Queensland Government
Department of Main Roads

ENGINEERING BOREHOLE

FOR GEOTECHNICAL TERMS AND SYMBOLS REFER FORM F:GEOT 017/3-2005

BOREHOLE No **BH22**
SHEET 1 of 2
REFERENCE No **H9722**

PROJECT IPSWICH MOTORWAY / LOGAN MOTORWAY GEOTECHNICAL INVESTIGATION
LOCATION Near Abutment A, Approximate Chainage 67m, 7m right of control MC81. COORDINATES 29686.6 E; 147202.8 N
PROJECT No FG5404 SURFACE R.L. 27.40 DATE STARTED 01/09/05 DATUM Ipswich Motorway
JOB No 148/17A/57 DATUM AHD DATE COMPLETED 01/09/05 DRILLER Drillsure

DEPTH (m)	R.L. (m)	AUGER / CASING / WASH BORING / CORE DRILLING	RQD ( )% CORE REC %	SAMPLE	MATERIAL DESCRIPTION	USC	WEATHERING	INTACT STRENGTH (EH VH H M L VL EL)	DEFECT SPACING (mm) (20 60 200 600 2000)	GRAPHIC LOG	ADDITIONAL DATA AND TEST RESULTS	SAMPLES	TESTS
0	27.40				**SILT and GRAVEL - Topsoil** Grey, loose. Contains gravel 50 - 100mm size. Based on Drillers logs only.								
1													
	25.90				**SILTY CLAYSTONE** Pale grey, mottled with orange-red iron stains, gritty, slightly moist. Engineering properties of a medium dense Silty Clay and Gravel.						3,7,8 N=15		SPT
2	24.90				**SANDSTONE** Pale grey, fine grained, friable, dry. Minor silt and clay throughout. Engineering properties of medium dense Silty Sand.						5,8,13 N=21		SPT
3	23.90				**CLAYEY SILTSTONE** Grey with orange-brown iron staining, moist. Faint subhorizontal structure visible. Engineering properties of hard Silty Clay or Clayey Silt.						10,19,22 N=41		SPT
4													
5	22.10				**CLAYSTONE** Pale grey, minor iron staining, moist. Trace silt throughout. Relict sub orizontal and vertical structure visible. Engineering properties of very stiff Silty Clay.		XW				9,9,13 N=22		SPT
6	20.60				**SANDSTONE** Pale grey, minor orange iron staining, fine to medium grained, friable, moist. Engineering properties of very dense Sand.						21,30/90mm N>50		SPT
7													
8					Fine grained. Engineering properties of very dense Clayey Sand.						16,19,30/120mm N>50		SPT
9													
10	17.40												

REMARKS See attached photograph for visual assessment of material. No groundwater reported during drilling. See Additional Descriptive Coding sheet for abbreviations.

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ENGINEERING BOREHOLE FG5404 - BOREHOLES.GPJ QLD MAIN ROADS.GDT 17/11/05

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FOR GEOTECHNICAL TERMS AND SYMBOLS REFER FORM F:GEOT 017/3-2005

BOREHOLE No BH22
SHEET 2 of 2
REFERENCE No H9722

PROJECT IPSWICH MOTORWAY / LOGAN MOTORWAY GEOTECHNICAL INVESTIGATION

LOCATION Near Abutment A, Approximate Chainage 67m, 7m right of control MC81. COORDINATES 29686.6 E; 147202.8 N

PROJECT No FG5404 SURFACE R.L. 27.40 DATE STARTED 01/09/05 DATUM Ipswich Motorway

JOB No 148/17A/57 DATUM AHD DATE COMPLETED 01/09/05 DRILLER Drillsure

DEPTH (m)	R.L. (m)	AUGER / CASING / WASH BORING / CORE DRILLING	RQD ( )% / CORE REC %	SAMPLE	MATERIAL DESCRIPTION	USC	WEATHERING	INTACT STRENGTH (EH VH H M L VL EL)	DEFECT SPACING (mm) (20 60 200 600 2000)	GRAPHIC LOG	ADDITIONAL DATA AND TEST RESULTS	SAMPLES / TESTS
10	17.40				**MUDSTONE** Dark grey - black, minor iron staining, moist. Contains some thin bands of fine sand and organic fragments. Engineering properties of hard Clay of low to intermediate plasticity.						8,17,18 N=35	SPT
11					Iron stained rock defects visible ~20-30°.						9,18,30/120mm N>50	SPT
12												
13					Trace iron stains.						12,30/130mm N>50	SPT
14						HW						
15					Trace iron stains.						17,30/130mm N>50	SPT
16					Contains thin bands of pale grey siltstone throughout. Average spacing 150-200mm. Bedding ~20°. Local variation to 10°. Defects mostly 20°, occasionally 60°. Defect surfaces are mostly PL, SM, C, CN.						Is(50)=0.08 MPa Is(50)=0.26 MPa Is(50)=0.13 MPa Is(50)=0.13 MPa Is(50)=0.17 MPa Is(50)=0.28 MPa	x o x o x x
17	9.90		100									
18					Borehole terminated at 17.5m							
19												
20												

ENGINEERING BOREHOLE FG5404 - BOREHOLES.GPJ QLD MAIN ROADS.GDT 17/11/05

REMARKS See attached photograph for visual assessment of material. No groundwater reported during drilling. See Additional Descriptive Coding sheet for abbreviations.

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Project: **Ipswich Motorway / Logan Motorway Interchange**
Borehole No: **BH22**
Start Depth: 1.50m
Finish Depth: 14.78m
Project No: FG5404
H No: 9722

Project: **Ipswich Motorway / Logan Motorway Interchange**

Borehole No: **BH22**

Start Depth: 15.00m
Finish Depth: 17.50m
Project No: FG5404
H No: 9722