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Sandberg LLP
5 Carpenters Place
London SW4 7TD

Tel: 020 7565 7000
email: mail@sandberg.co.uk
web: www.sandberg.co.uk

9 June 2022

Your Ref: M-ETF149/0056

Our Ref: 72435/M

McGee Group (Holdings) Limited
5 Hatfields
Level 9 Alto Tower
London
SE1 9PG

For the attention of Diego Fenaroli

Dear Diego

Re: Euston Tower - Steel Testing

Please find attached certificates 1 to 35 of 35 for your records.

Yours sincerely

Mariyana Pencheva
Secretary to Metallurgy Department

Enc.

Materials, samples and test specimens are retained for a period of 2 months from the issue of the final report.

Tests reported on sheets not bearing the UKAS mark in this report/certificate are not included in the UKAS accreditation schedule for this laboratory.

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

This report is personal to the client, confidential, non-assignable and written with no admission of liability to any third party.

This report shall not be reproduced, except in full, without the written approval of Sandberg LLP.

Where our involvement consists exclusively of testing samples, the results and our conclusions relate only to the samples tested.



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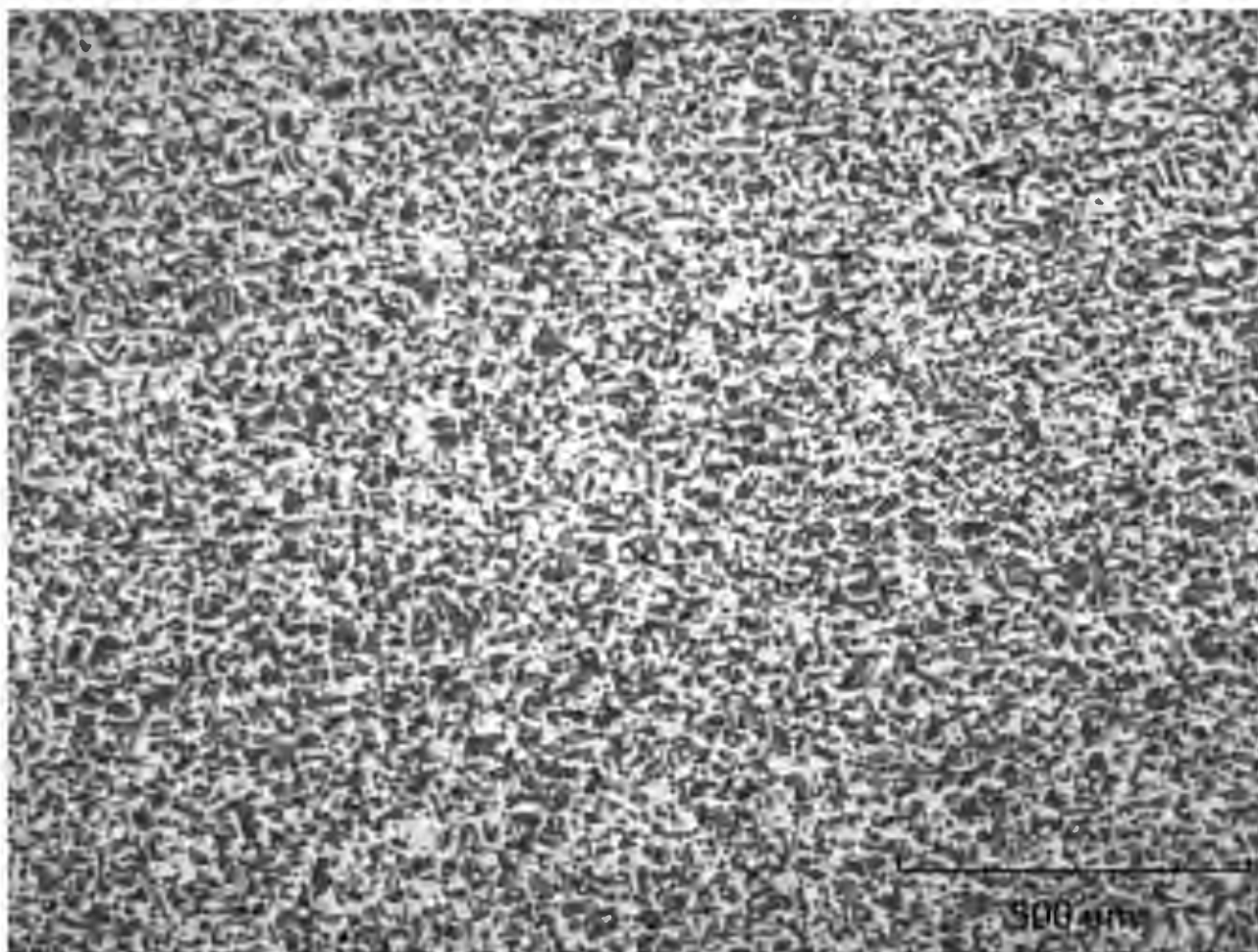
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TEST CERTIFICATE
METALLOGRAPHIC EXAMINATION
TO BS EN ISO 643:2020

Certificate:	72435/M/1	Order Ref:	M-ETF149/0056
Samples Received:	12 May 2022	Tested By:	VM
Test Date:	24 May 2022	Test Procedure:	M5/3/3 & M13/3/2
Client Details:	McGee Group, 5 Hatfields, Level 9 Alto Tower, London, SE1 9PG.		



Met Lab Ref:	MC 409		Client Ref:	H1-P1/B1 25 mm Ø Square Twisted Bar			
Examined By:	AK	Mag:	x 84	Etchant:	2% Nital	Grain Size Index:	7.5
Comments:	Material is a ferrite matrix with pearlite present. The image shows the material to be a carbon steel with an even and homogenous uniform structure.						

For Sandberg LLP

Date: 9 June 2022

Neale Fetter - Assistant Manager Metallurgy Department

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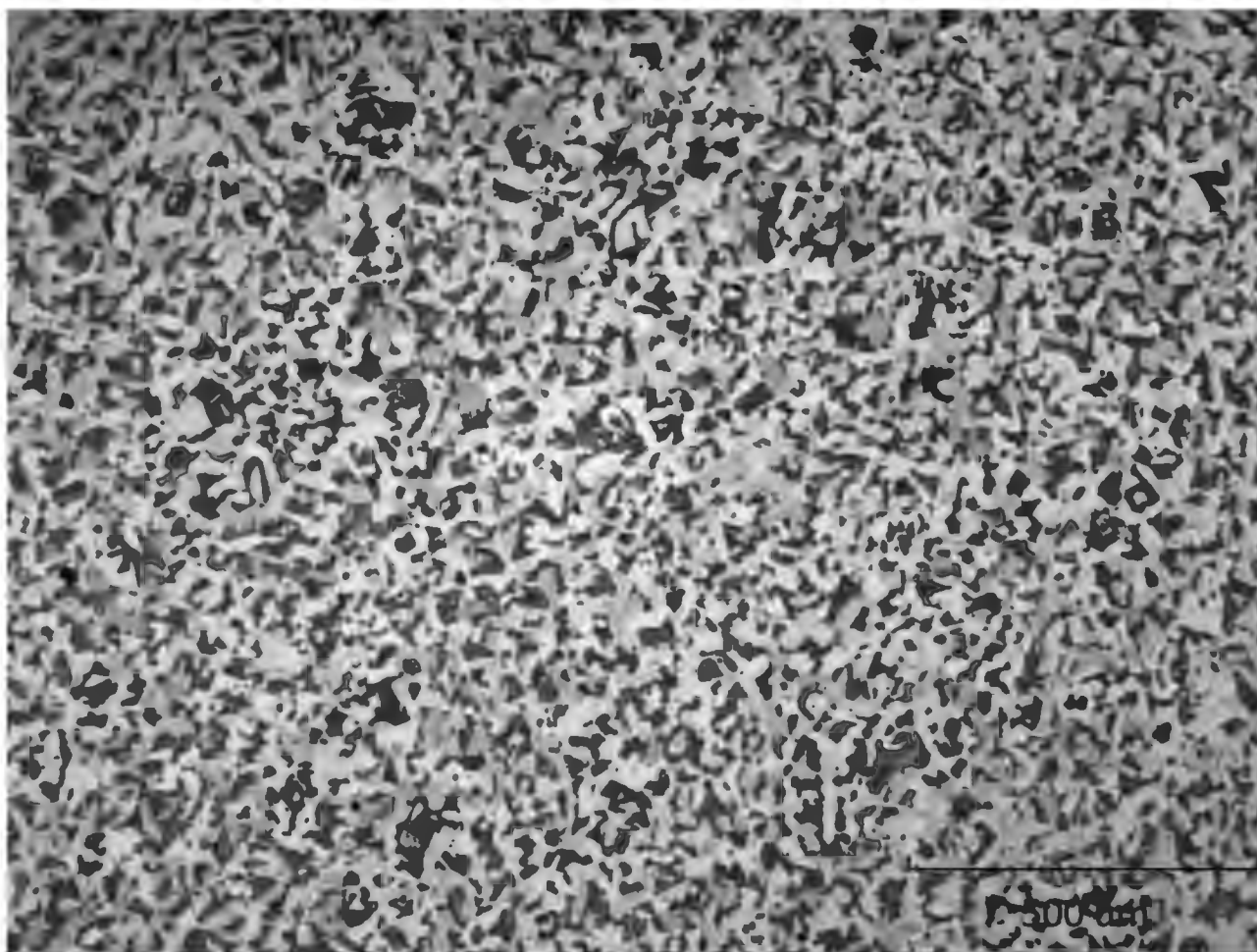
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TEST CERTIFICATE METALLOGRAPHIC EXAMINATION TO BS EN ISO 643:2020

Tel: 020 7565 7000
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web: www.sandberg.co.uk

Certificate:	72435/M/2	Order Ref:	M-ETF149/0056
Samples Received:	12 May 2022	Tested By:	VM
Test Date:	24 May 2022	Test Procedure:	M5/3/3 & M13/3/2
Client Details:	McGee Group, 5 Hatfields, Level 9 Alto Tower, London, SE1 9PG.		



Met Lab Ref: MC 410		Client Ref: H1-P1/B2 32 mm Ø Square Twisted Bar	
Examined By: AK	Mag: x 84	Etchant: 2% Nital	Grain Size Index: 6.5
Comments:		Material is a ferrite matrix with pearlite present. The image shows the material to be a carbon steel with an even and homogenous uniform structure.	

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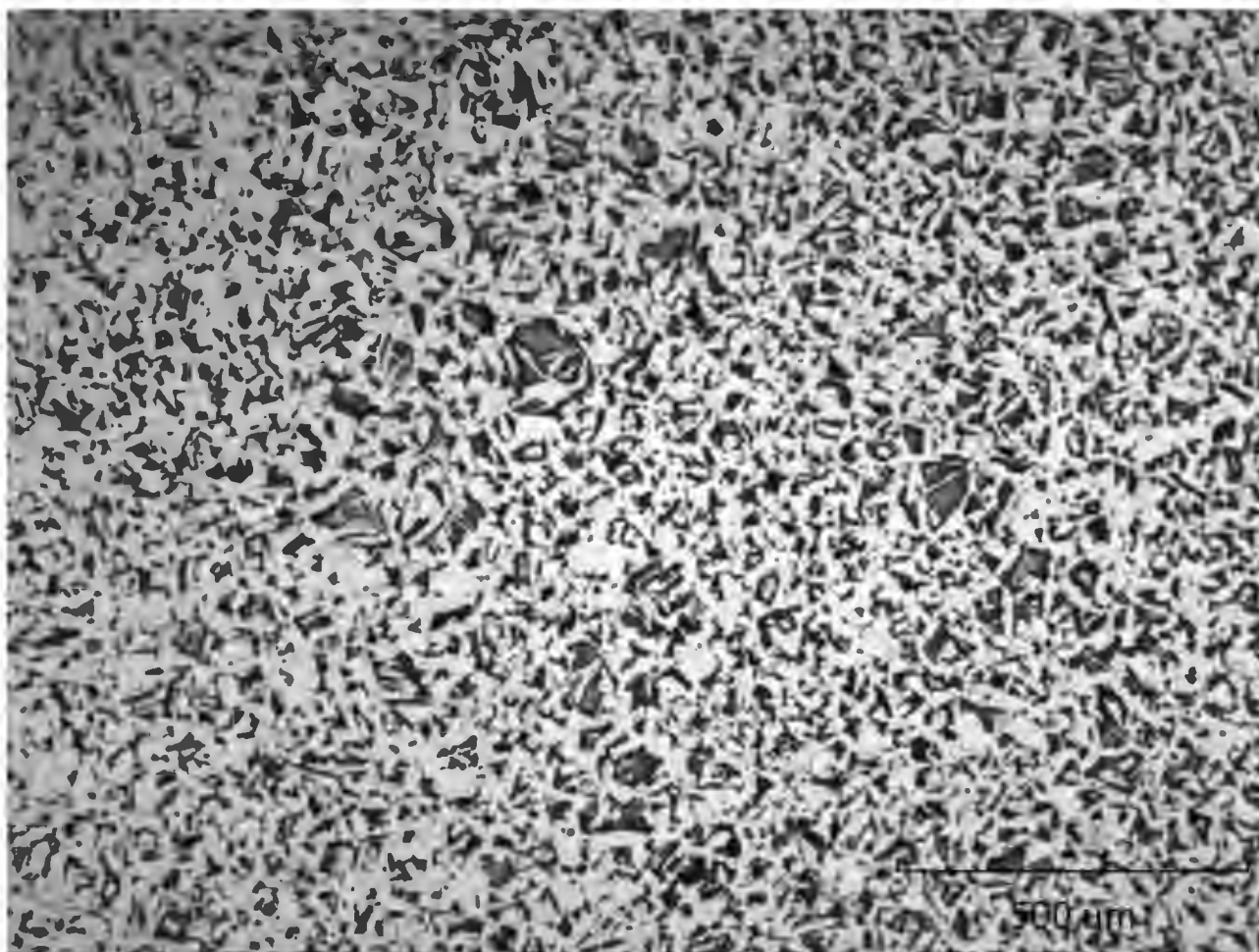
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Test Date:	24 May 2022	Test Procedure:	M5/3/3 & M13/3/2
Client Details:	McGee Group, 5 Hatfields, Level 9 Alto Tower, London, SE1 9PG.		



Met Lab Ref: MC 411		Client Ref: H1/B1 25 mm Ø Square Twisted Bar	
Examined By: AK	Mag: x 84	Etchant: 2% Nital	Grain Size Index: 6.5
Comments:		Material is a ferrite matrix with pearlite present. The image shows the material to be a carbon steel with an even and homogenous uniform structure.	

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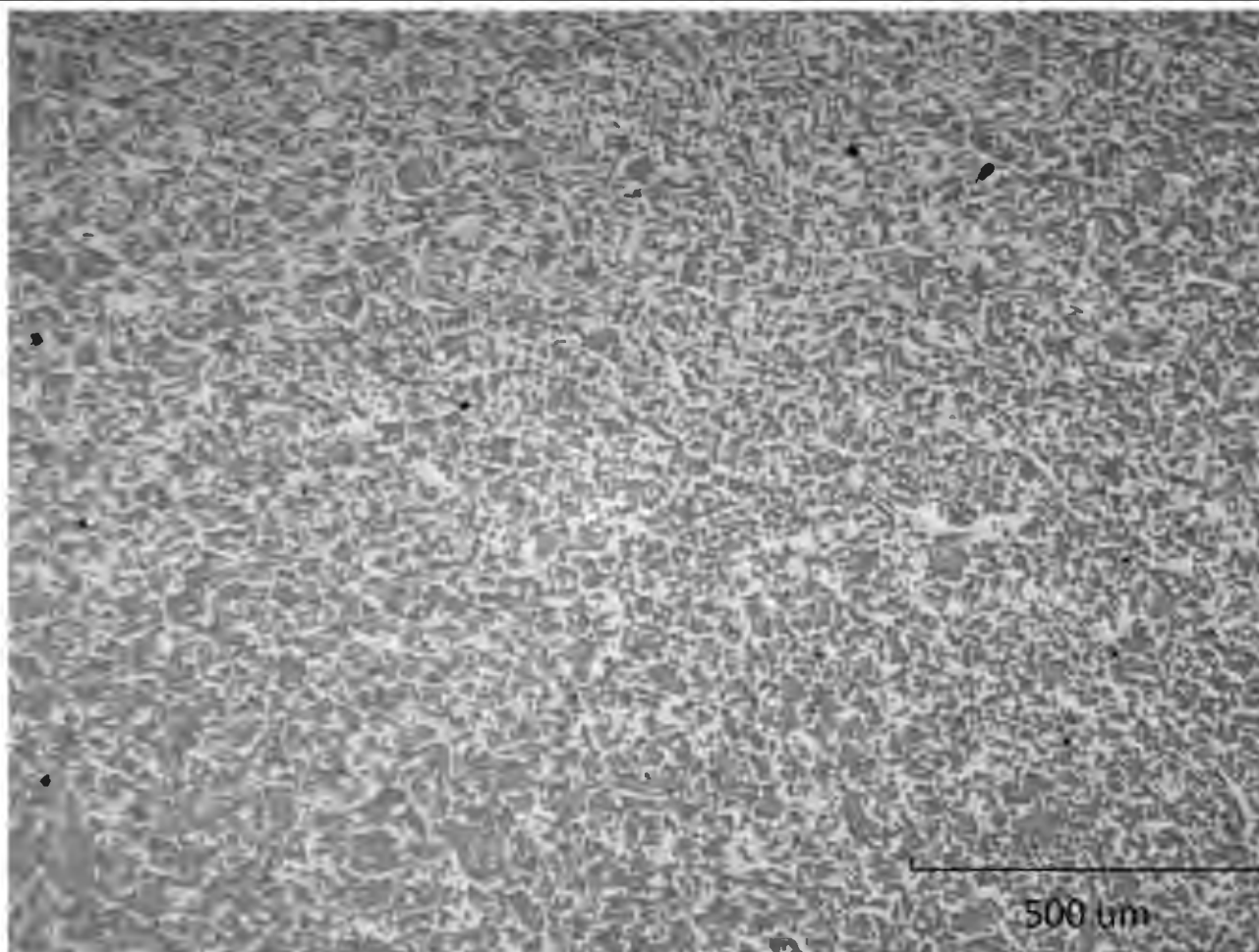
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Certificate:	72435/M/4	Order Ref:	M-ETF149/0056
Samples Received:	12 May 2022	Tested By:	VM
Test Date:	24 May 2022	Test Procedure:	M5/3/3 & M13/3/2
Client Details:	McGee Group, 5 Hatfields, Level 9 Alto Tower, London, SE1 9PG.		



Met Lab Ref: MC 412		Client Ref: H1-L3/B1 16 mm Ø Plain Round Bar	
Examined By: AK	Mag: x 84	Etchant: 2% Nital	Grain Size Index: 7.0
Comments:		Material is a ferrite matrix with pearlite present. The image shows the material to be a carbon steel with an even and homogenous uniform structure.	

For Sandberg LLP

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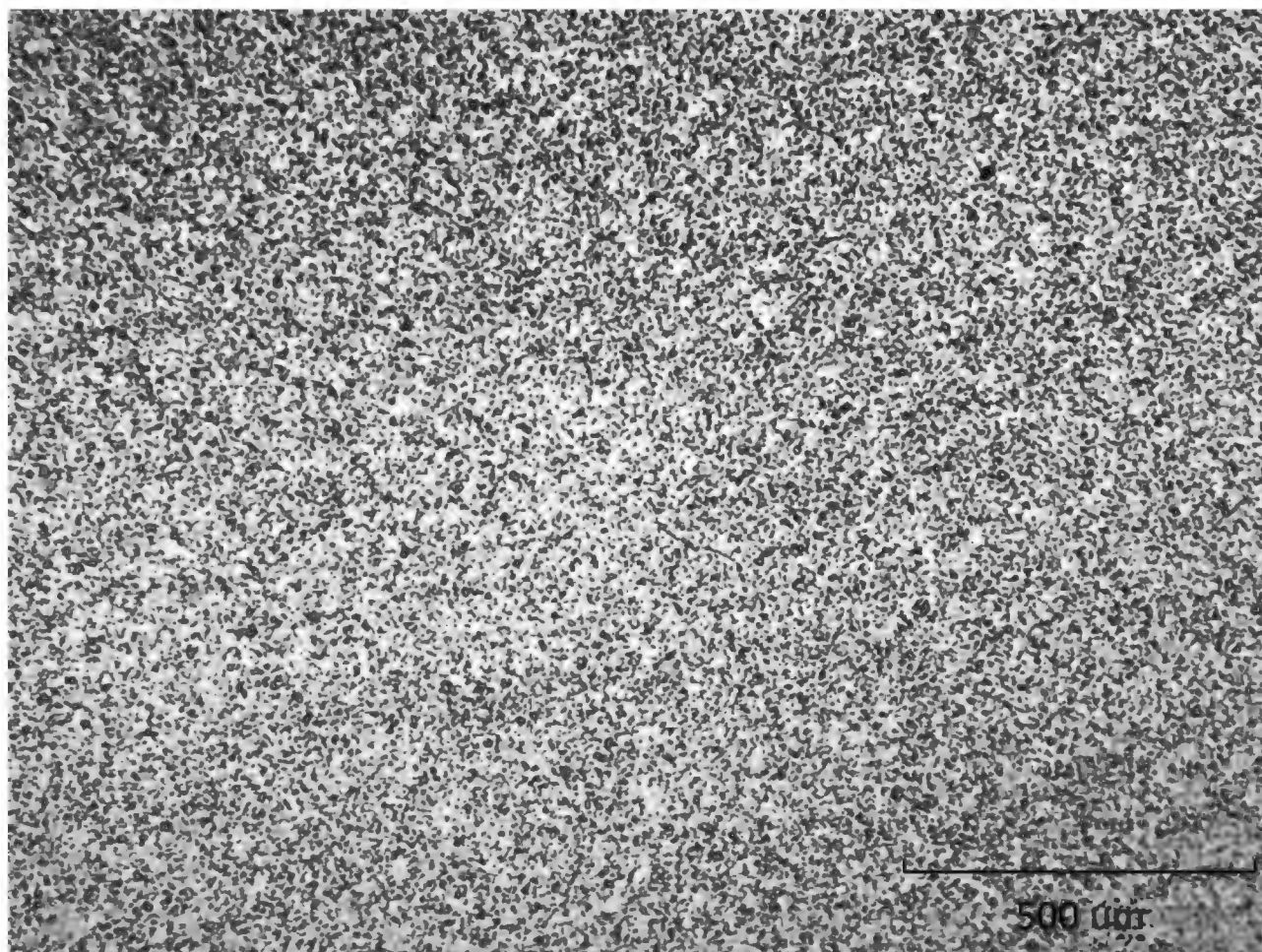
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Certificate:	72435/M/5	Order Ref:	M-ETF149/0056
Samples Received:	12 May 2022	Tested By:	VM
Test Date:	24 May 2022	Test Procedure:	M5/3/3 & M13/3/2
Client Details:	McGee Group, 5 Hatfields, Level 9 Alto Tower, London, SE1 9PG.		



Met Lab Ref:	MC 413		Client Ref:	H1-L3/L1 6 mm Ø Plain Round Bar			
Examined By:	AK	Mag:	x 84	Etchant:	2% Nital	Grain Size Index:	8.5
Comments:	Material is a ferrite matrix with pearlite present. The image shows the material to be a carbon steel with an even and homogenous uniform structure.						

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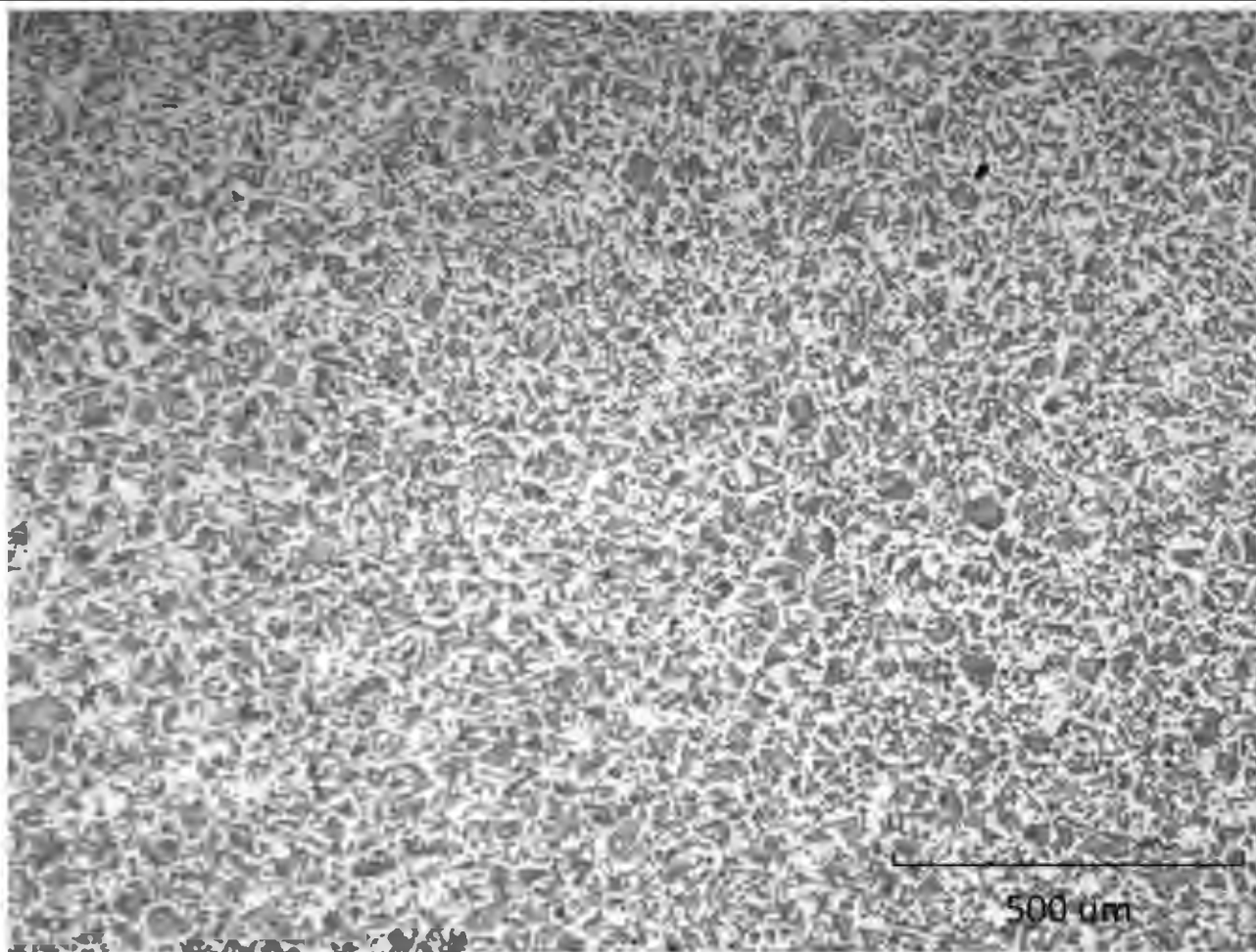
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Certificate:	72435/M/6	Order Ref:	M-ETF149/0056
Samples Received:	12 May 2022	Tested By:	VM
Test Date:	24 May 2022	Test Procedure:	M5/3/3 & M13/3/2
Client Details:	McGee Group, 5 Hatfields, Level 9 Alto Tower, London, SE1 9PG.		



Met Lab Ref: MC 414		Client Ref: H1-R2/B1 16 mm Ø Plain Round Bar	
Examined By: AK	Mag: x 84	Etchant: 2% Nital	Grain Size Index: 7.0
Comments:		Material is a ferrite matrix with pearlite present. The image shows the material to be a carbon steel with an even and homogenous uniform structure.	

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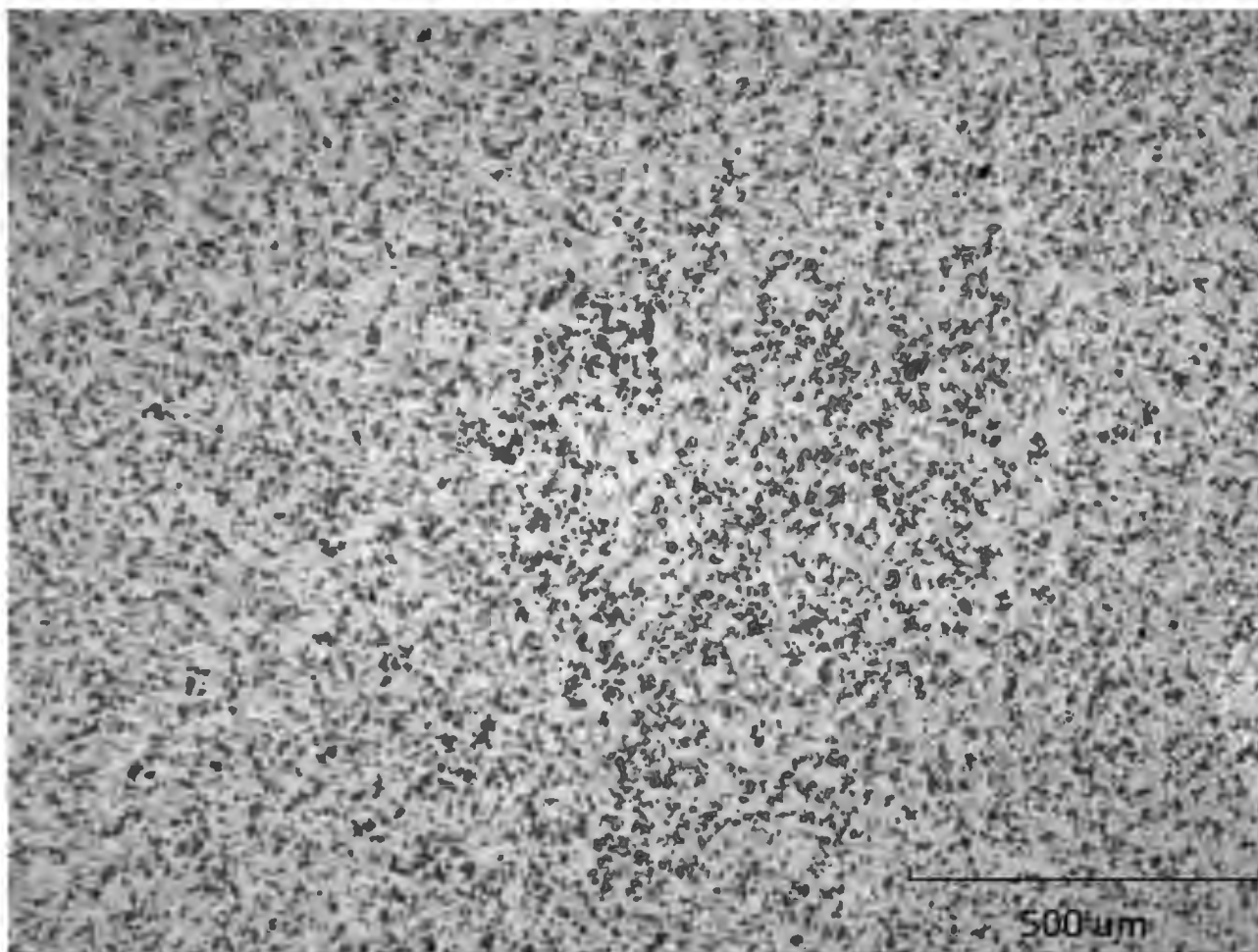
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Certificate:	72435/M/7	Order Ref:	M-ETF149/0056
Samples Received:	12 May 2022	Tested By:	VM
Test Date:	24 May 2022	Test Procedure:	M5/3/3 & M13/3/2
Client Details:	McGee Group, 5 Hatfields, Level 9 Alto Tower, London, SE1 9PG.		



Met Lab Ref:	MC 415		Client Ref:	H1-R2/L1 6 mm Ø Plain Round Bar			
Examined By:	AK	Mag:	x 84	Etchant:	2% Nital	Grain Size Index:	7.5
Comments:	Material is a ferrite matrix with pearlite present. The image shows the material to be a carbon steel with an even and homogenous uniform structure.						

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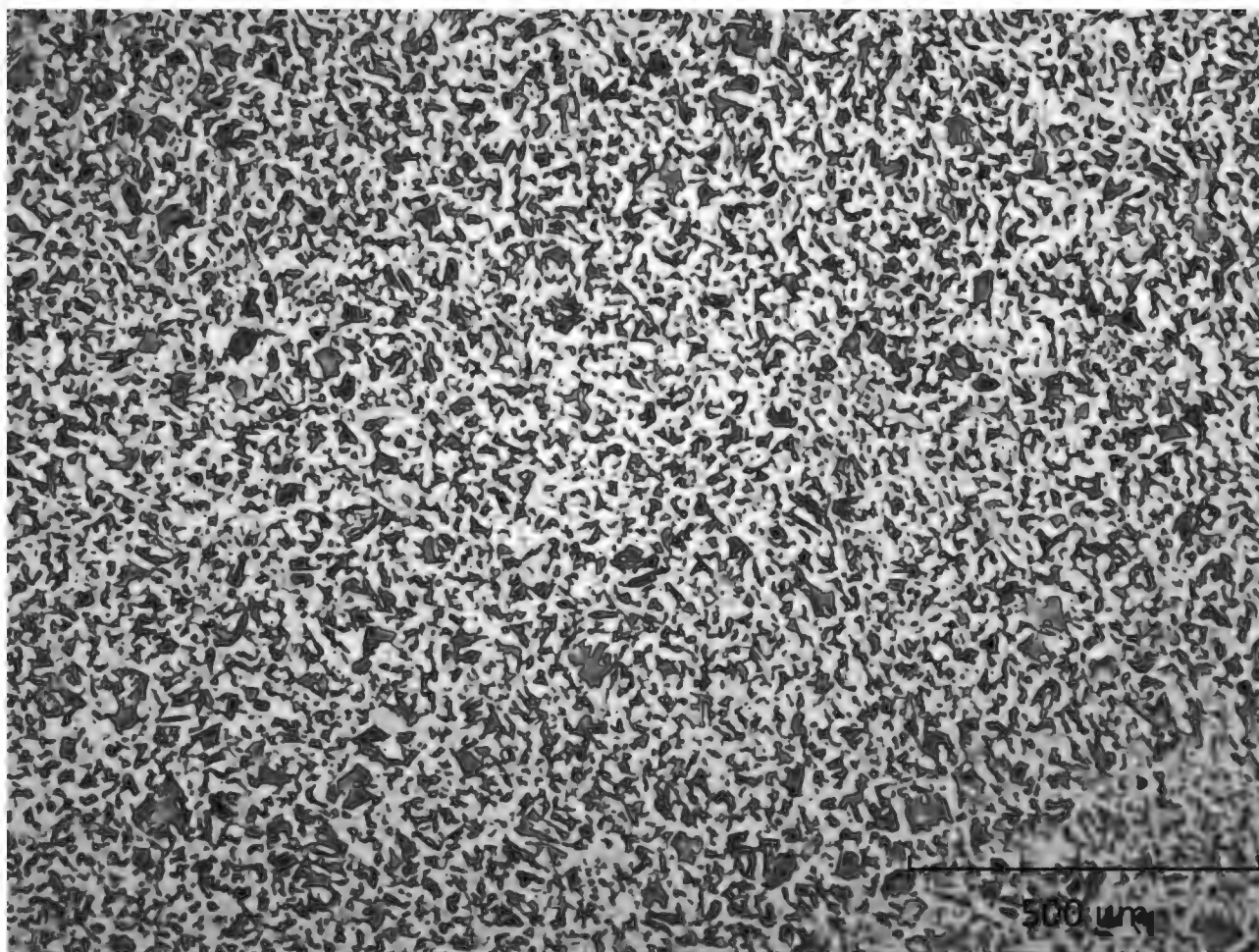
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Certificate:	72435/M/8	Order Ref:	M-ETF149/0056
Samples Received:	12 May 2022	Tested By:	VM
Test Date:	24 May 2022	Test Procedure:	M5/3/3 & M13/3/2
Client Details:	McGee Group, 5 Hatfields, Level 9 Alto Tower, London, SE1 9PG.		



Met Lab Ref: MC 416		Client Ref: H2-P2/B1 25 mm Ø Square Twisted Bar	
Examined By: AK	Mag: x 84	Etchant: 2% Nital	Grain Size Index: 7.0
Comments:		Material is a ferrite matrix with pearlite present. The image shows the material to be a carbon steel with an even and homogenous uniform structure.	

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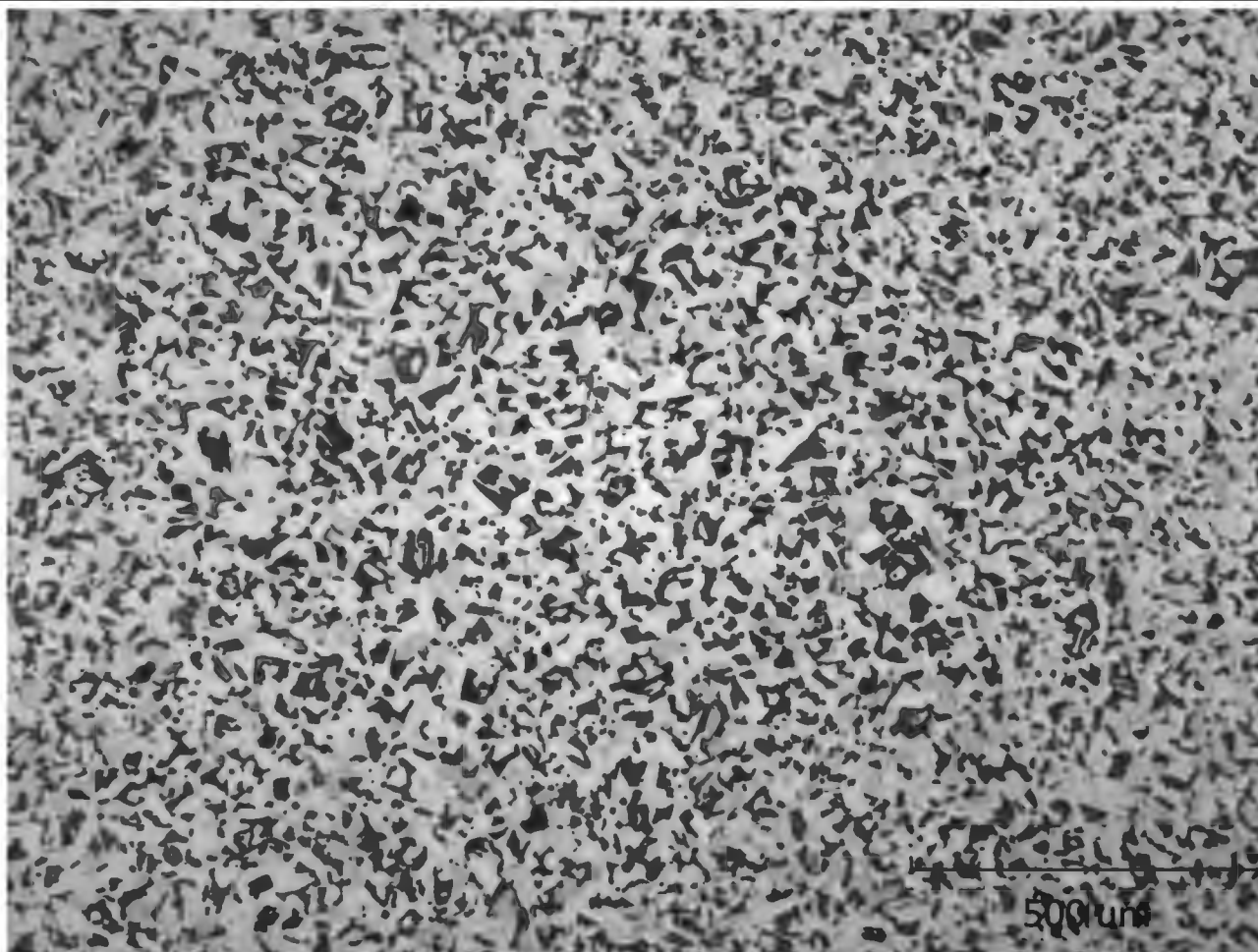
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Certificate:	72435/M/9	Order Ref:	M-ETF149/0056
Samples Received:	12 May 2022	Tested By:	VM
Test Date:	24 May 2022	Test Procedure:	M5/3/3 & M13/3/2
Client Details:	McGee Group, 5 Hatfields, Level 9 Alto Tower, London, SE1 9PG.		



Met Lab Ref:	MC 417		Client Ref:	H2-P2/B2 25 mm Ø Square Twisted Bar			
Examined By:	AK	Mag:	x 84	Etchant:	2% Nital	Grain Size Index:	6.5
Comments:	Material is a ferrite matrix with pearlite present. The image shows the material to be a carbon steel with an even and homogenous uniform structure.						

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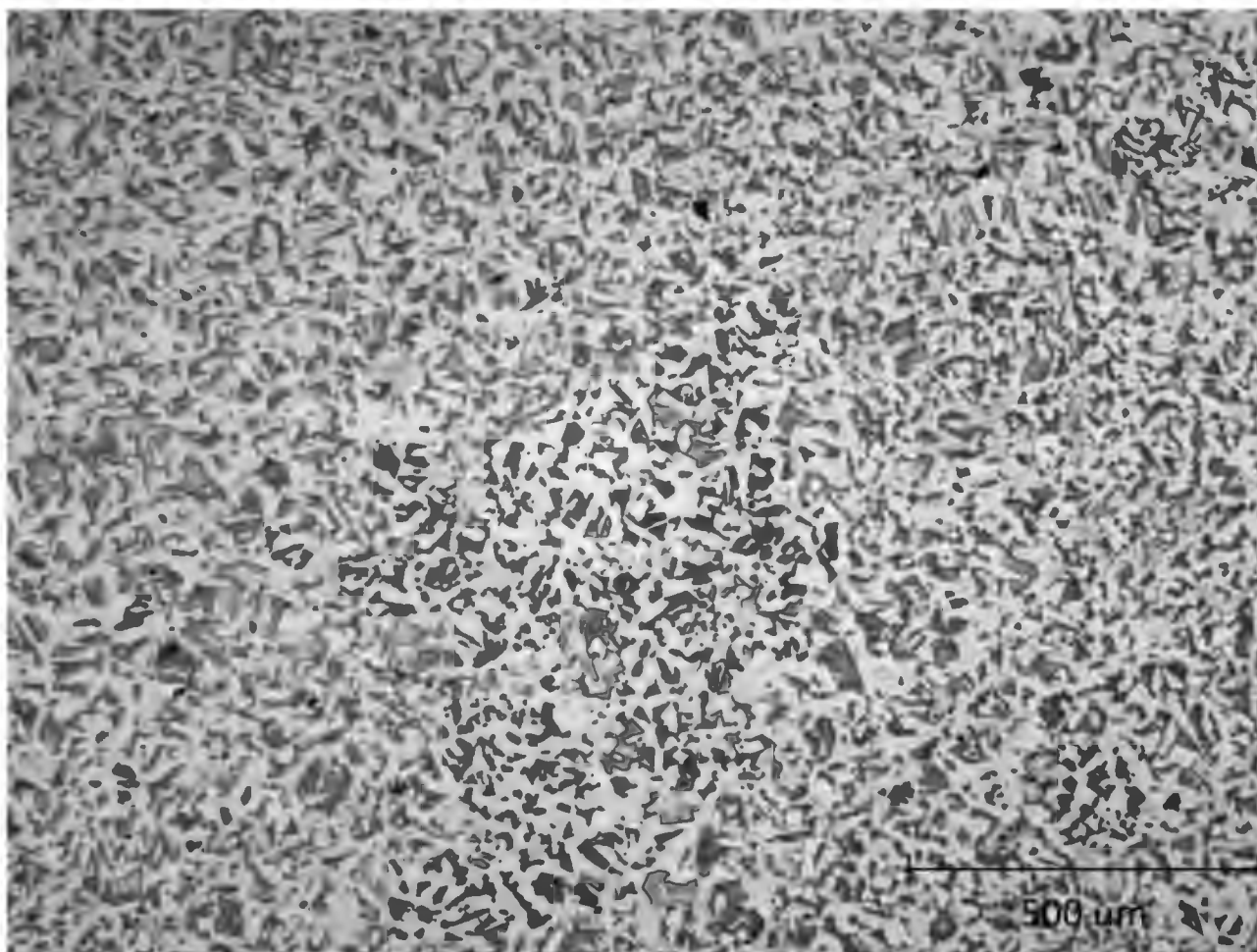
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Samples Received:	12 May 2022	Tested By:	VM
Test Date:	24 May 2022	Test Procedure:	M5/3/3 & M13/3/2
Client Details:	McGee Group, 5 Hatfields, Level 9 Alto Tower, London, SE1 9PG.		



Met Lab Ref: MC 418		Client Ref: H2/B1 25 mm Ø Square Twisted Bar	
Examined By: AK	Mag: x 84	Etchant: 2% Nital	Grain Size Index: 6.5
Comments:		Material is a ferrite matrix with pearlite present. The image shows the material to be a carbon steel with an even and homogenous uniform structure.	

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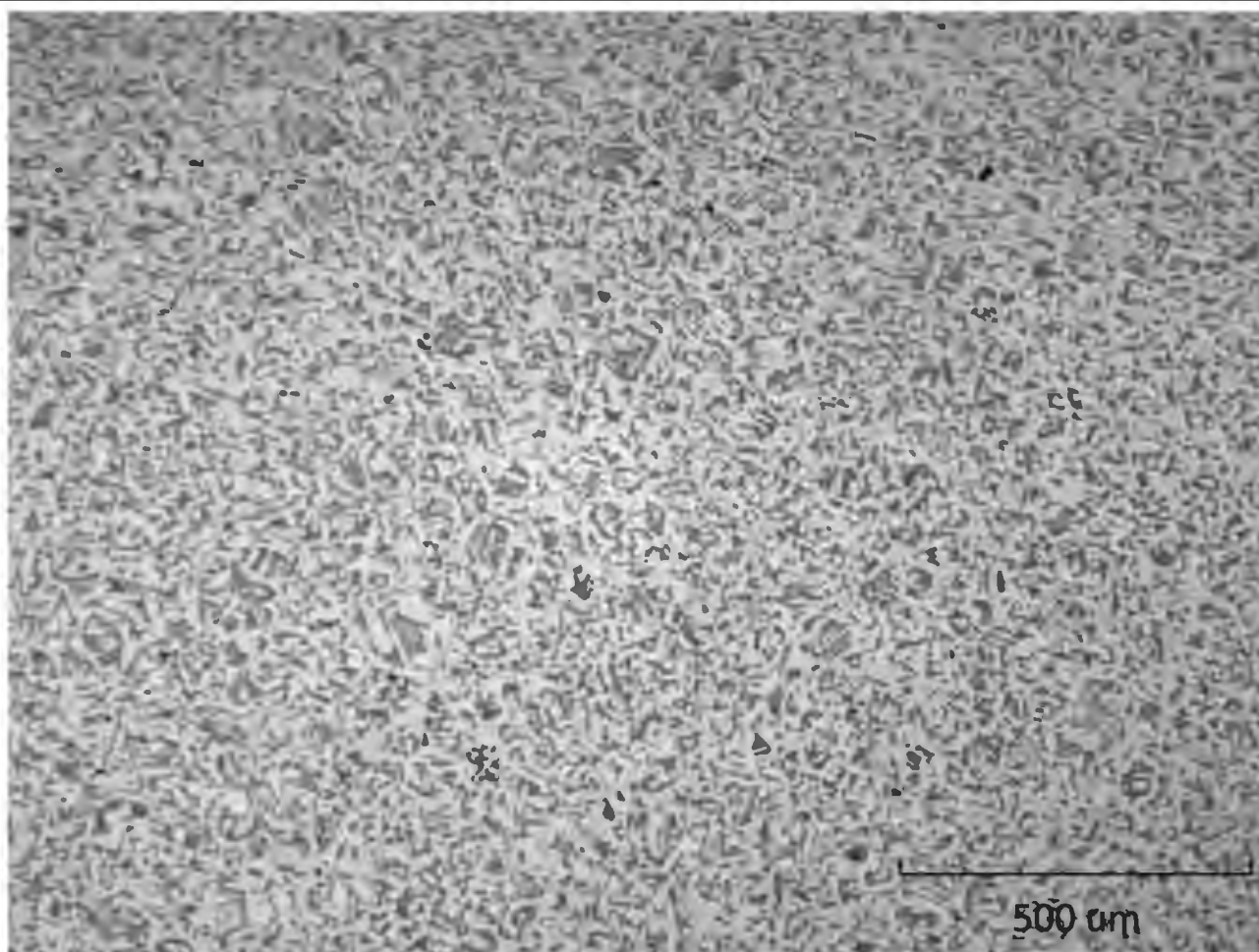
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Certificate:	72435/M/11	Order Ref:	M-ETF149/0056
Samples Received:	12 May 2022	Tested By:	VM
Test Date:	24 May 2022	Test Procedure:	M5/3/3 & M13/3/2
Client Details:	McGee Group, 5 Hatfields, Level 9 Alto Tower, London, SE1 9PG.		



