

APPENDIX 'A'

GEOTECHNICAL REPORT

APPENDIX 'A' - GEOTECHNICAL REPORT

<u>TABLE OF CONTENTS</u>	<u>NO. OF PAGES</u>
GEOTECHNICAL REPORT FOR SHARP BOULEVARD – LODGE AVENUE TO BRUCE AVENUE	8
Summary of Core Samples	1
Test Hole Log for TH1	1
Test Hole Log for TH2	1
Test Hole Log for TH3	1
Test Hole Log for TH4	1
Test Hole Location Plan	1
Pavement Core Photos	1
GEOTECHNICAL REPORT FOR HEARNE AVENUE – LODGE AVENUE TO MOUNT ROYAL ROAD	8
Summary of Core Samples	1
Test Hole Log for TH1	1
Test Hole Log for TH2	1
Test Hole Log for TH3	1
Test Hole Log for TH4	1
Test Hole Location Plan	1
Pavement Core Photos	1

The geotechnical report is provided to aid in the Contractor's evaluation of soil conditions. The information presented is considered accurate at the locations shown on the Drawings and at the time of drilling. However, variations in soil conditions may exist between test holes and fluctuations in groundwater levels can be expected seasonally and may occur as a result of construction activities. The nature and extent of variations may not become evident until construction commences.

**SHARP BOULEVARD
LODGE AVENUE TO BRUCE AVENUE
2007 CITY OF WINNIPEG
RESIDENTIAL STREET RENEWAL**

Prepared for
**Earth Tech (Canada) Inc.
1000 Waverley Street
Winnipeg, Manitoba
R3T 0P3**

Prepared by
**The National Testing Laboratories Limited
199 Henlow Bay
Winnipeg, Manitoba
R3Y 1G4**

