# APPENDIX 'A' GEOTECHNICAL REPORT

Template Version: C420110321 - RW

# **APPENDIX 'A' - GEOTECHNICAL REPORT**

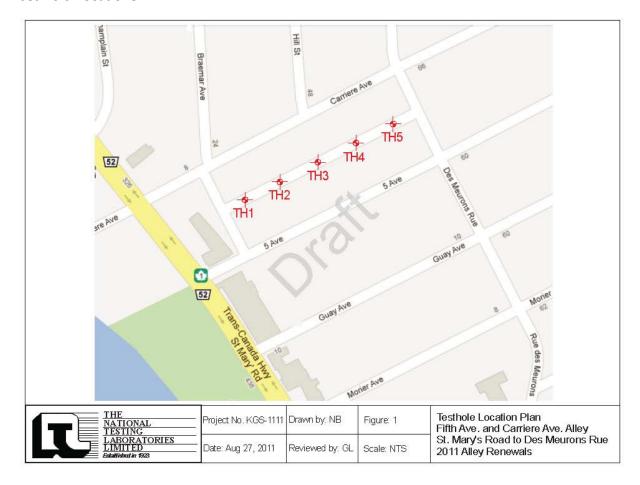
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The geotechnical report is provided to aid in the Contractor's evaluation of the existing soil conditions. The information presented is considered accurate at the locations shown on the Drawings and at the time of drilling. However, variations in soil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

## **Test Hole Locations**



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# **Summary of Core Samples**

### Fifth Avenue and Carriere Avenue Alley St. Mary's Road to Des Meurons Rue

Totaleste		Pavement S	Structure Material	CI	Sample	Moisture	Pai	ticle Size	Analys	sis	A	tterberg Li	mits
Testhole ID	Testhole Location	Туре	Thickness (mm)	Sample Description	Depth (m)	Content (%)	Gravel (%)	Sand (%)	Silt (%)	Clay (%)	Liquid Limit	Plastic Limit	Plasticity Index
TH1	14 U 635646 m E, 5526068 m N	Granular Fill / Clay Fill	130 / 330	1=	-		-	Ŧ	2	-	-	ï	
TH2	14 U 635679 m E, 5526085 m N	Granular Fill / Clay Fill	200 / 260	æ	-	æ	3	=		-	-	9	=:
TH3	14 U 635717 m E, 5526105 m N	Granular Fill / Clay Fill	70 / 310	-		V.	=1	-	-	-	-	-	-
TH4	14 U 635768 m E, 5526133 m N	Granular Fill / Clay Fill	150 / 400	-56	-		-1	ī	1	-	-:	ī	-
TH5	14 U 635813 m E, 5526157 m N	Granular Fill / Clay Fill	130 / 330		-	ŧ!	-	Ü	- 5	Ü	-	ũ	-

#### **TESTHOLE TH1**

THE
NATIONAL
TESTING
LABORATORIES
LIMITED
EMPLOYED
EMPLOY

Project Name: 2011 Alley Renewals

**Client: KGS Group** 

Drilling Contractor: Bonita Enterprises Drilling Method: 150 mm Auger

Location: Fifth Ave. and Carriere Ave., St. Mary's Road to Des Meurons Rue

Ē	Ѕушро	Description		Water Content (%)						
	en i			2	0	40	60	8	0	
-	. O. ₹	Granular Fill - tan, compact, dry - 25 mm maximum aggregate size	-	¦		ļ	<u>ļ.</u>			
		Clay Fill - black, stiff, moist, high plasticity - some fine gravel - trace organic material			•2	9				
5 -		Clay - black, stiff, moist, high plasticity - trace organic material				36	_			
-		- grey below a depth of 1.4 m				I I I				
0 -					larray 	●37	ļ	 		
1						<b>•39</b>	+			
5						 				
3		Olavary Olfs			•	31				
		Clayey Silt - brown, stiff, moist, medium plasticity - soft below 1.8 m			<b>•22</b>	 				
0 -					•2	- 8				
925 925		No groundwater seepage or soil sloughing was observed during or upon completion of drilling.     Testhole was terminated at a depth of 2.1 m.				ļ				
5 -		(		 		  -  -	- -	 	in the second	
H2.			43	    		] }			12	

