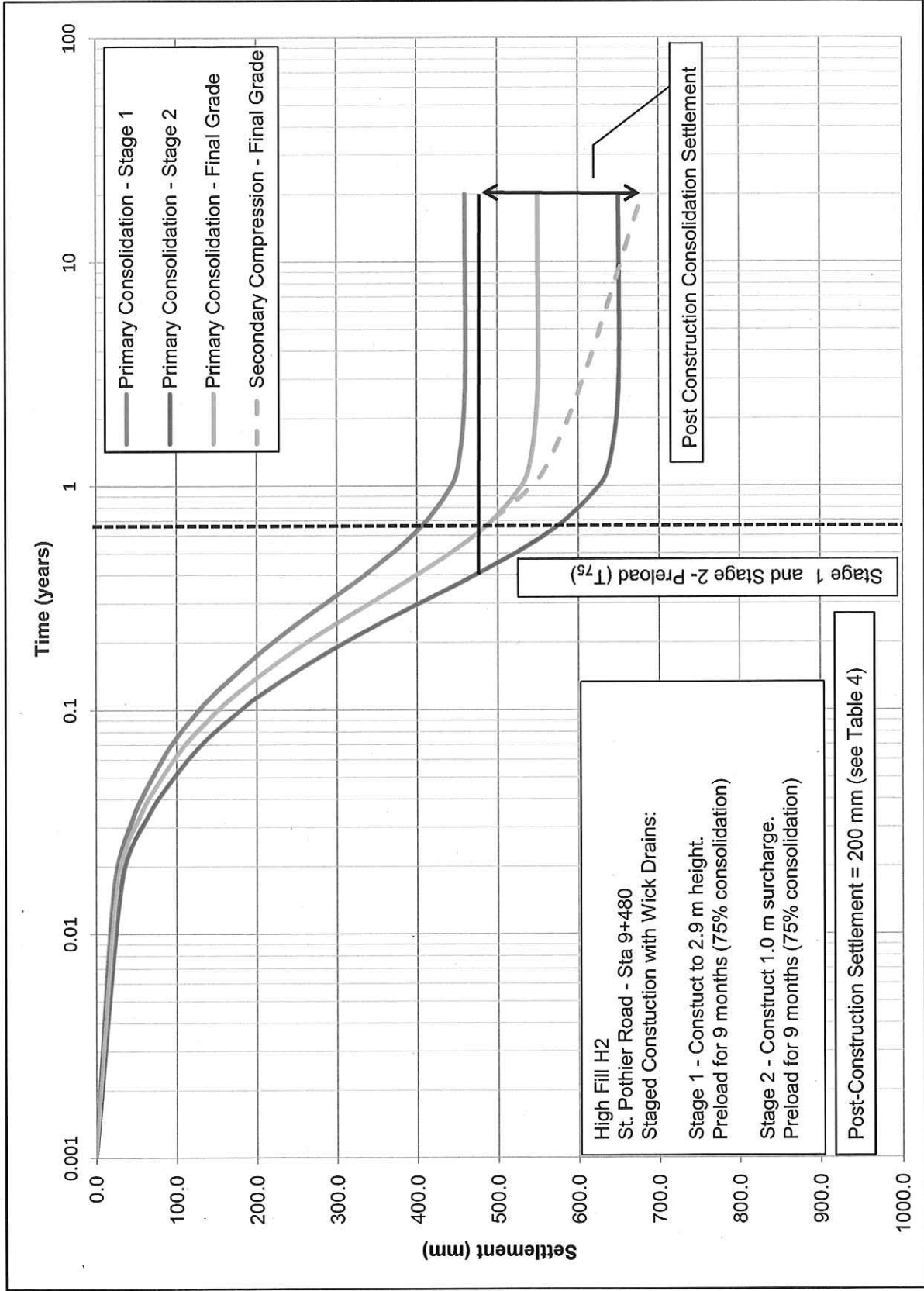




Settlement Analysis  
STA 9+480 – St. Pothier Road  
Settlement vs. log Time – Staged Construction

Figure B31



Date: July 6, 2015  
Project No. 11-1191-0007

Analysis By: MT    Reviewed By: SEMP



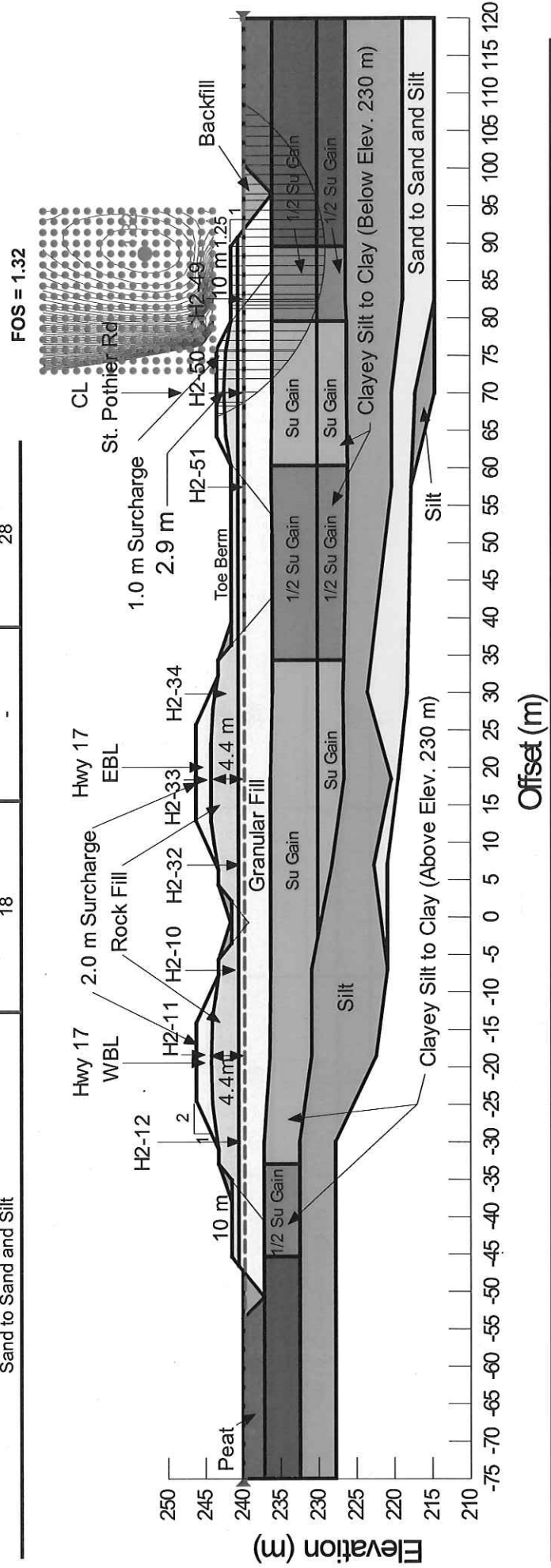




Stability Analysis  
STA 9+480 – St. Pothier Road South Side  
Stage 2 – 1.0 m Surcharge with Strength Gain

Figure B29

Material Name	Unit Weight (kN/m³)	Cohesion (kPa)	Friction Angle (°)
New Granular Fill (BWT)	20	-	35
New Rock Fill	19	-	40
Peat	12	1	27
Backfill	12	1	27
Clayey Silt to Clay (Above Elev. 230 m)	No Strength Gain	16	-
	EBL & WBL Strength Gain	26 – 32	-
	St. Pothier Road Strength Gain	20 – 26	-
Clayey Silt to Clay (Below Elev. 230 m)	No Strength Gain	16 – 22	-
	EBL & WBL Strength Gain	32 – 36	-
	St. Pothier Road Strength Gain	26 – 31	-
Silt	18	-	28
Sand to Sand and Silt	18	-	28



Date: July 6, 2015  
Project No. 11-1191-0007

Analysis By: MT    Reviewed By: SEMP



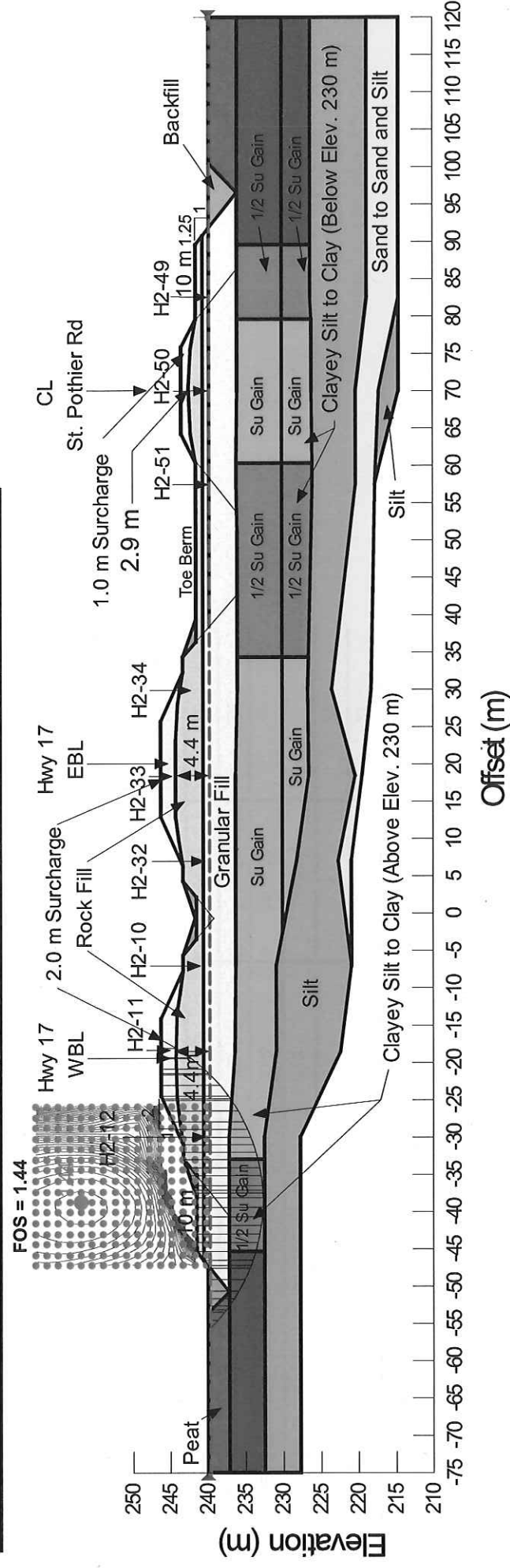




**Stability Analysis**  
**STA 13+260 – WBL North Side**  
**Stage 2 – 2.0 m Surcharge with Strength Gain**

**Figure B27**

Material Name	Unit Weight (kN/m³)	Cohesion (kPa)	Friction Angle (°)
New Granular Fill (BWT)	20	-	35
New Rock Fill	19	-	40
Peat	12	1	27
Backfill	12	1	27
Clayey Silt to Clay (Above Elev. 230 m)	No Strength Gain	16	-
	EBL& WBL Strength Gain	26 – 32	-
	St. Pothier Road Strength Gain	20 – 26	-
Clayey Silt to Clay (Below Elev. 230 m)	No Strength Gain	16 – 22	-
	EBL& WBL Strength Gain	32 – 36	-
	St. Pothier Road Strength Gain	26 – 31	-
Silt	18	-	28
Sand to Sand and Silt	18	-	28



