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			-,	Celebratin	n 40 m	EC			GEOT	ECHN	ICA	LLOG OF NON-CORE DRILLHOLE	s	Borehole Sheet No Project N	b: 1 OF 2
Clie Pro Fea Loc	jec Itur	:t: 'e:	Sm		lsen	Deta on P		Des	ign Geoteo	ch Inves	tigat	ion Co-ordinates System: UTM Zone 56 Easting: 535569.3m E Northing: 6906881.8m S	A	urface F ngle fro irection	m Horz: 90
		DRI	LLIN	G				TES	STING			SUBSTANCE			-
Method	_	Fast	ate Slow	Water	Sample	Depth (m)	Depth/RL	Type	Sample or Field Test	Graphic Log	USC Symbol	Description Soil Type: density/consistency, grain size/plasticity, colour, particle shape/secondary components, minor constituents, moisture, origin, additional observations.	Moisture	Consistency/ Density	Other Observations
- - -	2	3	4 5 	6	7 SPT	8	9 22.23	10 S	11 11,13,7 N=20		13 CG	14 Clayey GRAVEL: Medium dense, medium to coarse angular gravel, brown-grey low plasticity clay fines, some fine sand, some silt, fill.	15	16 MD	17
ATC						1	1.00 21.23 1.50 20.73				СН	Silty CLAY: Firm to stiff, medium to high plasticity, dark grey-brown some pale orange, trace of sand, possible natural. Silty CLAY: Stiff, medium to high plasticity, dark grey-brown some	м	F St	
 						- 2— -	0.50	UC	184 kPa			pale orange, trace of sand, residual.		St	
					SPT	- 3— -	2.50	s	4,19,15 N=34			SILTSTONE: Extremely low strength, extremely weathered, grey trace of iron staining, some fine to coarse gravel sized Quartz inclusions (remoulds to Gravelly CLAY).			
-						- - - -	3.80 18.43 4.00					Extremely low strength very low strength in parts, grey to dark grey. Refer to Geotechnical Log of Cored Drillhole			
-						- - 5	-								
-						- - 6-	-								
-						-	-								
-						7— - -	-								
- 						- 8— -	-								
- -						- - 9	1 - -								
- - Note	es (l	nstru	iment	ation	etc):	-	-								
Cont Equi	ipm	ent:	Н		ower	Scout		tions a	are given on e		note	Commenced: 20/07/11 Completed: 20/07/11			Logged By: ME/BD Checked By: AR

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Pro Fea Loo	ent: oject ature catio DRII	: e: on:	Sm Re		Olse	en De ation		d Design Geotech Investigation Co-c	ordir	nate	es S	ys	E	: UT : 53 : 69	556	69.3	8			Angle Directi	e RL (m): 22.23 from Horz: 90
								Description	We	athe	ering		Fsti	mated	d			Fra	cture		Description
Method	Water	TCR %	RQD %		Depth (m)	Depth/RL	Graphic Log	ROCK TYPE, mineralogy, grain size, colour, fabric, etc.					Stre	ength	1	Type	Result	Spaci	ng (mm) 300	Depth	Type, Orientation, Spacing, Infil Coating, Planarity, Roughnes
∑ 1	≥ 2	й З	č 4	5	<u>й</u> 6	ă 7	<u>دق</u> 8	9	≥ ≥ ⊒ I	<u>≩</u> § 10				<u>≥ ± </u> ≩ 11	불표	F 12	2 13	20 1	00 1000 4	15	16
-					- - 1- - - - - - - - - - - - - - - - -			Refer to Geotechnical log of Non-cored Drillhole													
		100 100 100 100	0 100 25	4.3 4.7 5.2 5.6	- - - - - - - - - - - - - - - - - - -	4.00 18.23 4.30 17.93 4.70 17.53 5.35 5.60 16.68		Start Coring at 4.00m METASILTSTONE: Grey occasional mudstone laminations at 70°; fractured, high strength, slightly weathered to moderately weathered. Low strength to high strength, moderately weathered to highly weathered. METASANDSTONE: Fine grained, grey stained orange-brown in healed fractures, foliated with healed fractures, slightly fractured, high strength, slightly weathered. ARGILLITE: Dark grey, iron staining in laminations and defects, fragmented, low strength, highly weathered. METASILTSTONE: Dark grey with grey brown laminations, foliated, slightly fractured, medium strength, slightly weathered.												4.15 4.30 4.40-4.50 4.70 5.00 5.10 5.25 5.30-5.60 5.61 5.80-6.00 6.35	Be, 60, Vn, Cy, St, Sm Be, 70, St, Fe, PI, Sm Vn, Ct, Cy, PI, Sm J, 65, Vn, Cy, PI, Ro Be, 55, St, Fe, PI, Sm J, 85, Ct, Cy, Ir, Sm Be, 55, Vn, Cy, PI, Ro CZ, In, Cy, PI, Sm J, 40, Vn, Cy, PI, Ro J, 85, St, Fe, PI, Ro J, 40, Vn, Cy, Ir, Ro
		100		6.6	- 7	7.06 15.17 7.33		METASANDSTONE: Fine grained, foliated, some Quartz veins, slightly fractured, high strength,												6.55 7.15 7.25	J, 50, Vn, Cy, Pl, Sm Vn, 20, In, Cy, Pl, Ro J, 60, In, Cy, Pl, Ro
					-	14.90		slightly weathered. ARGILLITE: Dark grey, with some pale grey	1											7.45 7.50 7.60	J, 55, In, Cy, PI, Ro Be, 55, CI, PI, SI J, 55, SI, Fe, PI, Ro
		100		7.7	-			brown laminations, foliated, fissile in places, fractured low to medium strength, slightly weathered.												7.60 7.65 7.80 7.90	J, 55, 51, Fe, FI, Ko J, 55, Vn, Cy, Ir, Ro F, 45, Vn, Cy, PI, Ro J, 40, In, Q, Ir, Ro
		100 100	0	8.2	8															8.05 8.10 8.15 8.20 8.25 8.30	S. 40, in . 51, in . 60 SM, 55, in . Q, ir, Ro F, 55, Vn, Cy, PI, Sm F, 55, Vn, Cy, PI, Sm
		100	0	9.2	- 9-			Hole discontinued at 9.20m												8.35 8.40 8.70 8.75 8.80 8.85 8.90 8.95 9.00 9.10	r, 35, Vi, Cy, PI, Sin F, 55, Ci, Po, Sin F, 65, Ci, Po F, 65, Ci, Po F, 50, Vi, Cy, PI, Sm F, 50, Vi, Cy, PI, Sm
					-															9.15 9.20	F, 50, Vn, Cy, PI, Sm F, 50, Vn, Cy, PI, Sm

