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**Queensland  
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**GEOTECHNICAL  
BOREHOLE LOG**

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

BOREHOLE No **BH222**

Sheet 1 of 3

REFERENCE No **H12159**

PROJECT Ipswich Motorway Upgrade - Rocklea to Darra  
 LOCATION Approach Embankment / Oxley Creek Overflow Bridge COORDINATES 498798.9 E; 6950982.3 N  
 PROJECT No FG6202 SURFACE RL 3.13m PLUNGE 90° DATE STARTED 22/04/2015 GRID DATUM MGA94 Z56  
 JOB No 201/416/003 HEIGHT DATUM AHD BEARING ° DATE COMPLETED 23/04/2015 DRILLER North Coast

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 VH H M J VI EI
0	1.53				Silty CLAY (Alluvium) Dark brown, moist, firm to stiff. High plasticity; some organic matter; trace sand.	CH						
1										LL=52% PI= 30% MC=26.6% LS= 15% p <sub>c</sub> =280kPa OCR=12.2 Oedometer Su(PP)=250 kPa	U100	
2					Becoming very stiff. Clayey SAND (Alluvium) Grey, wet, loose. Fine to medium grained sand.							
2.5				A						12/06/2015	1, 2, 4 N=6	SPT
4				B							1, 2, 2 N=4	SPT
5.5				C		(SC)					4, 4, 5 N=9	SPT
6.5				D	Becoming medium dense.						6, 6, 7 N=13	SPT
8.5				E	Becoming loose to medium dense.						6, 5, 5 N=10	SPT
9	-6.07				Gravelly SAND (Alluvium) Grey, moist, medium dense to very dense. Fine sand & angular gravel.	(SP)						
9.5	-6.87											

Continued on next sheet

REMARKS: Tod - Darra formation.  
A standpipe is installed in this borehole.

LOGGED BY	REVIEWED BY
MS	SF



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BOREHOLE No **BH222**

Sheet 2 of 3

REFERENCE No **H12159**

PROJECT Ipswich Motorway Upgrade - Rocklea to Darra  
 LOCATION Approach Embankment / Oxley Creek Overflow Bridge COORDINATES 498798.9 E; 6950982.3 N  
 PROJECT No FG6202 SURFACE RL 3.13m PLUNGE 90° DATE STARTED 22/04/2015 GRID DATUM MGA94 Z56  
 JOB No 201/416/003 HEIGHT DATUM AHD BEARING ° DATE COMPLETED 23/04/2015 DRILLER North Coast

DEPTH (m)	R.L. (m)	FAUGER CASING WASHBORING CONE DRILLING	RQD (%) CORE REC %	SAMPLE	MATERIAL DESCRIPTION	LITHOLOGY	USCS WEATHERING	INTACT STRENGTH	DEFECT SPACING	ADDITIONAL DATA AND TEST RESULTS	SAMPLES TESTS
10.5	-7.67			F	Gravelly SAND (Alluvium) (Contd')	(SP)				13/80mm hb	SPT
11.5				G	Silty CLAY (Residual) Grey, moist, very stiff. High plasticity.	(CH)				10, 12, 15 N=27	SPT
13.5				H						4, 6, 12 N=18	SPT
15.5	-11.87			I	Becoming hard.					8, 13, 10/70mm hb	SPT
15.5			(0)		SILTSTONE (Tod) XW: Recovered as: Grey brown, moist, hard Silty Clay. Trace Sand. High plasticity. Fine to medium grained sand.					UCS=0.20 MPa	(15.75m)
17.5			100 (0)			XW					
18.5			100 (0)		Becomes orange brown, Silty Clay with Sand.						
19.5			100 (0)		Becomes orange brown, Silty Clay with Sand.		HW			18.33m-18.55m: HW Sandstone. Extremely low to very low strength.	
19.5			100 (0)			XW				UCS=0.28 MPa	(18.90m)
16.87	-16.87										

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REMARKS: Tod - Darra formation.  
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REFERENCE No **H12159**

PROJECT Ipswich Motorway Upgrade - Rocklea to Darra

LOCATION Approach Embankment / Oxley Creek Overflow Bridge COORDINATES 498798.9 E; 6950982.3 N

PROJECT No FG6202 SURFACE RL 3.13m PLUNGE 90° DATE STARTED 22/04/2015 GRID DATUM MGA94 Z56

JOB No 201/416/003 HEIGHT DATUM AHD BEARING ° DATE COMPLETED 23/04/2015 DRILLER North Coast

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	H	M	L	VL	EL	EC	VC	C	M	W	VW	EW
21	-17.87		100		SILTSTONE (Tod) XW: Cont'd	XXXXXX	XW																		
Borehole completed at 21.00m																									
22																									
23																									
24																									
25																									
26																									
27																									
28																									
29																									

REMARKS: Tod - Darra formation. A standpipe is installed in this borehole.	<b>LOGGED BY</b>	<b>REVIEWED BY</b>
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# STANDPIPE INSTALLATION LOG

FOR GEOTECHNICAL TERMS AND  
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BOREHOLE No **BH222**