Met Lab Ref:	MC 419		Client Ref:	H2-L2/B1 16 mm Ø Plain Round Bar			
Examined By:	AK	Mag:	x 84	Etchant:	2% Nital	Grain Size Index:	7.5
Comments:	Material is a ferrite matrix with pearlite present. The image shows the material to be a carbon steel with an even and homogenous uniform structure.						

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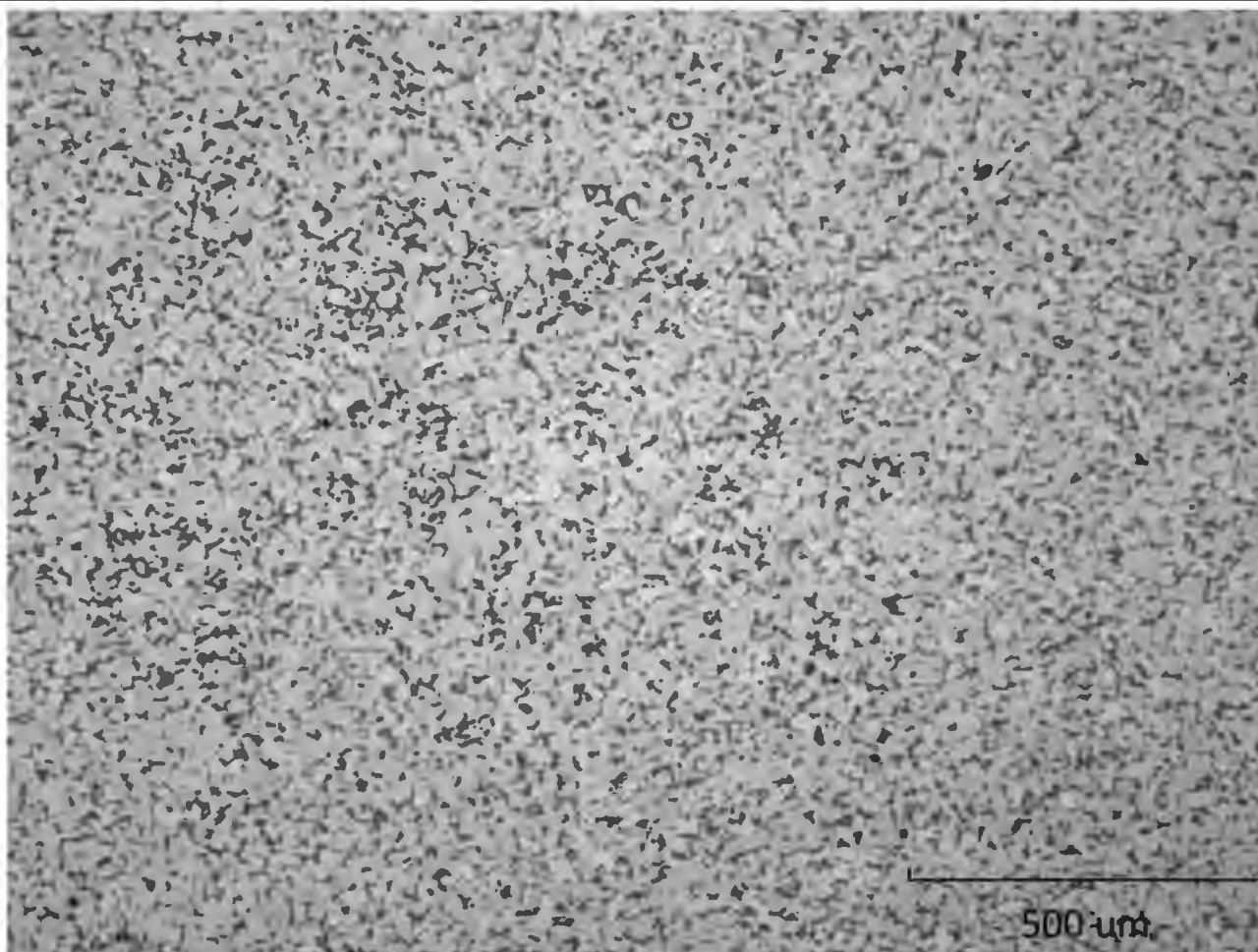
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Test Date:	24 May 2022	Test Procedure:	M5/3/3 & M13/3/2
Client Details:	McGee Group, 5 Hatfields, Level 9 Alto Tower, London, SE1 9PG.		



Met Lab Ref: MC 420		Client Ref: H2-L2/L1 6 mm Ø Plain Round Bar	
Examined By: AK	Mag: x 84	Etchant: 2% Nital	Grain Size Index: 8.0
Comments:		Material is a ferrite matrix with pearlite present. The image shows the material to be a carbon steel with an even and homogenous uniform structure.	

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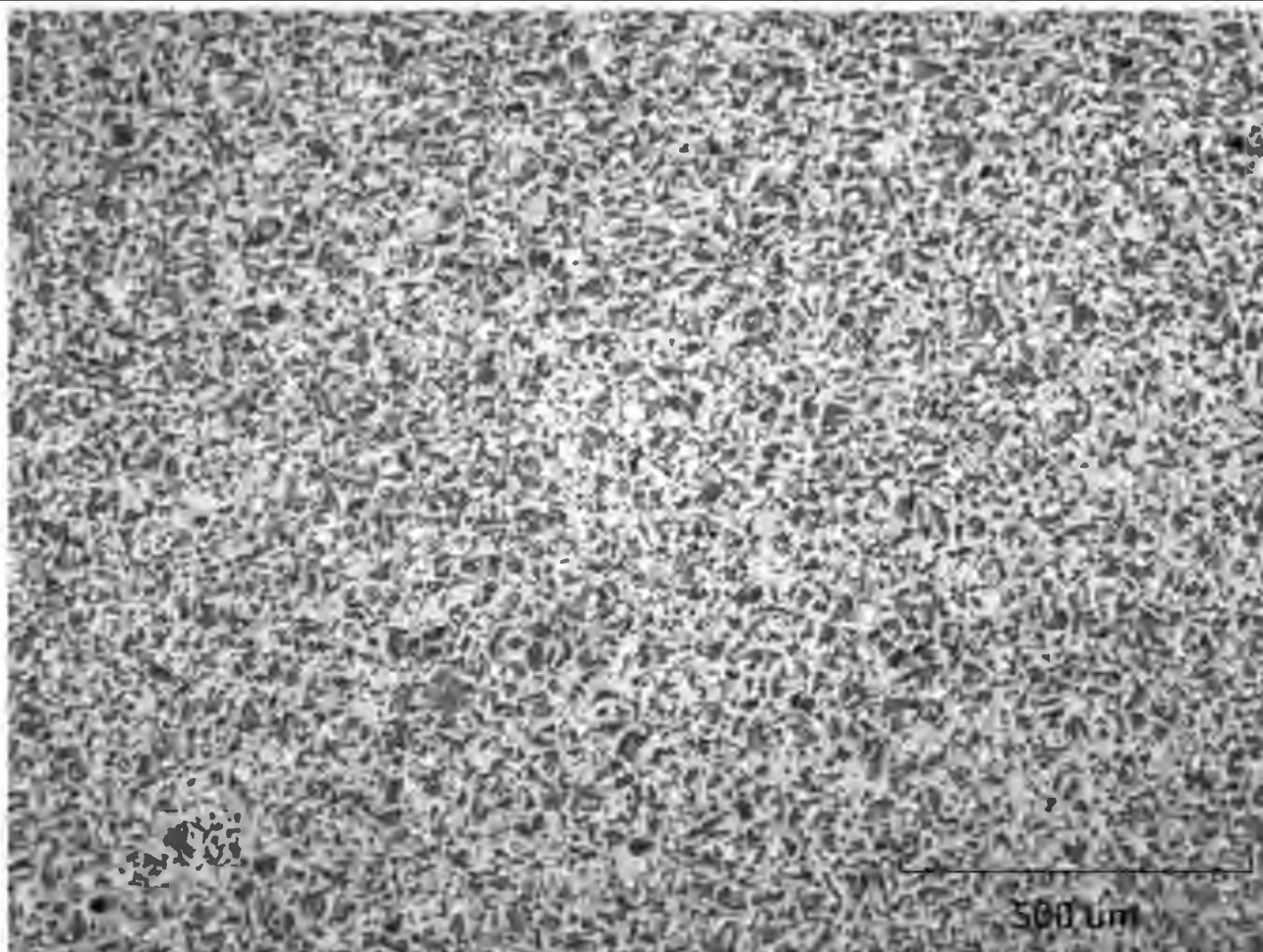
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Client Details:	McGee Group, 5 Hatfields, Level 9 Alto Tower, London, SE1 9PG.		



Met Lab Ref:	MC 421		Client Ref:	H2-R1/B1 16 mm Ø Plain Round Bar			
Examined By:	AK	Mag:	x 84	Etchant:	2% Nital	Grain Size Index:	7.5
Comments:	Material is a ferrite matrix with pearlite present. The image shows the material to be a carbon steel with an even and homogenous uniform structure.						

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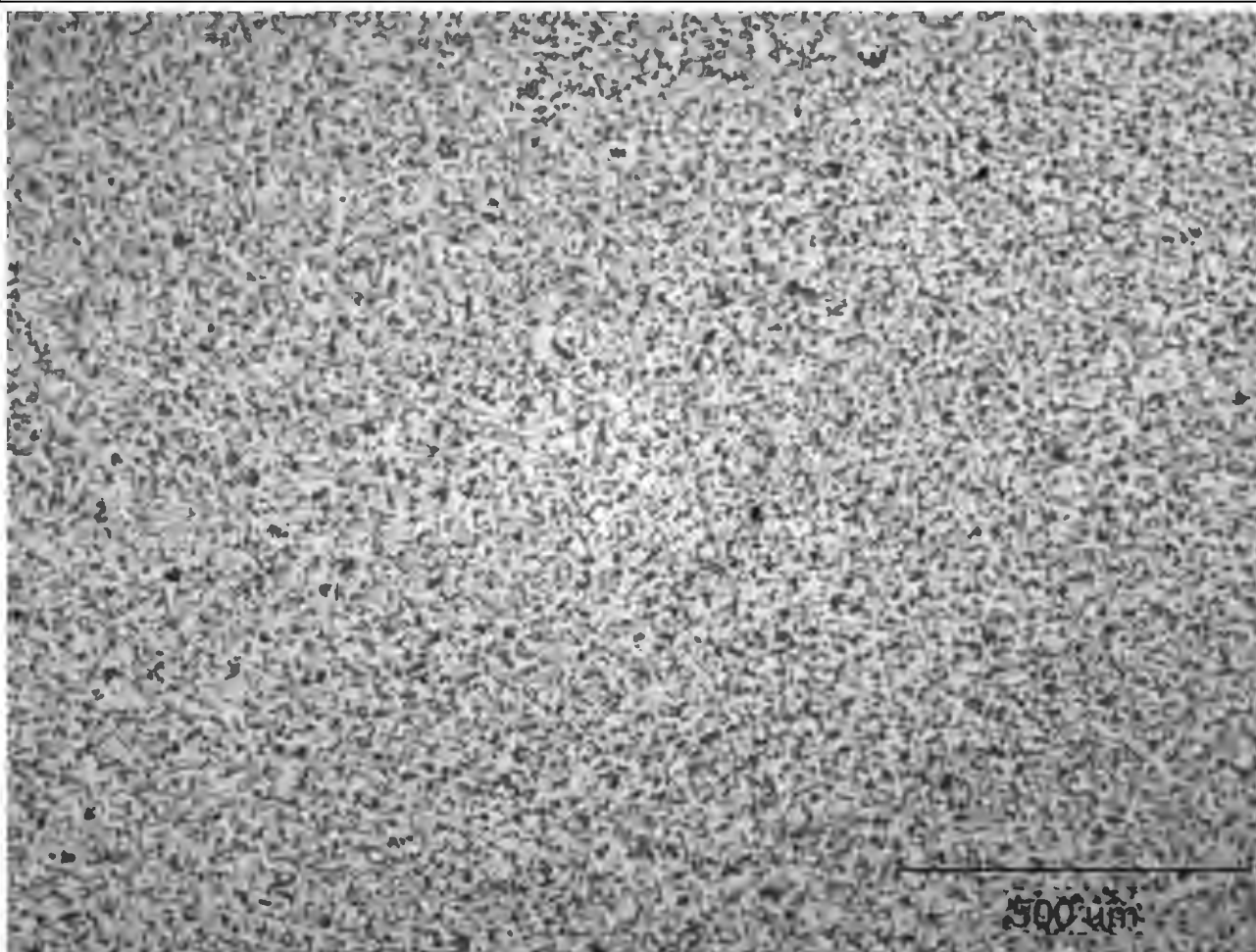
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Client Details:	McGee Group, 5 Hatfields, Level 9 Alto Tower, London, SE1 9PG.		



Met Lab Ref:	MC 422		Client Ref:	H2-R1/L1 6 mm Ø Plain Round Bar			
Examined By:	AK	Mag:	x 84	Etchant:	2% Nital	Grain Size Index:	8.0
Comments:	Material is a ferrite matrix with pearlite present. The image shows the material to be a carbon steel with an even and homogenous uniform structure.						

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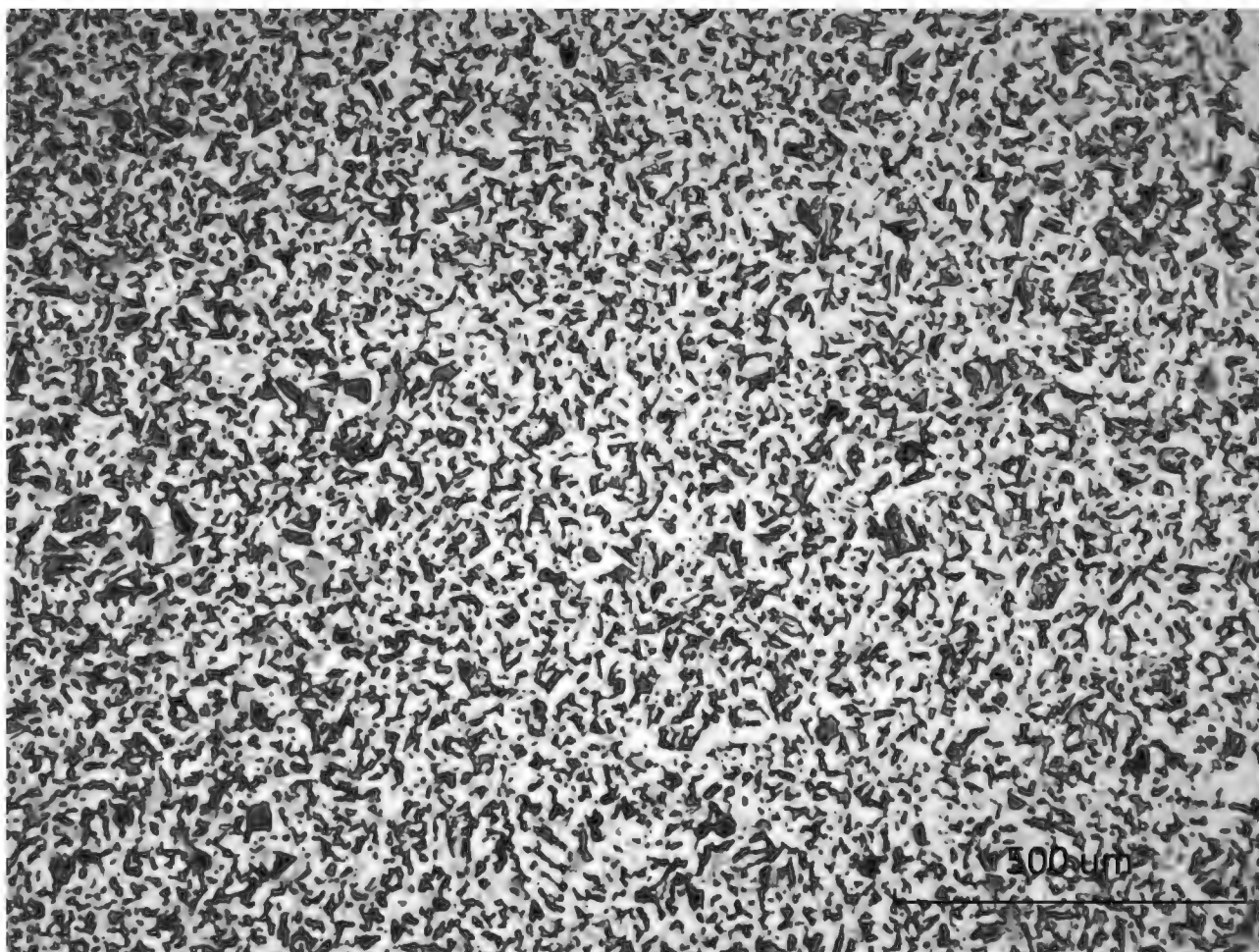
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Certificate:	72435/M/15	Order Ref:	M-ETF149/0056
Samples Received:	24 May 2022	Tested By:	VM
Test Date:	27 May 2022	Test Procedure:	M5/3/3 & M13/3/2
Client Details:	McGee Group, 5 Hatfields, Level 9 Alto Tower, London, SE1 9PG.		



Met Lab Ref:	MC 462		Client Ref:	H3-LC6/B1 25 mm Ø Square Twisted Bar			
Examined By:	AK	Mag:	x 84	Etchant:	2% Nital	Grain Size Index:	7.0
Comments:	Material is a ferrite matrix with pearlite present. The image shows the material to be a carbon steel with an even and homogenous uniform structure.						

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Where test results are given, the results and our conclusions relate only to the samples tested and apply to the sample(s) as received, except where sampling has been conducted by Sandberg LLP.



0262

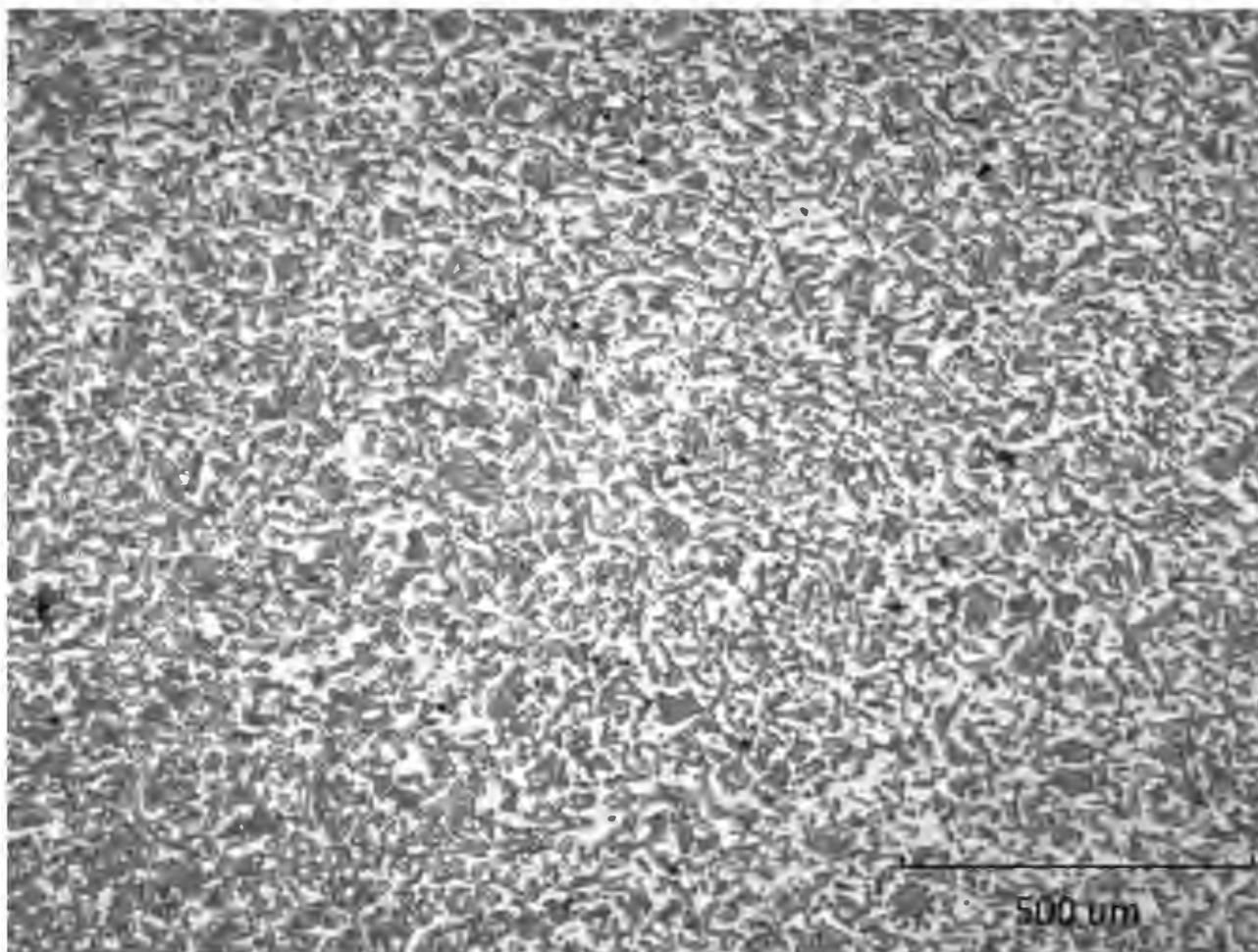
SANDBERG
CONSULTING ENGINEERS
INVESTIGATION INSPECTION
MATERIALS TESTING

Sandberg LLP
5 Carpenters Place
Clapham High Street
London, SW4 7TD

Tel: 020 7565 7000
Fax: 020 7565 7100
email: mail@sandberg.co.uk
web: www.sandberg.co.uk

TEST CERTIFICATE
METALLOGRAPHIC EXAMINATION
TO BS EN ISO 643:2020

Certificate:	72435/M/16	Order Ref:	M-ETF149/0056
Samples Received:	24 May 2022	Tested By:	VM
Test Date:	27 May 2022	Test Procedure:	M5/3/3 & M13/3/2
Client Details:	McGee Group, 5 Hatfields, Level 9 Alto Tower, London, SE1 9PG.		



Met Lab Ref:	MC 463		Client Ref:	H3-LC6/B2 25 mm Ø Square Twisted Bar			
Examined By:	AK	Mag:	x 84	Etchant:	2% Nital	Grain Size Index:	6.5
Comments:	Material is a ferrite matrix with pearlite present. The image shows the material to be a carbon steel with an even and homogenous uniform structure.						

For Sandberg LLP

Date: 9 June 2022

Neale Fetter - Assistant Manager Metallurgy Department

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0262

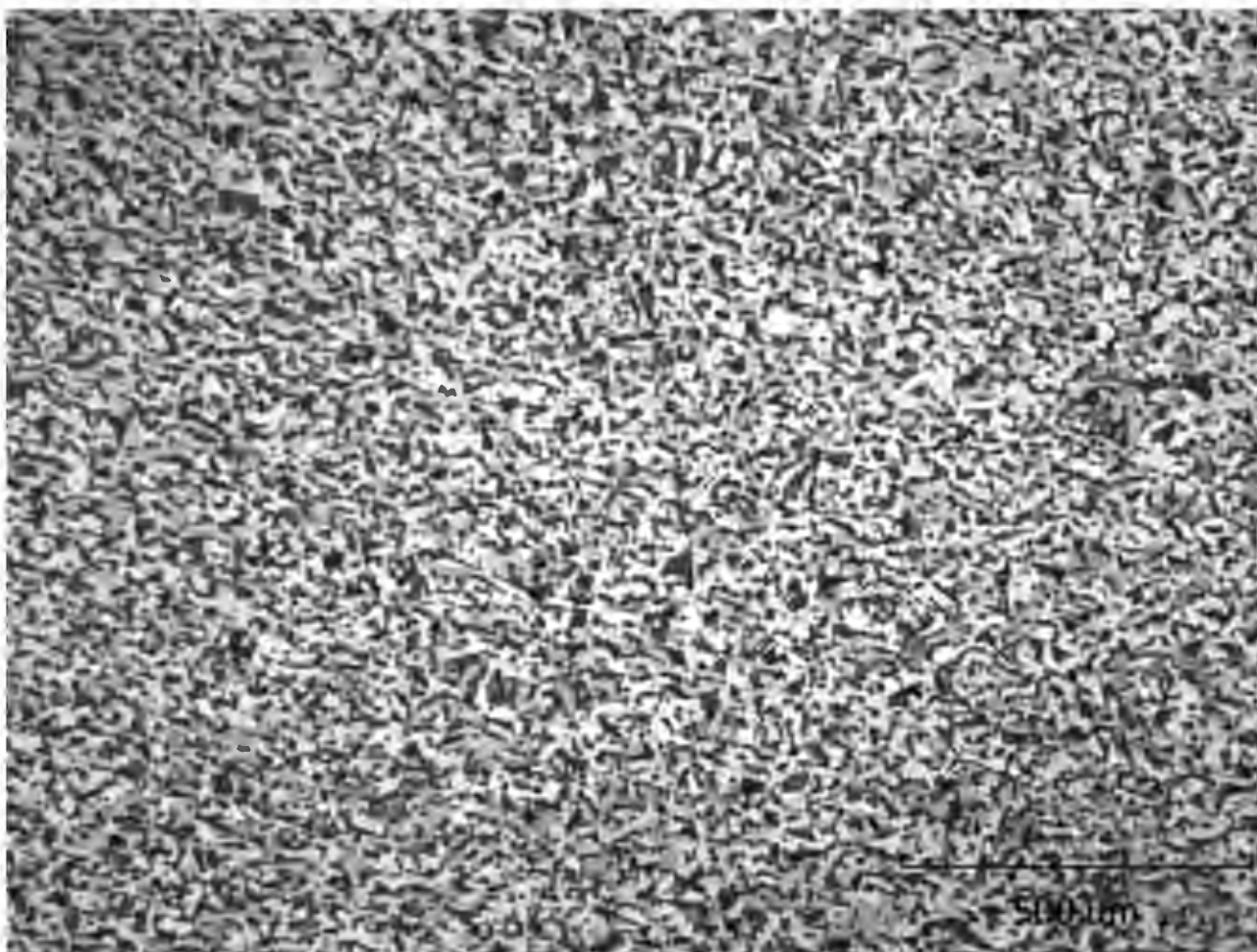
SANDBERG
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web: www.sandberg.co.uk

TEST CERTIFICATE
METALLOGRAPHIC EXAMINATION
TO BS EN ISO 643:2020

Certificate:	72435/M/17	Order Ref:	M-ETF149/0056
Samples Received:	24 May 2022	Tested By:	VM
Test Date:	27 May 2022	Test Procedure:	M5/3/3 & M13/3/2
Client Details:	McGee Group, 5 Hatfields, Level 9 Alto Tower, London, SE1 9PG.		



Met Lab Ref: MC 464		Client Ref: H3-P1/B1 25 mm Ø Square Twisted Bar	
Examined By: AK	Mag: x 84	Etchant: 2% Nital	Grain Size Index: 6.5
Comments:		Material is a ferrite matrix with pearlite present. The image shows the material to be a carbon steel with an even and homogenous uniform structure.	

For Sandberg LLP

Date: 9 June 2022

Neale Fetter - Assistant Manager Metallurgy Department

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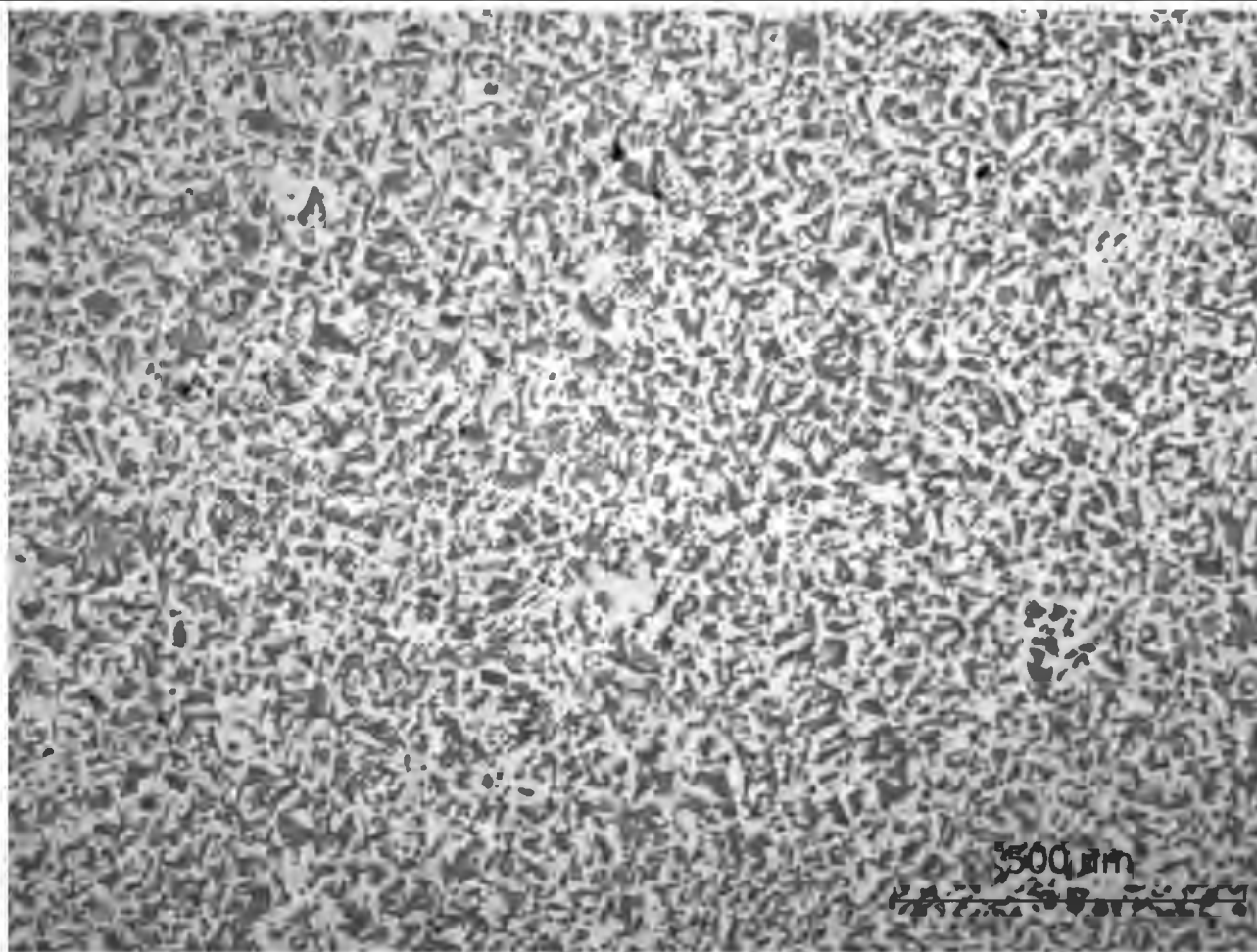
SANDBERG
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TEST CERTIFICATE
METALLOGRAPHIC EXAMINATION
TO BS EN ISO 643:2020

Certificate:	72435/M/18	Order Ref:	M-ETF149/0056
Samples Received:	24 May 2022	Tested By:	VM
Test Date:	27 May 2022	Test Procedure:	M5/3/3 & M13/3/2
Client Details:	McGee Group, 5 Hatfields, Level 9 Alto Tower, London, SE1 9PG.		



Met Lab Ref: MC 465		Client Ref: H3-P2/B1 25 mm Ø Square Twisted Bar	
Examined By: AK	Mag: x 84	Etchant: 2% Nital	Grain Size Index: 6.5
Comments:		Material is a ferrite matrix with pearlite present. The image shows the material to be a carbon steel with an even and homogenous uniform structure.	

For Sandberg LLP

Date: 9 June 2022

Neale Fetter - Assistant Manager Metallurgy Department

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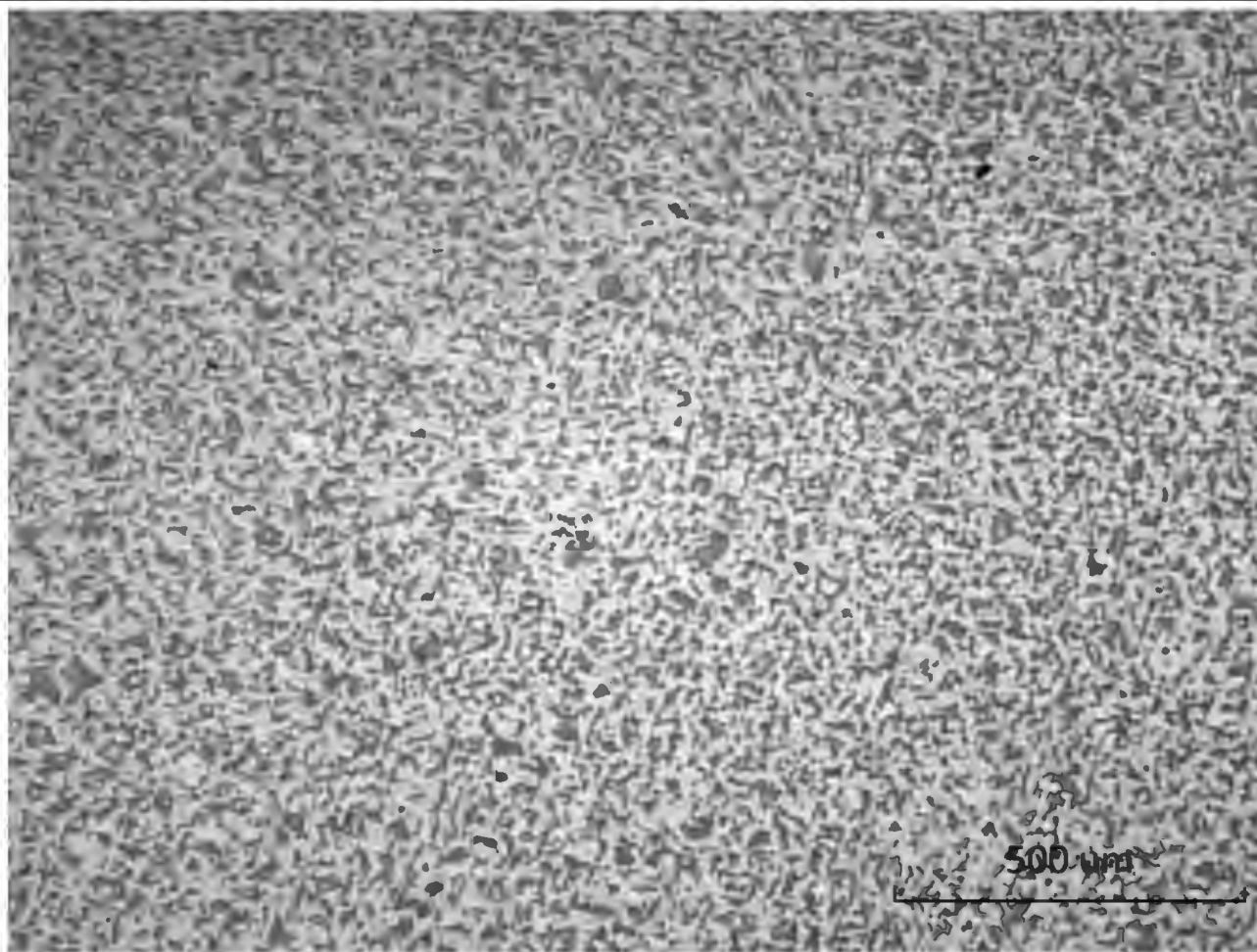
CONSULTING ENGINEERS
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web: www.sandberg.co.uk

TEST CERTIFICATE METALLOGRAPHIC EXAMINATION TO BS EN ISO 643:2020

Certificate:	72435/M/19	Order Ref:	M-ETF149/0056
Samples Received:	24 May 2022	Tested By:	VM
Test Date:	27 May 2022	Test Procedure:	M5/3/3 & M13/3/2
Client Details:	McGee Group, 5 Hatfields, Level 9 Alto Tower, London, SE1 9PG.		



Met Lab Ref: MC 466		Client Ref: H3-R2/B1 20 mm Ø Square Twisted Bar	
Examined By: AK	Mag: x 84	Etchant: 2% Nital	Grain Size Index: 7.5
Comments:		Material is a ferrite matrix with pearlite present. The image shows the material to be a carbon steel with an even and homogenous uniform structure.	

For Sandberg LLP

Date: 9 June 2022

Neale Fetter - Assistant Manager Metallurgy Department

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0262

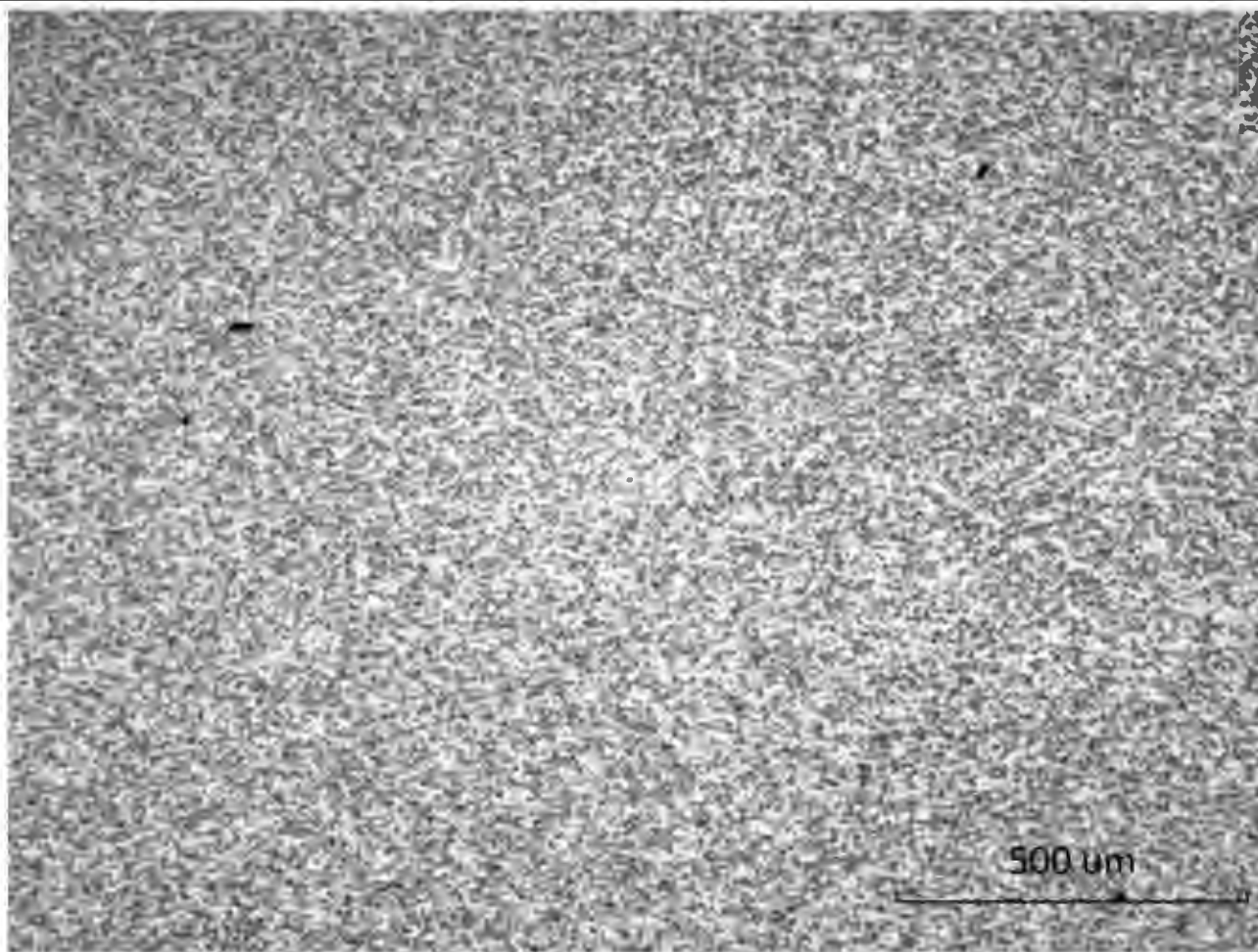
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web: www.sandberg.co.uk

TEST CERTIFICATE
METALLOGRAPHIC EXAMINATION
TO BS EN ISO 643:2020

Certificate:	72435/M/20	Order Ref:	M-ETF149/0056
Samples Received:	24 May 2022	Tested By:	VM
Test Date:	27 May 2022	Test Procedure:	M5/3/3 & M13/3/2
Client Details:	McGee Group, 5 Hatfields, Level 9 Alto Tower, London, SE1 9PG.		



Met Lab Ref: MC 467		Client Ref: H3-R2/L1 6 mm Ø Plain Round Bar	
Examined By: AK	Mag: x 84	Etchant: 2% Nital	Grain Size Index: 9.0
Comments:		Material is a ferrite matrix with pearlite present. The image shows the material to be a carbon steel with an even and homogenous uniform structure.	

For Sandberg LLP

Date: 9 June 2022

Neale Fetter - Assistant Manager Metallurgy Department

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web: www.sandberg.co.uk

TENSILE TEST CERTIFICATE BS EN ISO 6892-1:2019 B

Certificate:	72435/M/21	Order Ref:	M-ETF149/0056
Samples Received:	12/24 May 2022	Tested By:	AT/NAF
Test Date:	18/30 May 2022	Test Procedure:	M16/3/3
Client Details:	McGee Group, 5 Hatfields, Level 9 Alto Tower, London, SE1 9PG.		

Specimen Reference	Area mm ²	0.2% Proof		Ultimate Tensile		Stress Ratio Rm/Re	Elongation %
		Load kN	Stress N/mm ²	Load kN	Stress N/mm ²		
MC 410 H1-P1/B2 32 mm Ø square twisted bar	968.39	446.87	461	539.38	557	1.21	N/D*
MC 411 H1/B1 25 mm Ø square twisted bar	630.18	306.88	487	369.14	586	1.20	N/D*
MC 462 H3-LC6/B1 25 mm Ø square twisted bar	660.02	316.26	479	367.31	556	1.16	N/D*
MC 463 H3-LC6/B2 25 mm Ø square twisted bar	659.12	322.62	489	379.27	575	1.18	N/D*
MC 465 H3-P2/B1 25 mm Ø square twisted bar	644.67	311.57	483	381.15	591	1.22	N/D*
Specification: BS 4449:1997 (For reference only)							
Grade 250			250 min			1.15 min	22 min
Grade 460A			460 min			1.05 min	12 min
Grade 460B			460 min			1.08 min	14 min

Comments:	* Samples fractured in grips so no elongation was recorded. The tensile properties of samples MC 410, MC 411, MC 462, MC 463 and MC 465 would be considered typical of a cold-worked reinforcing bar.
------------------	--

For Sandberg LLP

Date: 9 June 2022

Neale Fetter - Assistant Manager Metallurgy Department

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Sandberg LLP
5 Carpenters Place
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TENSILE TEST CERTIFICATE BS EN ISO 6892-1:2019 A224

Tel: 020 7565 7000
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web: www.sandberg.co.uk

Certificate:	72435/M/22	Order Ref:	M-ETF149/0056
Samples Received:	12 May 2022	Tested By:	AT
Test Date:	20 May 2022	Test Procedure:	M10/3/3
Client Details:	McGee Group, 5 Hatfields, Level 9 Alto Tower, London, SE1 9PG.		

Specimen Reference	Area mm ²	Upper Yield		Ultimate Tensile		Stress Ratio Rm/Re	Elongation %
		Load kN	Stress N/mm ²	Load kN	Stress N/mm ²		
MC 412 H1-L3/B1 - 16 mm Ø Plain Round Bar	196.83	64.38	327	98.37	500	1.53	34.0
MC 413 H1-L3/L1 - 6 mm Ø Plain Round Bar	32.18	9.88	307*	13.98	434	1.42	37.5
MC 414 H1-R2/B1 - 16 mm Ø Plain Round Bar	197.97	65.85	333	98.79	499	1.50	32.0
MC 415 H1-R2/L1 - 6 mm Ø Plain Round Bar	33.16	9.29	280*	14.24	429	1.53	36.5
MC 419 H2-L2/B1 - 16 mm Ø Plain Round Bar	199.93	60.80	304	96.05	480	1.58	35.0
Specification:							
BS 4449:1997							
Grade 250			250 min			1.15 min	22 min
Grade 460A			460 min			1.05 min	12 min
Grade 460B			460 min			1.08 min	14 min

Comments:	* Upper yield phenomenon was not exhibited so 0.2% proof stress has been reported instead. The tensile properties of samples MC 412, MC 413, MC 414, MC 415 and MC 419 would comply with the requirements for a grade 250 reinforcing bar.
------------------	---

For Sandberg LLP

Date: 9 June 2022

Neale Fetter - Assistant Manager Metallurgy Department

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TENSILE TEST CERTIFICATE BS EN ISO 6892-1:2019 A224

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Certificate:	72435/M/23	Order Ref:	M-ETF149/0056
Samples Received:	12/24 May 2022	Tested By:	AT
Test Date:	20/27 May 2022	Test Procedure:	M10/3/3
Client Details:	McGee Group, 5 Hatfields, Level 9 Alto Tower, London, SE1 9PG.		

Specimen Reference	Area mm ²	Upper Yield		Ultimate Tensile		Stress Ratio Rm/Re	Elongation %
		Load kN	Stress N/mm ²	Load kN	Stress N/mm ²		
MC 420 H2-L2/L1 - 6 mm Ø Plain Round Bar	34.52	9.55	277*	13.55	393	1.42	36.5
MC 421 H2-R1/B1 - 16 mm Ø Plain Round Bar	195.69	65.38	334	93.80	479	1.43	34.0
MC 422 H2-R1/L1 - 6 mm Ø Plain Round Bar	34.76	10.75	309*	16.33	470	1.52	26.5
MC 467 H3-R2/L1 - 6 mm Ø Plain Round Bar	33.67	11.59	344*	15.32	455	1.32	40.0
Specification:							
BS 4449:1997							
Grade 250			250 min			1.15 min	22 min
Grade 460A			460 min			1.05 min	12 min
Grade 460B			460 min			1.08 min	14 min

Comments:	* Upper yield phenomenon was not exhibited so 0.2% proof stress has been reported instead. The tensile properties of samples MC 420, MC 421, MC 422 and MC 467 would comply with the requirements for a grade 250 reinforcing bar.
------------------	---

For Sandberg LLP

Date: 9 June 2022

Neale Fetter - Assistant Manager Metallurgy Department

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TENSILE TEST CERTIFICATE BS EN ISO 6892-1:2019 A224

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Certificate:	72435/M/24	Order Ref:	M-ETF149/0056
Samples Received:	12 May 2022	Tested By:	AT
Test Date:	20 May 2022	Test Procedure:	M10/3/3
Client Details:	McGee Group, 5 Hatfields, Level 9 Alto Tower, London, SE1 9PG.		

Specimen Reference	Area mm ²	0.2% Proof		Ultimate Tensile		Stress Ratio Rm/Re	Elongation %
		Load kN	Stress N/mm ²	Load kN	Stress N/mm ²		
MC 409 H1-P1/B1 25 mm Ø square twisted bar	249.13	105.08	422	135.91	546	1.29	20.0
MC 416 H2-P2/B1 25 mm Ø square twisted bar	322.38	153.50	476	191.90	595	1.25	19.5
MC 417 H2-P2/B2 25 mm Ø square twisted bar	320.47	127.21	397	165.50	516	1.30	18.5
MC 418 H2/B1 25 mm Ø square twisted bar	309.15	129.39	419	164.00	530	1.27	22.0
MC 464 H3-P1/B1 25 mm Ø square twisted bar	381.17	169.95	446	210.75	553	1.24	19.5
MC 466 H3-R2/B1 20 mm Ø square twisted bar	256.45	114.45	446	143.67	560	1.26	17.0
Specification: BS 4449:1997 (For reference only)							
Grade 250			250 min			1.15 min	22 min
Grade 460A			460 min			1.05 min	12 min
Grade 460B			460 min			1.08 min	14 min

Comments:	Due to mechanical damage, the above samples were tested as reduced section machined test pieces. The tensile properties of samples MC 409, MC 416, MC 417, MC 418, MC 464 and MC 466 would be considered typical of a square twisted reinforcing bar.
------------------	---

For Sandberg LLP

Date: 9 June 2022

Neale Fetter - Assistant Manager Metallurgy Department

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TEST CERTIFICATE

Certificate:	72435/M/25	Samples Received:	12 May 2022	Test Date:	18 May 2022
Reference:	M-ETF149/0056	Tested By:	Metaltech Services Limited	Test Procedure:	OES
Client Details:	McGee Group, 5 Hatfields, Level 9 Alto Tower, London, SE1 9PG.				

