

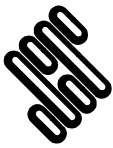
BOREHOLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Borehole: BH12
Contract Ref: 765865	Start: 31.07.24 End: 01.08.24	Ground Level: 46.16	National Grid Co-ordinate: E:437265.1 N:405610.9	Sheet: 4 of 7



GINT LIBRARY_V10_01.GLB LibVersion: v8_07_001 PtVersion: v8_07 | Log COMPOSITE LOG - A4P | 765865 A635 BARNSELEY BUS RAPIDTRANSIT ROUTE.GPJ - V10_01.
Structural Soils Ltd, Branch Office - Castleford, The Potteries, Pottery Street, Castleford, West Yorkshire, WF10 1NJ. Tel: 01977-552255, Fax: 01977-552299, Web: www.soils.co.uk, Email: ask@soils.co.uk | 10/12/24 - 15:24 | MG1 |

Method Used: Dynamic sampling + Rotary Cored	Plant Used: Massenza M-I-3	Drilled By: Gary Blake	Logged By: BSaimen	Checked By: AG	
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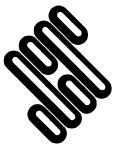
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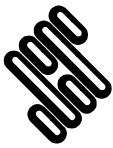


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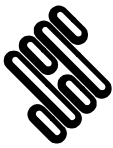
BOREHOLE LOG

Contract: A635 Barnsley Bus Rapid Transit Route		Client: Barnsley Metropolitan Borough council		Borehole: BH12
Contract Ref: 765865	Start: 31.07.24 End: 01.08.24	Ground Level: 46.16	National Grid Co-ordinate: E:437265.1 N:405610.9	Sheet: 7 of 7



GINT LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrVersion: v8_07 | Log COMPOSITE LOG - A4P | 765865 A635 BARNSELEY BUS RAPIDTRANSIT ROUTE.GPJ - V10_01. Structural Soils Ltd, Branch Office - Castleford. The Potteries, Pottery Street, Castleford, West Yorkshire, WF10 1NJ. Tel: 01977-552255, Fax: 01977-552299, Web: www.soils.co.uk, Email: ask@soils.co.uk | 10/12/24 - 15:25 | MG1 |

Method Used: Dynamic sampling + Rotary Cored	Plant Used: Massenza M-I-3	Drilled By: Gary Blake	Logged By: BSaimen	Checked By: AGS
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Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Borehole: BH13	
Contract Ref: 765865		Start: 29.07.24	Ground Level: 47.10	National Grid Co-ordinate: E:437262.0 N:405576.0	Sheet: 1 of 7
		End: 31.07.24			

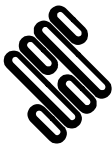
Depth (m)	Samples & Testing			Mechanical Log				Flush Returns & Details	Backfill & Instrumentation	Water	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
	No	Type	Results	TCR (%)	SCR (%)	RQD (%)	If (mm)							
0.15-0.30 0.15	1 101	B ES	1xV								MADE GROUND: Black TARMAC. (MADE GROUND)	47.02	0.08	
0.40-0.45 0.40-0.60 0.50	2 3 102	D B ES	1xT+1xJ+1xV								MADE GROUND: Light grey gravelly medium and coarse SAND. Gravel is angular subangular fine to coarse of limestone and sandstone. (MADE GROUND)	46.80	0.30 (0.30)	
0.65 0.65-0.80	103 4	ES B	1xT+1xJ+1xV								MADE GROUND: Dark grey sandy angular and subangular GRAVEL of asphalt, brick and limestone. Sand is coarse. (MADE GROUND)	46.50	0.60 (0.60)	
1.00 1.10-1.20	104 5	ES D	1xT+1xJ+1xV								MADE GROUND: Soft brownish grey slightly sandy gravelly CLAY with sand lenses. Sand is fine and medium gravel is subangular and subrounded fine to coarse of sandstone brick and limestone. (MADE GROUND)	45.90	1.20	
1.20-1.50 1.20-1.65 1.20-1.65	6 200 201	B SPT DSPT	N=7								(MADE GROUND): Soft brownish grey slightly sandy gravelly CLAY with sand lenses. Sand is fine and medium gravel is subangular and subrounded fine to coarse of sandstone brick and limestone. (MADE GROUND)	45.85	1.25 (0.50)	
1.45-1.60 1.70	7 105	D ES	1xT+1xJ+1xV								Window run 119mm dia (100% rec) ... At 0.60m, sandstone cobble.	45.35	1.75	
2.20-3.20 (0:09)											Soft grey with frequent orange lenses slightly sandy CLAY. Sand is fine. Orange lenses are likely weathering features of the mudstone.	44.90	2.20	
2.20-2.58 2.20-2.58	202 203	SPT DSPT	3,8/12,17,18,3 for 9mm	100	41	0					Very soft light grey mottled dark grey CLAY. (Weathered MUDSTONE). ... 1.60m-1.75m, brownish dark grey angular fine and medium gravel sized clasts of mudstone interbedded within clay.	44.65	2.45	
3.20-4.70 (0:18)											Extremely weak thinly laminated MUDSTONE. (PENNINE MIDDLE COAL MEASURES FORMATION)		(1.00)	
3.45-3.60	8	C									Extremely weak thickly laminated grey SILTSTONE/SANDSTONE. (PENNINE MIDDLE COAL MEASURES FORMATION) ... 2.20m-2.34m, soft grey clay, as seen in first strata description.	43.65	3.45	
4.25-4.45	9	C		100	83	61					Extremely weak to very weak thinly laminated dark grey and orange brown MUDSTONE. Locally mudstone is interlaminated with light grey fine to medium sandstone Bedding fractures are 0-10° extremely closely and closely spaced undulating and planar rough partially open with orange brown stain on fractures		(1.95)	

GINT LIBRARY V10.01.GLB LibVersion: v8.07.001 PIVersion: v8.07.001 Log COMPOSITE LOG - A4P | 765865 A635 BARNSELEY BUS RAPIDTRANSIT ROUTE.GPJ - V10.01. Structural Soils Ltd, Branch Office - Castleford, West Yorkshire, WF10 1NJ. Tel: 01977-552255, Fax: 01977-552299, Web: www.soils.co.uk, Email: ask@soils.co.uk | 10/12/24 - 15:26 | MG1 |

Boring Progress and Water Observations						General Remarks
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth	
30/07/24	17:00	10.20	1.70	150	8.90	1. Position cleared with GPR and CAT and Genny. 2. Hand dug inspection pit to 1.20m. 3. Dynamic Sampling between 1.20m and 2.20m depth. 4. No groundwater encountered during drilling. 5. Rotary Coring between 2.20m and 10.20m depth. 6. Standing water level at the end of drilling 8.90m depth. 7. 50mm standpipe installed on completion.
31/07/24	08:00	10.20	None	N/R		
31/07/24	08:00	10.20	None	N/R		
31/07/24		10.20	None	N/R		

All dimensions in metres Scale: **1:25**

Method Used: Inspection pit + Dynamic sampling + Rotary Cored	Plant Used: Massenza M-I-3	Drilled By: Gary Blake	Logged By: JHoughton	Checked By: AGS
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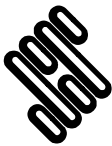
BOREHOLE LOG

Contract: A635 Barnsley Bus Rapid Transit Route		Client: Barnsley Metropolitan Borough Council		Borehole: BH13
Contract Ref: 765865	Start: 29.07.24 End: 31.07.24	Ground Level: 47.10	National Grid Co-ordinate: E:437262.0 N:405576.0	Sheet: 2 of 7

Depth (m)	Samples & Testing			Mechanical Log				Flush Returns & Details	Backfill & Instrumentation	Water	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
	No	Type	Results	TCR (%)	SCR (%)	RQD (%)	If (mm)							
4.70-6.20 (0:12)	10	C		100	83	61					penetrating up to 1mm. (PENNINE MIDDLE COAL MEASURES FORMATION)			
4.70-4.94								NI 100 230			... 2.48m-2.52m, non intact recovered as angular and subangular fine and medium clayey gravel.			
				100	83	59					... 3.05m-3.20m, non intact recovered as angular and subangular medium and coarse gravel.	41.70	5.40	
							NI 100 240				... 3.10m-3.45m, mudstone is locally interlaminated with grey fine to medium sandstone.		(0.80)	
6.12-6.20 (0:09)	11	C									Very weak to weak thinly to thickly laminated light grey fine medium SANDSTONE with extremely closely to very closely spaced frequent thin and thick laminae of grey mudstone. Bedding Fractures are 5 to 15° very closely to medium (40 -230mm) spaced undulating or planar rough with orange discolouration on fractures.	40.90	6.20	
6.20-7.70 (0:09)								40 60 120			(PENNINE MIDDLE COAL MEASURES FORMATION) (stratum copied from 3.45m from previous sheet)		(0.70)	
				100	67	25					Very weak to weak thinly to thickly laminated light grey fine medium SANDSTONE with extremely closely to very closely spaced frequent thin and thick laminae of grey mudstone. Bedding Fractures are 5 to 15° extremely closely to medium (15 -240mm) spaced undulating or planar rough with orange discolouration on fractures.	40.20	6.90	
							NI 100 160				(PENNINE MIDDLE COAL MEASURES FORMATION)		(1.05)	
7.70-9.20 (0:09)	12	C									... 5.40m -5.70m, possible joint (75°) dissects the core resulting non intact nature of the core with brown discolouration on fractures	39.15	7.95	
8.00-8.14								40 100 200		Air+Mist		Very weak weak thinly laminated light greyish fine to medium SANDSTONE interlaminated with thin or thick laminae of grey mudstone. Bedding Fractures are 5 to 15° very closely to closely spaced undulating rough open with brown discolouration on fractures.		(0.65)
				100	83	64					(PENNINE MIDDLE COAL)	38.50	8.60	
							40 100 410							

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Boring Progress and Water Observations						General Remarks
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth	
						8. SPT hammer AR3874-2024 (E _s = 65.00%) used.
All dimensions in metres						Scale: 1:25
Method Used: Inspection pit + Dynamic sampling + Rotary Cored	Plant Used: Massenza M-I-3			Drilled By: Gary Blake	Logged By: JHoughton	Checked By: AGS



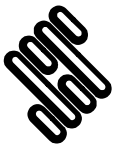
BOREHOLE LOG

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Contract Ref: 765865	Start: 29.07.24 End: 31.07.24	Ground Level: 47.10	National Grid Co-ordinate: E:437262.0 N:405576.0	Sheet: 3 of 7

Depth (m)	Samples & Testing			Mechanical Log				Flush Returns & Details Backfill & Instrumentation	Water	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend	
	No	Type	Results	TCR (%)	SCR (%)	RQD (%)	If (mm)							
8.96-9.20	13	C		100	83	64				MEASURES FORMATION) Very weak greyish white and light brown fine to coarse SANDSTONE with extremely closely to closely spaced thin laminae of grey mudstone. Bedding Fractures are 5 to 10° extremely closely to closely spaced planar or undulating rough open brown discoloration on fractures up to 2mm. (PENNINE MIDDLE COAL MEASURES FORMATION)				
9.20-10.20 (0:15)				↑	↑	↑							(1.60)	
9.50-9.75	14	C		80	80	41	40 100 410	100% return Air+Mist (Grey and brown)						
9.90-10.00	15	C		↓	↓	↓				Very weak to weak thinly laminated greyish white fine to coarse SANDSTONE with extremely closely to very closely spaced thin laminae of grey mudstone. Bedding Fractures are 5 to 15° extremely closely to medium spaced planar or undulating rough open brown discoloration on fractures up to 2mm. (PENNINE MIDDLE COAL MEASURES FORMATION) . . . 8.52m-8.60m, Joint is 55° undulating rough open with brown discoloration on fractures. Very weak thinly laminated greyish white fine to medium SANDSTONE with extremely closely to very closely spaced thin laminae of grey mudstone. Rare cross bedding in places. Bedding Fractures are 5 to 40° very closely to medium spaced planar or undulating rough open brown discoloration on fractures up to 2mm. (PENNINE MIDDLE COAL MEASURES FORMATION) (stratum copied from 8.60m from previous sheet) . . . 10.00m, thick laminae of coal up to 4mm. Borehole terminated at 10.00m depth.	36.90	10.20		

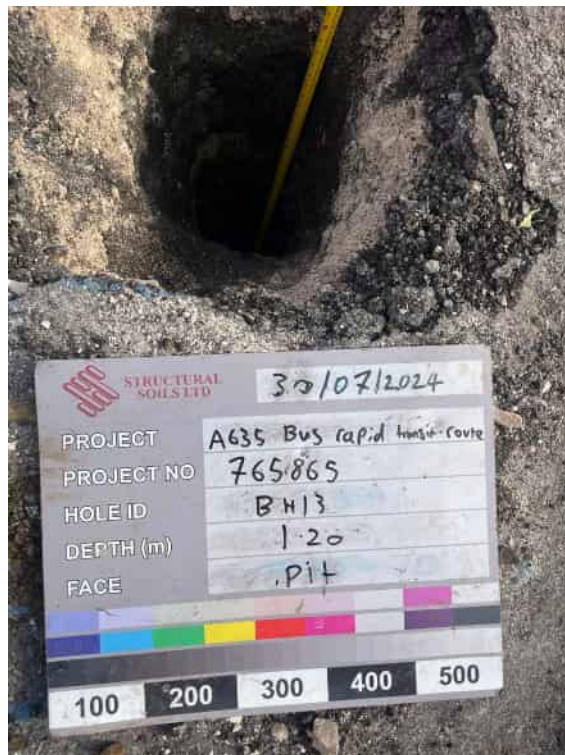
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Boring Progress and Water Observations						General Remarks
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth	
Method Used: Inspection pit + Dynamic sampling + Rotary Cored						All dimensions in metres
Plant Used: Massenza M-I-3		Drilled By: Gary Blake		Logged By: JHoughton		Scale: 1:25 Checked By: AGS



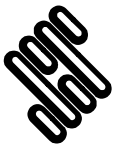
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Contract Ref: 765865	Start: 29.07.24 End: 31.07.24	Ground Level: 47.10	National Grid Co-ordinate: E:437262.0 N:405576.0	Sheet: 4 of 7



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Method Used: Inspection pit + Dynamic sampling + Rotary Cored	Plant Used: Massenza M-I-3	Drilled By: Gary Blake	Logged By: JHoughton	Checked By: AG	
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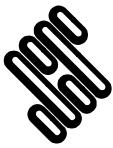
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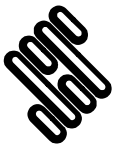


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Method Used:	Inspection pit + Dynamic sampling + Rotary Cored	Plant Used:	Massenza M-I-3	Drilled By:	Gary Blake	Logged By:	JHoughton	Checked By:	AG	
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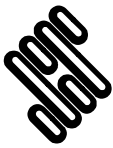


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Method Used:	Inspection pit + Dynamic sampling + Rotary Cored	Plant Used:	Massenza M-I-3	Drilled By:	Gary Blake	Logged By:	JHoughton	Checked By:	AG	
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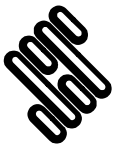
BOREHOLE LOG

Contract: A635 Barnsley Bus Rapid Transit Route		Client: Barnsley Metropolitan Borough Council		Borehole: BH14	
Contract Ref: 765865		Start: 20.08.24	Ground Level: 49.22	National Grid Co-ordinate: E:437240.0 N:405552.0	Sheet: 3 of 7
End: 06.09.24					

Depth (m)	Samples & Testing			Mechanical Log				Flush Returns & Details	Backfill	Water	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
	No	Type	Results	TCR (%)	SCR (%)	RQD (%)	If (mm)							
9.70-10.40 (0:23)	11	C		98	80	62	210	80% return Water (Grey)			. . . 8.73m-8.75m, Joint is 40° planar rough open with light brown discolouration on fracture. Very weak thinly laminated light grey MUDSTONE with extremely closely spaced thin laminae of greyish white sandstone. Bedding Fractures are 5 to 10° closely spaced to medium spaced undulating rough partly open to open clean or with light brown discolouration on fractures. (PENNINE MIDDLE COAL MEASURES FORMATION) (stratum copied from 7.35m from previous sheet)	40.12	9.10	
9.70-10.15				97	97	97	350							
							450	80% return Water			. . . 9.05m-9.10m, occasional rounded and elongated clasts of brown siltstone.	38.82	10.40	
											Weak to moderately weak thinly laminated light grey fine to coarse SANDSTONE with occasional thin laminae of mudstone and rare laminae of coal. Bedding Fractures are 5° medium spaced undulating rough partly open to open clean. (PENNINE MIDDLE COAL MEASURES FORMATION)			
											. . . 9.70m-9.90m, rare laminae of coal.			
											Borehole terminated at 10.40m depth.			

