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Queensland Government

GEOTECHNICAL BOREHOLE LOG

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

FINAL 18/03/2016

BH246 BOREHOLE No

Sheet 1 of 3

H12255

REFERENCE No Mackay Ring Road PROJECT Pioneer River Bridge, Pier 15 (LHS) COORDINATES 721342.6 E; 7660525.6 N LOCATION FG6184 SURFACE RL 3.39m PLUNGE 90° DATE STARTED 20/11/2015 GRID DATUM GDA 94 / MGA Z55 PROJECT No 242/10G/906 DRILLER Saxon Drilling HEIGHT DATUM A.H.D. DATE COMPLETED 22/11/2015 JOB No BEARING USCS WEATHERING ADDITIONAL DATA AND TEST RESULTS INTACT STRENGTH DEFECT SPACING SAMPLES TESTS Ξ LITHOLOGY SAMPLE RΙ DEPTH MATERIAL DESCRIPTION CORE REC % ᇁᆂᆂᄫᅴᅿᆿᆸᇝᇰᄓᄫᇂᇂᇕ SAND (Fill) Brown, moist, very loose to loose. Sand is fine to medium grained; trace gravel <10mm; trace silt. (SP) 2, 1, 2 3.0m: Becoming very loose. SPT -0.11 SAND (Alluvium) Brown, wet, very loose to loose. Sand is fine to coarse grained; trace 2, 2, 2 silt; trace gravel <30mm, angular. SPT (SP) 5.0m: Becoming medium dense; gravel content increasing. N=10 SPT -2.61 Silty SAND (Alluvium) SPT D Pale grey, moist, loose. Sand is fine grained; trace Clay. 7.0m: Becoming medium dense. N=11 SPT 7.9m: Increase in clay content; fine (SM) to coarse sand. SPT G SPT Continued on next sheet REMARKS: Kgwu = Wundaru Granodiorite **LOGGED BY REVIEWED BY** C. Boyes S.Foley TMR GEOTECHNICAL BOREHOLE LOG - CREATED WITH HOLEBASE SI

Queensland Government

GEOTECHNICAL BOREHOLE LOG

FINAL 18/03/2016

BH246 BOREHOLE No

Sheet 2 of 3

FOR GEOTECHNICAL TERMS AND SYMBOLS REFER FORM F:GEOT 017/8-2014 H12255 REFERENCE No Mackay Ring Road PROJECT Pioneer River Bridge, Pier 15 (LHS) COORDINATES 721342.6 E; 7660525.6 N LOCATION FG6184 SURFACE RL 3.39m PLUNGE 90° DATE STARTED 20/11/2015 GRID DATUM GDA 94 / MGA Z55 PROJECT No 242/10G/906 DRILLER Saxon Drilling HEIGHT DATUM A.H.D. DATE COMPLETED 22/11/2015 JOB No BEARING ADDITIONAL DATA AND TEST RESULTS USCS WEATHERING INTACT DEFECT SPACING SAMPLES TESTS Ê LITHOLOGY STRENGTH RΙ DEPTH SAMPI MATERIAL DESCRIPTION CORE REC % ᅾᆃᆠᆠᄝᅩᆛᅿᆑᆝᆔᇰᄓᄝᇰᆘ Clayey GRAVEL (Residual) Mottled orange brown with pale grey, moist, dense. Clay is low to (GC) medium plasticity; trace sand; gravel is angular to subangular. -7.61 30/110mm MICRODIORITE (Kgwu) XW: Recovered as Clayey Sandy GRAVEL. Pale green grey, moist, dense to very dense. Sand is fine to coarse grained; gravel is fine to medium, angular. 30/60mm ht Rare GRANODIORITE bands throughout. 10, 22, 30/40mm K SPT 30/110mm XW 15 28, 19, 30/50mm SPT Μ 16 30/120mn Ν 18 -14.71 (28)MICRODIORITE (Kgwu) D (18.28m) MW: Green grey, fine to medium MW ⇒ 18.42m-18.45m: HW Cly Zone grained, massive, high strength. - Js; 5°-25° (10/m) PI/Sm-Ro, TI-OP, 18.72m-19.03m: HFZ, Cly in part Is(50)=0.80 MPa HW -15.61 Cn, some Cly Vr Js; 25°-40° (4/m) PI/Sm-Ro, OP, Cn __ 19.19m-19.26m: HW Zone ome Cly Vr Is(50)=1.00 MPa A (19.30m) GRANODIORITE (Kgwu) UCS=18.80 MPa (19.53m) MW: Pale pink grey, medium to 19.72m-20.02m: BZ coarse grained, massive, generally Continued on next sheet REMARKS: Kgwu = Wundaru Granodiorite **LOGGED BY REVIEWED BY** C. Boyes S.Foley TMR GEOTECHNICAL BOREHOLE LOG - CREATED WITH HOLEBASE SI

