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GEOTECHNICAL BOREHOLE LOG

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

BH14

Sheet 1 of 3

BOREHOLE No

REFERENCE No

H12971

PROJE	ст	E	Boyr	ne Rive	r Bri	dge Repalcement								
LOCAT	ION	F	Pier	6, RHS							C	OORDINATES 323413.3	E; 715984	17.7 N
PROJE	CT No		FG6	482		SURFACE RL 115.58m	PLU	NGE S	IGE 90° DATE STARTED 31/08/2017		RTED 31/08/2017	GRID DATUM MGA Z56		
JOB No)	2	249,	/435/37	7555	0 HEIGHT DATUM AHD	BEAF	RING_	ING DATE COMPLETED 01/09/201			7		t Drilling
DEPTH (m)	R.L. (m)	NUGER	VASH BORING CORE DRILLING	RQD ()% CORE REC%	SAMPLE	MATERIAL DESCRIPTION	ПТНОГОGY	USCS WEATHERING	INTACT STRENGTH 표구구구주구구권	DEFECT SPACING DUC, D, Z, A, A, M	,	ADDITIONAL DATA AND TEST RESULTS		SAMPLES TESTS
- 1 - 1 					AB	Gravelly SAND (Alluvium) Orange brown and grey, coarse grained, dry, very loose. Fine to medium grained gravel, sub rounded. Trace fine to medium grained sand and coarse grained gravel. 2.20m - 2.80m: With cobbles/ boulders to 2.80m.		(SP)						DIST
- 3 - 3 	<u>112.78</u>				С	Sandy GRAVEL (Alluvium) Grey orange brown and pale grey, moist, fine to coarse grained, very loose to loose. Medium to coarse grained sand. Trace silt. At 3.50m: Becoming medium dense.		(GW)					3, 2, 2 N=4 7, 7, 5	SPT
- - - - - - - - - - - - - - - - - - -	<u>110.78</u>				E	Gravelly SAND (Alluvium) Grey brown, moist, fine to coarse grained, loose. Fine grained gravel, sub rounded. Trace silt.							N=12 5, 3, 3 N=6	SPT
- - - - - - - - - - - - - - - - - - -					F	6.0m: Becoming medium dense.		(SW)					8, 17, 21 N=38	SPT
- 7 - 7 					G								6, 6, 5 N=11	SPT
- 8 	106.88				н	Silty CLAY (Alluvium)							6, 7, 7 N=14	SPT
-	<u>106.24</u> 105.88				1	Brown, moist, very stiff. Low plasticity. Fine grained sand. Silty CLAY with Sand (Alluvium) Red grey, moist, stiff. Medium		(CL) (CI)					7, 8, 9 N=17	SPT
	105.58					plasticity. Fine grained sand.	::	НW		_				
RF	MAR	KS	:	le1 - F	ver	continued on next sheet green Formation.						LOGGED BY		WED BY
							M. Hayes		Foley					
						TMR GI	EOTECH	-INICAL B	OREHOLE LOG - CREATED \	VITH HOLEBASE SI		ivi. nayes	J.	, orcy

