



February 5, 2019

File No. 13-13-3046

Brampton Office

City of Mississauga
Transportation & Works, Environmental Services
300 City Centre Drive
Mississauga, Ontario L5B 3C1

**RE: LETTER OF RELIANCE
UPTOWN MISSISSAUGA
BLOCK 16, BLOCK 17 & PART BLOCKS 1 AND 2
MISSISSAUGA, ONTARIO**

In regard to the above-noted site, we confirm that the City of Mississauga may make reliance on the following reports:

- Terraprobe Inc., “*Phase 1 Environmental Site Assessment: Part of Lot 1 Concession 1 WHS, Designated as Parts 2 to 6 on Plan 43R-24983 and Part 1 on Plan 43R-24983, City of Mississauga, Ontario*”, dated August 18, 2008, our File No. 13-13-3046.
- Terraprobe Inc., “*Phase 2 Environmental Site Assessment: Part of Lot 1 Concession 1 WHS, Designated as Parts 2 to 6 on Plan 43R-24436 and Part 1 on Plan 43R-24983, City of Mississauga, Ontario*”, dated October 23, 2008, our File No. 13-13-3046.

The reliance is subject to the following conditions:

- (i) The reports were prepared for Pinnacle International/ Mondiale Development Ltd. on the dates noted above, and are representative of conditions at that time. We cannot comment and make no representations regarding any changes that may have occurred to the site or surrounding lands, and the impact that these changes may have had on the condition of the property, and/or the conclusions and recommendations of the report.
- (ii) Any use of the reports is subject to the general limitations noted in the report.
- (iii) The reports may only be used for the purposes expressly stated in the report.

Terraprobe Inc.

Greater Toronto

11 Indell Lane
Brampton, Ontario L6T 3Y3
(905) 796-2650 Fax: 796-2250

Hamilton – Niagara

903 Barton Street, Unit 22
Stoney Creek, Ontario L8E 5P5
(905) 643-7560 Fax: 643-7559

Central Ontario

220 Bayview Drive, Unit 25
Barrie, Ontario L4N 4Y8
(705) 739-8355 Fax: 739-8369

Northern Ontario

1012 Kelly Lake Rd., Unit 1
Sudbury, Ontario P3E 5P4
(705) 670-0460 Fax: 670-0558

www.terraprobe.ca

Should you have any questions regarding this matter, please do not hesitate to contact the undersigned.

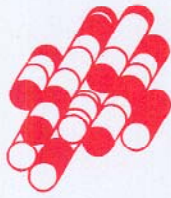
Yours truly,

Terraprobe Inc.



Serena Oyama, C.E.T., P.Geo(Limited), QP_{ESA}
Senior Project Manager





Terraprobe

*Consulting Geotechnical & Environmental Engineering
Construction Materials Engineering, Inspection & Testing*

**PHASE I
ENVIRONMENTAL SITE ASSESSMENT
PART OF LOT 1 CONCESSION 1, WHS
DESIGNATED AS PARTS 2 TO 6 ON PLAN 43R-24436
AND PART 1 ON PLAN 43R-24983
CITY OF MISSISSAUGA, ONTARIO**

Prepared for: Mondiale Development Ltd.
6 Harbour Street
Toronto, ON M5J 3B1
Attention: Mr. Don Meola

File No. 1-08-3160
© **Terraprobe Limited**
August 18, 2008

Distribution of Report:

6 copies Modiale Development Ltd.
1 copy Terraprobe Limited, Brampton

Terraprobe Limited

10 Bram Court
Brampton, Ontario L6W 3R6
(905) 796-2650 Fax 796-2250

220 Bayview Drive, Unit 25
Barrie, Ontario L4N 4Y8
(705) 739-8355 Fax 739-8369

1012 Kelly Lake Road, Unit 1
Sudbury, Ontario P3E 5P4
(705) 670-0460 Fax 670-0558

903 Barton Street, Unit 22
Stoney Creek, Ontario L8E 5P5
(905) 643-7560 Fax 643-7559

www.terraprobe.ca

EXECUTIVE SUMMARY

On behalf of Mondiale Development Ltd., Terraprobe Limited completed a Phase I Environmental Site Assessment (ESA) for a property identified as Part of Lot 1, Concession 1 WHS, designated as Parts 2 to 6 on Plan 43R-24436 and Part 1 on Plan 43R-24983, in the City of Mississauga, Ontario. The objectives of the investigation were to review historical information and document existing conditions to identify obvious or potential environmental concerns. The work included a review of the historical development/use of the subject property and a visual inspection of the property.

The subject property is irregular in shape and covers an area of approximately 9.9 hectares (24.4 acres). The majority of the study site comprises grass and shrub covered lands. Low wet land area is located in the northeast and east central portions of the property. Cooksville Creek borders the site to the west. The surrounding area was a mix of residential and commercial land uses. The following summarizes the results of the investigation:

- The review of the historical map and aerial photographs indicates that the subject property was in agricultural use from before 1954. Several farm buildings were located in the east central and norther portion of the subject property since prior to 1954 until at least 1982 there are remnants of the foundations and slab from these structures on site. A house located at the southwest corner of the property in 1954, but was no longer present in 1971 and the remains may be buried in fill in this area. All buried debris and foundations should be excavated and properly disposed of prior to development of the property.
- The regulatory review did not identify any issues of environmental concern. It was reported that there was no information related to fuel storage tanks on the subject property on file with the TSSA. There was no reference to the subject property in either the *Ontario Inventory of PCB Storage Sites (July 1993)* or the *Waste Disposal Site Inventory (June 1991)*.
- Cooksville Creek borders the property to the west. The portions of the property located within 30 m of the watercourse are considered environmentally sensitive in the context of Ontario Regulation 153 and the Table 1 Standards of the *Soil, Ground Water, and Sediment Standards* for use under Part XV.I of the *Environmental Protection Act of Ontario* will apply to those portions of the site. The lands located within 30 m of the watercourse could be treated as severed so that the Table 1

Standards would only apply the portion of the site within 30 m, and appropriate land use standards could be used for the remainder of the site.

- Fill materials were identified in the east central portion of the property during a Geotechnical Investigation conducted in 1987. The fill materials generally consisted of silty clay soils. No odours or staining were noted in any of the samples. Construction debris was noted in a fill sample. There is also likely fill in the southern and western end of the site. A subsurface investigation should be conducted to determine the composition and quality of these fill materials.
- A gas station is located adjacent to the southeast corner of the property, which contains underground fuel storage tanks. The potential exists that the soil and/or ground water on the subject site adjacent to the gas station has been impacted by petroleum hydrocarbons. A subsurface investigation should be conducted to determine if the soil and/or ground water on the subject site adjacent to the gas station has been impacted by petroleum hydrocarbons.
- There was a large diameter shallow well found in the north central portion of the site. This open well casing about a metre in diameter is a hazard which should be addressed without delay. Since this is an identifiable well, even though no well record exists, the well should be abandoned by a licensed well driller in accordance with Ontario Reg. 903.

TABLE OF CONTENTS

SECTION	PAGE (S)
EXECUTIVE SUMMARY	
1.0 INTRODUCTION.....	1
2.0 SCOPE OF WORK.....	2
2.1 Site History Review.....	2
2.2 Site Reconnaissance Inspection.....	2
3.0 SITE OVERVIEW.....	3
3.1 Site Description.....	3
3.2 Building Description(s).....	3
3.3 Utilities and Building Services.....	3
4.0 RECORDS REVIEW.....	4
4.1 Review of Aerial Photographs and Historical Mapping.....	4
4.2 Title Search and Assessment Rolls.....	4
4.3 CGI Information.....	7
4.4 EcoLog ERIS Information.....	8
4.5 MOE Databases.....	8
4.6 Water Well Records.....	8
4.7 MNR Natural Areas Database.....	8
4.8 Regulatory Information.....	9
4.8.1 Request for Information: Technical Standards and Safety Authority.....	9
4.8.2 Request for Information: The Ontario Ministry of the Environment.....	9
4.8.3 Request for Information: Region of Peel Sewer Use By-law.....	9
4.8.4 Request for Information: Hydro PCB Inquiry.....	9
4.9 Review of Previous Reports.....	10
4.9.1 Geotechnical Investigation (Soil-Eng Limited, 1987).....	10
4.9.2 Phase I ESA (McClymont & Rak Engineers Inc., 2000).....	10
4.10 Property Management Records.....	10
4.11 Agreement of Purchase and Sale.....	11
4.12 Review of Geologic Mapping.....	11
4.12.1 References.....	11
4.13 Review of Topographic Mapping.....	11
4.14 Review of Other Historical Information.....	11
5.0 SITE VISIT.....	12
5.1 General.....	12
5.2 Limitations.....	12
5.3 Property Use.....	12
5.4 Observations of Adjoining Properties.....	12
5.5 Building Description(s).....	13
5.6 Hazardous Materials.....	13
5.7 Unidentified Substances.....	13
5.8 Above Ground Storage Tanks.....	13
5.9 Underground Storage Tanks.....	13

5.10	Storage Containers.	13
5.11	Stains and Odours.	13
5.12	Potable Water Supply.	14
5.13	Special Attention Items.	14
5.13.1	Asbestos.	14
5.13.2	Polychlorinated Biphenyls (PCB's).	14
5.13.3	Lead.	14
5.13.4	Ozone-Depleting Substances.	14
5.13.5	Urea Foam Formaldehyde Insulation (UFFI).	14
5.13.6	Herbicide and Pesticide Use.	14
5.13.7	Radioactive Materials.	15
5.13.8	Mould.	15
5.14	Heating and Cooling.	15
5.15	Drains and Sumps.	15
5.16	Mechanical Equipment.	15
5.17	Exterior Site Conditions.	15
5.18	Roof(s).	16
5.19	Wells.	16
5.20	Sewage Disposal.	16
5.21	Pits and Lagoons.	16
5.22	Fill Materials.	16
5.23	Waste Management.	16
5.24	Stressed Vegetation.	17
5.25	Waste Water.	17
5.26	Watercourses, Ditches, or Standing Water.	17
5.27	Roads, Parking, Facilities and Right of Ways.	17
6.0	INTERVIEWS	18
6.1	Site Personnel.	18
6.2	Third Parties.	18
6.3	Government Officials.	18
7.0	CONCLUSIONS	19
8.0	RECOMMENDATIONS.	21
9.0	QUALIFICATIONS OF THE ASSESSORS.	22
10.0	LIMITATIONS AND USE OF REPORT.	23

Figures:

Site Location Plan.	Figure 1
Site Plan.	Figure 2

Appendices:

Photocopies of Historical Maps and Aerial Photographs.	Appendix A
Photographs.	Appendix B

1.0 INTRODUCTION

Terraprobe was retained by Mondiale Development Ltd. to conduct a Phase I Environmental Site Assessment (ESA) of the property identified as Part of Lot 1, Concession 1 WHS, designated as Parts 2 to 6 on Plan 43R-24436 and Part 1 on Plan 43R-24983, in the City of Mississauga, Ontario. The general location of the property is presented in Figure 1. The lands lie west of Hurontario Street and east of Cooksville Creek.

The subject property is irregular in shape and covers an area of approximately 9.9 hectares (24.4 acres). The study site consists of open grass and shrub covered lands. The surrounding area is a mix of residential and commercial land uses. Site features are presented in the Site Plan, Figure 2.

The purpose of the study was to assess the past uses and current condition of the property with respect to possible environmental liabilities in anticipation of proposed development of the site. The environmental study included an assessment of the likelihood that the environmental quality of the soil and ground water at the site may have been adversely affected by past and present practices at the site, and/or from the surrounding properties prior to development.

The Phase I ESA was completed to satisfy the intent of the requirements, methodology and practices described in CSA Standard Z768-01. Sampling and analysis of soil, ground water and/or other materials (i.e. construction materials, air) for the purpose of assessing environmental quality were not carried out as part of the Phase I ESA.

2.0 SCOPE OF WORK

2.1 Site History Review

The following tasks were completed during the review of the historical development of the subject property:

- a review of available archival information for the site including aerial photographs, topographic mapping, and available historical maps and drawings;
- a review of geological and hydrogeological information in published government maps and/or reports;
- a review of published Ministry of the Environment (MOE) directories related to registered PCB storage sites and active and closed landfill sites; and
- interviews with individuals with knowledge of past or current site operations.

In addition, requests were made to various regulatory agencies to establish the status of the subject property with those agencies.

2.2 Site Reconnaissance Inspection

The following issues were reviewed/assessed during the site reconnaissance inspection:

- review of activities and practices (including waste management) currently carried out on the subject property
- assessment for the potential presence of materials that contain friable and non-friable asbestos
- assessment for the potential presence of PCB containing electrical equipment
- evidence of past waste disposal or landfill on the subject property
- presence of existing or former above ground and/or underground storage tanks
- assessment for the potential presence of hazardous or toxic materials
- evidence of stained/odorous soils and stressed vegetation.

In addition, a cursory inspection of adjacent properties was completed to assess the potential for operations being carried out on those properties to impact on the environmental condition of the subject property.

3.0 SITE OVERVIEW

3.1 Site Description

The general location of the subject property is shown on Figure 1. The subject property is located west of Hurontario Street and north of Eglinton Avenue West, in the City of Mississauga, Ontario. The property is irregular in shape and covers an area of approximately 9.9 hectares (24.4 acres). The western boundary of the lands are a municipal right of way containing Cooksville Creek and the lands north comprise subdivided residential lands. There is an Esso gas station at the immediate corner of Eglinton Avenue West and Hurontario Street that is not part of the property.

The study site consists in the main of open grass and shrub covered lands. There are low lands located in the northeast and east central portions of the property including what was a dug pond that contain standing water and cattails. The general layout of the property is shown on the attached Figure No. 2.

The site generally slopes down to the west, towards Cooksville Creek. The site is hummocky and there is a steep slope to the west in the central portion of the site. Site photographs are presented in Appendix B.

3.2 Building Description(s)

No buildings were located on the subject property at the time of site inspection. There were the remains of two buildings found. One near the northern edge of the property and one in the east central portion of the property. All that remains of these buildings are foundations and slabs. There is a remnant of an asphaltic concrete drive way associated with the east central foundation slab. The approximate locations of these features are shown on Figure No. 2.

3.3 Utilities and Building Services

The site was apparently unserviced at the time of site inspection.

4.0 RECORDS REVIEW

4.1 Review of Aerial Photographs and Historical Mapping

Aerial photographs dating back to 1954 and Ontario Base mapping (Ministry of Natural Resources; Ontario Base Map, air photography 1982) were reviewed. Photocopies of the documents are compiled in Appendix A. These documents provide a visual record of the physical conditions on the subject property. The following summarizes development of the subject property, based on these sources of information.

Reference	Subject Property	Surrounding Area
1954 Air Photo	Interpreted as rural agricultural in use. Several farm buildings are located in the east central portion of the site, fronting onto Hurontario St. There is a building located near the north end of the property in the middle. A house is located at the southwest corner of the site, fronting onto Eglinton Ave W.	Interpreted as rural/agricultural in land use
1971 Air Photo	The house at the southwest corner of the property is no longer present.	A building has been constructed at the northwest corner of Hurontario St and Eglinton Ave W
1978 Air Photo	No change	No change
1982 Ontario Base Map	No change	No change

The review of the historical map and aerial photographs indicates that the subject property was agricultural property since before 1954. Several farm buildings were located in the north and east central portion of the subject property since prior to 1954 until at least 1982. A house was located at the southwest corner of the property in 1954, but was no longer present in 1971. A building was constructed at the northwest corner of Hurontario Street and Eglinton Avenue West, where the ESSO service station is currently located, between 1954 and 1971. Residential and commercial development of the surrounding area began after 1982.

4.2 Title Search and Assessment Rolls

The Chain of Title records, dating back to 1826, were provided by Accu-Search Limited (a professional title services firm). Six separate chains describe the past ownership of the various portions of the property, as follows:

Part 2 on Plan 43R-24436

Year	Owner
Apr 5, 2007 to Present	Pinnacle International (Ontario) Ltd.
Aug 10, 1998 - Apr 5, 2007	Longacres Developments Ltd.
Dec 18, 1987 - Aug 10, 1998	Poultney Developers Inc.
Dec 31, 1979 - Dec 18, 1987	Paul Horvat Investments Limited
Aug 1, 1973 - Dec 31, 1979	Gitto Electric & Construction Limited
Dec 16, 1963 - Aug 1, 1973	Newton Lake and Katherine Lake
May 16, 1962 - Dec 16, 1963	Donald E. Dean and Frances M. Dean
Oct 6, 1949 - May 16, 1962	Norman R. Dean
Aug 6, 1949 - Oct 6, 1949	Henry Struve
Oct 8, 1948 - Aug 6, 1949	Edward F. Lyons
May 1, 1947 - Oct 8, 1948	Henry Struve
Oct 17, 1826 - May 1, 1947	George Winter

Part 3 on Plan 43R-24436

Year	Owner
Apr 5, 2007 to Present	Pinnacle International (Ontario) Ltd.
Aug 10, 1998 - Apr 5, 2007	Longacres Developments Ltd.
Dec 18, 1987 - Aug 10, 1998	Groveton Investors Inc.
Feb 18, 1987 - Dec 18, 1987	Carry-On Investments Limited
Oct 22, 1962 - Feb 18, 1987	Robert H. Bull and Betty M. Bull
Aug 16, 1948 - Oct 22, 1962	Anna Hosinec and George Hosinec
May 1, 1947 - Aug 16, 1948	Henry Struve
Oct 17, 1826 - May 1, 1947	George Winter

Part 4 on Plan 43R-24436

Year	Owner
Apr 5, 2007 to Present	Pinnacle International (Ontario) Ltd.
Aug 10, 1998 - Apr 5, 2007	Longacres Developments Ltd.
Dec 18, 1987 - Aug 10, 1998	749375 Ontario Ltd.
Aug 16, 1948 - Dec 18, 1987	Anna Hosinec and George Hosinec
May 1, 1947 - Aug 16, 1948	Henry Struve
Oct 17, 1826 - May 1, 1947	George Winter

Part 5 on Plan 43R-24436

Year	Owner
Apr 5, 2007 to Present	Pinnacle International (Ontario) Ltd.
Aug 10, 1998 - Apr 5, 2007	Longacres Developments Ltd.
Dec 18, 1987 - Aug 10, 1998	749375 Ontario Ltd.
Jan 3, 1951 - Dec 18, 1987	James Hosinec
Aug 16, 1948 - Jan 3, 1951	Anna Hosinec and George Hosinec
May 1, 1947 - Aug 16, 1948	Henry Struve
Oct 17, 1826 - May 1, 1947	George Winter

Part 6 on Plan 43R-24436

Year	Owner
Apr 5, 2007 to Present	Pinnacle International (Ontario) Ltd.
Aug 10, 1998 - Apr 5, 2007	Longacres Developments Ltd.
Dec 18, 1987 - Aug 10, 1998	749376 Ontario Ltd.
Mar 5, 1953 - Dec 18, 1987	Michael Hosinec
Aug 16, 1948 - Mar 5, 1953	Anna Hosinec and George Hosinec
May 1, 1947 - Aug 16, 1948	Henry Struve
Oct 17, 1826 - May 1, 1947	George Winter

Part 1 on Plan 43R-24983

Year	Owner
Apr 5, 2007 to Present	Pinnacle International (Ontario) Ltd.
Sep 29, 2000 - Apr 5, 2007	Longacres Developments Ltd.
Jan 19, 1988 - Sep 29, 2000	587325 Ontario Limited (in trust) - name change to Antrex Development Corporation on Aug 22, 2000
Feb 28, 1986 - Jan 19, 1988	City of Mississauga
Dec 1, 1980 - Feb 28, 1986	Young S. Kim and Ock H. Kim
Dec 1, 1980 - Dec 1, 1980	Elizabeth Momat (exec. Amanda Ormond Estate)
Oct 29, 1952 - Dec 1, 1980	Walter M. Ormond and Amanda Ormond
Jul 12, 1952 - Oct 29, 1952	Iwan Szlapak and Zoja Szlapak
May 10, 1951 - Jul 12, 1952	Alexander Gural and Paul Melnyk
Sep 25, 1950 - May 10, 1951	Robert William Davies and Ann Davies
Jan 20, 1949 - Sep 25, 1950	Phyllis T. Freeman
May 1, 1947 - Jan 20, 1949	Henry Struve
Oct 17, 1826 - May 1, 1947	George Winter

The review of ownership records indicates that the property was originally divided into six parcels. The parcels were owned by private individuals until between 1973 and 1987. The parcels have been owned by various companies since that time, but have remained undeveloped. The current owner, Pinnacle International (Ontario) Ltd., acquired ownership of the property in 2007.

4.3 CGI Information

The CGI Environmental Services (formerly Insurers' Advisory Organization - IAO) is a private organization which provides risk information to insurers, private corporations, and risk managers. The CGI has property plans, building surveys, and inspection reports on file for many properties in many urban areas. The property is not developed. Therefore, it is unlikely CGI would have records for the subject property. CGI was not contacted for a search on the subject property.

4.4 EcoLog ERIS Information

EcoLog Environmental Risk Information Services Ltd. (ERIS) is an organization that searches various government and private environmental databases. A search of the EcoLog ERIS Ltd. database was not requested for the subject site. Sufficient environmental information has been provided from other sources during this investigation.

4.5 MOE Databases

Terraprobe Limited reviewed directories published by the MOE related to registered PCB storage sites and waste disposal sites. The following summarizes the information presented in those documents:

- The review of the MOE's *Ontario Inventory of PCB Storage Sites (July 1993)* indicated that the subject property is not registered as a licensed PCB storage facility.
- The review of the MOE *Waste Disposal Site Inventory (June 1991)* did not identify the subject property as an active or closed waste disposal facility. Information in that directory also indicated that the subject property has no recorded history of use as a coal gasification plant or an industrial site producing and/ or using coal tar and related products.

4.6 Water Well Records

A review of MOE water well records for the subject site was conducted. No water wells were listed for the subject property.

4.7 MNR Natural Areas Database

Terraprobe Limited reviewed the Natural Areas Database published by the Ministry of Natural Resources. The database lists areas of scientific, heritage, cultural, and habitat significance in Ontario. No natural areas are listed within 1 km of the subject property.

4.8 Regulatory Information

4.8.1 Request for Information: Technical Standards and Safety Authority

The Technical Standards and Safety Authority (TSSA) was contacted by telephone to determine if that agency has information on file with respect to the subject property. The TSSA maintains records related to above ground and underground storage tanks for petroleum related products. It was reported that no information related to the subject property was available on file with the TSSA.

4.8.2 Request for Information: The Ontario Ministry of the Environment

A written request was submitted to the MOE to determine if that agency has information on file with respect to the subject property. Specifically, the MOE was asked what information they have regarding historic spills, orders and complaints, as follows:

- Has the MOE ever issued any approvals, permits or licenses for this address, including registration of the subject property as a PCB storage facility?
- Does the subject property have a current Waste Generator Number?
- Has the MOE ever issued any control orders or violation notices with respect to the subject property?
- Does the MOE have any knowledge that the subject property has ever been used or is currently being used as a waste disposal site?

| | | | | | | | | |

At the time of preparation of this report, the response from the MOE had not yet been received. On receipt, a copy of the outstanding response will be forwarded to Mondiale Development Ltd.

4.8.3 Request for Information: Region of Peel Sewer Use By-Law

The subject property is not currently serviced by municipal sewers. Therefore, the Region of Peel was not contacted to determine whether any infractions to the Sewer Use By-Law had been recorded for the subject property.

