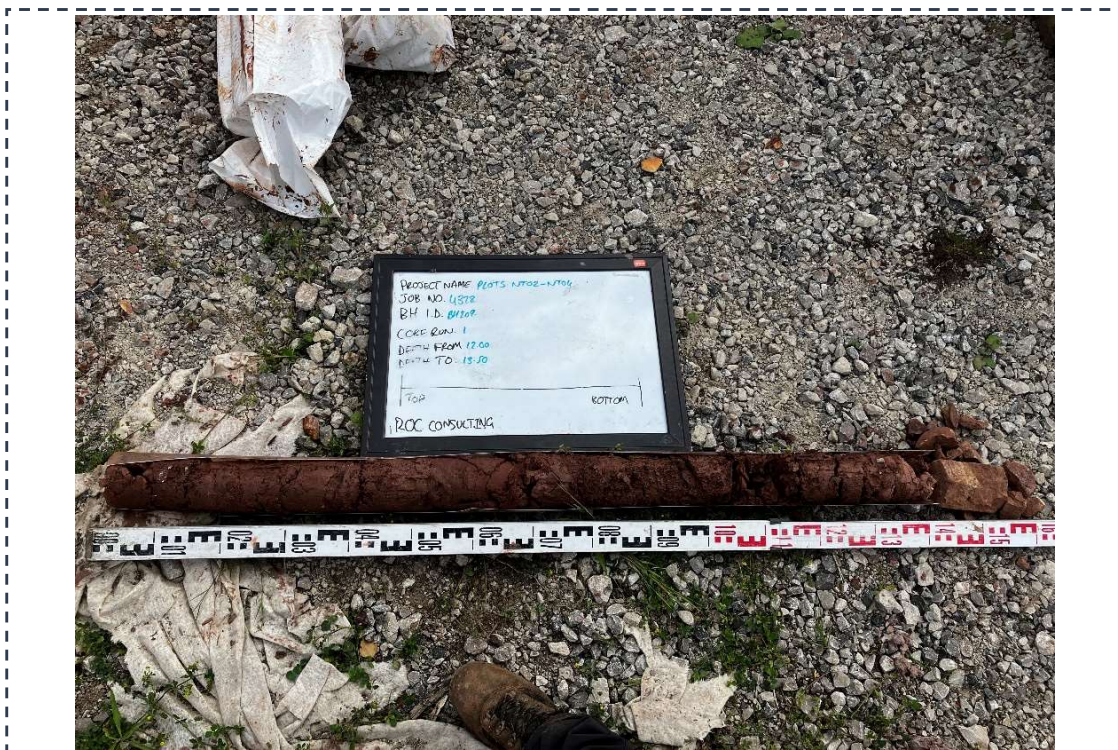


**COMPLEX CHALLENGES...
MADE SIMPLE**



RBH208 – Core Run 7 & 8 21.00 to 24.00mbgl



RBH209 – Core Run 1 12.00 to 13.50mbgl

**COMPLEX CHALLENGES...
MADE SIMPLE**

RBH209 – Core Run 2 13.50 to 15.00mbgl



RBH209 – Core Run 3 15.00 to 16.50mbgl

**COMPLEX CHALLENGES...
MADE SIMPLE**



RBH209 – Core Run 4 16.50 to 18.00mbgl

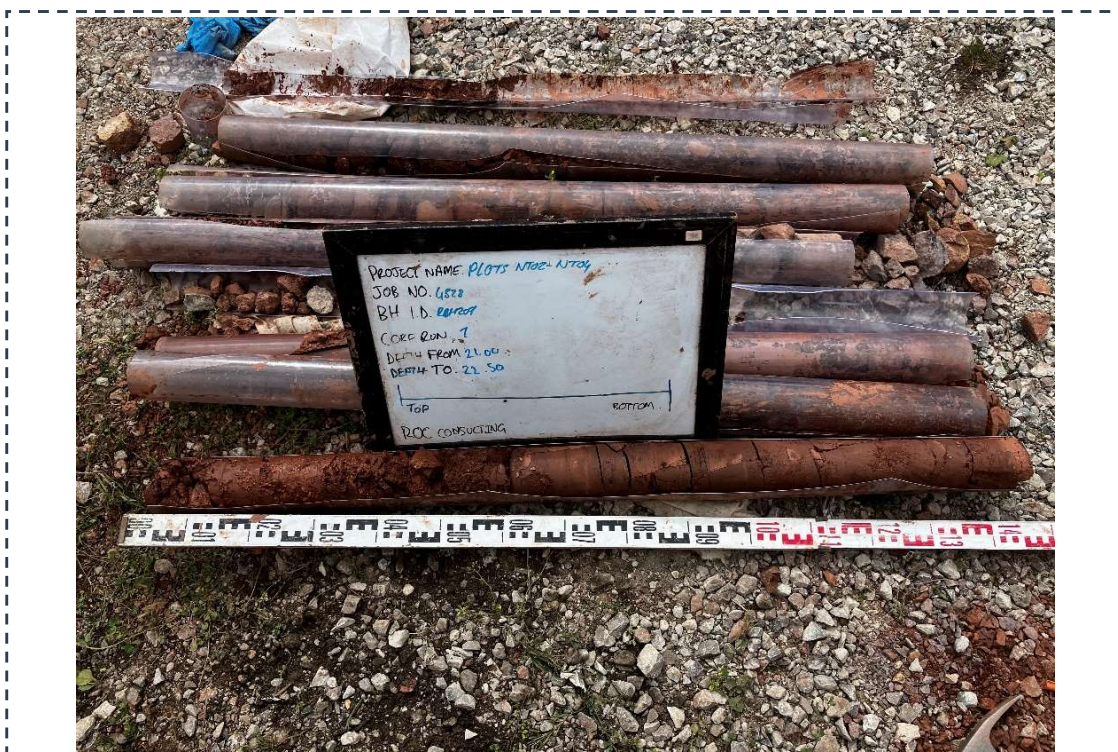


RBH209 – Core Run 5 18.00 to 19.50mbgl

**COMPLEX CHALLENGES...
MADE SIMPLE**

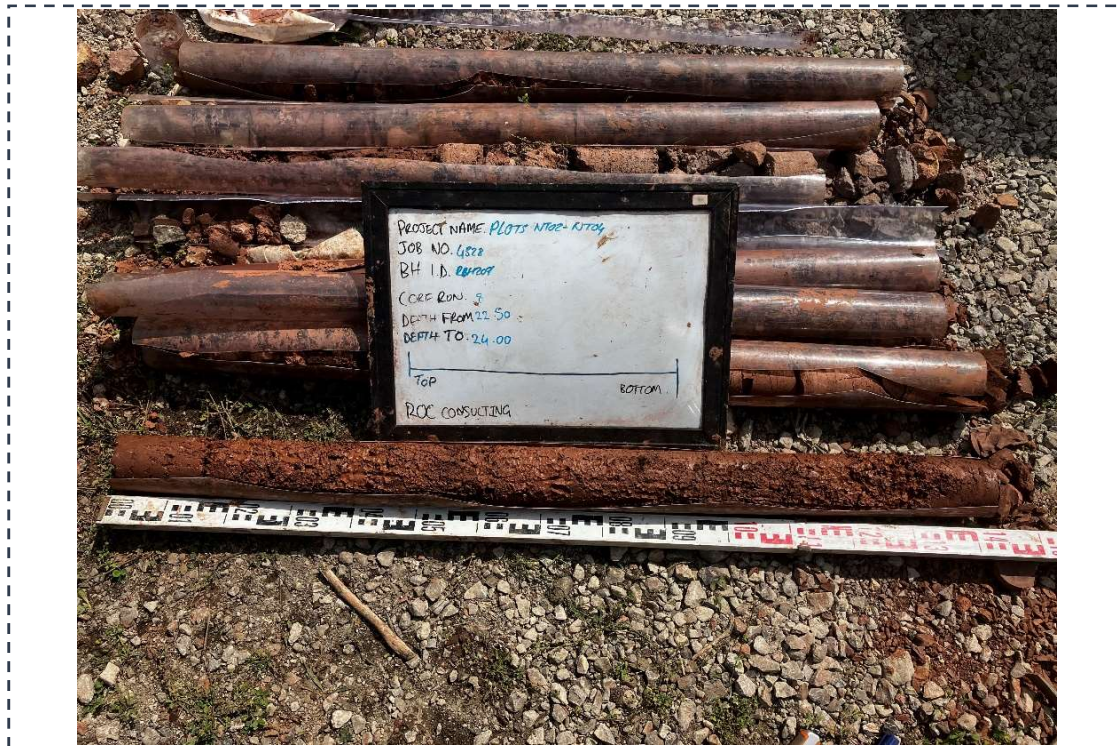


RBH209 – Core Run 6 19.50 to 21.00mbgl

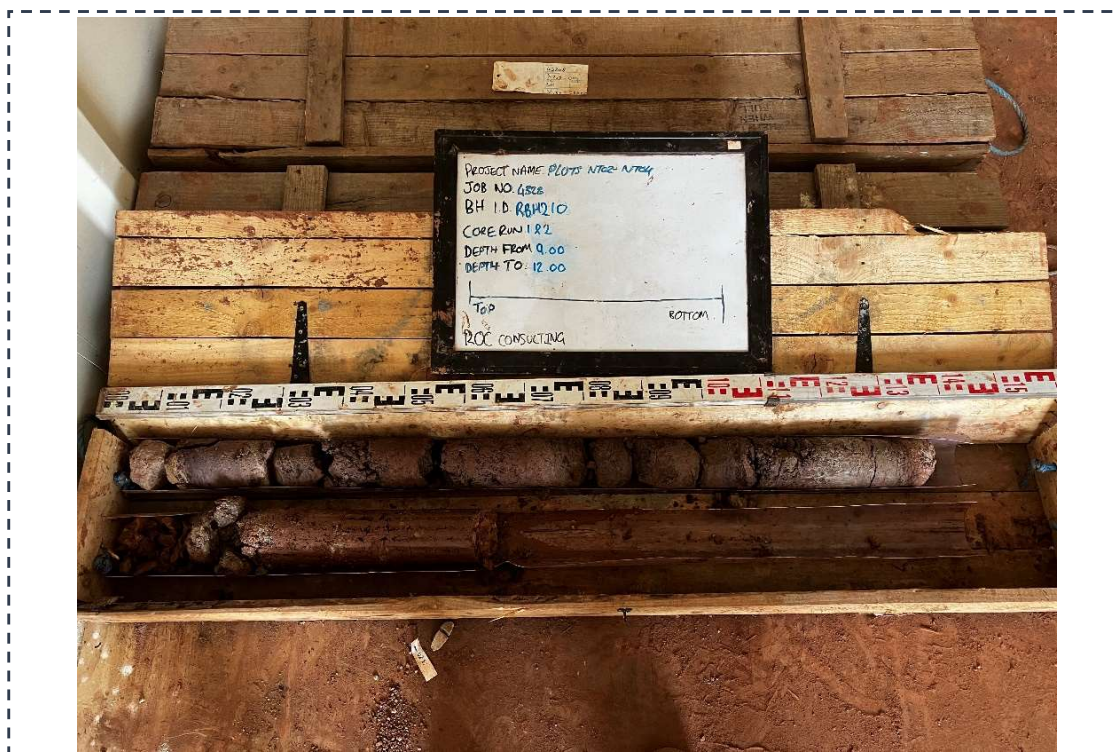


RBH209 – Core Run 7 21.00 to 22.50mbgl

**COMPLEX CHALLENGES...
MADE SIMPLE**



RBH209 – Core Run 8 22.50 to 24.00mbgl

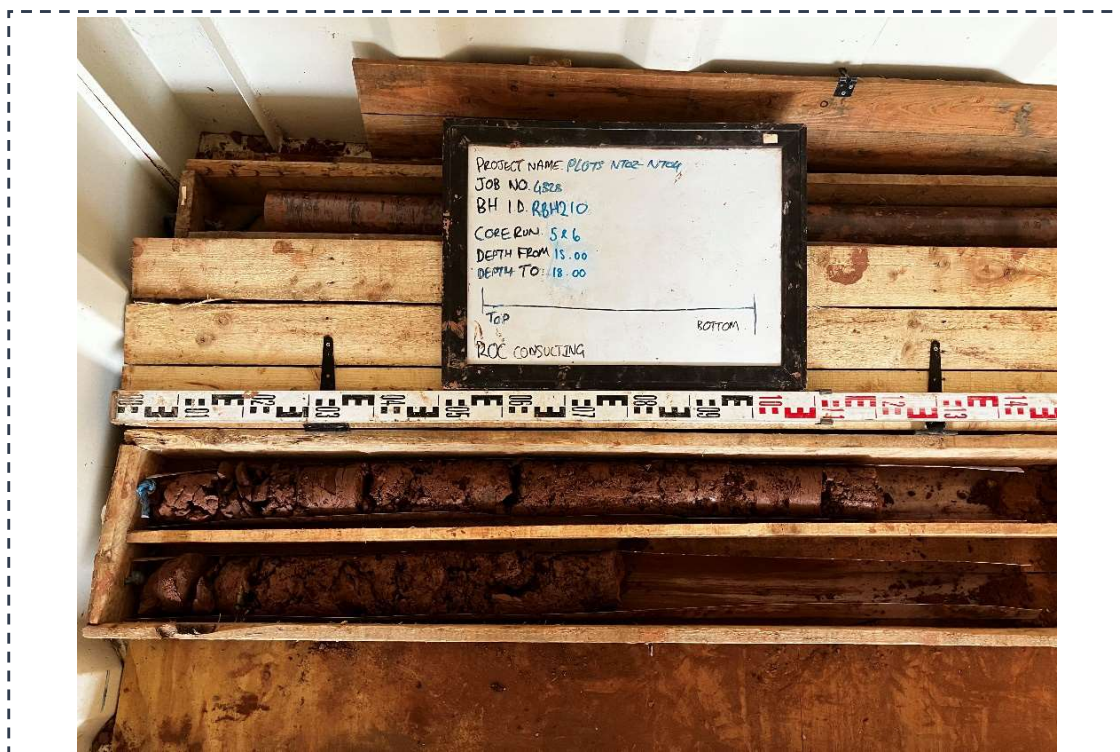


RBH210 – Core Run 1 & 2 9.00 to 12.00mbgl

**COMPLEX CHALLENGES...
MADE SIMPLE**

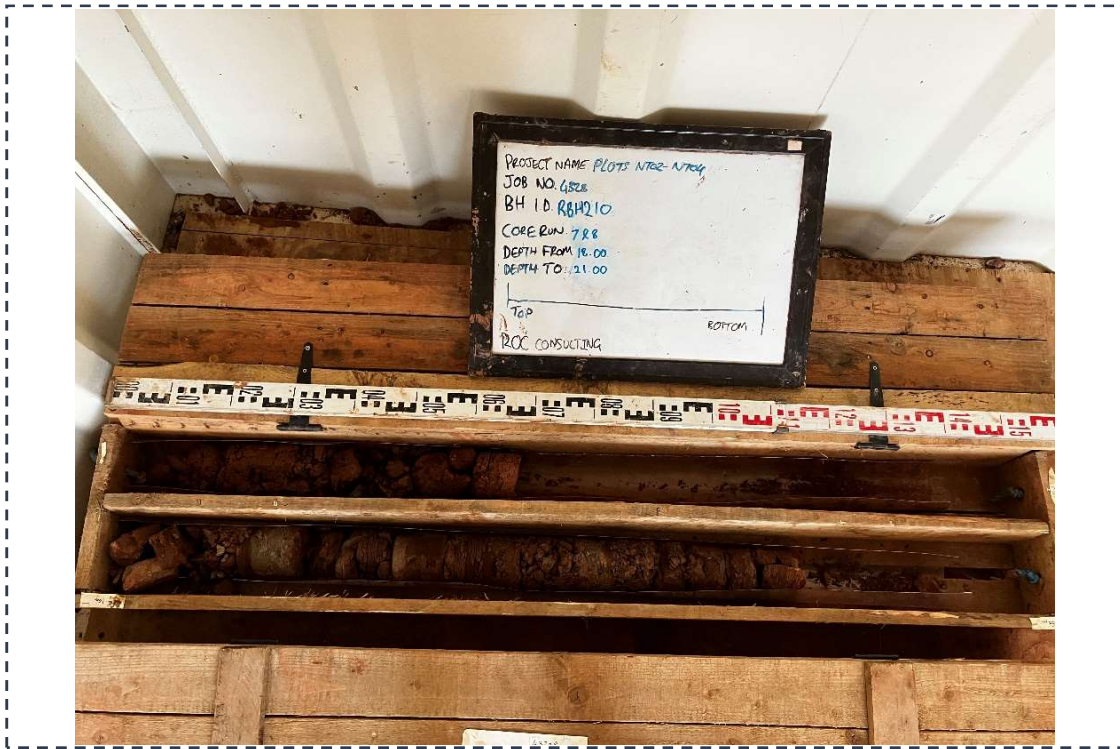


RBH210 – Core Run 3 & 4 12.00 to 15.00mbgl



RBH210 – Core Run 5 & 6 15.00 to 18.00mbgl

**COMPLEX CHALLENGES...
MADE SIMPLE**



RBH210 – Core Run 7 & 8 18.00 to 21.00mbgl

Rotary Core Log

Project Name: Plots NT02-NT04			Client: FEC			Date: 11/07/2022 - 12/07/2022		
Location: Manchester			Contractor: PB Drilling Ltd			Co-ords: E384597.08 N399455.18		
Project No. : 4328			Crew Name: D.G, L.L			Drilling Equipment: Massenza MI3		
Borehole Number RBH201		Hole Type RO+RC		Level 31.40m AoD		Logged By RM		Page Number Sheet 1 of 6

Well	Water	Depth (m)	Type /FI	Coring			Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD					
							0.15	31.25		Dark brown wood chippings (MADE GROUND) Grey Concrete (MADE GROUND)	
							0.50	30.90		Dark greyish brown clayey gravelly medium to coarse ashy SAND. Gravel is fine to coarse subangular to angular of brick and sandstone (MADE GROUND)	
							0.90	30.50		Light brown slightly silty sandy CLAY (DEVENSIAN TILL)	1
							2.00	29.40		Reddish brown SAND (CHESTER FORMATION)	2
							3.50	27.90		Reddish brown SANDSTONE (CHESTER FORMATION)	4
											5

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation				Drilling Flush					
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)
11.80 25.10	140 85	13.20	140					0.00	25.10								

Remarks 1. Location CAT scanned before breaking ground 2. Due to the drilling methodology water strikes were not recorded 3. Upon completion borehole was installed was a 50mm diameter standpipe with a response zone between 21.00 and 25.00mbgl.																	
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Rotary Core Log

Project Name: Plots NT02-NT04				Client: FEC				Date: 11/07/2022 - 12/07/2022			
Location: Manchester				Contractor: PB Drilling Ltd				Co-ords: E384597.08 N399455.18			
Project No. : 4328				Crew Name: D.G, L.L				Drilling Equipment: Massenza MI3			
Borehole Number RBH201		Hole Type RO+RC		Level 31.40m AoD		Logged By RM		Scale 1:25		Page Number Sheet 2 of 6	

Well	Water	Depth (m)	Type /FI	Coring			Diameter Recovery (SPT)	Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD						
											Reddish brown SANDSTONE (CHESTER FORMATION)	6
												7
												8
												9
												10

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation				Drilling Flush					
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)
11.80 25.10	140 85	13.20	140					0.00	25.10								

Remarks

1. Location CAT scanned before breaking ground 2. Due to the drilling methodology water strikes were not recorded 3. Upon completion borehole was installed was a 50mm diameter standpipe with a response zone between 21.00 and 25.00mbgl.

Rotary Core Log

Project Name: Plots NT02-NT04				Client: FEC				Date: 11/07/2022 - 12/07/2022			
Location: Manchester				Contractor: PB Drilling Ltd				Co-ords: E384597.08 N399455.18			
Project No. : 4328				Crew Name: D.G, L.L				Drilling Equipment: Massenza MI3			
Borehole Number RBH201		Hole Type RO+RC		Level 31.40m AoD		Logged By RM		Scale 1:25		Page Number Sheet 3 of 6	

Well	Water	Depth (m)	Type /FI	Coring			Diameter Recovery (SPT)	Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD						
											Reddish brown SANDSTONE (CHESTER FORMATION)	11
		11.80 - 13.20		102	0	0	85mm	11.80	19.60		Reddish brown MUDSTONE recovered as CLAY (MANCHESTER MARLS FORMATION)	12
												13
		13.20 - 14.60		101	87	76	85mm	13.23	18.17		Extremely weak reddish brown MUDSTONE joints horizontal close to medium spaced completely weathered to clay in places (MANCHESTER MARLS FORMATION)	14
								13.59	17.81	xxxxxxx	Extremely weak grey SILTSTONE joints horizontal closely spaced (MANCHESTER MARLS FORMATION)	
								13.77	17.63	xxxxxxx	Extremely weak reddish brown MUDSTONE completely weathered to clay in places (MANCHESTER MARLS FORMATION)	
								14.17	17.23	xxxxxxx	Very weak grey SILTSTONE joints horizontal closely spaced (MANCHESTER MARLS FORMATION)	
							85mm	14.22	17.18		Extremely weak reddish brown MUDSTONE joints horizontal closely spaced (MANCHESTER MARLS FORMATION)	15
											...at 14.42 to 14.62mbgl non intact	

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation				Drilling Flush					
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)
11.80	140	13.20	140					0.00	25.10								
25.10	85																

Remarks

1. Location CAT scanned before breaking ground 2. Due to the drilling methodology water strikes were not recorded 3. Upon completion borehole was installed was a 50mm diameter standpipe with a response zone between 21.00 and 25.00mbgl.

