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rogenie Smith Clean Detailed Design Gootech Investigation Co-ordinates System UTM Zone 55 Easting: 5370484 m. E. Surface Alexander Schuler Status Schuler Sc	lien	() t:	GEOTECHNICAL LOG OF NON-CORE DRILLHOLE								Sheet No: 1 OF 2 Project No: 3003659						
Rev by By By By By By By By By By By By By By	oje eatu	ect: ure	: S : G	mith riffith	Olser 1 Univ	ersit	ersity Easting: 537084.8m E							Angle from Horz: 90			
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$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	0				SPT	1-		s				Pale brown.	-				
SPT - 15.84 	Ā						-		N=23								
BPT - 15.4 s N-24 SAUSTOR: Externely tow strength, externely weathered, fine produces to very eith our to meduum application; Sandy CLAY) BPT -							-										
B SPT - S 6,10,14 N=24 N=24 N=24 SPT - - -						2-		\square									
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$ \begin{array}{c c c c c c c c c c c c c c c c c c c $						3-			0.0.40				_				
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SPT 0 11.94 S 11.18,30/ 140mm SILTSTONE: Extremely low strength, extremely weathered, pale grey and grey-brown, iron staining evident (remoulds to hard high plasticity Silty CLAY) SPT 7 7.00 9.21.23 SPT 9.21.23 N=44 SPT 9.94 S 9.21.23 N=44 11.14,30/ 115mm 11.14,30/ N=53 Rock fabric/structure clearly evident, iron staining in laminations, tending to highly weathered in parts. SPT 9 9.00 20.30/ 140mm 11.14,30/ N=64 Extremely low strength, took fabric/structure clearly evident, iron staining in laminations, tending to highly weathered, pale green-grey and pale grey, iron staining and very thin grey mudstone laminations.					SPT	5-		S	150mm			pale grey pleached yellow-orange, high silt content tending to					
SPT - S 140mm N'= 50 grey and grey-brown, iron staining evident (remoulds to hard high plasticity Silty CLAY) SPT - - - - - SPT - -<						6-			11 19 20/			SILTSTONE: Extremely low strength, extremely weathered, pale					
SPT - 10.94 S 9,21,23 Rock fabric/structure clearly evident, iron staining in laminations, tending to highly weathered in parts. SPT - - - - - - SPT - - - - - - SPT - - - - - - SPT - - S 11,14,30/ Extremely weathered, pale green-grey and pale grey, iron staining and very thin grey mudstone laminations. - SPT - S 115mm N*= 53 - N*= 53 - - - - - SPT - S 20,30/ - - SPT - - - 20,30/ - - N= - - - - - - N= - - - - - - - Very low strength to extremely low strength, rock fabric/structure clearly evident, iron staining in laminations, tending to highly weathered in parts. - -	ΛN				SPT		-	s	140mm			grey and grey-brown, iron staining evident (remoulds to hard high					
SPT - - S 9,21,23 N=44 Rock fabric/structure clearly evident, iron staining in laminations, tending to highly weathered in parts. I -						7-											
SPT 9.94 S 11,14,30/ 115mm N*= 53 N*= 53 9 9.00 20,30/ 140mm SPT 9 8.94 S 140mm N*= 64 Very low strength to extremely low strength, rock fabric/structure clearly evident, iron staining in laminations, tending to highly weathered in parts. Very low strength is laminations, tending to highly					SPT		-	s				rouck labric/structure clearly evident, fron staining in laminations, tending to highly weathered in parts.					
SPT - - S 11,14,30' 115m3 Extremely weathered, pale green-grey and pale grey, iron staining and very thin grey mudstone laminations. SPT - - S 20,30/ 140mm - - SPT - - S 20,30/ 140mm - - N*= 64 N*= 64 Very low strength to extremely low strength, rock fabric/structure clearly evident, iron staining in laminations, tending to highly weathered in parts. Very low strength is parts.						9.											
Image: Spring of the system 9 8.94 S 20,30/ 140mm Image: Spring of the system S S S Image: Spring of the system S S S <					SPT		9.94	s	115mm			Extremely weathered, pale green-grey and pale grey, iron staining and very thin grey mudstone laminations.					
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tes (Instrumentation etc):		(In-	 strum?	Interi	an etc):		- 10.00										
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	GEOTECHNICAL LOG OF NON-CORE DRILLHOLE								Borehole No:BH119Sheet No:2 OF 2Project No:3003659								
Clien Proje Featu Loca	ect: ure:	Sm	fith l	lsen Jnive	ersity	tailed Design Geotech Investigation Co-ordinates System: UTM Zone 56 ty Easting: 537084.8m E								Surface RL (m): 17.94 Angle from Horz: 90 Direction: n/a			
Method	F	Medium Slow Slow	Water	Sample	Depth (m)	Depth/RL	Type	Sample or Field Test	Graphic Log	USC Symbol	SUBSTANCE Description Soil Type: density/consistency, grain size/plasticity, colour, particle shape/secondary components, minor	Moisture	Consistency/ Density	Other Observation			
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MD				SPT	-	7.94	s	11,25,30 N=55			Orange brown and pale orange, a grey mudstone lamination running vertical through SPT sample 3mm thick.						
					-						Borehole discontinued at 10.45m						
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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.