4.8.4 Request for Information: Hydro PCB Inquiry

A PCB inquiry to the local hydro company was not made. There were no utility owned transformers or electrical equipment which may contain PCBs identified on the subject property.

4.9 Review of Previous Reports

A previous Geotechnical Investigation report and Phase I Environmental Site Assessment report, were provided for review. Each of these reports are summarized below:

4.9.1 Geotechnical Investigation (Soil-Eng Limited, November 1987)

A Geotechnical Investigation was conducted of the subject property in 1987 by Soil-Eng Limited. The results of the investigation are presented in the report entitled "*A Soil Investigation for a Proposed Apartment Building Complex & a Retail & Office Development, N.W. Quad. of Eglinton Avenue West & Hurontario Street, City of Mississauga*" dated November 1987 (Soil-Eng. Reference No. 8710-S.58). The investigation comprised 10 boreholes across the northern half of the subject property. The review of the investigation provided the following information:

- Two houses were located on the property at the time of the investigation (1987).
- Site stratigraphy general consists of silty clay till underlain by shale bedrock. The shale bedrock was generally encountered at a depth of 1.5 to 4.8 m below ground surface.
- Fill materials were encountered at the surface of some boreholes in the east central portion of the site. The fill materials generally consisted of silty clay soils. No odours or staining were noted in the any of the samples. Construction debris was noted in a fill sample obtained at one borehole location in the southern portion of the site.
- Ground water was encountered at three borehole locations at depths ranging from to approximately 1.8 to 5.5 m below ground surface.

4.9.2 Phase I ESA (McClymont & Rak Engineers, Inc. 2000)

A Phase I ESA was conducted for the subject property and the property to the west of Cooksville Creek in 2000. The results of this investigation are presented in the report entitled "*Phase I Environmental Site Assessment - Vacant Lands, Hurontario Street & Eglinton Avenue West, Mississauga, Ontario*" dated February 10, 2000 (McClymont & Rak Reference No. E2225). No issues of environmental concern were identified in the Phase I ESA.

4.10 Property Management Records

No property management records were available for review.

4.11 Agreement of Purchase and Sale

The agreement of purchase and sale for the subject property was not provided for review.

4.12 Review of Geologic Mapping

Based on published geological information for the general area, the near surface overburden soil at and in the vicinity of the subject property generally consists of Halton Till, comprising a clay and silt matrix. Beneath the sequence of soil deposits is bedrock of the Georgian Bay Formation.

It should be noted that the subsurface soil, rock and ground water conditions described above represent generalized conditions only, and should not be considered site specific.

4.12.1 References

Barnett, P.J. Cowan, W.R. and Henry, A.P. 1991, Quaternary Geology of Ontario, Southern Sheet; Ontario Ministry of Northern Development and Mines, Map No. 2556, scale 1:1 000 000.

Ontario Geological Survey 1991; Bedrock Geology of Ontario, Southern Sheet; Ontario Geological Survey, Map No. 2544; scale 1:1 000 000.

4.13 Review of Topographic Mapping

Based on published topographic mapping, the subject property ground surface elevation is approximately 170 m above mean sea level. Regionally, the ground surface slopes to the southeast.

Regional ground water flow is expected to be in a southeasterly direction, toward Lake Ontario. Locally, near surface ground water flow may be influenced by underground structures (i.e. service trenches) or surface watercourses, such as Cooksville Creek which borders the site to the west.

4.14 Review of Other Historical Information

No other historical information was available for the subject property.

5.0 SITE VISIT

5.1 General

Visual reconnaissance inspections of the subject property was conducted by Terraprobe staff between June 11, 2008 and August 14th, 2008. These efforts work included a visual inspection of the accessible portions of the property. The general arrangement of the subject property at the time of the site inspection is presented on the Site Plan, Figure No. 2. Site photographs are provided in Appendix B.

5.2 Limitations

The property was heavily vegetated at the time of site inspection. The visual inspection of the property was limited to the areas that were accessible and visible through the vegetative cover.

5.3 Property Use

The subject property was vacant at the time of site inspection. The general layout of the property is shown on the attached Figure 2.

5.4 Observations of Adjoining Properties

During the site reconnaissance inspection, the following land uses were noted adjacent to the subject site:

North: - Residential subdivision

South: - Eglinton Avenue then commercial plaza

- A gas station is located at the southeast corner of the property

West: - Cooksville Creek then vacant lands

East: - Hurontario Street then commercial development

- A gas station is located at the southeast corner of the property.

A gas station is located at the southeast corner of the property, which contains underground fuel storage tanks. The potential exists that the soil and/or ground water on the subject site adjacent to the gas station has been impacted by petroleum hydrocarbons.

5.5 Building Description(s)

No buildings were located on the subject property. There are concrete slabs and foundations in evidence of former building locations as shown on Figure No. 2.

5.6 Hazardous Materials

No obvious hazardous materials were identified on the subject property.

5.7 Unidentified Substances

No unidentified substances were observed on the subject property.

5.8 Above Ground Storage Tanks

No evidence of above ground storage tanks was noted on the subject property.

5.9 Underground Storage Tanks

No evidence of an underground storage tank was noted on the subject property. Since there were rural residential buildings on the property at one time. The possibility that one or more septic tanks could be found is recognized.

5.10 Storage Containers

No storage containers were noted on the subject property.

5.11 Stains and Odours

No staining or odours were noted on the subject property.

5.12 Potable Water Supply

The subject site is not currently supplied with potable water. The surrounding area is supplied with municipal water which is obtained from Lake Ontario.

5.13 Special Attention Items

5.13.1 Asbestos

There are no buildings located on the property; therefore, it is unlikely that asbestos-containing building materials, such as insulation, ceiling tiles, plaster and the like, are present. Based on our visual inspection, no evidence of asbestos containing materials was present on the property.

5.13.2 Polychlorinated Biphenyls (PCB's)

Based on our site inspection, no transformers or other electrical equipment were observed on the property which may contain PCB.

5.13.3 Lead

There are no buildings located on the property; therefore, it is unlikely that lead containing materials are present on the property.

5.13.4 Ozone Depleting Substances

Based on our site inspection, no refrigeration or air conditioning equipment was observed on the property which may contain CFC's.

5.13.5 Urea-Formaldehyde Foam Insulation (UFFI)

No buildings are located on the property; therefore, it is unlikely UFFI exists on the property.

5.13.6 Herbicide and Pesticide Use

The property was historically agricultural in use. Herbicides and pesticides may have been used on the property. Based on the observed condition of the grass lands and shrubs now on the site, it has been many years since these lands were actively farmed. Storage of pesticides and herbicides was not observed during site inspection.

5.13.7 Radioactive Materials

Based on local geological formations in the area it is unlikely the site is exposed to natural sources of radiation such as radon or uranium. Man made sources of radioactive materials were not observed during the site inspection. It should be noted that a radiometric survey was not conducted during this investigation.

5.13.8 Mould

As there are no buildings located on the property and therefore mould in the context of building materials is not present.

5.14 Heating and Cooling

There were no buildings on the site that are heated or cooled.

5.15 Drains and Sumps

No drains or sumps were observed on the property.

5.16 Mechanical Equipment

No hydraulic or mechanical equipment was observed on the property.

5.17 Exterior Site Conditions

The site generally consisted of open grass covered fields and shrub covered lands. There are the remnants of a dug pond at the east central portion of the site and some low wet land areas located in the northeast and east central portions of the property. Cooksville Creek borders the site to the west. The site general slopes down to the west, toward Cooksville Creek.

A well was observed in the north central portion of the site (as shown on Figure 2). The well was open and debris had been discarded down the well. Two concrete foundations and buried construction debris were observed in the vicinity of this well. Although not directly observed, buried foundations and construction materials can be expected in the east central portion of the site, where the former farm buildings were located.

5.18 Roof(s)

There were no buildings located on the property.

5.19 Wells

A large diameter shallow dug well was found in the north central portion of the property, as shown on Figure No. 2. The well was open and debris had been discarded down the well. This well is a hazard and potential liability and it should be abandoned in accordance with O.Reg. 903 without delay.

5.20 Sewage Disposal

Sewage is not generated at the subject site. Since there were buildings on the site historically there is the possibility that old tile fields may be found.

5.21 Pits and Lagoons

As noted a dug pond remnant exists on the east side of the site. Otherwise no pits or lagoons were identified on the subject property.

5.22 Fill Materials

Fill materials were identified in the east central portion of the property during a Geotechnical Investigation conducted in 1987, as described in Section 4.9.1. The fill materials generally consisted of silty clay soils. No odours or staining were noted in any of the samples. Construction debris was noted in a fill sample obtained at one borehole location in the southern portion of the site. The site has the appearance of having been raised with fills in the southwest and central portions of the property.

5.23 Waste Management

Wastes are not currently generated on the subject property. There is some debris on the property which is randomly discarded. There were found two different collections of debris constituting “forts or club houses” constructed by children and a tree house.

5.24 Stressed Vegetation

Vegetation observed on the subject property did not appear stressed.

5.25 Waste Water

Waste water is not generated at the subject site.

5.26 Watercourses, Ditches, or Standing Water

Cooksville Creek borders the property to the east and wetland features were located in the northeastern and east central portions of the site. Where property is located within 30 m of a watercourse, the lands are considered “sensitive” in the context of Ontario Regulation 153 and the Table 1 Standards of the *Soil, Ground Water, and Sediment Standards* for use under Part XV.I of the *Environmental Protection Act of Ontario* will apply to that portion of the site, as opposed to the Standards appropriate to the intended land use.

5.27 Roads, Parking Facilities and Right of Ways

Eglinton Avenue West borders the site to the south and Hurontario Street borders the site to the east. No parking lots or obvious right of ways are located on the property. There is a remnant of an asphalt surfaced drive way that can be found amongst the trees in the east central portion of the site.

6.0 INTERVIEWS

6.1 Site Personnel

No site personnel were interviewed during this investigation.

6.2 Third Parties

No third parties were interviewed during this investigation.

6.3 Government Officials

No government officials were interviewed during this investigation.

Several regulatory requests for information were made in writing to various regulatory agencies. Responses to our requests are summarized in section 4.9.

7.0 CONCLUSIONS

On behalf of Mondiale Development Ltd., Terraprobe Limited completed a Phase I Environmental Site Assessment (ESA) for a property identified as Part of Lot 1, Concession 1 WHS, designated as Parts 2 to 6 on Plan 43R-24436 and Part 1 on Plan 43R-24983, in the City of Mississauga, Ontario. The objectives of the investigation were to review historical information and document existing conditions to identify obvious or potential environmental concerns. The work included a review of the historical development/use of the subject property and a visual inspection of the property.

- The review of the historical map and aerial photographs indicates that the subject property was in agricultural use from before 1954. Several farm buildings were located in the east central and norther portion of the subject property since prior to 1954 until at least 1982 there are remnants of the foundations and slab from these structures on site. A house located at the southwest corner of the property in 1954, but was no longer present in 1971 and the remains may be buried in fill in this area.
- The regulatory review did not identify any issues of environmental concern. It was reported that there was no information related to fuel storage tanks on the subject property on file with the TSSA. There was no reference to the subject property in either the *Ontario Inventory of PCB Storage Sites (July 1993)* or the *Waste Disposal Site Inventory (June 1991)*.
- Cooksville Creek borders the property to the west. The portions of the property located within 30 m of the watercourse are considered environmentally sensitive in the context of Ontario Regulation 153 and the Table 1 Standards of the *Soil, Ground Water, and Sediment Standards* for use under Part XV.I of the *Environmental Protection Act of Ontario* will apply to those portions of the site. The lands located within 30 m of the watercourse could be treated as severed so that the Table 1 Standards would only apply the portion of the site within 30 m, and appropriate land use standards could be used for the remainder of the site.
- Fill materials were identified in the east central portion of the property during a Geotechnical Investigation conducted in 1987. The fill materials generally consisted of silty clay soils. No odours or staining were noted in the any of the samples. Construction debris was noted in a fill sample. There is also likely fill in the southern and western end of the site.

- A gas station is located adjacent to the southeast corner of the property, which contains underground fuel storage tanks. The potential exists that the soil and/or ground water on the subject site adjacent to the gas station has been impacted by petroleum hydrocarbons.
- There was a large diameter shallow well found in the north central portion of the site. This open well casing about a metre in diameter is a hazard which should be addressed without delay. Since this is an identifiable well, even though no well record exists, the well should be abandoned by a licensed well driller in accordance with Ontario Reg. 903.

8.0 RECOMMENDATIONS

Based on the results of the Phase I ESA, and given the nature of historical land use on the subject property, the following recommendations are made:

- Fill materials are present on the site. A subsurface investigation should be conducted to determine the composition and quality of these fill materials.
- A gas station is located at the southeast corner of the property. A subsurface investigation should be conducted to determine if the soil and/or ground water on the subject site adjacent to the gas station has been impacted by petroleum hydrocarbons.
- All buried debris and foundations should be excavated and properly disposed of prior to development of the property.
- The well identified on the property is a hazard which should be addressed without delay. Since this is an identifiable well, even though no well record exists, the well should be abandoned by a licensed well driller in accordance with Ontario Reg. 903.

9.0 QUALIFICATIONS OF THE ASSESSORS

9.1 Corporate

Terraprobe Limited is a consulting engineering firm that was established in 1977. The head office is located in Brampton, Ontario. Branch office locations include Stoney Creek, Barrie, and Sudbury. Terraprobe Limited holds certificates of practices / licences to provide environmental consulting services with both the Professional Engineers of Ontario and the Association of Professional Geoscientists of Ontario.

9.2 Professional Staff

Mr. Tim Orpwood, M.A.Sc., P.Geo., P. Eng. is a Principal Engineer with over 31 years of experience in the field of geoscience and environmental assessment. Mr. Orpwood is a Principal of Terraprobe Limited and is responsible for geo science and engineering projects. Mr. Orpwood has provided consulting services to various clients both in the private and public sector in Ontario and internationally since 1977. He has directed several hundred environmental investigations including from Phase I and Phase II Environmental Site Assessments and site remediation projects throughout Ontario.

10.0 LIMITATIONS AND USE OF REPORT

This report was prepared for Mondiale Development Ltd. and their legal counsel, and is intended to provide Mondiale Development Ltd. with an assessment of the environmental conditions on the property identified as Part of Lot 1, Concession 1 WHS, designated as Parts 2 to 6 on Plan 43R-24436 and Part 1 on Plan 43R-24983 in the City of Mississauga, Ontario.

Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. Terraprobe Limited accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report, including, consequential financial effects on transactions or property values, or requirements for follow-up actions and costs.

The assessment should not be considered a comprehensive audit that eliminates all risks of encountering environmental problems. The information presented in this report is based on information collected during the completion of the Phase I Environmental Site Assessment by Terraprobe Limited. It is based on the conditions on the subject property at the time of the site inspection supplemented by a review of historical information to assess the environmental conditions on the subject property, as reported herein. Sampling and analysis of soil, ground water or any other material was not carried out as part of this assessment.

In assessing the environmental condition/history of the subject property, Terraprobe Limited has relied in good faith on information provided by others, as noted in this report, and has assumed that the information provided by those individuals is factual and accurate. Terraprobe Limited accepts no responsibility for any deficiency, misstatement or inaccuracy in this report resulting from the information provided by those individuals.

There is no warranty expressed or implied by this report regarding the environmental status of the subject property. Professional judgement was exercised in gathering and analysing information collected by our staff, as well as that submitted by others. The conclusions presented are the product of professional care and competence, and cannot be construed as an absolute guarantee.

In the event that during future work new information regarding the environmental condition of the subject property is encountered, or in the event that the outstanding responses from the regulatory agencies indicate

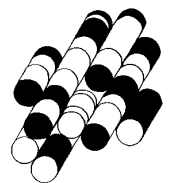
outstanding issues on file with respect to the subject property, Terraprobe Limited should be notified in order that we may re-evaluate the findings of this assessment and provide amendments, as required.

Terraprobe Limited

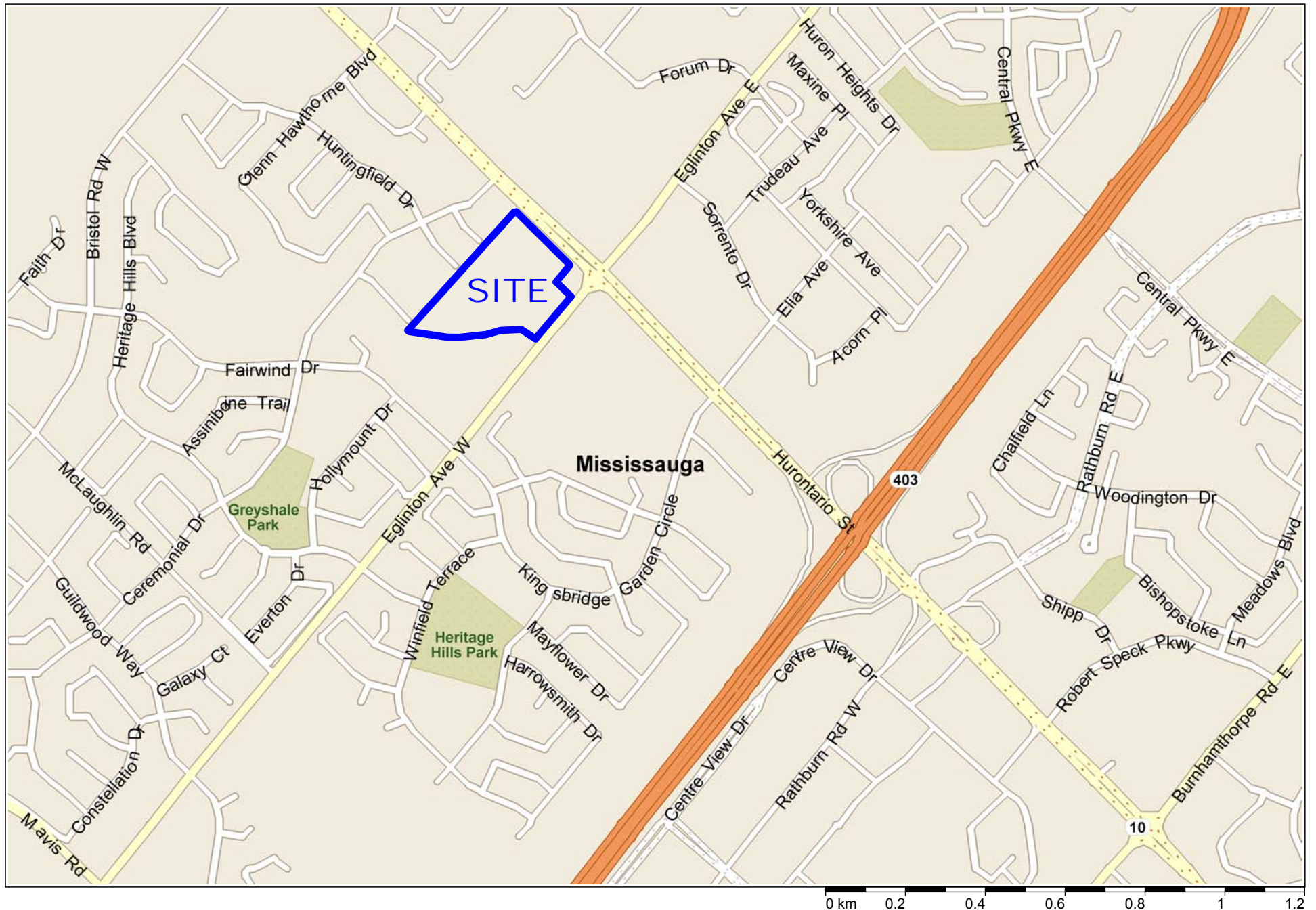
Tim Orpwood, M.A.Sc, P.Geo., P.Eng.
Principal

FIGURES

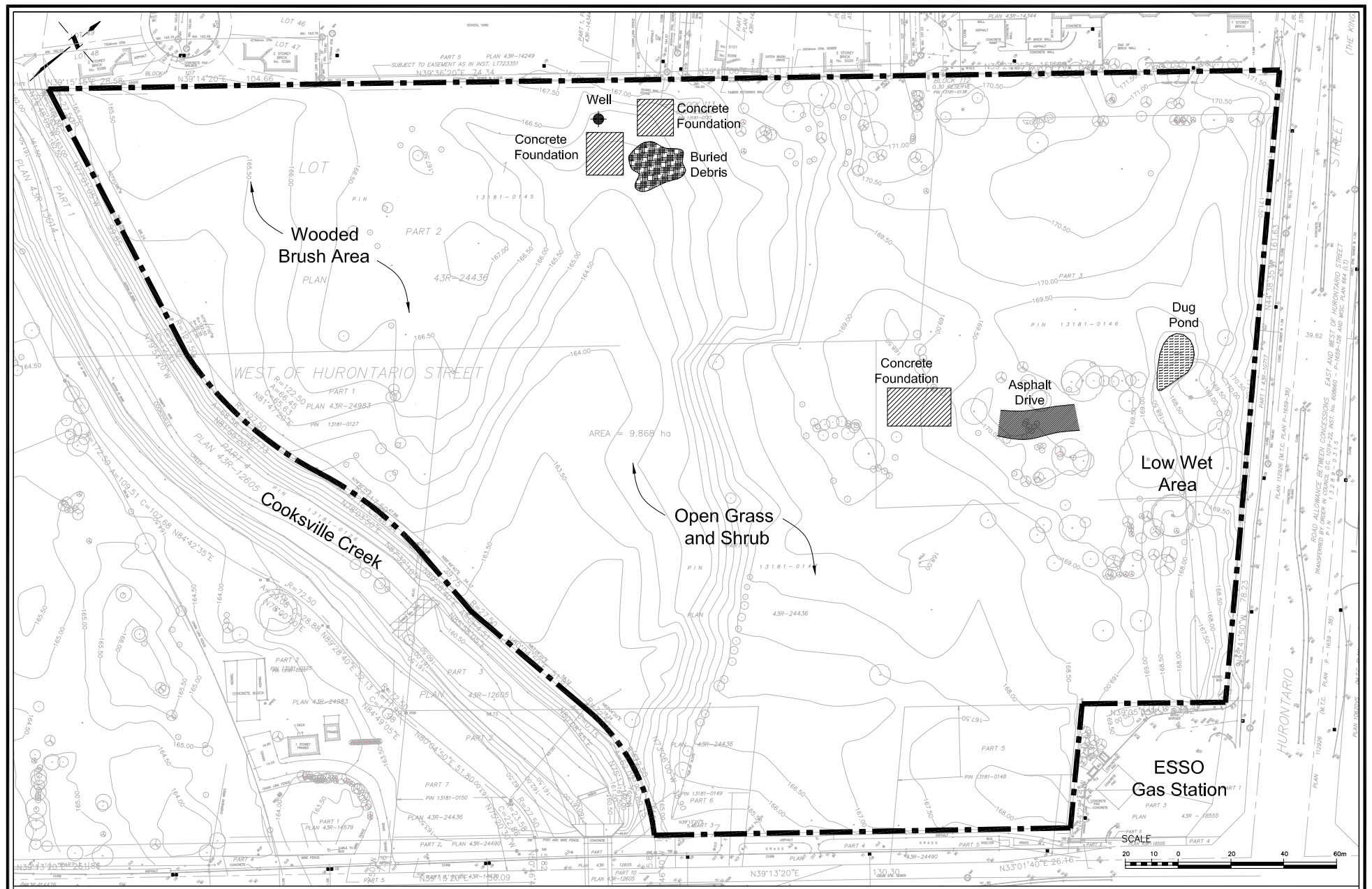
TERRAPROBE LIMITED



Hurontario Street & Eglinton Avenue West, Mississauga, Ontario



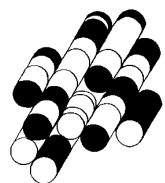
SITE LOCATION PLAN



SITE PLAN

APPENDIX A

TERRAPROBE LIMITED



C:\Documents and Settings\Admin\My Documents\AutoCAD\2008 DRAWINGS\1-08-3160 PHASE \1-08-3160.dwg, DB