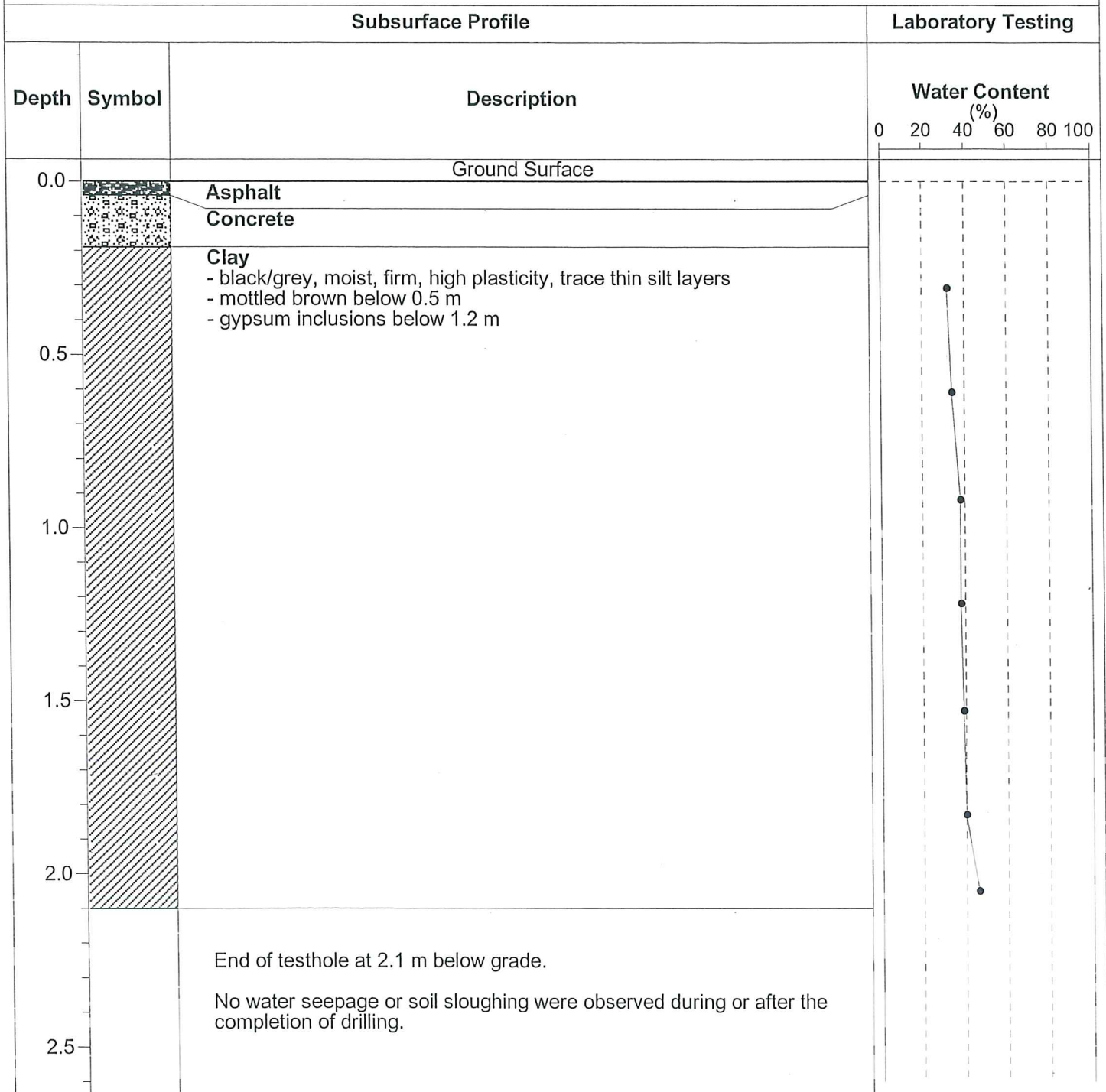
January 11, 2007

TESTHOLE TH1



Project Name: 2007 City of Winnipeg Residential Street Renewal
 Client: Earth Tech (Canada) Ltd.
 Site: Sharp Boulevard, Lodge Avenue to Bruce Avenue
 Testhole Location: 3.2 m N of the S property line of 262 Sharp Blvd., 1.9 m E of the W curb

Date Drilled: January 5, 2006
 Depth of Testhole: 2.1 m
 Logged by: Kurtis Kulchyski

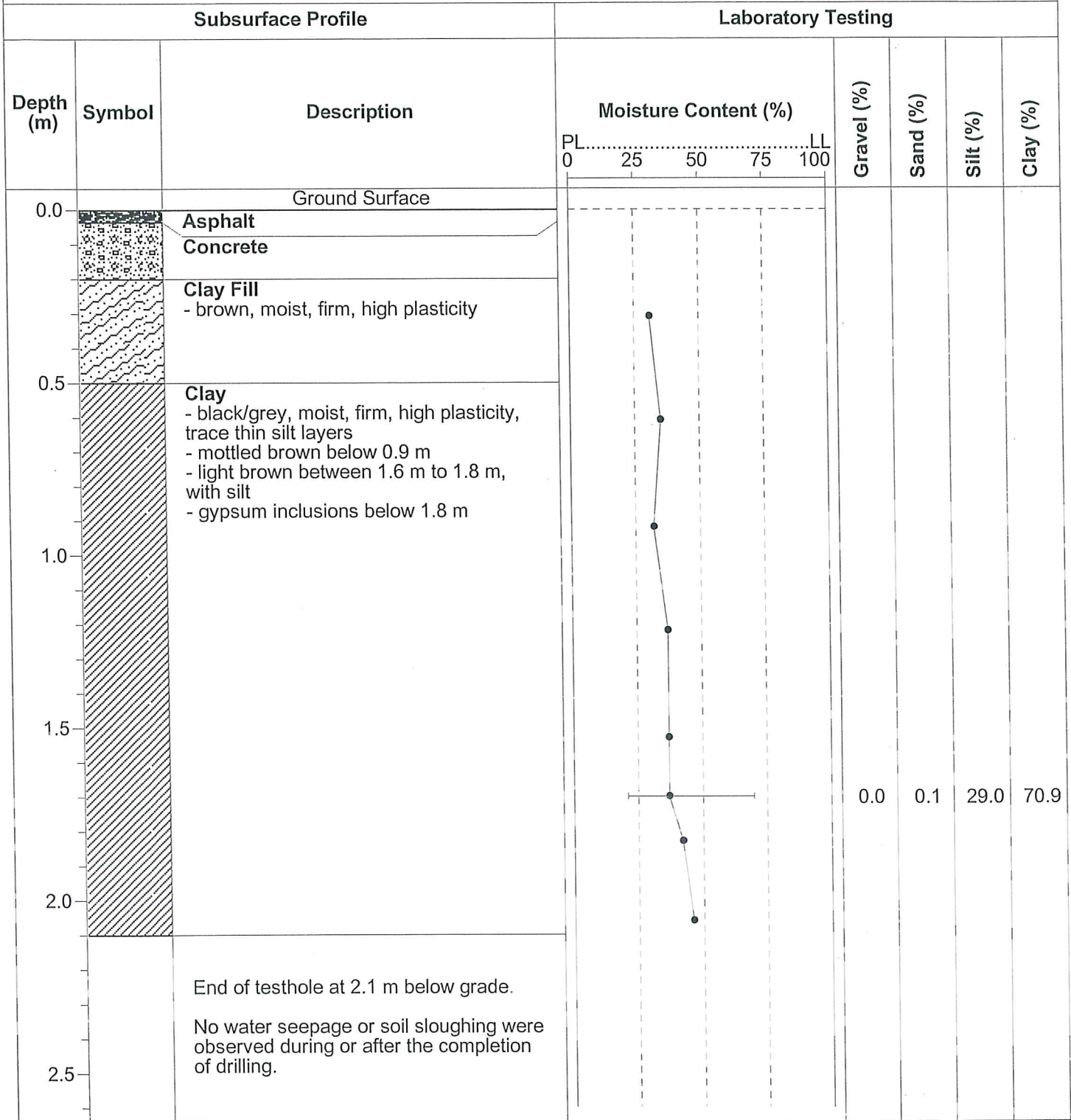


TESTHOLE TH2



Project Name: 2007 City of Winnipeg Residential Street Renewal
 Client: Earth Tech (Canada) Ltd.
 Site: Sharp Boulevard, Lodge Avenue to Bruce Avenue
 Testhole Location: 4.5 m S of the S property line of 284 Sharp Blvd., 2.1 m E of the W curb