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Boring Progress and Water Observations						General Remarks
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth	
All dimensions in metres						Scale: 1:25
Method Used: Inspection pit + Dynamic sampling + Rotary Cored	Plant Used: Massenza M-I-3		Drilled By: Gary Blake	Logged By: JHoughton	Checked By: AGS	



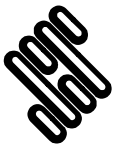
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Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Borehole: BH14
Contract Ref: 765865	Start: 20.08.24 End: 06.09.24	Ground Level: 49.22	National Grid Co-ordinate: E:437240.0 N:405552.0	Sheet: 4 of 7



GINT LIBRARY_V10_01.GLB LibVersion: v8_07_001 PiVersion: v8_07 | Log COMPOSITE LOG - A4P | 765865 A635 BARNSELEY BUS RAPIDTRANSIT ROUTE.GPJ - V10_01. Structural Soils Ltd, Branch Office - Castleford. The Potteries, Pottery Street, Castleford, West Yorkshire, WF10 1NJ. Tel: 01977-552255, Fax: 01977-552299, Web: www.soils.co.uk, Email: ask@soils.co.uk | 10/12/24 - 15:34 | MG1 |

Method Used: Inspection pit + Dynamic sampling + Rotary Cored	Plant Used: Massenza M-I-3	Drilled By: Gary Blake	Logged By: JHoughton	Checked By: AG	
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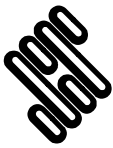
BOREHOLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Borehole: BH14
Contract Ref: 765865	Start: 20.08.24 End: 06.09.24	Ground Level: 49.22	National Grid Co-ordinate: E:437240.0 N:405552.0	Sheet: 5 of 7



GINT LIBRARY_V10_01.GLB LibVersion: v8_07_001 PiVersion: v8_07 | Log COMPOSITE LOG - A4P | 765865 A635 BARNSELEY BUS RAPIDTRANSIT ROUTE GPJ - V10_01 | Structural Soils Ltd, Branch Office - Castleford, The Potteries, Pottery Street, Castleford, West Yorkshire, WF10 1NJ. Tel: 01977-552255, Fax: 01977-552299, Web: www.soils.co.uk, Email: ask@soils.co.uk | 10/12/24 - 15:34 | MG1 |

Method Used: Inspection pit + Dynamic sampling + Rotary Cored	Plant Used: Massenza M-I-3	Drilled By: Gary Blake	Logged By: JHoughton	Checked By: AG	
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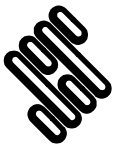
BOREHOLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Borehole: BH14
Contract Ref: 765865	Start: 20.08.24 End: 06.09.24	Ground Level: 49.22	National Grid Co-ordinate: E:437240.0 N:405552.0	Sheet: 6 of 7



GINT LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrVersion: v8_07 | Log COMPOSITE LOG - A4P | 765865 A635 BARNESLEY BUS RAPIDTRANSIT ROUTE.GPJ - V10_01 | Structural Soils Ltd, Branch Office - Castleford. The Potteries, Pottery Street, Castleford, West Yorkshire, WF10 1NJ. Tel: 01977-552255, Fax: 01977-552299, Web: www.soils.co.uk, Email: ask@soils.co.uk | 10/12/24 - 15:35 | MG1 |

Method Used:	Inspection pit + Dynamic sampling + Rotary Cored	Plant Used:	Massenza M-I-3	Drilled By:	Gary Blake	Logged By:	JHoughton	Checked By:	AG	
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BOREHOLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Borehole: BH14
Contract Ref: 765865	Start: 20.08.24 End: 06.09.24	Ground Level: 49.22	National Grid Co-ordinate: E:437240.0 N:405552.0	Sheet: 7 of 7



GINT LIBRARY_V10_01.GLB LibVersion: v8 07 001 PrVersion: v8 07 | Log COMPOSITE LOG - A4P | 765865 A635 BARNESLEY BUS RAPIDTRANSIT ROUTE GPJ - V10_01. Structural Soils Ltd, Branch Office - Castleford. The Potteries, Pottery Street, Castleford, West Yorkshire, WF10 1NJ. Tel: 01977-552255, Fax: 01977-552299, Web: www.soils.co.uk, Email: ask@soils.co.uk | 10/12/24 - 15:35 | MG1 |

Method Used:	Inspection pit + Dynamic sampling + Rotary Cored	Plant Used:	Massenza M-I-3	Drilled By:	Gary Blake	Logged By:	JHoughton	Checked By:	AG	
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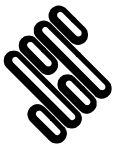
BOREHOLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Borehole: BH14A	
Contract Ref: 765865		Start: 20.08.24 End: 20.08.24	Ground Level: ---	National Grid Co-ordinate: ---	Sheet: 1 of 1

Depth (m)	Samples & Testing			Backfill	Water	Description of Strata	Reduced Level	Depth (Thick ness)	Material Graphic Legend
	No	Type	Results						
0.15	1	ES				MADE GROUND: Grass over brown sandy gravelly silt. Sand is fine, gravel is angular to subrounded fine to coarse stone aggregate, sandstone, mudstone, and flint. (MADE GROUND)		0.20	
0.50	2	B						(0.65)	
0.50	3	D						0.85	
1.00	4	B						1.10	
1.00	5	D							
1.10	6	ES				Dolomite cobble. (MADE GROUND) Borehole terminated at 1.10m depth.			

GINT LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrVersion: v8_07 | Log COMPOSITE LOG - A4P | 765865 A635 BARNSELEY BUS RAPIDTRANSIT ROUTE.GPJ - V10_01. Structural Soils Ltd, Branch Office - Castleford, The Potteries, Pottery Street, Castleford, West Yorkshire, WF10 1NJ. Tel: 01977-552255, Fax: 01977-552299, Web: www.soils.co.uk, Email: ask@soils.co.uk | 10/12/24 - 15:36 | MG1 |

Boring Progress and Water Observations						General Remarks	
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth		
						1. Inspection pit dug to 1.10m. 2. Obstruction encountered at the bottom of the pit. 3. Groundwater not encountered. 4. Location reinstated and relocated to BH14.	
All dimensions in metres						Scale:	1:50
Method Used:	Inspection pit + Inspection pit		Plant Used:	Hand tools		Drilled By:	???
						Logged By:	JMyles
						Checked By:	AGS



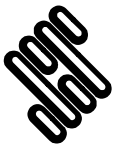
BOREHOLE LOG

Contract: A635 Barnsley Bus Rapid Transit Route		Client: Barnsley Metropolitan Borough Council		Borehole: BH15	
Contract Ref: 765865		Start: 05.08.24	Ground Level: 52.96	National Grid Co-ordinate: E:437225.4 N:405501.8	Sheet: 1 of 12
		End: 07.08.24			

Depth (m)	Samples & Testing			Mechanical Log				Flush Returns & Details	Backfill	Water	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
	No	Type	Results	TCR (%)	SCR (%)	RQD (%)	If (mm)							
0.25	1	ES									MADE GROUND: TARMAC. (MADE GROUND)	52.76	0.20	
0.50	2	B									MADE GROUND: Yellowish brown sandy gravel. Sand is fine. Gravel is angular to subangular fine to coarse stone aggregate. (MADE GROUND)	(1.30)		
0.50	3	D												
1.00	4	B												
1.00	5	D								 Between 1.20 to 1.50m AZCL, no recovery from first run.	51.46	1.50	
1.10	6	ES												
1.20-1.50	201	SPT	N=8					0% return Water						
1.20-1.65	202	DSPT												
1.50-3.00														
1.50-3.00											MADE GROUND: Loose yellow and dark grey slightly sandy subangular fine to coarse GRAVEL of sandstone and limestone. Sand is coarse. (MADE GROUND)	51.08	1.88	
											MADE GROUND: Soft locally very soft dark brown mottled grey and yellow slightly sandy slightly gravelly CLAY with local half brick and local shards of decorative plastic tile. Sand is fine to coarse, gravel is subangular and subrounded fine and medium of sandstone and mudstone. (MADE GROUND) 2.20m-2.30m Haff brick 100mm 2.81m decorative plastic tile shard, 140mm in length. AZCL.	(4.37)		
3.00-4.50														
3.00-4.50 (0.06)														
3.00-3.45	203	SPT	N=4											
3.00-3.45	204	DSPT												
3.40	104	ES												
4.20-4.50	10	B												
4.40	105	ES												

GINT LIBRARY: V10_01.GLB LibVersion: v8_07_001 PtVersion: v8_07 | Log COMPOSITE LOG - A4P | 765865 A635 BARNSELEY BUS RAPIDTRANSIT ROUTE.GPJ - V10_01. Structural Soils Ltd, Branch Office - Castleford, The Potteries, Pottery Street, Castleford, West Yorkshire, WF10 1NJ. Tel: 01977-552255, Fax: 01977-552299, Web: www.soils.co.uk, Email: ask@soils.co.uk | 10/12/24 - 15:36 | MG1 |

Boring Progress and Water Observations						General Remarks
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth	
05/08/24	08:00	3.00	3.00	178	-	1. Position cleared with GPR and CAT and Genny. 2. Hand dug inspection pit to 1.20m. 3. Sonic drilling between 1.20m and 20.20m depth. 4. No groundwater encountered during drilling. 5. Backfilled on completion. 6. SPT hammer AR3874-2024 (E _s = 65.00%) used.
05/08/24	16:40	3.00	3.00	178	Dry	
06/08/24	08:12	3.00	3.00	178	Dry	
06/08/24	17:14	14.20	None	N/R	-	
07/08/24	17:00	20.20	None	N/R	-	
09/08/24	08:00	20.20	None	N/R	-	
09/08/24	17:00	20.20	None	N/R	-	
28/08/24	08:00	20.20	None	N/R	-	
All dimensions in metres						Scale: 1:25
Method Used:	Inspection pit + Sonic Drilling + Rotary Cored		Plant Used:	Comacchio GEO 305 Sonic		Drilled By: Andrew Ward
						Logged By: BSaimen + JMcCarthy
						Checked By:



BOREHOLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Borehole: BH15
Contract Ref: 765865	Start: 05.08.24 End: 07.08.24	Ground Level: 52.96	National Grid Co-ordinate: E:437225.4 N:405501.8	Sheet: 2 of 12

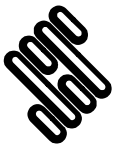
Depth (m)	Samples & Testing			Mechanical Log				Flush Returns & Details	Backfill	Water	Description of Strata	Reduced Level	Depth (Thick ness)	Material Graphic Legend					
	No	Type	Results	TCR (%)	SCR (%)	RQD (%)	If (mm)												
4.50-6.00 4.50-6.00 (0:06)	205 206	SPT DSPT	N=5	↑	↑	↑	↑	↑	0% return Water	█	MADE GROUND: Soft locally very soft dark brown mottled grey and yellow slightly sandy slightly gravelly CLAY with local half brick and local shards of decorative plastic tile. Sand is fine to coarse, gravel is subangular and subrounded fine and medium of sandstone and mudstone. (MADE GROUND) <i>(stratum copied from 1.88m from previous sheet)</i>	46.71	6.25						
5.00-5.10															11	D	100	100	100
5.40	106	ES	N=30	↑	↑	↑	↑	↑	0% return Water	█	Extremely weak destructured brownish grey mottled yellow MUDSTONE recovered as firm becoming stiff slightly sandy slightly gravelly becoming gravelly CLAY with low cobble content. Sand is fine to coarse gravel is angular to subrounded medium and coarse of mudstone. Cobbles are cylindrical of mudstone. (PENNINE MIDDLE COAL MEASURES FORMATION)	45.46	7.50						
5.70-6.00	12	B													100	100	100	100	100
6.00-7.50 6.00-7.50 (0:37)	207 208	SPT DSPT													100	100	100	100	100
6.90-7.00	13	D	12,13/31,19 for 18mm	↑	↑	↑	↑	↑	0% return Water	█	Very weak thinly laminated grey MUDSTONE recovered as angular fine to coarse gravel of mudstone. (PENNINE MIDDLE COAL MEASURES FORMATION)	45.06	7.90						
7.00-7.30	14	B													100	37	33	NI	Water
7.30	108	ES	12,13/31,19 for 18mm	↑	↑	↑	↑	↑	0% return Water	█	Very weak thinly laminated grey MUDSTONE recovered as angular fine to coarse gravel of mudstone. (PENNINE MIDDLE COAL MEASURES FORMATION)	45.06	7.90						
7.50-8.20 7.50-7.69 (0:08)	209	SPT													100	37	33	NI	Water
7.50-7.69	210	DSPT	12,13/31,19 for 18mm	↑	↑	↑	↑	↑	95% return Water (Brown)	█	Description on next sheet ... 8.20m-8.35m, sandstone is fractured and non intact.	45.06	7.90						
8.20-9.70 (0:15)															100	54	24	NI 180 250	95% return Water (Brown)

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Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth
28/08/24	17:24	20.20	None	N/R	-
28/08/24	17:30	20.20	None	N/R	-

All dimensions in metres		Scale: 1:25
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Method Used: Inspection pit + Sonic Drilling + Rotary Cored	Plant Used: Comacchio GEO 305 Sonic	Drilled By: Andrew Ward	Logged By: BSaimen + JMcCarthy	Checked By: [Signature]	
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BOREHOLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Borehole: BH15	
Contract Ref: 765865		Start: 05.08.24	Ground Level: 52.96	National Grid Co-ordinate: E:437225.4 N:405501.8	Sheet: 3 of 12
End: 07.08.24					

Depth (m)	Samples & Testing			Mechanical Log				Flush Returns & Details	Backfill	Water	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
	No	Type	Results	TCR (%)	SCR (%)	RQD (%)	If (mm)							
9.20-9.35	15	C		100	54	24					Very weak thinly laminated greyish white and greyish brown SANDSTONE with extremely closely spaced to very closely spaced thin to thick laminae of grey mudstone. Bedding Fractures are 5 to 15° very closely spaced to medium spaced undulating rough open infilled with greyish white clay or brown discolouration penetrates downward along the fractures. (PENNINE MIDDLE COAL MEASURES FORMATION)	42.86	10.10	
9.70-11.20							NI 180 250							
10.10-10.45	16	C		100	88	78		90% return Water (Brown)			Weak thinly laminated light grey fine to coarse SANDSTONE with extremely closely spaced to medium spaced thin laminae or lenticular shaped grey mudstone. Bedding Fractures are 5 to 15° closely spaced to widely spaced (150-800 mm) undulating rough open with brown discolouration on fractures. (PENNINE MIDDLE COAL MEASURES FORMATION)			
11.20-12.70 (0:17)														
11.45-11.77	17	C		90	90	87		95% return Water (Grey)			(3.35)			
12.70-14.20							160 600 1350							
12.70-13.00	18	C		87	70	64		95% return Water (Grey)			39.51	13.45		

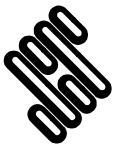
GINT LIBRARY_V10_01.LibVersion: v8_07_001 | Log COMPOSITE LOG - A4P | 765865 A635 BARNSELEY BUS RAPIDTRANSIT ROUTE.GPJ - V10_01. Structural Soils Ltd, Branch Office - Castleford, West Yorkshire, WF10 1NJ. Tel: 01977-552299, Fax: 01977-552255, Web: www.soils.co.uk, Email: ask@soils.co.uk | 10/12/24 - 15:36 | MG1 |

Boring Progress and Water Observations						General Remarks
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth	

All dimensions in metres Scale: **1:25**

Method Used: Inspection pit + Sonic Drilling + Rotary Cored	Plant Used: Comacchio GEO 305 Sonic	Drilled By: Andrew Ward	Logged By: BSaimen + JMcCarthy	Checked By:
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Contract: A635 Barnsley Bus Rapid Transit Route		Client: Barnsley Metropolitan Borough Council		Borehole: BH15	
Contract Ref: 765865		Start: 05.08.24	Ground Level: 52.96	National Grid Co-ordinate: E:437225.4 N:405501.8	Sheet: 4 of 12
End: 07.08.24					

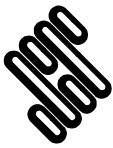
Depth (m)	Samples & Testing			Mechanical Log				Flush Returns & Details	Backfill	Water	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
	No	Type	Results	TCR (%)	SCR (%)	RQD (%)	If (mm)							
13.60-13.73	19	C		87	70	64		95% return Water (Grey)			Very weak thinly laminated grey MUDSTONE with extremely closely to very closely spaced thin laminae of grey greyish white fine to medium sandstone. Bedding Fractures are 5 to 10° extremely closely to medium spaced undulating rough open infilled with grey claybup to 2mm or light brown discolouration on fractures. Joints are 60° to 85° extremely closely spaced to widely spaced undulating rough infilled with grey clay or brown discolouration on fractures. (PENNINE MIDDLE COAL MEASURES FORMATION) <i>(stratum copied from 13.45m from previous sheet)</i> ... 13.75m-14.00m, Joint is 85° undulating rough open with brown discolouration or stain on fractures. ... 14.04m-14.20m, AZCL ... 14.25m-14.55m, mudstone is non intact recovered as angular fine to coarse gravel of mudstone and grey clay (Possible movements) ... 14.60m-14.70m, Joint is 60° planar rough clean. ... 14.60m-14.78m, Joint is 75° planar rough clean. ... 15.20m-15.30m, Joint is 60° planar rough clean. Very weak to weak thinly to thickly laminated grey fine to medium SANDSTONE. Bedding Fractures are 5° closely spaced to medium spaced undulating rough clean or light brown discolouration on fractures. (PENNINE MIDDLE COAL MEASURES FORMATION) ... 15.30m-15.40m, sandstone is non intact recovered as angular fine to coarse gravel of sandstone. <i>Description on Next Sheet</i> ... 16.05m-17.25m, occasional laminae of coal.			
14.20-15.70 (0:19)							NI 100 230					37.66	15.30	(1.85)
14.80-14.98	20	C		100	63	37		0% return Water (Grey)						
15.70-17.20 (0:24)							NI 150 380							
15.85-16.20	21	C		100	97	90		0% return Water						
17.20-18.70 (0:17)							400 500 600							
17.25-17.65	22	C		100	90	90		0% return Water						

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Boring Progress and Water Observations						General Remarks
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth	

All dimensions in metres Scale: **1:25**

Method Used: Inspection pit + Sonic Drilling + Rotary Cored	Plant Used: Comacchio GEO 305 Sonic	Drilled By: Andrew Ward	Logged By: BSaimen + JMcCarthy	Checked By: AGS
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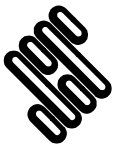
BOREHOLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Borehole: BH15
Contract Ref: 765865	Start: 05.08.24 End: 07.08.24	Ground Level: 52.96	National Grid Co-ordinate: E:437225.4 N:405501.8	Sheet: 5 of 12

Depth (m)	Samples & Testing			Mechanical Log				Flush Returns & Details	Backfill	Water	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
	No	Type	Results	TCR (%)	SCR (%)	RQD (%)	If (mm)							
18.70-20.20 (0:09)				100	90	90		0% return Water			Very weak to weak locally thinly laminated brown and brownish grey fine to coarse SANDSTONE. Rare localized thin laminae of coal. Joint set 1: 50° widely spaced undulating rough open brown discolouration on fractures. Joint set 2: 75° medium spaced undulating rough open brown discolouration on fractures. (PENNINE MIDDLE COAL MEASURES FORMATION) (stratum copied from 16.58m from previous sheet) ... 18.00m-18.55m, Joint is 75° undulating rough open brown discolouration penetrates downward along the fractures(up to 50mm- 90mm). ... 18.50m-19.15m, Joint is 75° undulating rough open brown discolouration penetrates downward along the fractures(up to 50mm- 90mm).	32.76	20.20	
				100	100	100	400 500 600	0% return Water			Borehole terminated 20.20m depth.			

