

APPENDIX C

LOGS



Rotary Core Log

Borehole No.
RO-R2/R3-01

Project Name: Baldock

Project No.
2899

Co-ords: 525233.39 - 234461.45

Sheet 1 of 4
Hole Type
RC

Location: Baldock, North Hertfordshire

Level: 64.22

Scale
1:25

Client: Urban & Civic

Dates: 21/11/2023

Logged By
SJF

Well	Water Strikes	Depth (m)	Type /FI	Coring			Depth (m)	Level (m)	Legend	Stratum Description							
				TCR	SCR	RQD											
		N=28 (4,4/9,10,6,3) 1.20 - 2.00					0.30	63.92		TOPSOIL: Brown friable slightly sandy slightly gravelly CLAY with low root content. Gravel is angular to sub-angular fine to coarse chalk. Soft light brown slightly sandy slightly gravelly CLAY with pockets of orange brown gravelly clayey sand. Gravel is angular fine to coarse chalk and flint. ... no orange brown mottling from 0.45m.	1						
							1.20	63.02		Non-intact Core Recovery: Black coarse angular black flint GRAVEL.							
							1.35	62.87		Non-intact Core Recovery: Structureless CHALK composed of white and orange brown silty angular fine to coarse GRAVEL of chalk and occasional flint.							
				75	0	0	1.80	62.42		Assessed Zone of Core Loss.							
							2.00	62.22				Non-intact Core Recovery: Structureless CHALK composed of white with occasional orange brown staining angular fine to coarse GRAVEL of weak medium density chalk.					
				2.00 - 3.50		91	0	0							2		
													3				
														3			
																3	
																	3
		3.50 - 5.00					3.35	60.87		Assessed Zone of Core Loss.							
							3.50	60.72			Non-intact Core Recovery: Structureless CHALK composed of white angular coarse GRAVEL of weak medium density chalk. White with occasional orange brown staining weak medium density CHALK with core disturbance due to vertical / steeply inclined fractures. Bedding fractures are very closely to closely spaced undulating rough tight clean with orange brown staining. Inclined fractures are undulating rough tight clean with orange brown staining.						
							3.70	60.52									
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Rotary Core Log

Borehole No.

RO-R2/R3-01

Sheet 2 of 4

Hole Type
RC

Project Name: Baldock

Project No.
2899

Co-ords: 525233.39 - 234461.45

Location: Baldock, North Hertfordshire

Level: 64.22

Scale
1:25

Client: Urban & Civic

Dates: 21/11/2023

Logged By
SJF

Well	Water Strikes	Depth (m)	Type /FI	Coring			Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD					
		5.00 - 6.50		100	0	0	7.97 8.00	56.25 56.22		White with occasional orange brown staining weak medium density CHALK with core disturbance due to vertical / steeply inclined fractures. Bedding fractures are very closely to closely spaced undulating rough tight clean with orange brown staining. Inclined fractures are undulating rough tight clean with orange brown staining. <u>Non-intact between 5m and 5.14m.</u> <u>... slightly silty between 5.60m and 6.0m.</u> <u>Non-intact between 5.78m and 6.5m.</u>	6
		6.50 - 8.00		98	0	0					7
		8.00 - 9.50		100	6	0				Assessed Zone of Core Loss. White with black speckling weak medium density CHALK with core disturbance due to vertical / steeply inclined fractures. Bedding fractures are very closely to closely spaced undulating rough tight clean with light grey brown staining and black speckling. Inclined fractures are undulating rough tight clean with light grey brown staining. <u>Non-intact between 8m and 9.04m.</u> <u>Non-intact between 9.15m and 9.5m.</u> <u>Non-intact between 9.5m and 11m.</u>	8 9
Continued on Next Sheet											

Remarks
No groundwater identified





Rotary Core Log

Borehole No.
RO-R2/R3-01

Sheet 3 of 4
Hole Type
RC

Project Name: Baldock

Project No.
2899

Co-ords: 525233.39 - 234461.45

Location: Baldock, North Hertfordshire

Level: 64.22

Client: Urban & Civic

Dates: 21/11/2023

Scale
1:25
Logged By
SJF

Well	Water Strikes	Depth (m)	Type /FI	Coring			Depth (m)	Level (m)	Legend	Stratum Description				
				TCR	SCR	RQD								
		10.50 - 11.00	C	100	0	0	11.35	52.87		White with black speckling weak medium density CHALK with core disturbance due to vertical / steeply inclined fractures. Bedding fractures are very closely to closely spaced undulating rough tight clean with light grey brown staining and black speckling. Inclined fractures are undulating rough tight clean with light grey brown staining.	11			
		11.00 - 12.50		99	0	0				Cream weak medium density CHALK with very closely to closely spaced wispy marl seams. Bedding fractures are closely spaced undulating rough tight clean with light brown staining. Inclined fractures are undulating rough tight clean with light brown staining.	12			
		12.50 - 14.00		100	12	0				12.48 12.50	51.74 51.72	Assessed Zone of Core Loss. Cream weak medium density CHALK with very closely to closely spaced wispy marl seams. Bedding fractures are very closely to closely spaced undulating rough tight clean with orange brown staining. Inclined fractures are undulating rough tight clean with orange brown staining.	13	
		14.00 - 15.50		100	0	0				14.78	49.44		Non-intact Core Recovery: White very weak low density CHALK with shaley texture.	14
													Continued on Next Sheet	15

Remarks
No groundwater identified





Borehole No.	RO-R2/R3-01
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Sheet 4 of 4
Hole Type
RC

Project No.
2899

Co-ords: 525233.39 - 234461.45

Level:	64.22
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Scale
1:25

Dates: 21/11/2023

Logged By
SJF

[illegible]

Remarks	No groundwater identified
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Rotary Core Log

Borehole No.
RO-R2/R3-02

Project Name: Baldock

Project No.
2899

Co-ords: 525264.86 - 234455.33

Sheet 1 of 4
Hole Type
RC

Location: Baldock, North Hertfordshire

Level: 64.46

Scale
1:25

Client: Urban & Civic

Dates: 22/11/2023

Logged By
SJF

Well	Water Strikes	Depth (m)	Type /FI	Coring			Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD					
		N=40 (2,5/6,10,9,15) 1.20 - 2.00	C				0.40	64.06		TOPSOIL: Brown friable slightly sandy slightly gravelly CLAY with low root content. Gravel is angular to sub-angular fine to coarse chalk.	1
							0.80	63.66		Soft light brown slightly sandy slightly gravelly CLAY with pockets of orange brown gravelly clayey sand. Gravel is angular fine to coarse chalk and flint.	
							1.20	63.26		Structureless CHALK composed of cream mottled orange brown silty angular fine to coarse GRAVEL of chalk and black flint.	
							1.45	63.01		Non-intact Core Recovery: Black coarse angular black flint GRAVEL.	
							1.65	62.81		Non-intact Core Recovery: Structureless CHALK composed of cream mottled orange brown silty angular fine to coarse GRAVEL of chalk and black flint.	
							2.00	62.46		Assessed Zone of Core Loss.	
		</									

Continued on Next Sheet

Remarks
No groundwater identified





Rotary Core Log

Borehole No.
RO-R2/R3-02

Sheet 2 of 4
Hole Type
RC

Scale
1:25

Logged By
SJF

Project Name: Baldock

Project No. 2899

Co-ords: 525264.86 - 234455.33

Location: Baldock, North Hertfordshire

Level: 64.46

Client: Urban & Civic

Dates: 22/11/2023

Well	Water Strikes	Depth (m)	Type /FI	Coring			Depth (m)	Level (m)	Legend	Stratum Description			
				TCR	SCR	RQD							
		5.00 - 6.50	C	99	3	0	6.48 6.50	57.98 57.96		White with occasional orange brown staining weak medium density CHALK with core disturbance due to vertical / steeply inclined fractures. Bedding fractures are extremely closely to very closely spaced undulating rough tight clean with orange brown staining. Inclined fractures are undulating rough tight clean with orange brown staining.	6		
		7.09 - 7.17 6.50 - 8.00		100	23	0				Assessed Zone of Core Loss. White with occasional orange brown staining weak medium density CHALK with core disturbance due to vertical / steeply inclined fractures. Bedding fractures are extremely closely to very closely spaced undulating rough tight clean with orange brown staining. Inclined fractures are undulating rough tight clean with orange brown staining.	7		
		8.00 - 9.50		99	0	0					8		
													9
													10
							9.49 9.50	54.97 54.96	White with occasional orange brown staining weak medium density CHALK with core disturbance due to vertical / steeply inclined fractures. Bedding fractures are extremely closely to very closely spaced undulating rough tight clean with orange brown staining. Inclined fractures are undulating rough tight clean with orange brown staining.				
Continued on Next Sheet													

Remarks
No groundwater identified





Rotary Core Log

Borehole No.
RO-R2/R3-02

Sheet 3 of 4
Hole Type
RC

Project Name: Baldock

Project No.
2899

Co-ords: 525264.86 - 234455.33

Location: Baldock, North Hertfordshire

Level: 64.46

Client: Urban & Civic

Dates: 22/11/2023

Scale
1:25

Logged By
SJF

Well	Water Strikes	Depth (m)	Type /FI	Coring			Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD					
		9.50 - 11.00	C	99	0	0	10.98 11.00	53.48 53.46		White with occasional orange brown staining weak medium density CHALK with core disturbance due to vertical / steeply inclined fractures. Bedding fractures are extremely closely to very closely spaced undulating rough tight clean with orange brown staining. Inclined fractures are undulating rough tight clean with orange brown staining.	11
		11.00 - 12.50		100	0	0				Assessed Zone of Core Loss. White with occasional orange brown staining weak medium density CHALK with core disturbance due to vertical / steeply inclined fractures. Bedding fractures are extremely closely to very closely spaced undulating rough tight clean with orange brown staining. Inclined fractures are undulating rough tight clean with orange brown staining.	
		12.58 - 12.64									
		12.50 - 14.00		100	0	0					
		14.00 - 15.50		87	0	0					14
Continued on Next Sheet											15

Remarks
No groundwater identified





Rotary Core Log

Borehole No.

RO-R2/R3-02

Sheet 4 of 4

Hole Type
RC

Project Name: Baldock

Project No.
2899

Co-ords: 525264.86 - 234455.33

Location: Baldock, North Hertfordshire

Level: 64.46

Scale
1:25

Client: Urban & Civic

Dates: 22/11/2023

Logged By
SJF

Well	Water Strikes	Depth (m)	Type /FI	Coring			Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD					
							15.30	49.16		White with occasional orange brown staining weak medium density CHALK with core disturbance due to vertical / steeply inclined fractures. Bedding fractures are extremely closely to very closely spaced undulating rough tight clean with orange brown staining. Inclined fractures are undulating rough tight clean with orange brown staining. Assessed Zone of Core Loss. End of Borehole at 15.50m	
							15.50	48.96			
											16
											17
											18
											19
											20

Remarks

No groundwater identified





Rotary Core Log

Borehole No.
RO-R2/R3-03

Sheet 1 of 4
Hole Type
RC

Scale
1:25

Logged By
SJF

Project Name: Baldock

Project No. 2899

Co-ords: 525247.79 - 234377.16

Location: Baldock, North Hertfordshire

Level: 65.37

Client: Urban & Civic

Dates: 30/11/2023 - 01/12/2023

Well	Water Strikes	Depth (m)	Type /FI	Coring			Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD					
							0.30	65.07		TOPSOIL: Brown slightly sandy slightly gravelly CLAY. Gravel is sub-angular fine to coarse chalk and flint.	1
									Light brown and orange brown very sandy slightly gravelly CLAY/ clayey SAND. Gravel is sub-angular fine to medium chalk and occasional flint.		
		N=19 (3,6/5,5,4)					1.20	64.17		No Recovery	2
		1.20 - 2.00									
		2.00 - 3.50					2.00	63.37		Non-intact Core Recovery: Structureless CHALK composed of cream mottled orange brown silty angular fine to coarse GRAVEL of chalk and black flint.	3
							2.25	63.12		Non-intact Core Recovery: Structureless CHALK composed of cream mottled orange brown silty angular fine to coarse GRAVEL of chalk.	
				97	0	0					
		3.50 - 5.00					3.45	61.92		Assessed Zone of Core Loss.	4
							3.50	61.87		Non-intact Core Recovery: Structureless CHALK composed of cream mottled orange brown silty angular fine to coarse GRAVEL of chalk.	
				87	0	0					
									Continued on Next Sheet		

Remarks
No groundwater identified





Rotary Core Log

Borehole No.

RO-R2/R3-03

Sheet 2 of 4

Hole Type
RC

Project Name: Baldock

Project No.
2899

Co-ords: 525247.79 - 234377.16

Location: Baldock, North Hertfordshire

Level: 65.37

Scale
1:25

Client: Urban & Civic

Dates: 30/11/2023 - 01/12/2023

Logged By
SJF

Well	Water Strikes	Depth (m)	Type /FI	Coring			Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD					
		5.00 - 6.50	C	97	0	0	5.00	60.37		White with orange brown staining weak medium density CHALK. Bedding fractures are extremely closely to closely spaced undulating rough tight to partly open with white/cream silt infill and orange brown staining.	6
		6.50 - 8.00		95	0	0	6.45 6.50	58.92 58.87		Assessed Zone of Core Loss.	7
										White with orange brown staining weak medium density CHALK with core disturbance due to vertical / steeply inclined fractures. Bedding fractures are extremely closely to closely spaced undulating rough tight to partly open with white/cream silt infill and orange brown staining. Inclined fractures are undulating rough tight clean to partly open with white/cream silt infill and orange brown staining.	
										Assessed Zone of Core Loss.	
		8.09 - 8.19		100	0	0	7.93 8.00	57.44 57.37		White with orange brown staining weak medium density CHALK with core disturbance due to vertical / steeply inclined fractures. Bedding fractures are extremely closely to closely spaced undulating rough tight with black speckling. Inclined fractures are undulating rough tight with black speckling.	8
8.00 - 9.50	9										
										10	
Continued on Next Sheet											

Remarks
No groundwater identified





Rotary Core Log

Borehole No.
RO-R2/R3-03

Project Name: Baldock

Project No.
2899

Co-ords: 525247.79 - 234377.16

Sheet 3 of 4
Hole Type
RC

Location: Baldock, North Hertfordshire

Level: 65.37

Scale
1:25

Client: Urban & Civic

Dates: 30/11/2023 - 01/12/2023

Logged By
SJF

Well	Water Strikes	Depth (m)	Type /FI	Coring			Depth (m)	Level (m)	Legend	Stratum Description		
				TCR	SCR	RQD						
		9.50 - 11.00	C	100	0	0	12.50	52.87		White with orange brown staining weak medium density CHALK with core disturbance due to vertical / steeply inclined fractures. Bedding fractures are extremely closely to closely spaced undulating rough tight with black speckling. Inclined fractures are undulating rough tight with black speckling.	11	
		11.21 - 11.33										
		11.00 - 12.50		100	59	43				<i>Non-intact between 11.85m and 12.5m.</i>	12	
		12.50 - 14.00		99	27	11				White weak medium density CHALK with core disturbance due to vertical / steeply inclined fractures. Bedding fractures are extremely closely to very closely spaced undulating rough tight with black speckling. Inclined fractures are undulating rough tight with black speckling. <i>Non-intact between 12.58m and 12.7m.</i>	13	
		14.00 - 15.50		99	9	0				13.98 14.00	51.39 51.37	Assessed Zone of Core Loss. Cream with black speckling weak high density CHALK with very closely to closely spaced marl seams. Bedding fractures are extremely closely to very closely spaced undulating rough tight with black speckling. Inclined fractures are undulating rough tight with black speckling.. <i>Non-intact between 14m and 14.2m.</i> <i>Non-intact between 14.34m and 14.5m.</i>
Continued on Next Sheet											15	

Remarks
No groundwater identified





Borehole No.	RO-R2/R3-03
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Sheet 4 of 4
Hole Type
RC

Project No.
2899

Co-ords: 525247.79 - 234377.16

Level: 65.37

Scale
1:25

Dates: 30/11/2023 - 01/12/2023

Logged By
SJF

[illegible]

Remarks	
No groundwater identified	





Rotary Core Log

Borehole No.
RO-R2/R3-04

Project Name: Baldock	Project No. 2899	Co-ords: 525268.07 - 234363.04	Sheet 1 of 4 Hole Type RC
Location: Baldock, North Hertfordshire		Level: 65.86	Scale 1:25
Client: Urban & Civic		Dates: 04/12/2023	Logged By SJF

Well	Water Strikes	Depth (m)	Type /FI	Coring			Depth (m)	Level (m)	Legend	Stratum Description		
				TCR	SCR	RQD						
		N=41 (3,9/9,10,11,11)					0.40	65.46		TOPSOIL: Brown slightly sandy slightly gravelly CLAY. Gravel is sub-angular fine to coarse chalk and flint.	1	
										Light brown and orange brown very sandy slightly gravelly CLAY/ clayey SAND. Gravel is sub-angular fine to medium chalk and occasional flint.		
		1.20 - 2.00					1.20	64.66		No Recovery	2	
		2.00 - 3.50					2.00	63.86		Non-intact Core Recovery: Structureless CHALK composed of white and orange brown silty sandy angular fine to coarse GRAVEL of chalk.	3	
							2.20	63.66		Non-intact Core Recovery: White, grey and black angular fine to coarse GRAVEL of flint.		
							2.35	63.51		Non-intact Core Recovery: Structureless CHALK composed of White mottled orange brown silty angular fine to coarse GRAVEL of weak medium density chalk.		
				77	0	0						
		3.50 - 5.00					3.15	62.71		Assessed Zone of Core Loss.	4	
							3.50	62.36		White mottled orange brown weak medium density CHALK with and core disturbance due to vertical / steeply inclined fractures. Bedding fractures are extremely closely to very closely spaced undulating rough tight clean. Inclined fractures are undulating rough tight clean.		
				92	0	0						
							4.88	60.98		Assessed Zone of Core Loss.	5	
							5.00	60.86		Continued on Next Sheet		

Remarks
No groundwater identified





Rotary Core Log

Borehole No.

RO-R2/R3-04

Sheet 2 of 4

Hole Type
RC

Project Name: Baldock

Project No.
2899

Co-ords: 525268.07 - 234363.04

Location: Baldock, North Hertfordshire

Level: 65.86

Scale
1:25

Client: Urban & Civic

Dates: 04/12/2023

Logged By
SJF

Well	Water Strikes	Depth (m)	Type /FI	Coring			Depth (m)	Level (m)	Legend	Stratum Description			
				TCR	SCR	RQD							
		5.00 - 6.50		87	0	0	6.30	59.56		White mottled orange brown locally black speckled weak medium density CHALK with core disturbance due to vertical / steeply inclined fractures. Bedding fractures are extremely closely to very closely spaced undulating rough tight clean with orange brown staining and black speckling. Inclined fractures are undulating rough tight clean with orange brown staining and black speckling. <u>Non-intact between 5m and 5.12m.</u>	6		
		6.50 - 8.00		100	0	0	6.50	59.36		Assessed Zone of Core Loss.			
										White mottled orange brown and black speckled weak medium density CHALK with core disturbance due to vertical / steeply inclined fractures. Bedding fractures are extremely closely to closely spaced undulating rough tight clean with orange brown staining and black speckling. Inclined fractures are undulating rough tight clean with orange brown staining and black speckling. <u>Non-intact between 6.9m and 7m.</u>	7		
		8.00 - 9.50		87	12	0				<u>Non-intact between 8m and 8.15m.</u>	8		
							9.30	56.56		Assessed Zone of Core Loss.			
								9.50	56.36		White mottled orange brown and black speckled weak medium density CHALK with core disturbance due to vertical / steeply inclined fractures. Bedding fractures are very closely to closely spaced undulating rough tight clean with orange brown staining and grey with black speckling. Inclined fractures are undulating rough tight clean with orange brown staining and grey with black speckling.	9	

Continued on Next Sheet

10

Continued on Next Sheet

Remarks
No groundwater identified





Rotary Core Log

Borehole No.

RO-R2/R3-04

Sheet 3 of 4

Hole Type
RC

Project Name: Baldock

Project No.
2899

Co-ords: 525268.07 - 234363.04

Location: Baldock, North Hertfordshire

Level: 65.86

Scale
1:25

Client: Urban & Civic

Dates: 04/12/2023

Logged By
SJF

Well	Water Strikes	Depth (m)	Type /FI	Coring			Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD					
11		9.50 - 11.00	C	100	0	0	12.50	53.36		White mottled orange brown and black speckled weak medium density CHALK with core disturbance due to vertical / steeply inclined fractures. Bedding fractures are very closely to closely spaced undulating rough tight clean with orange brown staining and grey with black speckling. Inclined fractures are undulating rough tight clean with orange brown staining and grey with black speckling.	11
		11.00 - 12.50		100	0	0					
		12.50 - 14.00		85	43	30					
		13.88 - 14.11									
		14.00 - 15.50		93	0	0					
14							13.78	52.08		White weak medium density CHALK with light brown extremely closely to closely spaced wispy marl seams with some core disturbance due to inclined fractures. Bedding fractures are very closely to closely spaced undulating rough tight clean with light grey brown staining and black speckling. Inclined fractures are undulating rough tight clean with light grey brown staining and black speckling. <i>Non-intact between 12.5m and 12.58m.</i> <i>Non-intact between 12.63m and 12.8m.</i> <i>Non-intact between 12.83m and 12.92m.</i> <i>Non-intact between 13.4m and 13.78m.</i>	13
							14.00	51.86			
							14.28	51.58			
15							14.66	51.20		Assessed Zone of Core Loss. Cream weak medium density CHALK with core disturbance due to vertical / steeply inclined fractures. Bedding fractures are very closely to closely spaced undulating rough tight clean. Inclined fractures are undulating rough tight clean. <i>Non-intact between 14m and 14.28m.</i> Non-intact Core Recovery: Structureless CHALK composed of cream silty sub-angular to angular fine GRAVEL of chalk. Cream weak medium density CHALK with core disturbance due to vertical / steeply inclined fractures. Bedding fractures are very closely to closely spaced undulating rough tight clean. Inclined fractures are undulating rough tight clean.	14

Continued on Next Sheet

Remarks
No groundwater identified





Rotary Core Log

Borehole No.

RO-R2/R3-04

Sheet 4 of 4

Hole Type
RC

Project Name: Baldock

Project No.
2899

Co-ords: 525268.07 - 234363.04

Location: Baldock, North Hertfordshire

Level: 65.86

Scale
1:25

Client: Urban & Civic

Dates: 04/12/2023

Logged By
SJF

Well	Water Strikes	Depth (m)	Type /FI	Coring			Depth (m)	Level (m)	Legend	Stratum Description	
				TCR	SCR	RQD					
							15.39	50.47		Cream weak medium density CHALK with core disturbance due to vertical / steeply inclined fractures. Bedding fractures are very closely to closely spaced undulating rough tight clean. Inclined fractures are undulating rough tight clean. Assessed Zone of Core Loss. End of Borehole at 15.50m	
							15.50	50.36			
											16
											17
											18
											19
											20

Remarks

No groundwater identified





Windowless Sample Log

Borehole No.
WS-R2/R3-01
Sheet 1 of 1

Project Name:	Baldock	Project No.	2899	Co-ords:	525224E - 234572N	Hole Type	WLS
Location:	Baldock, North Hertfordshire			Level:	62.99	Scale	1:25
Client:	Urban & Civic			Dates:	16/11/2023	Logged By	HB

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.10 - 0.15	D		0.30	62.69		Grass over TOPSOIL - Brown slightly sandy slightly gravelly CLAY. Gravel is fine to coarse, angular to sub-angular of chert and chalk.	
		0.50 - 0.60	ES					Loose brown mottled white gravelly SAND. Gravel is fine to coarse, angular to sub-angular of flint and chalk.	
		1.00	SPT	N=19 (4,5/4,4,6,5)	1.00	61.99		Structureless CHALK composed of white mottled cream gravelly CLAY. Gravel consist of very weak medium density angular to sub-angular fine to coarse chalk, Grade D.	1
		1.20 - 1.30	D						
		2.00 2.10 - 2.20	SPT D	N=23 (7,7/6,5,6,6)					2
		3.00	SPT	N=69 (9,13/14,12,20,23)	3.45	59.54			3
								End of Borehole at 3.45m	4
									5

Remarks
No groundwater encountered.





Windowless Sample Log

Borehole No.
WS-R2-02

Sheet 1 of 1

Project Name: Baldock

Project No.
2899

Co-ords: 525244E - 234477N

Hole Type
WLS

Location: Baldock, North Hertfordshire

Level: 64.19

Scale
1:25

Client: Urban & Civic

Dates: 16/11/2023

Logged By
HB

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.10 - 0.15	ES	N=25 (2,6/7,6,6,6)	0.30	63.89		Grass over TOPSOIL - Brown slightly sandy slightly gravelly CLAY. Gravel is fine to coarse, angular to sub-angular of chert.	1
		0.40 - 0.50	D					Loose orangish brown gravelly SAND. Gravel is fine to coarse, angular to sub-angular of chalk and flint.	
		0.60			0.60	63.59		Loose yellowish brown slightly gravelly slightly silty SAND. Gravel is fine to coarse, angular to sub-angular of chalk and flint.	
		0.90 - 1.00	D					Firm brown and white mottled slightly gravelly slightly sandy CLAY. Gravel is fine to coarse, angular to sub-angular of chalk.	
		1.00	SPT		1.10	63.09		Loose yellowish brown gravelly SAND. Gravel is fine to coarse, angular to sub-angular of chalk and flint.	
		1.10 - 1.20	D	N=9 (2,3/2,2,3,2)				Structureless CHALK composed of white mottled cream gravelly CLAY. Gravel consist of very weak medium density angular to sub-angular fine to coarse chalk, Grade D.	2
		1.40 - 1.50	D	1.30	62.89				
		1.80							
		2.00	SPT	2.40 - 2.50	62.39				
		2.40 - 2.50	D						
		3.00	SPT	N=9 (2,2/2,2,2,3)	3.45	60.74		End of Borehole at 3.45m	3
									4
									5

Remarks

No groundwater encountered.





