



 <b>British Geological Survey</b> NATURAL ENVIRONMENT RESEARCH COUNCIL						<b>Site</b> M1 WIDENING JUNCTION 21 TO 30 PRELIMINARY GI-CONTRACT 2			<b>Borehole Number</b> RC1216	
<b>Machine:</b> <b>Flush :</b> <b>Core Dia: mm</b> <b>Method :</b>		<b>Casing Diameter</b> 140mm cased to 2.00m		<b>Ground Level (mOD)</b> 113.65		<b>Client</b> Highways Agency		<b>Job Number</b> WAL060099		
		<b>Location</b> 445173 E 364255 N		<b>Dates</b> 08/11/2006		<b>Engineer</b> Arup		<b>Sheet</b> 1/2		
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.		V1
	O/H		0	0			(1.20)			
1.20	60	0	0	0	5,6/7,10,8,11 SPT(C) N=36	112.45	1.20	Open Hole.		
1.90							(0.70)			
							111.75	1.90	Assumed zone of core loss.	
					3,6/8,16,18,22 SPT N=64	111.15	2.50	Stiff, orange brown with some light grey mottling CLAY, with occasional fossilised plant remains.		
	0	0	0	0			(0.90)			
3.40-3.85 3.40					25/50 SPT 25'/43 50/61	110.25	3.40	No Recovery.		
	13	0	0	0			(1.50)			
4.90-5.35 4.90					P1	108.75	4.90	Poor recovery. Recovered as 0.20m of firm and stiff, grey slightly gravelly CLAY. Gravel is subrounded, fine to coarse of mudstone.		
	100	59	0	0			(1.50)			
6.40-6.50 6.40					25/50 SPT 25'/75 50/57	107.25	6.40	At top; soft grey clay with subangular, fine to coarse gravel of ironstone and mudstone. Probably due to SPT. Weak, grey MUDSTONE. Discontinuities: very closely to closely spaced, horizontal to subhorizontal, rough, often with gravelly clay infill up to 40mm thick.		
6.60							(1.05)			
7.22					25/50 SPT 25'/51 50/58	106.20	7.45	Moderately weak, grey SILTSTONE, with extremely closely spaced thin, occasionally thick carbonaceous laminae. Discontinuities: extremely closely to very closely spaced, horizontal, rough and smooth with some orange staining and occasional gravelly clay infill up to 30mm thick. 60 degrees, rough, with some orange staining and occasional clay infill <1mm thick. Vertical, planar, rough with occasional iron staining and clay infill <1mm thick.		
7.45	83	29	8	0			(1.01)			
7.90-8.03 7.90						105.19	8.46	Moderately strong light grey SILTSTONE, with occasional thin and thick wispy laminae of carbonaceous siltstone. Discontinuities: extremely closely to medium spaced, horizontal and subhorizontal, rough with orange discolouration penetrating up to 20mm into rock, but generally around 5mm. Vertical and subvertical, undulating, rough with common brown and orange staining and occasional clay infill up to 2mm thick. Fracture runs throughout length of stratum.		
8.46										
	97	51	25	0						
9.20 9.40-9.51 9.40										
<b>Remarks</b>								<b>Scale (approx)</b> 1:50	<b>Logged By</b> OP	<b>Figure No.</b>

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Machine: Flush : Core Dia: mm Method :			Casing Diameter 140mm cased to 2.00m			Ground Level (mOD) 113.65		Client Highways Agency		Job Number WAL060099	
			Location 445173 E 364255 N			Dates 08/11/2006		Engineer Arup		Sheet 2/2	
Depth (m)	TCR	SCR	RQD	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	
10.40	93	55	47	0	P3			At 10.90: recovered non-intact. Probably due to SPT.			
10.90 10.90-11.00					25/50 SPT 25'/37 50/62		(4.36)				
12.00-12.20	100	81	17	0	U4			From 11.85m; carbonaceous laminae are extremely closely spaced.			
12.40 12.40-12.50			0	0	25/50 SPT 25'/44 50/59						
12.82	81	45	25	0			12.82	Moderately weak grey MUDSTONE, occasionally grading to siltstone. Occasionally weathered to clayey gravel along discontinuities. Discontinuities: extremely closely to medium spaced, generally close, horizontal, rough, clean. Occasional clayey gravel infill up to 40mm thick. Vertical to 70 degrees, undulating, rough and smooth, occasional clay infill up to 2mm thick.			
13.75 13.90					P5		(2.58)				
13.90-13.99 14.05-14.36 14.95	Sample / Tests		Casing Depth (m)	Water Depth (m)	25/50			From 14.52m to 14.56m; ironstone.			
	SPT 25'/41 50/49 U6		2.00								
	P7										
					08/11/2006:	98.25	15.40	Complete at 15.40m			
					08/11/2006: 08/11/2006:						
Remarks											
								Scale (approx) 1:50	Logged By OP		
								Figure No.			