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ENGINEERING BOREHOLE LOG

FOR GEOTECHNICAL TERMS AND
SYMBOLS REFER FORM F:GEOT 017/8-2014

BOREHOLE No BH127
SHEET 1 of 3
REFERENCE No 12073

PROJECT Mackay Ring Road Geotechnical Investigation - Stage 1
LOCATION Gibsons Road Overpass Abutment B; CH: 6488m; COORDINATES 721111.2 E; 7658832.1 N
PROJECT No FG6184 SURFACE R.L. 10.43m PLUNGE _____ DATE STARTED 17/9/14 GRID DATUM GDA 94 /MGA Zone 55
JOB No _____ HEIGHT DATUM AHD BEARING _____ DATE COMPLETED 19/9/14 DRILLER ND 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
0	10.43					Sandy CLAY (TOPSOIL) Dark grey, moist, firm. Medium plasticity. Fine to coarse grained sand. Roots throughout.		(CI)					
0.80	9.63					Sandy CLAY (ALLUVIUM) Dark grey, moist, firm. Medium plasticity. Fine to coarse grained sand.		(CI)					U50
1	8.93				A	Clayey SAND (ALLUVIUM) Brown and black mottled orange, moist, medium dense. Fine to coarse grained. 2.90m: Becoming Silty SAND.		(SC)				4,5,3 N=8	SPT
2	7.53				B	Sandy CLAY (ALLUVIUM) Orange-brown, moist, stiff. Medium plasticity. Fine to coarse grained sand.		(CI)					U50
3	6.83				C	Silty Gravelly SAND (ALLUVIUM) Brown, wet, medium dense. Fine to coarse grained sand. Fine to medium, subrounded to rounded gravel.		(SM)				8,7,9 N=16	SPT
4	5.28				D	Clayey SAND (ALLUVIUM) Orange-brown and grey, wet, loose. Fine to coarse grained.		(SC)				5,2,4 N=6	SPT
5	4.43				E	Sandy CLAY (ALLUVIUM) Pale grey mottled orange, moist, firm to stiff. Medium plasticity. Fine to coarse grained sand.		(CI)				2,3,5 N=8	SPT
6	3.43				F	Silty SAND (ALLUVIUM) Grey and orange-brown, wet, medium dense. Fine to coarse grained sand. Trace fine to medium, subrounded to rounded gravel.		(SM)				3,6,10 N=16	SPT
7					G							4,5,6 N=11	SPT
8					H							13,20,25 N=45	SPT
9	1.13				J	Sandy Silty GRAVEL (ALLUVIUM) Grey and orange, wet, medium dense. Fine to medium, subangular to rounded gravel. Fine to coarse grained sand.		(SM)					
10	0.43												

REMARKS Kgwu - Wundaru Granodiorite;