Windowless Sample Log

Borehole No.
WS-R2-03

Sheet 1 of 1

Project Name: Baldock

Project No.
2899

Co-ords: 525266E - 234369N

Hole Type
WLS

Location: Baldock, North Hertfordshire

Level: 65.78

Scale
1:25

Client: Urban & Civic

Dates: 07/12/2023

Logged By
HB

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.10 - 0.15	ES		0.30	65.48		Grass over TOPSOIL - Brown slightly sandy slightly gravelly CLAY. Gravel is fine to coarse, angular to sub-angular of chert.	1
		0.40 - 1.00	D					Orangish brown slightly gravelly SAND. Gravel is sub-angular fine to coarse flint.	
		1.00	SPT	N=49 (3,5/11,13,13,12)	1.20	64.58		Structureless CHALK composed of cream and white mottled gravelly SILT. Gravel consist of very weak medium density angular to sub-angular fine to coarse chalk, Grade D.	
		1.40 - 1.50	D					Yellowish brown gravelly SAND. Gravel is anuglar fine to coarse chalk and flint.	
		1.70 - 1.80	D		2.20	63.58		Structureless CHALK composed of cream and white mottled gravelly SILT. Gravel consist of very weak medium density angular to sub-angular fine to coarse chalk, Grade D.	2
		2.00	SPT	N=26 (7,8/9,8,5,4)				Structureless CHALK composed of cream and white mottled gravelly SILT. Gravel consist of very weak medium density angular to sub-angular fine to coarse chalk, Grade D.	
		2.40 - 2.50	D		3.45	62.33		Structureless CHALK composed of cream and white mottled gravelly SILT. Gravel consist of very weak medium density angular to sub-angular fine to coarse chalk, Grade D.	3
		3.00	SPT	N=13 (2,2/2,4,3,4)				Structureless CHALK composed of cream and white mottled gravelly SILT. Gravel consist of very weak medium density angular to sub-angular fine to coarse chalk, Grade D.	
									4
								End of Borehole at 3.45m	5

Remarks

No groundwater identified





Windowless Sample Log

Borehole No.
WS-R2-04

Sheet 1 of 1

Project Name: Baldock

Project No.
2899

Co-ords: 525281E - 234306N

Hole Type
WLS

Location: Baldock, North Hertfordshire

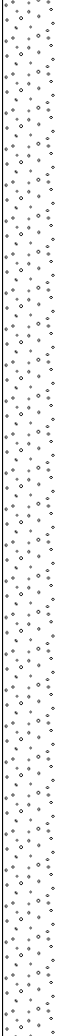
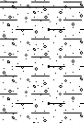
Level: 67.85

Scale
1:25

Client: Urban & Civic

Dates: 06/12/2023

Logged By
HB

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description			
		Depth (m)	Type	Results							
		0.10 - 0.15	D	N=29 (3,6/7,6,8,8)	0.30	67.55		Grass over TOPSOIL - Brown slightly sandy slightly gravelly CLAY. Gravel is fine to coarse, angular to sub-angular of chert.	1		
		0.40 - 0.50	ES			67.25		Soft to firm brown slightly sandy slightly gravelly CLAY. Gravel is sub-angular fine to coarse flint.			
		0.90 - 1.00	D		1.00	66.85		Firm light brown slightly sandy slightly gravelly CLAY. Gravel is sub-rounded fine to coarse chalk.			
		1.00	SPT								
		1.20 - 1.30	D	N=20 (5,3/2,6,5,7)	1.50	66.35		Light brown mottled white silty sub-angular GRAVEL of chalk and flint.	2		
		1.60 - 1.70	D								
		2.00	SPT		N=17 (4,3/5,3,4,5)	3.45	64.40			Structureless CHALK composed of cream, brown and white mottled gravelly SILT. Gravel consist of very weak medium density angular to sub-angular fine to coarse chalk, Grade D.	3
							End of Borehole at 3.45m	4			
								5			

Remarks
No groundwater identified





Windowless Sample Log

Borehole No.
WS-R3-02
Sheet 1 of 1

Project Name: Baldock

Project No.
2899

Co-ords: 525211E - 234493N

Hole Type
WLS

Location: Baldock, North Hertfordshire

Level: 63.86

Scale
1:25

Client: Urban & Civic

Dates: 16/11/2023

Logged By
HB

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.10 - 0.15	D	N=33 (8,10/12,9,7,5)	0.30	63.56		Grass over TOPSOIL - Brown slightly sandy slightly gravelly CLAY. Gravel is fine to coarse, angular to sub-angular of chert.	1
		0.50 - 0.60	ES		0.90	62.96		Loose brown mottled white gravelly SAND. Gravel is fine to coarse, angular to sub-angular of chalk and flint.	
		1.00	SPT				Firm white mottled brown slightly gravelly slightly sandy CLAY. Gravel is fine to coarse, angular to sub-angular of chalk.		
		1.20 - 1.30	D						
		1.70 - 1.80	D	N=38 (4,4/9,11,10,8)	1.50	62.36		Structureless CHALK composed of white mottled cream and brown gravelly CLAY. Gravel consist of very weak medium density angular to sub-angular fine to coarse chalk, Grade D.	2
		2.00	SPT						
		2.50 - 2.60	D						
		3.00	SPT	N=69 (12,23/22,12,15,20)	3.38	60.48		End of Borehole at 3.38m	3
									4
									5

Remarks

Potential groundwater at 2.00m





Windowless Sample Log

Borehole No.
WS-R3-03
Sheet 1 of 1

Project Name: Baldock

Project No.
2899

Co-ords: 525243E - 234356N

Hole Type
WLS

Location: Baldock, North Hertfordshire

Level: 65.90

Scale
1:25

Client: Urban & Civic

Dates: 07/12/2023

Logged By
HB

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description					
		Depth (m)	Type	Results									
		0.05 - 0.10	D	N=27 (3,4/5,6,7,9)	0.15	65.75		Grass over TOPSOIL - Brown slightly sandy slightly gravelly CLAY. Gravel is fine to coarse, angular to sub-angular of chert.	1				
		0.40 - 0.50	ES			65.10	Orangish brown sandy CLAY.						
		0.90 - 1.00	D								Yellowish brown gravelly SAND. Gravel is anuglar fine to coarse chalk and flint.		
		1.00	SPT										
		1.20 - 1.50	D	N=33 (6,7/8,8,9,8)	1.60	64.30		Structureless CHALK composed of cream, brown and white mottled gravelly SILT. Gravel consist of very weak medium density angular to sub-angular fine to coarse chalk and flint, Grade D.	2				
		2.00	SPT		1.90	64.00		Yellowish brown mottled white gravelly SAND. Sand is fine. Gravel is angular fine to coarse flint and chalk.					
		2.30 - 2.40	D										
		3.00	SPT										
		3.20 - 3.45	D										
					3.45	62.45		End of Borehole at 3.45m			3		
											4		
											5		

Remarks
No groundwater identified





Windowless Sample Log

Borehole No.
WS-R3-04

Sheet 1 of 1

Project Name: Baldock

Project No.
2899

Co-ords: 525252E - 234320N

Hole Type
WLS

Location: Baldock, North Hertfordshire

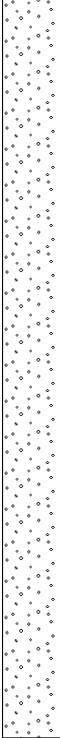
Level:

Scale
1:25

Client: Urban & Civic

Dates: 07/12/2023

Logged By
HB

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.10 - 0.15	D	N=12 (1,2/2,3,3,4)	0.30			Grass over TOPSOIL - Brown slightly sandy slightly gravelly CLAY. Gravel is fine to coarse, angular to sub-angular of chert.	1
		0.40 - 0.50	D					Orangish brown slightly gravelly SAND. Gravel is sub-angular fine to coarse flint.	
		1.00 - 1.10 1.00	ES SPT				1.00		
		1.60 - 1.70	D	N=52 (10,12/17,13,12,10)	2.45				2
		2.00 - 2.10 2.00	D SPT						
		End of Borehole at 2.45m							3
									4
									5

Remarks

No groundwater identified





Trial Pit Log

TrialPit No
TP-R2-01
Sheet 1 of 1

Project Name: Baldock	Project No. 2899	Co-ords: 525206.19 - 234653.88 Level: 63.26	Date 16/11/2023
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Location: Baldock, North Hertfordshire	Dimensions (m): 3.00 Depth 3.40	Scale 1:20 Logged RK
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Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.10 - 0.15	ES		0.25	63.01		Brown friable slightly sandy slightly gravelly clayey TOPSOIL with low root content. Gravel is angular to sub angular fine to coarse of chalk.	
	0.40 - 0.50	B		0.70	62.56		Very soft to soft light brown slightly sandy very gravelly CLAY. Gravel is angular to sub angular fine to coarse of chalk and flint.	
	1.00 - 1.20	B					Structureless CHALK composed of sub angular to angular mainly medium to coarse GRAVEL with high cobble content. Gravel is very weak to weak low to medium density white. Matrix is uncompact off white. Cobbles are very weak to weak low to medium density white.	1
	2.00 - 2.20	D						2
	3.00 - 3.20	D						3
				3.40	59.86		End of Pit at 3.40m	4

Remarks: No groundwater encountered.	
Stability: Stable	
Plant: 10T tracked excavator	



Trial Pit Log

Trial Pit No
TP-R3-01
Sheet 1 of 1

Project Name: Baldock	Project No. 2899	Co-ords: 525219.62 - 234641.41 Level: 63.09	Date 16/11/2023
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Location: Baldock, North Hertfordshire	Dimensions (m): 3.00	Scale 1:20
Client: Urban & Civic	Depth 3.50	Logged RK

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.10 - 0.15	ES					Brown friable slightly sandy slightly gravelly clayey TOPSOIL with low root content. Gravel is angular to sub angular fine to coarse of chalk.	
	0.40 - 0.50	B		0.30	62.79		Structureless CHALK recovered as sandy sub angular and sub rounded fine to coarse GRAVEL. Gravel is very weak and weak low and medium density light brown and cream. Matrix is light brown.	
				0.70	62.39		Structureless CHALK composed of sub angular to angular mainly medium to coarse GRAVEL with high cobble content. Gravel is very weak to weak low to medium density white. Matrix is uncompact off light cream. Cobbles are very weak to weak low to medium density light cream.	1
	1.40 - 1.50	B						2
	2.50 - 2.60	D						3
				3.50	59.59		End of Pit at 3.50m	4

Remarks: No groundwater encountered.	
Stability: Stable	
Plant: 10T tracked excavator	



Trial Pit Log

TrialPit No
TP-R2-02
Sheet 1 of 1

Project Name: Baldock	Project No. 2899	Co-ords: 525219.48 - 234590.95 Level: 62.73	Date 16/11/2023
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Location: Baldock, North Hertfordshire	Dimensions (m): 3.00	Scale 1:20
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Client: Urban & Civic	Depth 3.50	Logged RK
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Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.10 - 0.15	ES					Brown friable slightly sandy slightly gravelly clayey TOPSOIL with low root content. Gravel is angular to sub angular fine to coarse of chalk. TOPSOIL	
				0.30	62.43		Very soft to soft light brown slightly sandy very gravelly CLAY. Gravel is angular to sub angular fine to coarse of chalk and flint.	
	0.50 - 0.60	D					Structureless CHALK recovered as slightly sandy sub angular and sub rounded fine to coarse GRAVEL. Gravel is very weak and weak low and medium density light brown and cream. Matrix is light brown.	1
	0.80 - 1.00	B		0.70	62.03		Structureless CHALK composed of sub angular to angular mainly medium to coarse GRAVEL with high cobble content. Gravel is very weak to weak low to medium density white. Matrix is uncompact off light cream. Cobbles are very weak to weak low to medium density light cream.	2
				1.40	61.33		Structureless CHALK composed of sub angular to angular mainly medium to coarse GRAVEL with high cobble content. Gravel is very weak to weak low to medium density white. Matrix is uncompact off light cream. Cobbles are very weak to weak low to medium density light cream.	3
	2.80 - 3.00	D					Structureless CHALK composed of sub angular to angular mainly medium to coarse GRAVEL with high cobble content. Gravel is very weak to weak low to medium density white. Matrix is uncompact off light cream. Cobbles are very weak to weak low to medium density light cream.	4
				3.50	59.23		End of Pit at 3.50m	

Remarks: No groundwater encountered	AGS
Stability: Stable	
Plant: 10T tracked excavator	



Trial Pit Log

TrialPit No
TP-R3-02
Sheet 1 of 1

Project Name: Baldock	Project No. 2899	Co-ords: 525234.05 - 234604.95 Level: 62.85	Date 16/11/2023
Location: Baldock, North Hertfordshire		Dimensions (m): 3.00 Depth 3.50	Scale 1:20 Logged RK
Client: Urban & Civic			

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.10 - 0.15	D		0.30	62.55		Brown friable slightly sandy slightly gravelly clayey TOPSOIL with low root content. Gravel is angular to sub angular fine to coarse of chalk. TOPSOIL	1
	0.50 - 0.60	ES					Very soft to soft light brown slightly sandy very gravelly CLAY. Gravel is angular to sub angular fine to coarse of chalk and flint.	
	1.30 - 1.40	B		1.70	61.15		Structureless CHALK composed of sub angular to angular mainly medium to coarse GRAVEL with high cobble content. Gravel is very weak to weak low to medium density white. Matrix is uncompact off light cream. Cobbles are very weak to weak low to medium density light cream.	2
	2.80 - 3.00	D		3.50	59.35		End of Pit at 3.50m	3
								4

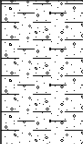
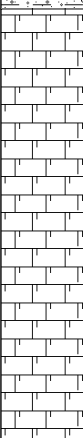
Remarks: No groundwater encountered.	
Stability: Stable	
Plant: 10T tracked excavator	



TrialPit No
**TP-R2/
R3-03**
Sheet 1 of 1

Date
16/11/2023

Scale 1:20
Logged RK

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description		
	Depth	Type	Results						
	0.10 - 0.15	D		0.30	63.09		Brown friable slightly sandy slightly gravelly clayey TOPSOIL with low root content. Gravel is angular to sub angular fine to coarse of chalk.		
	0.40 - 0.50	ES					Very soft to soft light brown slightly sandy very gravelly CLAY. Gravel is angular to sub angular fine to coarse of chalk and flint.		
	1.40 - 1.50	D		0.70	62.69		Structureless CHALK recovered as slightly sandy sub angular and sub rounded fine to coarse GRAVEL. Gravel is very weak and weak low and medium density light brown and cream. Matrix is light brown.		
						1.90	61.49		Structureless CHALK composed of sub angular to angular mainly medium to coarse GRAVEL with high cobble content. Gravel is very weak to weak low to medium density white. Matrix is uncompact off white. Cobbles are very weak to weak low to medium density white.
								2.50 - 2.60	B





Trial Pit Log

TrialPit No
TP-R2-04
Sheet 1 of 1

Project Name: Baldock	Project No. 2899	Co-ords: 525238.49 - 234499.90 Level: 64.04	Date 16/11/2023
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Location: Baldock, North Hertfordshire	Dimensions (m): 3.00	Scale 1:20
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Client: Urban & Civic	Depth 3.50	0.50	Logged RK
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Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.10 - 0.15	ES					Brown friable slightly sandy slightly gravelly clayey TOPSOIL with low root content. Gravel is angular to sub angular fine to coarse of chalk. TOPSOIL	
	0.40 - 0.50	D		0.30	63.74		Very soft to soft light brown slightly sandy very gravelly CLAY. Gravel is angular to sub angular fine to coarse of chalk and flint.	
	1.00 - 1.20	B		0.70	63.34		Structureless CHALK recovered as sandy sub angular and sub rounded fine to coarse GRAVEL. Gravel is very weak and weak low and medium density light brown and cream. Matrix is light brown.	1
	2.50 - 2.60	D		1.60	62.44		Structureless CHALK composed of sub angular to angular mainly medium to coarse GRAVEL with high cobble content. Gravel is very weak to weak low to medium density white. Matrix is uncompact off white. Cobbles are very weak to weak low to medium density white.	2
				3.50	60.54		End of Pit at 3.50m	3
								4

Remarks: No groundwater encountered.	Stability: Stable Plant: 10T tracked excavator	
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Trial Pit Log

Trial Pit No
TP-R3-04
Sheet 1 of 1

Project Name: Baldock	Project No. 2899	Co-ords: 525210.93 - 234485.13 Level: 63.85	Date 17/11/2023
Location: Baldock, North Hertfordshire		Dimensions (m): 3.00 Depth 3.40	Scale 1:20
Client: Urban & Civic			Logged RK

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.10 - 0.15	ES		0.30	63.55		Brown friable slightly sandy slightly gravelly clayey TOPSOIL with low root content. Gravel is angular to sub angular fine to coarse of chalk. TOPSOIL	1
	0.60 - 0.70	D					Structureless CHALK recovered as sandy sub angular and sub rounded fine to coarse GRAVEL. Gravel is very weak and weak low and medium density light brown and cream. Matrix is light brown.	
	1.40 - 1.50	B		1.30	62.55		Structureless CHALK composed of sub angular to angular mainly medium to coarse GRAVEL with high cobble content. Gravel is very weak to weak low to medium density white. Matrix is uncompact off white. Cobbles are very weak to weak low to medium density white.	2
				3.40	60.45		End of Pit at 3.40m	3
								4

Remarks: No groundwater encountered.	
Stability: Stable	
Plant: 10T tracked excavator	



Trial Pit Log

TrialPit No
**TP-R2-05/
R3-06**
Sheet 1 of 1

Project Name: Baldock	Project No. 2899	Co-ords: 525223.29 - 234447.34 Level: 64.35	Date 17/11/2023
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Location: Baldock, North Hertfordshire	Dimensions (m): 3.00 Depth 3.50	Scale 1:20 Logged RK
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Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.10 - 0.15	D					Brown friable slightly sandy slightly gravelly clayey TOPSOIL with low root content. Gravel is angular to sub angular fine to coarse of chalk.	
	0.40 - 0.50	ES		0.30	64.05		Very soft to soft light brown slightly sandy very gravelly CLAY. Gravel is angular to sub angular fine to coarse of chalk and flint.	
	1.00 - 1.20	B						1
				1.40	62.95		Structureless CHALK recovered as sandy sub angular and sub rounded fine to coarse GRAVEL. Gravel is very weak and weak low and medium density light brown and cream. Matrix is light brown.	
				2.00	62.35		Structureless CHALK composed of sub angular to angular mainly medium to coarse GRAVEL with high cobble content. Gravel is very weak to weak low to medium density white. Matrix is uncompact off white. Cobbles are very weak to weak low to medium density white.	2
	2.50 - 2.60	D						3
				3.50	60.85		End of Pit at 3.50m	4

Remarks: No groundwater encountered.	Stability: Stable Plant: 10T tracked excavator	
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Trial Pit Log

TrialPit No
TP-R3-05
Sheet 1 of 1

Project Name: Baldock				Project No. 2899		Co-ords: 525240.48 - 234464.47 Level: 64.27		Date 17/11/2023	
Location: Baldock, North Hertfordshire						Dimensions (m): 3.00		Scale 1:20	
Client: Urban & Civic						Depth 3.40		Logged RK	
Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description		
	Depth	Type	Results						
	0.10 - 0.15	D		0.30	63.97		Brown friable slightly sandy slightly gravelly clayey TOPSOIL with low root content. Gravel is angular to sub angular fine to coarse of chalk. TOPSOIL		
	0.40 - 0.50	ES					Very soft to soft light brown slightly sandy very gravelly CLAY. Gravel is angular to sub angular fine to coarse of chalk and flint.		
							Structureless CHALK composed of sub angular to angular mainly medium to coarse GRAVEL with high cobble content. Gravel is very weak to weak low to medium density white. Matrix is uncompact off white. Cobbles are very weak to weak low to medium density white.		
	1.40 - 1.50	D		0.60	63.67				
	2.00 - 2.30	B							
				3.40	60.87		End of Pit at 3.40m		

Remarks: No groundwater encountered.

Stability: Stable
Plant: 10T tracked excavator



Trial Pit Log

TrialPit No
TP-R2-06
Sheet 1 of 1

Project Name: Baldock	Project No. 2899	Co-ords: 525273.41 - 234458.38 Level: 64.50	Date 17/11/2023
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Location: Baldock, North Hertfordshire	Dimensions (m): 3.00	Scale 1:20
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Client: Urban & Civic	Depth 3.50	0.50	Logged RK
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Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.10 - 0.15	ES		0.25	64.25		Brown friable slightly sandy slightly gravelly clayey TOPSOIL with low root content. Gravel is angular to sub angular fine to coarse of chalk. TOPSOIL	
	0.40 - 0.50	D		0.60	63.90		Very soft to soft light brown slightly sandy very gravelly CLAY. Gravel is angular to sub angular fine to coarse of chalk and flint.	
	1.00 - 1.20	B		1.90	62.60		Structureless CHALK recovered as sandy silty sub angular and sub rounded fine to coarse GRAVEL. Gravel is very weak and weak low and medium density light brown and cream. Matrix is light brown.	1
	2.50 - 2.60	B		3.50	61.00		Structureless CHALK composed of sub angular to angular mainly medium to coarse GRAVEL with high cobble content. Gravel is very weak to weak low to medium density white. Matrix is uncompact off white. Cobbles are very weak to weak low to medium density white.	2
							End of Pit at 3.50m	3
								4

Remarks: No groundwater encountered.	Stability: Stable Plant: 10T tracked excavator	
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Trial Pit Log

Trial Pit No
**TP-R2/
R3-07**
Sheet 1 of 1

Project Name: Baldock	Project No. 2899	Co-ords: 525264.77 - 234379.66 Level: 65.60	Date 29/11/2023
Location: Baldock, North Hertfordshire		Dimensions (m): 2.20 Depth 2.60	Scale 1:20 Logged
Client: Urban & Civic			

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.15	ES					Brown friable slightly sandy slightly gravelly clayey TOPSOIL. Gravel is angular to sub angular fine to medium chalk.	
	0.40	D		0.30	65.30		Light brown friable very sandy slightly gravelly CLAY/ Clayey SAND. Gravel is fine to medium subangular chalk.	
				0.50	65.10		Brownish cream very sandy gravel of fine to coarse CHALK with rare flint/chert.	
				1.40	64.20		Creamy white clayey structureless CHALK. Recovered as fine to coarse angular gravel. <i>1.40 - 1.60m bgl - Band of flint/ chert.</i>	1
	1.70	B						2
				2.60	63.00		End of Pit at 2.60m	3
								4

Remarks: No groundwater encountered.	
Stability:	
Plant:	



Trial Pit Log

Trial Pit No
**TP-R2/
R3-08**
Sheet 1 of 1

Project Name: Baldock	Project No. 2899	Co-ords: 525265.06 - 234346.73 Level: 66.42	Date 29/11/2023
Location: Baldock, North Hertfordshire		Dimensions (m): 2.50 Depth 2.60	Scale 1:20 Logged
Client: Urban & Civic			

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
	Depth	Type	Results				
	0.10	ES		0.30	66.12		Brown friable slightly sandy slightly gravelly clayey TOPSOIL. Gravel is angular to sub angular fine to medium chalk.
	0.60	ES		0.70	65.72		Light brown friable very sandy slightly gravelly CLAY/very clayey SAND. Gravel is fine to medium subangular chalk.
	1.40	B		2.60	63.82		Light brown very sandy GRAVEL. Gravel is fine to coarse chalk and coarse flint.
							End of Pit at 2.60m

Remarks: No groundwater encountered.	
Stability:	
Plant:	



Trial Pit Log

Trial Pit No
**TP-R2/
R3-09**
Sheet 1 of 1

Project Name: Baldock	Project No. 2899	Co-ords: 525288.02 - 234333.94 Level: 66.76	Date 29/11/2023
Location: Baldock, North Hertfordshire		Dimensions (m): 2.40 Depth 2.60	Scale 1:20 Logged
Client: Urban & Civic			

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
	Depth	Type	Results				
	0.15	ES		0.25	66.51		Brown friable slightly sandy slightly gravelly clayey TOPSOIL. Gravel is angular to sub angular fine to medium chalk.
	0.65	B					Light brown friable very sandy slightly gravelly CLAY/ Clayey SAND. Gravel is fine to medium subangular chalk. Rare rounded chalk cobbles.
	1.60	ES		2.10	64.66		Brownish grey very sandy Gravel. Gravel is fine to coarse chalk and coarse flint.
				2.60	64.16		End of Pit at 2.60m

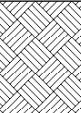
Remarks: No groundwater encountered.	
Stability:	
Plant:	



Trial Pit Log

Trial Pit No
**TP-R2/
R3-10**
Sheet 1 of 1

Project Name: Baldock	Project No. 2899	Co-ords: 525280.40 - 234298.46 Level: 68.21	Date 29/11/2023
Location: Baldock, North Hertfordshire		Dimensions (m): 2.20 Depth 2.50	Scale 1:20
Client: Urban & Civic			Logged

Water Strike	Samples & In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
	Depth	Type	Results				
	0.15	ES		0.30 0.40	67.91 67.81		Brown friable slightly sandy slightly gravelly clayey TOPSOIL. Gravel is angular to sub angular fine to medium chalk.
	0.80	B					Light brown friable very sandy slightly gravelly CLAY/very clayey SAND. Gravel is fine to medium subangular chalk and coarse flint.
							Light brown and grey very sandy GRAVEL of fine to coarse chalk and coarse flint.
	2.20	ES		2.50	65.71		
							End of Pit at 2.50m

Remarks: No groundwater encountered.

Stability:

Plant:



APPENDIX D

CHEMICAL ANALYSIS

Stephen Fisk
The Shadbolt Group
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Analytical Report Number : 23-75868-2

Replaces Analytical Report Number: 23-75868, issue no. 1
Additional analysis undertaken.
TPH: CWG as per customer request

Project / Site name:	Baldock Bridges	Samples received on:	12/12/2023
Your job number:	2899	Samples instructed on/ Analysis started on:	20/12/2023
Your order number:	2803	Analysis completed by:	06/02/2024
Report Issue Number:	2	Report issued on:	16/02/2024
Samples Analysed:	8 soil samples		

Signed: _____

Adam Fenwick
Technical Reviewer
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 23-75868
Project / Site name: Baldock Bridges
Your Order No: 2803

Lab Sample Number				2916340	2916341	2916342	2916343	2916344
Sample Reference				WS-R2/R3-04	TP-R1-10	TP-R1-08	TP-R2/R3-08	TP-R2/R3-10
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.00-1.10	0.40	0.15	0.10	0.15
Date Sampled				07/12/2023	08/12/2023	08/12/2023	08/12/2023	08/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	68	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	16	15	18	17	15
Total mass of sample received	kg	0.001	NONE	0.4	0.3	0.3	0.3	0.3

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	EWS	EWS	EWS	EWS	EWS

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.2	8.3	8	8	8.1
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0139	0.0129	0.0136	0.0124	0.0779
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	13.9	12.9	13.6	12.4	77.9
Organic Matter (automated)	%	0.1	MCERTS	0.6	1.7	3.5	3.9	3.1

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.05	0.09
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.32	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.29	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	2.8	0.32
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.66	0.07
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	0.05	0.11	3.7	1.2
Pyrene	mg/kg	0.05	MCERTS	< 0.05	0.05	0.12	3.1	1.1
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.05	1.7	0.78
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.07	1.6	0.75
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	0.1	1.9	1.1
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	0.05	0.87	0.44
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.07	1.7	0.9
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.05	0.78	0.52
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.25	0.14
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.08	0.98	0.61

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	< 0.80	< 0.80	< 0.80	20.8	8.03
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	9.5	4.9	8.2	13	13
Boron (water soluble)	mg/kg	0.2	MCERTS	0.6	1.3	1	0.8	0.3
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	0.4	0.4	0.5
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	16	7	11	17	17
Copper (aqua regia extractable)	mg/kg	1	MCERTS	10	9.9	25	24	26
Lead (aqua regia extractable)	mg/kg	1	MCERTS	7.9	13	36	63	65
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	15	6.6	9.8	15	16
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	33	28	66	120	120

Monoaromatics & Oxygenates

Benzene	µg/kg	5	MCERTS	-	-	-	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	-	-	-	< 5.0	< 5.0

Analytical Report Number: 23-75868
Project / Site name: Baldock Bridges
Your Order No: 2803

Lab Sample Number				2916340	2916341	2916342	2916343	2916344
Sample Reference				WS-R2/R3-04	TP-R1-10	TP-R1-08	TP-R2/R3-08	TP-R2/R3-10
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.00-1.10	0.40	0.15	0.10	0.15
Date Sampled				07/12/2023	08/12/2023	08/12/2023	08/12/2023	08/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Ethylbenzene	µg/kg	5	MCERTS	-	-	-	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	-	-	-	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	-	-	-	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	-	-	-	< 5.0	< 5.0

Petroleum Hydrocarbons

TPH C10 - C40 EH_CU_ID_TOTAL	mg/kg	10	MCERTS	< 10	< 10	< 10	24	46
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TPH-CWG - Aliphatic >EC5 - EC6 HS_ID_AL	mg/kg	0.02	NONE	-	-	-	< 0.020	< 0.020
TPH-CWG - Aliphatic >EC6 - EC8 HS_ID_AL	mg/kg	0.02	NONE	-	-	-	< 0.020	< 0.020
TPH-CWG - Aliphatic >EC8 - EC10 HS_ID_AL	mg/kg	0.05	NONE	-	-	-	< 0.050	< 0.050
TPH-CWG - Aliphatic >EC10 - EC12 EH_CU_ID_AL	mg/kg	1	MCERTS	-	-	-	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 EH_CU_ID_AL	mg/kg	2	MCERTS	-	-	-	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21 EH_CU_ID_AL	mg/kg	8	MCERTS	-	-	-	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35 EH_CU_ID_AL	mg/kg	8	MCERTS	-	-	-	< 8.0	24
TPH-CWG - Aliphatic (EC5 - EC35) EH_CU+HS_ID_AL	mg/kg	10	NONE	-	-	-	< 10	25

TPH-CWG - Aromatic >EC5 - EC7 HS_ID_AR	mg/kg	0.01	NONE	-	-	-	< 0.010	< 0.010
TPH-CWG - Aromatic >EC7 - EC8 HS_ID_AR	mg/kg	0.01	NONE	-	-	-	< 0.010	< 0.010
TPH-CWG - Aromatic >EC8 - EC10 HS_ID_AR	mg/kg	0.05	NONE	-	-	-	< 0.050	< 0.050
TPH-CWG - Aromatic >EC10 - EC12 EH_CU_ID_AR	mg/kg	1	MCERTS	-	-	-	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16 EH_CU_ID_AR	mg/kg	2	MCERTS	-	-	-	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21 EH_CU_ID_AR	mg/kg	10	MCERTS	-	-	-	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35 EH_CU_ID_AR	mg/kg	10	MCERTS	-	-	-	15	18
TPH-CWG - Aromatic (EC5 - EC35) EH_CU+HS_ID_AR	mg/kg	10	NONE	-	-	-	24	21

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 23-75868
Project / Site name: Baldock Bridges
Your Order No: 2803

Lab Sample Number				2916345	2916346	2916347
Sample Reference				TP-R4-07	TP-R5-08	TP-R5-09
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				0.15	0.20	0.50
Date Sampled				08/12/2023	08/12/2023	08/12/2023
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status			
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	19	16	13
Total mass of sample received	kg	0.001	NONE	0.3	0.3	0.3

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	EWS	EWS	EWS

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.2	8.3	8.3
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0105	0.01	0.0169
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	10.5	10	16.9
Organic Matter (automated)	%	0.1	MCERTS	4.8	4.4	2.3

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	0.07	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.13	0.17	< 0.05
Pyrene	mg/kg	0.05	MCERTS	0.14	0.17	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.06	0.07	< 0.05
Chrysene	mg/kg	0.05	MCERTS	0.07	0.13	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.11	0.14	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.07	0.11	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	0.08	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	0.13	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	< 0.80	1.12	< 0.80
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	13	12	11
Boron (water soluble)	mg/kg	0.2	MCERTS	0.8	0.7	1.8
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	0.5	0.4
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	20	32	22
Copper (aqua regia extractable)	mg/kg	1	MCERTS	23	28	11
Lead (aqua regia extractable)	mg/kg	1	MCERTS	62	70	16
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	15	18	17
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	1.1	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	120	93	55

Monoaromatics & Oxygenates

Benzene	µg/kg	5	MCERTS	-	-	-
Toluene	µg/kg	5	MCERTS	-	-	-

Analytical Report Number: 23-75868
 Project / Site name: Baldock Bridges
 Your Order No: 2803

Lab Sample Number				2916345	2916346	2916347
Sample Reference				TP-R4-07	TP-R5-08	TP-R5-09
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				0.15	0.20	0.50
Date Sampled				08/12/2023	08/12/2023	08/12/2023
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status			
Ethylbenzene	µg/kg	5	MCERTS	-	-	-
p & m-xylene	µg/kg	5	MCERTS	-	-	-
o-xylene	µg/kg	5	MCERTS	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	-	-	-

Petroleum Hydrocarbons

TPH C10 - C40 EH_CU_1D_TOTAL	mg/kg	10	MCERTS	< 10	< 10	< 10
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TPH-CWG - Aliphatic >EC5 - EC6 HS_1D_AL	mg/kg	0.02	NONE	-	-	-
TPH-CWG - Aliphatic >EC6 - EC8 HS_1D_AL	mg/kg	0.02	NONE	-	-	-
TPH-CWG - Aliphatic >EC8 - EC10 HS_1D_AL	mg/kg	0.05	NONE	-	-	-
TPH-CWG - Aliphatic >EC10 - EC12 EH_CU_1D_AL	mg/kg	1	MCERTS	-	-	-
TPH-CWG - Aliphatic >EC12 - EC16 EH_CU_1D_AL	mg/kg	2	MCERTS	-	-	-
TPH-CWG - Aliphatic >EC16 - EC21 EH_CU_1D_AL	mg/kg	8	MCERTS	-	-	-
TPH-CWG - Aliphatic >EC21 - EC35 EH_CU_1D_AL	mg/kg	8	MCERTS	-	-	-
TPH-CWG - Aliphatic (EC5 - EC35) EH_CU+HS_1D_AL	mg/kg	10	NONE	-	-	-

TPH-CWG - Aromatic >EC5 - EC7 HS_1D_AR	mg/kg	0.01	NONE	-	-	-
TPH-CWG - Aromatic >EC7 - EC8 HS_1D_AR	mg/kg	0.01	NONE	-	-	-
TPH-CWG - Aromatic >EC8 - EC10 HS_1D_AR	mg/kg	0.05	NONE	-	-	-
TPH-CWG - Aromatic >EC10 - EC12 EH_CU_1D_AR	mg/kg	1	MCERTS	-	-	-
TPH-CWG - Aromatic >EC12 - EC16 EH_CU_1D_AR	mg/kg	2	MCERTS	-	-	-
TPH-CWG - Aromatic >EC16 - EC21 EH_CU_1D_AR	mg/kg	10	MCERTS	-	-	-
TPH-CWG - Aromatic >EC21 - EC35 EH_CU_1D_AR	mg/kg	10	MCERTS	-	-	-
TPH-CWG - Aromatic (EC5 - EC35) EH_CU+HS_1D_AR	mg/kg	10	NONE	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number : 23-75868
Project / Site name: Baldock Bridges

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2916340	WS-R2/R3-04	None Supplied	1.00-1.10	Brown clay and sand with gravel and chalk.
2916341	TP-R1-10	None Supplied	0.4	Brown loam and clay with stones.
2916342	TP-R1-08	None Supplied	0.15	Brown loam with gravel.
2916343	TP-R2/R3-08	None Supplied	0.1	Brown loam with gravel and vegetation.
2916344	TP-R2/R3-10	None Supplied	0.15	Brown loam with gravel and vegetation.
2916345	TP-R4-07	None Supplied	0.15	Brown loam with gravel and vegetation.
2916346	TP-R5-08	None Supplied	0.2	Brown loam with gravel and vegetation.
2916347	TP-R5-09	None Supplied	0.5	Brown loam with gravel and vegetation.