Rotary Core Log

Project Name: Plots NT02-NT04			Client: FEC			Date: 11/07/2022 - 12/07/2022		
Location: Manchester			Contractor: PB Drilling Ltd			Co-ords: E384597.08 N399455.18		
Project No. : 4328			Crew Name: D.G, L.L			Drilling Equipment: Massenza MI3		
Borehole Number RBH201		Hole Type RO+RC		Level 31.40m AoD		Logged By RM		Page Number Sheet 4 of 6

Well	Water	Depth (m)	Type /FI	Coring			Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD					
		14.60 - 16.10		95	78	56				Extremely weak reddish brown MUDSTONE joints horizontal closely spaced (MANCHESTER MARLS FORMATION) ...at 15.30 to 15.35mbgl gravelly clay infill	
										...at 16.02 to 16.10mbgl non intact ...at 16.02 to 16.20mbgl band of weak grey siltstone	16
		16.10 - 17.60		100	95	77				...at 16.60 to 16.65mbgl gravelly clay infill	
										...at 17.64 to 17.69mbgl non intact ...at 17.74 to 17.88mbgl becoming destructured to clay	
							17.88	13.52	Weak grey SILTSTONE (MANCHESTER MARLS FORMATION)		18
		17.60 - 19.10		69	44	34	18.19	13.21	Weak reddish brown MUDSTONE joints horizontal closely spaced (MANCHESTER MARLS FORMATION) ...at 18.29 to 18.48mbgl destructured to clay		
										...at 19.40 to 19.45mbgl becoming destructured to clay	19
		19.10 - 20.60		98	98	69				Weak interbedded MUDSTONE and	
							19.85 19.90	11.55 11.50			20

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation				Drilling Flush					
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)
11.80 25.10	140 85	13.20	140					0.00	25.10								

Remarks

1. Location CAT scanned before breaking ground 2. Due to the drilling methodology water strikes were not recorded 3. Upon completion borehole was installed was a 50mm diameter standpipe with a response zone between 21.00 and 25.00mbgl.



Rotary Core Log

Project Name: Plots NT02-NT04		Client: FEC		Date: 11/07/2022 - 12/07/2022	
Location: Manchester		Contractor: PB Drilling Ltd		Co-ords: E384597.08 N399455.18	
Project No. : 4328		Crew Name: D.G, L.L		Drilling Equipment: Massenza MI3	
Borehole Number RBH201	Hole Type RO+RC	Level 31.40m AoD	Logged By RM	Scale 1:25	Page Number Sheet 5 of 6

[illegible]

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation				Drilling Flush					
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)
11.80 25.10	140 85	13.20	140					0.00	25.10								

Remarks

1. Location CAT scanned before breaking ground 2. Due to the drilling methodology water strikes were not recorded 3. Upon completion borehole was installed was a 50mm diameter standpipe with a response zone between 21.00 and 25.00mbgl.



Rotary Core Log

Project Name: Plots NT02-NT04		Client: FEC		Date: 11/07/2022 - 12/07/2022	
Location: Manchester		Contractor: PB Drilling Ltd		Co-ords: E384597.08 N399455.18	
Project No. : 4328		Crew Name: D.G, L.L		Drilling Equipment: Massenza MI3	
Borehole Number RBH201	Hole Type RO+RC	Level 31.40m AoD	Logged By RM	Scale 1:25	Page Number Sheet 6 of 6

[illegible]

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation				Drilling Flush					
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)
11.80 25.10	140 85	13.20	140					0.00	25.10								

Remarks

1. Location CAT scanned before breaking ground 2. Due to the drilling methodology water strikes were not recorded 3. Upon completion borehole was installed was a 50mm diameter standpipe with a response zone between 21.00 and 25.00mbgl.



Rotary Core Log

Project Name: Plots NT02-NT04				Client: FEC				Date: 13/07/2022			
Location: Manchester				Contractor: PB Drilling Ltd				Co-ords: E384638.05 N399446.26			
Project No. : 4328				Crew Name: D.G, L.L				Drilling Equipment: Massenza MI3			
Borehole Number RBH202		Hole Type RO+RC		Level 32.76m AoD		Logged By RM		Scale 1:25		Page Number Sheet 1 of 5	

Well	Water	Depth (m)	Type /FI	Coring			Diameter Recovery (SPT)	Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD						
								0.10	32.66		Asphalt (MADE GROUND)	
								1.35	31.41		Black gravelly SAND. Gravel is fine to coarse sub angular to angular of brick, slate and slag. Occassional fragments of wood, metal, plastic and glass (MADE GROUND)	1
								1.65	31.11		Dark brown sandy slightly gravelly CLAY. Gravel is fine to medium sub angular to angular of brick (MADE GROUND)	
								2.00	30.76		Light brown mottled orangish brown and white slightly sandy slightly gravelly CLAY. Gravel is fine rounded of sandstone and mudstone (DEVANSIAN TILL)	2
								3.20	29.56		Reddish brown fine to medium SAND (WEATHERED CHESTER FORMATION)	3
											Reddish brown SANDSTONE (CHESTER FORMATION)	4
												5

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation				Drilling Flush					
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)
7.00	140	12.00	140					0.00	25.00								
9.40	85																
9.40	140																
25.00	85																

Remarks 1. Location CAT scanned before breaking ground 2. Due to the drilling methodology water strikes were not recorded 3. Upon completion borehole was installed was a 50mm diameter standpipe with a response zone between 21.00 and 25.00mbgl.																	
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Rotary Core Log

Project Name: Plots NT02-NT04				Client: FEC				Date: 13/07/2022			
Location: Manchester				Contractor: PB Drilling Ltd				Co-ords: E384638.05 N399446.26			
Project No. : 4328				Crew Name: D.G, L.L				Drilling Equipment: Massenza MI3			
Borehole Number RBH202		Hole Type RO+RC		Level 32.76m AoD		Logged By RM		Scale 1:25		Page Number Sheet 2 of 5	

Well	Water	Depth (m)	Type /FI	Coring			Diameter Recovery (SPT)	Depth (m)	Level (m)	Legend	Stratum Description												
				TCR	SCR	RQD																	
											Reddish brown SANDSTONE (CHESTER FORMATION)	6											
												7											
												8											
												9											
												10	Reddish brown MUDSTONE recovered as										
												Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
		Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)				
7.00	140	12.00	140					0.00	25.00														
9.40	85																						
9.40	140																						
25.00	85																						

Remarks

1. Location CAT scanned before breaking ground 2. Due to the drilling methodology water strikes were not recorded 3. Upon completion borehole was installed was a 50mm diameter standpipe with a response zone between 21.00 and 25.00mbgl.

Rotary Core Log

Project Name: Plots NT02-NT04			Client: FEC			Date: 13/07/2022		
Location: Manchester			Contractor: PB Drilling Ltd			Co-ords: E384638.05 N399446.26		
Project No. : 4328			Crew Name: D.G, L.L			Drilling Equipment: Massenza MI3		
Borehole Number RBH202		Hole Type RO+RC		Level 32.76m AoD		Logged By RM		Page Number Sheet 3 of 5

Well	Water	Depth (m)	Type /FI	Coring			Diameter Recovery (SPT)	Depth (m)	Level (m)	Legend	Stratum Description		
				TCR	SCR	RQD							
		9.90 - 11.50		102	26	20		11.14	21.62		Reddish brown MUDSTONE recovered as slightly sandy CLAY (MANCHESTER MARL FORMATION)	11	
		11.50 - 13.00		99	36	32	85mm	11.61	21.15			Extremely weak reddish brown MUDSTONE joints horizontal closely spaced (MANCHESTER MARLS FORMATION)	12
		13.00 - 14.50		103	85	71	85mm	13.01 13.09 13.16	19.75 19.67 19.60			Very weak grey and yellow SILTSTONE with occasional reddish brown staining. Bedding horizontal thickly laminated (MANCHESTER MARLS FORMATION) Very weak reddish brown MUDSTONE joints horizontal closely spaced (MANCHESTER MARLS FORMATION) Weak reddish brown MUDSTONE with occasional grey spotting. Joints horizontal closely spaced (MANCHESTER MARLS FORMATION) Grey SILTSTONE recovered as fine to medium sub angular GRAVEL (MANCHESTER MARLS FORMATION) Very weak reddish brown MUDSTONE with occasional grey patches joints horizontal close to medium spaced (MANCHESTER MARLS FORMATION)	13
													15

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation				Drilling Flush					
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)
7.00	140	12.00	140					0.00	25.00								
9.40	85																
9.40	140																
25.00	85																

Remarks 1. Location CAT scanned before breaking ground 2. Due to the drilling methodology water strikes were not recorded 3. Upon completion borehole was installed was a 50mm diameter standpipe with a response zone between 21.00 and 25.00mbgl.																	
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Rotary Core Log

Project Name: Plots NT02-NT04			Client: FEC			Date: 13/07/2022		
Location: Manchester			Contractor: PB Drilling Ltd			Co-ords: E384638.05 N399446.26		
Project No. : 4328			Crew Name: D.G, L.L			Drilling Equipment: Massenza MI3		
Borehole Number RBH202		Hole Type RO+RC		Level 32.76m AoD		Logged By RM		Page Number Sheet 4 of 5

Well	Water	Depth (m)	Type /FI	Coring			Diameter Recovery (SPT)	Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD						
		14.50 - 16.00		96	85	57	85mm	15.71	17.05		Weak reddish brown MUDSTONE joints horizontal closely spaced (MANCHESTER MARLS FORMATION)	16
								16.02	16.74		Weak light brown and yellow SILSTONE joints horizontal closely spaced (MANCHESTER MARLS FORMATION)	
											Very weak reddish brown MUDSTONE joints horizontal closely spaced (MANCHESTER MARLS FORMATION)	
											Reddish brown MUDSTONE recovered as fine to coarse sub angular gravel (MANCHESTER MARLS FORMATION)	
		16.00 - 17.50		93	70	10					Very weak reddish brown MUDSTONE joints horizontal very close to closely spaced (MANCHESTER MARLS FORMATION)	
											...at 16.26 to 16.29mbgl band of weak grey siltstone	
								17.21	15.55		Weak light grey SILTSTONE (MANCHESTER MARLS)	
								17.28	15.48		MUDSTONE recovered as reddish brown fine to coarse sub angular to angular gravel (MANCHESTER MARLS FORMATION)	
								17.50	15.26		Very weak light grey fine to medium grained SANDSTONE joints horizontal closely spaced (MANCHESTER MARLS FORMATION)	
								17.92	14.84		...at 17.60mbgl reddish brown stained crack	
		17.50 - 19.00		98	58	43	85mm	17.98	14.78		Very weak reddish brown MUDSTONE (MANCHESTER MARLS FORMATION)	18
								18.13	14.63		Weak grey and yellow thickly laminated SILTSTONE (MANCHESTER MARLS FORMATION)	
											Weak reddish brown MUDSTONE joints horizontal very closely to closely spaced (MANCHESTER MARLS FORMATION)	
											...at 19.10 to 19.13mbgl 60 degree fracture	
		19.00 - 20.50		91	81	56		19.45	13.31		Weak light grey SILTSTONE joints horizontal closely spaced (MANCHESTER MARLS FORMATION)	
								19.59	13.17		Weak reddish brown and grey fine grained SANDSTONE joints horizontal close to medium spaced (MANCHESTER MARLS)	

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation				Drilling Flush					
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)
7.00	140	12.00	140					0.00	25.00								
9.40	85																
9.40	140																
25.00	85																

Remarks 1. Location CAT scanned before breaking ground 2. Due to the drilling methodology water strikes were not recorded 3. Upon completion borehole was installed was a 50mm diameter standpipe with a response zone between 21.00 and 25.00mbgl.																	
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Rotary Core Log

Project Name: Plots NT02-NT04				Client: FEC				Date: 13/07/2022			
Location: Manchester				Contractor: PB Drilling Ltd				Co-ords: E384638.05 N399446.26			
Project No. : 4328				Crew Name: D.G, L.L				Drilling Equipment: Massenza MI3			
Borehole Number RBH202		Hole Type RO+RC		Level 32.76m AoD		Logged By RM		Scale 1:25		Page Number Sheet 5 of 5	

Well	Water	Depth (m)	Type /FI	Coring			Diameter Recovery (SPT)	Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD						
		20.50 - 22.00		89	80	75	85mm	21.71	11.05		Weak reddish brown and grey fine grained SANDSTONE joints horizontal close to medium spaced (MANCHESTER MARLS FORMATION)	21
											...at 21.48 to 21.53mbgl clay infill	
											Weak reddish brown MUDSTONE with some inter bedded grey SILTSTONE joints are horizontal closely spaced (MANCHESTER MARLS FORMATION)	
											Reddish brown MUDSTONE (MANCHESTER MARLS FORMATION)	
								22.00	10.76			23
												24
								25.00	7.76		End of Borehole at 25.000m	25

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation				Drilling Flush					
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)
7.00	140	12.00	140					0.00	25.00								
9.40	85																
9.40	140																
25.00	85																

Remarks

1. Location CAT scanned before breaking ground 2. Due to the drilling methodology water strikes were not recorded 3. Upon completion borehole was installed was a 50mm diameter standpipe with a response zone between 21.00 and 25.00mbgl.

Rotary Core Log

Project Name: Plots NT02-NT04			Client: FEC			Date: 25/07/2022 - 27/07/2022		
Location: Manchester			Contractor: DMW Drilling Ltd			Co-ords: E384619.36 N399403.83		
Project No. : 4328			Crew Name: D.G, L.L			Drilling Equipment: Massenza MI3		
Borehole Number RBH203		Hole Type RO+RC		Level 33.59m AoD		Logged By RM		Page Number Sheet 1 of 2

Well	Water	Depth (m)	Type /FI	Coring			Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD					
							0.30	33.29		Grey reinforced CONCRETE (MADE GROUND)	
							1.20	32.39		Black gravelly SAND. Gravel is fine to coarse sub angular to angular of brick, clinker and slag. Frequent whole and half brick cobbles (MADE GROUND)	1
							2.30	31.29		Brown mottled orangish brown slightly sandy slightly gravelly CLAY. Gravel is fine rounded of sandstone and mudstone (DEVENSIAN TILL)	2
							3.50	30.09		Reddish brown fine SAND. Very strong solvent odour (CHESTER FORMATION)	3
										Reddish brown SANDSTONE (CHESTER FORMATION)	4
		5.00 - 6.50		31	9	0					5
											6
											7
		8.00 - 9.50		90	34	22	8.00	25.59		Very weak reddish brown fine grained SANDSTONE inter-bedded with bands of fine sand. Joints are horizontal closely spaced (CHESTER FORMATION)	8
											9
											10

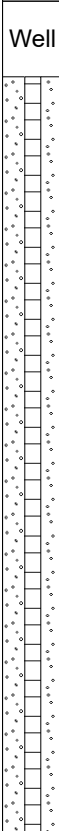
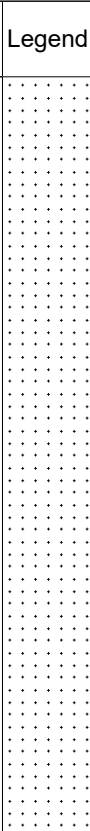
Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation				Drilling Flush					
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)
5.00	140	4.50	150					0.00	19.50								
6.50	85	16.00	140														
8.00	140																
9.50	85																
10.50	140																

Remarks

1. Location CAT scanned before breaking ground 2. Due to the drilling methodology water strikes were not recorded 3. Upon completion borehole was installed was a 50mm diameter standpipe with a response zone between 10.00 and 15.00mbgl.

Rotary Core Log

Project Name: Plots NT02-NT04		Client: FEC		Date: 25/07/2022 - 27/07/2022	
Location: Manchester		Contractor: DMW Drilling Ltd		Co-ords: E384619.36 N399403.83	
Project No. : 4328		Crew Name: D.G, L.L		Drilling Equipment: Massenza MI3	
Borehole Number RBH203	Hole Type RO+RC	Level 33.59m AoD	Logged By RM	Scale 1:50	Page Number Sheet 2 of 2

Well	Water	Depth (m)	Type /FI	Coring			Diameter Recovery (SPT)	Depth (m)	Level (m)	Legend	Stratum Description																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
				TCR	SCR	RQD																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
							85mm	15.07	18.52		Very weak reddish brown fine grained SANDSTONE inter-bedded with bands of fine sand. Joints are horizontal closely spaced (CHESTER FORMATION) <u>...at 10.50 to 11.30mbgl recovered as sand</u>	11																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
		10.50 - 12.00		53	0	0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
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		12.00 - 13.50		45	0	0							<u>...at 12.00 to 12.67mbgl recovered as sand</u>		13																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
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Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation				Drilling Flush					
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)
5.00	140	4.50	150					0.00	19.50								
6.50	85	16.00	140														
8.00	140																
9.50	85																
10.50	140																

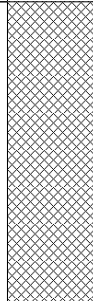
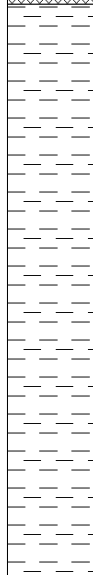
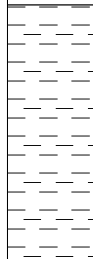
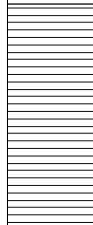
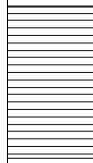
Remarks

1. Location CAT scanned before breaking ground 2. Due to the drilling methodology water strikes were not recorded 3. Upon completion borehole was installed was a 50mm diameter standpipe with a response zone between 10.00 and 15.00mbgl.



Rotary Core Log

Project Name: Plots NT02-NT04				Client: FEC				Date: 12/08/2022			
Location: Manchester				Contractor: DMW Drilling Ltd				Co-ords: E384721.68 N399517.64			
Project No. : 4328				Crew Name: D.G, L.L				Drilling Equipment: Massenza MI3			
Borehole Number RBH205		Hole Type RO+RC		Level 31.38m AoD		Logged By RM		Scale 1:50		Page Number Sheet 1 of 3	

Well	Water	Depth (m)	Type /FI	Coring			Diameter Recovery (SPT)	Depth (m)	Level (m)	Legend	Stratum Description						
				TCR	SCR	RQD											
								2.00	29.38		Brown sandy fine to coarse sub angular to angular GRAVEL of brick and concrete (MADE GROUND) `	1					
														Brown slightly gravelly CLAY. Gravel is fine sub rounded of mudstone and sandstone (DEVENSIAN TILL)	2		
															3		
															4		
															5		
													5.80	25.58		Reddish brown mottled grey slightly silty CLAY (DEVENSIAN TILL)	6
																7	
					7.50 - 9.00		75			0	0	85mm	7.50	23.88		Reddish brown MUDSTONE recovered as sightly gravelly clay. Gravel is fine to coarse subangular (MANCHESTER MARLS FORMATION)	8
					9.00 - 10.50		51			12	0	85mm	9.00	22.38		Very weak reddish brown MUDSTONE bedding horizontal closely spaced (MANCHESTER MARLS FORMATION) ...at 9.05 to 9.57mbgl clay infill	9
																	10
Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation				Drilling Flush					
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)
6.00	140	3.00	150					0.00	25.00								
18.00	85	6.00	140														
25.00	140																

Remarks

1. Location CAT scanned before breaking ground 2. Due to the drilling methodology water strikes were not recorded 3. Upon completion borehole was installed was a 50mm diameter standpipe with a response zone between 10.00 and 15.00mbgl.

Rotary Core Log

Project Name: Plots NT02-NT04				Client: FEC				Date: 12/08/2022			
Location: Manchester				Contractor: DMW Drilling Ltd				Co-ords: E384721.68 N399517.64			
Project No. : 4328				Crew Name: D.G, L.L				Drilling Equipment: Massenza MI3			
Borehole Number RBH205		Hole Type RO+RC		Level 31.38m AoD		Logged By RM		Scale 1:50		Page Number Sheet 2 of 3	

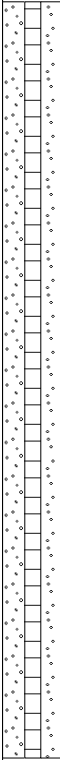
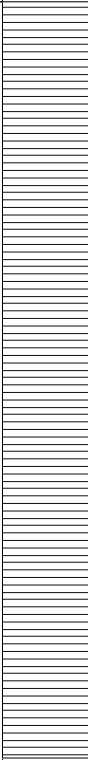
Well	Water	Depth (m)	Type /FI	Coring			Diameter Recovery (SPT)	Depth (m)	Level (m)	Legend	Stratum Description																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
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							85mm	10.50	20.88		Very weak reddish brown MUDSTONE bedding horizontal closely spaced (MANCHESTER MARLS FORMATION)	11																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
		10.50 - 12.00		53	19	7					Very weak reddish brown MUDSTONE joints horizontal closely spaced (MANCHESTER MARLS) ...at 10.50 to 10.64mbgl non intact ...at 10.69 to 10.72mbgl non intact ...at 10.79 to 11.12mbgl non intact																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
							12.00 - 13.50	91	0		0	...at 12.00 to 13.37mbgl destructured to clay																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
												13.50 - 15.00	89	49	37	...at 13.50 to 13.99mbgl destructured to clay ...at 14.11 to 14.37mbgl clay infill ...at 14.54 to 14.70mbgl non intact ...at 14.64mbgl becoming weak																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
																15.00 - 16.50	87	47	34	15.92 16.12	15.46 15.26	Weak grey fine to medium grained SANDSTONE (MANCHESTER MARLS) Weak reddish brown MUDSTONE completely weathered to clay in places joints are horizontal closely spaced (MANCHESTER MARL FORMATION) ...at 17.02 to 17.70mbgl recovered as clay																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
		16.50 - 18.00		85	39	31																18.00	13.38	Reddish brown MUDSTONE (MANCHESTER MARLS FORMATION)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	

Remarks

1. Location CAT scanned before breaking ground 2. Due to the drilling methodology water strikes were not recorded 3. Upon completion borehole was installed was a 50mm diameter standpipe with a response zone between 10.00 and 15.00mbgl.