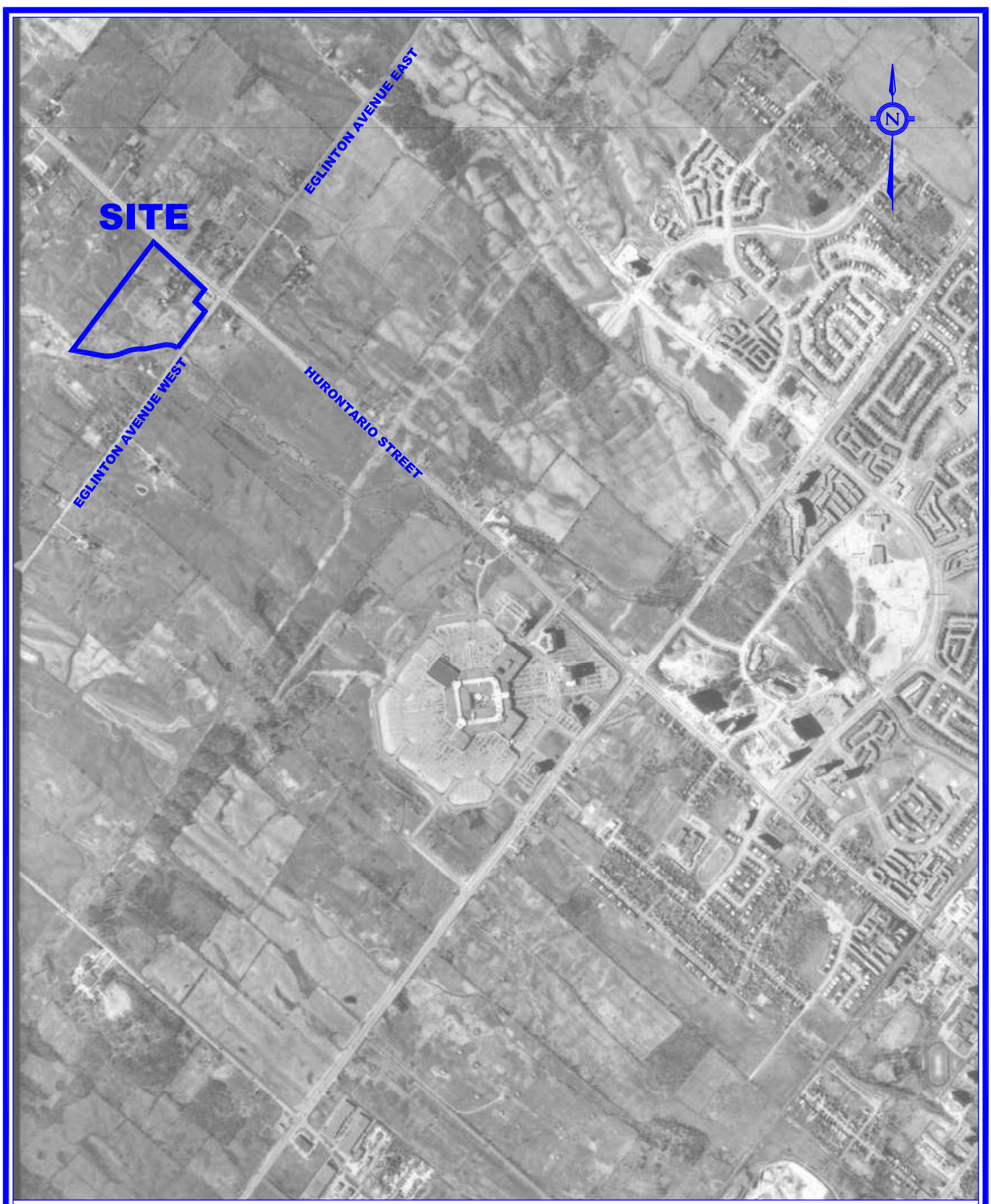


AERIAL PHOTOGRAPH – 1954



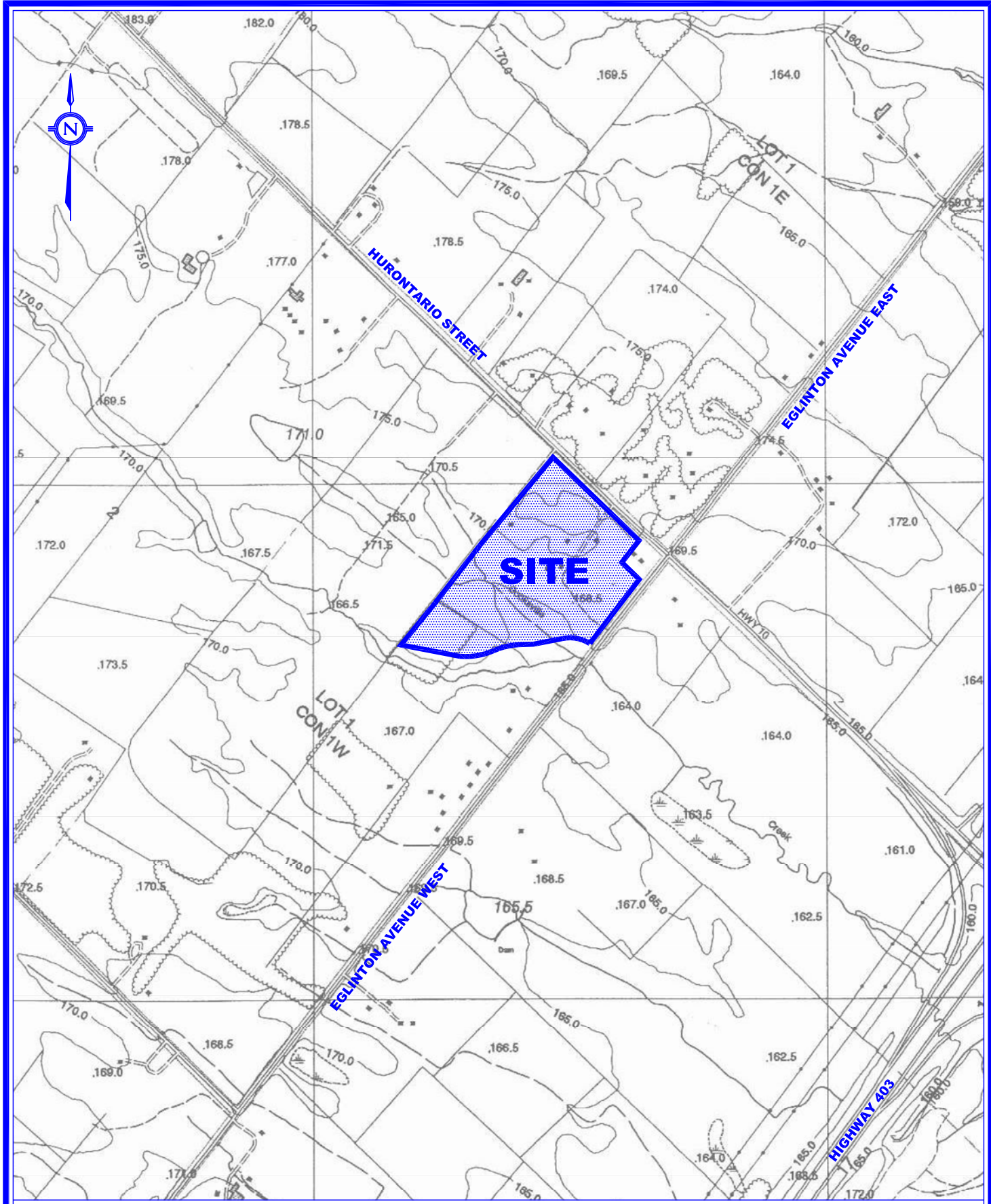
AERIAL PHOTOGRAPH – 1971

C:\Documents and Settings\Admin\My Documents\AutoCAD\2008 DRAWINGS\1-08-3160 PHASE \1-08-3160.dwg, DB



AERIAL PHOTOGRAPH – 1978

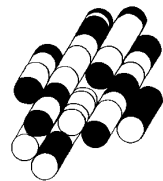
C:\Documents and Settings\Admin\My Documents\AutoCAD\2008 DRAWINGS\1-08-3160 PHASE \1-08-3160.dwg, DB



ONTARIO BASE MAP - 1982

APPENDIX B

TERRAPROBE LIMITED



Hurontario Street & Eglinton Avenue West, Mississauga, Ontario (East Parcel)



Photograph #1

View of the property, looking southwest.



Photograph #2

View of the property, looking southeast.



Photograph #3

Buried brick foundation located at the north end of the site.



Photograph #4

Buried metal debris at the north end of the site.



Photograph #5

Well located at the north end of the site.



Photograph #6

ESSO station located southeast of the subject site.



Terraprobe

*Consulting Geotechnical & Environmental Engineering
Construction Materials Engineering, Inspection & Testing*

**PHASE 2
ENVIRONMENTAL SITE ASSESSMENT
PART OF LOT 1 CONCESSION 1, WHS
DESIGNATED AS PARTS 2 TO 6 ON PLAN 43R-24436
AND PART 1 ON PLAN 43R-24983
CITY OF MISSISSAUGA, ONTARIO**

Prepared For: Mondiale Development Ltd.
6 Harbour Street
Toronto, ON M5J 3B1
Attention: Mr. Don Meola

File No. 1-08-3160
© **Terraprobe Limited**
October 23, 2008

Distribution of Report:
6 Copies Mondiale Development Ltd.
1 Copy Terraprobe Limited, Brampton

Terraprobe Limited

11 Indell Lane
Brampton, Ontario L6T 3Y3
(905) 796-2650 Fax: 796-2250

220 Bayview Drive, Unit 25
Barrie, Ontario L4N 4Y8
(705) 739-8355 Fax: 739-8369

1012 Kelly Lake Rd., Unit 1
Sudbury, Ontario P3E 5P4
(705) 670-0460 Fax: 670-0558
www.terraprobe.ca

903 Barton Street, Unit 22
Stoney Creek, Ontario L8E 5P5
(905) 643-7560 Fax: 643-7559

TABLE OF CONTENTS

EXECUTIVE SUMMARY	ii
1.0 INTRODUCTION	1
2.0 STUDY SCOPE AND PURPOSE	2
3.0 SITE AND PROJECT DESCRIPTION	3
3.1 Site Location and Description	3
3.2 Site Topography and Drainage	3
3.3 Site Geology and Hydrogeology	4
3.3.1 References	4
3.4 Summary of Previous Studies	4
3.4.1 Geotechnical Investigation (Soil-Eng Limited, November 1987)	4
3.4.2 Phase 1 ESA (McClymont & Rak Engineers, Inc., 2000)	5
3.4.3 Phase 1 ESA (Terraprobe Limited 2008)	5
4.0 STUDY PROCEDURE	6
4.1 Study Rationale	6
4.1.1 Borehole Locations and Soil Sampling	6
4.1.2 Monitoring Well Locations and Ground Water Sampling	7
4.1.3 Surface Water Sampling	7
4.2 Utility Clearance	7
4.3 Geophysical Survey	7
4.4 Limitations on Borehole Locations	7
4.5 Investigation Procedures	7
5.0 STUDY RESULTS	8
5.1 Soil Conditions	8
5.1.1 Summary	8
5.1.2 Surficial Materials and Fill	9
5.1.3 Halton Till	9
5.1.4 Sand and Silt	9
5.1.5 Bedrock	10
5.2 Ground Water Conditions	11
5.3 Chemical Characterization of Soil	11
5.3.1 Application of Regulatory Standards and Criteria	12
5.3.2 Soil Quality	12
5.3.3 Ground Water Quality	14
5.3.4 Quality Assurance/ Quality Control	14
6.0 CONCLUSIONS	15

Figures

Figure 1 - Site Location Plan

Figure 2 - Borehole Location Plan

Appendices

Appendix A	Borehole Logs
Appendix B	Summary of Field Investigation Procedures
Appendix C	Laboratory Certificates of Analyses Metals and Inorganics (Soil)
Appendix D	Laboratory Certificates of Analyses Petroleum Hydrocarbon and VOC (Soil)
Appendix E	Laboratory Certificates of Analyses Petroleum Hydrocarbon and VOC (Water)
Appendix F	Curricula Vitae of Study Team and Qualified Person
Appendix G	General Limitation and Use of Report

EXECUTIVE SUMMARY

Terraprobe was retained by Mondiale Development Ltd. to conduct a Phase 2 Environmental Site Assessment (ESA) of the property. The lands lie east of Cooksville Creek, west of Hurontario Street and north of Eglinton Avenue West in the City of Mississauga.

A Phase 1 Environmental Site Assessment of the Property was completed in August 18, 2008 by Terraprobe Ltd. The Phase 1 ESA report identified that under the requirements of Ontario Regulation 153, where a portion of the property is located within 30 metres of a watercourse the lands are defined as “environmentally sensitive”, and the Table 1 *Background* Standard is to be used to assess the soil and ground water quality as set out in *Soil, Ground Water, and Sediment Standards* for use under Part XV.I of the *Environmental Protection Act of Ontario*. The Table 1 Standard need only apply to the portion of the site within 30 metres of the watercourse and the generic land use standards could be used for the remainder of the site.

Fill materials were identified on the property during a Geotechnical Investigation conducted in 1987. A subsurface investigation was recommended to determine the composition and quality of these fill materials.

A gas station is located adjacent to the southeast corner of the property, which contains underground fuel storage tanks. A subsurface investigation was recommended to determine if the soil and/or ground water on the subject site adjacent to the gas station has been impacted by petroleum hydrocarbons.

The Phase II work programme consisted of a subsurface investigation fifteen exploratory boreholes. Two boreholes, next to the gas station lands, were completed with monitoring wells. Laboratory analyses for metals and inorganics were completed on 14 selected samples of soil. Two samples of soil, one from each of the boring next to the gas station, were assessed for concentrations of petroleum hydrocarbons and the volatile components benzene, toluene, ethyl benzene and xylene. Two samples of ground water, one from each of the wells installed next to the gas station, were assessed for concentrations of petroleum hydrocarbons and the suite of volatile organic compounds in ON Reg. 153.

The results of the investigation indicate that fill materials were encountered in seven of the fifteen borings made. The fill materials extended to depths of up to 2.4 metres below ground surface. Beneath the fill materials native soil consisting of hard glacial till is found.

- The results of chemical analyses of selected fill and undisturbed soil samples found that there are locations, Boreholes 1, 5 and 7 where soil exists on the site that has concentrations greater than the Table No. 1, Provincial Background criteria per *Soil, Ground Water, and Sediment Standards for use under Part XV.I of the Environmental Protection Act of Ontario*. None of these locations are

within 30 metres of the Cooksville Creek water course where the lands would be considered environmentally sensitive.

There is copper impact at the location of Borehole 7 in shallow fill and petroleum hydrocarbon impact at depth in this same location. Petroleum hydrocarbon impact is also present at the location of Borehole 5. There is salt impact in the undisturbed soil in the area of Borehole 1.

- The results of chemical analyses of selected fill and undisturbed soil samples found no locations on the site where soil metal, inorganic parameter, petroleum hydrocarbon or VOC concentrations are greater than the Table No. 2 residential land use criteria per *Soil, Ground Water, and Sediment Standards for use under Part XV.I of the Environmental Protection Act of Ontario*.
- The results of chemical analyses of ground water samples found no petroleum hydrocarbon or VOC concentrations greater than the Table No. 1 background criteria or the Table No. 2 residential land use criteria per *Soil, Ground Water, and Sediment Standards for use under Part XV.I of the Environmental Protection Act of Ontario*.

On the basis of these results, Terraprobe would, if requested, file a Record of Site condition for the lands which stipulates the site condition meets residential land use criteria as set out in Ontario Regulation 153.

The lands within 30 metres of Cooksville Creek would have to be addressed separately.

1.0 INTRODUCTION

Terraprobe was retained by Mondiale Development Ltd. to conduct a Phase 2 Environmental Site Assessment (ESA) of the property identified as part of Lot 1 Concession 1, WHS designated as Parts 2 to 6 on Plan 43R-24436 and Part 1 on Plan 43R-24983, in the City of Mississauga, Ontario. The general location of the property is presented in Figure 1. The lands lie east of Cooksville Creek and west of Hurontario Street. The subject property is irregular in shape and covers an area of approximately 9.9 hectares (24.4 acres). The majority of the study site comprises grass and shrub covered lands. Low wet land area is located in the northeast and east central portions of the property. Cooksville Creek borders the site to the west. The surrounding area was a mix of residential and commercial land uses. The surrounding area was predominantly residential in land use. Site features are presented in the Site Plan, Figure 2.

A Phase 1 Environmental Site Assessment of the Property was completed in August 18, 2008 by Terraprobe Ltd. The Phase 1 ESA report identified that Cooksville Creek borders the property to the west in lands owned by the Municipality. Under the requirements of Ontario Regulation 153, where a portion of the property is located within 30 metres of a watercourse the lands are defined as “environmentally sensitive”, and the Table 1 Background Standard is to be used to assess the soil and ground water quality as set out in Soil, Ground Water, and Sediment Standards for use under Part XV.I of the Environmental Protection Act of Ontario. The Table 1 Standard need only apply to the portion of the site within 30 metres of the watercourse and the generic land use standards could be used for the remainder of the site.

Several farm buildings were located in the east central and norther portion of the subject property since prior to 1954 until at least 1982 there are remnants of the foundations and slab from these structures on site. A house located at the southwest corner of the property in 1954, but was no longer present in 1971 and the remains may be buried in fill in this area. Fill materials were identified in the east central portion of the property during a Geotechnical Investigation conducted in 1987. The fill materials generally consisted of silty clay soils. No odours or staining were noted in the any of the samples. Construction debris was noted in a fill sample There is also likely fill in the southern and western end of the site. A subsurface investigation was recommended to determine the composition and quality of these fill materials.

A gas station is located adjacent to the southeast corner of the property, which contains underground fuel storage tanks. The potential exists that the soil and/or ground water on the subject site adjacent to the gas station has been impacted by petroleum hydrocarbons. A subsurface investigation was recommended to determine if the soil and/or ground water on the subject site adjacent to the gas station has been impacted by petroleum hydrocarbons.

The purpose of the Phase II ESA was to address the issues raised by the Phase 1 study and determine if the soil or ground water at the subject property has been environmentally impacted by the historical use of the site.

2.0 STUDY SCOPE AND PURPOSE

The potential for earth fill on the site, from unknown sources, to be environmentally impacted was recognized. The potential petroleum hydrocarbon impacts in the soil and ground water near the existing gas station was recognized.

The Phase II work programme consisted of the following:

- (i) The subsurface investigation consisted of the drilling of fifteen exploratory boreholes within the subject property. The boreholes were completed to depths of approximately 2.4 to 6.4 m below existing grades and generally terminated on the bedrock. Two boreholes with monitoring wells installed to provide for ground water sampling, were made next to the gas station lands.
- (ii) Laboratory analyses for metals and inorganics were completed on 14 selected samples of soil.
- (iii) Two samples of soil, one from each of the boring next to the gas station, were assessed for concentrations of petroleum hydrocarbons and the volatile components benzene, toluene, ethyl benzene and xylene.
- (iv) Two samples of ground water, one from each of the wells installed next to the gas station, were assessed for concentrations of petroleum hydrocarbons and the suite of volatile organic carbon compounds in ON Reg. 153.

The results of laboratory analysis for the soil samples were compared to the *Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (2004)*, Table No.1 Background.

3.0 SITE AND PROJECT DESCRIPTION

3.1 Site Location and Description

The general location of the subject property is shown on Figure 1. The subject property is located west of Hurontario Street and north of Eglinton Avenue West, in the City of Mississauga, Ontario. The property is irregular in shape and covers an area of approximately 9.9 hectares (24.4 acres). The western boundary of the lands are a municipal right of way containing Cooksville Creek and the lands north comprise subdivided residential lands. There is an Esso gas station at the immediate corner of Eglinton Avenue West and Hurontario Street that is not part of the property.

The study site consists in the main of open grass and shrub covered lands. There are low lands located in the northeast and east central portions of the property including what was a dug pond that contain standing water and cattails. The general layout of the property is shown on the attached Figure No. 2.

3.2 Site Topography and Drainage

Based on published topographic mapping, the subject property ground surface elevation is approximately 170 m above mean sea level. The site generally slopes down to the west, towards Cooksville Creek. The site is hummocky and there is a steep slope to the west in the central portion of the site.

Regional ground water flow is expected to be in a southeasterly direction, toward Lake Ontario. Locally, near surface ground water flow may be influenced by underground structures (i.e. service trenches) or surface watercourses, such as Cooksville Creek which borders the site to the west.

As noted a dug pond remnant exists on the east side of the site. Otherwise no pits or lagoons were identified on the subject property.

3.3 Site Geology and Hydrogeology

Based on published geological information for the general area, the near surface overburden soil at and in the vicinity of the subject property generally consists of Halton Till, comprising a clay and silt matrix. Beneath the sequence of soil deposits is bedrock of the Georgian Bay Formation.

It should be noted that the subsurface soil, rock and ground water conditions described above represent generalized conditions only, and should not be considered site specific.

3.3.1 References

Barnett, P.J. Cowan, W.R. and Henry, A.P. 1991, Quaternary Geology of Ontario, Southern Sheet; Ontario Ministry of Northern Development and Mines, Map No. 2556, scale 1:1 000 000.

Ontario Geological Survey 1991; Bedrock Geology of Ontario, Southern Sheet; Ontario Geological Survey, Map No. 2544; scale 1:1 000 000.

3.4 Summary of Previous Studies

3.4.1 Geotechnical Investigation (Soil-Eng Limited, November 1987)

A Geotechnical Investigation was conducted of the subject property in 1987 by Soil-Eng Limited. The results of the investigation are presented in the report entitled "A Soil Investigation for a Proposed Apartment Building Complex & a Retail & Office Development, N.W. Quad. of Eglinton Avenue West & Hurontario Street, City of Mississauga" dated November 1987 (Soil-Eng. Reference No. 8710-S.58). The investigation comprised 10 boreholes across the northern half of the subject property. The review of the investigation provided the following information:

- (ii) Two houses were located on the property at the time of the investigation (1987).
- (iii) Site stratigraphy general consists of silty clay till underlain by shale bedrock. The shale bedrock was generally encountered at a depth of 1.5 to 4.8 m below ground surface.
- (iv) Fill materials were encountered at the surface of some boreholes in the east central portion of the site. The fill materials generally consisted of silty clay soils. No odours or staining were noted in the any of the samples. Construction debris was noted in a fill sample obtained at one borehole location in the southern portion of the site.

- (v) Ground water was encountered at three borehole locations at depths ranging from to approximately 1.8 to 5.5 m below ground surface.

