood that the pond will most likely be a wet detention pond and be constructed through both excavation and berm construction. The base of the pond is proposed at elevation 194.25 (about 3 to 5 m below existing grade based on Boreholes 1 and 2) and the permanent water level at elevation 195.25. In addition, the pond is to be constructed with a clay liner.

Boreholes 1 and 2, advanced in the area of the SWM pond, revealed topsoil over a sandy silt layer over a sandy silt to silt unit within the area of the pond. The monitoring well in



Borehole 1 shows the stabilized ground water near about elevation 196.8 in the Spring (April) lowering to elevation 194.2 in the Summer (August).

The following general comments and recommendations are provided for your consideration. When final grading and details of the pond are established they should be submitted to PML for geotechnical review:

- Where the base of the pond is 0.5 m or more below the ground water level, dewatering will be required in order to permit excavation;
- The clay liner will have to be provided with adequate soil cover where the liner is placed below the ground water table in order to resist hydrostatic uplift, when the pond is empty. The coefficient of permeability of the clay liner material should be 1×10^{-6} cm/sec or less;
- Berms should be constructed as engineered fill, using select material, compacted to 95% Standard Proctor maximum dry density as discussed earlier in the report;
- Wet pond side slopes should be no steeper than 5H:1V, cognizant of the high ground water table, and protected from erosion by provision of vegetation cover, granular blanket, rip rap or the likes.

4.8 Concrete Resistance and Corrosion Protection

Reference is made to the Certificate of Analysis in Appendix B, for the results of sulphate and chloride analysis and measurement of corrosion parameters performed on two soil samples from the subject site.

In accordance with Canadian Standard Association, CSA-A23.1-09, Table 3, the test results indicate a negligible potential degree of sulphate attack on buried concrete. Accordingly, the use of normal Portland cement is indicated.



Assessment of the Corrosion Potential test results with the American Water Works Association, ANSI/AWWA C105/A21.5-10 is provided below:

MATERIAL	BOREHOLE 4	BOREHOLE 14
Sample	Sample 2	Sample 1
Depth (m)	0.8 to 1.1	0.08 to 0.6
Material	Native Silty Sand	Native Sandy Silt
Resistivity (ohm-cm)	9,350 (0)	7,940 (0)
PH	8.76 (3)	8.23 (0)
Redox Potential (mV)	225 (0)	248 (0)
Sulphide	Trace (2)	Trace (2)
Moisture	Poor Drainage (2)	Poor Drainage (2)
Total Points	7	4

Note: Point values are based on Table A.1 from ANSI/AWWA C105/A21.5-10. A total of ten points or more indicates the soil is corrosive to ductile iron pipe and protective measures are required.

Based on the above, protective measures are not indicated for ductile iron piping.

4.9 Pavement Design and Construction

The proposed grades for the site have not been finalized, however it understood that 2 to 3 m of fill will be placed on the site. As such, the subgrade soil for road pavement cannot be determined at this time and pavement design can be reconfirmed once site grades and fill materials are determined. Currently, it is assumed the subgrade will comprise moderate to high frost susceptible, silty sand to silt soils that are typically present at the site. Based on this the following pavement structure thicknesses are recommended:

MATERIAL	THICKNESS (mm)
Asphalt	90
Granular A Base Course	150
Granular B Subbase Course	400
Total Thickness	640



Following rough grading to the subgrade level, subgrade preparation should include proofrolling and compacting the exposed subgrade with a heavy vibratory compactor to 95% Standard Proctor maximum dry density under geotechnical review. Any unstable zones identified during this process should be sub-excavated and replaced with compacted select material.

Imported material for the granular base and subbase should conform to OPSS gradation specifications for Granular A and Granular B, and should be compacted to 100% Standard Proctor maximum dry density. Asphalt should be compacted in accordance with OPSS 310.

The pavement design considers that construction will be carried out during the drier time of the year and that the subgrade is stable, as determined by proofrolling operations. The subgrade may be excessively wet or become rutted during construction activities, additional sub-base material may be required.

For the pavement to function properly, it is essential that provisions be made for water to drain and not collect in the base material. The incorporation of subdrains is recommended in conjunction with crowning of the final surface to promote drainage away from the structure. Bedding and cover material for subdrains should comprise OPSS Granular A or Granular B. Maintenance holes/catch basins should be backfilled using free draining material. The above measures will help drain the pavement structure as well as minimize frost movement between manholes/catch basins and pavement.



4.10 Geotechnical Review and Construction Inspection and Testing

When final grading plans and site layout are established, the project design drawings should be submitted to PML for geotechnical review for compatibility with site subsurface conditions and the recommendations contained in this report, which may require additional analysis and/or investigation.

Earthworks operations should be carried out with review by PML to approve subgrade preparation, backfill materials, placement and compaction procedures and check the specified degree of compaction is achieved throughout.

Prior to placement of structural concrete, the subgrade surface must be examined by PML to verify that the design bearing capacity is available throughout.

The comments and recommendations provided in the report are based on the information revealed in the boreholes. Conditions away from and between boreholes may vary, which may necessitate modifications to the recommendations contained in the report.



5. CLOSURE

We trust this report is complete within our terms of reference, and the information presented is sufficient for your present purposes. If you have any questions, or when we may be of further assistance, please do not hesitate to call our office.

Sincerely

Peto MacCallum Ltd.



Geoffrey R. White, P.Eng.
Associate
Manager, Geotechnical and Geoenvironmental Services



Turney Lee-Bun, P.Eng.
President

GRW/TLB:jlh



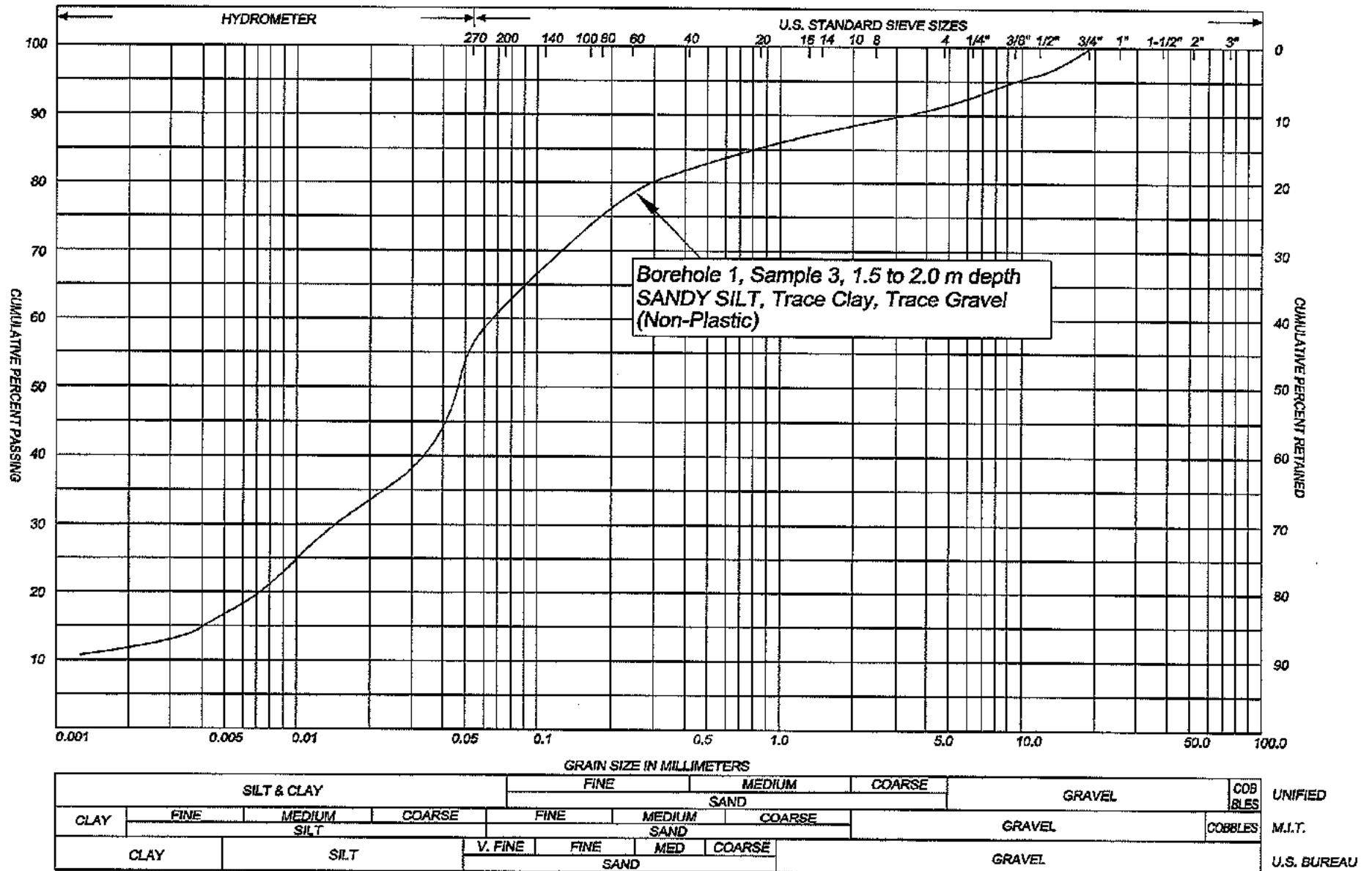
TABLE 1 – GROUND WATER LEVEL MEASUREMENTS

Borehole /Well	Borehole Ground Surface Elevation	Boring Day Levels 2014-01-30 to 2014-02-04	Depth of Water Below Existing Ground Surface (m)/Elevation											
			Date											
			2014-02-12	2014-03-05	2014-04-09	2014-05-12	2014-06-10	2014-07-10	2014-08-06	2014-09-	2014-10-	2014-11-	2014-12-	2015-01-
1	197.00	3.0/194.0	0.5*/196.5	0.5*/196.5	0.2/196.8	1.4/195.6	1.4/195.6	2.3/194.7	2.8/194.2					
3	202.20	3.4/198.8	1.7/200.5	1.7/200.5	0.8/201.4	1.2/201.0	1.8/200.4	2.5/199.7	3.8/198.4					
9	207.70	2.7/205.0	1.1/206.6	1.2/206.5	0.6/207.1	1.1/206.6	1.6/206.1	1.9/205.8	2.3/205.4					
11	203.65	3.0/200.7	1.5/202.2	1.5/202.2	0.4/203.3	0.5/203.2	0.1/203.6	0.2/203.5	0.3/203.4					
13	213.30	3.1/210.2	1.3/212.0	1.2/212.1	0.3/213.0	0.9/212.4	1.2/212.1	1.5/211.8	1.8/211.5					
19	207.35	3.4/204.0	1.7/205.7	1.9/205.5	0.3/207.1	1.0/206.4	1.6/205.8	1.8/205.6	2.2/205.2					

* - Water was frozen in pipe at the given depth/elevation

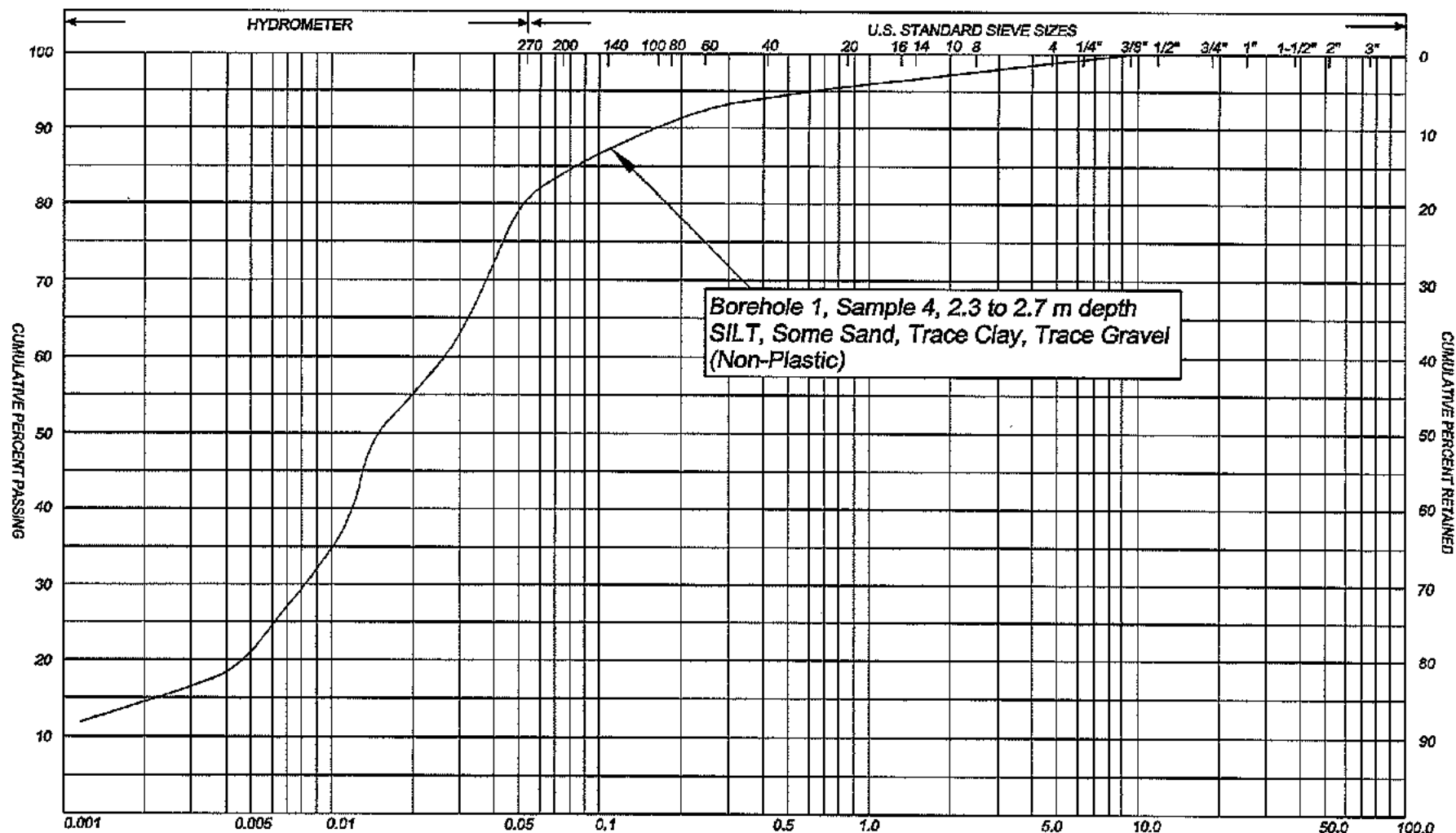
PML Peto MacCallum Ltd.
CONSULTING ENGINEERS
PARTICLE SIZE DISTRIBUTION CHART

PML Ref.: 14BF001
Figure No.: 1



PARTICLE SIZE DISTRIBUTION CHART

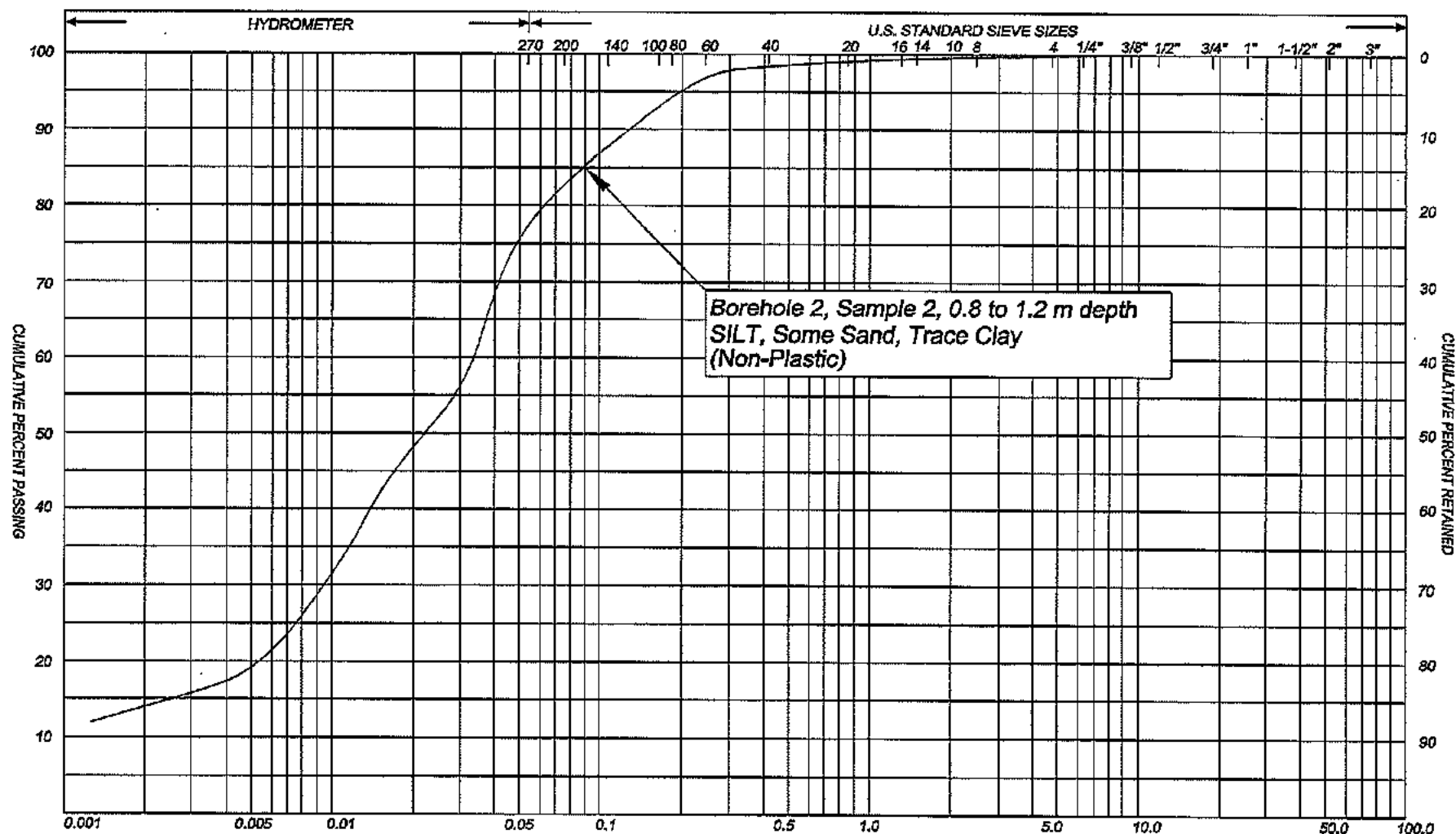
PML Ref.: 14BF001
Figure No.: 2



GRAIN SIZE IN MILLIMETERS										UNIFIED
SILT & CLAY				FINE SAND			MEDIUM SAND		COARSE SAND	
CLAY	FINE	MEDIUM	COARSE	FINE	MEDIUM	COARSE	GRAVEL			M.I.T.
CLAY		SILT		V. FINE	FINE	MED	COARSE	GRAVEL		U.S. BUREAU