Boring Progress and Water Observations						General Remarks
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth	
All dimensions in metres						Scale: 1:25
Method Used: Inspection pit + Sonic Drilling + Rotary Cored	Plant Used: Comacchio GEO 305 Sonic	Drilled By: Andrew Ward	Logged By: BSaimen + JMcCarthy	Checked By:		

GINT LIBRARY_V10_01.GLB LibVersion: v8_07_001 PiVersion: v8_07 | Log COMPOSITE LOG - A4P | 765865 A635 BARNSELY BUS RAPIDTRANSIT ROUTE.GPJ - V10_01.
 Structural Soils Ltd, Branch Office - Castleford, The Potteries, Pottery Street, Castleford, West Yorkshire, WF10 1NJ. Tel: 01977-552255, Fax: 01977-552299, Web: www.soils.co.uk, Email: ask@soils.co.uk | 10/12/24 - 15:37 | MG1 |

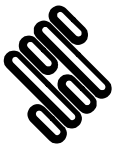


Contract: A635 Barnsley Bus Rapid Transit Route		Client: Barnsley Metropolitan Borough council		Borehole: BH15
Contract Ref: 765865	Start: 05.08.24 End: 07.08.24	Ground Level: 52.96	National Grid Co-ordinate: E:437225.4 N:405501.8	Sheet: 6 of 12



GINT LIBRARY_V10_01.GLB LibVersion: v8 07 001 PtVersion: v8 07 | Log COMPOSITE LOG - A4P | 765865 A635 BARNSELEY BUS RAPIDTRANSIT ROUTE.GPJ - V10_01.
Structural Soils Ltd, Branch Office - Castleford. The Potteries, Pottery Street, Castleford, West Yorkshire, WF10 1NJ. Tel: 01977-552255, Fax: 01977-552299, Web: www.soils.co.uk, Email: ask@soils.co.uk | 10/12/24 - 15:37 | MG1 |

Method Used: Inspection pit + Sonic Drilling + Rotary Cored	Plant Used: Comacchio GEO 305 Sonic	Drilled By: Andrew Ward	Logged By: BSaimen + JMcCarthy	Checked By:	
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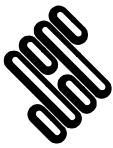


Contract: A635 Barnsley Bus Rapid Transit Route		Client: Barnsley Metropolitan Borough council		Borehole: BH15
Contract Ref: 765865	Start: 05.08.24 End: 07.08.24	Ground Level: 52.96	National Grid Co-ordinate: E:437225.4 N:405501.8	Sheet: 7 of 12



GINT LIBRARY_V10_01.GLB LibVersion: v8 07_001 PtVersion: v8 07 | Log COMPOSITE LOG - A4P | 765865 A635 BARNSELEY BUS RAPIDTRANSIT ROUTE.GPJ - V10_01. Structural Soils Ltd, Branch Office - Castleford. The Potteries, Pottery Street, Castleford, West Yorkshire, WF10 1NJ. Tel: 01977-552255, Fax: 01977-552299, Web: www.soils.co.uk, Email: ask@soils.co.uk | 10/12/24 - 15:37 | MG1 |

Method Used: Inspection pit + Sonic Drilling + Rotary Cored	Plant Used: Comacchio GEO 305 Sonic	Drilled By: Andrew Ward	Logged By: BSaimen + JMcCarthy	Checked By:	
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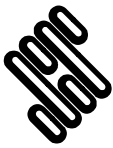


Contract: A635 Barnsley Bus Rapid Transit Route		Client: Barnsley Metropolitan Borough council		Borehole: BH15	
Contract Ref: 765865	Start: 05.08.24 End: 07.08.24	Ground Level: 52.96	National Grid Co-ordinate: E:437225.4 N:405501.8	Sheet: 8 of 12	



GINT LIBRARY_V10_01.GLB LibVersion: v8_07_001 PjVersion: v8_07 | Log COMPOSITE LOG - A4P | 765865 A635 BARNSELEY BUS RAPIDTRANSIT ROUTE GPJ - V10_01. Structural Soils Ltd, Branch Office - Castleford. The Potteries, Pottery Street, Castleford, West Yorkshire, WF10 1NJ. Tel: 01977-552255, Fax: 01977-552299, Web: www.soils.co.uk, Email: ask@soils.co.uk | 10/12/24 - 15:37 | MG1 |

Method Used:	Inspection pit + Sonic Drilling + Rotary Cored	Plant Used:	Comacchio GEO 305 Sonic	Drilled By:	Andrew Ward	Logged By:	BSaimen + JMcCarthy	Checked By:		
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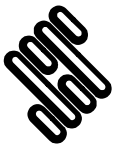


Contract: A635 Barnsley Bus Rapid Transit Route		Client: Barnsley Metropolitan Borough council		Borehole: BH15
Contract Ref: 765865	Start: 05.08.24 End: 07.08.24	Ground Level: 52.96	National Grid Co-ordinate: E:437225.4 N:405501.8	Sheet: 9 of 12



GINT LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrVersion: v8_07 | Log COMPOSITE LOG - A4P | 765865 A635 BARNSELEY BUS RAPIDTRANSIT ROUTE GPJ - V10_01. Structural Soils Ltd, Branch Office - Castleford. The Potteries, Pottery Street, Castleford, West Yorkshire, WF10 1NJ. Tel: 01977-552255, Fax: 01977-552299, Web: www.soils.co.uk, Email: ask@soils.co.uk | 10/12/24 - 15:38 | MG1 |

Method Used:	Inspection pit + Sonic Drilling + Rotary Cored	Plant Used:	Comacchio GEO 305 Sonic	Drilled By:	Andrew Ward	Logged By:	BSaimen + JMcCarthy	Checked By:		
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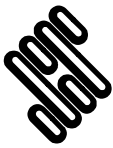


Contract: A635 Barnsley Bus Rapid Transit Route		Client: Barnsley Metropolitan Borough council		Borehole: BH15
Contract Ref: 765865	Start: 05.08.24 End: 07.08.24	Ground Level: 52.96	National Grid Co-ordinate: E:437225.4 N:405501.8	Sheet: 10 of 12



GINT LIBRARY_V10_01.GLB LibVersion: v8.07.001 PiVersion: v8.07.001 Log COMPOSITE LOG - A4P | 765865 A635 BARNSELEY BUS RAPIDTRANSIT ROUTE.GPJ - V10_01 | Structural Soils Ltd, Branch Office - Castleford, The Potteries, Pottery Street, Castleford, West Yorkshire, WF10 1NJ. Tel: 01977-552255, Fax: 01977-552299, Web: www.soils.co.uk, Email: ask@soils.co.uk | 10/12/24 - 15:38 | MG1 |

Method Used:	Inspection pit + Sonic Drilling + Rotary Cored	Plant Used:	Comacchio GEO 305 Sonic	Drilled By:	Andrew Ward	Logged By:	BSaimen + JMcCarthy	Checked By:	
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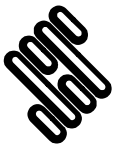


Contract: A635 Barnsley Bus Rapid Transit Route		Client: Barnsley Metropolitan Borough council		Borehole: BH15
Contract Ref: 765865	Start: 05.08.24 End: 07.08.24	Ground Level: 52.96	National Grid Co-ordinate: E:437225.4 N:405501.8	Sheet: 11 of 12



GINT LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrVersion: v8_07_001 Log COMPOSITE LOG - A4P | 765865 A635 BARNSELEY BUS RAPIDTRANSIT ROUTE.GPJ - V10_01. Structural Soils Ltd, Branch Office - Castleford, The Potteries, Pottery Street, Castleford, West Yorkshire, WF10 1NJ. Tel: 01977-552255, Fax: 01977-552299, Web: www.soils.co.uk, Email: ask@soils.co.uk | 10/12/24 - 15:39 | MG1 |

Method Used: Inspection pit + Sonic Drilling + Rotary Cored	Plant Used: Comacchio GEO 305 Sonic	Drilled By: Andrew Ward	Logged By: BSaimen + JMcCarthy	Checked By:	
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BOREHOLE LOG

Contract: A635 Barnsley Bus Rapid Transit Route		Client: Barnsley Metropolitan Borough council		Borehole: BH15
Contract Ref: 765865	Start: 05.08.24 End: 07.08.24	Ground Level: 52.96	National Grid Co-ordinate: E:437225.4 N:405501.8	Sheet: 12 of 12



GINT LIBRARY_V10_01.GLB LibVersion: v8_07_001 PiVersion: v8_07_001 Log COMPOSITE LOG - A4P | 765865 A635 BARNSELEY BUS RAPIDTRANSIT ROUTE GPJ - V10_01. Structural Soils Ltd, Branch Office - Castleford. The Potteries, Pottery Street, Castleford, West Yorkshire, WF10 1NJ. Tel: 01977-552255, Fax: 01977-552299, Web: www.soils.co.uk, Email: ask@soils.co.uk | 10/12/24 - 15:39 | MG1 |

Method Used:	Inspection pit + Sonic Drilling + Rotary Cored	Plant Used:	Comacchio GEO 305 Sonic	Drilled By:	Andrew Ward	Logged By:	BSaimen + JMcCarthy	Checked By:		
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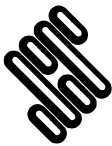
BOREHOLE LOG

Contract: A635 Barnsley Bus Rapid Transit Route		Client: Barnsley Metropolitan Borough Council		Borehole: BH16	
Contract Ref: 765865		Start: 07.08.24	Ground Level: 52.96	National Grid Co-ordinate: E:437234.9 N:405485.0	Sheet: 1 of 12
		End: 09.08.24			

Depth (m)	Samples & Testing			Mechanical Log				Flush Returns & Details	Backfill & Instrumentation	Water	Description of Strata	Depth (Thickness)	Material Graphic Legend
	No	Type	Results	TCR (%)	SCR (%)	RQD (%)	If (mm)						
0.20	101	ES									MADE GROUND: TARMAC. (MADE GROUND)	0.15	
0.50	1	B									MADE GROUND: Yellowish brown sandy GRAVEL. Sand is fine. Gravel is angular to subangular fine to coarse stone aggregate. (MADE GROUND)	(0.60)	
0.50	2	D									MADE GROUND: Dark greenish grey slightly sandy gravelly clay with some cobbles. Sand is fine. Gravel is angular to subangular fine to coarse mudstone and brick glass fragments. Cobbles are bricks fragments. (MADE GROUND)	0.75	
1.00	3	B									At 0.75m depth: Geotextile membrane encountered.	(1.33)	
1.00	4	D											
1.10	102	ES											
1.20-1.50 (0:10)	201	SPT	N=5					0% return Water					
1.20-1.65 (0:09)	202	DSPT											
1.90	103	ES	1xT+1xJ+1xV					0% return Water			MADE GROUND: Soft grey mottled brown slightly sandy slightly gravelly CLAY with low cobble content. Sand is fine to coarse gravel is angular and subangular fine and medium of mudstone and sandstone. Cobbles are subangular and subrounded of sandstone and pottery. (MADE GROUND)	2.08	
2.40	104	ES	1xT+1xJ+1xV					0% return Water					
2.45-2.80	5	B											
2.90-3.00 (0:25)	6	D											
3.00-3.45 (0:25)	203	SPT	N=4										
3.00-3.45	204	DSPT											
3.40	105	ES	1xT+1xJ+1xV								Soft brownish grey silty CLAY. Strong smell (Anoxic decay smell).	3.44	
3.55-3.65	7	D											
3.60	106	ES	1xT+1xJ+1xV					20% return Water (Brown)			Soft brownish yellow slightly sandy silty CLAY. Sand is fine.	3.79	
4.20-4.30	8	D											
4.40	107	ES	1xT+1xJ+1xV									(1.30)	

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Boring Progress and Water Observations						General Remarks
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth	
						1. Location cleared with GPR and CAT and Genny prior to drilling. 2. Inspection pit dug to 1.20m depth. 3. Sonic drilling between 1.20m and 6.00m depth 4. Rotary coring below 6.00m depth. 5. No groundwater encountered. 6. Standing water level at the end of drilling 9.28m depth. 7. 50mm standpipe installed on completion.
All dimensions in metres						Scale: 1:25
Method Used:	Inspection pit + Sonic Drilling + Rotary Cored		Plant Used:	Comacchio GEO 305 Sonic		Drilled By: Andrew Ward Logged By: BSaimen Checked By: AGS



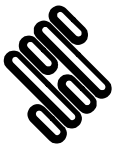
BOREHOLE LOG

Contract: A635 Barnsley Bus Rapid Transit Route		Client: Barnsley Metropolitan Borough Council		Borehole: BH16	
Contract Ref: 765865		Start: 07.08.24	Ground Level: 52.96	National Grid Co-ordinate: E:437234.9 N:405485.0	Sheet: 2 of 12
End: 09.08.24					

Depth (m)	Samples & Testing			Mechanical Log				Flush Returns & Details	Backfill & Instrumentation	Water	Description of Strata	Depth (Thickness)	Material Graphic Legend
	No	Type	Results	TCR (%)	SCR (%)	RQD (%)	If (mm)						
4.50-6.00	205 206	SPT	N=23	↑	↑	↑	↑	↑	↑	↑	Soft brownish yellow slightly sandy silty CLAY. Sand is fine. (stratum copied from 3.79m from previous sheet) 4.50m- 50.9m, becomes brown mottled grey.	5.09	
4.50-4.95		DSPT											
4.50-4.95													
5.15	108 9 10	ES	1xT+1xJ+1xV	89	↑	↑	↑	↑	↑	25% return Water	Extremely weak brownish dark grey thinly and thickly laminated partially weathered MUDSTONE recovered as slightly sandy CLAY. Sand is fine to coarse. (PENNINE MIDDLE COAL MEASURES FORMATION)	(0.91)	
5.20-5.30		D											
5.30-5.60		B											
6.00-6.70 (0:05)	207 208	SPT	8,10/10,10,12,8 for 48mm	↑	↑	↑	↑	↑	↑	100% return Water (Brown)	Extremely weak to very weak thinly laminated greyish brown MUDSTONE with extremely closely to very closely spaced thin laminae of greyish white fine to medium sandstone. Bedding Fractures are 5 to 10° extremely closely spaced to medium spaced undulating rough open infilled with brown clay or with brown discolouration penetrates downward along the fracture. (PENNINE MIDDLE COAL MEASURES FORMATION)	(1.70)	
6.00-6.42		DSPT											
6.70-8.20 (0:14)	11	C		↑	↑	↑	↑	↑	↑	100% return Water (Brown)	Extremely weak to very weak thinly laminated greyish brown MUDSTONE with extremely closely to very closely spaced thin laminae of greyish white fine to medium sandstone. Bedding Fractures are 5 to 10° extremely closely spaced to medium spaced undulating rough open infilled with brown clay or with brown discolouration penetrates downward along the fracture. (PENNINE MIDDLE COAL MEASURES FORMATION)	(1.70)	
7.00-7.15													
8.20-9.70 (0:17)	12	C		↑	↑	↑	↑	↑	↑	50% return Water (Brown)	7.65m-7.70m, grey mudstone recovered non intact as angular fine to coarse gravel. Very weak thinly laminated grey MUDSTONE with extremely closely to very closely spaced thin laminae of greyish white fine to medium sandstone. Bedding Fractures are 5 to 15° very closely to medium spaced undulating rough partly open to open clean and with light brown discolouration on fractures. (PENNINE MIDDLE COAL MEASURES FORMATION)	(2.00)	
8.65-8.90													

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Boring Progress and Water Observations						General Remarks
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth	
						8. SPT hammer AR3874-2024 ($E_r = 65.00\%$) used.
All dimensions in metres						Scale: 1:25
Method Used: Inspection pit + Sonic Drilling + Rotary Cored	Plant Used: Comacchio GEO 305 Sonic		Drilled By: Andrew Ward	Logged By: BSaimen	Checked By: AGS	

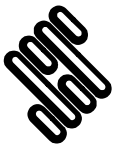


Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Borehole: BH16
Contract Ref: 765865	Start: 07.08.24 End: 09.08.24	Ground Level: 52.96	National Grid Co-ordinate: E:437234.9 N:405485.0	Sheet: 3 of 12

Depth (m)	Samples & Testing			Mechanical Log				Flush Returns & Details	Backfill & Instrumentation	Water	Description of Strata	Depth (Thickness)	Material Graphic Legend
	No	Type	Results	TCR (%)	SCR (%)	RQD (%)	If (mm)						
9.70-11.20 (0:14) 9.75-9.90	13	C		95	95	72	40 250 450				... 9.62m-9.70m, AZCL	9.70	
11.20-12.70 (0:11) 11.45-11.70	14	C		100	51	48	NI 200 450	100% return Water (Brown)			... 9.80m-10.15m, sandstone contains extremely closely spaced thin laminae of grey mudstone. ... 10.10m-11.50m, Joint is 85° undulating rough open dark brown stains on the fracture.	(2.30)	
12.40-12.70 12.70-14.20 (0:18)	15	C		97	71	60	50 200 350	70% return Water (Brown)			... 11.63m-11.70m, sandstone is non intact recovered angular fine to coarse gravel of sandstone.	12.00	
				97	67	29		70% return Water (Brown)			Weak thinly laminated grey fine to coarse SANDSTONE with extremely closely spaced to very closely spaced thin laminae of grey mudstone. Bedding Fractures are 5 to 15° very closely to medium spaced undulating rough open brown discolouration on fractures. (PENNINE MIDDLE COAL MEASURES FORMATION)	(1.45)	
												13.45	

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Boring Progress and Water Observations						General Remarks
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth	
All dimensions in metres						Scale: 1:25
Method Used: Inspection pit + Sonic Drilling + Rotary Cored	Plant Used: Comacchio GEO 305 Sonic	Drilled By: Andrew Ward	Logged By: BSaimen	Checked By: AGS		



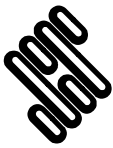
BOREHOLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Borehole: BH16
Contract Ref: 765865	Start: 07.08.24 End: 09.08.24	Ground Level: 52.96	National Grid Co-ordinate: E:437234.9 N:405485.0	Sheet: 4 of 12

Depth (m)	Samples & Testing			Mechanical Log				Flush Returns & Details	Backfill & Instrumentation	Water	Description of Strata	Depth (Thickness)	Material Graphic Legend
	No	Type	Results	TCR (%)	SCR (%)	RQD (%)	If (mm)						
14.20-15.70 (0:27)	16	C		97	67	29					Very weak thinly laminated grey MUDSTONE with extremely closely spaced to closely spaced thin laminae to thin beds of greyish white fine to coarse Sandstone. Bedding Fractures are 15 to 40° very closely spaced to closely spaced undulating rough partly open to open with brown discolouration on fractures. (PENNINE MIDDLE COAL MEASURES FORMATION) <i>(stratum copied from 13.45m from previous sheet)</i> ... 13.70m-14.20m, Joint is 75° planar rough open with dark brown discolouration on fractures. ... 14.07m-14.15m, thin beds of fine to coarse sandstone.	(2.55)	
14.40-14.55								NI 100 180	85% return Water (Brown)				
15.70-17.20 (0:11)	17	C		100	63	30					Weak to moderately weak locally thin laminated grey fine to coarse SANDSTONE with rare localized clasts of brown siltstone up to 6mm. Bedding Fractures are 10° medium to widely spaced planar rough open brown discolouration on fractures. (PENNINE MIDDLE COAL MEASURES FORMATION)	(1.00)	
16.30-16.70								220 500 760	70% return Water (Brown)				
17.20-18.70 (0:09)	18	C		100	88	73					Weak locally thinly laminated brown and brownish grey fine to coarse SANDSTONE with rare localized clasts of brown siltstone up to 6mm. Bedding Fractures are 5° to 10° closely spaced to widely spaced undulating rough open clean or brown discolouration on fractures. (PENNINE MIDDLE COAL MEASURES FORMATION) ... 17.20m-17.90m, sandstone contains occasional laminae of coal dipping along		
17.80-18.20								80 350 700	Water (Brown)				

Boring Progress and Water Observations						General Remarks
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth	
						All dimensions in metres
Method Used: Inspection pit + Sonic Drilling + Rotary Cored	Plant Used: Comacchio GEO 305 Sonic	Drilled By: Andrew Ward	Logged By: BSaimen	Checked By: AGS		

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BOREHOLE LOG

Contract: A635 Barnsley Bus Rapid Transit Route		Client: Barnsley Metropolitan Borough Council		Borehole: BH16
Contract Ref: 765865	Start: 07.08.24 End: 09.08.24	Ground Level: 52.96	National Grid Co-ordinate: E:437234.9 N:405485.0	Sheet: 5 of 12

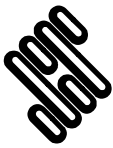
Depth (m)	Samples & Testing			Mechanical Log				Flush Returns & Details	Backfill & Instrumentation	Water	Description of Strata	Depth (Thickness)	Material Graphic Legend
	No	Type	Results	TCR (%)	SCR (%)	RQD (%)	If (mm)						
18.70-20.20 (0:10)				100	88	73		Water (Brown)			the bedding. Weak locally thinly laminated brown and brownish grey fine to coarse SANDSTONE with rare localized clasts of brown siltstone up to 6mm. Bedding Fractures are 5° to 10° closely spaced to widely spaced undulating rough open clean or brown discolouration on fractures. (PENNINE MIDDLE COAL MEASURES FORMATION) (<i>stratum copied from 17.00m from previous sheet</i>) . . . 18.25m-18.70m, randomly dipping occasional thin laminae of coal (up to 6mm).	(3.20)	
19.45-19.90	19	C		100	100	100	80 350 700	70% return Water (Brown)					
											Borehole terminated 20.20m depth.	20.20	

