


 <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> <b>RC1200</b>		
<b>Machine:</b> <b>Flush :</b> <b>Core Dia: mm</b> <b>Method :</b>		<b>Casing Diameter</b> 140mm cased to 4.50m		<b>Ground Level (mOD)</b> 167.75		<b>Client</b> Highways Agency		<b>Job Number</b> WAL060099		
		<b>Location</b> 444972 E 359822 N		<b>Dates</b> 02/11/2006- 03/11/2006		<b>Engineer</b> Arup		<b>Sheet</b> 1/2		
<b>Depth (m)</b>	<b>TCR</b>	<b>SCR</b>	<b>RQD</b>	<b>FI</b>	<b>Field Records</b>	<b>Level (mOD)</b>	<b>Depth (m) (Thickness)</b>	<b>Description</b>	<b>Legend</b>	<b>Water</b>
0.00	PIT		0	0	Groundwater was not apparent during boring(1) at 0.00m.			Inspection Pit.		V1
	OH		0	0			(1.20)			
1.20						166.55	1.20	Open Hole.		
	96	24	0	0			(3.30)			
4.50			0	0	P1 /59.41 SPT 0'/0 100/89	163.25	4.50 (0.25)	Recovered non-intact as stiff light grey brown mottled orange fine to medium sandy CLAY with rare subrounded sandstone cobbles.  Generally moderately weak to moderately strong (variably weak) light grey brown (locally thinly colour laminated black) fine grained SANDSTONE with frequent dark orange brown discolouration penetrating throughout with occasional brown black surface discolouration. Occasionally recovered in leached zones (up to 300mm) as weak frequently non-intact, with soft very sandy clay. Fractures: (where evident) horizontal, very closely and closely spaced, planar, occasionally stepped, frequently with soft sandy clay infill (up to 5mm); vertical, rough, undulating, open.		
4.90			0	0		163.00	4.75			
4.75	97	35	0	0						
5.00-5.09										
5.00	77	37	0	0			(2.85)			
6.50-6.60					/48.52 SPT 0'/0 100/97					
6.50					P2					
7.00			0	0						
7.60	49	15	0	0	/56.44 SPT 0'/0 100/110	160.15	7.60	Between 7.50m and 7.60m; locally very weak and weak, non-intact.		
8.00-8.11							(1.15)	No recovery.		
8.00			0	0						
8.75			0	0		159.00	8.75			
9.00					P3 /51.49 SPT 0'/0 100/96		(0.75)	Between 8.75m and 9.00m: non-intact. Generally moderately weak to moderately strong (variably weak) light grey brown (locally thinly colour laminated black) fine grained SANDSTONE with frequent dark orange brown discolouration penetrating throughout with occasional brown black surface discolouration.		
9.30	33	6	0	0						
9.50-9.60						158.25	9.50			
9.50								Poor recovery. Recovered as moderately strong subangular cobbles and slightly clayey angular medium to coarse gravel		
<b>Remarks</b>								<b>Scale (approx)</b> 1:50	<b>Logged By</b> TL	
								<b>Figure No.</b>		



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		Location 444972 E 359822 N		Dates 02/11/2006- 03/11/2006		Engineer Arup		Sheet 2/2			
Depth (m)	TCR	SCR	RQD	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	
11.00 11.00-11.15	99	68	0	0	/41.57.2 SPT 0°/0 100/151	156.75	11.00 (1.50)	of sandstone and mudstone.			
12.50 12.50-12.59 12.65 12.90	77	45	45	0	/59.41 SPT 0°/0 100/91	155.10 154.85	11.00 (1.65)  12.65 (0.25) 12.90	Very weak to weak thinly and thickly laminated dark grey MUDSTONE with occasional very thin beds of strong grey brown ironstone. Fractures: horizontal, extremely closely to very closely spaced, smooth, planar, to irregular, vertical, smooth, planar.  Between 11.90m and 11.94m; ironstone.  Between 12.20m and 12.24m; ironstone.  Weak thinly and thickly laminated black carbonaceous MUDSTONE. Fractures: horizontal, extremely closely to very closely spaced, smooth, planar.			
13.40-13.72	90	80	48	0	U4		(2.10)	Moderately strong to strong light and dark grey thinly colour laminated SILTSTONE, locally with very narrow non persistent black interlaminae. Occasional orange brown surface discolouration. Fractures: horizontal, closely to medium spaced, smooth, undulating, open; subvertical (55 degrees), rough, undulating; other subvertical (60 degrees) diameter at 90 degrees.			
13.95 14.00	Sample / Tests		Casing Depth (m)	Water Depth (m)	P5 02/11/2006:  02/11/2006: /62.38 02/11/2006:  03/11/2006: 03/11/2006:  03/11/2006:						
14.00-14.09 14.15-14.42	SPT 0°/0 100/94 U6		4.50			152.75	15.00	Complete at 15.00m			
Remarks								Scale (approx)  1:50	Logged By  TL		
								Figure No.			