**Date:** July 6, 2015  
**Project No.** 11-1191-0007

Analysis By: MT Reviewed By: SEMP



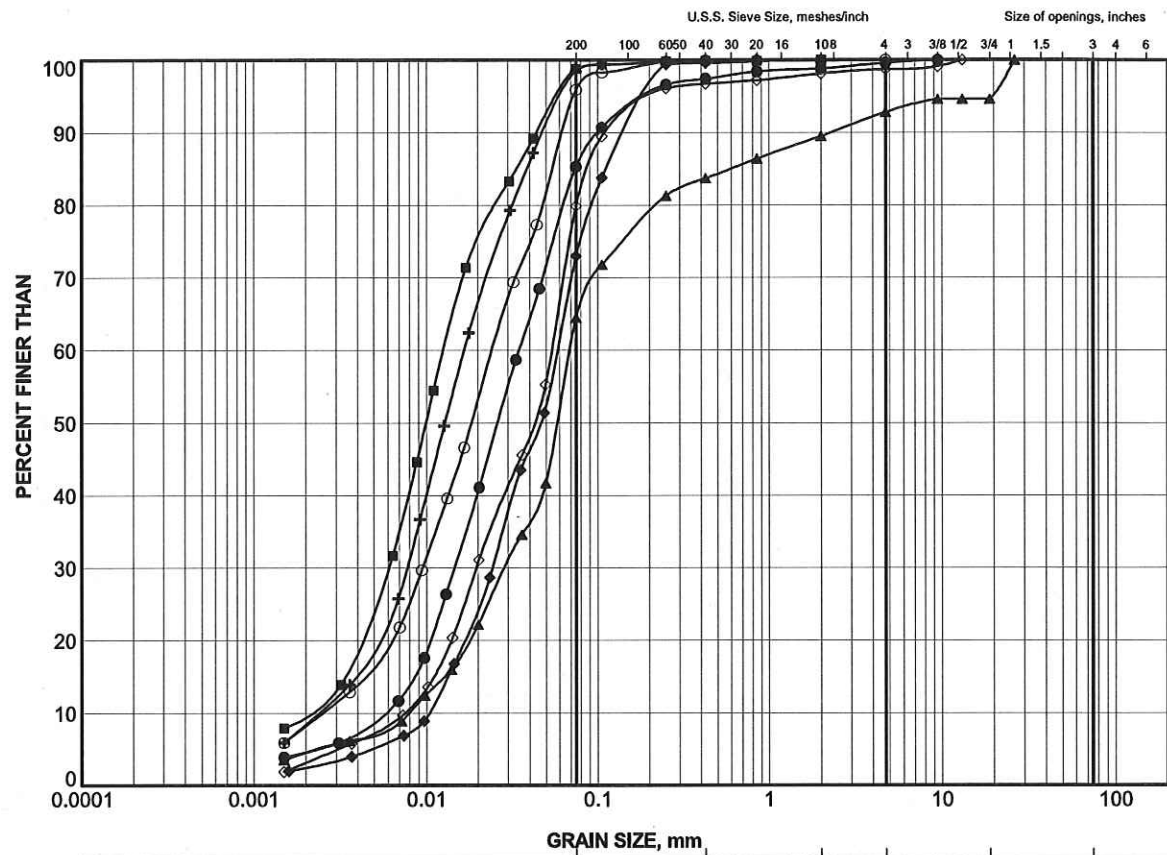













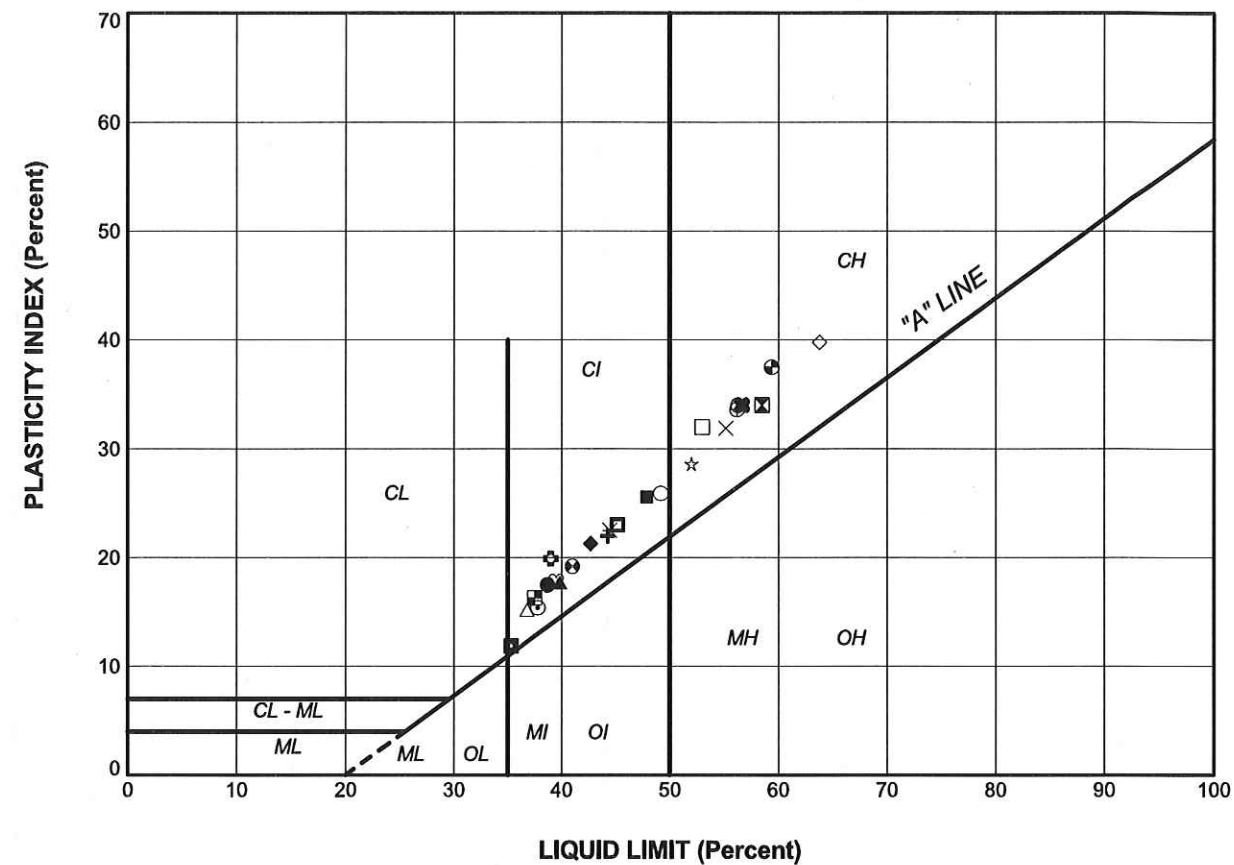
CLAY AND SILT	SAND SIZE			GRAVEL SIZE		Cobble Size
	fine	medium	coarse	fine	coarse	
	SAND SIZE			GRAVEL SIZE		

#### LEGEND

SYMBOL	BOREHOLE	SAMPLE	ELEV (m)
●	H2-53	15	222.4
■	H2-54	12	227.1
▲	H2-55	12	227.2
+	H2-57	9	231.7
◆	H2-58	9	231.7
◇	H2-59	7	233.3
○	H2-60	6	234.9


PROJECT						HIGHWAY 17 ST. POTHIER ROAD STA 9+400 TO 9+600					
TITLE						GRAIN SIZE DISTRIBUTION SILT to SANDY SILT					
 <b>Golder Associates</b> SUDBURY, ONTARIO		PROJECT No.		11-1191-0007		FILE No.		11-1191-0007.GPJ			
		DRAWN		TB		Mar 2014		SCALE		N/A	
		CHECK		SEMP		Mar 2014		FIGURE B23.2			
		APPR				Mar 2014					



