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**Queensland  
Government**

**GEOTECHNICAL  
BOREHOLE LOG**

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

BOREHOLE No **BH14**  
Sheet 1 of 3  
REFERENCE No **H12971**

PROJECT Boyne River Bridge Repalcement  
LOCATION Pier 6, RHS COORDINATES 323413.3 E; 7159847.7 N  
PROJECT No FG6482 SURFACE RL 115.58m PLUNGE 90° DATE STARTED 31/08/2017 GRID DATUM MGA Z56  
JOB No 249/435/375550 HEIGHT DATUM AHD BEARING ° DATE COMPLETED 01/09/2017 DRILLER NorthCoast Drilling

DEPTH (m)	R.L. (m)	AUGER CASING WASHBORING CORE DRILLING	RQD (%) CORE REC %	SAMPLE	MATERIAL DESCRIPTION	LITHOLOGY	USCS WEATHERING	INTACT STRENGTH	DEFECT SPACING	ADDITIONAL DATA AND TEST RESULTS	SAMPLES TESTS		
												EH	VH
1				A	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.	(SP)						DIST	
2				B	2.20m - 2.80m: With cobbles/ boulders to 2.80m.							DIST	
3	112.78			C	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.	(GW)						3, 2, 2 N=4	
4				D	At 3.50m: Becoming medium dense.							7, 7, 5 N=12	
5	110.78			E	Gravelly SAND (Alluvium) Grey brown, moist, fine to coarse grained, loose. Fine grained gravel, sub rounded. Trace silt.							5, 3, 3 N=6	
6				F	6.0m: Becoming medium dense.							8, 17, 21 N=38	
7				G		(SW)						6, 6, 5 N=11	
8				H								6, 7, 7 N=14	
9	106.88			I	Silty CLAY (Alluvium) Brown, moist, very stiff. Low plasticity. Fine grained sand.	(CL)						7, 8, 9 N=17	
	106.24				Silty CLAY with Sand (Alluvium) Red grey, moist, stiff. Medium plasticity. Fine grained sand.	(CI)							
	105.88												
	105.58					HW							

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REMARKS: Je1 - Evergreen Formation.

<b>LOGGED BY</b>	<b>REVIEWED BY</b>
M. Hayes	S. Foley



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**GEOTECHNICAL  
BOREHOLE LOG**

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SYMBOLS REFER FORM F:GEOT 017/8-2014

BOREHOLE No **BH14**

Sheet 2 of 3

REFERENCE No **H12971**

PROJECT	Boyne River Bridge Repalcement		
LOCATION	Pier 6, RHS	COORDINATES 323413.3 E; 7159847.7 N	
PROJECT No	FG6482	SURFACE RL 115.58m	PLUNGE 90°
			DATE STARTED 31/08/2017
			GRID DATUM MGA Z56
JOB No	249/435/375550	HEIGHT DATUM AHD	BEARING °
			DATE COMPLETED 01/09/2017
			DRILLER NorthCoast Drilling

DEPTH (m)	R.L. (m)	FAUGER CASING WASHBORING CORE DRILLING	RQD (%)	CORE REC %	SAMPLE	MATERIAL DESCRIPTION	LITHOLOGY	USCS WEATHERING	INTACT STRENGTH	DEFECT SPACING	ADDITIONAL DATA AND TEST RESULTS	SAMPLES TESTS	
													EH
11.0					(25)	SANDSTONE (Je1) HW: Light grey, fine grained.	HW						
11.05					(77)	SANDSTONE (Je1) MW: Light grey, medium to coarse grained, medium bedded, medium strength. Bedding dips at 30°-50°. -Js: 30°-45° (2/m), Pl/Ro, Tl, Fe St -Js: 5° (2/m), Pl/Ro, Tl, Fe St	MW				10.50m-10.53m: BZ 10.70m-10.75m: BZ 11.05m-11.25m: Highly weathered, extremely low strength to very low strength 11.25m-11.50m: Some yellow brown mottling to 11.50m, weak bedding 60° to 70°. Some fine to medium grained conglomerate clasts.	Is(50)=0.40 MPa Is(50)=0.42 MPa	D (11.40m) A (11.46m)
12.0							MW				12.50m-12.90m: Bedding 70°-80°, some fine grained sandstone interbeds.	Is(50)=0.20 MPa Is(50)=0.46 MPa	A (12.11m) D (12.15m)
13.0					100 (61)		HW				13.05m-13.70m: J, Un/Sm, 1mm-20mm Ciy infill	Is(50)=0.39 MPa Is(50)=0.47 MPa	D (12.65m) A (12.80m)
14.0							MW					Is(50)=0.78 MPa Is(50)=0.13 MPa	D (13.35m) A (13.60m)
15.0					100 (25)		SW				15.40m-15.50m: HFZ, J 60°-80° Pl/Sm	Is(50)=0.33 MPa Is(50)=0.56 MPa	A (14.86m) D (14.95m)
16.0	99.28				100 (78)	CONGLOMERATE (Je1) SW: Light grey and yellow brown, medium bedded at 45°, high strength. Medium to coarse gravel sized clasts within sand matrix. -Js: 30°-45° (2-3/m), Pl/Ro, Tl, Cn or FeSt	XW				15.75m-15.85m: Residual clayey gravel zone. 16.15m-16.25m: Residual clayey gravel zone.	Is(50)=0.16 MPa Is(50)=0.12 MPa	D (15.60m) A (15.65m)
17.0							SW					Is(50)=0.47 MPa Is(50)=0.33 MPa UCS=5.68 MPa	A (16.37m) D (16.46m) (16.65m)
18.0	97.58				100 (68)	SANDSTONE (Je1) SW: Pale grey, coarse grained, medium bedded at 30°-45°, medium to high strength.	SW				17.20m: J 30° Pl/Ro, 10mm clayey gravel infill 17.35m-17.40m: XW clayey gravel / clay seam	Is(50)=2.70 MPa Is(50)=3.00 MPa UCS=42.80 MPa	A (17.60m) D (17.68m) (17.84m)
19.0							SW					Is(50)=6.80 MPa Is(50)=3.80 MPa	D (18.18m) A (18.22m)
							MW					Is(50)=0.94 MPa Is(50)=0.68 MPa	A (18.80m) D (18.92m)
							SW					Is(50)=1.30 MPa Is(50)=0.11 MPa	D (19.40m) A (19.49m)
	95.58						SW						