Analytical Report Number : 23-75868
Project / Site name: Baldock Bridges

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards. Refer to CoA for analyte specific accreditation.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS. Individual components MCERTS accredited	In-house method based on USEPA8260. Refer to CoA for analyte specific accreditation	L073B-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID. Refer to CoA for band specific accreditation.	In-house method with silica gel split/clean up.	L088/76-PL	D	MCERTS
TPH Banding in Soil by FID	Determination of hexane extractable hydrocarbons in soil by GC-FID.	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Organic matter (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
Sulphate, water soluble, in soil	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).

For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Analytical Report Number : 23-75868
Project / Site name: Baldock Bridges

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
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Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
-	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

Analytical Report Number : 23-75868

Project / Site name: Baldock Bridges

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis. Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
TP-R1-08	None Supplied	S	2916342	c	Total cyanide in soil	L080-PL	c
TP-R1-10	None Supplied	S	2916341	c	Total cyanide in soil	L080-PL	c
TP-R2/R3-08	None Supplied	S	2916343	bc	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
TP-R2/R3-08	None Supplied	S	2916343	bc	TPHCWG (Soil)	L088/76-PL	b
TP-R2/R3-08	None Supplied	S	2916343	bc	Total cyanide in soil	L080-PL	c
TP-R2/R3-10	None Supplied	S	2916344	bc	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
TP-R2/R3-10	None Supplied	S	2916344	bc	TPHCWG (Soil)	L088/76-PL	b
TP-R2/R3-10	None Supplied	S	2916344	bc	Total cyanide in soil	L080-PL	c
TP-R4-07	None Supplied	S	2916345	c	Total cyanide in soil	L080-PL	c
TP-R5-08	None Supplied	S	2916346	c	Total cyanide in soil	L080-PL	c
TP-R5-09	None Supplied	S	2916347	c	Total cyanide in soil	L080-PL	c
WS-R2/R3-04	None Supplied	S	2916340	c	Total cyanide in soil	L080-PL	c

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Analytical Report Number : 24-77465-2

Replaces Analytical Report Number: 24-77465, issue no. 1
Additional analysis undertaken.
TPH: CWG added as per customers request

Project / Site name:	Baldock (Bridges)	Samples received on:	21/12/2023
Your job number:	2899	Samples instructed on/ Analysis started on:	09/01/2024
Your order number:	2812	Analysis completed by:	06/02/2024
Report Issue Number:	2	Report issued on:	16/02/2024
Samples Analysed:	13 soil samples		

Signed:

Adam Fenwick
Technical Reviewer
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 24-77465
Project / Site name: Baldock (Bridges)
Your Order No: 2812

Lab Sample Number				2924386	2924387	2924388	2924389	2924390
Sample Reference				TP-R1-04	TP-R1-06	TP-R3-04	TP-R4-02	TP-R5-01
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.15	0.40-0.50	0.10-0.15	0.10-0.15	0.10-0.15
Date Sampled				13/12/2023	15/12/2023	15/12/2023	14/12/2023	14/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	23	23	12	18	14
Total mass of sample received	kg	0.001	NONE	0.3	0.3	0.3	0.3	0.3

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	-	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	SCA	N/A	SCA	SCA	SCA

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.2	8.1	8.3	8.1	8.1
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0115	0.0143	0.011	0.0203	0.0152
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	11.5	14.3	11	20.3	15.2
Organic Matter (automated)	%	0.1	MCERTS	3.7	3.2	2.5	5.1	3.5

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.12	0.15	< 0.05	0.1	0.22
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.28	0.19	0.11	0.18	0.48
Pyrene	mg/kg	0.05	MCERTS	0.26	0.16	0.11	0.16	0.43
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.17	0.08	< 0.05	0.09	0.23
Chrysene	mg/kg	0.05	MCERTS	0.18	0.1	< 0.05	0.09	0.24
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.25	0.15	< 0.05	0.14	0.3
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.08	< 0.05	< 0.05	< 0.05	0.1
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.22	0.11	< 0.05	0.12	0.24
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.11	< 0.05	< 0.05	0.07	0.12
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.13	< 0.05	< 0.05	0.08	0.14

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	1.8	0.94	< 0.80	1.03	2.55
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	9.4	9.1	13	8.3	12
Boron (water soluble)	mg/kg	0.2	MCERTS	0.6	1.7	1.6	2.1	0.7
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.3	0.4	< 0.2	0.4	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	16	15	24	13	28
Copper (aqua regia extractable)	mg/kg	1	MCERTS	24	24	20	25	24
Lead (aqua regia extractable)	mg/kg	1	MCERTS	40	39	39	37	40
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	10	10	15	8.8	14
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	61	53	54	68	69

Monoaromatics & Oxygenates

Benzene	µg/kg	5	MCERTS	-	-	-	-	-
Toluene	µg/kg	5	MCERTS	-	-	-	-	-

Analytical Report Number: 24-77465
Project / Site name: Baldock (Bridges)
Your Order No: 2812

Lab Sample Number				2924386	2924387	2924388	2924389	2924390
Sample Reference				TP-R1-04	TP-R1-06	TP-R3-04	TP-R4-02	TP-R5-01
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.15	0.40-0.50	0.10-0.15	0.10-0.15	0.10-0.15
Date Sampled				13/12/2023	15/12/2023	15/12/2023	14/12/2023	14/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Ethylbenzene	µg/kg	5	MCERTS	-	-	-	-	-
p & m-xylene	µg/kg	5	MCERTS	-	-	-	-	-
o-xylene	µg/kg	5	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	-	-	-	-	-

Petroleum Hydrocarbons

TPH C10 - C40 EH_CU_1D_TOTAL	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
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TPH-CWG - Aliphatic >EC5 - EC6 HS_1D_AL	mg/kg	0.02	NONE	-	-	-	-	-
TPH-CWG - Aliphatic >EC6 - EC8 HS_1D_AL	mg/kg	0.02	NONE	-	-	-	-	-
TPH-CWG - Aliphatic >EC8 - EC10 HS_1D_AL	mg/kg	0.05	NONE	-	-	-	-	-
TPH-CWG - Aliphatic >EC10 - EC12 EH_CU_1D_AL	mg/kg	1	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC12 - EC16 EH_CU_1D_AL	mg/kg	2	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC16 - EC21 EH_CU_1D_AL	mg/kg	8	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC21 - EC35 EH_CU_1D_AL	mg/kg	8	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic (EC5 - EC35) EH_CU+HS_1D_AL	mg/kg	10	NONE	-	-	-	-	-

TPH-CWG - Aromatic >EC5 - EC7 HS_1D_AR	mg/kg	0.01	NONE	-	-	-	-	-
TPH-CWG - Aromatic >EC7 - EC8 HS_1D_AR	mg/kg	0.01	NONE	-	-	-	-	-
TPH-CWG - Aromatic >EC8 - EC10 HS_1D_AR	mg/kg	0.05	NONE	-	-	-	-	-
TPH-CWG - Aromatic >EC10 - EC12 EH_CU_1D_AR	mg/kg	1	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC12 - EC16 EH_CU_1D_AR	mg/kg	2	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC16 - EC21 EH_CU_1D_AR	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC21 - EC35 EH_CU_1D_AR	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic (EC5 - EC35) EH_CU+HS_1D_AR	mg/kg	10	NONE	-	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 24-77465
Project / Site name: Baldock (Bridges)
Your Order No: 2812

Lab Sample Number				2924391	2924392	2924393	2924394	2924395
Sample Reference				TP-R5-06	TP-R5-07	WS-R1-02	WS-R1-04	WS-R2-03
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.15	0.50-0.60	0.10-0.15	0.10-0.20	0.50-0.60
Date Sampled				14/12/2023	14/12/2023	14/12/2023	13/12/2023	13/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	19	18	22	14	13
Total mass of sample received	kg	0.001	NONE	0.3	0.3	0.3	0.3	0.3

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	-	Not-detected	Not-detected	-
Asbestos Analyst ID	N/A	N/A	N/A	SCA	N/A	SCA	SCA	N/A

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8	8.3	8.6	8.5	9.1
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.11	0.0349	0.0187	0.0505	0.0077
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	110	34.9	18.7	50.5	7.7
Organic Matter (automated)	%	0.1	MCERTS	4.4	1.6	3.4	2	< 0.1

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.2	< 0.05	< 0.05	0.09	< 0.05
Pyrene	mg/kg	0.05	MCERTS	0.17	< 0.05	< 0.05	0.09	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.11	< 0.05	< 0.05	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	0.14	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.17	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.06	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.13	< 0.05	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.07	< 0.05	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.08	< 0.05	< 0.05	< 0.05	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	1.13	< 0.80	< 0.80	< 0.80	< 0.80
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	13	6.1	9.6	8.3	6.1
Boron (water soluble)	mg/kg	0.2	MCERTS	2	1.2	1.7	2	< 0.2
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.5	0.8	0.5	12	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	19	11	12	13	5
Copper (aqua regia extractable)	mg/kg	1	MCERTS	29	21	24	60	4.3
Lead (aqua regia extractable)	mg/kg	1	MCERTS	45	19	38	86	3.7
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	15	8.9	11	14	5.2
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	1.2	1.3	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	78	55	60	150	16

Monoaromatics & Oxygenates

Benzene	µg/kg	5	MCERTS	-	-	-	-	-
Toluene	µg/kg	5	MCERTS	-	-	-	-	-

Analytical Report Number: 24-77465
Project / Site name: Baldock (Bridges)
Your Order No: 2812

Lab Sample Number				2924391	2924392	2924393	2924394	2924395
Sample Reference				TP-R5-06	TP-R5-07	WS-R1-02	WS-R1-04	WS-R2-03
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.15	0.50-0.60	0.10-0.15	0.10-0.20	0.50-0.60
Date Sampled				14/12/2023	14/12/2023	14/12/2023	13/12/2023	13/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Ethylbenzene	µg/kg	5	MCERTS	-	-	-	-	-
p & m-xylene	µg/kg	5	MCERTS	-	-	-	-	-
o-xylene	µg/kg	5	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	-	-	-	-	-

Petroleum Hydrocarbons

TPH C10 - C40 EH_CU_ID_TOTAL	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
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TPH-CWG - Aliphatic >EC5 - EC6 HS_ID_AL	mg/kg	0.02	NONE	-	-	-	-	-
TPH-CWG - Aliphatic >EC6 - EC8 HS_ID_AL	mg/kg	0.02	NONE	-	-	-	-	-
TPH-CWG - Aliphatic >EC8 - EC10 HS_ID_AL	mg/kg	0.05	NONE	-	-	-	-	-
TPH-CWG - Aliphatic >EC10 - EC12 EH_CU_ID_AL	mg/kg	1	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC12 - EC16 EH_CU_ID_AL	mg/kg	2	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC16 - EC21 EH_CU_ID_AL	mg/kg	8	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC21 - EC35 EH_CU_ID_AL	mg/kg	8	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic (EC5 - EC35) EH_CU+HS_ID_AL	mg/kg	10	NONE	-	-	-	-	-

TPH-CWG - Aromatic >EC5 - EC7 HS_ID_AR	mg/kg	0.01	NONE	-	-	-	-	-
TPH-CWG - Aromatic >EC7 - EC8 HS_ID_AR	mg/kg	0.01	NONE	-	-	-	-	-
TPH-CWG - Aromatic >EC8 - EC10 HS_ID_AR	mg/kg	0.05	NONE	-	-	-	-	-
TPH-CWG - Aromatic >EC10 - EC12 EH_CU_ID_AR	mg/kg	1	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC12 - EC16 EH_CU_ID_AR	mg/kg	2	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC16 - EC21 EH_CU_ID_AR	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC21 - EC35 EH_CU_ID_AR	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic (EC5 - EC35) EH_CU+HS_ID_AR	mg/kg	10	NONE	-	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 24-77465
Project / Site name: Baldock (Bridges)
Your Order No: 2812

Lab Sample Number				2924396	2924397	2924398
Sample Reference				WS-R5-02	WS-R5-03	WS-R5-04
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.15	0.50-0.60	0.15
Date Sampled				13/12/2023	13/12/2023	13/12/2023
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status			
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	18	22	18
Total mass of sample received	kg	0.001	NONE	0.3	0.3	0.3

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	-	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	SCA	N/A	SCA

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.3	8.3	7.4
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0575	0.143	0.0933
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	57.5	143	93.3
Organic Matter (automated)	%	0.1	MCERTS	4.1	2	3.8

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.06
Phenanthrene	mg/kg	0.05	MCERTS	0.1	0.14	0.36
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.08
Fluoranthene	mg/kg	0.05	MCERTS	0.2	0.17	0.65
Pyrene	mg/kg	0.05	MCERTS	0.17	0.17	0.62
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.13	0.09	0.26
Chrysene	mg/kg	0.05	MCERTS	0.09	0.09	0.32
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.13	0.09	0.36
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.05	0.05	0.16
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.11	0.1	0.35
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.05	< 0.05	0.22
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.07
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.08	< 0.05	0.29

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	1.11	0.9	3.85
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	9.3	8	14
Boron (water soluble)	mg/kg	0.2	MCERTS	2.5	0.9	2.9
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	1.9	0.9	2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	14	17	23
Copper (aqua regia extractable)	mg/kg	1	MCERTS	45	77	76
Lead (aqua regia extractable)	mg/kg	1	MCERTS	41	27	80
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	12	14	21
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	1.3	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	96	140	160

Monoaromatics & Oxygenates

Benzene	µg/kg	5	MCERTS	-	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	-	< 5.0	< 5.0

Analytical Report Number: 24-77465
 Project / Site name: Baldock (Bridges)
 Your Order No: 2812

Lab Sample Number				2924396	2924397	2924398
Sample Reference				WS-R5-02	WS-R5-03	WS-R5-04
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.15	0.50-0.60	0.15
Date Sampled				13/12/2023	13/12/2023	13/12/2023
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status			
Ethylbenzene	µg/kg	5	MCERTS	-	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	-	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	-	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	-	< 5.0	< 5.0

Petroleum Hydrocarbons

TPH C10 - C40 EH_CU_ID_TOTAL	mg/kg	10	MCERTS	< 10	11	17
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TPH-CWG - Aliphatic >EC5 - EC6 HS_ID_AL	mg/kg	0.02	NONE	-	< 0.020	< 0.020
TPH-CWG - Aliphatic >EC6 - EC8 HS_ID_AL	mg/kg	0.02	NONE	-	< 0.020	< 0.020
TPH-CWG - Aliphatic >EC8 - EC10 HS_ID_AL	mg/kg	0.05	NONE	-	< 0.050	< 0.050
TPH-CWG - Aliphatic >EC10 - EC12 EH_CU_ID_AL	mg/kg	1	MCERTS	-	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 EH_CU_ID_AL	mg/kg	2	MCERTS	-	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21 EH_CU_ID_AL	mg/kg	8	MCERTS	-	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35 EH_CU_ID_AL	mg/kg	8	MCERTS	-	10	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35) EH_CU+HS_ID_AL	mg/kg	10	NONE	-	11	< 10

TPH-CWG - Aromatic >EC5 - EC7 HS_ID_AR	mg/kg	0.01	NONE	-	< 0.010	< 0.010
TPH-CWG - Aromatic >EC7 - EC8 HS_ID_AR	mg/kg	0.01	NONE	-	< 0.010	< 0.010
TPH-CWG - Aromatic >EC8 - EC10 HS_ID_AR	mg/kg	0.05	NONE	-	< 0.050	< 0.050
TPH-CWG - Aromatic >EC10 - EC12 EH_CU_ID_AR	mg/kg	1	MCERTS	-	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16 EH_CU_ID_AR	mg/kg	2	MCERTS	-	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21 EH_CU_ID_AR	mg/kg	10	MCERTS	-	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35 EH_CU_ID_AR	mg/kg	10	MCERTS	-	< 10	< 10
TPH-CWG - Aromatic (EC5 - EC35) EH_CU+HS_ID_AR	mg/kg	10	NONE	-	< 10	< 10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number : 24-77465
Project / Site name: Baldock (Bridges)

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2924386	TP-R1-04	None Supplied	0.10-0.15	Brown clay and sand with gravel.
2924387	TP-R1-06	None Supplied	0.40-0.50	Brown clay and sand with gravel and vegetation.
2924388	TP-R3-04	None Supplied	0.10-0.15	Brown loam and sand with gravel and vegetation.
2924389	TP-R4-02	None Supplied	0.10-0.15	Brown loam and sand with gravel and vegetation.
2924390	TP-R5-01	None Supplied	0.10-0.15	Brown loam and sand with gravel and vegetation.
2924391	TP-R5-06	None Supplied	0.10-0.15	Brown loam and clay with gravel and vegetation.
2924392	TP-R5-07	None Supplied	0.50-0.60	Brown clay and sand with chalk.
2924393	WS-R1-02	None Supplied	0.10-0.15	Brown clay with gravel.
2924394	WS-R1-04	None Supplied	0.10-0.20	Brown loam and sand with gravel and chalk.
2924395	WS-R2-03	None Supplied	0.50-0.60	Beige clay and sand with chalk.
2924396	WS-R5-02	None Supplied	0.10-0.15	Brown loam and clay with chalk.
2924397	WS-R5-03	None Supplied	0.50-0.60	Brown clay and sand with gravel.
2924398	WS-R5-04	None Supplied	0.15	Brown loam and clay with gravel and vegetation.

Analytical Report Number : 24-77465
Project / Site name: Baldock (Bridges)

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards. Refer to CoA for analyte specific accreditation.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS. Individual components MCERTS accredited	In-house method based on USEPA8260. Refer to CoA for analyte specific accreditation	L073B-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID. Refer to CoA for band specific accreditation.	In-house method with silica gel split/clean up.	L088/76-PL	D	MCERTS
TPH Banding in Soil by FID	Determination of hexane extractable hydrocarbons in soil by GC-FID.	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Organic matter (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
Sulphate, water soluble, in soil	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).

For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Analytical Report Number : 24-77465
Project / Site name: Baldock (Bridges)

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
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Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
-	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

Analytical Report Number : 24-77465

Project / Site name: Baldock (Bridges)

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis. Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
TP-R1-04	None Supplied	S	2924386	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP-R1-04	None Supplied	S	2924386	c	TPH Banding in Soil by FID	L076-PL	c
TP-R1-04	None Supplied	S	2924386	c	Total cyanide in soil	L080-PL	c
TP-R1-06	None Supplied	S	2924387	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP-R1-06	None Supplied	S	2924387	c	TPH Banding in Soil by FID	L076-PL	c
TP-R1-06	None Supplied	S	2924387	c	Total cyanide in soil	L080-PL	c
TP-R3-04	None Supplied	S	2924388	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP-R3-04	None Supplied	S	2924388	c	TPH Banding in Soil by FID	L076-PL	c
TP-R3-04	None Supplied	S	2924388	c	Total cyanide in soil	L080-PL	c
TP-R4-02	None Supplied	S	2924389	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP-R4-02	None Supplied	S	2924389	c	TPH Banding in Soil by FID	L076-PL	c
TP-R4-02	None Supplied	S	2924389	c	Total cyanide in soil	L080-PL	c
TP-R5-01	None Supplied	S	2924390	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP-R5-01	None Supplied	S	2924390	c	TPH Banding in Soil by FID	L076-PL	c
TP-R5-01	None Supplied	S	2924390	c	Total cyanide in soil	L080-PL	c
TP-R5-06	None Supplied	S	2924391	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP-R5-06	None Supplied	S	2924391	c	TPH Banding in Soil by FID	L076-PL	c
TP-R5-06	None Supplied	S	2924391	c	Total cyanide in soil	L080-PL	c
TP-R5-07	None Supplied	S	2924392	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP-R5-07	None Supplied	S	2924392	c	TPH Banding in Soil by FID	L076-PL	c
TP-R5-07	None Supplied	S	2924392	c	Total cyanide in soil	L080-PL	c
WS-R1-02	None Supplied	S	2924393	c	Speciated EPA-16 PAHs in soil	L064-PL	c
WS-R1-02	None Supplied	S	2924393	c	TPH Banding in Soil by FID	L076-PL	c
WS-R1-02	None Supplied	S	2924393	c	Total cyanide in soil	L080-PL	c
WS-R1-04	None Supplied	S	2924394	c	Speciated EPA-16 PAHs in soil	L064-PL	c
WS-R1-04	None Supplied	S	2924394	c	TPH Banding in Soil by FID	L076-PL	c
WS-R1-04	None Supplied	S	2924394	c	Total cyanide in soil	L080-PL	c
WS-R2-03	None Supplied	S	2924395	c	Speciated EPA-16 PAHs in soil	L064-PL	c
WS-R2-03	None Supplied	S	2924395	c	TPH Banding in Soil by FID	L076-PL	c
WS-R2-03	None Supplied	S	2924395	c	Total cyanide in soil	L080-PL	c
WS-R5-02	None Supplied	S	2924396	c	Speciated EPA-16 PAHs in soil	L064-PL	c
WS-R5-02	None Supplied	S	2924396	c	TPH Banding in Soil by FID	L076-PL	c
WS-R5-02	None Supplied	S	2924396	c	Total cyanide in soil	L080-PL	c
WS-R5-03	None Supplied	S	2924397	bc	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	bc
WS-R5-03	None Supplied	S	2924397	bc	Speciated EPA-16 PAHs in soil	L064-PL	c
WS-R5-03	None Supplied	S	2924397	bc	TPH Banding in Soil by FID	L076-PL	c
WS-R5-03	None Supplied	S	2924397	bc	TPHCWG (Soil)	L088/76-PL	bc
WS-R5-03	None Supplied	S	2924397	bc	Total cyanide in soil	L080-PL	c
WS-R5-04	None Supplied	S	2924398	bc	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	bc
WS-R5-04	None Supplied	S	2924398	bc	Speciated EPA-16 PAHs in soil	L064-PL	c
WS-R5-04	None Supplied	S	2924398	bc	TPH Banding in Soil by FID	L076-PL	c
WS-R5-04	None Supplied	S	2924398	bc	TPHCWG (Soil)	L088/76-PL	bc
WS-R5-04	None Supplied	S	2924398	bc	Total cyanide in soil	L080-PL	c

APPENDIX E

GEOTECHNICAL ANALYSIS



TEST CERTIFICATE

DETERMINATION OF LIQUID AND PLASTIC LIMITS

Tested in Accordance with: BS 1377-2:1990: Clause 4.3 and 5

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 19/01/2024
Sampled By: Not Given

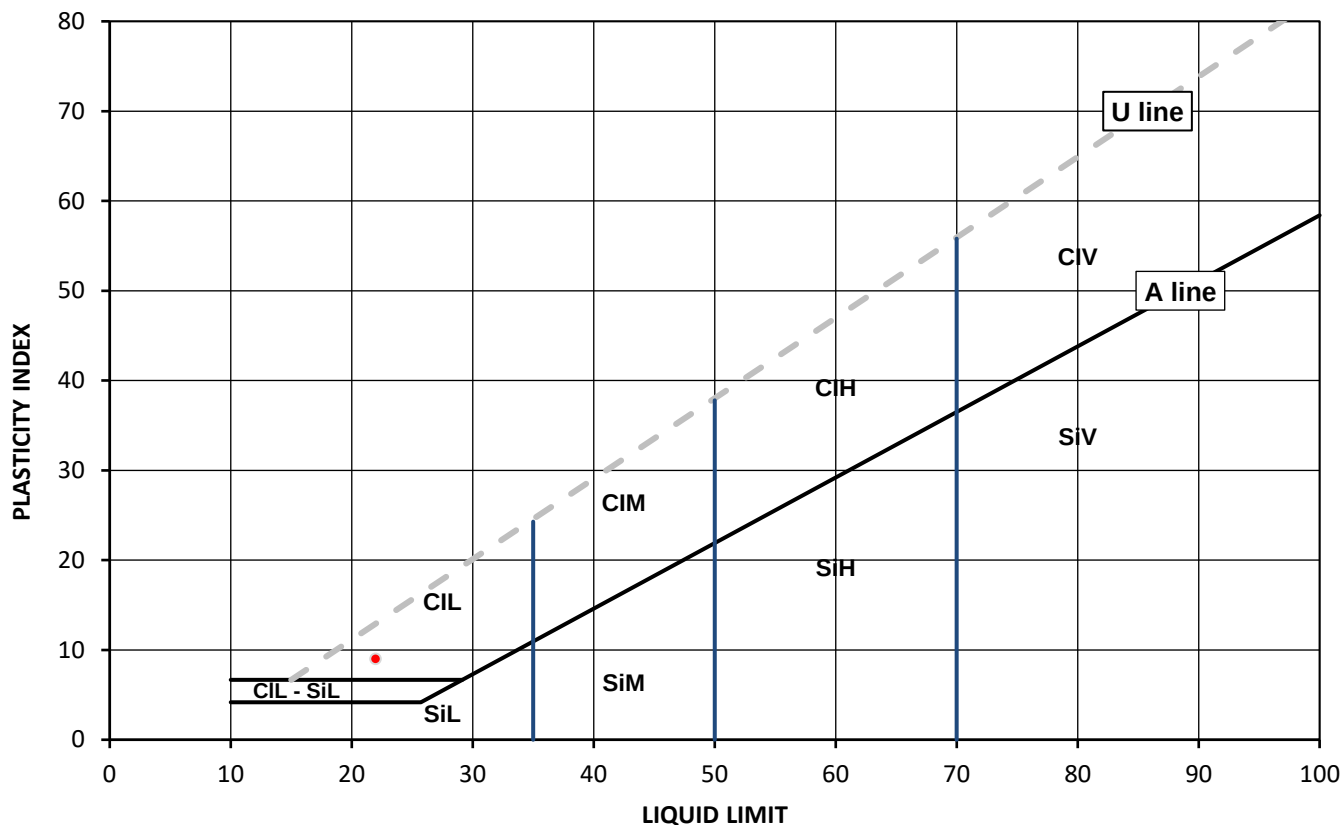
Test Results:

Laboratory Reference: 2927114
Hole No.: TP-R2/R3-10
Sample Reference: Not Given
Sample Description: Light brown sandy CLAY with fragments of chalk, plants

Depth Top [m]: 0.80
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested after washing to remove >425um

As Received Water Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
18	22	13	9	78



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	below 35
Si	Silt	35 to 50
	L	Low
	M	Medium
	H	High
	V	Very high
	O	Organic
		append to classification for organic material (eg CIHO)

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Katarzyna Banys
Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

Opinions and interpretations expressed herein are outside of the scope of the UKAS Accreditation. This report may not be reproduced other than in full without the prior written approval of the issuing laboratory. The results included within the report relate only to the sample(s) submitted for testing.



