# **APPENDIX 'G'**

# **GEOTECHNICAL REPORT**

# APPENDIX 'G' - GEOTECHNICAL REPORT

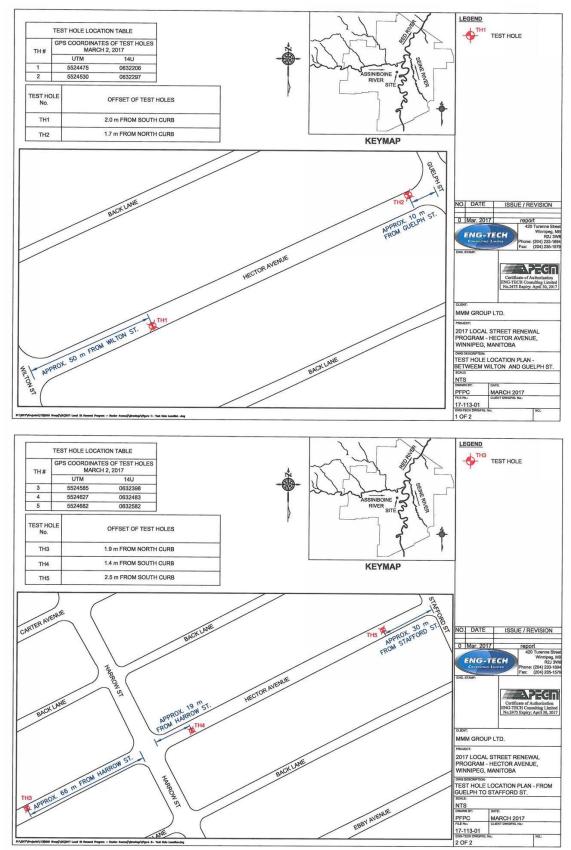
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The geotechnical report is provided to aid in the Contractor's evaluation of the soil conditions. The information presented is considered accurate at the locations shown on the Drawings and at the time of drilling. However, variations in soil conditions 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.

#### **Geotechnical Report for Hector Avenue**

#### **Test Hole Locations**



### **Summary of Core Samples**



420 Turenne Street, Winnipeg, Manitoba R2J 3W8 Phone: (204) 233-1694 Fax: (204) 235-1579 Email: engtech@mymts.net www.eng-tech.ca

File No.: 17-113-01

#### Table 1 Summary of Pavement Structure

Page 1

Hector Avenue: From Wilton Street to Stafford Street

Test Hole Number			Pavement Surface		Pavement Structure Material		Subgrade	Sample	Moisture	H	dromete	r Analysi	s	Atterberg Limits			
	Location	Туре	Thickness (mm)	Туре	Thickness (mm)	Description	Depth (m)	Content (%)	Gravel (%)	Sand (%)	Silt (%)	Clay (%)	Liquid Limit	Plastic Limit	Plasticity Index		
		1					0.1	27.8							1		
		Asshalt	45				0.4	24.1							-		
		Asphalt	45				0.7	36.0	0.0	1.5	28.3	70.2	88	21	67		
1	Hector		-	Granular Fill	152	Clau	1.0	38.4									
	Avenue			(20 to 50 mm)	152	Clay	1.3	39.6							1		
		Concrete	185				1.6	46.5									
							1.9	47.4									
							0.1	30.2									
		Asphalt	37				0.4	37.3									
				Granular Fill	51	Clay	0.7	34.9	0.0	2.3	20.7	77.0	89	23	rg Limits stic Plasticity Index 1 67 3 66 3 66 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9		
2	Hector Avenue						1.0	40.6									
	Avenue			(20 to 50 mm)			1.3	33.8									
		Concrete	190				1.6	33.0									
Test Hole	Test Hole	Pavemer	nt Surface	Pavement Strue	cture Material	Subgrade Description	Sample	Moisture	н	ydromete	er Analys	is	A	Atterberg Li	mits		
Number	Location	Туре	Thickness (mm)	Туре	Thickness (mm)			Content (%)	Gravel (%)	Sand (%)	Silt (%)	Clay (%)	Liquid	Plastic	Plastici		
											1 1 2	1		1	maox		
							0.1	40.0									
		Asphalt	Asphalt 25				0.4	38.6							Derg Limits Iastic Index		
							0.7	33.8									
3	Hector Avenue			Granular Fill (20 to 50 mm)	51	Clay	1.0	35.0		-	Image: second						
							1.3	34.6									
		Concrete	190				1.6	37.4									
							1.9	43.0									
							0.1	41.2							+		
		Asphalt	0				0.4	46.6							+		
						Clay	0.7	37.8									
	Hector			Granular Fill (20 to 50 mm)	51		1.0	36.4	0.0	1.0	25.5	73.5	92	22	70		
4				(20 to 50 mill)			1.3	34.0									
4																	
4	Hector Avenue	Concrete	186			Silt	1.6	25.3									

F

Test Hole Number	Test Hole	Paveme	ent Surface Pavement Struc		Pavement Structure Material		Subgrade Sample		Hy	drometer	Analysi	S	A	tterberg Li	mits
	Location	Туре	Thickness (mm)	Туре	Thickness (mm)	Description	Depth (m)	Moisture Content (%)	Gravel (%)	Sand (%)	Silt (%)	Clay (%)	Liquid Limit	Plastic Limit	Plasticit Index
							0.1	33.8							1
		Asphalt	0				0.4	32.4							
						Silt	0.7	25.7	0.0	1.8	80.0	18.2	32	18	14
5	Hector Avenue			Granular Fill (20 to 50 mm)	152		1.0	19.7							
				(2010/00/1111)			1.3	22.8							
		Concrete	155			Basking	1.6	38.0							
						Clay	1.9	40.8							

- Note: No water seepage was encountered in the test holes.

