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ENGINEERING BOREHOLE LOG

FOR GEOTECHNICAL TERMS AND
SYMBOLS REFER FORM F:GEOT 017/6-2010

BOREHOLE No BH306
SHEET 1 of 3
REFERENCE No 11484

PROJECT Townsville Ring Road Section 4
LOCATION Stony Creek Bridge COORDINATES 464695.7 E; 7871539.3 N
PROJECT No FG6020 SURFACE R.L. 12.09m PLUNGE DATE STARTED 16/4/13 GRID DATUM GDA 94
JOB No 268/10M/5 HEIGHT DATUM AHD BEARING DATE COMPLETED 17/4/13 DRILLER Saxon Drilling

DEPTH (m)	R.L. (m)	AUGER CASING WASH BORING CORE DRILLING	RQD (%)	CORE REC %	SAMPLE	MATERIAL DESCRIPTION	LITHOLOGY	USC	WEATHERING						DEFECT SPACING (mm)	GRAPHIC LOG	ADDITIONAL DATA AND TEST RESULTS	SAMPLES TESTS
									EH	VH	H	M	J	VL				
0	12.09																	
11.79						Silty CLAY (TOPSOIL) Dark brown, moist soft. Low to medium plasticity. Some tree roots.												
					A	Silty Sandy CLAY Brown, dark brown, moist, firm. Medium plasticity.	(Cl)										1,2,3 N=5	SPT
					B												2,2,4 N=6	SPT
9.79						Silty SAND Pale grey, pale yellow, brown, moist, very dense.												
					C	Fine grained sand. Trace of coarse grained sand and gravel. Some white calcareous white material.											17,30/120mm,29 N>50	SPT
					D												15,28,30/110mm N>50	SPT
					E		(SM)										15,27,30/110m N>50	SPT
					F	Becoming medium to coarse grained sand.											20,30/120mm,30/100mm N>50	SPT
6.09						Sandy SILT Pale grey, pale yellow, brown, moist, hard. Low plasticity. Thin clay seams.												
					G												16,28,30/50mm N>50	SPT
					H		(ML)										6,15,29 N=44	SPT
2.09																		

REMARKS 2.6m away towards South from its original location

LOGGED BY
MS

ENGINEERING BOREHOLE LOG

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SYMBOLS REFER FORM F:GEOT 017/6-2010

BOREHOLE No BH306
SHEET 2 of 3
REFERENCE No 11484

PROJECT Townsville Ring Road Section 4
LOCATION Stony Creek Bridge COORDINATES 464695.7 E; 7871539.3 N
PROJECT No FG6020 SURFACE R.L. 12.09m PLUNGE DATE STARTED 16/4/13 GRID DATUM GDA 94
JOB No 268/10M/5 HEIGHT DATUM AHD BEARING DATE COMPLETED 17/4/13 DRILLER Saxon Drilling

DEPTH (m)	R.L. (m)	AUGER CASING WASH BORING CORE DRILLING	RQD (%)	CORE REC %	SAMPLE	MATERIAL DESCRIPTION	LITHOLOGY	USC	WEATHERING						DEFECT SPACING (mm)	GRAPHIC LOG	ADDITIONAL DATA AND TEST RESULTS	SAMPLES TESTS
									EH	VH	H	M	L	VL				
10	2.09				J	Clayey SAND Pale brown, pale grey, moist, very dense. Fine to coarse grained sand. Some white calcareous material.											14,22,30/100mm N>50	SPT
11																		
12					K												12,22,30/90mm N>50	SPT
13					L	Becoming dense silty sand.											16,19,27 N=46	SPT
14																		
15					M	14.50-15.00m : Lenses of pale grey, brown, moist, hard sandy silty.											10,13,20 N=33	SPT
16					N	Becoming medium to coarse grained sand.											16,16,22 N=38	SPT
17																		
18					P	Becoming very dense.											12,21,30/130mm N>50	SPT
19					Q												10,17,30 N=47	SPT
20	-7.91																	

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BOREHOLE No BH306
SHEET 3 of 3
REFERENCE No 11484

PROJECT Townsville Ring Road Section 4
LOCATION Stony Creek Bridge COORDINATES 464695.7 E; 7871539.3 N
PROJECT No FG6020 SURFACE R.L. 12.09m PLUNGE DATE STARTED 16/4/13 GRID DATUM GDA 94
JOB No 268/10M/5 HEIGHT DATUM AHD BEARING DATE COMPLETED 17/4/13 DRILLER Saxon Drilling

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		
									EH	VH	H	M	L	V	EL	20	60				200	600
20	-7.91					Clayey SILT (Residual) Pale green, pale yellow, moist to dry, hard. Low plasticity.																
21					R		(ML)													15,17,27 N=44	SPT	
22	-9.41				S	TUFF Fine to medium grained, pyroclastic rock. XW: Generally exhibits the engineering properties of grey / brown, moist, hard, clayey sandy silt.														18,22,22 N=44	SPT	
23							XW															
24	-12.11				T	Becoming HW at 23.9m.														11,17,30/60mm N>50; Last drive HBx30	SPT	
25			(0) 100			HW: Grey, brown, fine to medium grained, massive to fractured, mainly very low strength.														Is(50) = 0.69MPa	o	
26			(65) 100																	Is(50) = 1.09MPa	o	
27			(4)			Defects: - Joints @ 30° (2/m) - Joints @ 45° (2/m) - Joints @ 60° (3/m) - Joints @ 70° - 80° (2/m) - Irregular Joints (3/m) Defect surfaces are generally planar or irregular, rough, weathered, open, clayey coated.														Is(50) = 0.04MPa	o	
28	-15.31		100				HW													Is(50) = 0.06MPa	o	
29	-15.79		(0)			VOLCANIC BRECCIA Pyroclastic rock consisting of angular fragments embedded in a finer grained matrix. MW: Orange / pink, dark grey, medium to coarse grained, massive to fractured, medium strength. Joints are mainly planar or irregular, rough, open, clayey coated. Borehole terminated at 27.88m														Is(50) = 0.04MPa	o	
30							MW															

REMARKS 2.6m away towards South from its original location

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CORE PHOTO LOG

DEPARTMENT OF TRANSPORT & MAIN ROADS
 Geotechnical Section
 35 Butterfield Street, HERSTON Qld 4006
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Department of
Transport and Main Roads

Project Name	Townsville Ring Road Section 4		
Project No	FG 6020	Date	18/04/13
Borehole No	BH 306	TMR H No	11484
Location	Stony Creek Bridge	Start Depth (m)	23.90
Detail	Pier 2 (Left)	Finish Depth (m)	27.88
Chainage		Submitted By	BW
Remarks			