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Boring Progress and Water Observations						General Remarks
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth	

All dimensions in metres Scale: **1:25**

Method Used: Inspection pit + Sonic Drilling + Rotary Cored	Plant Used: Comacchio GEO 305 Sonic	Drilled By: Andrew Ward	Logged By: BSaimen	Checked By: AGS
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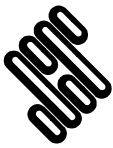
BOREHOLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Borehole: BH16
Contract Ref: 765865	Start: 07.08.24 End: 09.08.24	Ground Level: 52.96	National Grid Co-ordinate: E:437234.9 N:405485.0	Sheet: 6 of 12



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Method Used: Inspection pit + Sonic Drilling + Rotary Cored	Plant Used: Comacchio GEO 305 Sonic	Drilled By: Andrew Ward	Logged By: BSaimen	Checked By: AGS
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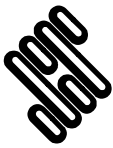
BOREHOLE LOG

Contract: A635 Barnsley Bus Rapid Transit Route		Client: Barnsley Metropolitan Borough council		Borehole: BH16
Contract Ref: 765865	Start: 07.08.24 End: 09.08.24	Ground Level: 52.96	National Grid Co-ordinate: E:437234.9 N:405485.0	Sheet: 7 of 12



GINT LIBRARY_V10_01.GLB LibVersion: v8_07_001 PiVersion: v8_07_001 Log COMPOSITE LOG - A4P | 765865 A635 BARNSELEY BUS RAPIDTRANSIT ROUTE.GPJ - V10_01. Structural Soils Ltd, Branch Office - Castleford. The Potteries, Pottery Street, Castleford, West Yorkshire, WF10 1NJ. Tel: 01977-552255, Fax: 01977-552299, Web: www.soils.co.uk, Email: ask@soils.co.uk | 10/12/24 - 12:10 | MG1 |

Method Used: Inspection pit + Sonic Drilling + Rotary Cored	Plant Used: Comacchio GEO 305 Sonic	Drilled By: Andrew Ward	Logged By: BSaimen	Checked By: AGS
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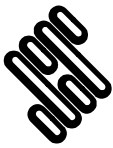
BOREHOLE LOG

Contract: A635 Barnsley Bus Rapid Transit Route		Client: Barnsley Metropolitan Borough council		Borehole: BH16
Contract Ref: 765865	Start: 07.08.24 End: 09.08.24	Ground Level: 52.96	National Grid Co-ordinate: E:437234.9 N:405485.0	Sheet: 8 of 12



GINT LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrVersion: v8_07 | Log COMPOSITE LOG - A4P | 765865 A635 BARNSELEY BUS RAPIDTRANSIT ROUTE GPJ - V10_01 | Structural Soils Ltd, Branch Office - Castleford, The Potteries, Pottery Street, Castleford, West Yorkshire, WF10 1NJ. Tel: 01977-552255, Fax: 01977-552299, Web: www.soils.co.uk, Email: ask@soils.co.uk | 10/12/24 - 12:11 | MG1 |

Method Used:	Inspection pit + Sonic Drilling + Rotary Cored	Plant Used:	Comacchio GEO 305 Sonic	Drilled By:	Andrew Ward	Logged By:	BSaimen	Checked By:	AG	
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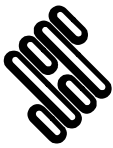
BOREHOLE LOG

Contract: A635 Barnsley Bus Rapid Transit Route		Client: Barnsley Metropolitan Borough council		Borehole: BH16
Contract Ref: 765865	Start: 07.08.24 End: 09.08.24	Ground Level: 52.96	National Grid Co-ordinate: E:437234.9 N:405485.0	Sheet: 9 of 12



GINT LIBRARY: V10_01.GLB LibVersion: v8_07_001 PrVersion: v8_07 | Log COMPOSITE LOG - A4P | 765865 A635 BARNSELEY BUS RAPIDTRANSIT ROUTE GPJ - V10_01. Structural Soils Ltd, Branch Office - Castleford. The Potteries, Pottery Street, Castleford, West Yorkshire, WF10 1NJ. Tel: 01977-552255, Fax: 01977-552299, Web: www.soils.co.uk, Email: ask@soils.co.uk | 10/12/24 - 12:11 | MG1 |

Method Used: Inspection pit + Sonic Drilling + Rotary Cored	Plant Used: Comacchio GEO 305 Sonic	Drilled By: Andrew Ward	Logged By: BSaimen	Checked By: AG	
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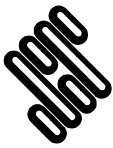
BOREHOLE LOG

Contract: A635 Barnsley Bus Rapid Transit Route		Client: Barnsley Metropolitan Borough council		Borehole: BH16
Contract Ref: 765865	Start: 07.08.24 End: 09.08.24	Ground Level: 52.96	National Grid Co-ordinate: E:437234.9 N:405485.0	Sheet: 10 of 12



GINT LIBRARY_V10_01.GLB LibVersion: v8_07_001 PiVersion: v8_07 | Log COMPOSITE LOG - A4P | 765865 A635 BARNSELY BUS RAPIDTRANSIT ROUTE.GPJ - V10_01. Structural Soils Ltd, Branch Office - Castleford. The Potteries, Pottery Street, Castleford, West Yorkshire, WF10 1NJ. Tel: 01977-552255, Fax: 01977-552299, Web: www.soils.co.uk, Email: ask@soils.co.uk | 10/12/24 - 12:12 | MG1 |

Method Used:	Inspection pit + Sonic Drilling + Rotary Cored	Plant Used:	Comacchio GEO 305 Sonic	Drilled By:	Andrew Ward	Logged By:	BSaimen	Checked By:	AG	
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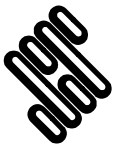
BOREHOLE LOG

Contract: A635 Barnsley Bus Rapid Transit Route		Client: Barnsley Metropolitan Borough council		Borehole: BH16	
Contract Ref: 765865	Start: 07.08.24 End: 09.08.24	Ground Level: 52.96	National Grid Co-ordinate: E:437234.9 N:405485.0	Sheet: 11 of 12	



GINT LIBRARY_V10_01.GLB LibVersion: v8.07.001 PrVersion: v8.07.001 Log COMPOSITE LOG - A4P | 765865 A635 BARNSELEY BUS RAPIDTRANSIT ROUTE.GPJ - V10_01. Structural Soils Ltd, Branch Office - Castleford. The Potteries, Pottery Street, Castleford, West Yorkshire, WF10 1NJ. Tel: 01977-552255, Fax: 01977-552299, Web: www.soils.co.uk, Email: ask@soils.co.uk | 10/12/24 - 12:12 | MG1 |

Method Used:	Inspection pit + Sonic Drilling + Rotary Cored	Plant Used:	Comacchio GEO 305 Sonic	Drilled By:	Andrew Ward	Logged By:	BSaimen	Checked By:	AG	
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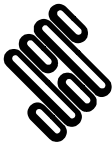
BOREHOLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Borehole: BH16
Contract Ref: 765865	Start: 07.08.24 End: 09.08.24	Ground Level: 52.96	National Grid Co-ordinate: E:437234.9 N:405485.0	Sheet: 12 of 12



GINT LIBRARY_V10_01.GLB LibVersion: v8_07_001 PrVersion: v8_07_001 | Log COMPOSITE LOG - A4P | 765865 A635 BARNSELEY BUS RAPIDTRANSIT ROUTE.GPJ - V10_01 | Structural Soils Ltd, Branch Office - Castleford, The Potteries, Pottery Street, Castleford, West Yorkshire, WF10 1NJ. Tel: 01977-552255, Fax: 01977-552299, Web: www.soils.co.uk, Email: ask@soils.co.uk | 10/12/24 - 12:12 | MG1 |

Method Used: Inspection pit + Sonic Drilling + Rotary Cored	Plant Used: Comacchio GEO 305 Sonic	Drilled By: Andrew Ward	Logged By: BSaimen	Checked By: AG	
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WINDOW SAMPLE LOG

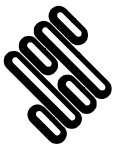
Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS01	
Contract Ref: 765865		Start: 06.08.24 End: 06.08.24	Ground Level: 50.13	National Grid Co-ordinate: E:437259.5 N:405445.3	Sheet: 1 of 3

Progress Window Run	Samples / Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
	Depth	No	Type	Results						
	0.10-0.30	1	B			MADE GROUND: Light brown sandy angular to subangular medium to coarse GRAVEL of limestone and dolomite. (MADE GROUND)	49.63	(0.50) 0.50		
	0.60-0.70	2	D			Extremely weak grey MUDSTONE. Recovered as 0.06mm to 12mm fragments of mudstone. (PENNINE MIDDLE COAL MEASURES FORMATION) Window Sample terminated at 0.70 m depth on mudstone.	49.43	0.70		

GINT LIBRARY_V10_01.GLB LibVersion: v8_07 | Log WINDOW SAMPLE LOG - A4F | 765865_A635_BARNSELEY_BUS_RAPIDTRANSIT_ROUTE.GPJ - v10_01. Structural Soils Ltd, Branch Office - Castleford, The Potteries, Pottery Street, Castleford, West Yorkshire, WF10 1NJ. Tel: 01977-552255; Fax: 01977-552299; Web: www.soils.co.uk; Email: ask@soils.co.uk | 10/12/24 - 14:40 | MG1 |

Drilling Progress and Water Observations						General Remarks
Date	Time	Borehole Depth (m)	Casing Depth (m)	Borehole Diameter (mm)	Water Depth (m)	
06/08/24	23:52	0.70	-		-	1. Position cleared with GPR and CAT and Genny. 2. Hand dug inspection pit to 0.70m depth. 3. Window Sample terminated at 0.70m depth on Mudstone. 4. No groundwater encountered. 5. Backfilled on completion.
All dimensions in metres						
Method Used:	Inspection pit + Tracked window sampling		Plant Used:	Archway Competitor		Drilled By: Ben Pine Logged By: KAdedotun Checked By: AG





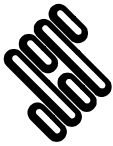
WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS01
Contract Ref: 765865	Start: 06.08.24 End: 06.08.24	Ground Level: 50.13	National Grid Co-ordinate: E:437259.5 N:405445.3	Sheet: 2 of 3



GINT LIBRARY_V10_01.GLB LibVersion: v8_07_001 ProjVersion: v8_07 | Log WINDOW SAMPLE LOG - A4F | 765865_A635_BARNSELEY_BUS_RAPIDTRANSIT_ROUTE.GPJ - v10_01.
 Structural Soils Ltd, Branch Office - Castleford. The Potteries, Pottery Street, Castleford, West Yorkshire, WF10 1NJ. Tel: 01977-552255; Fax: 01977-552299; Web: www.soils.co.uk; Email: ask@soils.co.uk | 10/12/24 - 14:40 | MG1 |

Method Used: Inspection pit + Tracked window sampling	Plant Used: Archway Competitor	Drilled By: Ben Pine	Logged By: KAdedotun	Checked By: AG	
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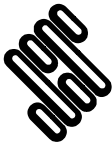
WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS01
Contract Ref: 765865	Start: 06.08.24 End: 06.08.24	Ground Level: 50.13	National Grid Co-ordinate: E:437259.5 N:405445.3	Sheet: 3 of 3



GINT LIBRARY_V10_01.GLB LibVersion: v8_07 | Log WINDOW SAMPLE LOG - A4F | 765865_A635_BARNSELEY_BUS_RAPIDTRANSIT_ROUTE.GPJ - v10_01.
Structural Soils Ltd, Branch Office - Castleford. The Potteries, Pottery Street, Castleford, West Yorkshire, WF10 1NJ. Tel: 01977-552255; Fax: 01977-552299; Web: www.soils.co.uk; Email: ask@soils.co.uk | 10/12/24 - 14:40 | MG1 |

Method Used: Inspection pit + Tracked window sampling	Plant Used: Archway Competitor	Drilled By: Ben Pine	Logged By: KAdedotun	Checked By: AG	
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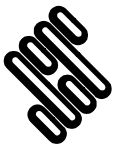
WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS02	
Contract Ref: 765865		Start: 06.08.24	Ground Level: 50.28	National Grid Co-ordinate: E:437292.1 N:405434.4	Sheet: 1 of 3
End: 06.08.24					

Progress Window Run	Samples / Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
	Depth	No	Type	Results						
0.00-0.10	1	D				MADE GROUND: Light brown slightly gravelly clayey fine SAND. Gravel is angular to subangular medium to coarse of limestone. (MADE GROUND)	50.08	0.20		
0.00-0.20	2	B								
0.10	101	ES	1xT+1xJ+1xV							
0.30-0.60	4	B			Grey extremely weak MUDSTONE. Recovered as 0.06mm to 10mm fragments. (PENNINE MIDDLE COAL MEASURES FORMATION)	49.68	0.60			
0.40	102	ES	1xT+1xJ+1xV							
0.50-0.60	3	D								
Window Sample terminated at 0.60m depth on mudstone.										

GINT LIBRARY V10_01.GLB LibVersion: v8_07 | Log WINDOW SAMPLE LOG - A4F | 765865_A635_BARNSELEY_BUS_RAPIDTRANSIT_ROUTE.GPJ - v10_01. Structural Soils Ltd, Branch Office - Castleford, The Potteries, Pottery Street, Castleford, West Yorkshire, WF10 1NJ. Tel: 01977-552255, Fax: 01977-552299, Web: www.soils.co.uk, Email: ask@soils.co.uk | 10/12/24 - 14:40 | MG1 |

Drilling Progress and Water Observations						General Remarks						
Date	Time	Borehole Depth (m)	Casing Depth (m)	Borehole Diameter (mm)	Water Depth (m)							
06/08/24	22:59	0.60	-		-	1. Position cleared with GPR and CAT and Genny. 2. Hand dug inspection pit to 0.60m depth. 3. Window Sample terminated at 0.60m depth on Mudstone. 4. No groundwater encountered. 5. Backfilled on completion.						
All dimensions in metres						Scale:	1:25					
Method Used:	Inspection pit + Tracked window sampling		Plant Used:	Archway Competitor		Drilled By:	Ben Pine	Logged By:	KAdedotun	Checked By:	AG	



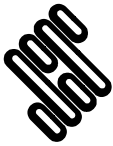
WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS02
Contract Ref: 765865	Start: 06.08.24 End: 06.08.24	Ground Level: 50.28	National Grid Co-ordinate: E:437292.1 N:405434.4	Sheet: 2 of 3



GINT LIBRARY_V10_01.GLB LibVersion: v8_07_001 ProjVersion: v8_07 | Log WINDOW SAMPLE LOG - A4F | 765865_A635_BARNESLEY_BUS_RAPIDTRANSIT_ROUTE.GPJ - v10_01.
 Structural Soils Ltd, Branch Office - Castleford, The Potteries, Pottery Street, Castleford, West Yorkshire, WF10 1NJ. Tel: 01977-552255; Fax: 01977-552299; Web: www.soils.co.uk; Email: ask@soils.co.uk | 10/12/24 - 14:40 | MG1 |

Method Used: Inspection pit + Tracked window sampling	Plant Used: Archway Competitor	Drilled By: Ben Pine	Logged By: KAdedotun	Checked By: AG	
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WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS02
Contract Ref: 765865	Start: 06.08.24 End: 06.08.24	Ground Level: 50.28	National Grid Co-ordinate: E:437292.1 N:405434.4	Sheet: 3 of 3



GINT LIBRARY_V10_01.GLB LibVersion: v8_07_001 ProjVersion: v8_07 | Log WINDOW SAMPLE LOG - A4F | 765865_A635_BARNESLEY_BUS_RAPIDTRANSIT_ROUTE.GPJ - v10_01.
Structural Soils Ltd, Branch Office - Castleford, The Potteries, Pottery Street, Castleford, West Yorkshire, WF10 1NJ. Tel: 01977-552255; Fax: 01977-552299; Web: www.soils.co.uk; Email: ask@soils.co.uk | 10/12/24 - 14:41 | MG1 |

Method Used: Inspection pit + Tracked window sampling	Plant Used: Archway Competitor	Drilled By: Ben Pine	Logged By: KAdedotun	Checked By: AG	
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WINDOW SAMPLE LOG

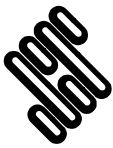
Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS03	
Contract Ref: 765865		Start: 06.08.24 End: 06.08.24	Ground Level: 51.92	National Grid Co-ordinate: E:437330.0 N:405412.8	Sheet: 1 of 3

Progress Window Run	Samples / Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
	Depth	No	Type	Results						
0.00-0.30	1	B				MADE GROUND: Light brown sandy angular to subangular medium to coarse GRAVEL of limestone and dolomite. (MADE GROUND)	51.42	0.50		
0.60 0.60-0.70 0.60-1.00	101 2 3	ES D B	1xT+1xJ+1xV			MADE GROUND: Brown slightly gravelly silty fine to medium SAND. Gravel are angular to subangular medium to coarse of limestone and dolomite. (MADE GROUND)	50.76	1.16		
1.20-1.58 1.20-1.58	1 5	SPT DSPT	5,7/9,13,28 for 75mm			Extremely weak light brown SILTSTONE. recovered as 0.06mm to 10mm fragments. (PENNINE MIDDLE COAL MEASURES FORMATION)	50.34	1.58		
Window Sample terminated at 1.58m depth on siltstone.										