Chemical Composition %														
Met Lab Ref	Client Description	C	Si	Mn	P	S	Cr	Mo	Ni	Al	Cu	Nb	V	CEV
MC 409	H1-P1/B1 25 mm Ø Square Twisted Bar	0.26	0.023	0.63	0.037	0.051	<0.06	<0.02	<0.035	<0.01	0.049	<0.01	<0.025	0.368
MC 410	H1-P1/B2 32 mm Ø Square Twisted Bar	0.24	0.049	0.63	0.012	0.042	<0.06	<0.02	0.042	<0.01	0.084	<0.01	<0.025	0.353
MC 411	H1/B1 25 mm Ø Square Twisted Bar	0.19	0.039	0.64	0.011	0.051	<0.06	<0.02	0.153	<0.01	0.274	<0.01	<0.025	0.325
Specification:	BS 4449:1997 (For reference only) Grade 250	0.27				0.065	0.065							0.45

Comments:	Results contained in this certificate are outside the UKAS accreditation for this laboratory but have been performed on our behalf by another laboratory that is so accredited at their laboratory. Metaltech Services Limited Report No. MSL 7208-1.
------------------	---

For Sandberg LLP

Date: 09 June 2022

N. Fetter

Neale Fetter - Assistant Manager Metallurgy Department

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TEST CERTIFICATE

Certificate:	72435/M/26	Samples Received:	12 May 2022	Test Date:	18 May 2022
Reference:	M-ETF149/0056	Tested By:	Metaltech Services Limited	Test Procedure:	OES
Client Details:	McGee Group, 5 Hatfields, Level 9 Alto Tower, London, SE1 9PG.				

Chemical Composition %														
Met Lab Ref	Client Description	C	Si	Mn	P	S	Cr	Mo	Ni	Al	Cu	Nb	V	CEV
MC 412	H1-L3/B1 16 mm Ø Plain Round Bar	0.29	0.073	0.56	0.035	0.023	<0.06	<0.02	0.071	<0.01	0.077	<0.01	<0.025	0.393
MC 414	H1-R2/B1 16 mm Ø Plain Round Bar	0.30	0.071	0.58	0.015	0.021	<0.06	<0.02	0.043	<0.01	0.077	<0.01	<0.025	0.405
MC 416	H2-P2/B1 25 mm Ø Square Twisted Bar	0.21	0.071	1.24	0.016	0.022	<0.06	<0.02	<0.035	<0.01	<0.015	<0.01	<0.025	0.417
Specification:	BS 4449:1997 (For reference only) Grade 250	0.27				0.065								0.45

Comments:	Results contained in this certificate are outside the UKAS accreditation for this laboratory but have been performed on our behalf by another laboratory that is so accredited at their laboratory. Metaltech Services Limited Report No. MSL 7208-1.
------------------	---

For Sandberg LLP

Date: 09 June 2022

N. Fetter

Neale Fetter - Assistant Manager Metallurgy Department

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TEST CERTIFICATE

Certificate:	72435/M/27	Samples Received:	12 May 2022	Test Date:	18 May 2022
Reference:	M-ETF149/0056	Tested By:	Metaltech Services Limited	Test Procedure:	OES
Client Details:	McGee Group, 5 Hatfields, Level 9 Alto Tower, London, SE1 9PG.				

Chemical Composition %														
Met Lab Ref	Client Description	C	Si	Mn	P	S	Cr	Mo	Ni	Al	Cu	Nb	V	CEV
MC 417	H2-P2/B2 25 mm Ø Square Twisted Bar	0.18	0.029	0.50	0.033	0.036	<0.06	<0.02	0.089	<0.01	0.165	<0.01	<0.025	0.280
MC 418	H2/B1 25 mm Ø Square Twisted Bar	0.23	0.042	0.79	0.040	0.042	<0.06	<0.02	<0.035	<0.01	<0.015	<0.01	<0.025	0.362
MC 419	H2-L2/B1 16 mm Ø Plain Round Bar	0.23	0.079	0.63	0.035	0.018	<0.06	<0.02	<0.035	<0.01	0.053	<0.01	<0.025	0.339
Specification:	BS 4449:1997 (For reference only) Grade 250	0.27			0.065	0.065								0.45

Comments:	Results contained in this certificate are outside the UKAS accreditation for this laboratory but have been performed on our behalf by another laboratory that is so accredited at their laboratory. Metaltech Services Limited Report No. MSL 7208-1.
------------------	---

For Sandberg LLP

Date: 09 June 2022

N. Fetter

Neale Fetter - Assistant Manager Metallurgy Department

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TEST CERTIFICATE

Certificate:	72435/M/28	Samples Received:	12/24 May 2022	Test Date:	18/27 May 2022
Reference:	M-ETF149/0056	Tested By:	Metaltech Services Limited	Test Procedure:	OES
Client Details:	McGee Group, 5 Hatfields, Level 9 Alto Tower, London, SE1 9PG.				

Chemical Composition %														
Met Lab Ref	Client Description	C	Si	Mn	P	S	Cr	Mo	Ni	Al	Cu	Nb	V	CEV
MC 421	H2-R1/B1 16 mm Ø Plain Round Bar	0.25	0.013	0.59	0.010	0.038	<0.06	0.037	0.148	0.026	0.173	<0.01	<0.025	0.377
MC 462	H3-LC6/B1 25 mm Ø Square Twisted Bar	0.17	0.086	1.24	0.014	0.022	<0.06	<0.02	<0.035	<0.01	<0.015	<0.01	<0.025	0.377
MC 463	H3-LC6/B2 25 mm Ø Square Twisted Bar	0.18	0.078	1.22	0.021	0.027	<0.06	<0.02	<0.035	<0.01	<0.015	<0.01	<0.025	0.383
Specification:	BS 4449:1997 (For reference only) Grade 250	0.27			0.065	0.065								0.45

Comments:	Results contained in this certificate are outside the UKAS accreditation for this laboratory but have been performed on our behalf by another laboratory that is so accredited at their laboratory. Metaltech Services Limited Report No. MSL 7208-1 & 7233-2.
------------------	--

For Sandberg LLP

Date: 09 June 2022

N. Fetter

Neale Fetter - Assistant Manager Metallurgy Department

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TEST CERTIFICATE

Certificate:	72435/M/29	Samples Received:	24 May 2022	Test Date:	27 May 2022
Reference:	M-ETF149/0056	Tested By:	Metaltech Services Limited	Test Procedure:	OES
Client Details:	McGee Group, 5 Hatfields, Level 9 Alto Tower, London, SE1 9PG.				

Chemical Composition %														
Met Lab Ref	Client Description	C	Si	Mn	P	S	Cr	Mo	Ni	Al	Cu	Nb	V	CEV
MC 464	H3-P1/B1 25 mm Ø Square Twisted Bar	0.20	0.062	1.06	0.027	0.031	<0.06	<0.02	<0.035	<0.01	<0.015	<0.01	<0.025	0.377
MC 465	H3-P2/B1 25 mm Ø Square Twisted Bar	0.22	0.059	1.06	0.047	0.037	<0.06	<0.02	<0.035	<0.01	<0.015	<0.01	<0.025	0.397
MC 466	H3-R2/B1 20 mm Ø Square Twisted Bar	0.19	0.071	0.64	0.010	0.050	<0.06	<0.02	0.083	<0.01	0.176	<0.01	<0.025	0.314
Specification:	BS 4449:1997 (For reference only) Grade 250	0.27			0.065	0.065								0.45

Comments:	Results contained in this certificate are outside the UKAS accreditation for this laboratory but have been performed on our behalf by another laboratory that is so accredited at their laboratory. Metaltech Services Limited Report No. MSL 7233-2.
------------------	---

For Sandberg LLP

Date: 09 June 2022

N. Fetter

Neale Fetter - Assistant Manager Metallurgy Department

Materials, samples and test specimens are retained for a period of 2 months from the issue of the final report.

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

Where test results are given, the results and our conclusions relate only to the samples tested and apply to the sample(s) as received, except where sampling has been conducted by Sandberg LLP.

TEST CERTIFICATE

Certificate:	72435/M/30	Samples Received:	12 May 2022	Test Date:	25 May 2022
Reference:	M-ETF149/0056	Tested By:	Rotech Laboratories	Test Procedure:	ICP-OES
Client Details:	McGee Group, 5 Hatfields, Level 9 Alto Tower, London, SE1 9PG.				

Chemical Composition %														
Met Lab Ref	Client Description	C	Si	Mn	P	S	Cr	Mo	Ni	Al	Cu	Nb	V	CEV
MC 413	H1-L3/L1 - 6 mm Ø Plain Round Bar	0.15	0.02	0.61	0.024	0.037	0.03	0.01	0.06	<0.01	0.06	<0.01	<0.01	0.270
MC 415	H1-R2/L1 - 6 mm Ø Plain Round Bar	0.17	0.03	0.62	0.026	0.043	0.03	0.01	0.06	<0.01	0.06	<0.01	<0.01	0.291
MC 420	H2-L2/L1 - 6 mm Ø Plain Round Bar	0.11	<0.01	0.39	0.011	0.039	0.03	0.01	0.06	<0.01	0.10	<0.01	<0.01	0.196
Specification:	BS 4449:1997 (For reference only) Grade 250	0.27			0.065	0.065								0.45

Comments:	Results contained in this certificate are outside the UKAS accreditation for this laboratory but have been performed on our behalf by another laboratory that is so accredited at their laboratory. Rotech Laboratories Report No. 22-05802.
------------------	--

For Sandberg LLP

Date: 09 June 2022

N. Fetter

Neale Fetter - Assistant Manager Metallurgy Department

Materials, samples and test specimens are retained for a period of 2 months from the issue of the final report.
Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

Where test results are given, the results and our conclusions relate only to the samples tested and apply to the sample(s) as received, except where sampling has been conducted by Sandberg LLP.

TEST CERTIFICATE

Certificate:	72435/M/31	Samples Received:	12/24 May 2022	Test Date:	25 May/ 07 June 2022
Reference:	M-ETF149/0056	Tested By:	Rotech Laboratories	Test Procedure:	ICP-OES
Client Details:	McGee Group, 5 Hatfields, Level 9 Alto Tower, London, SE1 9PG.				

Chemical Composition %														
Met Lab Ref	Client Description	C	Si	Mn	P	S	Cr	Mo	Ni	Al	Cu	Nb	V	CEV
MC 422	H2-R1/L1 - 6 mm Ø Plain Round Bar	0.20	0.05	0.64	0.011	0.030	0.04	0.01	0.04	<0.01	0.05	<0.01	<0.01	0.325
MC 467	H3-R2/L1 6 mm Ø Plain Round Bar	0.048	<0.01	0.38	0.028	0.035	0.03	<0.01	0.05	<0.01	0.06	<0.01	<0.01	0.129
Specification:	BS 4449:1997 (For reference only) Grade 250	0.27			0.065	0.065								0.45

Comments:	Results contained in this certificate are outside the UKAS accreditation for this laboratory but have been performed on our behalf by another laboratory that is so accredited at their laboratory. Rotech Laboratories Report No. 22-05802 and 22-06248.
------------------	---

For Sandberg LLP

Date: 09 June 2022

N. Fetter

Neale Fetter - Assistant Manager Metallurgy Department

Materials, samples and test specimens are retained for a period of 2 months from the issue of the final report.
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Where test results are given, the results and our conclusions relate only to the samples tested and apply to the sample(s) as received, except where sampling has been conducted by Sandberg LLP.



0262

SANDBERG
CONSULTING ENGINEERS
INVESTIGATION INSPECTION
MATERIALS TESTING

Sandberg LLP
5 Carpenters Place
Clapham High Street
London, SW4 7TD

Tel: 020 7565 7000
Fax: 020 7565 7100
email: mail@sandberg.co.uk
web: www.sandberg.co.uk

TEST CERTIFICATE
VICKERS HARDNESS
BS EN ISO 6507-1:2018

Certificate:	72435/M/32	Order Ref:	M-ETF149/0056
Samples Received:	12 May 2022	Tested By:	VM
Test Date:	19-20 May 2022	Test Procedure:	M20/1/1
Client Details:	McGee Group, 5 Hatfields, Level 9 Alto Tower, London, SE1 9PG.		

METALLURGY REFERENCE	MC 409	MC 410	MC 411	MC 412	MC 413
CLIENT REFERENCE	H1-P1/B1 25 mm Ø Square Twisted Bar	H1-P1/B2 32 mm Ø Square Twisted Bar	H1/B1 25 mm Ø Square Twisted Bar	H1-L3/B1 16 mm Ø Plain Round Bar	H1-L3/L1 6 mm Ø Plain Round Bar
LOAD/kg	10	10	10	10	10
HARDNESS VALUE (SURFACE)	211	199	216	143	179
	209	206	224	143	189
	208	200	215	144	195
AVERAGE HARDNESS VALUE (SURFACE)	209	202	218	143	188
HARDNESS VALUE (CORE)	164	179	191	151	143
	175	181	205	153	143
	190	181	193	153	161
AVERAGE HARDNESS VALUE (CORE)	176	180	196	152	149

Comments:	The above hardness values show that samples MC 409, MC 410, MC 411, MC 412 and MC 413 have not been quenched and self-tempered.
------------------	---

For Sandberg LLP

Date: 9 June 2022

Neale Fetter - Assistant Manager Metallurgy Department

Materials, samples and test specimens are retained for a period of 2 months from the issue of the final report.

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

Where test results are given, the results and our conclusions relate only to the samples tested and apply to the sample(s) as received, except where sampling has been conducted by Sandberg LLP.



0262

SANDBERG
CONSULTING ENGINEERS
INVESTIGATION INSPECTION
MATERIALS TESTING

Sandberg LLP
5 Carpenters Place
Clapham High Street
London, SW4 7TD

Tel: 020 7565 7000
Fax: 020 7565 7100
email: mail@sandberg.co.uk
web: www.sandberg.co.uk

TEST CERTIFICATE
VICKERS HARDNESS
BS EN ISO 6507-1:2018

Certificate:	72435/M/33	Order Ref:	M-ETF149/0056
Samples Received:	12 May 2022	Tested By:	VM
Test Date:	18-20 May 2022	Test Procedure:	M20/1/1
Client Details:	McGee Group, 5 Hatfields, Level 9 Alto Tower, London, SE1 9PG.		

METALLURGY REFERENCE	MC 414	MC 415	MC 416	MC 417	MC 418
CLIENT REFERENCE	H1-R2/B1 16 mm Ø Plain Round Bar	H1-R2/L1 6 mm Ø Plain Round Bar	H2-P2/B1 25 mm Ø Square Twisted Bar	H2-P2/B2 25 mm Ø Square Twisted Bar	H2/B1 25 mm Ø Square Twisted Bar
LOAD/kg	10	10	10	10	10
HARDNESS VALUE (SURFACE)	148	133	198	184	193
	148	138	203	192	163
	149	139	200	201	180
AVERAGE HARDNESS VALUE (SURFACE)	148	137	200	192	179
HARDNESS VALUE (CORE)	148	154	186	151	202
	152	156	179	155	196
	149	130	178	173	192
AVERAGE HARDNESS VALUE (CORE)	150	147	181	159	197

Comments:	The above hardness values show that samples MC 414, MC 415, MC 416, MC 417 and MC 418 have not been quenched and self-tempered.
------------------	---

For Sandberg LLP

Date: 9 June 2022

Neale Fetter - Assistant Manager Metallurgy Department

Materials, samples and test specimens are retained for a period of 2 months from the issue of the final report.

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

Where test results are given, the results and our conclusions relate only to the samples tested and apply to the sample(s) as received, except where sampling has been conducted by Sandberg LLP.



0262

SANDBERG
CONSULTING ENGINEERS
INVESTIGATION INSPECTION
MATERIALS TESTING

Sandberg LLP
5 Carpenters Place
Clapham High Street
London, SW4 7TD

Tel: 020 7565 7000
Fax: 020 7565 7100
email: mail@sandberg.co.uk
web: www.sandberg.co.uk

TEST CERTIFICATE
VICKERS HARDNESS
BS EN ISO 6507-1:2018

Certificate:	72435/M/34	Order Ref:	M-ETF149/0056
Samples Received:	12/24 May 2022	Tested By:	VM
Test Date:	19-20/ May 2022	Test Procedure:	M20/1/1
Client Details:	McGee Group, 5 Hatfields, Level 9 Alto Tower, London, SE1 9PG.		

METALLURGY REFERENCE	MC 419	MC 420	MC 421	MC 422	MC 462
CLIENT REFERENCE	H2-L2/B1 16 mm Ø Plain Round Bar	H2-L2/L1 6 mm Ø Plain Round Bar	H2-R1/B1 16 mm Ø Plain Round Bar	H2-R1/L1 6 mm Ø Plain Round Bar	H3-LC6/B1 25 mm Ø Square Twisted Bar
LOAD/kg	10	10	10	10	10
HARDNESS VALUE (SURFACE)	142	142	152	192	209
	145	144	159	207	207
	146	138	169	209	202
AVERAGE HARDNESS VALUE (SURFACE)	145	142	160	203	206
HARDNESS VALUE (CORE)	137	126	140	184	146
	136	133	141	178	155
	138	148	154	159	164
AVERAGE HARDNESS VALUE (CORE)	137	135	145	174	155

Comments:	The above hardness values show that samples MC 419, MC 420, MC 421, MC 422 and MC 462 have not been quenched and self-tempered.
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For Sandberg LLP

Date: 9 June 2022

Neale Fetter - Assistant Manager Metallurgy Department

Materials, samples and test specimens are retained for a period of 2 months from the issue of the final report.

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

Where test results are given, the results and our conclusions relate only to the samples tested and apply to the sample(s) as received, except where sampling has been conducted by Sandberg LLP.



0262

TEST CERTIFICATE
VICKERS HARDNESS
BS EN ISO 6507-1:2018

Certificate:	72435/M/35	Order Ref:	M-ETF149/0056
Samples Received:	24 May 2022	Tested By:	VM
Test Date:	May 2022	Test Procedure:	M20/1/1
Client Details:	McGee Group, 5 Hatfields, Level 9 Alto Tower, London, SE1 9PG.		

METALLURGY REFERENCE	MC 463	MC 464	MC 465	MC 466	MC 467
CLIENT REFERENCE	H3-LC6/B2 25 mm Ø Square Twisted Bar	H3-P1/B1 25 mm Ø Square Twisted Bar	H3-P2/B1 25 mm Ø Square Twisted Bar	H3-R2/B1 20 mm Ø Square Twisted Bar	H3-R2/L1 6 mm Ø Plain Round Bar
LOAD/kg	10	10	10	10	10
HARDNESS VALUE (SURFACE)	213	212	209	210	170
	217	205	213	207	186
	222	205	206	206	190
AVERAGE HARDNESS VALUE (SURFACE)	217	207	209	208	182
HARDNESS VALUE (CORE)	151	146	177	150	142
	156	153	174	158	153
	165	162	190	171	168
AVERAGE HARDNESS VALUE (CORE)	158	154	180	160	155

Comments:	The above hardness values show that samples MC 463, MC 464, MC 465, MC 466 and MC 467 have not been quenched and self-tempered.
------------------	---

For Sandberg LLP

Date: 9 June 2022

Neale Fetter - Assistant Manager Metallurgy Department

Materials, samples and test specimens are retained for a period of 2 months from the issue of the final report.

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

Where test results are given, the results and our conclusions relate only to the samples tested and apply to the sample(s) as received, except where sampling has been conducted by Sandberg LLP.

SANDBERG

CONSULTING ENGINEERS

INVESTIGATION INSPECTION
MATERIALS TESTING

Sandberg LLP
5 Carpenters Place
London SW4 7TD

Tel: 020 7565 7000
email: mail@sandberg.co.uk
web: www.sandberg.co.uk

AUTHORISATION FOR THE RETENTION OF MATERIALS, SAMPLES AND TEST SPECIMENS

CLIENT:	McGee Group (Holdings) Limited		
DATE REPORT ISSUED:	9 June 2022	JOB NO:	72435/M

Materials, samples and test specimens are retained for a period of 2 months from the issue of the final report. Thereafter we will either dispose of them or retain them for a further period, whichever you require. However, we cannot accept requests for indefinite retention and the maximum period of retention without review by yourselves is 6 months.

A charge is made for storage at £50 per 0.025 m³ (approximately one cubic foot) or part thereof per quarter commencing at the end of our standard 2 month retention period. You will be invoiced for the storage charges at the start of each quarterly period.

If you wish to retain them for a specified period, or if you intend to collect any of these items, please complete the form below and return it to the above address with 1 month.

PLEASE KEEP UPPER HALF FOR REFERENCE

PLEASE COMPLETE 'A' OR 'B' AND RETURN IF APPROPRIATE

- A. Please RETAIN/PREPARE FOR COLLECTION* all materials.

* Delete as appropriate

If materials are to be retained please give retention period

If materials are to be collected please give intended date of collection

- B. If you require only certain materials, samples or test specimens to be retained or collected please describe them below and give retention period or intended collection date.

(Any material not listed will be disposed)

TO BE RETAINED/COLLECTED (delete as appropriate)			JOB NO:
Contact Name		Signature	
Company		Date	

CONCEPT SITE INVESTIGATIONS

Site Name:	Euston Tower	Job No.:	22/3686
Client:	McGee	Date Reported:	09/06/2022

Summary Test Report

Determination of Moisture Content and Liquid and Plastic Limits by 4 Point Cone Method

Borehole No.	Sample Type	Sample No.	Depth m	Description	Natural Moisture Content %	Washed Natural	Passing 425 µm sieve %	Liquid Limit %	Plastic Limit %	Plasticity Index %	Remarks
Heading 1	D	Face S001A	0.15	Dark grey slightly micaceous silty CLAY	26	Natural	100	71	26	45	
Heading 1	D	Face S002A	0.80	Greyish brown slightly micaceous silty CLAY with rare pockets of light brown silty fine sand	26	Natural	100	71	26	45	
Heading 1	D	Face S003A	1.65	Greyish brown slightly micaceous silty CLAY	27	Natural	100	75	27	48	
Heading 2	D	Face S004A	0.10	Brown silty CLAY	29	Natural	100	75	27	48	
Heading 2	D	Face S005A	1.00	Greyish brown slightly micaceous slightly sandy silty CLAY with rare shell fragments and pockets of light grey silty fine sand	24	Natural	100	66	25	41	
Heading 2	D	Face S006A	2.00	Greyish brown slightly micaceous silty CLAY	27	Natural	100	73	26	47	

BS 1377: Part 2: Clause 4.3 & 4.4: 1990 Determination of the liquid limit by the cone penetrometer method

BS 1377: Part 2: Clause 5: 1990 Determination of the plastic limit and plasticity index

BS 1377: Part 2: Clause 3.2: 1990 Determination of the moisture content by the oven drying method

Remarks: The results reported relate only to the items tested or sampled.



Date - samples received:	20/04/2022	CONCEPT 47-49 Brunel Road, London W3 7XR Tel: 02087401553 Email: lab@conceptconsultants.co.uk
Date - sample testing commenced :	24/05/2022	
Date - sample testing completed :	26/05/2022	
Approved Signatories:	L Griffin LG (QA Technical & Lab Mngr) – K Mazerant KM (Lab Mngr)	Checked / Approved by: 01/06/2022 Date Approved: KM

CONCEPT SITE INVESTIGATIONS

Site Name:	Euston Tower	Job No.:	22/3686
Client:	McGee	Date Reported:	16/06/2022

Summary Test Report

Determination of Moisture Content and Liquid and Plastic Limits by 4 Point Cone Method

Borehole No.	Sample Type	Sample No.	Depth m	Description	Natural Moisture Content %	Washed Natural	Passing 425 µm sieve %	Liquid Limit %	Plastic Limit %	Plasticity Index %	Remarks
Heading 1	U38	Pile L3 S010 Disc 1	1.20	Greyish brown silty CLAY	26						
Heading 1	U38	Pile L3 S010 Disc 2	1.20	Greyish brown silty CLAY	26						
Heading 1	U38	Pile L3 S010 Disc 3	1.20	Greyish brown silty CLAY	27						
Heading 1	U38	Pile L3 S010 Disc 4	1.20	Greyish brown silty CLAY	32						
Heading 1	U38	Pile L3 S010 Disc 5	1.20	Greyish brown silty CLAY	29						
Heading 1	U38	Pile L3 S010 Disc 6	1.20	Greyish brown silty CLAY	28						
Heading 1	U38	Pile L3 S010 Disc 7	1.20	Greyish brown silty CLAY	29						

BS 1377: Part 2: Clause 4.3 & 4.4: 1990 Determination of the liquid limit by the cone penetrometer method

BS 1377: Part 2: Clause 5: 1990 Determination of the plastic limit and plasticity index

BS 1377: Part 2: Clause 3.2: 1990 Determination of the moisture content by the oven drying method

Remarks: The results reported relate only to the items tested or sampled.



Date - samples received:	20/04/2022	<div>CONCEPT 47-49 Brunel Road, London W3 7XR Tel: 02087401553 Email: lab@conceptconsultants.co.uk</div>
Date - sample testing commenced :	24/05/2022	
Date - sample testing completed :	26/05/2022	
Checked / Approved by: 01/06/2022 Date Approved: KM		
Approved Signatories: L Griffin LG (QA Technical & Lab Mngr) – K Mazerant KM (Lab Mngr)		

CONCEPT SITE INVESTIGATIONS

Site Name:	Euston Tower	Job No.:	22/3686
Client:	McGee	Date Reported:	16/06/2022

Summary Test Report

Determination of Moisture Content and Liquid and Plastic Limits by 4 Point Cone Method

Borehole No.	Sample Type	Sample No.	Depth m	Description	Natural Moisture Content %	Washed Natural	Passing 425 µm sieve %	Liquid Limit %	Plastic Limit %	Plasticity Index %	Remarks
Heading 1	U38	Pile R3 S011 Disc 1	1.20	Greyish brown silty CLAY with rare pockets of grey silty sand	25						
Heading 1	U38	Pile R3 S011 Disc 2	1.20	Greyish brown silty CLAY with rare pockets of grey silty sand	26						
Heading 1	U38	Pile R3 S011 Disc 3	1.20	Greyish brown silty CLAY with rare pockets of grey silty sand	26						
Heading 1	U38	Pile R3 S011 Disc 4	1.20	Greyish brown silty CLAY with rare pockets of grey silty sand	26						
Heading 1	U38	Pile R3 S011 Disc 5	1.20	Greyish brown silty CLAY with rare pockets of grey silty sand	23						
Heading 1	U38	Pile R3 S011 Disc 6	1.20	Greyish brown silty CLAY with rare pockets of grey silty sand	25						
Heading 1	U38	Pile R3 S011 Disc 7	1.20	Greyish brown silty CLAY with rare pockets of grey silty sand	25						

BS 1377: Part 2: Clause 4.3 & 4.4: 1990 Determination of the liquid limit by the cone penetrometer method

BS 1377: Part 2: Clause 5: 1990 Determination of the plastic limit and plasticity index

BS 1377: Part 2: Clause 3.2: 1990 Determination of the moisture content by the oven drying method

Remarks: The results reported relate only to the items tested or sampled.



Date - samples received:	20/04/2022	CONCEPT 47-49 Brunel Road, London W3 7XR Tel: 02087401553 Email: lab@conceptconsultants.co.uk
Date - sample testing commenced :	24/05/2022	
Date - sample testing completed :	26/05/2022	
Approved Signatories:	L Griffin LG (QA Technical & Lab Mngr) – K Mazerant KM (Lab Mngr)	Checked / Approved by: 01/06/2022 Date Approved: KM

CONCEPT SITE INVESTIGATIONS

Site Name:	Euston Tower	Job No.:	22/3686
Client:	McGee	Date Reported:	16/06/2022

Summary Test Report

Determination of Moisture Content and Liquid and Plastic Limits by 4 Point Cone Method

Borehole No.	Sample Type	Sample No.	Depth m	Description	Natural Moisture Content %	Washed Natural	Passing 425 µm sieve %	Liquid Limit %	Plastic Limit %	Plasticity Index %	Remarks
Heading 1	U38	Pile L4 S012 Disc 1	1.20	Greyish brown silty CLAY with rare pockets of grey silty sand	26						
Heading 1	U38	Pile L4 S012 Disc 2	1.20	Greyish brown silty CLAY with rare pockets of grey silty sand	25						
Heading 1	U38	Pile L4 S012 Disc 3	1.20	Greyish brown silty CLAY with rare pockets of grey silty sand	26						
Heading 1	U38	Pile L4 S012 Disc 4	1.20	Greyish brown silty CLAY with rare pockets of grey silty sand	26						
Heading 1	U38	Pile L4 S012 Disc 5	1.20	Greyish brown silty CLAY with rare pockets of grey silty sand	25						
Heading 1	U38	Pile L4 S012 Disc 6	1.20	Greyish brown silty CLAY with rare pockets of grey silty sand	25						
Heading 1	U38	Pile L4 S012 Disc 7	1.20	Greyish brown silty CLAY with rare pockets of grey silty sand	25						
Heading 1	U38	Pile L4 S012 Disc 8	1.20	Greyish brown silty CLAY with rare pockets of grey silty sand	25						

BS 1377: Part 2: Clause 4.3 & 4.4: 1990 Determination of the liquid limit by the cone penetrometer method

BS 1377: Part 2: Clause 5: 1990 Determination of the plastic limit and plasticity index

BS 1377: Part 2: Clause 3.2: 1990 Determination of the moisture content by the oven drying method

Remarks: The results reported relate only to the items tested or sampled.



Date - samples received:	20/04/2022	CONCEPT 47-49 Brunel Road, London W3 7XR Tel: 02087401553 Email: lab@conceptconsultants.co.uk
Date - sample testing commenced :	24/05/2022	
Date - sample testing completed :	26/05/2022	
Approved Signatories:	L Griffin LG (QA Technical & Lab Mngr) – K Mazerant KM (Lab Mngr)	Checked / Approved by: 01/06/2022 Date Approved: KM

[illegible]

CONCEPT SITE INVESTIGATIONS

Site Name:	Euston Tower	Job No.:	22/3686
Client:	McGee	Date Reported:	16/06/2022

Summary Test Report

Determination of Moisture Content and Liquid and Plastic Limits by 4 Point Cone Method

Borehole No.	Sample Type	Sample No.	Depth m	Description	Natural Moisture Content %	Washed Natural	Passing 425 µm sieve %	Liquid Limit %	Plastic Limit %	Plasticity Index %	Remarks
Heading 3	U38	Pile C2 S035 Disc 1	3.50	Greyish brown silty CLAY	27						
Heading 3	U38	Pile C2 S035 Disc 2	3.50	Greyish brown silty CLAY	28						
Heading 3	U38	Pile C2 S035 Disc 3	3.50	Greyish brown silty CLAY	27						
Heading 3	U38	Pile C2 S035 Disc 4	3.50	Greyish brown silty CLAY	27						
Heading 3	U38	Pile C2 S035 Disc 5	3.50	Greyish brown silty CLAY	28						
Heading 3	U38	Pile C2 S035 Disc 6	3.50	Greyish brown silty CLAY	27						
Heading 3	U38	Pile C2 S035 Disc 7	3.50	Greyish brown silty CLAY	27						
Heading 3	U38	Pile C2 S035 Disc 8	3.50	Greyish brown silty CLAY	27						
Heading 3	U38	Pile C2 S035 Disc 9	3.50	Greyish brown silty CLAY	27						

BS 1377: Part 2: Clause 4.3 & 4.4: 1990 Determination of the liquid limit by the cone penetrometer method

BS 1377: Part 2: Clause 5: 1990 Determination of the plastic limit and plasticity index

BS 1377: Part 2: Clause 3.2: 1990 Determination of the moisture content by the oven drying method

Remarks: The results reported relate only to the items tested or sampled.



Date - samples received:	25/05/2022	CONCEPT 47-49 Brunel Road, London W3 7XR Tel: 02087401553 Email: lab@conceptconsultants.co.uk
Date - sample testing commenced :	06/06/2022	
Date - sample testing completed :	13/06/2022	
Approved Signatories:	L Griffin LG (QA Technical & Lab Mngr) – K Mazerant KM (Lab Mngr)	Checked / Approved by: 15/06/2022 Date Approved: KM

CONCEPT SITE INVESTIGATIONS												
Site Name:		Euston Tower							Job No.:		22/3686	
Client:		McGee							Date Reported:		16/06/2022	
Summary Test Report												
Determination of Moisture Content and Liquid and Plastic Limits by 4 Point Cone Method												
Borehole No.	Sample Type	Sample No.	Depth m	Description	Natural Moisture Content %	Washed Natural	Passing 425 µm sieve %	Liquid Limit %	Plastic Limit %	Plasticity Index %	Remarks	
Heading 3	U38	Pile C2 S035 Disc 10	3.50	Greyish brown silty CLAY with rare pockets of grey silty sand	27							

BS 1377: Part 2: Clause 4.3 & 4.4: 1990 Determination of the liquid limit by the cone penetrometer method

BS 1377: Part 2: Clause 5: 1990 Determination of the plastic limit and plasticity index

BS 1377: Part 2: Clause 3.2: 1990 Determination of the moisture content by the oven drying method

Remarks: The results reported relate only to the items tested or sampled.

AGSASSOCIATION OF GEOTECHNICAL SPECIALISTS

UKAS TESTING4503

Date - samples received:

25/05/2022

Date - sample testing commenced :

06/06/2022

Date - sample testing completed :

13/06/2022

Checked / Approved by:

15/06/2022

Date Approved:

KM

Approved Signatories:

L Griffin LG (QA Technical & Lab Mngr) – K Mazerant KM (Lab Mngr)

CONCEPT

47-49 Brunel Road, London W3 7XR

Tel: 02087401553 Email: lab@conceptconsultants.co.uk

CONCEPT SITE INVESTIGATIONS

Site Name:	Euston Tower	Job No.:	22/3686
Client:	McGee	Date Reported:	16/06/2022

Summary Test Report

Determination of Moisture Content and Liquid and Plastic Limits by 4 Point Cone Method

Borehole No.	Sample Type	Sample No.	Depth m	Description	Natural Moisture Content %	Washed Natural	Passing 425 µm sieve %	Liquid Limit %	Plastic Limit %	Plasticity Index %	Remarks
Heading 3	U38	Pile C2 S033 Disc 1	7.00	Brownish grey silty CLAY	28						
Heading 3	U38	Pile C2 S033 Disc 2	7.00	Brownish grey silty CLAY	28						
Heading 3	U38	Pile C2 S033 Disc 3	7.00	Brownish grey silty CLAY	29						
Heading 3	U38	Pile C2 S033 Disc 4	7.00	Brownish grey silty CLAY	28						
Heading 3	U38	Pile C2 S033 Disc 5	7.00	Brownish grey silty CLAY	27						
Heading 3	U38	Pile C2 S033 Disc 6	7.00	Brownish grey silty CLAY	28						
Heading 3	U38	Pile C2 S033 Disc 7	7.00	Brownish grey silty CLAY	28						
Heading 3	U38	Pile C2 S033 Disc 8	7.00	Brownish grey silty CLAY	27						
Heading 3	U38	Pile C2 S033 Disc 9	7.00	Brownish grey silty CLAY	27						

BS 1377: Part 2: Clause 4.3 & 4.4: 1990 Determination of the liquid limit by the cone penetrometer method

BS 1377: Part 2: Clause 5: 1990 Determination of the plastic limit and plasticity index

BS 1377: Part 2: Clause 3.2: 1990 Determination of the moisture content by the oven drying method

Remarks: The results reported relate only to the items tested or sampled.



Date - samples received:	20/04/2022	CONCEPT 47-49 Brunel Road, London W3 7XR Tel: 02087401553 Email: lab@conceptconsultants.co.uk
Date - sample testing commenced :	06/06/2022	
Date - sample testing completed :	13/06/2022	
Approved Signatories:	L Griffin LG (QA Technical & Lab Mngr) – K Mazerant KM (Lab Mngr)	

[illegible]

CONCEPT SITE INVESTIGATIONS

Site Name:	Euston Tower	Job No.:	22/3686
Client:	McGee	Date Reported:	16/06/2022

Summary Test Report

Determination of Moisture Content and Liquid and Plastic Limits by 4 Point Cone Method

Borehole No.	Sample Type	Sample No.	Depth m	Description	Natural Moisture Content %	Washed Natural	Passing 425 µm sieve %	Liquid Limit %	Plastic Limit %	Plasticity Index %	Remarks
Heading 3	U38	Pile C2 S034 Disc 1	1.40	Brownish grey silty CLAY	29						
Heading 3	U38	Pile C2 S034 Disc 2	1.40	Brownish grey silty CLAY	29						
Heading 3	U38	Pile C2 S034 Disc 3	1.40	Brownish grey silty CLAY	28						
Heading 3	U38	Pile C2 S034 Disc 4	1.40	Brownish grey silty CLAY	28						
Heading 3	U38	Pile C2 S034 Disc 5	1.40	Brownish grey silty CLAY	29						
Heading 3	U38	Pile C2 S034 Disc 6	1.40	Brownish grey silty CLAY	29						
Heading 3	U38	Pile C2 S034 Disc 7	1.40	Brownish grey silty CLAY	29						
Heading 3	U38	Pile C2 S034 Disc 8	1.40	Brownish grey silty CLAY	29						
Heading 3	U38	Pile C2 S034 Disc 9	1.40	Brownish grey silty CLAY	29						

BS 1377: Part 2: Clause 4.3 & 4.4: 1990 Determination of the liquid limit by the cone penetrometer method

BS 1377: Part 2: Clause 5: 1990 Determination of the plastic limit and plasticity index

BS 1377: Part 2: Clause 3.2: 1990 Determination of the moisture content by the oven drying method

Remarks: The results reported relate only to the items tested or sampled.



Date - samples received:	20/04/2022	CONCEPT 47-49 Brunel Road, London W3 7XR Tel: 02087401553 Email: lab@conceptconsultants.co.uk
Date - sample testing commenced :	06/06/2022	
Date - sample testing completed :	13/06/2022	
Approved Signatories:	L Griffin LG (QA Technical & Lab Mngr) – K Mazerant KM (Lab Mngr)	

[illegible]

CONCEPT SITE INVESTIGATIONS

PARTICLE SIZE DISTRIBUTION

TEST REPORT

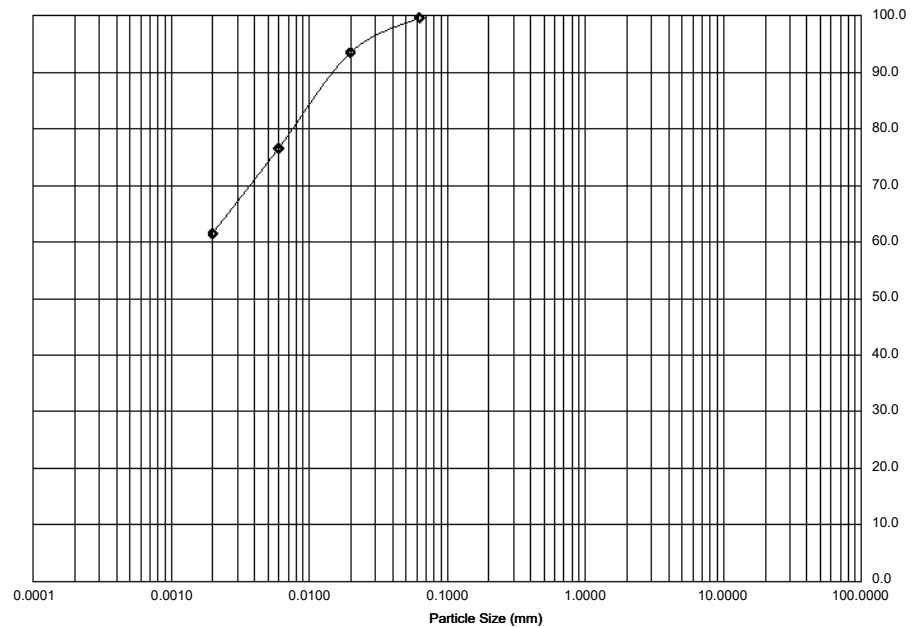
Site Name:	Euston Tower	Job Number:	22/3686
Client:	McGee	Date Reported:	01/06/2022
Borehole No:	Heading 1	Sample Type/No.	D Face S001A
		Top Depth:	0.15 m
		Bottom Depth:	m

Soil Description:

Dark grey slightly micaceous silty CLAY

BS Test Sieves	
Size (mm)	% Passing
75.000	100
63.000	100
50.000	100
37.500	100
28.000	100
20.000	100
14.000	100
10.000	100
6.300	100
5.000	100
3.350	100
2.000	100
1.180	100
0.600	100
0.425	100
0.300	100
0.212	100
0.150	100
0.063	100

Sedimentation (*if applicable)	
Size (mm)	% Passing
0.020	93
0.006	77
0.002	61



CLAY	F	M	C	F	M	C	F	M	C	COBBLES
	SILT			SAND			GRAVEL			

Method/type:	Pipette
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BS 1377: Part 2: Clause 9.4: 1990 Determination of sedimentation by the pipette method.

Particle Proportions %	
Cobbles	
Gravel	
Sand	0.4
Silt	38.2
Clay	61.5



Remarks: Particle size distribution by dry sieve was not carried out on sand fraction

The results reported relate only to the items tested or sampled.

Date - samples received:	20/04/2022	Checked / Approved by:	01/06/2022
Date - sample testing commenced :	24/05/2022	Date Approved:	KM
Date - sample testing completed :	29/05/2022		
Approved Signatories: L Griffin LG (QA Technical & Lab Mngr) – K Mazerant KM (Lab Mngr)			

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CONCEPT SITE INVESTIGATIONS

PARTICLE SIZE DISTRIBUTION

TEST REPORT

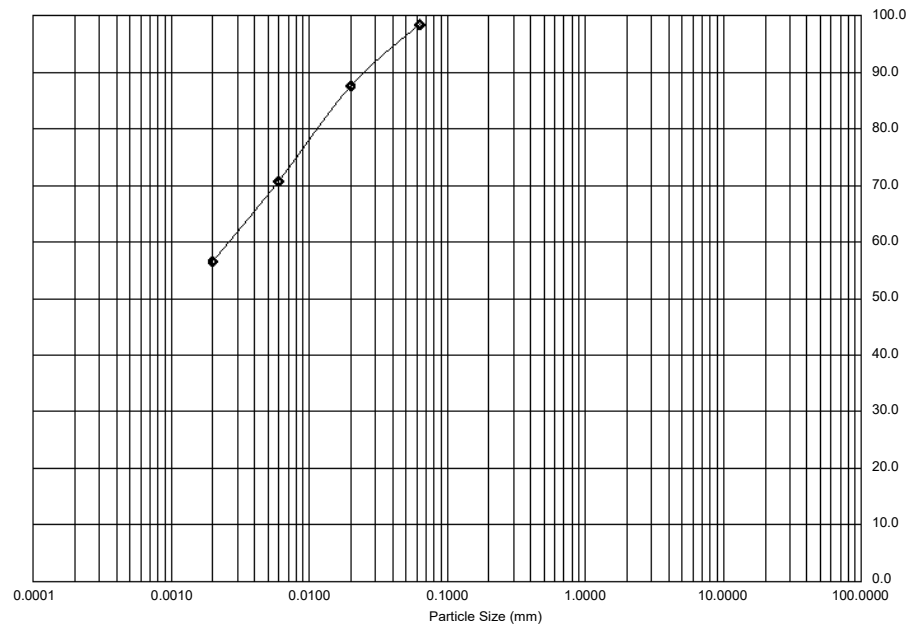
Site Name:	Euston Tower	Job Number:	22/3686
Client:	McGee	Date Reported:	01/06/2022
Borehole No:	Heading 1	Sample Type/No.	D Face S002A
		Top Depth:	0.80 m
		Bottom Depth:	m

Soil Description:

Greyish brown slightly micaceous silty CLAY with rare pockets of light brown silty fine sand

BS Test Sieves	
Size (mm)	% Passing
75.000	100
63.000	100
50.000	100
37.500	100
28.000	100
20.000	100
14.000	100
10.000	100
6.300	100
5.000	100
3.350	100
2.000	100
1.180	100
0.600	100
0.425	100
0.300	100
0.212	100
0.150	100
0.063	98

Sedimentation (*if applicable)	
Size (mm)	% Passing
0.020	88
0.006	71
0.002	56



CLAY	F	M	C	F	M	C	F	M	C	COBBLES
	SILT			SAND			GRAVEL			

Method/type:	Pipette
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BS 1377: Part 2: Clause 9.4: 1990 Determination of sedimentation by the pipette method.

Particle Proportions %	
Cobbles	
Gravel	
Sand	1.5
Silt	42.0
Clay	56.5



Remarks:

Particle size distribution by dry sieve was not carried out on sand fraction

The results reported relate only to the items tested or sampled.

Date - samples received:	20/04/2022
Date - sample testing commenced :	24/05/2022
Date - sample testing completed :	29/05/2022
Checked / Approved by:	01/06/2022
Date Approved:	KM
Approved Signatories: L Griffin LG (QA Technical & Lab Mngr) – K Mazerant KM (Lab Mngr)	

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CONCEPT SITE INVESTIGATIONS

PARTICLE SIZE DISTRIBUTION

TEST REPORT

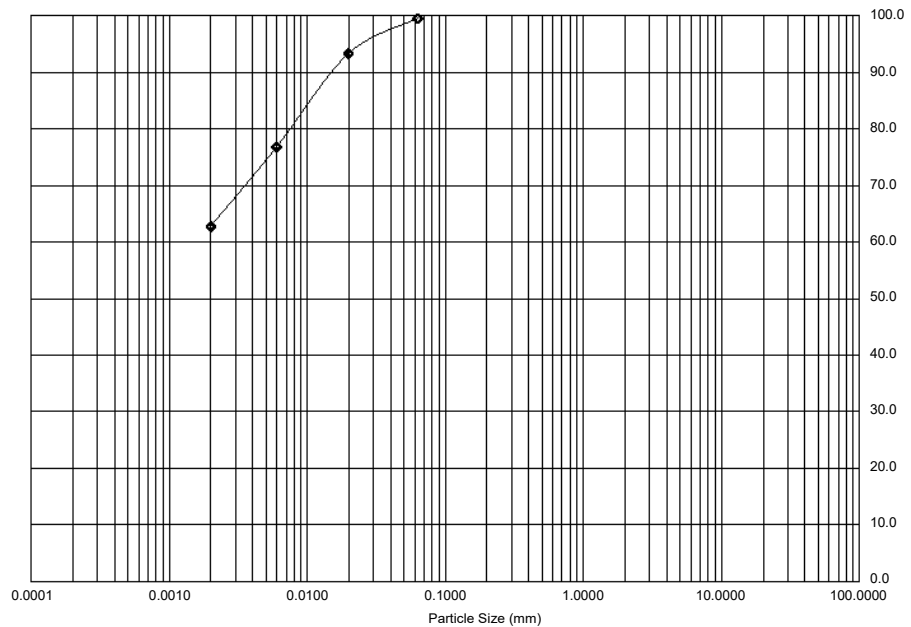
Site Name: Euston Tower				Job Number: 22/3686	
Client: McGee				Date Reported: 01/06/2022	
Borehole No:	Heading 1	Sample Type/No.	D	Face S003A	Top Depth: 1.65 m
				Bottom Depth:	m

Soil Description:

Greyish brown slightly micaceous silty CLAY

BS Test Sieves	
Size (mm)	% Passing
75.000	100
63.000	100
50.000	100
37.500	100
28.000	100
20.000	100
14.000	100
10.000	100
6.300	100
5.000	100
3.350	100
2.000	100
1.180	100
0.600	100
0.425	100
0.300	100
0.212	100
0.150	100
0.063	99

Sedimentation (*if applicable)	
Size (mm)	% Passing
0.020	93
0.006	77
0.002	63



CLAY	F	M	C	F	M	C	F	M	C	COBBLES
	SILT			SAND			GRAVEL			

Method/type:	Pipette
--------------	---------

BS 1377: Part 2: Clause 9.4: 1990 Determination of sedimentation by the pipette method.

Particle Proportions %	
Cobbles	
Gravel	
Sand	0.5
Silt	36.8
Clay	62.7



Remarks: Particle size distribution by dry sieve was not carried out on sand fraction

The results reported relate only to the items tested or sampled.