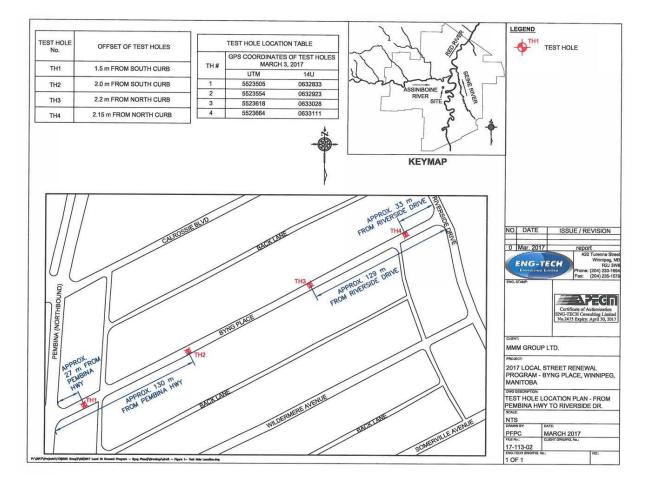
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# **Pavement Core Photos**



# **Geotechnical Report for Byng Place**

#### **Test Hole Locations**



### **Summary of Core Samples**



420 Turenne Street, Winnipeg, Manitoba R2J 3W8 Phone: (204) 233-1694 Fax: (204) 235-1579 Email: engtech@mymts.net www.eng-tech.ca

File No.: 17-113-02

#### Summary of Pavement Structure Byng Place: From Pembina Highway to Riverside Drive

Table 1

Page 1

Test Hole Number	Test Hole	Pavemer	nt Surface	Pavement Strue	cture Material	Subgrade	Sample	Moisture	Hy	drometer	and Silt Clay Liquid F %) (%) (%) Liquid F Limit F 	tterberg Li	mits		
	Location	Туре	Thickness (mm)	Туре	Thickness (mm)	Description	Depth (m)	Moisture Content (%) 10.9 28.9 27.9 30.9 30.8 22.9 24.8 9.4	Gravel (%)	Sand (%)	Silt (%)			Plastic Limit	
						Granular Fill	0.1	10.9							
		Asphalt	51			0.4	28.9							IP 60	
1		riopriale				0.7	27.9			0000					
	Byng Place			Granular Fill (20 to 50 mm)	305	Clay	1.0	30.9	0.0	1.9	27.7	70.4	79	Limit Limit Index <sup>*</sup>	
	10.02			(2010/30/1111)			1.3	30.8							ic Plasticity Index
		Concrete	0			Silt	1.6	22.9							
						Siit	1.9	24.8							
						Granular Fill	0.1	9.4							
		Asphalt	53				0.4	31.0							
							0.7	28.9	0.0	4.0	32.2	63.8	79	Plastic     Plastici       Limit     Plasticit       Index       19     60       19     60	
2	Byng Place			Granular Fill (20 to 50 mm)	203	Silty Clay	1.0	28.0							ic Plastici Index
				(2010-00 min)			1.3	26.9							
		Concrete	0			0.14	1.6	24.3							
						Silt	1.9	22.8							

Test Hole Number	Test Hole	Pavemen	nt Surface	Pavement Strue	cture Material	Subgrade	Sample	Moisture	Hy	drometer	Analysi	Clay Liquid Plasti (%) Limit Limit	tterberg Li	mits	
	Location	Туре	Thickness (mm)	Туре	Thickness (mm)	Description	Depth (m)	Content (%)	Gravel (%)	Sand (%)	Silt (%)		Liquid Limit	Plastic Limit	Plasticit Index
						Granular Fill	0.1	7.3							1
		Asphalt	40				0.4	28.6							
							0.7	33.1	0.0	3.2	44.4	52.4	61	15	nits Plasticity Index 46 46 46 49 49
3	Byng Place			Granular Fill (20 to 50 mm)		Silty Clay	1.0	26.0					ay Liquid Plastic Plasticity Limit Plastic Plasticity Index		
				(20 to 50 min)			1.3	26.3							
		Concrete	0			0	1.6	34.0							
						Clay	1.9	40.6							
						Granular Fill	0.1	6.5							
		Asphalt	48			Silty Clay	0.4	19.7							
						Silly Clay	0.7	32.3	0.0	1.8	37.7	Silt Clay Liquid Plastic Plat (%) Limit Platic Limit Plat 4.4 52.4 61 15	49		
4	Byng Place			Granular Fill (20 to 50 mm)	305		1.0	33.5							
				(20 10 00 mm)			1.3	37.6							
		Concrete	0			Clay	1.6	39.2							
							1.9	40.2							

- Note: No water seepage was encountered in the test holes.

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# **Pavement Core Photos**