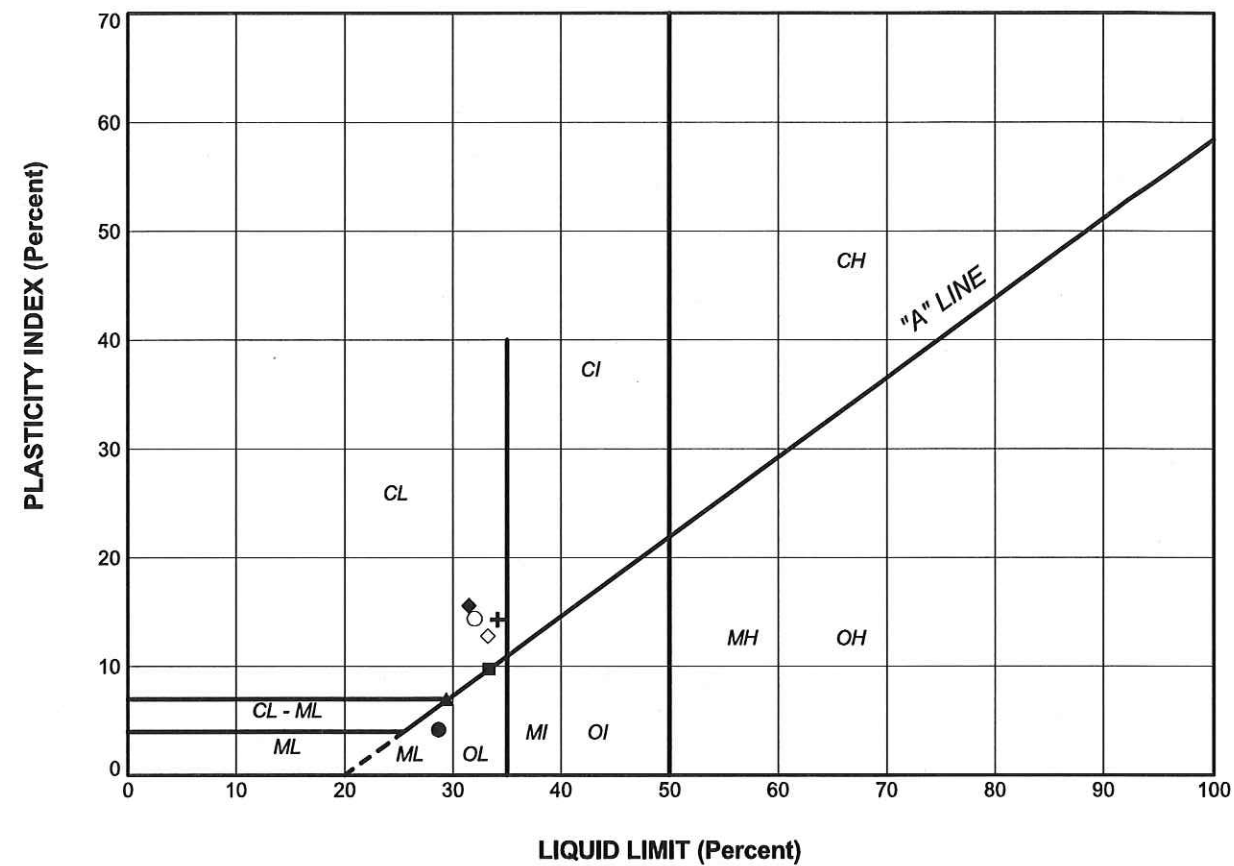


# **LEGEND**

SYMBOL	BOREHOLE	SAMPLE	LL(%)	PL(%)	PI
●	H2-45	6	38.7	21.2	17.5
■	H2-46	6	47.9	22.3	25.6
▲	H2-47	7	39.8	22.1	17.7
+	H2-47	10	44.3	22.3	22.0
◆	H2-48	7	42.7	21.4	21.3
◇	H2-48	10	63.8	24.0	39.8
○	H2-49	11	49.2	23.3	25.9
△	H2-50	6	36.8	21.6	15.2
⊗	H2-50	8	56.3	22.3	34.0
⊕	H2-50	10	56.2	22.6	33.6
□	H2-51	9	53.0	21.0	32.0
⊗	H2-51	11	41.0	21.8	19.2
⊕	H2-52	9	59.4	21.9	37.5
☆	H2-53	10	52.0	23.4	28.6
⊗	H2-54	6	39.5	21.7	17.8
⊗	H2-54	9	58.5	24.5	34.0
⊕	H2-55	9	37.8	22.4	15.4
⊗	H2-56	5	39.0	19.1	19.9
×	H2-56	8	55.2	23.3	31.9
⊗	H2-57	6	56.7	22.7	34.0
■	H2-57	8	35.3	23.4	11.9
✱	H2-58	6	44.5	22.0	22.5
□	H2-59	4	45.2	22.2	23.0
■	H2-60	4	37.5	21.2	16.3

PROJECT				
HIGHWAY 17 ST. POTHIER ROAD STA 9+400 TO 9+600				
TITLE				
PLASTICITY CHART SILTY CLAY to CLAY				
PROJECT No. 11-1191-0007		FILE No. 11-1191-0007.GPJ		
DRAWN	TB	Mar 2014	SCALE	N/A
CHECK	SEMP	Mar 2014	REV.	
APPR		Mar 2014		
 <b>Golder Associates</b> SUDBURY, ONTARIO		<b>FIGURE B22</b>		






**SOIL TYPE**  
 C = Clay  
 M = Silt  
 O = Organic

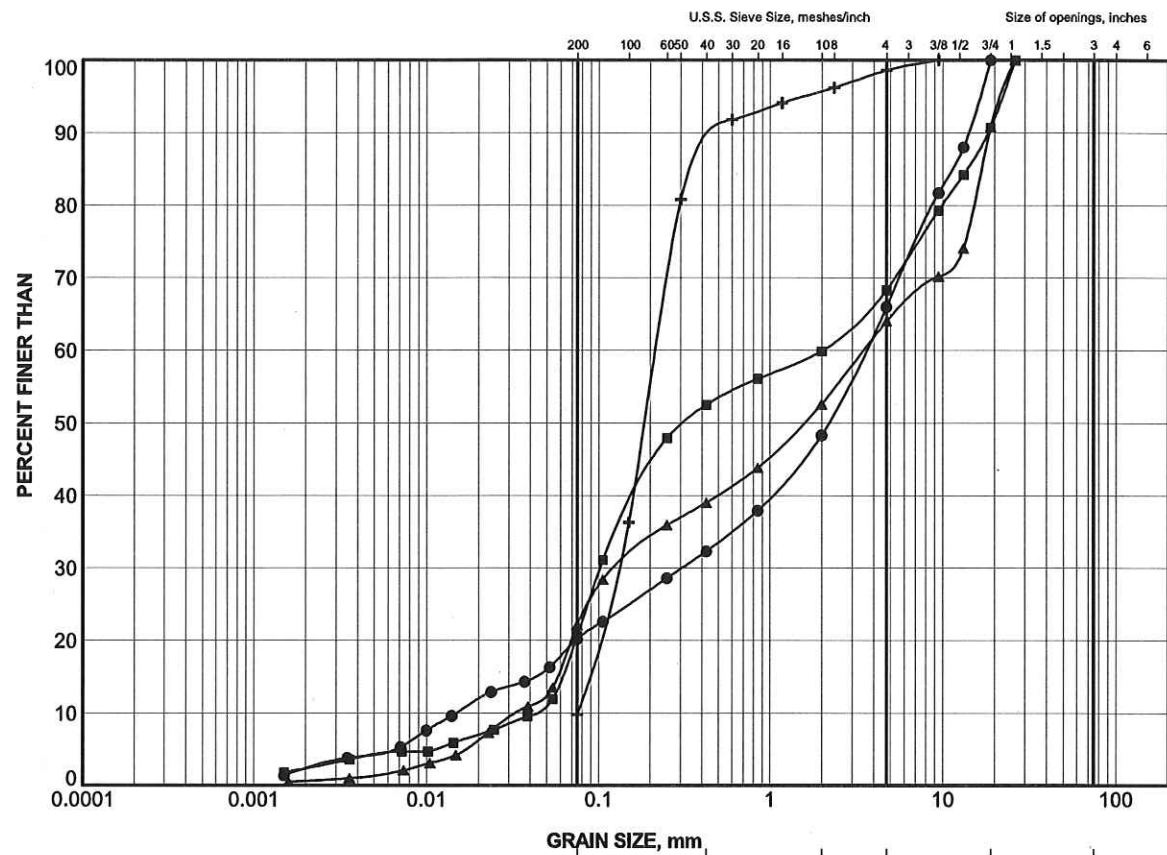
**PLASTICITY**  
 L = Low  
 I = Intermediate  
 H = High

### LEGEND

SYMBOL	BOREHOLE	SAMPLE	LL(%)	PL(%)	PI
●	H2-44	6	28.7	24.5	4.2
■	H2-45	9	33.3	23.5	9.8
▲	H2-46	9	29.4	22.4	7.0
✦	H2-49	6	34.1	19.8	14.3
◆	H2-51	6A	31.5	15.9	15.6
◇	H2-52	6	33.2	20.4	12.8
○	H2-53	6	32.0	17.6	14.4

PROJECT					HIGHWAY 17 ST. POTHIER ROAD STA 9+400 TO 9+600				
TITLE					PLASTICITY CHART CLAYEY SILT to SILT				
 <b>Golder Associates</b> SUDBURY, ONTARIO		PROJECT No.		11-1191-0007		FILE No.		11-1191-0007.GPJ	
		DRAWN	TB	Mar 2014		SCALE	N/A	REV.	
		CHECK	SEMP	Mar 2014					
		APPR		Mar 2014		<b>FIGURE B20</b>			





CLAY AND SILT	SAND SIZE, mm						Cobble Size
	fine	medium	coarse	fine	coarse		
	SAND SIZE			GRAVEL SIZE			

