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ENGINEERING BOREHOLE

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

BOREHOLE No	BH28
SHEET	_ 1 _ of _ 4 _
REFERENCE No	H9577

GATEWAY BRIDGE DUPLICATION FOUNDATION INVESTIGATION - GATEWAY UPGRADE PROJECT PROJECT LOCATION PIER 16 - DOWN STREAM END COORDINATES 9889.1 E; 168596.5 N PROJECT No FG5388 SURFACE R.L. _3.77 _. DATE STARTED 09/02/05 DATUM _SETP_ JOB No DATUM __AHD __. DATE COMPLETED 10/02/05 DRILLER R&D DRILLING PTY LTD INTACT DEFECT BORING (m) ()% STRENGTH SPACING ADDITIONAL DATA DEPTH (m) MATERIAL AND SAMPLE SAMPLES DESCRIPTION TESTS CORE USC | WEAT | WEA TEST RESULTS REC % 0 FILL Drilling records only Brown to grey, moist, stiff, gravelly clay. GC Occasional lithic fragments. 3.02 ESTUARINE WEATHERED OC CRUST Dark grey to mottled grey, slightly moist, soft to mainly firm. 1,2,2 N=4 SPT OL **ESTUARINE SILTY CLAY** Dark grey to dark brown, moist, very soft. High plasticity, slightly organic. SPT ENGINEERING BOREHOLE 09 04.GDT 31/08/05 SPT OH HW.-.-SPT GATEWAY UPGRADE PROJECT.GPJ RW,HW, SPT SANDY SILT Dark grey to black, wet, very soft to soft. BOREHOLE WITH LITHOLOGY Very fine grained sand. RW,-,2 SPT SM REMARKS Cafect angles have been measured with respect to a horizontal plane. LOGGED BY A. DISSANAYAKE (DISS)



ENGINEERING BOREHOLE

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

BOREHOLE No	BH28
SHEET	_2_ of _4_
REFERENCE No	H9577

GATEWAY BRIDGE DUPLICATION FOUNDATION INVESTIGATION - GATEWAY UPGRADE PROJECT PROJECT LOCATION PIER 16 - DOWN STREAM END COORDINATES 9889.1 E; 168596.5 N PROJECT No <u>FG5388</u> SURFACE R.L. __3.77_ __. DATE STARTED _09/02/05_ DATUM SETP JOB No DATE COMPLETED 10/02/05 DATUM _ AHD DRILLER R&D DRILLING PTY LTD RI RÓD INTACT DEFECT (m) ()% STRENGTH SPACING ADDITIONAL DATA DEPTH (m) MATERIAL AND GRAPHIC SAMPLES DESCRIPTION AUGER CASING WASH CORE WEATH WEATH CELL SOO 2000 CORE TEST RESULTS REC % 10 -6.23 SANDY SILT (As above) SPT SM -7.23SILTY SAND Dark grey to black, wet, medium dense. Occasional calcareous concretions and shell fragments. 8,7,4 SM SPT N=11 12 -8.73 ESTUARINE SILTY CLAY Dark grey to dark brown, moist to slightly wet, very soft. 13 Partly decomposed shell fragments, minor RW,-,1 SPT fine grained sand fraction towards bottom. N<1 - 14 PROJECT GPJ ENGINEERING BOREHOLE 99 04 GDT 31/08/05 HW,-,-SPT N<1 RW,-,-N<1 ОН SPT GATEWAY UPGRADE RW. W,-,∗ N<1 SPT - 18 WITH LITHOLOGY RW,-,-N<1 SPT REMARKS Defect angles have been measured with respect to a horizontal plane. LOGGED BY A. DISSANAYAKE (DISS)



ENGINEERING BOREHOLE

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

BOREHOLE No	BH28
SHEET	-3 of -4
REFERENCE No	H9577

PROJECT GATEWAY BRIDGE DUPLICATION FOUNDATION INVESTIGATION - GATEWAY UPGRADE PROJECT LOCATION PIER 16 - DOWN STREAM END COORDINATES 9889.1 E; 168596.5 N PROJECT No _FG5388 _ _ _ _ SURFACE R.L. _ 3.77___ DATE STARTED _09/02/05 DATUM SETP _ JOB No DATUM AHD DATE COMPLETED 10/02/05 DRILLER R&D DRILLING PTY LTD R.L. RQD INTACT DEFECT (m) ()% ADDITIONAL DATA STRENGTH SPACING DEPTH (m) 80 MATERIAL LITHOLOGY AND SAMPLE SAMPLES DESCRIPTION AUGER CASING WASH I CORE TEST RESULTS REC % -16.23 20 ESTUARINE SILTY CLAY (As above) RW,-,HW SPT N<1 N<1 -21 RW.-SPT N<1 RW. SPT N<1 ОН SPT RW,-,-N<1 SPT SPT RW,-,-SPT REMARKS Defect angles have been measured with respect to a horizontal plane. LOGGED BY A. DISSANAYAKE (DISS)



04.GDT

ENGINEERING

ENGINEERING **BOREHOLE**

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

BH28 BOREHOLE No __<u>4</u>_ of __<u>4</u>_ SHEET H9577 REFERENCE No

GATEWAY BRIDGE DUPLICATION FOUNDATION INVESTIGATION - GATEWAY UPGRADE PROJECT **PROJECT** LOCATION PIER 16 - DOWN STREAM END COORDINATES 9889.1 E; 168596.5 N PROJECT No _FG5388 _ _ _ _ SURFACE R.L. _ 3.77 _ _. DATE STARTED _09/02/05_ DATUM SETP JOB No DATE COMPLETED 10/02/05 DATUM _AHD _ DRILLER R&D DRILLING PTY LTD RQD INTACT DEFECT (m) ()% STRENGTH SPACING ADDITIONAL DATA DEPTH (m) ဗို MATERIAL (mm)AND SAMPLES DESCRIPTION CASING WASH CORE TESTS 문구도교기국교 88888 TEST RESULTS REC % 30 -26.23 **ESTUARINE SILTY CLAY** (As above) OH -26.73 INTERBEDDED MUDSTONE AND SANDSTONE HW: Medium to high strength sandstone, - 3 rock kernels in silty sand matrix. (0) High strength sandstone interbed ΗW Gradually grading into very low to low strength rock. Core toss 32 ~28.30 (73) MUDSTONE FINE GRAINED, THINLY LAMINATED. WEAK, SEDIMENTARY ROCK. (70) SW: Dark grey to black, thinly laminated, (s(50)=1.60 MPa very low to mainly low strength: ls(50)=1.06 MPa 0 - 33 Defects -- Frequent drilling induced lamination (72) partings 30° (<5/m). - Joints at 60° (4-5/m). SW High strength sandstone interbed 100 (65) Slightly broken and altered adjacent to - 34 defetcs. 100 (70) ls(50)=0.31 MPa ls(50)=0.25 MPa - 35 BOREHOLE 09 -31.53 100 Borehole terminated at 35,3m -36 .GPJ PROJECT. GATEWAY U BOREHOLE WITH LITHOLOGY REMARKS Defect angles have been measured with respect to a horizontal plane. LOGGED BY A. DISSANAYAKE (DISS)

Gateway Bridge Duplication Investigation Project:

Borehole No: BH 28 Start Depth: 31.00m

Finish Depth: 35.30m Project No:

FG5388

H No:

9459



