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BOREHOLE ENGINEERING LOG

BOREHOLE NO.

RTBH06

SHEET 1 OF 3

Client: Department of Transport and Main Roads
Project: Gold Coast Rapid Transit
Borehole Location: Smith Street Motorway, Ch: 20365.3
Project Number: 2161016A

Date Commenced: 18/2/10
Date Completed: 18/2/10
Recorded By: NG
Log Checked By: LMcK

Drill Model/Mounting: Drillpower Jackro 350
Borehole Diameter: 75 mm

Hole Angle: 90° Surface RL: 14.21 m AHD*
Bearing: --- Co-ords: E 81886.75 N 61621.62 GCCC Grid*

Borehole Information						Field Material Description						
1	2	3	4	5	6	7	8	9	10	11	12	13
METHOD	SUPPORT	WATER	RL(m) AHD*	DEPTH(m)	FIELD TEST	SAMPLE	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION	MOISTURE	RELATIVE DENSITY / CONSISTENCY	STRUCTURE AND ADDITIONAL OBSERVATIONS
WB	C											
				14					FILL:			FILL
				0.50				SM	Sandy SILT: pale grey, fine to medium gravel sand.	MC~PL		ALLUVIUM
				1	SPT 2,4,8 N=12	SPT		CL	Gravelly CLAY: brown, low plasticity clays, fine to medium grained gravel of quartz and fragments of meta-siltstone (extremely weathered, extremely low strength).			
				1.40				CH	CLAY: high plasticity, grey mottled red.	MC>PL		RESIDUAL SOIL
				2		U50			... 4.2 m: colour change to grey no mottling.			
				2.20							560 580 600	
				3								
				4	SPT 3,6,10 N=16	SPT						
				5								
				5.50		U50			META-SILTSTONE: pale grey-yellow mottled red, extremely weathered, extremely low strength, Fe stained.			WEATHERED ROCK
				6							360 400 600	
				7	SPT 20,23,22 N=45	SPT						
				8								
				9	SPT 10,19,14 N=33	SPT						
				10								
				11								
				12								
				13								
				14								

This borehole log should be read in conjunction with Parsons Brinckerhoff's accompanying standard notes.



BOREHOLE ENGINEERING LOG

BOREHOLE NO.

RTBH06

SHEET 2 OF 3

Client: Department of Transport and Main Roads
Project: Gold Coast Rapid Transit
Borehole Location: Smith Street Motorway, Ch: 20365.3
Project Number: 2161016A

Date Commenced: 18/2/10
Date Completed: 18/2/10
Recorded By: NG
Log Checked By: LMC

Drill Model/Mounting: Drillpower Jackro 350
Borehole Diameter: 75 mm

Hole Angle: 90°
Bearing: ---

Surface RL: 14.21 m AHD*
Co-ords: E 81886.75 N 61621.62 GCCC Grid*

Borehole Information						Field Material Description							
1	2	3	4	5	6	7	8	9		10	11	12	13
METHOD	SUPPORT	WATER	RL(m) AHD*	DEPTH(m)	FIELD TEST	SAMPLE	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION	MOISTURE	RELATIVE DENSITY / CONSISTENCY	PENETROMETER (kPa)	STRUCTURE AND ADDITIONAL OBSERVATIONS
WB			4	SPT 30 /100mm	SPT				META-SILTSTONE: pale grey-yellow mottled red, extremely weathered, extremely low strength, Fe stained. (continued) ... 10.0 m: change to highly weathered, very low strength.				SPT hammer bounce, no penetration
			11										
			3										
			12					REFER TO CORED BOREHOLE LOG					
			2										
			13										
			1										
			14										
			0										
			15										
			-1										
			16										
			-2										
			17										
			-3										
			18										
			-4										
			19										
			-5										

This borehole log should be read in conjunction with Parsons Brinckerhoff's accompanying standard notes.

Client: Department of Transport and Main Roads
Project: Gold Coast Rapid Transit
Borehole Location: Smith Street Motorway, Ch: 20365.3
Project Number: 2161016A

Date Commenced: 18/2/10
Date Completed: 18/2/10
Recorded By: NG
Log Checked By: *L M CK*

Drill Model/Mounting: **Drillpower Jackro 350**
Borehole Diameter: **75 mm**

Hole Angle: 90°
Bearing: ---

Surface RL: 14.21 m AHD*
Co-ords: E 81886.75 N 61621.62 GCCC Grid*

Borehole Information						Field Material Description						
1	2	3	4	5	6	7	8	9	10	11	12	
METHOD	SUPPORT	WATER	CORE RECOVERY	RQD	RL(m) AHD*	DEPTH(m)	GRAPHIC LOG	SOIL/ROCK MATERIAL FIELD DESCRIPTION	WEATHERING	INFERRED STRENGTH Is(50) MPa	AVERAGE DEFECT SPACING mm	STRUCTURE AND ADDITIONAL OBSERVATIONS
						4						
						11						
						3						
								COMMENCE CORING AT 11.6 m				
			100	90		12		META-SILTSTONE: pale grey to green, Fe staining along bedding/foliation.	MW			Bedding laminations at 45°
			100	100	2				MW-SW			11.6 m - 13.9 m: numerous Fe stained laminations 1 mm - 10 mm spacing
												12.1 m - 12.3 m: J, 75°, P, S, clean with Fe oxide coating, 1-2mm thick (healed).
			100	30	1	13						12.5 m: J, 75°, P, S, clean
												12.6 m - 13.7 m: DB x 20
												12.85 m - 12.9 m: Non intact core
												12.95 m: rotational/spin marks.
												13.25 m - 13.35 m: Non intact core
												13.4 m - 13.46 m: Non intact core
												13.5 m - 13.7 m: Non intact core
						14		... 13.8 m: colour change to dark grey and carbonaceous (?).	FR			Bedding laminations 45°, S, foliation 75°
								END OF BOREHOLE AT 14.00 m				
						0						Limit of Investigation. Depth of investigation limited due to permit time restrictions
						15						* Horizontal and vertical data determined by Ground Survey
						-1						
						16						
						-2						
						17						
						-3						
						18						
						-4						
						19						
						-5						

This borehole log should be read in conjunction with Parsons Brinckerhoff's accompanying standard notes.

REPORT OF PHOTOGRAPHS



Borehole number: **RTBH06**

Sheet **1** of **1**

Client:	Department of Transport and Main Roads	Coordinates:	E 81886.75 N 61621.62	Depth range:	11.6 m – 14.0 m
Project:	Gold Coast Rapid Transit	Surface RL:	14.21 m AHD	Inclined length:	–
Borehole location:	Ch: 20207.6	Hole angle:	90 °	Drill model/mounting:	Hydrapower Scout
Project number:	2161016A	Bearing:	–	Borehole diameter:	75 mm