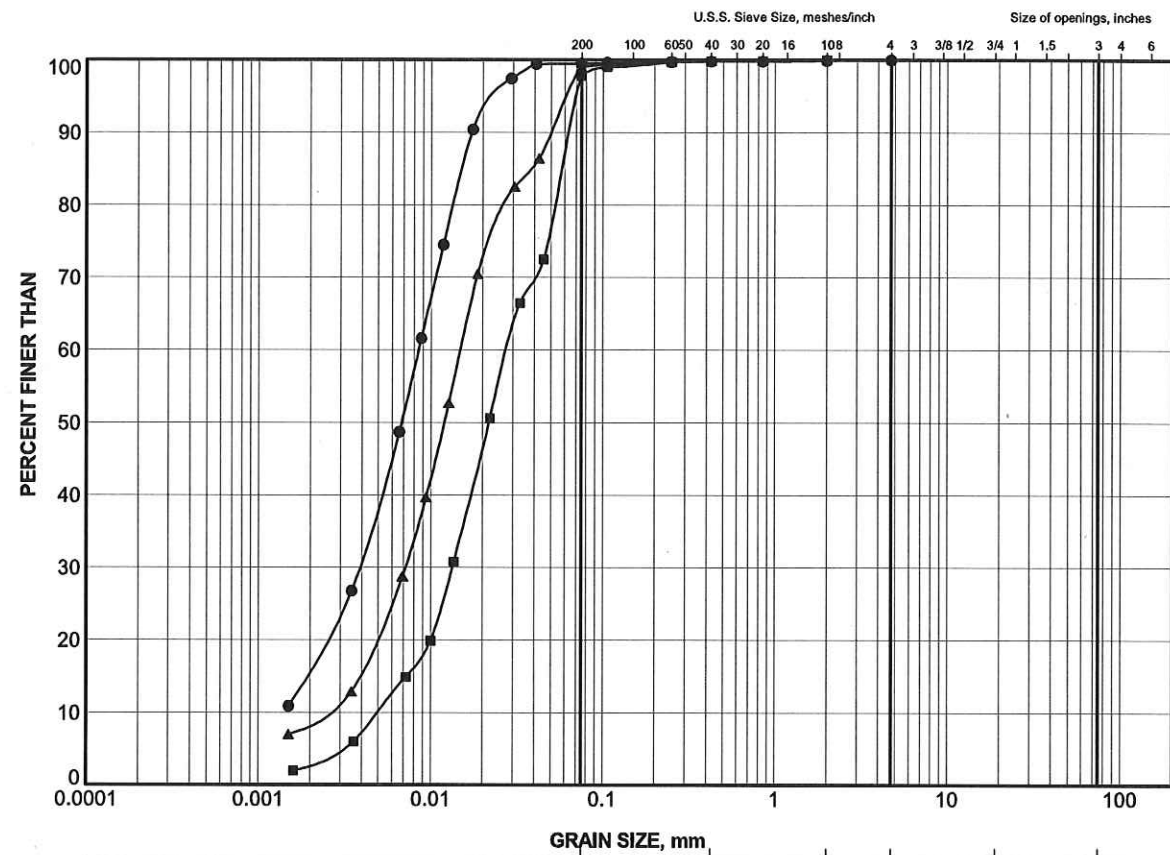
#### LEGEND

SYMBOL	BOREHOLE	SAMPLE	ELEV (m)
●	H2-25	9	230.4
■	H2-29	16	221.4
▲	H2-40	10	229.0
+	H2-41	9	229.1

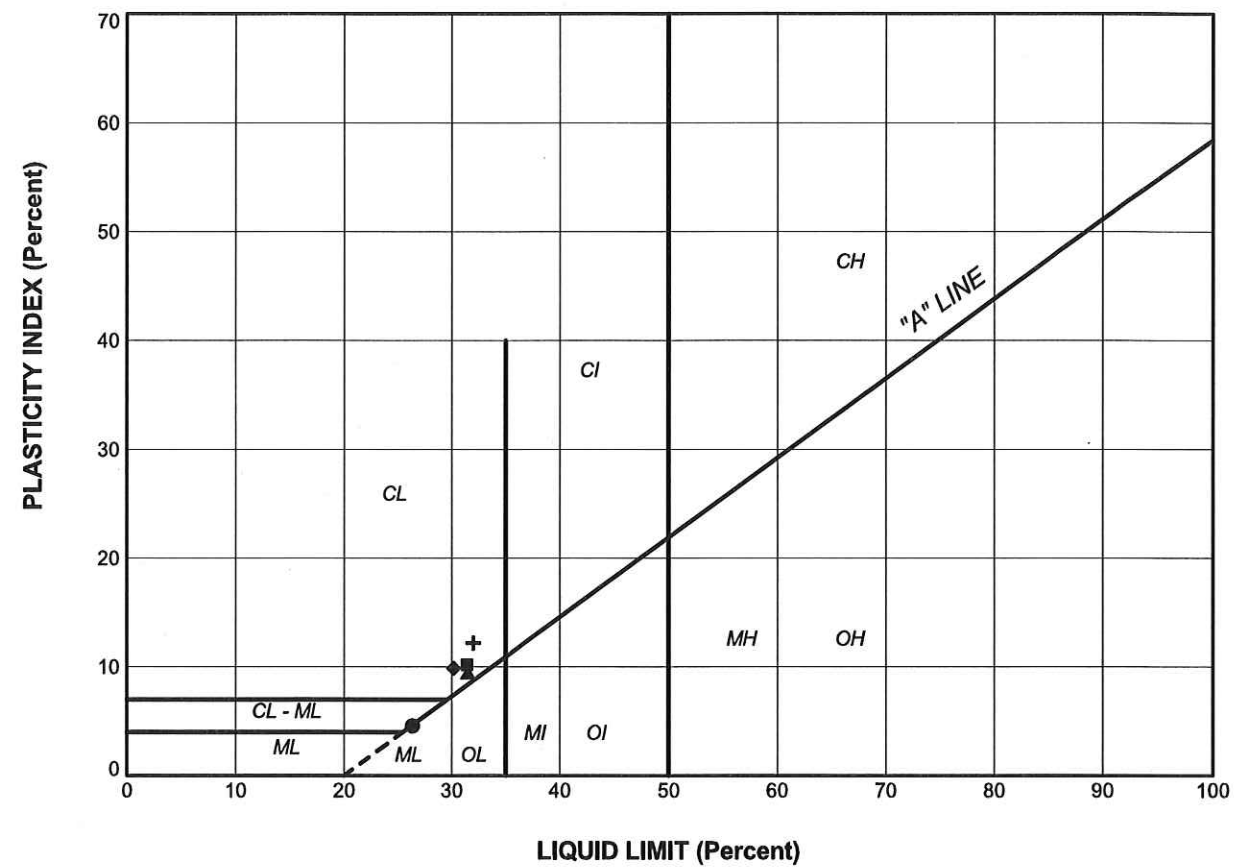
PROJECT					
HIGHWAY 17 STA 13+140 TO 13+390 (EBL)					
TITLE					
GRAIN SIZE DISTRIBUTION GRAVELLY SAND to SAND and GRAVEL					
 <b>Golder Associates</b> SUDBURY, ONTARIO		PROJECT No. 11-1191-0007		FILE No. 11-1191-0007.GPJ	
		DRAWN	TB	Mar 2014	SCALE N/A
		CHECK	SEMP	Mar 2014	REV.
		APPR		Mar 2014	
<b>FIGURE B18</b>					



SUD-MTO GSD (NEW) GLDR\_LDN.GDT







**SOIL TYPE**  
 C = Clay  
 M = Silt  
 O = Organic

**PLASTICITY**  
 L = Low  
 I = Intermediate  
 H = High

#### LEGEND

SYMBOL	BOREHOLE	SAMPLE	LL(%)	PL(%)	PI
●	H2-26	8	26.4	21.8	4.6
■	H2-32	11	31.4	21.2	10.2
▲	H2-33	10	31.5	22.0	9.5
+	H2-34	11	32.0	19.8	12.2
◆	H2-41	4	30.2	20.3	9.9

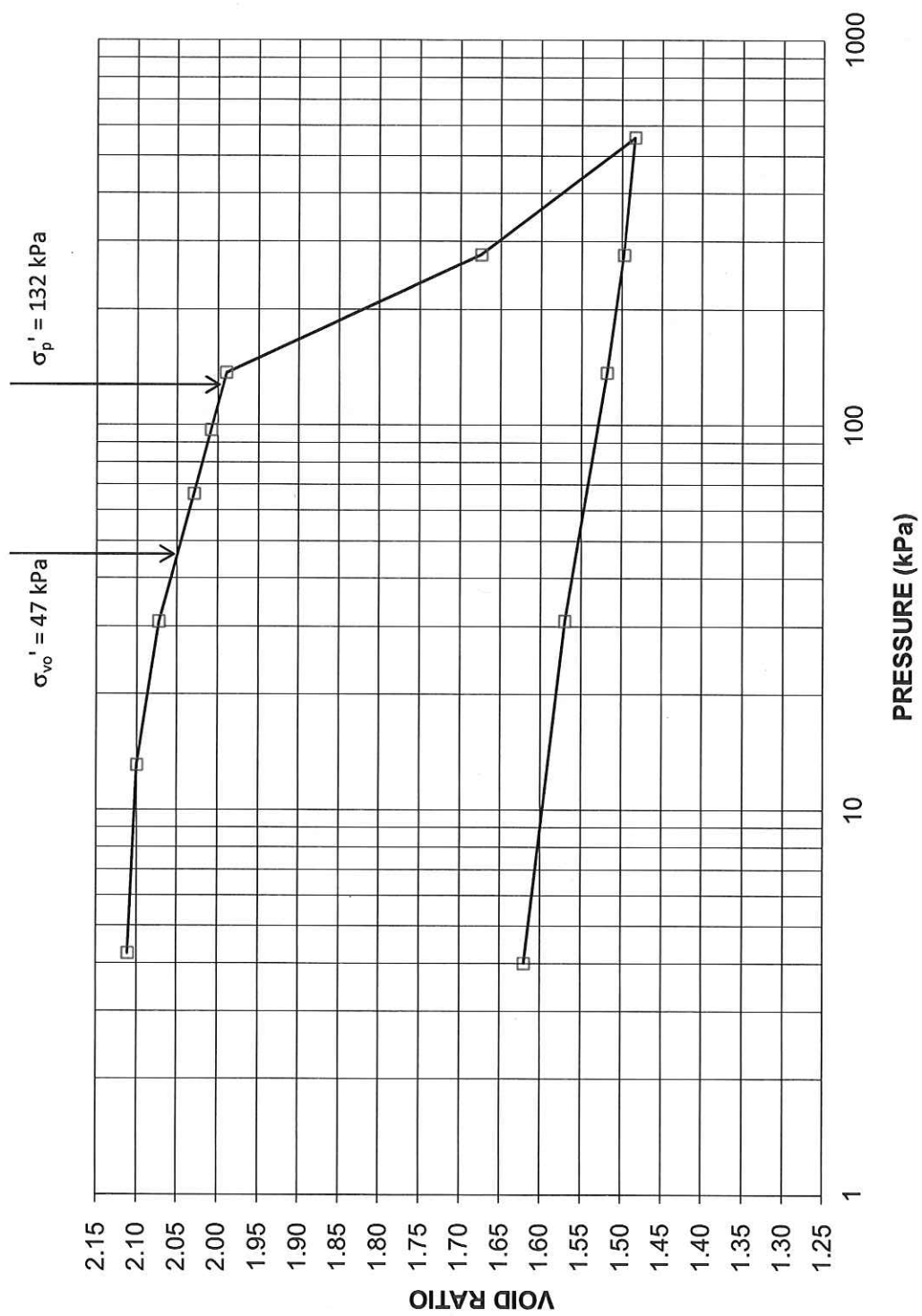
PROJECT					
HIGHWAY 17 STA 13+140 TO 13+390 (EBL)					
TITLE					
PLASTICITY CHART CLAYEY SILT to SILT					
<b>Golder Associates</b> SUDBURY, ONTARIO		PROJECT No. 11-1191-0007		FILE No. 11-1191-0007.GPJ	
		DRAWN TB	Mar 2014	SCALE N/A	REV.
		CHECK SEMP	Mar 2014		
		APPR	Mar 2014		
<b>FIGURE B15</b>					



