

HESPELER AVENUE

GLENWOOD CRESCENT TO 175 WEST OF HENDERSON HWY

2006 STREET RENEWAL PROGRAM

GEOTECHNICAL INVESTIGATION



UMA

AECOM



Hespeler Avenue-Testhole Locations From Glenwood Crescent to 175m W/Henderson Highway

Figure - H-TH1

City of Winnipeg 2006 Street Renewal Program Geotechnical Investigation

		Pavement Surface		Pavement Str	avement Structure Material		Sample	Moisture	Particle Size Analysis				Atterberg Limits			
Testhole	Testhole		Thickness		Thickness	Sample	Depth	Content	Gravel	Sand	Silt	Clay	Liquid	Plastic	Plasticity	
No.	Location	Туре	(mm)	Туре	(mm)	Description	(m)	(%)	(%)	(%)	(%)	(%)	Limit	Limit	Limit	
1	Hespeler Avenue	Asphalt/Concrete	75/375	NA	0											
2	Hespeler Avenue	Asphalt/Concrete	100/475	NA	0											
3	Hespeler Avenue	Asphalt/Concrete	100/200	Granular	75	Clay	1.8	19.2	0.0	21.5	25.8	52.7	31	13	18	
4	Hespeler Avenue	Asphalt/Concrete	100/225	NA	0											
5	Hespeler Avenue	Asphalt/Concrete	75/350	NA	0											
6	Hespeler Avenue	Asphalt/Concrete	100/375	Granular	305											
7	Hespeler Avenue	Asphalt/Concrete	80/245	Granular	50											
8	Hespeler Avenue	Asphalt/Concrete	130/220	Granular	255											



Project Name: 2006 City of Winnipeg Streets Reconstruction Client: UMA Engineering Ltd. Site: Hespeler Avenue

Date Drilled: January 17, 2006 Depth of Testhole: 2.0 m Logged by: Robert Brown

Testhole Location: 165 Glenwood Cres., 8.7 m N, 11.0 m W of NW building corner

	Subsurface Profile				Laboratory Testing									
Depth	oth Symbol Description					Water Content (%)								
			0	20	40	60	80 100							
0.0-		Ground Surface												
-		ASPHALT - 75 mm thick, good condition			- - - -									
-		CONCRETE - 375 mm thick, fractured												
0.5		CLAY - black, moist, firm, intermediate plasticity - brown, high plasticity below 0.8 m												
- 1.0- - -														
- 1.5- - -				•										
- 2.0-			-											
-	-	Frozen to a depth of 0.5 m below grade.		 	 									
-	-	End of testhole at 2.0 m below grade.												



Project Name: 2006 City of Winnipeg Streets Reconstruction Client: UMA Engineering Ltd. Site: Hespeler Avenue

Date Drilled: January 17, 2006 Depth of Testhole: 2.0 m Logged by: Robert Brown

Testhole Location: 38 Hespeler Ave., 1.7 m E of W building line, 1.5 m S of centreline

	Subsurface Profile						Laboratory Testing						
Depth	Symbol	Description		Water Content									
) 20) 40) 60	80 100						
0.0-		Ground Surface											
- 0.0		ASPHALT - 100 mm thick, poor condition											
- - - 0.5-	11	CONCRETE - 475 mm thick, fractured											
-		CLAY - brown, moist, firm, intermediate plasticity, some fine grained gravel - some silt from 1.1 m to 1.5 m											
- 1.0- - -					Ì								
- 1.5- -					•								
2.0-		Frozen to a depth 0.5 m below grade. End of testhole at 2.0 m below grade.											



Project Name: 2006 City of Winnipeg Streets Reconstruction Client: UMA Engineering Ltd. Site: Hespeler Avenue

Date Drilled: January 16, 2006 Depth of Testhole: 2.0 m

Logged by: Robert Brown

Testhole Location: 48 Hespeler Ave., 1.2 m E of west building line, 2 m N of curb

	Subsurface Profile					Laboratory Testing										
Depth (m)	Symbol	Description	P 0 +	N L	lois t 25	ure 50	Cor	n ten 75	t (%) 100 1	.LL 25	Gravel (%)	Sand (%)	Silt (%)	Clay (%)		
0.0-		Ground Surface								_						
- 0.0		ASPHALT - 100 mm thick, fractured														
-	00000000000000000000000000000000000000	CONCRETE - 200 mm thick, good condition														
0.5-	200	GRANULAR BASE - 19 mm maximum particle size, brown, with clay CLAY														
-		 brown moist, firm, intermediate plasticity, with silt below 0.8 m some fine grained sand below 1.1 m 			· · · · · · · · · · · · · · ·											
1.0																
- 1.5- - -				I							0.0	21 5	25.8	52.7		
- 2.0-												21.0	20.0	02.1		
-		Frozen to a depth of 0.8 m below grade. End of testhole at 2.0 m below grade.														



