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# GEOTECHNICAL BOREHOLE LOG

FOR GEOTECHNICAL TERMS AND SYMBOLS REFER FORM F:GEOT 017/8-2014 FINAL 02/11/2017

BH09

Sheet 1 of 3

BOREHOLE No

REFERENCE No

H12907

LOCATION   Pier 4, LHS   COORDINATES   323443.6 E; 7159871.2 N     PROJECT No   FG6482   SURFACE RL 114.31m   PLUNGE 90°   DATE STARTED 07/07/2017   GRID DATUM MGA Z56     JOB No   249/435/375550   HEIGHT DATUM AHD   BEARING °   DATE COMPLETED 08/07/2017   DRILLER NorthCoast Drillir     Image: Correct of the transmission of transmissing transmission of transmission of transmiss	
JOB No 249/435/37550 HEIGHT DATUM AHD BEARING ° DATE COMPLETED 08/07/2017 DRILLER NorthCoast Drillir   Image: Complete to the strength of the strengt	
Image: Construction Image: Construct	
Image: Set in the set of th	ng
Pale brown grey, moist, very loose.	TESTS
A A I II2.31 IIC II III III III IIII IIII IIIII IIIIII	- - - - - - - - - - - - - - - - - - -
B Dark grey to grey, moist, medium dense. Medium to coarse grained sand. Fine to medium grained gravel.	
Fine to medium grained gravel.	
IO8.31   E   SP     IO8.31   F   Gravelly SAND (Alluvium)   SP     Dark grey to grey, moist, loose to medium dense.   Medium to coarse grained sand.   SP     Medium to coarse grained gravel.   6.80m: Cobbles <200mm	
- 7 - 7 - 7 - 7 - 7 - 7 - 7 - 7	
SANDSTONE (Je1) XW: Recovered as Clayey SAND. Pale grey, moist, very dense. Medium to coarse grained sand. Trace Fine grained gravel, sub angular. SW SP SP	
- 104.31   Continued on next sheet	
REMARKS:   Je1 - Evergreen Formation. Hole offset due to flowing river channel.   LOGGED BY   REVIEWED	) BY
S. Louei S. Foley	,

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# **GEOTECHNICAL**

FINAL 02/11/2017

BH09

Sheet 2 of 3

COORDINATES 323443.6 E; 7159871.2 N

GRID DATUM MGA Z56

DRILLER NorthCoast Drilling

30/90mm hb

SAMPLES TESTS

SPT

BOREHOLE No

REFERENCE No

ADDITIONAL DATA AND TEST RESULTS

H12907

		ernment		FOR	REHOLE LOG GEOTECHNICAL TERMS AND REFER FORM F:GEOT 017/8-2014	
PROJECT	Boyne River Brid	dge Repalcement				
-	Pier 4, LHS					CC
- PROJECT No	FG6482	SURFACE RL 114.31m	PLUM	NGE 9	0° DATE STAF	RTED 07/07/2017
JOB No	249/435/37555	0 HEIGHT DATUM AHD	BEAR	ING	DATE COMPLE	TED 08/07/2017
DEPTH (m) (m) (m) (m) (m) (m) (m) (m) (m) (m)	COSH of Cosh o	MATERIAL DESCRIPTION	ГІТНОГОСУ	USCS WEATHERING		A
₹ 5	J	SANDSTONE (Je1) XW: Cont'd.	· · · · · · ·	xw		
-	(0)	SANDSTONE (Je1) XW: Pale grey and brown, fine	· · · · · · ·	нw	VL-L VC	11.10m-11.38m: HW
- 12 - 12 		grained, thinly bedded, mainly extremely low to very low strengt - BP: 20° to 30° (1-2/m); Pl-Un/Rc Tl; some Fe St; some Cly Vr	); : : : : : :	xw		
- 14	<u>    100                               </u>	SANDSTONE (Je1) HW: Pale brown and pale grey, fir grained, thinly bedded, mainly ve low to low strength. - BP: 15° to 30° (3-4/m); PI-Un/Ro TI-OP; Fe St; Cly Vr - Js: 50° to 70° (1-2/m); PI/Ro; TI-1	ne	HW XW HW XW		13.30m-13.48m: XW, r Clayey SAND 13.48m-13.55m: BZ 13.86m-13.90m: BZ, D 14.04m-14.10m: XW, F Clayey SAND
		Cly Vr Js: 70° to 90° (<1/m); Un/Ro; TI; Cly Vr <u>14.60m: Becoming</u> pale grey.	::			□ 15.05m-15.10m: BZ, D □ 15.25m-15.29m: BZ 15.33m-15.34m: BZ 15.46m-15.60m: HFZ
- 16	100		· · · · · · ·	нw	LM C	