TEST CERTIFICATE

DETERMINATION OF LIQUID AND PLASTIC LIMITS

Tested in Accordance with: BS 1377-2:1990: Clause 4.3 and 5

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 22/01/2024
Sampled By: Not Given

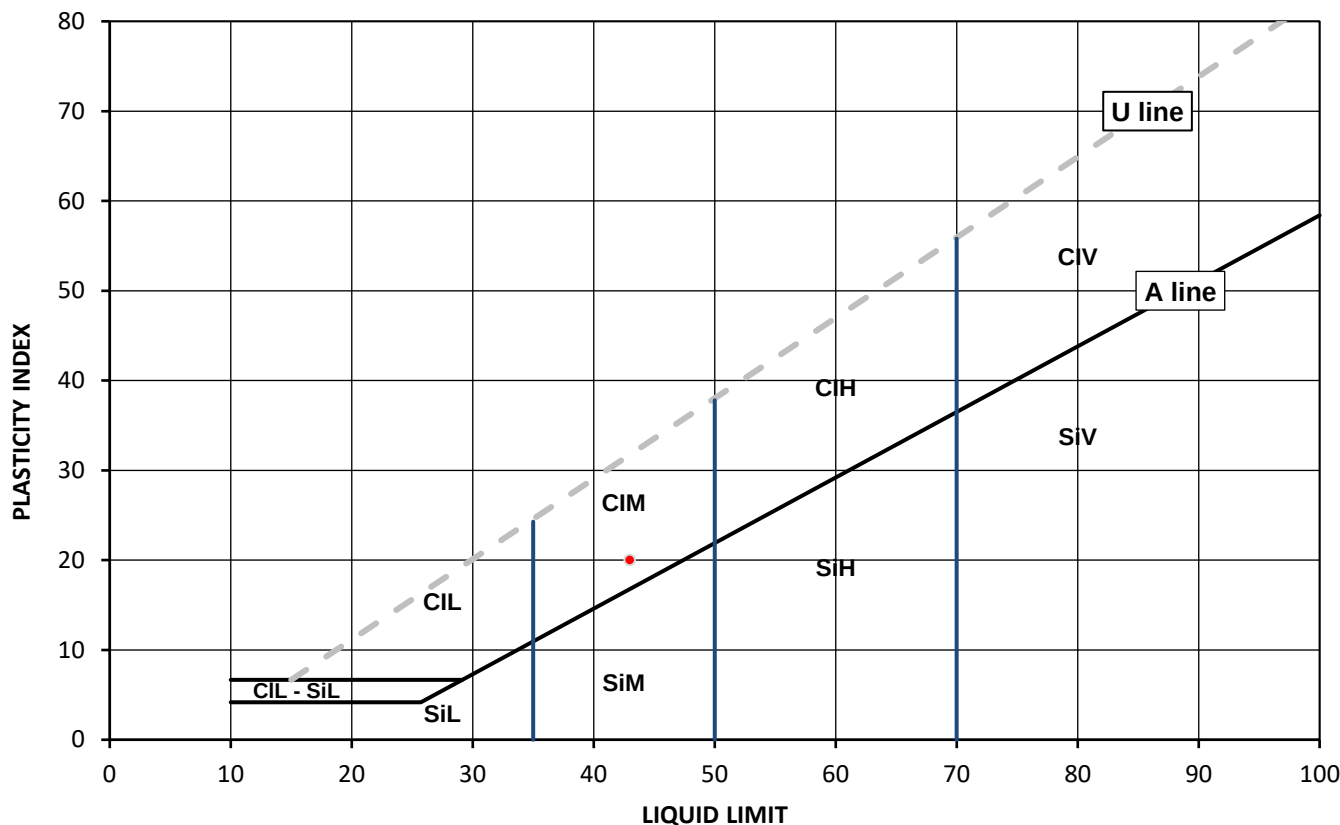
Test Results:

Laboratory Reference: 2927122
Hole No.: TP-R5-06
Sample Reference: Not Given
Sample Description: Light brown clayey GRAVEL with fragments of chalk

Depth Top [m]: 0.40
Depth Base [m]: 0.50
Sample Type: B

Sample Preparation: Tested after washing to remove >425um

As Received Water Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
21	43	23	20	36



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	below 35
Si	Silt	35 to 50
	L	Low
	M	Medium
	H	High
	V	Very high
	O	Organic
		append to classification for organic material (eg CIHO)

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Katarzyna Banys
Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

DETERMINATION OF LIQUID AND PLASTIC LIMITS

Tested in Accordance with: BS 1377-2:1990: Clause 4.3 and 5

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 19/01/2024
Sampled By: Not Given

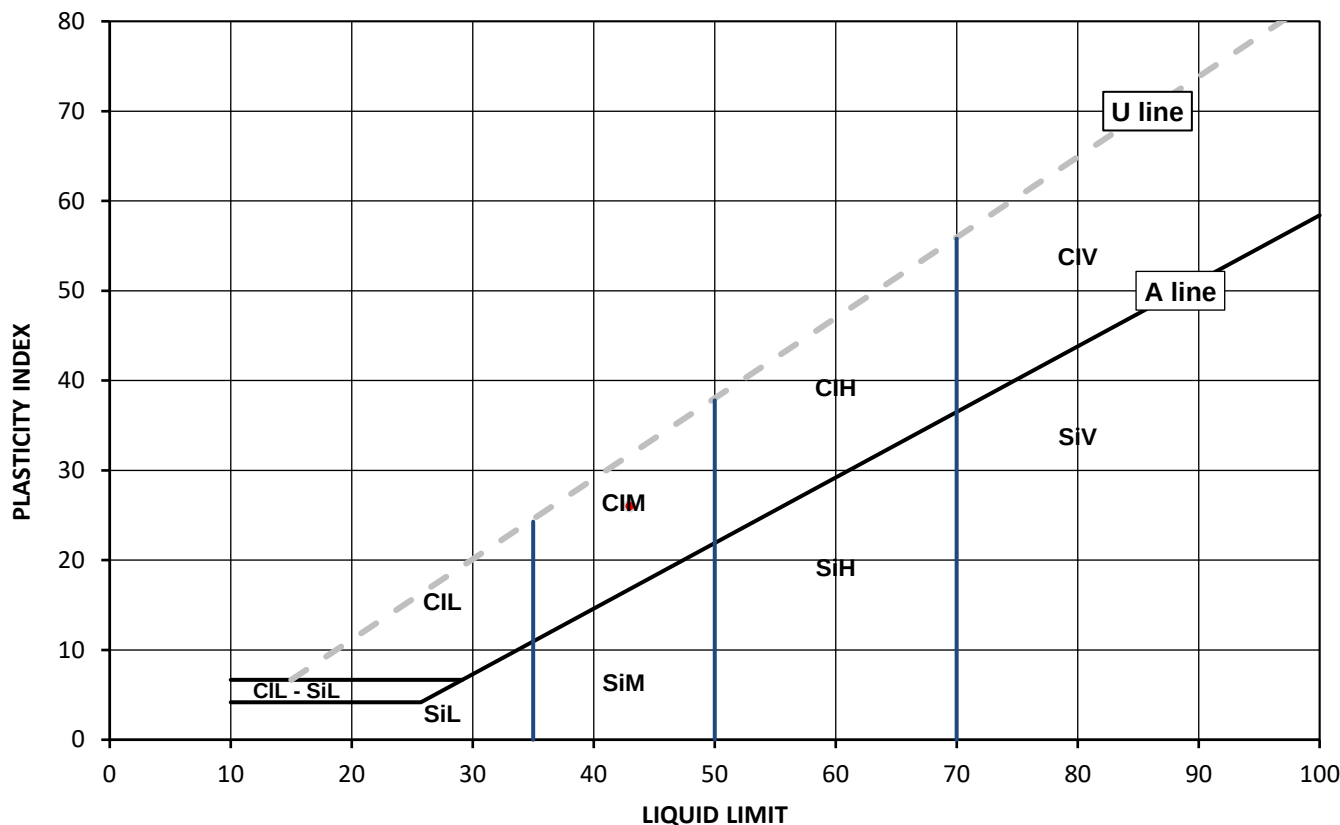
Test Results:

Laboratory Reference: 2927123
Hole No.: TP-R5-08
Sample Reference: Not Given
Sample Description: Brown sandy CLAY with fragments of chalk

Depth Top [m]: 0.70
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested after washing to remove >425um

As Received Water Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
27	43	17	26	79



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	below 35
Si	Silt	35 to 50
	L	Low
	M	Medium
	H	High
	V	Very high
	O	Organic
		append to classification for organic material (eg CIHO)

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

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Junior Reporting Specialist
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TEST CERTIFICATE

DETERMINATION OF LIQUID AND PLASTIC LIMITS

Tested in Accordance with: BS 1377-2:1990: Clause 4.3 and 5

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 23/01/2024
Sampled By: Not Given

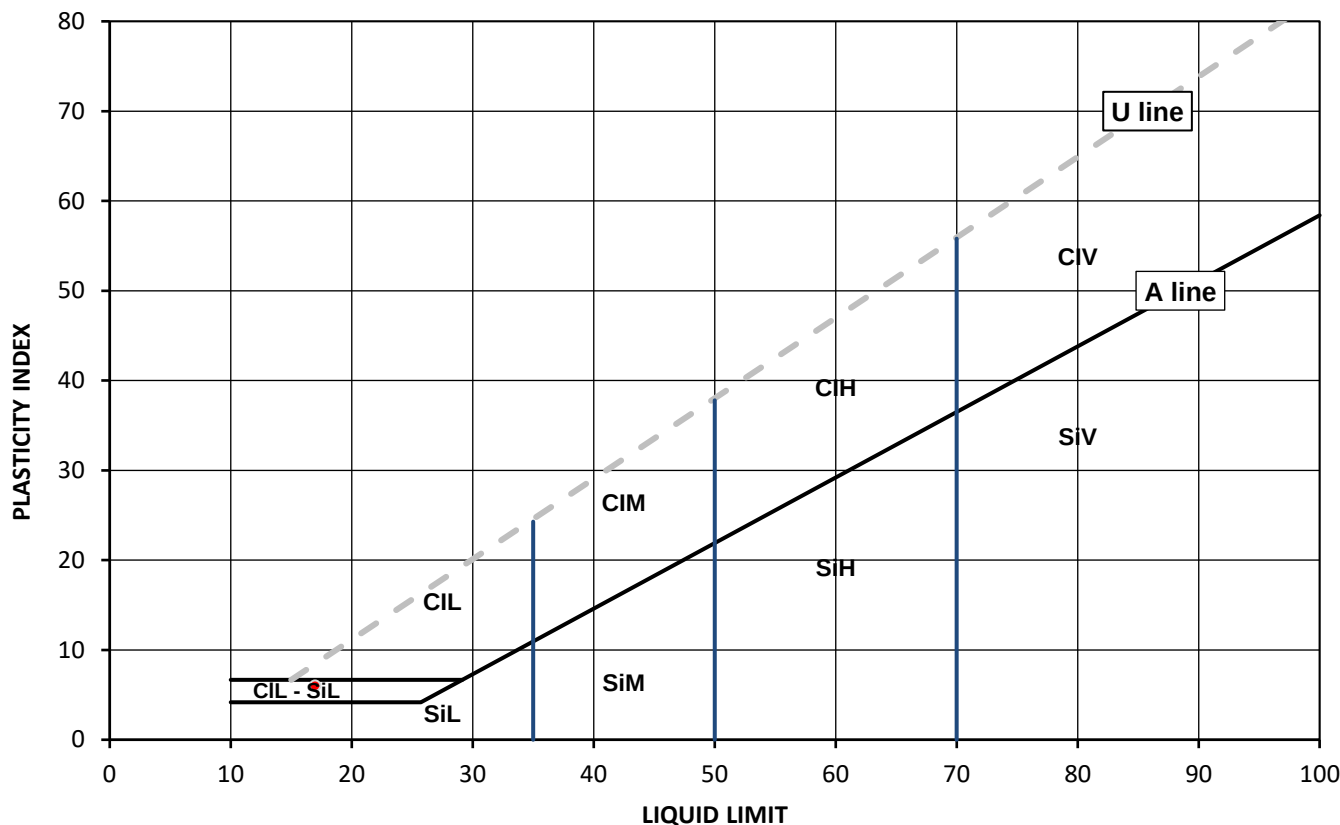
Test Results:

Laboratory Reference: 2930350
Hole No.: TP-R2/R3-08
Sample Reference: Not Given
Sample Description: Light brown clayey SAND with fragments of chalk

Depth Top [m]: 1.40
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested after >425um removed by hand

As Received Water Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
15	17	11	6	81



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	L Low below 35
Si	Silt	M Medium 35 to 50
		H High 50 to 70
		V Very high exceeding 70
	O Organic	append to classification for organic material (eg CIHO)

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

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Junior Reporting Specialist
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TEST CERTIFICATE

DETERMINATION OF LIQUID AND PLASTIC LIMITS

Tested in Accordance with: BS 1377-2:1990: Clause 4.3 and 5

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 23/01/2024
Sampled By: Not Given

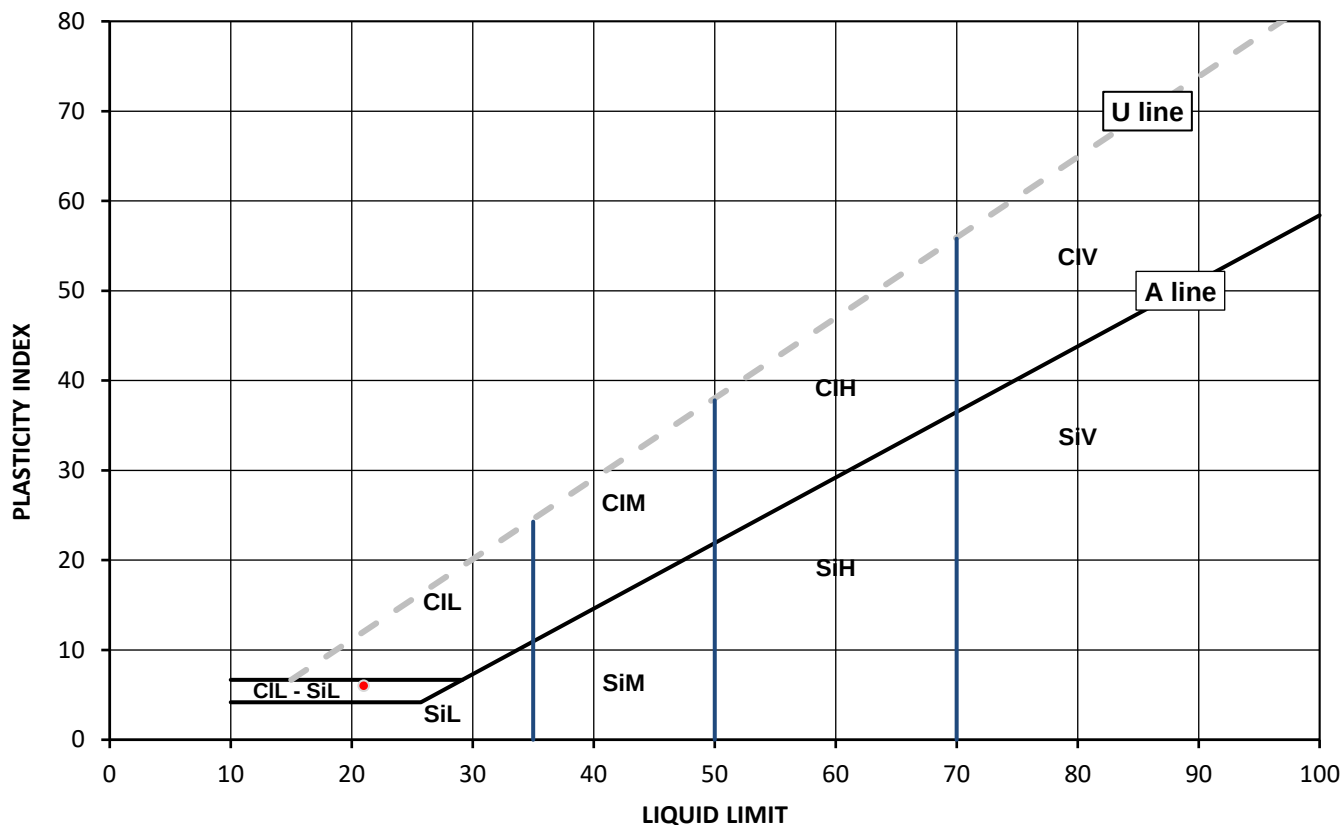
Test Results:

Laboratory Reference: 2930351
Hole No.: TP-R2/R3-09
Sample Reference: Not Given
Sample Description: Brown sandy CLAY with fragments of plants

Depth Top [m]: 0.65
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested after washing to remove >425um

As Received Water Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
19	21	15	6	90



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	below 35
Si	Silt	35 to 50
	L	Low
	M	Medium
	H	High
	V	Very high
	O	Organic
		append to classification for organic material (eg CIHO)

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

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Junior Reporting Specialist
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SUMMARY REPORT

SUMMARY OF CLASSIFICATION TEST RESULTS

Tested in Accordance with:

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Water Content by BS 1377-2:1990: Clause 3.2
Atterberg by BS 1377-2: 1990:
Clause 4.3 (4 Point Test), Clause 4.4 (1 Point Test) and 5

Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 19/01 - 23/01/2024
Sampled By: Not Given

Contact: Stephen Fisk
Site Address: Baldock Bridges

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	Water Content BS 1377-2 [W] %	Water Content BS EN ISO 17892-2 [W] %	Atterberg				Density			Total Porosity# %		
		Reference	Depth Top	Depth Base	Type					% Passing 425um	WL	Wp	Ip	bulk	dry	PD			
			m	m						%	%	%	%	Mg/m3	Mg/m3	Mg/m3			
2927110	TP-R2-01	Not Given	0.40	0.50	B	Brown clayey SAND with fragments of chalk		19											
2927111	TP-R2/R3-03	Not Given	2.50	2.60	B	White CHALK		22											
2927112	TP-R2-04	Not Given	1.00	1.20	B	Light brown very gravelly clayey SAND with fragments of chalk		14											
2927113	TP-R2-06	Not Given	1.00	1.20	B	Light brown CLAY with fragments of chalk		20											
2927114	TP-R2/R3-10	Not Given	0.80	Not Given	B	Light brown sandy CLAY with fragments of chalk, plants	Atterberg 4 Point	18		78	22	13	9						
2927115	TP-R3-01	Not Given	1.40	1.50	B	White CHALK		19											
2927116	TP-R3-04	Not Given	1.40	1.50	B	White CHALK		22											
2927117	TP-R4-01	Not Given	1.00	1.20	B	White sandy gravelly CLAY with fragments of chalk		15											
2927118	TP-R4-01	Not Given	2.00	2.20	B	White CHALK		25											
2927119	TP-R4-02	Not Given	0.50	0.60	B	White sandy CHALK		25											

Note: # Non accredited; NP - Non plastic

Comments:

Signed:

Katarzyna Banyś
Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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SUMMARY REPORT

SUMMARY OF CLASSIFICATION TEST RESULTS

Tested in Accordance with:

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

Water Content by BS 1377-2:1990: Clause 3.2
Atterberg by BS 1377-2: 1990:
Clause 4.3 (4 Point Test), Clause 4.4 (1 Point Test) and 5

Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 19/01 - 23/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	Water Content BS 1377-2 [W] %	Water Content BS EN ISO 17892-2 [W] %	Atterberg				Density			Total Porosity# %		
		Reference	Depth Top	Depth Base	Type					% Passing 425um	WL	Wp	Ip	bulk	dry	PD			
			m	m															
2927120	TP-R4-07	Not Given	1.70	Not Given	B	White CHALK		25											
2927121	TP-R5-03	Not Given	1.30	1.40	B	White CHALK		21											
2927122	TP-R5-06	Not Given	0.40	0.50	B	Light brown clayey GRAVEL with fragments of chalk	Atterberg 4 Point	21		36	43	23	20						
2927123	TP-R5-08	Not Given	0.70	Not Given	B	Brown sandy CLAY with fragments of chalk	Atterberg 4 Point	27		79	43	17	26						
2927124	TP-R5-09	Not Given	1.60	Not Given	B	White CHALK		26											
2930350	TP-R2/R3-08	Not Given	1.40	Not Given	B	Light brown clayey SAND with fragments of chalk	Atterberg 4 Point	15		81	17	11	6						
2930351	TP-R2/R3-09	Not Given	0.65	Not Given	B	Brown sandy CLAY with fragments of plants	Atterberg 4 Point	19		90	21	15	6						

Note: # Non accredited; NP - Non plastic

Comments:

Signed:

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Junior Reporting Specialist
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SUMMARY REPORT

DETERMINATION OF WATER CONTENT

Tested in Accordance with: BS 1377-2: 1990: Clause 3.2

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 19/01/2024
Sampled By: Not Given

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	WC	Sample preparation / Oven temperature at the time of testing			
		Reference	Depth Top m	Depth Base m	Type							
2927110	TP-R2-01	Not Given	0.40	0.50	B	Brown clayey SAND with fragments of chalk		19	Sample was quartered, oven dried at 108.7 °C			
2927111	TP-R2/R3-03	Not Given	2.50	2.60	B	White CHALK		22	Sample was quartered, oven dried at 108.7 °C			
2927112	TP-R2-04	Not Given	1.00	1.20	B	Light brown very gravelly clayey SAND with fragments of chalk		14	Sample was quartered, oven dried at 108.7 °C			
2927113	TP-R2-06	Not Given	1.00	1.20	B	Light brown CLAY with fragments of chalk		20	Sample was quartered, oven dried at 108.7 °C			
2927114	TP-R2/R3-10	Not Given	0.80	Not Given	B	Light brown sandy CLAY with fragments of chalk, plants		18	Sample was quartered, oven dried at 108.7 °C			
2927115	TP-R3-01	Not Given	1.40	1.50	B	White CHALK		19	Sample was quartered, oven dried at 108.7 °C			
2927116	TP-R3-04	Not Given	1.40	1.50	B	White CHALK		22	Sample was quartered, oven dried at 108.7 °C			
2927117	TP-R4-01	Not Given	1.00	1.20	B	White sandy gravelly CLAY with fragments of chalk		15	Sample was quartered, oven dried at 108.7 °C			
2927118	TP-R4-01	Not Given	2.00	2.20	B	White CHALK		25	Sample was quartered, oven dried at 108.7 °C			
2927119	TP-R4-02	Not Given	0.50	0.60	B	White sandy CHALK		25	Sample was quartered, oven dried at 108.7 °C			

Comments:

Signed:

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SUMMARY REPORT

DETERMINATION OF WATER CONTENT

Tested in Accordance with: BS 1377-2: 1990: Clause 3.2

i2 Analytical Ltd
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Site Address: Baldock Bridges

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 19/01 - 23/01/2024
Sampled By: Not Given

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	WC	Sample preparation / Oven temperature at the time of testing			
		Reference	Depth Top m	Depth Base m	Type							
2927120	TP-R4-07	Not Given	1.70	Not Given	B	White CHALK		25	Sample was quartered, oven dried at 108.7 °C			
2927121	TP-R5-03	Not Given	1.30	1.40	B	White CHALK		21	Sample was quartered, oven dried at 108.7 °C			
2927122	TP-R5-06	Not Given	0.40	0.50	B	Light brown clayey GRAVEL with fragments of chalk		21	Sample was quartered, oven dried at 108.7 °C			
2927123	TP-R5-08	Not Given	0.70	Not Given	B	Brown sandy CLAY with fragments of chalk		27	Sample was quartered, oven dried at 108.7 °C			
2927124	TP-R5-09	Not Given	1.60	Not Given	B	White CHALK		26	Sample was quartered, oven dried at 106.6 °C			
2930350	TP-R2/R3-08	Not Given	1.40	Not Given	B	Light brown clayey SAND with fragments of chalk		15	Sample was quartered, oven dried at 106.6 °C			
2930351	TP-R2/R3-09	Not Given	0.65	Not Given	B	Brown sandy CLAY with fragments of plants		19	Sample was quartered, oven dried at 106.6 °C			

Comments:

Signed: Katarzyna Banyś
Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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4041

TEST CERTIFICATE

DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Tested in Accordance with: BS 1377-2: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

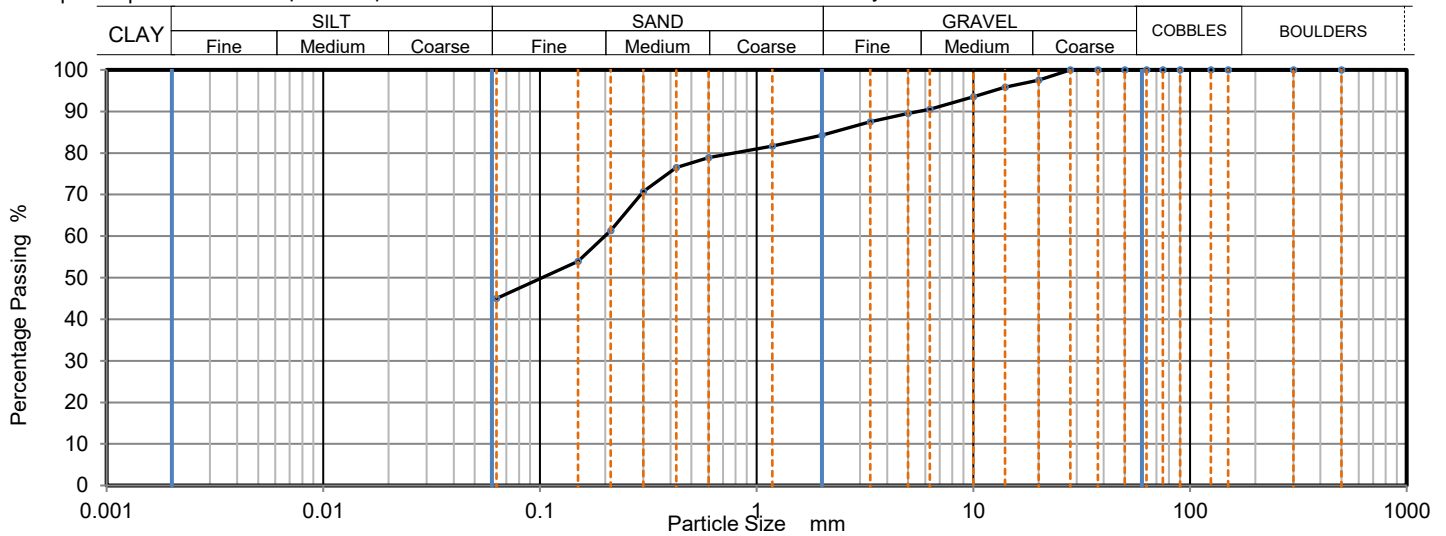
Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 19/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 2927114
Hole No.: TP-R2/R3-10
Sample Reference: Not Given
Sample Description: Light brown sandy CLAY with fragments of chalk, plants
Sample Preparation: Sample was quartered, oven dried at 108.7 °C and broken down by hand.

Depth Top [m]: 0.80
Depth Base [m]: Not Given
Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	98		
14	96		
10	94		
6.3	91		
5	90		
3.35	88		
2	84		
1.18	82		
0.6	79		
0.425	77		
0.3	71		
0.212	61		
0.15	54		
0.063	45		

Sample Proportions	% dry mass
Very coarse	0
Gravel	16
Sand	39
Fines <0.063mm	45

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	> 3.2
Curvature Coefficient	

Uniformity and Curvature Coefficient calculated in accordance with BS EN ISO 14688-2:2018

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

Katarzyna Banys
Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Tested in Accordance with: BS 1377-2: 1990

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Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
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Contact: Stephen Fisk
Site Address: Baldock Bridges

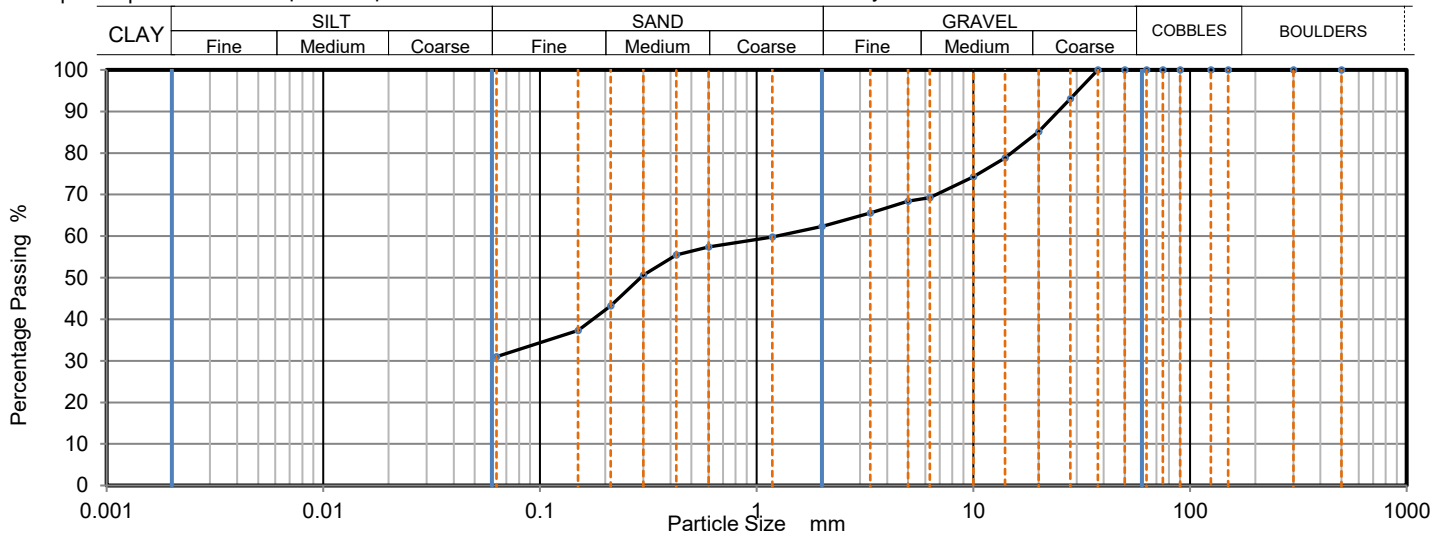
Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 19/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 2927117
Hole No.: TP-R4-01
Sample Reference: Not Given
Sample Description: White sandy gravelly CLAY with fragments of chalk
Sample Preparation: Sample was quartered, oven dried at 108.7 °C and broken down by hand.

