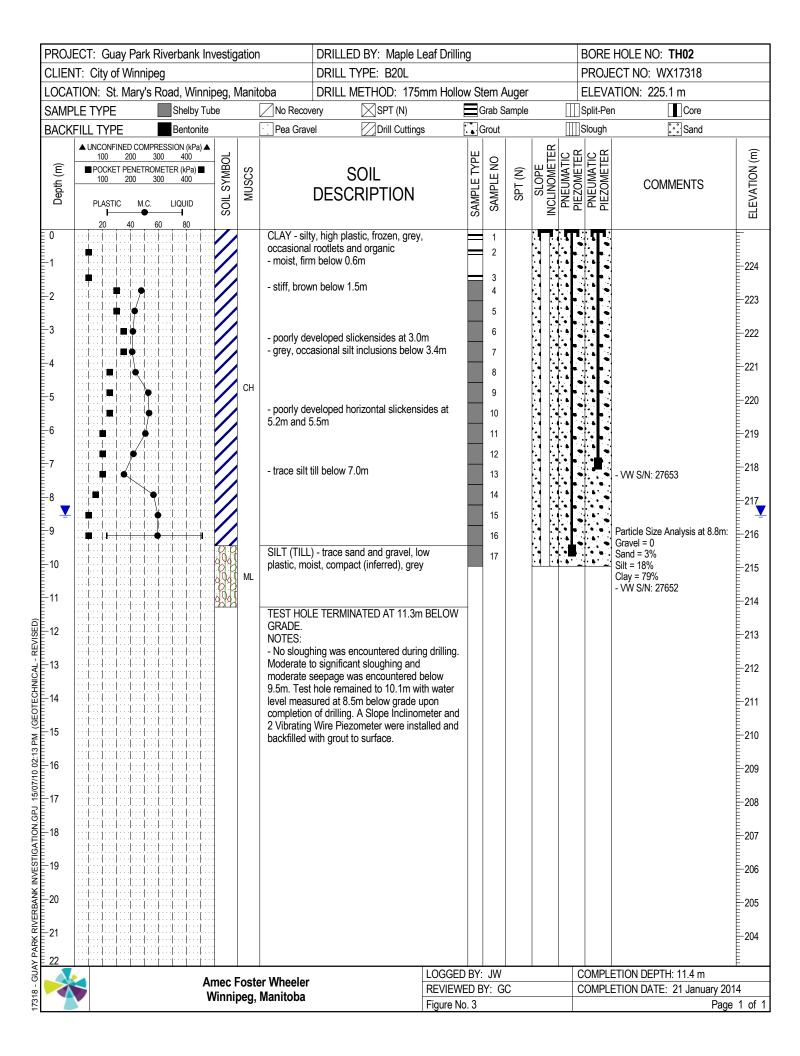
	ECT: Guay F			bank	invest	igation	<u> </u>	Lear Drilling		_		DLE NO: TH01	
CLIENT: City of Winnipeg LOCATION: St. Mary's Road, Winnipeg, Manitoba							DRILL TYPE: B20L			_		T NO: WX17318	
_OCA	TION: St. Ma	ary's R	Road,	, Win	nipeg,	Mani		5mm Solid Stem Auger	•	El	LEVATI	ON: 228.79 m	
SAMP	LE TYPE	[Sł	nelby 1	Гubе		No Recovery SPT (N)	Grab Samp	ole	Sp	olit-Pen	Core	
BACKI	FILL TYPE		Ве	entonit	e		Pea Gravel Drill Cutti	ngs Grout		∭SId	ough	Sand	
	▲ UNCONFINED	COMPRI	ESSION	N (kPa)	<u> </u>								
<u></u>	100 20	00 30	00	400					SAMPLE TYPE	9			
h (m	■ POCKET PE 100 20	:NETROM 00 30	DETER	(кРа) ■ 400	_ X	SSS	SOI	L	Ш	<u> </u>	2	COMMENTS	
Depth (m)					S	MUSCS	DESCRIF	PTION	₽	SAMPLE NO	SPT (N)	COMMENTS	
	PLASTIC -	M.C.	LIQ	UID	SOI					&			
	20 4	0 60	0	80	٠,,	∠ OH							
0		 					ORGANIC CLAY - silty, high plastic SILT - trace clay, low plastic, soft, g		otlets	1			Ē
-1		inini		iiiiii		ML	SILT - trace day, low plastic, sort, g	теу		2			-2
•				dad		Ц	CLAY - silty, high plastic, frozen, gre	y occasional rootlets and		3			E
-2							sulphates	ey, occasional rootiets and					<u>-</u> 2
-	::::t:::1:::1::: 1	P ariant		111			- brown, occasional sulphates below	<i>i</i> 2.1m		4			E
-3				1			- moist below 2.3m			5			-2
		أسأسأ		ini						-			Ē
-4				111									-2
7							- stiff, grey below 4.0m			6			Ē
-5										١			-2
J				4									Ē
-6		أسوسا		guj			- occasional silt inclusions below 5.8	Rm		,			_2
U	 	l]]]]][วงงินอางาณ อกุก กางเนอเบกอ มิซีเบฟ 3.0	лп		7			Ē
7			::::¦:::	jui									_2
-7							froquent eilt etill inglusione hele	' 2m					E
0		 		4		CH	- frequent silt still inclusions below 7	.JIII		8			_2
-8				guq									E
0	l J l • • • • • • • • • • • •	 -	l 	.Jt 									E-2
-9	[1						9			E
-10		 		1			- soft below 9.8m						<u>-</u> 2
10		 		4::4			Soft Bolow S.Siff						Ē
11		 -							Ħ	10			<u>-</u> 2
11				::::::									Ē
-12		1 1 1											-2
-12			ii.	diid						11			Ē
-13													-2
10				1[E
-13 <u>-</u>		r 1 1 1 1			100	ML	SILT (TILL) - gravelly, some sand, lo	ow plastic, compact (inferre	ed),	12 13			-2
		أسنسا	min.	ini			\wet, grey		· /				E
15				1111			AUGER REFUSAL AT 14.0m BELC COBBLES.	W GRADE ON SUSPECT	ED				-2
				jui			NOTES:						E
16				.1			- No sloughing was encountered du	ring drilling. Moderate seep	page				<u>-</u> 2