Date Drilled: January 5, 2006
 Depth of Testhole: 2.1 m
 Logged by: Kurtis Kulchyski



TESTHOLE TH3



Project Name: 2007 City of Winnipeg Residential Street Renewal
 Client: Earth Tech (Canada) Ltd.
 Site: Sharp Boulevard, Lodge Avenue to Bruce Avenue
 Testhole Location: 5.2 m S of the N property line of 300 Sharp Blvd., 2.3 m E of the W curb

Date Drilled: January 5, 2006
 Depth of Testhole: 2.1 m
 Logged by: Kurtis Kulchyski

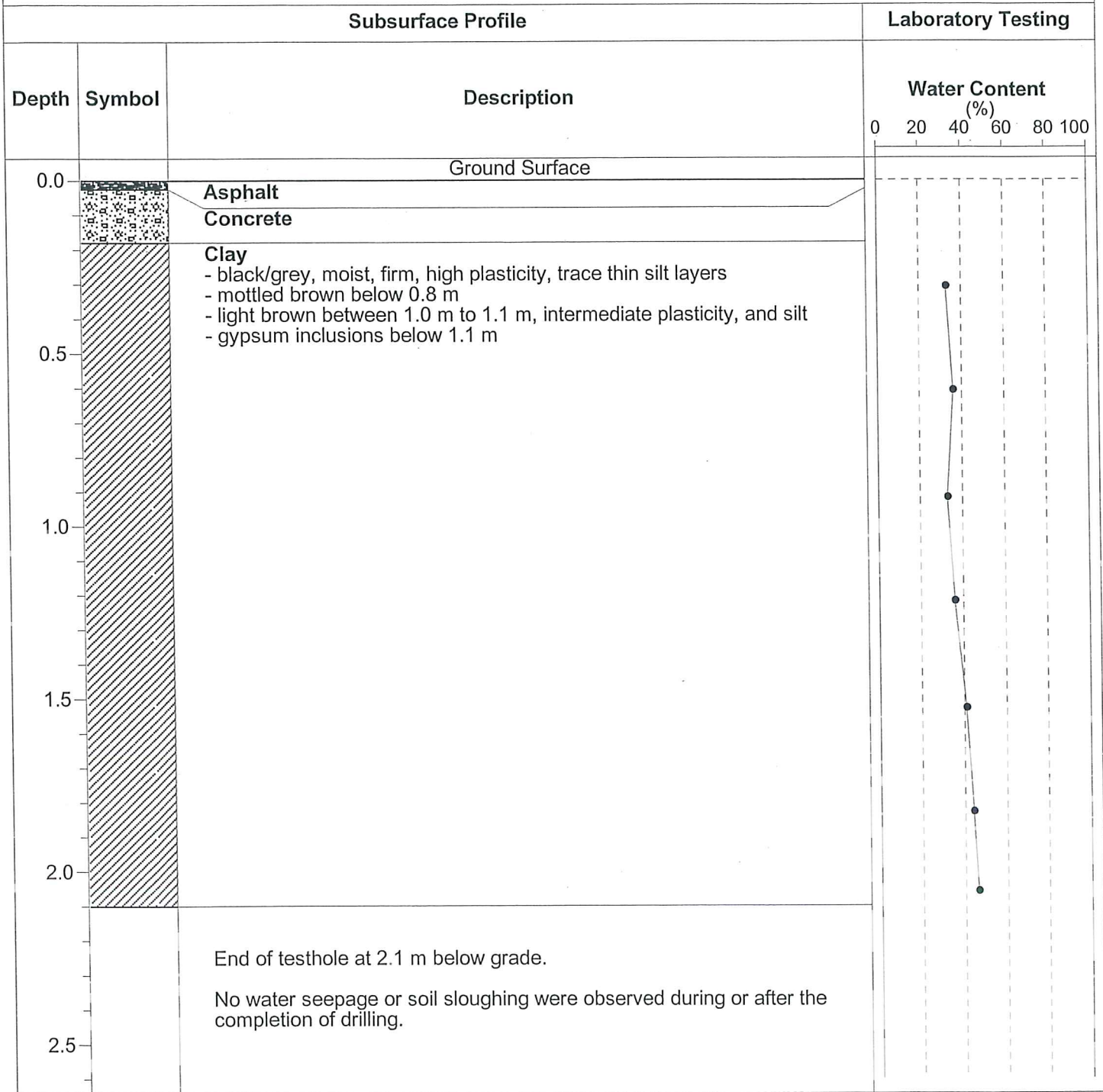
Subsurface Profile			Laboratory Testing					
Depth (m)	Symbol	Description	Moisture Content (%)		Gravel (%)	Sand (%)	Silt (%)	Clay (%)
			PL	LL				
0.0		Ground Surface						
0.0 - 0.1		Asphalt						
0.1 - 0.2		Concrete						
0.2 - 2.1		Clay - mottled brown, moist, firm, high plasticity, trace thin silt layers - light brown between 1.3 m to 1.4 m, with silt - gypsum inclusions below 1.8 m						
1.0					0.0	1.9	10.7	87.4
2.1		End of testhole at 2.1 m below grade.						
2.5		No water seepage or soil sloughing were observed during or after the completion of drilling.						

