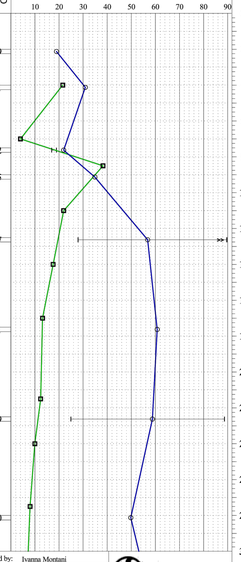
TH18-01 TESTHOLE RECORD

CLIENT City of Winnipeg | PROJECT No. 113733340
PROJECT Dublin Avenue Bridge Replacement | DATUM Geodetic | NORTHING 5530309.014
LOCATION Dublin Avenue at Omand's Creek | ELEVATION 233.883 m | EASTING 629555.137
DRILLING DATE August 3, 2018 | DRILLING CO. Paddock Drilling Ltd. | DRILLING METHOD 125 mm SSA

SOIL TYPE	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NUMBER	MOISTURE CONTENT (%)
TP	Brown to black TOPSOIL (TP) - with rootlets, some sand			
FL	FILL: brown clay with sand, with gravel, with silt	GS	19	
CH	Stiff black to grey fat CLAY (CH) - with to some silt	GS	31	
ML	Very soft tan SILT (ML) - with fine grained sand, trace clay, trace gravel - trace gravel at 1.8 m Particle Size Analysis Results from SPT @ 2.3 m: - 0% Gravel, 7% Sand, 79% Silt, 14% Clay	GS	22	
		GS	35	
CH	Stiff brown to grey fat CLAY (CH) - trace to some silt, trace sand - mottled brown and grey below 3.0 m - 2 mm silt seam at 3.7 m. Particle Size Analysis Results @ 3.8 m: - 0.2% Gravel, 0.5% Sand, 9.7% Silt, 89.6% Clay - firm below 4.4 m - trace silt inclusions at 4.6 m	GS	57	
	- trace oxidation below 5.8 m - grey below 6.1 m	GS	61	
	Particle Size Analysis Results @ 6.9 m: - 0% Gravel, 0.9% Sand, 21.5% Silt, 77.6% Clay - soft below 7.0 m	GS	59	
	- some silt inclusions at 8.4 m	GS	50	

Sample Type: GS - Grab Sample SS - Split Spoon RC - Rock Core ST - Shelby Tube PT - Piston Tube VT - Shear Vane Test
Piezometer Backfill Type: Bentonite, Drill Cuttings, Sand, Slough
Logged by: Ivanna Montani
Reviewed by: Rhett Bonham
Stantec



TH18-01 TESTHOLE RECORD cont'd

CLIENT City of Winnipeg | PROJECT No. 113733340
PROJECT Dublin Avenue Bridge Replacement | DATUM Geodetic | NORTHING 5530309.014
LOCATION Dublin Avenue at Omand's Creek | ELEVATION 233.883 m | EASTING 629555.137
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SOIL TYPE	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NUMBER	MOISTURE CONTENT (%)
	- trace gravel at 9.9 m	GS	58	
		GS	55	
SM	Loose grey SILTY SAND (SM) - fine grained sand	GS	22	
SW	Loose tan to brown SAND (SW) - medium to coarse grained sand, occasional cobbles, trace large gravel	SS	20	
	- compact below 13.7 m - no sample recovery below 14.0 m	SS	22	
TL	Inferred silt TILL (TL) - frequent cobbles encountered during drilling below 14.6 m			
	End of Testhole • Auger refusal at a depth of 15.4 m on suspected dense till. • Moderate groundwater seepage was observed at a depth of 11.6 m. • Groundwater level was observed at a depth of 8.5 m upon completion of drilling. • Soil sloughing was observed in the sand layer at a depth of 12.2 m. • Testhole backfilled with auger cuttings and bentonite chips. • Vibrating wire piezometer ID 100D1800939 installed with tip at Elev. 224.97 m immediately adjacent to testhole TH18-01.			