3.4.2 Phase I ESA (McClymont & Rak Engineers, Inc. 2000)

A Phase I ESA was conducted for the subject property and the property to the west of Cooksville Creek in 2000. The results of this investigation are presented in the report entitled “Phase I Environmental Site Assessment - Vacant Lands, Hurontario Street & Eglinton Avenue West, Mississauga, Ontario” dated February 10, 2000 (McClymont & Rak Reference No. E2225). No issues of environmental concern were identified in the Phase I ESA.

3.4.3 Phase 1 ESA (Terraprobe Limited 2008)

A Phase I Environmental Site Assessment, entitled “*PHASE I ENVIRONMENTAL SITE ASSESSMENT PART OF LOT 1 CONCESSION 1, WHS DESIGNATED AS PARTS 2 TO 6 ON PLAN 43R-24436 AND PART 1 ON PLAN 43R-24983, CITY OF MISSISSAUGA, ONTARIO*”, was completed by Terraprobe Ltd. for the subject property (File Reference No. 1-08-3160, dated August 18, 2008). The following summarizes the results of the investigation:

The review of the historical map and aerial photographs indicates that the subject property was in agricultural use from before 1954. Several farm buildings were located in the east central and norther portion of the subject property since prior to 1954 until at least 1982 there are remnants of the foundations and slab from these structures on site. A house located at the southwest corner of the property in 1954, but was no longer present in 1971 and the remains may be buried in fill in this area. All buried debris and foundations should be excavated and properly disposed of prior to development of the property.

The regulatory review did not identify any issues of environmental concern. It was reported that there was no information related to fuel storage tanks on the subject property on file with the TSSA. There was no reference to the subject property in either the *Ontario Inventory of PCB Storage Sites (July 1993)* or the *Waste Disposal Site Inventory (June 1991)*.

Cooksville Creek borders the property to the west. The portions of the property located within 30 m of the watercourse are considered environmentally sensitive in the context of Ontario Regulation 153 and the Table 1 Standards of the *Soil, Ground Water, and Sediment Standards* for use under Part XV.I of the *Environmental Protection Act of Ontario* will apply to those portions of the site. The lands located within 30 m of the watercourse could be treated as severed so that the Table 1 Standards would only apply the portion of the site within 30 m, and appropriate land use standards could be used for the remainder of the site.

Fill materials were identified in the east central portion of the property during a Geotechnical Investigation conducted in 1987. The fill materials generally consisted of silty clay soils. No odours or staining were noted in any of the samples. Construction debris was noted in a fill sample. There is also likely fill in the southern and western end of the site. A subsurface investigation should be conducted to determine the composition and quality of these fill materials.

A gas station is located adjacent to the southeast corner of the property, which contains underground fuel storage tanks. The potential exists that the soil and/or ground water on the subject site adjacent to the gas station has been impacted by petroleum hydrocarbons. A subsurface investigation should be conducted to determine if the soil and/or ground water on the subject site adjacent to the gas station has been impacted by petroleum hydrocarbons.

There was a large diameter shallow well found in the north central portion of the site. This open well casing about a metre in diameter is a hazard which should be addressed without delay. Since this is an identifiable well, even though no well record exists, the well should be abandoned by a licensed well driller in accordance with Ontario Reg. 903.

4.0 STUDY PROCEDURE

4.1 Study Rationale

The subsurface investigation was conducted to meet the standard requirements for a Phase II ESA under O.Reg. 153/04. The purpose of the subsurface investigation was to identify the environmental quality of the soil at the areas of concern identified in the Phase I ESA.

4.1.1 Borehole Locations and Soil Sampling

Borehole locations were selected to obtain representative samples of the strata penetrated and to be clear of any underground utilities. Thirteen boreholes were located throughout the site to identify areas where fill may have been placed. Two boreholes were located adjacent to land at the south eastern corner of the site which contains an active gas station, (Borehole 5 and 7). The gas station lands are not part of the site. Terraprobe advanced a total of fifteen boreholes on the site (numbered 1 to 15 inclusive). The borehole locations are shown on Figure No. 2.

4.1.2 Monitoring Well Locations and Ground Water Sampling

Ground water sampling was conducted in Boreholes 5 and 7, which were made near the gas station lands, as part of this investigation.

4.1.3 Surface Water Sampling

No surface water sampling was conducted as part of this investigation as there was no evidence of potential impact to surface water quality identified in the current investigation.

4.2 Utility Clearance

Prior to drilling boreholes, all applicable public utility companies (i.e. telephone, gas, hydro, etc.) were contacted to locate existing buried utilities. A private locator (On-Site Locates Inc.) was also hired to locate private utilities, such as water and sewers.

4.3 Geophysical Survey

No geophysical survey of the property was conducted, as there was no evidence of a requirement to identify subsurface features using geophysical methods.

4.4 Limitations on Borehole Locations

There were no significant limitations on the selection of the borehole locations.

4.5 Investigation Procedures

A total of fifteen boreholes were drilled across the subject property during the period July 9 to 14, 2008. Borehole locations are shown on the attached Borehole Location Plan, Figure 2. Borehole Logs are provided in Appendix A.

Also shown on the Borehole Location Plan are the locations of borings which were made by Soil-Eng. Ltd. in 1987. There was no environmental sampling carried out associated with these borings. They have been provided for completeness with respect to documenting the factual subsurface information as known.

The current borings were made using a power auger equipped with conventional soil sampling and testing tools. The drilling was conducted under the full time supervision of a Terraprobe technician who logged the borings and examined the samples as they were obtained. Soil samples were inspected in the field and logged to identify the soil material type. Soil samples were also inspected for evidence of soil contamination, including staining, odours or deleterious materials.

The investigation was carried out in accordance with the general procedures noted in Appendix B and standard industry practice and professional judgement. It should be noted that the subsurface conditions at the subject property were assessed based on information collected at specific borehole locations. The actual subsurface conditions between the sampling points may vary.

5.0 STUDY RESULTS

5.1 Soil Conditions

5.1.1 Summary

The results of the investigation indicate that fill materials were encountered in seven of the fifteen borehole locations. The fill materials extended to depths of up to 2.3 m below ground surface. Beneath the fill materials the native soil is a hard clayey silt glacial till which in the majority of the site continues to the bedrock level. The glacial till and bedrock have low hydraulic conductivity which generally precludes the free flow of ground water. A fluvial deposit of cohesionless sand and silt was found separating the glacial till from the bedrock in Boreholes 4, 5, 7, and 10. All of these borings are located in the south eastern portion of the site area.

During the investigation, all soil samples were inspected for evidence of potential environmental impact, such as staining, odours, or deleterious material. The only location where soil was found with any indication of odour or staining was at the location of Borehole 7, immediately west of the gas station property. This was the only visually identifiable evidence of environmental impact noted in any of the samples obtained during the investigation.

It should be noted that the subsurface conditions at the subject property were assessed based on information collected at specific borehole locations. The actual subsurface conditions between the sampling points may vary.

5.1.2 Surficial Materials and Fill

From the 1987 borings earth fill comprising silty clay was reported in the locations of Boreholes 101, 102 and 104. Terraprobe found earth fill at the locations of Boreholes 2, 6, 7, 8, 9, 13, and 14. At the location of Borehole 2, the fill is mostly sand with traces of gravel and topsoil. There is a buried boulder or concrete 800 mm below grade. At the other borehole locations where fill was found the majority of the earth is clayey silt with embedded sand and gravel. At the locations of Boreholes 8, 13 and 14 the original topsoil was found below the fill layer. Where fill was found it was generally less than 1.5 metres thick. Only at the locations of Boreholes 102, 104 and 14 was fill found which extended more than 2 metres below present grade.

Throughout the remainder of the site area there is a natural topsoil layer, the thickness of which varies in the range of 300 to 600 mm.

Locally on the site there is a thin surficial veneer of laminated silty clay of firm to stiff consistency. This layer was identified in Boreholes 103, 105 and 14.

5.1.3 Halton Till

The surficial layers are underlain by glacial till of the Halton Formation. This Wisconsin age glacial deposit has a matrix predominantly comprising silty clay and clayey silt which contains embedded sand, gravel, cobbles and boulders. The glacial till is locally weathered in the upper metre where it is subject to seasonal freeze/thaw cycles. In this zone the material has a mottled texture and a firm to stiff consistency. Otherwise the till is brown desiccated and has a very stiff to hard consistency. Throughout most of the site area the Halton Till was found lain on the bedrock surface.

5.1.4 Sand and Silt

There are a series of boreholes where there is a fluvial deposit of cohesionless sand or silt found separating the glacial till from the bedrock. This layer was found in Boreholes 4, 5, 7, and 10, all in the south eastern corner of the site area. The cohesionless deposit is wet and dense to very dense where found.

5.1.5 Bedrock

The area is underlain by bedrock of the Georgian Bay Formation. The bedrock of the Georgian Bay Formation is a deposit predominantly comprised of laminated to medium bedded grey shale of Ordovician age. The rock contains within the shale matrix layers of grey limestone/dolostone and shaly limestone and occasionally calcareous sandstone, which are discontinuous. The Elevation at which the bedrock as found throughout this site varies several metres. A tabulation is provided for reference as follows:

Soil Eng Boreholes 1987 (elev. estimated)

Borehole No.	1	2	3	4	5
Ground Elev.	165.0	166.7	167.0	164.7	168.0
Depth to Bedrock	2.4	2.2	3.7	1.5	2.7
Bedrock Elev.	162.5	164.5	163.3	163.2	165.3

Borehole No.	101	102	103	104	105
Ground Elev.	170.0	170.5	169.7	170.0	168.5
Depth to Bedrock	3.2	3.2	2.7	2.9	2.4
Bedrock Elev.	166.8	167.3	167.0	167.1	166.1

Terraprobe Boreholes 2008

Borehole No.	1	2	3	4	5
Ground Elev.	170.0	170.2	169.5	169.5	169.0
Depth to Bedrock	2.3	3.1	2.4	3.3	4.3
Bedrock Elev.	167.7	167.1	167.1	166.2	164.7

Borehole No.	6	7	8	9	10
Ground Elev.	169.3	167.8	169.5	169.0	167.5
Depth to Bedrock	3.0	6.2	3.0	4.6	6.4
Bedrock Elev.	166.3	161.6	166.5	164.4	161.1

Borehole No.	11	12	13	14	15
Ground Elev.	167.0	165.0	167.8	166.5	167.3
Depth to Bedrock	2.4	2.3	5.3	5.3	4.5
Bedrock Elev.	164.6	162.7	162.5	161.2	162.8

5.2 Ground Water Conditions

Ground water observations were made in the boreholes as drilling progressed and the observations are reported on the borehole logs. There was little flowing ground water observed. Where water entered boreholes it was in limited quantity associated with the cohesionless sand and silt locally found over the bedrock or the bedrock surface. The upper metre of the Georgian Bay Formation is sometimes found to be sufficiently fractured to provide a limited amount of seepage, but the storage capability of the fractures in the rock is small and the total volume of water that the bedrock will yield to an excavation is similarly small.

The hydrogeology of the site is dominated by the Halton Till which has a low hydraulic conductivity and the bedrock of the Georgian Bay Formation which similarly precludes the free flow of ground water. Three observation wells were installed at the site and observations were made over a two week period. These observations suggest that the ground water is within 2 metres of the ground surface, typical for a site of this character in southern Ontario. This is the summer condition in the spring it can be assumed that the ground water level approaches grade level.

5.3 Chemical Characterization of Soil

Select soil samples were submitted to a CAEAL Certified Laboratories. The samples were analysed in accordance with the methods described in Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act (2004).

AGAT Laboratories Ltd. of Mississauga, Ontario was used for the characterization of soil samples with respect to metal and inorganic parameters. The results of these analyses are presented in Appendix C as laboratory certificates of analysis. Maxxam Laboratories was used for the characterization of soil and water samples with respect to petroleum hydrocarbons and volatile organic compounds. The results of these analyses for soil and water are presented in Appendices D and E respectively. The selection of samples is tabulated as follows:

Location	Sample	Lab No.	Depth Range	Representing	Analysis
Bulk Chemistry					
BH 1	No. 2	1049595	0.7-2.3 metres	Halton Till - clayey silt embedded sand & gravel	metals & inorg.
BH 2	No. 1	1043782	0.0-0.5 metres	Fill - sand some silt, gravel & topsoil	metals & inorg.
BH 2	No. 2	1043783	0.5 -.1.5 metres	Fill -clayey silt some sand & gravel	metals & inorg.

Location	Sample	Lab No.	Depth Range	Representing	Analysis
BH 3	No. 2	1043785	0.6 - 2.4 metres	Halton Till - clayey silt embedded sand & gravel	metals & inorg.
BH 5	No. 5	AA1293 (Maxxam)	2.7-4.3 metres	Silt - layered brown dense north of gas station	BTEX & PHC.
BH 6	No. 1	1043786	0.4 - 0.8 metres	Fill -clayey silt some sand & gravel	metals & inorg.
BH 7	No. 2	1043787	0.4 - 1.4 metres	Fill -clayey silt some sand & gravel	metals & inorg.
BH 7	No. 6	AA1294 (Maxxam)	4.5 - 6.2 metres	Silt - layered brown dense west of gas station (petroleum odour)	BTEX & PHC
BH 8	No. 1	1043788	0.2 - 0.8 metres	Fill -clayey silt some sand & gravel	metals & inorg.
BH 9	No. 1	1043789	0.1 - 0.8 metres	Fill -clayey silt some sand & gravel	metals & inorg.
BH 11	No. 2	1049613	0.4 - 2.4 metres	Halton Till - clayey silt embedded sand & gravel	metals & inorg.
BH 12	No. 1	1049614	0.3 - 2.3 metres	Halton Till - clayey silt embedded sand & gravel	metals & inorg.
BH 13	No. 1	1043790	0.1 - 0.5 metres	Fill -clayey silt some sand & gravel	metals & inorg.
BH 14	No. 2	1043792	0.0 - 1.5 metres	Fill -clayey silt some sand & gravel	metals & inorg.
BH 14	No. 3	1043791	1.5 - 2.3 metres	Fill -topsoil	metals & inorg.
BH 15	No. 1	1049615	0.3 - 4.5 metres	Halton Till - clayey silt embedded sand & gravel	metals & inorg.

5.3.1 Application of Regulatory Standards and Criteria

Cooksville Creek borders the property to the east in lands owned by the Municipality. Under the requirements of Ontario Regulation 153, where a portion of the property are located within 30 metres of a watercourse the lands are defined as “environmentally sensitive”, and the Table 1 *Background* Standard is to be used to assess the soil and ground water quality as set out in *Soil, Ground Water, and Sediment Standards for use under Part XV.I of the Environmental Protection Act of Ontario*. The Table 1 Standard need only apply to the portion of the site within 30 metres of the watercourse and the generic land use standards could be used for the remainder of the site. The remainder of the site is intended for residential land use and parkland.

5.3.2 Soil Quality

Metals & Inorganic Parameters: Of the thirteen soil samples obtained from the boreholes and characterized for metal and inorganic concentrations, eight were selected from earth fill found on the site and five were selected from the near surface portion of the undisturbed Halton Till. Complete laboratory occurrences are provided in Appendix C, comprising the Laboratory Certificates of Analysis.

At only two locations were the results of the soil chemistry found to exceed the generic background concentrations as set out in Table No. 1 of the Provincial Soil standard, *Soil, Ground Water, and Sediment Standards for use under Part XV.I of the Environmental Protection Act of Ontario*.

- At the location of Borehole 7 the concentration of copper in the fill found between 0.4 and 1.4 metres depth was measured at 98.1 ug/g as compared to the background concentration of 85 ug/g. The soil standard for Residential/Parkland land use with respect to this parameter is 225 ug/g. This concentration is therefore not of concern with respect to the proposed land use.
- Undisturbed Halton Till was sampled at the location of Borehole 1. The concentration of chloride and the index properties Sodium Absorption Ratio (SAR) and Electrical Conductivity (EC), which are also indicators for salt, are all greater than the background criteria in Table No. 1. This borehole is located near Hurontario Street and the existing residential area to the north. It is likely that these measured properties are the result of snow disposal on the lands and deicing salt has leached into the undisturbed soil. The EC value of 0.871 mS/cm as measured at this location exceeds the concentration for Residential Land Use as set out in the Provincial Soil standard. However salt impact is not a “contaminant” under the provisions of ON Reg. 153 if it is derived from deicing salt. Therefore in the context of the land use regulation this occurrence is not significant.

Petroleum Hydrocarbons and VOC: The two soil samples assessed for petroleum and volatile organic compound concentrations in the permeable silt found at depth in Boreholes 5 and 7. At the location of Borehole 7 a concentration of F3 (C16-C34 Hydrocarbons) of 13 ug/g was measured. The concentrations of Benzene, Ethyl Benzene, Toluene and Xylene from the samples in both Borehole 5 and Borehole 7 were all found to exceed the generic background concentrations as set out in Table No. 1 of the Provincial Soil standard, *Soil, Ground Water, and Sediment Standards for use under Part XV.I of the Environmental Protection Act of Ontario*.

The concentrations of Petroleum Hydrocarbon and Benzene, Ethyl Benzene, Toluene and Xylene from the samples in both Borehole 5 and Borehole 7 were all found to be less than the generic remediation criteria concentrations as set out for Residential and Parkland land use as set out in Table No. 2 of the Provincial Soil standard, *Soil, Ground Water, and Sediment Standards for use under Part XV.I of the Environmental Protection Act of Ontario*.

5.3.3 Ground Water Quality

The two water samples were recovered from the wells installed next to the gas station at locations of Boreholes 5 and 7. These samples were assessed for petroleum and volatile organic compound concentrations. There were no measurable concentrations of either petroleum and volatile organic compounds found. As such the ground water quality meets the generic background concentrations as set out in Table No. 1 of the Provincial Soil standard, *Soil, Ground Water, and Sediment Standards for use under Part XV.I of the Environmental Protection Act of Ontario*.

By extension the concentrations of petroleum and volatile organic compounds from the water samples taken in the wells at Borehole 5 and Borehole 7 were found to be less than the generic remediation criteria concentrations as set out for Residential and Parkland land use as set out in Table No. 2 of the Provincial Soil standard, *Soil, Ground Water, and Sediment Standards for use under Part XV.I of the Environmental Protection Act of Ontario*.

5.3.4 Quality Assurance/ Quality Control

Laboratory results were compared to MOE standards for quality control under Ontario Regulation 153 which require laboratory results to meet specific method detection limit (MDL) requirements. In general, the sampling and analyses were performed conforming with the following:

- Ministry of the Environment Guidance on Sampling and Analytical Methods for Use at Contaminated Sites in Ontario
- Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.I of the Environmental Protection Act.

6.0 CONCLUSIONS

The following summarizes the results of the investigation:

- The subsurface investigation consisted of the drilling of fifteen exploratory boreholes.
- The results of the investigation indicate that fill materials were encountered in seven of the fifteen borings made . The fill materials extended to depths of up to 2.4 metres below ground surface. Beneath the fill materials native soil consisting of hard glacial till is found.
- The results of chemical analyses of selected fill and undisturbed soil samples found that there are locations, Boreholes 1, 5 and 7 where soil exists on the site that has concentrations greater than the Table No. 1, Provincial background criteria per *Soil, Ground Water, and Sediment Standards for use under Part XV.I of the Environmental Protection Act of Ontario*. None of these locations are within 30 metres of the Cooksville Creek water course where the lands would be considered environmentally sensitive.

There is copper impact at the location of Borehole 7 in shallow fill and petroleum hydrocarbon impact at depth in this same location. Petroleum hydrocarbon impact is also present at the location of Borehole 5. There is salt impact in the undisturbed soil in the area of Borehole 1.

- The results of chemical analyses of selected fill and undisturbed soil samples found no locations on the site where soil metal, inorganic parameter, petroleum hydrocarbon or VOC concentrations are greater than the Table No. 2 residential land use criteria per *Soil, Ground Water, and Sediment Standards for use under Part XV.I of the Environmental Protection Act of Ontario*.
- The results of chemical analyses of ground water samples found no petroleum hydrocarbon or VOC concentrations are greater than the Table No. 1 background criteria or the Table No. 2 residential land use criteria per *Soil, Ground Water, and Sediment Standards for use under Part XV.I of the Environmental Protection Act of Ontario*.

On the basis of these results, Terraprobe would, if requested, file a Record of Site condition for the lands which stipulates the site condition meets residential land use criteria as set out in Ontario Regulation 153.

The lands within 30 metres of Cooksville Creek would have to be addressed separately.

Terraprobe Limited

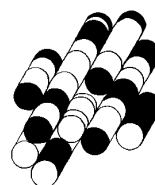


T. Orpwood MASc., P.Geo., P.Eng.
Principal

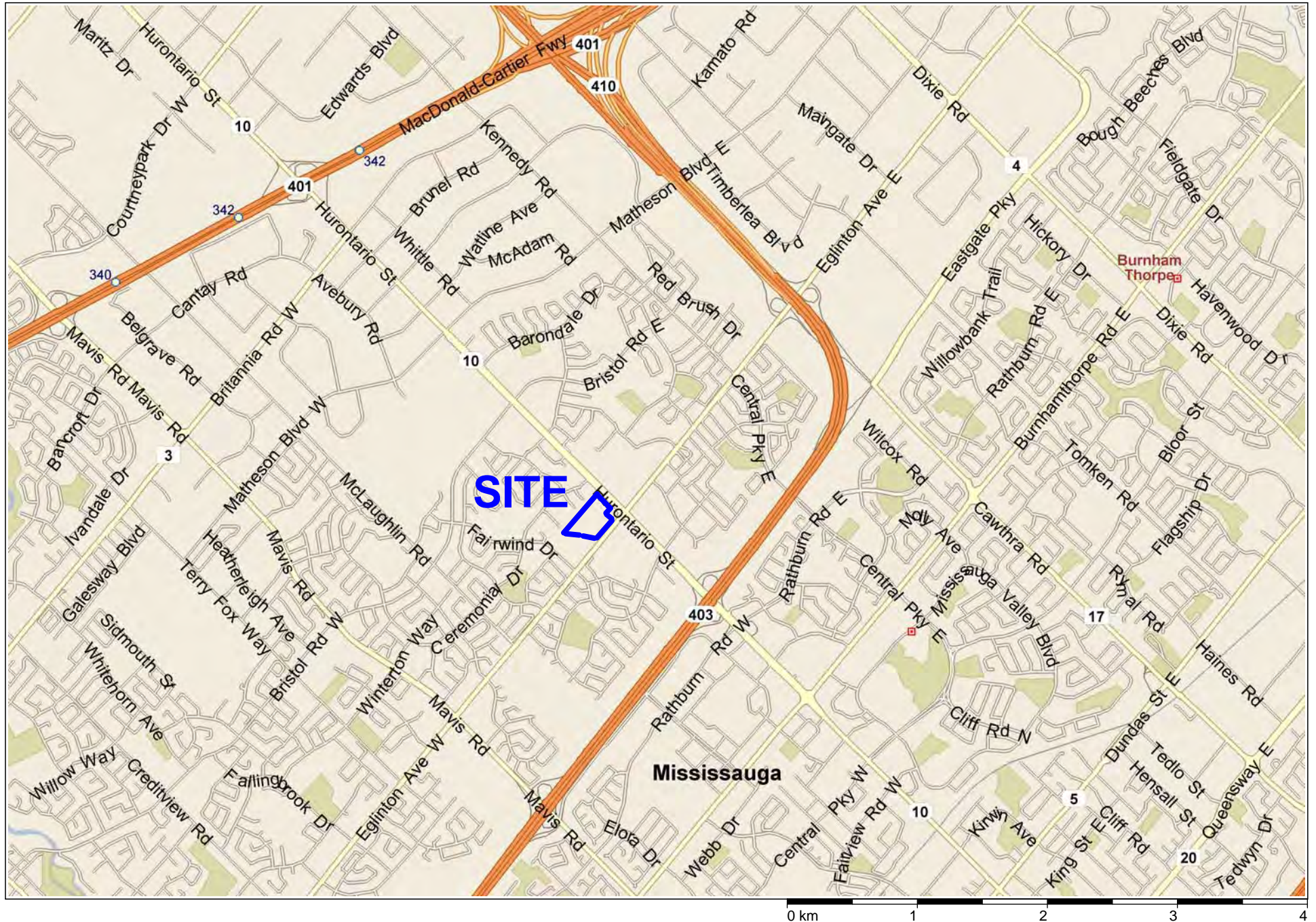


FIGURES

TERRAPROBE INC.