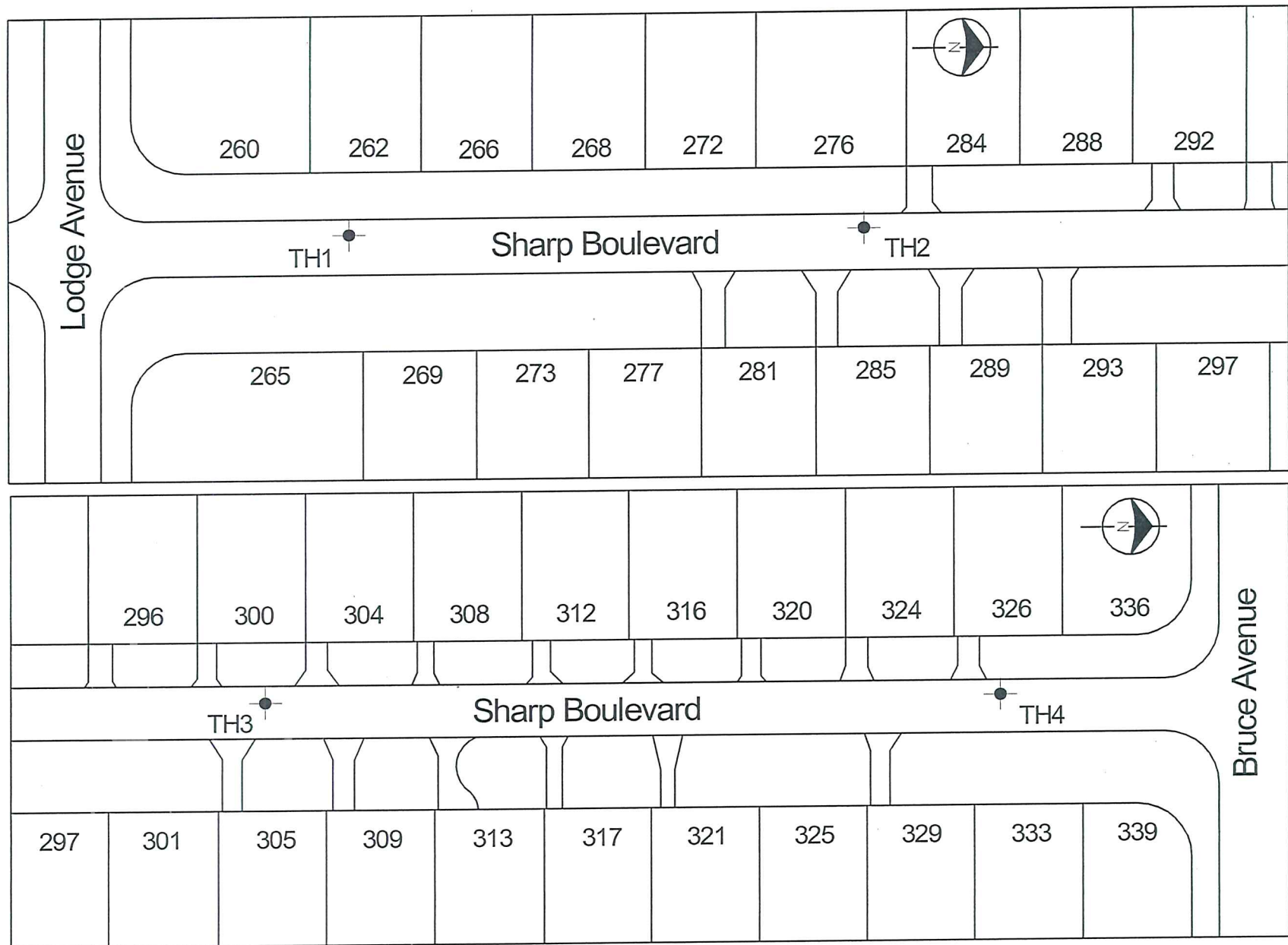
TESTHOLE TH4



Project Name: 2007 City of Winnipeg Residential Street Renewal
 Client: Earth Tech (Canada) Ltd.
 Site: Sharp Boulevard, Lodge Avenue to Bruce Avenue
 Testhole Location: 7.5 m N of the S property line of 328 Sharp Blvd., 2.4 m E of the W curb

Date Drilled: January 5, 2006
 Depth of Testhole: 2.1 m
 Logged by: Kurtis Kulchyski





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LIMITED**
Established in 1923

