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Main Roads

ENGINEERING BOREHOLE

FOR GEOTECHNICAL TERMS AND
SYMBOLS REFER FORM F:GEOT 017/2-2004

BOREHOLE No **BH30**

SHEET **1** of **3**

REFERENCE No **H9579**

PROJECT **GATEWAY BRIDGE DUPLICATION FOUNDATION INVESTIGATION - GATEWAY UPGRADE PROJECT**

LOCATION **PIER 18 - DOWN STREAM END** COORDINATES **9825.4 E, 168723.5 N**

PROJECT No **FG5388** SURFACE R.L. **2.93** DATE STARTED **07/02/05** DATUM **SETP**

JOB No DATUM **AHD** DATE COMPLETED **08/02/05** DRILLER **R&D DRILLING PTY LTD**

DEPTH (m)	R.L. (m)	ALGER CASING WASH BORING CORE DRILLING	RQD (%)	CORE REC %	SAMPLE	MATERIAL DESCRIPTION	LITHOLOGY	USC WEATHERING	INTACT STRENGTH	DEFECT SPACING (mm)	GRAPHIC LOG	ADDITIONAL DATA AND TEST RESULTS	SAMPLES TESTS
0	2.93					ESTUARINE (?) WEATHERED OC CRUST Dark grey brown to mottled grey, slightly moist, soft to mainly firm silty clay. High plasticity.						Gravel sizing up to 30mm on the surface	
1													1,2,2 N=4 SPT
2													U50
3	0.43					ESTUARINE SILTY CLAY Dark grey to dark brown, moist, very soft sensitive. High plasticity, slightly organic throughout.		OH				Peak Su=28.8kPa, Res Su=5.85kPa	
4	-0.97					ESTUARINE SANDY SILT Dark grey to dark brown, moist, very soft.							HW, N<1 SPT
5													1,1, N<1 SPT
6								SM					HW, N<1 SPT
7	-4.07					SILTY SAND Dark grey to dark brown, wet, very loose. Fine grained sand with some shell fragments.							HW, N<1 SPT
8								SM					HW, N<1 SPT
9													1,HW, N<1 SPT
10	-7.07												

REMARKS **Defect angles have been measured with respect to a horizontal plane.**

LOGGED BY
A. DISSANAYAKE (DISS)



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BOREHOLE No **BH30**

SHEET **2** of **3**

REFERENCE No **H9579**

PROJECT **GATEWAY BRIDGE DUPLICATION FOUNDATION INVESTIGATION - GATEWAY UPGRADE PROJECT**

LOCATION **PIER 18 - DOWN STREAM END** COORDINATES **9825.4 E; 168723.5 N**

PROJECT No **FG5388** SURFACE R.L. **2.93** DATE STARTED **07/02/05** DATUM **SETP**

JOB No **-----** DATUM **AHD** DATE COMPLETED **08/02/05** DRILLER **R&D DRILLING PTY LTD**

DEPTH (m)	R.L. (m)	AUGER CASING WASH BORING CORE DRILLING	RQD (%)	CORE REC %	SAMPLE	MATERIAL DESCRIPTION	LITHOLOGY	USC WEATHERING	INTACT STRENGTH	DEFECT SPACING (mm)	GRAPHIC LOG	ADDITIONAL DATA AND TEST RESULTS	SAMPLES TESTS
10	-7.07					ESTUARINE SILTY CLAY Dark grey to dark brown, moist, very soft.						HW, N<1	SPT
11												RW, N<1	SPT
12													U50
13												RW, HW, N<1	SPT
14							OH						U50
15						Some fissuring towards bottom.						RW, HW, N<1	SPT
16													U50
17												RW, HW, N<1	SPT
18	-14.82					SILTY CLAY Dark grey to dark brown, slightly moist, stiff.		CH				2,4,5 N=9	SPT
19	-15.82					SILTY SAND Brown to orange brown, moist becoming wet with depth, medium dense.		SM				6,10,9 N=19	SPT
20	-17.07												

REMARKS Defect angles have been measured with respect to a horizontal plane.

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BOREHOLE No **BH30**

SHEET **3** of **3**

REFERENCE No **H9579**

PROJECT GATEWAY BRIDGE DUPLICATION FOUNDATION INVESTIGATION - GATEWAY UPGRADE PROJECT
LOCATION PIER 18 - DOWN STREAM END COORDINATES 9825.4 E; 168723.5 N
PROJECT No FG5388 SURFACE R.L. 2.93 DATE STARTED 07/02/05 DATUM SETP
JOB No DATUM AHD DATE COMPLETED 08/02/05 DRILLER R&D DRILLING PTY LTD

DEPTH (m)	R.L. (m)	ALGER CASING WASH BORING CORE DRILLING	ROD (%)	CORE REC %	SAMPLE	MATERIAL DESCRIPTION	LITHOLOGY	USC	WEATHERING	INTACT STRENGTH	DEFECT SPACING (mm)	GRAPHIC LOG	ADDITIONAL DATA AND TEST RESULTS	SAMPLES	TESTS
20	-17.07					SILTY SAND As above. Very fine sand, high silt and clay content on the top, occasional gravel sizing up to 10mm.									
21													5,14,11 N=25		SPT
22									SM				4,8,12 N=20		SPT
23															
24													5,7,9 N=16		SPT
25	-21.52					SANDSTONE MW : Pale orange to white, cemented, massive high strength. Defects - Nil.			MW				Is(50)=1.78 MPa Is(50)=2.59 MPa Is(50)=2.96 MPa Is(50)=3.10 MPa	x o x o	
26	-21.93		(67)			INTERBEDDED SANDSTONE AND MUDSTONE. MUDSTONE DOMINANT SW : Pale grey to dark grey, thinly laminated and bedded, low to medium strength rock becoming high below 28.0m. MW : Orange, very low strength rock, showing some medium dense sandy properties towards bottom.			SW				Conglomerate band		
27	-22.60		100 (47)						MW						
28	-23.41		74 (60)			SW : Pale grey to dark grey, thinly laminated and bedded, low to mainly medium strength rock becoming high below 28.0m. Defects - Frequent drilling induced lamination partings <30° (5-10/m). - Joints - 45° (1-2/m). - Joints - 65° (1-2/m).			SW				Sheared and healed zone Is(50)=0.34 MPa Is(50)=0.42 MPa	x o	
29			100 (61)										Is(50)=0.82 MPa Is(50)=1.20 MPa	x o	
30	-26.57		100			Becoming predominantly sandstone with depth.									
						Borehole terminated at 29.5m									

REMARKS Defect angles have been measured with respect to a horizontal plane.

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Project: **Gateway Bridge Duplication Investigation**

Borehole No: **BH 30**

Start Depth: 24.45m

Finish Depth: 29.50m

Project No: FG5388

H No: 9457