CONSOLIDATION TEST  
VOID RATIO VS LOG PRESSURE

FIGURE B14  
Pg. 3 of 4

CONSOLIDATION TEST  
VOID RATIO vs PRESSURE  
BH H2-36 Sa 8



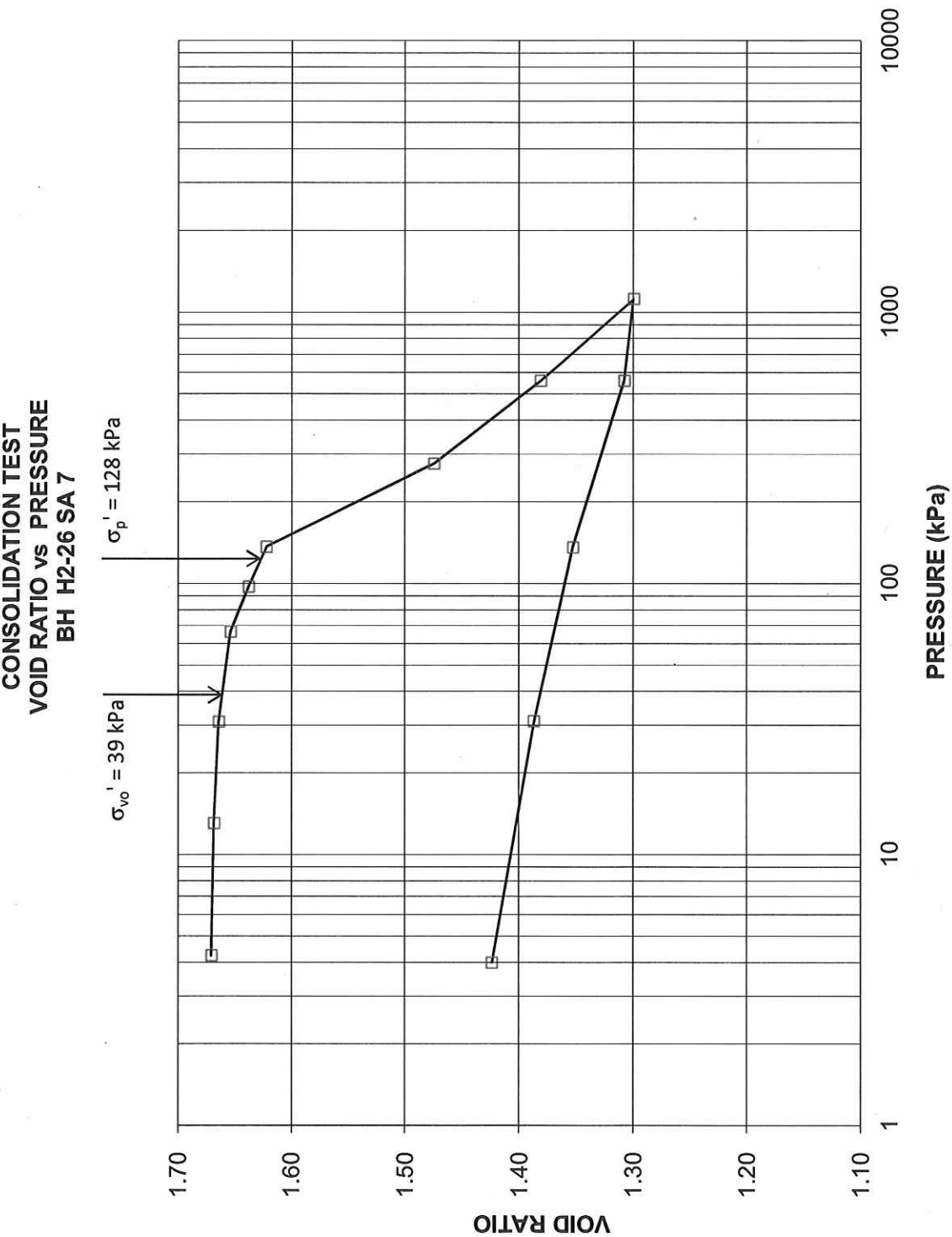


CONSOLIDATION TEST SUMMARY				FIGURE B14 Pg. 1 of 4					
SAMPLE IDENTIFICATION									
Project Number: 11-1191-0007		Sample Number: 8							
Borehole Number: H2-36		Sample Depth, m: 7.7							
TEST CONDITIONS									
Test Type	Standard	Load Duration, hr		24					
Oedometer Number	2								
Date Started	July 6/12								
Date Completed	July 24/12								
SAMPLE DIMENSIONS AND PROPERTIES - INITIAL									
Sample Height, cm	2.526	Unit Weight, kN/m <sup>3</sup>	15.62						
Sample Diameter, cm	6.351	Dry Unit Weight, kN/m <sup>3</sup>	8.69						
Area, cm <sup>2</sup>	31.68	Specific Gravity, Measured	2.77						
Volume, cm <sup>3</sup>	80.02	Solids Height, cm	0.807						
Water Content, %	79.76	Volume of Solids, cm <sup>3</sup>	25.57						
Wet Mass, g	127.45	Volume of Voids, cm <sup>3</sup>	54.45						
Dry Mass, g	70.90								
TEST COMPUTATIONS									
Pressure	Primary	Corr.		Average					Total
kPa	Consolidation	Height	Void	Height	t <sub>90</sub>	cv.	mv	k	Work
		cm	Ratio	cm	sec	cm <sup>2</sup> /s	m <sup>2</sup> /kN	cm/s	kJ/m3
0	0	2.526	2.130	2.526					
4	0.15	2.511	2.111	2.518	1009	0.0013	1.44E-03	1.88E-07	0.013
13	0.09	2.502	2.100	2.506	1058	0.0013	3.95E-04	4.86E-08	0.043
31	0.22	2.480	2.073	2.491	1325	0.0010	4.89E-04	4.76E-08	0.237
66	0.35	2.445	2.029	2.462	960	0.0013	3.92E-04	5.14E-08	0.922
97	0.17	2.428	2.008	2.436	2940	0.0004	2.19E-04	9.18E-09	1.490
137	0.15	2.413	1.990	2.420	2160	0.0006	1.50E-04	1.01E-08	2.250
277	2.54	2.159	1.675	2.286	5415	0.0002	7.16E-04	1.43E-08	24.029
558	1.54	2.005	1.484	2.082	3110	0.0003	2.17E-04	6.29E-09	53.813
277	-0.11	2.016	1.498	2.010					
137	-0.17	2.032	1.518	2.024					
31	-0.42	2.074	1.570	2.053					
4	-0.40	2.115	1.620	2.094					
Note: k calculated using α based on t <sub>90</sub> values.									
SAMPLE DIMENSIONS AND PROPERTIES - FINAL									
Sample Height, cm	2.115	Unit Weight, kN/m <sup>3</sup>	15.34						
Sample Diameter, cm	6.35	Dry Unit Weight, kN/m <sup>3</sup>	10.38						
Area, cm <sup>2</sup>	31.68	Specific Gravity, Measured	2.77						
Volume, cm <sup>3</sup>	66.99	Solids Height, cm	0.807						
Water Content, %	47.83	Volume of Solids, cm <sup>3</sup>	25.57						
Wet Mass, g	104.81	Volume of Voids, cm <sup>3</sup>	41.42						
Dry Mass, g	70.9								
Prepared By: SL		Golder Associates		Checked By:					



CONSOLIDATION TEST  
VOID RATIO VS LOG PRESSURE

FIGURE B13  
Pg. 3 of 4

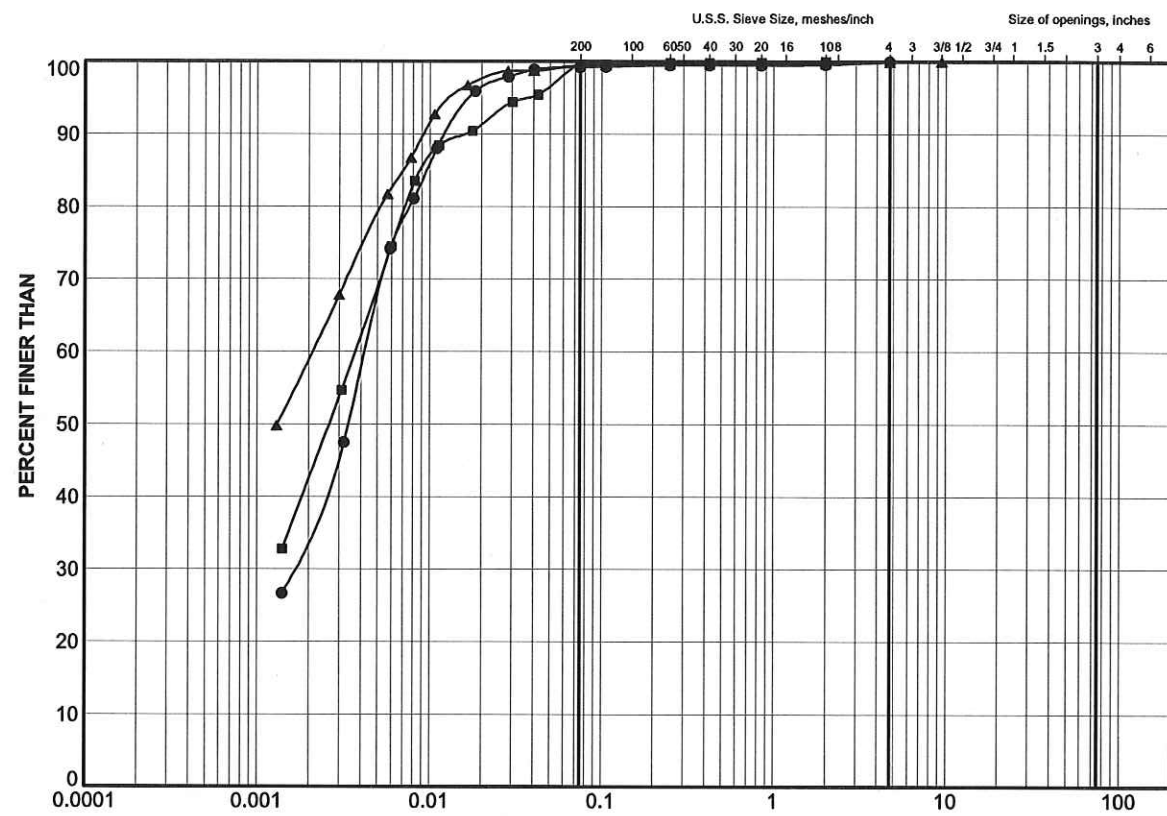




CONSOLIDATION TEST SUMMARY					FIGURE B13 Pg. 1 of 4				
SAMPLE IDENTIFICATION									
Project Number: 11-1191-0007					Sample Number: 7				
Borehole Number: H2-26					Sample Depth, m: 6.4				
TEST CONDITIONS									
Test Type		Standard			Load Duration, hr		24		
Oedometer Number		2							
Date Started		3-May-12							
Date Completed		25-May-12							
SAMPLE DIMENSIONS AND PROPERTIES - INITIAL									
Sample Height, cm		2.526			Unit Weight, kN/m <sup>3</sup>		16.55		
Sample Diameter, cm		6.351			Dry Unit Weight, kN/m <sup>3</sup>		10.19		
Area, cm <sup>2</sup>		31.68			Specific Gravity, measured		2.78		
Volume, cm <sup>3</sup>		80.02			Solids Height, cm		0.945		
Water Content, %		62.32			Volume of Solids, cm <sup>3</sup>		29.94		
Wet Mass, g		135.02			Volume of Voids, cm <sup>3</sup>		50.08		
Dry Mass, g		83.18							
TEST COMPUTATIONS									
Pressure	Primary	Corr.		Average					Total
kPa	Consolidation	Height	Void	Height	t <sub>90</sub>	cv.	mv	k	Work
		cm	Ratio	cm	sec	cm <sup>2</sup> /s	m <sup>2</sup> /kN	cm/s	kJ/m3
0	0	2.526	1.673	2.526					
4	0.02	2.524	1.671	2.525	5	0.2503	1.64E-04	4.03E-06	0.001
13	0.02	2.522	1.668	2.523	86	0.0156	9.37E-05	1.43E-07	0.009
31	0.04	2.518	1.664	2.520	86	0.0156	8.80E-05	1.34E-07	0.043
66	0.10	2.508	1.654	2.513	135	0.0099	1.11E-04	1.08E-07	0.234
97	0.15	2.493	1.638	2.501	2160	0.0006	1.92E-04	1.16E-08	0.723
137	0.15	2.478	1.622	2.486	2160	0.0006	1.50E-04	1.00E-08	1.447
277	1.40	2.339	1.474	2.408	866	0.0014	3.94E-04	5.47E-08	13.109
558	0.88	2.251	1.381	2.295	346	0.0032	1.24E-04	3.93E-08	28.820
1117	0.77	2.174	1.300	2.212	240	0.0043	5.45E-05	2.31E-08	57.478
558	-0.08	2.181	1.308	2.177					
136	-0.43	2.224	1.353	2.203					
31	-0.32	2.256	1.387	2.240					
4	-0.35	2.291	1.423	2.273					
Note: k calculated using α based on t <sub>90</sub> values.									
SAMPLE DIMENSIONS AND PROPERTIES - FINAL									
Sample Height, cm		2.291			Unit Weight, kN/m <sup>3</sup>		15.49		
Sample Diameter, cm		6.35			Dry Unit Weight, kN/m <sup>3</sup>		11.24		
Area, cm <sup>2</sup>		31.68			Specific Gravity, measured		2.78		
Volume, cm <sup>3</sup>		72.56			Solids Height, cm		0.945		
Water Content, %		37.82			Volume of Solids, cm <sup>3</sup>		29.94		
Wet Mass, g		114.64			Volume of Voids, cm <sup>3</sup>		42.62		
Dry Mass, g		83.18							
Prepared By: TG					Golder Associates			Checked By:	