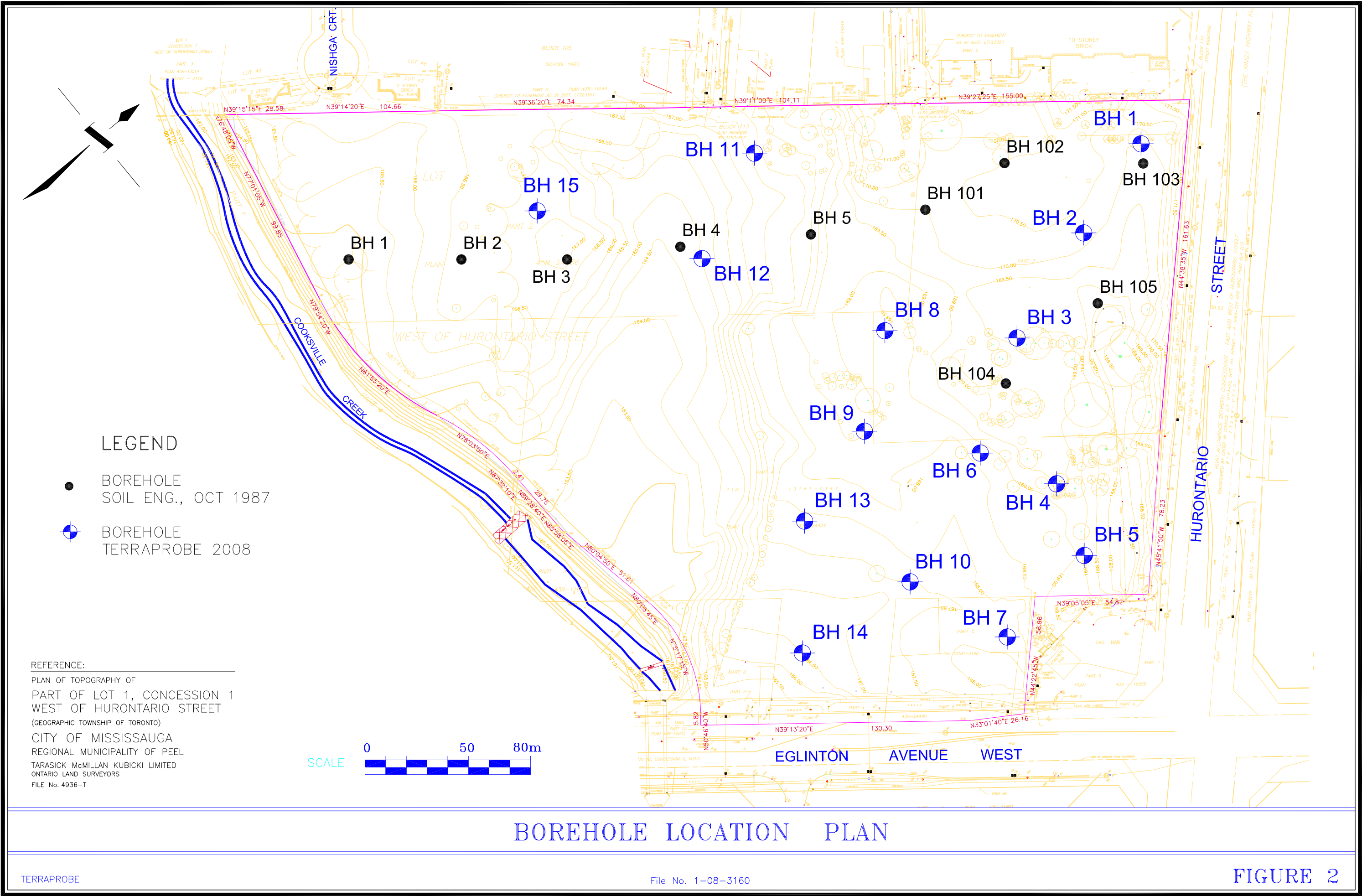


HURONTARIO ST. AND EGLINGTON AVE. W., MISSISSAUGA



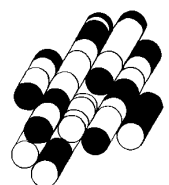
SITE LOCATION PLAN

C:\Documents and Settings\Admin\My Documents\AutoCAD\2008 Drawings\1-38-3160 BH PLAN.dwg, JB



APPENDIX A

TERRAPROBE INC.





Terraprobe

LOG OF BOREHOLE 1

PROJECT: Eglinton Avenue and Hurontario Street

DATE: 14 July 2008

LOCATION: Mississauga, Ontario

EQUIPMENT: Track-Mounted / Solid Stem Augers

CLIENT: Mondiale Development

ELEVATION DATUM: Geodetic

FILE: 1-08-3160

SOIL PROFILE			SAMPLES			ELEVATION SCALE	PENETRATION RESISTANCE PLOT		PLASTIC LIMIT LIMIT	NATURAL MOISTURE CONTENT	LIQUID LIMIT	ORGANIC VAPOUR (ppm)	STANDPIPE INSTALLATION OR REMARKS
ELEV DEPTH	DESCRIPTION	STRAT PLOT	NUMBER	TYPE	"N" VALUES		SHEAR STRENGTH kPa						
170.0	Ground Surface					170	20	40	60	80	100		
0.0	400mm TOPSOIL						20	40	60	80	100		
169.6			1	SS	6								
0.4	Weathered, firm												
169.3													
0.7	CLAYEY SILT embedded sand and gravel, very stiff to hard, grey, (GLACIAL TILL)		2	SS	19								
			3	SS	50/10cm								
167.7													
2.3	GEORGIAN BAY FORMATION (bedrock)		4	SS	50/8cm								
166.9													
166.9			5	SS	50/2.5cm	167							
3.1	End of Borehole Auger Refusal at 3.1m												

NOTES:

Borehole was open and water level at 2.9m upon completion of drilling.



Terraprobe

LOG OF BOREHOLE 2

PROJECT: Eglinton Avenue and Hurontario Street

DATE: 14 July 2008

LOCATION: Mississauga, Ontario

EQUIPMENT: Track-Mounted / Solid Stem Augers

CLIENT: Mondiale Development

ELEVATION DATUM: Geodetic

FILE: 1-08-3160

SOIL PROFILE			SAMPLES			PENETRATION RESISTANCE PLOT	PLASTIC LIMIT w _p	NATURAL MOISTURE CONTENT w	LIQUID LIMIT w _L	ORGANIC VAPOUR (ppm)	STANDPIPE INSTALLATION OR REMARKS
ELEV DEPTH	DESCRIPTION	STRAT PLOT	NUMBER	TYPE	"N" VALUES						
170.2	Ground Surface										
170.0	150mm TOPSOIL										
0.2	FILL - Sand, trace silt, trace gravel, trace rootlets, compact, brown, damp		1	SS	15						metals & Inorganics
	---- concrete or boulder at 0.8m ---- clayey silt, some sand, hard		2	SS	50/18cm						metals & Inorganics
168.7	CLAYEY SILT trace sand, trace gravel, hard, grey (GLACIAL TILL)		3	SS	59						
1.5			4	SS	50/15cm						
157.1	End of Borehole		5	SS	50/5cm						
3.1	Auger Refusal at 3.1m (Probable Bedrock)										

NOTES:

Borehole was open and dry upon completion of drilling.



Terraprobe

LOG OF BOREHOLE 3

PROJECT: Eglinton Avenue and Hurontario Street

DATE: 14 July 2008

LOCATION: Mississauga, Ontario

EQUIPMENT: Track-Mounted / Solid Stem Augers

CLIENT: Mondiale Development

ELEVATION DATUM: Geodetic

FILE: 1-08-3160

SOIL PROFILE			SAMPLES			ELEVATION SCALE	PENETRATION RESISTANCE PLOT		PLASTIC LIMIT NATURAL MOISTURE CONTENT LIQUID LIMIT			ORGANIC VAPOUR (ppm)	STANDPIPE INSTALLATION OR REMARKS
ELEV DEPTH	DESCRIPTION	STRAT PLOT	NUMBER	TYPE	"N" VALUES		SHEAR STRENGTH kPa		W _p	W	W _L		
169.5 0.0	Ground Surface						20 40 60 80 100						
	600mm TOPSOIL		1	SS	9								
159.9 0.6	CLAYEY SILT embedded sand and gravel, stiff, brown / grey / mottled (GLACIAL TILL)		2	SS	10								
	hard, brown		3	SS	50/15cm								
167.1 2.4	GEORGIAN BAY FORMATION (bedrock)		4	SS	50/15cm								
166.4 3.1	End of Borehole Auger Refusal at 3.1m		5	SS	50/8cm								

NOTES:

Borehole was open and water level at 2.9m upon completion of drilling.



Terraprobe

LOG OF BOREHOLE 4

PROJECT: Eglinton Avenue and Hurontario Street

DATE: 14 July 2008

LOCATION: Mississauga, Ontario

EQUIPMENT: Track-Mounted / Solid Stem Augers

CLIENT: Mordiale Development

ELEVATION DATUM: Geodetic

FILE: 1-08-3160

SOIL PROFILE			SAMPLES			ELEVATION SCALE	PENETRATION RESISTANCE PLOT SHEAR STRENGTH kPa ○ UNCONFINED + FIELD VANE ● POCKET PEN. × LAB VANE	PLASTIC LIMIT NATURAL MOISTURE CONTENT LIQUID LIMIT WATER CONTENT (%) w _p — w — w _L	ORGANIC VAPOUR (ppm)	STANDPIPE INSTALLATION OR REMARKS	
ELEV DEPTH	DESCRIPTION	STRAT PLOT	NUMBER	TYPE	"N" VALUES						
169.5 0.0	Ground Surface										
	360mm TOPSOIL										
169.1 0.4	CLAYEY SILT AND SANDY SILT embedded gravel, thin sand lenses, hard to dense, damp (GLACIAL TILL)		1	SS	20						
			2	SS	31						
			3	SS	50/13cm						
167.2 2.3	SILTY SAND trace gravel, very dense, brown, wet		4	SS	50/13cm						
166.2 3.3	GEORGIAN BAY FORMATION (bedrock)		5	SS	82						
166.0 3.5	End of Borehole Auger Refusal at 3.5m										

NOTES:
Borehole was open and dry upon completion of drilling.



Terraprobe

LOG OF BOREHOLE 5

PROJECT: Eglinton Avenue and Hurontario Street

DATE: 14 July 2008

LOCATION: Mississauga, Ontario

EQUIPMENT: Track-Mounted / Solid Stem Augers

CLIENT: Mondiale Development

ELEVATION DATUM: Geodetic

FILE: 1-08-3160

SOIL PROFILE			SAMPLES			ELEVATION SCALE	PENETRATION RESISTANCE PLOT SHEAR STRENGTH kPa ○ UNCONFINED + FIELD VANE ● POCKET PEN. x LAB VANE	PLASTIC LIMIT NATURAL MOISTURE CONTENT LIQUID LIMIT WATER CONTENT (%) w _p w w _L	ORGANIC VAPOUR (ppm)	STANDPIPE INSTALLATION OR REMARKS
ELEV DEPTH	DESCRIPTION	STRAT PLOT	NUMBER	TYPE	"N" VALUES					
169.0	Ground Surface					169				
0.0	380mm TOPSOIL		1	SS	17				40	
168.6										
0.4	CLAYEY SILT embedded sand and gravel, very stiff to hard, brown (GLACIAL TILL)		2	SS	41	168			0	
			3	SS	42				0	
			4	SS	50	167			0	
166.3										
2.7	SILT - Layered, very dense, brown, wet		5	SS	50/13cm	166			0	RIEX & TPH
164.7			6	SS	50/0cm	165				
4.3	End of Borehole Auger Refusal at 4.3m (Probable Bedrock)									

NOTES:

Borehole was open and water level at 3.2m upon completion of drilling.

Water level in monitoring well at 2.9m on July 23, 2008. Water level in monitoring well at 2.1m on July 31, 2008.

Water sampled VOC's on July 23, 2008.



Terraprobe

LOG OF BOREHOLE 6

PROJECT: Eglinton Avenue and Hurontario Street

DATE: 14 July 2008

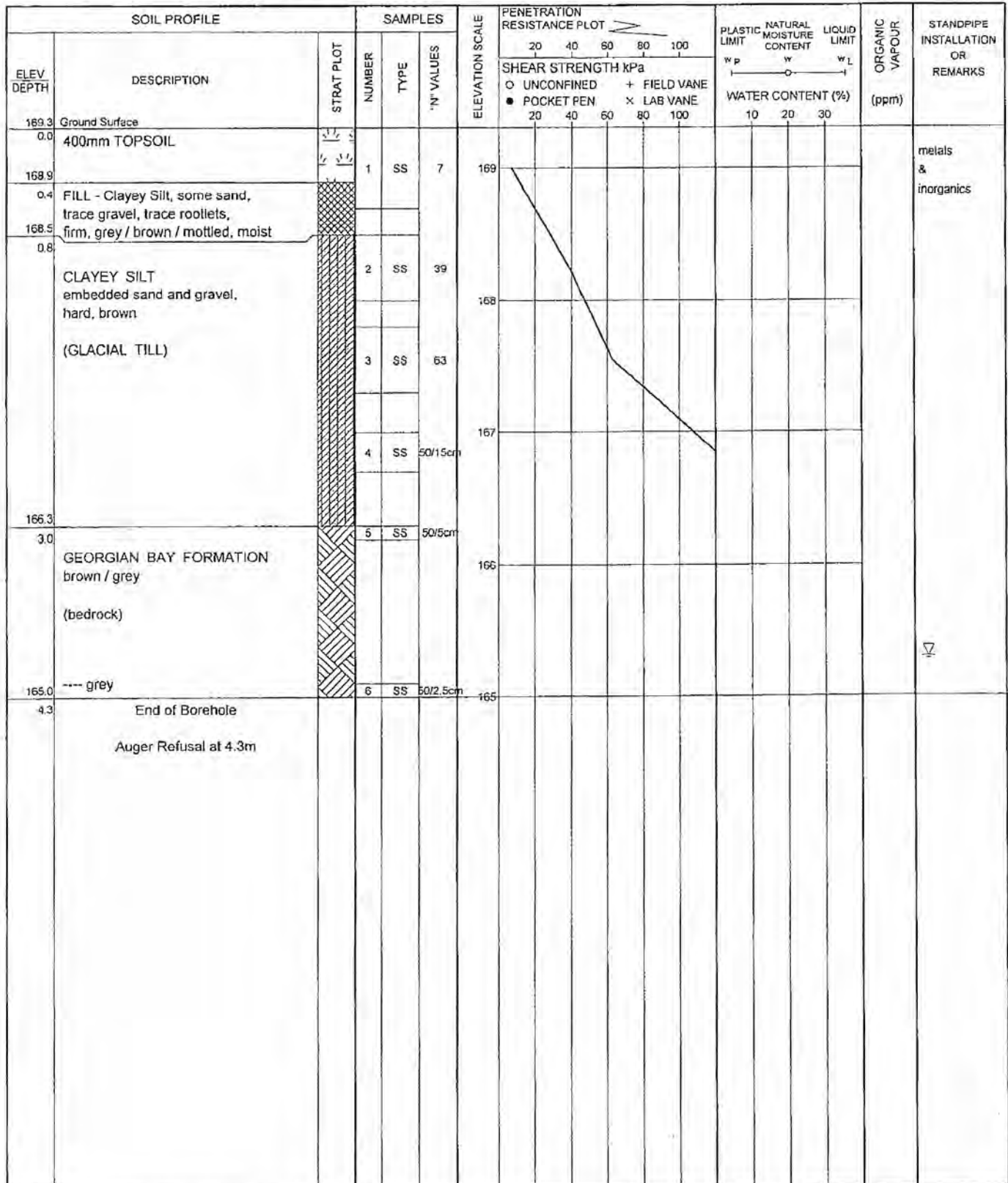
LOCATION: Mississauga, Ontario

EQUIPMENT: Track-Mounted / Solid Stem Augers

CLIENT: Mondiale Development

ELEVATION DATUM: Geodetic

FILE: 1-08-3160



NOTES:

Borehole was open and water level at 4.0m upon completion of drilling.



Terraprobe

LOG OF BOREHOLE 7

PROJECT: Eglinton Avenue and Hurontario Street

DATE: 14 July 2008

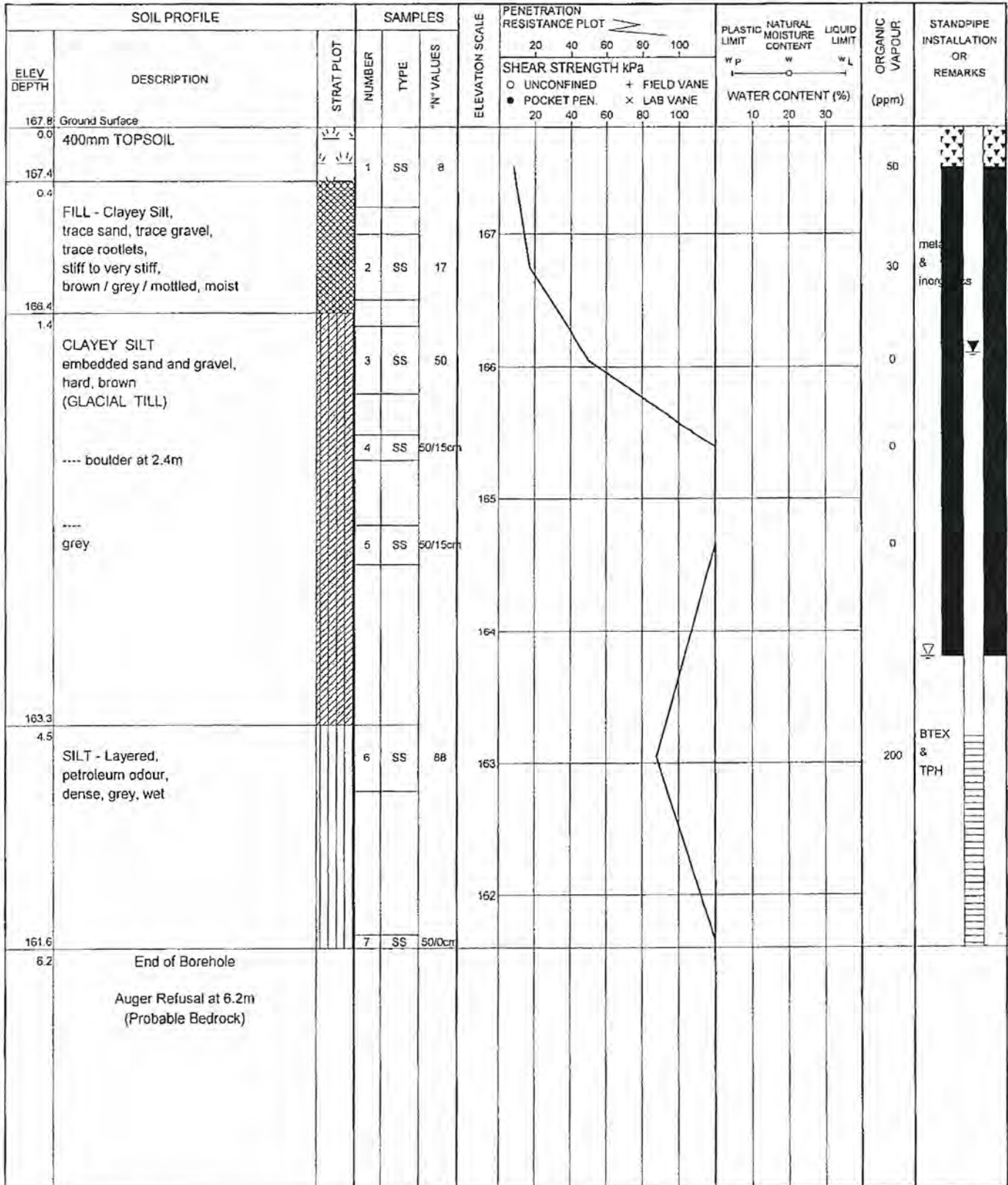
LOCATION: Mississauga, Ontario

EQUIPMENT: Track-Mounted / Solid Stem Augers

CLIENT: Mondiale Development

ELEVATION DATUM: Geodetic

FILE: 1-08-3160



NOTES:

Borehole was open and water level at 4.0m upon completion of drilling.
Water level in monitoring well at 1.8m on July 23, 2008. Water level in monitoring well at 1.7m on July 31, 2008.
Water sampled TPH and VOC's on July 23, 2008.



Terraprobe

SIEVE AND HYDROMETER ANALYSIS TEST REPORT

PROJECT: Eglinton Ave. & Hurontario

LOCATION: Mississauga, Ontario

CLIENT: Mondiale Development

BOREHOLE: 7

SAMPLE NUMBER: 6

SAMPLE DEPTH: ?

