

SITE OBSERVATION FORM:	DNV Landslide Risk Assessment
LOCATION:	2441 Mowat Place
INSPECTION DATE: (mm/dd/yy)	11/08/05
WEATHER:	Rain, rained previous few days



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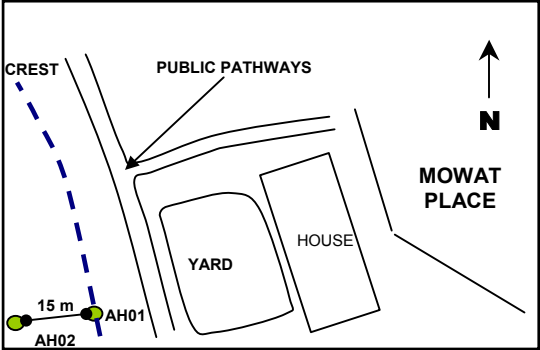
THICKNESS OF LOOSE MATERIALS	<1 m	1-2 m	2-3 m	>3 m
AT SLOPE CREST	<input checked="" type="checkbox"/>			
15 m DOWNSLOPE FROM SLOPE CREST		<input checked="" type="checkbox"/>		

SLOPE BELOW CREST/ RETAINING STRUCTURE	SLOPE = 32°		
	CRACKS	SLIDES	EROSION
OBSERVATIONS: None observed.			

TREES BELOW CREST/ RETAINING STRUCTURE	STRAIGHT	PISTOL-BUTT	LEANING
PERCENT CONIFER:	90%	<input checked="" type="checkbox"/>	
OBSERVATIONS: Fallen logs, branches and considerable compost/garbage on slope.			

RETAINING STRUCTURES	YES	NO <input checked="" type="checkbox"/>	HEIGHT= n/a
TYPE	BLOCKS	CONCRETE	TIMBER CRIB
DEFORMATION	UNDEFORMED	CRACKED	SETTLED
OBSERVATIONS:			

DEFORMATION IN BACKYARD	YES	NO <input checked="" type="checkbox"/>
LOCATION:		
DESCRIPTION: Yard dips naturally to the south, no deformation.		



POOLS	YES	NO <input checked="" type="checkbox"/>
DESCRIPTION: None.		

SEEPAGE/ SPRINGS IN OR BELOW FILL	YES	NO <input checked="" type="checkbox"/>
OBSERVATIONS: None observed.		

HOUSE DISTANCE TO CREST = 21.3 m

RECEIVES SURFACE RUNOFF FROM	BACKYARD	½ ROOF	FULL ROOF	FRONT YARD	STREET
	<input checked="" type="checkbox"/>				
OBSERVATIONS: Runoff only from the path and park between the house and the slope crest.					

CONNECTED TO STORM SEWER	YES	NO	UNSURE <input checked="" type="checkbox"/>
OWNERS COMMENTS:			

GENERAL OBSERVATIONS

- Appears to be a communal compost dumping site at crest of slope.



Figure 1. 2441 Mowat Place – Front of the house



Figure 2. 2441 Mowat Place - View looking north along public path between houses and crest

Project : DNV Landslide Risk Assessment

Project No. : 0404-002-01

Location : 2441 Mowat
Drill Method : Dutch Hand Auger
Inspection Date : 08 Nov 05
Logged by : MB/ES
Reviewed by : MJP

Depth (m)	Lithologic Description	Depth To Water Table	Depth (m)	Lithologic Description	Depth To Water Table
	<p>AUGERHOLE: BGC05-2441MOW-AH01 on Slope Crest FINAL DEPTH OF AUGERHOLE: 0.90 m THICKNESS OF LOOSE MATERIALS: 0.50 m</p>			<p>AUGERHOLE: BGC05-2441MOW-AH02 15 m Downslope FINAL DEPTH OF AUGERHOLE: 1.30 m THICKNESS OF LOOSE MATERIALS: 1.30 m minimum</p>	
0.0	SAND (SP) Fine sand, some silt, trace fine to coarse gravel, medium gravel sized fine sand and silt clasts, poorly graded, loose, max particle size = 44 mm, sub-rounded, light brown, no odour, dry to moist, homogeneous, no cementation [FILL]		0.0	SAND (SM) Fine sand, silty, poorly graded, loose, max particle size = <1 mm, dark brown, no odour, moist, homogeneous, no cementation, trace rootlets, trace wood fragments [TOPSOIL]	
0.5	SILT (ML) and SAND (SP) Fine sand, trace coarse gravel, low plastic, firm, light brown, no odour, moist, homogeneous, no cementation, non dilatant [Weathered GLACIOMARINE]		0.5	SAND (SP) Some silt, some fine to coarse gravel, poorly graded, loose, max particle size = 30 mm, light brown to brown, no odour, moist, homogeneous, no cementation [FILL]	
1.0	0.80 m: Material density becomes stiff		1.0	SAND (SP) Fine to medium sand, trace silt, poorly graded, loose to compact, max particle size = <1 mm, light brown to grey with slight orange mottling, no odour, moist, homogeneous, no cementation [COLLUVIUM / Weathered GLACIOMARINE]	
1.5	0.90 m: EOH - Refusal as material is too stiff to auger through		1.5	1.30 m: EOH - Refusal of auger on roots	
2.0			2.0		
2.5			2.5		
3.0			3.0		