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REMARKS: Je1 - Evergreen Formation.

LOGGED BY	REVIEWED BY
M. Hayes	S. Foley



Queensland Government

# GEOTECHNICAL BOREHOLE LOG

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

BOREHOLE No **BH14**

Sheet 3 of 3

REFERENCE No **H12971**

PROJECT	Boyne River Bridge Repalcement				
LOCATION	Pier 6, RHS		COORDINATES 323413.3 E; 7159847.7 N		
PROJECT No	FG6482	SURFACE RL	115.58m	PLUNGE	90°
				DATE STARTED	31/08/2017
				GRID DATUM	MGA Z56
JOB No	249/435/375550	HEIGHT DATUM	AHD	BEARING	°
				DATE COMPLETED	01/09/2017
				DRILLER	NorthCoast Drilling

DEPTH (m)	R.L. (m)	AUGER CASING WASHBORING CONE DRILLING	RQD (%) CORE REC %	SAMPLE	MATERIAL DESCRIPTION	LITHOLOGY	USCS WEATHERING	INTACT STRENGTH	DEFECT SPACING	ADDITIONAL DATA AND TEST RESULTS	SAMPLES TESTS				
												EH		EC	
												VH	H	V	C
21	93.08		100 (84)		SANDSTONE (Je1) SW: Cont'd. -Js: 45° (2-3/m) Pl/Ro -Js: 20° (2-3/m) Pl/Sm At 10.75m: 150mm fine to medium grained sandstone interbed.	SW MW HW	M VL-L M	M C M	Is(50)=0.38 MPa Is(50)=0.69 MPa	A (20.11m) D (20.17m)					
22						FR XW SW	MH M	C M	20.60m-20.80m: Sandy clay zone, bedding at 45°  21.58m: J 60° Pl/Ro, 50mm clay infill	Is(50)=0.72 MPa Is(50)=1.20 MPa	D (21.14m) A (21.23m)				
23	92.02		100		SANDSTONE (Je1) MW: Yellow brown and pale grey, fine grained, medium bedded, medium to high strength. Bedding dips at 30°-45°. -BP: 30°-45° (1-2/m), Pl/Sm, FeSt -Js: 10°-30° (1-2/m), Pl/Sm Numerous tight or healed micro defects at 30°-65° Borehole completed at 23.57m	MW HW SW	MH M	C M	Is(50)=1.30 MPa Is(50)=0.34 MPa  Is(50)=0.15 MPa Is(50)=0.50 MPa	A (22.50m) D (22.58m)  A (22.92m) D (22.95m)					

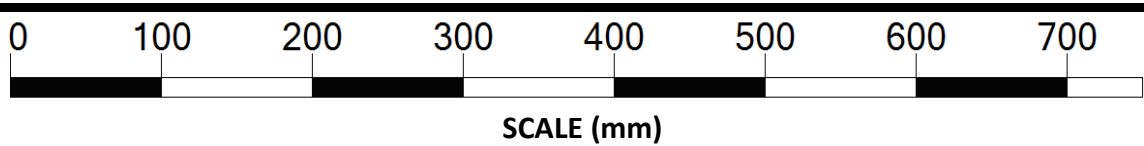
REMARKS: Je1 - Evergreen Formation.

<b>LOGGED BY</b>	<b>REVIEWED BY</b>
M. Hayes	S. Foley

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



Project Name	<b>Boyne River Bridge Replacement</b>		
Project No.	FG6482	Date	31/08/2017
Borehole No.	BH14	Reference No.	H12971
Location	Pier 6, RHS	Start Depth (m)	10.30
Submitted By	M. de Gee	Finish Depth (m)	23.57
Remarks			



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



Project Name	<b>Boyne River Bridge Replacement</b>		
Project No.	FG6482	Date	31/08/2017
Borehole No.	BH14	Reference No.	H12971
Location	Pier 6, RHS	Start Depth (m)	10.30
Submitted By	M. de Gee	Finish Depth (m)	23.57
Remarks			

