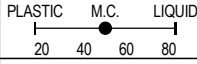


APPENDIX A
TEST HOLE LOGS

PROJECT: Alexander-Banatyne Combined Sewer Relief	CLIENT: City of Winnipeg - WWD	TESTHOLE NO: TH04-01
LOCATION: 907 William Ave, Westbound curb lane		PROJECT NO.: D265-177-01
CONTRACTOR: Maple Leaf Drillers	METHOD: B-40, 125 mm Solid Stem Augers	ELEVATION (m): 232.2
SAMPLE TYPE	<input checked="" type="checkbox"/> GRAB <input type="checkbox"/> SHELBY TUBE <input checked="" type="checkbox"/> SPLIT SPOON <input type="checkbox"/> BULK	<input checked="" type="checkbox"/> NO RECOVERY <input type="checkbox"/> CORE

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	COMMENTS	ELEVATION (m)
0	ASPHALT CONCRETE					232
0 to 1.5		SAND AND GRAVEL (FILL) - crushed limestone - light brown - dry				231
1.5		- trace wood at 1.5 m END OF TEST HOLE @ 1.5 m IN SAND AND GRAVEL FILL Notes: 1. Test hole not drilled past 1.5 m due to presence of backfill in the upper 1.5 m and the related concern about the location of buried utilities.		G32		230
2						230
3						229
4						228
5						227
6						227

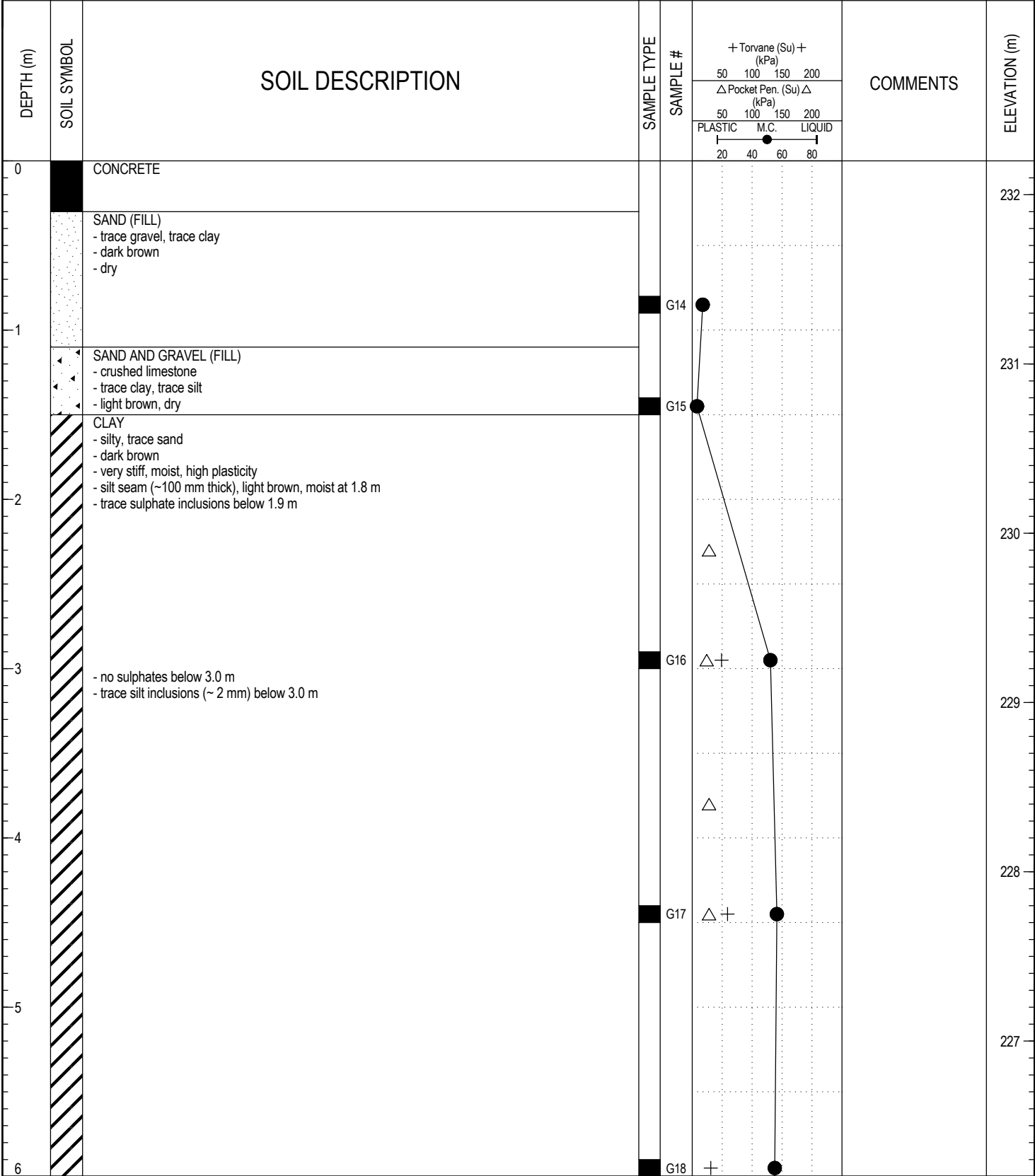


LOG OF TESTHOLE - ALEXANDER BANINATYNE.GPJ UMA.GDT 8/2/05



LOGGED BY: Kate Franklin	COMPLETION DEPTH: 1.50 m
REVIEWED BY: Gil Robinson	COMPLETION DATE: 23/12/04
PROJECT ENGINEER: Gil Robinson	Page 1 of 1

PROJECT: Alexander-Banatyne Combined Sewer Relief	CLIENT: City of Winnipeg - WWD	TESTHOLE NO: TH04-02
LOCATION: Arlington St, 18.5 m North of William Ave, Southbound center lane		PROJECT NO.: D265-177-01
CONTRACTOR: Maple Leaf Drillers	METHOD: B-40, 125 mm Solid Stem Augers	ELEVATION (m): 232.2
SAMPLE TYPE	<input checked="" type="checkbox"/> GRAB <input type="checkbox"/> SHELBY TUBE <input type="checkbox"/> SPLIT SPOON <input type="checkbox"/> BULK	<input checked="" type="checkbox"/> NO RECOVERY <input type="checkbox"/> CORE



LOG OF TESTHOLE - ALEXANDER BANINATYNE.GPJ UMA.GDT 8/2/05



LOGGED BY: Kate Franklin	COMPLETION DEPTH: 7.60 m
REVIEWED BY: Gil Robinson	COMPLETION DATE: 23/12/04
PROJECT ENGINEER: Gil Robinson	Page 1 of 2

PROJECT: Alexander-Banatyne Combined Sewer Relief	CLIENT: City of Winnipeg - WWD	TESTHOLE NO: TH04-02
LOCATION: Arlington St, 18.5 m North of William Ave, Southbound center lane		PROJECT NO.: D265-177-01
CONTRACTOR: Maple Leaf Drillers	METHOD: B-40, 125 mm Solid Stem Augers	ELEVATION (m): 232.2
SAMPLE TYPE <input checked="" type="checkbox"/> GRAB <input type="checkbox"/> SHELBY TUBE <input type="checkbox"/> SPLIT SPOON <input type="checkbox"/> BULK <input checked="" type="checkbox"/> NO RECOVERY <input type="checkbox"/> CORE		