Date - samples received:	20/04/2022	
Date - sample testing commenced :	24/05/2022	Checked / Approved by: 01/06/2022
Date - sample testing completed :	29/05/2022	Date Approved: KM
Approved Signatories: L Griffin LG (QA Technical & Lab Mngr) – K Mazerant KM (Lab Mngr)		

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CONCEPT SITE INVESTIGATIONS

PARTICLE SIZE DISTRIBUTION

TEST REPORT

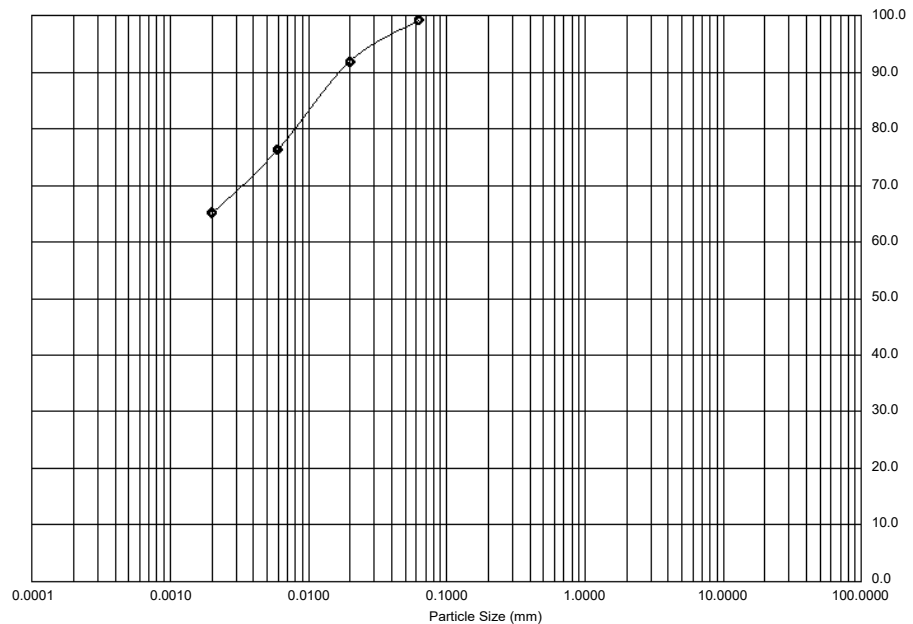
Site Name:	Euston Tower	Job Number:	22/3686
Client:	McGee	Date Reported:	01/06/2022
Borehole No:	Heading 2	Sample Type/No.	D Face S004A
		Top Depth:	0.10 m
		Bottom Depth:	m

Soil Description:

Brown silty CLAY

BS Test Sieves	
Size (mm)	% Passing
75.000	100
63.000	100
50.000	100
37.500	100
28.000	100
20.000	100
14.000	100
10.000	100
6.300	100
5.000	100
3.350	100
2.000	100
1.180	100
0.600	100
0.425	100
0.300	100
0.212	100
0.150	100
0.063	99

Sedimentation (*if applicable)	
Size (mm)	% Passing
0.020	92
0.006	76
0.002	65



CLAY	F	M	C	F	M	C	F	M	C	COBBLES
	SILT			SAND			GRAVEL			

Method/type:	Pipette
--------------	---------

BS 1377: Part 2: Clause 9.4: 1990 Determination of sedimentation by the pipette method.

Particle Proportions %	
Cobbles	
Gravel	
Sand	0.8
Silt	34.0
Clay	65.2



Remarks:

Particle size distribution by dry sieve was not carried out on sand fraction

The results reported relate only to the items tested or sampled.

Date - samples received:	20/04/2022
Date - sample testing commenced :	24/05/2022
Date - sample testing completed :	29/05/2022
Checked / Approved by:	01/06/2022
Date Approved:	KM
Approved Signatories: L Griffin LG (QA Technical & Lab Mngr) – K Mazerant KM (Lab Mngr)	

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CONCEPT SITE INVESTIGATIONS

PARTICLE SIZE DISTRIBUTION

TEST REPORT

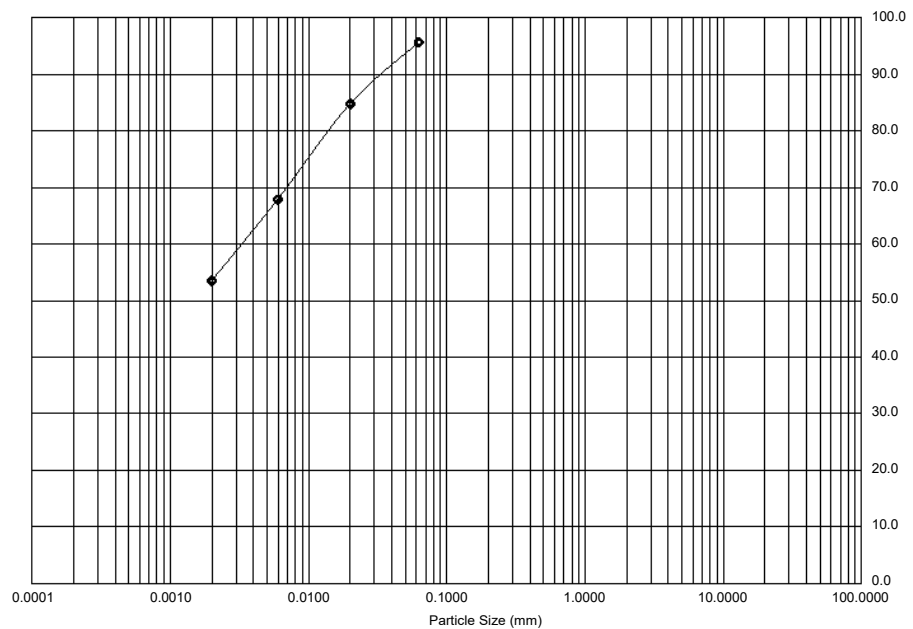
Site Name:	Euston Tower	Job Number:	22/3686
Client:	McGee	Date Reported:	01/06/2022
Borehole No:	Heading 2	Sample Type/No.	D Face S005A
		Top Depth:	1.00 m
		Bottom Depth:	m

Soil Description:

Greyish brown slightly micaceous slightly sandy silty CLAY with rare shell fragments and pockets of light grey silty fine sand

BS Test Sieves	
Size (mm)	% Passing
75.000	100
63.000	100
50.000	100
37.500	100
28.000	100
20.000	100
14.000	100
10.000	100
6.300	100
5.000	100
3.350	100
2.000	100
1.180	100
0.600	100
0.425	100
0.300	100
0.212	100
0.150	100
0.063	96

Sedimentation (*if applicable)	
Size (mm)	% Passing
0.020	85
0.006	68
0.002	53



CLAY	F	M	C	F	M	C	F	M	C	COBBLES
	SILT			SAND			GRAVEL			

Method/type:	Pipette
--------------	---------

BS 1377: Part 2: Clause 9.4: 1990 Determination of sedimentation by the pipette method.

Particle Proportions %	
Cobbles	
Gravel	
Sand	4.3
Silt	42.2
Clay	53.5



Remarks:

Particle size distribution by dry sieve was not carried out on sand fraction

The results reported relate only to the items tested or sampled.

Date - samples received:	20/04/2022
Date - sample testing commenced :	24/05/2022
Date - sample testing completed :	29/05/2022
Checked / Approved by:	01/06/2022
Date Approved:	KM
Approved Signatories: L Griffin LG (QA Technical & Lab Mngr) – K Mazerant KM (Lab Mngr)	

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CONCEPT SITE INVESTIGATIONS

PARTICLE SIZE DISTRIBUTION

TEST REPORT

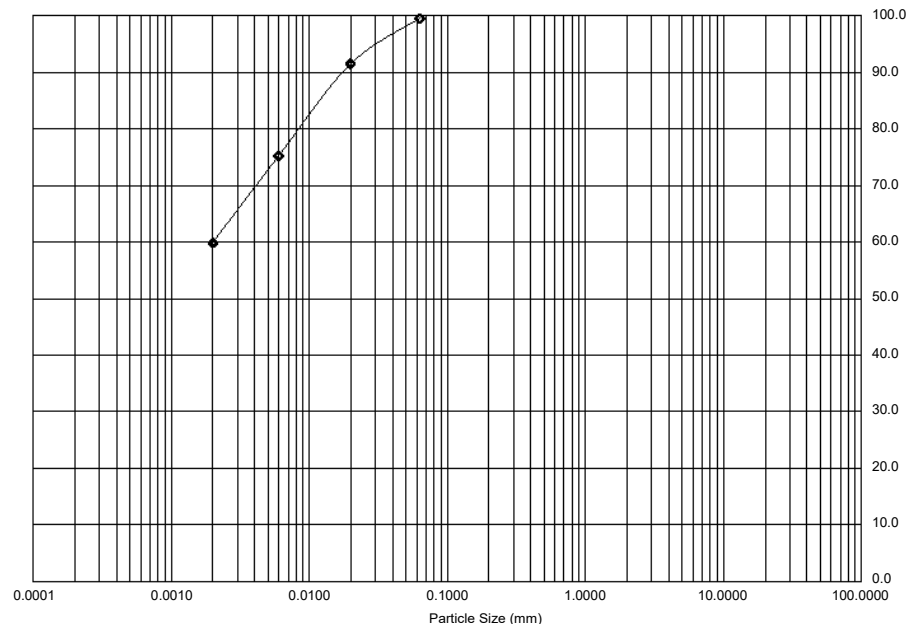
Site Name: Euston Tower				Job Number: 22/3686	
Client: McGee				Date Reported: 01/06/2022	
Borehole No: Heading 2	Sample Type/No: D	Face S006A	Top Depth: 2.00 m	Bottom Depth: m	

Soil Description:

Greyish brown slightly micaceous silty CLAY

BS Test Sieves	
Size (mm)	% Passing
75.000	100
63.000	100
50.000	100
37.500	100
28.000	100
20.000	100
14.000	100
10.000	100
6.300	100
5.000	100
3.350	100
2.000	100
1.180	100
0.600	100
0.425	100
0.300	100
0.212	100
0.150	100
0.063	100

Sedimentation (*if applicable)	
Size (mm)	% Passing
0.020	91
0.006	75
0.002	60



CLAY	F	M	C	F	M	C	F	M	C	COBBLES
	SILT			SAND			GRAVEL			

Method/type:	Pipette
--------------	---------

BS 1377: Part 2: Clause 9.4: 1990 Determination of sedimentation by the pipette method.

Particle Proportions %	
Cobbles	
Gravel	
Sand	0.5
Silt	39.7
Clay	59.8



Remarks:

Particle size distribution by dry sieve was not carried out on sand fraction

The results reported relate only to the items tested or sampled.

Date - samples received: 20/04/2022	
Date - sample testing commenced : 24/05/2022	Checked / Approved by: 01/06/2022
Date - sample testing completed : 29/05/2022	Date Approved: KM
Approved Signatories: L Griffin LG (QA Technical & Lab Mngr) – K Mazerant KM (Lab Mngr)	

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CONCEPT SITE INVESTIGATIONS

PARTICLE SIZE DISTRIBUTION

TEST REPORT

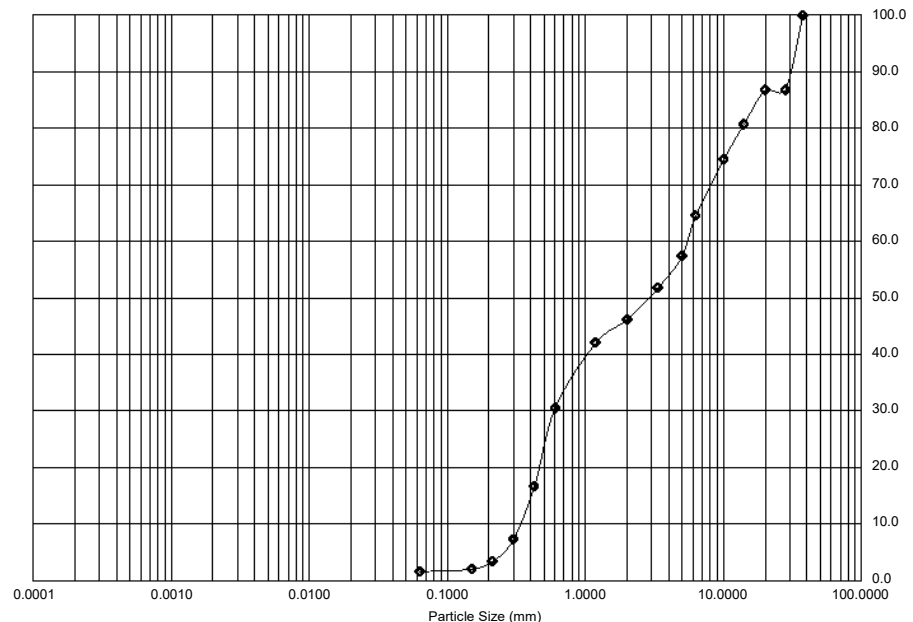
Site Name:	Euston Tower	Job Number:	22/3686
Client:	McGee	Date Reported:	01/06/2022
Borehole No:	Heading 2	Sample Type/No.	D Gravel spoil
		Top Depth:	2.00 m
		Bottom Depth:	m

Soil Description:

Brown slightly silty very sandy fine to coarse flint GRAVEL

BS Test Sieves	
Size (mm)	% Passing
75.000	100
63.000	100
50.000	100
37.500	100
28.000	87
20.000	87
14.000	81
10.000	74
6.300	65
5.000	57
3.350	52
2.000	46
1.180	42
0.600	30
0.425	17
0.300	7
0.212	3
0.150	2
0.063	2

Sedimentation (*if applicable)	
Size (mm)	% Passing
0.020	
0.006	
0.002	



CLAY	F	M	C	F	M	C	F	M	C	COBBLES
	SILT			SAND			GRAVEL			

Method/type:	Wet Sieving
--------------	-------------

BS 1377: Part 2: Clause 9.2: 1990 Determination of particle size distribution - wet sieving method.

Particle Proportions %	
Cobbles	
Gravel	53.8
Sand	44.6
Silt and Clay	1.6



Remarks:

Sample mass does not meet the requirements of BS1377: Part 2: 1990

The results reported relate only to the items tested or sampled.

Date - samples received:	20/04/2022
Date - sample testing commenced :	24/05/2022
Date - sample testing completed :	25/05/2022
Approved Signatories: L Griffin LG (QA Technical & Lab Mngr) – K Mazerant KM (Lab Mngr)	

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CONCEPT SITE INVESTIGATIONS

PARTICLE SIZE DISTRIBUTION

TEST REPORT

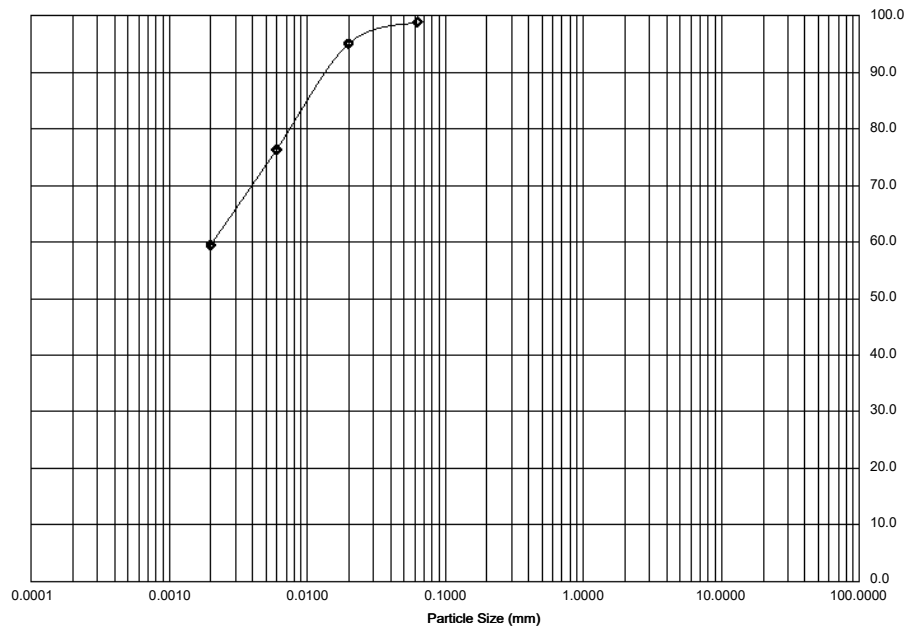
Site Name:	Euston Tower	Job Number:	22/3686
Client:	McGee	Date Reported:	15/06/2022
Borehole No:	Heading 3	Sample Type/No.	D Face S030A
		Top Depth:	0.20 m
		Bottom Depth:	m

Soil Description:

Brownish grey silty CLAY with rare pockets of silty fine sand and fine flint gravel

BS Test Sieves	
Size (mm)	% Passing
75.000	100
63.000	100
50.000	100
37.500	100
28.000	100
20.000	100
14.000	100
10.000	100
6.300	100
5.000	100
3.350	100
2.000	100
1.180	100
0.600	100
0.425	100
0.300	100
0.212	100
0.150	100
0.063	99

Sedimentation (*if applicable)	
Size (mm)	% Passing
0.020	95
0.006	76
0.002	59



CLAY	F	M	C	F	M	C	F	M	C	COBBLES
	SILT			SAND			GRAVEL			

Method/type:	Pipette
--------------	---------

BS 1377: Part 2: Clause 9.4: 1990 Determination of sedimentation by the pipette method.

Particle Proportions %	
Cobbles	
Gravel	
Sand	1.1
Silt	39.5
Clay	59.4



Remarks: Particle size distribution by dry sieve was not carried out on sand fraction

The results reported relate only to the items tested or sampled.

Date - samples received:	25/05/2022
Date - sample testing commenced :	06/06/2022
Date - sample testing completed :	13/06/2022
Approved Signatories: L Griffin LG (QA Technical & Lab Mngr) – K Mazerant KM (Lab Mngr)	

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CONCEPT SITE INVESTIGATIONS

PARTICLE SIZE DISTRIBUTION

TEST REPORT

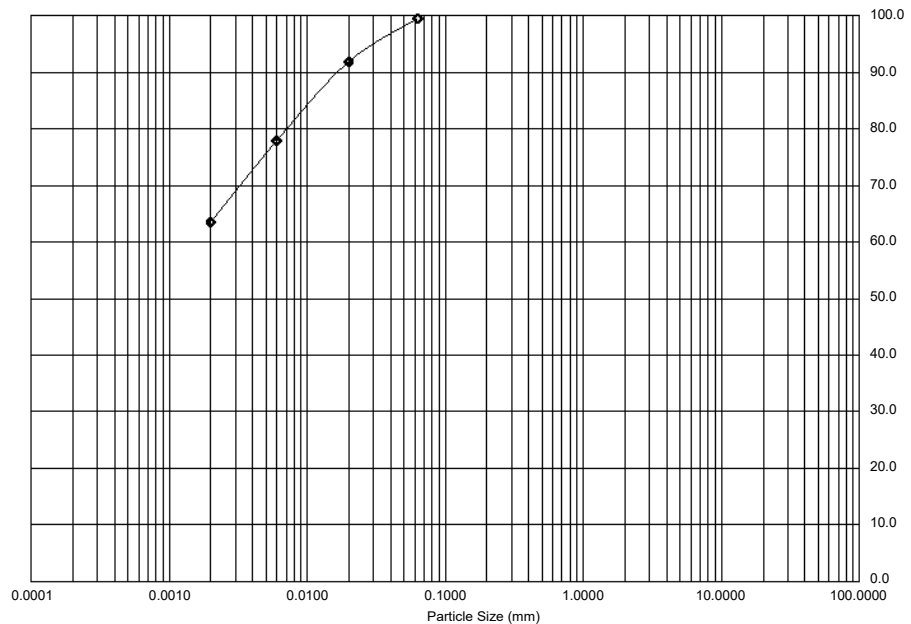
Site Name: Euston Tower				Job Number: 22/3686	
Client: McGee				Date Reported: 15/06/2022	
Borehole No: Heading 3	Sample Type/No: D	Face S031A	Top Depth: 1.05 m	Bottom Depth: m	

Soil Description:

Brownish grey slightly micaceous silty CLAY

BS Test Sieves	
Size (mm)	% Passing
75.000	100
63.000	100
50.000	100
37.500	100
28.000	100
20.000	100
14.000	100
10.000	100
6.300	100
5.000	100
3.350	100
2.000	100
1.180	100
0.600	100
0.425	100
0.300	100
0.212	100
0.150	100
0.063	99

Sedimentation (*if applicable)	
Size (mm)	% Passing
0.020	92
0.006	78
0.002	63



CLAY	F	M	C	F	M	C	F	M	C	COBBLES
	SILT			SAND			GRAVEL			

Method/type:	Pipette
--------------	---------

BS 1377: Part 2: Clause 9.4: 1990 Determination of sedimentation by the pipette method.

Particle Proportions %	
Cobbles	
Gravel	
Sand	0.5
Silt	36.0
Clay	63.5



Remarks: Particle size distribution by dry sieve was not carried out on sand fraction

The results reported relate only to the items tested or sampled.

Date - samples received: 25/05/2022		
Date - sample testing commenced: 06/06/2022	Checked / Approved by: KM	
Date - sample testing completed: 13/06/2022	Date Approved: 15/06/2022	
Approved Signatories: L Griffin LG (QA Technical & Lab Mngr) – K Mazerant KM (Lab Mngr)		

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CONCEPT SITE INVESTIGATIONS

PARTICLE SIZE DISTRIBUTION

TEST REPORT

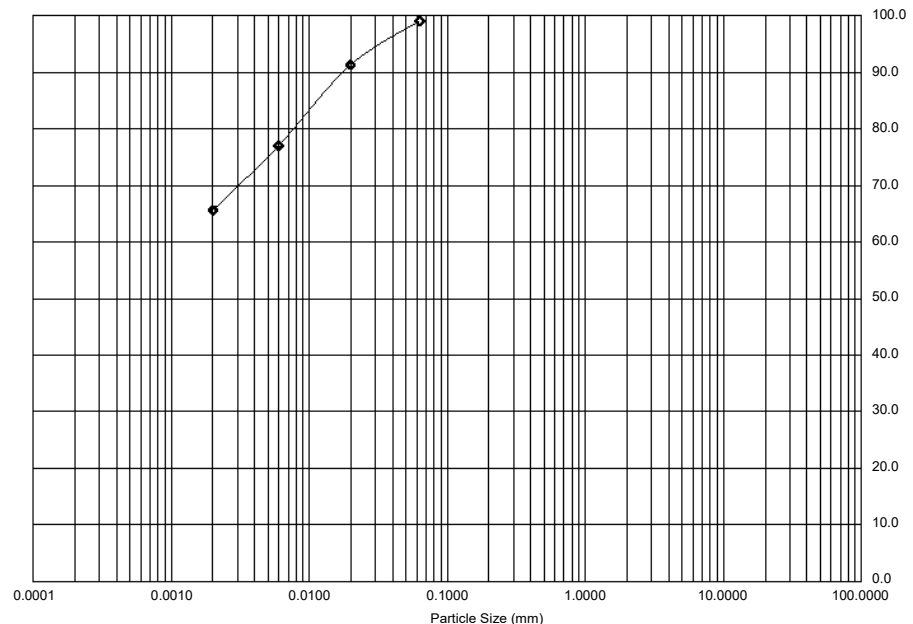
Site Name:	Euston Tower	Job Number:	22/3686
Client:	McGee	Date Reported:	15/06/2022
Borehole No:	Heading 3	Sample Type/No.	D Face S032A
		Top Depth:	1.95 m
		Bottom Depth:	m

Soil Description:

Brownish grey slightly micaceous silty CLAY with rare pockets of light grey silt

BS Test Sieves	
Size (mm)	% Passing
75.000	100
63.000	100
50.000	100
37.500	100
28.000	100
20.000	100
14.000	100
10.000	100
6.300	100
5.000	100
3.350	100
2.000	100
1.180	100
0.600	100
0.425	100
0.300	100
0.212	100
0.150	100
0.063	99

Sedimentation (*if applicable)	
Size (mm)	% Passing
0.020	91
0.006	77
0.002	66



CLAY	F	M	C	F	M	C	F	M	C	COBBLES
	SILT			SAND			GRAVEL			

Method/type:	Pipette
--------------	---------

BS 1377: Part 2: Clause 9.4: 1990 Determination of sedimentation by the pipette method.

Particle Proportions %	
Cobbles	
Gravel	
Sand	1.0
Silt	33.5
Clay	65.5



Remarks:

Particle size distribution by dry sieve was not carried out on sand fraction

The results reported relate only to the items tested or sampled.

Date - samples received:	25/05/2022
Date - sample testing commenced :	06/06/2022
Date - sample testing completed :	13/06/2022
Checked / Approved by:	KM
Date Approved:	15/06/2022
Approved Signatories: L Griffin LG (QA Technical & Lab Mngr) – K Mazerant KM (Lab Mngr)	

CONCEPT
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e: reception@i2analytical.com

Analytical Report Number : 22-57065

Replaces Analytical Report Number: 22-57065, issue no. 2
Client references/information amended.

Project / Site name:	Euston Tower	Samples received on:	09/05/2022
Your job number:	22 3686	Samples instructed on/ Analysis started on:	09/05/2022
Your order number:	L2800	Analysis completed by:	17/05/2022
Report Issue Number:	3	Report issued on:	17/05/2022
Samples Analysed:	5 soil samples		

Signed:

Joanna Wawrzeczko
Reporting Specialist
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

Excel copies of reports are only valid when accompanied by this PDF certificate.

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: 22-57065
Project / Site name: Euston Tower
Your Order No: L2800

Lab Sample Number				2268489	2268490	2268491	2268492	2268493
Sample Reference				Heading 1	Heading 1	Heading 2	Heading 2	Heading 2
Sample Number				Face S001A	Face S003A	Face S004A	Face S006A	Gravel spoil S007
Depth (m)				0.15	1.65	0.10	2.00	2.00
Date Sampled				09/05/2022	09/05/2022	09/05/2022	09/05/2022	09/05/2022
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	17	17	18	17	4.5
Total mass of sample received	kg	0.001	NONE	0.2	0.2	0.2	0.2	0.4

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.2	8.3	8.6	8.2	9
Total Sulphate as SO ₄	%	0.005	MCERTS	0.154	0.101	0.014	0.113	-
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.94	0.47	0.06	0.67	0.1
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	938	470	60.4	671	99.5
Water Soluble Chloride (2:1) (leachate equivalent)	mg/l	0.5	MCERTS	73	47	4.5	40	4.5
Total Sulphur	%	0.005	MCERTS	0.407	0.289	0.011	0.35	-
Water Soluble Nitrate (2:1) as N (leachate equivalent)	mg/l	2	NONE	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0

Heavy Metals / Metalloids

Magnesium (water soluble)	mg/kg	5	NONE	69	56	8.2	77	< 5.0
Magnesium (leachate equivalent)	mg/l	2.5	NONE	34	28	4.1	39	< 2.5

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number : 22-57065

Project / Site name: Euston Tower

* 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 *
2268489	Heading 1	Face S001A	0.15	Grey clay.
2268490	Heading 1	Face S003A	1.65	Grey clay.
2268491	Heading 2	Face S004A	0.1	Brown clay.
2268492	Heading 2	Face S006A	2	Grey clay.
2268493	Heading 2	Gravel spoil S00	2	Brown sand with gravel.

Analytical Report Number : 22-57065

Project / Site name: Euston Tower

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
Magnesium, water soluble, in soil	Determination of water soluble magnesium by extraction with water followed by ICP-OES.	In-house method based on TRL 447	L038-PL	D	NONE
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
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 Sulphate in soil as %	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total Sulphur in soil as %	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	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
Water Soluble Nitrate (2:1) as N in soil	Determination of nitrate by reaction with sodium salicylate and colorimetry.	In-house method based on Examination of Water and Wastewater & Polish Standard Method PN-82/C-04579.08, 2:1 extraction.	L078-PL	W	NONE
Chloride, water soluble, in soil	Determination of Chloride colorimetrically by discrete analyser.	In house method.	L082-PL	D	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' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' 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.

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.

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Analytical Report Number : 22-63057

Replaces Analytical Report Number: 22-63057, issue no. 1
Client sampling date amended.

Project / Site name:	Euston Tower	Samples received on:	07/06/2022
Your job number:	22 3686	Samples instructed on/ Analysis started on:	07/06/2022
Your order number:	L2825	Analysis completed by:	15/06/2022
Report Issue Number:	2	Report issued on:	15/06/2022
Samples Analysed:	2 soil samples		

Signed:

Martyna Langer
Martyna Langer
Junior Reporting Specialist
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

Excel copies of reports are only valid when accompanied by this PDF certificate.

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: 22-63057
Project / Site name: Euston Tower
Your Order No: L2825

Lab Sample Number				2303222	2303223
Sample Reference				Heading 3	Heading 3
Sample Number				Face S030A	Face S032A
Depth (m)				0.20	1.95
Date Sampled				06/06/2022	06/06/2022
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	22	19
Total mass of sample received	kg	0.001	NONE	0.2	0.3

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.9	8.1
Total Sulphate as SO ₄	%	0.005	MCERTS	0.141	0.184
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.56	0.75
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	562	746
Water Soluble Chloride (2:1) (leachate equivalent)	mg/l	0.5	MCERTS	39	39
Total Sulphur	%	0.005	MCERTS	0.252	0.353
Water Soluble Nitrate (2:1) as N (leachate equivalent)	mg/l	2	NONE	< 2.0	< 2.0

Heavy Metals / Metalloids

Magnesium (water soluble)	mg/kg	5	NONE	6.6	67
Magnesium (leachate equivalent)	mg/l	2.5	NONE	3.3	33

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number : 22-63057

Project / Site name: Euston Tower

* 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 *
2303222	Heading 3	Face S030A	0.2	Brown clay and loam.
2303223	Heading 3	Face S032A	1.95	Brown clay.

Analytical Report Number : 22-63057

Project / Site name: Euston Tower

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
Magnesium, water soluble, in soil	Determination of water soluble magnesium by extraction with water followed by ICP-OES.	In-house method based on TRL 447	L038-PL	D	NONE
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
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 Sulphate in soil as %	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total Sulphur in soil as %	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	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
Water Soluble Nitrate (2:1) as N in soil	Determination of nitrate by reaction with sodium salicylate and colorimetry.	In-house method based on Examination of Water and Wastewater & Polish Standard Method PN-82/C-04579.08, 2:1 extraction.	L078-PL	W	NONE
Chloride, water soluble, in soil	Determination of Chloride colorimetrically by discrete analyser.	In house method.	L082-PL	D	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' analysis have been carried out in our laboratory in the United Kingdom.



For method numbers ending in 'PL' 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.

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.



CONCEPT SITE INVESTIGATIONS				Summary Test Report - Undrained Triaxial Compression (Single-Stage) BS 1377 : Part 7: 1990 Clause 8						Date Reported:		16/06/2022	
Site Location: Euston Tower				Client: McGee									
BH No.	Sample Type	Sample No	Depth top (m)	Description	Cell pressure kN/m2	Strain at failure %	Bulk Density Mg/m3	Dry Density Mg/m3	NMC %	Max Dev. Stress kPa	Shear Strength kPa	Mode of failure/Comments	
Heading 1	UT100	Face U1/5020	0.35	Very stiff, extremely closely fissured dark brown slightly micaceous silty CLAY with occasional pockets of light brown silty sand (<30mm)	75	3.8	2.00	1.58	27	245	123	Brittle	
Heading 1	UT100	Face U25021	1.45	Very stiff, extremely closely fissured dark brown slightly micaceous silty CLAY with rare pockets of light brown silty sand (<25mm)	100	4.6	1.99	1.58	26	168	84	Brittle	
Heading 2	UT100	Face U3/5022	0.15	Very stiff, dark brown slightly micaceous silty CLAY	75	4.0	1.97	1.54	28	126	63	Brittle	
Heading 2	UT100	Face U4/5023	1.50	Very stiff, extremely closely fissured dark brown slightly micaceous silty CLAY with 1 No pocket (<65mm) of claystone fragments (<20mm) at 1.71m	100	4.1	2.00	1.58	27	242	121	Brittle	

Remarks: The results reported relate only to the items tested or sampled.

Date - samples received: 20/04/2022				CONCEPT 47-49 Brunel Road, London W3 7XR Tel: 02087401553 Email: Lab@conceptconsultants.co.uk				 	
Date - sample testing commenced: 27/05/2022		Checked/Approved by: KM							
Date - sample testing completed: 27/05/2022		Date Approved: 01/06/2022							
Approved Signatories: L Griffin LG (QA Technical & Lab Mngr) – K Mazerant KM (Lab Mngr)									

CONCEPT SITE INVESTIGATIONS				Summary Test Report - Undrained Triaxial Compression (Single-Stage) BS 1377 : Part 7: 1990 Clause 8						Date Reported:		16/06/2022	
Site Location: Euston Tower				Client: McGee									
BH No.	Sample Type	Sample No	Depth top (m)	Description	Cell pressure kN/m2	Strain at failure %	Bulk Density Mg/m3	Dry Density Mg/m3	NMC %	Max Dev. Stress kPa	Shear Strength kPa	Mode of failure/Comments	
Heading 3	UT100	RHS OF PILE C2 S040	0.25	Stiff to very stiff, dark brown slightly micaceous silty CLAY with white flecks	75	7.6	1.98	1.54	28	168	84	Brittle	
Heading 3	UT100	LHS OF PILE C2 S041	1.55	Very stiff, extremely closely fissured dark brown slightly micaceous silty CLAY with rare shell fragments (<1mm)	100	6.4	1.96	1.52	29	215	108	Brittle	
Heading 3	UT100	LHS OF PILE R1 S042	0.10	Very stiff, dark brown mottled dark grey slightly micaceous silty CLAY with rare shell fragments (<1mm)	75	6.6	1.92	1.49	29	124	62	Brittle	
Heading 3	UT100	LHS OF PILE R1 S043	1.40	Very stiff, dark brown slightly micaceous silty CLAY with rare shell fragments (<1mm) and rare pyrite nodules (<12mm)	100	2.8	1.98	1.55	28	186	93	Brittle	

Remarks: The results reported relate only to the items tested or sampled.

Date - samples received: 25/05/2022		CONCEPT 47-49 Brunel Road, London W3 7XR Tel: 02087401553 Email: Lab@conceptconsultants.co.uk	 
Date - sample testing commenced: 09/06/2022	Checked/Approved by: KM		
Date - sample testing completed: 09/06/2022	Date Approved: 15/06/2022		
Approved Signatories: L Griffin LG (QA Technical & Lab Mngr) – K Mazerant KM (Lab Mngr)			

TEST CERTIFICATE

DETERMINATION OF THE UNDRAINED SHEAR STRENGTH IN TRIAXIAL COMPRESSION WITHOUT MEASUREMENT OF PORE PRESSURE

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

Tested in Accordance with: BS 1377-7: 1990: Clause 8

Client: Concept Site Investigations
Client Address: Unit 8, Warple Mews,
Warple Way, London
W3 0RF
Contact: Lynn Griffin
Site Address: Euston Tower

Client Reference: 22 3686
Job Number: 22-60188
Date Sampled: Not Given
Date Received: 18/05/2022
Date Tested: 03/06/2022
Sampled By: Not Given

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

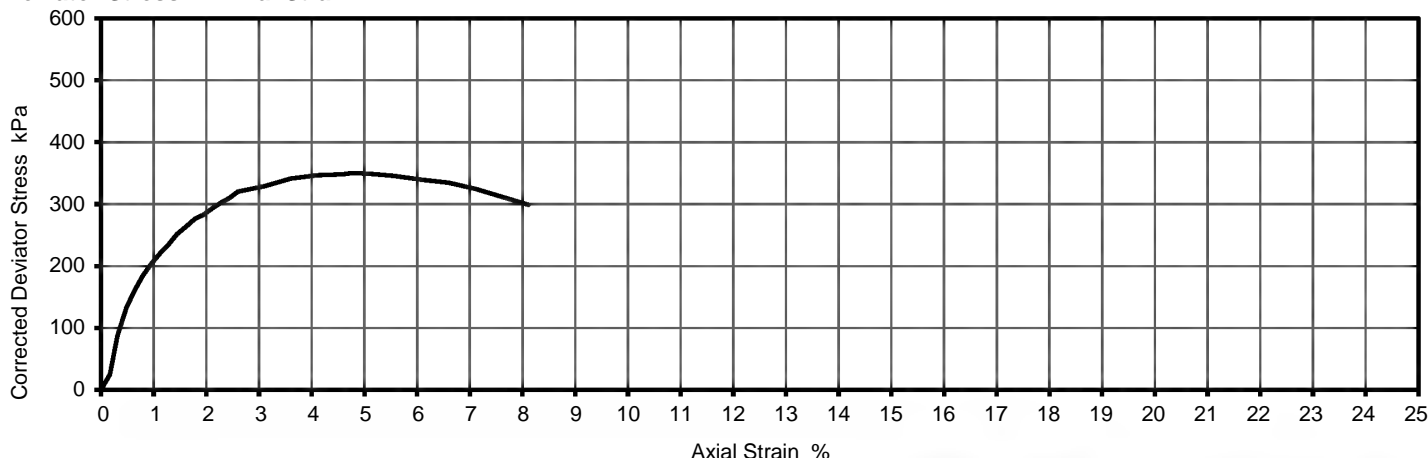
Test Results:

Laboratory Reference: 2286735
Hole No.: Heading 1
Sample Reference: Face S001
Sample Description: Greyish brown CLAY
Sample Preparation: Sample prepared in accordance with BS 1377-1:2016 Clause 9.1.1.

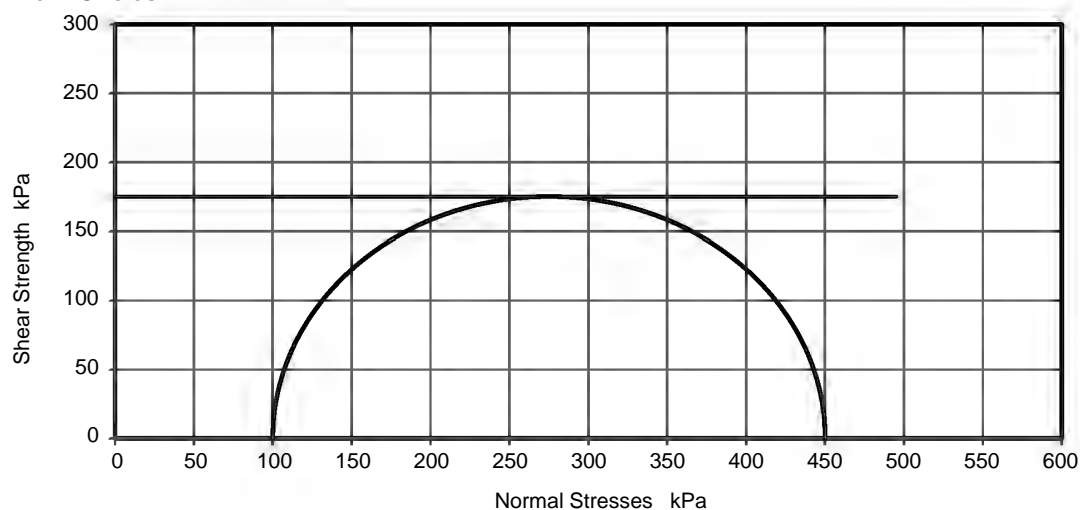
Depth Top [m]: 0.15
Depth Base [m]: Not Given
Sample Type: U

Test Number	1	Rate of Strain	2.00	%/min
Length	77.05	Cell Pressure	100	kPa
Diameter	37.64	Axial Strain at failure	4.8	%
Bulk Density	2.01	Deviator Stress, ($\sigma_1 - \sigma_3$) _f	350	kPa
Moisture Content	26	Undrained Shear Strength, c_u	175	kPa $\frac{1}{2}(\sigma_1 - \sigma_3)_f$
Dry Density	1.59	Mode of Failure	Brittle	
Membrane Correction	0.73	Membrane thickness	0.21	mm

Deviator Stress v Axial Strain



Mohr Circles



Position within sample



Note: Deviator stress corrected for area change and membrane effects. Mohr circles and their interpretation is not covered by BS1377.
This is provided for information only.

Remarks:

Signed:

Anna Dudzinska

Anna Dudzinska
PL Deputy Head of Reporting Team
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 THE UNDRAINED SHEAR STRENGTH IN TRIAXIAL COMPRESSION WITHOUT MEASUREMENT OF PORE PRESSURE

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

Tested in Accordance with: BS 1377-7: 1990: Clause 8

Client: Concept Site Investigations
Client Address: Unit 8, Warple Mews,
Warple Way, London
W3 0RF
Contact: Lynn Griffin
Site Address: Euston Tower

Client Reference: 22 3686
Job Number: 22-60188
Date Sampled: Not Given
Date Received: 18/05/2022
Date Tested: 03/06/2022
Sampled By: Not Given

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

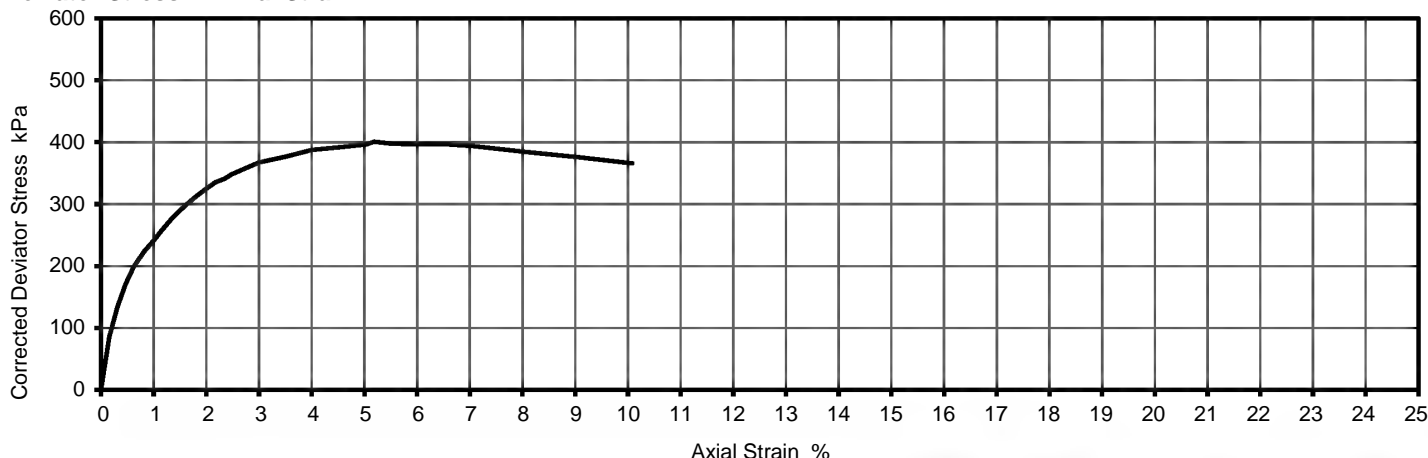
Test Results:

Laboratory Reference: 2286735_1
Hole No.: Heading 1
Sample Reference: Face S001
Sample Description: Greyish brown CLAY
Sample Preparation: Sample prepared in accordance with BS 1377-1:2016 Clause 9.1.1.

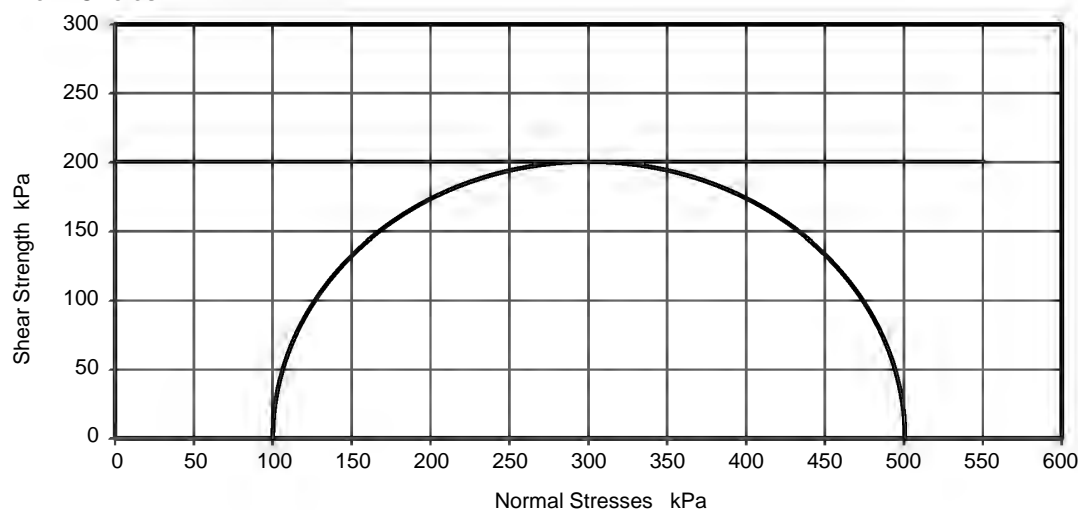
Depth Top [m]: 0.15
Depth Base [m]: Not Given
Sample Type: U

Test Number	1	Rate of Strain	2.00	%/min
Length	76.96	Cell Pressure	100	kPa
Diameter	37.47	Axial Strain at failure	5.2	%
Bulk Density	2.04	Deviator Stress, ($\sigma_1 - \sigma_3$) _f	401	kPa
Moisture Content	26	Undrained Shear Strength, c_u	200	kPa $\frac{1}{2}(\sigma_1 - \sigma_3)_f$
Dry Density	1.62	Mode of Failure	Brittle	
Membrane Correction	0.81	Membrane thickness	0.21	mm

Deviator Stress v Axial Strain



Mohr Circles



Position within sample



Note: Deviator stress corrected for area change and membrane effects. Mohr circles and their interpretation is not covered by BS1377.
This is provided for information only.

Remarks:

Signed:

Anna Dudzinska

Anna Dudzinska
PL Deputy Head of Reporting Team
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

DETERMINATION OF THE UNDRAINED SHEAR STRENGTH IN TRIAXIAL COMPRESSION WITHOUT MEASUREMENT OF PORE PRESSURE

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
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Tested in Accordance with: BS 1377-7: 1990: Clause 8

Client: Concept Site Investigations
Client Address: Unit 8, Warple Mews,
Warple Way, London
W3 0RF
Contact: Lynn Griffin
Site Address: Euston Tower

Client Reference: 22 3686
Job Number: 22-60188
Date Sampled: Not Given
Date Received: 18/05/2022
Date Tested: 03/06/2022
Sampled By: Not Given

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

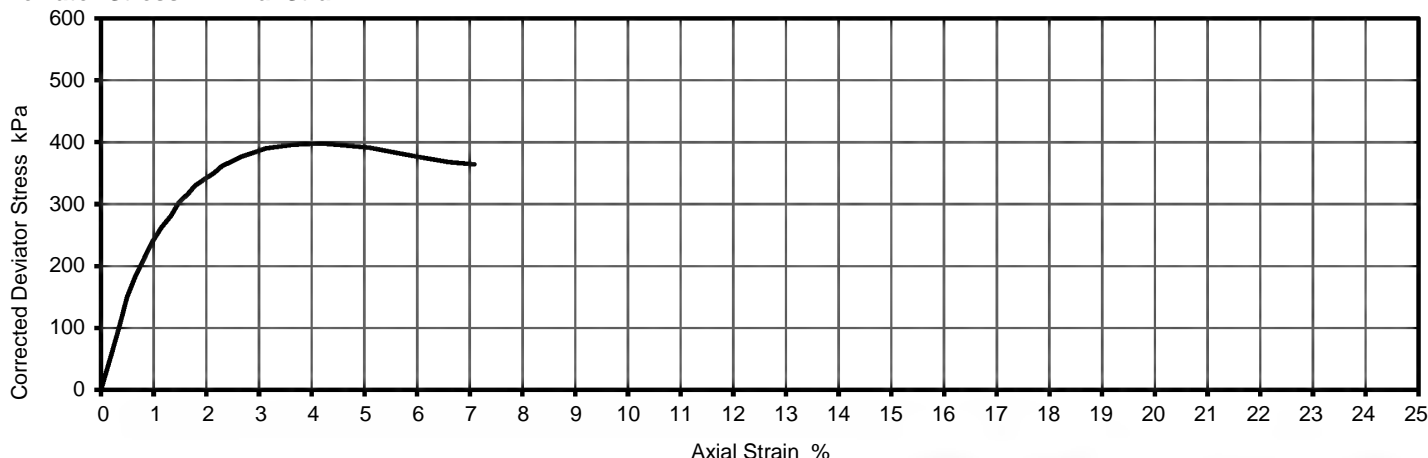
Test Results:

Laboratory Reference: 2286736
Hole No.: Heading 1
Sample Reference: Face S002
Sample Description: Greyish brown CLAY
Sample Preparation: Sample prepared in accordance with BS 1377-1:2016 Clause 9.1.1.

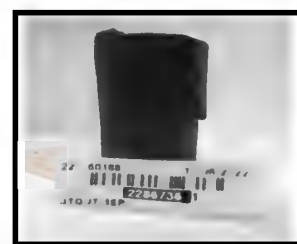
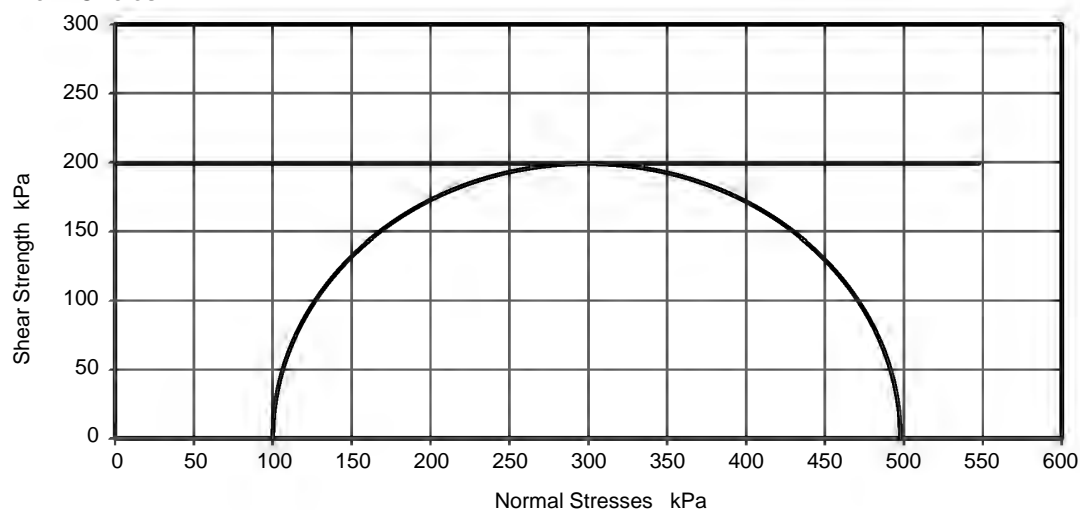
Depth Top [m]: 0.80
Depth Base [m]: Not Given
Sample Type: U

Test Number	1	Rate of Strain	2.00	%/min
Length	76.93	Cell Pressure	100	kPa
Diameter	37.62	Axial Strain at failure	4.1	%
Bulk Density	2.01	Deviator Stress, $(\sigma_1 - \sigma_3)_f$	398	kPa
Moisture Content	23	Undrained Shear Strength, c_u	199	kPa $\frac{1}{2}(\sigma_1 - \sigma_3)_f$
Dry Density	1.63	Mode of Failure	Brittle	
Membrane Correction	0.66	Membrane thickness	0.22	mm

Deviator Stress v Axial Strain



Mohr Circles



Position within sample



Note: Deviator stress corrected for area change and membrane effects. Mohr circles and their interpretation is not covered by BS1377.
This is provided for information only.