Rotary Core Log

Project Name: Plots NT02-NT04				Client: FEC				Date: 12/08/2022			
Location: Manchester				Contractor: DMW Drilling Ltd				Co-ords: E384721.68 N399517.64			
Project No. : 4328				Crew Name: D.G, L.L				Drilling Equipment: Massenza MI3			
Borehole Number RBH205		Hole Type RO+RC		Level 31.38m AoD		Logged By RM		Scale 1:50		Page Number Sheet 3 of 3	

Well	Water	Depth (m)	Type /FI	Coring			Diameter Recovery (SPT)	Depth (m)	Level (m)	Legend	Stratum Description								
				TCR	SCR	RQD													
								25.00	6.38		Reddish brown MUDSTONE (MANCHESTER MARLS FORMATION)	21							
												22							
												23							
												24							
												25							
												26							
												27							
												28							
												29							
												30							
Hole Diameter				Casing Diameter				Chiselling				Inclination and Orientation				Drilling Flush			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)		
6.00	140	3.00	150					0.00	25.00										
18.00	85	6.00	140																
25.00	140																		

Remarks

1. Location CAT scanned before breaking ground 2. Due to the drilling methodology water strikes were not recorded 3. Upon completion borehole was installed was a 50mm diameter standpipe with a response zone between 10.00 and 15.00mbgl.

Rotary Core Log

Project Name: Plots NT02-NT04				Client: FEC				Date: 14/07/2022			
Location: Manchester				Contractor: DMW Drilling Ltd				Co-ords: E384701.70 N399491.17			
Project No. : 4328				Crew Name: D.G, L.L				Drilling Equipment: Massenza MI3			
Borehole Number RBH206		Hole Type RO+RC		Level 32.00m AoD		Logged By RM		Scale 1:25		Page Number Sheet 1 of 5	

Well	Water	Depth (m)	Type /FI	Coring			Diameter Recovery (SPT)	Depth (m)	Level (m)	Legend	Stratum Description										
				TCR	SCR	RQD															
								2.00	30.00		Brown sandy GRAVEL. Gravel is fine to coarse sub angular to angular of brick and concrete (MADE GROUND)	1									
																			2		
																				3	
																					4
Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation				Drilling Flush									
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)				
5.80	140	7.20	140					0.00	25.00												
19.20	85																				
25.00	140																				

Remarks

1. Location CAT scanned before breaking ground 2. Due to the drilling methodology water strikes were not recorded 3. Upon complete borehole was installed was a 50mm diameter standpipe with a response zone between 21.00 and 25.00mbgl.

Rotary Core Log

Project Name: Plots NT02-NT04				Client: FEC				Date: 14/07/2022			
Location: Manchester				Contractor: DMW Drilling Ltd				Co-ords: E384701.70 N399491.17			
Project No. : 4328				Crew Name: D.G, L.L				Drilling Equipment: Massenza MI3			
Borehole Number RBH206		Hole Type RO+RC		Level 32.00m AoD		Logged By RM		Scale 1:25		Page Number Sheet 2 of 5	

Well	Water	Depth (m)	Type /FI	Coring			Diameter Recovery (SPT)	Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD						
		5.80 - 7.20		90	0	0	85mm	5.80	26.20		Brown slightly gravelly CLAY. Gravel is fine sub rounded of mudstone and sandstone (DEVENSIAN TILL)	6
											Reddish brown mottled grey slightly silty CLAY (DEVENSIAN TILL)	
		7.20 - 8.70		93	43	21	85mm	7.65	24.35		Very weak yellowish brown fine grained SANDSTONE joints horizontal closely spaced (CHESTER FORMATION)	8
											...at 7.65 to 7.93mbgl non intact	
											Weak reddish brown fine grained SANDSTONE (CHESTER FORMATION)	
											...at 8.18 to 8.30mbgl non intact	
		8.70 - 10.20		64	35	17	85mm	8.70	23.30		Very weak reddish brown fine grained SANDSTONE recovered primarily as gravel with some small tabular sandstone discs (CHESTER FORMATION)	9
											...at 8.50 to 8.64mbgl non intact	
											Reddish brown gravelly CLAY. Gravel is fine to medium sub angular to angular of mudstone lithorelicts (CHESTER FORMATION)	
											Weak reddish brown fine to medium grained SANDSTONE with occasionally clayey sand infill joints horizontal closely to medium spaced (CHESTER FORMATION)	
		8.70 - 10.20		64	35	17	85mm	9.20	22.80			10
		8.70 - 10.20		64	35	17	85mm	9.41	22.59			

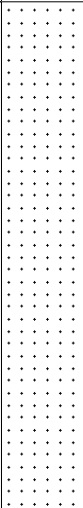
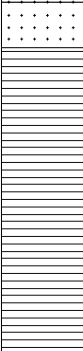
Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation				Drilling Flush					
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)
5.80	140	7.20	140					0.00	25.00								
19.20	85																
25.00	140																

Remarks

1. Location CAT scanned before breaking ground 2. Due to the drilling methodology water strikes were not recorded 3. Upon complete borehole was installed was a 50mm diameter standpipe with a response zone between 21.00 and 25.00mbgl.

Rotary Core Log

Project Name: Plots NT02-NT04			Client: FEC			Date: 14/07/2022		
Location: Manchester			Contractor: DMW Drilling Ltd			Co-ords: E384701.70 N399491.17		
Project No. : 4328			Crew Name: D.G, L.L			Drilling Equipment: Massenza MI3		
Borehole Number RBH206		Hole Type RO+RC		Level 32.00m AoD		Logged By RM		Page Number Sheet 3 of 5

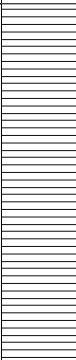
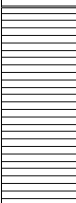
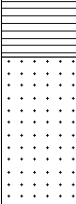
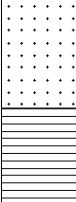
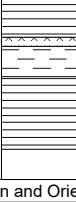
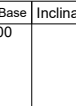
Well	Water	Depth (m)	Type /FI	Coring			Diameter Recovery (SPT)	Depth (m)	Level (m)	Legend	Stratum Description						
				TCR	SCR	RQD											
							85mm	11.70	20.30		Weak reddish brown fine to medium grained SANDSTONE with occasionally clayey sand infill joints horizontal closely to medium spaced (CHESTER FORMATION) ...at 10.38 to 10.55mbgl non intact ...at 10.74 to 10.87mbgl non intact ...at 10.87 to 11.48mbgl occasional fine gravel inclusions and black speckling at joints	11					
		10.20 - 11.70		98	74	72											
							85mm										
		11.70 - 13.20		42	0	0											
							85mm										
		13.20 - 14.70		67	43	38		13.82 13.97	18.18 18.03		Weak reddish brown fine grained SANDSTONE (CHESTER FORMATION) ...at 13.92 to 14.09mbgl vertical fracture Weak reddish brown MUDSTONE joints are horizontal closely spaced (MANCHESTER MARLS FORMATION) ...at 14.70 to 14.86mbgl non intact	14					
							85mm					15					
Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation				Drilling Flush					
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)
5.80 19.20 25.00	140 85 140	7.20	140					0.00	25.00								

Remarks

1. Location CAT scanned before breaking ground 2. Due to the drilling methodology water strikes were not recorded 3. Upon complete borehole was installed was a 50mm diameter standpipe with a response zone between 21.00 and 25.00mbgl.

Rotary Core Log

Project Name: Plots NT02-NT04			Client: FEC			Date: 14/07/2022		
Location: Manchester			Contractor: DMW Drilling Ltd			Co-ords: E384701.70 N399491.17		
Project No. : 4328			Crew Name: D.G, L.L			Drilling Equipment: Massenza MI3		
Borehole Number RBH206		Hole Type RO+RC		Level 32.00m AoD		Logged By RM		Page Number Sheet 4 of 5

Well	Water	Depth (m)	Type /FI	Coring			Diameter Recovery (SPT)	Depth (m)	Level (m)	Legend	Stratum Description						
				TCR	SCR	RQD											
		14.70 - 16.20		100	81	54	85mm	16.20	15.80		Weak reddish brown MUDSTONE joints are horizontal closely spaced (MANCHESTER MARLS FORMATION) ...at 15.26mbgl becoming weak dark reddish brown mudstone	16					
		16.20 - 17.70		94	45	43		16.86	15.14		Grey SILTSTONE and reddish brown MUDSTONE recovered as fine to coarse sub angular to subrounded gravel (MANCHESTER MARLS FORMATION)	17					
		17.70 - 19.20		100	88	83	85mm	18.36	13.64		Weak reddish brown MUDSTONE joints are horizontally closely spaced (MANCHESTER MARLS FORMATION) ...at 17.20 to 17.70mbgl becoming very weak	18					
											...at 17.70 to 18.04mbgl becoming weak						
											...at 18.18 to 18.30mbgl non intact						
											Weak grey fine to medium grained SANDSTONE. Joints are horizontal medium spaced with occasional black patches and reddish brown staining with up to 20mm penetration (MANCHESTER MARLS FORMATION) ...at 19.09 to 19.20mbgl non intact		19				
		19.20 - 20.70		84	62	37	85mm	19.20	12.80		Very weak reddish brown MUDSTONE completely weathered to clay in places joints are horizontal closely spaced (MANCHESTER MARLS FORMATION) ...at 19.42 to 19.54mbgl non intact	20					
											Very weak grey SILTSTONE (MANCHESTER MARLS FORMATION)						
											Reddish brown slightly gravelly CLAY. Gravel is fine to medium sub angular to						
		Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation				Drilling Flush			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)
5.80	140	7.20	140					0.00	25.00								
19.20	85																
25.00	140																

Remarks

1. Location CAT scanned before breaking ground 2. Due to the drilling methodology water strikes were not recorded 3. Upon complete borehole was installed was a 50mm diameter standpipe with a response zone between 21.00 and 25.00mbgl.



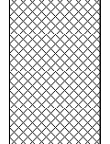
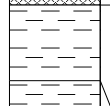
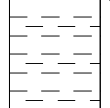
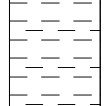
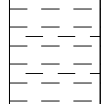
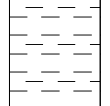
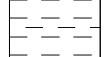
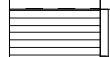
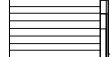
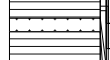
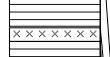
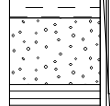
Rotary Core Log

Project Name: Plots NT02-NT04			Client: FEC			Date: 14/07/2022		
Location: Manchester			Contractor: DMW Drilling Ltd			Co-ords: E384701.70 N399491.17		
Project No. : 4328			Crew Name: D.G, L.L			Drilling Equipment: Massenza MI3		
Borehole Number RBH206		Hole Type RO+RC		Level 32.00m AoD		Logged By RM		Page Number Sheet 5 of 5

Well	Water	Depth (m)	Type /FI	Coring			Diameter Recovery (SPL)	Depth (m)	Level (m)	Legend	Stratum Description								
				TCR	SCR	RQD													
</																			

Rotary Core Log

Project Name: Plots NT02-NT04		Client: FEC		Date: 10/08/2022 - 11/08/2022	
Location: Manchester		Contractor: DMW Drilling Ltd		Co-ords: E384797.90 N399510.73	
Project No. : 4328		Crew Name: D.G, L.L		Drilling Equipment: Massenza MI3	
Borehole Number RBH207	Hole Type RO+RC	Level 36.17m AoD	Logged By RM	Scale 1:50	Page Number Sheet 1 of 3

Well	Water	Depth (m)	Type /FI	Coring			Diameter Recovery (SPT)	Depth (m)	Level (m)	Legend	Stratum Description		
				TCR	SCR	RQD							
W1								1.00	35.17		Brown gravelly SAND. Gravel is fine to coarse rounded to angular of brick, mudstone and sandstone (MADE GROUND)	1	
								1.50	34.67		Brown slightly gravelly CLAY. Gravel is fine to medium sub rounded to rounded of sandstone and mudstone (DEVENSIAN TILL)	2	
											Reddish brown slightly gravelly CLAY. Gravel is fine to medium rounded of mudstone (DEVENSIAN TILL)	3	
												4	
												5	
		6.00 - 7.50						85mm	6.00	30.17		Extremely weak reddish brown MUDSTONE joints are horizontal closely spaced(MANCHESTER MARLS FORMATION)	6
									6.80	29.37		...at 6.00 to 6.31mbgl non intact	7
									6.89	29.28		...at 6.31 to 6.40mbgl becoming clay	
												...at 6.40 to 6.50mbgl non intact	
												...at 6.72 to 6.75mbgl grey siltstone	
		7.50 - 9.00						85mm	7.63	28.54		Medium strong yellowish brown fine grained SANDSTONE with black spotting (MANCHESTER MARLS FORMATION)	8
									7.72	28.45		Very weak reddish brown MUDSTONE joints horizontal very closely spaced (MANCHESTER MARLS FORMATION)	
									8.50	27.67		Very weak reddish brown and grey SILTSTONE (MANCHESTER MARLS FORMATION)	
									8.66	27.51			
													
9.00 - 10.50						85mm	9.00	27.17		Reddish brown MUDSTONE recovered as gravelly CLAY. Gravel is fine to medium sub angular (MANCHESTER MARLS FORMATION)	9		
							9.44	26.73		...at 8.29 to 8.37mbgl tabular discs of mudstone			
							9.73	26.44		Very weak reddish brown MUDSTONE	10		

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation				Drilling Flush					
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)
6.00	140	1.50	150					0.00	25.00								
19.50	85	6.00	140														
25.00	140																

Remarks

1. Location CAT scanned before breaking ground 2. Due to the drilling methodology water strikes were not recorded 3. Upon completion borehole was installed was a 50mm diameter standpipe with a response zone between 20.00 and 25.00mbgl.



Rotary Core Log

Project Name: Plots NT02-NT04		Client: FEC		Date: 10/08/2022 - 11/08/2022	
Location: Manchester		Contractor: DMW Drilling Ltd		Co-ords: E384797.90 N399510.73	
Project No. : 4328		Crew Name: D.G, L.L		Drilling Equipment: Massenza MI3	
Borehole Number RBH207	Hole Type RO+RC	Level 36.17m AoD	Logged By RM	Scale 1:50	Page Number Sheet 2 of 3

[illegible]

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation				Drilling Flush					
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)
6.00	140	1.50	150					0.00	25.00								
19.50	85	6.00	140														
25.00	140																

Remarks

1. Location CAT scanned before breaking ground 2. Due to the drilling methodology water strikes were not recorded 3. Upon completion borehole was installed was a 50mm diameter standpipe with a response zone between 20.00 and 25.00mbgl.



Rotary Core Log

Project Name: Plots NT02-NT04				Client: FEC				Date: 10/08/2022 - 11/08/2022			
Location: Manchester				Contractor: DMW Drilling Ltd				Co-ords: E384797.90 N399510.73			
Project No. : 4328				Crew Name: D.G, L.L				Drilling Equipment: Massenza MI3			
Borehole Number RBH207		Hole Type RO+RC		Level 36.17m AoD		Logged By RM		Scale 1:50		Page Number Sheet 3 of 3	

Well	Water	Depth (m)	Type /FI	Coring			Diameter Recovery (SPT)	Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD						

Remarks

1. Location CAT scanned before breaking ground 2. Due to the drilling methodology water strikes were not recorded 3. Upon completion borehole was installed was a 50mm diameter standpipe with a response zone between 20.00 and 25.00mbgl.

Rotary Core Log

Project Name: Plots NT02-NT04				Client: FEC				Date: 03/08/2022 - 05/08/2022			
Location: Manchester				Contractor: DMW Drilling Ltd				Co-ords: E384757.48 N399461.38			
Project No. : 4328				Crew Name: D.G, L.L				Drilling Equipment: Massenza MI3			
Borehole Number RBH208		Hole Type RO+RC		Level 42.00m AoD		Logged By RM		Scale 1:50		Page Number Sheet 1 of 3	

Well	Water	Depth (m)	Type /FI	Coring			Diameter Recovery (SPT)	Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD						
								0.20	41.80		Light brown slightly silty gravelly SAND. Gravel is fine to coarse angular of ceramic and brick (MADE GROUND) Dark brown gravelly SAND. Gravel is fine to coarse sub angular to sub rounded of clinker and brick (MADE GROUND)	1
								1.40	40.60			
								1.80	40.20		Brown slightly gravelly CLAY gravel is fine to medium angular of brick and clinker (MADE GROUND) Light brown mottled grey slightly gravelly CLAY. Gravel is fine rounded of sandstone and mudstone (DEVANSIAN TILL)	2
												3
												4
												5
												6
												7
												8
												9
								10.00	32.00			10

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation				Drilling Flush					
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)
12.00	140	4.50	150					0.00	24.00								
24.00	85	12.00	140														

Remarks

1. Location CAT scanned before breaking ground 2. Due to the drilling methodology water strikes were not recorded 3. Upon completion borehole was installed was a 50mm diameter standpipe with a response zone between 19.00 and 24.00mbgl.

Rotary Core Log

Project Name: Plots NT02-NT04			Client: FEC			Date: 03/08/2022 - 05/08/2022		
Location: Manchester			Contractor: DMW Drilling Ltd			Co-ords: E384757.48 N399461.38		
Project No. : 4328			Crew Name: D.G, L.L			Drilling Equipment: Massenza MI3		
Borehole Number RBH208		Hole Type RO+RC		Level 42.00m AoD		Logged By RM		Page Number Sheet 2 of 3

Well	Water	Depth (m)	Type /FI	Coring			Diameter Recovery (SPT)	Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD						
											Reddish brown MUDSTONE (MANCHESTER MARLS FORMATIONS)	11
		12.00 - 13.50		79	68	57	85mm	12.00 12.09	30.00 29.91		Reddish brown fine to medium sub angular mudstone and sandstone GRAVEL (MANCHESTER MARLS FORMATION) Weak reddish brown fine grained SANDSTONE joints are horizontal medium spaced (MANCHESTER MARLS FORMATION) ...at 12.75 to 12.80mbgl non intact	12
							85mm	13.00	29.00		Weak reddish brown MUDSTONE joints are horizontal closely spaced (MANCHESTER MARLS FORMATION)	13
		13.50 - 15.00		81	64	42	85mm	13.50 13.69 13.85 14.10	28.50 28.31 28.15 27.90		Reddish brown slightly gravelly clayey SAND. Gravel is fine to medium subrounded of SANDSTONE (MANCHESTER MARLS FORMATION) Weak reddish brown clayey SANDSTONE (MANCHESTER MARLS FORMATION) Weak grey SILTSTONE joints are horizontal closely spaced (MANCHESTER MARLS FORMATION)	14
							85mm				Weak reddish brown MUDSTONE completely weathered to clay in places joints are horizontal closely spaced (MANCHESTER MARLS FORMATION) ...at 14.10 to 14.15mbgl clay infill ...at 15.00 to 15.16mbgl non intact ...at 15.25 to 15.48mbgl non intact ...at 15.53 to 15.58mbgl clay infill ...at 15.70 to 15.80mbgl becoming destructured to clay	15
		15.00 - 16.50		93	50	44	85mm	16.50 - 18.00	25.05		...at 16.07 to 16.17mbgl clay infill ...at 16.60 to 16.82mbgl non intact Strong reddish brown clayey fine grained SANDSTONE joints are horizontal closely spaced (MANCHESTER MARLS FORMATION)	16
							85mm	17.52	24.48		Weak reddish brown MUDSTONE joints are horizontal closely spaced (MANCHESTER MARLS FORMATION) ...at 17.58 to 17.61mbgl clay infill Medium strong yellowish brown fine grained SANDSTONE (MANCHESTER MARLS FORMATION)	17
		18.00 - 19.50		86	81	60	85mm	18.00 18.21 18.44 18.66	24.00 23.79 23.56 23.34		Weak reddish brown MUDSTONE joints are horizontal closely spaced (MANCHESTER MARLS FORMATION) ...at 17.58 to 17.61mbgl clay infill Medium strong yellowish brown fine grained SANDSTONE (MANCHESTER MARLS FORMATION)	18
							85mm	19.89	22.11		Weak reddish brown MUDSTONE joints are horizontal closely spaced (MANCHESTER MARLS FORMATION) ...at 18.28 to 18.29 clay infilled fracture	19
												20

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation				Drilling Flush					
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)
12.00	140	4.50	150					0.00	24.00								
24.00	85	12.00	140														

Remarks

1. Location CAT scanned before breaking ground 2. Due to the drilling methodology water strikes were not recorded 3. Upon completion borehole was installed was a 50mm diameter standpipe with a response zone between 19.00 and 24.00mbgl.