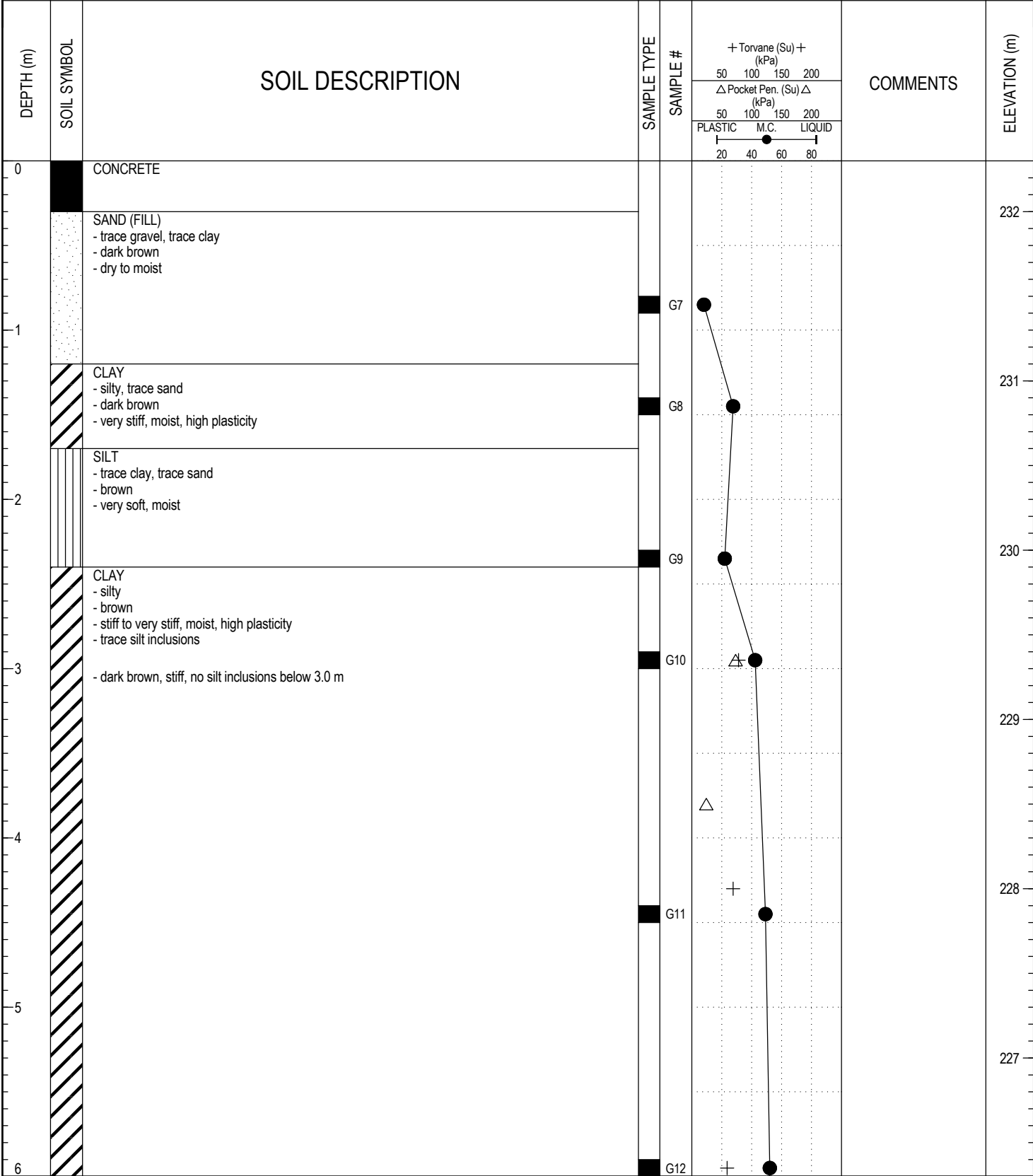
DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	+ Torvane (Su) + (kPa) 50 100 150 200 Δ Pocket Pen. (Su) Δ (kPa) 50 100 150 200 PLASTIC M.C. LIQUID 20 40 60 80	COMMENTS	ELEVATION (m)
6		- greyish brown, firm below 6.1 m					226
7							225
8		END OF TEST HOLE @ 7.6 m IN CLAY Notes: 1. No seepage or sloughing 2. The torvane and pocket penetrometer tests were performed on disturbed samples (auger cuttings) and only represent relative consistency of the soils tested.	<input checked="" type="checkbox"/>	G19	+ ●		224
9							223
10							222
11							221
12							

LOG OF TESTHOLE - ALEXANDER BANINATYNE.GPJ UMA.GDT 8/2/05



LOGGED BY: Kate Franklin	COMPLETION DEPTH: 7.60 m
REVIEWED BY: Gil Robinson	COMPLETION DATE: 23/12/04
PROJECT ENGINEER: Gil Robinson	Page 2 of 2

PROJECT: Alexander-Banatyne Combined Sewer Relief	CLIENT: City of Winnipeg - WWD	TESTHOLE NO: TH04-03
LOCATION: 1034 Arlington St, Southbound center lane		PROJECT NO.: D265-177-01
CONTRACTOR: Maple Leaf Drillers	METHOD: B-40, 125 mm Solid Stem Augers	ELEVATION (m): 232.3
SAMPLE TYPE	<input checked="" type="checkbox"/> GRAB <input type="checkbox"/> SHELBY TUBE <input type="checkbox"/> SPLIT SPOON <input type="checkbox"/> BULK <input type="checkbox"/> NO RECOVERY <input type="checkbox"/> CORE	




LOG OF TESTHOLE - ALEXANDER BANINATYNE.GPJ UMA.GDT 8/2/05



LOGGED BY: Kate Franklin	COMPLETION DEPTH: 7.60 m
REVIEWED BY: Gil Robinson	COMPLETION DATE: 23/12/04
PROJECT ENGINEER: Gil Robinson	Page 1 of 2

PROJECT: Alexander-Banatyne Combined Sewer Relief	CLIENT: City of Winnipeg - WWD	TESTHOLE NO: TH04-03
LOCATION: 1034 Arlington St, Southbound center lane		PROJECT NO.: D265-177-01
CONTRACTOR: Maple Leaf Drillers	METHOD: B-40, 125 mm Solid Stem Augers	ELEVATION (m): 232.3
SAMPLE TYPE	<input checked="" type="checkbox"/> GRAB <input type="checkbox"/> SHELBY TUBE <input type="checkbox"/> SPLIT SPOON <input type="checkbox"/> BULK	<input checked="" type="checkbox"/> NO RECOVERY <input type="checkbox"/> CORE