-							was observed below 13.7m upon coremained open to 14.0m with water	impletion of drilling . Test h	nole				E
17			[.]	44			below grade upon completion of dril	ling. Test hole was backfill	ed				-2
							with auger cuttings and bentonite.						Ē
18		 											=2
													Ē
19		 											-2
				diil									Ē
20				4:::	: : :								-2
													Ē
21		pojeci	mji.	إنتان									=2
	• • • • • • • • • • • • • • • • • • • • • • • •	 											Ē
22			· · · · · · ·	<u> </u>				1,00055 51/ """		100	\\ AB: ==	ON DEDTH 4:	-2
					Amec	Fost	er Wheeler	LOGGED BY: JW		_		ON DEPTH: 14 m	, 2014
							Manitoba	REVIEWED BY: GC		UU	NILLE I I	ON DATE: 21 January F	<i>i</i> 2014



	ECT: Guay Park F IT: City of Winnipe		sugation	DRILLED BY: Map DRILL TYPE: Acke		BORE HOLE NO: TH03				
	TION: St. Mary's	•	n Manit		PROJECT NO: WX17318 ELEVATION: 231.16 m					
	LE TYPE	Shelby Tube		No Recovery SPT (N		Grab Sampl		Split-Per		
		Bentonite		Pea Gravel Drill Cu		Grout		Slough	Sand	
BAUNI	FILL TYPE A UNCONFINED COMPR		1		ungs []			<u> </u>	Saliu Saliu	
Depth (m)	100 200 3 ■ POCKET PENETRO 100 200 3 PLASTIC M.C.	00 400 7 7 7 7 7 7 7 7 7	SOIL SYMBOL MUSCS	SOIL DESCRIPTION		SAMPLE NO SPT (N)	SLOPE INCLINOMETER PNEUMATIC	PNEUMATIC PIEZOMETER	COMMENTS	V NOIF V//L
0 -1 -2 -3 -4 -5 -6 -7 -8 ▼ -9 -10 -11 -12 -13 -14 -15 -16 -17 -18		50 80	OR ML	TOPSOIL - grass, 50mm thick SILT - trace clay, low plastic, moist CLAY - silty, high plastic, moist, si frequent silt inclusions - interbedded silt layers from 2.4m - poorly developed horizontal slicker 3.7m and 4.2m - poorly developed horizontal slicker 5.2m - frequent silt till inclusions betwee 6.7m - very stiff, trace sand below 6.7m - very stiff, trace sand below 6.7m - poorly developed horizontal slicker 7.0m, 7.3m, and 7.6m - frequent silt inclusions, mottled below 7.9m - poorly developed horizontal slicker 8.8m - occasional gravel inclusions below - frequent silt till inclusions below SILT (TILL) - some clay, gravelly, cobble, low plastic, compact (infergrey TEST HOLE TERMINATED AT 16 GRADE. NOTES: - Slight to moderate sloughing wa encountered below 0.2m during d	itiff, brown, in to 2.7m itensides at itens	1 1 2 3 3 4 4 5 5 6 6 7 8 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24			- VW S/N: 27654	-23 -23 -22 -22 -22 -22 -22 -22 -22 -22