Remarks:

Signed:

Anna Dudzinska

Anna Dudzinska
PL Deputy Head of Reporting Team
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

DETERMINATION OF THE UNDRAINED SHEAR STRENGTH IN TRIAXIAL COMPRESSION WITHOUT MEASUREMENT OF PORE PRESSURE

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

Tested in Accordance with: BS 1377-7: 1990: Clause 8

Client: Concept Site Investigations
Client Address: Unit 8, Warple Mews,
Warple Way, London
W3 0RF
Contact: Lynn Griffin
Site Address: Euston Tower

Client Reference: 22 3686
Job Number: 22-60188
Date Sampled: Not Given
Date Received: 18/05/2022
Date Tested: 03/06/2022
Sampled By: Not Given

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

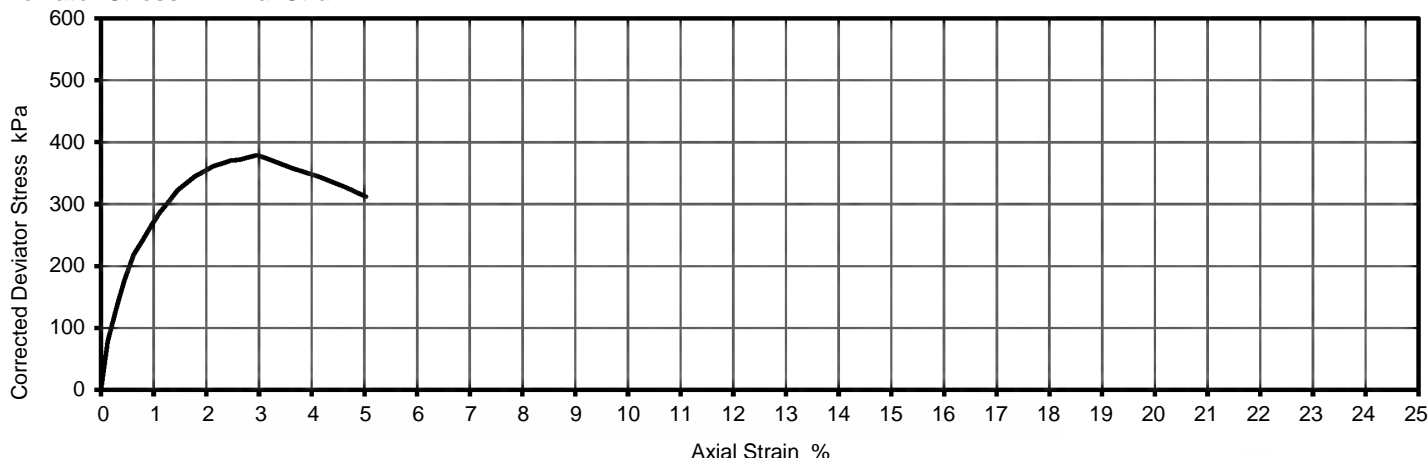
Test Results:

Laboratory Reference: 2286736_1
Hole No.: Heading 1
Sample Reference: Face S002
Sample Description: Greyish brown CLAY
Sample Preparation: Sample prepared in accordance with BS 1377-1:2016 Clause 9.1.1.

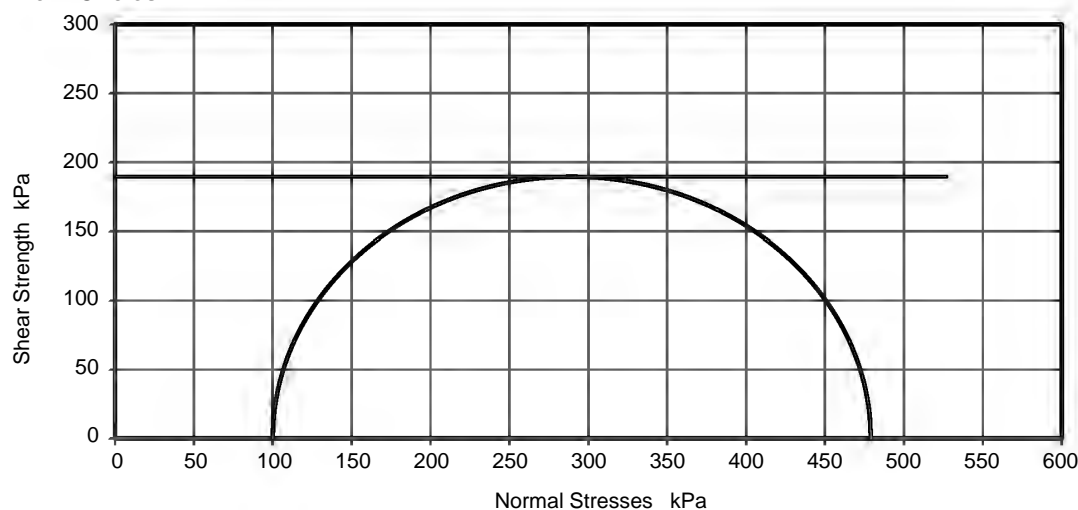
Depth Top [m]: 0.80
Depth Base [m]: Not Given
Sample Type: U

Test Number	1	Rate of Strain	2.00	%/min
Length	77.16	Cell Pressure	100	kPa
Diameter	37.68	Axial Strain at failure	3.0	%
Bulk Density	2.02	Deviator Stress, ($\sigma_1 - \sigma_3$) _f	379	kPa
Moisture Content	27	Undrained Shear Strength, c_u	189	kPa $\frac{1}{2}(\sigma_1 - \sigma_3)_f$
Dry Density	1.59	Mode of Failure	Brittle	
Membrane Correction	0.45	Membrane thickness	0.21	mm

Deviator Stress v Axial Strain



Mohr Circles



Position within sample



Note: Deviator stress corrected for area change and membrane effects. Mohr circles and their interpretation is not covered by BS1377.
This is provided for information only.

Remarks:

Signed:

Anna Dudzinska

Anna Dudzinska
PL Deputy Head of Reporting Team
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

DETERMINATION OF THE UNDRAINED SHEAR STRENGTH IN TRIAXIAL COMPRESSION WITHOUT MEASUREMENT OF PORE PRESSURE

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

Tested in Accordance with: BS 1377-7: 1990: Clause 8

Client: Concept Site Investigations
Client Address: Unit 8, Warple Mews,
Warple Way, London
W3 0RF
Contact: Lynn Griffin
Site Address: Euston Tower

Client Reference: 22 3686
Job Number: 22-60188
Date Sampled: Not Given
Date Received: 18/05/2022
Date Tested: 03/06/2022
Sampled By: Not Given

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

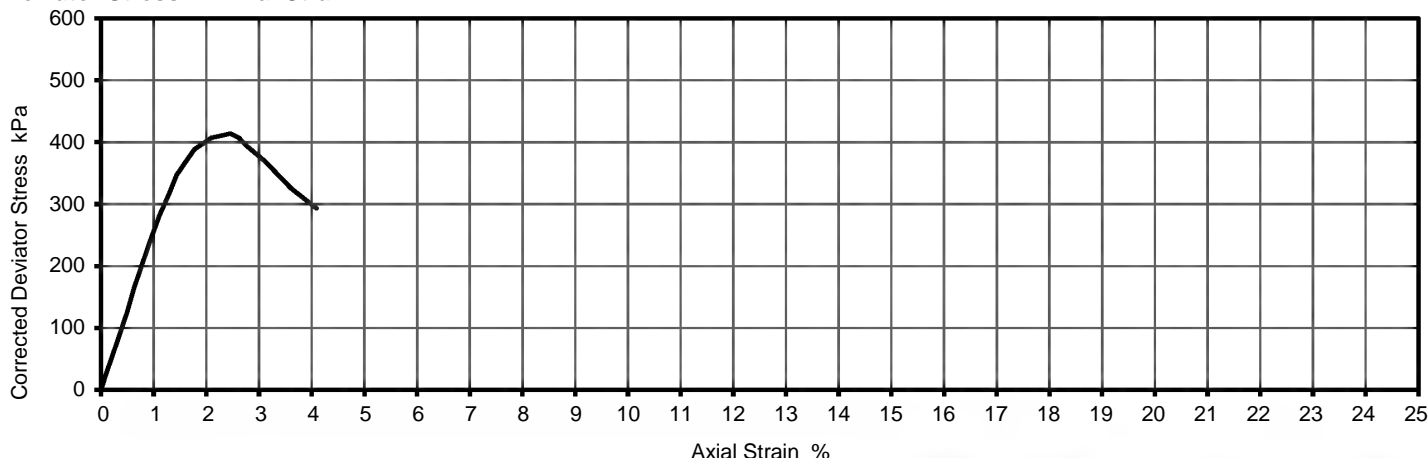
Test Results:

Laboratory Reference: 2286737
Hole No.: Heading 1
Sample Reference: Face S003
Sample Description: Greyish brown CLAY
Sample Preparation: Sample prepared in accordance with BS 1377-1:2016 Clause 9.1.1.

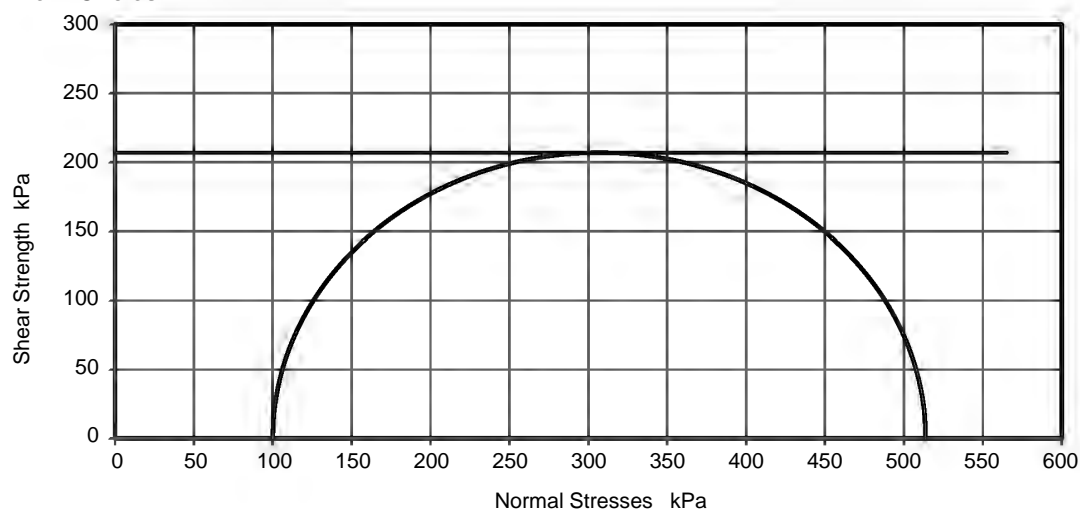
Depth Top [m]: 1.65
Depth Base [m]: Not Given
Sample Type: U

Test Number	1	Rate of Strain	2.00	%/min
Length	76.78	Cell Pressure	100	kPa
Diameter	37.58	Axial Strain at failure	2.4	%
Bulk Density	2.03	Deviator Stress, ($\sigma_1 - \sigma_3$) _f	414	kPa
Moisture Content	25	Undrained Shear Strength, c_u	207	kPa $\frac{1}{2}(\sigma_1 - \sigma_3)_f$
Dry Density	1.62	Mode of Failure	Brittle	
Membrane Correction	0.39	Membrane thickness	0.22	mm

Deviator Stress v Axial Strain



Mohr Circles



Position within sample



Note: Deviator stress corrected for area change and membrane effects. Mohr circles and their interpretation is not covered by BS1377.
This is provided for information only.

Remarks:

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Anna

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W3 0RF
Contact: Lynn Griffin
Site Address: Euston Tower

Client Reference: 22 3686
Job Number: 22-60188
Date Sampled: Not Given
Date Received: 18/05/2022
Date Tested: 03/06/2022
Sampled By: Not Given

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

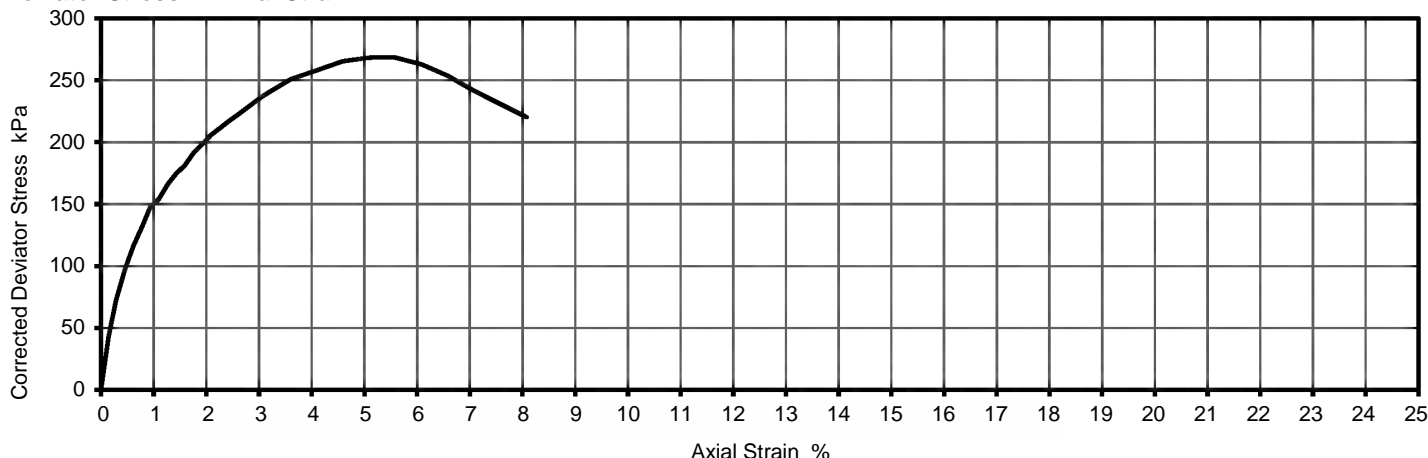
Test Results:

Laboratory Reference: 2286738
Hole No.: Heading 2
Sample Reference: Face S004
Sample Description: Yellowish brown CLAY
Sample Preparation: Sample prepared in accordance with BS 1377-1:2016 Clause 9.1.1.

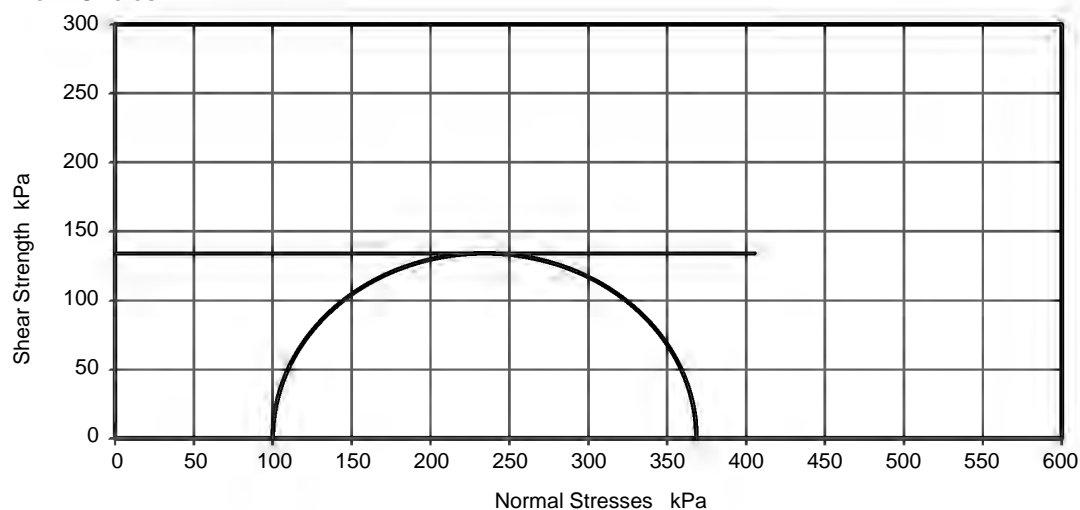
Depth Top [m]: 0.10
Depth Base [m]: Not Given
Sample Type: U

Test Number	1	Rate of Strain	2.00	%/min
Length	76.15	Cell Pressure	100	kPa
Diameter	37.44	Axial Strain at failure	5.3	%
Bulk Density	1.97	Deviator Stress, ($\sigma_1 - \sigma_3$) _f	269	kPa
Moisture Content	29	Undrained Shear Strength, c_u	134	kPa $\frac{1}{2}(\sigma_1 - \sigma_3)_f$
Dry Density	1.53	Mode of Failure	Brittle	
Membrane Correction	0.78	Membrane thickness	0.20	mm

Deviator Stress v Axial Strain



Mohr Circles



Position within sample



Note: Deviator stress corrected for area change and membrane effects. Mohr circles and their interpretation is not covered by BS1377.
This is provided for information only.

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Job Number: 22-60188
Date Sampled: Not Given
Date Received: 18/05/2022
Date Tested: 03/06/2022
Sampled By: Not Given

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

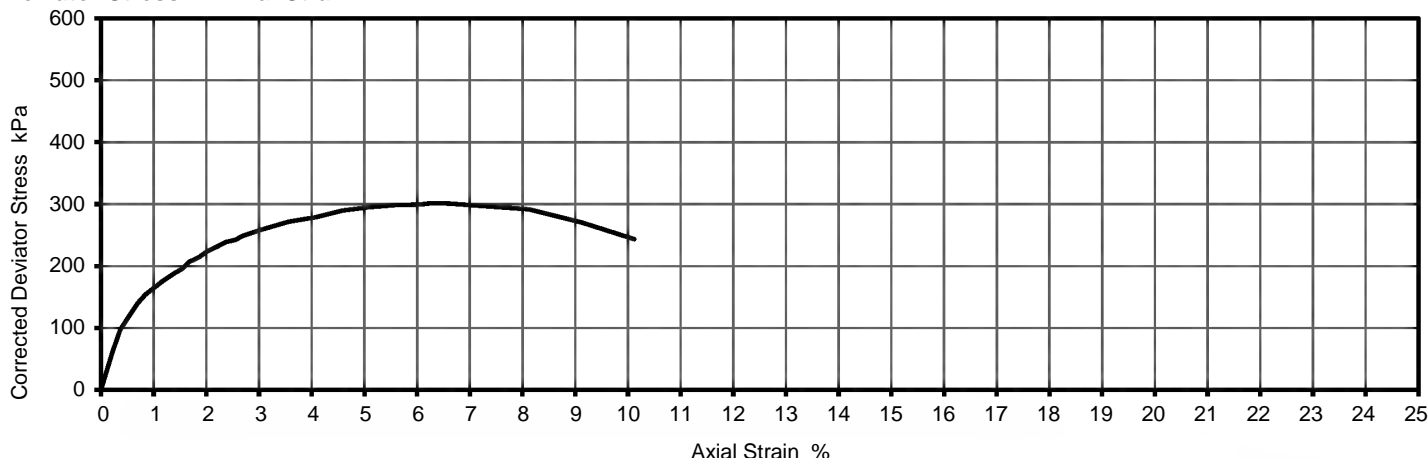
Test Results:

Laboratory Reference: 2286738_1
Hole No.: Heading 2
Sample Reference: Face S004
Sample Description: Yellowish brown CLAY
Sample Preparation: Sample prepared in accordance with BS 1377-1:2016 Clause 9.1.1.

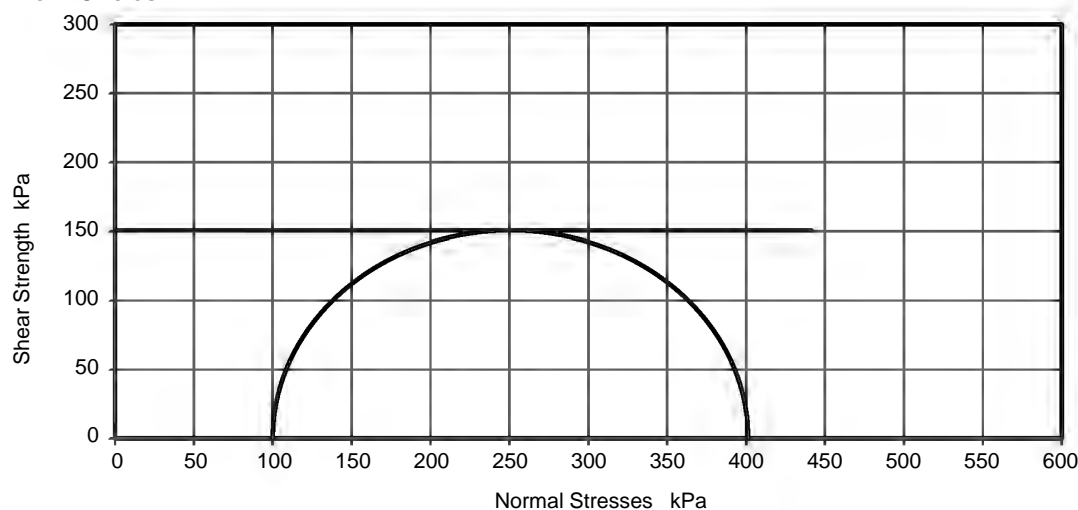
Depth Top [m]: 0.10
Depth Base [m]: Not Given
Sample Type: U

Test Number	1	Rate of Strain	2.00	%/min
Length	76.00	Cell Pressure	100	kPa
Diameter	37.34	Axial Strain at failure	6.3	%
Bulk Density	1.95	Deviator Stress, $(\sigma_1 - \sigma_3)_f$	301	kPa
Moisture Content	30	Undrained Shear Strength, c_u	151	kPa $\frac{1}{2}(\sigma_1 - \sigma_3)_f$
Dry Density	1.50	Mode of Failure	Brittle	
Membrane Correction	0.91	Membrane thickness	0.21	mm

Deviator Stress v Axial Strain



Mohr Circles



Position within sample



Note: Deviator stress corrected for area change and membrane effects. Mohr circles and their interpretation is not covered by BS1377.
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Remarks:

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Client Reference: 22 3686
Job Number: 22-60188
Date Sampled: Not Given
Date Received: 18/05/2022
Date Tested: 03/06/2022
Sampled By: Not Given

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

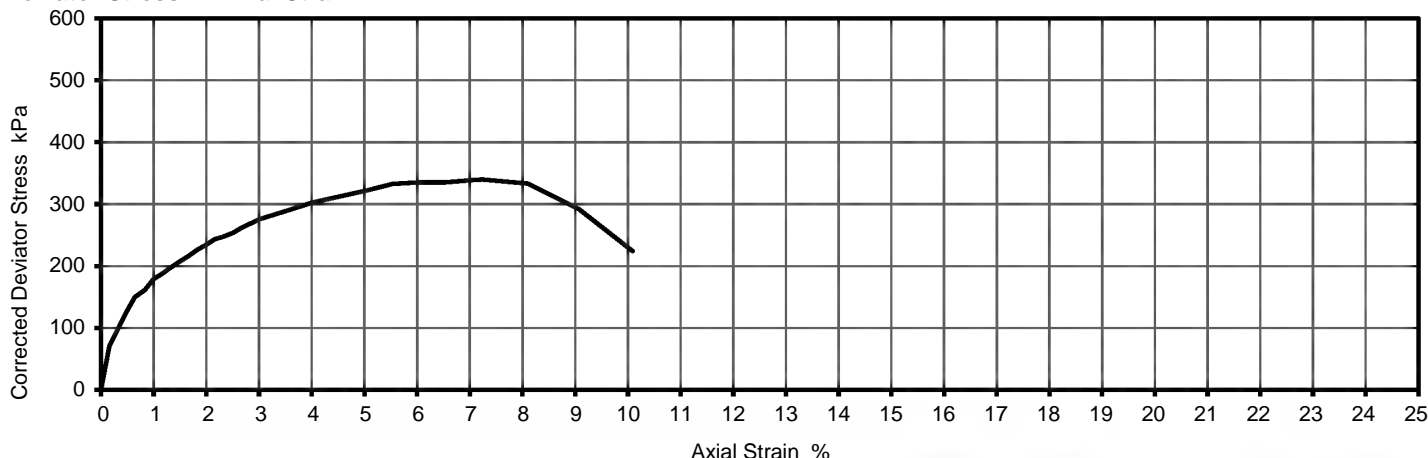
Test Results:

Laboratory Reference: 2286739
Hole No.: Heading 2
Sample Reference: Face S005
Sample Description: Greyish brown CLAY
Sample Preparation: Sample prepared in accordance with BS 1377-1:2016 Clause 9.1.1.

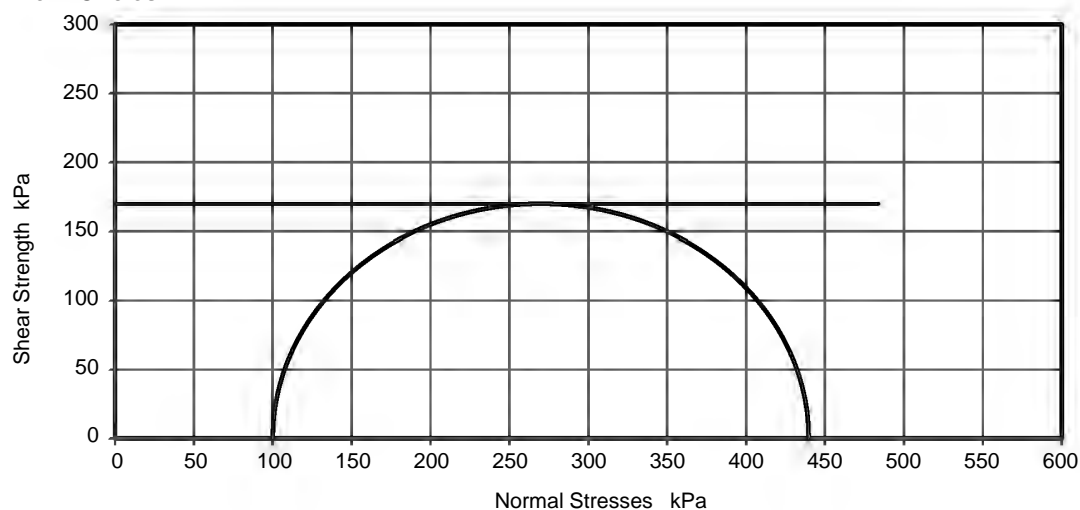
Depth Top [m]: 1.00
Depth Base [m]: Not Given
Sample Type: U

Test Number	1	Rate of Strain	2.00	%/min
Length	76.54	Cell Pressure	100	kPa
Diameter	36.10	Axial Strain at failure	7.2	%
Bulk Density	2.08	Deviator Stress, $(\sigma_1 - \sigma_3)_f$	340	kPa
Moisture Content	24	Undrained Shear Strength, c_u	170	kPa $\frac{1}{2}(\sigma_1 - \sigma_3)_f$
Dry Density	1.69	Mode of Failure	Brittle	
Membrane Correction	1.04	Membrane thickness	0.21	mm

Deviator Stress v Axial Strain



Mohr Circles



Position within sample



Note: Deviator stress corrected for area change and membrane effects. Mohr circles and their interpretation is not covered by BS1377.
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Sampled By: Not Given

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

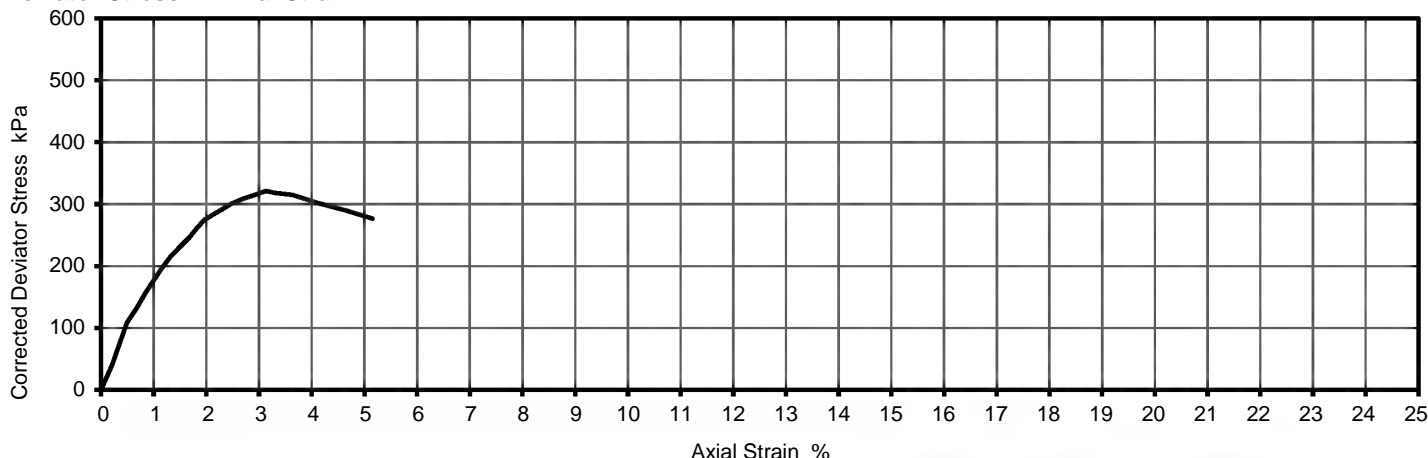
Test Results:

Laboratory Reference: 2286740
Hole No.: Heading 2
Sample Reference: Face S006
Sample Description: Greyish brown CLAY
Sample Preparation: Sample prepared in accordance with BS 1377-1:2016 Clause 9.1.1.

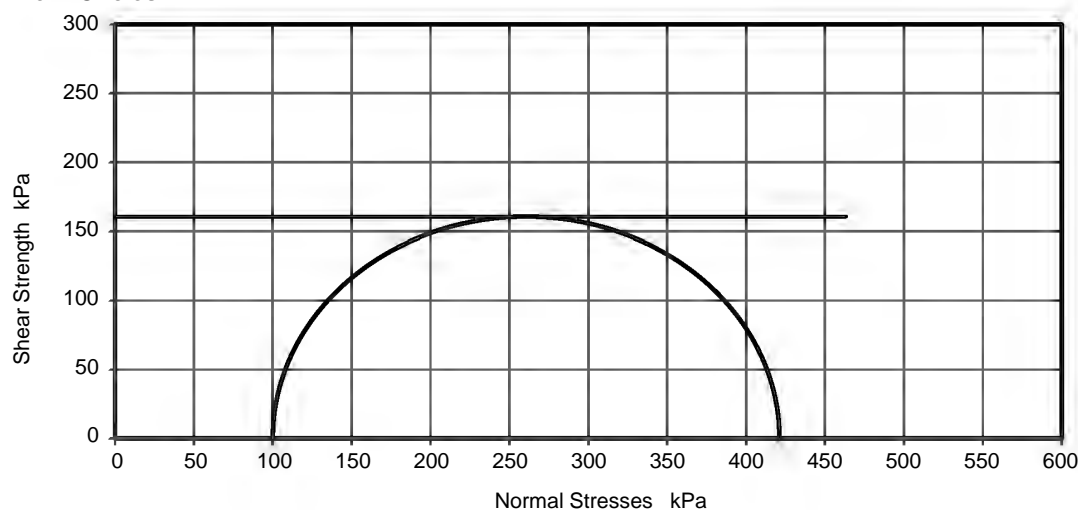
Depth Top [m]: 2.00
Depth Base [m]: Not Given
Sample Type: U

Test Number	1	Rate of Strain	2.00	%/min
Length	75.30	Cell Pressure	100	kPa
Diameter	37.51	Axial Strain at failure	3.1	%
Bulk Density	2.00	Deviator Stress, ($\sigma_1 - \sigma_3$) _f	321	kPa
Moisture Content	27	Undrained Shear Strength, c_u	161	kPa $\frac{1}{2}(\sigma_1 - \sigma_3)_f$
Dry Density	1.57	Mode of Failure	Brittle	
Membrane Correction	0.50	Membrane thickness	0.22	mm

Deviator Stress v Axial Strain



Mohr Circles



Position within sample



Note: Deviator stress corrected for area change and membrane effects. Mohr circles and their interpretation is not covered by BS1377.
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Date Received: 18/05/2022
Date Tested: 03/06/2022
Sampled By: Not Given

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

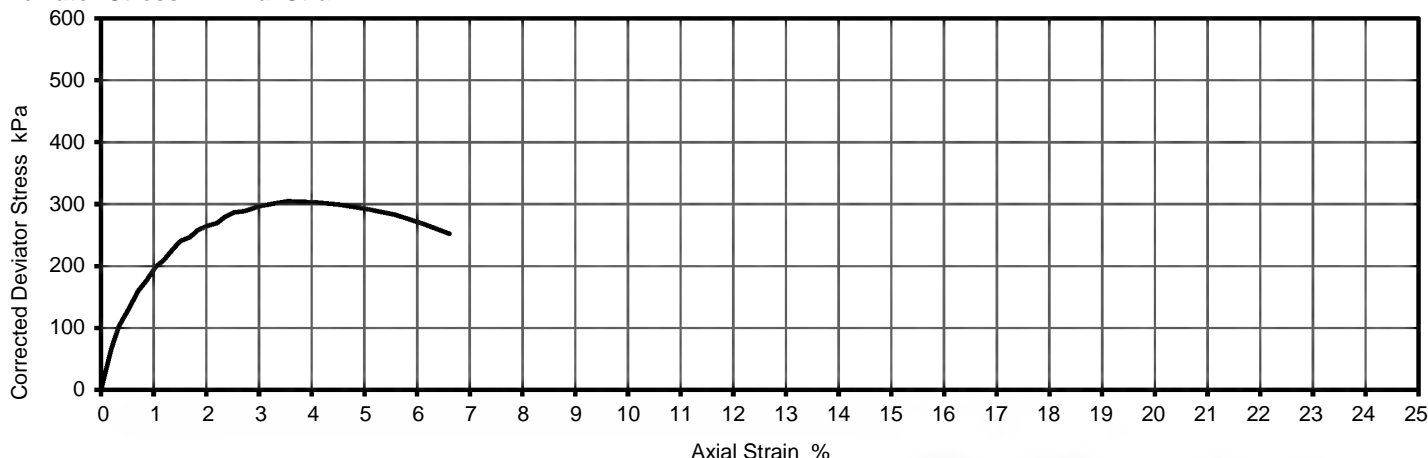
Test Results:

Laboratory Reference: 2286740_1
Hole No.: Heading 2
Sample Reference: Face S006
Sample Description: Greyish brown CLAY
Sample Preparation: Sample prepared in accordance with BS 1377-1:2016 Clause 9.1.1.

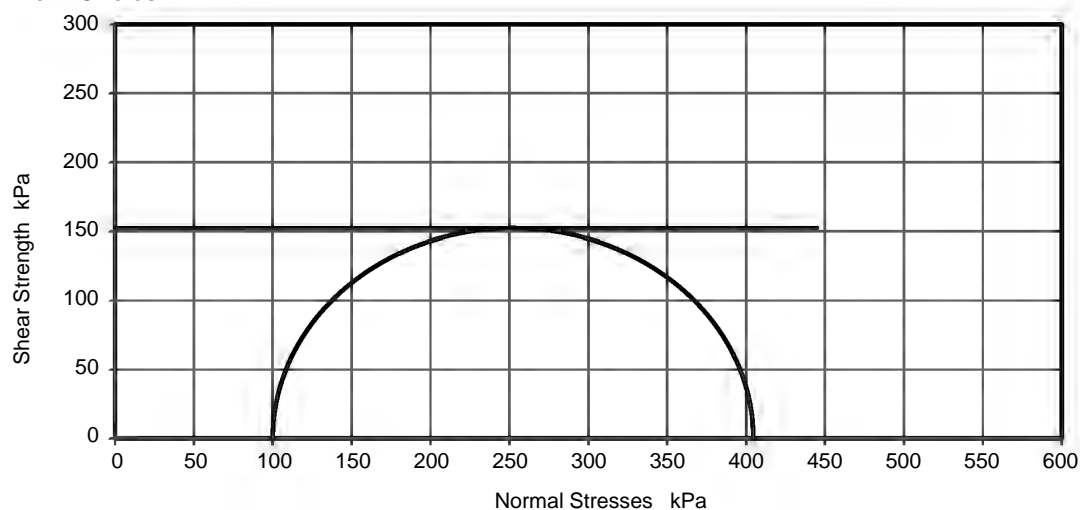
Depth Top [m]: 2.00
Depth Base [m]: Not Given
Sample Type: U

Test Number	1	Rate of Strain	2.00	%/min
Length	76.26	Cell Pressure	100	kPa
Diameter	37.16	Axial Strain at failure	3.5	%
Bulk Density	2.04	Deviator Stress, ($\sigma_1 - \sigma_3$) _f	305	kPa
Moisture Content	27	Undrained Shear Strength, c_u	152	kPa $\frac{1}{2}(\sigma_1 - \sigma_3)_f$
Dry Density	1.60	Mode of Failure	Brittle	
Membrane Correction	0.55	Membrane thickness	0.21	mm

Deviator Stress v Axial Strain



Mohr Circles



Position within sample



Note: Deviator stress corrected for area change and membrane effects. Mohr circles and their interpretation is not covered by BS1377.
This is provided for information only.

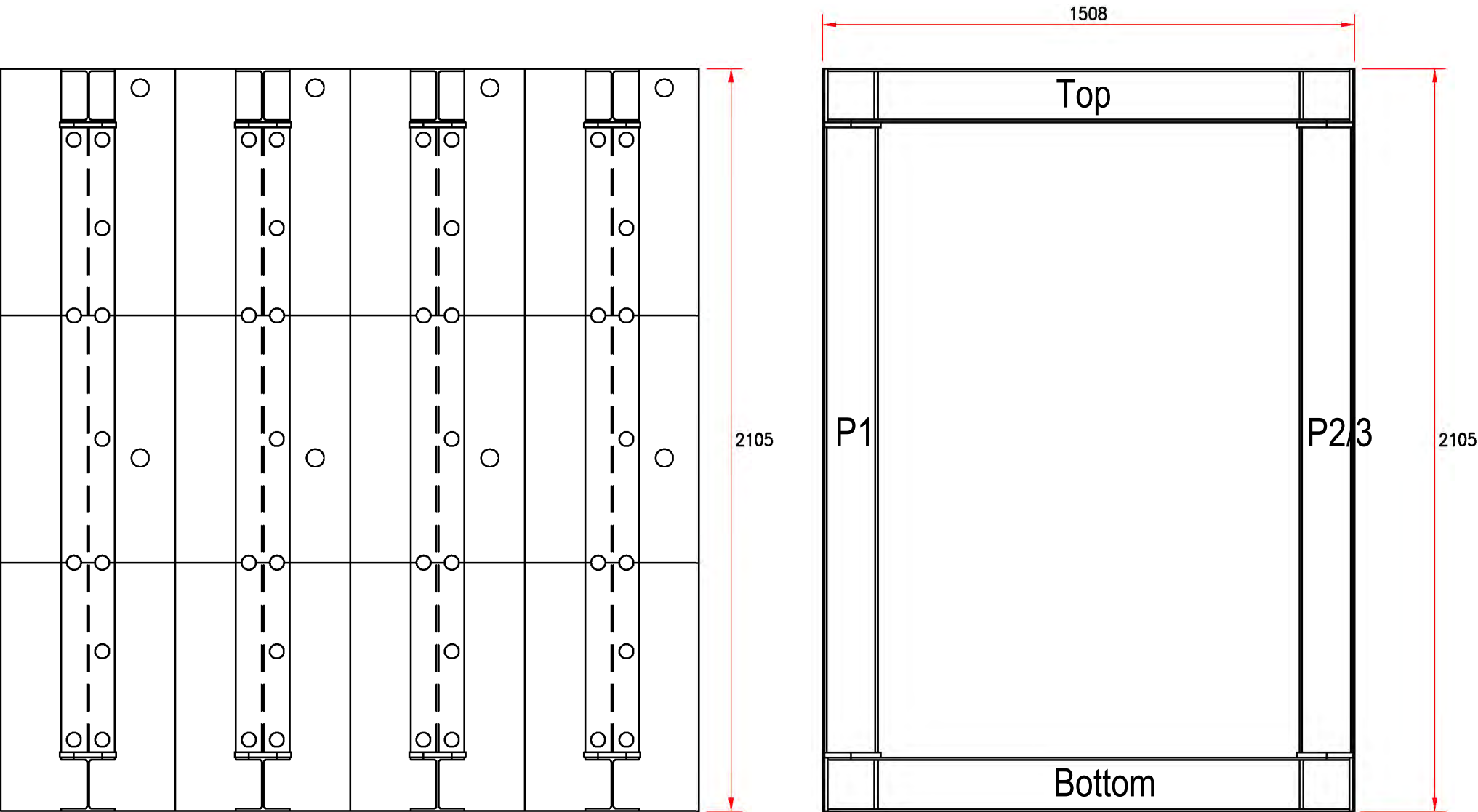
Remarks:

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Beams (B) Plates (P)	Sizes:	P/O no. or Cast No.	Initial	Date

Fabrication Status	
Saw by	Date:
Drill by	Date:
Fab by	Date:
Weld by	Date:
Painted by	Date:
Check by	Date:

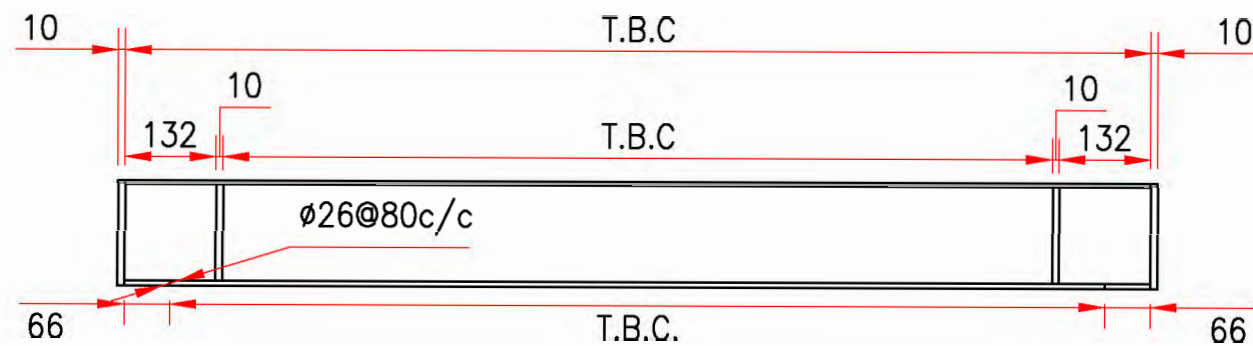
General Notes
All dimetres in millimetres UNO
All holes 22 dia. UNO
All material min. S275JR UNO
All weld leg length 25mm UNO
All butt weld full penetration UNO
All weld symbols to be in accordance with BS EN ISO 2553
Fabrication tolerance to be in accordance with BS EN1090-2 Annex B
Fuction tolerance class 1 UNO
Weld acceptance criteria to be BS EN 5817 class C
supplementary NDT to be in accordance with table 24 UNO
Hold times to be in accordance with table 23UNO

SCALE: N.T.S.

EXC 2	Welding Wire batch 12125212		
TITLE JN3323 / Mc Gee			
ADDRESS Euston Tower			
Draw by: G.K.	DRAWING No. 3323-11-02-22-0	Rev	ISSUE/DATE 11/020/2022

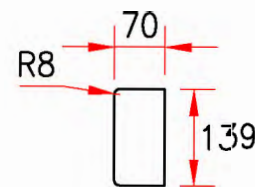
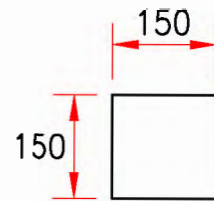


MARETH FABRICATIONS LTD.
5 ARKWRIGHT ROAD
COLNBROOK
SLOUGH
SL3 0HJ
TEL: 02085798922
g.kubala@mareth.co.uk



56no. 152x152x23 UC Top/Bottom


Plates Details

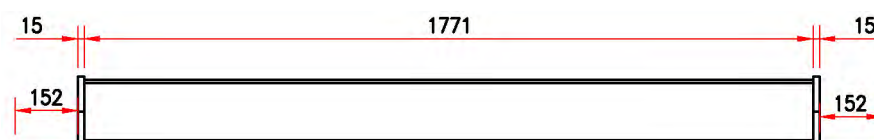


112no. 150x150x10 PLT

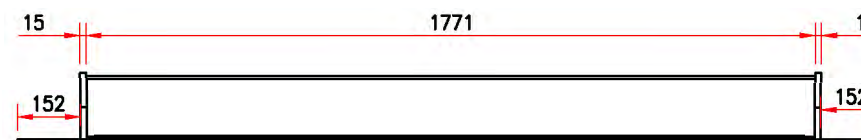
224no. 139x73x10 PLT

Beams (B) Plates (P)	Sizes:	P/O no. or Cast No.	Initial	Date

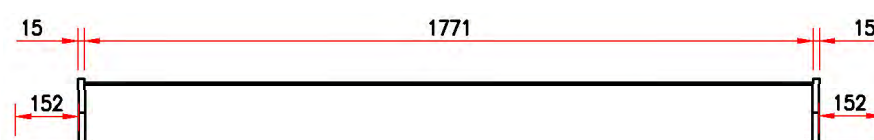
Fabrication Status										
Saw by	Date:	<div>General Notes</div> <div>All dimetres in millimetres UNO All holes 22 dia. UNO All material min. S275 JR UNO All weld leg lenght z6mm UNO All butt weld full penetration UNO All weld symbols to be in accordance with BS EN ISO 2553 Fabrication tolerance to be in accordance with BS EN1090-2 Annex B Function tolerance class 1 UNO Weld acceptance criteria to be BS EN 5817 class C suplementary NDT to be in accordance with table 24 UNO Hold times to be in accordance with table 23UNO</div>	EXC 2		Welding Wire batch 12125212		<div></div> <div>MARETH FABRICATIONS LTD. 5 ARKWRIGHT ROAD COLNBROOK SLOUGH SL3 0HJ TEL: 02085798922 g.kubala@mareth.co.uk</div>			
Drill by	Date:		TITLE JN3323 / Mc Gee							
Fab by	Date:		ADDRESS Euston Tower							
Weld by	Date:		Draw by: G.K.		DRAWING No. 3323-11-02-22-1		Rev	ISSUE/DATE 11/020/2022		
Painted by	Date:		SCALE: N.T.S.							
Check by	Date:									



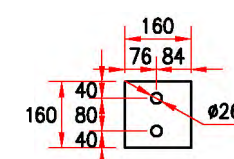
28no. 152x152x23 UC P1



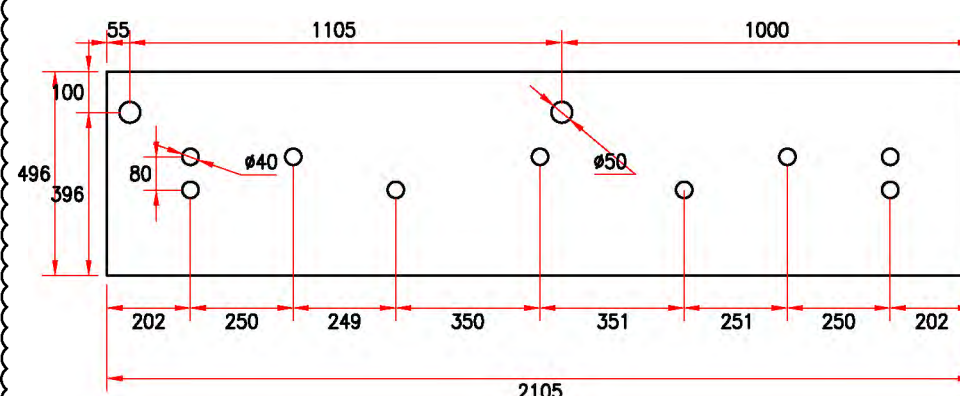
14no. 152x152x23 UC P3



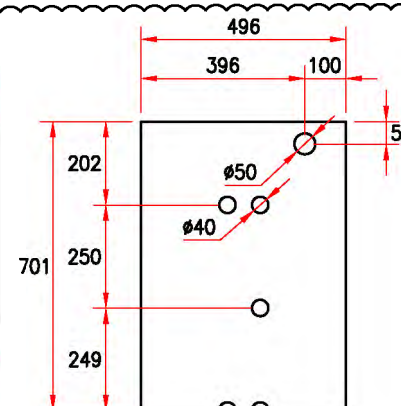
14no. 152x152x23 UC P2



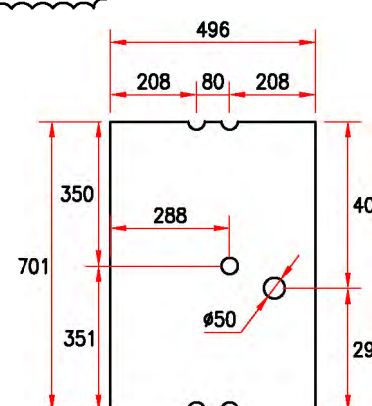
112no. 160x160x15 PLT



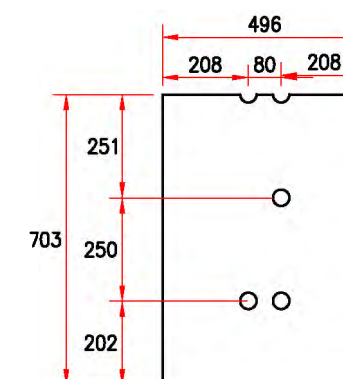
42no. 496x2105x4 PLT SP



14no. 496x2105x4 PLT
TP



14no. 496x2105x4 PLT
MP



14no. 496x2105x4 PLT
BP

[illegible]

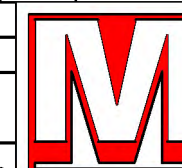
Fabrication Status	
Saw by	Date:
Drill by	Date:
Fab by	Date:
Weld by	Date:
Painted by	Date:
Check by	Date:

General Notes	
All diameters in millimetres UNO	
All holes 22 dia. UNO	
All material min. S275 JR UNO	
All weld leg length: z6mm UNO	
All butt weld full penetration UNO	
All weld symbols to be in accordance with BS EN ISO 2553	
Fabrication tolerance to be in accordance with BS EN1090-2 Annex	
Function tolerance class 1 UNO	
Weld acceptance criteria to be BS EN 5817 class C	
supplementary NDT to be in accordance with table 24 UNO	
Hold times to be in accordance with table 23UNO	

SCALE: N.T.S.