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A. T.	受引				GE	OTECHN	ICAL		BOREHOLE No	E	3H14
Queensland					BOREHOLE LOG				She	et 2 of 3	
No.	Gove	ernment		SY		GEOTECHNICAL TE REFER FORM F:GE			REFERENCE No	н	12971
PROJECT	Bovne River Brid	lge Repalcement						[
LOCATION	Pier 6, RHS								COORDINATES 323413	.3 E; 71598	47.7 N
PROJECT No	FG6482	SURFACE RL 115.5	8m	PLL	JNGE 9	0°	DATE STA	 RTED 31/08/201	7 GRID DATUN	1 MGA Z56	
JOB No	249/435/375550			BEA	RING °			ETED 01/09/201		NorthCoa	st Drilling
	RQD				-				ADDITIONAL DATA		
(m) R.L. (m)	AUGER COASING CONE DRILLING CORE ORICING CORE SAMPLE COSING CORE SAMPLE	MATERIAL DESCRIPTIC	DN	ГІТНОГОGY	USCS WEATHERING				ADDITIONAL DATA AND TEST RESULTS		SAMPLES TESTS
-		SANDSTONE (Je1)			HW	╙┝╷┍╷┹╷┹ ┙	<u></u>				-
	(25)	HW: Light grey, fine grained SANDSTONE (Je1) MW: Light grey, medium to	o coarse	· · · · · · · · · · · · · · · · · · ·	MW	H	c	— 10.50m-10.53m: Bi			
- 11		grained, medium bedded, i strength. Bedding dips at 3		::	нw нw			11.05m-11.25m: H	ighly weathered.		
		-Js: 30°-45° (2/m), Pl/Ro, TI -Js: 5° (2/m), Pl/Ro, TI, Fe S		· · · · ·			M	extremely low stre strength 11.25m-11.50m: Se		Is(50)=0.40 MPa	 D (11.40m)
				· · · · · · · · ·				brown mottling to bedding 60° to 70° medium grained co clasts.	11.50m, weak . Some fine to	Is(50)=0.42 MPa	A (11.46m)_
- 12 - -				· · · · ·	MW	м	м			Is(50)=0.20 MPa Is(50)=0.46 MPa	A (12.11m) D (12.15m)-
- - -				· · · · · · · ·		E	M	12.50m-12.90m: Bi some fine grained s interbeds.	sandstone	Is(50)=0.39 MPa Is(50)=0.47 MPa	D (12.65m)_ A (12.80m)_
13	100 (61)			••• ••• •••	HW		3-	13.05m-13.70m: J, 1mm-20mm Cly int			
-				••• ••• •••			vc			Is(50)=0.78 MPa Is(50)=0.13 MPa	D (13.35m)
-				· · · · · ·	мw	M VL				IS(50)=0.13 MPa	A (13.60m)_
14 				· · · · · ·			м				-
-				::		м					-
- 15							с			Is(50)=0.33 MPa Is(50)=0.56 MPa	A (14.86m) D (14.95m)
				· · · · ·	SW	M	vc				D (14.9511)_ - -
-	100 (25)			· · · · ·		L	м	15.40m-15.50m: H Sm		Is(50)=0.16 MPa	 D (15.60m)
- 16				· · · · · · ·	нw		vc	15.75m-15.85m: R gravel zone.	esidual clayey	Is(50)=0.12 MPa	A (15.65m)_
99.28		CONGLOMERATE (Je1)		::	xw	VL		16.15m-16.25m: R gravel zone.		Is(50)=0.47 MPa	– – – A (16.37m)–
-		SW: Light grey and yellow b medium bedded at 45°, hig	orown,				м			Is(50)=0.33 MPa UCS=5.68 MPa	D (16.46m) (16.65m) -
17		strength. Medium to coars	e gravel	Ď	sw xw sw	м					
		sized clasts within sand ma -Js: 30°-45° (2-3/m), Pl/Ro,	TI, Cn or		xw		vc	17.20m: J 30° PI/Ro			-
	(68)	FeSt			sw		м	17.35m-17.40m: X clay seam		Is(50)=2.70 MPa Is(50)=3.00 MPa	A (17.60m) D (17.68m)–
97.58		SANDSTONE (Je1)		\tilde{c}	-					UCS=42.80 MPa	(17.84m)
		SW: Pale grey, coarse grain medium bedded at 30°-45°		· · · · · ·		н	M C			Is(50)=6.80 MPa Is(50)=3.80 MPa	D (18.18m)- A (18.22m)_
		medium to high strength.	,	••• ••• •••	SW					Is(50)=0.94 MPa	 A (18.80m)
- - 19 -				· · · · ·			м			Is(50)=0.68 MPa	D (18.92m)
				· · · · ·	MW	MH				ls(50)=1.30 MPa ls(50)=0.11 MPa	 D (19.40m) A (19.49m)
- 95.58				· · ·	SW	м	M				- (19.49111)
		Continued on next shee	et		J			1	1		I
REMAR	RKS: Je1 - Everg	green Formation.							LOGGED BY		EWED BY
			TEAD	FOTEC	HNICAL	PREHOLE LOG - CREATED V	ITH HOI FRACE CI		M. Hayes	S.	Foley
L			IIVIK GI	LUIEL	AL BU	MENOLE LOG - CREATED V					