PML **Peto MacCallum Ltd.**
CONSULTING ENGINEERS
PARTICLE SIZE DISTRIBUTION CHART

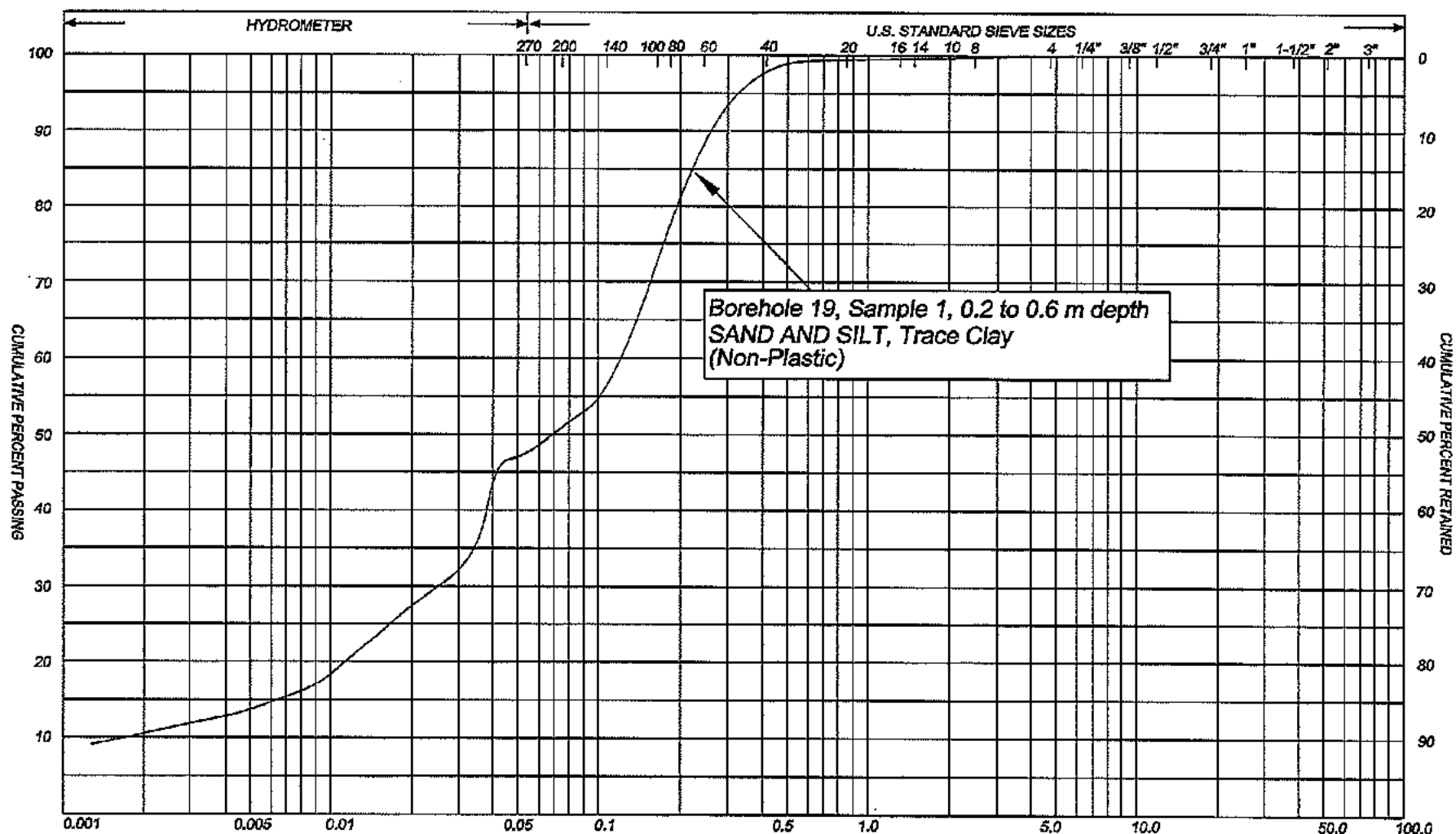
PML Ref.: 14BF001
Figure No.: 3



GRAIN SIZE IN MILLIMETERS										COBBLES	UNIFIED					
SILT & CLAY				FINE SAND		MEDIUM SAND		COARSE SAND								
CLAY	FINE		MEDIUM SILT		COARSE SILT		FINE SAND		MEDIUM SAND		COARSE SAND		GRAVEL	COBBLES	M.I.T.	
	CLAY		SILT		V. FINE		FINE		MED		COARSE					
CLAY		SILT				V. FINE		FINE		MED		COARSE		GRAVEL		U.S. BUREAU OF SOILS

PARTICLE SIZE DISTRIBUTION CHART

PML Ref.: 14BF001
Figure No.: 4



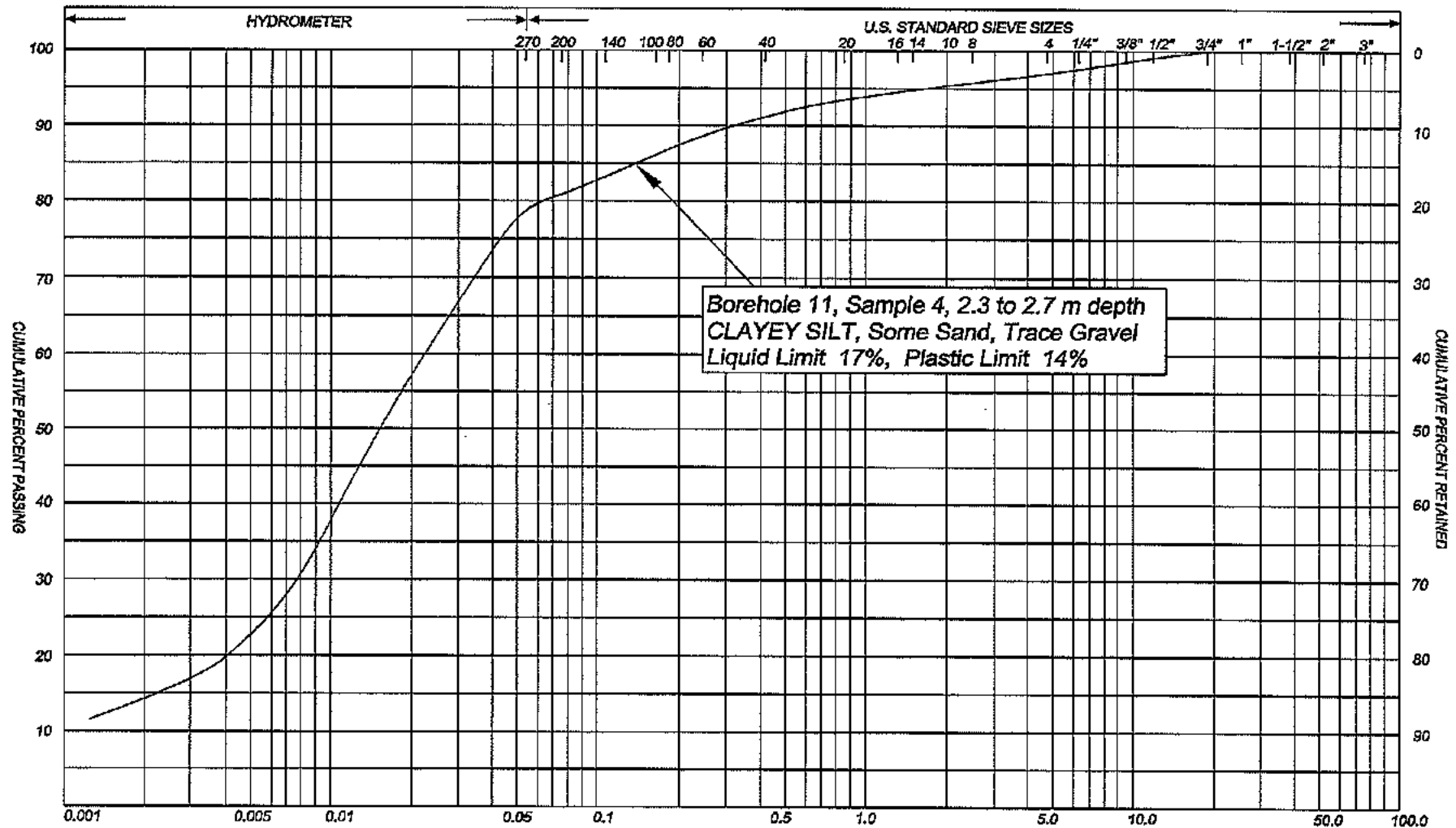
Borehole 19, Sample 1, 0.2 to 0.6 m depth
SAND AND SILT, Trace Clay
(Non-Plastic)

GRAIN SIZE IN MILLIMETERS										
SILT & CLAY				FINE SAND		MEDIUM SAND		COARSE SAND	GRAVEL	COBBLES
CLAY	FINE	MEDIUM SILT	COARSE	FINE	MEDIUM SAND	COARSE	GRAVEL			COBBLES
CLAY		SILT		V. FINE	FINE	MED	COARSE	GRAVEL		

UNIFIED
M.I.T.
U.S. BUREAU

PML Peto MacCallum Ltd.
CONSULTING ENGINEERS
PARTICLE SIZE DISTRIBUTION CHART

PML Ref.: 14BF001
Figure No.: 5



GRAIN SIZE IN MILLIMETERS									
SILT & CLAY				FINE SAND		MEDIUM SAND		COARSE SAND	
CLAY	FINE		MEDIUM		COARSE		GRAVEL		
	SILT		SAND		COARSE		COBBLES		
CLAY		SILT		V. FINE SAND		FINE SAND		GRAVEL	
				SAND		COARSE			

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LIST OF ABBREVIATIONS



PENETRATION RESISTANCE

Standard Penetration Resistance N: - The number of blows required to advance a standard split spoon sampler 0.3 m into the subsoil. Driven by means of a 63.5 kg hammer falling freely a distance of 0.76 m.

Dynamic Penetration Resistance: - The number of blows required to advance a 51 mm, 60 degree cone, fitted to the end of drill rods, 0.3 m into the subsoil. The driving energy being 475 J per blow.

DESCRIPTION OF SOIL

The consistency of cohesive soils and the relative density or denseness of cohesionless soils are described in the following terms:

<u>CONSISTENCY</u>	<u>N (blows/0.3 m)</u>	<u>c (kPa)</u>	<u>DENSENESS</u>	<u>N (blows/0.3 m)</u>
Very Soft	0 - 2	0 - 12	Very Loose	0 - 4
Soft	2 - 4	12 - 25	Loose	4 - 10
Firm	4 - 8	25 - 50	Compact	10 - 30
Stiff	8 - 15	50 - 100	Dense	30 - 50
Very Stiff	15 - 30	100 - 200	Very Dense	> 50
Hard	> 30	> 200		
WTPL	Wetter Than Plastic Limit			
APL	About Plastic Limit			
DTPL	Drier Than Plastic Limit			

TYPE OF SAMPLE

SS	Split Spoon	TW	Thinwall Open
WS	Washed Sample	TP	Thinwall Piston
SB	Scraper Bucket Sample	OS	Oesterberg Sample
AS	Auger Sample	FS	Foil Sample
CS	Chunk Sample	RC	Rock Core
ST	Slotted Tube Sample		
	PH	Sample Advanced Hydraulically	
	PM	Sample Advanced Manually	

SOIL TESTS

Qu	Unconfined Compression	LV	Laboratory Vane
Q	Undrained Triaxial	FV	Field Vane
Qcu	Consolidated Undrained Triaxial	C	Consolidation
Qd	Drained Triaxial		

LOG OF BOREHOLE NO. 1

PROJECT Proposed Linksview Subdivision
LOCATION 780 and 788 Tenth Line, Collingwood, Ontario
BORING METHOD Continuous Flight Solid Stem Augers

BORING DATE: January 30, 2014

OUR PROJECT NO.14BF001
ENGINEER GW
TECHNICIAN AT

SOIL PROFILE			SAMPLES			SHEAR STRENGTH C_u (kPa)				LIQUID LIMIT W_L				UNIT WEIGHT	GROUND WATER OBSERVATIONS AND REMARKS	
DEPTH in METRES	DESCRIPTION	LEGEND	NUMBER	TYPE	BLOWS/0.3m N-VALUES	ELEVATION SCALE	DYNAMIC CONE PENETRATION STANDARD PENETRATION TEST				PLASTIC LIMIT W_P					
							BLOWS/0.3M				WATER CONTENT %					
0.0	GROUND ELEVATION 197.00															
0.11	TOPSOIL: Brown, silty sand/sandy silt, frozen		1	GS	-										Stick up casing Concrete	
0.70	SANDY SILT: Brown, sandy silt, trace gravel, frozen to wet		2	SS	29	196										
1.0	SANDY SILT TO SILT: Compact to very dense, brown, sandy silt to silt, trace clay, trace gravel, very moist to wet		3	SS	41	195									Bentonite	
2.0			4	SS	41	194										
3.0	Becoming gray		5	SS	40	193										
4.0	Becoming till-like		6	SS	83/250 mm	192									Filter sand 50 mm slotted pipe	
5.0			7	SS	83/275 mm	191										
6.4	BOREHOLE TERMINATED AT 6.4 m														Upon completion of augering Water at 3.0 m No cave	
7.0															Water Level Readings	
8.0															Date Depth (m)	
9.0															Feb 12 Frozen at 0.5 m	
10.0															Mar 5 Frozen at 0.5 m	
11.0																
12.0																
13.0																
14.0																
15.0																

NOTES:

+

+

+

+

+

SENSITIVITY

UNDISTURBED FIELD VANE

REMOLDED FIELD VANE

LAB SHEAR TEST

POCKET PENETROMETER

CHECKED BY

NOTES:

- SENSITIVITY
 + UNDISTURBED FIELD VANE
 ⊕ REMOLDED FIELD VANE
 ⊗ LAB SHEAR TEST
 ▲ POCKET PENETROMETER
 CHECKED BY

LOG OF BOREHOLE NO. 2

PROJECT Proposed Linksview Subdivision

LOCATION 780 and 788 Tenth Line, Collingwood, Ontario

BORING METHOD Continuous Flight Solid Stem Augers

BORING DATE: January 30, 2014

OUR PROJECT NO.14BF001

ENGINEER GW

TECHNICIAN AT

SOIL PROFILE		SAMPLES			SHEAR STRENGTH C_u (kPa)		LIQUID LIMIT W_L		PLASTIC LIMIT W_P		WATER CONTENT W		UNIT WEIGHT γ	GROUND WATER OBSERVATIONS AND REMARKS
DEPTH In METRES	DESCRIPTION	LEGEND	NUMBER	TYPE	BLOWS/0.3m N-VALUES	ELEVATION SCALE	DYNAMIC CONE PENETRATION STANDARD PENETRATION TEST	BLOWS/0.3m	WATER CONTENT %					
0.0	GROUND ELEVATION 199.10													
0.10	TOPSOIL: Brown, silty sand/sandy silt, frozen		1	GS	-	199								
0.40	SANDY SILT: Brown, sandy silt, trace gravel, frozen to wet		2	SS	27	198								
0.70	SANDY SILT TO SILT: Compact to very dense, brown, sandy silt to silt, trace clay, trace gravel, very moist to wet		3	SS	28	197								
2.0	Becoming grey, till-like		4	SS	83/200 mm	196								
3.0			5	SS	91/225 mm	195								
4.0						195								
5.0			6	SS	73/250 mm	194								
6.0						193								
6.2	BOREHOLE TERMINATED AT 6.2 m		7	GS	50/125 mm	193								Upon completion of augering No water No cave

NOTES:

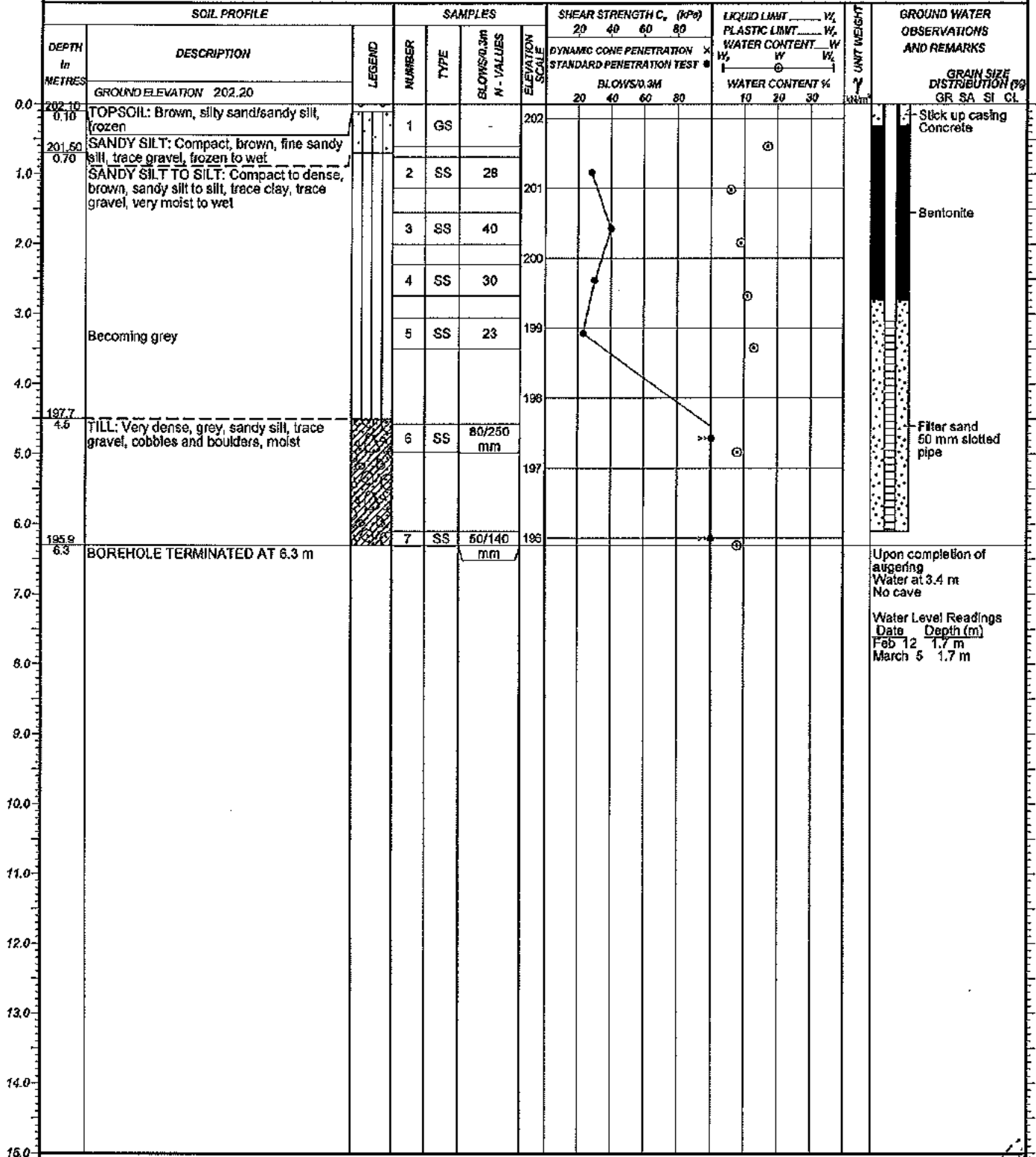
+ UNSTURBED FIELD VANE
 + REMOLDED FIELD VANE
 ⊗ LAB SHEAR TEST
 ▲ POCKET PENETROMETER
 CHECKED BY

LOG OF BOREHOLE NO. 3

PROJECT Proposed Linksview Subdivision
LOCATION 780 and 788 Tenth Line, Collingwood, Ontario
BORING METHOD Continuous Flight Solid Stem Augers

BORING DATE: January 30, 2014

OUR PROJECT NO.14BF001
ENGINEER GW
TECHNICIAN AT



NOTES:

+ SENSITIVITY
 + UNDISTURBED FIELD VANE
 ⊕ REMOVED FIELD VANE
 ⊗ LAB SHEAR TEST
 ▲ POCKET PENETROMETER
 CHECKED BY

LOG OF BOREHOLE NO. 4

PROJECT Proposed Linkview Subdivision

LOCATION 780 and 788 Tenth Line, Collingwood, Ontario

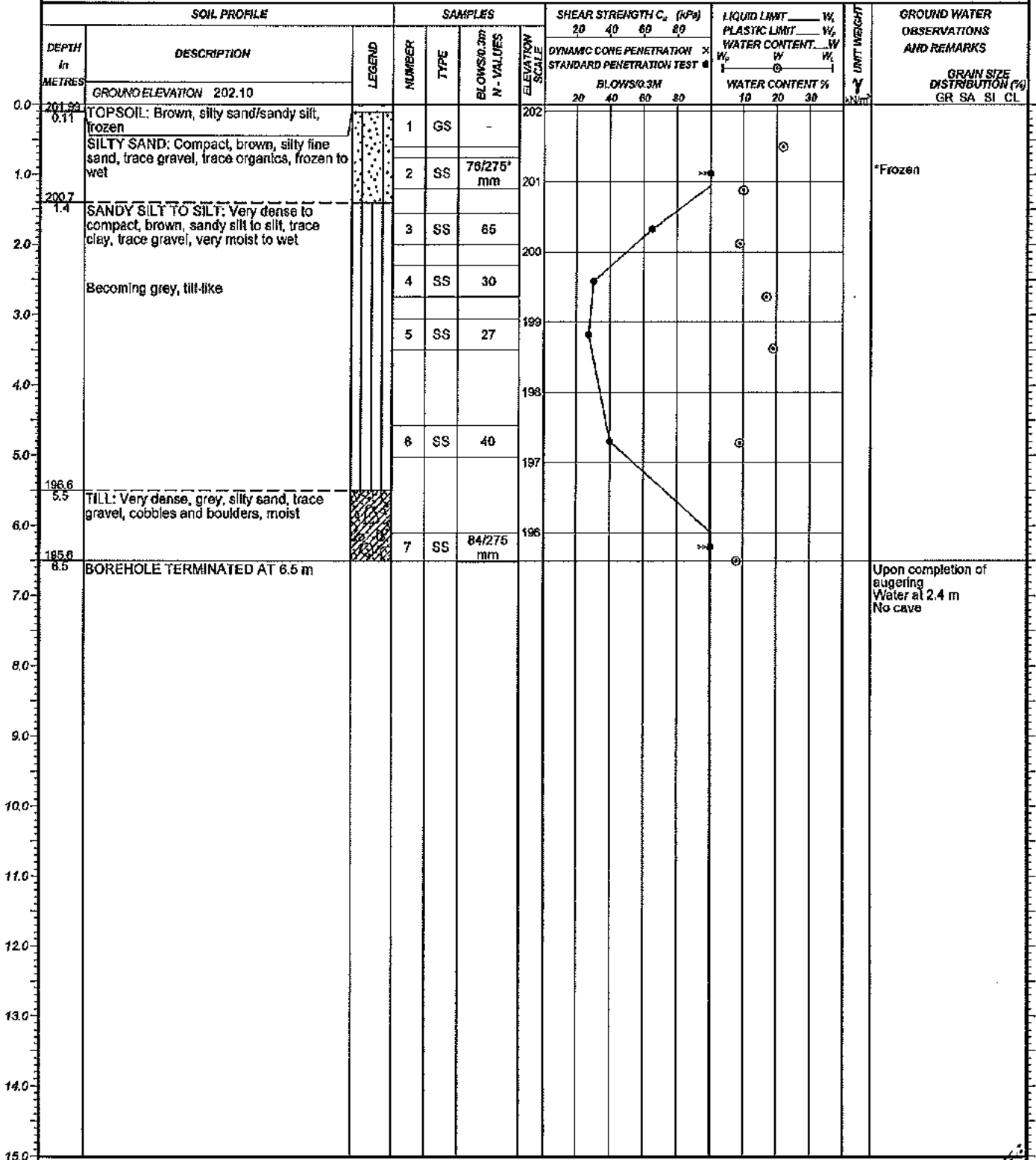
BORING METHOD Continuous Flight Solid Stem Augers

BORING DATE: January 29, 2014

OUR PROJECT NO. 14BF001

ENGINEER GW

TECHNICIAN TP



NOTES:

+ SENSITIVITY
 + UNDISTURBED FIELD VANE
 ⊕ REMOVED FIELD VANE
 ⊗ LAB SHEAR TEST
 ▲ POCKET PENETROMETER
 CHECKED BY

LOG OF BOREHOLE NO. 5

PROJECT Proposed Linksview Subdivision

LOCATION 780 and 788 Tenth Line, Collingwood, Ontario

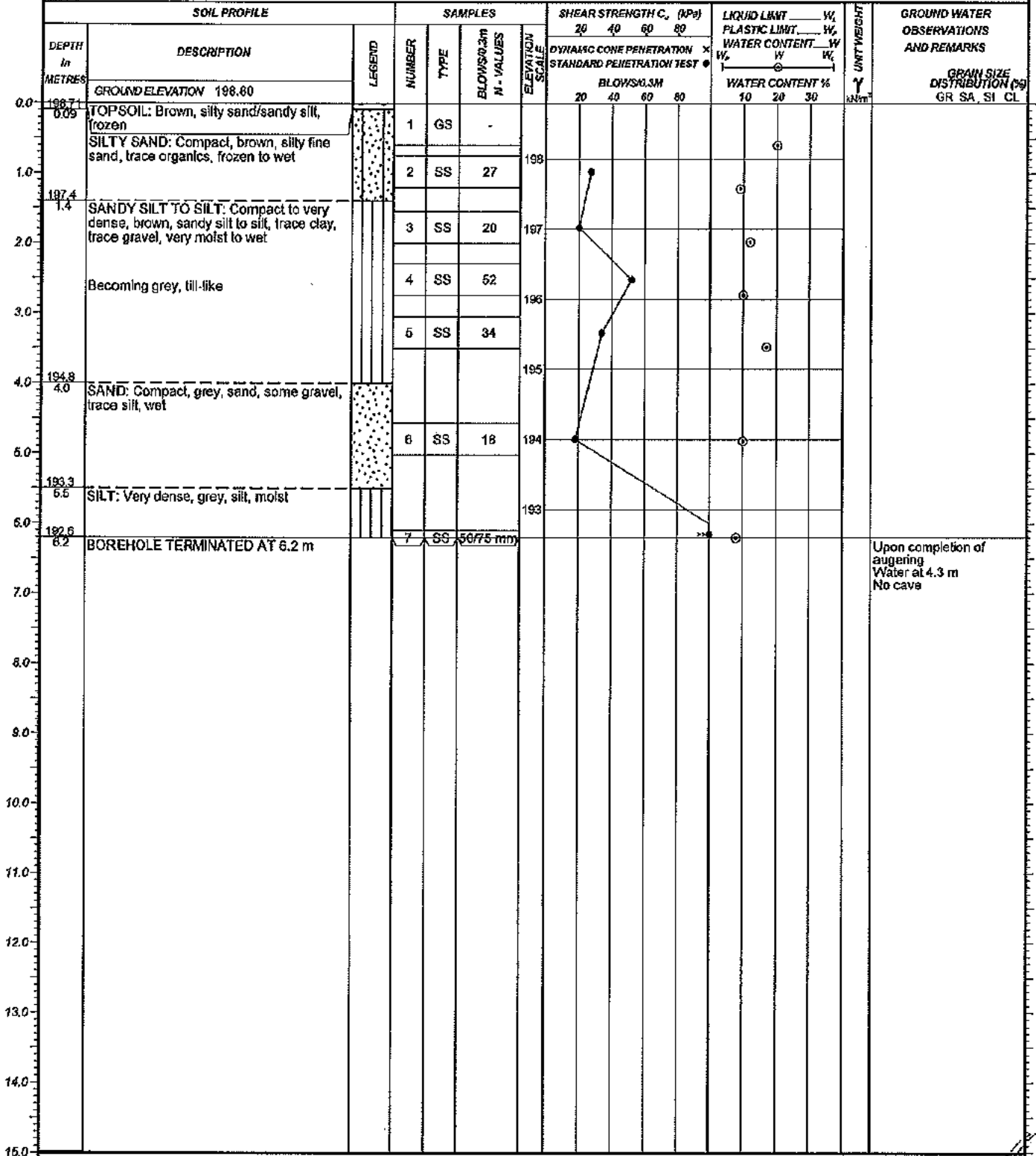
BORING METHOD Continuous Flight Solid Stem Augers

BORING DATE: January 29, 2014

OUR PROJECT NO. 14BF001

ENGINEER GW

TECHNICIAN TP



NOTES:

+² SENSITIVITY
 + UNDISTURBED FIELD VANE
 ⊕ REMOLDED FIELD VANE
 ⊗ LAB SHEAR TEST
 ▲ POCKET PENETROMETER
 CHECKED BY

LOG OF BOREHOLE NO. 6

PROJECT Proposed Linkview Subdivision

LOCATION 780 and 786 Tenth Line, Collingwood, Ontario

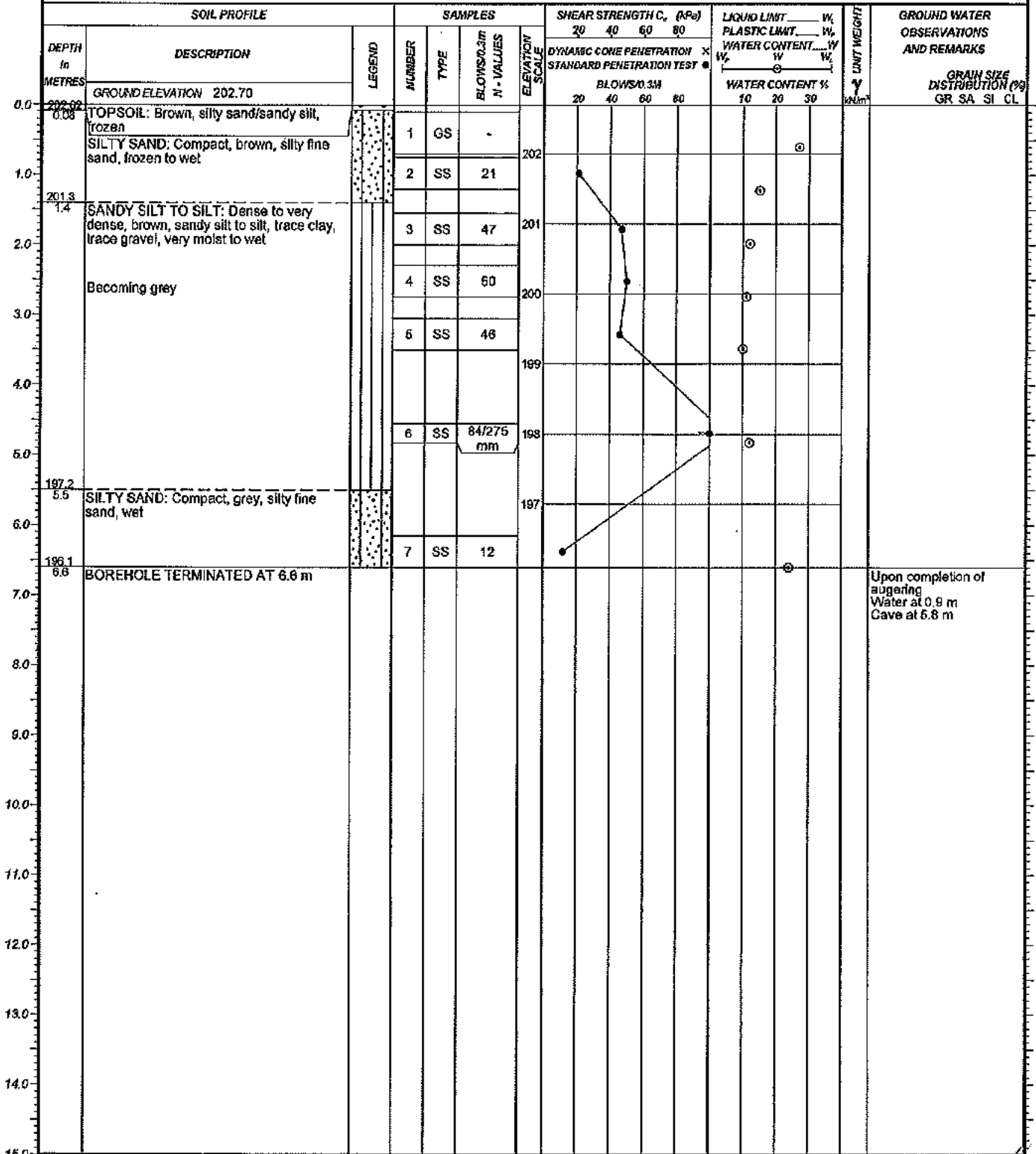
BORING METHOD Continuous Flight Solid Stem Augers

BORING DATE: January 30, 2014

OUR PROJECT NO. 14BF001

ENGINEER GW

TECHNICIAN AT



NOTES:

+ SENSITIVITY
 + UNDISTURBED FIELD VANE
 ⊕ REMOVED FIELD VANE
 ⊗ LAB SHEAR TEST
 ▲ POCKET PENETROMETER
 CHECKED BY

LOG OF BOREHOLE NO. 7

PROJECT Proposed Linkview Subdivision

LOCATION 780 and 788 Tenth Line, Collingwood, Ontario

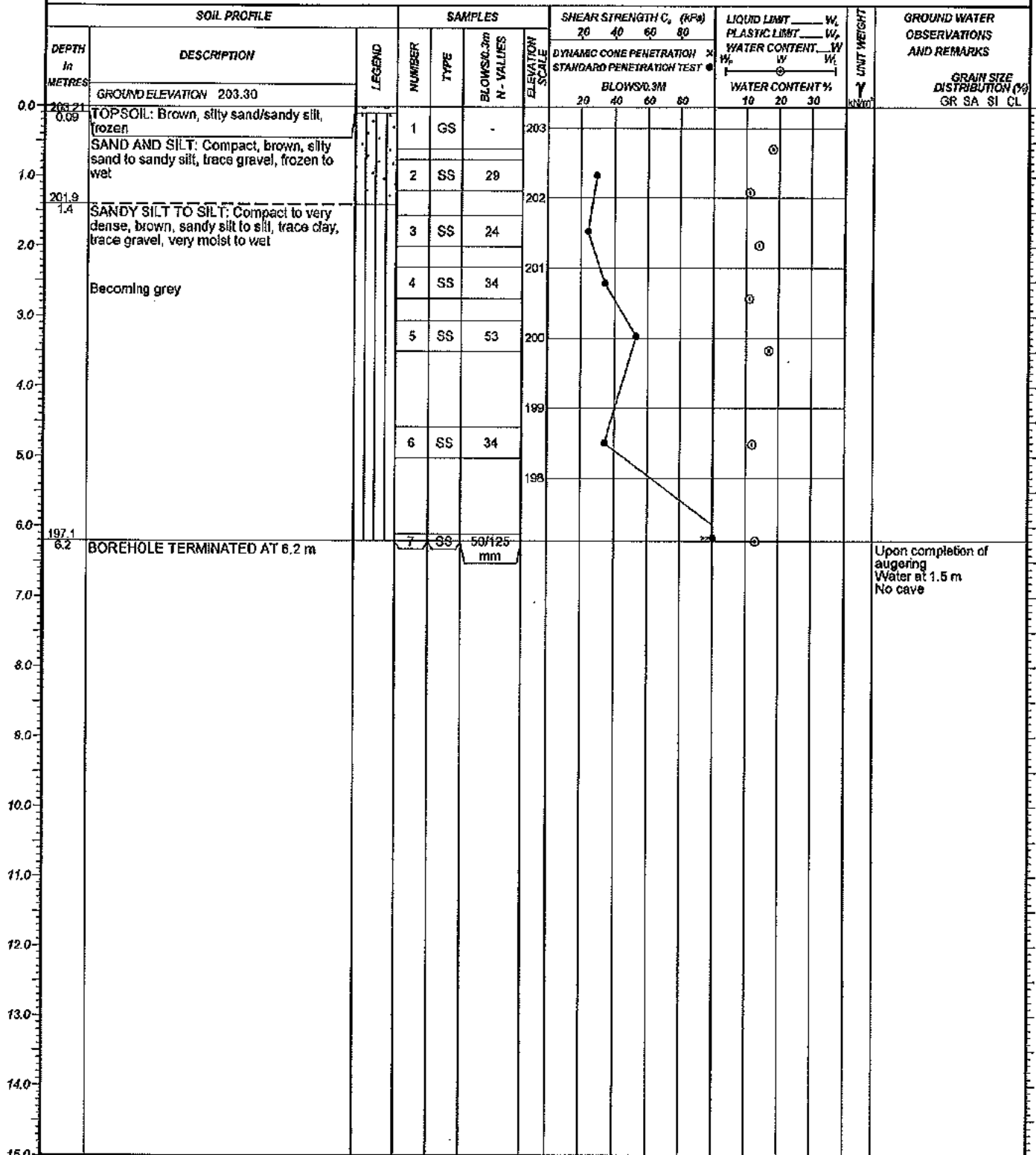
BORING METHOD Continuous Flight Solid Stem Augers