Rotary Core Log

Project Name: Plots NT02-NT04			Client: FEC			Date: 03/08/2022 - 05/08/2022		
Location: Manchester			Contractor: DMW Drilling Ltd			Co-ords: E384757.48 N399461.38		
Project No. : 4328			Crew Name: D.G, L.L			Drilling Equipment: Massenza MI3		
Borehole Number RBH208		Hole Type RO+RC		Level 42.00m AoD		Logged By RM		Page Number Sheet 3 of 3

Well	Water	Depth (m)	Type /FI	Coring			Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD					
		19.50 - 21.00		92	60	15	20.13	21.87	XXXXXX	Medium strong grey SILTSTONE joints are horizontal closely spaced (MANCHESTER MARLS)	
							21.00	21.00		Weak reddish brown MUDSTONE joints are horizontal closely spaced (MANCHESTER MARLS FORMATION)	21
							21.20	20.80		...at 19.50 to 19.80mbgl non intact	
		21.00 - 22.50		90	21	7				Medium strong grey fine grained SANDSTONE and SILTSTONE (MANCHESTER MARLS FORMATION)	
										...at 20.10 to 20.13mbgl mudstone gravel infilled fracture	22
										Weak reddish brown MUDSTONE joints are horizontal closely spaced (MANCHESTER MARLS FORMATION)	
		22.50 - 24.00		66	20	15				Grey fine to coarse sub angular sandstone GRAVEL (MANCHESTER MARLS FORMATION)	23
										Weak reddish brown MUDSTONE (MANCHESTER MARLS FORMATION)	
										...at 21.20 to 21.86mbgl becoming destructured to clay	24
							24.00	18.00		...at 22.50 to 22.82mbgl becoming destructured to clay	
										End of Borehole at 24.000m	24
											25
											26
											27
											28
											29
											30

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation				Drilling Flush					
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)
12.00	140	4.50	150					0.00	24.00								
24.00	85	12.00	140														

Remarks 1. Location CAT scanned before breaking ground 2. Due to the drilling methodology water strikes were not recorded 3. Upon completion borehole was installed was a 50mm diameter standpipe with a response zone between 19.00 and 24.00mbgl.																	
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Rotary Core Log

Project Name: Plots NT02-NT04				Client: FEC				Date: 29/07/2022 - 02/08/2022			
Location: Manchester				Contractor: DMW Drilling Ltd				Co-ords: E384796.49 N399492.29			
Project No. : 4328				Crew Name: D.G, L.L				Drilling Equipment: Massenza MI3			
Borehole Number RBH209		Hole Type RO+RC		Level 40.46m AoD		Logged By RM		Scale 1:25		Page Number Sheet 1 of 5	

Well	Water	Depth (m)	Type /FI	Coring			Diameter Recovery (SPT)	Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD						
								0.40	40.06		Brown sandy fine to coarse sub angular to angular brick GRAVEL (MADE GROUND)	
								2.00	38.46		Grey sandy fine to coarse sub angular to angular brick and ceramic GRAVEL. Occassional whole and half brick cobbles and timber fragements (MADE GROUND) ...at 1.50 to 2.00mbgl becoming slightly clayey	1
								3.00	37.46		Greyish brown gravelly CLAY. Gravel is fine to coarse sub angular to angular of brick. Occassional glass fragments (MADE GROUND)	2
								4.00	36.46		Reddish brown slightly gravelly CLAY. Gravel is fine to medium sub rounded to rounded of mudstone (DEVENSIAN TILL)	3
								5.00	35.46		Reddish brown slightly gravelly clayey SAND. Gravel is fine to medium sub rounded to rounded of mudstone (DEVENSIAN TILL)	4
												5

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation				Drilling Flush					
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)
12.00	140	4.50	150					0.00	24.00								
24.00	85	12.00	140														

Remarks

1. Location CAT scanned before breaking ground 2. Due to the drilling methodology water strikes were not recorded 3. Upon completion borehole was installed was a 50mm diameter standpipe with a response zone between 12.00 and 17.00mbgl.

Rotary Core Log

Project Name: Plots NT02-NT04				Client: FEC				Date: 29/07/2022 - 02/08/2022			
Location: Manchester				Contractor: DMW Drilling Ltd				Co-ords: E384796.49 N399492.29			
Project No. : 4328				Crew Name: D.G, L.L				Drilling Equipment: Massenza MI3			
Borehole Number RBH209		Hole Type RO+RC		Level 40.46m AoD		Logged By RM		Scale 1:25		Page Number Sheet 2 of 5	

Well	Water	Depth (m)	Type /FI	Coring			Diameter Recovery (SPT)	Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD						
								6.00	34.46		Brown sandy gravelly CLAY. Gravel fine to coarse sub angular of mudstone (DEVENSIAN TILL)	6
								7.50	32.96		Reddish brown slightly gravelly clayey SAND. Gravel is fine to coarse sub angular of mudstone (DEVENSIAN TILL)	7
								9.00	31.46		Reddish brown slightly gravelly sandy CLAY. Gravel is fine to medium sub angular of mudstone (DEVENSIAN TILL)	8
											Extremely weak reddish brown MUDSTONE joints are horizontal closely spaced (MANCHESTER MARLS FORMATION)	9
												10

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation				Drilling Flush					
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)
12.00	140	4.50	150					0.00	24.00								
24.00	85	12.00	140														

Remarks

1. Location CAT scanned before breaking ground 2. Due to the drilling methodology water strikes were not recorded 3. Upon completion borehole was installed was a 50mm diameter standpipe with a response zone between 12.00 and 17.00mbgl.

Rotary Core Log

Project Name: Plots NT02-NT04				Client: FEC				Date: 29/07/2022 - 02/08/2022			
Location: Manchester				Contractor: DMW Drilling Ltd				Co-ords: E384796.49 N399492.29			
Project No. : 4328				Crew Name: D.G, L.L				Drilling Equipment: Massenza MI3			
Borehole Number RBH209		Hole Type RO+RC		Level 40.46m AoD		Logged By RM		Scale 1:25		Page Number Sheet 3 of 5	

Well	Water	Depth (m)	Type /FI	Coring			Diameter Recovery (SPT)	Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD						
											Extremely weak reddish brown MUDSTONE joints are horizontal closely spaced (MANCHESTER MARLS FORMATION)	11
							85mm					12
		12.00 - 13.50		107	100	48		12.52	27.94		...at 12.13 to 12.18mbgl reddish brown clay	
								12.66	27.80		...at 12.29 to 12.35mbgl reddish brown clay	
											Very weak reddish brown SILTSTONE (MANCHESTER MARLS FORMATION)	13
											Reddish brown MUDSTONE recovered as slightly gravelly clay. Gravel is fine to medium sub angular (MANCHESTER MARLS FORMATION)	
								13.12	27.34		Weak reddish brown MUDSTONE completely weathered to clay in places joints are horizontal closely spaced (MANCHESTER MARLS FORMATION)	
								13.40	27.06		...at 13.32 to 13.50mbgl no longer clayey	
		13.50 - 15.00		87	67	39		13.60	26.86		Strong yellowish brown fine grained SANDSTONE with grey, red and dark grey staining joints are horizontal closely spaced (MANCHESTER MARLS FORMATION)	14
								13.80	26.66		Strong yellowish brown and reddish brown SILTSTONE with dark grey staining (MANCHESTER MARLS FORMATION)	
											Weak reddish brown MUDSTONE joints are horizontal closely spaced (MANCHESTER MARLS FORMATION)	
							85mm	15.00	25.46			15

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation				Drilling Flush					
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)
12.00	140	4.50	150					0.00	24.00								
24.00	85	12.00	140														

Remarks

1. Location CAT scanned before breaking ground 2. Due to the drilling methodology water strikes were not recorded 3. Upon completion borehole was installed was a 50mm diameter standpipe with a response zone between 12.00 and 17.00mbgl.

Rotary Core Log

Project Name: Plots NT02-NT04			Client: FEC			Date: 29/07/2022 - 02/08/2022		
Location: Manchester			Contractor: DMW Drilling Ltd			Co-ords: E384796.49 N399492.29		
Project No. : 4328			Crew Name: D.G, L.L			Drilling Equipment: Massenza MI3		
Borehole Number RBH209		Hole Type RO+RC		Level 40.46m AoD		Logged By RM		Page Number Sheet 4 of 5

Well	Water	Depth (m)	Type /FI	Coring			Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD					
		15.00 - 16.50		93	27	7				Reddish brown MUDSTONE recovered as reddish brown slightly gravelly clay. Gravel is fine to medium sub rounded to sub angular (MANCHESTER MARLS FORMATION) ...at 15.00 to 15.40mbgl becoming very gravelly ...at 15.40 to 15.70mbgl becoming slightly gravelly ...at 15.70 to 16.10mbgl becoming mottled grey silty sandy gravelly	16
							16.10	24.36	XXXXXXXXXX	Strong grey SILTSTONE with some dark grey staining joints are horizontal closely spaced (MANCHESTER MARLS FORMATION)	
							16.50	23.96	XXXXXXXXXX	Reddish brown MUDSTONE and grey SILTSTONE recovered as fine to medium sub angular mudstone and siltstone gravel (MANCHESTER MARLS FORMATION)	17
		16.50 - 18.00		20	0	0					
							18.00	22.46		Reddish brown MUDSTONE recovered as gravelly clay. Gravel is fine to coarse sub rounded to sub angular (MANCHESTER MARLS FORMATION)	18
							18.58	21.88		Weak reddish brown MUDSTONE bedding horizontal joints are horizontal closely spaced (MANCHESTER MARLS FORMATION) ...at 18.70 to 18.95mbgl destructured to clay	19
		18.00 - 19.50		97	61	46					
										...at 19.75 to 19.95mbgl becoming destructured to clay	20

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation				Drilling Flush					
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)
12.00	140	4.50	150					0.00	24.00								
24.00	85	12.00	140														

Remarks

1. Location CAT scanned before breaking ground 2. Due to the drilling methodology water strikes were not recorded 3. Upon completion borehole was installed was a 50mm diameter standpipe with a response zone between 12.00 and 17.00mbgl.



Rotary Core Log

Project Name: Plots NT02-NT04				Client: FEC				Date: 29/07/2022 - 02/08/2022			
Location: Manchester				Contractor: DMW Drilling Ltd				Co-ords: E384796.49 N399492.29			
Project No. : 4328				Crew Name: D.G, L.L				Drilling Equipment: Massenza MI3			
Borehole Number RBH209		Hole Type RO+RC		Level 40.46m AoD		Logged By RM		Scale 1:25		Page Number Sheet 5 of 5	

Well	Water	Depth (m)	Type /FI	Coring			Diameter Recovery (SPT)	Depth (m)	Level (m)	Legend	Stratum Description		
				TCR	SCR	RQD							
		19.50 - 21.00		33	33	0							
		21.00 - 22.50		95	69	27	85mm	21.00	19.46		Weak reddish brown MUDSTONE completely weathered to clay in places joints are horizontal closely spaced (MANCHESTER MARLS FORMATION) ...at 21.00 to 21.10mbgl becoming clayey fine to coarse sub angular mudstone gravel ...at 21.30 to 21.60mbgl becoming destructured to clay ...at 21.60 to 21.76mbgl vertical fracture ...at 21.76 to 22.01mbgl 80 degree fracture	21	
		22.50 - 24.00		97	0	0	85mm	22.60	17.86		Reddish brown MUDSTONE recovered as gravelly clay. Gravel is fine to medium sub angular to angular of mudstone (MANCHESTER MARLS FORMATION)	23	
								24.00	16.46		End of Borehole at 24.000m	24	
												25	

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation				Drilling Flush					
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)
12.00	140	4.50	150					0.00	24.00								
24.00	85	12.00	140														

Remarks

1. Location CAT scanned before breaking ground 2. Due to the drilling methodology water strikes were not recorded 3. Upon completion borehole was installed was a 50mm diameter standpipe with a response zone between 12.00 and 17.00mbgl.



Rotary Core Log

Project Name: Plots NT02-NT04			Client: FEC			Date: 08/08/2022 - 09/08/2022		
Location: Manchester			Contractor: DMW Drilling Ltd			Co-ords: E384845.14 N399489.02		
Project No. : 4328			Crew Name: D.G, L.L			Drilling Equipment: Massenza MI3		
Borehole Number RBH210		Hole Type RO+RC		Level 41.38m AoD		Logged By RM		Page Number Sheet 1 of 3

Well	Water	Depth (m)	Type /FI	Coring			Diameter Recovery (SPT)	Depth (m)	Level (m)	Legend	Stratum Description																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
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Remarks

1. Location CAT scanned before breaking ground 2. Due to the drilling methodology the accuracy of measured water strikes is questionable and therefore water strikes were not recorded 3. Upon completion borehole was installed was a 50mm diameter standpipe with a response zone between 20.00 and 25.00mbgl.

Rotary Core Log

Project Name: Plots NT02-NT04			Client: FEC			Date: 08/08/2022 - 09/08/2022		
Location: Manchester			Contractor: DMW Drilling Ltd			Co-ords: E384845.14 N399489.02		
Project No. : 4328			Crew Name: D.G, L.L			Drilling Equipment: Massenza MI3		
Borehole Number RBH210		Hole Type RO+RC		Level 41.38m AoD		Logged By RM		Page Number Sheet 2 of 3

Well	Water	Depth (m)	Type /FI	Coring			Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD					
									xxxxxx	Weak grey SILTSTONE (MANCHESTER MARLS FORMATION)	
									xxxxxx	...at 10.07 to 10.39mbgl becoming greyish	
									xxxxxx	brown and reddish brown	
		10.50 - 12.00		43	33	27	85mm	10.50 10.64 10.75	30.88 30.74 30.63	Reddish brown MUDSTONE recovered as fine to coarse sub angular GRAVEL (MANCHESTER MARLS FORMATION)	11
										Weak grey SILTSTONE (MANCHESTER MARLS FORMATION)	
										...at 10.68 to 10.75mbgl non intact	
										Very weak reddish brown MUDSTONE completely weathered to clay in places (MANCHESTER MARLS FORMATION)	12
		12.00 - 13.50		91	57	27	85mm			...at 12.05 to 12.43mbgl destructured to clay	
										...at 12.48 to 12.61mbgl destructured to clay	
										...at 12.61 to 12.76mbgl 15 degree bedding	
										...at 12.76 to 12.78mbgl gravel infilled joint	13
										...at 12.78 to 13.13mbgl horizontal bedding	
										...at 13.13 to 13.37mbgl 10 degree bedding	
		13.50 - 15.00		84	30	26	85mm			...at 13.50 to 13.86mbgl non intact	
										...at 14.02 to 14.55mbgl destructured to clay	14
		15.00 - 16.50		79	51	46	85mm			...at 15.00 to 15.25mbgl non intact	15
										...at 15.35 to 15.53mbgl destructured to clay	
										...at 15.62mbgl to 15.87 destructured to clay	16
		16.50 - 18.00		50	17	7	85mm				17
		18.00 - 19.50		49	0	0	85mm	18.00 18.33	23.38 23.05	Reddish brown MUDSTONE recovered as slightly gravelly CLAY. Gravel is fine to medium sub angular (MANCHESTER MARLS FORMATION)	18
										Reddish brown MUDSTONE recovered as fine to coarse sub angular to angular GRAVEL (MANCHESTER MARLS FORMATION)	19
										Weak reddish brown MUDSTONE	20

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation				Drilling Flush					
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)
9.00	140	1.50	150					0.00	25.00								
22.50	85	9.00	140														
25.00	140																

Remarks

1. Location CAT scanned before breaking ground 2. Due to the drilling methodology the accuracy of measured water strikes is questionable and therefore water strikes were not recorded 3. Upon completion borehole was installed was a 50mm diameter standpipe with a response zone between 20.00 and 25.00mbgl.

Rotary Core Log

Project Name: Plots NT02-NT04			Client: FEC			Date: 08/08/2022 - 09/08/2022		
Location: Manchester			Contractor: DMW Drilling Ltd			Co-ords: E384845.14 N399489.02		
Project No. : 4328			Crew Name: D.G, L.L			Drilling Equipment: Massenza MI3		
Borehole Number RBH210		Hole Type RO+RC		Level 41.38m AoD		Logged By RM		Page Number Sheet 3 of 3

Well	Water	Depth (m)	Type /FI	Coring			Diameter Recovery (SPT)	Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD						
		19.50 - 21.00		78	51	15		20.44	20.94		Weak reddish brown MUDSTONE inter-bedded with weak grey SILTSTONE (MANCHESTER MARLS FORMATION) ...at 19.82 to 19.98mbgl non intact ...at 20.20 to 20.29mbgl non intact ...at 20.33 to 20.37mbgl becoming grey ...at 20.37 to 20.44mbgl non intact Weak reddish brown MUDSTONE (MANCHESTER MARLS FORMATION)	21
												22
												23
												24
								25.00	16.38		End of Borehole at 25.000m	25
												26
												27
												28
												29
												30

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation				Drilling Flush					
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)
9.00	140	1.50	150					0.00	25.00								
22.50	85	9.00	140														
25.00	140																

Remarks

1. Location CAT scanned before breaking ground 2. Due to the drilling methodology the accuracy of measured water strikes is questionable and therefore water strikes were not recorded 3. Upon completion borehole was installed was a 50mm diameter standpipe with a response zone between 20.00 and 25.00mbgl.

Trial Pit Log

Project Name: Plots NT02-NT04		Client: FEC		Date: 20/04/2023	
Location: Manchester		Contractor: PB Drilling Ltd			
Project No. : 4328		Crew Name: RM		Equipment: Hand Digging Tools	
Location Number HP301	Location Type TP	Level	Logged By RM	Scale 1:25	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.50	ES		0.80			Dark brown gravelly CLAY with frequent roots and rootlets. Gravel is fine to coarse sub angular to angular of brick, limestone and sandstone. (TOPSOIL - MADE GROUND)	
								End of Borehole at 0.800m	1
									2
									3
									4
									5

Dimensions		Trench Support and Comment				Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks		Date	Rate	Remarks

Remarks

1. Location CAT scanned before breaking ground 2. No water strikes were encountered within inspection pit 3. On completion inspection pit was backfilled with arisings.

Trial Pit Log

Project Name: Plots NT02-NT04		Client: FEC		Date: 06/04/2023	
Location: Manchester		Contractor: PB Drilling Ltd		Co-ords: E384740.70 N399421.63	
Project No. : 4328		Crew Name:		Equipment: 13T Excavator	
Location Number MP301	Location Type TP	Level 40.20m AoD	Logged By LR	Scale 1:25	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.50	D					Loose dark brown clayey very gravelly SAND. Gravel is fine to coarse angular to rounded of wood, plastic, brick, sandstone. Occasional cobbles of brick and occasional pockets of ash (MADE GROUND)	
		1.00 1.00	B ES		1.00	39.20		End of Borehole at 1.000m	1
									2
									3
									4
									5

Dimensions		Trench Support and Comment				Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks		Date	Rate	Remarks

Remarks

1. Location CAT scanned before breaking ground 2. Groundwater was not observed. 3. Upon completion borehole backfilled with arisings.

Trial Pit Log

Project Name: Plots NT02-NT04		Client: FEC		Date: 06/04/2023	
Location: Manchester		Contractor: PB Drilling Ltd		Co-ords: E384725.10 N399474.22	
Project No. : 4328		Crew Name:		Equipment: 13T Excavator	
Location Number MP302	Location Type TP	Level 36.00m AoD	Logged By LR	Scale 1:25	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.50	D					Weeds over loose brown clayey gravelly SAND. Gravel is fine to coarse angular to rounded of wood, brick, concrete and plastic (MADE GROUND)	
		1.00 1.00	B ES		1.00	35.00		End of Borehole at 1.000m	1
									2
									3
									4
									5

Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks

Remarks

1. Location CAT scanned before breaking ground 2. Groundwater was not observed. 3. Upon completion borehole backfilled with arisings.

Trial Pit Log

Project Name: Plots NT02-NT04		Client: FEC		Date: 06/04/2023	
Location: Manchester		Contractor: PB Drilling Ltd		Co-ords: E384752.31 N399439.40	
Project No. : 4328		Crew Name:		Equipment: 13T Excavator	
Location Number MP303	Location Type TP	Level 39.50m AoD	Logged By LR	Scale 1:25	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
					1.00	38.50		Brown and black silty gravelly SAND. Gravel is fine to coarse subrounded to angular of brick, plastic, glass and concrete. Occasional ash pockets and frequent timber and metal fragments (MADE GROUND)	1
								End of Borehole at 1.000m	2
									3
									4
									5

Dimensions		Trench Support and Comment				Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks		Date	Rate	Remarks

Remarks

1. Location CAT scanned before breaking ground 2. Groundwater was not observed. 3. Upon completion borehole backfilled with arisings.