GINT LIBRARY V10_01.GLB LibVersion: v8_07_001 ProjVersion: v8_07 | Log WINDOW SAMPLE LOG - A4F | 765865_A635_BARNSELEY_BUS_RAPIDTRANSIT_ROUTE.GPJ - v10_01 | Structural Soils Ltd, Branch Office - Castleford, The Potteries, Pottery Street, Castleford, West Yorkshire, WF10 1NJ. Tel: 01977-552255; Fax: 01977-552299; Web: www.soils.co.uk; Email: ask@soils.co.uk | 10/12/24 - 14:41 | MG1 |

Drilling Progress and Water Observations						General Remarks
Date	Time	Borehole Depth (m)	Casing Depth (m)	Borehole Diameter (mm)	Water Depth (m)	
06/08/24	21:53	1.58	-		-	1. Position cleared with GPR and CAT and Genny. 2. Hand dug inspection pit to 1.58m depth. 3. Window Sample terminated at 1.58m depth on Siltstone. 4. No groundwater encountered. 5. Backfilled on completion. 6. SPT hammer DART384-2024 (E _r = 68.00%) used.
All dimensions in metres						
Method Used:	Inspection pit + Tracked window sampling		Plant Used:	Archway Competitor		Drilled By: Ben Pine Logged By: KAdedotun Checked By: AG





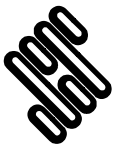
WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS03
Contract Ref: 765865	Start: 06.08.24 End: 06.08.24	Ground Level: 51.92	National Grid Co-ordinate: E:437330.0 N:405412.8	Sheet: 2 of 3



GINT LIBRARY_V10_01.GLB LibVersion: v8_07_001 ProjVersion: v8_07 | Log WINDOW SAMPLE LOG - A4F | 765865_A635_BARNESLEY_BUS_RAPIDTRANSIT_ROUTE.GPJ - v10_01. Structural Soils Ltd, Branch Office - Castleford, The Potteries, Pottery Street, Castleford, West Yorkshire, WF10 1NJ. Tel: 01977-552255; Fax: 01977-552299; Web: www.soils.co.uk; Email: ask@soils.co.uk | 10/12/24 - 14:41 | MG1 |

Method Used: Inspection pit + Tracked window sampling	Plant Used: Archway Competitor	Drilled By: Ben Pine	Logged By: KAdedotun	Checked By: AG	
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WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus Rapid Transit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS03
Contract Ref: 765865	Start: 06.08.24 End: 06.08.24	Ground Level: 51.92	National Grid Co-ordinate: E:437330.0 N:405412.8	Sheet: 3 of 3



GINT LIBRARY_V10_01.GLB LibVersion: v8_07_001 ProjVersion: v8_07 | Log WINDOW SAMPLE LOG - A4F | 765865_A635_BARNESLEY_BUS_RAPIDTRANSIT_ROUTE.GPJ - v10_01. Structural Soils Ltd, Branch Office - Castleford, The Potteries, Pottery Street, Castleford, West Yorkshire, WF10 1NJ. Tel: 01977-552255; Fax: 01977-552299; Web: www.soils.co.uk; Email: ask@soils.co.uk | 10/12/24 - 14:41 | MG1 |

Method Used: Inspection pit + Tracked window sampling	Plant Used: Archway Competitor	Drilled By: Ben Pine	Logged By: KAdedotun	Checked By: AG	
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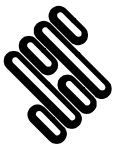
WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS04	
Contract Ref: 765865		Start: 07.08.24	Ground Level: 50.22	National Grid Co-ordinate: E:437315.0 N:405447.1	Sheet: 1 of 3
End: 07.08.24					

Progress Window Run	Samples / Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
	Depth	No	Type	Results						
0.10-0.20	1	D	1xT+1xJ+1xV			MADE GROUND: Brown slightly gravelly slightly fine SAND. Gravel are angular to subangular fine to coarse of brick, limestone and concrete. (MADE GROUND)	49.92	(0.30)		
0.10	101	ES								
0.10-0.30	2	B								
Window sample terminated at 0.30m due to services exposure.										

GINT LIBRARY_V10_01.GLB LibVersion: v8_07_001 ProjVersion: v8_07 | Log WINDOW SAMPLE LOG - A4F | 765865_A635_BARNSELEY_BUS_RAPIDTRANSIT_ROUTE.GPJ - v10_01. Structural Soils Ltd, Branch Office - Castleford, The Potteries, Pottery Street, Castleford, West Yorkshire, WF10 1NJ. Tel: 01977-552255; Fax: 01977-552299; Web: www.soils.co.uk; Email: ask@soils.co.uk | 10/12/24 - 14.41 | MG1 |

Drilling Progress and Water Observations						General Remarks						
Date	Time	Borehole Depth (m)	Casing Depth (m)	Borehole Diameter (mm)	Water Depth (m)							
07/08/24	00:39	0.30	-		-	1. Position cleared with GPR and CAT and Genny. 2. Hand dug inspection pit to 0.30m depth. 3. Window Sample terminated at 0.30m depth due to services encountered. 4. No groundwater encountered. 5. Backfilled on completion.						
All dimensions in metres						Scale:	1:25					
Method Used:	Inspection pit + Tracked window sampling		Plant Used:	Archway Competitor		Drilled By:	Ben Pine	Logged By:	KAdedotun	Checked By:	AG	



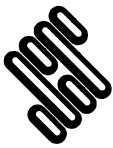
WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus Rapid Transit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS04
Contract Ref: 765865	Start: 07.08.24 End: 07.08.24	Ground Level: 50.22	National Grid Co-ordinate: E:437315.0 N:405447.1	Sheet: 2 of 3



GINT LIBRARY_V10_01.GLB LibVersion: v8_07_001 ProjVersion: v8_07 | Log WINDOW SAMPLE LOG - A4F | 765865_A635_BARNESLEY_BUS_RAPIDTRANSIT_ROUTE.GPJ - v10_01.
 Structural Soils Ltd, Branch Office - Castleford. The Potteries, Pottery Street, Castleford, West Yorkshire, WF10 1NJ. Tel: 01977-552255; Fax: 01977-552299; Web: www.soils.co.uk; Email: ask@soils.co.uk | 10/12/24 - 14:41 | MG1 |

Method Used: Inspection pit + Tracked window sampling	Plant Used: Archway Competitor	Drilled By: Ben Pine	Logged By: KAdedotun	Checked By: AG	
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WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS04
Contract Ref: 765865	Start: 07.08.24 End: 07.08.24	Ground Level: 50.22	National Grid Co-ordinate: E:437315.0 N:405447.1	Sheet: 3 of 3



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Structural Soils Ltd, Branch Office - Castleford, The Potteries, Pottery Street, Castleford, West Yorkshire, WF10 1NJ. Tel: 01977-552255; Fax: 01977-552299; Web: www.soils.co.uk; Email: ask@soils.co.uk | 10/12/24 - 14.41 | MG1 |

Method Used: Inspection pit + Tracked window sampling	Plant Used: Archway Competitor	Drilled By: Ben Pine	Logged By: KAdedotun	Checked By: AG	
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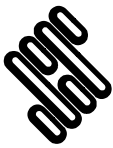
WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS04A
Contract Ref: 765865	Start: 19.08.24 End: 19.08.24	Ground Level: 49.80	National Grid Co-ordinate: E:437334.3 N:405474.2	Sheet: 1 of 3

Progress Window Run	Samples / Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
	Depth	No	Type	Results						
							MADE GROUND: Grass over greyish brown slightly gravelly silty fine sand. Gravel is angular to subangular fine to coarse mudstone, sandstone, brick and ash fragments. (MADE GROUND)	49.15	0.65	
							Window sample terminated at 0.65m depth on bedrock.			

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Drilling Progress and Water Observations						General Remarks	
Date	Time	Borehole Depth (m)	Casing Depth (m)	Borehole Diameter (mm)	Water Depth (m)		
19/08/24	17:00	0.65	-		-	1. Position cleared with GPR and CAT and Genny. 2. Hand dug inspection pit to 0.65m depth. 3. Window Sample terminated at 0.65m depth on bedrock. 4. No groundwater encountered. 5. Backfilled on completion.	
All dimensions in metres						Scale:	1:25
Method Used:	Inspection pit + Tracked window sampling		Plant Used:	Archway Competitor		Drilled By:	DSUK
						Logged By:	JMyles
						Checked By:	AGS



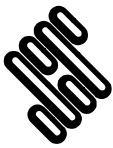
WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus Rapid Transit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS04A
Contract Ref: 765865	Start: 19.08.24 End: 19.08.24	Ground Level: 49.80	National Grid Co-ordinate: E:437334.3 N:405474.2	Sheet: 2 of 3



GINT LIBRARY_V10_01.GLB LibVersion: v8_07_001 ProjVersion: v8_07 | Log WINDOW SAMPLE LOG - A4F | 765865_A635_BARNESLEY_BUS_RAPIDTRANSIT_ROUTE.GPJ - v10_01.
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Method Used: Inspection pit + Tracked window sampling	Plant Used: Archway Competitor	Drilled By: DSUK	Logged By: JMyles	Checked By: AG	
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WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS04A
Contract Ref: 765865	Start: 19.08.24 End: 19.08.24	Ground Level: 49.80	National Grid Co-ordinate: E:437334.3 N:405474.2	Sheet: 3 of 3



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Method Used: Inspection pit + Tracked window sampling	Plant Used: Archway Competitor	Drilled By: DSUK	Logged By: JMyles	Checked By: AG	
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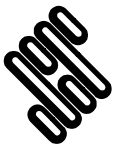
WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS04B
Contract Ref: 765865	Start: 19.08.24 End: 19.08.24	Ground Level: ---	National Grid Co-ordinate: ---	Sheet: 1 of 3

Progress Window Run	Samples / Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
	Depth	No	Type	Results						
							MADE GROUND: Grass over greyish brown slightly gravelly silty fine sand. Gravel is angular to subangular fine to coarse mudstone, sandstone, brick and ash fragments. (MADE GROUND)		(0.61)	
							Window sample terminated at 0.61m depth on bedrock.		0.61	

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Drilling Progress and Water Observations						General Remarks	
Date	Time	Borehole Depth (m)	Casing Depth (m)	Borehole Diameter (mm)	Water Depth (m)		
						1. Position cleared with GPR and CAT and Genny. 2. Hand dug inspection pit to 0.61m depth. 3. Window Sample terminated at 0.61m depth on bedrock. 4. No groundwater encountered. 5. Backfilled on completion.	
All dimensions in metres						Scale:	1:25
Method Used:	Inspection pit + Tracked window sampling		Plant Used:	Archway Competitor		Drilled By:	DSUK
						Logged By:	JMyles
						Checked By:	AGS



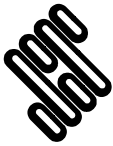
WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus Rapid Transit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS04B
Contract Ref: 765865	Start: 19.08.24 End: 19.08.24	Ground Level: ---	National Grid Co-ordinate: ---	Sheet: 2 of 3



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Method Used: Inspection pit + Tracked window sampling	Plant Used: Archway Competitor	Drilled By: DSUK	Logged By: JMyles	Checked By: AG	
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WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus Rapid Transit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS04B
Contract Ref: 765865	Start: 19.08.24 End: 19.08.24	Ground Level: ---	National Grid Co-ordinate: ---	Sheet: 3 of 3



GINT LIBRARY_V10_01.GLB LibVersion: v8_07_001 ProjVersion: v8_07 | Log WINDOW SAMPLE LOG - A4F | 765865_A635_BARNESLEY_BUS_RAPIDTRANSIT_ROUTE.GPJ - v10_01.
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Method Used: Inspection pit + Tracked window sampling	Plant Used: Archway Competitor	Drilled By: DSUK	Logged By: JMyles	Checked By: AG	
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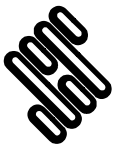
WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS05	
Contract Ref: 765865		Start: 16.08.24 End: 16.08.24	Ground Level: 52.69	National Grid Co-ordinate: E:437378.5 N:405406.0	Sheet: 1 of 5

Progress Window Run	Samples / Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
	Depth	No	Type	Results						
<p>1.20 - 2.00 (85mm dia) 100% rec</p> <p>2.00 - 3.00 (75mm dia) 26% rec</p> <p>3.00 - 3.80 (75mm dia) 100% rec</p>	0.10-0.20 0.10 0.10-0.30 0.10	1 101 2	D ES B PID	1xT+1xJ+1xV 0.2ppm		MADE GROUND: Stiff brown sandy slightly gravelly CLAY. Sands are fine to medium. Gravel are angular to subangular fine to medium of sandstone (MADE GROUND)	52.39	(0.30) 0.30		
	0.40 0.40-0.50 0.40-0.80 0.40	102 3 4	ES D B PID	1xT+1xJ+1xV 0.2ppm		MADE GROUND: Brown slightly gravelly silty fine to medium SAND with low cobble content. Gravel are angular to subangular fine to coarse of bricks,sandstone,clinker and concrete. Cobbles are angular of subangular of bricks and concrete. (MADE GROUND)		(0.90)		
	1.20-1.65 1.20-1.65 1.20-1.40 1.20	6 7 103	DSPT SPT ES PID	N=3 1xT+1xJ+1xV 0.3ppm		MADE GROUND: Soft brown slightly sandy slightly gravelly CLAY. sands are fine to coarse. Gravel are angular to subangular fine to coarse of bricks and sandstone. (MADE GROUND)	51.49 51.29	1.20 1.40		
	1.50-1.70 1.50	104	ES PID	1xT+1xJ+1xV 0.2ppm		MADE GROUND: Soft brown mottled light grey slightly gravelly CLAY. Gravel are angular to subrounded fine to coarse of sandstone and bricks. Also included is plastic (MADE GROUND)		(0.50)		
	1.70-1.80	7	D			MADE GROUND: Very soft black slightly gravelly CLAY. Gravel are angular to subangular fine to medium of bricks. Also included are pieces of wood and plastic. (MADE GROUND)	50.79	1.90		
	1.90-2.00 1.90 2.00-2.45 2.00-2.45	105 8 9	ES PID SPT DSPT	1xT 1.0ppm N=0		MADE GROUND: Very soft black slightly gravelly CLAY. Gravel are angular to subangular fine to medium of bricks. Also included are pieces of wood and plastic. (MADE GROUND)		(0.84)		
	2.74-3.00 2.74	106	ES PID	1xT+1xJ+1xV 0.4ppm		... 2.65m- 2.74m No recovery. MADE GROUND: Very soft black slightly gravelly CLAY. Gravel are angular to subangular fine to medium of bricks. Also included are pieces of wood and plastic. (MADE GROUND)	49.95	2.74		
	3.00-3.45 3.00-3.45 3.00-3.30	10 11 12	SPT DSPT B	N=15		MADE GROUND: Very soft black slightly gravelly CLAY. Gravel are angular to subangular fine to medium of bricks. Also included are pieces of wood and plastic. (MADE GROUND)	49.39	3.30		
	3.40-3.60	107	ES	1xT+1xJ+1xV		Very stiff light brown and light grey CLAY with abundant >40% lithorelicts of extremely weak mudstone and siltstone.		(0.45)		
	3.60-3.75	13	B				48.94	3.75		
	3.80-4.03	14	SPT	16,9/50 for 75mm		Extremely weak light brown MUDSTONE. (PENNINE MIDDLE COAL MEASURES FORMATION)		(0.28)		
	3.80-3.97	15	DSPT			Window Sample terminated at 4.03m depth on mudstone.		4.03		

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Drilling Progress and Water Observations						General Remarks
Date	Time	Borehole Depth (m)	Casing Depth (m)	Borehole Diameter (mm)	Water Depth (m)	
16/08/24	10:45	3.97	-		-	1. Position cleared with GPR and CAT and Genny. 2. Hand dug inspection pit to 1.20m depth. 3. Window Sample terminated at 4.03m depth on bedrock. 4. No groundwater encountered. 5. 50mm standpipe installed on completion. 6. SPT hammer 110.49-2024 ($E_r = 81.00\%$) used.
All dimensions in metres						
Method Used: Inspection pit + Tracked window sampling		Plant Used: Archway Competitor		Drilled By: Sam Keenan	Logged By: KAdedotun	Checked By: AGS



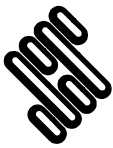
WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS05
Contract Ref: 765865	Start: 16.08.24 End: 16.08.24	Ground Level: 52.69	National Grid Co-ordinate: E:437378.5 N:405406.0	Sheet: 2 of 5



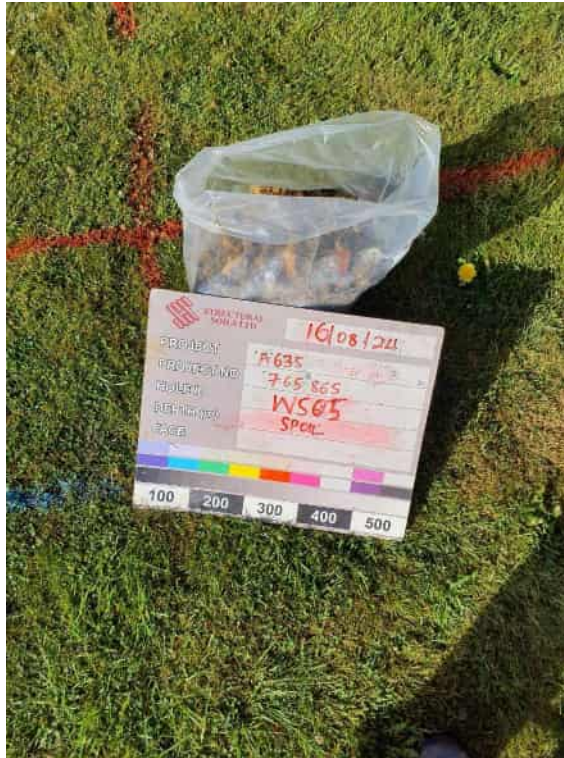
GINT LIBRARY_V10_01.GLB LibVersion: v8_07_001 ProjVersion: v8_07 | Log WINDOW SAMPLE LOG - A4F | 765865_A635_BARNESLEY_BUS_RAPIDTRANSIT_ROUTE.GPJ - v10_01.
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Method Used: Inspection pit + Tracked window sampling	Plant Used: Archway Competitor	Drilled By: Sam Keenan	Logged By: KAdedotun	Checked By: AG	
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WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS05
Contract Ref: 765865	Start: 16.08.24 End: 16.08.24	Ground Level: 52.69	National Grid Co-ordinate: E:437378.5 N:405406.0	Sheet: 3 of 5



GINT LIBRARY_V10_01.GLB LibVersion: v8_07_001 ProjVersion: v8_07 | Log WINDOW SAMPLE LOG - A4F | 765865_A635_BARNESLEY_BUS_RAPIDTRANSIT_ROUTE.GPJ - v10_01. Structural Soils Ltd, Branch Office - Castleford, The Potteries, Pottery Street, Castleford, West Yorkshire, WF10 1NJ. Tel: 01977-552255; Fax: 01977-552299; Web: www.soils.co.uk; Email: ask@soils.co.uk | 10/12/24 - 14:42 | MG1 |

Method Used: Inspection pit + Tracked window sampling	Plant Used: Archway Competitor	Drilled By: Sam Keenan	Logged By: KAdedotun	Checked By: AG	
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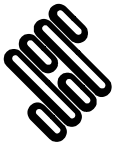
WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS05
Contract Ref: 765865	Start: 16.08.24 End: 16.08.24	Ground Level: 52.69	National Grid Co-ordinate: E:437378.5 N:405406.0	Sheet: 4 of 5



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Method Used: Inspection pit + Tracked window sampling	Plant Used: Archway Competitor	Drilled By: Sam Keenan	Logged By: KAdedotun	Checked By: AG	
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WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS05
Contract Ref: 765865	Start: 16.08.24 End: 16.08.24	Ground Level: 52.69	National Grid Co-ordinate: E:437378.5 N:405406.0	Sheet: 5 of 5



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Method Used: Inspection pit + Tracked window sampling	Plant Used: Archway Competitor	Drilled By: Sam Keenan	Logged By: KAdedotun	Checked By: AG	
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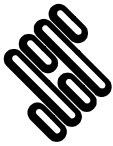
WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS06	
Contract Ref: 765865		Start: 19.08.24	Ground Level: 52.74	National Grid Co-ordinate: E:437420.6 N:405387.6	Sheet: 1 of 4
End: 19.08.24					