BGC05-2441MOW-AH01

SITE OBSERVATION FORM: DNV Landslide Risk Assessment
LOCATION: 2437 Mowat Place
INSPECTION DATE: (mm/dd/yy) 11/08/05
WEATHER: Raining



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THICKNESS OF LOOSE MATERIALS	<1 m	1-2 m	2-3 m	>3 m
AT SLOPE CREST		<input checked="" type="checkbox"/>		
10 m DOWNSLOPE FROM SLOPE CREST		<input checked="" type="checkbox"/>		

SLOPE BELOW CREST/ RETAINING STRUCTURE	SLOPE = 34°		
	CRACKS	SLIDES	EROSION
			<input checked="" type="checkbox"/>
OBSERVATIONS: Minor surface erosion and surficial movement.			

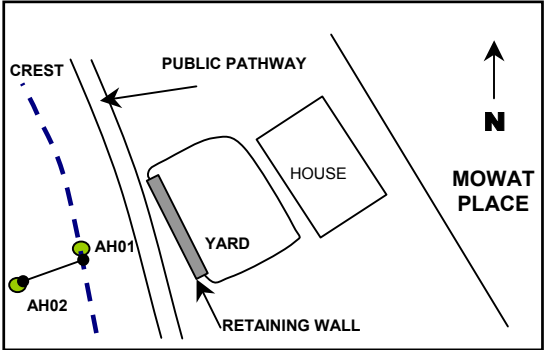
TREES BELOW CREST/ RETAINING STRUCTURE	STRAIGHT	PISTOL-BUTT	LEANING
PERCENT CONIFER: 75%	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
OBSERVATIONS: Mostly straight with some leaning trees			

RETAINING STRUCTURES	YES <input checked="" type="checkbox"/>	NO	HEIGHT= 1.5 m
TYPE	BLOCKS CONCRETE	TIMBER CRIB	OTHER:
DEFORMATION	UNDEFORMED <input checked="" type="checkbox"/>	CRACKED	SETTLED BULGING
OBSERVATIONS: 12 m level ground to slope crest.			

DEFORMATION IN BACKYARD	YES	NO <input checked="" type="checkbox"/>
LOCATION:		
DESCRIPTION: None observed.		

POOLS	YES	NO <input checked="" type="checkbox"/>
DESCRIPTION: None		

SEEPAGE/ SPRINGS IN OR BELOW FILL	YES	NO <input checked="" type="checkbox"/>
OBSERVATIONS: None observed.		



HOUSE DISTANCE TO CREST = 21.7 m

RECEIVES SURFACE RUNOFF FROM	BACKYARD <input checked="" type="checkbox"/>	½ ROOF	FULL ROOF	FRONT YARD	STREET
OBSERVATIONS: Runoff only from the path and park between the house and the slope crest.					

CONNECTED TO STORM SEWER	YES	NO	UNSURE <input checked="" type="checkbox"/>
OWNERS COMMENTS:			

GENERAL OBSERVATIONS

- Back yard on fill on northern three quarters of yard, 12 m to crest from the front of the property.
- Slope slightly over steepened with compost.