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	Grey Scale	Borehole	Number	BH	1110
SMEC		Box	1	of	2
-	Colour Scale	Depth	4.00m	to	8.75m
		Project	Smith St & O	lsen Av	,
		Number	3003659		
		Client	QDTMR		
2 No h	La Contra			4.3	SP)
	Provide a constraint of the second se				3P
					5P)
	43 52 52 52 52 52 52 52 52 52 52 52 52 52				
	77 85 85 72				

	Grey Scale	Borehole	Number	BH	110
SMEC	Colour Scale	Box Depth Project Number	2 8.75m Smith St & C 3003659	of to Isen Av	2 9.20m
		Client	QDTMR		
	NN NY TING MANUT	CH IN SO FUEL IN	UTERA 1010 AB-428 1:	000 607.11S	0101010 1000
	NY THE THE STREET	CV IN SO PUEL W	E. O. T. Lineon 1010 RB-1428 1.	oger 617) [00-ML 81510
		N BO PUEN SY	Langon 1010 AND-14250 11	900 GH11C	101218 18+00



NOTES RELATING TO GEOTECHNICAL REPORTS AND SITE INVESTIGATION LOGS

GEOTECHNICAL REPORTS AND SITE INVESTIGATION LOGS

Geotechnical reports/logs are prepared by qualified personnel on the information supplied or obtained and are based on current engineering standards of interpretation and analysis.

Information may be gained from limited subsurface testing, surface observations, previous work, and is supplemented by knowledge of the local geology and experience of the range of properties that may exhibited by the materials present. For this reason, geotechnical reports should be regarded as interpretative rather than factual documents, limited to some extent by the scope of information on which they rely.

Where the report/log has been prepared for a specific purpose (e.g. design of a three-storey building), the information and interpretation may not be appropriate if the design is changed (e.g. a twenty-storey building). In such cases, the report/log and the sufficiency of the existing work should be reviewed by SMEC in the light of the new proposal.

Every care is taken with the report/log content; however, it is not always possible to anticipate or assume responsibility for the following conditions:

- Unexpected variations in ground conditions. The potential for this depends on the amount of investigative work undertaken.
- Changes in policy or interpretation by statutory authorities
- The actions of contractors responding to commercial pressures

If these occur, SMEC would be pleased to resolve the matter through further investigation, analysis or advice.

UNFORESEEN CONDITIONS

Should conditions encountered on site differ markedly from those anticipated from the information contained in the report/log, SMEC should be notified immediately. Early identification of site anomalies generally results in any problems being more readily resolved and allows re-interpretation and assessment of the implications for future work.

SUBSURFACE INFORMATION

Logs of a borehole, recovered core, test pit, excavated face, or cone penetration test are an engineering and/or geological interpretation of the subsurface conditions. The reliability of the logged information depends on the drilling/testing method, sampling/observation spacing's and the ground conditions. It is not always possible or economic to obtain continuous high-quality data. It should also be recognised that the volume of material observed or tested is only a fraction of the total subsurface profile.

Interpretation of subsurface information and application to design and construction must take into consideration the spacing of the test locations, the frequency of observations and testing, and the possibility that geological boundaries may vary between observation points.

Groundwater observations and measurements outside of specially designed and constructed piezometers should be treated with care for the following reasons:

- In low permeability soils groundwater may not seep into an excavation or bore in the short time it is left open.
- A localised perched water table may not represent the true water table.
- Groundwater levels vary according to rainfall events or season.
- Some drilling and testing procedures mask or prevent groundwater inflow.

The installation of piezometers and long-term monitoring of groundwater levels may be required to adequately identify groundwater conditions.