Depth Top [m]: 1.00
Depth Base [m]: 1.20
Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	93		
20	85		
14	79		
10	74		
6.3	69		
5	68		
3.35	66		
2	62		
1.18	60		
0.6	57		
0.425	56		
0.3	51		
0.212	43		
0.15	37		
0.063	32		

Sample Proportions	% dry mass
Very coarse	0
Gravel	38
Sand	31
Fines <0.063mm	32

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	> 19
Curvature Coefficient	

Uniformity and Curvature Coefficient calculated in accordance with BS EN ISO 14688-2:2018

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

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Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Tested in Accordance with: BS 1377-2: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

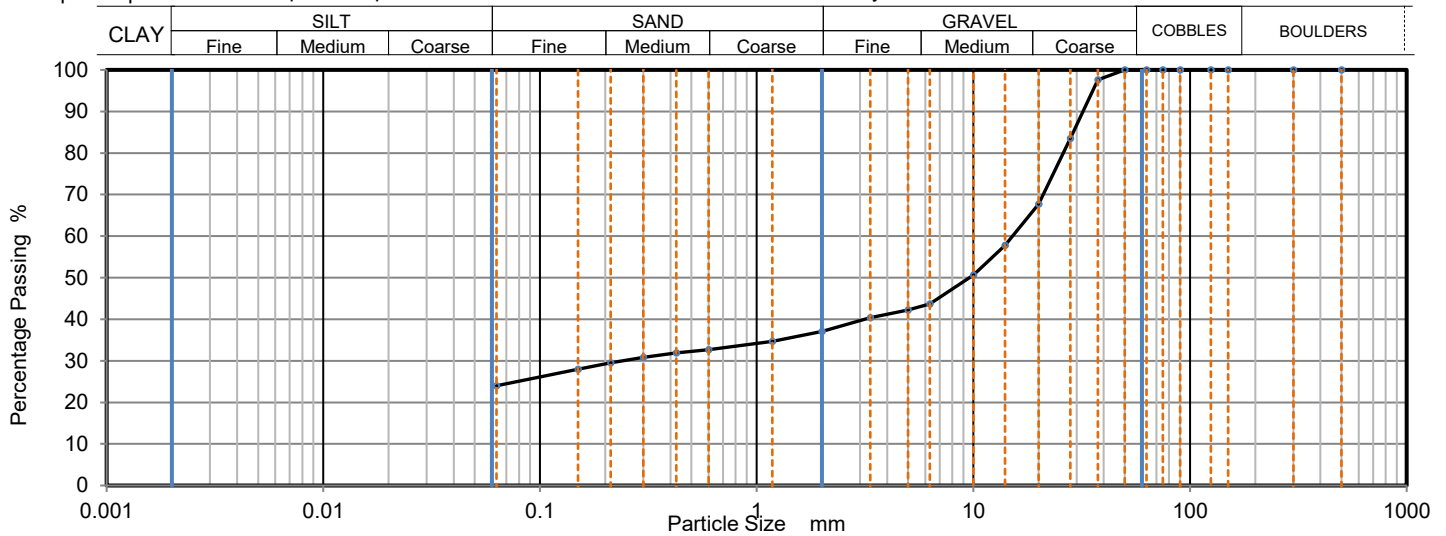
Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 22/01/2024
Sampled By: Not Given

Test Results:

Laboratory Reference: 2927122
Hole No.: TP-R5-06
Sample Reference: Not Given
Sample Description: Light brown clayey GRAVEL with fragments of chalk
Sample Preparation: Sample was quartered, oven dried at 108.7 °C and broken down by hand.

Depth Top [m]: 0.40
Depth Base [m]: 0.50
Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	98		
28	84		
20	68		
14	58		
10	51		
6.3	44		
5	42		
3.35	40		
2	37		
1.18	35		
0.6	33		
0.425	32		
0.3	31		
0.212	30		
0.15	28		
0.063	25		

Sample Proportions	% dry mass
Very coarse	0
Gravel	63
Sand	13
Fines <0.063mm	25

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	> 240
Curvature Coefficient	

Uniformity and Curvature Coefficient calculated in accordance with BS EN ISO 14688-2:2018

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

Katarzyna Banys
Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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4041

TEST CERTIFICATE

DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Tested in Accordance with: BS 1377-2: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

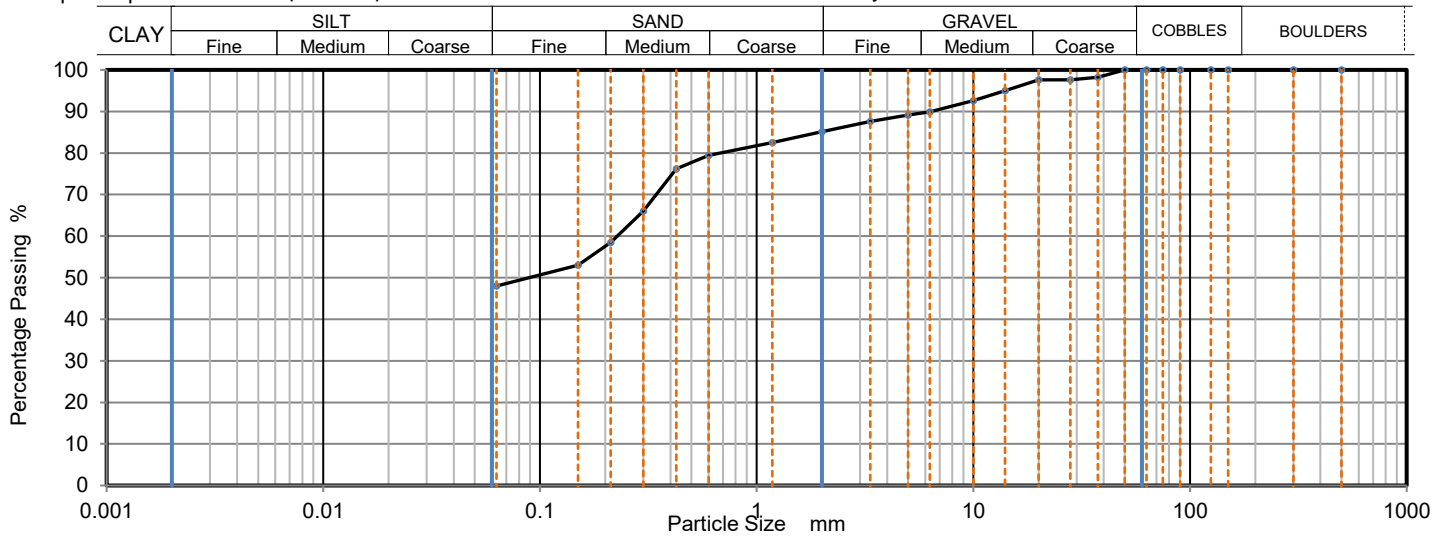
Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 19/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 2927123
Hole No.: TP-R5-08
Sample Reference: Not Given
Sample Description: Brown sandy CLAY with fragments of chalk
Sample Preparation: Sample was quartered, oven dried at 108.7 °C and broken down by hand.

Depth Top [m]: 0.70
Depth Base [m]: Not Given
Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	98		
28	98		
20	98		
14	95		
10	93		
6.3	90		
5	89		
3.35	88		
2	85		
1.18	83		
0.6	79		
0.425	76		
0.3	66		
0.212	59		
0.15	53		
0.063	48		

Sample Proportions	% dry mass
Very coarse	0
Gravel	15
Sand	37
Fines <0.063mm	48

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	> 3.6
Curvature Coefficient	

Uniformity and Curvature Coefficient calculated in accordance with BS EN ISO 14688-2:2018

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

Katarzyna Banys
Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE**DETERMINATION OF PARTICLE SIZE DISTRIBUTION**

Tested in Accordance with: BS 1377-2: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

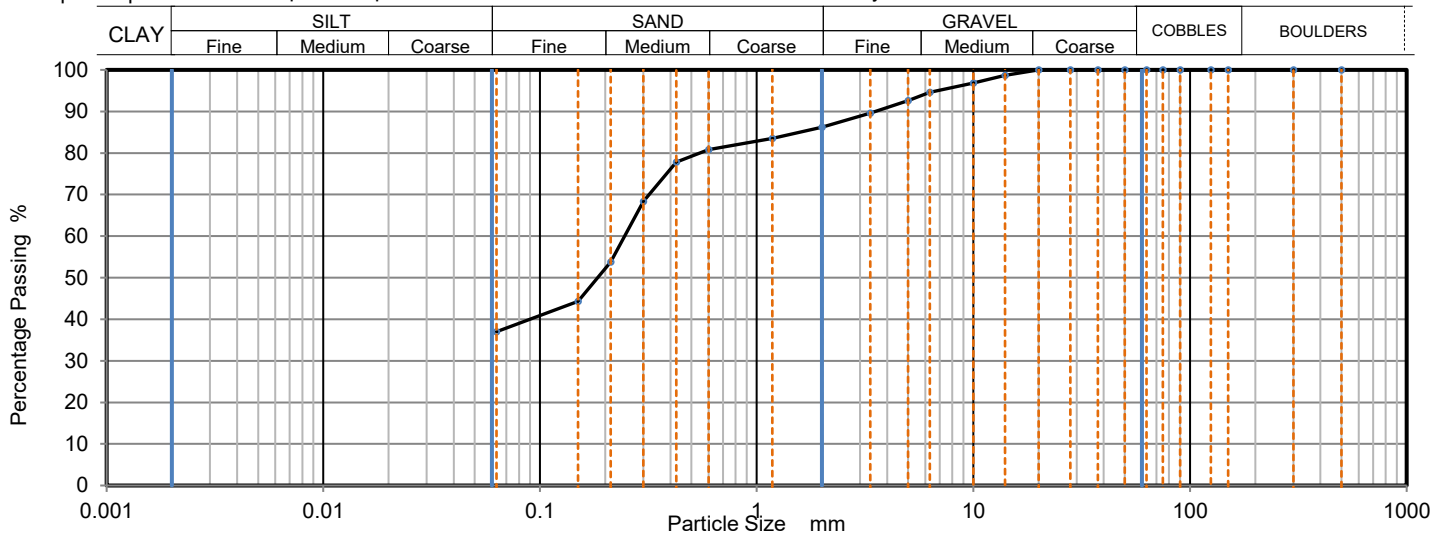
Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 23/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 2930350
Hole No.: TP-R2/R3-08
Sample Reference: Not Given
Sample Description: Light brown clayey SAND with fragments of chalk
Sample Preparation: Sample was quartered, oven dried at 108.7 °C and broken down by hand.

Depth Top [m]: 1.40
Depth Base [m]: Not Given
Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	99		
10	97		
6.3	95		
5	93		
3.35	90		
2	86		
1.18	84		
0.6	81		
0.425	78		
0.3	68		
0.212	54		
0.15	44		
0.063	37		

Sample Proportions	% dry mass
Very coarse	0
Gravel	14
Sand	49
Fines <0.063mm	37

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	> 3.9
Curvature Coefficient	

Uniformity and Curvature Coefficient calculated in accordance with BS EN ISO 14688-2:2018

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:**Signed:**

Katarzyna Banys
Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Tested in Accordance with: BS 1377-2: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

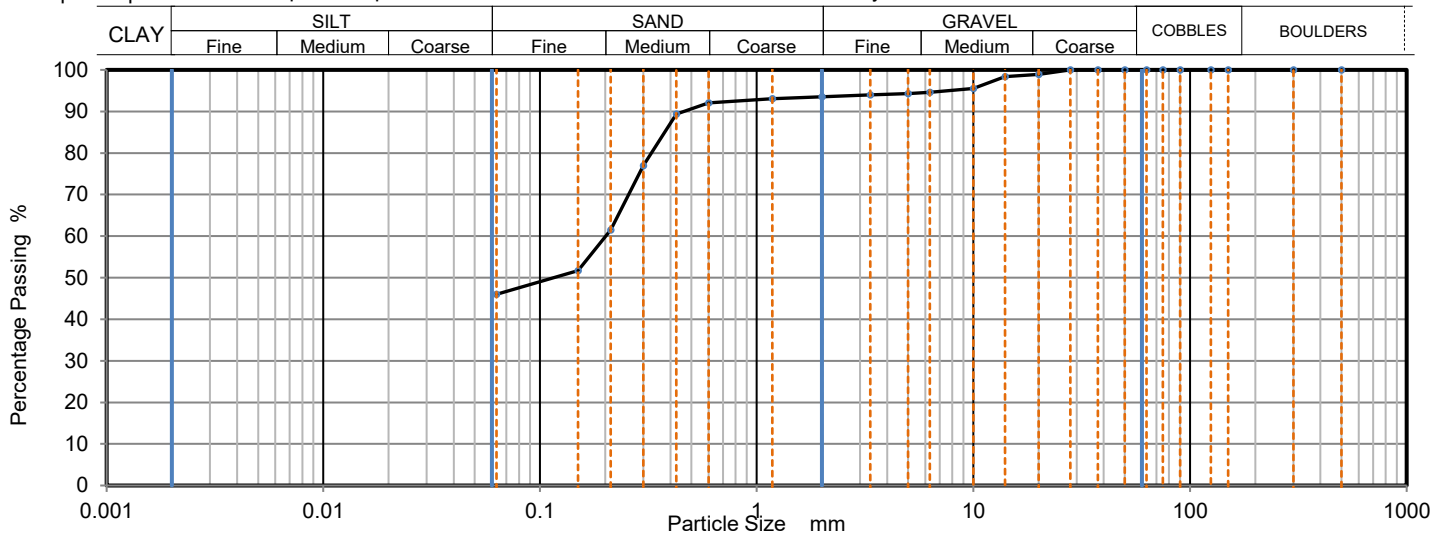
Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 23/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 2930351
Hole No.: TP-R2/R3-09
Sample Reference: Not Given
Sample Description: Brown sandy CLAY with fragments of plants
Sample Preparation: Sample was quartered, oven dried at 108.7 °C and broken down by hand.

Depth Top [m]: 0.65
Depth Base [m]: Not Given
Sample Type: B





4041

TEST CERTIFICATE**DETERMINATION OF DRY DENSITY/MOISTURE
CONTENT RELATIONSHIP METHOD USING
4.5 KG RAMMER**

Tested in Accordance with: BS 1377-4: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

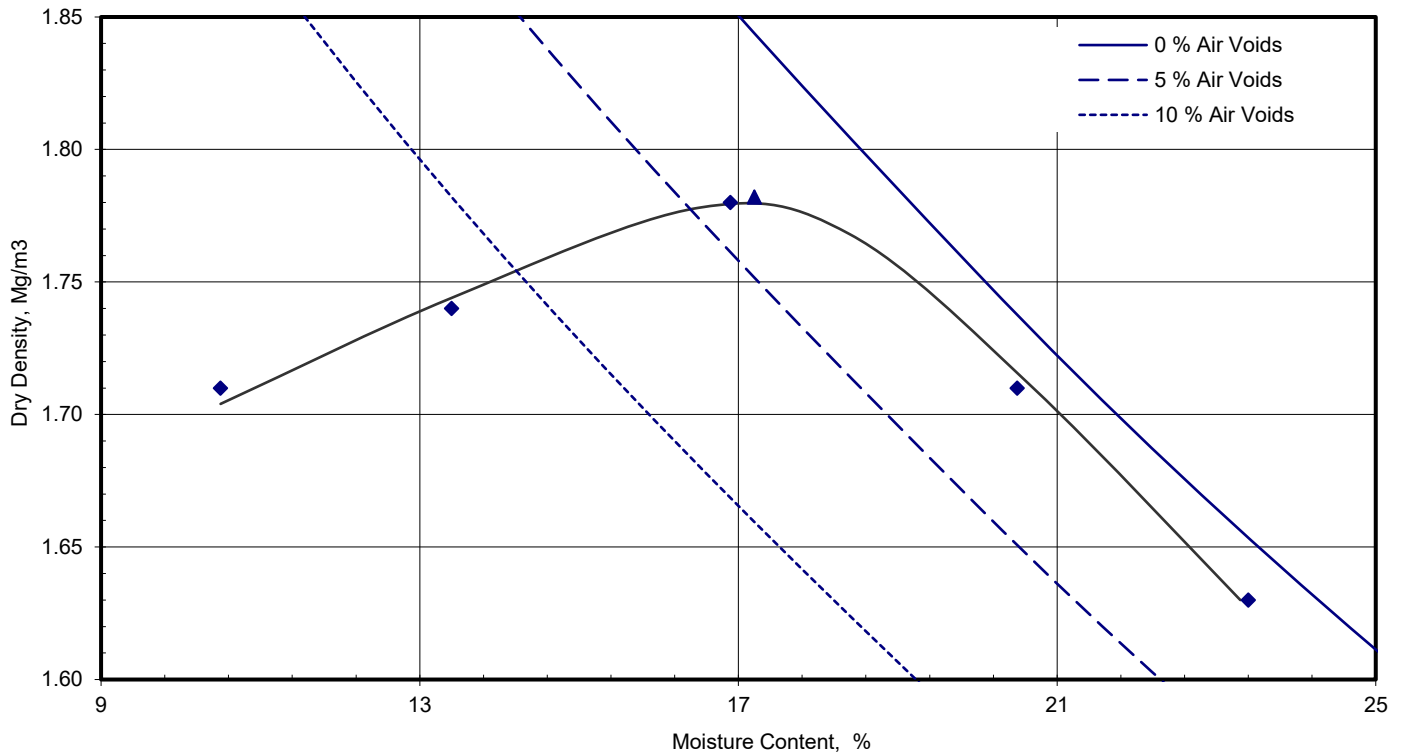
Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 23/01/2024
Sampled By: Not Given

Test Results:

Laboratory Reference: 2927111
Hole No.: TP-R2/R3-03
Sample Reference: Not Given
Sample Description: White CHALK
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.

Depth Top [m]: 2.50
Depth Base [m]: 2.60
Sample Type: B



Compaction Point No.	1	2	3	4	5	
Moisture Content	%	11	13	17	21	23
Dry Density	Mg/m³	1.71	1.74	1.78	1.71	1.63

Mould Type		1 Litre
Samples Used		Single sample tested
Dry Mass Retained on 37.5 mm Sieve	%	0
Dry Mass Retained on 20.0 mm Sieve	%	2
Particle Density - Assumed	Mg/m³	2.70
As received Moisture Content	%	21
Maximum Dry Density	Mg/m³	1.78

Optimum Moisture Content	%	17
--------------------------	---	----

Note: Tested in Accordance with BS 1377-4: 1990: Clause 3.5 using 4.5kg [heavy] Rammer

Remarks:

Signed:

Katarzyna Banys
Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

DETERMINATION OF DRY DENSITY/MOISTURE CONTENT RELATIONSHIP METHOD USING 4.5 KG RAMMER

Tested in Accordance with: BS 1377-4: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

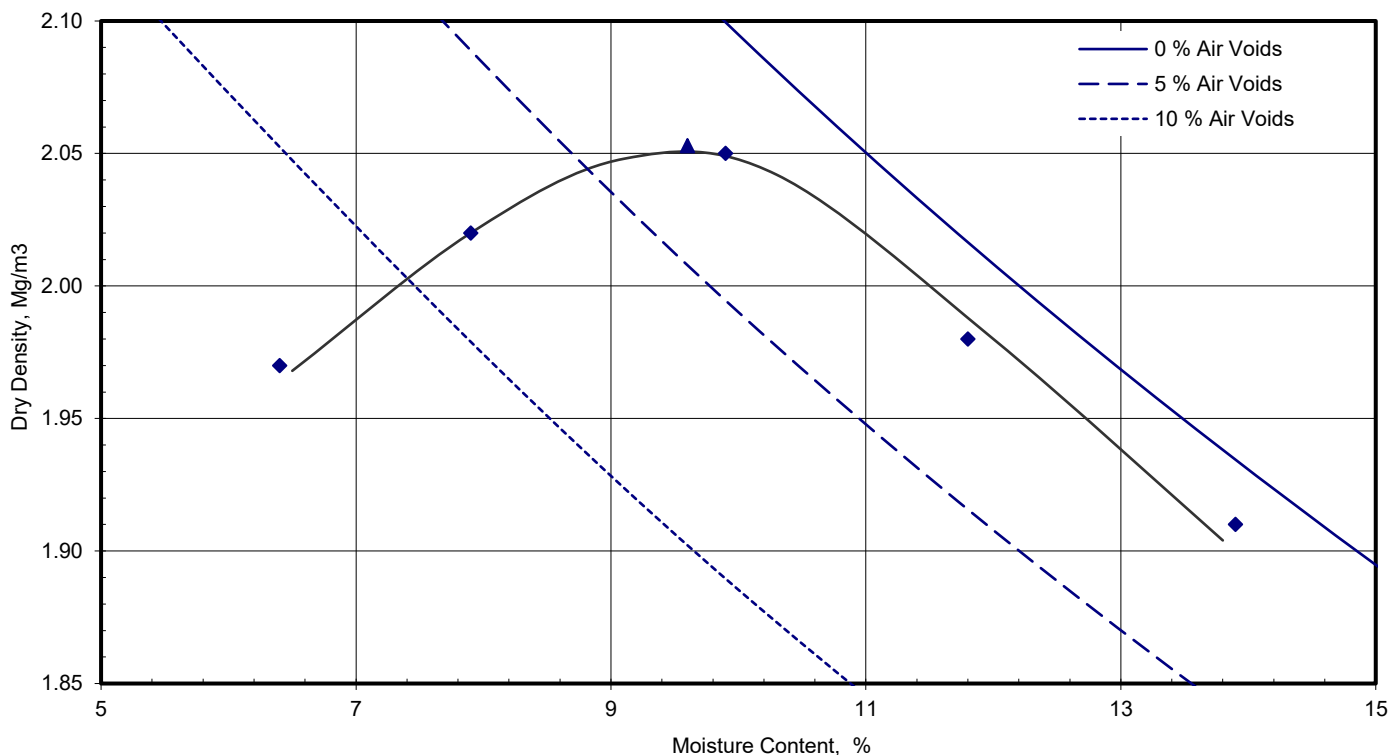
Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 23/01/2024
Sampled By: Not Given

Test Results:

Laboratory Reference: 2927112
Hole No.: TP-R2-04
Sample Reference: Not Given
Sample Description: Light brown very gravelly clayey SAND with fragments of chalk
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.

Depth Top [m]: 1.00
Depth Base [m]: 1.20
Sample Type: B



Compaction Point No.	1	2	3	4	5	
Moisture Content	%	6.4	7.9	9.9	12	14
Dry Density	Mg/m³	1.97	2.02	2.05	1.98	1.91

Mould Type		CBR
Samples Used		Single sample tested
Dry Mass Retained on 37.5 mm Sieve	%	0
Dry Mass Retained on 20.0 mm Sieve	%	7
Particle Density - Assumed	Mg/m³	2.65
As received Moisture Content	%	14
Maximum Dry Density	Mg/m³	2.05

Optimum Moisture Content	%	9.6
--------------------------	---	-----

Note: Tested in Accordance with BS 1377-4: 1990: Clause 3.6 using 4.5kg [heavy] Rammer

Remarks:

Signed:

Katarzyna Banys
Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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4041

TEST CERTIFICATE**DETERMINATION OF DRY DENSITY/MOISTURE
CONTENT RELATIONSHIP METHOD USING
4.5 KG RAMMER**

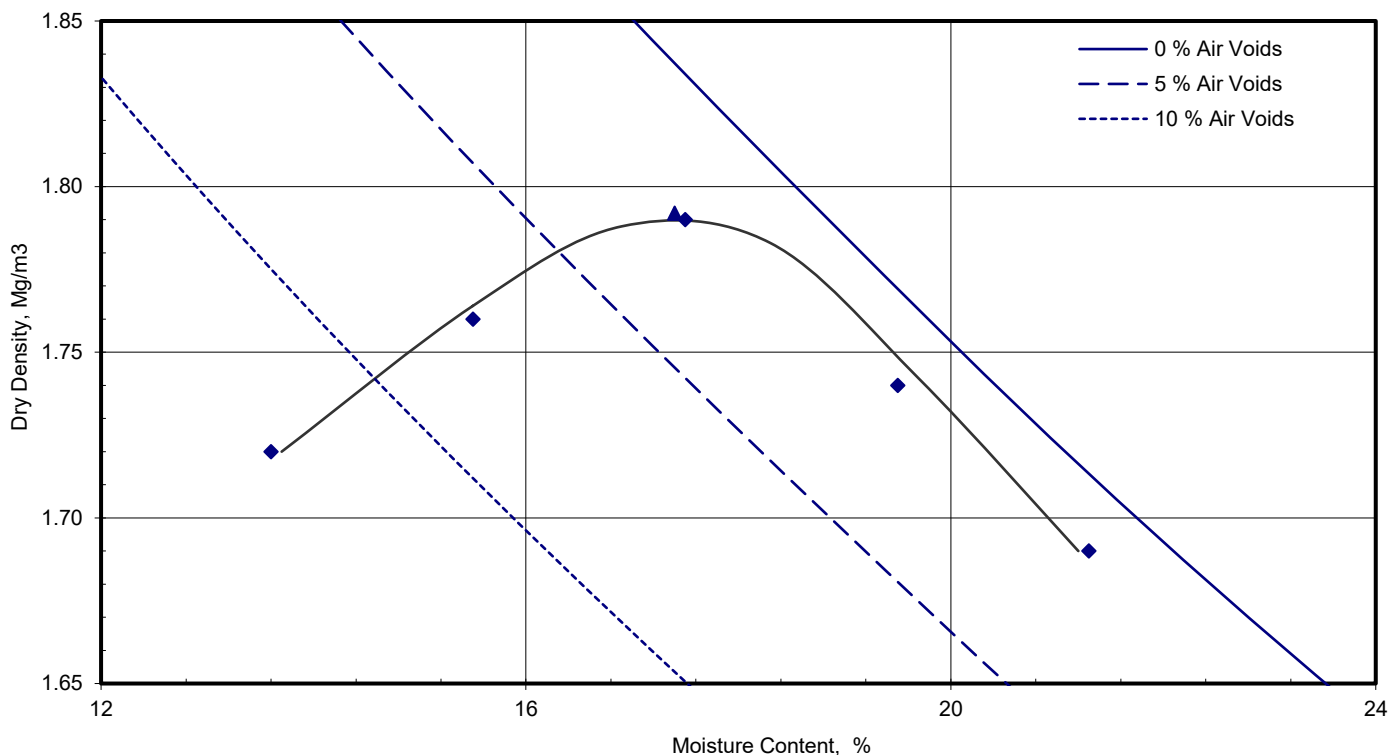
Tested in Accordance with: BS 1377-4: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DPContact: Stephen Fisk
Site Address: Baldock BridgesClient Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 23/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:Laboratory Reference: 2927115
Hole No.: TP-R3-01
Sample Reference: Not Given
Sample Description: White CHALK
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.Depth Top [m]: 1.40
Depth Base [m]: 1.50
Sample Type: B

Compaction Point No.		1	2	3	4	5
Moisture Content	%	14	16	18	20	21
Dry Density	Mg/m³	1.72	1.76	1.79	1.74	1.69

Mould Type		CBR
Samples Used		Single sample tested
Dry Mass Retained on 37.5 mm Sieve	%	4
Dry Mass Retained on 20.0 mm Sieve	%	25
Particle Density - Assumed	Mg/m³	2.70
As received Moisture Content	%	20
Maximum Dry Density	Mg/m³	1.79

Optimum Moisture Content	%	17
--------------------------	---	----

Note: Tested in Accordance with BS 1377-4: 1990: Clause 3.6 using 4.5kg [heavy] Rammer

Remarks:

Signed:

Katarzyna Banys
Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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4041