Figure 1. 2437 Mowat Place – Front of the house



Figure 2. 2437 Mowat Place – View from crest to retaining wall

Project : DNV Landslide Risk Assessment

Project No. : 0404-002-01

Location : 2437 Mowat
Drill Method : Dutch Hand Auger
Inspection Date : 08 Nov 05
Logged by : SF/JB
Reviewed by : MJP

Depth (m)	Lithologic Description	Depth To Water Table	Depth (m)	Lithologic Description	Depth To Water Table
	<p>AUGERHOLE: BGC05-2437MOW-AH01 on Slope Crest FINAL DEPTH OF AUGERHOLE: 1.10 m THICKNESS OF LOOSE MATERIALS: 1.10 m</p>			<p>AUGERHOLE: BGC05-2437MOW-AH02 10 m Downslope FINAL DEPTH OF AUGERHOLE: 1.45 m THICKNESS OF LOOSE MATERIALS: 1.45 m minimum</p>	
0.0	<p>SILT (ML) Trace fine to medium sand, non plastic, brown, dry, very soft, some landscape netting [FILL]</p>		0.0	<p>ORGANICS Silty, trace fine sand, very loose, dark brown, twigs, roots and leaves</p>	
0.5	<p>SAND (SW) Fine to coarse sand, trace fine to medium gravel, trace silt, gravel sized silt clasts, very loose to loose, sub-rounded particles, dry, homogeneous, trace organics, trace ash layers [FILL]</p>		0.5	<p>SAND (SW) Fine to coarse sand, some fine to coarse gravel, trace silt, well graded, very loose, max particle size = 30 mm, sub-angular, dark brown, moist, homogeneous [COLLUVIUM]</p> <p>0.50 m: Material colour becomes light brown</p>	
1.0	<p>SAND (SP) Mainly fine to medium sand, coarse sand, some fine to medium gravel, silt clasts, loose to compact, brown to light brown, material becomes siltier with depth [COLLUVIUM]</p>		1.0	<p>SAND (SW) and GRAVEL (GW) Well graded, loose to compact, max particle size = 50 mm, sub-rounded gravel, light brown, moist, homogeneous [GLACIOFLUVIAL]</p>	
1.10	<p>1.10 m: EOH - Refusal as material is too stiff to auger through</p>		1.45	<p>1.45 m: EOH - Refusal on gravel clast</p>	
1.5			1.5		
2.0			2.0		
2.5			2.5		
3.0			3.0		

BGC05-2437MOW-AH01

SITE OBSERVATION FORM:	DNV Landslide Risk Assessment
LOCATION:	2433 Mowat Place
INSPECTION DATE: (mm/dd/yy)	11/08/05
WEATHER:	Raining, light rain past few days



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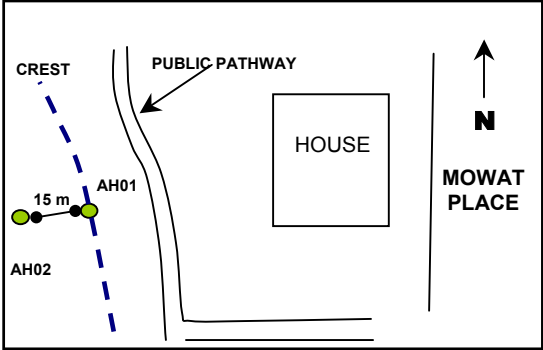
THICKNESS OF LOOSE MATERIALS	<1 m	1-2 m	2-3 m	>3 m
AT SLOPE CREST		<input checked="" type="checkbox"/>		
15 m DOWNSLOPE FROM SLOPE CREST		<input checked="" type="checkbox"/>		

SLOPE BELOW CREST/ RETAINING STRUCTURE	SLOPE = 37°		
	CRACKS	SLIDES	EROSION
			<input checked="" type="checkbox"/>
OBSERVATIONS: Minor surface erosion around trees.			

TREES BELOW CREST/ RETAINING STRUCTURE	STRAIGHT	PISTOL-BUTT	LEANING
PERCENT CONIFER: 70%	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
OBSERVATIONS: Mostly straight with some leaning trees.			

RETAINING STRUCTURES	YES	NO <input checked="" type="checkbox"/>	HEIGHT= n/a
TYPE	BLOCKS	CONCRETE	TIMBER CRIB
DEFORMATION	UNDEFORMED	CRACKED	SETTLED
OBSERVATIONS:			

DEFORMATION IN BACKYARD	YES	NO <input checked="" type="checkbox"/>
LOCATION:		
DESCRIPTION: Yard slopes naturally to the south.		



POOLS	YES <input checked="" type="checkbox"/>	NO
DESCRIPTION: Hot tub on deck.		