-19 -20 -21				Moderate to significant seepage vencountered from 15.4m below grow drilling. Test hole remained to 16. water level measured at 8.5m below upon completion of drilling. A Slop Inclinometer and 2 Vibrating Wirewere installed and backfilled with surface.	ade during Bm with ow grade pe Piezometer					-21 21 21
22					1,00055 511	DI		00145: -	TION DEDTIL 40.0	E
				er Wheeler Manitoba	REVIEWED E				ETION DEPTH: 16.8 m ETION DATE: 17 January	2014 age 1 c

PROJECT: Guay Park Riverbank Investigation CLIENT: City of Winnipeg						I	DRILLED BY: Maple Leaf Drilling DRILL TYPE: B20L						BORE HOLE NO: TH04 PROJECT NO: WX17318				
	TION: St. Ma		•	nninea	Mani	toba	DRILL 11PE. BZUL DRILL METHOD: 125mm Solid Stem Auger					_	ELEVATION: 227.68 m				
	PLE TYPE	iy 3 i	Shelby		, iviai ii	No Recov		SPT (N)	.5111111 5011	Grab Sample	<u>,</u>	_	Split-Pen	Core			
	FILL TYPE	i	Bentor	·		Pea Grav	-	Drill Cuttir	nas	Grout		ш	Slough	\$\cdots\delta\delt			
D/ 1011	▲ UNCONFINED (COMPRI	ESSION (kPa	a) 🔺				<u> </u>						[F_V] = \$11.12			
Depth (m)	■POCKET PEN 100 200	S					SOIL DESCRIPTION				SAMPLE TYPE	SAMPLE NO	SPT (N)	COMMENTS			
0	20 40				OR	ORGANIC frequent ro	CLAY - ootlets a	silty, high plastic, nd organic	, frozen, so	ft (inferred),		1 2			-2		
-2						CLAY - sil	ty, high բ	plastic, moist, stiff	f, brown			3			2:		
-3												5			22		
-4						- occasion	al silt ind	clusions below 3.7	7m			6 7			-2		
-6												8			-2		
-7					СН	below 6.4r	'n	silt inclusions, occ below 6.9m	asional oxi	dation inclusions		10			-2		
8								l inclusions below	7.6m			11			-2		
9 🔽												12			-2		
10												13			-2		
-12				000	ML	SILT (TILL compact (i	_) - some inferred)	e clay, gravelly, lo , grey	w plastic, r	noist to wet,		14 15 16			-2		
13						COBBLES NOTES:	S.	AT 14.0m BELO				10			2 2		
14 15						was obser	ved belo to 11.9m	s encountered dur ow 11.4m upon con owith water level of drilling. Test hole	mpletion o measured	f drilling . Test ho at 9.1m below gra	le				2		
15 16 17						cuttings ar	nd bento	nite.							-2		
17				· · · · · · · · · · · · · · ·											-2		
18															-2		
19 20															-2		
18 19 20 21 22				- - -											-2		
22									1						-2		
						er Wheeler Manitoba				D BY: BK VED BY: GC				ΓΙΟΝ DEPTH: 12.5 m ΓΙΟΝ DATE: 17 January	2014 age 1 d		