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ENGINEERING BOREHOLE LOG

FOR GEOTECHNICAL TERMS AND
SYMBOLS REFER FORM F:GEOT 017/8-2014

BOREHOLE No **BH127**
SHEET **2** of **3**
REFERENCE No **12073**

PROJECT Mackay Ring Road Geotechnical Investigation - Stage 1
LOCATION Gibsons Road Overpass Abutment B; CH: 6488m; COORDINATES 721111.2 E; 7658832.1 N
PROJECT No FG6184 SURFACE R.L. 10.43m PLUNGE _____ DATE STARTED 17/9/14 GRID DATUM GDA 94 /MGA Zone 55
JOB No _____ HEIGHT DATUM AHD BEARING _____ DATE COMPLETED 19/9/14 DRILLER ND 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	0.43												
11					K	Silty Gravelly SAND (ALLUVIUM) Orange and grey-brown, moist, medium dense. Fine to coarse grained sand. Fine to medium, subrounded to rounded gravel. 10.35m: Gravel fraction decreasing.	(SM)					9,11,13 N=24	SPT
12					L							14,8,8 N=16	SPT
12.80	-1.37				M	Sandy CLAY (ALLUVIUM) Grey, moist, stiff. High plasticity. Fine to coarse grained sand.	(CH)						
12.40	-1.97				N	Silty SAND (ALLUVIUM) Grey-brown, wet, medium dense. Fine to coarse grained.	(SM)						
12.80	-2.37				P	Silty CLAY (ALLUVIUM) Grey and orange, moist, very stiff. High plasticity. With fine to coarse grained sand.	(CH)						
14					P	14.00m: Sand content increasing.						6,9,11 N=20	SPT
14.25	-3.82				Q	Clayey SAND (ALLUVIUM) Orange and grey, moist, medium dense. Fine to coarse grained.	(SC)						
15.00	-4.57				R	Sandy CLAY (ALLUVIUM) Orange-grey mottled black and brown, moist, very stiff. Medium to high plasticity. Fine to coarse grained sand.	(CI-CH)					7,11,11 N=22	SPT
16					R							9,12,14 N=26	SPT
16.35	-5.92				S	Clayey SAND (RESIDUAL) Grey, moist, medium dense. Fine to coarse grained.	(SC)						
17					T	GRANODIORITE (Kgwu) XW: Recovered as grey and pink, moist, very dense Clayey SAND.		XW				6,10,18 N=28	SPT
17.33	-6.90				U	GRANODIORITE (Kgwu) HW: Grey, white and pink, fine to coarse grained, massive, extremely low to very low strength.		HW				13,24,39 N=63	SPT
18												23,35,50 N=85	SPT
18.30	-7.87												
19													
19.50	-9.07												
19.74	-9.57												
20.00													

REMARKS Kgwu - Wundaru Granodiorite;

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ENGINEERING BOREHOLE LOG

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SYMBOLS REFER FORM F:GEOT 017/8-2014

BOREHOLE No BH127
SHEET 3 of 3
REFERENCE No 12073

PROJECT Mackay Ring Road Geotechnical Investigation - Stage 1
LOCATION Gibsons Road Overpass Abutment B; CH: 6488m; COORDINATES 721111.2 E; 7658832.1 N
PROJECT No FG6184 SURFACE R.L. 10.43m PLUNGE _____ DATE STARTED 17/9/14 GRID DATUM GDA 94 /MGA Zone 55
JOB No _____ HEIGHT DATUM AHD BEARING _____ DATE COMPLETED 19/9/14 DRILLER ND 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
20	-9.57												
20.20	-9.77			100	X	Core Loss	X					19.92m: J; 0°-10°, Pl/Ro;	
			(0)	0		MICRODIORITE (Kgwu) XW: Recovered as grey to pale grey, moist, hard, Clayey SILT. Low plasticity fines. Trace sand. Occasional HW rock fragments.	+						
			(0)	100			+						
			(0)				+						
21			100				+	XW					
			(0)				+						
21.55	-11.12		100				+					21.50m: J; 0°-15°, Pl/Ro;	
			(0)				+					21.55m: J; 60°, Pl/Ro;	
21.90	-11.47		100				+	HW					
22						MICRODIORITE (Kgwu) HW: Grey-brown, fine grained, massive, very low strength. Occasional calcite veins and thin clay seams <20mm. Borehole terminated at 21.9m.							
23													
24													
25													
26													
27													
28													
29													
30													

REMARKS Kgwu - Wundaru Granodiorite;

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CORE PHOTO LOG

DEPARTMENT OF TRANSPORT & MAIN ROADS
Geotechnical Branch
35 Butterfield Street, HERSTON Qld 4006
Phone 07 3066 3336



Department of
Transport and Main Roads

Project Name	Mackay – Ring Road		
Project No	FG6184	Date	19/09/14
Borehole No	BH127	TMR H No	12073
Location	Gibsons Road Overpass	Start Depth (m)	19.5
Detail	Abutment B	Finish Depth (m)	21.9
Chainage	6488m	Submitted By	DC
Remarks			



Scale (mm)