SEEPAGE/ SPRINGS IN OR BELOW FILL	YES	NO <input checked="" type="checkbox"/>
OBSERVATIONS: None observed		

HOUSE DISTANCE TO CREST = 25 m

RECEIVES SURFACE RUNOFF FROM	BACKYARD <input checked="" type="checkbox"/>	½ ROOF	FULL ROOF	FRONT YARD	STREET
OBSERVATIONS: Runoff only from the path and park between the house and the slope crest					

CONNECTED TO STORM SEWER	YES	NO	UNSURE <input checked="" type="checkbox"/>
OWNERS COMMENTS:			

GENERAL OBSERVATIONS
<ul style="list-style-type: none"> Public path between house and slope crest



Figure 1. 2433 Mowat Place - View of house from crest



Figure 2. 2433 Mowat Place - View downslope from crest

Project : DNV Landslide Risk Assessment

Project No. : 0404-002-01

Location : 2433 Mowat
Drill Method : Dutch Hand Auger
Inspection Date : 08 Nov 05
Logged by : MB/ES
Reviewed by : MJP

Depth (m)	Lithologic Description	Depth To Water Table	Depth (m)	Lithologic Description	Depth To Water Table
	<p>AUGERHOLE: BGC05-2433MOW-AH01 on Slope Crest FINAL DEPTH OF AUGERHOLE: 1.10 m THICKNESS OF LOOSE MATERIALS: 1.10 m minimum</p>			<p>AUGERHOLE: BGC05-2433MOW-AH02 15 m Downslope FINAL DEPTH OF AUGERHOLE: 1.0 m THICKNESS OF LOOSE MATERIALS: 1.00 m minimum</p>	
0.0	<p>SILT (ML) Some fine sand, non plastic, very soft, dark brown to black, organic odour, moist, homogeneous, no cementation, no dilatancy, charcoal, rootlets [TOPSOIL]</p>		0.0	<p>SAND (SM) Fine sand, silty, trace medium to coarse gravel, poorly graded, very loose, max particle size = 30 mm, dark brown, no odour, dry, homogeneous, no cementation, trace rootlets [FILL or COLLUVIUM]</p>	
0.5	<p>SAND (SM) Fine to medium sand, silty, gravel sized silt clasts, poorly graded sand, loose, max particle size = <1 mm, grey and brown with orange mottling (Fe staining) around silt clasts, no odour, moist, homogeneous, no cementation [FILL]</p>		0.5	<p>0.50 m: Material becomes 'gravelly' with medium to coarse gravel</p>	
1.0	<p>SAND (SM) Fine to medium sand, silty, trace coarse gravel, poorly graded, loose, max particle size = 20 mm, dark brown, no odour, moist, homogeneous, no cementation [FILL]</p>		1.0	<p>1.00 m: Refusal of auger on root or cobble</p>	
1.5	<p>SAND (SP) Fine to medium sand, some silt, trace to some medium to coarse gravel, gravel sized clasts of fine sand, poorly graded, loose, max particle size = 20 mm, brown, no odour, moist, homogeneous, no cementation [FILL or COLLUVIUM] 0.80 m: Material colour changes to light brown 1.10 m: EOH - Refusal of auger on cobble No water table encountered</p>		1.5		
2.0			2.0		
2.5			2.5		
3.0			3.0		

BGC05-2433MOW-AH01

SITE OBSERVATION FORM: DNV Landslide Risk Assessment
LOCATION: 2429 Mowat Drive
INSPECTION DATE: (mm/dd/yy) 11/08/05
WEATHER: Raining



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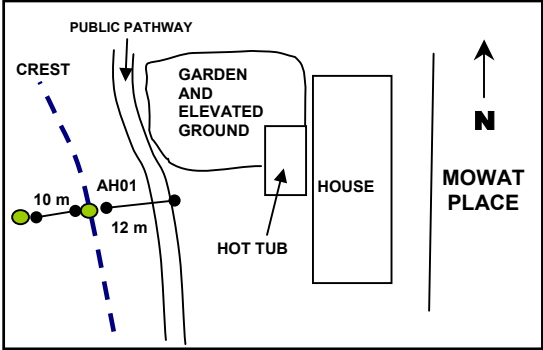
THICKNESS OF LOOSE MATERIALS	<1 m	1-2 m	2-3 m	>3 m
AT SLOPE CREST		<input checked="" type="checkbox"/>		
10 m DOWNSLOPE FROM SLOPE CREST		<input checked="" type="checkbox"/>		

SLOPE BELOW CREST/ RETAINING STRUCTURE	SLOPE = 33°		
	CRACKS	SLIDES	EROSION
OBSERVATIONS: Minor soil erosion.			<input checked="" type="checkbox"/>

TREES BELOW CREST/ RETAINING STRUCTURE	STRAIGHT	PISTOL-BUTT	LEANING
PERCENT CONIFER: 80%			<input checked="" type="checkbox"/>
OBSERVATIONS: Trees leaning in random directions.			