Sample Type: GS - Grab Sample SS - Split Spoon RC - Rock Core ST - Shelby Tube PT - Piston Tube VT - Shear Vane Test
Piezometer Backfill Type: Bentonite, Drill Cuttings, Sand, Slough
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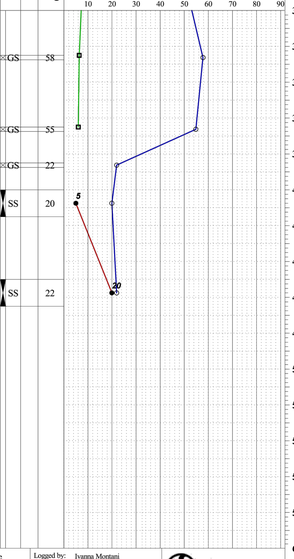
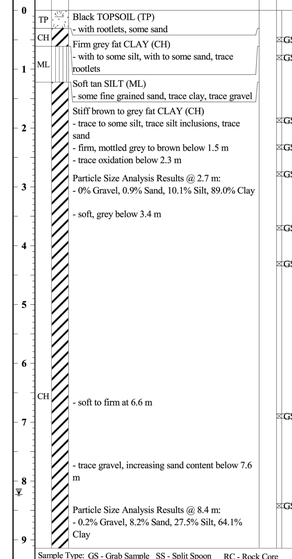


TH18-02 TESTHOLE RECORD

CLIENT City of Winnipeg | PROJECT No. 113733340
PROJECT Dublin Avenue Bridge Replacement | DATUM Geodetic | NORTHING 5530351.932
LOCATION Dublin Avenue at Omand's Creek | ELEVATION 232.105 m | EASTING 629569.771
DRILLING DATE August 3, 2018 | DRILLING CO. Paddock Drilling Ltd. | DRILLING METHOD 125 mm SSA

SOIL TYPE	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NUMBER	MOISTURE CONTENT (%)
TP	Black TOPSOIL (TP) - with rootlets, some sand			
CH	Firm grey fat CLAY (CH) - with to some silt, with to some sand, trace rootlets	GS	40	
ML	Soft tan SILT (ML) - some fine grained sand, trace clay, trace gravel	GS	23	
CH	Stiff brown to grey fat CLAY (CH) - trace to some silt, trace silt inclusions, trace sand - firm, mottled grey to brown below 1.5 m - trace oxidation below 2.3 m Particle Size Analysis Results @ 2.7 m: - 0% Gravel, 0.9% Sand, 10.1% Silt, 89.0% Clay	GS	61	
		GS	54	
		GS	55	
	- soft, grey below 3.4 m	GS	62	
		GS	63	
	- soft to firm at 6.6 m	GS	59	
	- trace gravel, increasing sand content below 7.6 m			
	Particle Size Analysis Results @ 8.4 m: - 0.2% Gravel, 8.2% Sand, 27.5% Silt, 64.1% Clay	GS	52	

Sample Type: GS - Grab Sample SS - Split Spoon RC - Rock Core ST - Shelby Tube PT - Piston Tube VT - Shear Vane Test
Piezometer Backfill Type: Bentonite, Drill Cuttings, Sand, Slough
Logged by: Ivanna Montani
Reviewed by: Rhett Bonham
Stantec



TH18-02 TESTHOLE RECORD cont'd

CLIENT City of Winnipeg | PROJECT No. 113733340
PROJECT Dublin Avenue Bridge Replacement | DATUM Geodetic | NORTHING 5530351.932
LOCATION Dublin Avenue at Omand's Creek | ELEVATION 232.105 m | EASTING 629569.771
DRILLING DATE August 3, 2018 | DRILLING CO. Paddock Drilling Ltd. | DRILLING METHOD 125 mm SSA

SOIL TYPE	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NUMBER	MOISTURE CONTENT (%)
	- very soft below 8.8 m - increasing silt below 9.1 m	GS	53	
	- intermixed silt till with clay below 10.7 m - frequent silt inclusions below 11.3 m	GS	44	
		GS	30	
TL	Loose grey SILT TILL (TL) - with to some clay, with sand, some gravel - compact below 12.8 m	SS	15	
	- very dense below 13.4 m	SS	26	
	End of Testhole • Auger refusal at a depth of 14.0 m on suspected dense till. • Moderate to heavy groundwater seepage was observed at a depth of 12.2 m. • Groundwater level was observed at a depth of 8.2 m. • No soil sloughing was observed during or upon completion of drilling. • Testhole backfilled with auger cuttings and bentonite chips.			

Sample Type: GS - Grab Sample SS - Split Spoon RC - Rock Core ST - Shelby Tube PT - Piston Tube VT - Shear Vane Test
Piezometer Backfill Type: Bentonite, Drill Cuttings, Sand, Slough
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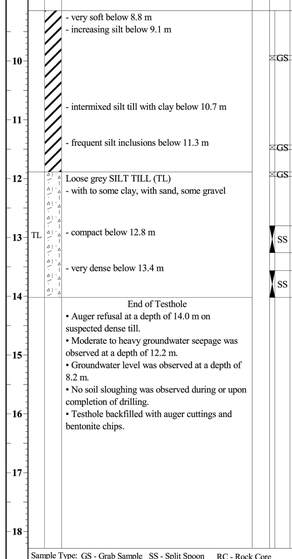

