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Client: Department of Transport and Main Roads
 Project: Gold Coast Rapid Transit
 Borehole Location: Gold Coast Highway, Ch: 30578.5
 Project Number: 2161016A

Date Commenced: 9/3/10
 Date Completed: 10/3/10
 Recorded By: DS
 Log Checked By: *Lmk*

Drill Model/Mounting: Drillpower Hydrapower Scout Hole Angle: 90° Surface RL: 2.67 m AHD*
 Borehole Diameter: 75 mm Bearing: --- Co-ords: E 85753.9 N 59588.14 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
TC	C			0.10					TOPSOIL (Silty SAND): fine grained, brown. FILL (SAND): fine grained, grey-brown.	D		TOPSOIL
				2						M		FILL
				1								
				1.30					... 1.2 m: trace root			
				1	SPT 2,2,1 N=3	SPT			FILL (SAND): fine grained, pale yellow-brown.			SPT: some fall in with sample
				2								
				0					... 2.4m: grey-brown.			
				3						W		
				-1					... 3.6 m: grey, trace organics.			
				4								
				-2					... 4.2m: fine to medium grained.			
				5	SPT 1,0,0 N=0	SPT						
				5.70					META-GREYWACKE: fine to coarse grained, grey and dark green. Appears silicified. Medium to high strength.			5.7 m to 6.35 m: NMLC. Boulder within fill (?).
				6					CORE LOSS			5.85 m - 5.93 m: J, 60°, I, R, Fe stained.
				-4					SAND: fine grained, pale brown.	W		6.0 m: complete water loss, unable to seal casing against rock.
				7								BEACH DEPOSITS
				-5								
				8	SPT 14,23,23 N=46	SPT						
				-6								
				9								
				9.20								
				-7					SAND: fine grained, grey.			ESTUARINE SEDIMENTS

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

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Date Commenced: 9/3/10
 Date Completed: 10/3/10
 Recorded By: DS
 Log Checked By: LMYL

Drill Model/Mounting: Drillpower Hydrapower Scout Hole Angle: 90° Surface RL: 2.67 m AHD*
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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								SW	SAND: fine grained, grey. (continued)	W		
				-8	SPT 4,5,1 N=6	SPT						
				11								
				-9								
				12								
				12.40								
				-10				SC	Interlayered Clayey SAND and SAND: fine grained, black/dark grey and sand fine grained, grey-white.			
				13								
				-11	SPT 9,15,19 N=34	SPT						
				14								
				-12								
				15								
				-13								
				16								
				-14	SPT 7,14,25 N=39	SPT						
				16.80				CL	Silty CLAY: low plasticity, brown.	MC-PL		RESIDUAL SOIL
				17								
				-15								
				17.80					META-SILTSTONE: grey and dark grey, extremely weathered, extremely low strength.			WEATHERED ROCK
				18								
				-16								
				19					META-GREYWACKE: fine grained, grey-green, extremely weathered, extremely low strength.			
				19.20								
				-17					REFER TO CORED BOREHOLE LOG			

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



CORED BOREHOLE ENGINEERING LOG

BOREHOLE NO.


RTBH24

SHEET 3 OF 4

Client: Department of Transport and Main Roads
Project: Gold Coast Rapid Transit
Borehole Location: Gold Coast Highway, Ch: 30578.5
Project Number: 2161016A

Date Commenced: 9/3/10
Date Completed: 10/3/10
Recorded By: DS
Log Checked By: LMgk

Drill Model/Mounting: Drillpower Hydrapower Scout Hole Angle: 90° Surface RL: 2.67 m AHD*
Borehole Diameter: 75 mm Bearing: --- Co-ords: E 85753.9 N 59588.14 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
									EL 0.03 VL 0.1 L 0.3 M 1 H 3 VH 10 EH 30	10 30 100 300 1000 3000		
						-8						
						11						
						-9						
						12						
						-10						
						13						
						-11						
						14						
						-12						
						15						
						-13						
						16						
						-14						
						17						
						-15						
						18						
						-16						
						19						
						-17						
NMLC					19.86			COMMENCE CORING AT 19.5 m META-GREYWACKE: fine grained, grey-green. META-SILTSTONE: dark grey.	SW			19.5 m - 19.6 m: Fractured 19.65 m, 19.68 m: J x 2, 45°, P, S, Fe stained 19.86 m: B. 30° P. R. clean

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CORED BOREHOLE ENGINEERING LOG

BOREHOLE NO.

RTBH24

SHEET 4 OF 4

Client: Department of Transport and Main Roads
Project: Gold Coast Rapid Transit
Borehole Location: Gold Coast Highway, Ch: 30578.5
Project Number: 2161016A

Date Commenced: 9/3/10
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Borehole Diameter: 75 mm Bearing: --- Co-ords: E 85753.9 N 59588.14 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)	SOIL/ROCK MATERIAL FIELD DESCRIPTION	WEATHERING	INFERRED STRENGTH Is(50) MPa	AVERAGE DEFECT SPACING mm	STRUCTURE AND ADDITIONAL OBSERVATIONS
NMLC			100	20			META-SILTSTONE: dark grey. (continued)	HW-MW	EL 0.03 VL 0.1 L 0.3 M 1 H 3 VH 10 PH 10	10 30 100 300 1000 3000	
						20.50	CORE LOSS				
			92	0		18 20.70	META-SILTSTONE: dark grey.	MW			
						21	... dark grey, thinly laminated with pale green-grey siltstone.				
						19 21.80					
						22					
						20					20.7 m to 22.55 m: Non intact core
						23					
			95	20		21					23.1 m: DB 23.13 m: DB 30mm 23.15, 23.18, 23.8 m: J, 30-60°, P, S, clean 23.3 m - 23.34 m: Fractured 23.34 m - 23.45 m: J, 70°, P, R, clean 23.5 m - 23.55 m: J, 45°, P, S, clean 23.58, 23.78 m: J, 70-75°, P, R, clean
						23.95	CORE LOSS				
						24	END OF BOREHOLE AT 24.00 m				
						22					Limit of Investigation
						25					* Horizontal and vertical data determined by Ground Survey
						23					
						26					
						24					
						27					
						25					
						28					
						26					
						29					
						27					

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

REPORT OF PHOTOGRAPHS



Borehole number: **RTBH24**

Sheet 1 of 1

Client:	Department of Transport and Main Roads	Coordinates:	E 85753.90 N 59588.14	Depth range:	6.7 m – 7.0 m & 19.5 m – 24.0 m
Project:	Gold Coast Rapid Transit	Surface RL:	2.67 m AHD	Inclined length:	–
Borehole location:	Ch: 30579.7	Hole angle:	90 °	Drill model/mounting:	Hydrapower Scout
Project number:	2161016A	Bearing:	–	Borehole diameter:	75 mm