RETAINING STRUCTURES	YES	NO <input checked="" type="checkbox"/>	HEIGHT= n/a
TYPE	CONCRETE	TIMBER CRIB	OTHER:
DEFORMATION	UNDEFORMED	CRACKED	BULGING
OBSERVATIONS:			

DEFORMATION IN BACKYARD	YES	NO <input checked="" type="checkbox"/>
LOCATION:		
DESCRIPTION:		



POOLS	YES <input checked="" type="checkbox"/>	NO
DESCRIPTION: Hot tub		

SEEPAGE/ SPRINGS IN OR BELOW FILL	YES	NO <input checked="" type="checkbox"/>
OBSERVATIONS: None observed		

HOUSE DISTANCE TO CREST = 20 m

RECEIVES SURFACE RUNOFF FROM	BACKYARD	½ ROOF	FULL ROOF	FRONT YARD	STREET
OBSERVATIONS:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			

CONNECTED TO STORM SEWER	YES	NO	UNSURE <input checked="" type="checkbox"/>
OWNERS COMMENTS:			

GENERAL OBSERVATIONS

- Public path between house and slope crest, path sloping to the south.
- Crest slightly over steepened by compost.



Figure 1. 2429 Mowat Place – Front of the house



Figure 2. 2429 Mowat - Eroded root system of tree near crest

Project : DNV Landslide Risk Assessment

Project No. : 0404-002-01

Location : 2429 Mowat
Drill Method : Dutch Hand Auger
Inspection Date : 08 Nov 05
Logged by : SF/JB
Reviewed by : MJP

Depth (m)	Lithologic Description	Depth To Water Table	Depth (m)	Lithologic Description	Depth To Water Table
	<p>AUGERHOLE: BGC05-2429MOW-AH01 on Slope Crest FINAL DEPTH OF AUGERHOLE: 1.10 m THICKNESS OF LOOSE MATERIALS: 1.10 m minimum</p>			<p>AUGERHOLE: BGC05-2429MOW-AH02 10 m Downslope FINAL DEPTH OF AUGERHOLE: 1.75 m THICKNESS OF LOOSE MATERIALS: 1.75 m minimum</p>	
0.0	ORGANIC SILT (ML) Trace fine to coarse sand, non plastic, soft, dark brown, moist, homogeneous, rootlets and organic material [ORGANIC TOPSOIL]		0.0	SAND (SW) Fine to coarse sand, silty, trace fine to medium gravel, trace cobbles, very loose, max particle size = 66 mm, dark brown, dry, homogeneous, no cementation, trace rootlets [FILL] 0.10 m: Cobble encountered, 66 mm in size	
0.5	SILT (ML) Sandy, fine to coarse sand, trace fine to coarse gravel, non plastic, soft, max particle size = 40 mm, sub-rounded gravel, brown, moist, homogeneous [FILL]		0.5	0.50 m: Material becomes loose and moist	
1.0	ORGANICS - Bark, twigs SAND (SW) Fine to coarse sand, silty, trace fine to medium gravel, medium gravel sized silt clasts, loose, reddish brown, moist, homogeneous, trace roots and bark [FILL] 1.10 m: EOH - Refusal of auger on gravel		1.0	1.10 m: Charcoal and undecomposed bark encountered 1.30 m: Material density becomes 'loose to compact'	
1.5			1.5		
2.0			2.0	1.75 m: EOH - Refusal of auger on root	
2.5			2.5		
3.0			3.0		

BGC05-2429MOW-AH01

SITE OBSERVATION FORM: DNV Landslide Risk Assessment
LOCATION: 2425 Mowat Place
INSPECTION DATE: (mm/dd/yy) 11/04/05
WEATHER: Overcast



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THICKNESS OF LOOSE MATERIALS	<1 m	1-2 m	2-3 m	>3 m
AT SLOPE CREST	<input checked="" type="checkbox"/>			
20 m DOWNSLOPE FROM SLOPE CREST		<input checked="" type="checkbox"/>		

SLOPE BELOW CREST/ RETAINING STRUCTURE	SLOPE = 35°		
	CRACKS	SLIDES	EROSION
		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
OBSERVATIONS: Some erosion under trees at the corner of Lennox and Carnation Streets. Evidence of old slide gullies.			