Trial Pit Log

Project Name: Plots NT02-NT04		Client: FEC		Date: 06/04/2023	
Location: Manchester		Contractor: PB Drilling Ltd		Co-ords: E384697.67 N399439.07	
Project No. : 4328		Crew Name:		Equipment: 13T Excavator	
Location Number MP304	Location Type TP	Level 34.30m AoD	Logged By LR	Scale 1:25	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		1.00	ES		1.00	33.30		Loose orangish brown slightly clayey very gravelly SAND. Gravel is fine to coarse angular of wood, brick and sandstone. Occasional pockets of ash (MADE GROUND)	1
								End of Borehole at 1.000m	2
									3
									4
									5

Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks

Remarks

1. Location CAT scanned before breaking ground 2. Groundwater was not observed. 3. Upon completion borehole backfilled with arisings.

**COMPLEX CHALLENGES...
MADE SIMPLE**



RBH305 – Core Runs 1 to 4 - 4.50 – 10.10 mbgl



RBH305 – Core Run 1 to 4 – 4.50 – 10.10 mbgl

**COMPLEX CHALLENGES...
MADE SIMPLE**



RBH305 – Core Runs 4 to 7 – 10.10 – 13.50mbgl



RBH305 – Core Runs 4 to 5 – 10.10 – 12.00 mbgl

**COMPLEX CHALLENGES...
MADE SIMPLE**



RBH305 – Core Run 7 – 12.00-13.50 mbgl



RBH306 – Core Run 1 – 7.50 to 9.00 mbgl

**COMPLEX CHALLENGES...
MADE SIMPLE**



RBH306 – Core Run 2 – 15.00 – 16.50 mbgl



RBH306 – Core Run 3 – 18.00 to 19.50mbgl

**COMPLEX CHALLENGES...
MADE SIMPLE**



RBH306 – Core Run 4 - 19.50 to 21.00mbgl

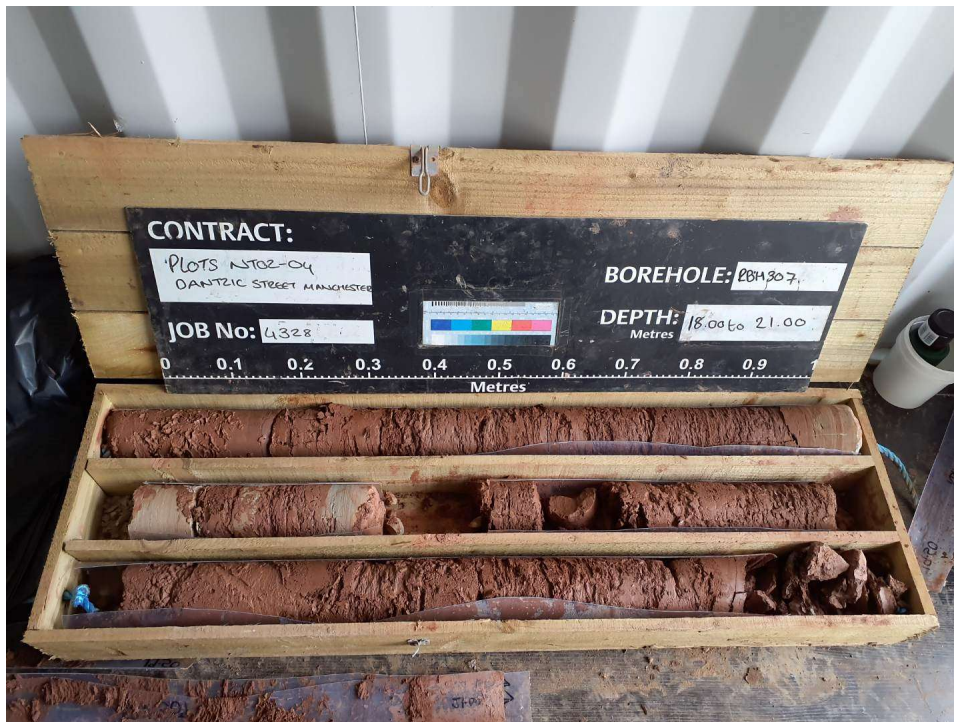


RBH306 – Core Run 5 – 21.00 to 22.50mbgl

**COMPLEX CHALLENGES...
MADE SIMPLE**



RBH307 – Core Runs 1 to 2 – 18.00 to 21.00mbgl



RBH307 – Core Runs 1 to 2 – 18.00 to 21.00mbgl

Rotary Core Log

Project Name: Plots NT02-NT04				Client: FEC				Date: 20/04/2023			
Location: Manchester				Contractor: PB Drilling Ltd				Co-ords: E384576.68 N399444.27			
Project No. : 4328				Crew Name: M.E, G.S				Drilling Equipment: Beretta T44			
Borehole Number RBH301		Hole Type RO+RC		Level 31.41m AoD		Logged By RM		Scale 1:50		Page Number Sheet 1 of 2	

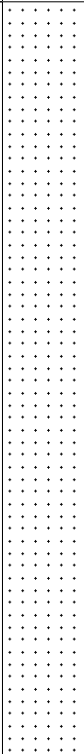
Well	Water	Depth (m)	Type /FI	Coring			Diameter Recovery (SPT)	Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD						

Remarks

1. Location CAT scanned before breaking ground 2. Due to the drilling methodology the accuracy of measured water strikes is questionable and therefore water strikes were not recorded 3. Upon completion borehole was installed was a 50mm diameter standpipe with a response zone between 4.00 and 10.00mbgl.

Rotary Core Log

Project Name: Plots NT02-NT04				Client: FEC				Date: 20/04/2023			
Location: Manchester				Contractor: PB Drilling Ltd				Co-ords: E384576.68 N399444.27			
Project No. : 4328				Crew Name: M.E, G.S				Drilling Equipment: Beretta T44			
Borehole Number RBH301		Hole Type RO+RC		Level 31.41m AoD		Logged By RM		Scale 1:50		Page Number Sheet 2 of 2	

Well	Water	Depth (m)	Type /FI	Coring			Diameter Recovery (SPT)	Depth (m)	Level (m)	Legend	Stratum Description																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
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								15.00	16.41		Reddish brown fine to medium grained SANDSTONE (CHESTER FORMATION)	11																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															

Remarks

1. Location CAT scanned before breaking ground 2. Due to the drilling methodology the accuracy of measured water strikes is questionable and therefore water strikes were not recorded 3. Upon completion borehole was installed was a 50mm diameter standpipe with a response zone between 4.00 and 10.00mbgl.

Rotary Core Log

Project Name: Plots NT02-NT04				Client: FEC				Date: 20/04/2023			
Location: Manchester				Contractor: PB Drilling Ltd				Co-ords: E384608.42 N399383.57			
Project No. : 4328				Crew Name: M.E, G.S				Drilling Equipment: Beretta T44			
Borehole Number RBH302		Hole Type RO+RC		Level 33.60m AoD		Logged By RM		Scale 1:50		Page Number Sheet 1 of 2	

Well	Water	Depth (m)	Type /FI	Coring			Diameter Recovery (SPT)	Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD						
								0.30	33.30		Concrete slab (MADE GROUND)	
											Brown clayey very gravelly fine to coarse SAND. Gravel is fine to coarse subangular to angular of brick, (MADE GROUND)	1
												2
							(8)	3.00	30.60		Reddish brown fine to medium grained SANDSTONE (CHESTER FORMATION)	3
							(50)					4
							(50)					5
							(50)					6
							(50)					7
												8
												9
												10

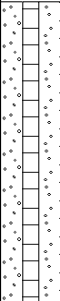
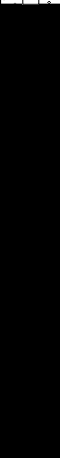
Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation				Drilling Flush					
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)
								0.00	15.00	90	0						

Remarks

1. Location CAT scanned before breaking ground 2. Due to the drilling methodology the accuracy of measured water strikes is questionable and therefore water strikes were not recorded 3. Upon completion borehole was installed was a 50mm diameter standpipe with a response zone between 4.00 and 12.00mbgl.

Rotary Core Log

Project Name: Plots NT02-NT04			Client: FEC			Date: 20/04/2023		
Location: Manchester			Contractor: PB Drilling Ltd			Co-ords: E384608.42 N399383.57		
Project No. : 4328			Crew Name: M.E, G.S			Drilling Equipment: Beretta T44		
Borehole Number RBH302		Hole Type RO+RC		Level 33.60m AoD		Logged By RM		Page Number Sheet 2 of 2

Well	Water	Depth (m)	Type /FI	Coring			Diameter Recovery (SPT)	Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD						
								15.00	18.60		Reddish brown fine to medium grained SANDSTONE (CHESTER FORMATION)	11
												12
												13
												14
												15
											End of Borehole at 15.000m	16
												17
												18
												19
												20

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation				Drilling Flush					
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)
								0.00	15.00	90	0						

Remarks

1. Location CAT scanned before breaking ground 2. Due to the drilling methodology the accuracy of measured water strikes is questionable and therefore water strikes were not recorded 3. Upon completion borehole was installed was a 50mm diameter standpipe with a response zone between 4.00 and 12.00mbgl.

Rotary Core Log

Project Name: Plots NT02-NT04				Client: FEC				Date: 20/04/2023			
Location: Manchester				Contractor: PB Drilling Ltd				Co-ords: E384640.07 N399422.36			
Project No. : 4328				Crew Name: M.E, G.S				Drilling Equipment: Beretta T44			
Borehole Number RBH303		Hole Type RO+RC		Level 33.01m AoD		Logged By RM		Scale 1:50		Page Number Sheet 1 of 2	

Well	Water	Depth (m)	Type /FI	Coring			Diameter Recovery (SPT)	Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD						
								0.15	32.86		Asphalt (MADE GROUND)	
								1.50	31.51		Brown clayey very gravelly fine to coarse SAND. Gravel is fine to coarse sub angular to angular of concrete brick and clinker (MADE GROUND)	1
								2.00	31.01		Grey sandy CLAY (DEVENSIAN TILL)	
											Brown clayey SAND (DEVENSIAN TILL)	2
												3
								3.70	29.31		Reddish brown fine to medium grained SANDSTONE (CHESTER FORMATION)	4
												5
												6
												7
												8
												9
												10

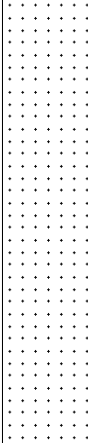
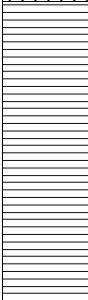
Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation				Drilling Flush					
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)
								0.00	15.00	90	0						

Remarks

1. Location CAT scanned before breaking ground 2. Due to the drilling methodology the accuracy of measured water strikes is questionable and therefore water strikes were not recorded 3. Upon completion borehole was installed was a 50mm diameter standpipe with a response zone between 4.00 and 10.00mbgl.

Rotary Core Log

Project Name: Plots NT02-NT04				Client: FEC				Date: 20/04/2023			
Location: Manchester				Contractor: PB Drilling Ltd				Co-ords: E384640.07 N399422.36			
Project No. : 4328				Crew Name: M.E, G.S				Drilling Equipment: Beretta T44			
Borehole Number RBH303		Hole Type RO+RC		Level 33.01m AoD		Logged By RM		Scale 1:50		Page Number Sheet 2 of 2	

Well	Water	Depth (m)	Type /FI	Coring			Diameter Recovery (SPT)	Depth (m)	Level (m)	Legend	Stratum Description					
				TCR	SCR	RQD										
								13.00	20.01		Reddish brown fine to medium grained SANDSTONE (CHESTER FORMATION)	11				
												12				
												13				
													Reddish brown MUDSTONE (MANCHESTER MARLS FORMATION)	14		
														15		
														End of Borehole at 15.000m	End of Borehole at 15.000m	16
																17
																18
																19
																20

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation				Drilling Flush					
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)
								0.00	15.00	90	0						

Remarks

1. Location CAT scanned before breaking ground 2. Due to the drilling methodology the accuracy of measured water strikes is questionable and therefore water strikes were not recorded 3. Upon completion borehole was installed was a 50mm diameter standpipe with a response zone between 4.00 and 10.00mbgl.

Rotary Core Log

Project Name: Plots NT02-NT04				Client: FEC				Date: 20/04/2023			
Location: Manchester				Contractor: PB Drilling Ltd				Co-ords: E384680.66 N399402.07			
Project No. : 4328				Crew Name: M.E, G.S				Drilling Equipment: Beretta T44			
Borehole Number RBH304		Hole Type RO+RC		Level 34.66m AoD		Logged By RM		Scale 1:50		Page Number Sheet 1 of 1	

Well	Water	Depth (m)	Type /FI	Coring			Diameter Recovery (SPT)	Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD						
								1.20	33.46		Brown gravelly sandy CLAY. Gravel is fine to coarse subangular to angular of brick (MADE GROUND)	1
							(7)				Loose becoming medium dense brown clayey gravelly SAND. Gravel is fine to coarse rounded of sandstone and quartzite (DEVENSIAN TILL)	2
							(29)					3
							(38)	3.60	31.06		Dense grey slightly sandy medium to coarse rounded to well rounded GRAVEL of sandstone, quartzite and siltstone (RIVER TERRACE DEPOSITS)	4
							(40)					5
							(46)					6
							(43)					7
							(32)					8
								9.45	25.21			9
											End of Borehole at 9.450m	10

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation				Drilling Flush					
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)
								0.00	20.00	90	0						

Remarks

1. Location CAT scanned before breaking ground 2. Due to the drilling methodology the accuracy of measured water strikes is questionable and therefore water strikes were not recorded 3. River Terrace Gravels were encountered within the borehole from 3.60 to 9.45mbgl halting drilling progress as gravels became coarser with depth and risked damaging the drilling rig due to excessive strain. Therefore the borehole was terminated at 9.45mbgl 4. Upon completion borehole was installed was a 50mm diameter

Rotary Core Log

Project Name: Plots NT02-NT04			Client: FEC			Date: 20/04/2023		
Location: Manchester			Contractor: PB Drilling Ltd			Co-ords: E384636.01 N399469.21		
Project No. : 4328			Crew Name: M.E, G.S			Drilling Equipment: Beretta T44		
Borehole Number RBH305		Hole Type RO+RC		Level 32.15m AoD		Logged By RM		Page Number Sheet 1 of 2

Well	Water	Depth (m)	Type /FI	Coring			Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD					
										Brown clayey very gravelly SAND. Gravel is fine to coarse subangular to angular of brick and concrete (MADE GROUND)	1
							1.20	30.95		Brown sandy gravelly CLAY. Gravel is fine to coarse subangular to angular of brick (MADE GROUND)	
							2.00	30.15		Medium dense brown clayey gravelly SAND gravel is fine to coarse rounded of sandstone and mudstone (DEVENSIAN TILL)	2
							3.20	28.95		Reddish brown fine to medium grained SANDSTONE (CHESTER FORMATION)	3
							4.50	27.65		Extremely weak reddish brown fine to medium grained SANDSTONE. Joints are horizontal to 10 degrees very close to closely spaced (CHESTER FORMATION) ...at 4.50 to 4.80mbgl sandy gravelly clay	4
		4.50 - 6.00		73	39	9					5
		6.00 - 7.50		0	0	0					6
		7.50 - 9.00		40	17	7	7.50	24.65		Extremely weak reddish brown fine to coarse grained SANDSTONE. Joints are 10 degrees very closely to closely spaced (CHESTER FORMATION) ...at 7.50 to 7.65 very soft reddish brown very sandy clay	7
		9.00 - 10.50		100	100	100	9.00	23.15		Extremely weak reddish brown MUDSTONE. Joints are horizontal closely to mediumly spaced (MANCHESTER MARLS FORMATION)	8
											9
											10

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation				Drilling Flush					
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)
								0.00	20.00	90	0						

Remarks

1. Location CAT scanned before breaking ground 2. Due to the drilling methodology the accuracy of measured water strikes is questionable and therefore water strikes were not recorded 3. Upon completion borehole was installed was a 50mm diameter standpipe with a response zone between 4.00 and 9.00mbgl.

Rotary Core Log

Project Name: Plots NT02-NT04			Client: FEC			Date: 20/04/2023		
Location: Manchester			Contractor: PB Drilling Ltd			Co-ords: E384636.01 N399469.21		
Project No. : 4328			Crew Name: M.E, G.S			Drilling Equipment: Beretta T44		
Borehole Number RBH305		Hole Type RO+RC		Level 32.15m AoD		Logged By RM		Page Number Sheet 2 of 2

Well	Water	Depth (m)	Type /FI	Coring			Diameter Recovery (SPT)	Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD						
							(50)				Extremely weak reddish brown MUDSTONE. Joints are horizontal closely to mediumly spaced (MANCHESTER MARLS FORMATION)	11
		10.50 - 12.00		108	108	103						
							(50)				...at 12.00 to 12.13mbgl weathered to soft reddish brown clay	12
		12.00 - 13.50		100	97	89					...at 12.22 to 12.52mbgl thinly laminated with greyish green SILTSTONE	13
							(50)	13.50	18.65		Reddish brown MUDSTONE (MANCHESTER MARLS FROMATION)	14
							(50)					15
							(50)					16
							(50)					17
							(50)					18
							(50)					19
								20.00	12.15		End of Borehole at 20.000m	20

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation				Drilling Flush					
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)
								0.00	20.00	90	0						

Remarks

1. Location CAT scanned before breaking ground 2. Due to the drilling methodology the accuracy of measured water strikes is questionable and therefore water strikes were not recorded 3. Upon completion borehole was installed was a 50mm diameter standpipe with a response zone between 4.00 and 9.00mbgl.

Rotary Core Log

Project Name: Plots NT02-NT04				Client: FEC				Date: 20/04/2023			
Location: Manchester				Contractor: PB Drilling Ltd				Co-ords: E384692.00 N399446.81			
Project No. : 4328				Crew Name: M.E, G.S				Drilling Equipment: Beretta T44			
Borehole Number RBH306		Hole Type RO+RC		Level 33.73m AoD		Logged By RM		Scale 1:50		Page Number Sheet 1 of 3	

Well	Water	Depth (m)	Type /FI	Coring			Diameter Recovery (SPT)	Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD						
								0.60	33.13		Brown clayey very gravelly SAND. Gravel is fine to coarse subangular to angular of brick (MADE GROUND)	
							(33)				Brown gravelly very sandy CLAY. Gravel is fine to coarse subangular to angular of brick (MADE GROUND)	1
							(32)	2.00	31.73		Grey sandy CLAY (MADE GROUND)	2
							(31)	3.30	30.43		Brown stiff sandy gravelly CLAY. Gravel is fine to coarse sub angular to rounded of sandstone (DEVANSIAN TILL)	3
							(50)					4
							(32)					5
												6
												7
												8
												9
												10

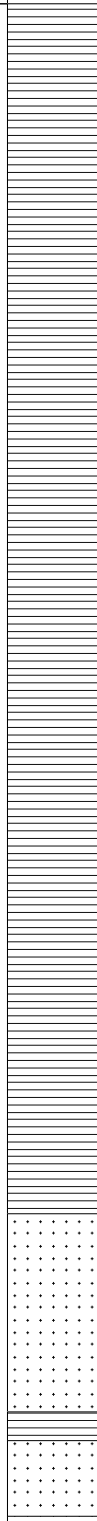
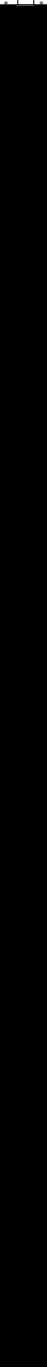
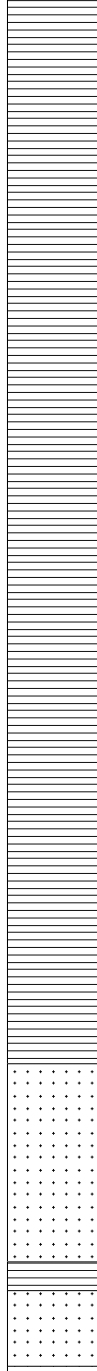
Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation				Drilling Flush					
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)
								0.00	30.00	90	0						

Remarks

1. Location CAT scanned before breaking ground 2. Due to the drilling methodology the accuracy of measured water strikes is questionable and therefore water strikes were not recorded 3. Upon completion borehole was installed was a 50mm diameter standpipe with a response zone between 9.00 and 11.00mbgl.