Progress Window Run	Samples / Tests				Water Backfill & Instru- mentation	Description of Strata	Reduced Level	Depth (Thick- ness)	Material Graphic Legend	
	Depth	No	Type	Results						
0.20	1	ES				MADE GROUND: Grass over greyish brown gravelly slightly silty fine SAND. Gravel is angular to subangular fine to coarse mudstone, ash and brick fragments. (MADE GROUND)	52.49	0.25		
0.50 0.50	2 3	B D				MADE GROUND: Dark greyish brown sandy slightly silty angular to subangular fine to coarse GRAVEL of sandstone, mudstone ash and brick fragments. Sand is fine. (MADE GROUND)				
0.80	4	ES						(1.50)		
1.00 1.00	5 6	B D								
1.20-1.65 1.20-2.00	1 7	SPT B	N=8							
1.90 1.90	105 8	ES ES					MADE GROUND: Greyish brown slightly sandy gravelly CLAY. Sand is fine. Gravel is angular to subangular fine to coarse sandstone, mudstone and brick fragments. (MADE GROUND)	50.99	1.75	
2.00-2.45 2.00-2.70	2 9	SPT D	N=5						(0.45)	
2.50-3.00	11	B					MADE GROUND: Firm orangish brown mottled grey slightly sandy slightly gravelly silty CLAY. Sand is fine. Gavel is angular fine to coarse sandstone. (MADE GROUND)			
2.70-2.90	10	ES							(1.20)	
3.00-3.45 3.00-3.60	3 12	SPT B	N=21							
3.70-4.00	13	ES					MADE GROUND: Lens of grey sandy angular to subangular fine to coarse GRAVEL of mudstone and brick fragments. Sand is fine. (MADE GROUND)	49.34	3.40	
4.00-4.45 4.00-4.60	4 14	SPT B	N=17				Firm to stiff orangish brown mottled grey silty CLAY.	49.14	3.60	
4.40-4.60	15	ES							(1.09)	

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Drilling Progress and Water Observations						General Remarks
Date	Time	Borehole Depth (m)	Casing Depth (m)	Borehole Diameter (mm)	Water Depth (m)	
						1. Position cleared with GPR and CAT and Genny. 2. Hand dug inspection pit to 1.20m depth. 3. Window Sample terminated at 4.69m depth on SPT refusal. 4. No groundwater encountered. 5. 50mm installed on completion. 6. SPT hammer 110.49-2024 ($E_r = 81.00\%$) used.
All dimensions in metres						
Method Used:	Inspection pit + Tracked window sampling		Plant Used:	Archway Competitor		Drilled By: Sam Keenan Logged By: JMyles Checked By: AGS



WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS06	
Contract Ref: 765865		Start: 19.08.24 End: 19.08.24	Ground Level: 52.74	National Grid Co-ordinate: E:437420.6 N:405387.6	
				Sheet: 2 of 4	

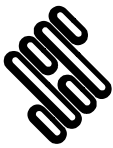
Progress Window Run	Samples / Tests				Water Backfill & Instru- mentation	Description of Strata	Reduced Level	Depth (Thick- ness)	Material Graphic Legend
	Depth	No	Type	Results					
	4.60-4.69	5	SPT	NP		Firm to stiff orangish brown mottled grey silty CLAY. <i>(stratum copied from 3.60m from previous sheet)</i> Window Sample terminated at 4.69m depth on SPT refusal.	48.05	4.69	

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Drilling Progress and Water Observations						General Remarks	
Date	Time	Borehole Depth (m)	Casing Depth (m)	Borehole Diameter (mm)	Water Depth (m)		

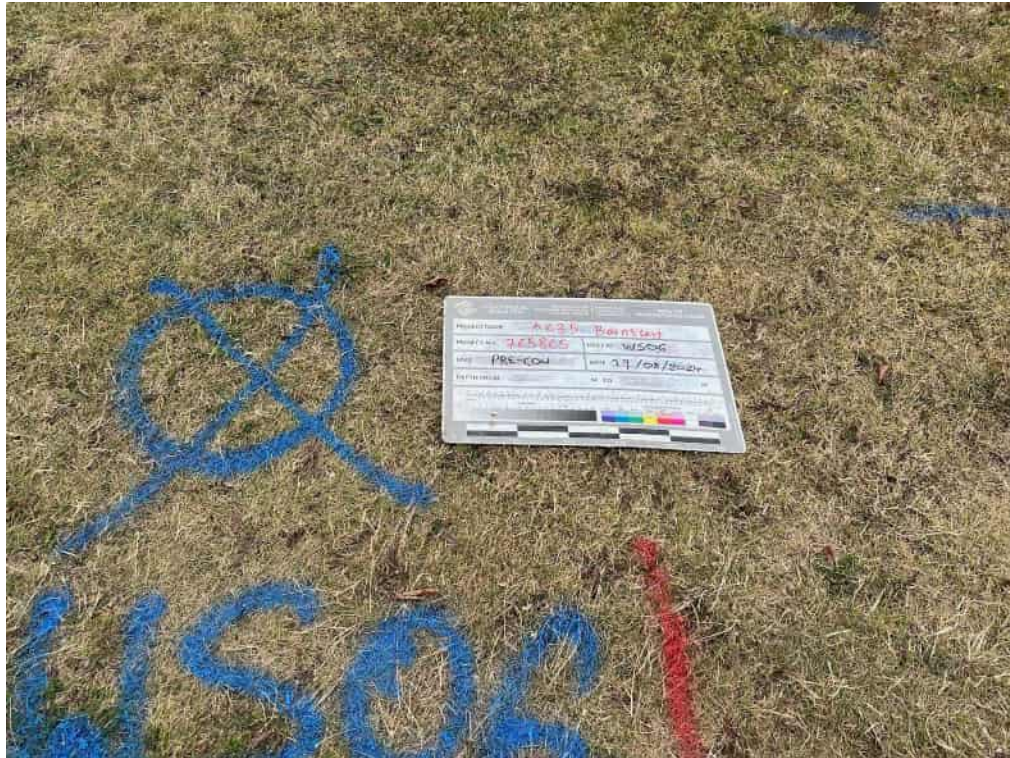
All dimensions in metres Scale: **1:25**

Method Used: Inspection pit + Tracked window sampling	Plant Used: Archway Competitor	Drilled By: Sam Keenan	Logged By: JMyles	Checked By: AG	
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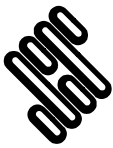
WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus Rapid Transit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS06
Contract Ref: 765865	Start: 19.08.24 End: 19.08.24	Ground Level: 52.74	National Grid Co-ordinate: E:437420.6 N:405387.6	Sheet: 3 of 4



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Method Used: Inspection pit + Tracked window sampling	Plant Used: Archway Competitor	Drilled By: Sam Keenan	Logged By: JMyles	Checked By: AG	
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WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS06
Contract Ref: 765865	Start: 19.08.24 End: 19.08.24	Ground Level: 52.74	National Grid Co-ordinate: E:437420.6 N:405387.6	Sheet: 4 of 4



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Method Used: Inspection pit + Tracked window sampling	Plant Used: Archway Competitor	Drilled By: Sam Keenan	Logged By: JMyles	Checked By: AG	
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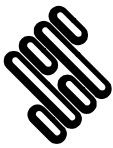
WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS07	
Contract Ref: 765865		Start: 15.08.24	Ground Level: 52.28	National Grid Co-ordinate: E:437454.6 N:405405.4	Sheet: 1 of 5
		End: 15.08.24			

Progress Window Run	Samples / Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
	Depth	No	Type	Results						
0.10-0.20 0.10 0.10-0.50	1	D	1xT+1xJ+1xV			MADE GROUND: TARMACADAM. (MADE GROUND)	52.23	0.05		
	101	ES								
	2	B				MADE GROUND: Dark brown/black gravelly fine to coarse SAND. Gravel is angular to subangular fine to coarse of sandstone with tarmac, clinker, concrete fragments. (MADE GROUND)		(1.55)		
1.20-1.65 1.20-1.65	3	SPT	N=3				50.68	1.60		
	4	DSPT								
1.65-1.80 1.80-2.00	102	ES	1xT+1xJ+1xV			Stiff orangish brown mottled light grey slightly sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is angular to subangular fine to medium of generally mudstone.	49.68	2.60		
	5	D								
2.00-2.45 2.00-2.45 2.00-2.60	6	SPT	N=10				48.91	3.38		
	7	DSPT								
	8	B				Extremely weak light brown MUDSTONE. (PENNINE MIDDLE COAL MEASURES FORMATION)		(0.78)		
2.60-3.00 3.00-3.31 3.00-3.31	9	B	7,7/14,23,13 for 10mm				48.91	3.38		
	10	SPT								
	11	DSPT				Window Sample terminated at 3.38m depth on mudstone.				

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Drilling Progress and Water Observations						General Remarks
Date	Time	Borehole Depth (m)	Casing Depth (m)	Borehole Diameter (mm)	Water Depth (m)	
15/08/24	13:12	3.31	-		-	1. Position cleared with GPR and CAT and Genny. 2. Hand dug inspection pit to 1.20m depth. 3. Window Sample terminated at 3.38m depth on bedrock. 4. No groundwater encountered. 5. 50mm standpipe installed on completion. 6. SPT hammer 110.49-2024 ($E_r = 81.00\%$) used.
All dimensions in metres						
Method Used:	Inspection pit + Tracked window sampling		Plant Used:	Archway Competitor		Drilled By: Sam Keenan Logged By: KAdedotun Checked By: AGS



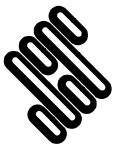
WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS07
Contract Ref: 765865	Start: 15.08.24 End: 15.08.24	Ground Level: 52.28	National Grid Co-ordinate: E:437454.6 N:405405.4	Sheet: 2 of 5



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Method Used: Inspection pit + Tracked window sampling	Plant Used: Archway Competitor	Drilled By: Sam Keenan	Logged By: KAdedotun	Checked By: AG	
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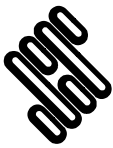
WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS07
Contract Ref: 765865	Start: 15.08.24 End: 15.08.24	Ground Level: 52.28	National Grid Co-ordinate: E:437454.6 N:405405.4	Sheet: 3 of 5



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Method Used: Inspection pit + Tracked window sampling	Plant Used: Archway Competitor	Drilled By: Sam Keenan	Logged By: KAdedotun	Checked By: AG	
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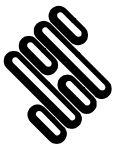
WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus Rapid Transit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS07
Contract Ref: 765865	Start: 15.08.24 End: 15.08.24	Ground Level: 52.28	National Grid Co-ordinate: E:437454.6 N:405405.4	Sheet: 4 of 5



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Method Used: Inspection pit + Tracked window sampling	Plant Used: Archway Competitor	Drilled By: Sam Keenan	Logged By: KAdedotun	Checked By: AG	
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WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS07
Contract Ref: 765865	Start: 15.08.24 End: 15.08.24	Ground Level: 52.28	National Grid Co-ordinate: E:437454.6 N:405405.4	Sheet: 5 of 5



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Method Used: Inspection pit + Tracked window sampling	Plant Used: Archway Competitor	Drilled By: Sam Keenan	Logged By: KAdedotun	Checked By: AG	
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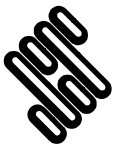
WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS08	
Contract Ref: 765865		Start: 15.08.24	Ground Level: 51.97	National Grid Co-ordinate: E:437425.2 N:405433.4	Sheet: 1 of 4

Progress Window Run	Samples / Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
	Depth	No	Type	Results						
0.00-0.10	1	B				MADE GROUND: light grey CONCRETE. (MADE GROUND)	51.87	0.10		
0.10-0.20	2	D				MADE GROUND: Light brown slightly gravelly fine to medium SAND. Gravel is angular to subrounded fine to coarse of sandstone. (MADE GROUND)	51.42	0.55		
0.10-0.40	3	B								
0.20	101	ES	1xT+1xJ+1xV							
0.60	102	ES	1xT+1xJ+1xV			MADE GROUND: Dark grey/black slightly gravelly clayey fine to medium SAND. Gravel is angular to subangular fine to coarse of sandstone and bricks fragments. (MADE GROUND)	50.87	1.10		
0.60-0.70	4	D								
0.60-1.00	5	B								
1.10-1.20	6	D				MADE GROUND: Soft light greenish brown slightly gravelly CLAY. Gravel is angular to subrounded fine to medium of sandstone. (MADE GROUND)	50.17	1.80		
1.15	103	ES	1xT+1xJ+1xV N=2							
1.20-1.65	7	SPT								
1.20-1.65	8	DSPT								
1.20-1.65	9	B								
1.20 - 2.00 (85mm dia) 100% rec						MADE GROUND: Black and red clayey angular to subangular fine to coarse GRAVEL of clinker and bricks fragments. Also include is a piece of tile. (MADE GROUND)	49.87	2.10		
1.80-2.00	104	ES	1xT+1xJ+1xV							
2.00-2.45	10	SPT	N=15			Extremely weak light brown MUDSTONE. (PENNINE MIDDLE COAL MEASURES FORMATION)	48.70	3.28		
2.00-2.45	11	DSPT								
2.00 - 2.90 (75mm dia) 100% rec										
2.40-2.90	12	B								
2.90-3.21	13	SPT	11,14/19,25,6 for 5mm							
2.90-3.21	14	DSPT								
Window Sample terminated at 3.28m depth on mudstone.										

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Drilling Progress and Water Observations						General Remarks
Date	Time	Borehole Depth (m)	Casing Depth (m)	Borehole Diameter (mm)	Water Depth (m)	
15/08/24	11:44	3.21	-		-	1. Position cleared with GPR and CAT and Genny. 2. Hand dug inspection pit to 1.20m depth. 3. Window Sample terminated at 3.28m depth on Mudstone. 4. No groundwater encountered. 5. 50mm installed on completion. 6. SPT hammer 110.49-2024 ($E_r = 81.00\%$) used.
All dimensions in metres						
Method Used: Inspection pit + Tracked window sampling		Plant Used: Archway Competitor		Drilled By: Sam Keenan	Logged By: KAdedotun	Checked By: AGS



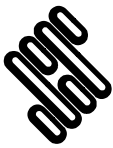
WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS08
Contract Ref: 765865	Start: 15.08.24 End: 15.08.24	Ground Level: 51.97	National Grid Co-ordinate: E:437425.2 N:405433.4	Sheet: 2 of 4



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Method Used: Inspection pit + Tracked window sampling	Plant Used: Archway Competitor	Drilled By: Sam Keenan	Logged By: KAdedotun	Checked By: AG	
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WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS08
Contract Ref: 765865	Start: 15.08.24 End: 15.08.24	Ground Level: 51.97	National Grid Co-ordinate: E:437425.2 N:405433.4	Sheet: 3 of 4



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Method Used: Inspection pit + Tracked window sampling	Plant Used: Archway Competitor	Drilled By: Sam Keenan	Logged By: KAdedotun	Checked By: AG	
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WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS08
Contract Ref: 765865	Start: 15.08.24 End: 15.08.24	Ground Level: 51.97	National Grid Co-ordinate: E:437425.2 N:405433.4	Sheet: 4 of 4



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Method Used: Inspection pit + Tracked window sampling	Plant Used: Archway Competitor	Drilled By: Sam Keenan	Logged By: KAdedotun	Checked By: AG	
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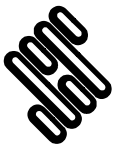
WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus Rapid Transit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS09	
Contract Ref: 765865		Start: 16.08.24	Ground Level: 52.22	National Grid Co-ordinate: E:437405.7 N:405418.9	Sheet: 1 of 5

Progress Window Run	Samples / Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
	Depth	No	Type	Results						
	0.10-0.20 0.10-0.40 0.15	1 2 101	D B ES	1xT+1xJ+1xV			MADE GROUND: TARMACADAM. (MADE GROUND)	52.13	0.09	
							MADE GROUND: Dark brown gravelly fine to coarse SAND. Gravel is angular to subangular fine to coarse of limestone, bricks, tarmac and concrete fragments. (MADE GROUND)		(1.11)	
	1.20-1.65 1.20-1.65 1.20-1.45	3 4 5	SPT DSPT D	N=10			MADE GROUND: Red sandy angular to subangular fine to coarse GRAVEL fragments of bricks. Sand is fine to coarse. (MADE GROUND)	51.02	1.20	
	1.20 - 2.00 (85mm dia) 100% rec	102	ES				Stiff light brown mottled light grey CLAY.	50.77	1.45	
	1.70-1.90	6	D						(1.10)	
	2.00-2.45 2.00-2.45 2.00-2.55	7 8 9	SPT DSPT B	N=9						
	2.00 - 3.00 (75mm dia) 100% rec	10	B					49.67	2.55	
	3.00-3.45 3.00-3.45 3.00-3.70	11 12 13	SPT DSPT B	N=15			Very stiff light brown and light grey CLAY with abundant > 40% lithorelicts of extremely weak siltstone and mudstone. (PENNINE MIDDLE COAL MEASURES FORMATION)		(1.15)	
	3.00 - 3.90 (65mm dia) 100% rec									
	3.70-3.90	14	D				Extremely weak light brown MUDSTONE. (PENNINE MIDDLE COAL MEASURES FORMATION)	48.52	3.70	
	3.90-4.13	15	SPT	50/16,30 for 75mm					(0.43)	
	3.90-4.05	16	DSPT					48.09	4.13	
							Location terminated at 4.13m depth on Mudstone.			