EXC 2	Welding Wire batch 12125212
TITLE JN3323 / Mc Gee	
ADDRESS Euston Tower	

Draw by: G.K.	DRAWING No. 3323-11-02-22-2	Rev	ISSUE/DATE 11/020/202
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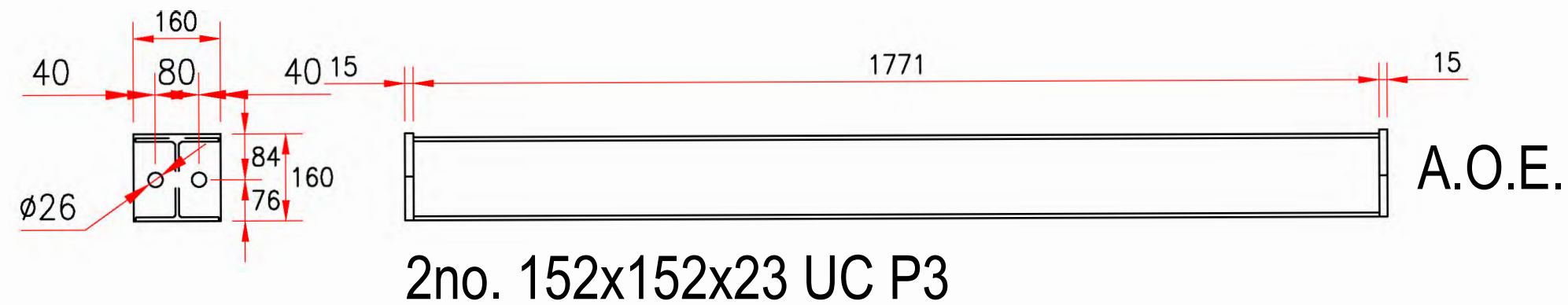
MARETH FABRICATIONS LTD.
5 ARKWRIGHT ROAD
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TEL: 02085798922
g.kubala@mareth.co.uk



Technical drawing of a rectangular plate. The width is 70 and the height is 139. A fillet with a radius of R8 is shown at the top corners. The drawing is a top view, with the width dimension 70 and height dimension 139. The fillet radius R8 is indicated at the top corners.

224no. 139x73x10 PLT

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Fabrication Status	
Saw by	Date:
Drill by	Date:
Fab by	Date:
Weld by	Date:
Painted by	Date:
Check by	Date:

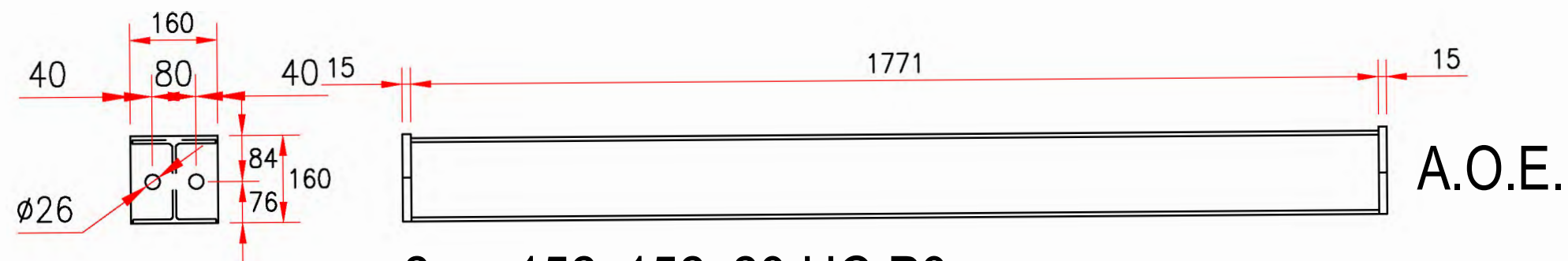
General Notes
All dimetres in millimetres UNO
All holes 22 dia. UNO
All material min. S275 JR UNO
All weld leg lenght z6mm UNO
All butt weld full penetration UNO
All weld symbols to be in accordance with BS EN ISO 2553
Fabrication tolerance to be in accordance with BS EN1090-2 Annex B
Function tolerance class 1 UNO
Weld acceptance criteria to be BS EN 5817 class C
supplementary NDT to be in accordance with table 24 UNO
Hold times to be in accordance with table 23UNO

SCALE: N.T.S.

EXC 2	Welding Wire batch 12125212
TITLE JN3323 / Mc Gee	
ADDRESS Euston Tower	
Draw by: G.K.	DRAWING No. 3323-11-02-22-4
Rev	ISSUE/DATE 11/020/2022




MARETH FABRICATIONS LTD.
5 ARKWRIGHT ROAD
COLNBROOK
SLOUGH
SL3 0HJ
TEL: 02085798922
g.kubala@mareth.co.uk



2no. 152x152x23 UC P3

Beams (B) Plates (P)	Sizes:	P/O no. or Cast No	Initial	Date

Fabrication Status										
Saw by	Date:	<div>General Notes</div> <div>All dimetres in millimetres UNO</div> <div>All holes 22 dia. UNO</div> <div>All material min. S275 JR UNO</div> <div>All weld leg lenght z6mm UNO</div> <div>All butt weld full penetration UNO</div> <div>All weld symbols to be in accordance with BS EN ISO 2553</div> <div>Fabrication tolerance to be in accordance with BS EN1090-2 Annex B</div> <div>Function tolerance class 1 UNO</div> <div>Weld acceptance criteria to be BS EN 5817 class C</div> <div>supplementary NDT to be in accordance with table 24 UNO</div> <div>Hold times to be in accordance with table 23UNO</div>	EXC 2	Welding Wire batch 12125212				MARETH FABRICATIONS LTD. 5 ARKWRIGHT ROAD COLNBROOK SLOUGH SL3 0HJ TEL: 02085798922 g.kubala@mareth.co.uk		
Drill by	Date:		TITLE JN3323 / Mc Gee							
Fab by	Date:		ADDRESS Euston Tower							
Weld by	Date:									
Painted by	Date:									
Check by	Date:	SCALE: N.T.S.	Draw by: G.K.	DRAWING No. 3323-11-02-22-5	Rev	ISSUE/DATE 26/02/2022				



Technical drawing of a rectangular plate. The width is 70 and the height is 139. A fillet with a radius of R8 is shown at the top edge.

224no. 139x73x10 PLT

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SL3 0HJ
TEL: 02085798922
g.kubala@mareth.co.uk



Technical drawing of a rectangular plate. The width is 70 and the height is 139. A fillet with a radius of R8 is shown at the top edge.

224no. 139x73x10 PLT

Fabrication Status	
Saw by	Date:
Drill by	Date:
Fab by	Date:
Weld by	Date:
Painted by	Date:
Check by	Date:

MARETH FABRICATIONS LTD.
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COLNBROOK
SLOUGH
SL3 0HJ
TEL: 02085798922
g.kubala@mareth.co.uk



A square is shown with a side length of 150. The top and left sides are labeled with the number 150 and red dimension lines.

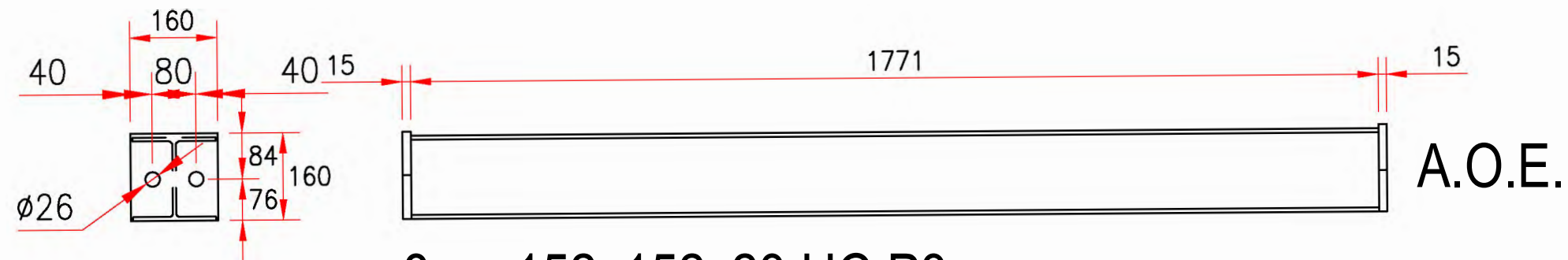
Technical drawing of a rectangular plate. The width is 70 and the height is 139. A fillet with a radius of R8 is shown at the top corners. The drawing includes dimension lines and arrows indicating the measurements.

224no. 139x73x10 PLT

Fabrication Status	
Saw by	Date:
Drill by	Date:
Fab by	Date:
Weld by	Date:
Painted by	Date:
Check by	Date:




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5 ARKWRIGHT ROAD
COLNBROOK
SLOUGH
SL3 0HJ
TEL: 02085798922
g.kubala@mareth.co.uk



8no. 152x152x23 UC P3

Beams (B) Plates (P)	Sizes:	P/O no. or Cast No	Initial	Date

Fabrication Status										
Saw by	Date:	<div>General Notes</div> <div>All dimetres in millimetres UNO</div> <div>All holes 22 dia. UNO</div> <div>All material min. S275 JR UNO</div> <div>All weld leg lenght z6mm UNO</div> <div>All butt weld full penetration UNO</div> <div>All weld symbols to be in accordance with BS EN ISO 2553</div> <div>Fabrication tolerance to be in accordance with BS EN1090-2 Annex B</div> <div>Function tolerance class 1 UNO</div> <div>Weld acceptance criteria to be BS EN 5817 class C</div> <div>supplementary NDT to be in accordance with table 24 UNO</div> <div>Hold times to be in accordance with table 23UNO</div>	EXC 2	Welding Wire batch 12125212				MARETH FABRICATIONS LTD. 5 ARKWRIGHT ROAD COLNBROOK SLOUGH SL3 0HJ TEL: 02085798922 g.kubala@mareth.co.uk		
Drill by	Date:		TITLE JN3323 / Mc Gee							
Fab by	Date:		ADDRESS Euston Tower							
Weld by	Date:									
Painted by	Date:			Draw by: G.K.	DRAWING No. 3323-11-02-22-9	Rev	ISSUE/DATE 08/03/2022			
Check by	Date:	SCALE: N.T.S.								



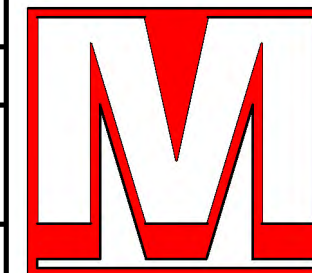
A diagram of a square with side length 150. The top side is labeled 150 with a horizontal double-headed arrow. The left side is labeled 150 with a vertical double-headed arrow.

Technical drawing of a rectangular plate. The width is 70 and the height is 139. A fillet with a radius of R8 is shown at the top corners. The drawing includes dimension lines and arrows indicating the measurements.

224no. 139x73x10 PLT

Fabrication Status	
Saw by	Date:
Drill by	Date:
Fab by	Date:
Weld by	Date:
Painted by	Date:
Check by	Date:

ISSUE/DATE	14/03/2022
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TEL: 02085798922
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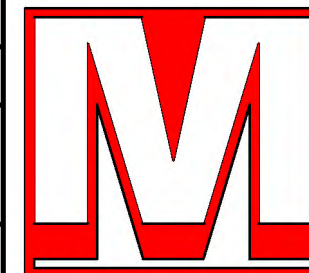
A square is shown with a side length of 150. The top and left sides are labeled with the number 150 and red dimension lines.

Technical drawing of a rectangular plate. The width is 70 and the height is 139. A fillet with a radius of R8 is shown at the top edge.

224no. 139x73x10 PLT

Fabrication Status	
Saw by	Date:
Drill by	Date:
Fab by	Date:
Weld by	Date:
Painted by	Date:
Check by	Date:

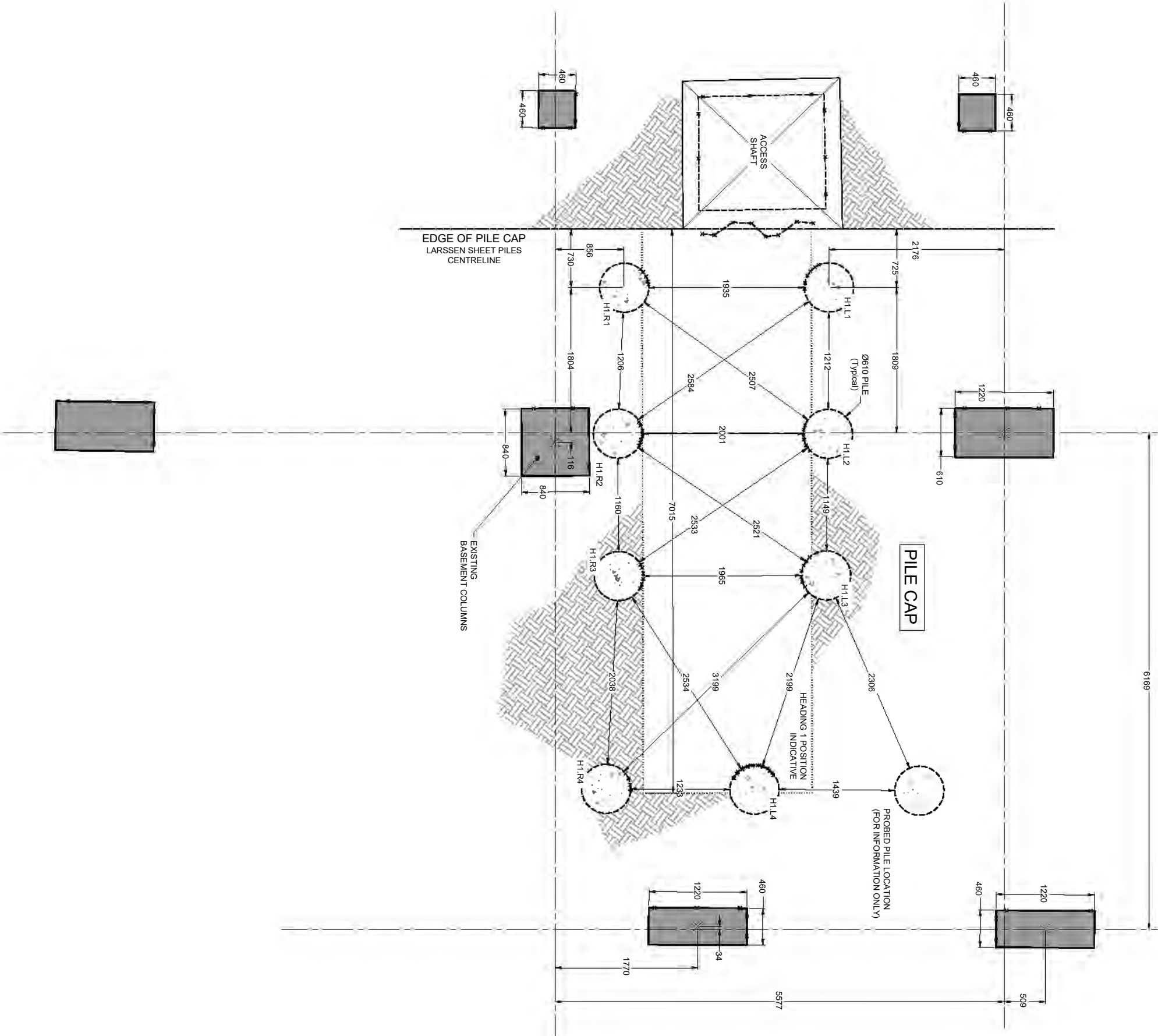
ISSUE/DATE	17/03/2022
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MARETH FABRICATIONS LTD.
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Notes:

- 1. Do not scale this drawing
- 2. All dimensions are in millimeter unless noted otherwise.
- 3. Shown gridlines are arbitrary and to be used for the purpose of this survey only.
- 4. Position of piles surveyed in relation to existing columns at basement level (no visible cladding to RC elements).
- 5. Accuracy of survey below pile cap ± 25 mm due to irregular pile surface. Pile diameter estimated from fully exposed pile at Location 2.
- 6. Access shaft formed as per McGee sketch ETF149-SK-003b (Rev -). For heading frame information refer to geometry sketch ETF149-SK-004 (Rev -) and fabrication drawings 3323-11-02-22-0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 and 11.
- 7. Total number of heading frames installed within Heading 1:
 - Standard 11 No @ 500mm c/c
 - Special 0 No.
- 8. Dry-packing thickness varies between 25 and 75mm, heading frames installed at approximate 500mm c/c.



Rev

B

21-06-22

Temporary works notes added

DF

DF

-

Rev

A

01-06-22

ARUP comments addressed

DF

DF

-

Rev	Date	By	Checked

Project

EUSTON TOWER

Drawing Title

FOUNDATION SI WORK
LOCATION 1
SURVEY OF EXISTING PILES

Drawn

DF

Date

22-04-2022

Checked

-

Scale

NTS

Drawn

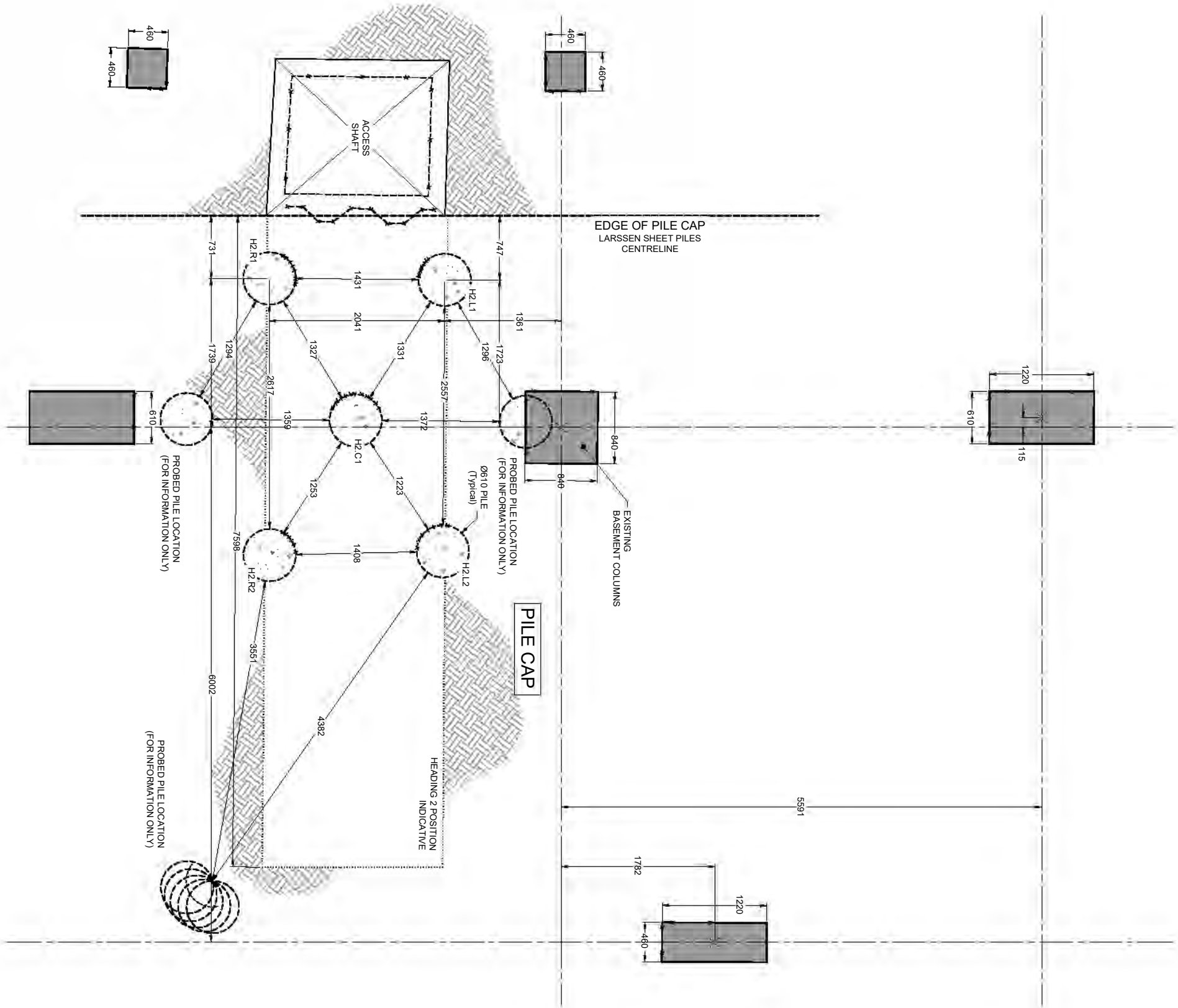
ETF149-SK005a

Revised

B

Notes:

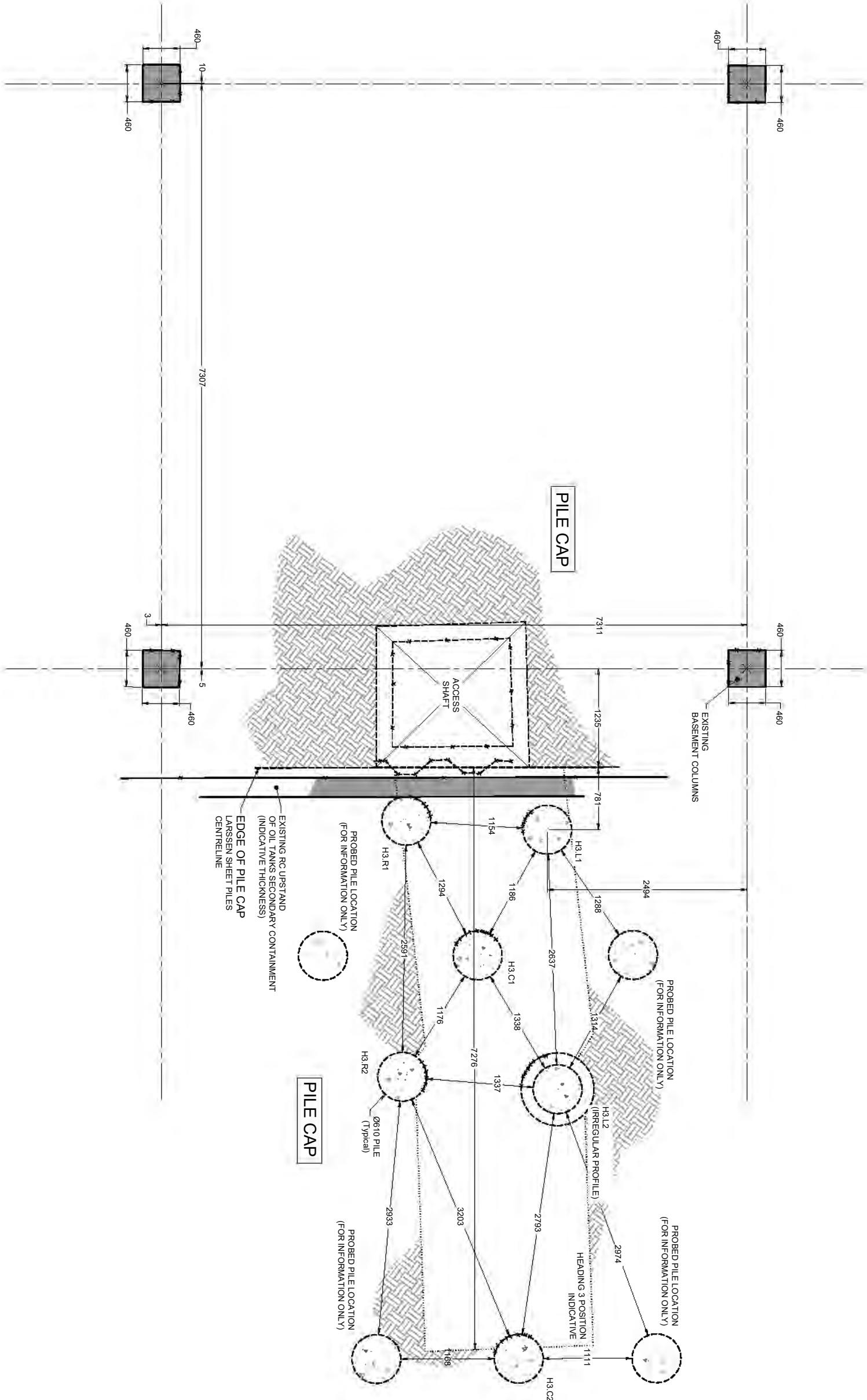
1. Do not scale this drawing
2. All dimensions are in millimeter unless noted otherwise.
3. Shown gridlines are arbitrary and to be used for the purpose of this survey only.
4. Position of piles surveyed in relation to existing columns at basement level (no visible cladding to RC elements).
5. Accuracy of survey below pile cap ± 25 mm due to irregular pile surface. Pile diameter estimated from fully exposed pile at Location 2.
6. Access shaft formed as per McGee sketch ETF149-SK-003b (Rev -). For heading frame information refer to geometry sketch ETF149-SK-004 (Rev -) and fabrication drawings 3323-11-02-22-0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 and 11.
7. Total number of heading frames installed within Heading 2:
 - Standard 10 No.
 - Special 2 No.
8. Dry-packing thickness varies between 25 and 75mm, heading frames installed at approximate 500mm c/c.



Project:			
EUSTON TOWER			
Drawing Title:			
FOUNDATION SI WORK LOCATION 2 SURVEY OF EXISTING PILES			
Drawn:	Date:	Checked:	Revised:
DF	22-04-2022	-	
Scale:	Day No:	Revision:	
NTS	ETF149-SK005b	B	

Notes:

- 1. Do not scale this drawing
- 2. All dimensions are in millimeter unless noted otherwise.
- 3. Shown gridlines are arbitrary and to be used for the purpose of this survey only.
- 4. Position of piles surveyed in relation to existing columns at basement level (no visible cladding to RC elements).
- 5. Accuracy of survey below pile cap ± 25 mm due to irregular pile surface. Pile diameter estimated from fully exposed pile at Location 2.
- 6. Access shaft formed as per McGee sketch ETF149-SK-003b (Rev -). For heading frame information refer to geometry sketch ETF149-SK-004 (Rev -) and fabrication drawings 3323-11-02-22-0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 and 11.
- 7. Total number of heading frames installed within Heading 3:
 - Standard 0 No.
 - Special 10 No.
- 8. Dry-packing thickness varies between 25 and 75mm, heading frames installed at approximate 500mm c/c.



Project:			
Drawing:			
McGEE			
EUSTON TOWER			
FOUNDATION SI WORK			
LOCATION 3			
SURVEY OF EXISTING PILES			
Drawn:	Date:	Checked:	Revised:
DF	21-05-2022	-	
Scale:	Day No:		
NTS	ETF149-SK005c		B

CONCEPT SITE INVESTIGATIONS

Site Name:	Euston Tower	Job No.:	22/3686
Client:	McGee	Date Reported:	09/06/2022

Summary Test Report

Determination of Moisture Content and Liquid and Plastic Limits by 4 Point Cone Method

Borehole No.	Sample Type	Sample No.	Depth m	Description	Natural Moisture Content %	Washed Natural	Passing 425 µm sieve %	Liquid Limit %	Plastic Limit %	Plasticity Index %	Remarks
Heading 1	D	Face S001A	0.15	Dark grey slightly micaceous silty CLAY	26	Natural	100	71	26	45	
Heading 1	D	Face S002A	0.80	Greyish brown slightly micaceous silty CLAY with rare pockets of light brown silty fine sand	26	Natural	100	71	26	45	
Heading 1	D	Face S003A	1.65	Greyish brown slightly micaceous silty CLAY	27	Natural	100	75	27	48	
Heading 2	D	Face S004A	0.10	Brown silty CLAY	29	Natural	100	75	27	48	
Heading 2	D	Face S005A	1.00	Greyish brown slightly micaceous slightly sandy silty CLAY with rare shell fragments and pockets of light grey silty fine sand	24	Natural	100	66	25	41	
Heading 2	D	Face S006A	2.00	Greyish brown slightly micaceous silty CLAY	27	Natural	100	73	26	47	

BS 1377: Part 2: Clause 4.3 & 4.4: 1990 Determination of the liquid limit by the cone penetrometer method

BS 1377: Part 2: Clause 5: 1990 Determination of the plastic limit and plasticity index

BS 1377: Part 2: Clause 3.2: 1990 Determination of the moisture content by the oven drying method

Remarks: The results reported relate only to the items tested or sampled.



Date - samples received:	20/04/2022	CONCEPT 47-49 Brunel Road, London W3 7XR Tel: 02087401553 Email: lab@conceptconsultants.co.uk
Date - sample testing commenced :	24/05/2022	
Date - sample testing completed :	26/05/2022	
Approved Signatories:	L Griffin LG (QA Technical & Lab Mngr) – K Mazerant KM (Lab Mngr)	Checked / Approved by: 01/06/2022 Date Approved: KM

CONCEPT SITE INVESTIGATIONS

Site Name:	Euston Tower	Job No.:	22/3686
Client:	McGee	Date Reported:	16/06/2022

Summary Test Report

Determination of Moisture Content and Liquid and Plastic Limits by 4 Point Cone Method

Borehole No.	Sample Type	Sample No.	Depth m	Description	Natural Moisture Content %	Washed Natural	Passing 425 µm sieve %	Liquid Limit %	Plastic Limit %	Plasticity Index %	Remarks
Heading 1	U38	Pile L3 S010 Disc 1	1.20	Greyish brown silty CLAY	26						
Heading 1	U38	Pile L3 S010 Disc 2	1.20	Greyish brown silty CLAY	26						
Heading 1	U38	Pile L3 S010 Disc 3	1.20	Greyish brown silty CLAY	27						
Heading 1	U38	Pile L3 S010 Disc 4	1.20	Greyish brown silty CLAY	32						
Heading 1	U38	Pile L3 S010 Disc 5	1.20	Greyish brown silty CLAY	29						
Heading 1	U38	Pile L3 S010 Disc 6	1.20	Greyish brown silty CLAY	28						
Heading 1	U38	Pile L3 S010 Disc 7	1.20	Greyish brown silty CLAY	29						

BS 1377: Part 2: Clause 4.3 & 4.4: 1990 Determination of the liquid limit by the cone penetrometer method

BS 1377: Part 2: Clause 5: 1990 Determination of the plastic limit and plasticity index

BS 1377: Part 2: Clause 3.2: 1990 Determination of the moisture content by the oven drying method

Remarks: The results reported relate only to the items tested or sampled.



Date - samples received:	20/04/2022	Checked / Approved by:	01/06/2022	CONCEPT 47-49 Brunel Road, London W3 7XR Tel: 02087401553 Email: lab@conceptconsultants.co.uk
Date - sample testing commenced :	24/05/2022	Date Approved:	KM	
Date - sample testing completed :	26/05/2022			
Approved Signatories:	L Griffin LG (QA Technical & Lab Mngr) – K Mazerant KM (Lab Mngr)			

CONCEPT SITE INVESTIGATIONS

Site Name:	Euston Tower	Job No.:	22/3686
Client:	McGee	Date Reported:	16/06/2022

Summary Test Report

Determination of Moisture Content and Liquid and Plastic Limits by 4 Point Cone Method

Borehole No.	Sample Type	Sample No.	Depth m	Description	Natural Moisture Content %	Washed Natural	Passing 425 µm sieve %	Liquid Limit %	Plastic Limit %	Plasticity Index %	Remarks
Heading 1	U38	Pile R3 S011 Disc 1	1.20	Greyish brown silty CLAY with rare pockets of grey silty sand	25						
Heading 1	U38	Pile R3 S011 Disc 2	1.20	Greyish brown silty CLAY with rare pockets of grey silty sand	26						
Heading 1	U38	Pile R3 S011 Disc 3	1.20	Greyish brown silty CLAY with rare pockets of grey silty sand	26						
Heading 1	U38	Pile R3 S011 Disc 4	1.20	Greyish brown silty CLAY with rare pockets of grey silty sand	26						
Heading 1	U38	Pile R3 S011 Disc 5	1.20	Greyish brown silty CLAY with rare pockets of grey silty sand	23						
Heading 1	U38	Pile R3 S011 Disc 6	1.20	Greyish brown silty CLAY with rare pockets of grey silty sand	25						
Heading 1	U38	Pile R3 S011 Disc 7	1.20	Greyish brown silty CLAY with rare pockets of grey silty sand	25						

BS 1377: Part 2: Clause 4.3 & 4.4: 1990 Determination of the liquid limit by the cone penetrometer method

BS 1377: Part 2: Clause 5: 1990 Determination of the plastic limit and plasticity index

BS 1377: Part 2: Clause 3.2: 1990 Determination of the moisture content by the oven drying method

Remarks: The results reported relate only to the items tested or sampled.



Date - samples received:	20/04/2022	<div>CONCEPT 47-49 Brunel Road, London W3 7XR Tel: 02087401553 Email: lab@conceptconsultants.co.uk</div>
Date - sample testing commenced :	24/05/2022	
Date - sample testing completed :	26/05/2022	
Checked / Approved by: 01/06/2022 Date Approved: KM		
Approved Signatories: L Griffin LG (QA Technical & Lab Mngr) – K Mazerant KM (Lab Mngr)		

CONCEPT SITE INVESTIGATIONS

Site Name:	Euston Tower	Job No.:	22/3686
Client:	McGee	Date Reported:	16/06/2022

Summary Test Report

Determination of Moisture Content and Liquid and Plastic Limits by 4 Point Cone Method

Borehole No.	Sample Type	Sample No.	Depth m	Description	Natural Moisture Content %	Washed Natural	Passing 425 µm sieve %	Liquid Limit %	Plastic Limit %	Plasticity Index %	Remarks
Heading 1	U38	Pile L4 S012 Disc 1	1.20	Greyish brown silty CLAY with rare pockets of grey silty sand	26						
Heading 1	U38	Pile L4 S012 Disc 2	1.20	Greyish brown silty CLAY with rare pockets of grey silty sand	25						
Heading 1	U38	Pile L4 S012 Disc 3	1.20	Greyish brown silty CLAY with rare pockets of grey silty sand	26						
Heading 1	U38	Pile L4 S012 Disc 4	1.20	Greyish brown silty CLAY with rare pockets of grey silty sand	26						
Heading 1	U38	Pile L4 S012 Disc 5	1.20	Greyish brown silty CLAY with rare pockets of grey silty sand	25						
Heading 1	U38	Pile L4 S012 Disc 6	1.20	Greyish brown silty CLAY with rare pockets of grey silty sand	25						
Heading 1	U38	Pile L4 S012 Disc 7	1.20	Greyish brown silty CLAY with rare pockets of grey silty sand	25						
Heading 1	U38	Pile L4 S012 Disc 8	1.20	Greyish brown silty CLAY with rare pockets of grey silty sand	25						

BS 1377: Part 2: Clause 4.3 & 4.4: 1990 Determination of the liquid limit by the cone penetrometer method

BS 1377: Part 2: Clause 5: 1990 Determination of the plastic limit and plasticity index

BS 1377: Part 2: Clause 3.2: 1990 Determination of the moisture content by the oven drying method

Remarks: The results reported relate only to the items tested or sampled.



Date - samples received:	20/04/2022	<div>CONCEPT</div> <div>47-49 Brunel Road, London W3 7XR</div> <div>Tel: 02087401553 Email: lab@conceptconsultants.co.uk</div>	
Date - sample testing commenced :	24/05/2022		Checked / Approved by: 01/06/2022
Date - sample testing completed :	26/05/2022		Date Approved: KM
Approved Signatories: L Griffin LG (QA Technical & Lab Mngr) – K Mazerant KM (Lab Mngr)			

[illegible]

CONCEPT SITE INVESTIGATIONS

Site Name:	Euston Tower	Job No.:	22/3686
Client:	McGee	Date Reported:	16/06/2022

Summary Test Report

Determination of Moisture Content and Liquid and Plastic Limits by 4 Point Cone Method

Borehole No.	Sample Type	Sample No.	Depth m	Description	Natural Moisture Content %	Washed Natural	Passing 425 µm sieve %	Liquid Limit %	Plastic Limit %	Plasticity Index %	Remarks
Heading 3	U38	Pile C2 S035 Disc 1	3.50	Greyish brown silty CLAY	27						
Heading 3	U38	Pile C2 S035 Disc 2	3.50	Greyish brown silty CLAY	28						
Heading 3	U38	Pile C2 S035 Disc 3	3.50	Greyish brown silty CLAY	27						
Heading 3	U38	Pile C2 S035 Disc 4	3.50	Greyish brown silty CLAY	27						
Heading 3	U38	Pile C2 S035 Disc 5	3.50	Greyish brown silty CLAY	28						
Heading 3	U38	Pile C2 S035 Disc 6	3.50	Greyish brown silty CLAY	27						
Heading 3	U38	Pile C2 S035 Disc 7	3.50	Greyish brown silty CLAY	27						
Heading 3	U38	Pile C2 S035 Disc 8	3.50	Greyish brown silty CLAY	27						
Heading 3	U38	Pile C2 S035 Disc 9	3.50	Greyish brown silty CLAY	27						

BS 1377: Part 2: Clause 4.3 & 4.4: 1990 Determination of the liquid limit by the cone penetrometer method

BS 1377: Part 2: Clause 5: 1990 Determination of the plastic limit and plasticity index

BS 1377: Part 2: Clause 3.2: 1990 Determination of the moisture content by the oven drying method

Remarks: The results reported relate only to the items tested or sampled.



Date - samples received:	25/05/2022	CONCEPT 47-49 Brunel Road, London W3 7XR Tel: 02087401553 Email: lab@conceptconsultants.co.uk
Date - sample testing commenced :	06/06/2022	
Date - sample testing completed :	13/06/2022	
Approved Signatories:	L Griffin LG (QA Technical & Lab Mngr) – K Mazerant KM (Lab Mngr)	Checked / Approved by: 15/06/2022 Date Approved: KM

[illegible]

CONCEPT SITE INVESTIGATIONS

Site Name:	Euston Tower	Job No.:	22/3686
Client:	McGee	Date Reported:	16/06/2022

Summary Test Report

Determination of Moisture Content and Liquid and Plastic Limits by 4 Point Cone Method

Borehole No.	Sample Type	Sample No.	Depth m	Description	Natural Moisture Content %	Washed Natural	Passing 425 µm sieve %	Liquid Limit %	Plastic Limit %	Plasticity Index %	Remarks
Heading 3	U38	Pile C2 S033 Disc 1	7.00	Brownish grey silty CLAY	28						
Heading 3	U38	Pile C2 S033 Disc 2	7.00	Brownish grey silty CLAY	28						
Heading 3	U38	Pile C2 S033 Disc 3	7.00	Brownish grey silty CLAY	29						
Heading 3	U38	Pile C2 S033 Disc 4	7.00	Brownish grey silty CLAY	28						
Heading 3	U38	Pile C2 S033 Disc 5	7.00	Brownish grey silty CLAY	27						
Heading 3	U38	Pile C2 S033 Disc 6	7.00	Brownish grey silty CLAY	28						
Heading 3	U38	Pile C2 S033 Disc 7	7.00	Brownish grey silty CLAY	28						
Heading 3	U38	Pile C2 S033 Disc 8	7.00	Brownish grey silty CLAY	27						
Heading 3	U38	Pile C2 S033 Disc 9	7.00	Brownish grey silty CLAY	27						

BS 1377: Part 2: Clause 4.3 & 4.4: 1990 Determination of the liquid limit by the cone penetrometer method

BS 1377: Part 2: Clause 5: 1990 Determination of the plastic limit and plasticity index

BS 1377: Part 2: Clause 3.2: 1990 Determination of the moisture content by the oven drying method

Remarks: The results reported relate only to the items tested or sampled.



Date - samples received:	20/04/2022	CONCEPT 47-49 Brunel Road, London W3 7XR Tel: 02087401553 Email: lab@conceptconsultants.co.uk
Date - sample testing commenced :	06/06/2022	
Date - sample testing completed :	13/06/2022	
Approved Signatories:	L Griffin LG (QA Technical & Lab Mngr) – K Mazerant KM (Lab Mngr)	

[illegible]

CONCEPT SITE INVESTIGATIONS

Site Name:	Euston Tower	Job No.:	22/3686
Client:	McGee	Date Reported:	16/06/2022

Summary Test Report

Determination of Moisture Content and Liquid and Plastic Limits by 4 Point Cone Method

Borehole No.	Sample Type	Sample No.	Depth m	Description	Natural Moisture Content %	Washed Natural	Passing 425 µm sieve %	Liquid Limit %	Plastic Limit %	Plasticity Index %	Remarks
Heading 3	U38	Pile C2 S034 Disc 1	1.40	Brownish grey silty CLAY	29						
Heading 3	U38	Pile C2 S034 Disc 2	1.40	Brownish grey silty CLAY	29						
Heading 3	U38	Pile C2 S034 Disc 3	1.40	Brownish grey silty CLAY	28						
Heading 3	U38	Pile C2 S034 Disc 4	1.40	Brownish grey silty CLAY	28						
Heading 3	U38	Pile C2 S034 Disc 5	1.40	Brownish grey silty CLAY	29						
Heading 3	U38	Pile C2 S034 Disc 6	1.40	Brownish grey silty CLAY	29						
Heading 3	U38	Pile C2 S034 Disc 7	1.40	Brownish grey silty CLAY	29						
Heading 3	U38	Pile C2 S034 Disc 8	1.40	Brownish grey silty CLAY	29						
Heading 3	U38	Pile C2 S034 Disc 9	1.40	Brownish grey silty CLAY	29						

BS 1377: Part 2: Clause 4.3 & 4.4: 1990 Determination of the liquid limit by the cone penetrometer method

BS 1377: Part 2: Clause 5: 1990 Determination of the plastic limit and plasticity index

BS 1377: Part 2: Clause 3.2: 1990 Determination of the moisture content by the oven drying method

Remarks: The results reported relate only to the items tested or sampled.



Date - samples received:	20/04/2022	CONCEPT 47-49 Brunel Road, London W3 7XR Tel: 02087401553 Email: lab@conceptconsultants.co.uk
Date - sample testing commenced :	06/06/2022	
Date - sample testing completed :	13/06/2022	
Approved Signatories:	L Griffin LG (QA Technical & Lab Mngr) – K Mazerant KM (Lab Mngr)	

[illegible]

CONCEPT SITE INVESTIGATIONS

PARTICLE SIZE DISTRIBUTION

TEST REPORT

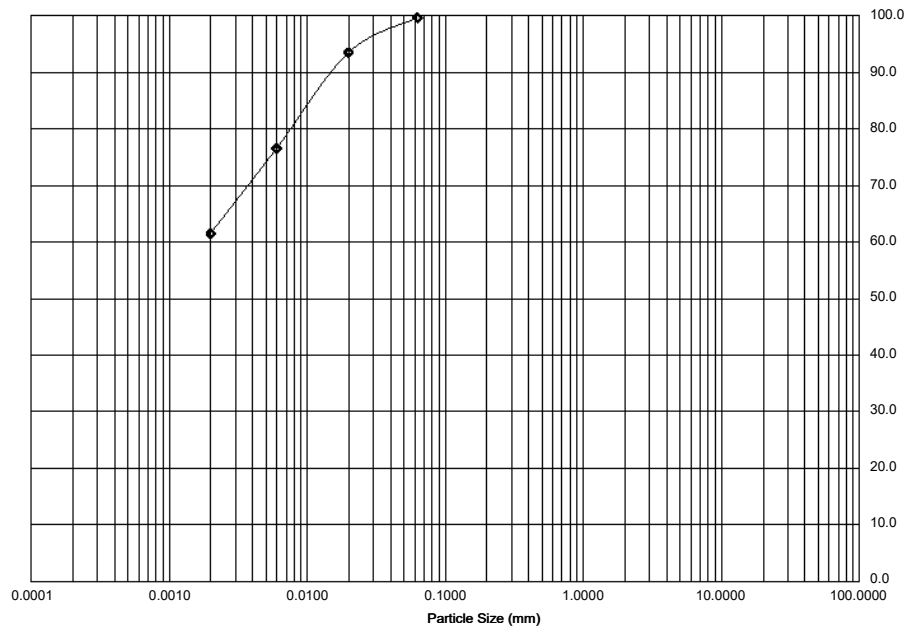
Site Name:	Euston Tower	Job Number:	22/3686
Client:	McGee	Date Reported:	01/06/2022
Borehole No:	Heading 1	Sample Type/No.	D Face S001A
		Top Depth:	0.15 m
		Bottom Depth:	m

Soil Description:

Dark grey slightly micaceous silty CLAY

BS Test Sieves	
Size (mm)	% Passing
75.000	100
63.000	100
50.000	100
37.500	100
28.000	100
20.000	100
14.000	100
10.000	100
6.300	100
5.000	100
3.350	100
2.000	100
1.180	100
0.600	100
0.425	100
0.300	100
0.212	100
0.150	100
0.063	100

Sedimentation (*if applicable)	
Size (mm)	% Passing
0.020	93
0.006	77
0.002	61



CLAY	F	M	C	F	M	C	F	M	C	COBBLES
	SILT			SAND			GRAVEL			

Method/type:	Pipette
--------------	---------

BS 1377: Part 2: Clause 9.4: 1990 Determination of sedimentation by the pipette method.

Particle Proportions %	
Cobbles	
Gravel	
Sand	0.4
Silt	38.2
Clay	61.5



Remarks:

Particle size distribution by dry sieve was not carried out on sand fraction

The results reported relate only to the items tested or sampled.