#### **TESTHOLE TH2**

THE
NATIONAL
TESTING
LABORATORIES
LIMITED
EMPLOYED
EMPLOY

Project Name: 2011 Alley Renewals

**Client: KGS Group** 

Drilling Contractor: Bonita Enterprises Drilling Method: 150 mm Auger

Location: Fifth Ave. and Carriere Ave., St. Mary's Road to Des Meurons Rue

	Symbol	Description		Water Content (%)						
6	OI I			20	40		0	80		
-)	200	Granular Fill - tan, compact, dry - 25 mm maximum aggregate size	Hanne	ļ.,				ļ		
		Clay Fill - black, stiff, moist, high plasticity - trace fine to medium sand	U3000		<b>•32</b>		   	 		
0.5		Clay - black, stiff, moist, high plasticity - grey below a depth of 0.9 m - trace silt below a depth of 1.1 m		- <del> </del> ,	•32		         			
1.0 -			1200		•3	7				
1.0					-	8	[ [ [ [			
1.5			,	-+-	•33	i,.,.	 	 		
					<b>932</b>		       			
2.0		Clayey Silt - brown, stiff, moist, medium plasticity		-   -   -	26		i I I I	<u> </u>		
10 <u>2</u> 0		No groundwater seepage or soil sloughing was observed during or upon completion of drilling.     Testhole was terminated at a depth of 2.1 m.			1		 			
2.5 -							     	+		

#### **TESTHOLE TH3**

THE
NATIONAL
TESTING
LABORATORIES
LIMITED
Exhibited in 1973

Project Name: 2011 Alley Renewals

**Client: KGS Group** 

Drilling Contractor: Bonita Enterprises Drilling Method: 150 mm Auger

Location: Fifth Ave. and Carriere Ave., St. Mary's Road to Des Meurons Rue

Ē	Symbol	Description	Water Content (%)
c	जू प	Granular Fill	20 40 60 80
		- tan, compact, dry - 25 mm maximum aggregate size	
-		Clay Fill	—           -
}		- black, stiff, moist, high plasticity	●33
-		- trace fine to coarse sand and silt Clav	
.5 -		- black, stiff, moist, high plasticity - trace fine to coarse sand	
		- trace fine to coarse sand - trace silt below 0.8 m	
		- grey below a depth of 1.1 m	●37
7			
		- (° O	
-			●333
.0		( ) '	
-			
			•31
-		Clayey Silt	
1		- tan, soft, moist, medium plasticity	1 1 1
.5		- stiff below 1.5 m	
.5			●26
7			
7			
-		Clay	●34
		- brown, stiff, moist, high plasticity - trace silt	
.0 -		20.41 MWW WITE	
1			38
70 <u>1</u> 0		No groundwater seepage or soil sloughing was observed during or upon	
194		completion of drilling.  Testhole was terminated at a depth of 2.1 m.	
		- resultite was terminated at a deput of 2.1 m.	
_ ]			
.5 -			
112			

#### **TESTHOLE TH4**

NATIONAL TESTING LABORATORIES LIMITED

Project Name: 2011 Alley Renewals

Client: KGS Group

Drilling Contractor: Bonita Enterprises
Drilling Method: 150 mm Auger

Location: Fifth Ave. and Carriere Ave., St. Mary's Road to Des Meurons Rue

Œ	Ѕутро	Description	Water Conter (%)									
				20	) 4	ю	60	80				
		Granular Fill - tan, compact, dry - 25 mm maximum aggregate size	<u></u>			 	 					
		Clay Fill - black, stiff, moist, high plasticity - trace medium sand and organic material			•28	 	 					
.5 -		Clay	_	- ¦			-					
		- black, stiff, moist, high plasticity - grey and trace silt below a depth of 1.1 m	100			36						
.0 -					●26			  -  -				
-						38						
.5 -		Clayey Silt - tan, soft, moist, high plasticity			●28	   	j    -	, .j.,    -				
			100			 		-  -				
794 194			4.0	l	<b>024</b>	ļ	 					
.0 -					●25		- 	-+-				
92 62		<ul> <li>No groundwater seepage or soil sloughing was observed during or upon completion of drilling.</li> <li>Testhole was terminated at a depth of 2.1 m.</li> </ul>				 						
.5 -			100			ļ 	  -  -	- - -				
114				 		 						

#### **TESTHOLE TH5**

THE
NATIONAL
TESTING
LABORATORIES
LIMITED
Exclusived in 1923

Project Name: 2011 Alley Renewals

**Client: KGS Group** 

Drilling Contractor: Bonita Enterprises Drilling Method: 150 mm Auger

Location: Fifth Ave. and Carriere Ave., St. Mary's Road to Des Meurons Rue

E (E)	Symbol	Description	Water Content (%)							
	S) I			20	40	60	80			
-0	₩	Granular Fill - tan, compact, dry - 25 mm maximum aggregate size		į	ļ					
		Clay Fill - brown, stiff, moist, high plasticity - trace fine sand and silt		•26	 					
0.5		Clay - black, stiff, moist, high plasticity - trace fine sand		•2	9					
1.0				-	33	-	-			
		Clayey Silt - tan, soft, moist, high plasticity	-	•:	31					
1.5				•2	7	-				
2.0 -				●24	i    -					
		No. 2012 Annual Control of the Contr		●24	ļ					
12-2		<ul> <li>No groundwater seepage or soil sloughing was observed during or upon completion of drilling.</li> <li>Testhole was terminated at a depth of 2.1 m.</li> </ul>		 	 					
2.5				 	  -  -		-+-			