

 British Geological Survey NATURAL ENVIRONMENT RESEARCH COUNCIL						Site M1 WIDENING JUNCTION 21 TO 30 PRELIMINARY GI- CONTRACT 2			Borehole Number RC1286	
Machine: Flush : Core Dia: mm Method :		Casing Diameter 140mm cased to 18.50m		Ground Level (mOD) 119.10		Client Highways Agency			Job Number WAL060099A	
		Location 445160 E 363802 N		Dates 14/11/2006- 15/11/2006		Engineer Arup			Sheet 1/3	
Depth (m)	TCR	SCR	RQD	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.00	PIT		0	0	Groundwater was not apparent during boring(1) at 0.00m.			Inspection Pit.		▽1
	O/H		0	0			(1.20)			
1.20						117.90	1.20	Open Hole.		
	42	15	0	0			(3.60)			
4.80						114.30	4.80	Poor recovery. Possible MADE GROUND. Recovered as moderately weak to moderately strong subangular cobbles of grey mudstone.		
	20	0	0	0			(1.55)			
6.35-6.73 6.35					4/4,2,3,3 SPT(C) 4'/75 N=12	112.75	6.35	Very poor recovery. Possible MADE GROUND. Recovered as moderately strong to strong coarse gravel and subangular cobbles of light grey brown fine grained sandstone.		
	20	0	0	0			(1.50)			
7.85-8.23 7.85					2/2,3,3,4 SPT(C) 2'/75 N=12	111.25	7.85	Very poor recovery. Possible MADE GROUND. Recovered as strong subangular gravel of light grey fine grained sandstone.		
	43	17	17	0			(1.50)			
9.35-9.73 9.35					1/2,3,6,10 SPT(C) 1'/75 N=21	109.75	9.35	Poor recovery. Possible MADE GROUND. Recovered as strong subangular cobbles (up to 180mm) of light grey fine grained sandstone (locally with very narrow wispy black laminae orientated subvertically).		
Remarks								Scale (approx) 1:50	Logged By TL	
								Figure No.		



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Depth (m)	TCR	SCR	RQD	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	
10.85 10.85-11.23	33	13	7	0	1/2,4,4,4 SPT(C) 1'/75 N=14						
	67	21	9	0			(6.00)				
12.35 12.35-12.73					4/3,4,4,9 SPT(C) 4'/75 N=20						
	37	20	13	0							
13.85 13.85-14.23					3/3,4,4,6 14/11/2006: 14/11/2006: SPT(C) 3'/75 N=17 14/11/2006: 15/11/2006:						
	81	65	58	0							
15.35 15.35-15.73					4/4,4,6,6 SPT(C) 4'/75 N=20	103.75	15.35	Possible MADE GROUND. Strong boulders (up to 660mm) of strong light grey fine grained sandstone.			
	69	47	0	0			(1.15)				
16.85 16.85-17.23					6/6,7,6,7 SPT(C) 6'/75 N=26	102.60	16.50	Possible MADE GROUND. Moderately strong subangular cobble of black carbonaceous mudstone, rarely of fine grained sandstone. From 16.85m to 17.32m; assumed zone of core loss.			
			0	0			(0.97)				
17.47 17.60					P1	101.63	17.47	Generally weak (variably very weak to moderately weak) grey SILTSTONE with rare black carbonised fossil plant remains. Fractures: horizontal, very closely to closely spaced, smooth, planar. Occasionally weathered to stiff clay.			
	94	47	0	0							
18.35 18.35-18.73					6/7,7,8,12 SPT(C) 6'/75 N=34						
	0	0	0	0			(3.53)				
19.20					P2			From 19.38m to 19.41m; ironstone.			
19.85								From 19.85m and 20.15m; no recovery.			
Remarks								Scale (approx)	Logged By		
								1:50	TL		
								Figure No.			



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		Location 445160 E 363802 N		Dates 14/11/2006- 15/11/2006		Engineer Arup		Sheet 3/3		
Depth (m)	TCR	SCR	RQD	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
19.85-20.23 20.15	67	22	8	0	SPT(C) 23'/75 N=102			From 20.15m to 20.64m; assumed zone of core loss.	XXXXXXXXXX	
			0	0					XXXXXXXXXX	
20.90 21.00					P3	98.10	21.00	From 20.94m to 20.97m; ironstone.	XXXXXXXXXX	
	85	52	9	0				Moderately weak, grey MUDSTONE, with occasional gravel sized nodules of ironstone. Locally firm clay. Discontinuities: very closely to closely spaced, horizontal and subhorizontal, rough and smooth, clean. Vertical and subvertical, smooth and clean, persistence within core up to 120mm.	XXXXXXXXXX	
21.65 21.65-21.88 21.93					24/2.50 SPT(C) 24'/75 52/150 P4			From 21.65m to 21.83m; assumed zone of core loss.	XXXXXXXXXX	
	98	83	11	0					XXXXXXXXXX	
22.85 22.85-23.00					25/50 SPT(C) 25'/75 50/75			From 22.48m to 22.60m; strong light brown grey ironstone.	XXXXXXXXXX	
								From 22.85m to 22.89m; siltstone.	XXXXXXXXXX	
23.57	100	51	17	0	P5		(5.01)		XXXXXXXXXX	
24.16 24.35 24.35-24.50 24.48					P6 25/50 SPT(C) 25'/75 50/75 P7			From 23.82m to 23.92m; siltstone. From 23.92m to 23.97m; ironstone.	XXXXXXXXXX	
	67	49	32	0				At 24.28m; thick lamination of coal.	XXXXXXXXXX	
25.85 25.85-26.00 26.01 26.00-26.28			0	0	25/50 SPT(C) 25'/75 50/75 U8	93.09	26.01	Moderately strong light grey SILTSTONE, with extremely closely to closely spaced thin and thick laminae of grey mudstone. Discontinuities: horizontal and subhorizontal, very closely to medium spaced, rough, clean.	XXXXXXXXXX	
			0	0			(0.64)	From 26.35m to 26.65m; thinly and thickly interlaminated mudstone and siltstone.	XXXXXXXXXX	
26.55 26.65 26.78			0	0	P9	92.45	26.65	Moderately strong grey MUDSTONE locally weakened with extremely closely spaced fractures. Vertical, planar, rough, clean, persistence within the core 60mm.	XXXXXXXXXX	
							(0.70)	From 26.65m to 26.78m; Discontinuities: very closely to closely spaced, horizontal and subhorizontal, rough, clean.	XXXXXXXXXX	
					15/11/2006: 15/11/2006:	91.75	27.35	From 26.78m to 26.85m; recovered largely non-intact due to extremely closely spaced, randomly orientated microfractures.	XXXXXXXXXX	
								Complete at 27.35m	XXXXXXXXXX	
Remarks								Scale (approx) 1:50	Logged By TL	
								Figure No.		