Project No.: EAR-612

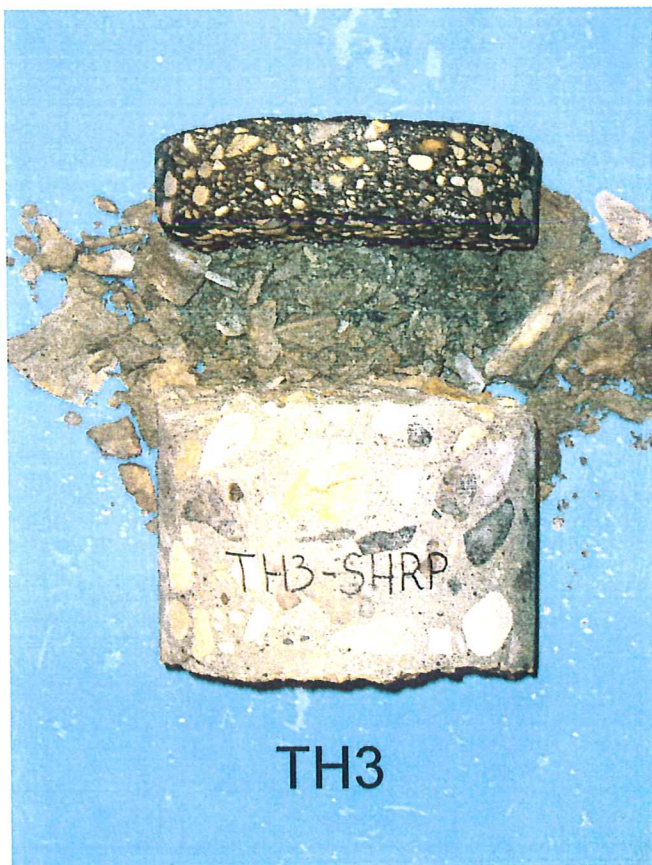
Drawn By: KK

Date: Jan. 8, 2007

Scale: NTS

Testhole Location Plan
2007 City of Winnipeg Residential Street Renewal
Sharp Boulevard
Lodge Avenue to Bruce Avenue

2007 City of Winnipeg Residential Street Renewal
Sharp Boulevard
Lodge Avenue to Bruce Avenue



Blair Cockrell

**HEARNE AVENUE
LODGE AVENUE TO MOUNT ROYAL ROAD
2007 CITY OF WINNIPEG
RESIDENTIAL STREET RENEWAL**

Prepared for
Earth Tech (Canada) Inc.
1000 Waverley Street
Winnipeg, Manitoba
R3T 0P3

Prepared by
The National Testing Laboratories Limited
199 Henlow Bay
Winnipeg, Manitoba
R3Y 1G4