SAMPLE DESCRIPTION: SILT, trace clay, trace sand

FILE NO.: 1-08-3160

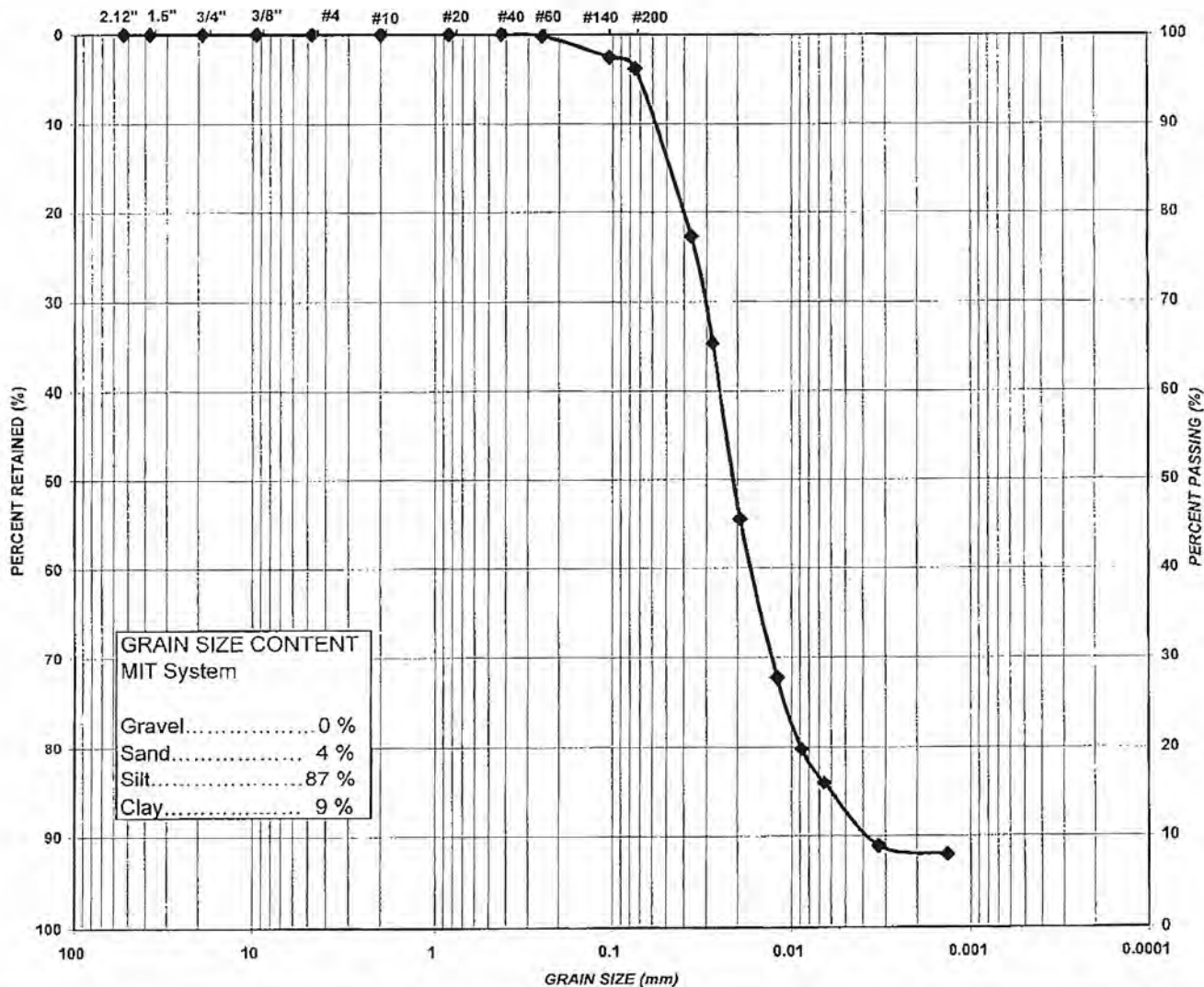
LAB NO.: 1229

SAMPLE DATE: Aug, 2008

SAMPLED BY: J.S.

GRAIN SIZE DISTRIBUTION

U.S. STANDARD SIEVE SIZES



MIT SYSTEM	GRAVEL		COARSE	MEDIUM	FINE	SILT	CLAY
			SAND				
UNIFIED SYSTEM	COARSE	FINE	COARSE	MEDIUM	FINE	SILT AND CLAY	
	GRAVEL		SAND				



Terraprobe

LOG OF BOREHOLE 8

PROJECT: Eglinton Avenue and Hurontario Street

DATE: 09 July 2008

LOCATION: Mississauga, Ontario

EQUIPMENT: Track-Mounted / Solid Stem Augers

CLIENT: Mondiale Development

ELEVATION DATUM: Geodetic

FILE: 1-08-3160

SOIL PROFILE			SAMPLES			PENETRATION RESISTANCE PLOT		PLASTIC LIMIT NATURAL MOISTURE CONTENT LIQUID LIMIT			ORGANIC VAPOUR (ppm)	STANDPIPE INSTALLATION OR REMARKS
ELEV DEPTH	DESCRIPTION	STRAT PLOT	NUMBER	TYPE	"N" VALUES	ELEVATION SCALE	SHEAR STRENGTH kPa	WATER CONTENT (%)				
169.5	Ground Surface											
169.2	150mm TOPSOIL											
0.2	FILL - Clayey Silt, some sand, trace gravel, trace rootlets, very stiff, brown, damp		1	SS	26							metals & inorganics
168.7	TOPSOIL											
0.8	TOPSOIL											
168.5	Weathered, stiff		2	SS	15							
1.0												
168.1												
1.4	CLAYEY SILT embedded sand and gravel, hard, grey		3	SS	85/28cm							
			4	SS	50/15cm							
168.5	GEORGIAN BAY FORMATION (bedrock)		5	SS	50/8cm							
3.0												
166.4												
3.1	End of Borehole											
	Auger Refusal at 3.1m											

NOTES:
Borehole was open and dry upon completion of drilling.



Terraprobe

LOG OF BOREHOLE 9

PROJECT: Eglinton Avenue and Hurontario Street

DATE: 09 July 2008

LOCATION: Mississauga, Ontario

EQUIPMENT: Track-Mounted / Solid Stem Augers

CLIENT: Mondiale Development

ELEVATION DATUM: Geodetic

FILE: 1-08-3160

SOIL PROFILE			SAMPLES			PENETRATION RESISTANCE PLOT	PLASTIC LIMIT	NATURAL MOISTURE CONTENT	LIQUID LIMIT	ORGANIC VAPOUR	STANDPIPE INSTALLATION OR REMARKS
ELEV DEPTH	DESCRIPTION	STRAT PLOT	NUMBER	TYPE	"N" VALUES						
169.0	Ground Surface										
168.8	100mm TOPSOIL										
0.1	FILL - Clayey Silt, some sand, trace gravel, concrete at 0.4m, very stiff, brown, damp		1	SS	25						metals & inorganics
168.2	CLAYEY SILT embedded sand and gravel, hard, brown (GLACIAL TILL)		2	SS	55						
0.8			3	SS	91						
	— cobble or boulder at 2.3m		4	SS	50/13cm						
			5	SS	50/15cm						
164.4	End of Borehole		6	SS	50/2.5cm						
4.6	Auger Refusal at 4.6m (Probable Bedrock)										

NOTES:
Borehole was open and dry upon completion of drilling.



Terraprobe

LOG OF BOREHOLE 10

PROJECT: Eglinton Avenue and Hurontario Street

DATE: 09 July 2008

LOCATION: Mississauga, Ontario

EQUIPMENT: Track-Mounted / Solid Stem Augers

CLIENT: Mondiale Development

ELEVATION DATUM: Geodetic

FILE: 1-08-3160

SOIL PROFILE			SAMPLES			ELEVATION SCALE	PENETRATION RESISTANCE PLOT		PLASTIC LIMIT NATURAL MOISTURE CONTENT LIQUID LIMIT			ORGANIC VAPOUR (ppm)	STANDPIPE INSTALLATION OR REMARKS
ELEV DEPTH	DESCRIPTION	STRAT PLOT	NUMBER	TYPE	"N" VALUES		SHEAR STRENGTH kPa		WATER CONTENT (%)				
167.5	Ground Surface						20 40 60 80 100		10 20 30				
0.0	300mm TOPSOIL												
167.2			1	SS	9								
0.3	CLAYEY SILT embedded sand and gravel, hard, brown (GLACIAL TILL)		2	SS	45								
			3	SS	50/15cm								
			4	SS	77								
			5	SS	50/15cm								
163.0			6	SS	50/15cm								
4.5	SILT - Layered, very dense, grey, wet												
161.1			7	SS	50/1cm								
6.4	End of Borehole Auger Refusal at 6.4m (Probable Bedrock)												

NOTES:

Borehole was open and water level at 4.3m upon completion of drilling.



Terraprobe

LOG OF BOREHOLE 11

PROJECT: Eglinton Avenue and Hurontario Street

DATE: 09 July 2008

LOCATION: Mississauga, Ontario

EQUIPMENT: Track-Mounted / Solid Stem Augers

CLIENT: Mondiale Development

ELEVATION DATUM: Geodetic

FILE: 1-08-3160

SOIL PROFILE			SAMPLES			ELEVATION SCALE	PENETRATION RESISTANCE PLOT 20 40 60 80 100 SHEAR STRENGTH kPa ○ UNCONFINED + FIELD VANE ● POCKET PEN. x LAB VANE	PLASTIC LIMIT NATURAL MOISTURE CONTENT LIQUID LIMIT W _p — W — W _L WATER CONTENT (%)	ORGANIC VAPOUR (ppm)	STANDPIPE INSTALLATION OR REMARKS
ELEV DEPTH	DESCRIPTION	STRAT PLOT	NUMBER	TYPE	"N" VALUES					
167.0	Ground Surface					167				
0.0	360mm TOPSOIL		1	SS	14					
166.6										
0.4	CLAYEY SILT embedded sand and gravel, hard, brown (GLACIAL TILL)		2	SS	44					
			3	SS	64					
			4	SS	50/15cm					
164.6										
2.4	End of Borehole Auger Refusal at 2.4m (Probable Bedrock)									

NOTES:

Borehole was open and dry upon completion of drilling.



Terraprobe

LOG OF BOREHOLE 12

PROJECT: Eglinton Avenue and Hurontario Street

DATE: 09 July 2008

LOCATION: Mississauga, Ontario

EQUIPMENT: Track-Mounted / Solid Stem Augers

CLIENT: Mondiale Development

ELEVATION DATUM: Geodetic

FILE: 1-08-3160

SOIL PROFILE			SAMPLES		ELEVATION SCALE	PENETRATION RESISTANCE PLOT	PLASTIC LIMIT	NATURAL MOISTURE CONTENT	LIQUID LIMIT	ORGANIC VAPOUR (ppm)	STANDPIPE INSTALLATION OR REMARKS
ELEV DEPTH	DESCRIPTION	STRAT PLOT	NUMBER	TYPE							
165.0	Ground Surface										
0.0	250mm TOPSOIL										
164.8											
0.3	Weathered, stiff		1	SS	13						metals & inorganics
154.3											
0.7	CLAYEY SILT embedded sand and gravel, hard, grey (GLACIAL TILL)		2	SS	58						
			3	SS	50/8cm						
162.7											
2.3	GEORGIAN BAY FORMATION (bedrock)		4	SS	50/8cm						
162.6											
2.4	End of Borehole Auger Refusal at 2.4m										

NOTES:

Borehole was open and dry upon completion of drilling.



Terraprobe

LOG OF BOREHOLE 13

PROJECT: Eglinton Avenue and Hurontario Street

DATE: 09 July 2008

LOCATION: Mississauga, Ontario

EQUIPMENT: Track-Mounted / Solid Stem Augers

CLIENT: Mondiale Development

ELEVATION DATUM: Geodetic

FILE: 1-08-3160

SOIL PROFILE			SAMPLES			ELEVATION SCALE	PENETRATION RESISTANCE PLOT		PLASTIC LIMIT NATURAL MOISTURE CONTENT LIQUID LIMIT		ORGANIC VAPOUR (ppm)	STANDPIPE INSTALLATION OR REMARKS
ELEV DEPTH	DESCRIPTION	STRAT PLOT	NUMBER	TYPE	"N" VALUES		SHEAR STRENGTH kPa		W _p W W _L			
167.8	Ground Surface						20 40 60 80 100					
168.8	100mm TOPSOIL											
0.1	FILL - Clayey Silt, with sand and gravel, stiff, grey, damp		1	SS	27							metals & inorganics
167.3	TOPSOIL											
0.5												
167.1	Weathered, stiff		2	SS	16							
0.7												
166.4	CLAYEY SILT - embedded sand and gravel, hard, brown (GLACIAL TILL)		3	SS	65/20cm							
1.4	---- cobble or boulder at 2.0m											
			4	SS	50/15cm							
			5	SS	50/15cm							
	---- grey											
			6	SS	56							
162.5	End of Borehole		7	SS	50/1cm							
5.3	Auger Refusal at 5.3m (Probable Bedrock)											

NOTES:

Borehole was open and dry upon completion of drilling.



Terraprobe

LOG OF BOREHOLE 14

PROJECT: Eglinton Avenue and Hurontario Street

DATE: 09 July 2008

LOCATION: Mississauga, Ontario

EQUIPMENT: Track-Mounted / Solid Stem Augers

CLIENT: Mondiale Development

ELEVATION DATUM: Geodetic

FILE: 1-08-3160

SOIL PROFILE			SAMPLES			ELEVATION SCALE	PENETRATION RESISTANCE PLOT 20 40 60 80 100 SHEAR STRENGTH kPa ○ UNCONFINED + FIELD VANE ● POCKET PEN. x LAB VANE	PLASTIC LIMIT NATURAL MOISTURE CONTENT LIQUID LIMIT W _p — W — W _L WATER CONTENT (%)	ORGANIC VAPOUR (ppm)	STANDPIPE INSTALLATION OR REMARKS
ELEV DEPTH	DESCRIPTION	STRAT PLOT	NUMBER	TYPE	"N" VALUES					
165.5 0.0	Ground Surface									
	FILL - Clayey Silt, with sand and gravel, rootlets, very stiff, brown, damp		1	SS	25					
	---- topsoil, stiff, moist		2	SS	32					metals & inorganics
			3	SS	15					metals & inorganics
164.2 2.3	CLAYEY SILT stiff		4	SS	20					
163.5 3.0	CLAYEY SILT embedded sand and gravel, very stiff to hard, brown (GLACIAL TILL)		5	SS	21					
	---- cobbles at 4.5m		6	SS	50/2.5cm					
161.2 5.3	GEORGIAN BAY FORMATION (bedrock)		7	SS	50/1cm					
161.1 5.4	End of Borehole Auger Refusal at 5.4m									

NOTES:
Borehole was open and dry upon completion of drilling.



Terraprobe

LOG OF BOREHOLE 15

PROJECT: Eglinton Avenue and Hurontario Street

DATE: 09 July 2008

LOCATION: Mississauga, Ontario

EQUIPMENT: Track-Mounted / Solid Stem Augers

CLIENT: Mondiale Development

ELEVATION DATUM: Geodetic

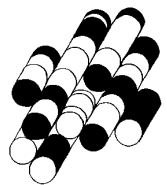
FILE: 1-08-3160

SOIL PROFILE			SAMPLES			ELEVATION SCALE	PENETRATION RESISTANCE PLOT 20 40 60 80 100 SHEAR STRENGTH kPa ○ UNCONFINED + FIELD VANE ● POCKET PEN. x LAB VANE	PLASTIC LIMIT NATURAL MOISTURE CONTENT LIQUID LIMIT W _P W W _L WATER CONTENT (%)	ORGANIC VAPOUR (ppm)	STANDPIPE INSTALLATION OR REMARKS
ELEV DEPTH	DESCRIPTION	STRAT PLOT	NUMBER	TYPE	"N" VALUES					
167.3	Ground Surface									
0.0	300mm TOPSOIL									
167.0			1	SS	11					
0.3	Weathered, stiff									
166.6			2	SS	41					
0.7	CLAYEY SILT embedded sand and gravel, hard, brown (GLACIAL TILL)		3	SS	50/8cm					
			4	SS	50/15cm					
			5	SS	85					
162.8			6	SS	50/2.5cm					
4.5	GEORGIAN BAY FORMATION (bedrock)									
162.7										
4.6	End of Borehole Auger Refusal at 4.6m									

NOTES:
Borehole was open and dry upon completion of drilling.
Water level in monitoring well at 1.8m on July 23, 2008. Water level in monitoring well at 2.8m on July 31, 2008.

APPENDIX B

TERRAPROBE INC.



SUMMARY OF FIELD INVESTIGATION PROTOCOL**1. Drilling and Soil Sampling Procedures**

Drilling and sampling of overburden materials are generally conducted using a mobile power auger. During augering operations, soil samples are recovered using a standard 50 mm diameter split-spoon sampling device. The sampler is generally advanced by a drop hammer to obtain standard penetration values (N values) for assessment of soil consistency.

In some instances, soil samples are obtained by directly pushing a sampling device into the soil using specialized drilling equipment.

Soil samples obtained from the split-spoon are examined in the field by qualified engineering staff. The soil is classified according to: grain size distribution, texture, colour, odour, moisture content, and other pertinent details. Field borehole logs are prepared and notes are made regarding visual or olfactory evidence of potential contamination of soil materials.

Following logging, all samples are placed into laboratory-cleaned 500 mL glass jars, with foil-lined lids. The samples are transported to Terraprobe's laboratory for detailed inspection by the site engineer. Where samples are collected for analysis of volatile organic compounds, they are placed into laboratory-cleaned, 50 mL glass septum jars with Teflon-lined caps. Following review by the project engineer, samples are forwarded to a CAEAL-certified laboratory for analysis.

During the drilling procedure, no lubricants are used on any of the drilling and sampling equipment in order to ensure there is no contamination with hydrocarbon-based or other lubricating materials.

If significant contamination of the soil or ground water is expected, then drill cuttings are placed into 205 L steel drums stored on the site. The drill cuttings and water are later characterized for proper off-site disposal, where necessary.

The sample collection and preservation techniques follow the general requirements of *Table 5.2(d), Required Container Preservation Techniques and Maximum Handling Times for Water Samples*, and from *MOE Guidance on Sampling and Analytical Methods for Use at Contaminated Sites in Ontario* (May 1996).

Chain of custody forms are filled out for all samples which are shipped to commercial laboratories. The chain of custody forms are provided by the laboratory and include the following information:

1. Terraprobe's project number
2. Sample number and locations
3. Name of party shipping the samples to the laboratory
4. Required scope of analysis
5. Date of submission
6. Date of receipt by the laboratory
7. Any special notes or items of clarification appropriate to the project

2. Test Pit Excavation and Sampling

Test pits are generally excavated using a hydraulic backhoe of appropriate size and capacity depending on test pit depth and soil consistency. The test pit operations are carried out under the full-time supervision of Terraprobe engineering staff. During excavation, the test pits are logged based on the exposed soil and ground water profile. Soil samples are generally recovered from each soil strata noted during the investigation. Depending on the depth of the test pit, samples are obtained either by a spade or shovel from the side wall, or directly from the backhoe bucket.

In all cases, operations are carried out in strict accordance with the requirements of the Occupational Health and Safety Act. Personnel are not permitted to enter unsupported test pits with depths in excess of 1.2 m below prevailing grade.

3. Equipment Clean-up

All drilling equipment is cleaned by the contractor prior to beginning each project. This includes augers, drill rods, sampling spoons, and the like.

In the event that significant contamination is expected or noted during drilling, then the drilling equipment is also cleaned between each borehole location. The cleaning is conducted using high pressure washing equipment and a phosphate detergent. A decontamination pad or cleaning area is set up well away from the general work area.

All sampling equipment used during the investigation is cleaned between collection of each sample. This includes split-spoon equipment, shovels, trowels, and any other sampling equipment. Sampling equipment is cleaned as follows:

- All sampling equipment is wiped to remove excess soil material.
- Equipment is rinsed in municipal water.
- Equipment is further rinsed with distilled water.
- In the event of significant organic contamination (such as hydrocarbons), the material is rinsed with detergent and/or methanol to remove materials.
- A final rinse with distilled water is carried out prior to utilizing the sampling equipment.

4. Soil Gas Monitoring

Soil gas monitoring is conducted to assess the potential presence of volatile organic compounds in soil materials. The monitoring is conducted by obtaining headspace measurements from soil samples. Headspace measurement is conducted by placing the tip of a photo-ionization detector or flame ionization detector through an aluminum foil cover placed over the 500 mL sample jars. Alternatively, samples may be placed into polyethylene sampling bags and vapour analysis can be conducted through the wall of the sampling bag.

When the ambient air temperature is less than 10°C, samples are generally transported to Terraprobe's laboratory and allowed to remain in sealed containers until reaching room temperature. Vapour analysis is

then conducted at room temperature.

All testing equipment is calibrated each day prior to conducting soil vapour measurements. Measurements are generally taken with respect to equivalent hexane concentration (concentration of parts per million), or in relation to the lower explosive limit of hexane. Where appropriate, the results are converted to represent concentrations of other gases such as methane.

The results of vapour monitoring are generally utilized to provide guidance for the selection of samples for later chemical analysis. They may also be used in assessing the presence of volatile organic compounds for the siting of monitoring wells.

5. Monitoring Well Installation

Monitoring wells are generally constructed using new, pre-packaged 50 mm diameter Schedule 40 PVC pipe and screens. The screen length and opening are dependent on the project requirements.

All wells are constructed using threaded joints without glues or solvents.

A silica sand pack is placed around the well screen and typically to a height of approximately 500 mm above the top of the well screen. A well seal, consisting of bentonite clay or cementitious bentonite grout, is then placed to a thickness of at least 1 m above the sand zone. The remainder of the hole is then filled to surface with an appropriate grout material or drill cuttings.

A locking security cap is fitted in areas which may be subject to vandalism or tampering of the well installation.

Specialized drilling procedures and monitoring well installation procedures are used where aquifer zones may be penetrated. All drilling is conducted in accordance with the general requirements of Regulation 903 to ensure that there is no cross-contamination or cross flow between aquifer zones.

6. Ground Water Sampling and Water Level Measurement

Water level measurements are conducted using an electronic water level finder. The water level finder is cleaned with distilled water, detergent, and where appropriate, methanol, prior to insertion into each well.

Measurements of non-aqueous phase liquids are conducted using specialized monitoring equipment which detects the presence of both the water column and non-aqueous phase liquids.

All measurements in the field are taken relative to a fixed point, which is generally the top of the well casing or top of the well protective cap. These are later referenced to appropriate elevations or ground surface.

Ground water sampling is conducted following proper development of the well. Wells are generally developed using a dedicated Waterra inertial pump. The wells are developed by removing a minimum of three casing volumes of water, or by bailing to dryness. Where possible, the wells are developed until clear,

sediment-free water is obtained. Ground water samples are obtained only following well bailing and development, as noted above. Samples are obtained either from a dedicated inertial pump, or a dedicated bailer.

During sampling, measurements are made for selected parameters including pH, conductivity, and temperature.

Samples are collected directly into laboratory-supplied containers. Samples collected for analysis of metals are filtered through a 0.45 micron disposable filter to eliminate suspended solids.

Sample bottles are stored in an insulated cooler to protect from freezing, and to maintain temperatures of less than 10°C.

The sample collection and preservation techniques follow the general requirements of *Table 5.2(d), Required Container Preservation Techniques and Maximum Handling Times for Water Samples*, and from *MOE Guidance on Sampling and Analytical Methods for Use at Contaminated Sites in Ontario* (May 1996).

Chain of custody forms are filled out for all samples which are shipped to commercial laboratories. The chain of custody forms are provided by the laboratory and include the following information:

- Terraprobe's project number
- Sample number and locations
- Name of party shipping the samples to the laboratory
- Required scope of analysis
- Date of submission
- Date of receipt by the laboratory
- Any special notes or items of clarification appropriate to the project

7. Sample Quality Assurance and Quality Control

All chemical analysis of soil and ground water samples is carried out only by CAEAL certified laboratories. These laboratories provide internal quality control checks regarding laboratory analytical procedures. This includes the use of sample spikes, surrogate samples, and duplicate analysis.

For each sampling program, one trip blank is included. The trip blank consists of deionized water that is placed in the sample containers provided by the laboratory, and is prepared by the laboratory.

Field duplicate samples are prepared at the rate of approximately one sample per ten soil or ground water samples submitted. The number of duplicate samples depends on site and project-specific requirements. Duplicate samples are provided with a fictitious sample number in order that the laboratory is not aware of the duplicate sample.

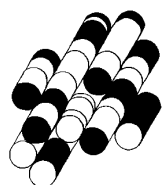
A field blank sample is obtained at the rate of approximately one sample per ten ground water samples submitted. A field blank is obtained by filling the appropriate laboratory containers with the deionized water

in the field during the sampling procedure. The results of all laboratory analysis are carefully examined and compared to the results of visual, olfactory, and soil vapour monitoring conducted in the field. Any unusual results or unexpected results are discussed carefully with the field technician and the laboratory. Where appropriate, resampling is conducted to ensure the veracity of all results.