Rotary Core Log

Project Name: Plots NT02-NT04			Client: FEC			Date: 20/04/2023		
Location: Manchester			Contractor: PB Drilling Ltd			Co-ords: E384692.00 N399446.81		
Project No. : 4328			Crew Name: M.E, G.S			Drilling Equipment: Beretta T44		
Borehole Number RBH306		Hole Type RO+RC		Level 33.73m AoD		Logged By RM		Page Number Sheet 2 of 3

Well	Water	Depth (m)	Type /FI	Coring			Diameter Recovery (SPT)	Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD						
							(50)				Reddish brown MUDSTONE and fine to medium grained reddish brown SANDSTONE (MANCHESTER MARLS FORMATION)	11
												12
												13
												14
												15
												16
												17
												18
												19
												20
		15.00 - 16.50		44	0	0	(50)	18.00	15.73		...at 15.00 to 15.40mbgl soft reddish brown clay	15
		16										
		17										
		18										
		19										
		20										
		20										
		20										
		20										
		20										
		18.00 - 19.50		90	76	31	(50)	19.31 19.50	14.42 14.23		Very weak clayey reddish brown fine grained SANDSTONE. Joints are 10 degrees closely to mediumly spaced (MANCHESTER MARLS FORMATION)	18
		19										
		20										
		20										
		20										
		20										
		20										
		20										
		20										
		20										
											Extremely weak reddish brown MUDSTONE. Joints are horizontal very closely spaced (MANCHESTER MARLS FORMATION)	20
											20	
											20	
											20	
											20	
											20	
											20	
											20	
											20	
											20	

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation				Drilling Flush					
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)
								0.00	30.00	90	0						

Remarks

1. Location CAT scanned before breaking ground 2. Due to the drilling methodology the accuracy of measured water strikes is questionable and therefore water strikes were not recorded 3. Upon completion borehole was installed was a 50mm diameter standpipe with a response zone between 9.00 and 11.00mbgl.

Rotary Core Log

Project Name: Plots NT02-NT04		Client: FEC		Date: 20/04/2023	
Location: Manchester		Contractor: PB Drilling Ltd		Co-ords: E384692.00 N399446.81	
Project No. : 4328		Crew Name: M.E, G.S		Drilling Equipment: Beretta T44	
Borehole Number RBH306	Hole Type RO+RC	Level 33.73m AoD	Logged By RM	Scale 1:50	Page Number Sheet 3 of 3

Well	Water	Depth (m)	Type /FI	Coring			Diameter Recovery (SPT)	Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD						
		19.50 - 21.00		73	49	29		20.30	13.43			

Rotary Core Log

Project Name: Plots NT02-NT04		Client: FEC		Date: 20/04/2023	
Location: Manchester		Contractor: PB Drilling Ltd		Co-ords: E384749.15 N399493.27	
Project No. : 4328		Crew Name: M.E, G.S		Drilling Equipment: Beretta T44	
Borehole Number RBH307	Hole Type RO+RC	Level 39.84m AoD	Logged By RM	Scale 1:50	Page Number Sheet 1 of 3

Well	Water	Depth (m)	Type /FI	Coring			Diameter Recovery (SPT)	Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD						
							(23)				Medium dense to dense brown slightly clayey very gravelly SAND. Gravel is fine to coarse subangular to angular of brick, sandstone and concrete. Low cobble content. (MADE GROUND)	1
							(29)					2
							(47)					3
							(31)					4
							(34)					5
							(23)	9.00	30.84			6
							(37)				Reddish brown MUDSTONE interbedded with reddish brown fine to medium grained SANDSTONE (MANCHESTER MARLS FORMATION)	7
												8
												9
												10

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation				Drilling Flush					
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)
								0.00	24.00	90	0						

Remarks

1. Location CAT scanned before breaking ground 2. Due to the drilling methodology the accuracy of measured water strikes is questionable and therefore water strikes were not recorded 3. Upon completion borehole was installed was a 50mm diameter standpipe with a response zone between 9.00 and 20.00mbgl.

Rotary Core Log

Project Name: Plots NT02-NT04		Client: FEC		Date: 20/04/2023	
Location: Manchester		Contractor: PB Drilling Ltd		Co-ords: E384749.15 N399493.27	
Project No. : 4328		Crew Name: M.E, G.S		Drilling Equipment: Beretta T44	
Borehole Number RBH307	Hole Type RO+RC	Level 39.84m AoD	Logged By RM	Scale 1:50	Page Number Sheet 2 of 3

Well	Water	Depth (m)	Type /FI	Coring			Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD					
							(50)			Reddish brown MUDSTONE interbedded with reddish brown fine to medium grained SANDSTONE (MANCHESTER MARLS FORMATION)	11
							(50)				12
							(50)				13
							(50)				14
							(50)				15
							(50)				16
							(50)				17
		18.00 - 19.50		99	87	82	18.00	21.84		Extremely weak reddish brown MUDSTONE. Joints are horizontal closely to mediumly spaced (MANCHESTER MARLS) ...at 18.00 to 18.16mbgl soft clay	18
							19.04	20.80		Very weak grey SILTSTONE with bands of reddish brown MUDSTONE. Joints are horizontal closely spaced (MANCHESTER MARLS)	19
							19.50	20.34		Extremely weak reddish brown	20

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation				Drilling Flush					
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)
								0.00	24.00	90	0						

Remarks

1. Location CAT scanned before breaking ground 2. Due to the drilling methodology the accuracy of measured water strikes is questionable and therefore water strikes were not recorded 3. Upon completion borehole was installed was a 50mm diameter standpipe with a response zone between 9.00 and 20.00mbgl.

Rotary Core Log

Project Name: Plots NT02-NT04		Client: FEC		Date: 20/04/2023	
Location: Manchester		Contractor: PB Drilling Ltd		Co-ords: E384749.15 N399493.27	
Project No. : 4328		Crew Name: M.E, G.S		Drilling Equipment: Beretta T44	
Borehole Number RBH307	Hole Type RO+RC	Level 39.84m AoD	Logged By RM	Scale 1:50	Page Number Sheet 3 of 3

Well	Water	Depth (m)	Type /FI	Coring			Diameter Recovery (SPT)	Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD						
		19.50 - 21.00		100	83	77					Extremely weak reddish brown MUDSTONE joints are horizontal closely spaced (MANCHESTER MARLS) ...at 20.05 to 20.35mbgl firm clay	21
												22
							(50)					23
							(50)	24.00	15.84		End of Borehole at 24.000m	24
												25
												26
												27
												28
												29
												30

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation				Drilling Flush					
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)
								0.00	24.00	90	0						

Remarks

1. Location CAT scanned before breaking ground 2. Due to the drilling methodology the accuracy of measured water strikes is questionable and therefore water strikes were not recorded 3. Upon completion borehole was installed was a 50mm diameter standpipe with a response zone between 9.00 and 20.00mbgl.

Trial Pit Log

Project Name: Plots NT02-NT04		Client: FEC		Date: 13/04/2023	
Location: Manchester		Contractor: PB Drilling Ltd		Co-ords: E384692.39 N399499.68	
Project No. : 4328		Crew Name:		Equipment: 13 Ton Tracked Excavator	
Location Number TP301	Location Type TP	Level 31.87m AoD	Logged By RM	Scale 1:25	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
					0.15	31.72		Asphalt (MADE GROUND) ...at 0.00 to 3.10mbgl instability in western face	
		0.50	ES		0.60	31.27		Dark brown clayey sandy fine to coarse subangular to angular GRAVEL of brick, slate, ceramic and slag. Rare glass and plastic (MADE GROUND)	
								...at 0.50mbgl clay pipe (disused) running east to west Firm light brown mottled orangish brown slightly sandy CLAY (DEVENSIAN TILL)	1
		1.00 1.00 1.00 1.00	D	HVP=57.0 HVP=68.0 HVP=84.0					
					1.50	30.37		Very soft orangish brown slightly gravelly sandy CLAY. Gravel is fine to medium subangular to rounded of sandstone, mudstone and quartzite (DEVENSIAN TILL)	2
		2.00 2.00 2.00 2.00	D	HVP=15.0 HVP=15.0 HVP=9.0					
					2.30	29.57		Light grey slightly gravelly very clayey SAND. Gravel is fine to coarse rounded of sandstone mudstone and quartzite (DEVENSIAN TILL)	
					2.70	29.17		Orangish brown silty gravelly SAND. Gravel is fine to coarse sub angular to rounded of sandstone and quartzite rare angular sandstone cobbles (DEVENSIAN TILL)	3
		3.00	B		3.10	28.77		End of Borehole at 3.100m	
									4
									5

Dimensions		Trench Support and Comment				Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks	
5.00	1.00							

Remarks

1. Location CAT scanned before breaking ground 2. Groundwater was not observed. 3. Upon completion borehole backfilled with arisings.

Trial Pit Log

Project Name: Plots NT02-NT04		Client: FEC		Date: 13/04/2023	
Location: Manchester		Contractor: PB Drilling Ltd		Co-ords: E384717.01 N399494.28	
Project No. : 4328		Crew Name:		Equipment: 13 Ton Tracked Excavator	
Location Number TP302	Location Type TP	Level 32.25m AoD	Logged By RM	Scale 1:25	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.40 0.40	B ES					Brown and dark brown sandy fine to coarse subangular to angular GRAVEL of brick and slate. High cobble content of brick (MADE GROUND)	
		1.10 1.10	D ES		1.00	31.25		Firm brown and dark brown slightly sandy slightly gravelly CLAY. Gravel is fine to coarse sub angular to angular of brick (MADE GROUND)	1
		1.50	B		1.30	30.95		Orangish brown clayey slightly gravelly fine to medium SAND. Gravel is fine to coarse subangular to rounded of sandstone, mudstone and quartzite (DEVENSIAN TILL)	2
					3.30	28.95		End of Borehole at 3.300m	3
									4
									5

Dimensions		Trench Support and Comment				Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks		Date	Rate	Remarks
5.00	1.00							

Remarks

1. Location CAT scanned before breaking ground 2. Groundwater was not observed. 3. Upon completion borehole backfilled with arisings.

Trial Pit Log

Project Name: Plots NT02-NT04		Client: FEC		Date: 13/04/2023	
Location: Manchester		Contractor: PB Drilling Ltd		Co-ords: E384801.86 N399489.35	
Project No. : 4328		Crew Name:		Equipment: 13 Ton Tracked Excavator	
Location Number TP304	Location Type TP	Level 41.26m AoD	Logged By RM	Scale 1:25	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.20	ES		0.30	40.96		Grass over dark brown gravelly SAND. Gravel is fine to coarse subangular of brick. Occasional plastic fragments and frequent roots and rootlets (MADE GROUND)	
		0.50 0.50	B ES					Dark brown very gravelly fine to coarse SAND. Gravel is fine to coarse subangular to angular of brick and concrete. Medium cobble content of brick and concrete. Occasional plastic and wood fragments (MADE GROUND)	
								...at 0.70 to 2.10mbgl brick structure in northern portion	1
		1.50	ES		1.80	39.46			
		2.20 2.20	D		2.10	39.16		Orangish brown stiff slightly gravelly CLAY. Gravel is fine to medium rounded of sandstone (DEVENSIAN TILL)	2
								Very stiff to stiff reddish brown slightly sandy CLAY (DEVENSIAN TILL)	
					3.10	38.16		End of Borehole at 3.100m	3
									4
									5

Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks
5.00	1.00						

Remarks

1. Location CAT scanned before breaking ground 2. Groundwater was not observed. 3. Upon completion borehole backfilled with arisings.

Trial Pit Log

Project Name: Plots NT02-NT04

Client: FEC

Date: 12/04/2023

Location: Manchester

Contractor: PB Drilling Ltd

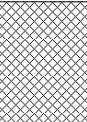
Co-ords: E384717.78 N399479.50

Project No. : 4328

Crew Name:

Equipment: 13 Ton Tracked Excavator

Location Number
TP305Location Type
TPLevel
32.97m AoDLogged By
RMScale
1:25Page Number
Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.40	B ES		0.40	32.57		Brown slightly clayey sandy fine to coarse subangular to angular GRAVEL of brick and concrete. Medium brick and concrete cobble content. (MADE GROUND)	1
		0.50 0.50			0.70	32.27		Dark brown slightly clayey sandy fine to coarse sub angular to angular GRAVEL of brick and concrete. Occasional timber fragments (MADE GROUND) ...at 0.60 to 1.20 brick structure in western face	
		1.00	D		1.20	31.77		Firm orangish brown mottled grey slightly sandy slightly gravelly CLAY. Gravel is rounded to subangular of sandstone and quartzite (DEVENSIAN TILL)	
		1.50	ES					Light brown clayey gravelly fine to coarse SAND. Gravel is fine to coarse subangular to rounded of sandstone, mudstone and quartzite (DEVENSIAN TILL)	
					2.00	30.97		End of Borehole at 2.000m	2
									3
									4
									5

Dimensions

Trench Support and Comment

Pumping Data

Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks
5.00	1.00						

Remarks

1. Location CAT scanned before breaking ground 2. Groundwater strike at 0.40mbgl. 3. Upon completion borehole backfilled with arisings.

Trial Pit Log

Project Name: Plots NT02-NT04		Client: FEC		Date: 13/04/2023	
Location: Manchester		Contractor: PB Drilling Ltd		Co-ords: E384774.85 N399474.29	
Project No. : 4328		Crew Name:		Equipment: 13 Ton Tracked Excavator	
Location Number TP306	Location Type TP	Level 40.19m AoD	Logged By RM	Scale 1:25	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.20 0.50 0.50	B ES		0.20	39.99		Grass over dark brown gravelly SAND. Gravel is fine to coarse subangular of brick. Occasional plastic fragments and frequent roots and rootlets (MADE GROUND)	
								Dark brown very gravelly fine to coarse SAND. Gravel is fine to coarse subangular to angular of brick and concrete. Medium cobble content of brick and concrete. Occasional plastic and wood fragments (MADE GROUND)	
		1.00 1.50 1.50	B D		1.00	39.19		Very stiff brown mottled grey slightly gravelly CLAY. Gravel is fine to coarse sub rounded to rounded of sandstone and quartzite (DEVENSIAN TILL)	1
		3.00 - 3.10 3.00	D		3.10	37.09			2
								End of Borehole at 3.100m	3
									4
									5

Dimensions		Trench Support and Comment				Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks		Date	Rate	Remarks
5.00	1.00							

Remarks

1. Location CAT scanned before breaking ground 2. Groundwater strike at 1.00mbgl. 3. Upon completion borehole backfilled with arisings.

Trial Pit Log

Project Name: Plots NT02-NT04		Client: FEC		Date: 12/04/2023	
Location: Manchester		Contractor: PB Drilling Ltd		Co-ords: E384736.94 N399457.29	
Project No. : 4328		Crew Name:		Equipment: 13 Ton Tracked Excavator	
Location Number TP307	Location Type TP	Level 34.82m AoD	Logged By RM	Scale 1:25	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.30	ES		0.50	34.32		Brown clayey sandy fine to coarse sub angular to angular GRAVEL of brick, ceramic, concrete and slate. High cobble content of stone setts, brick and concrete (MADE GROUND)	1
		0.60 0.60	B ES		1.10	33.72		Dark brown clayey sandy fine to coarse subangular to angular GRAVEL of brick and concrete. High cobble content of brick and concrete. Occasional wood fragments, boulder sized concrete and relic cables. Slight hydrocarbon odour (MADE GROUND) ...at 0.80mbgl loose steel girder	
		1.20 - 1.50	B		2.20	32.62		Orangish brown slightly gravelly fine SAND. Gravel is fine to coarse sub rounded to rounded of sandstone and mudstone. Occasional pockets of reddish brown mottled grey slightly gravelly sandy clay (DEVENSIA TILL)	2
					3.70	31.12		Orangish brown gravelly fine to coarse SAND. Gravel is fine to coarse rounded of quartzite, sandstone and mudstone (DEVENSIA TILL)	3
								End of Borehole at 3.700m	4
									5

Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks
5.00	1.00						

Remarks

1. Location CAT scanned before breaking ground 2. Groundwater was not observed. 3. Upon completion borehole backfilled with arisings.

Trial Pit Log

Project Name: Plots NT02-NT04		Client: FEC		Date: 12/04/2023	
Location: Manchester		Contractor: PB Drilling Ltd		Co-ords: E384690.47 N399456.64	
Project No. : 4328		Crew Name:		Equipment: 13 Ton Tracked Excavator	
Location Number TP308	Location Type TP	Level 33.24m AoD	Logged By RM	Scale 1:25	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.10	ES		0.20	33.04		Brown sandy gravelly CLAY. Gravel is fine to medium angular of plastic and brick (MADE GROUND)	1
		0.80	ES					Black very sandy fine to coarse subangular to angular GRAVEL of brick slate and concrete. Occasional metal fragments and low cobble content of brick and concrete (MADE GROUND) ...at 0.40 to 0.70mbgl possible brick structure across base of pit ...at 0.70mbgl disused plastic drainage pipe	
		1.50		HVP=20.0	1.50	31.74		Firm dark brown sandy gravelly CLAY. Gravel is fine to coarse subangular to angular of brick, concrete and slate. Low brick and sandstone block cobble content (MADE GROUND)	2
		3.00		HVP=40.0	3.00	30.24		Light grey mottled orangish brown slightly sandy slightly gravelly CLAY. Gravel is fine to coarse rounded of sandstone (DEVENSIA TILL)	3
					3.10	30.14		Orangish brown slightly silty slightly gravelly fine SAND. Gravel is fine to medium subangular of sandstone and mudstone (DEVENSIA TILL)	
					3.80	29.44		End of Borehole at 3.800m	4
									5

Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks
5.00	1.00						

Remarks

1. Location CAT scanned before breaking ground 2. Groundwater was not observed. 3. Upon completion borehole backfilled with arisings.

Trial Pit Log

Project Name: Plots NT02-NT04		Client: FEC		Date: 11/04/2023	
Location: Manchester		Contractor: PB Drilling Ltd		Co-ords: E384668.83 N399448.01	
Project No. : 4328		Crew Name:		Equipment: 13 Ton Tracked Excavator	
Location Number TP309	Location Type TP	Level 33.33m AoD	Logged By RM	Scale 1:25	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
					0.30	33.03		Grey reinforced concrete (MADE GROUND)	
		0.40 0.50	ES B					Black sandy clayey fine to coarse sub angular to angular GRAVEL of brick, asphalt, clinker and slag. Medium brick cobble content. Occasional timber fragments. Hydrocarbon odour (MADE GROUND) ...at 0.30 to 2.90mbgl wall in northern face ...at 0.80mbgl small empty plastic Jerry can	1
		1.00 1.00	ES PID	PID=0.0				In the eastern half of the trial pit made ground extends to 2.10mbgl	2
		3.00 - 3.50 3.00 - 3.50	B ES		2.90	30.43		Light brown fine silty SAND (DEVENSIAN TILL)	3
					3.80	29.53		End of Borehole at 3.800m	4
									5

Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks
4.00	1.00						

Remarks

1. Location CAT scanned before breaking ground 2. Groundwater was not observed. 3. Upon completion borehole backfilled with arisings.

Trial Pit Log

Project Name: Plots NT02-NT04

Client: FEC

Date: 12/04/2023

Location: Manchester

Contractor: PB Drilling Ltd

Co-ords: E384684.74 N399434.30

Project No. : 4328

Crew Name:

Equipment: 13 Ton Tracked Excavator

Location Number
TP310Location Type
TPLevel
36.38m AoDLogged By
RMScale
1:25Page Number
Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.50 0.50 - 1.00	ES B		1.00	35.38		Brown slightly sandy fibrous material containing frequent fragments of shredded plastic (MADE GROUND)	1
								End of Borehole at 1.000m	2
									3
									4
									5

Dimensions

Trench Support and Comment

Pumping Data

Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks
1.00	1.00						

Remarks

1. Location CAT scanned before breaking ground 2. Groundwater was not observed. 3. Upon completion borehole backfilled with arisings.

Percussion Drilling Log

Project Name: Plots NT02-NT04		Client: FEC		Date: 04/04/2023	
Location: Manchester		Contractor: PB Drilling Ltd		Co-ords: E384598.67 N399393.38	
Project No. : 4328		Crew Name: JG, SG		Drilling Equipment: Premier 110	
Borehole Number WS301	Hole Type WS	Level 33.60m AoD	Logged By LR	Scale 1:30	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
					0.25	33.35		Grey reinforced concrete (MADE GROUND)	1
		0.50	ES					Medium dense dark grey very gravelly coarse SAND. Gravel is fine to coarse subrounded to angular of concrete, slag and brick. Occasional ash and cobble of concrete (MADE GROUND)	
		1.00	SPT	N=16 (1,1/2,2,6,6)					2
		1.50	ES						
					2.20	31.40		Medium dense reddish brown gravelly SAND. Gravel is fine to coarse subrounded to angular of brick, concrete and sandstone (MADE GROUND)	3
		2.50	ES						
		3.00	SPT	N=5 (1,1/1,1,1,2)					4
		3.50	ES		3.20	30.40		Reddish brown slightly gravelly very clayey medium SAND. Gravel is fine to medium subrounded to rounded sandstone (DEVENSIAN TILL)	
		4.40	SPT	N=50 (25 for 125mm/50 for 55mm)					5
		4.50	ES		4.50	29.10		Very dense reddish brown gravelly SAND. Gravel is medium angular sandstone. (CHESTER FORMATION)	
					5.00	28.60	End of Borehole at 5.000m		

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation
								0.00	5.00	90	

Remarks

1. Location CAT scanned before breaking ground 2. Groundwater was not observed. 3. Upon completion borehole was installed with a 50mm diameter standpipe with a response zone between 0.50 and 1.50mbgl.