SUD-MTO GSD (NEW) GLDR\_LDN.GDT



GRAIN SIZE, mm						
CLAY AND SILT	fine	medium	coarse	fine	coarse	Cobble Size
	SAND SIZE			GRAVEL SIZE		

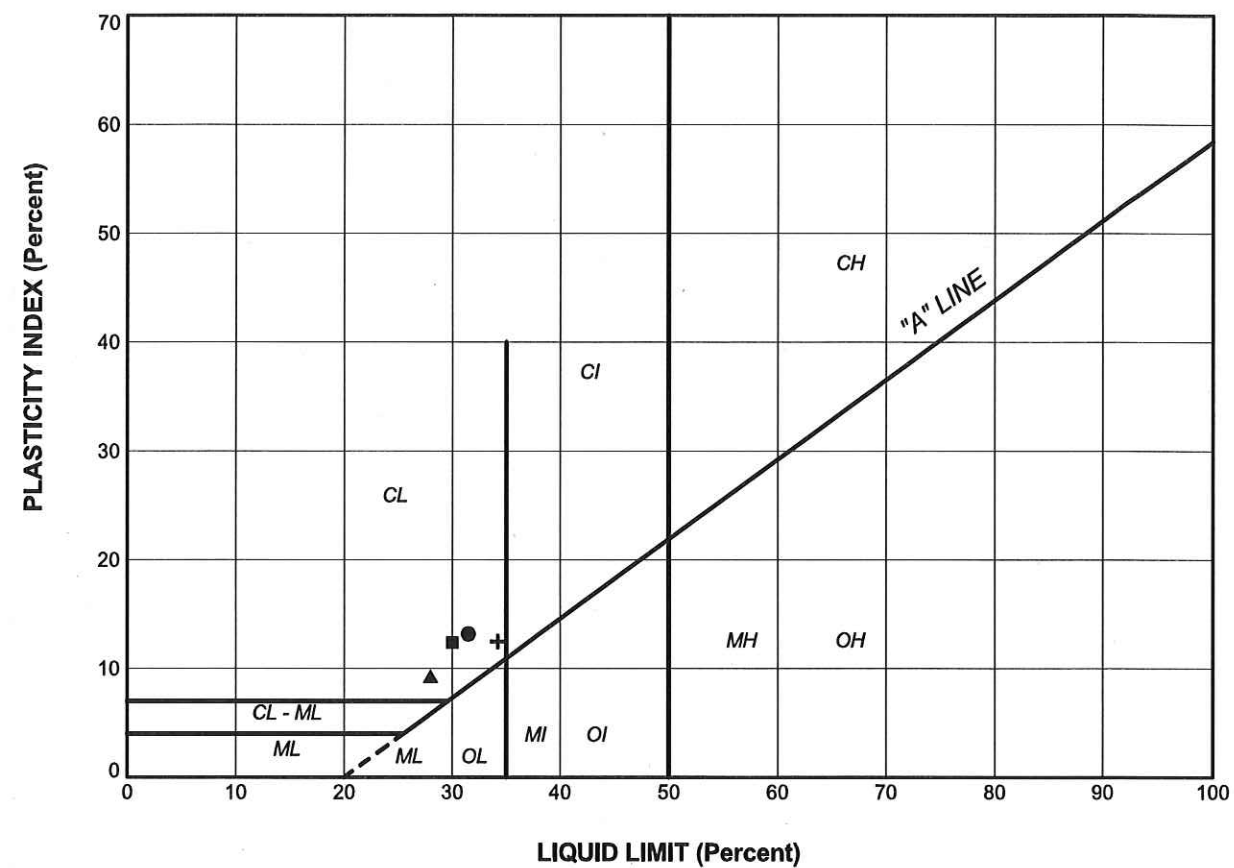
LEGEND

SYMBOL	BOREHOLE	SAMPLE	ELEV (m)
●	H2-28	9	230.3
■	H2-30	10	230.2
▲	H2-34	7	234.8

PROJECT		HIGHWAY 17 STA 13+140 TO 13+390 (EBL)	
TITLE		GRAIN SIZE DISTRIBUTION SILTY CLAY to CLAY	
	PROJECT No.	11-1191-0007	FILE No. 11-1191-0007.GPJ
	DRAWN	TB	Mar 2014
	CHECK	SEMP	Mar 2014
	APPR		Mar 2014
		SCALE N/A	
		REV.	
		FIGURE B11	



SUD-MTO PL (NEW) GLDR\_LDN.GDT




SOIL TYPE  
C = Clay  
M = Silt  
O = Organic

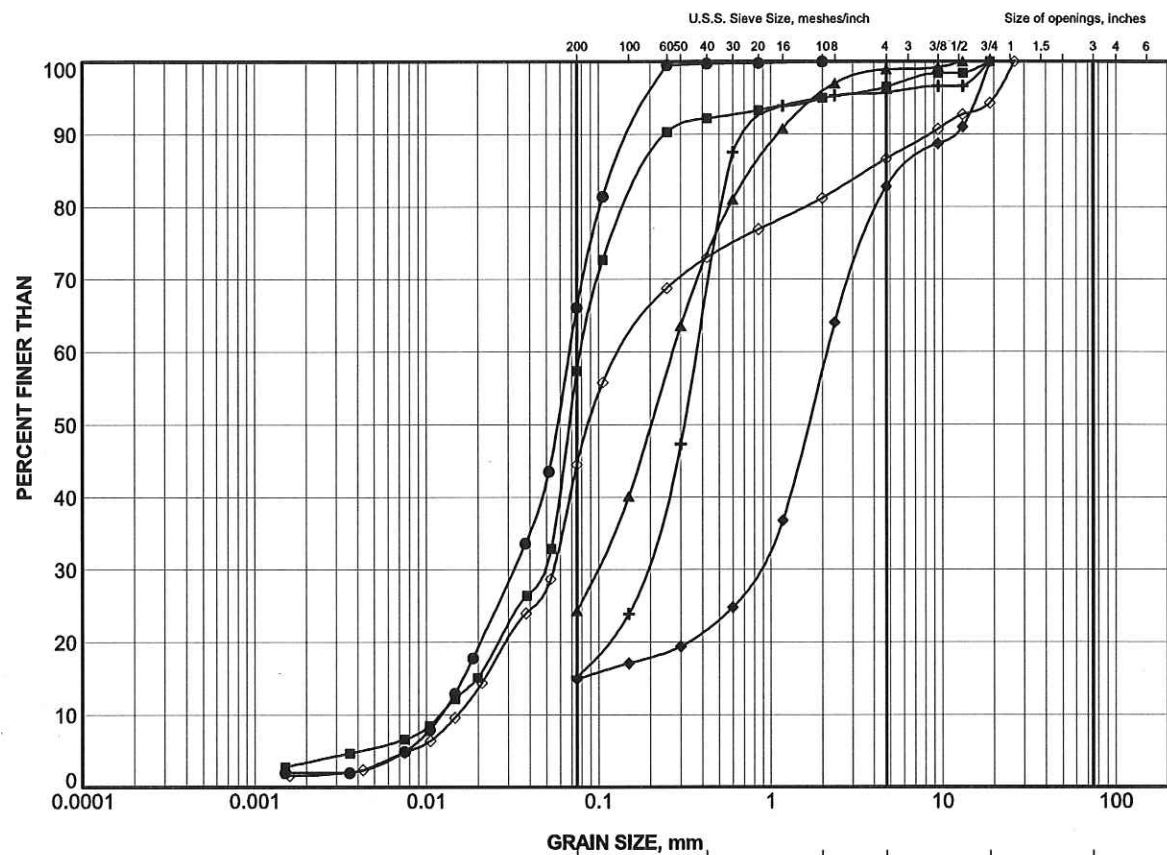
PLASTICITY  
L = Low  
I = Intermediate  
H = High

**LEGEND**

SYMBOL	BOREHOLE	SAMPLE	LL(%)	PL(%)	PI
●	H2-23	3	31.5	18.3	13.2
■	H2-30	6	30.0	17.6	12.4
▲	H2-31	6	28.0	18.7	9.3
+	H2-43	2	34.2	21.7	12.5

PROJECT							
HIGHWAY 17 STA 13+140 TO 13+390 (EBL)							
TITLE							
PLASTICITY CHART CLAYEY SILT							
 <b>Golder Associates</b> SUDBURY, ONTARIO		PROJECT No.	11-1191-0007	FILE No.	11-1191-0007.GPJ		
		DRAWN	TB	Mar 2014	SCALE	N/A	REV.
		CHECK	SEMP	Mar 2014			
		APPR		Mar 2014			
<b>FIGURE B9</b>							



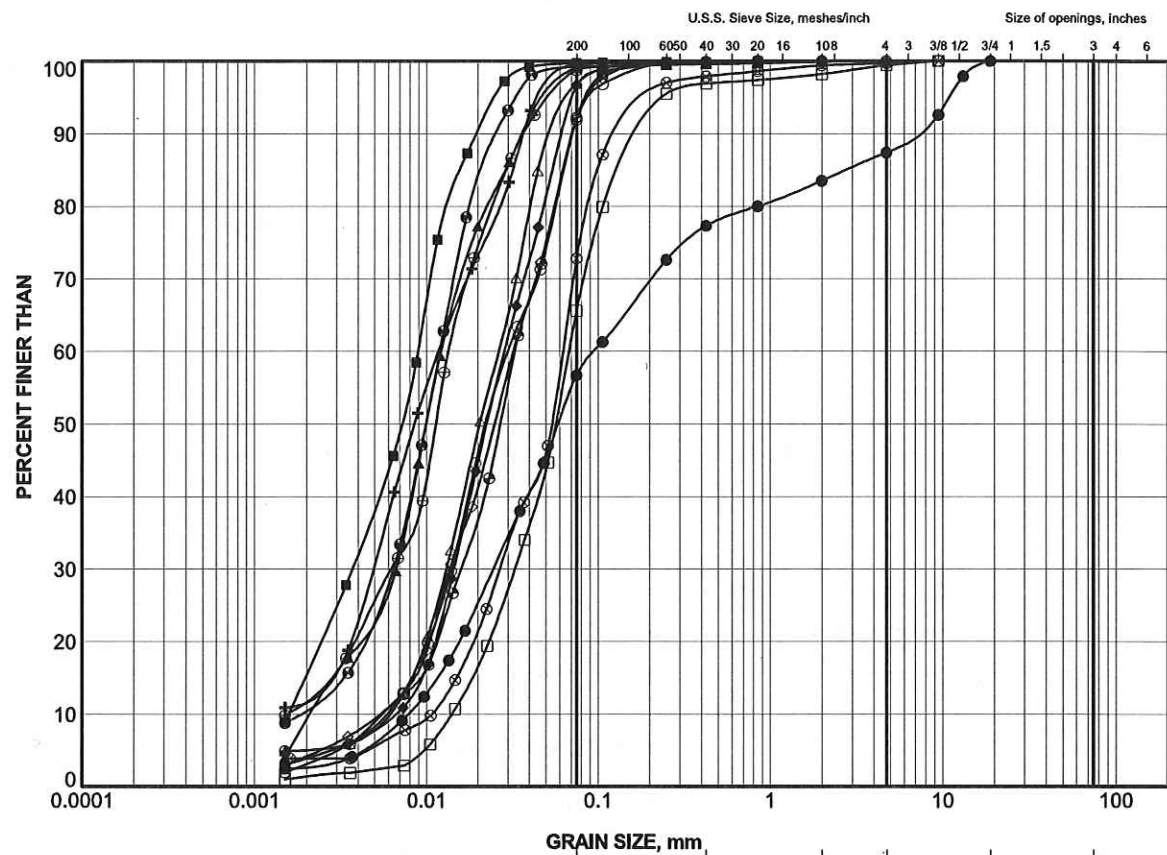


#### LEGEND

SYMBOL	BOREHOLE	SAMPLE	ELEV (m)
●	H2-6	12	227.3
■	H2-8	14	224.4
▲	H2-14	11	228.1
+	H2-15	9	228.9
◆	H2-17	9	228.9
◇	H2-20	10	227.9