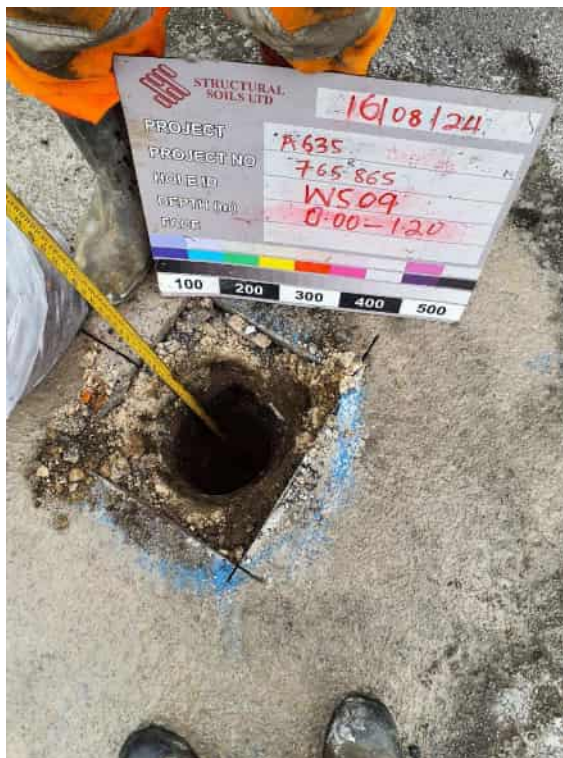
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Drilling Progress and Water Observations						General Remarks
Date	Time	Borehole Depth (m)	Casing Depth (m)	Borehole Diameter (mm)	Water Depth (m)	
						1. Position cleared with GPR and CAT and Genny. 2. Hand dug inspection pit to 1.20m depth. 3. Window Sample terminated at 4.13m depth on Mudstone. 4. No groundwater encountered. 5. 50mm installed on completion. 6. SPT hammer 110.49-2024 (E _r = 81.00%) used.
All dimensions in metres						Scale: 1:25
Method Used: Inspection pit + Tracked window sampling	Plant Used: Archway Competitor			Drilled By: Sam Keenan	Logged By: KAdedotun	Checked By: AGS



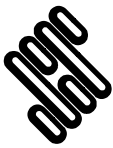
WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS09
Contract Ref: 765865	Start: 16.08.24 End: 16.08.24	Ground Level: 52.22	National Grid Co-ordinate: E:437405.7 N:405418.9	Sheet: 2 of 5



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Method Used: Inspection pit + Tracked window sampling	Plant Used: Archway Competitor	Drilled By: Sam Keenan	Logged By: KAdedotun	Checked By: AG	
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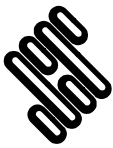
WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS09
Contract Ref: 765865	Start: 16.08.24 End: 16.08.24	Ground Level: 52.22	National Grid Co-ordinate: E:437405.7 N:405418.9	Sheet: 3 of 5



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Method Used: Inspection pit + Tracked window sampling	Plant Used: Archway Competitor	Drilled By: Sam Keenan	Logged By: KAdedotun	Checked By: AG	
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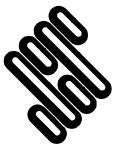
WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS09
Contract Ref: 765865	Start: 16.08.24 End: 16.08.24	Ground Level: 52.22	National Grid Co-ordinate: E:437405.7 N:405418.9	Sheet: 4 of 5



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Method Used: Inspection pit + Tracked window sampling	Plant Used: Archway Competitor	Drilled By: Sam Keenan	Logged By: KAdedotun	Checked By: AG	
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WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS09
Contract Ref: 765865	Start: 16.08.24 End: 16.08.24	Ground Level: 52.22	National Grid Co-ordinate: E:437405.7 N:405418.9	Sheet: 5 of 5



GINT LIBRARY_V10_01.GLB LibVersion: v8_07_001 ProjVersion: v8_07 | Log WINDOW SAMPLE LOG - A4F | 765865_A635_BARNESLEY BUS RAPIDTRANSIT ROUTE.GPJ - v10_01.
 Structural Soils Ltd, Branch Office - Castleford, The Potteries, Pottery Street, Castleford, West Yorkshire, WF10 1NJ. Tel: 01977-552255; Fax: 01977-552299; Web: www.soils.co.uk; Email: ask@soils.co.uk | 10/12/24 - 14:44 | MG1 |

Method Used: Inspection pit + Tracked window sampling	Plant Used: Archway Competitor	Drilled By: Sam Keenan	Logged By: KAdedotun	Checked By: AG	
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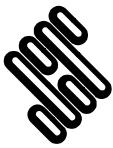
WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS10	
Contract Ref: 765865		Start: 14.08.24	Ground Level: 51.68	National Grid Co-ordinate: E:437380.0 N:405464.9	Sheet: 1 of 5

Progress Window Run	Samples / Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
	Depth	No	Type	Results						
0.10-0.20 0.10 0.10-0.40	1	D	1xT+1xJ+1xV			MADE GROUND: Dark brown friable slightly gravelly CLAY. Gravel is angular to subangular fine to coarse of sandstone, limestone, and concrete fragments. (MADE GROUND)	51.18	(0.50)		
	101	ES								
0.60 0.60-0.70 0.60-0.90	102	ES	1xT+1xJ+1xV			MADE GROUND: Light brown slightly gravelly fine to medium SAND. Gravel is angular to subangular fine to coarse of sandstone, limestone and bricks fragments. (MADE GROUND)		(0.80)		
	3	D								
1.20-1.65 1.20-1.40 1.20-1.65 1.40-2.00	5	SPT	1xT+1xJ+1xV	N=7		Stiff orangish brown mottled light grey CLAY.	50.38	1.30		
	103	ES								
2.00-2.45 2.00-3.00 2.00-2.45	8	SPT	N=15			Extremely weak light brown SILTSTONE. (PENNINE MIDDLE COAL MEASURES FORMATION)	49.68	2.00		
	10	B								
3.00-3.25 3.00-3.25	11	SPT	11,14/31,19 for 20mm			Window Sample terminated at 3.30 m on Siltstone.	48.38	3.30		
	12	DSPT								

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Drilling Progress and Water Observations						General Remarks	
Date	Time	Borehole Depth (m)	Casing Depth (m)	Borehole Diameter (mm)	Water Depth (m)		
14/08/24	16:06	3.25	-		-	1. Position cleared with GPR and CAT and Genny. 2. Hand dug inspection pit to 1.20m depth. 3. Window Sample terminated at 3.30m depth on Mudstone. 4. No groundwater encountered. 5. Backfilled on completion. 6. SPT hammer 110.49-2024 ($E_r = 81.00\%$) used.	
All dimensions in metres						Scale:	1:25
Method Used:	Inspection pit + Tracked window sampling		Plant Used:	Archway Competitor		Drilled By:	Sam Keenan
						Logged By:	KAdedotun
						Checked By:	AGS



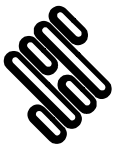
WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS10
Contract Ref: 765865	Start: 14.08.24 End: 14.08.24	Ground Level: 51.68	National Grid Co-ordinate: E:437380.0 N:405464.9	Sheet: 2 of 5



GINT LIBRARY_V10_01.GLB LibVersion: v8_07_001 ProjVersion: v8_07 | Log WINDOW SAMPLE LOG - A4F | 765865_A635_BARNESLEY_BUS_RAPIDTRANSIT_ROUTE.GPJ - v10_01.
 Structural Soils Ltd, Branch Office - Castleford, The Potteries, Pottery Street, Castleford, West Yorkshire, WF10 1NJ. Tel: 01977-552255; Fax: 01977-552299; Web: www.soils.co.uk; Email: ask@soils.co.uk | 10/12/24 - 14.44 | MG1 |

Method Used: Inspection pit + Tracked window sampling	Plant Used: Archway Competitor	Drilled By: Sam Keenan	Logged By: KAdedotun	Checked By: AG	
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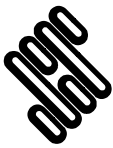
WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS10
Contract Ref: 765865	Start: 14.08.24 End: 14.08.24	Ground Level: 51.68	National Grid Co-ordinate: E:437380.0 N:405464.9	Sheet: 3 of 5



GINT LIBRARY_V10_01.GLB LibVersion: v8_07_001 ProjVersion: v8_07_001 Log WINDOW SAMPLE LOG - A4F | 765865_A635_BARNLSLEY_BUS_RAPIDTRANSIT_ROUTE.GPJ - v10_01. Structural Soils Ltd, Branch Office - Castleford. The Potteries, Pottery Street, Castleford, West Yorkshire, WF10 1NJ. Tel: 01977-552255; Fax: 01977-552299; Web: www.soils.co.uk; Email: ask@soils.co.uk | 10/12/24 - 14:44 | MG1 |

Method Used: Inspection pit + Tracked window sampling	Plant Used: Archway Competitor	Drilled By: Sam Keenan	Logged By: KAdedotun	Checked By: AG	
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WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS10
Contract Ref: 765865	Start: 14.08.24 End: 14.08.24	Ground Level: 51.68	National Grid Co-ordinate: E:437380.0 N:405464.9	Sheet: 4 of 5



GINT LIBRARY_V10_01.GLB LibVersion: v8_07_001 ProjVersion: v8_07 | Log WINDOW SAMPLE LOG - A4F | 765865_A635_BARNSELEY_BUS_RAPIDTRANSIT_ROUTE.GPJ - v10_01.
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Method Used: Inspection pit + Tracked window sampling	Plant Used: Archway Competitor	Drilled By: Sam Keenan	Logged By: KAdedotun	Checked By: AG	
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WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS10
Contract Ref: 765865	Start: 14.08.24 End: 14.08.24	Ground Level: 51.68	National Grid Co-ordinate: E:437380.0 N:405464.9	Sheet: 5 of 5



GINT LIBRARY_V10_01.GLB LibVersion: v8_07_001 ProjVersion: v8_07 | Log WINDOW SAMPLE LOG - A4F | 765865_A635_BARNESLEY_BUS_RAPIDTRANSIT_ROUTE.GPJ - v10_01.
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Method Used: Inspection pit + Tracked window sampling	Plant Used: Archway Competitor	Drilled By: Sam Keenan	Logged By: KAdedotun	Checked By: AG	
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WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS11	
Contract Ref: 765865		Start: 19.08.24 End: 19.08.24	Ground Level: 50.55	National Grid Co-ordinate: E:437352.3 N:405460.8	Sheet: 1 of 3

Progress Window Run	Samples / Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
	Depth	No	Type	Results						
	0.20	102	ES			MADE GROUND: Grass over greyish brown slightly gravelly silty fine SAND. Gravel is angular to subangular fine to coarse mudstone, sandstone, brick and ash. (MADE GROUND) Window Sample terminated at 0.32m depth due to obstruction on suspected concrete.	50.23	0.32		

GINT LIBRARY_V10_01.GLB LibVersion: v8_07 | Log WINDOW SAMPLE LOG - A4F | 765865_A635_BARNSELEY_BUS_RAPIDTRANSIT_ROUTE.GPJ - v10_01.
 Structural Soils Ltd, Branch Office - Castleford, The Potteries, Pottery Street, Castleford, West Yorkshire, WF10 1NJ. Tel: 01977-552255; Fax: 01977-552299; Web: www.soils.co.uk; Email: ask@soils.co.uk | 10/12/24 - 14:45 | MG1 |

Drilling Progress and Water Observations						General Remarks	
Date	Time	Borehole Depth (m)	Casing Depth (m)	Borehole Diameter (mm)	Water Depth (m)		
						1. Position cleared with GPR and CAT and Genny. 2. Hand dug inspection pit to 0.32m depth. 3. Window Sample terminated at 0.32m depth on obstruction. 4. No groundwater encountered. 5. Backfilled on completion.	
All dimensions in metres						Scale:	1:25
Method Used:	Inspection pit + Tracked window sampling		Plant Used:	Archway Competitor		Drilled By:	Sam Keenan
						Logged By:	JMyles
						Checked By:	AGS



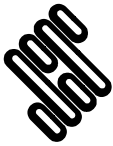
WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus Rapid Transit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS11
Contract Ref: 765865	Start: 19.08.24 End: 19.08.24	Ground Level: 50.55	National Grid Co-ordinate: E:437352.3 N:405460.8	Sheet: 2 of 3



GINT LIBRARY V10_01.GLB LibVersion: v8_07_001 ProjVersion: v8_07_001 | Log WINDOW SAMPLE LOG - A4F | 765865_A635_BARNLSLEY_BUS_RAPIDTRANSIT_ROUTE.GPJ - v10_01.
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Method Used: Inspection pit + Tracked window sampling	Plant Used: Archway Competitor	Drilled By: Sam Keenan	Logged By: JMyles	Checked By: AG	
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WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS11
Contract Ref: 765865	Start: 19.08.24 End: 19.08.24	Ground Level: 50.55	National Grid Co-ordinate: E:437352.3 N:405460.8	Sheet: 3 of 3



GINT LIBRARY_V10_01.GLB LibVersion: v8_07_001 ProjVersion: v8_07 | Log WINDOW SAMPLE LOG - A4F | 765865_A635_BARNESLEY_BUS_RAPIDTRANSIT_ROUTE.GPJ - v10_01.
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Method Used: Inspection pit + Tracked window sampling	Plant Used: Archway Competitor	Drilled By: Sam Keenan	Logged By: JMyles	Checked By: AG	
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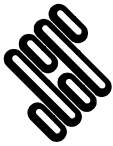
WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS11A
Contract Ref: 765865	Start: 19.08.24 End: 19.08.24	Ground Level: ---	National Grid Co-ordinate: ---	Sheet: 1 of 2

Progress Window Run	Samples / Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
	Depth	No	Type	Results						
						MADE GROUND: Grass over greyish brown slightly gravelly silty fine SAND. Gravel is angular to subangular fine to coarse mudstone, sandstone, brick and ash. (MADE GROUND)		(0.35) 0.35		
						Window Sample terminated at 0.35m depth due to obstruction on suspected concrete.				

GINT LIBRARY_V10_01.GLB LibVersion: v8_07 | Log WINDOW SAMPLE LOG - A4F | 765865_A635_BARNESLEY_BUS_RAPIDTRANSIT_ROUTE.GPJ - v10_01. Structural Soils Ltd, Branch Office - Castleford, The Potteries, Pottery Street, Castleford, West Yorkshire, WF10 1NJ. Tel: 01977-552255, Fax: 01977-552299, Web: www.soils.co.uk, Email: ask@soils.co.uk | 10/12/24 - 14:45 | MG1 |

Drilling Progress and Water Observations						General Remarks	
Date	Time	Borehole Depth (m)	Casing Depth (m)	Borehole Diameter (mm)	Water Depth (m)		
						1. Position cleared with GPR and CAT and Genny. 2. Hand dug inspection pit to 0.35m depth. 3. Window Sample terminated at 0.35m depth on obstruction. 4. No groundwater encountered. 5. Backfilled on completion.	
All dimensions in metres						Scale:	1:25
Method Used:	Inspection pit + Tracked window sampling		Plant Used:	Archway Competitor		Drilled By:	Sam Keenan
						Logged By:	JMyles
						Checked By:	AGS



WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS11A
Contract Ref: 765865	Start: 19.08.24 End: 19.08.24	Ground Level: ---	National Grid Co-ordinate: ---	Sheet: 2 of 2



GINT LIBRARY_V10_01.GLB LibVersion: v8_07_001 ProjVersion: v8_07 | Log WINDOW SAMPLE LOG - A4P | 765865_A635_BARNLSLEY_BUS_RAPIDTRANSIT_ROUTE.GPJ - v10_01.
 Structural Soils Ltd, Branch Office - Castleford. The Potteries, Pottery Street, Castleford, West Yorkshire, WF10 1NJ. Tel: 01977-552255; Fax: 01977-552299; Web: www.soils.co.uk; Email: ask@soils.co.uk | 10/12/24 - 14.45 | MG1 |

Method Used: Inspection pit + Tracked window sampling	Plant Used: Archway Competitor	Drilled By: Sam Keenan	Logged By: JMyles	Checked By: AG	
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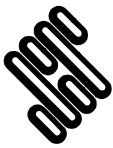
WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS13	
Contract Ref: 765865		Start: 22.08.24 End: 22.08.24	Ground Level: 49.21	National Grid Co-ordinate: E:437341.4 N:405484.5	Sheet: 1 of 4

Progress Window Run	Samples / Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
	Depth	No	Type	Results						
						MADE GROUND: TARMAC. (MADE GROUND)	48.96	0.25		
	0.40	101	ES			MADE GROUND: Yellowish brown sandy silty gravel. Sand is fine. Gravel is angular to subangular fine to coarse stone aggregate. (Type 1) (MADE GROUND)		(1.10)		
	0.50 0.50	1 2	B D							
	1.00 1.00 1.10	3 4 102	B D ES			Firm to stiff dark greyish brown gravelly silty CLAY. Gravel is angular fine to coarse mudstone. (PENNINE MIDDLE COAL MEASURES FORMATION)	47.86	1.35		
	1.20-1.65 1.20-2.00	1 6	SPT B	N=7						
	1.20 - 2.00 (116mm dia) 100% rec	103	ES			... From 2.00m depth: Becoming stiff to very stiff.		(1.98)		
	1.90 2.00-2.45 2.00	7 2 9	D SPT D	N=22						
	2.00 - 2.80 (116mm dia) 100% rec	104	ES			Window sample hole terminated at 3.33m depth.	45.88	3.33		
	2.80 3.00-3.33	3	SPT	6,14/13,19,18 for 30mm						

GINT LIBRARY V10_01.GLB LibVersion: v8_07_001 ProjVersion: v8_07 | Log WINDOW SAMPLE LOG - A4F | 765865_A635_BARNSELEY_BUS_RAPIDTRANSIT_ROUTE.GPJ - v10_01. Structural Soils Ltd, Branch Office - Castleford, The Potteries, Pottery Street, Castleford, West Yorkshire, WF10 1NJ. Tel: 01977-552255; Fax: 01977-552299; Web: www.soils.co.uk; Email: ask@soils.co.uk | 10/12/24 - 14.45 | MG1 |

Drilling Progress and Water Observations						General Remarks
Date	Time	Borehole Depth (m)	Casing Depth (m)	Borehole Diameter (mm)	Water Depth (m)	
						<ol style="list-style-type: none"> Position cleared with GPR and CAT and Genny. Hand dug inspection pit to 1.20m depth. Window Sample terminated at 3.33m depth on SPT refusal. No groundwater encountered. Backfilled on completion. SPT hammer 110.49-2024 ($E_r = 81.00\%$) used.
All dimensions in metres						Scale: 1:25
Method Used:	Inspection pit + Tracked window sampling		Plant Used:	Archway Competitor		Drilled By: Sam Keenan Logged By: JMyles Checked By: AGS



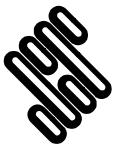
WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus Rapid Transit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS13
Contract Ref: 765865	Start: 22.08.24 End: 22.08.24	Ground Level: 49.21	National Grid Co-ordinate: E:437341.4 N:405484.5	Sheet: 2 of 4



GINT LIBRARY_V10_01.GLB LibVersion: v8_07_001 ProjVersion: v8_07_001 Log WINDOW SAMPLE LOG - A4F | 765865_A635_BARNESLEY_BUS_RAPIDTRANSIT_ROUTE.GPJ - v10_01. Structural Soils Ltd, Branch Office - Castleford, The Potteries, Pottery Street, Castleford, West Yorkshire, WF10 1NJ. Tel: 01977-552255; Fax: 01977-552299; Web: www.soils.co.uk; Email: ask@soils.co.uk | 10/12/24 - 14.45 | MG1 |

Method Used: Inspection pit + Tracked window sampling	Plant Used: Archway Competitor	Drilled By: Sam Keenan	Logged By: JMyles	Checked By: AG	
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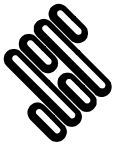
WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS13
Contract Ref: 765865	Start: 22.08.24 End: 22.08.24	Ground Level: 49.21	National Grid Co-ordinate: E:437341.4 N:405484.5	Sheet: 3 of 4



GINT LIBRARY_V10_01.GLB LibVersion: v8_07_001 ProjVersion: v8_07_001 Log WINDOW SAMPLE LOG - A4F | 765865_A635_BARNESLEY_BUS_RAPIDTRANSIT_ROUTE.GPJ - v10_01. Structural Soils Ltd, Branch Office - Castleford, The Potteries, Pottersy Street, Castleford, West Yorkshire, WF10 1NJ. Tel: 01977-552255; Fax: 01977-552299; Web: www.soils.co.uk; Email: ask@soils.co.uk | 10/12/24 - 14:45 | MG1 |

Method Used: Inspection pit + Tracked window sampling	Plant Used: Archway Competitor	Drilled By: Sam Keenan	Logged By: JMyles	Checked By: AG	
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WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS13
Contract Ref: 765865	Start: 22.08.24 End: 22.08.24	Ground Level: 49.21	National Grid Co-ordinate: E:437341.4 N:405484.5	Sheet: 4 of 4



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Method Used: Inspection pit + Tracked window sampling	Plant Used: Archway Competitor	Drilled By: Sam Keenan	Logged By: JMyles	Checked By: AG	
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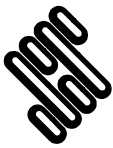
WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS14
Contract Ref: 765865	Start: 08.08.24 End: 08.08.24	Ground Level: 47.63	National Grid Co-ordinate: E:437330.3 N:405512.0	Sheet: 1 of 3

Progress Window Run	Samples / Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
	Depth	No	Type	Results						
0.15-0.25	1	D	1xT+1xJ+1xV		▲▲	MADE GROUND: TARMACADAM. (MADE GROUND)	47.53	0.10		
0.20	101	ES				MADE GROUND: Grey slightly sandy clayey angular to subangular fine to coarse GRAVEL of mudstone. Sands is fine to medium. (MADE GROUND)		(0.45)		
0.20-0.50	2	B					47.08	0.55		
Window Sample terminated at 0.55m depth on concrete slab.										