Date - samples received:	20/04/2022
Date - sample testing commenced :	24/05/2022
Date - sample testing completed :	29/05/2022
Checked / Approved by:	01/06/2022
Date Approved:	KM
Approved Signatories: L Griffin LG (QA Technical & Lab Mngr) – K Mazerant KM (Lab Mngr)	

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CONCEPT SITE INVESTIGATIONS

PARTICLE SIZE DISTRIBUTION

TEST REPORT

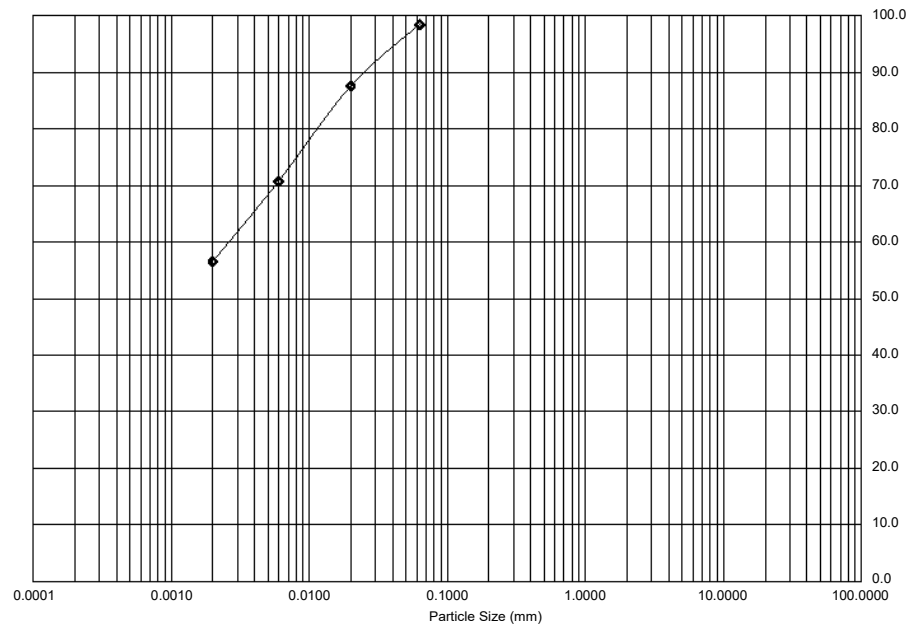
Site Name: Euston Tower				Job Number: 22/3686	
Client: McGee				Date Reported: 01/06/2022	
Borehole No: Heading 1	Sample Type/No: D	Face S002A	Top Depth: 0.80 m	Bottom Depth: m	

Soil Description:

Greyish brown slightly micaceous silty CLAY with rare pockets of light brown silty fine sand

BS Test Sieves	
Size (mm)	% Passing
75.000	100
63.000	100
50.000	100
37.500	100
28.000	100
20.000	100
14.000	100
10.000	100
6.300	100
5.000	100
3.350	100
2.000	100
1.180	100
0.600	100
0.425	100
0.300	100
0.212	100
0.150	100
0.063	98

Sedimentation (*if applicable)	
Size (mm)	% Passing
0.020	88
0.006	71
0.002	56



CLAY	F	M	C	F	M	C	F	M	C	COBBLES
	SILT			SAND			GRAVEL			

Method/type:	Pipette
--------------	---------

BS 1377: Part 2: Clause 9.4: 1990 Determination of sedimentation by the pipette method.

Particle Proportions %	
Cobbles	
Gravel	
Sand	1.5
Silt	42.0
Clay	56.5



Remarks:

Particle size distribution by dry sieve was not carried out on sand fraction

The results reported relate only to the items tested or sampled.

Date - samples received:	20/04/2022	Checked / Approved by: 01/06/2022 Date Approved: KM
Date - sample testing commenced :	24/05/2022	
Date - sample testing completed :	29/05/2022	
Approved Signatories: L Griffin LG (QA Technical & Lab Mngr) – K Mazerant KM (Lab Mngr)		

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CONCEPT SITE INVESTIGATIONS

PARTICLE SIZE DISTRIBUTION

TEST REPORT

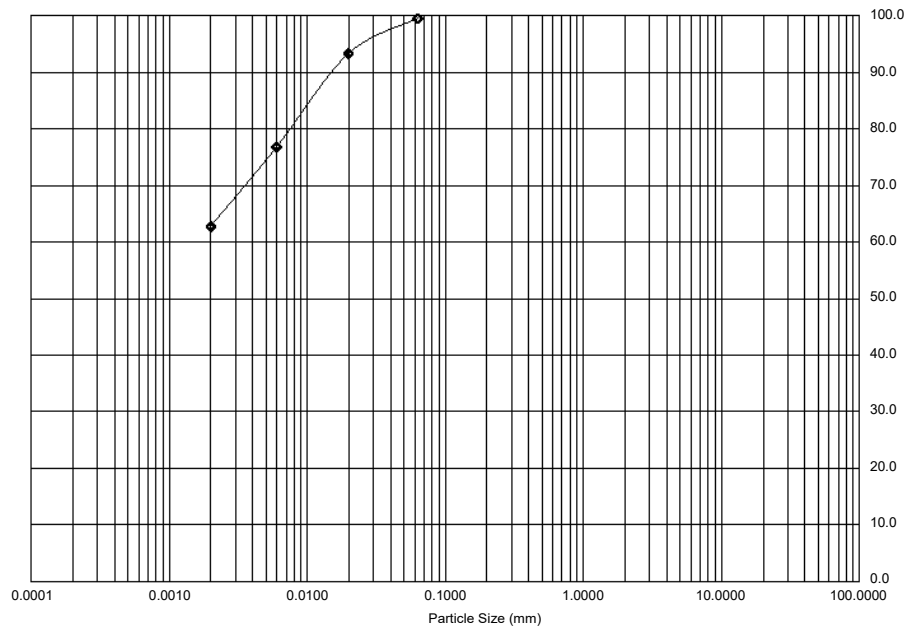
Site Name: Euston Tower				Job Number: 22/3686	
Client: McGee				Date Reported: 01/06/2022	
Borehole No: Heading 1	Sample Type/No: D	Face S003A	Top Depth: 1.65 m	Bottom Depth: m	

Soil Description:

Greyish brown slightly micaceous silty CLAY

BS Test Sieves	
Size (mm)	% Passing
75.000	100
63.000	100
50.000	100
37.500	100
28.000	100
20.000	100
14.000	100
10.000	100
6.300	100
5.000	100
3.350	100
2.000	100
1.180	100
0.600	100
0.425	100
0.300	100
0.212	100
0.150	100
0.063	99

Sedimentation (*if applicable)	
Size (mm)	% Passing
0.020	93
0.006	77
0.002	63



CLAY	F	M	C	F	M	C	F	M	C	COBBLES
	SILT			SAND			GRAVEL			

Method/type:	Pipette
--------------	---------

BS 1377: Part 2: Clause 9.4: 1990 Determination of sedimentation by the pipette method.

Particle Proportions %	
Cobbles	
Gravel	
Sand	0.5
Silt	36.8
Clay	62.7



Remarks: Particle size distribution by dry sieve was not carried out on sand fraction

The results reported relate only to the items tested or sampled.

Date - samples received: 20/04/2022	
Date - sample testing commenced : 24/05/2022	Checked / Approved by: 01/06/2022
Date - sample testing completed : 29/05/2022	Date Approved: KM
Approved Signatories: L Griffin LG (QA Technical & Lab Mngr) – K Mazerant KM (Lab Mngr)	

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CONCEPT SITE INVESTIGATIONS

PARTICLE SIZE DISTRIBUTION

TEST REPORT

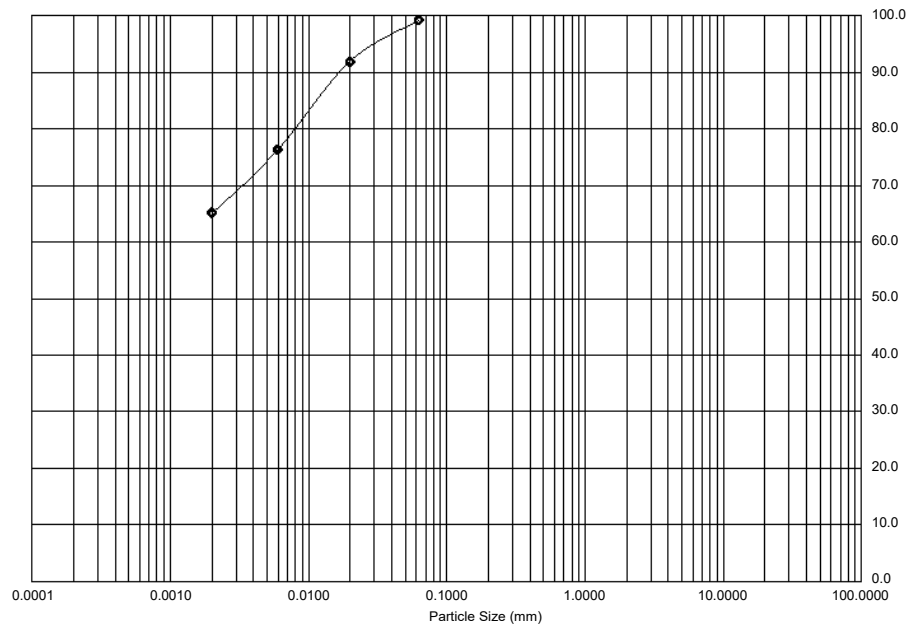
Site Name:	Euston Tower	Job Number:	22/3686
Client:	McGee	Date Reported:	01/06/2022
Borehole No:	Heading 2	Sample Type/No.	D Face S004A
		Top Depth:	0.10 m
		Bottom Depth:	m

Soil Description:

Brown silty CLAY

BS Test Sieves	
Size (mm)	% Passing
75.000	100
63.000	100
50.000	100
37.500	100
28.000	100
20.000	100
14.000	100
10.000	100
6.300	100
5.000	100
3.350	100
2.000	100
1.180	100
0.600	100
0.425	100
0.300	100
0.212	100
0.150	100
0.063	99

Sedimentation (*if applicable)	
Size (mm)	% Passing
0.020	92
0.006	76
0.002	65



CLAY	F	M	C	F	M	C	F	M	C	COBBLES
	SILT			SAND			GRAVEL			

Method/type:	Pipette
--------------	---------

BS 1377: Part 2: Clause 9.4: 1990 Determination of sedimentation by the pipette method.

Particle Proportions %	
Cobbles	
Gravel	
Sand	0.8
Silt	34.0
Clay	65.2



Remarks:

Particle size distribution by dry sieve was not carried out on sand fraction

The results reported relate only to the items tested or sampled.

Date - samples received:	20/04/2022
Date - sample testing commenced :	24/05/2022
Date - sample testing completed :	29/05/2022
Checked / Approved by:	01/06/2022
Date Approved:	KM
Approved Signatories: L Griffin LG (QA Technical & Lab Mngr) – K Mazerant KM (Lab Mngr)	

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CONCEPT SITE INVESTIGATIONS

PARTICLE SIZE DISTRIBUTION

TEST REPORT

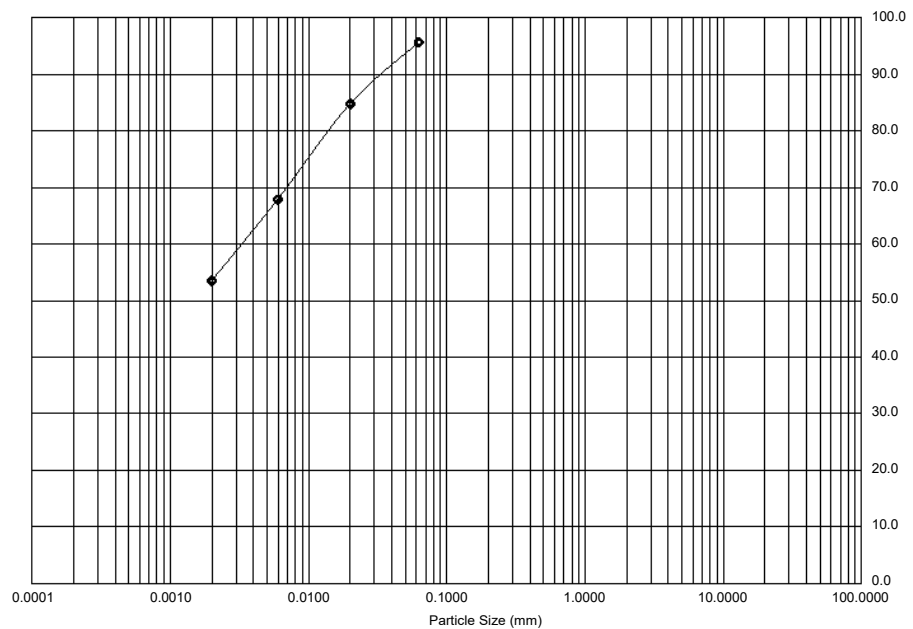
Site Name:	Euston Tower	Job Number:	22/3686
Client:	McGee	Date Reported:	01/06/2022
Borehole No:	Heading 2	Sample Type/No.	D Face S005A
		Top Depth:	1.00 m
		Bottom Depth:	m

Soil Description:

Greyish brown slightly micaceous slightly sandy silty CLAY with rare shell fragments and pockets of light grey silty fine sand

BS Test Sieves	
Size (mm)	% Passing
75.000	100
63.000	100
50.000	100
37.500	100
28.000	100
20.000	100
14.000	100
10.000	100
6.300	100
5.000	100
3.350	100
2.000	100
1.180	100
0.600	100
0.425	100
0.300	100
0.212	100
0.150	100
0.063	96

Sedimentation (*if applicable)	
Size (mm)	% Passing
0.020	85
0.006	68
0.002	53



CLAY	F	M	C	F	M	C	F	M	C	COBBLES
	SILT			SAND			GRAVEL			

Method/type:	Pipette
--------------	---------

BS 1377: Part 2: Clause 9.4: 1990 Determination of sedimentation by the pipette method.

Particle Proportions %	
Cobbles	
Gravel	
Sand	4.3
Silt	42.2
Clay	53.5



Remarks:

Particle size distribution by dry sieve was not carried out on sand fraction

The results reported relate only to the items tested or sampled.

Date - samples received:	20/04/2022
Date - sample testing commenced :	24/05/2022
Date - sample testing completed :	29/05/2022
Approved Signatories: L Griffin LG (QA Technical & Lab Mngr) – K Mazerant KM (Lab Mngr)	

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CONCEPT SITE INVESTIGATIONS

PARTICLE SIZE DISTRIBUTION

TEST REPORT

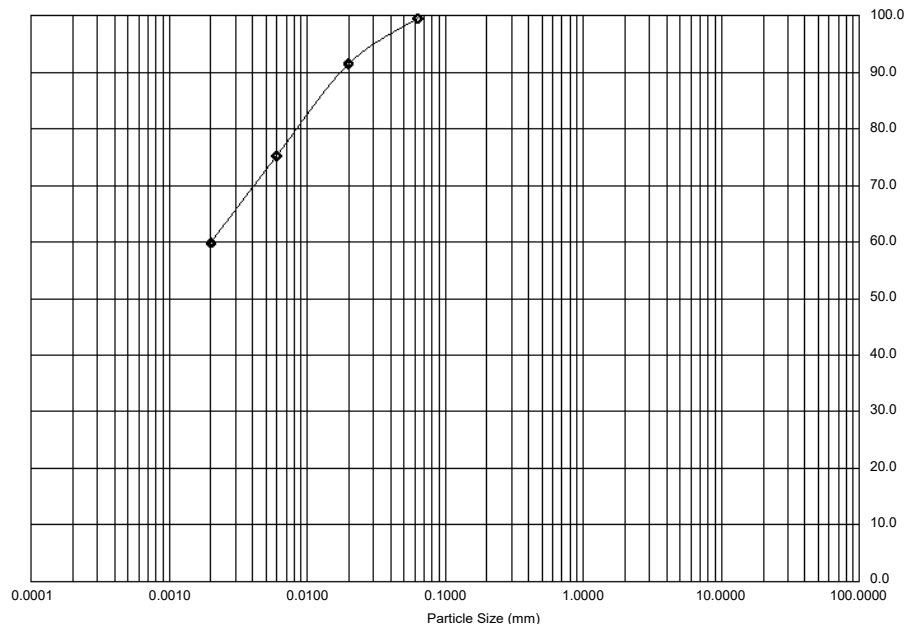
Site Name:	Euston Tower	Job Number:	22/3686
Client:	McGee	Date Reported:	01/06/2022
Borehole No:	Heading 2	Sample Type/No.	D Face S006A
		Top Depth:	2.00 m
		Bottom Depth:	m

Soil Description:

Greyish brown slightly micaceous silty CLAY

BS Test Sieves	
Size (mm)	% Passing
75.000	100
63.000	100
50.000	100
37.500	100
28.000	100
20.000	100
14.000	100
10.000	100
6.300	100
5.000	100
3.350	100
2.000	100
1.180	100
0.600	100
0.425	100
0.300	100
0.212	100
0.150	100
0.063	100

Sedimentation (*if applicable)	
Size (mm)	% Passing
0.020	91
0.006	75
0.002	60



CLAY	F	M	C	F	M	C	F	M	C	COBBLES
	SILT			SAND			GRAVEL			

Method/type:	Pipette
--------------	---------

BS 1377: Part 2: Clause 9.4: 1990 Determination of sedimentation by the pipette method.

Particle Proportions %	
Cobbles	
Gravel	
Sand	0.5
Silt	39.7
Clay	59.8



Remarks:

Particle size distribution by dry sieve was not carried out on sand fraction

The results reported relate only to the items tested or sampled.

Date - samples received:	20/04/2022
Date - sample testing commenced :	24/05/2022
Date - sample testing completed :	29/05/2022
Checked / Approved by:	01/06/2022
Date Approved:	KM
Approved Signatories: L Griffin LG (QA Technical & Lab Mngr) – K Mazerant KM (Lab Mngr)	

CONCEPT
47-49 Brunel Road, London W3 7XR
Tel: 02087401553
Email: lab@conceptconsultants.co.uk

CONCEPT SITE INVESTIGATIONS

PARTICLE SIZE DISTRIBUTION

TEST REPORT

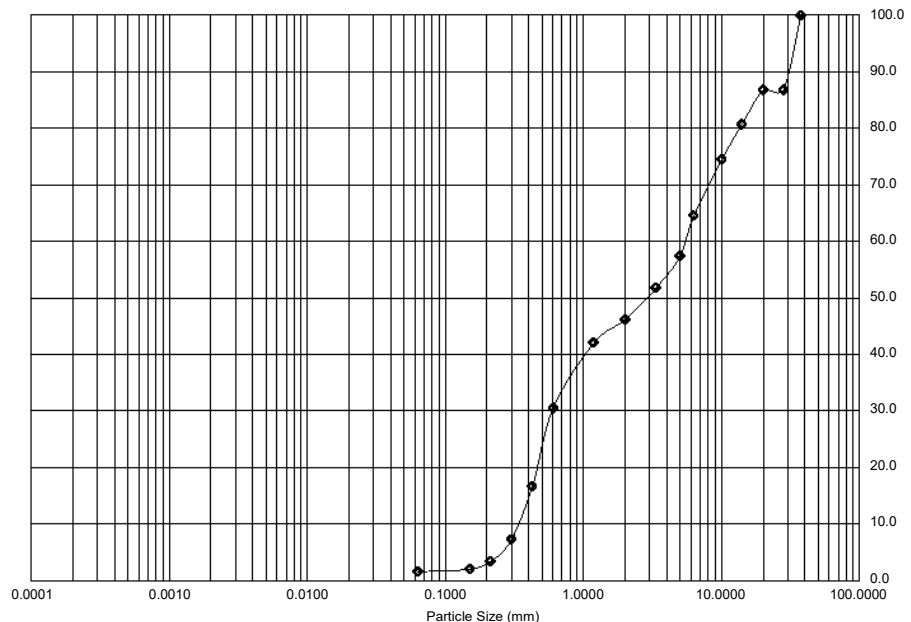
Site Name:	Euston Tower	Job Number:	22/3686
Client:	McGee	Date Reported:	01/06/2022
Borehole No:	Heading 2	Sample Type/No.	D Gravel spoil
		Top Depth:	2.00 m
		Bottom Depth:	m

Soil Description:

Brown slightly silty very sandy fine to coarse flint GRAVEL

BS Test Sieves	
Size (mm)	% Passing
75.000	100
63.000	100
50.000	100
37.500	100
28.000	87
20.000	87
14.000	81
10.000	74
6.300	65
5.000	57
3.350	52
2.000	46
1.180	42
0.600	30
0.425	17
0.300	7
0.212	3
0.150	2
0.063	2

Sedimentation (*if applicable)	
Size (mm)	% Passing
0.020	
0.006	
0.002	



CLAY	F	M	C	F	M	C	F	M	C	COBBLES
	SILT			SAND			GRAVEL			

Method/type:	Wet Sieving
--------------	-------------

BS 1377: Part 2: Clause 9.2: 1990 Determination of particle size distribution - wet sieving method.

Particle Proportions %	
Cobbles	
Gravel	53.8
Sand	44.6
Silt and Clay	1.6



Remarks:

Sample mass does not meet the requirements of BS1377: Part 2: 1990

The results reported relate only to the items tested or sampled.

Date - samples received:	20/04/2022
Date - sample testing commenced :	24/05/2022
Date - sample testing completed :	25/05/2022
Approved Signatories: L Griffin LG (QA Technical & Lab Mngr) – K Mazerant KM (Lab Mngr)	

CONCEPT
47-49 Brunel Road, London W3 7XR
Tel: 02087401553
Email: lab@conceptconsultants.co.uk

CONCEPT SITE INVESTIGATIONS

PARTICLE SIZE DISTRIBUTION

TEST REPORT

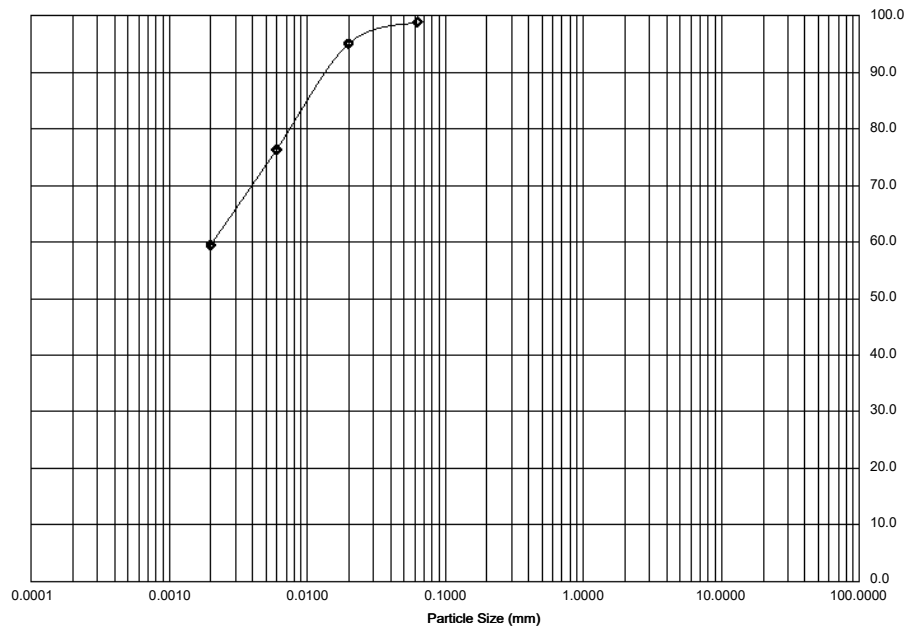
Site Name:	Euston Tower	Job Number:	22/3686
Client:	McGee	Date Reported:	15/06/2022
Borehole No:	Heading 3	Sample Type/No.	D Face S030A
		Top Depth:	0.20 m
		Bottom Depth:	m

Soil Description:

Brownish grey silty CLAY with rare pockets of silty fine sand and fine flint gravel

BS Test Sieves	
Size (mm)	% Passing
75.000	100
63.000	100
50.000	100
37.500	100
28.000	100
20.000	100
14.000	100
10.000	100
6.300	100
5.000	100
3.350	100
2.000	100
1.180	100
0.600	100
0.425	100
0.300	100
0.212	100
0.150	100
0.063	99

Sedimentation (*if applicable)	
Size (mm)	% Passing
0.020	95
0.006	76
0.002	59



CLAY	F	M	C	F	M	C	F	M	C	COBBLES
	SILT			SAND			GRAVEL			

Method/type:	Pipette
--------------	---------

BS 1377: Part 2: Clause 9.4: 1990 Determination of sedimentation by the pipette method.

Particle Proportions %	
Cobbles	
Gravel	
Sand	1.1
Silt	39.5
Clay	59.4



Remarks: Particle size distribution by dry sieve was not carried out on sand fraction

The results reported relate only to the items tested or sampled.

Date - samples received:	25/05/2022
Date - sample testing commenced :	06/06/2022
Date - sample testing completed :	13/06/2022
Approved Signatories: L Griffin LG (QA Technical & Lab Mngr) – K Mazerant KM (Lab Mngr)	

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47-49 Brunel Road, London W3 7XR
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CONCEPT SITE INVESTIGATIONS

PARTICLE SIZE DISTRIBUTION

TEST REPORT

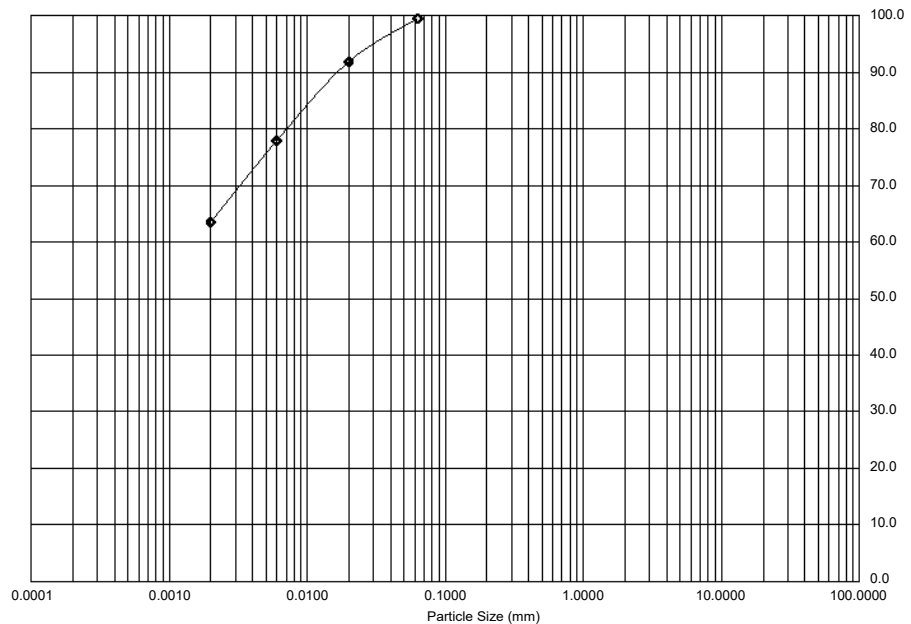
Site Name:	Euston Tower	Job Number:	22/3686
Client:	McGee	Date Reported:	15/06/2022
Borehole No:	Heading 3	Sample Type/No.	D Face S031A
		Top Depth:	1.05 m
		Bottom Depth:	m

Soil Description:

Brownish grey slightly micaceous silty CLAY

BS Test Sieves	
Size (mm)	% Passing
75.000	100
63.000	100
50.000	100
37.500	100
28.000	100
20.000	100
14.000	100
10.000	100
6.300	100
5.000	100
3.350	100
2.000	100
1.180	100
0.600	100
0.425	100
0.300	100
0.212	100
0.150	100
0.063	99

Sedimentation (*if applicable)	
Size (mm)	% Passing
0.020	92
0.006	78
0.002	63



CLAY	F	M	C	F	M	C	F	M	C	COBBLES
	SILT			SAND			GRAVEL			

Method/type:	Pipette
--------------	---------

BS 1377: Part 2: Clause 9.4: 1990 Determination of sedimentation by the pipette method.

Particle Proportions %	
Cobbles	
Gravel	
Sand	0.5
Silt	36.0
Clay	63.5



Remarks:

Particle size distribution by dry sieve was not carried out on sand fraction

The results reported relate only to the items tested or sampled.

Date - samples received:	25/05/2022
Date - sample testing commenced :	06/06/2022
Date - sample testing completed :	13/06/2022
Approved Signatories: L Griffin LG (QA Technical & Lab Mngr) – K Mazerant KM (Lab Mngr)	

CONCEPT
47-49 Brunel Road, London W3 7XR
Tel: 02087401553
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CONCEPT SITE INVESTIGATIONS

PARTICLE SIZE DISTRIBUTION

TEST REPORT

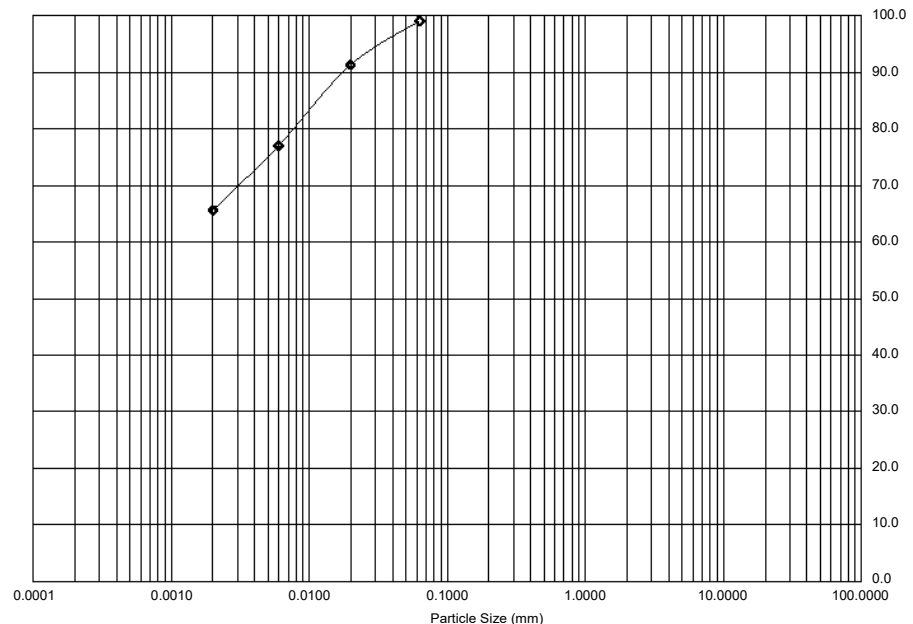
Site Name:	Euston Tower	Job Number:	22/3686
Client:	McGee	Date Reported:	15/06/2022
Borehole No:	Heading 3	Sample Type/No.	D Face S032A
		Top Depth:	1.95 m
		Bottom Depth:	m

Soil Description:

Brownish grey slightly micaceous silty CLAY with rare pockets of light grey silt

BS Test Sieves	
Size (mm)	% Passing
75.000	100
63.000	100
50.000	100
37.500	100
28.000	100
20.000	100
14.000	100
10.000	100
6.300	100
5.000	100
3.350	100
2.000	100
1.180	100
0.600	100
0.425	100
0.300	100
0.212	100
0.150	100
0.063	99

Sedimentation (*if applicable)	
Size (mm)	% Passing
0.020	91
0.006	77
0.002	66



CLAY	F	M	C	F	M	C	F	M	C	COBBLES
	SILT			SAND			GRAVEL			

Method/type:	Pipette
--------------	---------

BS 1377: Part 2: Clause 9.4: 1990 Determination of sedimentation by the pipette method.

Particle Proportions %	
Cobbles	
Gravel	
Sand	1.0
Silt	33.5
Clay	65.5



Remarks:

Particle size distribution by dry sieve was not carried out on sand fraction

The results reported relate only to the items tested or sampled.

Date - samples received:	25/05/2022
Date - sample testing commenced :	06/06/2022
Date - sample testing completed :	13/06/2022
Checked / Approved by:	KM
Date Approved:	15/06/2022
Approved Signatories: L Griffin LG (QA Technical & Lab Mngr) – K Mazerant KM (Lab Mngr)	

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Analytical Report Number : 22-57065

Replaces Analytical Report Number: 22-57065, issue no. 2
 Client references/information amended.

Project / Site name:	Euston Tower	Samples received on:	09/05/2022
Your job number:	22 3686	Samples instructed on/ Analysis started on:	09/05/2022
Your order number:	L2800	Analysis completed by:	17/05/2022
Report Issue Number:	3	Report issued on:	17/05/2022
Samples Analysed:	5 soil samples		

Signed:

Joanna Wawrzeczko
 Reporting Specialist
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: 22-57065
Project / Site name: Euston Tower
Your Order No: L2800

Lab Sample Number				2268489	2268490	2268491	2268492	2268493
Sample Reference				Heading 1	Heading 1	Heading 2	Heading 2	Heading 2
Sample Number				Face S001A	Face S003A	Face S004A	Face S006A	Gravel spoil S007
Depth (m)				0.15	1.65	0.10	2.00	2.00
Date Sampled				09/05/2022	09/05/2022	09/05/2022	09/05/2022	09/05/2022
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	17	17	18	17	4.5
Total mass of sample received	kg	0.001	NONE	0.2	0.2	0.2	0.2	0.4

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.2	8.3	8.6	8.2	9
Total Sulphate as SO ₄	%	0.005	MCERTS	0.154	0.101	0.014	0.113	-
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.94	0.47	0.06	0.67	0.1
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	938	470	60.4	671	99.5
Water Soluble Chloride (2:1) (leachate equivalent)	mg/l	0.5	MCERTS	73	47	4.5	40	4.5
Total Sulphur	%	0.005	MCERTS	0.407	0.289	0.011	0.35	-
Water Soluble Nitrate (2:1) as N (leachate equivalent)	mg/l	2	NONE	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0

Heavy Metals / Metalloids

Magnesium (water soluble)	mg/kg	5	NONE	69	56	8.2	77	< 5.0
Magnesium (leachate equivalent)	mg/l	2.5	NONE	34	28	4.1	39	< 2.5

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number : 22-57065

Project / Site name: Euston Tower

* 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 *
2268489	Heading 1	Face S001A	0.15	Grey clay.
2268490	Heading 1	Face S003A	1.65	Grey clay.
2268491	Heading 2	Face S004A	0.1	Brown clay.
2268492	Heading 2	Face S006A	2	Grey clay.
2268493	Heading 2	Gravel spoil S00	2	Brown sand with gravel.

Analytical Report Number : 22-57065

Project / Site name: Euston Tower

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
Magnesium, water soluble, in soil	Determination of water soluble magnesium by extraction with water followed by ICP-OES.	In-house method based on TRL 447	L038-PL	D	NONE
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
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 Sulphate in soil as %	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total Sulphur in soil as %	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	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
Water Soluble Nitrate (2:1) as N in soil	Determination of nitrate by reaction with sodium salicylate and colorimetry.	In-house method based on Examination of Water and Wastewater & Polish Standard Method PN-82/C-04579.08, 2:1 extraction.	L078-PL	W	NONE
Chloride, water soluble, in soil	Determination of Chloride colorimetrically by discrete analyser.	In house method.	L082-PL	D	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' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' 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.

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.

Lynn Griffin
Concept Site Investigations
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Warple Way
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Analytical Report Number : 22-63057

Replaces Analytical Report Number: 22-63057, issue no. 1
Client sampling date amended.

Project / Site name:	Euston Tower	Samples received on:	07/06/2022
Your job number:	22 3686	Samples instructed on/ Analysis started on:	07/06/2022
Your order number:	L2825	Analysis completed by:	15/06/2022
Report Issue Number:	2	Report issued on:	15/06/2022
Samples Analysed:	2 soil samples		

Signed:

Martyna Langer
Martyna Langer
Junior Reporting Specialist
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

Excel copies of reports are only valid when accompanied by this PDF certificate.

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: 22-63057
Project / Site name: Euston Tower
Your Order No: L2825

Lab Sample Number				2303222	2303223
Sample Reference				Heading 3	Heading 3
Sample Number				Face S030A	Face S032A
Depth (m)				0.20	1.95
Date Sampled				06/06/2022	06/06/2022
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	22	19
Total mass of sample received	kg	0.001	NONE	0.2	0.3

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.9	8.1
Total Sulphate as SO ₄	%	0.005	MCERTS	0.141	0.184
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.56	0.75
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	562	746
Water Soluble Chloride (2:1) (leachate equivalent)	mg/l	0.5	MCERTS	39	39
Total Sulphur	%	0.005	MCERTS	0.252	0.353
Water Soluble Nitrate (2:1) as N (leachate equivalent)	mg/l	2	NONE	< 2.0	< 2.0

Heavy Metals / Metalloids

Magnesium (water soluble)	mg/kg	5	NONE	6.6	67
Magnesium (leachate equivalent)	mg/l	2.5	NONE	3.3	33

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number : 22-63057

Project / Site name: Euston Tower

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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 *
2303222	Heading 3	Face S030A	0.2	Brown clay and loam.
2303223	Heading 3	Face S032A	1.95	Brown clay.

Analytical Report Number : 22-63057

Project / Site name: Euston Tower

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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Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
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 Sulphate in soil as %	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total Sulphur in soil as %	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	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
Water Soluble Nitrate (2:1) as N in soil	Determination of nitrate by reaction with sodium salicylate and colorimetry.	In-house method based on Examination of Water and Wastewater & Polish Standard Method PN-82/C-04579.08, 2:1 extraction.	L078-PL	W	NONE
Chloride, water soluble, in soil	Determination of Chloride colorimetrically by discrete analyser.	In house method.	L082-PL	D	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' analysis have been carried out in our laboratory in the United Kingdom.



For method numbers ending in 'PL' 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.

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.



CONCEPT SITE INVESTIGATIONS				Summary Test Report - Undrained Triaxial Compression (Single-Stage) BS 1377 : Part 7: 1990 Clause 8						Date Reported:		16/06/2022	
Site Location: Euston Tower				Client: McGee									
BH No.	Sample Type	Sample No	Depth top (m)	Description	Cell pressure kN/m2	Strain at failure %	Bulk Density Mg/m3	Dry Density Mg/m3	NMC %	Max Dev. Stress kPa	Shear Strength kPa	Mode of failure/Comments	
Heading 1	UT100	Face U1/5020	0.35	Very stiff, extremely closely fissured dark brown slightly micaceous silty CLAY with occasional pockets of light brown silty sand (<30mm)	75	3.8	2.00	1.58	27	245	123	Brittle	
Heading 1	UT100	Face U25021	1.45	Very stiff, extremely closely fissured dark brown slightly micaceous silty CLAY with rare pockets of light brown silty sand (<25mm)	100	4.6	1.99	1.58	26	168	84	Brittle	
Heading 2	UT100	Face U3/5022	0.15	Very stiff, dark brown slightly micaceous silty CLAY	75	4.0	1.97	1.54	28	126	63	Brittle	
Heading 2	UT100	Face U4/5023	1.50	Very stiff, extremely closely fissured dark brown slightly micaceous silty CLAY with 1 No pocket (<65mm) of claystone fragments (<20mm) at 1.71m	100	4.1	2.00	1.58	27	242	121	Brittle	

Remarks: The results reported relate only to the items tested or sampled.

Date - samples received: 20/04/2022				CONCEPT 47-49 Brunel Road, London W3 7XR Tel: 02087401553 Email: Lab@conceptconsultants.co.uk				 	
Date - sample testing commenced: 27/05/2022		Checked/Approved by: KM							
Date - sample testing completed: 27/05/2022		Date Approved: 01/06/2022							
Approved Signatories: L Griffin LG (QA Technical & Lab Mngr) – K Mazerant KM (Lab Mngr)									

CONCEPT SITE INVESTIGATIONS				Summary Test Report - Undrained Triaxial Compression (Single-Stage) BS 1377 : Part 7: 1990 Clause 8						Date Reported:		16/06/2022	
Site Location: Euston Tower				Client: McGee									
BH No.	Sample Type	Sample No	Depth top (m)	Description	Cell pressure kN/m2	Strain at failure %	Bulk Density Mg/m3	Dry Density Mg/m3	NMC %	Max Dev. Stress kPa	Shear Strength kPa	Mode of failure/Comments	
Heading 3	UT100	RHS OF PILE C2 S040	0.25	Stiff to very stiff, dark brown slightly micaceous silty CLAY with white flecks	75	7.6	1.98	1.54	28	168	84	Brittle	
Heading 3	UT100	LHS OF PILE C2 S041	1.55	Very stiff, extremely closely fissured dark brown slightly micaceous silty CLAY with rare shell fragments (<1mm)	100	6.4	1.96	1.52	29	215	108	Brittle	
Heading 3	UT100	LHS OF PILE R1 S042	0.10	Very stiff, dark brown mottled dark grey slightly micaceous silty CLAY with rare shell fragments (<1mm)	75	6.6	1.92	1.49	29	124	62	Brittle	
Heading 3	UT100	LHS OF PILE R1 S043	1.40	Very stiff, dark brown slightly micaceous silty CLAY with rare shell fragments (<1mm) and rare pyrite nodules (<12mm)	100	2.8	1.98	1.55	28	186	93	Brittle	

Remarks: The results reported relate only to the items tested or sampled.

Date - samples received: 25/05/2022		CONCEPT 47-49 Brunel Road, London W3 7XR Tel: 02087401553 Email: Lab@conceptconsultants.co.uk		 
Date - sample testing commenced: 09/06/2022	Checked/Approved by: KM			
Date - sample testing completed: 09/06/2022	Date Approved: 15/06/2022			
Approved Signatories: L Griffin LG (QA Technical & Lab Mngr) – K Mazerant KM (Lab Mngr)				

TEST CERTIFICATE

DETERMINATION OF THE UNDRAINED SHEAR STRENGTH IN TRIAXIAL COMPRESSION WITHOUT MEASUREMENT OF PORE PRESSURE

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

Tested in Accordance with: BS 1377-7: 1990: Clause 8

Client: Concept Site Investigations
Client Address: Unit 8, Warple Mews,
Warple Way, London
W3 0RF
Contact: Lynn Griffin
Site Address: Euston Tower

Client Reference: 22 3686
Job Number: 22-60188
Date Sampled: Not Given
Date Received: 18/05/2022
Date Tested: 03/06/2022
Sampled By: Not Given

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

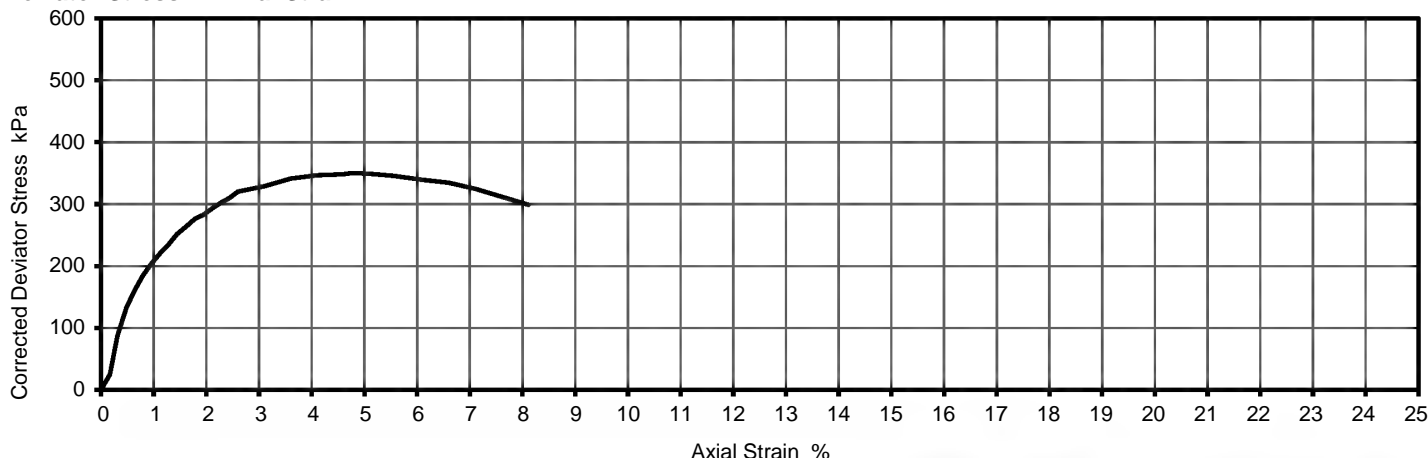
Test Results:

Laboratory Reference: 2286735
Hole No.: Heading 1
Sample Reference: Face S001
Sample Description: Greyish brown CLAY
Sample Preparation: Sample prepared in accordance with BS 1377-1:2016 Clause 9.1.1.

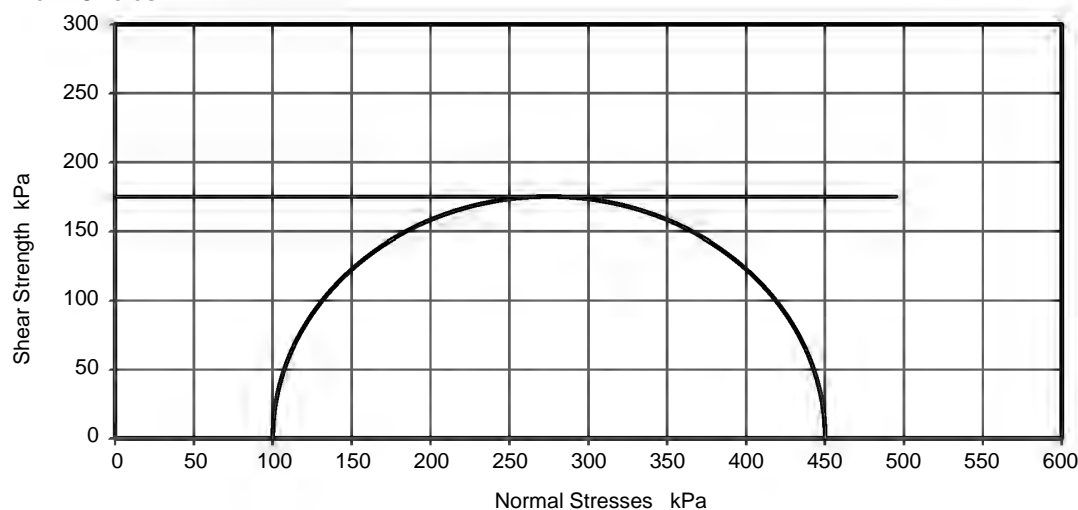
Depth Top [m]: 0.15
Depth Base [m]: Not Given
Sample Type: U

Test Number	1	Rate of Strain	2.00	%/min
Length	77.05	Cell Pressure	100	kPa
Diameter	37.64	Axial Strain at failure	4.8	%
Bulk Density	2.01	Deviator Stress, ($\sigma_1 - \sigma_3$) _f	350	kPa
Moisture Content	26	Undrained Shear Strength, c_u	175	kPa $\frac{1}{2}(\sigma_1 - \sigma_3)_f$
Dry Density	1.59	Mode of Failure	Brittle	
Membrane Correction	0.73	Membrane thickness	0.21	mm

Deviator Stress v Axial Strain



Mohr Circles



Position within sample



Note: Deviator stress corrected for area change and membrane effects. Mohr circles and their interpretation is not covered by BS1377.
This is provided for information only.

Remarks:

Signed:

Anna Dudzinska

Anna Dudzinska
PL Deputy Head of Reporting Team
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.

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Contact: Lynn Griffin
Site Address: Euston Tower

Client Reference: 22 3686
Job Number: 22-60188
Date Sampled: Not Given
Date Received: 18/05/2022
Date Tested: 03/06/2022
Sampled By: Not Given

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

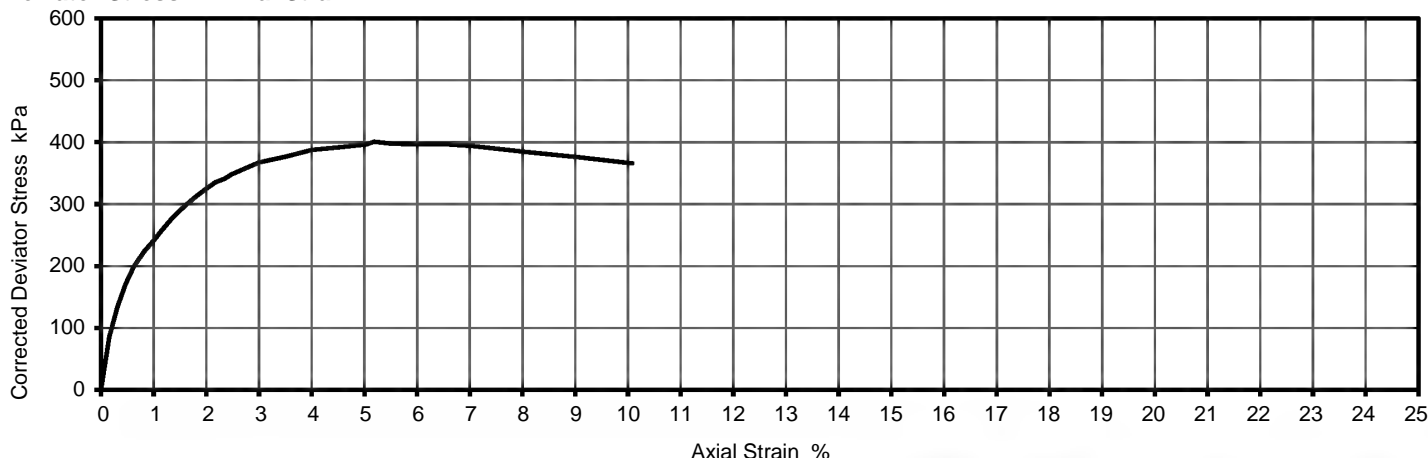
Test Results:

Laboratory Reference: 2286735_1
Hole No.: Heading 1
Sample Reference: Face S001
Sample Description: Greyish brown CLAY
Sample Preparation: Sample prepared in accordance with BS 1377-1:2016 Clause 9.1.1.