TEST CERTIFICATE**DETERMINATION OF DRY DENSITY/MOISTURE
CONTENT RELATIONSHIP METHOD USING
4.5 KG RAMMER**

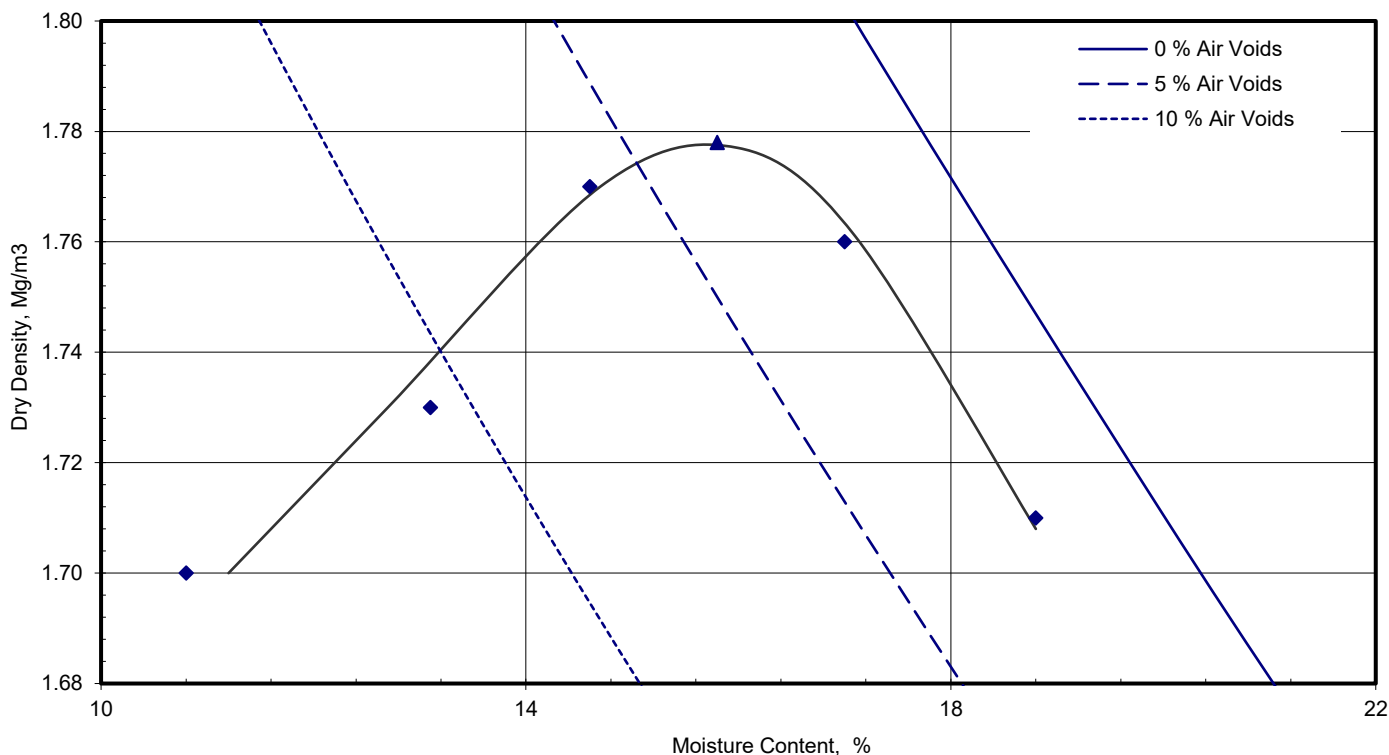
Tested in Accordance with: BS 1377-4: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DPContact: Stephen Fisk
Site Address: Baldock BridgesClient Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 23/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:Laboratory Reference: 2927116
Hole No.: TP-R3-04
Sample Reference: Not Given
Sample Description: White CHALK
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.Depth Top [m]: 1.40
Depth Base [m]: 1.50
Sample Type: B

Compaction Point No.		1	2	3	4	5
Moisture Content	%	11	13	15	17	19
Dry Density	Mg/m³	1.70	1.73	1.77	1.76	1.71

Mould Type		1 Litre
Samples Used		Single sample tested
Dry Mass Retained on 37.5 mm Sieve	%	0
Dry Mass Retained on 20.0 mm Sieve	%	4
Particle Density - Assumed	Mg/m³	2.60
As received Moisture Content	%	22
Maximum Dry Density	Mg/m³	1.78

Optimum Moisture Content	%	16
--------------------------	---	----

Note: Tested in Accordance with BS 1377-4: 1990: Clause 3.5 using 4.5kg [heavy] Rammer

Remarks:

Signed:

Katarzyna Banys
Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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4041

TEST CERTIFICATE**DETERMINATION OF DRY DENSITY/MOISTURE
CONTENT RELATIONSHIP METHOD USING
4.5 KG RAMMER**

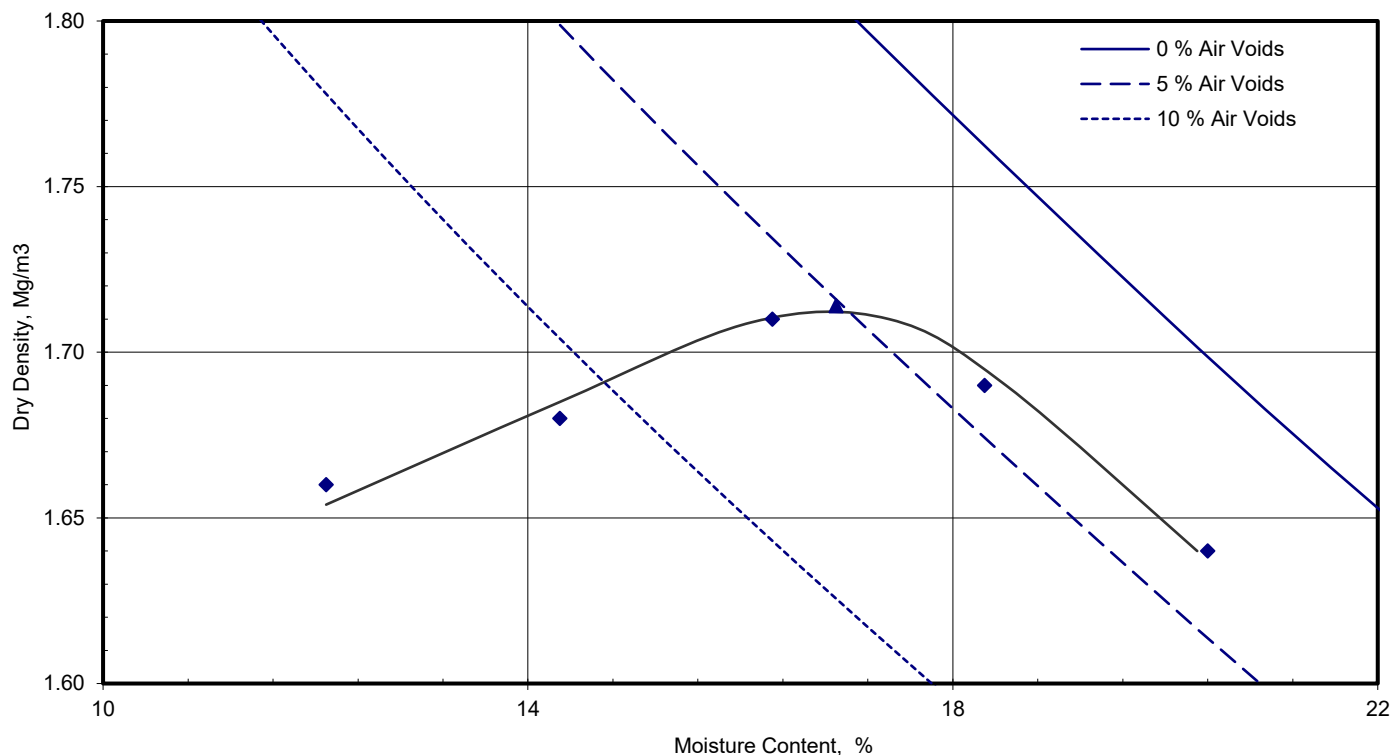
Tested in Accordance with: BS 1377-4: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DPContact: Stephen Fisk
Site Address: Baldock BridgesClient Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 23/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:Laboratory Reference: 2927118
Hole No.: TP-R4-01
Sample Reference: Not Given
Sample Description: White CHALK
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.Depth Top [m]: 2.00
Depth Base [m]: 2.20
Sample Type: B

Compaction Point No.		1	2	3	4	5
Moisture Content	%	12	14	16	18	20
Dry Density	Mg/m³	1.66	1.68	1.71	1.69	1.64

Mould Type		CBR
Samples Used		Single sample tested
Dry Mass Retained on 37.5 mm Sieve	%	10
Dry Mass Retained on 20.0 mm Sieve	%	43
Particle Density - Assumed	Mg/m³	2.60
As received Moisture Content	%	26
Maximum Dry Density	Mg/m³	1.71

Optimum Moisture Content	%	17
--------------------------	---	----

Note: Tested in Accordance with BS 1377-4: 1990: Clause 3.6 using 4.5kg [heavy] Rammer

Remarks: Coarse fragments were crushed to obtain sufficient mass of size fraction suitable to carry out the test as per client request.

Signed:

Katarzyna Banys
Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE**DETERMINATION OF DRY DENSITY/MOISTURE
CONTENT RELATIONSHIP METHOD USING
4.5 KG RAMMER**

Tested in Accordance with: BS 1377-4: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

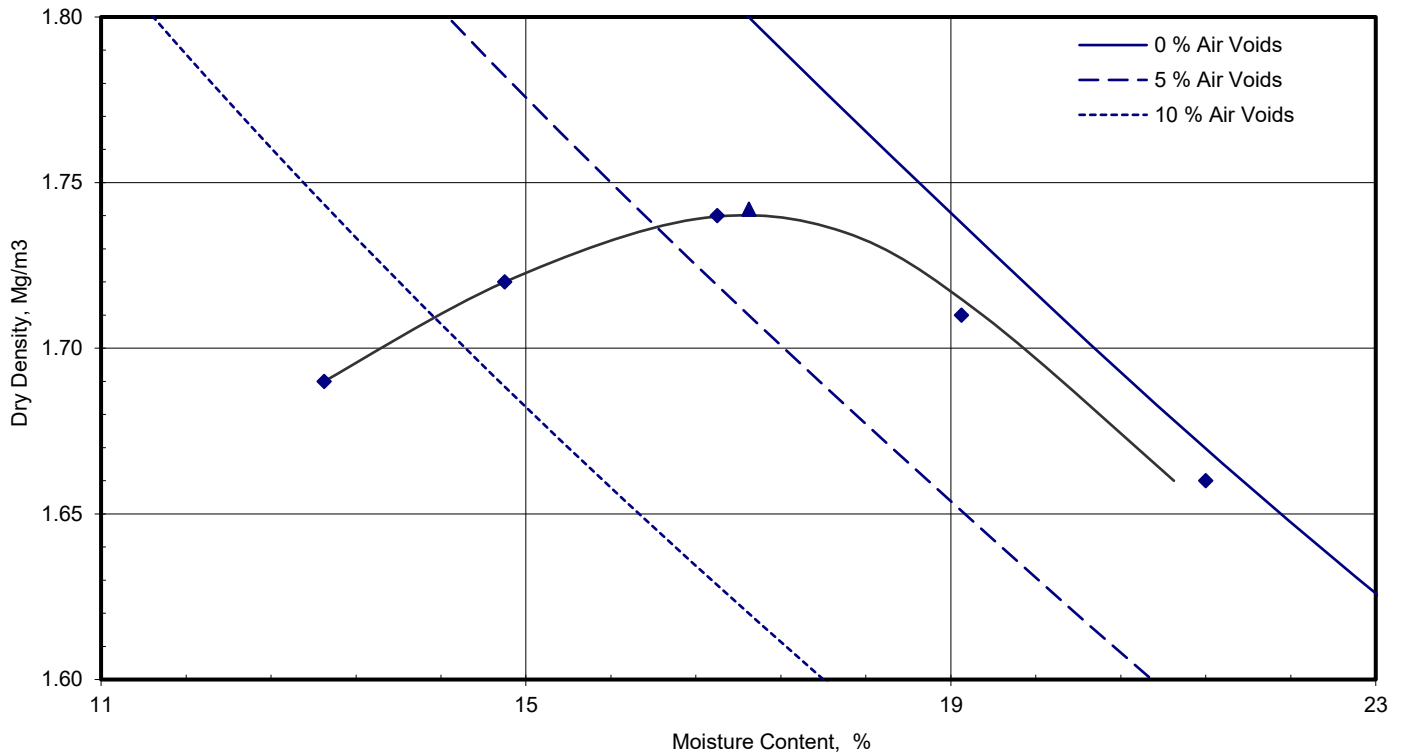
Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 23/01/2024
Sampled By: Not Given

Test Results:

Laboratory Reference: 2927120
Hole No.: TP-R4-07
Sample Reference: Not Given
Sample Description: White CHALK
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.

Depth Top [m]: 1.70
Depth Base [m]: Not Given
Sample Type: B



Compaction Point No.	1	2	3	4	5	
Moisture Content	%	13	15	17	19	21
Dry Density	Mg/m³	1.69	1.72	1.74	1.71	1.66

Mould Type		CBR
Samples Used		Single sample tested
Dry Mass Retained on 37.5 mm Sieve	%	20
Dry Mass Retained on 20.0 mm Sieve	%	71
Particle Density - Assumed	Mg/m³	2.60
As received Moisture Content	%	25
Maximum Dry Density	Mg/m³	1.74

Optimum Moisture Content	%	17
--------------------------	---	----

Note: Tested in Accordance with BS 1377-4: 1990: Clause 3.6 using 4.5kg [heavy] Rammer

Remarks: Coarse fragments were crushed to obtain sufficient mass of size fraction suitable to carry out the test as per client request

Signed:

Katarzyna Banys
Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE**DETERMINATION OF DRY DENSITY/MOISTURE
CONTENT RELATIONSHIP METHOD USING
4.5 KG RAMMER**

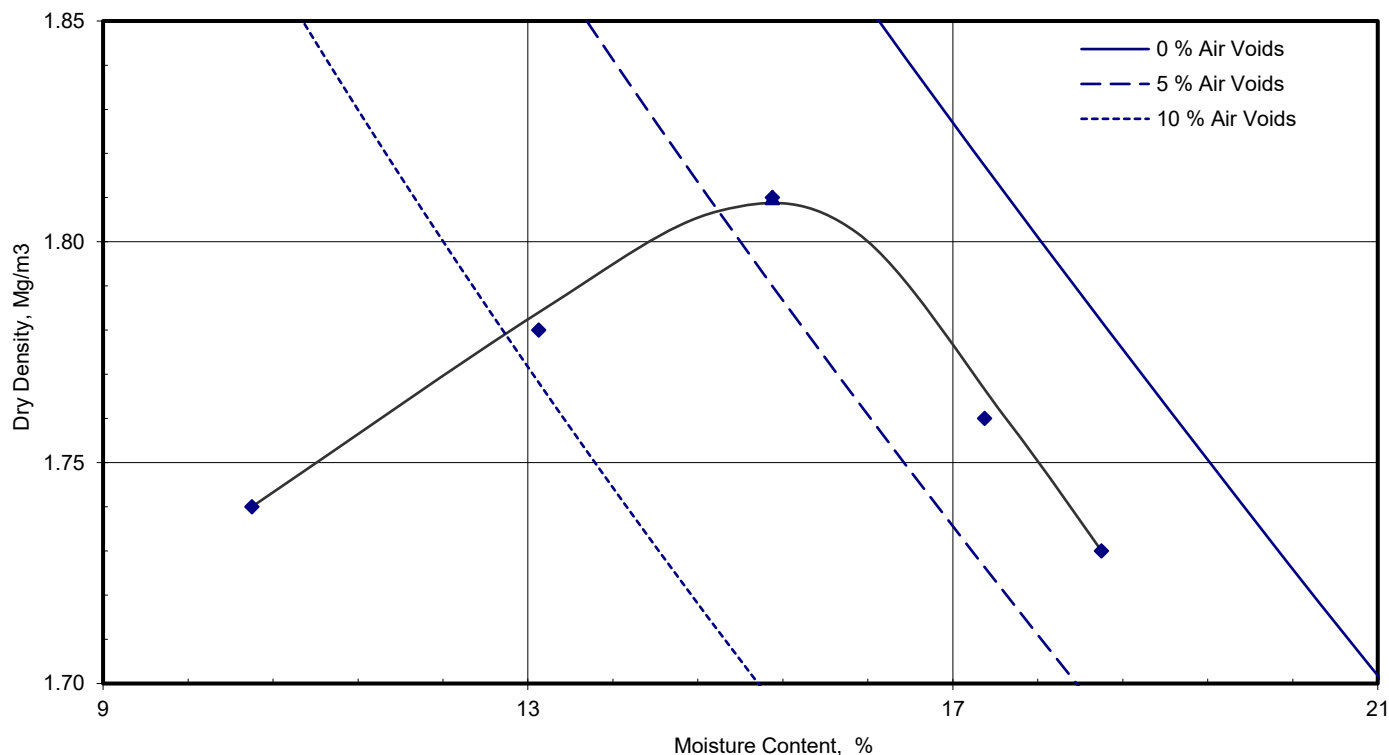
Tested in Accordance with: BS 1377-4: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DPContact: Stephen Fisk
Site Address: Baldock BridgesClient Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 23/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:Laboratory Reference: 2927121
Hole No.: TP-R5-03
Sample Reference: Not Given
Sample Description: White CHALK
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.Depth Top [m]: 1.30
Depth Base [m]: 1.40
Sample Type: B

Compaction Point No.		1	2	3	4	5
Moisture Content	%	10	13	15	17	18
Dry Density	Mg/m³	1.74	1.78	1.81	1.76	1.73

Mould Type		CBR
Samples Used		Single sample tested
Dry Mass Retained on 37.5 mm Sieve	%	4
Dry Mass Retained on 20.0 mm Sieve	%	7
Particle Density - Assumed	Mg/m³	2.65
As received Moisture Content	%	18
Maximum Dry Density	Mg/m³	1.81

Optimum Moisture Content	%	15
--------------------------	---	----

Note: Tested in Accordance with BS 1377-4: 1990: Clause 3.6 using 4.5kg [heavy] Rammer

Remarks:

Signed:

Katarzyna Banys
Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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4041

TEST CERTIFICATE**DETERMINATION OF DRY DENSITY/MOISTURE
CONTENT RELATIONSHIP METHOD USING
4.5 KG RAMMER**

Tested in Accordance with: BS 1377-4: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

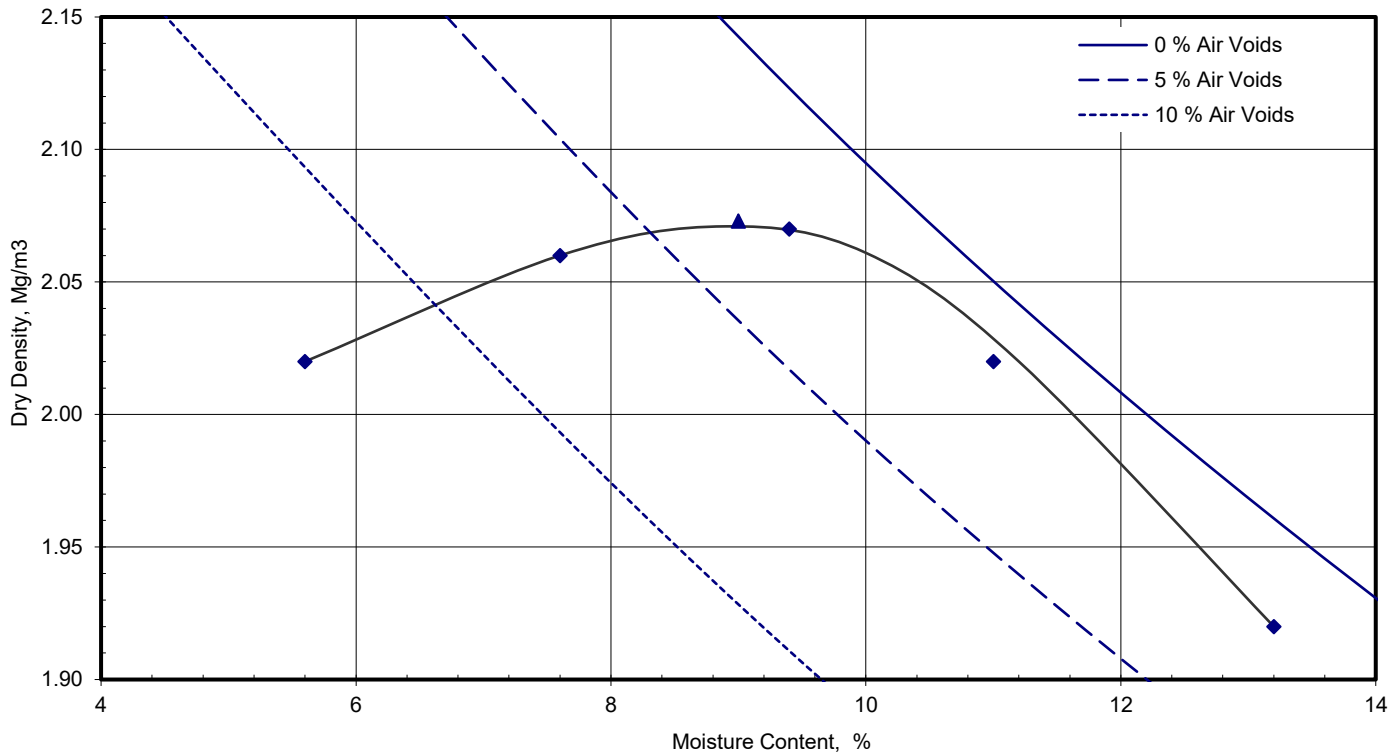
Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 24/01/2024
Sampled By: Not Given

Test Results:

Laboratory Reference: 2930350
Hole No.: TP-R2/R3-08
Sample Reference: Not Given
Sample Description: Light brown clayey SAND with fragments of chalk
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.

Depth Top [m]: 1.40
Depth Base [m]: Not Given
Sample Type: B



Compaction Point No.		1	2	3	4	5
Moisture Content	%	5.6	7.6	9.4	11	13
Dry Density	Mg/m³	2.02	2.06	2.07	2.02	1.92

Mould Type		CBR
Samples Used		Single sample tested
Dry Mass Retained on 37.5 mm Sieve	%	2
Dry Mass Retained on 20.0 mm Sieve	%	6
Particle Density - Assumed	Mg/m³	2.65
As received Moisture Content	%	15
Maximum Dry Density	Mg/m³	2.07

Optimum Moisture Content	%	9.0
--------------------------	---	-----

Note: Tested in Accordance with BS 1377-4: 1990: Clause 3.6 using 4.5kg [heavy] Rammer

Remarks:

Signed:

Katarzyna Banys
Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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4041

TEST CERTIFICATE**DETERMINATION OF THE CALIFORNIA BEARING RATIO (CBR)**

Tested in Accordance with: BS 1377-4: 1990: Clause 7

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 02/01/2024
Sampled By: Not Given

Test Results:

Laboratory Reference: 2927110
Hole No.: TP-R2-01
Sample Reference: Not Given
Sample Description: Brown clayey SAND with fragments of chalk

Depth Top [m]: 0.40
Depth Base [m]: 0.50
Sample Type: B

Specimen Preparation:

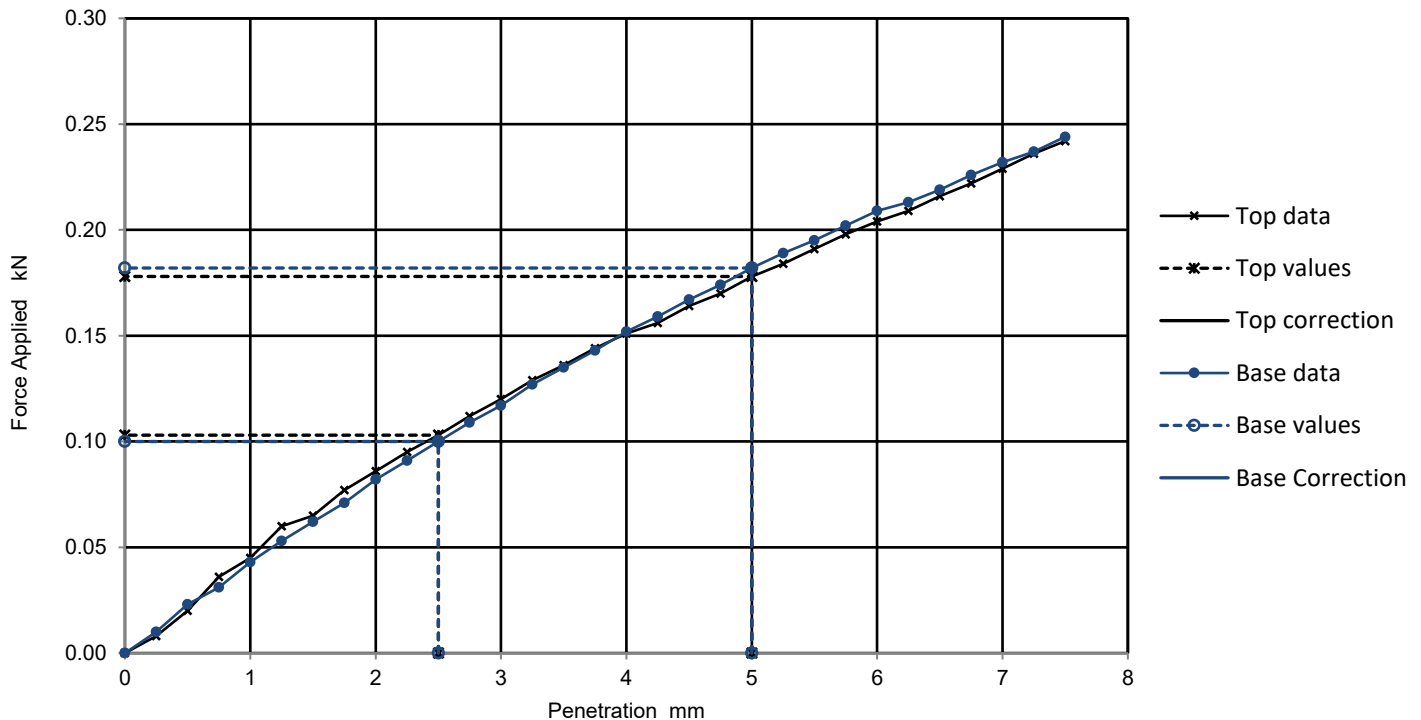
Condition Remoulded
Details Recompacted with specified standard effort using 2.5kg rammer

Soaking details Not soaked
Period of soaking days
Time to surface days
Amount of swell recorded mm
Dry density after soaking Mg/m3

Material retained on 20mm sieve removed 1 %

Initial Specimen details Bulk density 2.02 Mg/m3
Dry density 1.69 Mg/m3
Moisture content 20 %

Surcharge applied 8 kg
4.9 kPa

Force v Penetration Plots**Results**

TOP
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
No	0.78	0.89	0.89	0.9
No	0.76	0.91	0.91	

Moisture Content %
19
19

Remarks:

Test/ Specimen
specific remarks:

Signed:

Katarzyna Banys
Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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4041

TEST CERTIFICATE

DETERMINATION OF THE CALIFORNIA BEARING RATIO (CBR)

Tested in Accordance with: BS 1377-4: 1990: Clause 7

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 23/01/2024
Sampled By: Not Given

Test Results:

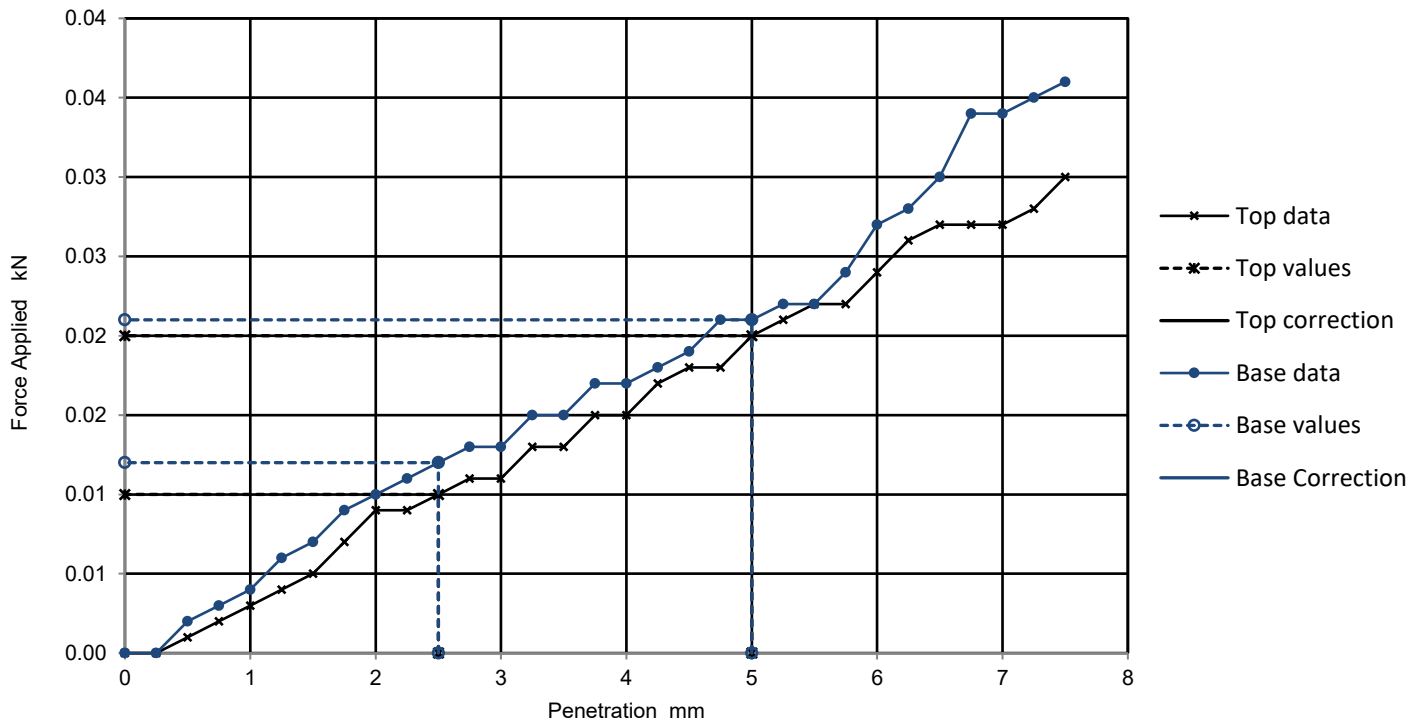
Laboratory Reference: 2927113
Hole No.: TP-R2-06
Sample Reference: Not Given
Sample Description: Light brown CLAY with fragments of chalk