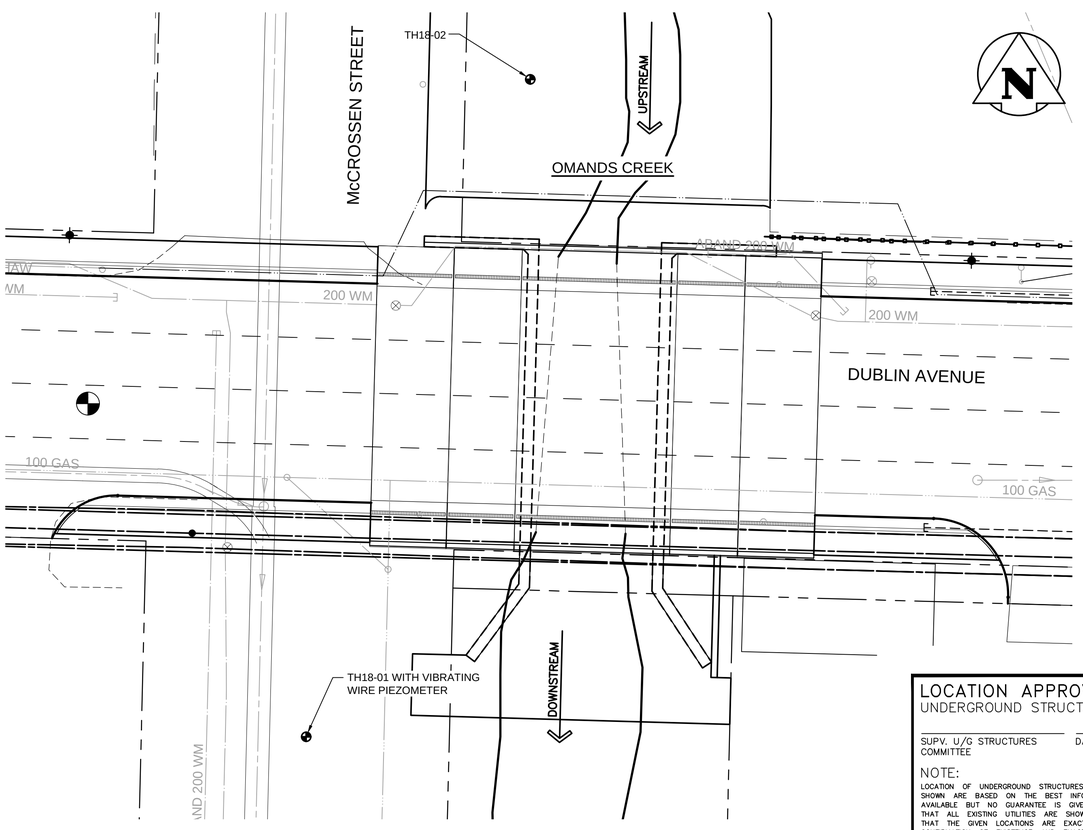

LOCATION PLAN

LOCATION APPROVED
UNDERGROUND STRUCTURES

SUPV. U/G STRUCTURES COMMITTEE — DATE

NOTE:
LOCATION OF UNDERGROUND STRUCTURES AS SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE BUT NO GUARANTEE IS GIVEN THAT ALL EXISTING UTILITIES ARE SHOWN OR THAT THE GIVEN LOCATIONS ARE EXACT. CONFIRMATION OF EXISTENCE AND EXACT LOCATION OF ALL SERVICES MUST BE OBTAINED FROM THE INDIVIDUAL UTILITIES BEFORE PROCEEDING WITH CONSTRUCTION.

B.M.
ELEV.

NO.	REVISIONS	DATE	BY
0	ISSUED FOR TENDER	19.09.18	J.M.B.

Stantec
500 - 311 Portage Avenue, Winnipeg MB Canada
www.stantec.com

DESIGNED BY	R.B.	CHECKED BY	T.C.
DRAWN BY	J.M.B.	APPROVED BY	R.B.
HOR. SCALE: VERTICAL:	1:200 OR AS NOTED	RELEASED FOR CONSTRUCTION:	
DATE	2019.09.18	DATE	

ENGINEER'S SEAL
TENDER DRAWING
NOT TO BE USED FOR CONSTRUCTION
CONSULTANT DRAWING NO. B-101

Winnipeg
THE CITY OF WINNIPEG
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

DUBLIN AVENUE BRIDGE REPLACEMENT
TESTHOLE LOG AND LOCATION PLAN

SHEET 3 OF 48
CAD FILE DRAWING NUMBER 33340b-101-926.dwg
CITY DRAWING NUMBER B105-19-3

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2019/09/18 1:29 PM By: Hon, Jake