.....

APPENDIX C

TERRAPROBE INC.





Certificate of Analysis

AGAT WORK ORDER: 08T286934
PROJECT NO: 1-08-3160

5835 COOPERS AVENUE
MISSISSAUGA, ON
CANADA L4Z 1Y2

PH: (905)712-5100
FAX: (905)712-5122
<http://www.agatlabs.com>

CLIENT NAME: TERRAPROBE LIMITED

ATTENTION TO: Tim Orpwood

O. Reg. 153 Metals & Inorganics in Soil - Table 1

DATE SAMPLED: Jul 14, 2008				DATE RECEIVED: Aug 08, 2008				DATE REPORTED: Aug 19, 2008				SAMPLE TYPE: Soil	
	Unit	G / S	RDL	BH2 SA1 1043782	BH2 SA2 1043783	BH3 SA2 1043785	BH6 SA1 1043786	BH7 SA2 1043787	BH8 SA1 1043788	BH9 SA1 1043789	BH13 SA1 1043790		
Antimony	µg/g	1.0	0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8		
Arsenic	µg/g	17	0.3	3.0	4.8	6.5	7.6	4.2	4.1	7.9	5.9		
Barium	µg/g	210	0.2	31.7	62.9	155	78.0	93.8	61.8	90.8	49.2		
Beryllium	µg/g	1.2	0.2	<0.2	0.3	0.5	0.5	0.5	0.3	0.5	0.6		
Boron (Hot Water Extractable)	µg/g		0.10	0.14	0.30	0.19	0.16	0.12	0.21	0.34	0.51		
Cadmium	µg/g	1.0	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		
Chromium	µg/g	71	0.3	5.9	15.9	20.8	19.2	21.1	15.0	20.5	25.0		
Cobalt	µg/g	21	0.2	3.6	8.2	13.0	11.0	8.9	8.0	11.3	15.0		
Copper	µg/g	85	0.2	17.8	28.1	45.5	51.2	98.1	23.6	50.4	37.2		
Lead	µg/g	120	0.3	4.9	8.9	8.0	7.4	6.8	8.0	8.0	7.2		
Molybdenum	µg/g	2.5	0.3	<0.3	<0.3	0.3	<0.3	<0.3	<0.3	<0.3	<0.3		
Nickel	µg/g	43	0.3	8.2	18.3	25.9	24.1	22.4	18.1	25.8	33.3		
Selenium	µg/g	1.9	0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	0.4	<0.4		
Silver	µg/g	0.42	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		
Thallium	µg/g	2.5	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		
Vanadium	µg/g	91	0.2	10.3	21.3	32.7	28.3	33.5	23.1	29.0	34.4		
Zinc	µg/g	160	0.2	24.3	49.8	50.1	47.2	47.1	41.2	52.3	70.4		
Chromium, Hexavalent	µg/g	2.5	0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40		
Cyanide, Free	µg/g	0.12	0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08		
Mercury	µg/g	0.23	0.011	<0.011	0.023	0.018	0.018	0.020	0.018	0.027	0.019		
Electrical Conductivity (2:1)	mS/cm	0.57	0.002	0.105	0.255	0.169	0.143	0.331	0.159	0.238	0.176		
Sodium Adsorption Ratio (2:1)	N/A	2.4	N/A	0.165	0.398	0.570	0.306	0.986	0.218	0.308	0.382		
pH (2:1)	N/A		N/A	8.36	7.86	8.16	8.21	8.13	8.20	8.16	8.18		
Chloride (2:1)	µg/g	330	2.0	3.2	23.3	6.6	<2.0	31.0	5.2	9.3	6.9		

Certified By:

Jokey Takewski



Certificate of Analysis

AGAT WORK ORDER: 08T286934
PROJECT NO: 1-08-3160

5835 COOPERS AVENUE
MISSISSAUGA, ON
CANADA L4Z 1Y2

PH: (905)712-5100
FAX: (905)712-5122
<http://www.agatlabs.com>

CLIENT NAME: TERRAPROBE LIMITED

ATTENTION TO: Tim Orpwood

O. Reg. 153 Metals & Inorganics in Soil - Table 1

DATE SAMPLED: Jul 14, 2008

DATE RECEIVED: Aug 08, 2008

DATE REPORTED: Aug 19, 2008

SAMPLE TYPE: Soil

	Unit	G / S	RDL	BH14 SA3 1043791	BH14 SA2 1043792
Antimony	µg/g	1.0	0.8	<0.8	<0.8
Arsenic	µg/g	17	0.3	6.1	4.7
Barium	µg/g	210	0.2	74.7	66.3
Beryllium	µg/g	1.2	0.2	0.3	0.4
Boron (Hot Water Extractable)	µg/g		0.10	0.32	0.32
Cadmium	µg/g	1.0	0.2	0.2	<0.2
Chromium	µg/g	71	0.3	16.6	17.5
Cobalt	µg/g	21	0.2	9.0	9.2
Copper	µg/g	85	0.2	34.4	34.7
Lead	µg/g	120	0.3	39.4	23.8
Molybdenum	µg/g	2.5	0.3	0.3	0.4
Nickel	µg/g	43	0.3	17.5	20.2
Selenium	µg/g	1.9	0.4	0.4	<0.4
Silver	µg/g	0.42	0.2	<0.2	<0.2
Thallium	µg/g	2.5	0.2	<0.2	<0.2
Vanadium	µg/g	91	0.2	26.3	26.6
Zinc	µg/g	160	0.2	64.1	69.4
Chromium, Hexavalent	µg/g	2.5	0.40	<0.40	<0.40
Cyanide, Free	µg/g	0.12	0.08	<0.08	<0.08
Mercury	µg/g	0.23	0.011	0.031	0.028
Electrical Conductivity (2:1)	mS/cm	0.57	0.002	0.273	0.230
Sodium Adsorption Ratio (2:1)	N/A	2.4	N/A	1.32	0.728
pH (2:1)	N/A		N/A	8.01	8.05
Chloride (2:1)	µg/g	330	2.0	11.0	11.4

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to T1(All)

Certified By:



Certificate of Analysis

AGAT WORK ORDER: 08T288190
PROJECT NO: 1-08-3160

5835 COOPERS AVENUE
MISSISSAUGA, ON
CANADA L4Z 1Y2

PH: (905)712-5100
FAX: (905)712-5122
<http://www.agatlabs.com>

CLIENT NAME: TERRAPROBE LIMITED

ATTENTION TO: Tim Orpwood

O. Reg. 153 Metals & Inorganics in Soil - Table 1

DATE SAMPLED: Aug 09, 2008

DATE RECEIVED: Aug 15, 2008

DATE REPORTED: Aug 25, 2008

SAMPLE TYPE: Soil

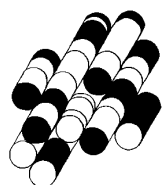
	Unit	G / S	RDL	BH#11 Sample	BH#12 Sample	BH#15 Sample	
				BH#1 Sample #2 1049595	#2 1049613	#1 1049614	#1 1049615
Antimony	µg/g	1.0	0.8	<0.8	<0.8	<0.8	<0.8
Arsenic	µg/g	17	0.3	13.3	4.6	7.0	5.9
Barium	µg/g	210	0.2	42.1	49.5	99.6	62.7
Beryllium	µg/g	1.2	0.2	0.7	0.5	1.0	0.8
Boron (Hot Water Extractable)	µg/g		0.10	0.23	0.63	0.49	0.16
Cadmium	µg/g	1.0	0.2	<0.2	<0.2	<0.2	<0.2
Chromium	µg/g	71	0.3	20.6	17.4	28.5	20.9
Cobalt	µg/g	21	0.2	18.6	11.5	14.3	11.9
Copper	µg/g	85	0.2	69.3	34.9	50.6	46.0
Lead	µg/g	120	0.3	5.4	14.4	9.9	6.5
Molybdenum	µg/g	2.5	0.3	<0.3	<0.3	<0.3	<0.3
Nickel	µg/g	43	0.3	29.2	22.5	32.9	23.8
Selenium	µg/g	1.9	0.4	<0.4	<0.4	<0.4	<0.4
Silver	µg/g	0.42	0.2	0.2	<0.2	<0.2	<0.2
Thallium	µg/g	2.5	0.2	<0.2	<0.2	<0.2	<0.2
Vanadium	µg/g	91	0.2	26.4	23.5	38.4	28.4
Zinc	µg/g	160	0.2	58.3	49.4	73.7	55.2
Chromium, Hexavalent	µg/g	2.5	0.40	<0.40	<0.40	<0.40	<0.40
Cyanide, Free	µg/g	0.12	0.08	<0.08	<0.08	<0.08	<0.08
Mercury	µg/g	0.23	0.011	0.012	0.014	0.030	0.011
Electrical Conductivity (2:1)	mS/cm	0.57	0.002	0.871	0.179	0.328	0.143
Sodium Adsorption Ratio (2:1)	N/A	2.4	N/A	3.11	0.424	1.21	0.220
pH (2:1)	N/A		N/A	8.06	8.32	8.25	8.30
Chloride (2:1)	µg/g	330	2.0	400	7.8	133	3.9

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to T1(All)

Certified By:

APPENDIX D

TERRAPROBE INC.



Your Project #: 1-08-3160
Your C.O.C. #: 00551066**Attention: Jackie Shaw**Terraprobe
10 Bram Crt
Brampton, ON
L6W 3R6

Report Date: 2008/07/29

CERTIFICATE OF ANALYSIS**MAXXAM JOB #: A879311****Received: 2008/07/21, 16:27**Sample Matrix: Soil
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
Petroleum Hydro. CCME F1 & BTEX in Soil	2	2008/07/22	2008/07/24	CAM SOP-00315	CCME CWS
Petroleum Hydrocarbons F2-F4 in Soil	2	2008/07/23	2008/07/24	CAM SOP-00316	CCME CWS
MOISTURE	1	N/A	2008/07/22	CAM SOP-00445	McKeague 2nd ed 1978
MOISTURE	1	N/A	2008/07/24	CAM SOP-00445	McKeague 2nd ed 1978
Volatile Organic Compounds in Soil	2	N/A	2008/07/29	CAM SOP-00226	EPA 8260 modified

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

ANDREW WHITE, Project Manager
Email: Andrew.White@maxxamanalytics.com
Phone# (905) 817-5700

=====

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. SCC and CAEAL have approved this reporting process and electronic report format.

For Service Group specific validation please refer to the Validation Signature Page

Total cover pages: 1

Page 1 of 8

Maxxam Job #: A879311
Report Date: 2008/07/29

Terraprobe
Client Project #: 1-08-3160

O'REG 153 PETROLEUM HYDROCARBONS (SOIL)

Maxxam ID		AA1293	AA1293		AA1294		
Sampling Date		2008/07/14	2008/07/14		2008/07/14		
COC Number		00551066	00551066		00551066		
	Units	BH5 SA5	BH5 SA5 Lab-Dup	QC Batch	BH7 SA6	RDL	QC Batch

BTEX & F1 Hydrocarbons							
F1 (C6-C10)	ug/g	<10	<10	1568915	<10	10	1568915
F1 (C6-C10) - BTEX	ug/g	<10	<10	1568915	<10	10	1568915
F2-F4 Hydrocarbons							
F2 (C10-C16 Hydrocarbons)	ug/g	<10	<10	1568665	<10	10	1568298
F3 (C16-C34 Hydrocarbons)	ug/g	<10	<10	1568665	13	10	1568298
F4 (C34-C50 Hydrocarbons)	ug/g	<10	<10	1568665	<10	10	1568298
Reached Baseline at C50	ug/g	Yes	Yes	1568665	Yes		1568298
Surrogate Recovery (%)							
1,4-Difluorobenzene	%	104	103	1568915	103		1568915
4-Bromofluorobenzene	%	99	100	1568915	99		1568915
D10-Ethylbenzene	%	101	98	1568915	103		1568915
D4-1,2-Dichloroethane	%	99	99	1568915	96		1568915
o-Terphenyl	%	89	88	1568665	80		1568298

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam Job #: A879311
Report Date: 2008/07/29

Terraprobe
Client Project #: 1-08-3160

RESULTS OF ANALYSES OF SOIL

Maxxam ID		AA1293		AA1294		
Sampling Date		2008/07/14		2008/07/14		
COC Number		00551066		00551066		
	Units	BH5 SA5	QC Batch	BH7 SA6	RDL	QC Batch

Inorganics						
Moisture	%	14	1567727	16	0.2	1570019

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam Job #: A879311
Report Date: 2008/07/29

Terraprobe
Client Project #: 1-08-3160

VOLATILE ORGANICS BY GC/MS (SOIL)

Maxxam ID		AA1293	AA1294		
Sampling Date		2008/07/14	2008/07/14		
COC Number		00551066	00551066		
	Units	BH5 SA5	BH7 SA6	RDL	QC Batch

Volatile Organics					
Benzene	ug/g	0.004	0.004	0.002	1572729
Ethylbenzene	ug/g	0.005	0.002	0.002	1572729
Toluene	ug/g	0.018	0.011	0.002	1572729
p+m-Xylene	ug/g	0.014	0.009	0.002	1572729
o-Xylene	ug/g	0.007	0.003	0.002	1572729
Xylene (Total)	ug/g	0.021	0.011	0.002	1572729
Surrogate Recovery (%)					
4-Bromofluorobenzene	%	96	86		1572729
D4-1,2-Dichloroethane	%	99	99		1572729
D8-Toluene	%	108	115		1572729
RDL = Reportable Detection Limit QC Batch = Quality Control Batch					

Maxxam Job #: A879311
Report Date: 2008/07/29

Terraprobe
Client Project #: 1-08-3160

Package 1	11.7°C
-----------	--------

Each temperature is the average of up to three cooler temperatures taken at receipt

GENERAL COMMENTS

Sample AA1293-01: F1-BTEX Analysis: The BTEX results used for the F1-BTEX calculation were obtained from Headspace-GC analysis.

Sample AA1294-01: F1-BTEX Analysis: The BTEX results used for the F1-BTEX calculation were obtained from Headspace-GC analysis.

Results relate only to the items tested.

Terraprobe
Attention: Jackie Shaw
Client Project #: 1-08-3160
P.O. #:
Project name:

Quality Assurance Report
Maxxam Job Number: MA879311

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1567727 AYU	RPD	Moisture	2008/07/22	13.1		%	50
1568298 DPO	MATRIX SPIKE	o-Terphenyl	2008/07/24		94	%	30 - 130
		F2 (C10-C16 Hydrocarbons)	2008/07/24		91	%	60 - 130
		F3 (C16-C34 Hydrocarbons)	2008/07/24		91	%	60 - 130
		F4 (C34-C50 Hydrocarbons)	2008/07/24		91	%	60 - 130
	Spiked Blank	o-Terphenyl	2008/07/24		94	%	30 - 130
		F2 (C10-C16 Hydrocarbons)	2008/07/24		80	%	60 - 130
		F3 (C16-C34 Hydrocarbons)	2008/07/24		80	%	60 - 130
		F4 (C34-C50 Hydrocarbons)	2008/07/24		80	%	60 - 130
	Method Blank	o-Terphenyl	2008/07/24		92	%	30 - 130
		F2 (C10-C16 Hydrocarbons)	2008/07/24	<10		ug/g	
		F3 (C16-C34 Hydrocarbons)	2008/07/24	<10		ug/g	
		F4 (C34-C50 Hydrocarbons)	2008/07/24	<10		ug/g	
	RPD	F2 (C10-C16 Hydrocarbons)	2008/07/24	NC		%	50
		F3 (C16-C34 Hydrocarbons)	2008/07/24	NC		%	50
		F4 (C34-C50 Hydrocarbons)	2008/07/24	NC		%	50
1568665 JKA	MATRIX SPIKE [AA1293-01]	o-Terphenyl	2008/07/25		86	%	30 - 130
		F2 (C10-C16 Hydrocarbons)	2008/07/25		93	%	60 - 130
		F3 (C16-C34 Hydrocarbons)	2008/07/25		93	%	60 - 130
		F4 (C34-C50 Hydrocarbons)	2008/07/25		93	%	60 - 130
	Spiked Blank	o-Terphenyl	2008/07/25		93	%	30 - 130
		F2 (C10-C16 Hydrocarbons)	2008/07/25		90	%	60 - 130
		F3 (C16-C34 Hydrocarbons)	2008/07/25		90	%	60 - 130
		F4 (C34-C50 Hydrocarbons)	2008/07/25		90	%	60 - 130
	Method Blank	o-Terphenyl	2008/07/24		89	%	30 - 130
		F2 (C10-C16 Hydrocarbons)	2008/07/24	<10		ug/g	
		F3 (C16-C34 Hydrocarbons)	2008/07/24	<10		ug/g	
		F4 (C34-C50 Hydrocarbons)	2008/07/24	<10		ug/g	
	RPD [AA1293-01]	F2 (C10-C16 Hydrocarbons)	2008/07/24	NC		%	50
		F3 (C16-C34 Hydrocarbons)	2008/07/24	NC		%	50
		F4 (C34-C50 Hydrocarbons)	2008/07/24	NC		%	50
1568915 GBA	MATRIX SPIKE [AA1293-01]	1,4-Difluorobenzene	2008/07/24		104	%	60 - 140
		4-Bromofluorobenzene	2008/07/24		99	%	60 - 140
		D10-Ethylbenzene	2008/07/24		97	%	30 - 130
		D4-1,2-Dichloroethane	2008/07/24		99	%	60 - 140
		F1 (C6-C10)	2008/07/24		92	%	60 - 140
	Spiked Blank	1,4-Difluorobenzene	2008/07/24		104	%	60 - 140
		4-Bromofluorobenzene	2008/07/24		101	%	60 - 140
		D10-Ethylbenzene	2008/07/24		97	%	30 - 130
		D4-1,2-Dichloroethane	2008/07/24		100	%	60 - 140
		F1 (C6-C10)	2008/07/24		102	%	60 - 140
	Method Blank	1,4-Difluorobenzene	2008/07/24		104	%	60 - 140
		4-Bromofluorobenzene	2008/07/24		98	%	60 - 140
		D10-Ethylbenzene	2008/07/24		93	%	30 - 130
		D4-1,2-Dichloroethane	2008/07/24		98	%	60 - 140
		F1 (C6-C10)	2008/07/24	<10		ug/g	
		F1 (C6-C10) - BTEX	2008/07/24	<10		ug/g	
	RPD [AA1293-01]	F1 (C6-C10)	2008/07/24	NC		%	50
		F1 (C6-C10) - BTEX	2008/07/24	NC		%	50
1570019 FF	RPD	Moisture	2008/07/24	8.3		%	50
1572729 SRY	MATRIX SPIKE	4-Bromofluorobenzene	2008/07/29		88	%	60 - 140
		D4-1,2-Dichloroethane	2008/07/29		96	%	60 - 140
		D8-Toluene	2008/07/29		117	%	60 - 140

Terraprobe
Attention: Jackie Shaw
Client Project #: 1-08-3160
P.O. #:
Project name:

Quality Assurance Report (Continued)

Maxxam Job Number: MA879311

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1572729 SRY	MATRIX SPIKE	Benzene	2008/07/29		77	%	39 - 137
		Ethylbenzene	2008/07/29		62	%	46 - 150
		Toluene	2008/07/29		83	%	30 - 158
		p+m-Xylene	2008/07/29		62	%	29 - 161
		o-Xylene	2008/07/29		69	%	45 - 150
	Spiked Blank	4-Bromofluorobenzene	2008/07/29		104	%	60 - 140
		D4-1,2-Dichloroethane	2008/07/29		92	%	60 - 140
		D8-Toluene	2008/07/29		100	%	60 - 140
		Benzene	2008/07/29		100	%	60 - 140
		Ethylbenzene	2008/07/29		103	%	60 - 140
	Method Blank	Toluene	2008/07/29		100	%	60 - 140
		p+m-Xylene	2008/07/29		103	%	60 - 140
		o-Xylene	2008/07/29		105	%	60 - 140
		4-Bromofluorobenzene	2008/07/29		90	%	60 - 140
		D4-1,2-Dichloroethane	2008/07/29		111	%	60 - 140
	RPD	D8-Toluene	2008/07/29		105	%	60 - 140
		Benzene	2008/07/29	<0.002		ug/g	
		Ethylbenzene	2008/07/29	<0.002		ug/g	
		Toluene	2008/07/29	<0.002		ug/g	
		p+m-Xylene	2008/07/29	<0.002		ug/g	
		o-Xylene	2008/07/29	<0.002		ug/g	
		Xylene (Total)	2008/07/29	<0.002		ug/g	
		Benzene	2008/07/29	NC		%	50
		Ethylbenzene	2008/07/29	NC		%	50
		Toluene	2008/07/29	NC		%	50
		p+m-Xylene	2008/07/29	NC		%	50
		o-Xylene	2008/07/29	NC		%	50
		Xylene (Total)	2008/07/29	NC		%	50
NC = Non-calculable RPD = Relative Percent Difference SPIKE = Fortified sample							

Validation Signature Page

Maxxam Job #: A879311

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

Christina Nervo

CHRISTINA NERVO, Scientific Services

M. Riskallah

MEDHAT RISKALLAH, Manager, Hydrocarbon Department

Suzana Popovic

SUZANA POPOVIC, Supervisor, Hydrocarbons

Troy Carriere



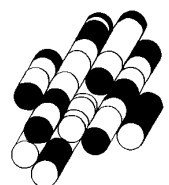
TROY CARRIERE, B.Sc., C.Chem, Scientific Specialist

=====

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. SCC and CAEAL have approved this reporting process and electronic report format.

APPENDIX E

TERRAPROBE INC.



Your Project #: 1-08-3160
Site: HURONTARIO & EGLINGTON
Your C.O.C. #: 90806-01

Attention: Jackie Shaw

Terraprobe
10 Bram Crt
Brampton, ON
L6W 3R6

Report Date: 2008/07/31

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: A880775

Received: 2008/07/23, 15:41

Sample Matrix: Water
Samples Received: 3

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
Petroleum Hydro. CCME F1 & BTEX in Water	2	N/A	2008/07/30	CAM SOP-00315	CCME CWS
Petroleum Hydro. CCME F1 & BTEX in Water	1	N/A	2008/07/31	CAM SOP-00315	CCME CWS
Petroleum Hydrocarbons F2-F4 in Water	3	2008/07/28	2008/07/29	CAM SOP-00316	CCME Hydrocarbons
Volatile Organic Compounds in Water	3	N/A	2008/07/30	CAM SOP-00226	EPA 8260 modified

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

ANDREW WHITE, Project Manager
Email: Andrew.White@maxxamanalytics.com
Phone# (905) 817-5700

=====

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. SCC and CAEAL have approved this reporting process and electronic report format.