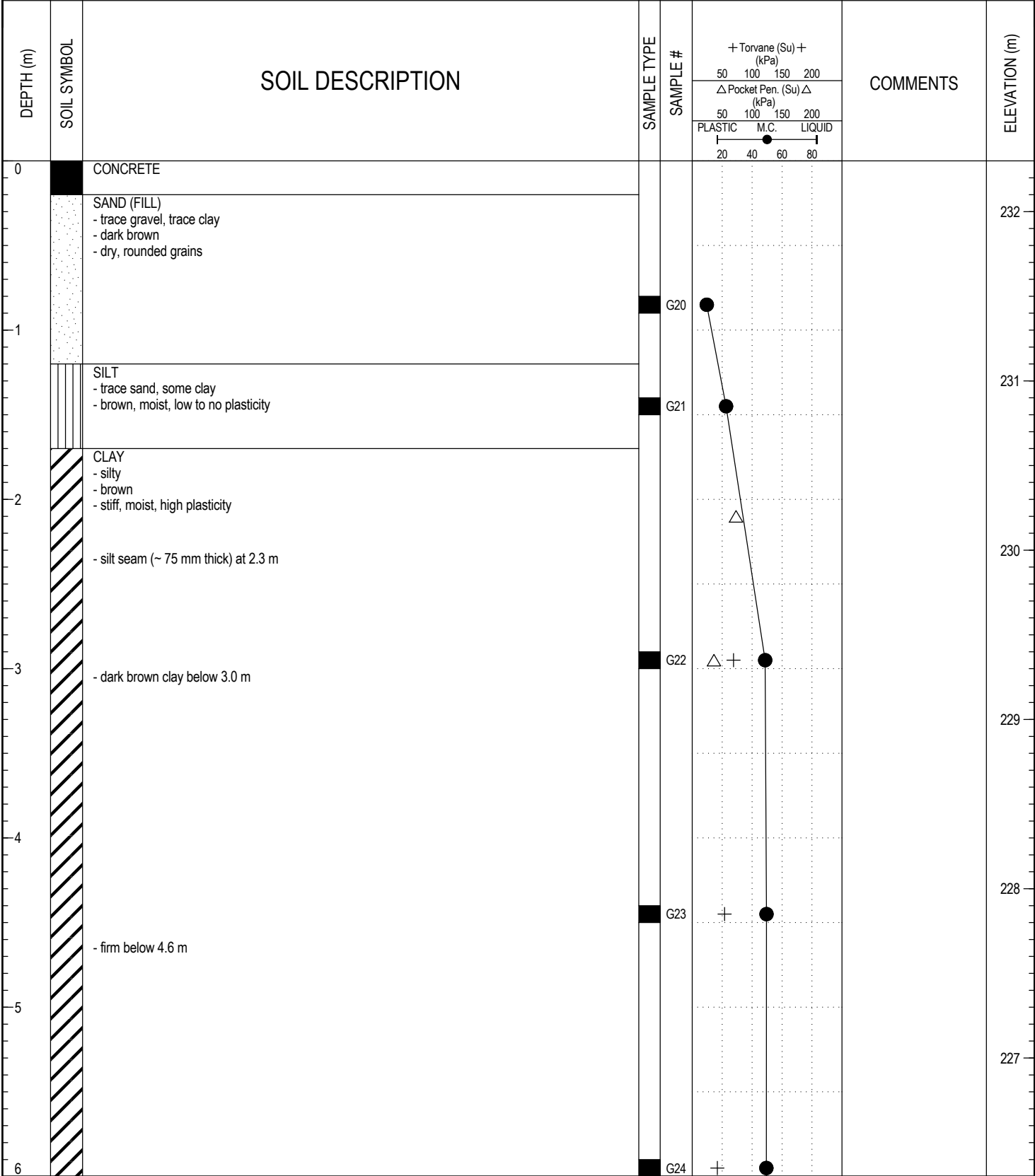
DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	+ Torvane (Su) + (kPa)		COMMENTS	ELEVATION (m)
					50	100		
6								226
7		- greyish brown below 7.3 m						225
8		END OF TEST HOLE @ 7.6 m IN CLAY Notes: 1. Sloughing from sand and silt layers to 6.2 m 2. No seepage 3. The torvane and pocket penetrometer tests were performed on disturbed samples (auger cuttings) and only represent relative consistency of the soils tested.	<input checked="" type="checkbox"/>	G13	+	●		224
9								223
10								222
11								221
12								

LOG OF TESTHOLE - ALEXANDER BANINATYNE.GPJ UMA.GDT 8/2/05



LOGGED BY: Kate Franklin	COMPLETION DEPTH: 7.60 m
REVIEWED BY: Gil Robinson	COMPLETION DATE: 23/12/04
PROJECT ENGINEER: Gil Robinson	Page 2 of 2

PROJECT: Alexander-Banatyne Combined Sewer Relief	CLIENT: City of Winnipeg - WWD	TESTHOLE NO: TH04-04
LOCATION: 960 Arlington St, Southbound center lane		PROJECT NO.: D265-177-01
CONTRACTOR: Maple Leaf Drillers	METHOD: B-40, 125 mm Solid Stem Augers	ELEVATION (m): 232.3
SAMPLE TYPE	<input checked="" type="checkbox"/> GRAB <input type="checkbox"/> SHELBY TUBE <input type="checkbox"/> SPLIT SPOON <input type="checkbox"/> BULK <input type="checkbox"/> NO RECOVERY <input type="checkbox"/> CORE	



LOG OF TESTHOLE - ALEXANDER BANINATYNE.GPJ UMA.GDT 8/2/05



LOGGED BY: Kate Franklin	COMPLETION DEPTH: 7.60 m
REVIEWED BY: Gil Robinson	COMPLETION DATE: 23/12/04
PROJECT ENGINEER: Gil Robinson	Page 1 of 2

PROJECT: Alexander-Banatyne Combined Sewer Relief	CLIENT: City of Winnipeg - WWD	TESTHOLE NO: TH04-04
LOCATION: 960 Arlington St, Southbound center lane		PROJECT NO.: D265-177-01
CONTRACTOR: Maple Leaf Drillers	METHOD: B-40, 125 mm Solid Stem Augers	ELEVATION (m): 232.3
SAMPLE TYPE	<input checked="" type="checkbox"/> GRAB <input type="checkbox"/> SHELBY TUBE <input type="checkbox"/> SPLIT SPOON <input type="checkbox"/> BULK	<input checked="" type="checkbox"/> NO RECOVERY <input type="checkbox"/> CORE