Percussion Drilling Log

Project Name: Plots NT02-NT04		Client: FEC		Date: 04/04/2023	
Location: Manchester		Contractor: PB Drilling Ltd		Co-ords: E384614.24 N399398.45	
Project No. : 4328		Crew Name: JG, SG		Drilling Equipment: Premier 110	
Borehole Number WS302	Hole Type WS	Level 33.60m AoD	Logged By LR	Scale 1:30	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
					0.30	33.30		Grey reinforced concrete (MADE GROUND)	
		0.50	ES					Medium dense dark brown slightly clayey very sandy fine to coarse subrounded to angular GRAVEL of brick and concrete. Low brick cobble content (MADE GROUND)	1
		1.00	SPT	N=10 (1,5/3,3,2,2)					
		1.50	ES		1.40	32.20		Firm brown sandy CLAY (DEVENSIAN TILL)	2
		1.60		HVP=20 HVP=30					
		2.00		HVP=25 HVP=30					
		2.40	ES						
		2.40		HVP=35 HVP=40					
		2.50							
		2.80		HVP=60 HVP=68					
		2.80							
		3.00	SPT	N=25 (3,4/5,6,7,7)					3
		3.20		HVP=65 HVP=72					
		3.20							
		3.50	ES		3.50	30.10		End of Borehole at 3.500m	4
									5
									6

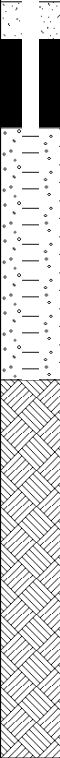
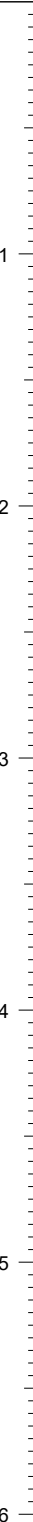
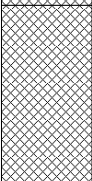
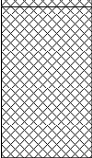
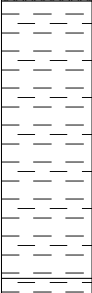
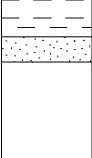
Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation
								0.00	3.50	90	

Remarks

1. Location CAT scanned before breaking ground 2. Groundwater was not observed. 3. Upon completion borehole was backfilled with arisings.

Percussion Drilling Log

Project Name: Plots NT02-NT04		Client: FEC		Date: 03/04/2023	
Location: Manchester		Contractor: PB Drilling Ltd		Co-ords: E384627.12 N399408.31	
Project No. : 4328		Crew Name: JG, SG		Drilling Equipment: Premier 110	
Borehole Number WS303	Hole Type WS	Level 33.60m AoD	Logged By RM	Scale 1:30	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
					0.28	33.32		Grey reinforced concrete (MADE GROUND)	
		0.40	ES					Dark brown sandy fine to coarse sub angular to angular GRAVEL of brick and clinker. Hydrocarbon odour (MADE GROUND)	
		1.00	SPT	N=4 (1,1/1,1,1,1)	1.00	32.60		Soft dark brown slightly gravelly sandy CLAY. Gravel is fine to coarse subangular of brick, and coal. Hydrocarbon odour (MADE GROUND)	
		1.00	PID	PID=0.00					
		1.20	ES						
		1.80	ES		1.60	32.00		Firm orangish brown mottled greyish brown slightly sandy CLAY. Hydrocarbon odour (DEVENSIA TILL)	
		1.80		HVP=55					
		1.80		HVP=58					
		1.80		HVP=60					
		2.00	PID	PID=0.00					
		2.50	D					...at 2.40 to 2.70mbgl becoming soft very sandy	
		2.50		HVP=12	2.70	30.90			
		2.50		HVP=14					
		2.50		HVP=23					
		3.00	SPT	N=25 (6,5/5,6,7,7)	2.90	30.70		Firm orangish brown mottled greyish brown slightly sandy gravelly CLAY. Hydrocarbon odour. Gravel comprises fine to medium subrounded sandstone (DEVENSIA TILL)	3
		3.00	PID	PID=0.00	3.00	30.60		...at 2.70 to 2.90mbgl becoming firm slightly sandy gravelly. Gravel fine to medium subrounded of sandstone	
		3.10	ES					Medium dense reddish brown fine to medium slightly gravelly SAND. Gravel is fine to coarse subangular of sandstone. Hydrocarbon odour (WEATHERED CHESTER FORMATION) End of Borehole at 3.000m	

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation
								0.00	3.00	90	

Remarks

1. Location CAT scanned before breaking ground 2. Groundwater was not observed. 3. Upon completion borehole was installed with a 50mm diameter standpipe with a response zone between 0.50 and 1.50mbgl.

Percussion Drilling Log

Project Name: Plots NT02-NT04		Client: FEC		Date: 04/04/2023	
Location: Manchester		Contractor: PB Drilling Ltd		Co-ords: E384612.01 N399389.02	
Project No. : 4328		Crew Name: JG, SG		Drilling Equipment: Premier 110	
Borehole Number WS304	Hole Type WS	Level 33.60m AoD	Logged By LR	Scale 1:30	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
					0.30	33.30		Grey reinforced concrete (MADE GROUND)	
		0.50	ES					Medium dense grey very sandy fine to coarse subangular to rounded GRAVEL of brick and concrete. Gravel comprises fine to coarse subangular to rounded brick and concrete. Occasional ash. Low brick cobble content (MADE GROUND)	1
					1.20	32.40		Firm brown sandy CLAY (DEVENSIAN TILL)	
		1.40	PP	35.00					
		1.40	PP	48.00					
		1.50	ES						
		1.80	PP	45.00					
		1.80	PP	50.00					
		2.00	SPT	N=6 (1,1/1,1,2,2)					2
		2.20	PP	48.00					
		2.20	PP	50.00					
		2.50	ES						
		2.60	PP	50.00					
		2.60	PP	55.00					
					2.80	30.80		Very dense reddish brown slightly gravelly SAND. Gravel is fine to medium subangular rounded sandstone (CHESTER FORMATION) ...at 3.00 to 3.25mbgl becoming dark brown	3
		3.40	SPT	38 (10,12/38 for 210mm)					
		3.50	ES		3.50	30.10		End of Borehole at 3.500m	4
									5
									6

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation
								0.00	3.50	90	

Remarks

1. Location CAT scanned before breaking ground 2. Groundwater was not observed. 3. Upon completion borehole was backfilled with arisings.

Percussion Drilling Log

Project Name: Plots NT02-NT04		Client: FEC		Date: 03/04/2023	
Location: Manchester		Contractor: PB Drilling Ltd		Co-ords: E384626.31 N399395.73	
Project No. : 4328		Crew Name: JG, SG		Drilling Equipment: Premier 110	
Borehole Number WS305	Hole Type WS	Level 33.60m AoD	Logged By RM	Scale 1:30	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
					0.30	33.30		Reinforced concrete slab (MADE GROUND)	
		0.50	ES					Dark brown sandy fine to coarse subrounded to angular GRAVEL of brick and clinker. Medium cobble content of brick (MADE GROUND)	
		1.00	ES		0.85	32.75		Soft orangish brown mottled greyish brown slightly sandy CLAY (DEVENSIAN TILL)	1
		1.00	PID	PID=0.00				...at 1.00mbgl becoming firm to stiff	
		1.50		HVP=70					
		1.50		HVP=81					
		1.50		HVP=96					
		1.80	D						
		2.00	SPT	N=16 (1,2/2,3,5,6)					2
		2.00	PID	PID=0.00				...at 2.10 to 2.55mbgl becoming slightly gravelly. Gravel fine to medium rounded of sandstone and quartzite.	
					2.55	31.05		Brown slightly clayey sandy fine to medium subrounded to rounded GRAVEL of sandstone and mudstone (DEVENSIAN TILL)	
		2.90	ES		2.90	30.70		Reddish brown slightly gravelly fine to medium SAND. Gravel is fine to medium subangular of sandstone (WEATHERED CHESTER FORMATION)	3
		3.00	PID	PID=0.00	3.00	30.60		End of Borehole at 3.000m	
									4
									5
									6

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation
								0.00	3.00	90	

Remarks
 1. Location CAT scanned before breaking ground 2. Groundwater was not observed. 3. Upon completion borehole was backfilled with arisings.

Percussion Drilling Log

Project Name: Plots NT02-NT04		Client: FEC		Date: 04/04/2023	
Location: Manchester		Contractor: PB Drilling Ltd		Co-ords: E384640.55 N399403.38	
Project No. : 4328		Crew Name: JG, SG		Drilling Equipment: Premier 110	
Borehole Number WS306	Hole Type WS	Level 34.60m AoD	Logged By LR	Scale 1:30	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
					0.20	34.40		Grey reinforced concrete (MADE GROUND)	
		0.50	ES					Medium dense grey sandy fine to coarse subangular to angular GRAVEL of concrete, brick and slag (MADE GROUND)	
		1.00	PID	PID=0.00					1
		1.50	ES						
		1.80		HVP=35					
		2.00	SPT	N=9 (1,1/2,2,2,3)	1.90	32.70		Soft brown slightly gravelly very sandy CLAY. Gravel comprises medium rounded sandstone (DEVENSIAN TILL)	2
		2.00	PID	PID=0.00					
		2.20		HVP=35					
		2.50	ES					...at 2.50mbgl becoming firm	
		2.60		HVP=55					
		3.00	PID	PID=0.00					3
		4.00	SPT	N=35 (5,7/8,8,9,10)	3.90 4.00	30.70 30.60		Dense reddish brown slightly gravelly coarse SAND. Gravel comprises medium subangular sandstone (CHESTER FORMATION) End of Borehole at 4.000m	4
									5
									6

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation
								0.00	3.30	90	

Remarks

1. Location CAT scanned before breaking ground 2. Groundwater was not observed. 3. Upon completion borehole was backfilled with arisings.

Percussion Drilling Log

Project Name: Plots NT02-NT04		Client: FEC		Date: 04/04/2023	
Location: Manchester		Contractor: PB Drilling Ltd		Co-ords: E384607.66 N399377.50	
Project No. : 4328		Crew Name: JG, SG		Drilling Equipment: Premier 110	
Borehole Number WS307	Hole Type WS	Level 33.60m AoD	Logged By LR	Scale 1:30	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
								Grey reinforced concrete (MADE GROUND)	
		0.40	ES		0.28	33.32		Medium dense grey clayey sandy fine to coarse sub rounded to angular GRAVEL. of concrete, slag and brick. Low cobble content of brick and concrete (MADE GROUND)	
					0.50	33.10		End of Borehole at 0.500m	
									1
									2
									3
									4
									5
									6

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation
								0.00	0.50	90	

Remarks

1. Location CAT scanned before breaking ground 2. Groundwater was not observed. 3. Borehole terminated at 0.50mbgl due to encountering masonry structure within handpit 4. Upon completion borehole was backfilled with arisings.

Percussion Drilling Log

Project Name: Plots NT02-NT04		Client: FEC		Date: 03/04/2023	
Location: Manchester		Contractor: PB Drilling Ltd		Co-ords: E384622.66 N399382.64	
Project No. : 4328		Crew Name: JG, SG		Drilling Equipment: Premier 110	
Borehole Number WS308	Hole Type WS	Level 33.60m AoD	Logged By RM	Scale 1:30	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
					0.25	33.35		Grey reinforced concrete slab (MADE GROUND)	
					0.40	33.20		Brick COBBLES (MADE GROUND)	
								End of Borehole at 0.400m	
									1
									2
									3
									4
									5
									6

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation
								0.00	0.40	90	

Remarks

1. Location CAT scanned before breaking ground 2. Groundwater was not observed. 3. Borehole was terminated at 0.40mbgl due to encountering masonry structure within handpit 4. Upon completion borehole was backfilled with arisings.

Percussion Drilling Log

Project Name: Plots NT02-NT04		Client: FEC		Date: 03/04/2023	
Location: Manchester		Contractor: PB Drilling Ltd		Co-ords: E384622.66 N399382.64	
Project No. : 4328		Crew Name: JG, SG		Drilling Equipment: Premier 110	
Borehole Number WS308A	Hole Type WS	Level 33.60m AoD	Logged By RM	Scale 1:30	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
					0.30	33.30		Grey reinforced concrete (MADE GROUND)	
					0.45	33.15		Slightly sandy fine to coarse sub angular to angular GRAVEL of limestone (MADE GROUND)	
		0.60	ES					Dark brown sandy fine to coarse sub angular to angular GRAVEL of brick and concrete. Low brick cobble content (MADE GROUND)	
		1.00	ES						1
		1.00	PID	PID=0.00					
					1.85	31.75			
		2.00	ES		2.00	31.60		Firm orangish brown mottled grey slightly sandy CLAY (DEVENSIAN TILL)	2
		2.00	SPT	N=20 (4,5/5,5,5,5)				Medium dense brown gravelly SAND. Gravel is fine to medium subangular to subrounded of mudstone and sandstone (DEVENSIAN TILL)	
		2.00	PID	PID=0.00					
					2.65	30.95		Reddish brown fine to medium slightly gravelly SAND. Gravel is fine to medium subangular of sandstone (WEATHERED CHESTER FORMATION)	3
		3.00	PID	PID=0.00					
		4.00	PID	PID=0.00	4.00	29.60		End of Borehole at 4.000m	4
									5
									6

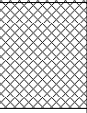
Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation
								0.00	4.00	90	

Remarks

1. Location CAT scanned before breaking ground 2. Groundwater was not observed. 3. Upon completion borehole was backfilled with arisings.

Percussion Drilling Log

Project Name: Plots NT02-NT04		Client: FEC		Date: 03/04/2023	
Location: Manchester		Contractor: PB Drilling Ltd		Co-ords: E384638.06 N399388.17	
Project No. : 4328		Crew Name: JG, SG		Drilling Equipment: Premier 110	
Borehole Number WS309	Hole Type WS	Level 33.60m AoD	Logged By RM	Scale 1:25	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
					0.30	33.30		Grey reinforced concrete (MADE GROUND)	
					0.65	32.95		Medium dense brownish grey clayey sandy fine to coarse sub rounded to angular GRAVEL. of concrete, slag and brick. Low cobble content of brick (MADE GROUND)	
		0.70	ES					Firm slightly sandy reddish brown mottled grey CLAY (DEVENSIAN TILL)	
		0.80	D						
		0.80		HVP=55					
		0.80		HVP=68					
		0.80		HVP=78					
		1.00	SPT	N=10 (1,1/2,2,3,3)				...at 1.00mbgl becoming soft and sandy	
		1.00	PID	PID=0.00					
		1.20		HVP=27					
		1.20		HVP=32					
		1.20		HVP=33					
		1.80	ES		1.80	31.80		Brown slightly clayey sandy fine to medium subrounded GRAVEL of sandstone and mudstone (DEVENSIAN TILL)	
		1.90	PID	PID=0.00					
		2.00			2.10	31.50		Stiff brown slightly sandy slightly gravelly CLAY. Gravel is fine to medium subrounded of sandstone and mudstone (DEVENSIAN TILL)	
		2.30			2.30	31.30		Very dense reddish brown fine to medium slightly gravelly SAND. Gravel is medium to fine sub angular to sub rounded of sandstone (CHESTER FORMATION)	
		2.50	ES						
		3.00	SPT	50 (7,14/50 for 140mm)	3.00	30.60		End of Borehole at 3.000m	
		3.00	PID	PID=0.00					

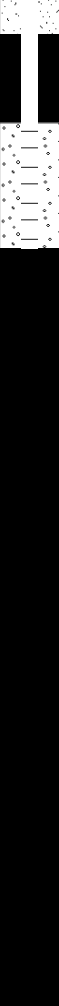
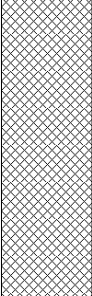
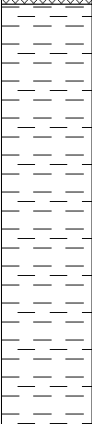
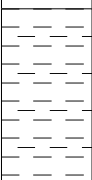
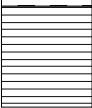
Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation
								0.00	3.00	90	

Remarks

1. Location CAT scanned before breaking ground 2. Groundwater was not observed. 3. Upon completion borehole was installed with a 50mm diameter standpipe between 1.00 and 2.00mbgl.

Percussion Drilling Log

Project Name: Plots NT02-NT04		Client: FEC		Date: 05/04/2023	
Location: Manchester		Contractor: PB Drilling Ltd		Co-ords: E384675.49 N399499.30	
Project No. : 4328		Crew Name: JG, SG		Drilling Equipment: Premier 110	
Borehole Number WS310	Hole Type WS	Level 31.72m AoD	Logged By RM	Scale 1:30	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.40	ES					Brown slightly clayey sandy fine to coarse sub angular to angular GRAVEL of brick, glass and concrete (MADE GROUND)	1
		1.00	SPT	N=4 (1,1/1,1,1,1)	1.20	30.52			
		1.30	ES					Soft light brown slightly gravelly slightly sandy CLAY. Gravel is fine to coarse rounded of sandstone and mudstone (DEVENSIAN TILL)	
		1.40	D	HVP=18					
		1.40							
		1.90	D	HVP=34					2
		1.90	SPT	N=6 (1,1/1,1,2,2)					
		2.00							
		3.00	SPT	N=5 (1,1/1,1,1,2)	2.90	28.82		Brown and Reddish brown very sandy CLAY (DEVENSIAN TILL)	3
		3.70		HVP=22	3.60	28.12		Reddish brown and grey MUDSTONE (MANCHESTER MARLS)	
		4.00	SPT	N=11 (3,2/2,3,3,3)	4.00	27.72		End of Borehole at 4.000m	4
									5
									6

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation
								0.00	5.00	90	

Remarks 1. Location CAT scanned before breaking ground 2. Groundwater was not observed. 3. Upon completion borehole was installed with a 50mm diameter standpipe with a response zone between 0.50 and 1.00mbgl.										
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Percussion Drilling Log

Project Name: Plots NT02-NT04		Client: FEC		Date: 05/04/2023	
Location: Manchester		Contractor: PB Drilling Ltd		Co-ords: E384712.61 N399444.78	
Project No. : 4328		Crew Name: JG, SG		Drilling Equipment: Premier 110	
Borehole Number WS311	Hole Type WS	Level 35.04m AoD	Logged By RM	Scale 1:30	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.40	ES	PID=0.00	0.10	34.94		Light brown slightly clayey gravelly SAND. Gravel is fine to coarse angular to rounded of brick, limestone and sandstone (MADE GROUND) Medium dense black sandy fine to coarse subangular to angular GRAVEL of brick and concrete. Medium cobble content of brick. Hydrocarbon odour. (MADE GROUND)	1
		0.50	PID						
		1.20	SPT	N=22 (8,10/7,6,5,4)					
		2.00	SPT	N=11 (5,6/3,4,2,2)	1.60	33.44		Medium dense brown gravelly medium to coarse SAND. Gravel is fine to medium rounded of sandstone. (DEVENSIAN TILL)	2
		3.00	SPT	N=11 (4,1/3,2,4,2)					
		4.00	SPT	N=11 (2,4/2,2,4,3)					3
									4
					5.00	30.04		End of Borehole at 5.000m	5
									6

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation
								0.00	1.21	90	

Remarks

1. Location CAT scanned before breaking ground 2. Groundwater strike at 0.50mbgl. 3. Upon completion borehole was installed with a 50mm diameter standpipe with a response zone between 0.50 and 1.50mbgl.