BORING DATE: January 29, 2014

OUR PROJECT NO.14BF001

ENGINEER GW

TECHNICIAN TP



NOTES:

+ SENSITIVITY
 + UNDISTURBED FIELD VANE
 ⊕ REMOVED FIELD VANE
 ⊗ LAB SHEAR TEST
 ▲ POCKET PENETROMETER
 CHECKED BY

LOG OF BOREHOLE NO. 8

PROJECT Proposed Linksview Subdivision

LOCATION 780 and 788 Tenth Line, Collingwood, Ontario

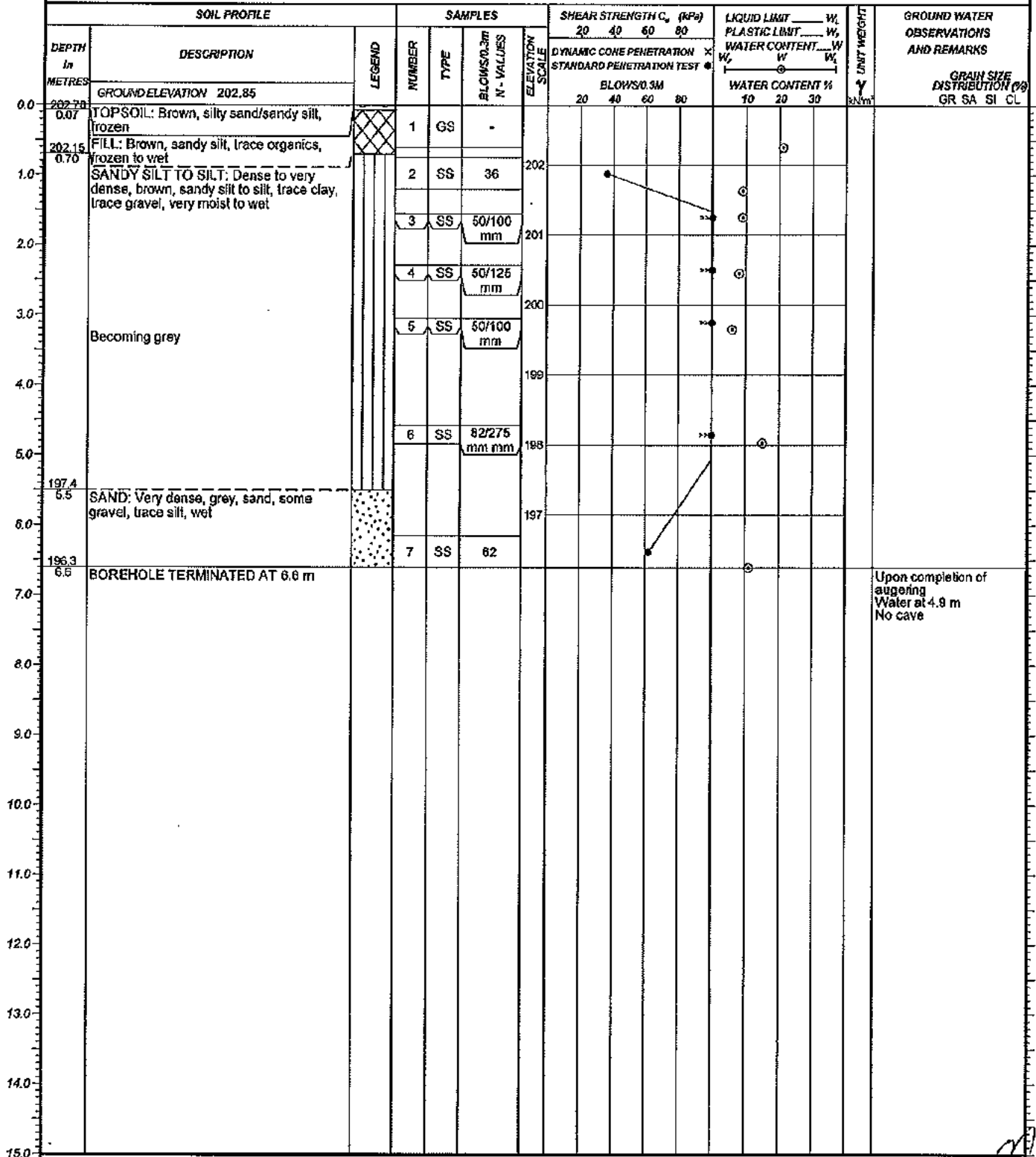
BORING METHOD Continuous Flight Solid Stem Augers

BORING DATE: January 29, 2014

OUR PROJECT NO. 14BF001

ENGINEER GW

TECHNICIAN TP



NOTES:

+² SENSITIVITY
 + UNDISTURBED FIELD VANE
 ⊕ REMOLDED FIELD VANE
 ⊗ LAB SHEAR TEST
 ▲ POCKET PENETROMETER
 CHECKED BY

LOG OF BOREHOLE NO. 9

PROJECT Proposed Linksview Subdivision

LOCATION 780 and 788 Tenth Line, Collingwood, Ontario

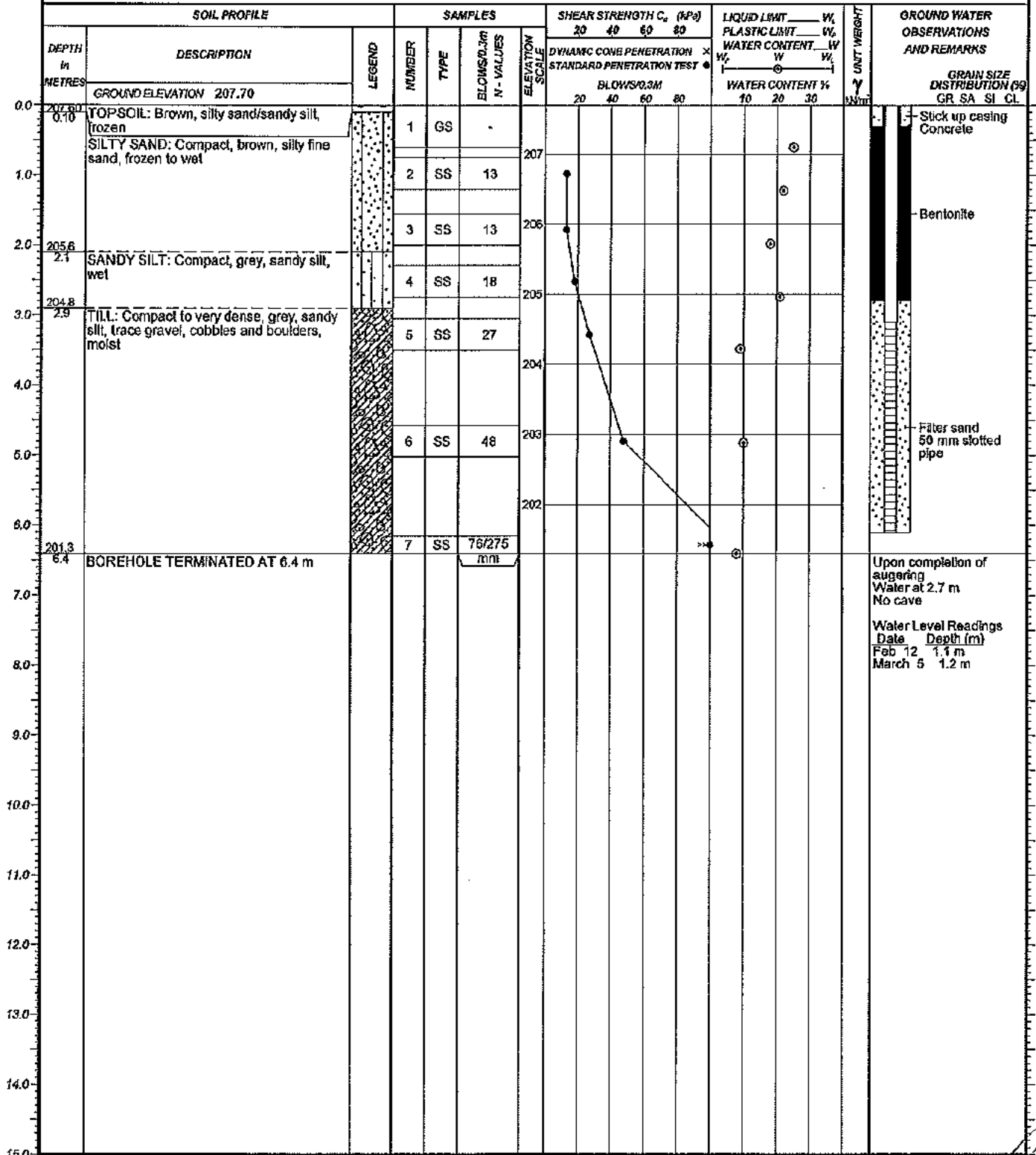
BORING METHOD Continuous Flight Solid Stem Augers

BORING DATE: February 4, 2014

OUR PROJECT NO. 14BF001

ENGINEER GW

TECHNICIAN AT



NOTES:

+ SENSITIVITY
 + UNDISTURBED FIELD VANE
 ⊕ REMOVED FIELD VANE
 ⊗ LAB SHEAR TEST
 ▲ POCKET PENETROMETER
 CHECKED BY

LOG OF BOREHOLE NO. 10

PROJECT Proposed Linksview Subdivision

LOCATION 780 and 788 Tenth Line, Collingwood, Ontario

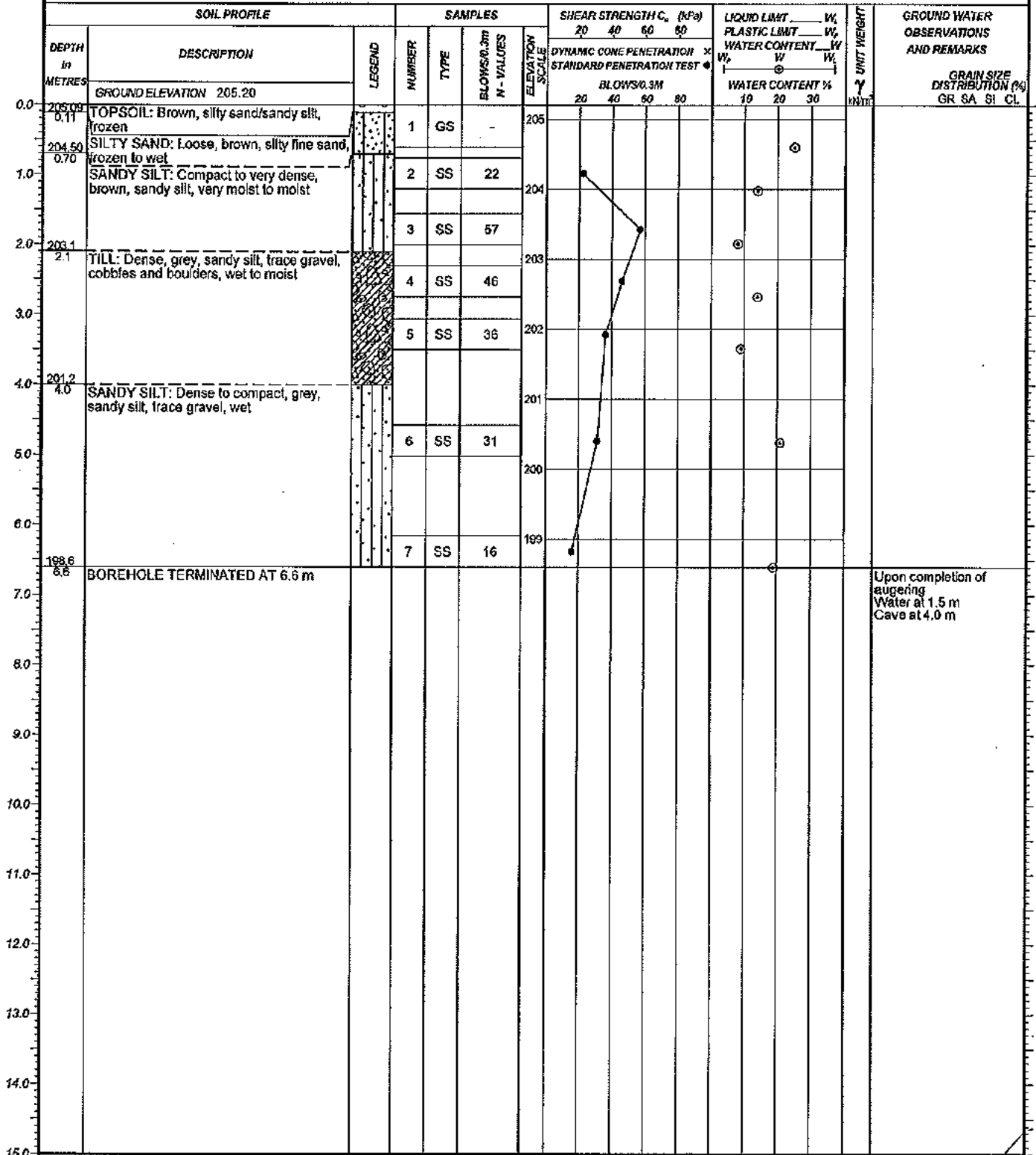
BORING METHOD Continuous Flight Solid Stem Augers

BORING DATE: February 4, 2014

OUR PROJECT NO.148F001

ENGINEER GW

TECHNICIAN AT



NOTES:

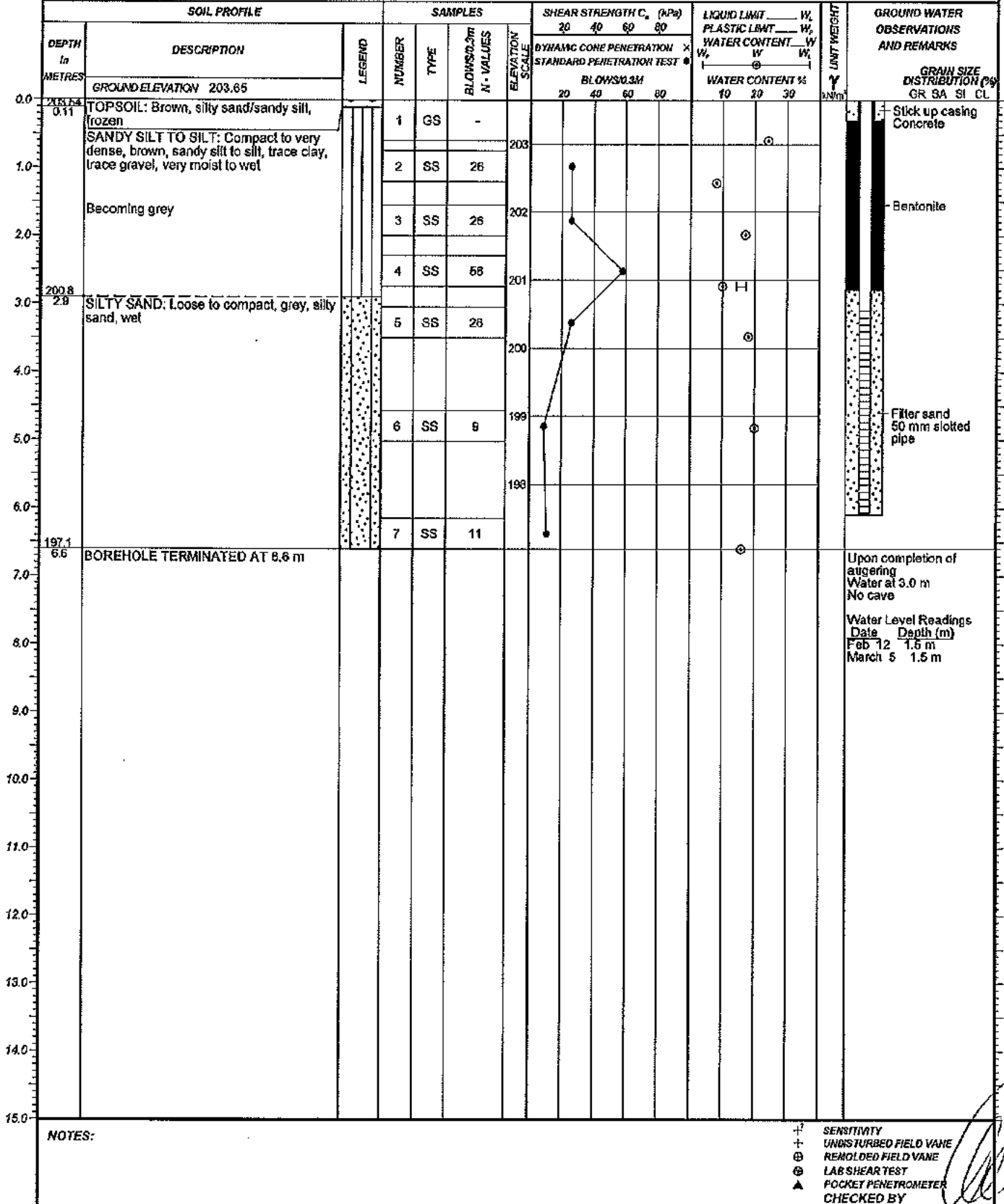
+ SENSITIVITY
 + UNDISTURBED FIELD VANE
 ⊗ REMOVED FIELD VANE
 ⊙ LAB SHEAR TEST
 ▲ POCKET PENETROMETER
 CHECKED BY