Queensland Government

GEOTECHNICAL BOREHOLE LOG

FOR GEOTECHNICAL TERMS AND SYMBOLS REFER FORM F:GEOT 017/8-2014 FINAL 18/03/2016

BH246

Sheet 3 of 3

BOREHOLE No

H12255

REFERENCE No Mackay Ring Road PROJECT Pioneer River Bridge, Pier 15 (LHS) COORDINATES 721342.6 E; 7660525.6 N LOCATION FG6184 SURFACE RL 3.39m PLUNGE 90° DATE STARTED 20/11/2015 GRID DATUM GDA 94 / MGA Z55 PROJECT No 242/10G/906 DRILLER Saxon Drilling HEIGHT DATUM A.H.D. DATE COMPLETED 22/11/2015 JOB No BEARING USCS WEATHERING ADDITIONAL DATA INTACT DEFECT SPACING SAMPLES TESTS Ê LITHOLOGY AND TEST RESULTS STRENGTH RΙ DEPTH MATERIAL DESCRIPTION CORE REC % ᅾᆂᆂᆂᄀᅿᆿᇛᇬᇬᇎᇂᇂᇕ (78) medium to high strength. GRANODIORITE (Kgwu) SW М MW: Cont'd. - Js: 5°-15° (<3/m) PI/ Is(50)=0.61 MPa D (20.45m) Sm-Ro, TI, Fe St С Is(50)=0.18 MPa A (20.70m) - Js: 20°-40° (<3/m) PI/Sm-Ro, TI, Fe (21.00m) MW Is(50)=0.66 MPa UCS=4.20 MPa - Js: 60°-85° (<2/m) PI/Sm, TI, Fe St D (21.15m) 21.25m-21.28m: CA VN, 60°, Un, (21.24m) _ E=2.59 GPa -18.28 GRANODIORITE (Kgwu) SW: Pale pink grey, medium to Is(50)=2.00 MPa A (22.00m) coarse grained, massive, high strength. SW Js: 5°-15° (2/m) PI/Sm, TI, Fe St Js: 20°-35° (3/m) PI/Sm-Ro, TI, Fe 100 -19.61 23.00m: Contact 40°, PI/Sm, Fe St MICRODIORITE (Kgwu) 23.00m-23.10m: HFZ MW SW: Grey, fine grained, massive, high to very high strength. - Js: SW Is(50)=1.20 MPa I (23.50m) -20.29 20°-50° (8/m) Pl/Sm, Tl, Fe St. - Js: 23.68m-23.83m: HW HW (84) 60°-80° (2/m) Pl/Sm, TI, Fe St. MW 23.93m: CA VN GRANODIORITE (Kgwu) Is(50)=0.43 MPa D (24.00m) SW Is(50)=0.40 MPa MW: Pale grey pink, medium to A (24.13m)coarse grained, porphyritic, generally medium to high strength. - Js: 5°-20° (7/m) Pl-Un/Ro, Tl-OP, Fe 25 - Js: 20°-50° (2/m) Pl-Un/Ro, Tl-OP, Fe St Is(50)=1.00 MPa A (25.30m)-С 25.55m - 26.47m: Altered Is(50)=1.90 MPa D (25.66m)-Granodiorite, pale green grey, calcite veins throughout. UCS=25.00 MPa (25.92m) (64) 26 MW 26.55m: J,55°,PI/Sm,TI,Fe St Is(50)=0.39 MPa A (26.68m)-D (27.00m) 27 Is(50)=0.80 MPa 27.60m-28.12m: HFZ Is(50)=0.61 MPa A (28.20m) -24.96100 Is(50)=0.61 MPa D (28.30m) Borehole completed at 28.35m REMARKS: Kgwu = Wundaru Granodiorite **LOGGED BY REVIEWED BY** C. Boyes S.Foley

TMR GEOTECHNICAL BOREHOLE LOG - CREATED WITH HOLEBASE SI

CORE PHOTO LOG

DEPARTMENT OF TRANSPORT AND MAIN ROADS Geotechnical Section 35 Butterfield Street, Herston Qld 4006 Phone 07 3066 3336



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Project Name	Mackay – Ring	Road (Stag	e 2)	Date		22/11/15	
Project No.	FG6184					H12255	
Borehole No. Location	BH 246			TMR H No.			
	Pioneer River Bridge			Start Depth (m)		18.10	
Detail	Pier 15, LHS			Finish Depth (m)		28.35	
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CORE PHOTO LOG

DEPARTMENT OF TRANSPORT AND MAIN ROADS Geotechnical Section 35 Butterfield Street, Herston Qld 4006 Phone 07 3066 3336



Project Name	Mackay – Ring Road (Stage 2)		
Project No.	FG6184	Date	22/11/15
Borehole No.	BH 246	TMR H No.	H12255
Location	Pioneer River Bridge	Start Depth (m)	18.10
Detail	Pier 15, LHS	Finish Depth (m)	28.35
Chainage		Submitted By	M.Ensor
Remarks			