Depth Top [m]: 1.00
Depth Base [m]: 1.20
Sample Type: B

Specimen Preparation:

Condition	Remoulded	Soaking details	Not soaked
Details	Recompacted with specified standard effort using 2.5kg rammer	Period of soaking	days
		Time to surface	days
		Amount of swell recorded	mm
		Dry density after soaking	Mg/m3
Material retained on 20mm sieve removed	17 %		
Initial Specimen details	Bulk density 2.09 Mg/m3	Surcharge applied	8 kg
	Dry density 1.78 Mg/m3		4.9 kPa
	Moisture content 18 %		

Force v Penetration Plots



Results

TOP
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
No	0.076	0.1	0.1	0.1
No	0.091	0.11	0.11	

Moisture Content %
18
19

Remarks:

Test/ Specimen
specific remarks:

Signed:

Katarzyna Banys
Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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4041

TEST CERTIFICATE

DETERMINATION OF THE CALIFORNIA BEARING RATIO (CBR)

Tested in Accordance with: BS 1377-4: 1990: Clause 7

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 23/01/2024
Sampled By: Not Given

Test Results:

Laboratory Reference: 2927114
Hole No.: TP-R2/R3-10
Sample Reference: Not Given
Sample Description: Light brown sandy CLAY with fragments of chalk, plants

Depth Top [m]: 0.80
Depth Base [m]: Not Given
Sample Type: B

Specimen Preparation:

Condition Remoulded
Details Recompacted with specified standard effort using 2.5kg rammer

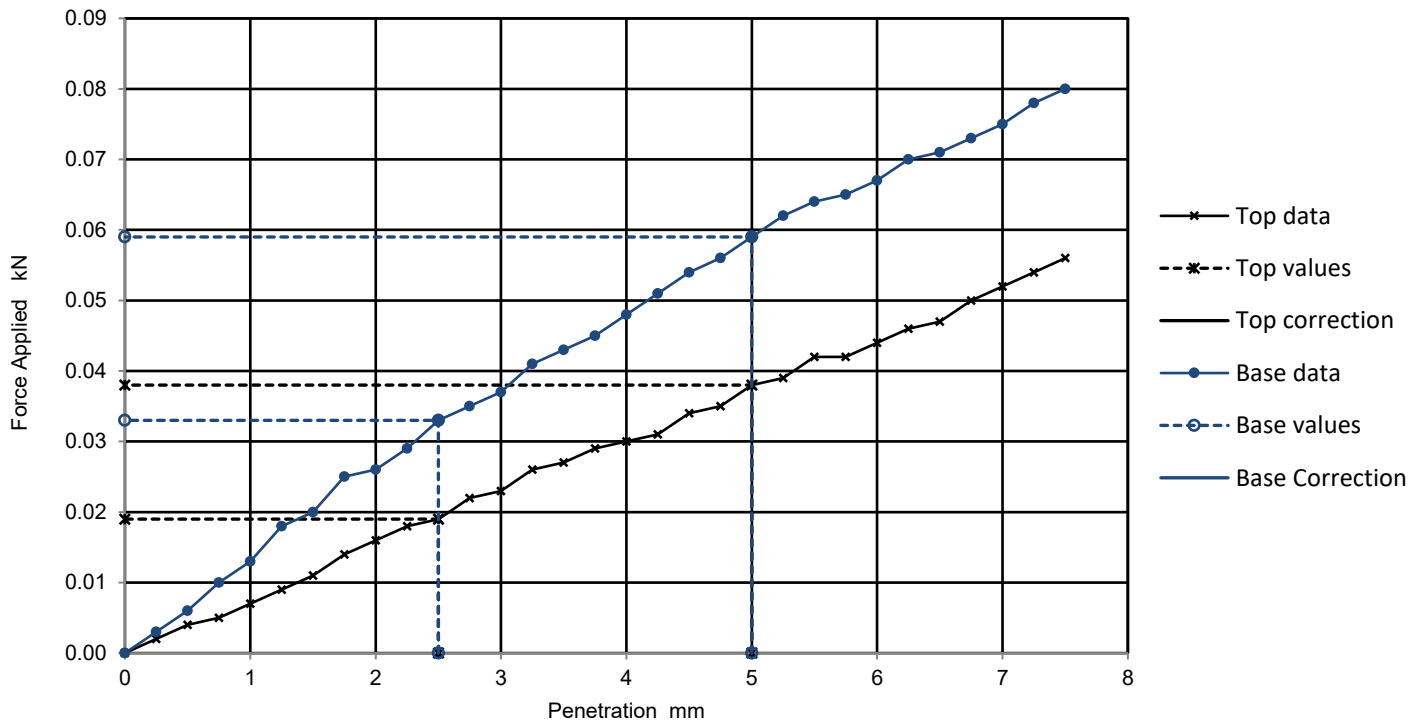
Soaking details Not soaked
Period of soaking days
Time to surface days
Amount of swell recorded mm
Dry density after soaking Mg/m³

Material retained on 20mm sieve removed 3 %

Initial Specimen details Bulk density 2.11 Mg/m³
Dry density 1.80 Mg/m³
Moisture content 17 %

Surcharge applied 8 kg
4.9 kPa

Force v Penetration Plots



Results

TOP
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
No	0.14	0.19	0.19	
No	0.25	0.3	0.3	

Moisture Content %
17
17

Remarks:

Test/ Specimen specific remarks:

Signed:

Katarzyna Banys
Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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4041

TEST CERTIFICATE**DETERMINATION OF THE CALIFORNIA BEARING
RATIO (CBR)**

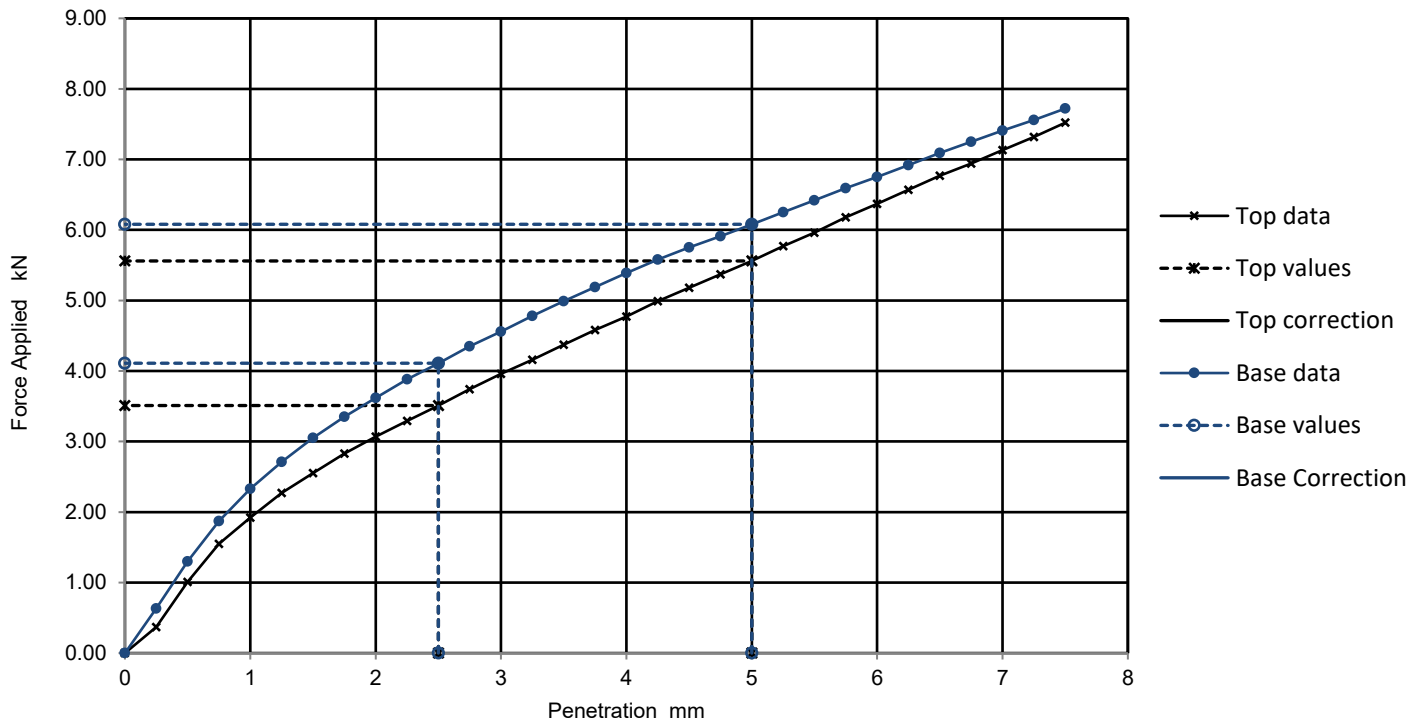
Tested in Accordance with: BS 1377-4: 1990: Clause 7

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EBClient: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DPContact: Stephen Fisk
Site Address: Baldock Bridges

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 23/01/2024
Sampled By: Not Given**Test Results:**Laboratory Reference: 2927117
Hole No.: TP-R4-01
Sample Reference: Not Given
Sample Description: White sandy gravelly CLAY with fragments of chalkDepth Top [m]: 1.00
Depth Base [m]: 1.20
Sample Type: B**Specimen Preparation:**

Condition	Remoulded	Soaking details	Not soaked
Details	Recompacted with specified standard effort using 2.5kg rammer	Period of soaking	days
		Time to surface	days
		Amount of swell recorded	mm
		Dry density after soaking	Mg/m3
Material retained on 20mm sieve removed	15 %		
Initial Specimen details	Bulk density 2.04 Mg/m3	Surcharge applied	8 kg
	Dry density 1.78 Mg/m3		4.9 kPa
	Moisture content 14 %		

Force v Penetration Plots**Results**TOP
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
No	27	28	28	29
No	31	30	31	

Moisture Content %
0.1
0.1

Remarks:

Test/ Specimen
specific remarks:

Signed:

Katarzyna Banys
Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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4041

TEST CERTIFICATE**DETERMINATION OF THE CALIFORNIA BEARING RATIO (CBR)**

Tested in Accordance with: BS 1377-4: 1990: Clause 7

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 25/01/2024
Sampled By: Not Given

Test Results:

Laboratory Reference: 2927119
Hole No.: TP-R4-02
Sample Reference: Not Given
Sample Description: White sandy CHALK

Depth Top [m]: 0.50
Depth Base [m]: 0.60
Sample Type: B

Specimen Preparation:

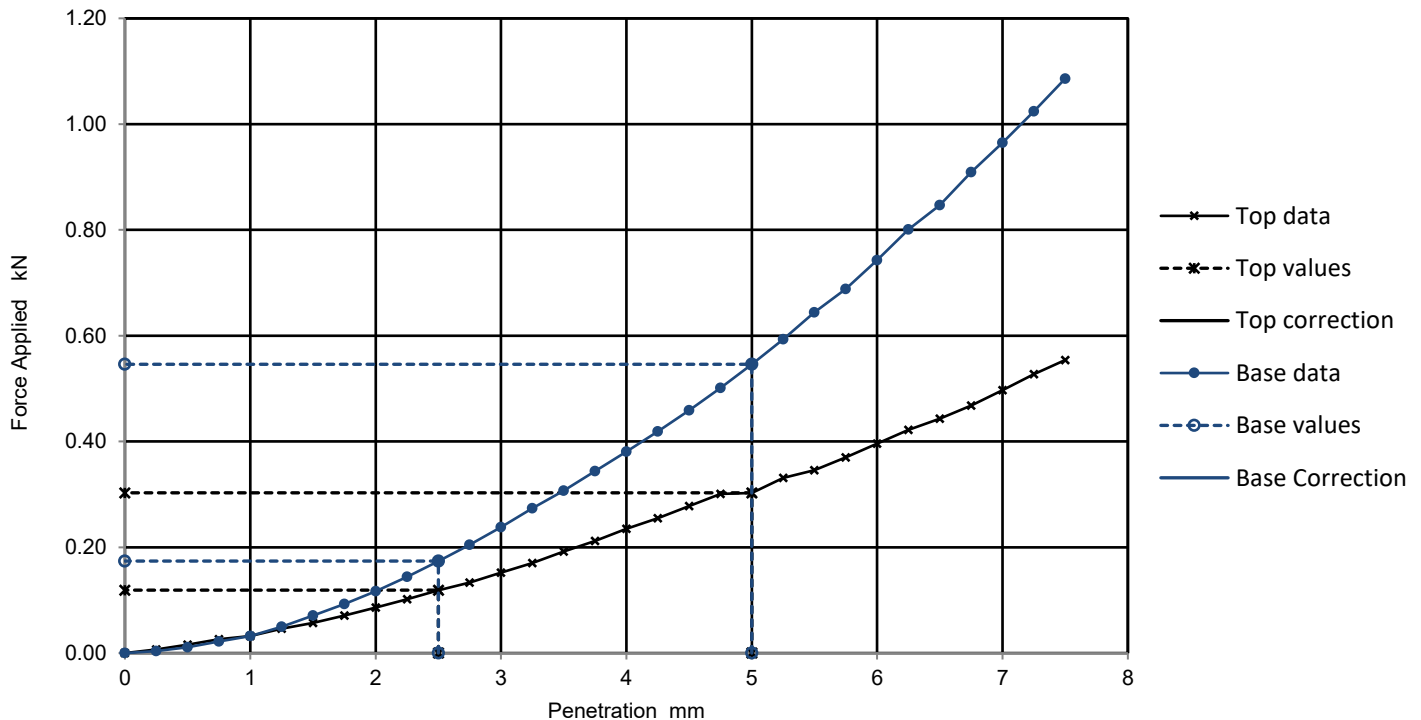
Condition Remoulded
Details Recompacted with specified standard effort using 2.5kg rammer

Soaking details Not soaked
Period of soaking days
Time to surface days
Amount of swell recorded mm
Dry density after soaking Mg/m3

Material retained on 20mm sieve removed 52 %

Initial Specimen details Bulk density 1.95 Mg/m3
Dry density 1.54 Mg/m3
Moisture content 26 %

Surcharge applied 8 kg
4.9 kPa

Force v Penetration Plots**Results**

TOP
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
No	0.9	1.5	1.5	
No	1.3	2.7	2.7	

Moisture Content %
25
26

Remarks:**Test/ Specimen specific remarks:**

Test carried out with > 25 % retained on 20mm as per clause 7.2.1.2 according to the client's request

Signed:

Katarzyna Banyś
Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

DETERMINATION OF THE CALIFORNIA BEARING RATIO (CBR)

Tested in Accordance with: BS 1377-4: 1990: Clause 7

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 23/01/2024
Sampled By: Not Given

Test Results:

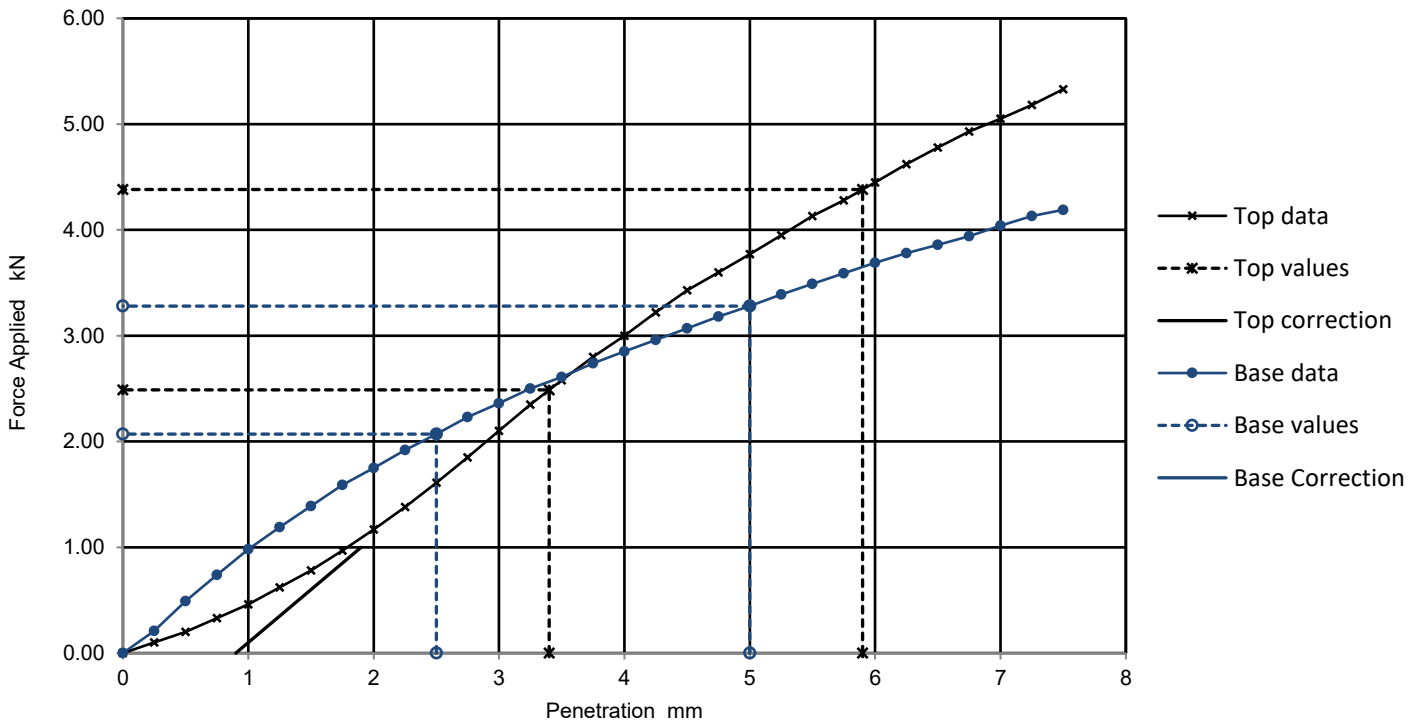
Laboratory Reference: 2927122
Hole No.: TP-R5-06
Sample Reference: Not Given
Sample Description: Light brown clayey GRAVEL with fragments of chalk

Depth Top [m]: 0.40
Depth Base [m]: 0.50
Sample Type: B

Specimen Preparation:

Condition	Remoulded			Soaking details		Not soaked	
Details	Recompacted with specified standard effort using 2.5kg rammer			Period of soaking		days	
				Time to surface		days	
				Amount of swell recorded		mm	
Material retained on 20mm sieve removed	32	%		Dry density after soaking		Mg/m3	
Initial Specimen details	Bulk density	1.91	Mg/m3	Surcharge applied		8	kg
	Dry density	1.55	Mg/m3			4.9	kPa
	Moisture content	23	%				

Force v Penetration Plots



Results

TOP
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
Yes	19	22	22	
No	16	16	16	

Moisture Content %
22
23

Remarks:

Test/ Specimen specific remarks:

Test carried out with > 25 % retained on 20mm as per clause 7.2.1.2 according to the client's request

Signed:

Katarzyna Banyś
Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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4041

TEST CERTIFICATE**DETERMINATION OF THE CALIFORNIA BEARING
RATIO (CBR)**

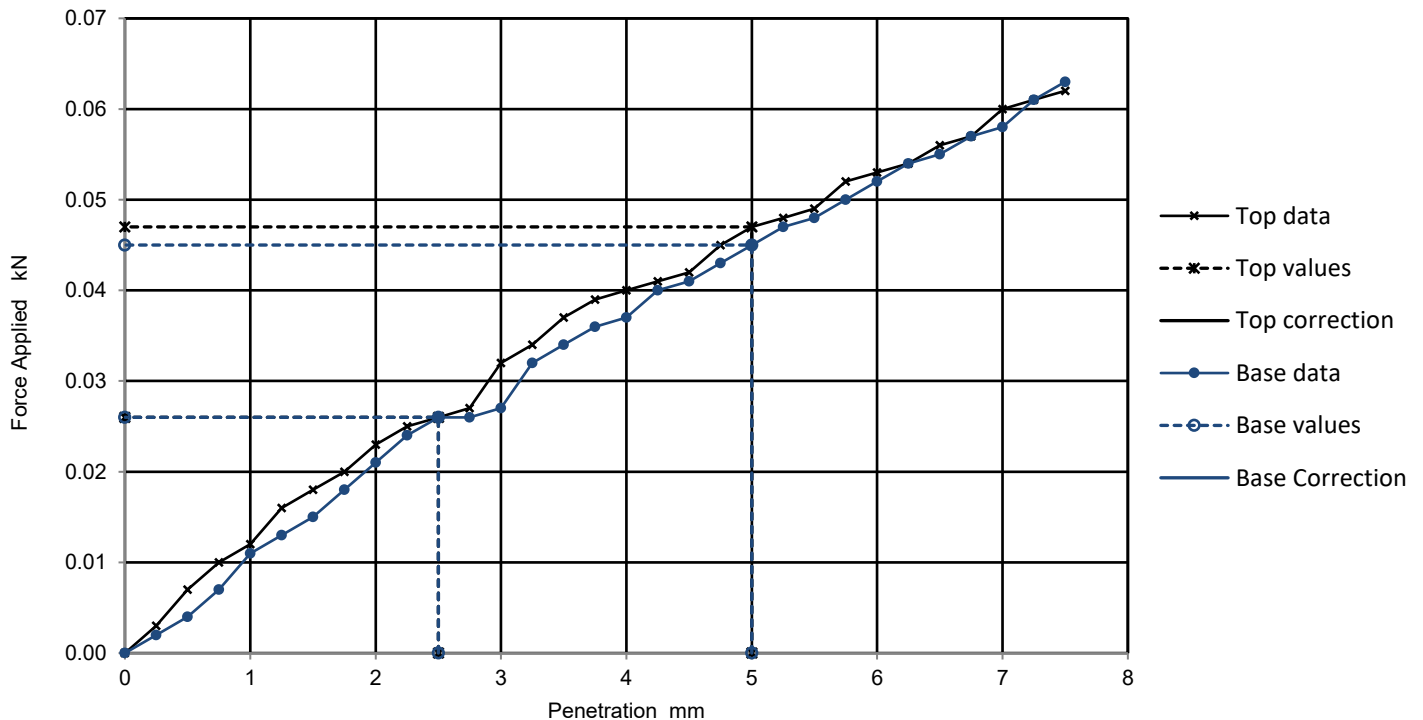
Tested in Accordance with: BS 1377-4: 1990: Clause 7

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EBClient: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DPContact: Stephen Fisk
Site Address: Baldock Bridges

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 23/01/2024
Sampled By: Not Given**Test Results:**Laboratory Reference: 2927123
Hole No.: TP-R5-08
Sample Reference: Not Given
Sample Description: Brown sandy CLAY with fragments of chalkDepth Top [m]: 0.70
Depth Base [m]: Not Given
Sample Type: B**Specimen Preparation:**Condition Remoulded
Details Recompacted with specified standard effort using 2.5kg rammerSoaking details Not soaked
Period of soaking days
Time to surface days
Amount of swell recorded mm
Dry density after soaking Mg/m3

Material retained on 20mm sieve removed 3 %

Initial Specimen details Bulk density 1.93 Mg/m3
Dry density 1.53 Mg/m3
Moisture content 27 %
Surcharge applied 8 kg
4.9 kPa**Force v Penetration Plots****Results**TOP
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
No	0.2	0.24	0.24	0.23
No	0.2	0.23	0.23	

Moisture Content %
27
26

Remarks:

Test/ Specimen
specific remarks:

Signed:

Katarzyna Banys
Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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4041

TEST CERTIFICATE**DETERMINATION OF THE CALIFORNIA BEARING RATIO (CBR)**

Tested in Accordance with: BS 1377-4: 1990: Clause 7

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 24/01/2024
Sampled By: Not Given

Test Results:

Laboratory Reference: 2930351
Hole No.: TP-R2/R3-09
Sample Reference: Not Given
Sample Description: Brown sandy CLAY with fragments of plants

Depth Top [m]: 0.65
Depth Base [m]: Not Given
Sample Type: B

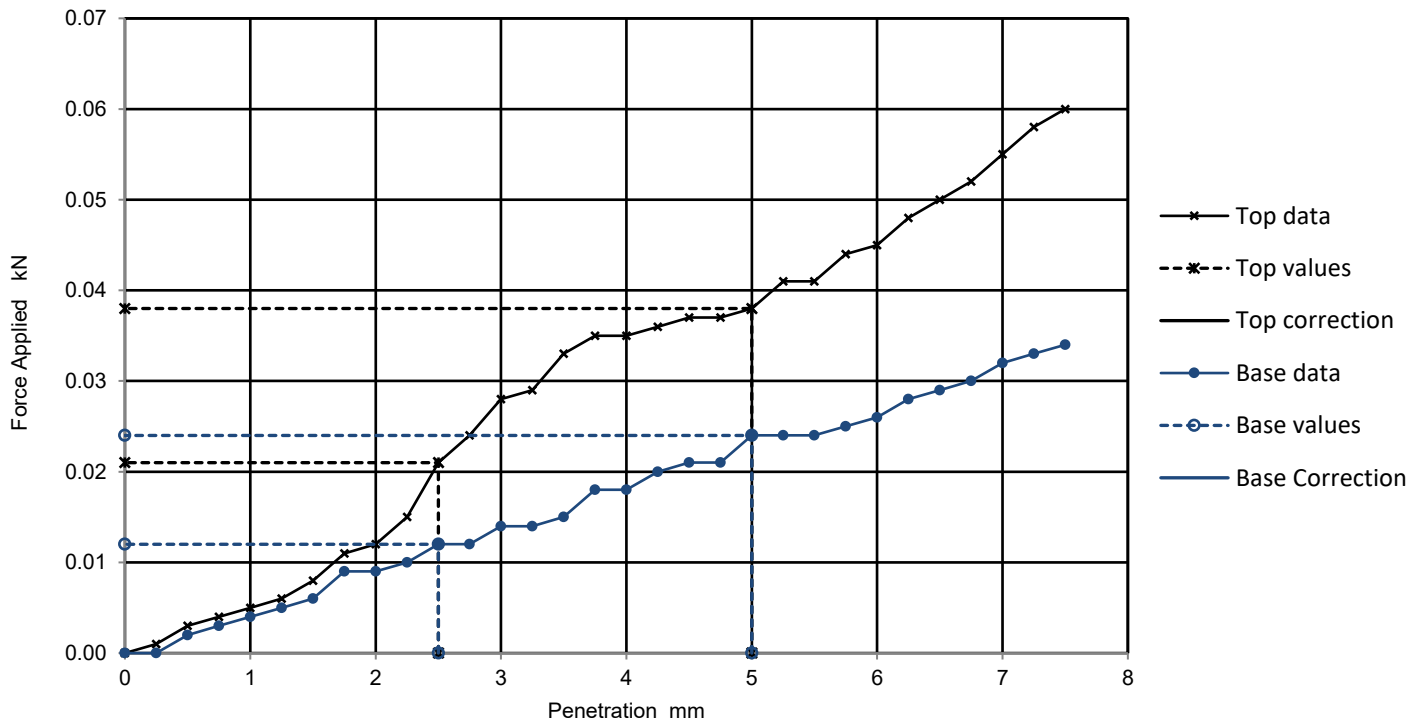
Specimen Preparation:

Condition Remoulded
Details Recompacted with specified standard effort using 2.5kg rammer

Soaking details Not soaked
Period of soaking days
Time to surface days
Amount of swell recorded mm
Dry density after soaking Mg/m3

Material retained on 20mm sieve removed 1 %

Initial Specimen details Bulk density 2.01 Mg/m3
Dry density 1.68 Mg/m3
Moisture content 19 %
Surcharge applied 8 kg
4.9 kPa

Force v Penetration Plots**Results**

TOP
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
No	0.16	0.19	0.19	
No	0.091	0.12	0.12	

Moisture Content %
20
20

Remarks:

Test/ Specimen
specific remarks:

Signed:

Katarzyna Banys
Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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SUMMARY REPORT

DETERMINATION OF BULK DENSITY - IMMERSION IN FLUID METHOD

Tested in Accordance with: BS EN ISO 17892-2: 2014: Clause 5.2

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041
Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 19/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	Bulk density	Dry density	WC	Preparation		
		Reference	Depth Top	Depth Base	Type								
			m	m				Mg/m3	Mg/m3	%			
2927110	TP-R2-01	Not Given	0.40	0.50	B	Brown clayey SAND with fragments of chalk		2.01	1.70	18.3			
2927112	TP-R2-04	Not Given	1.00	1.20	B	Light brown very gravelly clayey SAND with fragments of chalk		1.53	1.35	12.9			
2927113	TP-R2-06	Not Given	1.00	1.20	B	Light brown CLAY with fragments of chalk		2.12	1.82	16.5			

Note: WC - Water Content by BS EN ISO 17892-1

Comments:

Signed: Katarzyna Banyś
Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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SUMMARY REPORT

METHOD FOR SATURATION MOISTURE CONTENT OF CHALK

Tested in Accordance with: BS 1377-2: 1990: Clause 3.3

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 19/01/2024
Sampled By: Not Given

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	SMC	Bulk density	Dry density	MC	Preparation
		Reference	Depth Top	Depth Base	Type							
			m	m				%	Mg/m3	Mg/m3	%	
2927111	TP-R2/R3-03	Not Given	2.50	2.60	B	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	20	2.09	1.75	20	
2927115	TP-R3-01	Not Given	1.40	1.50	B	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	16	2.18	1.88	16	
2927116	TP-R3-04	Not Given	1.40	1.50	B	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	20	2.10	1.77	19	
2927118	TP-R4-01	Not Given	2.00	2.20	B	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	21	2.08	1.73	20	
2927119	TP-R4-02	Not Given	0.50	0.60	B	White sandy CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	22	2.03	1.69	20	
2927120	TP-R4-07	Not Given	1.70	Not Given	B	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	23	2.05	1.67	23	
2927121	TP-R5-03	Not Given	1.30	1.40	B	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	23	2.03	1.67	21	
2927124	TP-R5-09	Not Given	1.60	Not Given	B	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	24	2.02	1.63	24	