- 11	103.21				к		::					20/60mm	
ł	100.21			(0)		SANDSTONE (Je1)	· ·	нw	VL-L VC	11.10m-11.38m: HW		hb	D (11.20m)
						XW: Pale grey and brown, fine	•••						A (11.21m)
-						grained, thinly bedded, mainly			EE				_
						extremely low to very low strength.	::		VL-L			Is(50)=0.02 MPa Is(50)=0.11 MPa	D (11.80m)
- 12						- BP: 20° to 30° (1-2/m); Pl-Un/Ro;	::		VC			Is(50)=0.12 MPa	A (11.84m)
			-	100 (0)		TI; some Fe St; some Cly Vr	::	xw	EC			Is(50)=0.30 MPa	-
				(0)			•••						_
-							· ·		VL				_
							::					Is(50)=0.09 MPa	D (12.80m)
- 13	101.19						•••		E			Is(50)=0.07 MPa	A (12.84m)
						SANDSTONE (Je1)	•••	нw	vc			Is(50)=0.07 MPa	 D (13.22m)
						HW: Pale brown and pale grey, fine	•••	XW	EELC	13.30m-13.48m: XW, r Clayey SAND	ecovered as	Is(50)=0.05 MPa	A (13.24m)-
-						grained, thinly bedded, mainly very	· ·			13.48m-13.55m: BZ			-
				100		low to low strength.	::	HW		13.86m-13.90m: BZ, D		Is(50)=0.05 MPa Is(50)=0.04 MPa	D (13.76m)
- 14				(0)		- BP: 15° to 30° (3-4/m); Pl-Un/Ro;	::	xw	vc			13(30)-0.04 10178	A (13.77m <u>)</u>
						TI-OP; Fe St; Cly Vr - Js: 50° to 70° (1-2/m); Pl/Ro; TI-CD;	::		VL	Clayey SAND			=
						Cly Vr	::						Ξ
-						Js: 70° to 90° (<1/m); Un/Ro; TI;			vc				-
						Cly Vr	::		VL				3
- 15				100		'	•••		E	15.05m-15.10m: BZ, D	I		_
				(10)		14.60m: Becoming pale grey.	::			15.25m-15.29m: BZ			3
							::		L	15.33m-15.34m: BZ			Ξ
-							::			15.46m-15.60m: HFZ			Ξ
							::	HW				Is(50)=0.02 MPa Is(50)=0.05 MPa	D (15.76m)_
- 16				100			::		VC VC	16.05m-16.12m: BZ, D		15(50) 0.05 111 0	A (15.77m)
				(45)			::		VL VC				_
_						16.30m: Becoming pale brown	::						_
						mottled pale grey.	•••		L C			Is(50)=0.05 MPa	D (16.60m)
							•••		LM C			Is(50)=0.08 MPa	A (16.62m)_
- 17							•••		L VC				
									LMC				-
_							::	XW	EC	17.33m-17.39m: XW, F Sandy CLAY	Recovered as		-
							::		мнс			Is(50)=1.30 MPa	D (17.60m)
							::					Is(50)=0.26 MPa	A (17.62m)
- 18							::		LM C				
			-	100 (68)		18.25m: Becoming pale grey.	::		м			Is(50)=0.41 MPa	D (18.20m)
				(00)		10.2011. Decoming pare grey.	::	нw				Is(50)=0.08 MPa	A (18.21m)
							•••		M			Is(50)=0.40 MPa	D (18.65m)
							::					Is(50)=0.49 MPa	A (18.67m)
- 19							•••		LM				
							•••		M				-
-							•••	MW	LM				-
									M			Is(50)=0.17 MPa Is(50)=0.19 MPa	D (19.60m)
	94.31						::	HW	LM			,	A (19.64m)
						Continued on next sheet							
RF	MARK	<u>(ς</u> .	le	۵1 - F۱	ver	green Formation. Hole offset du	lie	to fl	owing river channel			DEV/IE	
				'	8		40	10 11		-	LOGGED BY		WED BY
	S. Louei S. Foley										Foley		
						TMR GE	OTEC	HNICAL B	OREHOLE LOG - CREATED WITH HOLEBASE SI				