LOG OF BOREHOLE NO. 11

PROJECT Proposed Linksview Subdivision
LOCATION 780 and 788 Teath Line, Collingwood, Ontario
BORING METHOD Continuous Flight Solid Stem Augers

BORING DATE: February 3, 2014

OUR PROJECT NO. 14BF001
ENGINEER GW
TECHNICIAN AT



LOG OF BOREHOLE NO. 12

PROJECT Proposed Linksview Subdivision

LOCATION 780 and 788 Tenih Line, Collingwood, Ontario

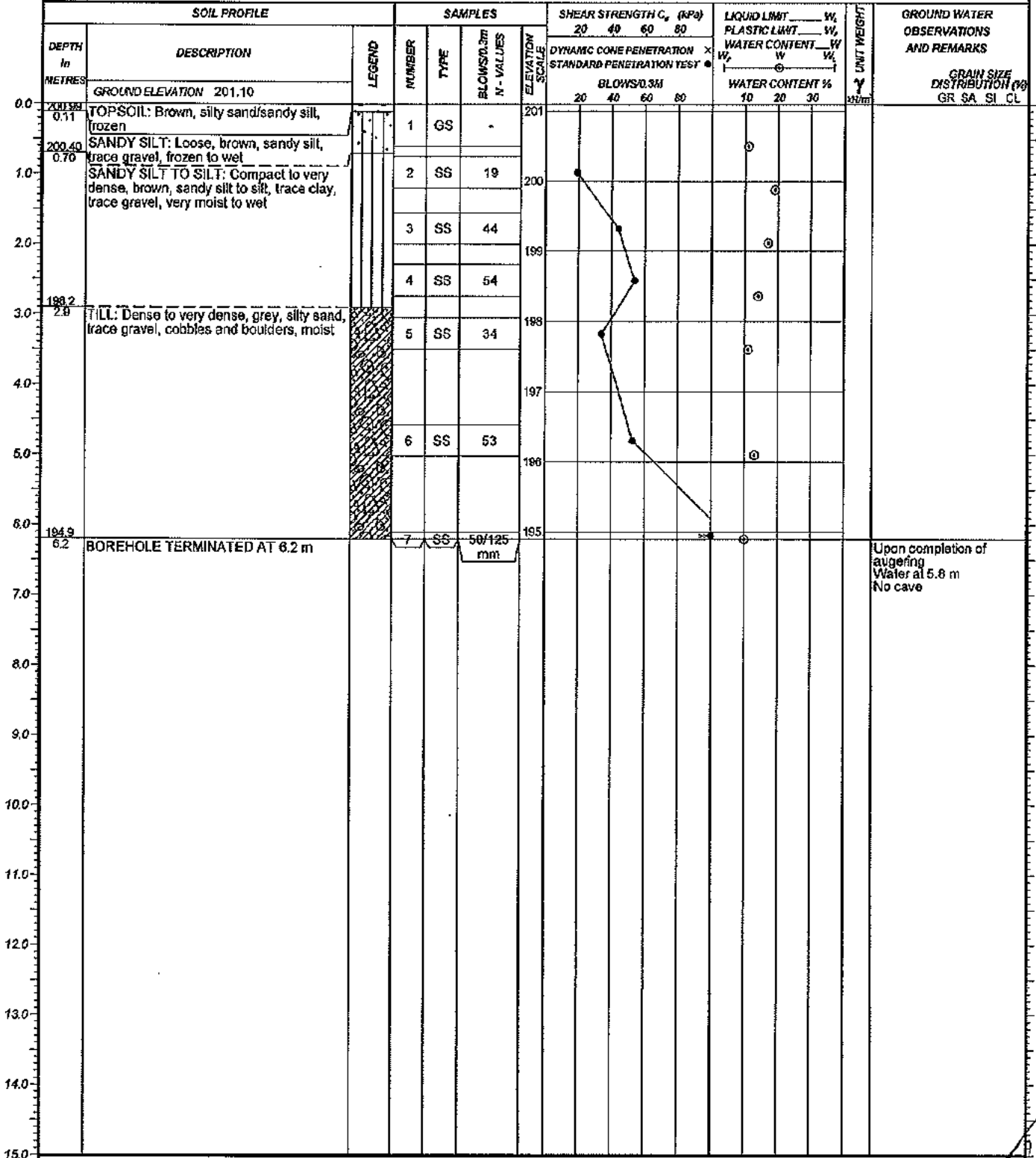
BORING METHOD Continuous Flight Solid Stem Augers

BORING DATE: January 30, 2014

OUR PROJECT NO.14BF001

ENGINEER GW

TECHNICIAN AT



NOTES:

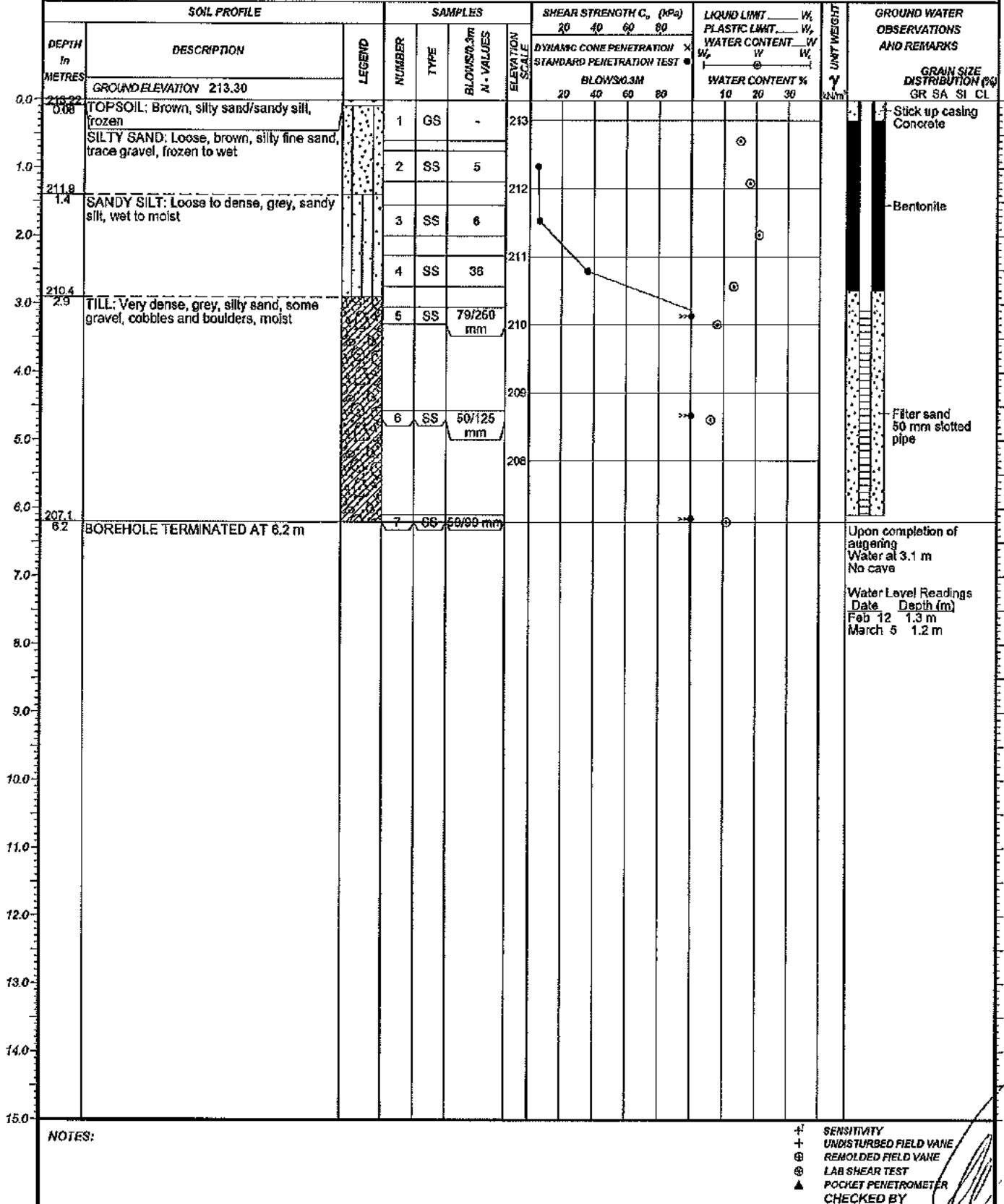
+¹ SENSITIVITY
 + UNDISTURBED FIELD VANE
 ⊕ REMOLDED FIELD VANE
 ⊗ LAB SHEAR TEST
 ▲ POCKET PENETROMETER
 CHECKED BY

LOG OF BOREHOLE NO. 13

PROJECT Proposed Linksview Subdivision
LOCATION 780 and 788 Teath Line, Collingwood, Ontario
BORING METHOD Continuous Flight Solid Stem Augers

BORING DATE: February 4, 2014

OUR PROJECT NO. 14BF001
ENGINEER GW
TECHNICIAN AT



NOTES:

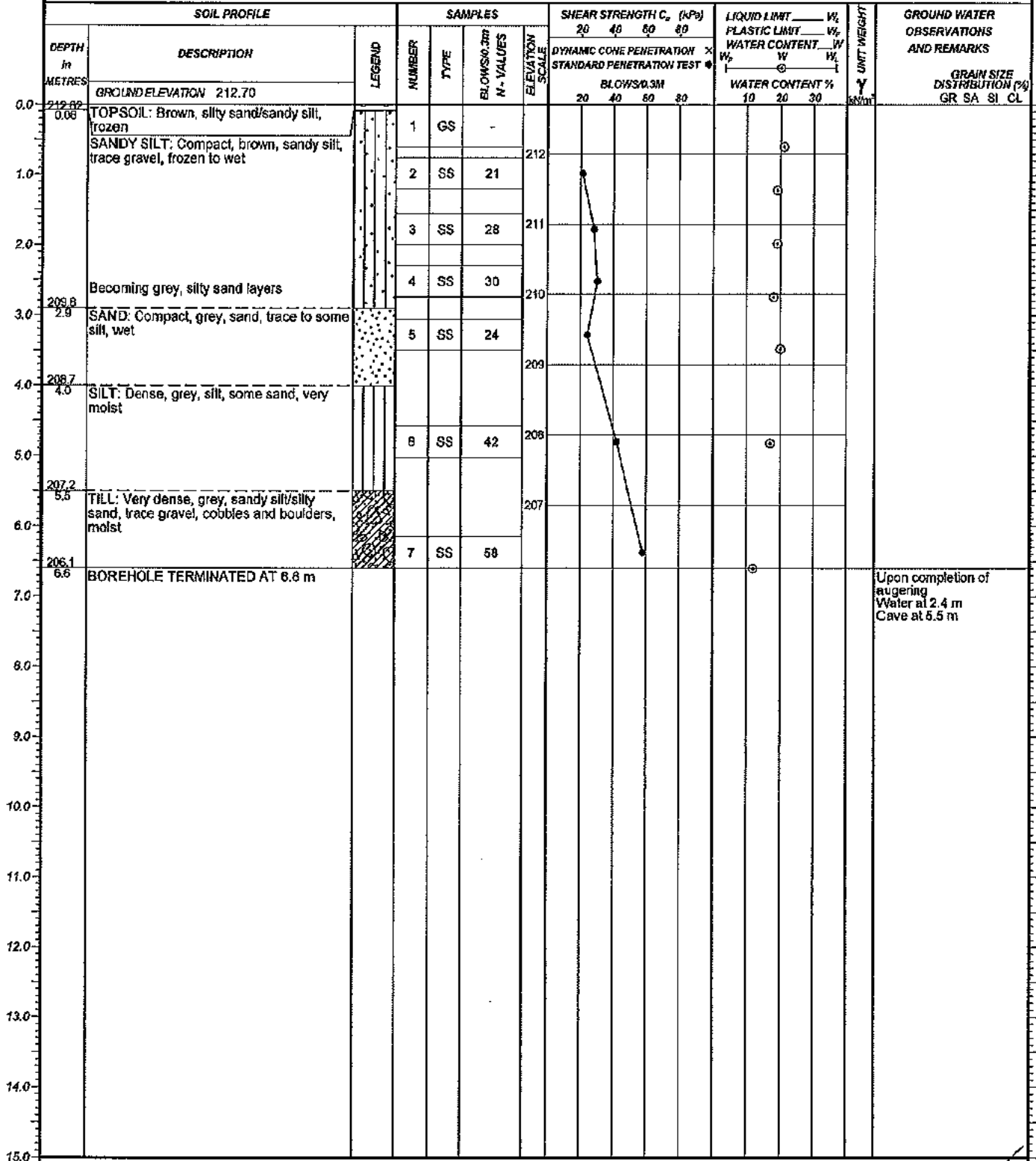
+ SENSITIVITY
 + UNDISTURBED FIELD VANE
 + REMOVED FIELD VANE
 @ LAB SHEAR TEST
 ▲ POCKET PENETROMETER
 CHECKED BY

LOG OF BOREHOLE NO. 14

PROJECT Proposed Linksview Subdivision
LOCATION 780 and 788 Tenth Line, Collingwood, Ontario
BORING METHOD Continuous Flight Solid Stem Augers

BORING DATE: February 4, 2014

OUR PROJECT NO. 14BF001
ENGINEER GW
TECHNICIAN AT



NOTES:

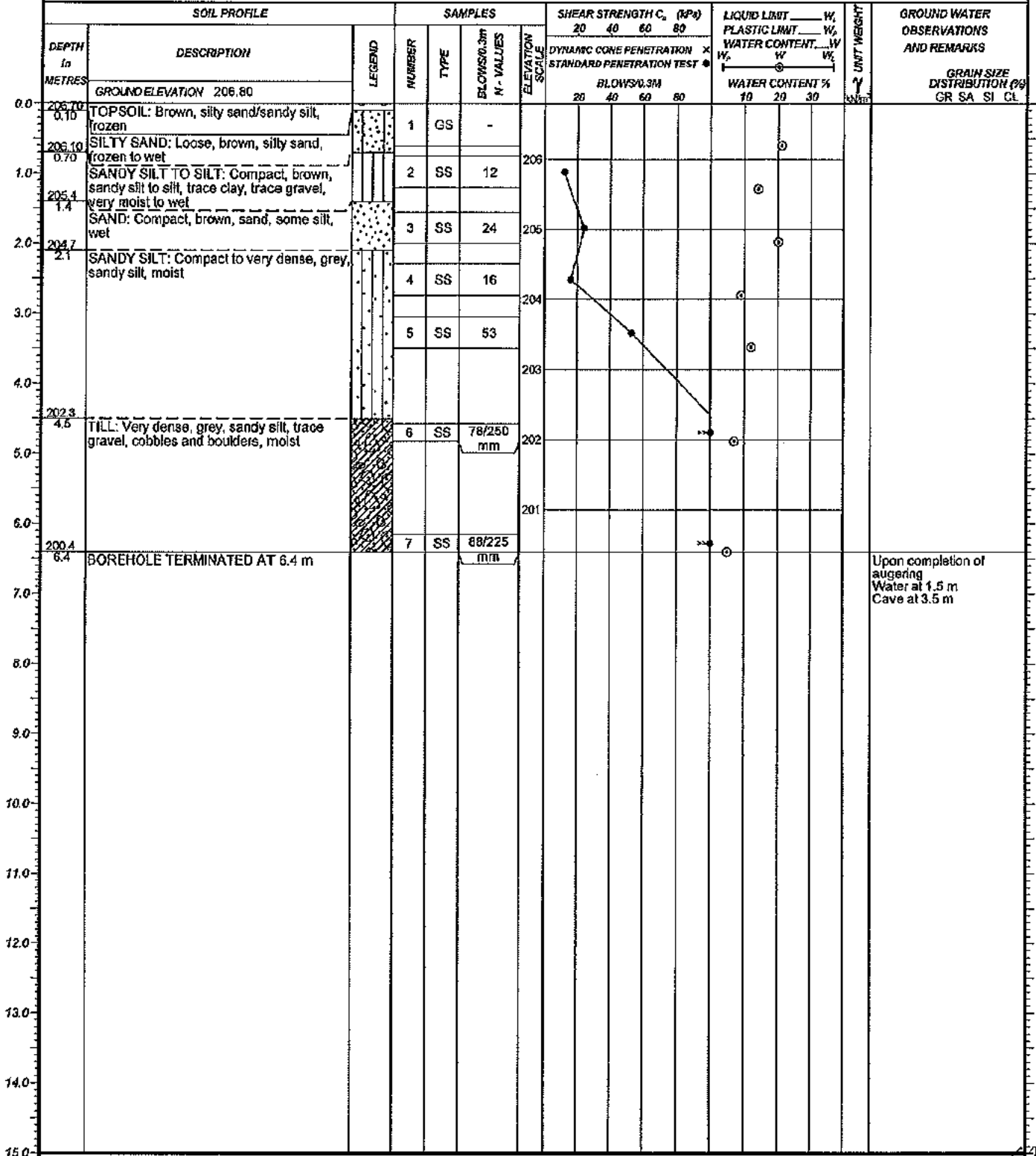
+² SENSITIVITY
 + UNDISTURBED FIELD VANE
 ⊕ REMOVED FIELD VANE
 ⊗ LAB SHEAR TEST
 ▲ POCKET PENETROMETER
 CHECKED BY