January 11, 2007

TESTHOLE TH1

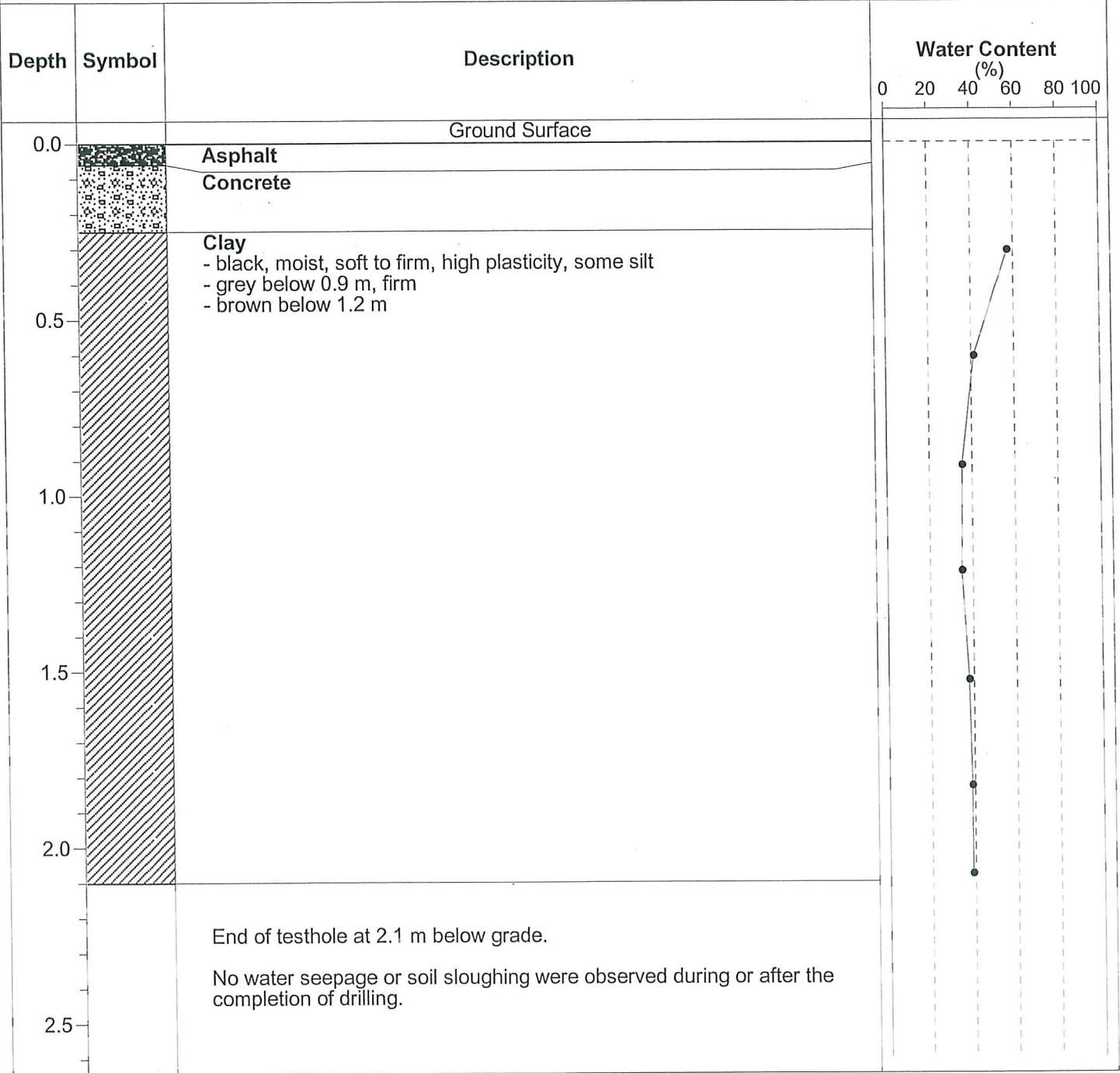


Project Name: 2007 City of Winnipeg Residential Street Renewal
 Client: Earth Tech (Canada) Inc.
 Site: Hearne Avenue, Lodge Avenue to Mount Royal Road
 Testhole Location: 1.3 m S of the S property line of 151 Hearne Ave., 1.5 m E of the W curb

Date Drilled: December 19, 2006
 Depth of Testhole: 2.1 m
 Logged by: Kurtis Kulchyski

Subsurface Profile

Laboratory Testing



TESTHOLE TH2



Project Name: 2007 City of Winnipeg Residential Street Renewal
 Client: Earth Tech (Canada) Inc.
 Site: Hearne Avenue, Lodge Avenue to Mount Royal Road
 Testhole Location: 3.4 m W of the E property line of 127 Hearne Ave., 1.5 m S of the N curb