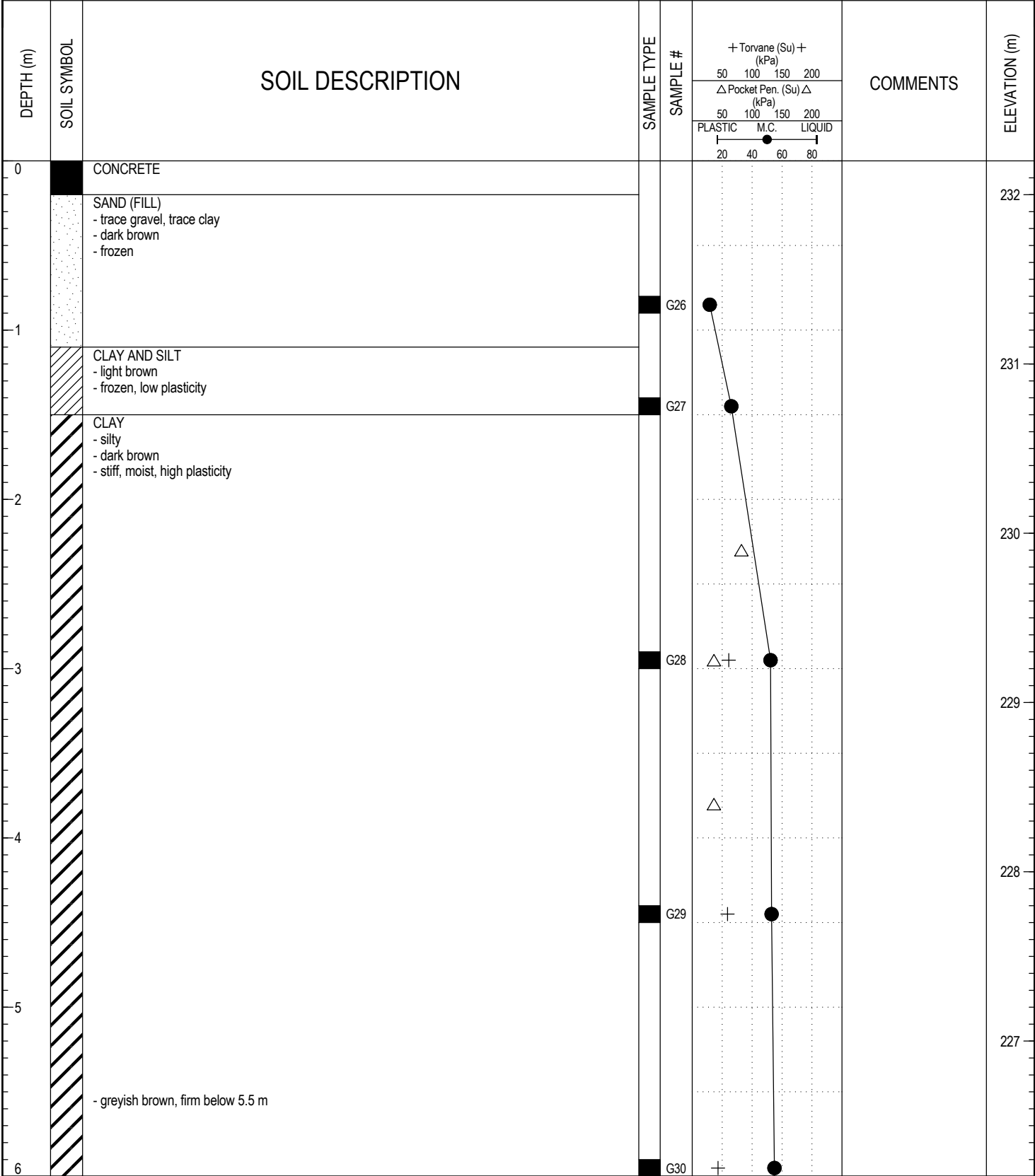
DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	+ Torvane (Su) + (kPa) 50 100 150 200 △ Pocket Pen. (Su) △ (kPa) 50 100 150 200 PLASTIC M.C. LIQUID 20 40 60 80	COMMENTS	ELEVATION (m)
6		- greyish brown below 6.1 m					226
7							225
8		END OF TEST HOLE @ 7.6 m IN CLAY Notes: 1. Sloughing from sand and silt layers to 6.1 m 2. No seepage 3. The torvane and pocket penetrometer tests were performed on disturbed samples (auger cuttings) and only represent relative consistency of the soils tested.	<input checked="" type="checkbox"/>	G25	+		224
9							223
10							222
11							221
12							

LOG OF TESTHOLE - ALEXANDER BANINATYNE.GPJ UMA.GDT 8/2/05



LOGGED BY: Kate Franklin	COMPLETION DEPTH: 7.60 m
REVIEWED BY: Gil Robinson	COMPLETION DATE: 23/12/04
PROJECT ENGINEER: Gil Robinson	Page 2 of 2

PROJECT: Alexander-Banatyne Combined Sewer Relief	CLIENT: City of Winnipeg - WWD	TESTHOLE NO: TH04-05
LOCATION: Arlington St, 15.5 m North of Winnipeg Ave, Southbound center lane		PROJECT NO.: D265-177-01
CONTRACTOR: Maple Leaf Drillers	METHOD: B-40, 125 mm Solid Stem Augers	ELEVATION (m): 232.2
SAMPLE TYPE	<input checked="" type="checkbox"/> GRAB <input type="checkbox"/> SHELBY TUBE <input type="checkbox"/> SPLIT SPOON <input type="checkbox"/> BULK <input type="checkbox"/> NO RECOVERY <input type="checkbox"/> CORE	



LOG OF TESTHOLE - ALEXANDER BANINATYNE.GPJ UMA.GDT 8/2/05



LOGGED BY: Kate Franklin	COMPLETION DEPTH: 7.60 m
REVIEWED BY: Gil Robinson	COMPLETION DATE: 23/12/04
PROJECT ENGINEER: Gil Robinson	Page 1 of 2

PROJECT: Alexander-Banatyne Combined Sewer Relief	CLIENT: City of Winnipeg - WWD	TESTHOLE NO: TH04-05
LOCATION: Arlington St, 15.5 m North of Winnipeg Ave, Southbound center lane		PROJECT NO.: D265-177-01
CONTRACTOR: Maple Leaf Drillers	METHOD: B-40, 125 mm Solid Stem Augers	ELEVATION (m): 232.2
SAMPLE TYPE	<input checked="" type="checkbox"/> GRAB <input type="checkbox"/> SHELBY TUBE <input type="checkbox"/> SPLIT SPOON <input type="checkbox"/> BULK	<input checked="" type="checkbox"/> NO RECOVERY <input type="checkbox"/> CORE

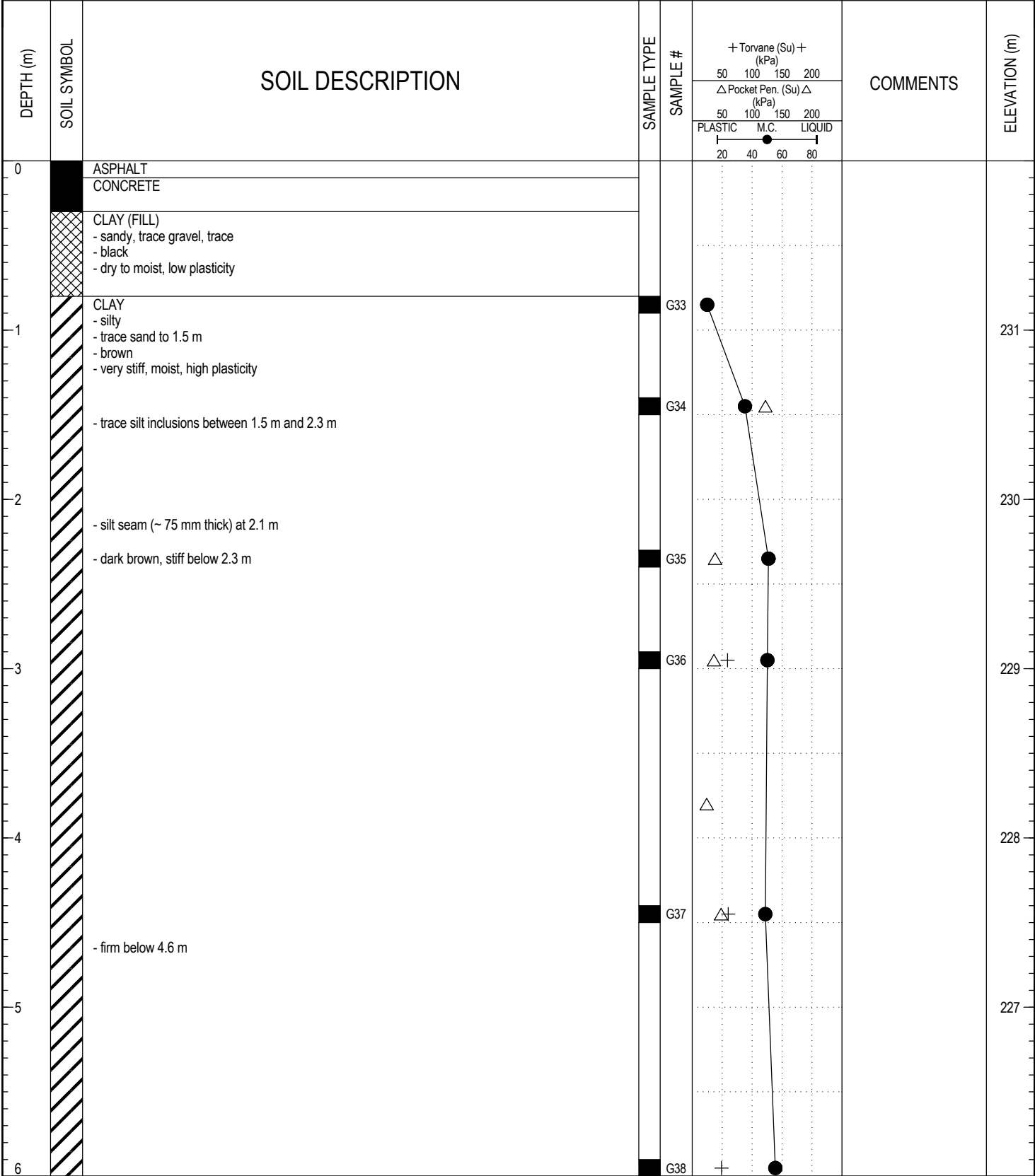
DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	+ Torvane (Su) + (kPa)		COMMENTS	ELEVATION (m)		
					50	100			150	200
					△ Pocket Pen. (Su) △ (kPa)					
					50	100	150	200		
					PLASTIC	M.C.	LIQUID			
					20	40	60	80		
6								226		
7								225		
8		END OF TEST HOLE @ 7.6 m IN CLAY Notes: 1. No sloughing or seepage 2. The torvane and pocket penetrometer tests were performed on disturbed samples (auger cuttings) and only represent relative consistency of the soils tested.	<input checked="" type="checkbox"/>	G31	+	●		224		
9								223		
10								222		
11								221		
12										