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Drilling Progress and Water Observations						General Remarks					
Date	Time	Borehole Depth (m)	Casing Depth (m)	Borehole Diameter (mm)	Water Depth (m)						
08/08/24	21:30	0.50	-		-	1. Position cleared with GPR and CAT and Genny. 2. Hand dug inspection pit to 0.55m depth. 3. Window Sample terminated at 0.55m depth on concrete slab. 4. No groundwater encountered. 5. Backfilled on completion.					
All dimensions in metres						Scale:	1:25				
Method Used:	Inspection pit + Tracked window sampling		Plant Used:	Archway Competitor		Drilled By:	Ben Pine	Logged By:	KAdedotun	Checked By:	AGS



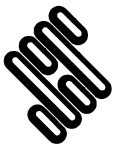
WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS14
Contract Ref: 765865	Start: 08.08.24 End: 08.08.24	Ground Level: 47.63	National Grid Co-ordinate: E:437330.3 N:405512.0	Sheet: 2 of 3



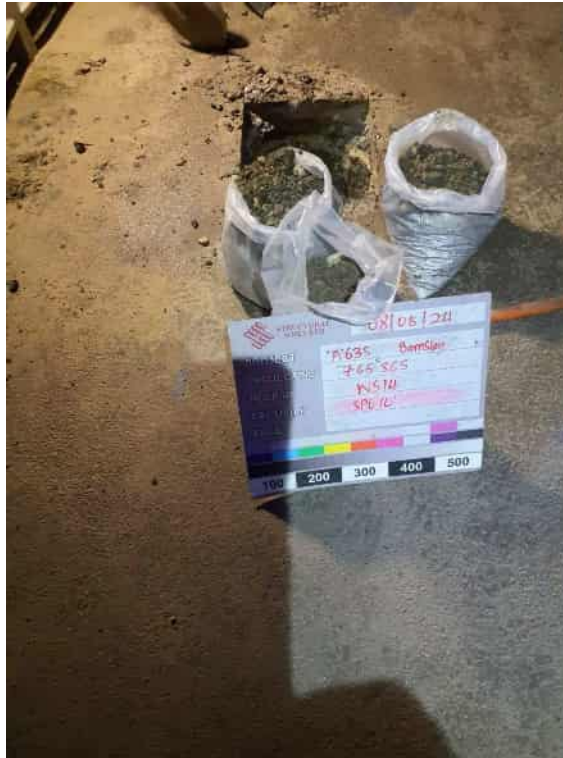
GINT LIBRARY_V10_01.GLB LibVersion: v8_07_001 ProjVersion: v8_07 | Log WINDOW SAMPLE LOG - A6F | 765865_A635_BARNESLEY_BUS_RAPIDTRANSIT_ROUTE.GPJ - v10_01.
 Structural Soils Ltd, Branch Office - Castleford, The Potteries, Pottery Street, Castleford, West Yorkshire, WF10 1NJ. Tel: 01977-552255; Fax: 01977-552299; Web: www.soils.co.uk; Email: ask@soils.co.uk | 10/12/24 - 14:46 | MG1 |

Method Used: Inspection pit + Tracked window sampling	Plant Used: Archway Competitor	Drilled By: Ben Pine	Logged By: KAdedotun	Checked By: AG	
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WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS14
Contract Ref: 765865	Start: 08.08.24 End: 08.08.24	Ground Level: 47.63	National Grid Co-ordinate: E:437330.3 N:405512.0	Sheet: 3 of 3



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Method Used: Inspection pit + Tracked window sampling	Plant Used: Archway Competitor	Drilled By: Ben Pine	Logged By: KAdedotun	Checked By: AG	
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WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS15	
Contract Ref: 765865		Start: 08.08.24	Ground Level: 46.69	National Grid Co-ordinate: E:437328.9 N:405549.8	Sheet: 1 of 4
End: 08.08.24					

Progress Window Run	Samples / Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
	Depth	No	Type	Results						
0.00-0.20	1	B				MADE GROUND: Brown friable slightly gravelly CLAY. Gravel are angular to subangular fine to coarse of limestone, concrete and bricks fragments. (MADE GROUND)	46.49	0.20		
0.10	101	ES	1xT+1xJ+1xV							
0.10-0.20	2	D								
0.30-0.40	3	D								
0.40-0.70	4	B			MADE GROUND: Light brown angular to subangular medium to coarse GRAVEL of limestone. (MADE GROUND)		(1.20)			
1.20-1.65	1	SPT	N=39							
1.20-1.65	6	DSPT			Extremely weak grey MUDSTONE. (PENNINE MIDDLE COAL MEASURES FORMATION)		45.29	1.40		
1.20 - 1.70 (75mm dia) 100% rec										
1.70-1.91	2	SPT	8,17/35,15 for 10mm				44.78	1.91		
Window Sample terminated at 1.91m depth on mudstone.										

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Drilling Progress and Water Observations						General Remarks
Date	Time	Borehole Depth (m)	Casing Depth (m)	Borehole Diameter (mm)	Water Depth (m)	
08/08/24	23:08	1.91	-		-	1. Position cleared with GPR and CAT and Genny. 2. Hand dug inspection pit to 1.20m depth. 3. Window Sample terminated at 1.91m depth on Mudstone. 4. No groundwater encountered. 5. Backfilled on completion. 6. SPT hammer DART384-2024 ($E_r = 68.00\%$) used.
All dimensions in metres						
Method Used:	Inspection pit + Tracked window sampling		Plant Used:	Archway Competitor		Drilled By: Ben Pine Logged By: KAdedotun Checked By: AG





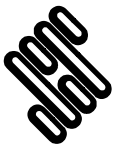
WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS15
Contract Ref: 765865	Start: 08.08.24 End: 08.08.24	Ground Level: 46.69	National Grid Co-ordinate: E:437328.9 N:405549.8	Sheet: 2 of 4



GINT LIBRARY_V10_01.GLB LibVersion: v8_07_001 ProjVersion: v8_07 | Log WINDOW SAMPLE LOG - A4F | 765865_A635_BARNESLEY_BUS_RAPIDTRANSIT_ROUTE.GPJ - v10_01.
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Method Used: Inspection pit + Tracked window sampling	Plant Used: Archway Competitor	Drilled By: Ben Pine	Logged By: KAdedotun	Checked By: AG	
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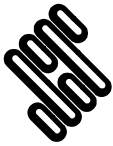
WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS15
Contract Ref: 765865	Start: 08.08.24 End: 08.08.24	Ground Level: 46.69	National Grid Co-ordinate: E:437328.9 N:405549.8	Sheet: 3 of 4



GINT LIBRARY_V10_01.GLB LibVersion: v8_07_001 ProjVersion: v8_07 | Log WINDOW SAMPLE LOG - A4F | 765865_A635_BARNESLEY_BUS_RAPIDTRANSIT_ROUTE.GPJ - v10_01.
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Method Used: Inspection pit + Tracked window sampling	Plant Used: Archway Competitor	Drilled By: Ben Pine	Logged By: KAdedotun	Checked By: AG	
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WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus Rapid Transit Route		Client: Barnsley Metropolitan Borough Council		Window Sample: WS15
Contract Ref: 765865	Start: 08.08.24 End: 08.08.24	Ground Level: 46.69	National Grid Co-ordinate: E:437328.9 N:405549.8	Sheet: 4 of 4



GINT LIBRARY_V10_01.GLB LibVersion: v8_07_001 ProjVersion: v8_07 | Log WINDOW SAMPLE LOG - A4F | 765865_A635_BARNESLEY_BUS_RAPIDTRANSIT_ROUTE.GPJ - v10_01. Structural Soils Ltd, Branch Office - Castleford, The Potteries, Pottery Street, Castleford, West Yorkshire, WF10 1NJ. Tel: 01977-552255; Fax: 01977-552299; Web: www.soils.co.uk, Email: ask@soils.co.uk | 10/12/24 - 14:47 | MG1 |

Method Used: Inspection pit + Tracked window sampling	Plant Used: Archway Competitor	Drilled By: Ben Pine	Logged By: KAdedotun	Checked By: AG	
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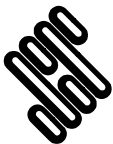
WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS16	
Contract Ref: 765865		Start: 06.08.24 End: 06.08.24	Ground Level: 47.01	National Grid Co-ordinate: E:437307.0 N:405555.3	Sheet: 1 of 4

Progress Window Run	Samples / Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
	Depth	No	Type	Results						
	0.10-0.20 0.10 0.20-0.60	1 101 2	D ES B	1xT+1xJ+1xV		MADE GROUND: Greyish white very sandy very clayey angular fine to coarse GRAVEL of sandstone and quartzite. Sand is fine to coarse. (MADE GROUND)		(1.15)		
	1.20-1.65 1.20-1.40 1.20-1.65 1.40-1.50 1.50-1.90	1 102 4 5 6	SPT ES DSPT D B	N=13 1xT+1xJ+1xV		MADE GROUND: Brown silty slightly gravelly fine SAND. Gravel is angular to subangular fine to coarse of limestone, sandstone, concrete and bricks fragments. (MADE GROUND)	45.86 45.81	1.15 1.20	(0.70)	
	1.80-2.10 1.90-2.00	2 103	SPT ES	10,14/23,27 for 75mm 2xJ+1xV		MADE GROUND: Greyish white very sandy very clayey angular fine to coarse GRAVEL of sandstone and mixed lithologies. Sand is fine to coarse. (MADE GROUND)	45.11	1.90		
						Ballast gravel kept falling into borehole	44.91	2.10		
						Extremely weak thinly laminated grey MUDSTONE. Bedding fractures are 5° extremely closely space undulating/ planar orangish with brown. Discontinuation on Fractures. (PENNINE MIDDLE COAL MEASURES FORMATION)				
						Window sample hole terminated at 2.10m depth on SPT refusal.				

Drilling Progress and Water Observations						General Remarks
Date	Time	Borehole Depth (m)	Casing Depth (m)	Borehole Diameter (mm)	Water Depth (m)	
06/08/24	02:45	2.10	-		-	1. Position cleared with GPR and CAT and Genny. 2. Hand dug inspection pit to 1.20m depth. 3. Window Sample terminated at 2.10m depth on SPT refusal. 4. No groundwater encountered. 5. Backfilled on completion. 6. SPT hammer DART384-2024 ($E_r = 68.00\%$) used.
All dimensions in metres						
Method Used: Inspection pit + Tracked window sampling		Plant Used: Archway Competitor		Drilled By: Ben Pine	Logged By: KAdedotun	Checked By: AGS

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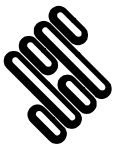
WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus Rapid Transit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS16
Contract Ref: 765865	Start: 06.08.24 End: 06.08.24	Ground Level: 47.01	National Grid Co-ordinate: E:437307.0 N:405555.3	Sheet: 2 of 4



GINT LIBRARY_V10_01.GLB LibVersion: v8_07_001 ProjVersion: v8_07 | Log WINDOW SAMPLE LOG - A4F | 765865_A635_BARNESLEY_BUS_RAPIDTRANSIT_ROUTE.GPJ - v10_01. Structural Soils Ltd, Branch Office - Castleford, The Potteries, Pottery Street, Castleford, West Yorkshire, WF10 1NJ. Tel: 01977-552255; Fax: 01977-552299; Web: www.soils.co.uk, Email: ask@soils.co.uk | 10/12/24 - 14:47 | MG1 |

Method Used: Inspection pit + Tracked window sampling	Plant Used: Archway Competitor	Drilled By: Ben Pine	Logged By: KAdedotun	Checked By: AG	
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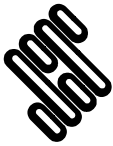
WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS16
Contract Ref: 765865	Start: 06.08.24 End: 06.08.24	Ground Level: 47.01	National Grid Co-ordinate: E:437307.0 N:405555.3	Sheet: 3 of 4



GINT LIBRARY_V10_01.GLB LibVersion: v8_07_001 ProjVersion: v8_07 | Log WINDOW SAMPLE LOG - A4F | 765865_A635_BARNESLEY_BUS_RAPIDTRANSIT_ROUTE.GPJ - v10_01.
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Method Used: Inspection pit + Tracked window sampling	Plant Used: Archway Competitor	Drilled By: Ben Pine	Logged By: KAdedotun	Checked By: AG	
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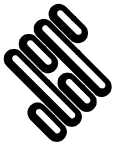
WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus Rapid Transit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS16
Contract Ref: 765865	Start: 06.08.24 End: 06.08.24	Ground Level: 47.01	National Grid Co-ordinate: E:437307.0 N:405555.3	Sheet: 4 of 4



GINT LIBRARY_V10_01.GLB LibVersion: v8_07_001 ProjVersion: v8_07_001 Log WINDOW SAMPLE LOG - A4F | 765865_A635_BARNSELEY_BUS RAPID TRANSIT ROUTE.GPJ - v10_01. Structural Soils Ltd, Branch Office - Castleford, The Potteries, Pottery Street, Castleford, West Yorkshire, WF10 1NJ. Tel: 01977-552255; Fax: 01977-552299; Web: www.soils.co.uk; Email: ask@soils.co.uk | 10/12/24 - 14:48 | MG1 |

Method Used: Inspection pit + Tracked window sampling	Plant Used: Archway Competitor	Drilled By: Ben Pine	Logged By: KAdedotun	Checked By: AG	
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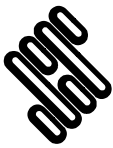
WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS17	
Contract Ref: 765865		Start: 12.08.24 End: 12.08.24	Ground Level: 46.82	National Grid Co-ordinate: E:437293.7 N:405572.6	Sheet: 1 of 4

Progress Window Run	Samples / Tests				Water Backfill & Instru- mentation	Description of Strata	Reduced Level	Depth (Thick- ness)	Material Graphic Legend							
	Depth	No	Type	Results												
0.10 0.10 0.10-0.50	1	D	1xT+1xJ+1xV			MADE GROUND: Brown friable slightly sandy slightly gravelly CLAY. Sand is fine. Gravel are angular to subangular fine to coarse of bricks, sandstone and limestone. (MADE GROUND)	46.02	(0.80)								
	101	ES														
0.85-0.95 0.90 0.90-1.20	3	D	1xT+1xJ+1xV				Stiff brown mottled grey silty CLAY.		(0.60)							
	102	ES														
1.20-1.65 1.20-1.65	5	SPT	N=12													
	6	DSPT														
1.40-1.50 1.50-2.00	7	D							Extremely weak grey and brown MUDSTONE. (PENNINE MIDDLE COAL MEASURES FORMATION)		1.40					
	8	B														
2.00-2.45 2.00-2.45 2.00-2.30	9	SPT	N=15													
	10	DSPT														
2.30-3.00 2.00 - 3.00 (65mm dia) 100% rec	11	B											(2.56)			
	103	ES														
3.00-3.45 3.00-3.45 3.00-3.70	12	SPT	N=33													
	13	DSPT														
3.70-3.96 3.70-3.95	15	SPT	13,10/27,23 for 30mm													
	16	DSPT														
Window Sample terminated at 3.96m depth on refusal.													42.87	3.96		

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Drilling Progress and Water Observations						General Remarks	
Date	Time	Borehole Depth (m)	Casing Depth (m)	Borehole Diameter (mm)	Water Depth (m)		
						1. Position cleared with GPR and CAT and Genny. 2. Hand dug inspection pit to 1.20m depth. 3. Window Sample terminated at 3.96m depth on refusal. 4. No groundwater encountered. 5. Backfilled on completion. 6. SPT hammer 110.49-2024 ($E_r = 81.00\%$) used.	
All dimensions in metres						Scale:	1:25
Method Used:	Inspection pit + Tracked window sampling		Plant Used:	Archway Competitor		Drilled By:	Sam Keenan
						Logged By:	KAdedotun
						Checked By:	AGS



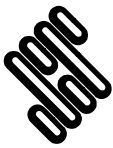
WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS17
Contract Ref: 765865	Start: 12.08.24 End: 12.08.24	Ground Level: 46.82	National Grid Co-ordinate: E:437293.7 N:405572.6	Sheet: 2 of 4



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Method Used: Inspection pit + Tracked window sampling	Plant Used: Archway Competitor	Drilled By: Sam Keenan	Logged By: KAdedotun	Checked By: AG	
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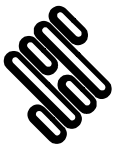
WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus Rapid Transit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS17
Contract Ref: 765865	Start: 12.08.24 End: 12.08.24	Ground Level: 46.82	National Grid Co-ordinate: E:437293.7 N:405572.6	Sheet: 3 of 4



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Method Used: Inspection pit + Tracked window sampling	Plant Used: Archway Competitor	Drilled By: Sam Keenan	Logged By: KAdedotun	Checked By: AG	
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WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS17
Contract Ref: 765865	Start: 12.08.24 End: 12.08.24	Ground Level: 46.82	National Grid Co-ordinate: E:437293.7 N:405572.6	Sheet: 4 of 4



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Method Used: Inspection pit + Tracked window sampling	Plant Used: Archway Competitor	Drilled By: Sam Keenan	Logged By: KAdedotun	Checked By: AG	
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WINDOW SAMPLE LOG

Contract: A635 Barnsley Bus RapidTransit Route		Client: Barnsley Metropolitan Borough council		Window Sample: WS18	
Contract Ref: 765865		Start: 21.08.24 End: 21.08.24	Ground Level: 46.77	National Grid Co-ordinate: E:437304.5 N:405618.9	Sheet: 1 of 3

Progress Window Run	Samples / Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
	Depth	No	Type	Results						
						MADE GROUND: TARMAC. (MADE GROUND)	46.67	0.10		
	0.20	101	ES			MADE GROUND: Dark grey sandy silty angular to subangular fine to coarse GRAVEL of mudstone, stone aggregates and brick. (MADE GROUND)		(0.70)		
	0.50 0.50	1 2	B D							
						Window Sample terminated at 0.80m on suspected concrete.	45.97	0.80		

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Drilling Progress and Water Observations						General Remarks						
Date	Time	Borehole Depth (m)	Casing Depth (m)	Borehole Diameter (mm)	Water Depth (m)							
						1. Position cleared with GPR and CAT and Genny. 2. Hand dug inspection pit to 0.80m depth. 3. Window Sample terminated at 0.80m depth on concrete. 4. No groundwater encountered. 5. Backfilled on completion.						
All dimensions in metres						Scale:	1:25					
Method Used:	Tracked window sampling		Plant Used:	Archway Competitor		Drilled By:	Sam Keenan	Logged By:	JMyles	Checked By:	AG	