Percussion Drilling Log

Project Name: Plots NT02-NT04		Client: FEC		Date: 05/04/2023	
Location: Manchester		Contractor: PB Drilling Ltd		Co-ords: E384709.02 N399502.71	
Project No. : 4328		Crew Name: JG, SG		Drilling Equipment: Premier 110	
Borehole Number WS312	Hole Type WS	Level 31.87m AoD	Logged By RM	Scale 1:30	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.60	ES					Loose brown sandy fine to coarse angular GRAVEL of brick, plastic and concrete (MADE GROUND)	
								...at 0.70 to 1.40mbgl becoming dark brown high brick cobble content. No plastic	1
		1.00	SPT	N=7 (2,2/3,1,2,1)					
		1.40	ES		1.40	30.47		Very soft light brown mottled orangish brown slightly sandy CLAY (DEVENSIAN TILL)	
		1.50	D					...at 1.60mbgl becoming firm	
		2.00	SPT	N=11 (1,2/3,3,2,3)				...at 1.90mbgl becoming very soft	2
								...at 2.50 to 2.70mbgl Pocket of slightly gravelly very clayey sand. Gravel fine to medium angular of sandstone	
		3.00	D		2.70	29.17		Firm orangish brown sandy CLAY (DEVENSIAN TILL)	
		3.00	SPT	N=9 (1,2/3,2,2,2)				...at 2.90 to 3.30mbgl clayey sand pocket	3
		4.00	D		3.50	28.37		Firm to stiff brown slightly sandy slightly gravelly CLAY. Gravel is fine to medium subangular of sandstone (DEVENSIAN TILL)	
		4.00	SPT	N=38 (3,4/5,8,11,14)	4.10	27.77		...at 3.50 to 3.70mbgl becoming stiff	4
								Dense brown sandy slightly gravelly silty SAND. Gravel is fine rounded to subangular of sandstone, siltstone and mudstone (DEVENSIAN TILL)	
					4.70	27.17		Reddish brown and grey MUDSTONE (MANCHESTER MARLS)	
		5.00	SPT	N=31 (4,6/7,7,8,9)	5.00	26.87		End of Borehole at 5.000m	5
									6

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation
								0.00	5.00	90	

Remarks

1. Location CAT scanned before breaking ground 2. Groundwater was not observed. 3. Upon completion borehole was installed with a 50mm diameter standpipe between 0.50 and 1.00mbgl

Rotary Core Log

Project Name: Plots NT02-NT04			Client: FEC			Date: 28/09/2023		
Location: Manchester			Contractor: MT Geoservices			Co-ords: E384697.40 N399411.32		
Project No. : 4328			Crew Name: M.E.			Drilling Equipment: Beretta T44		
Borehole Number RBH401		Hole Type RC		Level 43.07m AoD		Logged By RM		Page Number Sheet 1 of 3

Well	Water	Depth (m)	Type /FI	Coring			Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD					
		0.20-1.00	B				0.20	42.87		Brown slightly clayey sandy fine to coarse subangular to angular GRAVEL of brick (MADE GROUND)	
		1.00	ES							Black clayey gravelly organic material suspected wood mulch. Gravel is fine to coarse sub angular to angular of glass, clinker and plastic. Ash present. Hydrocarbon odour. (MADE GROUND)	1
											2
		2.50-3.00	B				2.50	40.57		Soft to firm black sandy very gravelly CLAY. Gravel is fine to coarse subangular to angular of brick, glass, clinker, coal, plastic. Rare metal fragments. Low brick cobble content. Hydrocarbon odour. (MADE GROUND)	3
		2.60	ES								
							3.40	39.67		Firm brown sandy slightly gravelly CLAY. Gravel is medium to coarse subangular to angular of brick	4
							3.70	39.37		Black sandy fine to coarse subangular to angular GRAVEL of brick, slag and clinker (MADE GROUND)	
		4.00	ES				4.10	38.97		Orangish brown slightly gravelly silty fine to medium SAND. Gravel is rounded of sandstone and siltstone. (MADE GROUND)	5
		4.10-4.45	B				4.45	38.62		Firm brown slightly sandy gravelly CLAY. Gravel fine to coarse sub angular to angular of brick, slate and ceramic. Rare clinker and rounded fine to medium natural lithologies (MADE GROUND)	6
		6.50	D							...at 6.50mbgl shear vane Cu = 40kPa, Cr = 12 kPa	7
		6.50	ES								
							7.80	35.27		Firm brown slightly gravelly CLAY. Gravel is fine to medium sub rounded to subangular of coal and sandstone. (MADE GROUND - REWORKED CLAY)	8
		8.00	D								
		8.00	ES								
							9.20	33.87		Medium dense reddish brown fine to medium SAND.	9
										...at 9.60 to 10.50 no recovery	
											10

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation				Drilling Flush					
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)

Remarks

1. Location CAT scanned before breaking ground 2. Water strikes not recorded due to drilling with water flush 3. Upon completion borehole was installed was a 50mm diameter standpipe with a response zone between 11.50 and 16.50mbgl.

Rotary Core Log

Project Name: Plots NT02-NT04		Client: FEC		Date: 28/09/2023	
Location: Manchester		Contractor: MT Geoservices		Co-ords: E384697.40 N399411.32	
Project No. : 4328		Crew Name: M.E.		Drilling Equipment: Beretta T44	
Borehole Number RBH401	Hole Type RC	Level 43.07m AoD	Logged By RM	Scale 1:50	Page Number Sheet 2 of 3

Well	Water	Depth (m)	Type /FI	Coring			Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD					
							(36)	10.50	32.57	Medium dense reddish brown fine to medium SAND.	
										Brown SAND and GRAVEL. Gravel fine to coarse well rounded to sub rounded of various lithologies.	11
		12.00 12.00-13.20	B ES				(15)			...at 11.55 to 12.00mbgl no recovery	12
								13.20	29.87		13
							(33)	13.50	29.57	Medium dense to dense orangish brown medium to coarse slightly gravelly SAND. Gravel is fine subangular to rounded of sandstone.	14
										Dense orange brown medium to coarse slightly gravelly silty SAND. Gravel is fine subangular to rounded of sandstone.	14
							(50)	15.00	28.07	Very dense brown slightly clayey gravelly fine to coarse SAND. Gravel is sub rounded to rounded of sandstone and quartz. Medium cobble content (OPENHOLE RETURNS)	15
											16
											17
											18
											19
		19.00 - 20.50		83	53	53		19.30	23.77	Extremely weak reddish brown MARL weathered to hard reddish brown CLAY (MANCHESTER MARLS FORMATION)	20

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation				Drilling Flush					
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)

Remarks

1. Location CAT scanned before breaking ground 2. Water strikes not recorded due to drilling with water flush 3. Upon completion borehole was installed was a 50mm diameter standpipe with a response zone between 11.50 and 16.50mbgl.

Rotary Core Log

Project Name: Plots NT02-NT04		Client: FEC		Date: 28/09/2023	
Location: Manchester		Contractor: MT Geoservices		Co-ords: E384697.40 N399411.32	
Project No. : 4328		Crew Name: M.E.		Drilling Equipment: Beretta T44	
Borehole Number RBH401	Hole Type RC	Level 43.07m AoD	Logged By RM	Scale 1:50	Page Number Sheet 3 of 3

Well	Water	Depth (m)	Type /FI	Coring			Diameter Recovery (SPT)	Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD						
								20.50	22.57		Extremely weak reddish brown MARL weathered to hard reddish brown CLAY (MANCHESTER MARLS FORMATION) End of Borehole at 20.500m	
												21
												22
												23
												24
												25
												26
												27
												28
												29
												30

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation				Drilling Flush					
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)

Remarks

1. Location CAT scanned before breaking ground 2. Water strikes not recorded due to drilling with water flush 3. Upon completion borehole was installed was a 50mm diameter standpipe with a response zone between 11.50 and 16.50mbgl.

Rotary Core Log

Project Name: Plots NT02-NT04				Client: FEC				Date: 28/09/2023			
Location: Manchester				Contractor: MT Geoservices				Co-ords: E384709.44 N399413.82			
Project No. : 4328				Crew Name: M.E.				Drilling Equipment: Beretta T44			
Borehole Number RBH402		Hole Type RC		Level 43.28m AoD		Logged By RM		Scale 1:50		Page Number Sheet 1 of 2	

Well	Water	Depth (m)	Type /FI	Coring			Diameter Recovery (SPT)	Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD						
		0.30 0.30	B ES					0.15 43.12			Brown clayey sandy medium to coarse GRAVEL of brick (MADE GROUND)	
								1.00 42.28			Black clayey gravelly organic material suspected wood mulch. Gravel is fine to coarse sub angular to angular of glass, slag, clinker and plastic. Ash present. Frequent plastic sheets. Hydrocarbon odour (MADE GROUND)	1
		1.50 1.50	D ES				(4)				...at 0.15 to 1.00mbgl occasional pockets of clay and hydrocarbon odour throughout	
											Soft to firm brown very sandy gravelly CLAY. Gravel fine to coarse subangular to angular of brick, glass, limestone. Occasional rounded fine to medium quartzite and small branches (MADE GROUND)	2
							(9)				...at 2.30 to 3.00mbgl no recovery	3
		3.70	ES				(7)	3.40 39.88			Loose black slightly sandy GRAVEL. Gravel is fine to coarse sub rounded to angular of slag and clinker. (MADE GROUND)	4
											...at 3.80 to 4.50mbgl no recovery	
								5.10 38.17			...at 4.90 to 5.10mbgl light brown silty fine sand	5
		5.30 5.30	B ES				(4)				Very soft to soft light brown slightly sandy slightly gravelly CLAY. Gravel is fine to coarse subangular to angular of brick. Occasional glass fragments.	6
											...at 5.60 to 5.80mbgl soft brown sandy very gravelly CLAY. Gravel is fine to coarse subangular to angular of brick, slate and clinker.	
											...at 5.80 to 6.00mbgl no recovery	
		6.80	ES				(5)				...at 6.50mbgl shear vane Cu = 25kPa, Cr = 15 kPa	7
											...at 6.70 to 7.00mbgl dark brown sandy gravelly CLAY. Gravel is fine to medium subangular to angular of brick and ceramic.	
											...at 7.50 to 9.00mbgl contains clinker and coal	
		8.00-8.50	B				(13)				...at 8.00mbgl shear vane Cu = 25kPa, Cr = 8kPa	8
											...at 8.70 to 9.00mbgl no recovery	9
		10.00	B					9.50 33.78			Firm brown slightly sandy slightly gravelly CLAY. Gravel is fine to coarse subangular	10

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation				Drilling Flush					
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)

Remarks

1. Location CAT scanned before breaking ground 2. Water strikes not recorded due to drilling with water flush 3. Upon completion borehole was backfilled with arisings.

Rotary Core Log

Project Name: Plots NT02-NT04			Client: FEC			Date: 28/09/2023		
Location: Manchester			Contractor: MT Geoservices			Co-ords: E384709.44 N399413.82		
Project No. : 4328			Crew Name: M.E.			Drilling Equipment: Beretta T44		
Borehole Number RBH402		Hole Type RC		Level 43.28m AoD		Logged By RM		Page Number Sheet 2 of 2

Well	Water	Depth (m)	Type /FI	Coring			Diameter Recovery (SPT)	Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD						
		10.00 10.00	B ES					10.20	33.08		Firm brown slightly sandy slightly gravelly CLAY. Gravel is fine to coarse subangular to rounded of quartzite, coal, sandstone and siltstone (DEVENSIAN TILL)	
		10.50 10.50-12.00 10.50-12.00	B B ES				(28)				...at 9.50 to 9.60mbgl reddish brown medium fine to medium SAND. ...at 10.00mbgl Cu = 45kPa, Cr = 18kPa	11
							(26)	12.00	31.28		Medium dense orangish brown slightly gravelly silty fine to medium SAND. Gravel is medium to coarse rounded of sandstone quartzite and siltstone.	12
							(26)				Medium dense orangish brown slightly gravelly medium to coarse SAND. Gravel is fine to coarse rounded of sandstone and quartzite. Low cobble content.	13
												14
								15.00	28.28		End of Borehole at 15.000m	15
												16
												17
												18
												19
												20

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation				Drilling Flush					
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)

Remarks

1. Location CAT scanned before breaking ground 2. Water strikes not recorded due to drilling with water flush 3. Upon completion borehole was backfilled with arisings.

Rotary Core Log

Project Name: Plots NT02-NT04				Client: FEC				Date: 18/09/2023			
Location: Manchester				Contractor: MT Geoservices				Co-ords: E384717.73 N399423.13			
Project No. : 4328				Crew Name: M.E.				Drilling Equipment: Beretta T44			
Borehole Number RBH403		Hole Type RC		Level 43.03m AoD		Logged By RM		Scale 1:50		Page Number Sheet 1 of 3	

Well	Water	Depth (m)	Type /FI	Coring			Diameter Recovery (SPT)	Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD						
		0.00-3.00	B					0.20	42.83		Brown clayey sandy medium to coarse subangular to angular GRAVEL of brick (MADE GROUND)	
		0.50	ES								Very loose brown clayey gravelly sandy wood mulch and organic matter. Gravel is fine to coarse subangular to angular of brick, glass, plastic and ceramic. Occasional metal fragments (MADE GROUND)	1
							(3)					2
								2.50	40.53		Loose clayey gravelly organic material suspected wood mulch. Gravel is fine to coarse sub angular to angular of glass and plastic. Ash present. Hydrocarbon odour. (MADE GROUND)	3
		3.50 3.50-5.30	B ES					3.50	39.53		Loose black slightly clayey gravelly SAND. Contains ash. Gravel is fine to coarse sub angular of brick, plastic and glass. Frequent metal and non organic fibres. Hydrocarbon odour (MADE GROUND)	4
							(5)					5
		5.00	ES									
								5.30	37.73		Firm brown sandy gravelly CLAY. Gravel is fine to coarse rounded to angular of brick, mudstone and sandstone. Occasional sand bands and brick cobble (MADE GROUND)	6
		6.00 6.00	D ES				(12)					
											...at 6.90 to 7.50mbgl becoming slightly gravelly sandy	7
		7.20	D				(12)				...at 7.50 to 9.00mbgl no recovery besides a small amount of slag gravel and cobbles	8
							(6)	9.00	34.03		Soft light brown with black staining slightly gravelly slightly sandy CLAY. Gravel is fine to medium sub angular of brick. Slight hydrocarbon odour (MADE GROUND)	9
		9.90	ES									10

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation				Drilling Flush					
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)

Remarks

1. Location CAT scanned before breaking ground 2. Water strikes not recorded due to drilling with water flush 3. Upon completion borehole was installed was a 50mm diameter standpipe with a response zone between 11.50 and 16.50mbgl.

Rotary Core Log

Project Name: Plots NT02-NT04			Client: FEC			Date: 18/09/2023		
Location: Manchester			Contractor: MT Geoservices			Co-ords: E384717.73 N399423.13		
Project No. : 4328			Crew Name: M.E.			Drilling Equipment: Beretta T44		
Borehole Number RBH403		Hole Type RC		Level 43.03m AoD		Logged By RM		Page Number Sheet 2 of 3

Well	Water	Depth (m)	Type /FI	Coring			Diameter Recovery (SPT)	Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD						
		10.20-12.00	B								Soft light brown with black staining slightly gravelly slightly sandy CLAY. Gravel is fine to medium sub angular of brick. Slight hydrocarbon odour (MADE GROUND) <u>...at 10.2mbgl to 10.50mbgl no recovery</u> Medium dense brown gravelly medium to coarse SAND. Gravel fine to coarse rounded of sandstone and quartzite.	
		10.50	ES				(10)	10.50	32.53			11
							(15)					
							(50)					12
							(35)					
							(40)					14
							(51)	15.00	28.03			15
		16.00	ES				(50)	16.50	26.53			16
											Very dense slightly gravelly silty fine to medium SAND. Gravel medium to coarse of sandstone.	
											Stiff brown slightly sandy slightly gravelly CLAY. Gravel is medium rounded of mudstone and quartzite	
											Very dense brown slightly clayey gravelly fine to medium SAND. Gravel is fine to medium rounded of quartzite, sandstone and mudstone.	
											Extremely weak highly weathered reddish brown MUDSTONE. Almost completely	
		17.50	B				(50)	18.00	25.03			18
												19
							(50)	19.50	23.53			20

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation				Drilling Flush					
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)

Remarks

1. Location CAT scanned before breaking ground 2. Water strikes not recorded due to drilling with water flush 3. Upon completion borehole was installed was a 50mm diameter standpipe with a response zone between 11.50 and 16.50mbgl.

Rotary Core Log

Project Name: Plots NT02-NT04				Client: FEC				Date: 18/09/2023			
Location: Manchester				Contractor: MT Geoservices				Co-ords: E384717.73 N399423.13			
Project No. : 4328				Crew Name: M.E.				Drilling Equipment: Beretta T44			
Borehole Number RBH403		Hole Type RC		Level 43.03m AoD		Logged By RM		Scale 1:50		Page Number Sheet 3 of 3	

Well	Water	Depth (m)	Type /FI	Coring			Diameter Recovery (SPT)	Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD						
								21.00	22.03		Extremely weak highly weathered reddish brown MUDSTONE. Almost completely weathered to a very stiff clay (MANCHESTER MARLS)	21
											End of Borehole at 21.000m	22
												23
												24
												25
												26
												27
												28
												29
												30

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation				Drilling Flush					
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)

Remarks

1. Location CAT scanned before breaking ground 2. Water strikes not recorded due to drilling with water flush 3. Upon completion borehole was installed was a 50mm diameter standpipe with a response zone between 11.50 and 16.50mbgl.

Rotary Core Log

Project Name: Plots NT02-NT04				Client: FEC				Date: 14/11/2023			
Location: Manchester				Contractor: Central Alliance				Co-ords: E384638.99 N399388.87			
Project No. : 4328				Crew Name: A.P, D.C.				Drilling Equipment: Comacchio 305			
Borehole Number RBH501		Hole Type RC		Level 33.59m AoD		Logged By RM		Scale 1:50		Page Number Sheet 1 of 2	

Well	Water	Depth (m)	Type /FI	Coring			Diameter Recovery (SPT)	Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD						
		0.80	ES					0.25	33.34		Concrete (MADE GROUND)	1
								0.60	32.99		Red brick cobbles (MADE GROUND - SUSPECTED RELIC STRUCTURE)	
								1.20	32.39		Firm light brown slightly gravelly CLAY. Gravel is fine to coarse subangular to angular of brick and ceramic. Low brick cobble content (MADE GROUND)	
											Stiff brown mottled grey slightly sandy CLAY (DEVENSIAN TILL)	
		2.00	ES								...at 1.80 to 2.90mbgl becoming soft sandy slightly gravelly	2
		3.00	ES					2.90	30.69		Reddish brown fine to medium SAND (CHESTER FORMATION)	3
								3.20	30.39		Reddish brown SANDSTONE (CHESTER FORMATION - OPENHOLE RETURNS)	
												4
												5
												6
												7
												8
												9
												10

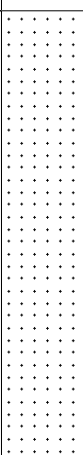
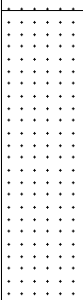
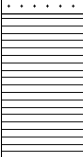
Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation				Drilling Flush					
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)

Remarks

1. Location CAT scanned before breaking ground 2. Water strikes not recorded due to drilling with water flush 3. Upon completion borehole was installed was a 50mm diameter standpipe with a response zone between 4.50 and 15.0mbgl.

Rotary Core Log

Project Name: Plots NT02-NT04				Client: FEC				Date: 14/11/2023			
Location: Manchester				Contractor: Central Alliance				Co-ords: E384638.99 N399388.87			
Project No. : 4328				Crew Name: A.P, D.C.				Drilling Equipment: Comacchio 305			
Borehole Number RBH501		Hole Type RC		Level 33.59m AoD		Logged By RM		Scale 1:50		Page Number Sheet 2 of 2	

Well	Water	Depth (m)	Type /FI	Coring			Diameter Recovery (SPT)	Depth (m)	Level (m)	Legend	Stratum Description						
				TCR	SCR	RQD											
											Reddish brown SANDSTONE (CHESTER FORMATION - OPENHOLE RETURNS)	11					
												12					
		13.00 - 14.50	0 5 8	45	18	0		13.00	20.59		Extremely weak reddish brown medium to coarse grained SANDSTONE. Joints are horizontal closely spaced planar smooth. Largely non intact and recovered as sand and gravel (CHESTER FORMATION)	13					
		14.50 - 16.00		0	0	0		15.00	18.59		Extremely weak reddish brown MUDSTONE (MANCHESTER MARLS) End of Borehole at 15.000m	15					
								16.00	17.59			16					
												17					
												18					
												19					
												20					
Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation				Drilling Flush					
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)

Remarks

1. Location CAT scanned before breaking ground 2. Water strikes not recorded due to drilling with water flush 3. Upon completion borehole was installed was a 50mm diameter standpipe with a response zone between 4.50 and 15.0mbgl.

Rotary Core Log

Project Name: Plots NT02-NT04			Client: FEC			Date: 14/11/2023		
Location: Manchester			Contractor: Central Alliance			Co-ords: E384599.85 N399394.37		
Project No. : 4328			Crew Name: S.A, D.M.			Drilling Equipment: Comacchio 305		
Borehole Number RBH502		Hole Type RC		Level 33.59m AoD		Logged By RM		Page Number Sheet 1 of 3

Well	Water	Depth (m)	Type /FI	Coring			Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD					
							0.08	33.51		Concrete (MADE GROUND)	
		1.00	ES							Brown clayey sandy fine to coarse sub rounded to angular GRAVEL of limestone, brick and clinker. Medium cobble content of bricks and paving cobbles (MADE GROUND)	1
							1.80	31.79		...at 1.20 to 1.80mbgl hydrocarbon odour	
										Concrete obstruction - possible relic slab (MADE GROUND)	2
		2.60	ES				2.50	31.09		Soft to firm light brown slightly sandy gravelly CLAY. Gravel is fine to coarse sub rounded to sub angular of brick and sandstone (MADE GROUND)	3
							3.00	30.59		Light brown slightly clayey slightly silty fine to medium SAND (DEVENSAN TILL)	
							3.30	30.29		Firm to stiff light brown slightly sandy CLAY (DEVENSAN TILL)	
		3.80	ES				3.60	29.99		Brown slightly clayey slightly sandy fine to medium rounded GRAVEL of sandstone, mudstone and quartzite (DEVENSAN TILL)	4
		4.50	ES				4.30	29.29		Reddish brown gravelly SAND. Gravel is medium to coarse rounded of quartzite and sandstone (CHESTER FORMATION)	5
							4.50	29.09		Reddish brown SANDSTONE (CHESTER FORMATION - OPENHOLE RETURNS)	
											6
											7
											8
											9
		10.00-11.50	B				10.00	23.59			10

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation				Drilling Flush					
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation	Depth Top	Depth Base	Type	Colour	Min (%)	Max (%)

Remarks

1. Location CAT scanned before breaking ground 2. Water strikes not recorded due to drilling with water flush 3. Upon completion borehole was installed was a 50mm diameter standpipe with a response zone between 5.50 and 18.30mbgl and a 32mm diameter standpipe with a response between 19.30 and 20.30mbgl.