LOG OF BOREHOLE NO. 15

PROJECT Proposed Linksview Subdivision
LOCATION 780 and 788 Tenth Line, Collingwood, Ontario
BORING METHOD Continuous Flight Solid Stem Augers

BORING DATE: February 4, 2014

OUR PROJECT NO. 14BF001
ENGINEER GW
TECHNICIAN AT



NOTES:

+ SENSITIVITY
 + UNDISTURBED FIELD VANE
 ⊕ REMOLDED FIELD VANE
 ⊗ LAB SHEAR TEST
 ▲ POCKET PENETROMETER
 CHECKED BY

LOG OF BOREHOLE NO. 16

PROJECT Proposed Linksview Subdivision
LOCATION 780 and 788 Tenth Line, Collingwood, Ontario
BORING METHOD Continuous Flight Solid Stem Augers

BORING DATE: February 3, 2014

OUR PROJECT NO. 14BF001
ENGINEER GW
TECHNICIAN AT

SOIL PROFILE		LEGEND	SAMPLES			SHEAR STRENGTH C_u (kPa)				LIQUID LIMIT W_L			UNIT WEIGHT γ	GROUND WATER OBSERVATIONS AND REMARKS
DEPTH in METRES	DESCRIPTION		NUMBER	TYPE	BLOWS/0.3m N-VALUES	ELEVATION SCALE	20	40	60	80	PLASTIC LIMIT W_P	WATER CONTENT W		
0.0	GROUND ELEVATION 205.40						20	40	60	80	10	20	30	
0.08	TOPSOIL: Brown, silty sand/sandy silt, frozen		1	GS	-	205								
1.0	SANDY SILT TO SILT: Compact, brown, sandy silt to silt, trace clay, trace gravel, very moist to wet		2	SS	22	204								
2.0	Becoming grey		3	SS	21	203								
2.1	SAND: Compact, grey, sand, trace to some silt, wet		4	SS	23	202								
3.0			5	SS	22	201								
4.0						200								
5.0			6	SS	21	199								
6.0														
6.6	BOREHOLE TERMINATED AT 6.6 m		7	SS	25									
7.0														Upon completion of augering Water at 3.0 m Cave at 3.3 m
8.0														
9.0														
10.0														
11.0														
12.0														
13.0														
14.0														
15.0														

NOTES:

+² SENSITIVITY
 + UNDISTURBED FIELD VANE
 ⊕ REMOILED FIELD VANE
 ⊗ LAB SHEAR TEST
 ▲ POCKET PENETROMETER
 CHECKED BY

LOG OF BOREHOLE NO. 18

PROJECT Proposed Linkview Subdivision

LOCATION 780 and 788 Tenth Line, Collingwood, Ontario

BORING METHOD Continuous Flight Solid Stem Augers

BORING DATE: February 4, 2014

OUR PROJECT NO. 14BF001

ENGINEER GW

TECHNICIAN AT

SOIL PROFILE			SAMPLES			SHEAR STRENGTH C_u (kPa)		LIQUID LIMIT W_L		PLASTIC LIMIT W_P		WATER CONTENT W		UNIT WEIGHT γ (kN/m ³)	GROUND WATER OBSERVATIONS AND REMARKS
DEPTH In METRES	DESCRIPTION	LEGEND	NUMBER	TYPE	BLOWS/0.3m N-VALUES	ELEVATION SCALE	20 40 60 80	20 40 60 80	20 40 60 80	20 40 60 80	20 40 60 80	20 40 60 80			
0.0	GROUND ELEVATION 212.15														
0.07	TOPSOIL: Brown, silty sand/sandy silt, frozen		1	GS	-	212									
1.0	SANDY SILT: Dense to very dense, brown, sandy silt, trace gravel, frozen to moist		2	SS	73/275 mm	211									
2.0			3	SS	47	210									
2.1	TILL: Very dense, brown, sandy silt/silty sand, trace gravel, cobbles and boulders, moist		4	SS	75/275 mm	210									
3.0	Becoming gray		5	SS	50/140 mm	209									
4.0			6	SS	50/125 mm	207									
5.0			7	SS	50/125 mm	206									
6.0	BOREHOLE TERMINATED AT 6.2 m														
6.2															
7.0															
8.0															
9.0															
10.0															
11.0															
12.0															
13.0															
14.0															
15.0															

NOTES:

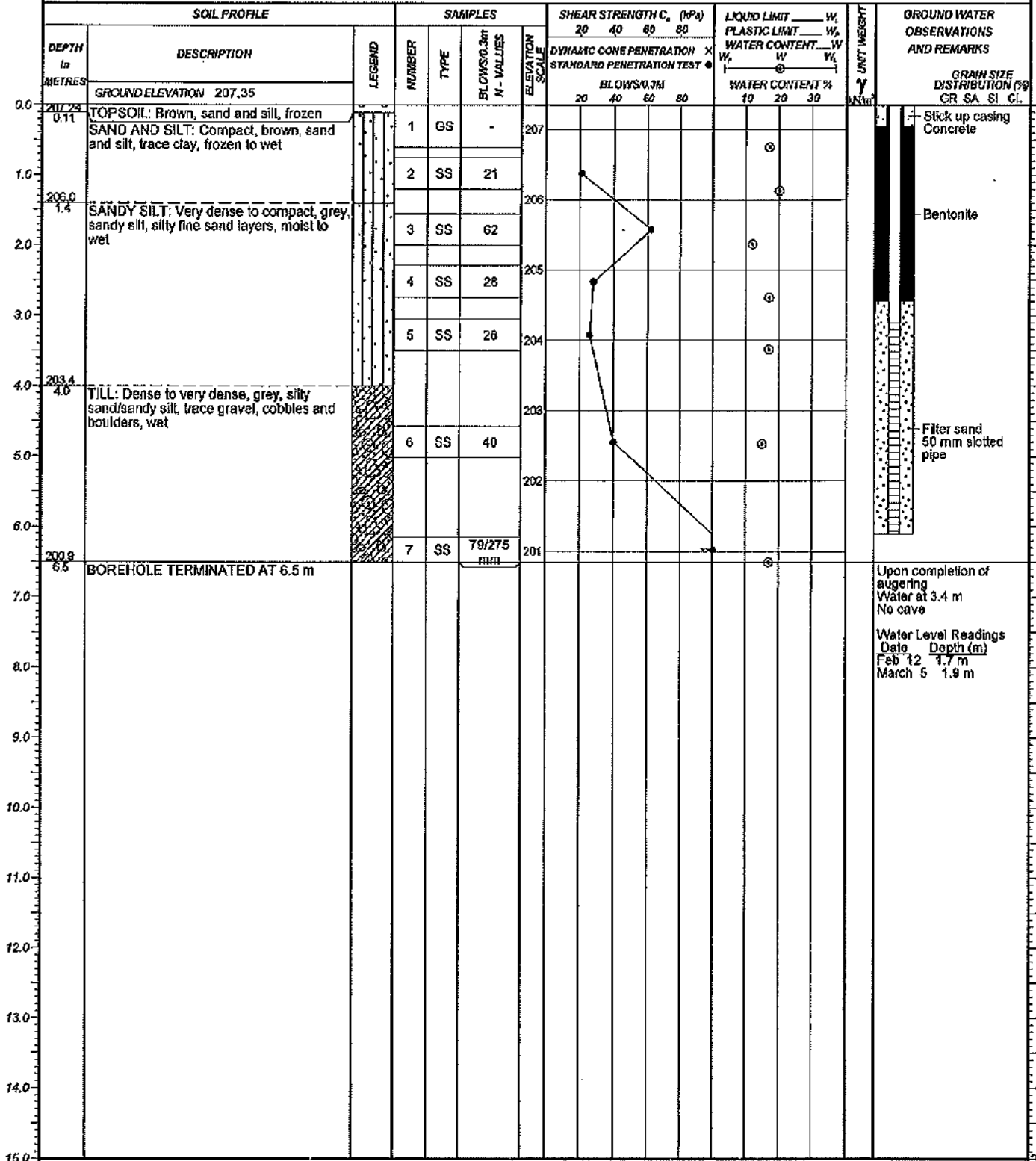
+ SENSITIVITY
 + UNDISTURBED FIELD VANE
 + REMOLDED FIELD VANE
 ⊕ LAB SHEAR TEST
 ▲ POCKET PENETROMETER
 CHECKED BY

LOG OF BOREHOLE NO. 19

PROJECT Proposed Linksview Subdivision
LOCATION 780 and 788 Tenth Line, Collingwood, Ontario
BORING METHOD Continuous Flight Solid Stem Augers

BORING DATE: February 3, 2014

OUR PROJECT NO. 14BF001
ENGINEER GW
TECHNICIAN AT



NOTES:

+ SENSITIVITY
 + UNDISTURBED FIELD VANE
 + REMOLDED FIELD VANE
 ⊕ LAB SHEAR TEST
 ▲ POCKET PENETROMETER
 CHECKED BY

LOG OF BOREHOLE NO. 20

PROJECT Proposed Linksview Subdivision
LOCATION 780 and 788 Tenth Line, Collingwood, Ontario
BORING METHOD Continuous Flight Solid Stem Augers

BORING DATE: February 3, 2014

OUR PROJECT NO. 14BF001
ENGINEER GW
TECHNICIAN AT

SOIL PROFILE			SAMPLES				SHEAR STRENGTH C_u (NPa)				LIQUID LIMIT W_L				UNIT WEIGHT γ	GROUND WATER OBSERVATIONS AND REMARKS
DEPTH In METRES	DESCRIPTION	LEGEND	NUMBER	TYPE	BLOWS/0.3m N - VALUES	ELEVATION SCALE	20 40 60 80				PLASTIC LIMIT W_P					
							DYNAMIC CONE PENETRATION $\times$				WATER CONTENT W					
							STANDARD PENETRATION TEST $\bullet$				WATER CONTENT %					
							BLOWS/0.3M				10 20 30					
							20 40 60 80				10 20 30					
0.0	GROUND ELEVATION 205.40															
0.12	TOPSOIL: Brown, silty sand/sandy silt, frozen		1	GS	-	205										
0.70	SILTY SAND: Loose, brown, silty fine sand, trace gravel, frozen to wet															
1.0	SAND: Compact, brown, sand, trace silt, wet		2	SS	10	204										
			3	SS	12	204										
2.0			4	SS	11	203										
3.0			5	SS	14	202										
4.0	201.4															
4.0	SILTY SAND: Compact, brown to grey, silty fine sand, wet		6	SS	13	201										
5.0																
5.5	199.9															
6.0	SILT: Dense, grey, silt, trace to some sand, trace gravel, moist		7	SS	38	199										
6.6	198.8															
7.0	BOREHOLE TERMINATED AT 6.6 m														Upon completion of augering Water at 0.9 m Cave at 5.2 m	
8.0																
9.0																
10.0																
11.0																
12.0																
13.0																
14.0																
15.0																

NOTES:

$\pm$ SENSITIVITY
 + UNDISTURBED FIELD VANE
 @ REMOLDED FIELD VANE
 @ LAB SHEAR TEST
 ▲ POCKET PENETROMETER
 CHECKED BY



Location of Proposed
Storm Water Management Pond

Location of Proposed
Three-Storey Apartment Buildings

LEGEND

-  **BH 1**
Elev. 197.00 Borehole 1 (With Monitoring Well)
Ground Surface Elevation
-  **BH 2**
Elev. 199.10 Borehole 2
Ground Surface Elevation

0m 60m 120m 180m 240m 300m
SCALE: 

NOTE: Base plan provided by Client. Ground Surface Elevations are approximated based on survey plan provided by Client.

BOREHOLE LOCATION PLAN
PROPOSED LINKSVIEW SUBDIVISION
780 AND 788 TENTH LINE
COLLINGWOOD, ONTARIO

PML Peto MacCallum Ltd. CONSULTING ENGINEERS			
DATE	SCALE	JOB NO.	DRAWING NO.
AUGUST 2014	AS SHOWN	14BF001	1



APPENDIX A

ENGINEERED FILL

The information presented in this appendix is intended for general guidance only. Site specific conditions and prevailing weather may require modification of compaction standards, backfill type or procedures. Each site must be discussed, and procedures agreed with Peto MacCallum Ltd. prior to the start of the earthworks and must be subject to ongoing review during construction. This appendix is not intended to apply to embankments. Steeply sloping ravine residential lots require special consideration.

For fill to be classified as engineered fill suitable for supporting structural loads, a number of conditions must be satisfied, including but not necessarily limited to the following:

1. Purpose

The site specific purpose of the engineered fill must be recognized. In advance of construction, all parties should discuss the project and its requirements and agree on an appropriate set of standards and procedures.

2. Minimum Extent

The engineered fill envelope must extend beyond the footprint of the structure to be supported. The minimum extent of the envelope should be defined from a geotechnical perspective by:

- at founding level, extend a minimum 1.0 m beyond the outer edge of the foundations, greater if adequate layout has not yet been completed as noted below; and
- extend downward and outward at a slope no greater than 45° to meet the subgrade

All fill within the envelope established above must meet the requirements of engineered fill in order to support the structure safely. Other considerations such as survey control, or construction methods may require an envelope that is larger, as noted in the following sections.

Once the minimum envelope has been established, structures must not be moved or extended without consultation with Peto MacCallum Ltd. Similarly, Peto MacCallum Ltd. should be consulted prior to any excavation within the minimum envelope.

3. Survey Control

Accurate survey control is essential to the success of an engineered fill project. The boundaries of the engineered fill must be laid out by a surveyor in consultation with engineering staff from Peto MacCallum Ltd. Careful consideration of the maximum building envelope is required.

During construction it is necessary to have a qualified surveyor provide total station control on the three dimensional extent of filling.

4. Subsurface Preparation

Prior to placement of fill, the subgrade must be prepared to the satisfaction of Peto MacCallum Ltd. All deleterious material must be removed and in some cases, excavation of native mineral soils may be required.

Particular attention must be paid to wet subgrades and possible additional measures required to achieve sufficient compaction. Where fill is placed against a slope, benching may be necessary and natural drainage paths must not be blocked.

5. Suitable Fill Materials

All material to be used as fill must be approved by Peto MacCallum Ltd. Such approval will be influenced by many factors and must be site and project specific. External fill sources must be sampled, tested and approved prior to material being hauled to site.

6. Test Section

In advance of the start of construction of the engineered fill pad, the Contractor should conduct a test section. The compaction criterion will be assessed in consultation with Peto MacCallum Ltd. for the various fill material types using different lift thicknesses and number of passes for the compaction equipment proposed by the Contractor.

Additional test sections may be required throughout the course of the project to reflect changes in fill sources, natural moisture content of the material and weather conditions.

The Contractor should be particularly aware of changes in the moisture content of fill material. Site review by Peto MacCallum Ltd. is required to ensure the desired lift thickness is maintained and that each lift is systematically compacted, tested and approved before a subsequent lift is commenced.

7. Inspection and Testing

Uniform, thorough compaction is crucial to the performance of the engineered fill and the supported structure. Hence, all subgrade preparation, filling and compacting must be carried out under the full time inspection by Peto MacCallum Ltd.

All founding surfaces for all buildings and residential dwellings or any part thereof (including but not limited to footings and floor slabs) on structural fill or native soils must be inspected and approved by PML engineering personnel prior to placement of the base/subbase granular material and/or concrete. The purpose of the inspection is to ensure the subgrade soils are capable of supporting the building/house foundation and floor slab loads and to confirm the building/house envelope does not extend beyond the limits of any structural fill pads.

8. Protection of Fill

Fill is generally more susceptible to the effects of weather than natural soil. Fill placed and approved to the level at which structural support is required must be protected from excessive wetting, drying, erosion or freezing. Where adequate protection has not been provided, it may be necessary to provide deeper footings or to strip and recompact some of the fill.

9. Construction Delay Time Considerations

The integrity of the fill pad can deteriorate due to the harsh effects of our Canadian weather. Hence, particular care must be taken if the fill pad is constructed over a long time period.

It is necessary therefore, that all fill sources are tested to ensure the material compactability prior to the soil arriving at site. When there has been a lengthy delay between construction periods of the fill pad, it is necessary to conduct subgrade proof rolling, test pits or boreholes to verify the adequacy of the exposed subgrade to accept new fill material.

When the fill pad will be constructed over a lengthy period of time, a field survey should be completed at the end of each construction season to verify the areal extent and the level at which the compacted fill has been brought up to, tested and approved.

In the following spring, subexcavation may be necessary if the fill pad has been softened attributable to ponded surface water or freeze/thaw cycles.

A new survey is required at the beginning of the next construction season to verify that random dumping and/or spreading of fill has not been carried out at the site.

10. Approved Fill Pad Surveillance

It should be appreciated that once the fill pad has been brought to final grade and documented by field survey, there must be ongoing surveillance to ensure that the integrity of the fill pad is not threatened.

Grading operations adjacent to fill pads can often take place several months or years after completion of the fill pad.

It is imperative that all site management and supervision staff, the staff of Contractors and earthwork operators be fully aware of the boundaries of all approved engineered fill pads.

Excavation into an approved engineered fill pad should never be contemplated without the full knowledge, approval and documentation by the geotechnical consultant.

If the fill pad is knowingly built several years in advance of ultimate construction, the areal limits of the fill pad should be substantially overbuilt laterally to allow for changes in possible structure location and elevation and other earthwork operations and competing interests on the site. The overbuilt distance required is project and/or site specified.

Iron bars should be placed at the corner/intermediate points of the fill pad as a permanent record of the approved limits of the work for record keeping purposes.

11. Unusual Working Conditions

Construction of fill pads may at times take place at night and/or during periods of freezing weather conditions because of the requirements of the project schedule. It should be appreciated therefore, that both situations present more difficult working conditions. The Owner, Contractor, Design Consultant and Geotechnical Engineer must be willing to work together to revise site construction procedures, enhance field testing and surveillance, and incorporate design modifications as necessary to suit site conditions.