For Service Group specific validation please refer to the Validation Signature Page

Total cover pages: 1

Page 1 of 10

Maxxam Job #: A880775
Report Date: 2008/07/31

Terraprobe
Client Project #: 1-08-3160
Project name: HURONTARIO & EGLINGTON

OREG 153 PETROLEUM HYDROCARBONS (WATER)

Maxxam ID		AA7721	AA7722	AA7722	AA7723		
Sampling Date		2008/07/23	2008/07/23	2008/07/23	2008/07/23		
COC Number		90806-01	90806-01	90806-01	90806-01		
	Units	MW 5	MW 7	MW 7 Lab-Dup	DUP	RDL	QC Batch

BTEX & F1 Hydrocarbons							
F1 (C6-C10)	ug/L	<100	<100	<100	<100	100	1574778
F1 (C6-C10) - BTEX	ug/L	<100	<100	<100	<100	100	1574778
F2-F4 Hydrocarbons							
F2 (C10-C16 Hydrocarbons)	ug/L	<100	<100		<100	100	1572720
F3 (C16-C34 Hydrocarbons)	ug/L	<100	<100		<100	100	1572720
F4 (C34-C50 Hydrocarbons)	ug/L	<100	<100		<100	100	1572720
Reached Baseline at C50	ug/L	Yes	Yes		Yes		1572720
Surrogate Recovery (%)							
1,4-Difluorobenzene	%	102	100	100	95		1574778
4-Bromofluorobenzene	%	97	100	97	93		1574778
D10-Ethylbenzene	%	109	110	110	105		1574778
D4-1,2-Dichloroethane	%	100	106	101	100		1574778
o-Terphenyl	%	98	97		94		1572720

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam Job #: A880775
Report Date: 2008/07/31

Terraprobe
Client Project #: 1-08-3160
Project name: HURONTARIO & EGLINGTON

O'REG 153 VOLATILE ORGANICS (WATER)

Maxxam ID		AA7721	AA7721	AA7722	AA7723		
Sampling Date		2008/07/23	2008/07/23	2008/07/23	2008/07/23		
COC Number		90806-01	90806-01	90806-01	90806-01		
	Units	MW 5	MW 5 Lab-Dup	MW 7	DUP	RDL	QC Batch

Volatile Organics							
Acetone (2-Propanone)	ug/L	<10	<10	<10	<10	10	1572113
Benzene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	1572113
Bromodichloromethane	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	1572113
Bromoform	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	1572113
Bromomethane	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	1572113
Carbon Tetrachloride	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	1572113
Chlorobenzene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	1572113
Chloroform	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	1572113
Dibromochloromethane	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	1572113
1,2-Dichlorobenzene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	1572113
1,3-Dichlorobenzene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	1572113
1,4-Dichlorobenzene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	1572113
1,1-Dichloroethane	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	1572113
1,2-Dichloroethane	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	1572113
1,1-Dichloroethylene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	1572113
cis-1,2-Dichloroethylene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	1572113
trans-1,2-Dichloroethylene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	1572113
1,2-Dichloropropane	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	1572113
cis-1,3-Dichloropropene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	1572113
trans-1,3-Dichloropropene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	1572113
Ethylbenzene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	1572113
Ethylene Dibromide	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	1572113
Methylene Chloride(Dichloromethane)	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	1572113
Methyl Isobutyl Ketone	ug/L	<5	<5	<5	<5	5	1572113
Methyl Ethyl Ketone (2-Butanone)	ug/L	<5	<5	<5	<5	5	1572113
Methyl t-butyl ether (MTBE)	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	1572113
Styrene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	1572113
1,1,1,2-Tetrachloroethane	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	1572113
1,1,1,2,2-Tetrachloroethane	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	1572113
Tetrachloroethylene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	1572113
Toluene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	1572113
1,1,1-Trichloroethane	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	1572113

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam Job #: A880775
Report Date: 2008/07/31

Terraprobe
Client Project #: 1-08-3160
Project name: HURONTARIO & EGLINGTON

O'REG 153 VOLATILE ORGANICS (WATER)

Maxxam ID		AA7721	AA7721	AA7722	AA7723		
Sampling Date		2008/07/23	2008/07/23	2008/07/23	2008/07/23		
COC Number		90806-01	90806-01	90806-01	90806-01		
	Units	MW 5	MW 5 Lab-Dup	MW 7	DUP	RDL	QC Batch
1,1,2-Trichloroethane	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	1572113
Trichloroethylene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	1572113
Vinyl Chloride	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	1572113
p+m-Xylene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	1572113
o-Xylene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	1572113
Xylene (Total)	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	1572113
Surrogate Recovery (%)							
4-Bromofluorobenzene	%	99	98	96	100		1572113
D4-1,2-Dichloroethane	%	89	92	96	97		1572113
D8-Toluene	%	102	101	99	101		1572113
RDL = Reportable Detection Limit QC Batch = Quality Control Batch							

Maxxam Job #: A880775
Report Date: 2008/07/31

Terraprobe
Client Project #: 1-08-3160
Project name: HURONTARIO & EGLINGTON

Package 1	14.0°C
-----------	--------

Each temperature is the average of up to three cooler temperatures taken at receipt

GENERAL COMMENTS

F1-BTEX Analysis. The BTEX results used for the F1-BTEX calculation were obtained from eadspace-GC analysis.

Results relate only to the items tested.

Terraprobe
Attention: Jackie Shaw
Client Project #: 1-08-3160
P.O. #:
Project name: HURONTARIO & EGLINGTON

Quality Assurance Report
Maxxam Job Number: MA880775

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1572113 BCA	MATRIX SPIKE [AA7723-03]	4-Bromofluorobenzene	2008/07/30		102	%	70 - 130
		D4-1,2-Dichloroethane	2008/07/30		95	%	70 - 130
		D8-Toluene	2008/07/30		103	%	70 - 130
		Acetone (2-Propanone)	2008/07/30		91	%	60 - 140
		Benzene	2008/07/30		102	%	70 - 130
		Bromodichloromethane	2008/07/30		92	%	70 - 130
		Bromoform	2008/07/30		108	%	70 - 130
		Bromomethane	2008/07/30		92	%	60 - 140
		Carbon Tetrachloride	2008/07/30		101	%	70 - 130
		Chlorobenzene	2008/07/30		98	%	70 - 130
		Chloroform	2008/07/30		99	%	70 - 130
		Dibromochloromethane	2008/07/30		100	%	70 - 130
		1,2-Dichlorobenzene	2008/07/30		101	%	70 - 130
		1,3-Dichlorobenzene	2008/07/30		110	%	70 - 130
		1,4-Dichlorobenzene	2008/07/30		110	%	70 - 130
		1,1-Dichloroethane	2008/07/30		103	%	70 - 130
		1,2-Dichloroethane	2008/07/30		90	%	70 - 130
		1,1-Dichloroethylene	2008/07/30		102	%	70 - 130
		cis-1,2-Dichloroethylene	2008/07/30		103	%	70 - 130
		trans-1,2-Dichloroethylene	2008/07/30		103	%	70 - 130
		1,2-Dichloropropane	2008/07/30		98	%	70 - 130
		cis-1,3-Dichloropropene	2008/07/30		106	%	70 - 130
		trans-1,3-Dichloropropene	2008/07/30		105	%	70 - 130
		Ethylbenzene	2008/07/30		110	%	70 - 130
		Ethylene Dibromide	2008/07/30		101	%	70 - 130
		Methylene Chloride(Dichloromethane)	2008/07/30		98	%	70 - 130
		Methyl Isobutyl Ketone	2008/07/30		89	%	60 - 140
		Methyl Ethyl Ketone (2-Butanone)	2008/07/30		97	%	60 - 140
		Methyl t-butyl ether (MTBE)	2008/07/30		101	%	70 - 130
		Styrene	2008/07/30		95	%	70 - 130
		1,1,1,2-Tetrachloroethane	2008/07/30		100	%	70 - 130
		1,1,2,2-Tetrachloroethane	2008/07/30		96	%	70 - 130
		Tetrachloroethylene	2008/07/30		107	%	70 - 130
		Toluene	2008/07/30		107	%	70 - 130
		1,1,1-Trichloroethane	2008/07/30		101	%	70 - 130
		1,1,2-Trichloroethane	2008/07/30		98	%	70 - 130
		Trichloroethylene	2008/07/30		105	%	70 - 130
		Vinyl Chloride	2008/07/30		93	%	70 - 130
		p+m-Xylene	2008/07/30		112	%	70 - 130
		o-Xylene	2008/07/30		111	%	70 - 130
	Spiked Blank	4-Bromofluorobenzene	2008/07/30		102	%	70 - 130
		D4-1,2-Dichloroethane	2008/07/30		98	%	70 - 130
		D8-Toluene	2008/07/30		102	%	70 - 130
		Acetone (2-Propanone)	2008/07/30		92	%	60 - 140
		Benzene	2008/07/30		100	%	70 - 130
		Bromodichloromethane	2008/07/30		95	%	70 - 130
		Bromoform	2008/07/30		112	%	70 - 130
		Bromomethane	2008/07/30		94	%	60 - 140
		Carbon Tetrachloride	2008/07/30		100	%	70 - 130
		Chlorobenzene	2008/07/30		98	%	70 - 130
		Chloroform	2008/07/30		100	%	70 - 130
		Dibromochloromethane	2008/07/30		105	%	70 - 130
		1,2-Dichlorobenzene	2008/07/30		102	%	70 - 130
		1,3-Dichlorobenzene	2008/07/30		108	%	70 - 130

Terraprobe
Attention: Jackie Shaw
Client Project #: 1-08-3160
P.O. #:
Project name: HURONTARIO & EGLINGTON

Quality Assurance Report (Continued)

Maxxam Job Number: MA880775

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1572113 BCA	Spiked Blank	1,4-Dichlorobenzene	2008/07/30		109	%	70 - 130
		1,1-Dichloroethane	2008/07/30		103	%	70 - 130
		1,2-Dichloroethane	2008/07/30		95	%	70 - 130
		1,1-Dichloroethylene	2008/07/30		101	%	70 - 130
		cis-1,2-Dichloroethylene	2008/07/30		103	%	70 - 130
		trans-1,2-Dichloroethylene	2008/07/30		102	%	70 - 130
		1,2-Dichloropropane	2008/07/30		99	%	70 - 130
		cis-1,3-Dichloropropene	2008/07/30		106	%	70 - 130
		trans-1,3-Dichloropropene	2008/07/30		107	%	70 - 130
		Ethylbenzene	2008/07/30		108	%	70 - 130
		Ethylene Dibromide	2008/07/30		107	%	70 - 130
		Methylene Chloride(Dichloromethane)	2008/07/30		100	%	70 - 130
		Methyl Isobutyl Ketone	2008/07/30		97	%	60 - 140
		Methyl Ethyl Ketone (2-Butanone)	2008/07/30		100	%	60 - 140
		Methyl t-butyl ether (MTBE)	2008/07/30		107	%	70 - 130
		Styrene	2008/07/30		97	%	70 - 130
		1,1,1,2-Tetrachloroethane	2008/07/30		102	%	70 - 130
		1,1,2,2-Tetrachloroethane	2008/07/30		101	%	70 - 130
		Tetrachloroethylene	2008/07/30		103	%	70 - 130
		Toluene	2008/07/30		104	%	70 - 130
		1,1,1-Trichloroethane	2008/07/30		100	%	70 - 130
		1,1,2-Trichloroethane	2008/07/30		103	%	70 - 130
		Trichloroethylene	2008/07/30		102	%	70 - 130
		Vinyl Chloride	2008/07/30		95	%	70 - 130
		p+m-Xylene	2008/07/30		107	%	70 - 130
		o-Xylene	2008/07/30		108	%	70 - 130
	Method Blank	4-Bromofluorobenzene	2008/07/30		94	%	70 - 130
		D4-1,2-Dichloroethane	2008/07/30		75	%	70 - 130
		D8-Toluene	2008/07/30		117	%	70 - 130
		Acetone (2-Propanone)	2008/07/30	<10		ug/L	
		Benzene	2008/07/30	<0.1		ug/L	
		Bromodichloromethane	2008/07/30	<0.1		ug/L	
		Bromoform	2008/07/30	<0.2		ug/L	
		Bromomethane	2008/07/30	<0.5		ug/L	
		Carbon Tetrachloride	2008/07/30	<0.1		ug/L	
		Chlorobenzene	2008/07/30	<0.1		ug/L	
		Chloroform	2008/07/30	<0.1		ug/L	
		Dibromochloromethane	2008/07/30	<0.2		ug/L	
		1,2-Dichlorobenzene	2008/07/30	<0.2		ug/L	
		1,3-Dichlorobenzene	2008/07/30	<0.2		ug/L	
		1,4-Dichlorobenzene	2008/07/30	<0.2		ug/L	
		1,1-Dichloroethane	2008/07/30	<0.1		ug/L	
		1,2-Dichloroethane	2008/07/30	<0.2		ug/L	
		1,1-Dichloroethylene	2008/07/30	<0.1		ug/L	
		cis-1,2-Dichloroethylene	2008/07/30	<0.1		ug/L	
		trans-1,2-Dichloroethylene	2008/07/30	<0.1		ug/L	
		1,2-Dichloropropane	2008/07/30	<0.1		ug/L	
		cis-1,3-Dichloropropene	2008/07/30	<0.2		ug/L	
		trans-1,3-Dichloropropene	2008/07/30	<0.2		ug/L	
		Ethylbenzene	2008/07/30	<0.1		ug/L	
		Ethylene Dibromide	2008/07/30	<0.2		ug/L	
		Methylene Chloride(Dichloromethane)	2008/07/30	<0.5		ug/L	
		Methyl Isobutyl Ketone	2008/07/30	<5		ug/L	
		Methyl Ethyl Ketone (2-Butanone)	2008/07/30	<5		ug/L	
		Methyl t-butyl ether (MTBE)	2008/07/30	<0.2		ug/L	

Terraprobe
Attention: Jackie Shaw
Client Project #: 1-08-3160
P.O. #:
Project name: HURONTARIO & EGLINGTON

Quality Assurance Report (Continued)

Maxxam Job Number: MA880775

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1572113 BCA	Method Blank	Styrene	2008/07/30	<0.2		ug/L	
		1,1,1,2-Tetrachloroethane	2008/07/30	<0.1		ug/L	
		1,1,2,2-Tetrachloroethane	2008/07/30	<0.2		ug/L	
		Tetrachloroethylene	2008/07/30	<0.1		ug/L	
		Toluene	2008/07/30	<0.2		ug/L	
		1,1,1-Trichloroethane	2008/07/30	<0.1		ug/L	
		1,1,2-Trichloroethane	2008/07/30	<0.2		ug/L	
		Trichloroethylene	2008/07/30	<0.1		ug/L	
		Vinyl Chloride	2008/07/30	<0.2		ug/L	
		p+m-Xylene	2008/07/30	<0.1		ug/L	
		o-Xylene	2008/07/30	<0.1		ug/L	
		Xylene (Total)	2008/07/30	<0.1		ug/L	
	RPD [AA7721-03]	Acetone (2-Propanone)	2008/07/30	NC		%	40
		Benzene	2008/07/30	NC		%	40
		Bromodichloromethane	2008/07/30	NC		%	40
		Bromoform	2008/07/30	NC		%	40
		Bromomethane	2008/07/30	NC		%	40
		Carbon Tetrachloride	2008/07/30	NC		%	40
		Chlorobenzene	2008/07/30	NC		%	40
		Chloroform	2008/07/30	NC		%	40
		Dibromochloromethane	2008/07/30	NC		%	40
		1,2-Dichlorobenzene	2008/07/30	NC		%	40
		1,3-Dichlorobenzene	2008/07/30	NC		%	40
		1,4-Dichlorobenzene	2008/07/30	NC		%	40
		1,1-Dichloroethane	2008/07/30	NC		%	40
		1,2-Dichloroethane	2008/07/30	NC		%	40
		1,1-Dichloroethylene	2008/07/30	NC		%	40
		cis-1,2-Dichloroethylene	2008/07/30	NC		%	40
		trans-1,2-Dichloroethylene	2008/07/30	NC		%	40
		1,2-Dichloropropane	2008/07/30	NC		%	40
		cis-1,3-Dichloropropene	2008/07/30	NC		%	40
		trans-1,3-Dichloropropene	2008/07/30	NC		%	40
		Ethylbenzene	2008/07/30	NC		%	40
		Ethylene Dibromide	2008/07/30	NC		%	40
		Methylene Chloride(Dichloromethane)	2008/07/30	NC		%	40
		Methyl Isobutyl Ketone	2008/07/30	NC		%	40
		Methyl Ethyl Ketone (2-Butanone)	2008/07/30	NC		%	40
		Methyl t-butyl ether (MTBE)	2008/07/30	NC		%	40
		Styrene	2008/07/30	NC		%	40
		1,1,1,2-Tetrachloroethane	2008/07/30	NC		%	40
		1,1,2,2-Tetrachloroethane	2008/07/30	NC		%	40
		Tetrachloroethylene	2008/07/30	NC		%	40
		Toluene	2008/07/30	NC		%	40
		1,1,1-Trichloroethane	2008/07/30	NC		%	40
		1,1,2-Trichloroethane	2008/07/30	NC		%	40
		Trichloroethylene	2008/07/30	NC		%	40
		Vinyl Chloride	2008/07/30	NC		%	40
		p+m-Xylene	2008/07/30	NC		%	40
		o-Xylene	2008/07/30	NC		%	40
		Xylene (Total)	2008/07/30	NC		%	40
1572720 DPO	MATRIX SPIKE	o-Terphenyl	2008/07/29		118	%	30 - 130
		F2 (C10-C16 Hydrocarbons)	2008/07/29		111	%	60 - 130
		F3 (C16-C34 Hydrocarbons)	2008/07/29		111	%	60 - 130
		F4 (C34-C50 Hydrocarbons)	2008/07/29		111	%	60 - 130
	Spiked Blank	o-Terphenyl	2008/07/29		118	%	30 - 130

Terraprobe
Attention: Jackie Shaw
Client Project #: 1-08-3160
P.O. #:
Project name: HURONTARIO & EGLINGTON

Quality Assurance Report (Continued)

Maxxam Job Number: MA880775

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1572720 DPO	Spiked Blank	F2 (C10-C16 Hydrocarbons)	2008/07/29		111	%	60 - 130
		F3 (C16-C34 Hydrocarbons)	2008/07/29		111	%	60 - 130
		F4 (C34-C50 Hydrocarbons)	2008/07/29		111	%	60 - 130
	Method Blank	o-Terphenyl	2008/07/29		107	%	30 - 130
		F2 (C10-C16 Hydrocarbons)	2008/07/29	<100		ug/L	
		F3 (C16-C34 Hydrocarbons)	2008/07/29	<100		ug/L	
	RPD	F4 (C34-C50 Hydrocarbons)	2008/07/29	<100		ug/L	
		F2 (C10-C16 Hydrocarbons)	2008/07/29	NC		%	50
		F3 (C16-C34 Hydrocarbons)	2008/07/29	NC		%	50
		F4 (C34-C50 Hydrocarbons)	2008/07/29	NC		%	50
1574778 ABD	MATRIX SPIKE [AA7722-02]	1,4-Difluorobenzene	2008/07/30		99	%	70 - 130
		4-Bromofluorobenzene	2008/07/30		100	%	70 - 130
		D10-Ethylbenzene	2008/07/30		106	%	70 - 130
		D4-1,2-Dichloroethane	2008/07/30		102	%	70 - 130
		F1 (C6-C10)	2008/07/30		80	%	70 - 130
	Spiked Blank	1,4-Difluorobenzene	2008/07/30		98	%	70 - 130
		4-Bromofluorobenzene	2008/07/30		100	%	70 - 130
		D10-Ethylbenzene	2008/07/30		111	%	70 - 130
		D4-1,2-Dichloroethane	2008/07/30		103	%	70 - 130
	Method Blank	F1 (C6-C10)	2008/07/30		86	%	70 - 130
		1,4-Difluorobenzene	2008/07/30		102	%	70 - 130
		4-Bromofluorobenzene	2008/07/30		101	%	70 - 130
		D10-Ethylbenzene	2008/07/30		106	%	70 - 130
	RPD [AA7722-02]	D4-1,2-Dichloroethane	2008/07/30		101	%	70 - 130
		F1 (C6-C10)	2008/07/30	<100		ug/L	
		F1 (C6-C10) - BTEX	2008/07/30	<100		ug/L	
		F1 (C6-C10)	2008/07/30	NC		%	40
		F1 (C6-C10) - BTEX	2008/07/30	NC		%	40

NC = Non-calculable
RPD = Relative Percent Difference
SPIKE = Fortified sample

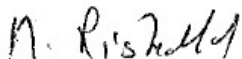
Validation Signature Page

Maxxam Job #: A880775

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).



BRAD NEWMAN, Scientific Specialist



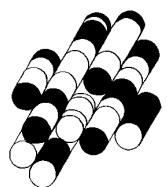
MEDHAT RISKALLAH, Manager, Hydrocarbon Department

=====

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. SCC and CAEAL have approved this reporting process and electronic report format.

APPENDIX F

TERRAPROBE INC.



Timothy G. Orpwood, M.A.Sc., P.Geo., P.Eng.

PROFESSIONAL EXPERTISE

- Geotechnical Engineering
- Shoring Systems Design/Performance
- Pavement Design and Evaluation
- Construction Inspection & Supervision
- Construction Materials Quality Control
- Environmental Site Assessment/Remediation
- Dam Safety Assessment and Rehabilitation
- Building Systems and Sciences
- Peer Review and Expert Consultations
- Technical Policy Development

EDUCATION

B.A.Sc. Geological Engineering, University of Toronto, 1977 (Geotechnical Engineering)
M.A.Sc. Geological Engineering, University of Windsor, 1984 (Hydrogeology)

CONTINUING EDUCATION

Concrete Testing, Concrete Quality	Geotechnical Instrumentation
Groundwater & Petroleum Hydrocarbons	Pavement Design and Management
Soil & Groundwater Remediation	Dam Safety and Assessment
Municipal and Industrial Waste Disposal	Asphalt Technology
Project Implementation and Management	Mould Management & Remediation
Business Administration	Canadian Business Law
Finance and Accounting Principles	Geopier Foundation Design

PROFESSIONAL AFFILIATIONS

Registered Professional Engineer, Province of Ontario
Registered Professional Geoscientist, Province of Ontario
Registered Professional Engineer Province of Alberta

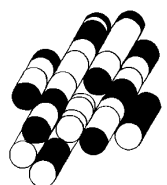
Member, Ontario Society of Professional Engineers
Member, Engineering Institute of Canada
Member, Canadian Geotechnical Society
Member, Canadian Tunnelling Association
Member, Canadian Dam Safety Association

PROFESSIONAL DESIGNATIONS

Designated Consulting Engineer, Province of Ontario
Qualified Person - Ontario Ministry of Environment O.Reg 153
Ontario Building Code Qualification Examinations: Designer Legal Process 2005
BCIN: 24238 Designer Structural 2003

APPENDIX G

TERRAPROBE INC.



APPENDIX G

This report was prepared for the exclusive use of Mondiale Development Ltd. and is intended to provide an assessment of the environmental conditions on the property identified as Part of Lot 1 Concession 1, WHS designated as Parts 2 to 6 on Plan 43R-24436 and Part 1 on Plan 43R-24983, in the City of Mississauga, Ontario. Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. Terraprobe Limited accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report, including consequential financial effects on transactions or property values, or requirements for follow-up actions and costs.

The assessment should not be considered a comprehensive audit that eliminates all risks of encountering environmental problems. The information presented in this report is based on information collected during the completion of the subsurface investigation conducted by Terraprobe Limited. It is based on conditions at the subject property at the time of the site inspection. The subsurface conditions were assessed based on information collected at specific borehole locations. The actual subsurface conditions between the sampling points may vary.

There is no warranty expressed or implied by this report regarding the environmental status of the subject property. Professional judgement was exercised in gathering and analysing information collected by our staff. The conclusions presented are the product of professional care and competence, and cannot be construed as an absolute guarantee.

In the event that during future work new information regarding the environmental condition of the subject property is encountered, Terraprobe Limited should be notified in order that we may re-evaluate the findings of this assessment and provide amendments, as required.