Note: SMC - Saturation Moisture Content; MC - Moisture Content

Comments:

Signed:

Katarzyna Banyś
Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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SUMMARY REPORT

DETERMINATION OF THE CHALK CRUSHING VALUE (CCV)

Tested in Accordance with: BS 1377-4: 1990: Clause 6

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 30/01 - 31/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	Material >10 mm %	Specimen Moisture Content %	Saturated Moisture Content %	Chalk Crushing Value	Preparation
		Reference	Depth Top m	Depth Base m	Type							
2927111	TP-R2/R3-03	Not Given	2.50	2.60	B	White CHALK		36	19	20	2.2	
2927112	TP-R2-04	Not Given	1.00	1.20	B	Light brown very gravelly clayey SAND with fragments of chalk		12	17	N/A	1.8	
2927116	TP-R3-04	Not Given	1.40	1.50	B	White CHALK		47	19	20	2.5	
2927121	TP-R5-03	Not Given	1.30	1.40	B	White CHALK		46	20	23	2.4	
2927122	TP-R5-06	Not Given	0.40	0.50	B	Light brown clayey GRAVEL with fragments of chalk		21	19	N/A	2.3	
2927124	TP-R5-09	Not Given	1.60	Not Given	B	White CHALK	Water ooze out from the mould at 40 blows	20	24	24	2.7	

Comments:

Signed:

Katarzyna Banyś
Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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SUMMARY REPORT

METHOD FOR SATURATION MOISTURE CONTENT OF CHALK

Tested in Accordance with: BS 1377-2: 1990: Clause 3.3

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges (Schedule 2)

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-79644-1
Date Sampled: Not Given
Date Received: 22/01/2024
Date Tested: 30/01/2024
Sampled By: Not Given

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	SMC	Bulk density	Dry density	MC	Preparation
		Reference	Depth Top	Depth Base	Type							
			m	m				%	Mg/m3	Mg/m3	%	
2936118	RO-R1-02	Not Given	2.96	3.02	C	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	26	1.98	1.58	25	
2936119	RO-R1-02	Not Given	3.52	3.56	C	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	26	1.96	1.59	23	
2936120	RO-R1-02	Not Given	7.58	7.75	C	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	25	1.96	1.60	23	
2936121	RO-R1-02	Not Given	11.80	11.99	C	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	24	1.99	1.63	23	
2936122	RO-R2/R3-01	Not Given	10.50	10.62	C	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	17	2.22	1.86	19	
2936123	RO-R2/R3-02	Not Given	4.20	4.28	C	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	26	1.99	1.59	25	
2936124	RO-R2/R3-02	Not Given	7.09	7.17	C	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	27	1.97	1.56	26	
2936125	RO-R2/R3-02	Not Given	12.58	12.64	C	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	11	2.29	2.06	11	
2936126	RO-R2/R3-03	Not Given	8.09	8.19	C	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	19	2.10	1.78	18	
2936127	RO-R2/R3-03	Not Given	11.21	11.33	C	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	24	2.02	1.65	22	

Note: SMC - Saturation Moisture Content; MC - Moisture Content

Comments:

Signed:

Katarzyna Koziel
Senior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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SUMMARY REPORT

METHOD FOR SATURATION MOISTURE CONTENT OF CHALK

Tested in Accordance with: BS 1377-2: 1990: Clause 3.3

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges (Schedule 2)

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-79644-1
Date Sampled: Not Given
Date Received: 22/01/2024
Date Tested: 30/01/2024
Sampled By: Not Given

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	SMC	Bulk density	Dry density	MC	Preparation
		Reference	Depth Top	Depth Base	Type							
			m	m				%	Mg/m3	Mg/m3	%	
2936128	RO-R2/R3-04	Not Given	13.88	14.11	C	Cream colour CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377-2 Clause 3.3.5.1	12	2.26	2.04	11	
2936129	RO-R4-03	Not Given	4.70	4.78	C	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377-2 Clause 3.3.5.1	17	2.10	1.85	14	
2936130	RO-R4-03	Not Given	11.00	11.21	C	Light grey CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377-2 Clause 3.3.5.1	24	2.02	1.63	24	
2936131	RO-R4-04	Not Given	3.00	3.11	C	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377-2 Clause 3.3.5.1	21	2.06	1.73	20	
2936132	RO-R4-04	Not Given	6.50	6.62	C	Cream colour CHALK		12	2.28	2.05	11	
2936133	RO-R4-04	Not Given	8.00	8.16	C	White mottled cream colour CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377-2 Clause 3.3.5.1	12	2.26	2.05	11	
2936134	RO-R4-04	Not Given	13.16	13.49	C	White CHALK		25	2.00	1.61	25	
2936135	RO-R4-04	Not Given	15.22	15.43	C	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377-2 Clause 3.3.5.1	22	2.06	1.70	21	
2936136	RO-R5-01	Not Given	7.03	7.20	C	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377-2 Clause 3.3.5.1	11	2.32	2.10	10	
2936137	RO-R5-01	Not Given	15.16	15.42	C	Cream colour CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377-2 Clause 3.3.5.1	23	2.02	1.68	20	

Note: SMC - Saturation Moisture Content; MC - Moisture Content

Comments:

Signed:

Katarzyna Koziel
Senior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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SUMMARY REPORT

METHOD FOR SATURATION MOISTURE CONTENT OF CHALK

Tested in Accordance with: BS 1377-2: 1990: Clause 3.3

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges (Schedule 2)

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-79644-1
Date Sampled: Not Given
Date Received: 22/01/2024
Date Tested: 30/01/2024
Sampled By: Not Given

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	SMC	Bulk density	Dry density	MC	Preparation
		Reference	Depth Top	Depth Base	Type							
			m	m				%	Mg/m3	Mg/m3	%	
2936138	RO-R5-02	Not Given	6.82	6.88	C	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	13	2.26	2.02	12	
2936139	RO-R5-02	Not Given	13.78	13.98	C	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	27	1.99	1.57	27	
2936140	RO-R5-03	Not Given	7.33	7.62	C	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	22	2.04	1.69	21	
2936141	RO-R5-03	Not Given	13.11	13.32	C	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	26	1.98	1.60	24	
2936142	RO-R5-03	Not Given	14.24	14.51	C	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	26	1.97	1.59	23	
2936143	RO-R5-04	Not Given	4.30	4.50	C	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	22	2.04	1.69	21	
2936144	RO-R5-04	Not Given	10.43	10.67	C	Cream colour CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	13	2.24	2.02	11	
2936145	RO-R5-04	Not Given	12.83	12.92	C	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	28	1.97	1.55	27	

Note: SMC - Saturation Moisture Content; MC - Moisture Content

Comments:

Signed:

Katarzyna Koziel
Senior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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SUMMARY REPORT

DETERMINATION OF POINT LOAD STRENGTH

Tested in Accordance with: ISRM: 2007, pages 125-132

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges (Schedule 2)

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-79644-1
Date Sampled: Not Given
Date Received: 22/01/2024
Date Tested: 09/02/2024
Sampled By: Not Given

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks # (including water content if measured)	Specimen Reference	Test Type see ISRM		Failure Valid (Y/N)	Dimensions				Force P kN	Equivalent diameter, De mm	Point Load Strength Index	
		Reference	Depth Top m	Depth Base m	Type				Type (D, A, I, B)	Direction (L, P or U)		Lne mm	W mm	Dps mm	Dps' mm			Is MPa	Is(50) MPa
2936118	RO-R1-02	Not Given	2.96	3.02	C	White CHALK	WC = 22.6%	1	I	U	YES	48.0	63.8	46.0	38.0	2.0	55.6	0.65	0.68
2936119	RO-R1-02	Not Given	3.52	3.56	C	White CHALK	WC = 22.3%	1	I	U	YES	50.2	55.5	45.0	41.0	0.8	53.8	0.28	0.29
2936120	RO-R1-02	Not Given	7.58	7.75	C	White CHALK	WC = 21.1%	1	A	U	YES	-	101.7	47.0	39.0	1.9	71.0	0.38	0.44
2936120_1	RO-R1-02	Not Given	7.58	7.75	C	White CHALK	WC = 20.2%	1	I	U	YES	37.4	51.3	36.0	28.0	0.9	42.8	0.49	0.46
2936121_1	RO-R1-02	Not Given	11.80	11.99	C	White CHALK	WC = 21.6%	1	I	U	YES	35.9	49.8	33.0	25.0	0.8	39.8	0.47	0.43
2936121	RO-R1-02	Not Given	11.80	11.99	C	White CHALK	WC = 21.2%	1	I	U	YES	44.3	68.2	43.0	31.0	1.1	51.9	0.39	0.40
2936122	RO-R2/R3-01	Not Given	10.50	10.62	C	White CHALK	WC = 18.5%	1	A	U	YES	-	100.7	49.0	37.0	1.5	68.9	0.32	0.37
2936123	RO-R2/R3-02	Not Given	4.20	4.28	C	White CHALK	WC = 25.6%	1	I	U	YES	51.0	87.6	66.0	62.0	0.8	83.2	0.12	0.15
2936124	RO-R2/R3-02	Not Given	7.09	7.17	C	White CHALK	WC = 26.7%	1	A	U	YES	-	101.5	49.0	38.0	1.4	70.1	0.28	0.33
2936125	RO-R2/R3-02	Not Given	12.58	12.64	C	White CHALK	WC = 10.6%	1	I	U	YES	52.3	71.1	33.0	26.0	1.0	48.5	0.40	0.40

Note: # non accredited; Test Type: D - Diametral, A - Axial, I - Irregular Lump, B - Block; Direction: L - parallel to planes of weakness, P - perpendicular to planes of weakness, U - unknown or random;
Dimensions: Dps - Distance between platens (platen separation), Dps' - at failure (see ISRM note 6), Lne - Length from platens to nearest free end W - Width of shortest dimension perpendicular to load, P;
Detailed legend for test and dimensions, based on ISRM, is shown above; Size factor, F = (De/50)0.45 for all tests

Equipment No.: i2 4341 Calibration Date: 14/03/2023 - 14/03/2024

Comments:

Signed:

Katarzyna Koziel
Senior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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SUMMARY REPORT

DETERMINATION OF POINT LOAD STRENGTH

Tested in Accordance with: ISRM: 2007, pages 125-132

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges (Schedule 2)

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-79644-1
Date Sampled: Not Given
Date Received: 22/01/2024
Date Tested: 09/02/2024
Sampled By: Not Given

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks # (including water content if measured)	Specimen Reference	Test Type see ISRM		Failure Valid (Y/N)	Dimensions				Force P kN	Equivalent diameter, De mm	Point Load Strength Index	
		Reference	Depth Top m	Depth Base m	Type				Type (D, A, I, B)	Direction (L, P or U)		Lne mm	W mm	Dps mm	Dps' mm			Is MPa	Is(50) MPa
2936126	RO-R2/R3-03	Not Given	8.09	8.19	C	White CHALK	WC = 17.9%	1	I	U	YES	50.7	74.1	45.0	39.0	2.1	60.7	0.56	0.61
2936130_1	RO-R2/R3-03	Not Given	11.00	11.21	C	Light grey CHALK	WC = 22.6%	1	A	U	YES	-	99.8	72.0	66.0	1.5	91.6	0.18	0.23
2936127	RO-R2/R3-03	Not Given	11.21	11.33	C	White CHALK	WC = 21.9%	1	A	U	YES	-	100.8	65.0	46.0	3.3	76.8	0.56	0.68
2936128	RO-R2/R3-04	Not Given	13.88	14.11	C	Cream colour CHALK	WC = 9.2%	1	A	U	YES	-	99.3	59.0	45.0	5.9	75.4	1.03	1.24
2936128_1	RO-R2/R3-04	Not Given	13.88	14.11	C	Cream colour CHALK	WC = 8.4%	1	A	U	YES	-	99.3	76.0	72.0	2.6	95.4	0.28	0.37
2936129	RO-R4-03	Not Given	4.70	4.78	C	White CHALK	WC = 13.2%	1	I	U	YES	50.0	79.4	65.0	49.0	2.4	70.4	0.48	0.57
2936130	RO-R4-03	Not Given	11.00	11.21	C	Light grey CHALK	WC = 22.7%	1	A	U	YES	-	100.3	68.0	58.0	1.8	86.1	0.24	0.30
2936131	RO-R4-04	Not Given	3.00	3.11	C	White CHALK	WC = 18.5%	1	I	U	YES	50.7	78.2	37.0	32.0	1.6	56.4	0.49	0.51
2936132	RO-R4-04	Not Given	6.50	6.62	C	Cream colour CHALK	WC = 12.2%	1	A	U	YES	-	98.7	63.0	46.0	3.6	76.0	0.61	0.74
2936133	RO-R4-04	Not Given	8.00	8.16	C	White mottled cream colour CHALK	WC = 10.1%	1	A	P	YES	-	99.0	51.0	43.0	1.7	73.6	0.30	0.36

Note: # non accredited; Test Type: D - Diametral, A - Axial, I - Irregular Lump, B - Block; Direction: L - parallel to planes of weakness, P - perpendicular to planes of weakness, U - unknown or random;
Dimensions: Dps - Distance between platens (platen separation), Dps' - at failure (see ISRM note 6), Lne - Length from platens to nearest free end W - Width of shortest dimension perpendicular to load, P;
Detailed legend for test and dimensions, based on ISRM, is shown above; Size factor, F = (De/50)0.45 for all tests

Equipment No.: i2 4341 Calibration Date: 14/03/2023 - 14/03/2024

Comments:

Signed:

Katarzyna Koziel
Senior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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SUMMARY REPORT

DETERMINATION OF POINT LOAD STRENGTH

Tested in Accordance with: ISRM: 2007, pages 125-132

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges (Schedule 2)

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-79644-1
Date Sampled: Not Given
Date Received: 22/01/2024
Date Tested: 09/02/2024
Sampled By: Not Given

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks # (including water content if measured)	Specimen Reference	Test Type see ISRM		Failure Valid (Y/N)	Dimensions				Force P kN	Equivalent diameter, De mm	Point Load Strength Index	
		Reference	Depth Top m	Depth Base m	Type				Type (D, A, I, B)	Direction (L, P or U)		Lne mm	W mm	Dps mm	Dps' mm			Is MPa	Is(50) MPa
2936133_1	RO-R4-04	Not Given	8.00	8.16	C	White mottled cream colour CHALK	WC = 9.5%	1	I	U	YES	38.6	50.2	39.0	31.0	1.3	44.5	0.66	0.62
2936134_1	RO-R4-04	Not Given	13.16	13.49	C	White CHALK	WC = 23.1%	1	D	U	YES	74.6	99.7	99.0	93.0	1.8	96.3	0.19	0.26
2936134	RO-R4-04	Not Given	13.16	13.49	C	White CHALK	WC = 25.2%	1	A	U	YES	-	100.2	48.0	34.0	1.4	65.9	0.31	0.35
2936135	RO-R4-04	Not Given	15.22	15.43	C	White CHALK	WC = 19.9%	1	I	U	YES	55.8	85.1	73.0	68.0	0.7	85.8	0.10	0.12
2936136	RO-R5-01	Not Given	7.03	7.20	C	White CHALK	WC = 10.9%	1	I	U	YES	50.3	54.3	35.0	28.0	1.4	44.0	0.72	0.68
2936137	RO-R5-01	Not Given	15.16	15.42	C	Cream colour CHALK	WC = 20.3%	1	A	U	YES	-	102.0	41.0	35.0	0.7	67.4	0.14	0.16
2936137_1	RO-R5-01	Not Given	15.16	15.42	C	Cream colour CHALK	WC = 20.4%	1	A	U	YES	-	101.5	87.0	78.0	1.2	100.4	0.12	0.16
2936138	RO-R5-02	Not Given	6.82	6.88	C	White CHALK	WC = 11.1%	1	I	U	YES	47.8	65.1	46.0	39.0	0.9	56.9	0.28	0.29
2936139	RO-R5-02	Not Given	13.78	13.98	C	White CHALK	WC = 27.5%	1	I	U	YES	54.6	92.3	62.0	53.0	0.6	78.9	0.10	0.12
2936140	RO-R5-03	Not Given	7.33	7.62	C	White CHALK	WC = 15.5%	1	A	U	YES	-	99.4	68.0	59.0	1.5	86.4	0.19	0.25

Note: # non accredited; Test Type: D - Diametral, A - Axial, I - Irregular Lump, B - Block; Direction: L - parallel to planes of weakness, P - perpendicular to planes of weakness, U - unknown or random;
Dimensions: Dps - Distance between platens (platen separation), Dps' - at failure (see ISRM note 6), Lne - Length from platens to nearest free end W - Width of shortest dimension perpendicular to load, P;
Detailed legend for test and dimensions, based on ISRM, is shown above; Size factor, F = (De/50)0.45 for all tests

Equipment No.: i2 4341 Calibration Date: 14/03/2023 - 14/03/2024

Comments:

Signed:

Katarzyna Koziel
Senior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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SUMMARY REPORT

DETERMINATION OF POINT LOAD STRENGTH

Tested in Accordance with: ISRM: 2007, pages 125-132

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges (Schedule 2)

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-79644-1
Date Sampled: Not Given
Date Received: 22/01/2024
Date Tested: 09/02/2024
Sampled By: Not Given

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks # (including water content if measured)	Specimen Reference	Test Type see ISRM		Failure Valid (Y/N)	Dimensions				Force P kN	Equivalent diameter, De mm	Point Load Strength Index	
		Reference	Depth Top m	Depth Base m	Type				Type (D, A, I, B)	Direction (L, P or U)		Lne mm	W mm	Dps mm	Dps' mm			Is MPa	Is(50) MPa
2936140_1	RO-R5-03	Not Given	7.33	7.62	C	White CHALK	WC = 15.1%	1	A	U	YES	-	99.7	76.0	70.0	1.3	94.2	0.15	0.19
2936141_1	RO-R5-03	Not Given	13.11	13.32	C	White CHALK	WC = 24.9%	1	D	U	YES	56.9	99.3	99.0	92.0	0.9	95.6	0.10	0.13
2936141	RO-R5-03	Not Given	13.11	13.32	C	White CHALK	WC = 25.4%	1	A	U	YES	-	99.7	66.0	49.0	1.4	78.9	0.22	0.27
2936142	RO-R5-03	Not Given	14.24	14.51	C	White CHALK	WC = 22.2%	1	I	U	YES	51.3	89.7	63.0	51.0	1.2	76.3	0.21	0.25
2936142_1	RO-R5-03	Not Given	14.24	14.51	C	White CHALK	WC = 21.8%	1	D	U	YES	53.6	101.5	101.0	95.0	1.0	98.2	0.10	0.14
2936143_1	RO-R5-04	Not Given	4.30	4.50	C	White CHALK	WC = 19.8%	1	I	U	YES	34.9	52.8	42.0	35.0	1.2	48.5	0.51	0.50
2936143	RO-R5-04	Not Given	4.30	4.50	C	White CHALK	WC = 20.9%	1	A	U	YES	-	100.3	53.0	42.0	1.7	73.2	0.32	0.38
2936144	RO-R5-04	Not Given	10.43	10.67	C	Cream colour CHALK	WC = 11.2%	1	A	U	YES	-	100.4	41.0	32.0	1.4	64.0	0.33	0.37
2936144_1	RO-R5-04	Not Given	10.43	10.67	C	Cream colour CHALK	WC = 10.5%	1	D	U	YES	56.6	100.2	100.0	95.0	2.1	97.6	0.22	0.30
2936145	RO-R5-04	Not Given	12.83	12.92	C	White CHALK	WC = 27.5%	1	I	U	YES	49.9	88.7	74.0	42.0	1.1	68.9	0.23	0.27

Note: # non accredited; Test Type: D - Diametral, A - Axial, I - Irregular Lump, B - Block; Direction: L - parallel to planes of weakness, P - perpendicular to planes of weakness, U - unknown or random;
Dimensions: Dps - Distance between platens (platen separation), Dps' - at failure (see ISRM note 6), Lne - Length from platens to nearest free end W - Width of shortest dimension perpendicular to load, P;
Detailed legend for test and dimensions, based on ISRM, is shown above; Size factor, F = (De/50)0.45 for all tests

Equipment No.: i2 4341 Calibration Date: 14/03/2023 - 14/03/2024

Comments:

Signed:

Katarzyna Koziel
Senior Reporting Specialist
for and on behalf of i2 Analytical Ltd

Opinions and interpretations expressed herein are outside of the scope of the UKAS Accreditation. This report may not be reproduced other than in full without the prior written approval of the issuing laboratory. The results included within the report relate only to the sample(s) submitted for testing.

APPENDIX F

GROUNDWATER AND GROUND GAS MONITORING RECORDS

The Shadbolt Group

18 Bewick Road, Gateshead, Tyne & Wear, NE8 4DP Tel: 0191 478 3330 Email: admin@shadboltgroup.net

GROUNDWATER / GAS MONITORING RECORD SHEET



SHADBOLT
ENVIRONMENTAL

Site:	Baldock										Job No:		2899			
Client:	Urban & Civic										Date:		07/12/2023			
											Weather:		Clear/Windy			
Monitored by:	HB										Instruments Used:		GFM 436 + Dipmeter			
											Pressure Trend:		Falling			
Borehole		surface level (as surveyed)	CH4		CO2		O2		CO	H2S	Flow Rate	Atmospheric	Water	Water	Base	Remarks
			Peak	Steady	Peak	Steady	Peak	Steady	Steady	Steady	Peak (Steady)	Pressure	Depth	Depth	Depth	
			(% vol)	(% vol)	(% vol)	(% vol)	(% vol)	(% vol)	PPM	PPM	(l/hr)	(mbar)	(m bgl)	(m aOD)	(m bgl)	
Ambients			0.0	0.0	0.0	0.0	20.0	20.0	0.0	0.0	0.0	993				08/12/2023
RO-R2/R3-01			0.0	0.0	0.4	0.4	19.9	19.9	0.0	0.0	0.0	993	7.88		15.84	
RO-R2/R3-02			-	-	-	-	-	-	-	-	-	991	8.15		15.98	Bung Open
Ambient						0.0	19.9					992				
RO-R2/R3-03			0.0	0.0	0.1	0.1	20.5	20.5	0.0	0.0	0.0	991	8.92		15.83	
RO-R2/R3-04			0.0	0.0	0.3	0.3	20.2	20.2	0.0	0.0	0.0	991	9.35		15.62	

Notes:

- 1 The peak reading is the maximum recorded level during a monitoring event.
- 2 The steady reading is the level which remained constant after approximately 1 minute.

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GROUNDWATER / GAS MONITORING RECORD SHEET



SHADBOLT
ENVIRONMENTAL

Site:	Baldock											Job No:	2899			
Client:	Urban & Civic											Date:	09/01/2024			
Monitored by:	HB											Weather:	Raining/Windy			
												Instruments Used:	GFM 436 + Dipmeter			
												Pressure Trend:	Decrease			
Borehole		surface level (as surveyed)	CH4		CO2		O2		CO	H2S	Flow Rate	Atmospheric	Water	Water	Base	Remarks
			Peak	Steady	Peak	Steady	Peak	Steady	Steady	Steady	Peak (Steady)	Pressure	Depth	Depth	Depth	
			(% vol)	(% vol)	(% vol)	(% vol)	(% vol)	(% vol)	PPM	PPM	(l/hr)	(mbar)	(m bgl)	(m aOD)	(m bgl)	
Ambient						0.0	20.4					1021				
RO-R2/R3-01			0.0	0.0	0.7	0.7	19.2	19.2	0.0	0.0	0.0	1021	6.50		15.84	
RO-R2/R3-02			-	-	-	-	-	-	-	-	-	1021	7.32		15.98	Bung Open
RO-R2/R3-03			-	-	-	-	-	-	-	-	-	-	6.97		15.80	Bung Open
RO-R2/R3-04			0.0	0.0	0.2	0.2	20.2	19.8	0.0	0.0	0.0	1020	7.28		15.62	

Notes:

1 The peak reading is the maximum recorded level during a monitoring event.

2 The steady reading is the level which remained constant after approximately 1 minute.

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GROUNDWATER / GAS MONITORING RECORD SHEET



SHADBOLT
ENVIRONMENTAL

Site:	Baldock										Job No:	2899				
Client:	Urban & Civic										Date:	25/01/2024				
Monitored by:	HB										Weather:	Partly Cloudy				
											Instruments Used:	GFM 436 + Dipmeter				
											Pressure Trend:	Decrease				
Borehole		surface level (as surveyed)	CH4		CO2		O2		CO	H2S	Flow Rate	Atmospheric	Water	Water	Base	Remarks
			Peak	Steady	Peak	Steady	Peak	Steady	Steady	Steady	Peak (Steady)	Pressure	Depth	Depth	Depth	
			(% vol)	(% vol)	(% vol)	(% vol)	(% vol)	(% vol)	PPM	PPM	(l/hr)	(mbar)	(m bgl)	(m aOD)	(m bgl)	
Ambient						0.0	20.9					1012				
RO-R2/R3-01			0.0	0.0	0.6	0.6	20.0	20.0	0.0	0.0	0.0	1010	6.18		15.80	
RO-R2/R3-02			0.0	0.0	0.7	0.7	19.9	19.9	0.0	0.0	0.0	1010	5.95		15.98	
RO-R2/R3-03			0.0	0.0	0.2	0.2	20.6	20.6	0.0	0.0	0.0	1011	7.06		15.70	
RO-R2/R3-04			0.0	0.0	0.2	0.2	20.5	20.4	0.0	0.0	0.0	1011	7.42		15.62	

Notes:

- 1 The peak reading is the maximum recorded level during a monitoring event.
- 2 The steady reading is the level which remained constant after approximately 1 minute.

The Shadbolt Group 18 Bewick Road, Gateshead, Tyne & Wear, NE8 4DP Tel: 0191 478 3330 Email: admin@shadboltgroup.net GROUNDWATER / GAS MONITORING RECORD SHEET  SHADBOLT ENVIRONMENTAL																
Site:	Baldock											Job No:	2899			
Client:	Urban & Civic											Date:	07/02/2024			
Monitored by:	HB											Weather:	Partly Cloudy			
												Instruments Used:	GFM 436 + Dipmeter			
											Pressure Trend:	Decrease				
Borehole		surface level (as surveyed)	CH4		CO2		O2		CO	H2S	Flow Rate	Atmospheric	Water	Water	Base	Remarks
			Peak (% vol)	Steady (% vol)	Peak (% vol)	Steady (% vol)	Peak (% vol)	Steady (% vol)	Steady PPM	Steady PPM	Peak (Steady) (l/hr)	Pressure (mbar)	Depth (m bgl)	Depth (m aOD)	Depth (m bgl)	
Ambient						0.0	20.3					994				
RO-R2/R3-01			0.0	0.0	0.6	0.6	20.0	20.0	0.0	0.0	0.0	994	6.08		15.80	
RO-R2/R3-02			0.0	0.0	0.7	0.7	19.6	19.6	0.0	0.0	0.0	994	6.29		15.98	
RO-R2/R3-03			0.0	0.0	0.2	0.2	20.3	20.3	0.0	0.0	0.0	994	7.11		15.70	
RO-R2/R3-04			0.0	0.0	0.2	0.2	20.1	20.1	0.0	0.0	0.0	994	7.55		15.62	
Notes: 1 The peak reading is the maximum recorded level during a monitoring event. 2 The steady reading is the level which remained constant after approximately 1 minute.																

The Shadbolt Group 18 Bewick Road, Gateshead, Tyne & Wear, NE8 4DP Tel: 0191 478 3330 Email: admin@shadboltgroup.net GROUNDWATER / GAS MONITORING RECORD SHEET  SHADBOLT ENVIRONMENTAL																
Site:	Baldock											Job No:		2899		
Client:	Urban & Civic											Date:		20/02/2024		
Monitored by:	HB											Weather:		Partly Cloudy		
												Instruments Used:		GFM 436 + Dipmeter		
Pressure Trend:																
Borehole		surface level (as surveyed)	CH4		CO2		O2		CO	H2S	Flow Rate	Atmospheric	Water	Water	Base	Remarks
			Peak	Steady	Peak	Steady	Peak	Steady	Steady	Steady	Peak (Steady)	Pressure	Depth	Depth	Depth	
			(% vol)	(% vol)	(% vol)	(% vol)	(% vol)	(% vol)	PPM	PPM	(l/hr)	(mbar)	(m bgl)	(m aOD)	(m bgl)	
Ambient						0.0	20.8					1012				
RO-R2/R3-01			0.0	0.0	0.8	0.8	18.9	18.8	0.0	0.0	0.0	1012	5.78		15.80	
RO-R2/R3-02			0.0	0.0	0.8	0.8	18.9	18.8	0.0	0.0	0.0	1012	5.98		15.98	
RO-R2/R3-03			0.0	0.0	0.7	0.7	19.0	18.5	0.0	0.0	0.0	1011	6.90		15.70	
RO-R2/R3-04			0.0	0.0	1.1	1.1	18.6	18.6	0.0	0.0	0.0	1011	7.26		15.62	
Notes:																
1 The peak reading is the maximum recorded level during a monitoring event.																
2 The steady reading is the level which remained constant after approximately 1 minute.																



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