LOG OF TESTHOLE - ALEXANDER BANATYNE.GPJ UMA.GDT 8/2/05



LOGGED BY: Kate Franklin	COMPLETION DEPTH: 7.60 m
REVIEWED BY: Gil Robinson	COMPLETION DATE: 23/12/04
PROJECT ENGINEER: Gil Robinson	Page 2 of 2

PROJECT: Alexander-Banatyne Combined Sewer Relief	CLIENT: City of Winnipeg - WWD	TESTHOLE NO: TH04-06
LOCATION: Between 861 & 859 McDermot Ave, North lane		PROJECT NO.: D265-177-01
CONTRACTOR: Maple Leaf Drillers	METHOD: B-40, 125 mm Solid Stem Augers	ELEVATION (m): 232
SAMPLE TYPE	<input checked="" type="checkbox"/> GRAB <input type="checkbox"/> SHELBY TUBE <input type="checkbox"/> SPLIT SPOON <input type="checkbox"/> BULK <input type="checkbox"/> NO RECOVERY <input type="checkbox"/> CORE	



LOG OF TESTHOLE - ALEXANDER BANINATYNE.GPJ UMA.GDT 8/2/05



LOGGED BY: Kate Franklin	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Gil Robinson	COMPLETION DATE: 23/12/04
PROJECT ENGINEER: Gil Robinson	Page 1 of 2

PROJECT: Alexander-Banatyne Combined Sewer Relief	CLIENT: City of Winnipeg - WWD	TESTHOLE NO: TH04-06
LOCATION: Between 861 & 859 McDermot Ave, North lane		PROJECT NO.: D265-177-01
CONTRACTOR: Maple Leaf Drillers	METHOD: B-40, 125 mm Solid Stem Augers	ELEVATION (m): 232
SAMPLE TYPE <input checked="" type="checkbox"/> GRAB	<input type="checkbox"/> SHELBY TUBE	<input checked="" type="checkbox"/> NO RECOVERY
	<input checked="" type="checkbox"/> SPLIT SPOON	<input type="checkbox"/> CORE
	<input type="checkbox"/> BULK	

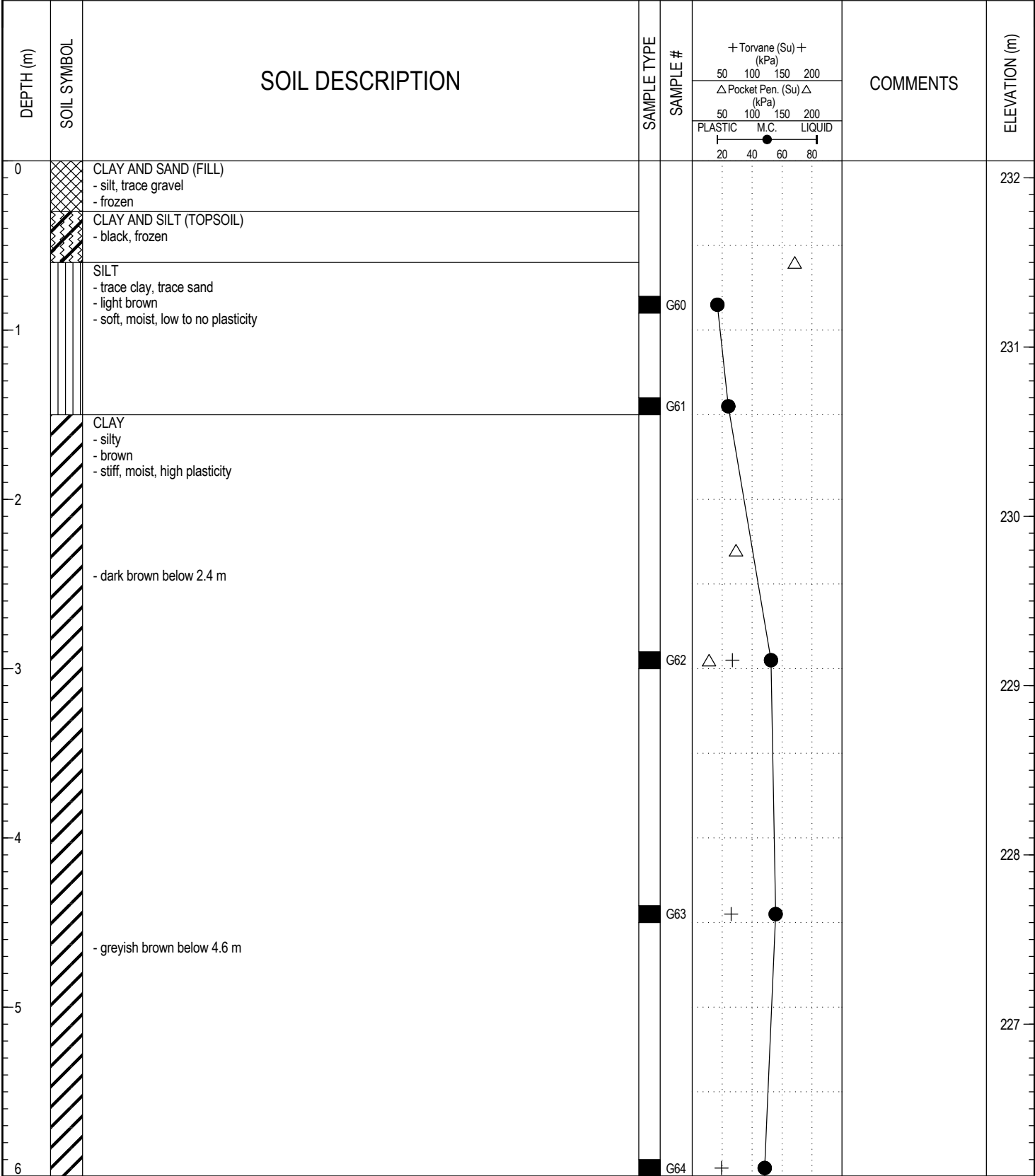
DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	+ Torvane (Su) + (kPa) 50 100 150 200 Δ Pocket Pen. (Su) Δ (kPa) 50 100 150 200 PLASTIC M.C. LIQUID 20 40 60 80	COMMENTS	ELEVATION (m)
6	/	END OF TEST HOLE @ 6.1 m IN CLAY Notes: 1. No sloughing or seepage 2. The torvane and pocket penetrometer tests were performed on disturbed samples (auger cuttings) and only represent relative consistency of the soils tested.					
7							225
8							224
9							223
10							222
11							221
12							