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<b>Queensland</b> Government								SYI	BC	COTECHN PREHOLI GEOTECHNICAL TI REFER FORM F:GI	E LOG		BOREHOLE No	
PROJE	СТ		Bo	yne	River	Bri	dge Repalcement							
LOCAT	ION	_	Pie	er 4,	, LHS								CO(	ORDINATES 3234
PROJE	CT No	_	FG	64	82		SURFACE RL	114.31m	PLU		00°	DATE STA	RTED 07/07/2017	GRID DAT
JOB N	D	_	249	9/4	35/37	555	O HEIGHT DATUM	AHD	BEAI	RING_		DATE COMPL	ETED 08/07/2017	DRIL
DEPTH (m)	R.L. (m)	AUGER	WASH BORING		RQD ()% CORE REC%	SAMPLE	MATERIAL DESC	RIPTION	ГІТНОГОGY	USCS WEATHERING	INTACT STRENGTH 표,독,파,파,파,쿄	DEFECT SPACING		DITIONAL DATA AND EST RESULTS
- - - - - - - - - - - - - - - - -	93.11				<u>100</u> (42)		SANDSTONE (Je1) HW: Cont'd. 20.30m: Becoming pa mottled pale grey. SANDSTONE (Je1) MW: Pale grey mottle parts, fine grained, th medium bedded, mai	d brown in inly to		нw			⇒ 20.77m-20.79m: XW, Cl 21.15m-21.21m: BZ, DI 21.21m-21.30m: BZ	ayey SAND

FINAL 02/11/2017

BH09 LE No

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H12907

23443.6 E; 7159871.2 N id datum MGA Z56 DRILLER NorthCoast Drilling ATA SAMPLES TESTS ГS Is(50)=0.19 MPa Is(50)=0.38 MPa D (21.30m) A (21.31m) medium strength. 22 BP: 10° to 20° (2-3/m); PI/Sm; TI; 22.29m-22.41m: HW HW some Fe St; Cly Vr LM - Js: 40° to 60° (1-2/m); Pl/Ro-Sm; TI; some Fe St; Cly Vr MW Is(50)=0.14 MPa Is(50)=0.02 MPa D (22.90m) 23 \_\_\_\_\_23.02m-23.10m: BZ, HW A (22.92m)\_ 23.29m-23.40m: BZ, HW 100 (18) нw 23.52m-23.54m: BZ, HW D (23.90m)-Is(50)=0.12 MPa 24 Is(50)=0.09 MPa A (23.93m)\_ 25 Is(50)=0.05 MPa Is(50)=0.06 MPa D (25.10m) A (25.19m)-L 100 (71) 26 MW Is(50)=0.34 MPa Is(50)=0.22 MPa LM D (26.35m) М A (26.38m) LM 27 Is(50)=0.25 MPa Is(50)=0.16 MPa D (27.32m) LM A (27.34m)с м 28 vc Is(50)=0.16 MPa Is(50)=0.22 MPa D (28.55m)\_ A (28.57m) :: #₩ \_\_\_ 28.76m-28.83m: BZ, HW 85.41 100 Borehole completed at 28.90m 29 REMARKS: Je1 - Evergreen Formation. Hole offset due to flowing river channel. LOGGED BY **REVIEWED BY** S. Louei S. Foley TMR GEOTECHNICAL BOREHOLE LOG - CREATED WITH HOLEBASE SI

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### **CORE PHOTO LOG** DEPARTMENT OF TRANSPORT AND MAIN ROADS GEOTECHNICAL SECTION



Project Name	Boyne River Bridge Replacement		
Project No.	FG6482	Date	08/07/2017
Borehole No.	BH09	Reference No.	H12907
Location	Pier 4, LHS	Start Depth (m)	11.10
Submitted By	S. Louei	Finish Depth (m)	28.90
Remarks			
0 100		500 600	700
	SCALE (mm)		

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### **CORE PHOTO LOG** DEPARTMENT OF TRANSPORT AND MAIN ROADS GEOTECHNICAL SECTION



Project Name	Boyne River Bridge Replac	ement	
Project No.	FG6482	Date	08/07/2017
Borehole No.	BH09	Reference No.	H12907
Location	Pier 4, LHS	Start Depth (m)	) 11.10
Submitted By	S. Louei	Finish Depth (n	n) 28.90
Remarks		÷	
	PK 4 G	EOF	н @ 28.90 m ВН09
0 100	200 300	400 500 60	0 700
	SCA	LE (mm)	

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