PROJECT							
HIGHWAY 17 STA 13+140 TO 13+390 (WBL)							
TITLE							
GRAIN SIZE DISTRIBUTION SAND and SILT to SAND							
 <b>Golder Associates</b> SUDBURY, ONTARIO		PROJECT No. 11-1191-0007		FILE No. 11-1191-0007.GPJ			
		DRAWN	TB	Mar 2014	SCALE	N/A	REV.
		CHECK	SEMP	Mar 2014			
		APPR		Mar 2014			
<b>FIGURE B7</b>							






CLAY AND SILT	GRAVEL SIZE, mm					Cobble Size
	fine	medium	coarse	fine	coarse	
	SAND SIZE			GRAVEL SIZE		

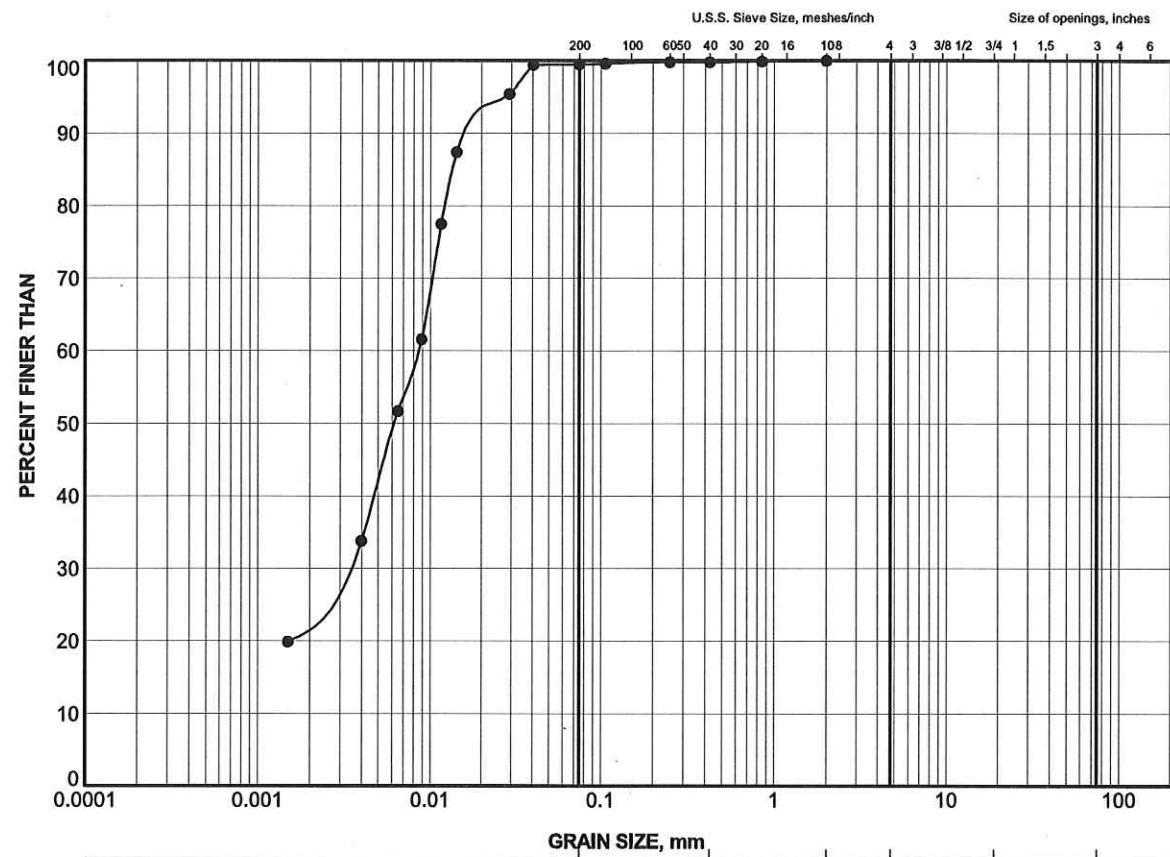
#### LEGEND

SYMBOL	BOREHOLE	SAMPLE	ELEV (m)
●	H2-2	6	234.1
■	H2-3	5B	235.8
▲	H2-4	8	231.8
+	H2-5	8	231.9
◆	H2-7	11	227.4
◇	H2-8	12	227.4
○	H2-9	11	227.3
△	H2-10	11	227.3
⊗	H2-10	14	222.8
⊕	H2-11	9	230.4
□	H2-11	13	224.3
⊙	H2-12	7	232.0
⊖	H2-13	9	230.5

PROJECT					
HIGHWAY 17 STA 13+140 TO 13+390 (WBL)					
TITLE					
GRAIN SIZE DISTRIBUTION SILT to SANDY SILT					
 <b>Golder Associates</b> SUDBURY, ONTARIO		PROJECT No. 11-1191-0007		FILE No. 11-1191-0007.GPJ	
		DRAWN	TB	Mar 2014	SCALE N/A
		CHECK	SEMP	Mar 2014	REV.
		APPR		Mar 2014	
<b>FIGURE B6.1</b>					




SUD-MTO GSD (NEW) GLDR\_LDN.GDT

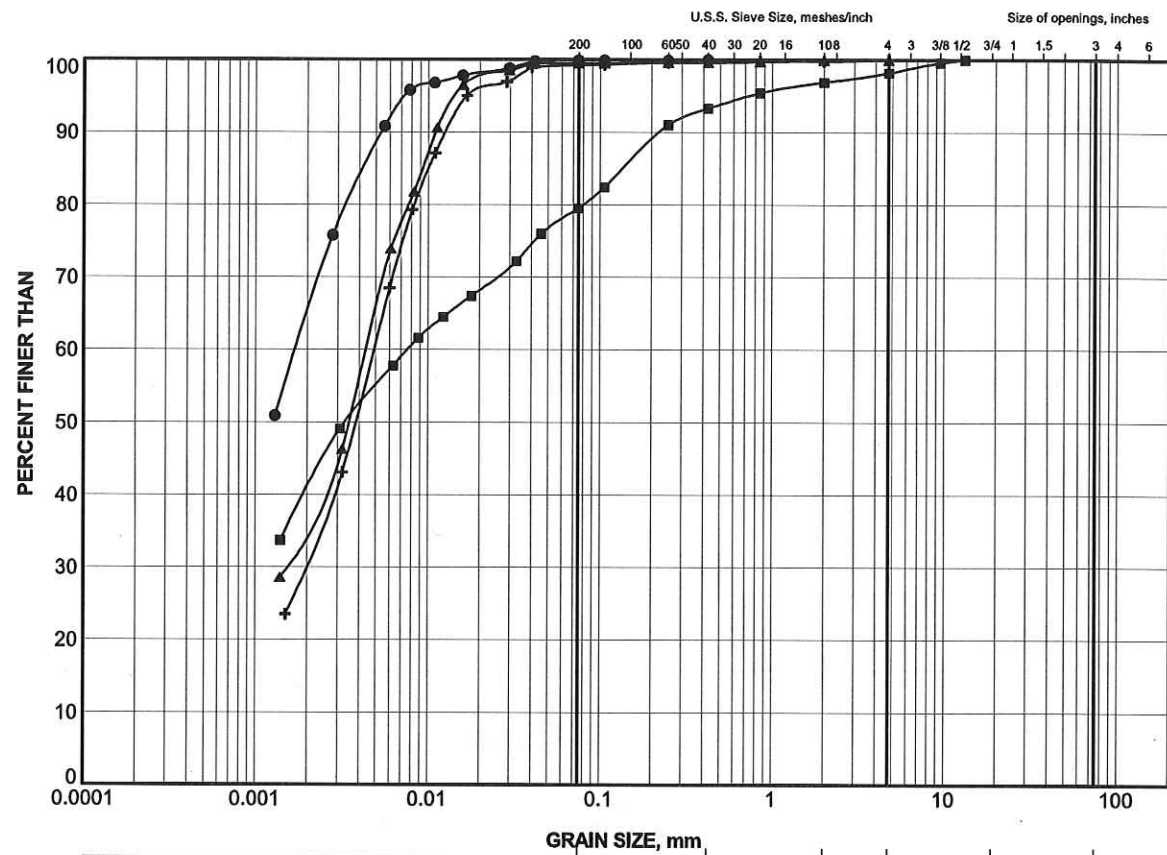


**LEGEND**

SYMBOL	BOREHOLE	SAMPLE	ELEV (m)
●	H2-19	6	235.3


PROJECT						
HIGHWAY 17 STA 13+140 TO 13+390 (WBL)						
TITLE						
GRAIN SIZE DISTRIBUTION CLAYEY SILT						
		PROJECT No.		11-1191-0007		
		FILE No.		11-1191-0007.GPJ		
		DRAWN	TB	Mar 2014	SCALE	N/A
		CHECK	SEMP	Mar 2014	REV.	
		APPR		Mar 2014	<b>FIGURE B4</b>	