LOG OF TESTHOLE ALEXANDER BANINATYNE.GPJ UMA.GDT 8/2/05



LOGGED BY: Kate Franklin	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Gil Robinson	COMPLETION DATE: 23/12/04
PROJECT ENGINEER: Gil Robinson	Page 2 of 2

PROJECT: Alexander-Banatyne Combined Sewer Relief	CLIENT: City of Winnipeg - WWD	TESTHOLE NO: TH04-07
LOCATION: 247 Trinity St, on West curb		PROJECT NO.: D265-177-01
CONTRACTOR: Maple Leaf Drillers	METHOD: B-40, 125 mm Solid Stem Augers	ELEVATION (m): 232.1
SAMPLE TYPE	<input checked="" type="checkbox"/> GRAB <input type="checkbox"/> SHELBY TUBE <input type="checkbox"/> SPLIT SPOON <input type="checkbox"/> BULK <input type="checkbox"/> NO RECOVERY <input type="checkbox"/> CORE	




LOG OF TESTHOLE - ALEXANDER BANINATYNE.GPJ UMA.GDT 8/2/05



LOGGED BY: Kate Franklin	COMPLETION DEPTH: 7.60 m
REVIEWED BY: Gil Robinson	COMPLETION DATE: 23/12/04
PROJECT ENGINEER: Gil Robinson	Page 1 of 2

PROJECT: Alexander-Banatyne Combined Sewer Relief	CLIENT: City of Winnipeg - WWD	TESTHOLE NO: TH04-07
LOCATION: 247 Trinity St, on West curb		PROJECT NO.: D265-177-01
CONTRACTOR: Maple Leaf Drillers	METHOD: B-40, 125 mm Solid Stem Augers	ELEVATION (m): 232.1

SAMPLE TYPE GRAB SHELBY TUBE SPLIT SPOON BULK NO RECOVERY CORE

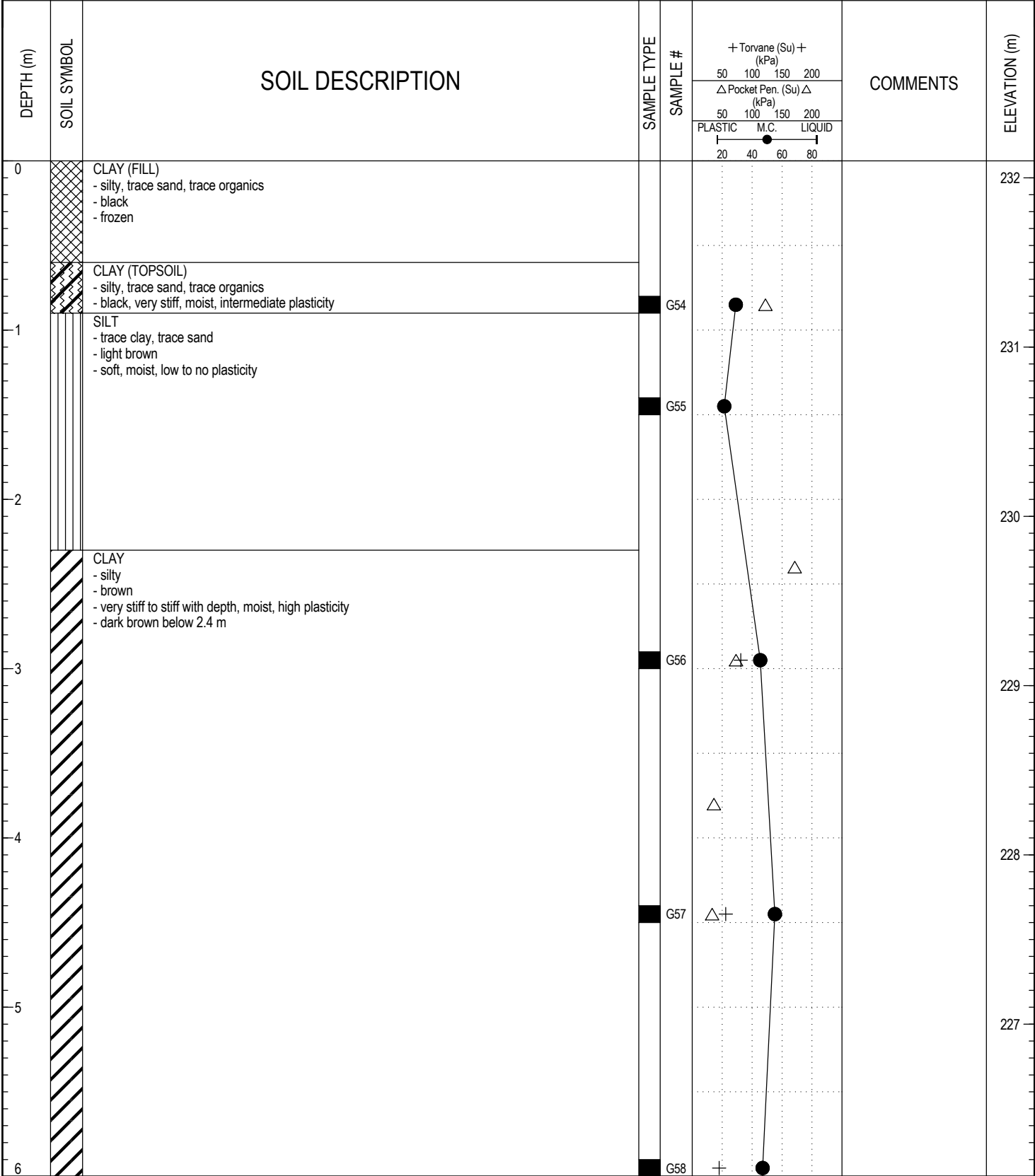
DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	+ Torvane (Su) + (kPa)		COMMENTS	ELEVATION (m)
					50	100		
6								226
7								225
8		END OF TEST HOLE @ 7.6 m IN CLAY Notes: 1. No sloughing or seepage 2. The torvane and pocket penetrometer tests were performed on disturbed samples (auger cuttings) and only represent relative consistency of the soils tested.		G65				224
9								223
10								222
11								221
12								

LOG OF TESTHOLE - ALEXANDER BANINATYNE.GPJ UMA.GDT 8/2/05



LOGGED BY: Kate Franklin	COMPLETION DEPTH: 7.60 m
REVIEWED BY: Gil Robinson	COMPLETION DATE: 23/12/04
PROJECT ENGINEER: Gil Robinson	Page 2 of 2

PROJECT: Alexander-Banatyne Combined Sewer Relief	CLIENT: City of Winnipeg - WWD	TESTHOLE NO: TH04-08
LOCATION: 948 Alexander Ave (empty lot), on South curb		PROJECT NO.: D265-177-01
CONTRACTOR: Maple Leaf Drillers	METHOD: B-40, 125 mm Solid Stem Augers	ELEVATION (m): 232.1
SAMPLE TYPE	<input checked="" type="checkbox"/> GRAB <input type="checkbox"/> SHELBY TUBE <input type="checkbox"/> SPLIT SPOON <input type="checkbox"/> BULK <input type="checkbox"/> NO RECOVERY <input type="checkbox"/> CORE	