Date Drilled: December 19, 2006
 Depth of Testhole: 2.1 m
 Logged by: Kurtis Kulchyski

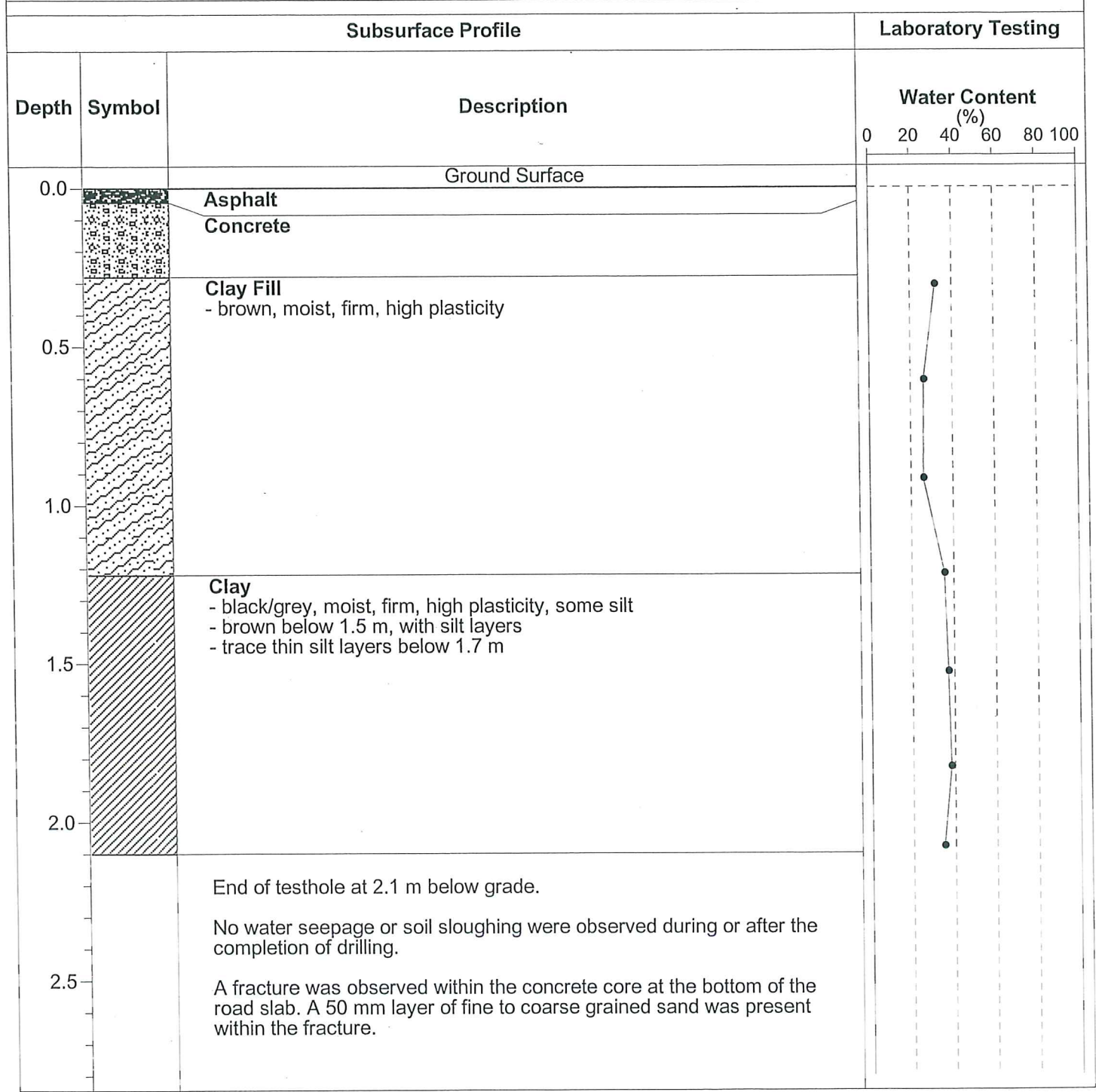
Subsurface Profile			Laboratory Testing					
Depth (m)	Symbol	Description	Moisture Content (%)		Gravel (%)	Sand (%)	Silt (%)	Clay (%)
			PL	LL				
0.0		Ground Surface						
0.0 - 0.1	[Asphalt symbol]	Asphalt						
0.1 - 0.2	[Concrete symbol]	Concrete						
0.2 - 2.1	[Clay symbol]	Clay - black/grey, moist, soft to firm, high plasticity, some silt - brown below 1.2 m						
0.5								
1.0					0.0	3.9	19.5	76.6
1.5								
2.0								
2.1		End of testhole at 2.1 m below grade.						
2.5		No water seepage or soil sloughing were observed during or after the completion of drilling.						