Sheet 1 of 3

PIEZOMETER No **BH222**

PROJECT	Ipswich Motorway Upgrade - Rocklea to Darra		
LOCATION	Approach Embankment / Oxley Creek Overflow Bridge		COORDINATES 498798.9 E; 6950982.3 N
PROJECT No	FG6202	SURFACE RL 3.13m	PLUNGE 90°
			DATE STARTED 22/04/2015
			GRID DATUM MGA94 Z56
JOB No	201/416/003	HEIGHT DATUM AHD	BEARING °
			DATE COMPLETED 23/04/2015
			DRILLER North Coast

DEPTH (m)	R.L. (m)	LITHOLOGY	MATERIAL DESCRIPTION	Standpipe Construction Details		
				Depth (m) /RL (AHD)	50mm PVC Class No. 18 Stick Up = 0.50m	Backfill Details
0			Silty CLAY (Alluvium) Dark brown, moist, firm to stiff. High plasticity; some organic matter; trace sand.			
1						
1.53			Becoming very stiff.			
2			Clayey SAND (Alluvium) Grey, wet, loose. Fine to medium grained sand.	2.00m / 1.13 AHD		
				12/06/2015		
3				3.00m / 0.13 AHD		Bentonite Seal
4				4.00m / -0.87 AHD		Top of Slotted Pipe
5						
6						
7			Becoming medium dense.			
8						
9			Becoming loose to medium dense.			
-6.07						
			Gravelly SAND (Alluvium) Grey, moist, medium dense to very dense. Fine sand & angular gravel.			
-6.87				10.00m / -6.87 AHD		

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REMARKS: Tod - Darra formation. A standpipe is installed in this borehole.	LOGGED BY	REVIEWED BY
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**STANDPIPE  
INSTALLATION LOG**

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BOREHOLE No **BH222**

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PIEZOMETER No **BH222**

PROJECT	Ipswich Motorway Upgrade - Rocklea to Darra		
LOCATION	Approach Embankment / Oxley Creek Overflow Bridge		COORDINATES 498798.9 E; 6950982.3 N
PROJECT No	FG6202	SURFACE RL 3.13m	PLUNGE 90°
			DATE STARTED 22/04/2015
			GRID DATUM MGA94 Z56
JOB No	201/416/003	HEIGHT DATUM AHD	BEARING °
			DATE COMPLETED 23/04/2015
			DRILLER North Coast

DEPTH (m)	R.L. (m)	LITHOLOGY	MATERIAL DESCRIPTION	Standpipe Construction Details		
				Depth (m) /RL (AHD)	50mm PVC Class No. 18 Stick Up = 0.50m	Backfill Details
			Gravelly SAND(Alluvium) (Contd')			
	-7.67					
11			Silty CLAY(Residual) Grey, moist, very stiff. High plasticity.			
12						
13						
14			Becoming hard.			
15	-11.87		SILTSTONE (Tod) Recovered as: Grey brown, moist, hard Silty Clay. Trace Sand. High plasticity. Fine to medium grained sand.			Filter: Washed / Graded Sand
16						
17						
18			Becomes orange brown, Silty Clay with Sand.			
			Becomes orange brown, Silty Clay with Sand.			
19						
	-16.87					

Continued on next sheet

REMARKS: Tod - Darra formation. A standpipe is installed in this borehole.	<b>LOGGED BY</b>	<b>REVIEWED BY</b>
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**STANDPIPE  
INSTALLATION LOG**

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PIEZOMETER No **BH222**

PROJECT Ipswich Motorway Upgrade - Rocklea to Darra

LOCATION Approach Embankment / Oxley Creek Overflow Bridge COORDINATES 498798.9 E; 6950982.3 N

PROJECT No FG6202 SURFACE RL 3.13m PLUNGE 90° DATE STARTED 22/04/2015 GRID DATUM MGA94 Z56

JOB No 201/416/003 HEIGHT DATUM AHD BEARING ° DATE COMPLETED 23/04/2015 DRILLER North Coast

DEPTH (m)	R.L. (m)	LITHOLOGY	MATERIAL DESCRIPTION	Standpipe Construction Details		
				Depth (m) /RL (AHD)	50mm PVC Class No. 18 Stick Up = 0.50m	Backfill Details
	-17.87	××× ××× ××× ××× ××× ××× ××× ××× ××× ××× ×××	SILTSTONE (Tod) Cont'd			
Borehole completed at 21.00m				21.00m / -17.87 AHD		
21						
22						
23						
24						
25						
26						
27						
28						
29						

REMARKS: Tod - Darra formation. A standpipe is installed in this borehole.	<b>LOGGED BY</b>	<b>REVIEWED BY</b>
	MS	SF

Project Name	<b>Ipswich Motorway Upgrade – Rocklea to Darra</b>		
Project No.	FG6202	Date Completed	23/04/2015
Borehole No.	BH222	Reference Number	H12159
Location	36922.5 E; 151851.8 N	Start Depth (m)	15.0
Submitted By	DP	Finish Depth (m)	21.0
Remarks	-		