LOG OF TESTHOLE - ALEXANDER BANINATYNE.GPJ UMA.GDT 8/2/05



LOGGED BY: Kate Franklin	COMPLETION DEPTH: 7.60 m
REVIEWED BY: Gil Robinson	COMPLETION DATE: 23/12/04
PROJECT ENGINEER: Gil Robinson	Page 1 of 2

PROJECT: Alexander-Banatyne Combined Sewer Relief	CLIENT: City of Winnipeg - WWD	TESTHOLE NO: TH04-08
LOCATION: 948 Alexander Ave (empty lot), on South curb		PROJECT NO.: D265-177-01
CONTRACTOR: Maple Leaf Drillers	METHOD: B-40, 125 mm Solid Stem Augers	ELEVATION (m): 232.1
SAMPLE TYPE	<input checked="" type="checkbox"/> GRAB <input type="checkbox"/> SHELBY TUBE <input type="checkbox"/> SPLIT SPOON <input type="checkbox"/> BULK	<input checked="" type="checkbox"/> NO RECOVERY <input type="checkbox"/> CORE

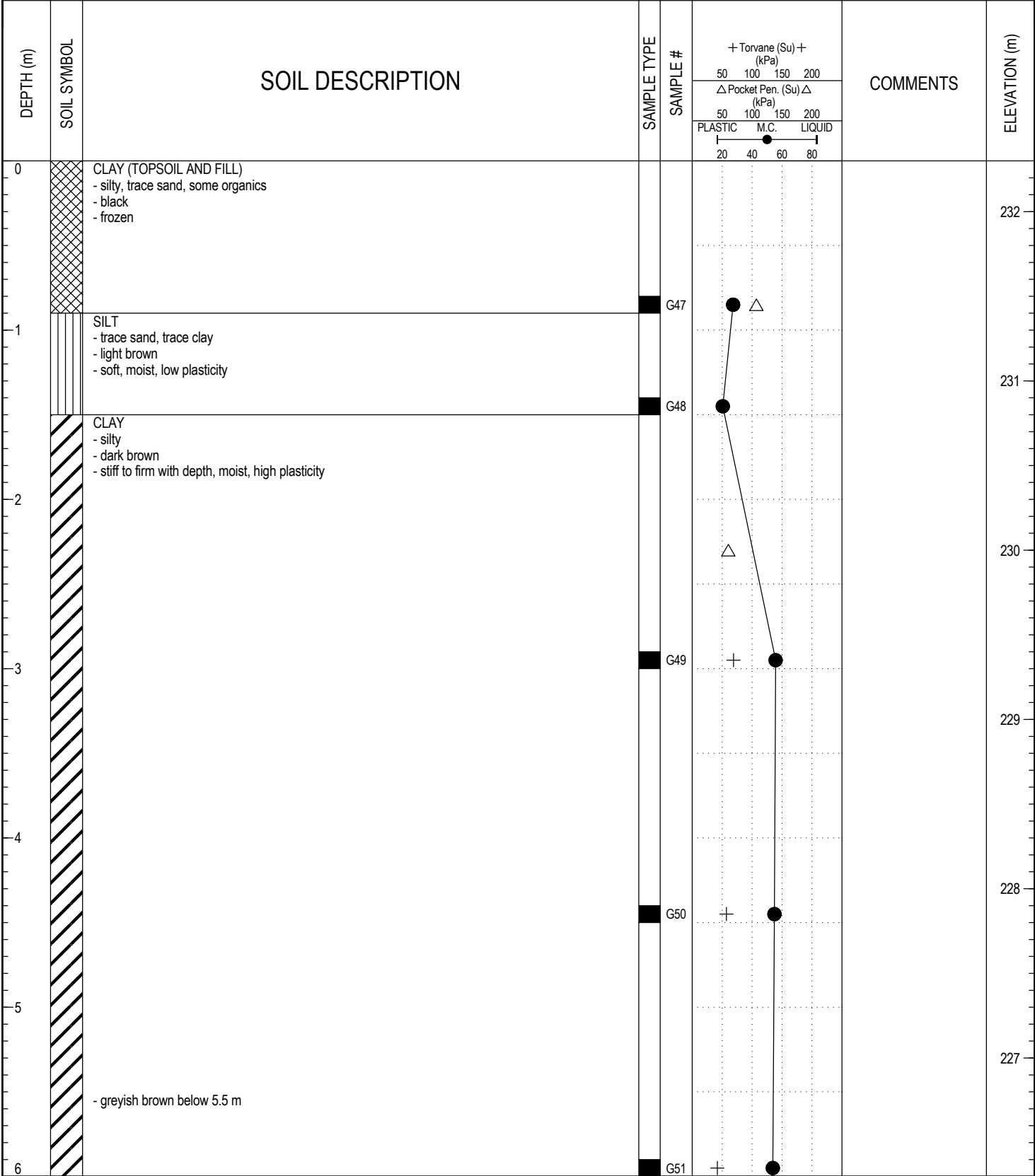
DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	+ Torvane (Su) + (kPa)		COMMENTS	ELEVATION (m)		
					50	100			150	200
					△ Pocket Pen. (Su) △ (kPa)					
					50	100	150	200		
					PLASTIC	M.C.	LIQUID			
					20	40	60	80		
6		- grey below 6.1 m						226		
7								225		
8		END OF TEST HOLE @ 7.6 m IN CLAY Notes: 1. No sloughing or seepage 2. The torvane and pocket penetrometer tests were performed on disturbed samples (auger cuttings) and only represent relative consistency of the soils tested.	<input checked="" type="checkbox"/>	G59	+	●		224		
9								223		
10								222		
11								221		
12										

LOG OF TESTHOLE - ALEXANDER BANINATYNE.GPJ UMA.GDT 8/2/05



LOGGED BY: Kate Franklin	COMPLETION DEPTH: 7.60 m
REVIEWED BY: Gil Robinson	COMPLETION DATE: 23/12/04
PROJECT ENGINEER: Gil Robinson	Page 2 of 2

PROJECT: Alexander-Banatyne Combined Sewer Relief	CLIENT: City of Winnipeg - WWD	TESTHOLE NO: TH04-09
LOCATION: 988 Alexander Ave, on South curb		PROJECT NO.: D265-177-01
CONTRACTOR: Maple Leaf Drillers	METHOD: B-40, 125 mm Solid Stem Augers	ELEVATION (m): 232.3
SAMPLE TYPE	<input checked="" type="checkbox"/> GRAB <input type="checkbox"/> SHELBY TUBE <input type="checkbox"/> SPLIT SPOON <input type="checkbox"/> BULK <input type="checkbox"/> NO RECOVERY <input type="checkbox"/> CORE	




LOG OF TESTHOLE - ALEXANDER BANINATYNE.GPJ UMA.GDT 8/2/05



LOGGED BY: Kate Franklin	COMPLETION DEPTH: 7.60 m
REVIEWED BY: Gil Robinson	COMPLETION DATE: 23/12/04
PROJECT ENGINEER: Gil Robinson	Page 1 of 2

PROJECT: Alexander-Banatyne Combined Sewer Relief	CLIENT: City of Winnipeg - WWD	TESTHOLE NO: TH04-09
LOCATION: 988 Alexander Ave, on South curb		PROJECT NO.: D265-177-01
CONTRACTOR: Maple Leaf Drillers	METHOD: B-40, 125 mm Solid Stem Augers	ELEVATION (m): 232.3
SAMPLE TYPE	<input checked="" type="checkbox"/> GRAB <input type="checkbox"/> SHELBY TUBE <input type="checkbox"/> SPLIT SPOON <input type="checkbox"/> BULK	<input checked="" type="checkbox"/> NO RECOVERY <input type="checkbox"/> CORE

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	+ Torvane (Su) + (kPa)		COMMENTS	ELEVATION (m)		
					50	100			150	200
					△ Pocket Pen. (Su) △ (kPa)					
					50	100	150	200		
					PLASTIC	M.C.	LIQUID			
					20	40	60	80		
6		- grey, trace silt inclusions (< 2 mm diameter) below 6.7 m						226		
7								225		
8								224		
9								223		
10								222		
11								221		
12										

END OF TEST HOLE @ 9.1 m IN CLAY
Notes:
1. No sloughing or seepage
2. The torvane and pocket pentrometer tests were performed on disturbed samples (auger cuttings) and only represent relative consistency of the soils tested.