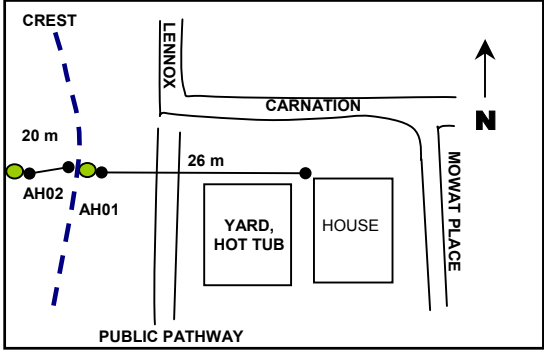
TREES BELOW CREST/ RETAINING STRUCTURE	STRAIGHT	PISTOL-BUTT	LEANING
PERCENT CONIFER: 40%			<input checked="" type="checkbox"/>
OBSERVATIONS: Some trees undercut at corner of Lennox and Carnation Streets.			

RETAINING STRUCTURES	YES <input checked="" type="checkbox"/>	NO	HEIGHT= 1.3 m
TYPE	BLOCKS	CONCRETE	TIMBER CRIB
			OTHER: Landscape ties
DEFORMATION	UNDEFORMED	CRACKED	SETTLED
			BULGING
OBSERVATIONS: Retaining wall is 18.3 m back from the slope crest.			

DEFORMATION IN BACKYARD	YES	NO <input checked="" type="checkbox"/>
LOCATION:		
DESCRIPTION:		

POOLS	YES	NO <input checked="" type="checkbox"/>
DESCRIPTION:	Hot tub, small pond and waterfall garden feature in the yard	

SEEPAGE/ SPRINGS IN OR BELOW FILL	YES	NO <input checked="" type="checkbox"/>
OBSERVATIONS:	None observed	



HOUSE DISTANCE TO CREST = 26 m

RECEIVES SURFACE RUNOFF FROM	BACKYARD	½ ROOF	FULL ROOF	FRONT YARD	STREET
	<input checked="" type="checkbox"/>				
OBSERVATIONS: Potential runoff from Lennox Street					

CONNECTED TO STORM SEWER	YES	NO	UNSURE <input checked="" type="checkbox"/>
OWNERS COMMENTS:			

GENERAL OBSERVATIONS

- House is well back from slope crest.
- Public path and park are between slope crest and house.



Figure 1. 2425 Mowat Place – Front of the house



Figure 2. 2425 Mowat Place - View looking south along public path between houses and crest

INSPECTION LOCATION # 2425 Mowat

Project : DNV Landslide Risk Assessment

Project No. : 0404-002-01

Location : 2425 Mowat
Drill Method : Dutch Hand Auger
Inspection Date : 04 Nov 05
Logged by : MB/ES
Reviewed by : MJP

Depth (m)	Lithologic Description	Depth To Water Table	Depth (m)	Lithologic Description	Depth To Water Table
	<p>AUGERHOLE: BGC05-2425MOW-AH01 on Slope Crest FINAL DEPTH OF AUGERHOLE: 0.50 m THICKNESS OF LOOSE MATERIALS: 0 m</p>			<p>AUGERHOLE: BGC05-2425MOW-AH02 20 m Downslope FINAL DEPTH OF AUGERHOLE: 1.50 m THICKNESS OF LOOSE MATERIALS: 1.50 m minimum</p>	
0.0	<p>SILT (ML) and SAND (SP) Fine to medium grained sand, trace fine to coarse gravel, trace clay, poorly graded sand, low plastic silt, stiff to very stiff, light brown with orange mottling, no odour, dry, homogeneous, no cementation, no dilatancy [Weathered GLACIOMARINE]</p>		0.0	<p>SAND (SW) Some silt, trace fine gravel, trace cobbles, well graded sand, loose, max particle = 80 mm, sub-rounded, brown, no odour, moist, homogeneous, no cementation [COLLUVIUM]</p>	
0.5	<p>0.50 m: EOH - Refusal as material is too stiff to auger through</p>		0.5		
1.0			1.0		
1.5			1.5	<p>1.50 m: EOH - Refusal of auger on cobbles</p>	
2.0			2.0		
2.5			2.5		
3.0			3.0		

BGC05-2425MOW-AH01

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