TESTHOLE TH3



Project Name: 2007 City of Winnipeg Residential Street Renewal
 Client: Earth Tech (Canada) Inc.
 Site: Hearne Avenue, Lodge Avenue to Mount Royal Road
 Testhole Location: 4.8 m W of the E property line of 114 Hearne Ave., 1.4 m N of the S curb

Date Drilled: December 19, 2006
 Depth of Testhole: 2.1 m
 Logged by: Kurtis Kulchyski



TESTHOLE TH4

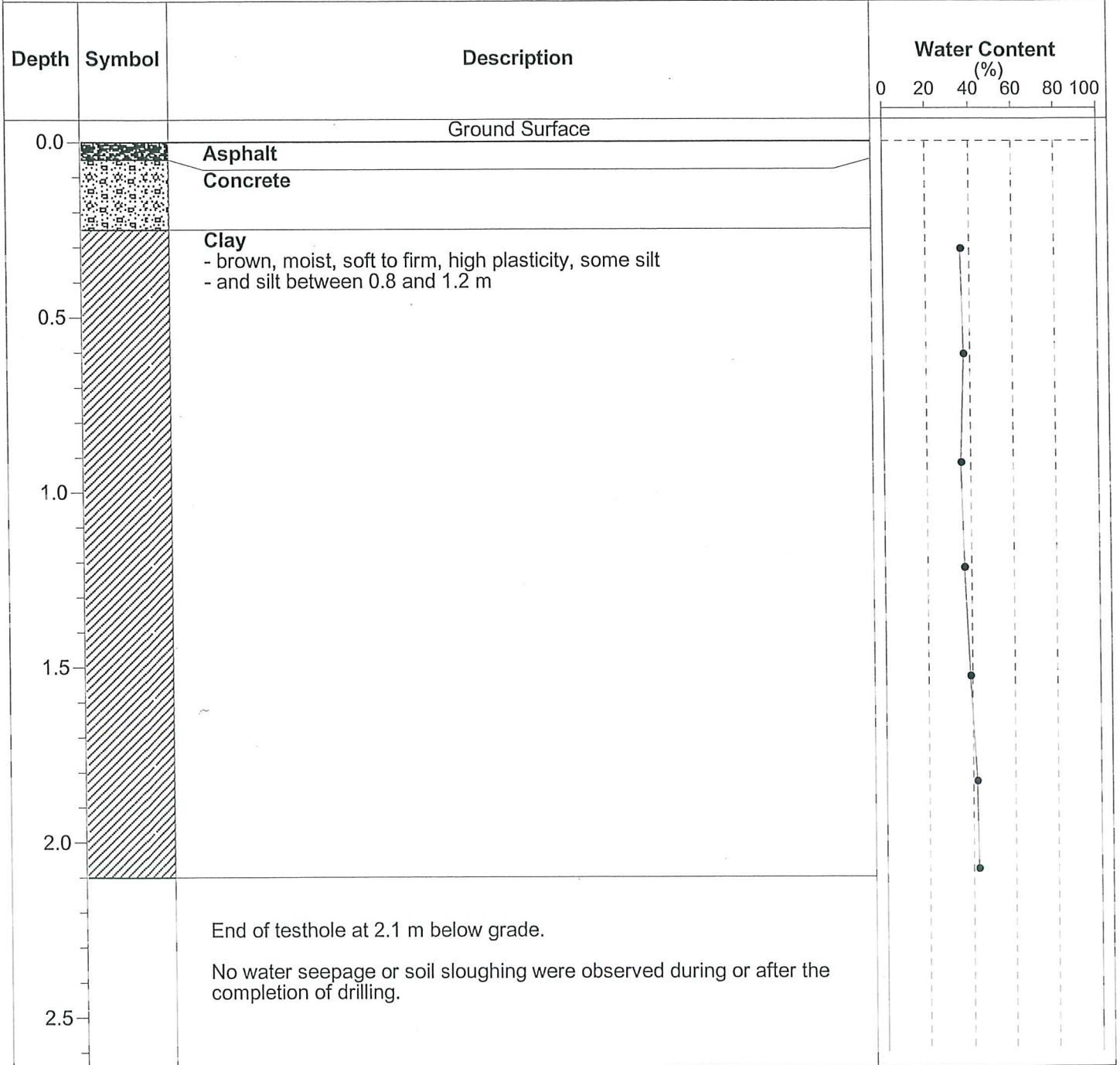


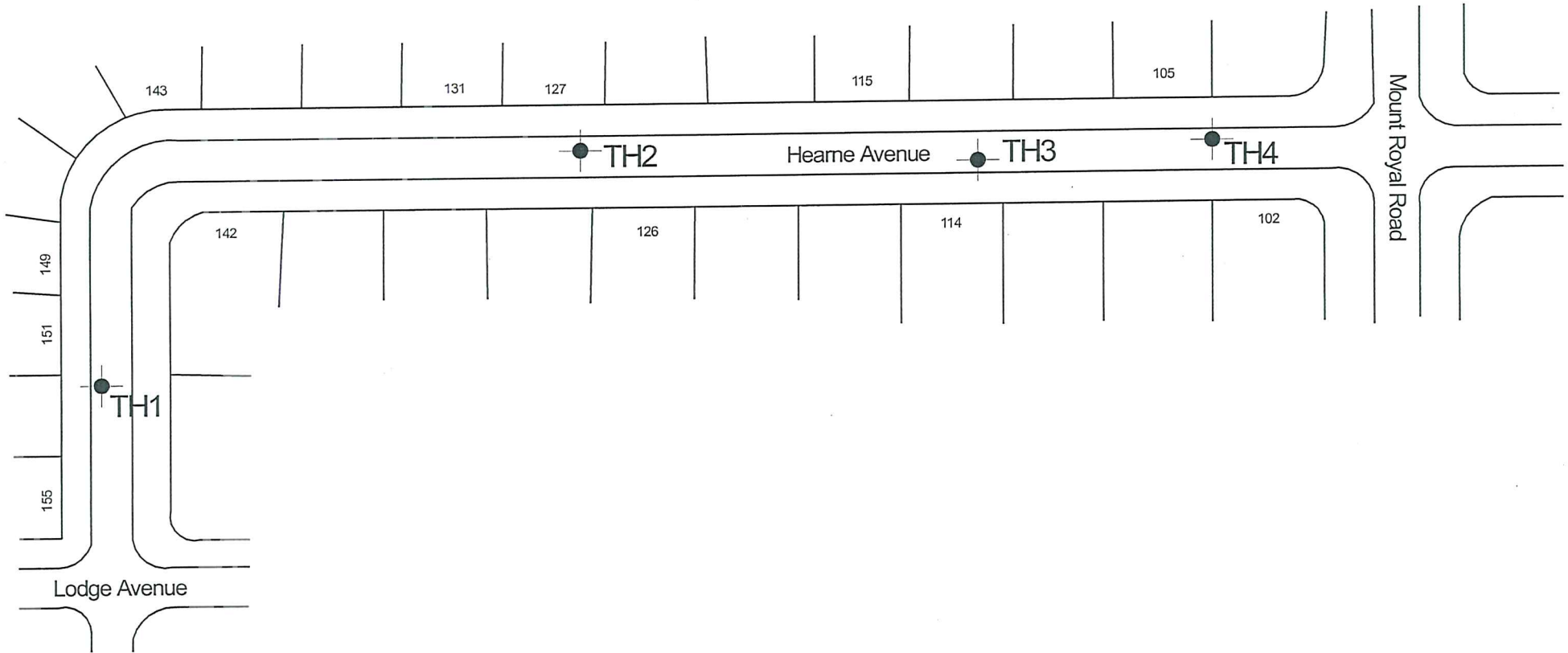
Project Name: 2007 City of Winnipeg Residential Street Renewal
 Client: Earth Tech (Canada) Inc.
 Site: Hearne Avenue, Lodge Avenue to Mount Royal Road
 Testhole Location: In line with the W property line of 102 Hearne Ave., 1.1 m S of the N curb

Date Drilled: December 19, 2006
 Depth of Testhole: 2.1 m
 Logged by: Kurtis Kulchyski

Subsurface Profile

Laboratory Testing





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Project No.: EAR-612

Drawn By: SD

Date: Jan. 2, 2007

Scale: NTS

Testhole Location Plan
2007 City of Winnipeg Residential Street Renewal
Heame Avenue
Lodge Avenue to Mount Royal Road

2007 City of Winnipeg Residential Street Renewal
Hearne Avenue
Lodge Avenue to Mount Royal Road