LOG OF TESTHOLE ALEXANDER BANINATYNE.GPJ UMA.GDT 8/2/05



LOGGED BY: Kate Franklin	COMPLETION DEPTH: 7.60 m
REVIEWED BY: Gil Robinson	COMPLETION DATE: 23/12/04
PROJECT ENGINEER: Gil Robinson	Page 2 of 2

PROJECT: Alexander-Banatyne Combined Sewer Relief	CLIENT: City of Winnipeg - WWD	TESTHOLE NO: TH04-10
LOCATION: 965 Pacific Ave, South lane		PROJECT NO.: D265-177-01
CONTRACTOR: Maple Leaf Drillers	METHOD: B-40, 125 mm Solid Stem Augers	ELEVATION (m): 232
SAMPLE TYPE	<input checked="" type="checkbox"/> GRAB <input type="checkbox"/> SHELBY TUBE <input type="checkbox"/> SPLIT SPOON <input type="checkbox"/> BULK <input type="checkbox"/> NO RECOVERY <input type="checkbox"/> CORE	

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	+ Torvane (Su) + (kPa)		COMMENTS	ELEVATION (m)
					50	100		
					△ Pocket Pen. (Su) △ (kPa)			
					50	100	150	200
					PLASTIC	M.C.	LIQUID	
0	<div style="background-color: black; width: 100%; height: 10px; margin-bottom: 2px;"></div> <div style="background-color: grey; width: 100%; height: 10px; margin-bottom: 2px;"></div> <div style="border: 1px solid black; width: 100%; height: 10px; margin-bottom: 2px;"></div> <div style="border: 1px solid black; width: 100%; height: 10px; margin-bottom: 2px;"></div>	ASPHALT CONCRETE CLAY (TOPSOIL) - silty, trace organics - black						
1	<div style="border: 1px solid black; width: 100%; height: 10px; margin-bottom: 2px;"></div>	CLAY - silty, trace sand - dark brown - moist, stiff, high plasticity	<div style="background-color: black; width: 100%; height: 10px;"></div>	G39			△	231
2	<div style="border: 1px solid black; width: 100%; height: 10px; margin-bottom: 2px;"></div>	SILT - trace sand, trace clay - light brown - moist to wet, low plasticity	<div style="background-color: black; width: 100%; height: 10px;"></div>	G40				230
3	<div style="border: 1px solid black; width: 100%; height: 10px; margin-bottom: 2px;"></div>	CLAY - silty - brown - stiff, moist, high plasticity	<div style="background-color: black; width: 100%; height: 10px;"></div>	G41				229
4	<div style="border: 1px solid black; width: 100%; height: 10px; margin-bottom: 2px;"></div>	CLAY - silty - brown - stiff, moist, high plasticity - greyish brown below 3.7 m	<div style="background-color: black; width: 100%; height: 10px;"></div>	G42			△ +	228
5	<div style="border: 1px solid black; width: 100%; height: 10px; margin-bottom: 2px;"></div>	- grey, trace silt inclusion (< 2 mm diameter), firm below 4.6 m	<div style="background-color: black; width: 100%; height: 10px;"></div>	G43			+	227
6	<div style="border: 1px solid black; width: 100%; height: 10px; margin-bottom: 2px;"></div>		<div style="background-color: black; width: 100%; height: 10px;"></div>	G44			+	

LOG OF TESTHOLE - ALEXANDER BANINATYNE.GPJ UMA.GDT 8/2/05



LOGGED BY: Kate Franklin	COMPLETION DEPTH: 9.10 m
REVIEWED BY: Gil Robinson	COMPLETION DATE: 23/12/04
PROJECT ENGINEER: Gil Robinson	Page 1 of 2

PROJECT: Alexander-Banatyne Combined Sewer Relief	CLIENT: City of Winnipeg - WWD	TESTHOLE NO: TH04-10
LOCATION: 965 Pacific Ave, South lane		PROJECT NO.: D265-177-01
CONTRACTOR: Maple Leaf Drillers	METHOD: B-40, 125 mm Solid Stem Augers	ELEVATION (m): 232

SAMPLE TYPE GRAB SHELBY TUBE SPLIT SPOON BULK NO RECOVERY CORE

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	+ Torvane (Su) + (kPa)		COMMENTS	ELEVATION (m)
					50	100		
					△ Pocket Pen. (Su) △ (kPa)			
					50	100	150	200
					PLASTIC		M.C.	LIQUID
					20	40	60	80
6								
7								225
8								224
9								223
10								222
11								221
12								

END OF TEST HOLE @ 9.1 m IN CLAY
Notes:
1. Sloughing from silt layer to 8.1 m
2. No seepage
3. The torvane and pocket penetrometer tests were performed on disturbed samples (auger cuttings) and only represent relative consistency of the soils tested.

LOG OF TESTHOLE ALEXANDER BANINATYNE.GPJ UMA.GDT 8/2/05



LOGGED BY: Kate Franklin	COMPLETION DEPTH: 9.10 m
REVIEWED BY: Gil Robinson	COMPLETION DATE: 23/12/04
PROJECT ENGINEER: Gil Robinson	Page 2 of 2

PROJECT: Alexander-Banatyne Combined Sewer Relief	CLIENT: City of Winnipeg - WWD	TESTHOLE NO: TH04-11
LOCATION: 917 Pacific Ave, South lane		PROJECT NO.: D265-177-01
CONTRACTOR: Maple Leaf Drillers	METHOD: B-40, 125 mm Solid Stem Augers	ELEVATION (m): 232.1
SAMPLE TYPE	<input checked="" type="checkbox"/> GRAB <input type="checkbox"/> SHELBY TUBE <input checked="" type="checkbox"/> SPLIT SPOON <input type="checkbox"/> BULK <input checked="" type="checkbox"/> NO RECOVERY <input type="checkbox"/> CORE	

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	+ Torvane (Su) + (kPa) 50 100 150 200 Δ Pocket Pen. (Su) Δ (kPa) 50 100 150 200 PLASTIC M.C. LIQUID ───┬───┬───┬───┬─── 20 40 60 80	COMMENTS	ELEVATION (m)
6	/	END OF TEST HOLE @ 6.1 m IN CLAY Notes: 1. No sloughing or seepage 2. The torvane and pocket penetrometer tests were performed on disturbed samples (auger cuttings) and only represent relative consistency of the soils tested.					226
7							225
8							224
9							223
10							222
11							221
12							

LOG OF TESTHOLE - ALEXANDER BANATYNE.GPJ UMA.GDT 8/2/05



LOGGED BY: Kate Franklin	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Gil Robinson	COMPLETION DATE: 23/12/04
PROJECT ENGINEER: Gil Robinson	Page 2 of 2