When working at night there must be sufficient artificial light to properly illuminate the fill pad and borrow areas.

Placement of material to form an engineered fill pad during winter and freezing temperatures has its own special conditions that must be addressed. It is imperative that each day prior to placement of new fill, the exposed subgrade must be inspected and any overnight snow or frozen material removed. Particular attention should be given to the borrow source inspection to ensure only nonfrozen fill is brought to the site.

The Contractor must continually assess the work program and have the necessary spreading and compacting equipment to ensure that densification of the fill material takes place in a minimum amount of time. Changes may be required to the spreading methods, lift thickness, and compaction techniques to ensure the desired compaction is achieved uniformly throughout each fill lift.

The Contractor should adequately protect the subgrade at the end of each shift to minimize frost penetration overnight. Since water cannot be added to the fill material to facilitate compaction, it is imperative that densification of the fill be achieved by additional compaction effort and an appropriate reduced lift thickness. Once the fill pad has been completed, it must be properly protected from freezing temperatures and ponding of water during the spring thaw period.

If the pad is unusually thick or if the fill thickness varies dramatically across the width or length of the fill pad, Peto MacCallum Ltd. should be consulted for additional recommendations. In this case, alternative special provisions may be recommended, such as providing a surcharge preload for a limited time or increase the degree of compaction of the fill.



APPENDIX B

CERTIFICATES OF ANALYSIS



CLIENT NAME: PETO MACCALLUM
19 CHURCHILL DRIVE
BARRIE, ON L4N8Z5
(705) 734-3900

ATTENTION TO: Geoff White

PROJECT NO: 14BF001

AGAT WORK ORDER: 14T809425

SOIL ANALYSIS REVIEWED BY: Sofka Pehlyova, Senior Analyst

DATE REPORTED: Feb 18, 2014

PAGES (INCLUDING COVER): 4

VERSION*: 1

Should you require any information regarding this analysis please contact your client services representative at (905) 712-5100

NOTES

All samples will be disposed of within 30 days following analysis. Please contact the lab if you require additional sample storage time.

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
http://www.agallabs.com

Certificate of Analysis

AGAT WORK ORDER: 14T809425
PROJECT NO: 14BF001

ATTENTION TO: Geoff White



CLIENT NAME: PETO MACCALLUM

Corrosivity Package

DATE RECEIVED: 2014-02-10		DATE REPORTED: 2014-02-18			
		SAMPLE DESCRIPTION:		BH4 GS1	BH4 SS2
		SAMPLE TYPE:		Soil	Soil
		DATE SAMPLED:		2/4/2014	2/4/2014
		G / S		5151882	5151885
		RDL			
Parameter	Unit				
Sulphide*	%		0.01	0.01	0.01
Chloride (2:1)	µg/g	NA	2	4	3
Sulphate (2:1)	µg/g		2	6	7
pH (2:1)	pH Units		N/A	8.23	8.76
Electrical Conductivity (2:1)	mS/cm	0.7	0.005	0.126	0.107
Resistivity (2:1)	ohm.cm		1	7940	9350
Redox Potential (2:1)	mV		5	248	225

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard; Refers to T3(RPI) - Current
5151882-5151885 * Analysis was performed at AGAT's Mining Division.

EC/Resistivity, pH, Chloride, Sulphate and Redox Potential were determined on the extract obtained from the 2:1 leaching procedure (2 parts DI water: 1 part soil).

Certified By:

Sofia Pahljara



AGAT Laboratories

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905) 712-5100
FAX (905) 712-5122
<http://www.agallabs.com>

Quality Assurance

CLIENT NAME: PETO MACCALLUM

AGAT WORK ORDER: 14T809425

PROJECT NO: 14BF001

ATTENTION TO: Geoff White

Soil Analysis															
RPT Date: Feb 18, 2014			DUPLICATE			Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD		Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper

Corrosivity Package

Sulphide*	1	5151882	0.01	0.01	0.0%	< 0.01	100%	80%	120%	NA			NA		
Chloride (2:1)	5155362		69	67	3.6%	< 2	110%	80%	120%	85%	80%	120%	90%	70%	130%
Sulphate (2:1)	5155362		58	54	3.7%	< 2	110%	80%	120%	95%	80%	120%	97%	70%	130%
pH (2:1)	1		8.41	8.59	2.1%	N/A	99%	90%	110%	NA			NA		
Electrical Conductivity (2:1)	1		0.176	0.174	1.1%	< 0.005	100%	90%	110%	NA			NA		
Redox Potential (2:1)	1		200	198	1.0%	< 5	101%	70%	130%	NA			NA		

Comments: NA - Not Applicable.

Certified By:

Sofia Pehlivan

AGAT QUALITY ASSURANCE REPORT (V1)

Page 3 of 4

AGAT Laboratories is accredited to ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA) and/or Standards Council of Canada (SCC) for specific tests listed on the scope of accreditation. AGAT Laboratories (Mississauga) is also accredited by the Canadian Association for Laboratory Accreditation Inc. (CALA) for specific drinking water tests. Accreditations are location and parameter specific. A complete listing of parameters for each location is available from www.cala.ca and/or www.scc.ca. The tests in this report may not necessarily be included in the scope of accreditation.

Results relate only to the items tested and to all the items tested



AGAT Laboratories

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905) 712-5100
FAX (905) 712-5122
<http://www.agatlabs.com>

Method Summary

CLIENT NAME: PETO MACCALLUM

AGAT WORK ORDER: 14T809425

PROJECT NO: 14BF001

ATTENTION TO: Geoff White

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Soil Analysis			
Sulphide*	MIN-200-12000	ASTM E1915-07a	LECO C_S
Chloride (2:1)	INOR-93-6004	McKeague 4.12 & SM 4110 B	ION CHROMATOGRAPH
Sulphate (2:1)	INOR-93-6004	McKeague 4.12 & SM 4110 B	ION CHROMATOGRAPH
pH (2:1)	INOR 93-6031	MSA part 3 & SM 4500-H+ B	PH METER
Electrical Conductivity (2:1)	INOR 1036	McKeague 4.12, SM 2510 B	EC METER
Resistivity (2:1)	INOR 1036		CALCULATION
Redox Potential (2:1)		McKeague 4.12 & SM 2510 B	REDOX POTENTIAL ELECTRODE



5835 Coopers Avenue
Mississauga, ON
L4Z 1Y2
webearth.agatlabs.com

Client Information

Peizo MacCallum Ltd
 Great Wicks
 19 Churchill Drive, Barrow PA1
 Phone: 705-734-3900 FAX: 705-734-9811
 Project: LABFOO1 PO:
 AGAT Quotation #: 12-949

Please note, if quotation number is not provided, client will be billed full price for analysis.

☒ Regulation 455/04
(Int. S21 Annexes)

Table 3

Indicate one

☐ Ind/Oorn

☒ Res/Park

☐ Agriculture

Sell Texture (check one)

☐ Coarse ☐ Fine

Invoice To

Same: Yes ☒ No ☐

Company: _____

Contact: _____

Address: _____

GW Ground Water O Oil
SW Surface Water P Palm
SD Sediment S Soil

1. Name: Richard Blair
Email: rblair@ptopaccellum.com

2. Name: _____
Email: _____

Sample Identification	Date Sampled	Time Sampled	Sample Matrix	# of Containers	Comments Site/Sample Information
B114 G51	Feb 4 2009	1:00	S	1	1 jar
B114 S52	Feb 29 2009	8:45	S	1	1 jar

[illegible]

Signature Requested by (Print Name and DOB) Richard Blair Jr Blair	Date/TIME 2017-02-10 17:58	Signature Requested by (Print Name and DOB) Richard Blair Jr Blair	Date/TIME 2017-02-10 17:58
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Estimated 10:30 AM - 5:00 PM

5835 Coopers Avenue
Mississauga, ON
L4Z 1Y2
www.agatlabs.com • webeart@agatlabs.com

P: 905.712.5100 • F: 905.712.5122

☐ Sewer Use

☐ Regulation 55B

☐ CCME

☐ Other (specify) _____

☐ Sanitary

☐ Storm

☐ Prov. Water Quality Objectives (PWQO)

☐ None

Region _____

Indicate one

Is this submission for a Record of Site Condition? ☐ Yes ☐ No

☐ Inorganics
☐ Volatile Metals
☐ Non-Volatile Metals
☐ HgMS ☐ Cd ☐ Cr
☐ Cu ☐ Pb ☐ Zn
☐ Ni ☐ Mn ☐ Fe
☐ Al ☐ Si ☐ Ti
☐ B ☐ F ☐ Cl
☐ S ☐ N ☐ O
☐ H ☐ C
☐ NO₂ ☐ NO
☐ NH₃ ☐ H₂S
☐ CO ☐ CH₄
☐ H₂ ☐ O₂ ☐ N₂
☐ Ar ☐ Kr ☐ Xe
☐ Rn ☐ He
☐ Li ☐ Na ☐ K
☐ Rb ☐ Cs ☐ Fr
☐ Be ☐ Mg ☐ Ca
☐ Sr ☐ Ba ☐ Ra
☐ Sc ☐ Y ☐ La
☐ Ce ☐ Pr ☐ Nd
☐ Pm ☐ Sm ☐ Eu
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Metals	Metals	Hydrid	Client	ORP:	FOC	NO ₃	Nutrient	NO ₃	VOC	DCME	ABNs
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Year	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099
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5

Laboratory Use Only
 Arrival Temperature: 31.27.2.5
 AGAT WO #: 19.0-1.8
 Lab Temperature: 14.809425
 Notes:

Turnaround Time Required (TAT) Required*

Regular TAT

☒ 5 to 7 Working Days

Rush TAT (please provide prior notification)
Rush Surcharges Apply

☐ 3 Working Days

☐ 2 Working Days

☐ 1 Working Day

OR

Date Required (Rush surcharges may apply):

* TAT is exclusive of weekends and statutory holidays

[illegible]

4	Pink Copy - Client	Page 7 of 7	N ^o : 29373
3	Yellow Copy - AGAT		
	White Copy- AGAT		



MEMO

DATE	September 18, 2014	FILE NO.	183-2687
RE	Linksview Development – Testpit Observations		

TO	Geoff White	CC	Kevin Morris Ken Hale
FROM	Darrin Tone		

This memo serves to provide the observation record for three testpits advanced in the vicinity of Monitoring Borehole #11.

Per the Peto MacCallum Ltd. Geotechnical Investigation Report (August 2014), the report indicated that 'monitoring well in Borehole 11 has shown the water level to be within 0.5 m of the existing grade since April, indicating artesian groundwater in the underlying silty sand deposit'. Due to the potential implications of an artesian condition on development opportunities, we retained Ferris Contracting to advance three (3) testpits in the vicinity of Borehole #11 to further understand the groundwater characteristics. The testpits were advanced on September 12, 2014. The observation record is as follows (refer to the appended CD for the pictures):

BH#11

GW – 0.5 m below grade

Testpit#1 – 30 m North of BH#11

* all measurements represent bottom layer of soil type

0.3 m bg topsoil

1.0 m bg brown silty sand

Bottom (~3.0 m) grey sandy silt

Groundwater 1.8 m bg (1 hour after completion). High inflow rate. Highly unstable soils within grey sandy silt layer due to saturation. No confining layer observed.

Testpit#2 – 10 m South of BH#11

0.3 m topsoil

1.8 m grey clayey silty sand

5.2 m grey tight clay till

5.3 m (bottom) clay till to grey sand transition

Groundwater not observed. Transition between till and grey sand less pronounced than in Testpit 3.

Testpit #3 – 50 m West of BH#11

0.3 m topsoil
1.6 m brown silty sand
2.9 m grey tight clay till
3.0 m (bottom) grey sand

Once the excavator encountered the grey sand, very high groundwater inflow into the testpit was observed. Testpit filled in prior to measuring the stabilized groundwater level.

Summary of Findings

It is our opinion that Testpits 2 and 3 indicate the existence of a confining layer, that once breached by the excavator, enabled the underlying groundwater table to rise to the hydrostatic pressure elevation. It appears that Testpits 2 and 3 have a similar soil profile as Boreholes 9, 10, 12, 13, and 18.

Testpit 1 did not exhibit the presence of a confining layer and has a similar soil profile as Borehole 11.

Please feel free to call myself or Kevin Morris to discuss.

Sincerely,

C.F.CROZIER & ASSOCIATES INC.



Darrin Tone, P.Eng.
Project Engineer
DT/km

J:\100\183 – Landex Projects\2687 Linksview\Memos\09182014_TestPitObservations.docx



APPENDIX D

Site Reconnaissance and Interview Notes

AZIMUTH ENVIRONMENTAL CONSULTING, INC.

Phase One Environmental Site Assessment

INTERVIEWEE INFORMATION

Name: Ken Hale (Landex) Address: 40 Huron St. Suite 300
 Unit No: _____ Town: Collingwood Postal Code: L9Y 4R3
 Phone No: (709) 445-1660 (709) 796-4253 Fax No: (709) 445-8158
ex. 32

Association to property (e.g., owner, tenant, employee): employee of owner

Site knowledge from : (mm/yy) 2014-Jan to (mm/yy) present

Known Property Owners

Name: Landex Business type: / From: (mm/yy) 2004-present
 Site Use: _____

Name: Bay Ridge Inc. Business type: / From: (mm/yy) 1998-2004
 Site Use: _____

Name: VanDerKee Business type: Family farm From: (mm/yy) 1984-1998
 Site Use: _____

PROPERTY OCCUPANT(S)

Current Tenant(s) Timpson

(attach others to back of form)

Name: Geoffrey Business type: Farmer From: (mm/yy) June 2014

Description: "tenant + farmer"

Name: Blue Mountain Golf + Country Club Business type: _____ From: (mm/yy) _____

Description: Driving Range

Name: _____ Business type: _____ From: (mm/yy) _____

Description: _____

Name: _____ Business type: _____ From: (mm/yy) _____

Description: _____

Past Tenant(s)

(attach others to back of form)

Name: Collingwood Horse Show Business type: _____ From: (mm/yy) _____

Description: _____

Name: _____ Business type: _____ From: (mm/yy) _____

Description: _____

Name: _____ Business type: _____ From: (mm/yy) _____

Description: _____

Name: _____ Business type: _____ From: (mm/yy) _____

Description: _____

Used property for a few weeks every year for the show - reason for the berms + hydro hook ups.

SITE CONDITION (General)Property Size/Area or Dimensions: 40.7 ha rectangle

Shape: _____

Current Use: farming, driving rangePast Use(s): residence, farming, horse showProposed Use: ResidentialKnown Environmental Conditions: Monitoring wells for gw. levelCurrent Environmental Order(s) or Prosecution(s): - NonePast Environmental Order(s) or Prosecution(s): - NonePast, Current, Pending or Outstanding Legal or Civil Environmental Actions: - None**Ground Surface Details:**Grassed: ☒ % Area.: 15 Location(s): driving rangeGravel: ☒ % Area.: 5 Location(s): drive wayPaved: ☐ % Area.: _____ Location(s): _____Natural: ☒ % Area.: 40 Location(s): Wooded area NW corner, + berm areaCrop: ☒ % Area.: 40 Location(s): west side + portions of east sideOther: ☐ % Area.: _____ Location(s): _____Ground Staining: ☒ Size: 1m² Location(s): below tractor stored on siteVegetation Die-off: ☒ Size: _____ Location(s): various, throughout site.**Private Servicing: (check applicable)**Water: ☒ Details: dug well on 788, no known wells on 780
Past Changes: _____Power: ☒ Details: hydro line coming in off Tenth line for houses, barn,
Past Changes: + hydro hook-ups for horse showNatural Gas: ☐ Details: NA

Past Changes: _____

Sewage: ☒ Details: In past, not sure where tank is

Past Changes: _____

Oil Separator: ☐ Details: N/A

Past Changes: _____

Waste Disposal: ☒ Details: illegal dumping of household garbage

Past Changes: _____

Heating: ☒ Details: Assume heating oil - however location not sure

Past Changes: _____

Cooling: ☐ Details: NA

Past Changes: _____

Other (specify): N/A

SITE CONDITION (General cont'd)Oil / Gas Well(s): ☐ Details: N/A.**Municipal Servicing:** (check applicable)Water: ☐ Hydro: ☒ Gas: ☐ Sewage: ☐ Telephone: ☐ Cable: ☐ Garbage: ☒

Other (specify):

→ there is a municipal well within Fisher Field to the South.

Structures (General): (Including former permanent / temporary structures – Sketch details on back of form if required)

Current

Bldg #: 1 Type: Barn #1 - South (demolished) Plans: ☐
Age: 1950's Additions/Modifications: ☒ Date(s): demolished 2010Bldg #: 2 Type: Barn #2 - North (demolished) Plans: ☐
Age: 1950's Additions/Modifications: ☒ Date(s): demolished 2010Bldg #: 3 Type: existing residence (788 Tenth Line) Plans: ☐
Age: 1 Additions/Modifications: ☐ Date(s):

Demolished

Bldg #: 4 Type: Former residence (780 Tenth Line) Plans: ☐
Age: 1950's Additions/Modifications: ☒ Date(s): demolished 20105 - storage shed within driving range - used to store tools
(sketch details on site map or back of form)**Transport Corridors:** (past & present)Rail / Spur Line: ☐ Details / Location: NA - noneDock: ☐ Details / Location: N/A - noneAccess Roads: ☒ Details / Location: off of Tenth Line - gravel to 780 +
paved to 788 - path @ W end of site.
(sketch details on site map or back of form)**Site Development:**Fill imported for property development: ☒ Details / Location: Numerous bermsFill imported for building foundations: ☐ Details / Location:Fill imported for transport corridors: ☐ Details / Location:

→ "fill" is topsoil scraped off Phase I property or topsoil from Georgian Meadows subdivision - a Landex property ~ 10m from site.