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27	を発		GEOTECHN	ICAL	BOREHOLE	No E	BH14
	🔊 Queensland		BOREHOLE	LOG		Sheet 3 of 3	
18 g	Government		FOR GEOTECHNICAL TER		REFERENCE		12971
		SYN	MBOLS REFER FORM F:GEC	01 017/8-2014			
PROJECT	Boyne River Bridge Repalcement						
LOCATION	Pier 6, RHS					3413.3 E; 71598	47.7 N
PROJECT No			inge 90°	DATE STARTED		DATUM MGA Z56	
JOB No	249/435/375550 HEIGHT DATU	JM AHD BEAR	RING	DATE COMPLETED	01/09/2017	DRILLER NorthCoas	st Drilling
(m) R.L. (m)		ESCRIPTION 69010		DEFECT SPACING	ADDITIONAL DAT/ AND TEST RESULTS	Ą	SAMPLES TESTS
DE	DELEVENCE CORE DELEVENCE CORE	5		200 ∭>0∑≥≥≥∭			Ś
22 23 93.08 92.02 24 92.02 24 25 26 26 27 28	SANDSTONE (Je1) SW: Cont'd. -Js: 45° (2-3/m) Pl/ (84) -Js: 20° (2-3/m) Pl/ At 10.75m: 150mn grained sandstone SANDSTONE (Je1) MW: Yellow brown fine grained, medi medium to high st dips at 30°-45°.	Sm i fine to medium interbed. and pale grey, um bedded, rength. Bedding n), PI/Sm, FeSt), PI/Sm healed micro	SW VLL MW VLL HW L FR MM SW MM SW MM HW MM <td>M 20. bec c M 21. infi</td> <td>).60m-20.80m: Sandy clay zone, rdding at 45° 58m: J 60° PI/Ro, 50mm clay fill</td> <td>Is(50)=0.38 MPa Is(50)=0.69 MPa Is(50)=1.20 MPa Is(50)=1.20 MPa Is(50)=0.34 MPa Is(50)=0.50 MPa</td> <td>A (20.11m) D (20.17m) D (20.17m) A (21.23m) A (21.23m) D (22.58m) D (22.58m) D (22.92m) D (22.95m) D (22.95m) </td>	M 20. bec c M 21. infi).60m-20.80m: Sandy clay zone, rdding at 45° 58m: J 60° PI/Ro, 50mm clay fill	Is(50)=0.38 MPa Is(50)=0.69 MPa Is(50)=1.20 MPa Is(50)=1.20 MPa Is(50)=0.34 MPa Is(50)=0.50 MPa	A (20.11m) D (20.17m) D (20.17m) A (21.23m) A (21.23m) D (22.58m) D (22.58m) D (22.92m) D (22.95m) D (22.95m)
DEVIND	KS: Je1 - Evergreen Formation						
NEIVIAK	NO. JET - EVELBIEGH FOLHIGHON				LOGGED		WED BY
		TMR GEOTECH	HNICAL BOREHOLE LOG - CREATED WI	ITH HOLEBASE SI	M. Hay	es S.	Foley

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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		31/08/2017				
Borehole No.	BH14		Reference	e No.	H12971				
Location	Pier 6, RHS		Start Dep	th (m)	10.30				
Submitted By	M. de Gee		Finish De	pth (m)	23.57				
Remarks									
01 SIGNOR	51-8-2017 0-30-13-00 Box 1	Runi	the states of the states	1 the					
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	Run	n4							
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Charles his	1 de	a June 1	half 1	Maria	TR.				
0 100	200 3	00 400	500	600	700				
	SCALE (mm)								

Page 1 of 2

CORE PHOTO LOG DEPARTMENT OF TRANSPORT AND MAIN ROADS GEOTECHNICAL SECTION



Project Name	Boyne River Bridge	Replacement							
Project No.	FG6482		Date	31/08/2017					
Borehole No.	BH14		Reference No.	H12971					
Location	Pier 6, RHS		Start Depth (m)						
Submitted By	M. de Gee		Finish Depth (m						
Remarks			· · · · · · · · · · · · · · · · · · ·	,,					
ρ 100									
	SCALE (mm)								

Page 2 of 2