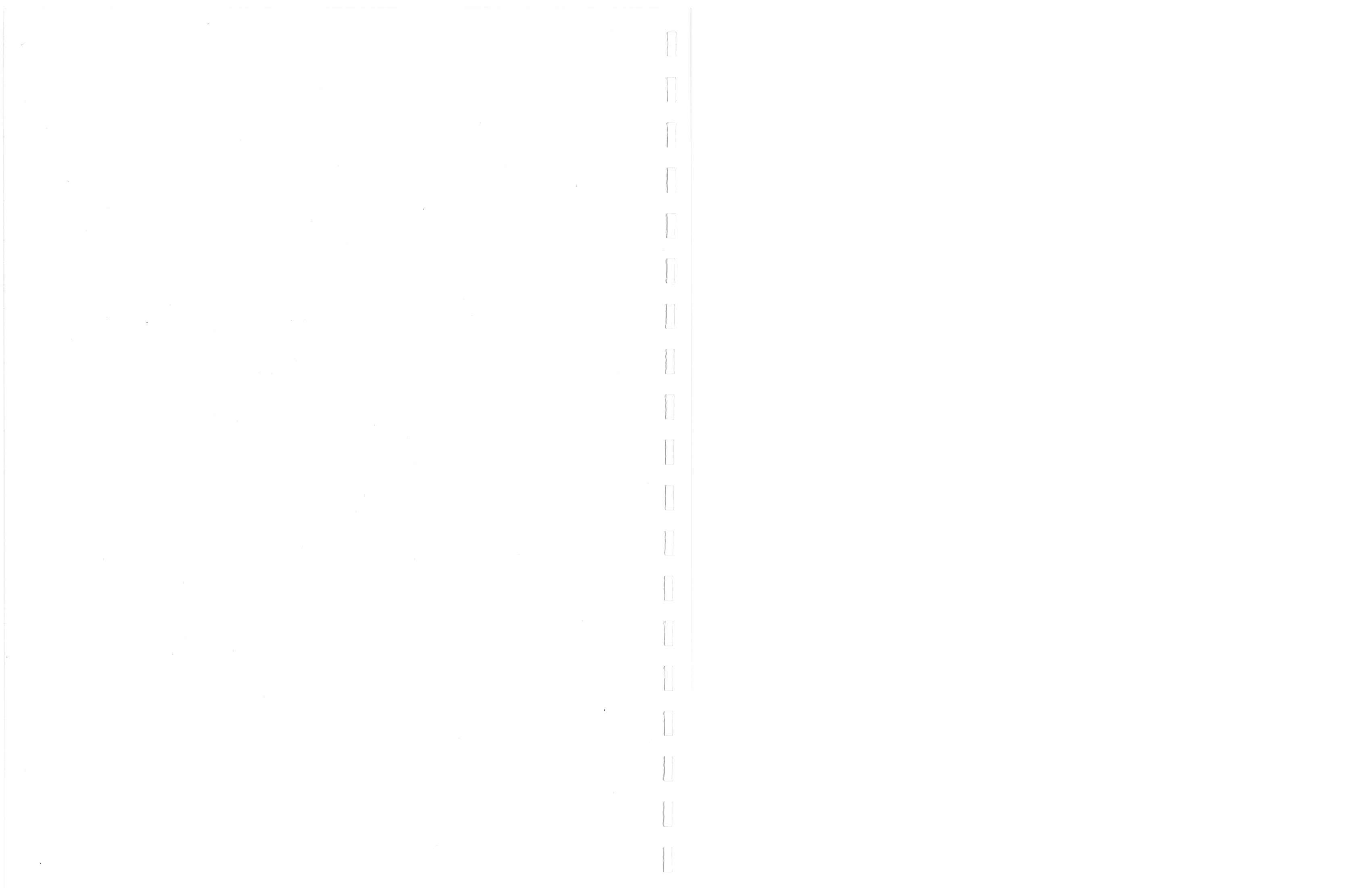


#### LEGEND

SYMBOL	BOREHOLE	SAMPLE	ELEV (m)
●	H2-7	7	234.3
■	H2-9	6	235.7
▲	H2-15	6	234.3
+	H2-16	5	235.9

PROJECT					
HIGHWAY 17 STA 13+140 TO 13+390 (WBL)					
TITLE					
GRAIN SIZE DISTRIBUTION SILTY CLAY to CLAY					
 <b>Golder Associates</b> SUDBURY, ONTARIO		PROJECT No. 11-1191-0007		FILE No. 11-1191-0007.GPJ	
		DRAWN TB	Mar 2014	SCALE N/A	REV.
		CHECK SEMP	Mar 2014		
		APPR	Mar 2014		
		<b>FIGURE B2</b>			









PROJECT 11-1191-0007		RECORD OF DCPT No H2-DC28				2 OF 2		METRIC					
G.W.P. 156-98-00		LOCATION N 5136291.0; E 274094.9				ORIGINATED BY GM							
DIST HWY 17		BOREHOLE TYPE Dynamic Cone Penetration Test				COMPILED BY EC							
DATUM Geodetic		DATE May 15, 2012				CHECKED BY SEMP							
SOIL PROFILE		SAMPLES			GROUND WATER CONDITIONS	ELEVATION SCALE	DYNAMIC CONE PENETRATION RESISTANCE PLOT		PLASTIC LIMIT W <sub>p</sub>	NATURAL MOISTURE CONTENT W	LIQUID LIMIT W <sub>L</sub>	UNIT WEIGHT γ	REMARKS & GRAIN SIZE DISTRIBUTION (%)
ELEV DEPTH	DESCRIPTION	STRAT PLOT	NUMBER	TYPE			"N" VALUES	SHEAR STRENGTH kPa					
--- CONTINUED FROM PREVIOUS PAGE ---							20 40 60 80 100	20 40 60					
222.3	END OF DCPT REFUSAL TO FURTHER PENETRATION (100 Blows / 0.28 m)						224						
17.3							223						

SUD-MTO 001 11-1191-0007.GPJ GAL-MISS.GDT 17/03/14 DATA INPUT:





PROJECT	11-1191-0007	RECORD OF DCPT No H2-DC27		2 OF 2	METRIC	
G.W.P.	156-98-00	LOCATION	N 5136261.1; E 274079.6		ORIGINATED BY	GM
DIST		HWY	17	BOREHOLE TYPE	Dynamic Cone Penetration Test	
DATUM	Geodetic	DATE	May 8, 2012		COMPILED BY	EC
					CHECKED BY	SEMP

SOIL PROFILE		SAMPLES				GROUND WATER CONDITIONS	ELEVATION SCALE	DYNAMIC CONE PENETRATION RESISTANCE PLOT		PLASTIC LIMIT W <sub>p</sub>	NATURAL MOISTURE CONTENT W	LIQUID LIMIT W <sub>L</sub>	UNIT WEIGHT γ  kN/m <sup>3</sup>	REMARKS & GRAIN SIZE DISTRIBUTION (%)  GR SA SI CL	
ELEV DEPTH	DESCRIPTION	STRAT PLOT	NUMBER	TYPE	"N" VALUES			SHEAR STRENGTH kPa							WATER CONTENT (%)
— CONTINUED FROM PREVIOUS PAGE —							○ UNCONFINED ● QUICK TRIAXIAL	+ FIELD VANE × REMOULDED							
							20	40	60	80	100	20	40	60	
							224								
							223								
							222								
							221								
220.5 19.1	END OF DCPT REFUSAL TO FURTHER PENETRATION (100 Blows / 0.20 m)														





PROJECT11-1191-0007

RECORD OF DCPT No H2-DC26

2 OF 2METRIC

G.W.P.156-98-00

LOCATIONN 5136273.8; E 274048.0

ORIGINATED BYTM

DIST

HWY17

BOREHOLE TYPEDynamic Cone Penetration Test

COMPILED BYEC

DATUMGeodetic

DATESeptember 14, 2012

CHECKED BYSEMP

SOIL PROFILE		SAMPLES			GROUND WATER CONDITIONS	ELEVATION SCALE	DYNAMIC CONE PENETRATION RESISTANCE PLOT				UNIT WEIGHT $\gamma$ kN/m <sup>3</sup>	REMARKS & GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
ELEV DEPTH	DESCRIPTION	STRAT PLOT	NUMBER	TYPE	"N" VALUES		20	40	60	80	100	
--- CONTINUED FROM PREVIOUS PAGE ---							SHEAR STRENGTH kPa ○ UNCONFINED + FIELD VANE ● QUICK TRIAXIAL × REMOULDED					
							WATER CONTENT (%) PLASTIC LIMIT NATURAL MOISTURE CONTENT LIQUID LIMIT					
215.5												
24.1	END OF DCPT											

SUD-MTO 001 11-1191-0007.GPJ GAL-MISS.GDT 17/03/14 DATA INPUT:





SOIL PROFILE			SAMPLES			GROUND WATER CONDITIONS	ELEVATION SCALE	DYNAMIC CONE PENETRATION RESISTANCE PLOT		PLASTIC LIMIT W <sub>p</sub>	NATURAL MOISTURE CONTENT W	LIQUID LIMIT W <sub>L</sub>	UNIT WEIGHT γ kN/m <sup>3</sup>	REMARKS & GRAIN SIZE DISTRIBUTION (%) GR SA SI C
ELEV DEPTH	DESCRIPTION	STRAT PLOT	NUMBER	TYPE	"N" VALUES			SHEAR STRENGTH kPa						
							○ UNCONFINED    + FIELD VANE ● QUICK TRIAXIAL    × REMOULDED							
215.4 24.4	END OF DCPT REFUSAL TO FURTHER PENETRATION (104 Blows / 0.30 m)						216							
							217							
							218							
							219							
							220							
							221							
							222							
							223							
							224							

+ 3, × 3; Numbers refer to Sensitivity      ○ 3% STRAIN AT FAILURE





+<sup>3</sup>, ×<sup>3</sup>: Numbers refer to Sensitivity      ○ 3% STRAIN AT FAILURE





+ 3, × 3: Numbers refer to Sensitivity      ○ 3% STRAIN AT FAILURE





+ 3, × 3: Numbers refer to Sensitivity      ○ 3% STRAIN AT FAILURE





+<sup>3</sup>, ×<sup>3</sup>: Numbers refer to Sensitivity      ○ 3% STRAIN AT FAILURE





PROJECT 11-1191-0007		RECORD OF DCPT No H2-DC19		1 OF 2 METRIC	
G.W.P. 156-98-00		LOCATION N 5136333.2; E 274063.5		ORIGINATED BY GM	
DIST _____ HWY 17		BOREHOLE TYPE Dynamic Cone Penetration Test		COMPILED BY EC	
DATUM Geodetic		DATE May 4, 2013		CHECKED BY SEMP	

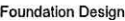
SOIL PROFILE		SAMPLES			GROUND WATER CONDITIONS	ELEVATION SCALE	DYNAMIC CONE PENETRATION RESISTANCE PLOT		PLASTIC LIMIT W <sub>p</sub>	NATURAL MOISTURE CONTENT W	LIQUID LIMIT W <sub>L</sub>	UNIT WEIGHT γ  kN/m <sup>3</sup>	REMARKS & GRAIN SIZE DISTRIBUTION (%)  GR SA SI CL
ELEV DEPTH	DESCRIPTION	STRAT PLOT	NUMBER	TYPE			"N" VALUES	SHEAR STRENGTH kPa					
240.0 0.0	GROUND SURFACE						○ UNCONFINED ● QUICK TRIAXIAL	+ FIELD VANE × REMOULDED					

Continued Next Page

+ 3, × 3: Numbers refer to Sensitivity ○ 3% STRAIN AT FAILURE

SUD-MTO 001 11-1191-0007.GPJ GAL-MISS.GDT 17/03/14 DATA INPUT:





SUD-MTO 001 11-1191-0007.GPJ GAL-MISS.GDT 17/03/14 DATA INPUT:

Continued Next Page

+ 3, × 3: Numbers refer to Sensitivity      ○ 3% STRAIN AT FAILURE