Adjacent Land Use:North - Blue Mountain Golf + Country Club (attach others to back of form)Ground Cover @ Boundary: natural veg. Distance to Significant Feature: 0mDescription of Significant Feature: maintenance shed for golf course adjacent
to NE corner of Phase I PropertyEast - Tenth Line, residential subdivisionGround Cover @ Boundary: grass + crops Distance to Significant Feature: Ø - NADescription of Significant Feature: noneSouth Fisher Field Park, Bygone Days Heritage Park, agricultureGround Cover @ Boundary: natural veg. Distance to Significant Feature: Ø - NADescription of Significant Feature: noneWest AgricultureGround Cover @ Boundary: forest + crops Distance to Significant Feature: Ø - NADescription of Significant Feature: none

SITE CONDITION – Building #1

Building(s): (Including former permanent / temporary structures – Sketch details on Page 9 or attach drawings)

Bldg #: 1+2 Type: Demolished barns Plans: ☐Age: ~60yrs Additions/Modifications: ☒ Date(s): demolished 2010Foundation Type: cementBasement /Crawl Space: ☐ Constr.: _____ Details: _____Past Use(s): farmCurrent Use(s): _____ / NIA

Future Use(s): _____

AST(s): ☒ No.: _____ Location(s): _____ Contents: _____

AST(s) Age: _____ Capacity: _____ Constr. Mat'l: _____

In Use: ☐ Cathodic Protection: ☐ Last tested: _____ 2nd Containment: _____

Other: _____

UST(s): ☒ No.: _____ Location(s): _____ Contents: _____

UST(s) Age: _____ Capacity: _____ Constr. Mat'l: _____

In Use: ☐ Cathodic Protection: ☐ Last tested: _____ 2nd Containment: _____

Other: _____

Water Supply Sources No wells found or known (write in details for private servicing [e.g. well dia., testing, etc.]Potable: ☐ Source: _____ Age: _____ Last Serviced: _____Non-potable: ☐ Source: _____ Age: _____ Last Serviced: _____**Utilities (corridor locations)**

(sketch details on back of form)

Sewage: ☐ Type: _____ Age: _____ Last Serviced: _____Power: ☒ Overhead: Y/N Conduit Location(s): _____ Age: /Gas: ☐ Conduit Location(s): _____ Age: _____

Other: _____ Conduit Location(s): _____ Age: _____

Entry / Exit Points: - Not Known

(attach other details / sketch to back of form)

Individuals (specify): _____

Supplies (specify): _____

Vehicles (specify): _____

Solid Wastes (specify): _____

Liquid Wastes (specify): _____

Subsurface Infrastructure (Past / Present):

(attach other details / sketch to back of form)

Floor Drains: ☐ Details: _____Floor Pits: ☐ Details: _____Floor Sumps: ☐ Details: _____Waste Drains: ☐ Details: _____Waste Pits: ☐ Details: _____Waste Sumps: ☐ Details: _____Dry Pits: ☐ Details: _____Well Pits: ☐ Details: _____Subfloor Liquid Product Conduits: ☐ Details: _____**Floor:**

(attach other details / sketch to back of form)

Constr. Mat'l (specify): concrete foundation onlyStained: ☐ Details: _____Cracked: ☐ Details: _____

SITE CONDITION – Building #2

Building(s): (Including former permanent / temporary structures – Sketch details on Page 9 or attach drawings)

Bldg #: 213 Type: Houses @ 780 + 788 tenth line Plans: ☐

Age: 60yrs Additions/Modifications: ☒ Date(s): #4 demolished in ~2010

Foundation Type: cement

Basement /Crawl Space: ☒ Constr.: _____ Details: _____

Past Use(s): NIA

Current Use(s): _____

Future Use(s): _____

AST(s): ☒ No.: _____ Location(s): _____ Contents: _____

AST(s) Age: _____ Capacity: _____ Constr. Mat'l: _____

In Use: ☐ Cathodic Protection: ☐ Last tested: _____ 2nd Containment: _____

Other: _____

UST(s): ☒ No.: _____ Location(s): _____ Contents: _____

UST(s) Age: _____ Capacity: _____ Constr. Mat'l: _____

In Use: ☐ Cathodic Protection: ☐ Last tested: _____ 2nd Containment: _____

Other: _____

Water Supply Sources - dog well west of #3, no known for #4. (write in details for private servicing [e.g. well dia., testing, etc.])

Potable: ☐ Source: _____ Age: _____ Last Serviced: _____

Non-potable: ☐ Source: _____ Age: _____ Last Serviced: _____

Utilities (corridor locations) - assume have tank, no information available (sketch details on back of form)

Sewage: ☐ Type: _____ Age: _____ Last Serviced: _____

Power: ☐ Overhead: Y/N Conduit Location(s): _____ Age: _____

Gas: ☐ Conduit Location(s): _____ Age: _____

Other: _____ Conduit Location(s): _____ Age: _____

Entry / Exit Points:

Individuals (specify): _____

Supplies (specify): _____

Vehicles (specify): _____

Solid Wastes (specify): _____

Liquid Wastes (specify): _____

Subsurface Infrastructure (Past / Present):

(attach other details / sketch to back of form)

Floor Drains: ☐ Details: _____

Floor Pits: ☐ Details: _____

Floor Sumps: ☐ Details: _____

Waste Drains: ☐ Details: _____

Waste Pits: ☐ Details: _____

Waste Sumps: ☐ Details: _____

Dry Pits: ☐ Details: _____

Well Pits: ☐ Details: _____

Subfloor Liquid Product Conduits: ☒ Details: _____

Floor:

(attach other details / sketch to back of form)

Constr. Mat'l (specify): concrete, brick

Stained: ☐ Details: _____

Cracked: ☐ Details: _____

EXISTING COMPANY INFORMATION

Operation name: Landex Capital Corporation
 Existed from : (mm/yy) to (mm/yy)
 Main activity(s): _____

- Does the company require any environmental permits to operate? No ☒ Yes ☐
- Does the company have emergency response or contingency plans? No ☒ Yes ☐
- Does the company use any chemical or petroleum products? No ☐ Yes ☒
→ gas + diesel for farm eg.
- Does the company have an inventory of chemicals and their usage (e.g., WHMIS)? No ☒ Yes ☐
- Does the company have material safety data sheets? No ☒ Yes ☐
- Has there ever been a spill of a volume greater than 2 litres? No ☒ Yes ☐
- Does the company have spill reporting plans and records? No ☒ Yes ☐
- Does the company have environmental monitoring data? No ☐ Yes ☒
ground water levels, geo tech reports
- Does the company have waste management records? No ☒ Yes ☐
- Does the company have an inventory of on-site storage tanks? No ☒ Yes ☐
- Does the company have past environmental audit reports? No ☐ Yes ☒
yes - Peto (2014) Phase 1 report
- Does the company have PCB storage or equipment on-site? No ☒ Yes ☐
- Has the company ever used any PCB related products or equipment? No ☒ Yes ☐
- Does the company have an asbestos survey? No ☒ Yes ☐
- Has the company ever used any asbestos related products? No ☒ Yes ☐
- Does the company have any lead-based products? No ☒ Yes ☐
- Has the company ever used any lead-based products? No ☒ Yes ☐
- Does the company have any ozone-depleting substances? No ☒ Yes ☐
- Has the company ever used any ozone-depleting substances? No ☒ Yes ☐
- Has the company ever use any urea formaldehyde foam insulation? No ☒ Yes ☐
- Has the company ever use waste oil spraying for road surfaces? No ☒ Yes ☐

COMPANY OPERATIONS

What materials does the company use and how is it used?

1. _____
2. _____ Landex is not active at this
3. _____
4. _____ property - only tenant farmer
5. _____
6. _____ who uses regular + diesel fuel
7. _____
8. _____ for equipment use
9. _____
10. _____

What materials does the company discard and how is it done?

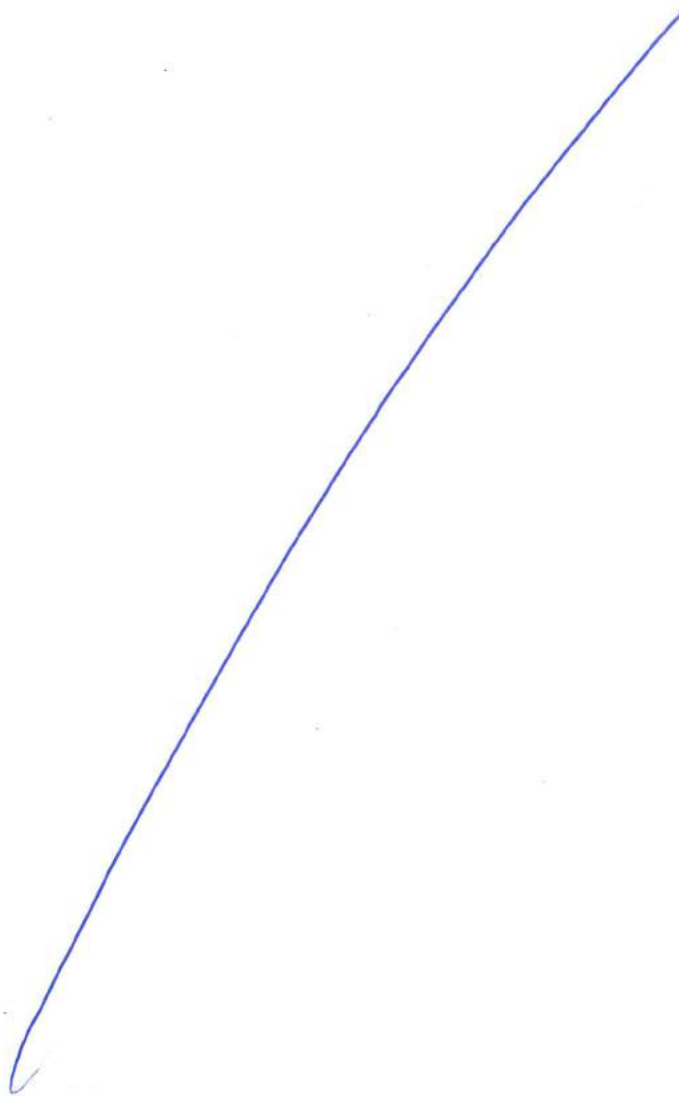
1. _____
2. _____
3. _____
4. _____ N/A
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

Comments or relevant insights:

SITE SKETCH**Copy and make a sketch for each site operation**

(Please draw a sketch of the site noting all buildings, additions, temporary buildings or structures. Show location of material storage areas, waste storage areas, spill areas, wells, above or underground storage tanks, utility corridors, piping above or underground, filled areas, property changes, concerns on adjacent properties, stained areas, areas of poor vegetation growth, PCB storage areas, sump locations and piping, drain corridors, roads, paved or gravel areas, drum storage areas, streams, lakes, water courses, grease traps, transformers, environmentally sensitive operation areas, debris piles, exhaust stacks, fuel/chemical storage areas, septic tanks and leaching bed, odour locations, or other)

- See attached



PAST COMPANY INFORMATION

Copy and fill out for each company

Operation name: No information known on past company activities
Existed from : (mm/yy) to (mm/yy)
Main activity(s): _____

Did the company require any environmental permits to operate?	No ☐	Yes ☐
Did the company have emergency response or contingency plans?	No ☐	Yes ☐
Did the company use any chemical or petroleum products?	No ☐	Yes ☐
Did the company have an inventory of chemicals and their usage (e.g., WHMIS)?	No ☐	Yes ☐
Did the company have material safety data sheets?	No ☐	Yes ☐
Was there ever been a spill of a volume greater than 2 litres?	No ☐	Yes ☐
Did the company have spill reporting plans and records?	No ☐	Yes ☐
Did the company have environmental monitoring data?	No ☐	Yes ☐
Did the company have waste management records?	No ☐	Yes ☐
Did the company have an inventory of on-site storage tanks?	No ☐	Yes ☐
Did the company have past environmental audit reports?	No ☐	Yes ☐
Did the company have PCB storage or equipment on-site?	No ☐	Yes ☐
Did the company ever use any PCB related products or equipment?	No ☐	Yes ☐
Did the company have an asbestos survey?	No ☐	Yes ☐
Did the company ever use any asbestos related products?	No ☐	Yes ☐
Did the company ever use any lead-based products?	No ☐	Yes ☐
Did the company ever use any ozone-depleting substances?	No ☐	Yes ☐
Did the company ever use any urea formaldehyde foam insulation?	No ☐	Yes ☐
Did the company ever use waste oil spraying for road surfaces?	No ☐	Yes ☐

PAST COMPANY OPERATIONS**Copy and fill for each operation**

What materials were used by company and how is it used?

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

What materials did the company discard and how is it done?

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

Comments or relevant insights:

BUSINESS PRACTICE AS RELATED TO ENVIRONMENTAL CONCERNS

PAST

Person(s) responsible for environmental conditions: _____

Established policies/procedures/training: _____

POLICY STATUS (CERTIFICATES OF APPROVAL)

COMMENT ON: Applications, convictions, Fines, Grievances, Inspections, Licences, Notifications, Permits, Violations.

OCCUPATIONAL HEALTH AND SAFETY ACT: None

ENVIRONMENTAL PROTECTION ACT: None

ONTARIO WATER RESOURCES ACT: None

OTHER (BE SPECIFIC): None.

SUMMARY

Are you aware of or have heard of any present or past activities or operations or know of others who may have such knowledge that may provide insight(s) for this evaluation? (Please elaborate)

Do you have any general remarks:

To the best of my knowledge I acknowledge the information presented is correct.

Signature: _____

Date: _____

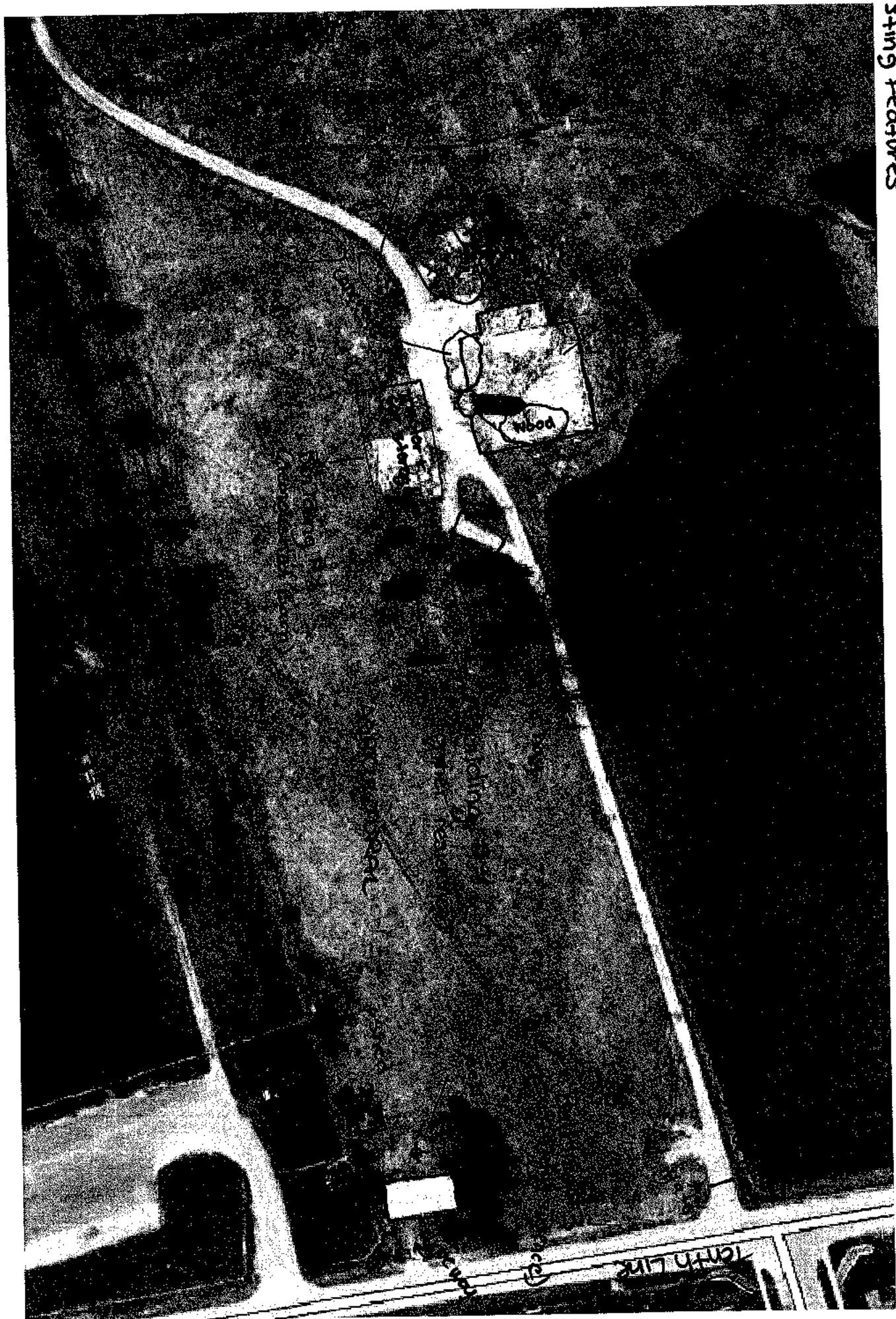
Print Name: _____



Position: 44.18536, -80.72731 Zoom Level: 20m1 map: 17

14-300 LINKSVIEW SUBDIVISION PHASE 1 SITE VISIT - Sept. 10 2014

Existing Features



↑
N



APPENDIX E

Site Photographs



Photograph 1: View facing north of the agricultural area at the western side of the property taken on September 10th 2014.



Photograph 2: View facing north of the berm features taken on September 10th 2014.



Photograph 3: View facing north east of the hydraulic and irrigation hook ups taken on September 10th 2014.



Photograph 4: View of a debris pile taken on September 10th 2014.



Photograph 5: View of farming equipment stored on site and associated fuel storage taken on September 10th 2014.



Photograph 6: View facing east of the north barn foundation and debris piles taken on September 10th 2014.



Photograph 7: View of a tractor stored on site and soil staining taken on September 10th 2014.



Photograph 8: View facing north of the wood and concrete piles taken on September 10th 2014.



Photograph 9: View facing north east of material storage within the north barn foundation taken on September 10th 2014.



Photograph 10: View facing west of the abandoned residence taken on September 10th 2014.



Photograph 11: View of the dug well located next to the abandoned residence taken on September 10th 2014.



Photograph 12: View facing east of the driving range and storage shed on the north east corner of the property taken on September 10th 2014.