Project Name: 2006 City of Winnipeg Streets Reconstruction Client: UMA Engineering Ltd. Site: Hespeler Avenue Date Drilled: January 17, 2006 Depth of Testhole: 2.0 m Logged by: Robert Brown

Testhole Location: 69 Hespeler Ave., 1.5 m W of west building line, 1.5 m N of centreline

	Subsurface Profile						Laboratory Testing							
Depth	Symbol	Description	0	Wa 20	iter (40	Conte %) 60	ent 80 100							
		Cround Surface	╞											
0.0-		ASPHALT - 100 mm thick, good condition												
-		CONCRETE - 225 mm thick, good condition												
- 0.5		CLAY FILL - brown, moist, firm, intermediate plasticity, some rubble												
1.0- - - -		CLAY - brown, moist, firm, intermediate plasticity - some silt below 1.5 m												
1.5 - - - -														
2.0-		Frozen to a depth of 0.5 m below grade. End of testhole at 2.0 m below grade.												



Project Name: 2006 City of Winnipeg Streets Reconstruction Client: UMA Group Site: Hespeler Avenue

Date Drilled: January 17, 2006 Depth of Testhole: 2.0 m Logged by: Robert Brown

Testhole Location: 101 Hespeler Ave., 2.9 m W of west building line, 1.6 m N of centreline

	Subsurface Profile							Laboratory Testing							
Depth	Symbol	Description	0	N 20	/ate	e r Co (%) 40 6	nte i	nt 80 100							
		Ground Surface	╟												
0.0-	23733	Δ	╎┝	· — — ┯			ן – – י								
-	1999 - 1999 - 1999 1999 - 1999 - 1999 1999 - 1999 - 1999	- 75 mm thick, good condition		i		i	i I								
		CONCRETE				1	 	-							
-	10 0 0 0 0 0 11 0 0 0 0 0 10 0 0 0 0 0 10 0 0 0	- 350 mm thick, good condition					 								
0.5-		CLAY FILL - brown, moist, firm, high plasticity, with fine to coarse grained gravel		•		 									
- - - 1.0-															
- - 1.5–		CLAY - brown, moist, firm, high plasticity													
2.0-		Frozen to a depth of 0.5 m below grade. End of testhole at 2.0 m below grade.													
-				i		 	 								



Project Name: 2006 City of Winnipeg Streets Reconstruction Client: UMA Engineering Ltd. Site: Hespeler Avenue Date Drilled: January 17, 2006 Depth of Testhole: 2.0 m Logged by: Robert Brown

Testhole Location: 127 Hespeler Ave., 1.6 m E of west building line, 1.4 m N of centreline

	Subsurface Profile					Laboratory Testing					
Depth	pth Symbol Description						ent 80.100				
			`								
0.0-		Ground Surface					·				
-		ASPHALT			 	 					
-	00, 90, 90, 90, 90, 90, 90, 90, 90, 90,	CONCRETE - 375 mm thick, fractured									
0.5-	5.000 0.000 0.000 0.000 0.000	GRANULAR BASE - 19 mm maximum particle size, brown, moist, dense, with clay		•							
- - 1.0- -		CLAY - brown, moist, firm, high plasticity - some silt below 1.8 m									
- 1.5- -											
- 2.0-		Frozen to a depth of 0.5 m below grade. End of testhole at 2.0 m below grade.									



Project Name: 2006 City of Winnipeg Streets Reconstruction Client: UMA Engineering Ltd. Site: Hespeler Avenue

Date Drilled: January 17, 2006 Depth of Testhole: 2.0 m Logged by: Robert Brown

Testhole Location: 138 Hespeler Ave., 0.3 m W of east building line, 2.0 m S of curb

	Subsurface Profile						Laboratory Testing						
Depth	Symbol	Description		Wa	ter C	conte	ent						
				20	40	60	80 100						
0.0-		Ground Surface					,						
-		ASPHALT - 80 mm thick, good condition											
-	0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	CONCRETE - 245 mm thick, good condition											
-	8008	GRANULAR BASE - 19 mm maximum particle size, brown											
0.5		CLAY - black - brown, moist, stiff, intermediate plasticity below 0.8 m - with silt, firm below 1.1 m											
- 1.5 – - -													
2.0-						 							
-		Frozen to a depth of 0.8 m below grade.											
-		End of testhole at 2.0 m below grade.				 							



Project Name: 2006 City of Winnipeg Streets Reconstruction Client: UMA Engineering Ltd. Site: Hespeler Avenue Date Drilled: January 17, 2006 Depth of Testhole: 2.0 m Logged by: Robert Brown

Testhole Location: 159 Hespeler Ave., 7 m W of east building line, 1.6 m N of centreline

	Subsurface Profile				Laboratory Testing					
Depth	Symbol	Description	0	Wa 20	ter C (% 40	Conte %) 60	ent 80 100			
			Ĭ							
0.0-		Ground Surface ASPHALT - 130 mm thick, good condition		·+-	- - - - - - -					
-	6 00 9 0 8 00 9 0 8 00 9 0 9 00 9 0 9 00 9 0 9 00 9 0 9 0 0 9 0 9	CONCRETE - 200 mm thick, good condition								
- 0.5	2000 2000 2000 2000 2000	GRANULAR BASE - 19 mm maximum particle size, brown, moist, dense, with clay		•						
- - - 1.0- - -		CLAY - brown, moist, firm, high plasticity								
- 1.5- - -										
- 2.0- -		Frozen to a depth of 0.5 m below grade. End of testhole at 2.0 m below grade.								
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