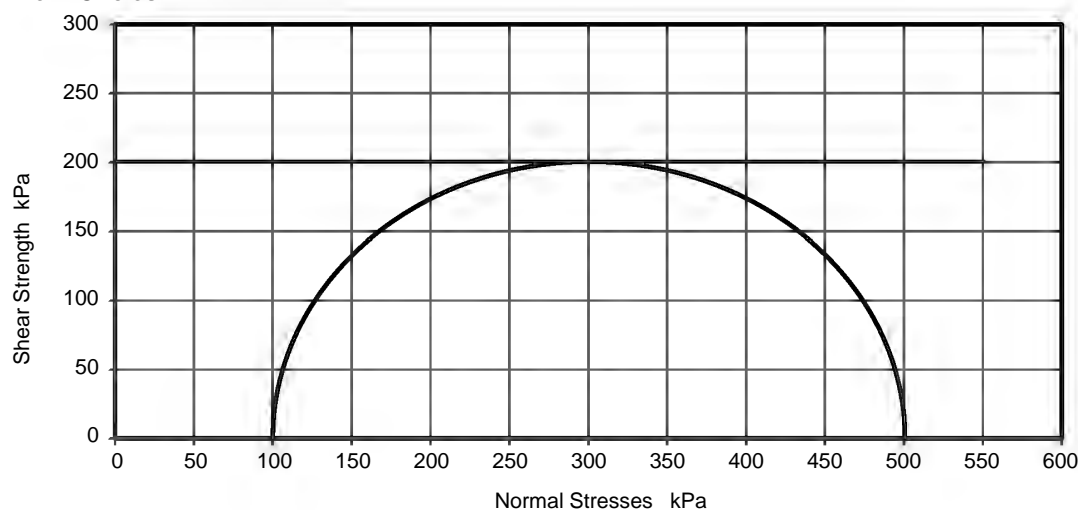
Depth Top [m]: 0.15
Depth Base [m]: Not Given
Sample Type: U

Test Number	1	Rate of Strain	2.00	%/min
Length	76.96	Cell Pressure	100	kPa
Diameter	37.47	Axial Strain at failure	5.2	%
Bulk Density	2.04	Deviator Stress, $(\sigma_1 - \sigma_3)_f$	401	kPa
Moisture Content	26	Undrained Shear Strength, c_u	200	kPa $\frac{1}{2}(\sigma_1 - \sigma_3)_f$
Dry Density	1.62	Mode of Failure	Brittle	
Membrane Correction	0.81	Membrane thickness	0.21	mm

Deviator Stress v Axial Strain



Mohr Circles



Position within sample



Note: Deviator stress corrected for area change and membrane effects. Mohr circles and their interpretation is not covered by BS1377.
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Remarks:

Signed:

Anna Dudzinska
Anna

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Contact: Lynn Griffin
Site Address: Euston Tower

Client Reference: 22 3686
Job Number: 22-60188
Date Sampled: Not Given
Date Received: 18/05/2022
Date Tested: 03/06/2022
Sampled By: Not Given

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

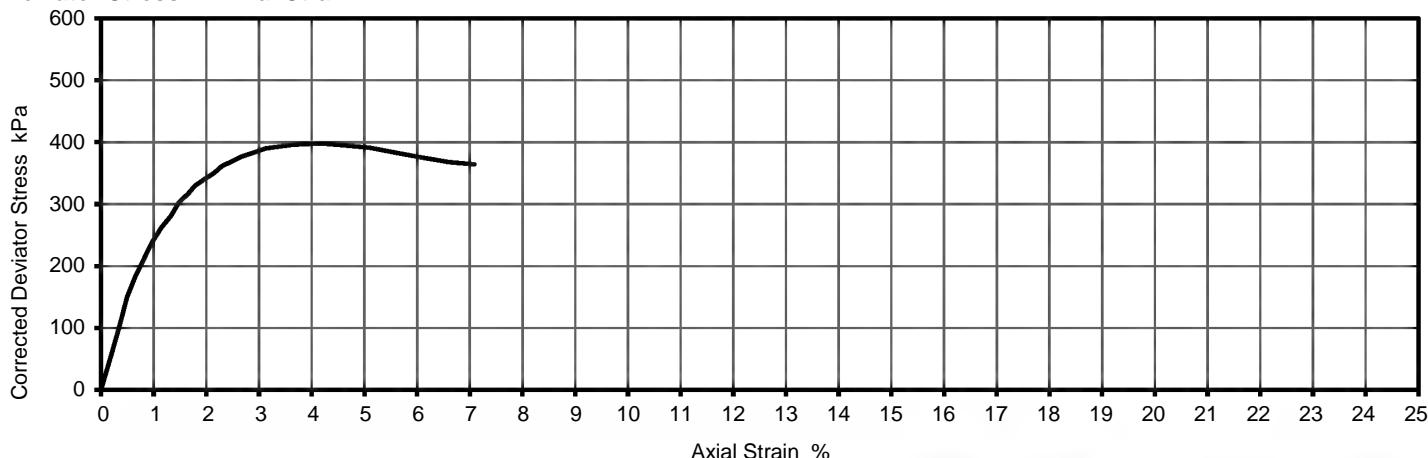
Test Results:

Laboratory Reference: 2286736
Hole No.: Heading 1
Sample Reference: Face S002
Sample Description: Greyish brown CLAY
Sample Preparation: Sample prepared in accordance with BS 1377-1:2016 Clause 9.1.1.

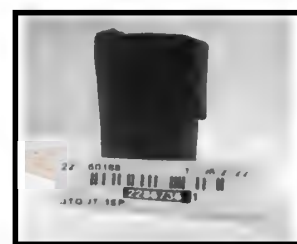
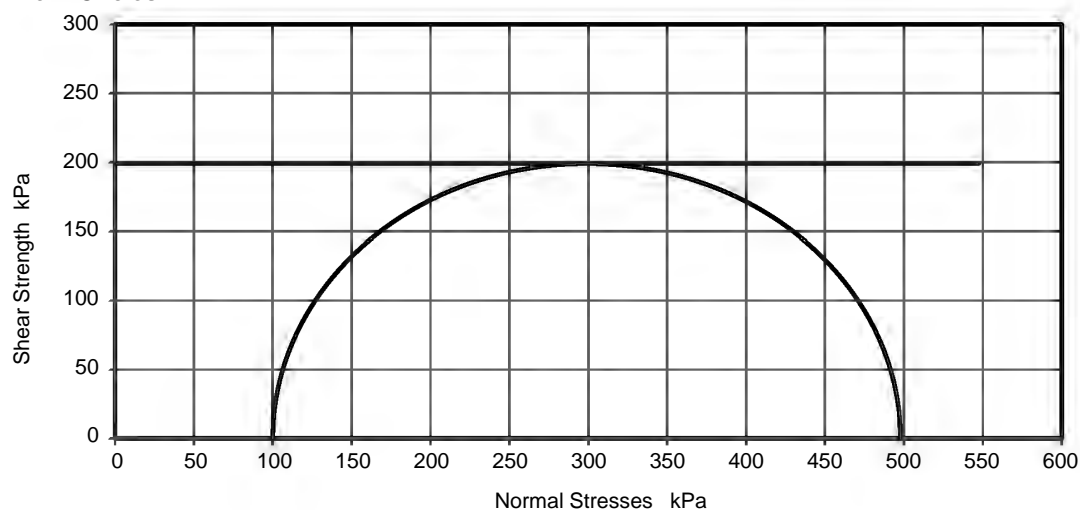
Depth Top [m]: 0.80
Depth Base [m]: Not Given
Sample Type: U

Test Number	1	Rate of Strain	2.00	%/min
Length	76.93	Cell Pressure	100	kPa
Diameter	37.62	Axial Strain at failure	4.1	%
Bulk Density	2.01	Deviator Stress, $(\sigma_1 - \sigma_3)_f$	398	kPa
Moisture Content	23	Undrained Shear Strength, c_u	199	kPa $\frac{1}{2}(\sigma_1 - \sigma_3)_f$
Dry Density	1.63	Mode of Failure	Brittle	
Membrane Correction	0.66	Membrane thickness	0.22	mm

Deviator Stress v Axial Strain



Mohr Circles



Position within sample



Note: Deviator stress corrected for area change and membrane effects. Mohr circles and their interpretation is not covered by BS1377.
This is provided for information only.

Remarks:

Signed:

Anna Dudzinska
Anna

Anna Dudzinska
PL Deputy Head of Reporting Team
for and on behalf of i2 Analytical Ltd

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Client Address: Unit 8, Warple Mews,
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W3 0RF
Contact: Lynn Griffin
Site Address: Euston Tower

Client Reference: 22 3686
Job Number: 22-60188
Date Sampled: Not Given
Date Received: 18/05/2022
Date Tested: 03/06/2022
Sampled By: Not Given

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

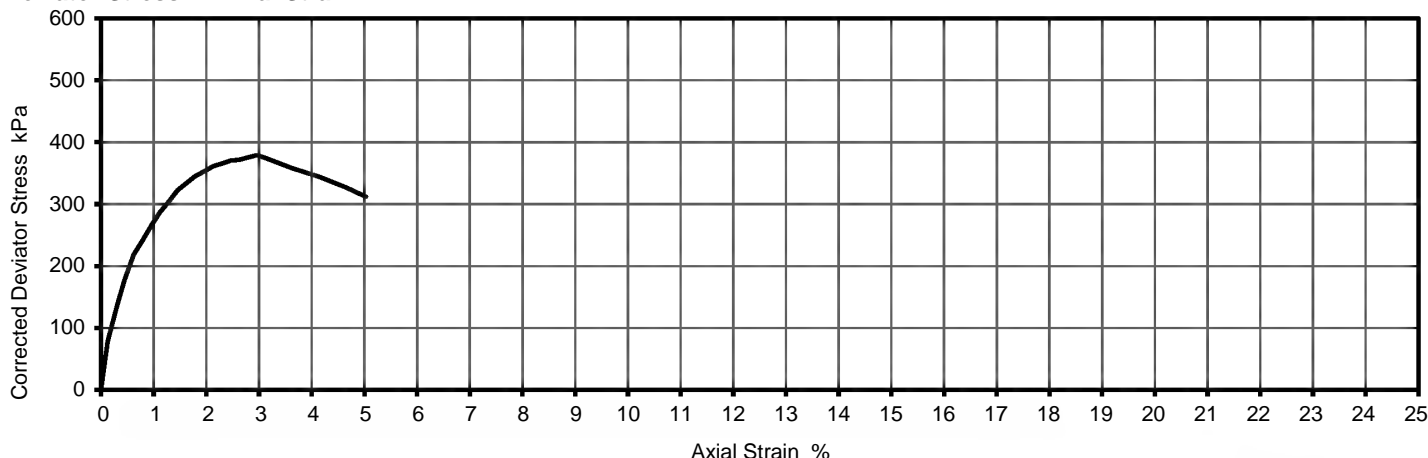
Test Results:

Laboratory Reference: 2286736_1
Hole No.: Heading 1
Sample Reference: Face S002
Sample Description: Greyish brown CLAY
Sample Preparation: Sample prepared in accordance with BS 1377-1:2016 Clause 9.1.1.

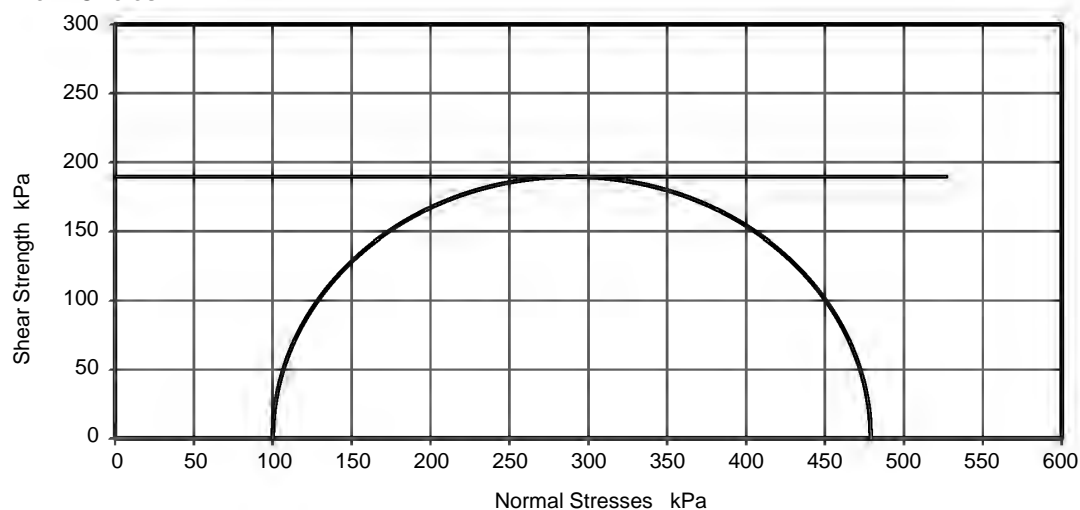
Depth Top [m]: 0.80
Depth Base [m]: Not Given
Sample Type: U

Test Number	1	Rate of Strain	2.00	%/min
Length	77.16	Cell Pressure	100	kPa
Diameter	37.68	Axial Strain at failure	3.0	%
Bulk Density	2.02	Deviator Stress, ($\sigma_1 - \sigma_3$) _f	379	kPa
Moisture Content	27	Undrained Shear Strength, c_u	189	kPa $\frac{1}{2}(\sigma_1 - \sigma_3)_f$
Dry Density	1.59	Mode of Failure	Brittle	
Membrane Correction	0.45	Membrane thickness	0.21	mm

Deviator Stress v Axial Strain



Mohr Circles



Position within sample



Note: Deviator stress corrected for area change and membrane effects. Mohr circles and their interpretation is not covered by BS1377.
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Contact: Lynn Griffin
Site Address: Euston Tower

Client Reference: 22 3686
Job Number: 22-60188
Date Sampled: Not Given
Date Received: 18/05/2022
Date Tested: 03/06/2022
Sampled By: Not Given

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

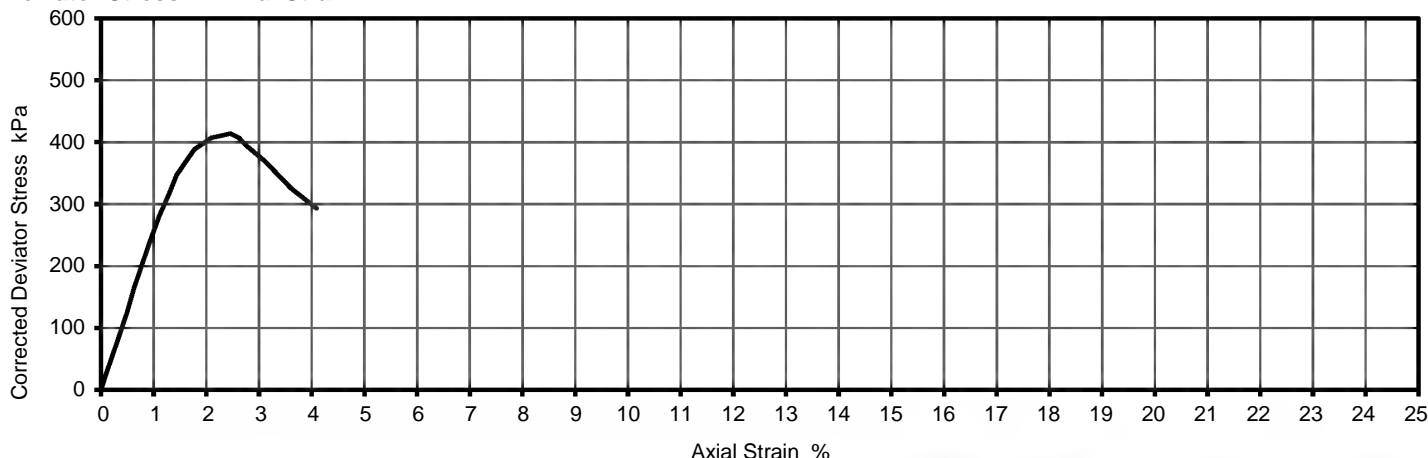
Test Results:

Laboratory Reference: 2286737
Hole No.: Heading 1
Sample Reference: Face S003
Sample Description: Greyish brown CLAY
Sample Preparation: Sample prepared in accordance with BS 1377-1:2016 Clause 9.1.1.

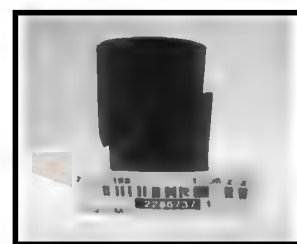
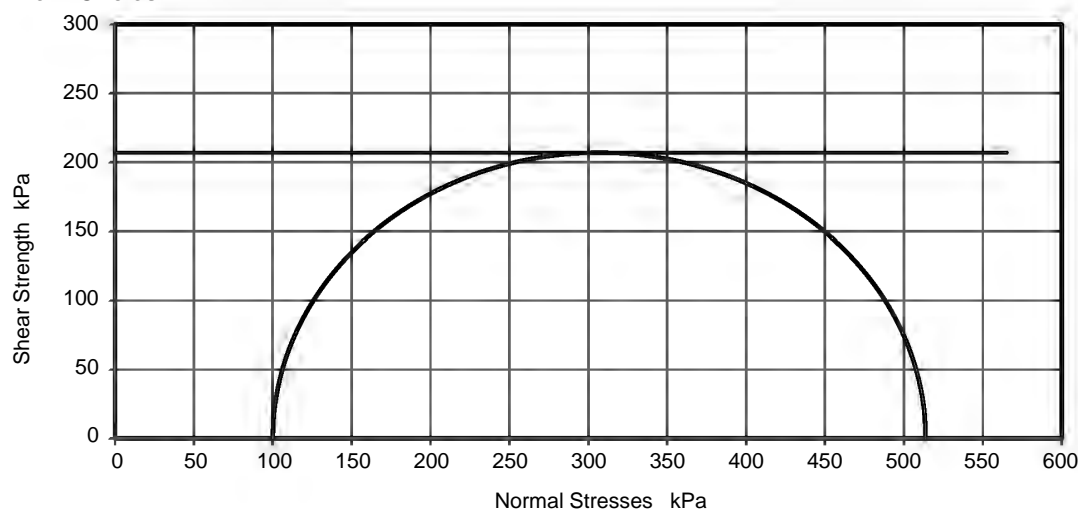
Depth Top [m]: 1.65
Depth Base [m]: Not Given
Sample Type: U

Test Number	1	Rate of Strain	2.00	%/min
Length	76.78	Cell Pressure	100	kPa
Diameter	37.58	Axial Strain at failure	2.4	%
Bulk Density	2.03	Deviator Stress, ($\sigma_1 - \sigma_3$) _f	414	kPa
Moisture Content	25	Undrained Shear Strength, c_u	207	kPa $\frac{1}{2}(\sigma_1 - \sigma_3)_f$
Dry Density	1.62	Mode of Failure	Brittle	
Membrane Correction	0.39	Membrane thickness	0.22	mm

Deviator Stress v Axial Strain



Mohr Circles



Position within sample



Note: Deviator stress corrected for area change and membrane effects. Mohr circles and their interpretation is not covered by BS1377.
This is provided for information only.

Remarks:

Signed:

Anna Dudzinska

Anna Dudzinska
PL Deputy Head of Reporting Team
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

DETERMINATION OF THE UNDRAINED SHEAR STRENGTH IN TRIAXIAL COMPRESSION WITHOUT MEASUREMENT OF PORE PRESSURE

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

Tested in Accordance with: BS 1377-7: 1990: Clause 8

Client: Concept Site Investigations
Client Address: Unit 8, Warple Mews,
Warple Way, London
W3 0RF
Contact: Lynn Griffin
Site Address: Euston Tower

Client Reference: 22 3686
Job Number: 22-60188
Date Sampled: Not Given
Date Received: 18/05/2022
Date Tested: 03/06/2022
Sampled By: Not Given

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

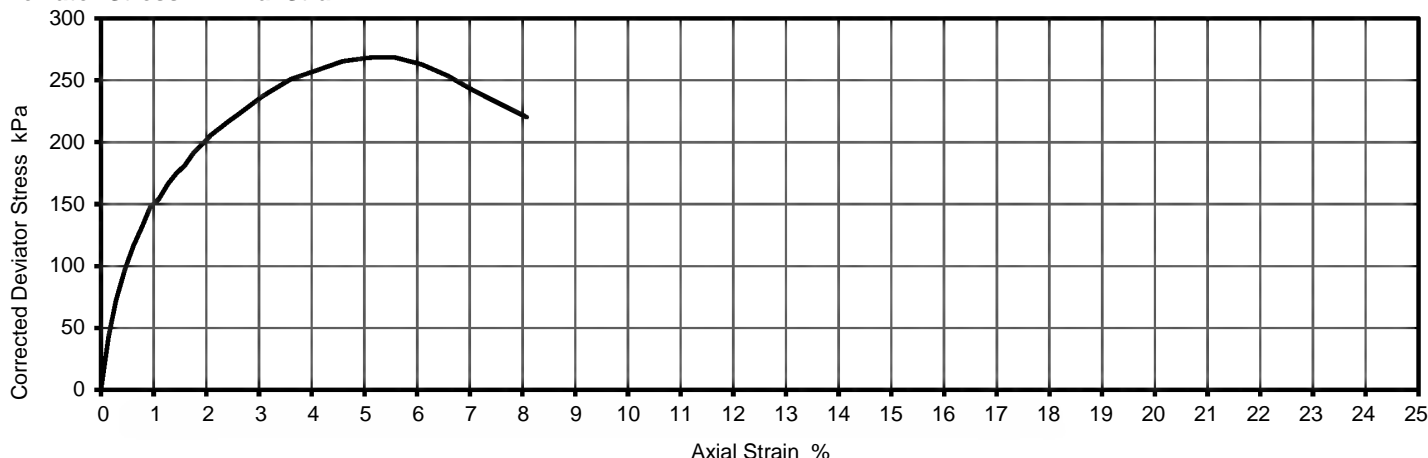
Test Results:

Laboratory Reference: 2286738
Hole No.: Heading 2
Sample Reference: Face S004
Sample Description: Yellowish brown CLAY
Sample Preparation: Sample prepared in accordance with BS 1377-1:2016 Clause 9.1.1.

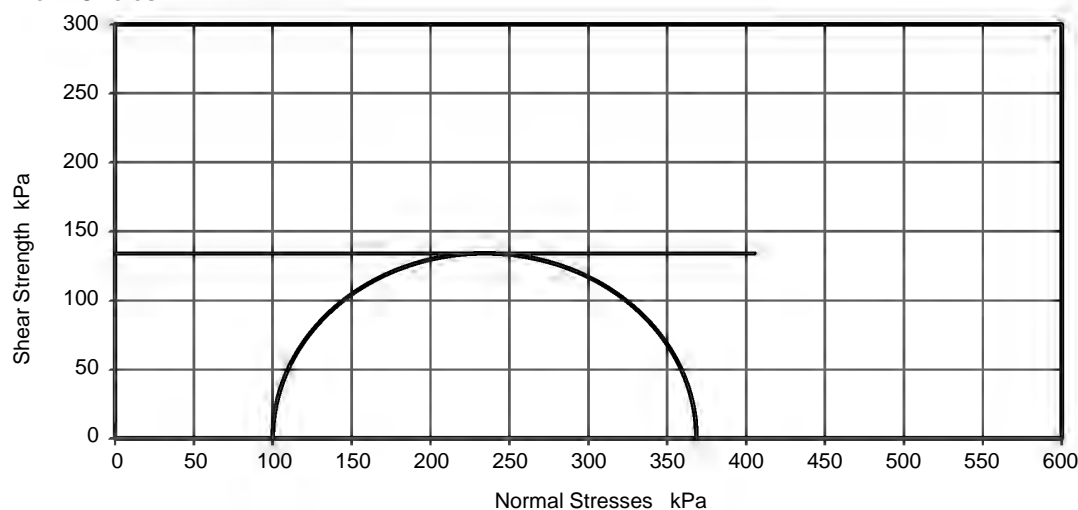
Depth Top [m]: 0.10
Depth Base [m]: Not Given
Sample Type: U

Test Number	1	Rate of Strain	2.00	%/min
Length	76.15	Cell Pressure	100	kPa
Diameter	37.44	Axial Strain at failure	5.3	%
Bulk Density	1.97	Deviator Stress, ($\sigma_1 - \sigma_3$) _f	269	kPa
Moisture Content	29	Undrained Shear Strength, c_u	134	kPa $\frac{1}{2}(\sigma_1 - \sigma_3)_f$
Dry Density	1.53	Mode of Failure	Brittle	
Membrane Correction	0.78	Membrane thickness	0.20	mm

Deviator Stress v Axial Strain



Mohr Circles



Position within sample



Note: Deviator stress corrected for area change and membrane effects. Mohr circles and their interpretation is not covered by BS1377.
This is provided for information only.

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Signed:

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Anna Dudzinska
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Contact: Lynn Griffin
Site Address: Euston Tower

Client Reference: 22 3686
Job Number: 22-60188
Date Sampled: Not Given
Date Received: 18/05/2022
Date Tested: 03/06/2022
Sampled By: Not Given

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

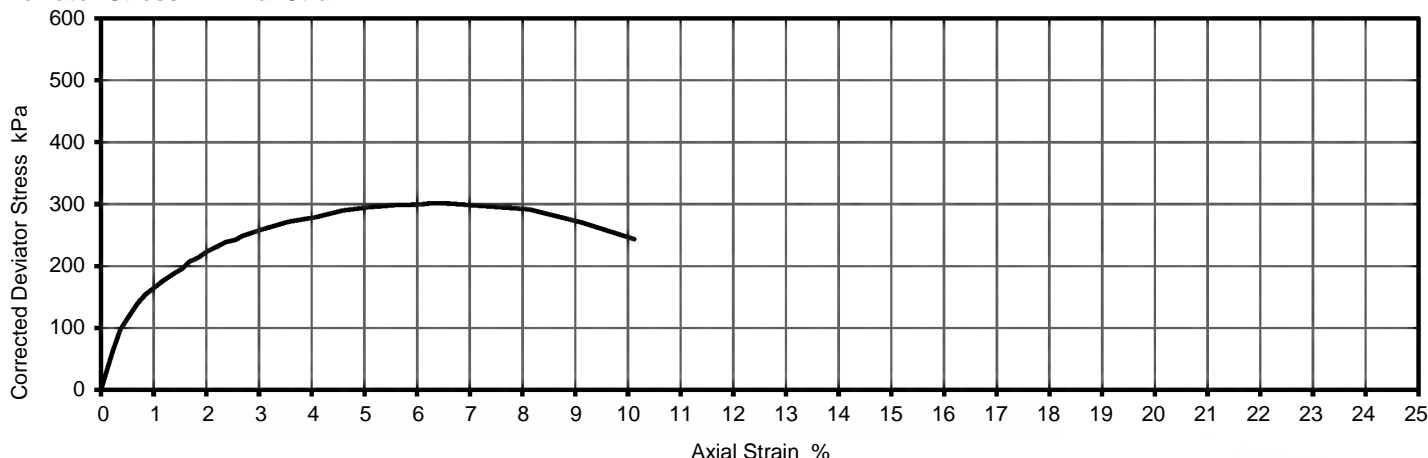
Test Results:

Laboratory Reference: 2286738_1
Hole No.: Heading 2
Sample Reference: Face S004
Sample Description: Yellowish brown CLAY
Sample Preparation: Sample prepared in accordance with BS 1377-1:2016 Clause 9.1.1.

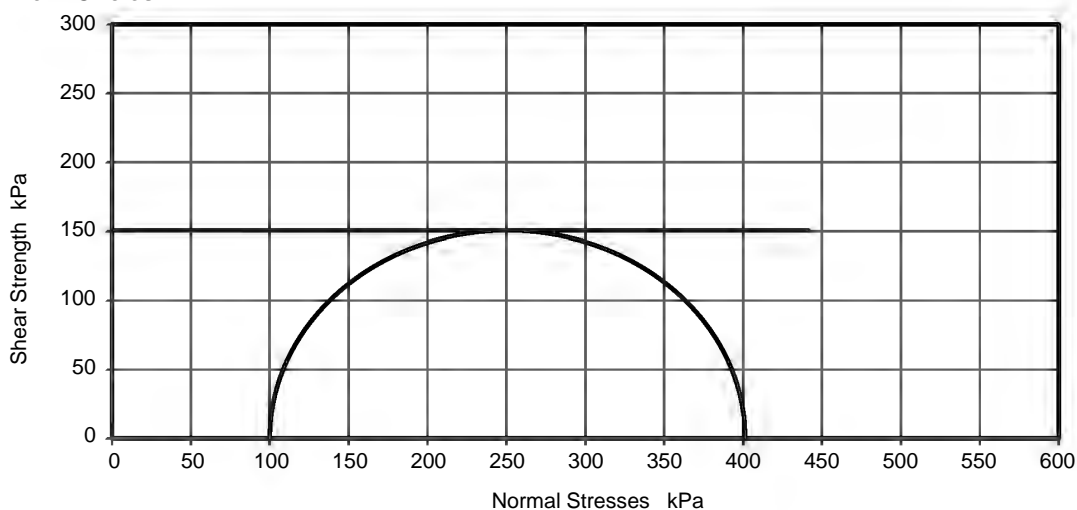
Depth Top [m]: 0.10
Depth Base [m]: Not Given
Sample Type: U

Test Number	1	Rate of Strain	2.00	%/min
Length	76.00	Cell Pressure	100	kPa
Diameter	37.34	Axial Strain at failure	6.3	%
Bulk Density	1.95	Deviator Stress, ($\sigma_1 - \sigma_3$) _f	301	kPa
Moisture Content	30	Undrained Shear Strength, c_u	151	kPa $\frac{1}{2}(\sigma_1 - \sigma_3)_f$
Dry Density	1.50	Mode of Failure	Brittle	
Membrane Correction	0.91	Membrane thickness	0.21	mm

Deviator Stress v Axial Strain



Mohr Circles



Position within sample



Note: Deviator stress corrected for area change and membrane effects. Mohr circles and their interpretation is not covered by BS1377.
This is provided for information only.

Remarks:

Signed:

Anna Dudzinska
Anna

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TEST CERTIFICATE

DETERMINATION OF THE UNDRAINED SHEAR STRENGTH IN TRIAXIAL COMPRESSION WITHOUT MEASUREMENT OF PORE PRESSURE

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Client Reference: 22 3686
Job Number: 22-60188
Date Sampled: Not Given
Date Received: 18/05/2022
Date Tested: 03/06/2022
Sampled By: Not Given

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

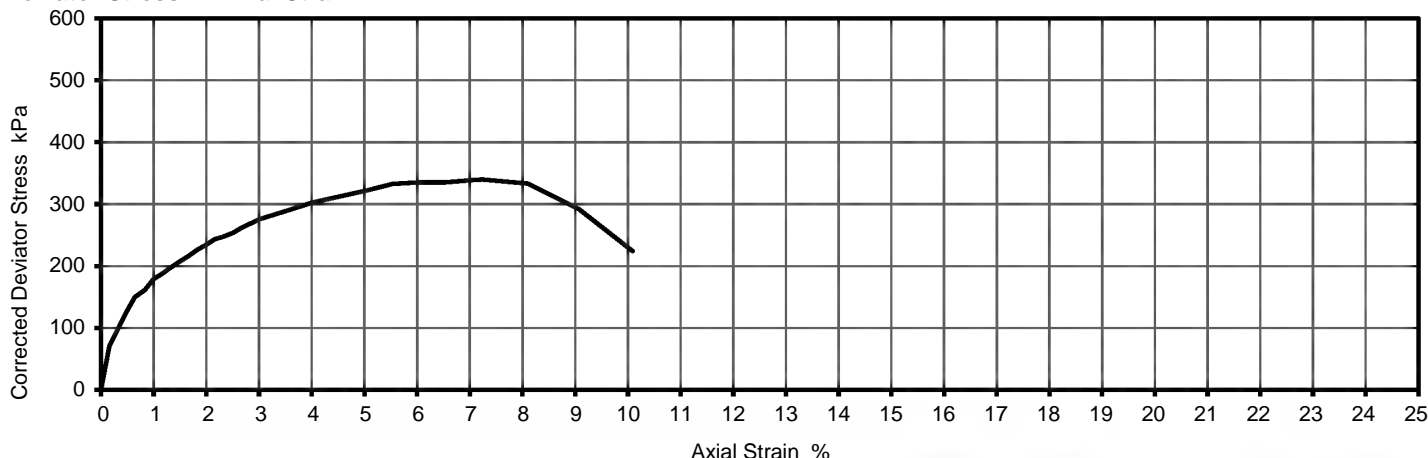
Test Results:

Laboratory Reference: 2286739
Hole No.: Heading 2
Sample Reference: Face S005
Sample Description: Greyish brown CLAY
Sample Preparation: Sample prepared in accordance with BS 1377-1:2016 Clause 9.1.1.

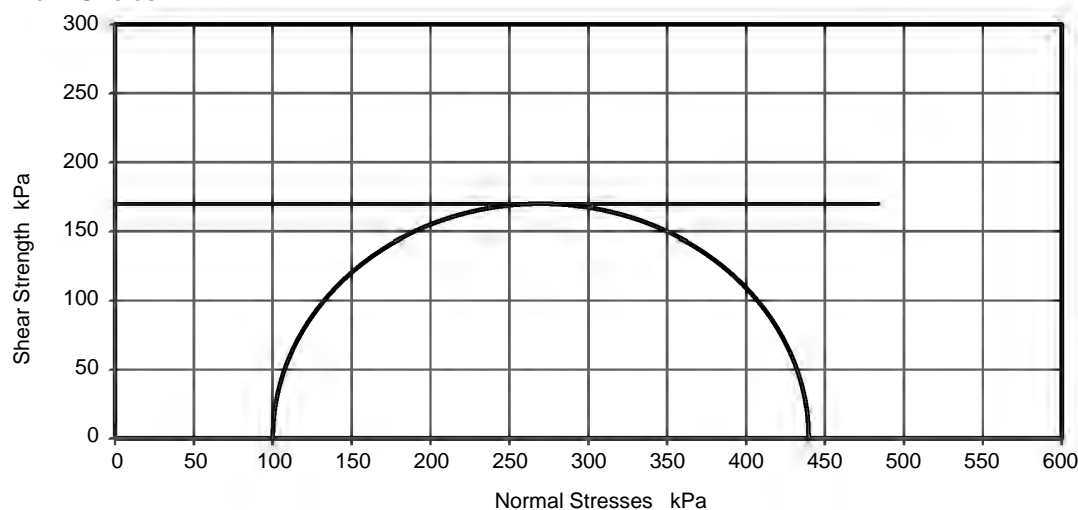
Depth Top [m]: 1.00
Depth Base [m]: Not Given
Sample Type: U

Test Number	1	Rate of Strain	2.00	%/min
Length	76.54	Cell Pressure	100	kPa
Diameter	36.10	Axial Strain at failure	7.2	%
Bulk Density	2.08	Deviator Stress, ($\sigma_1 - \sigma_3$) _f	340	kPa
Moisture Content	24	Undrained Shear Strength, c_u	170	kPa $\frac{1}{2}(\sigma_1 - \sigma_3)_f$
Dry Density	1.69	Mode of Failure	Brittle	
Membrane Correction	1.04	Membrane thickness	0.21	mm

Deviator Stress v Axial Strain



Mohr Circles



Position within sample



Note: Deviator stress corrected for area change and membrane effects. Mohr circles and their interpretation is not covered by BS1377.
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Remarks:

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Contact: Lynn Griffin
Site Address: Euston Tower

Client Reference: 22 3686
Job Number: 22-60188
Date Sampled: Not Given
Date Received: 18/05/2022
Date Tested: 03/06/2022
Sampled By: Not Given

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

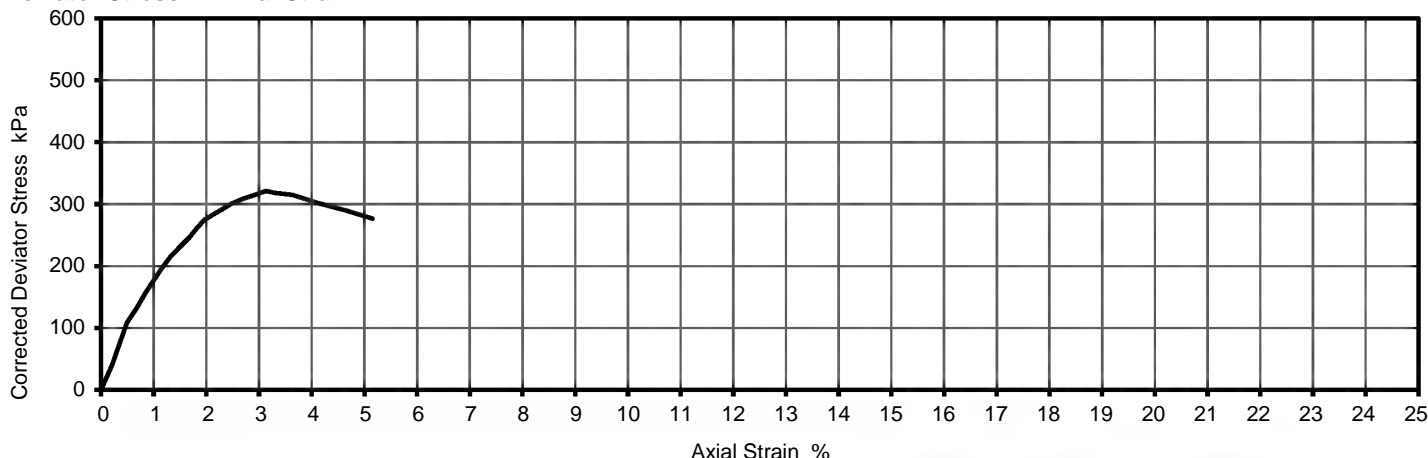
Test Results:

Laboratory Reference: 2286740
Hole No.: Heading 2
Sample Reference: Face S006
Sample Description: Greyish brown CLAY
Sample Preparation: Sample prepared in accordance with BS 1377-1:2016 Clause 9.1.1.

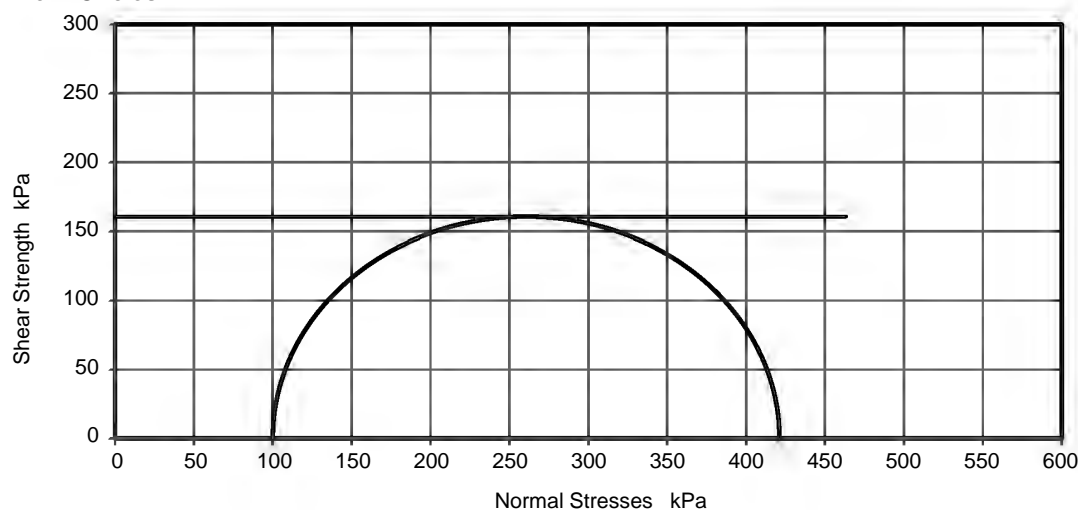
Depth Top [m]: 2.00
Depth Base [m]: Not Given
Sample Type: U

Test Number	1	Rate of Strain	2.00	%/min
Length	75.30	Cell Pressure	100	kPa
Diameter	37.51	Axial Strain at failure	3.1	%
Bulk Density	2.00	Deviator Stress, ($\sigma_1 - \sigma_3$) _f	321	kPa
Moisture Content	27	Undrained Shear Strength, c_u	161	kPa $\frac{1}{2}(\sigma_1 - \sigma_3)_f$
Dry Density	1.57	Mode of Failure	Brittle	
Membrane Correction	0.50	Membrane thickness	0.22	mm

Deviator Stress v Axial Strain



Mohr Circles



Position within sample



Note: Deviator stress corrected for area change and membrane effects. Mohr circles and their interpretation is not covered by BS1377.
This is provided for information only.

Remarks:

Signed:

Anna Dudzinska
Anna

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for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

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W3 0RF
Contact: Lynn Griffin
Site Address: Euston Tower

Client Reference: 22 3686
Job Number: 22-60188
Date Sampled: Not Given
Date Received: 18/05/2022
Date Tested: 03/06/2022
Sampled By: Not Given

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

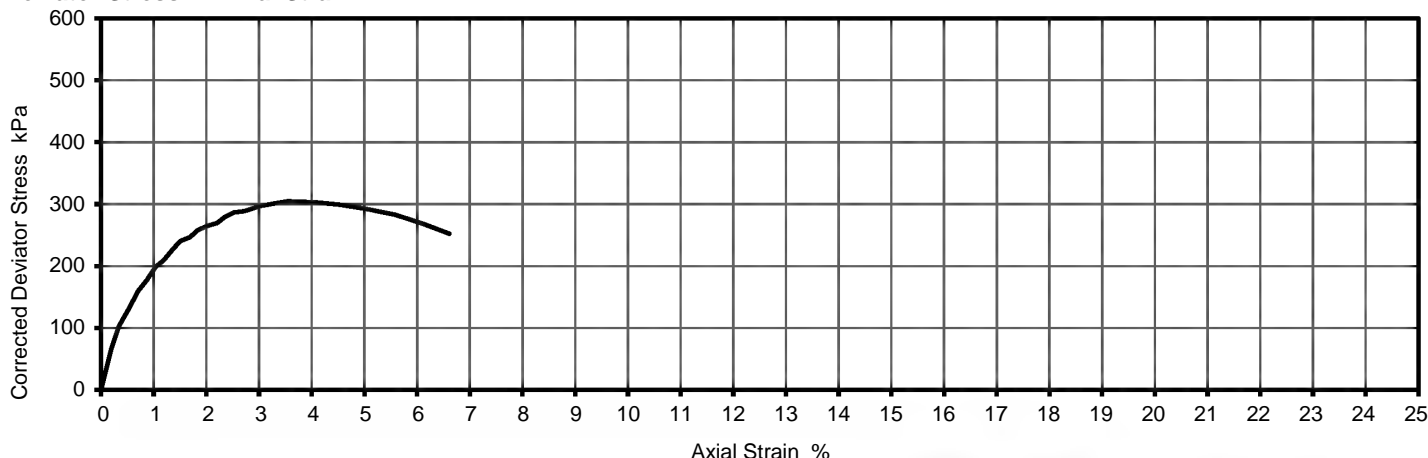
Test Results:

Laboratory Reference: 2286740_1
Hole No.: Heading 2
Sample Reference: Face S006
Sample Description: Greyish brown CLAY
Sample Preparation: Sample prepared in accordance with BS 1377-1:2016 Clause 9.1.1.

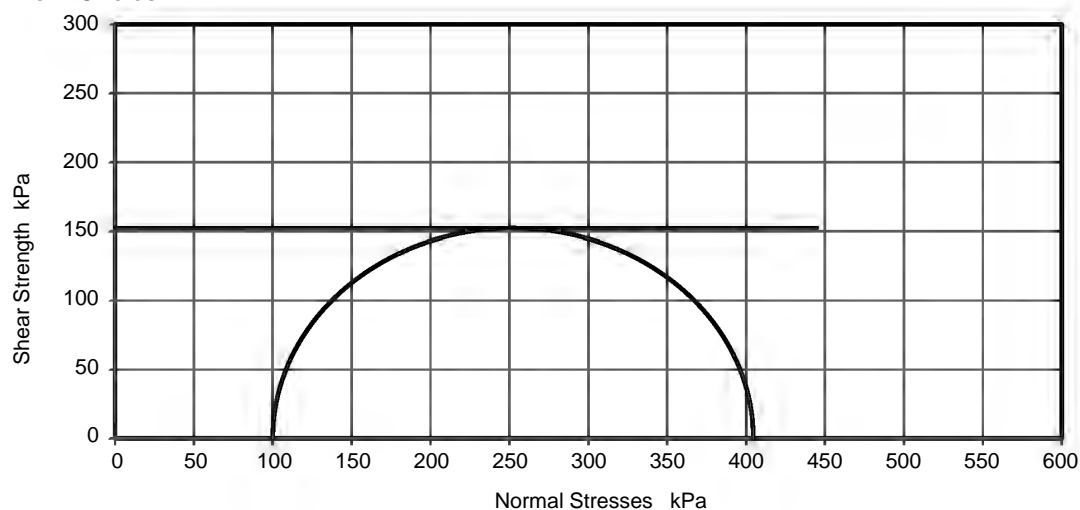
Depth Top [m]: 2.00
Depth Base [m]: Not Given
Sample Type: U

Test Number	1	Rate of Strain	2.00	%/min
Length	76.26	Cell Pressure	100	kPa
Diameter	37.16	Axial Strain at failure	3.5	%
Bulk Density	2.04	Deviator Stress, ($\sigma_1 - \sigma_3$) _f	305	kPa
Moisture Content	27	Undrained Shear Strength, c_u	152	kPa $\frac{1}{2}(\sigma_1 - \sigma_3)_f$
Dry Density	1.60	Mode of Failure	Brittle	
Membrane Correction	0.55	Membrane thickness	0.21	mm

Deviator Stress v Axial Strain



Mohr Circles



Position within sample



Note: Deviator stress corrected for area change and membrane effects. Mohr circles and their interpretation is not covered by BS1377.
This is provided for information only.

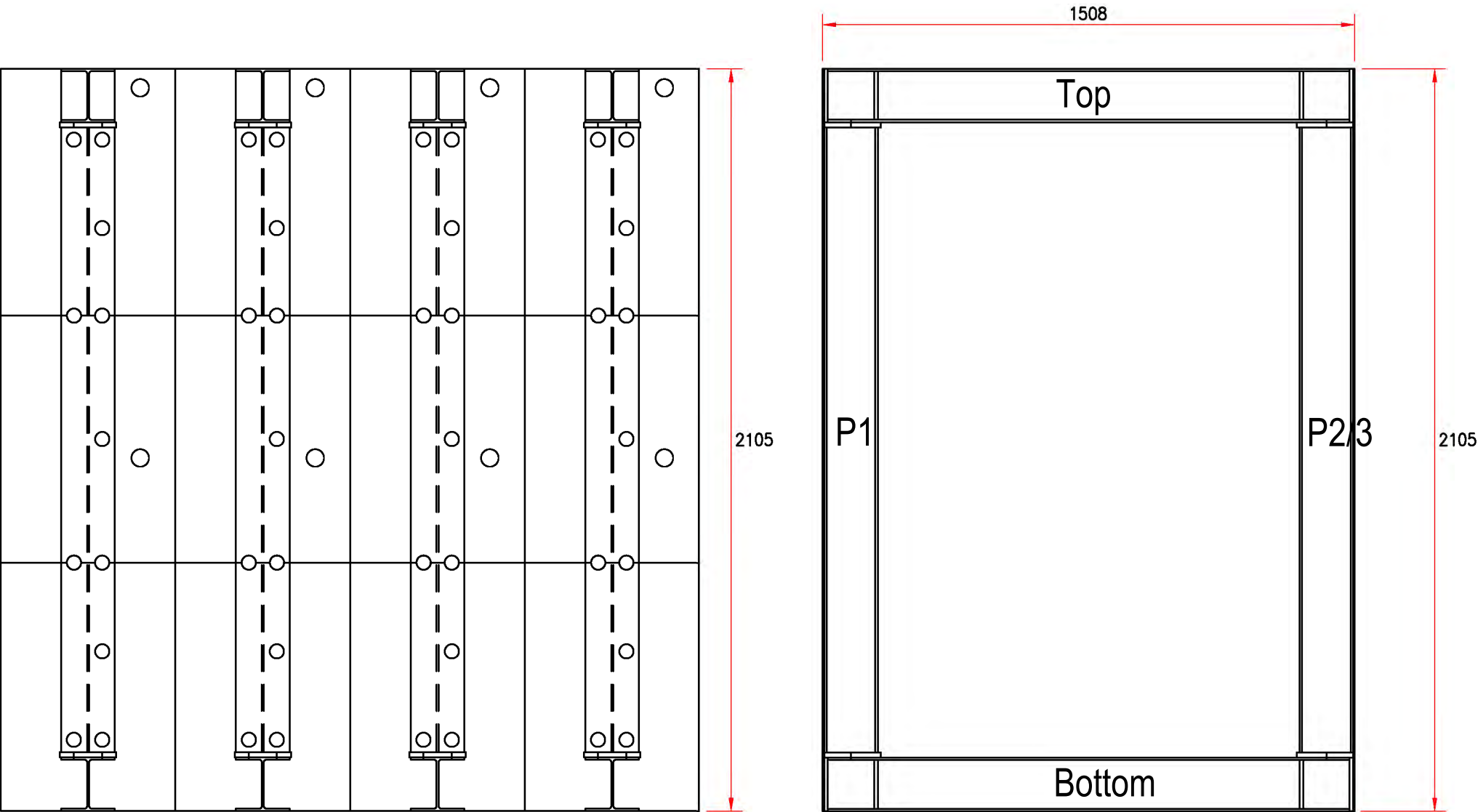
Remarks:

Signed:

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Anna

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Beams (B) Plates (P)	Sizes:	P/O no. or Cast No.	Initial	Date

Fabrication Status	
Saw by	Date:
Drill by	Date:
Fab by	Date:
Weld by	Date:
Painted by	Date:
Check by	Date:

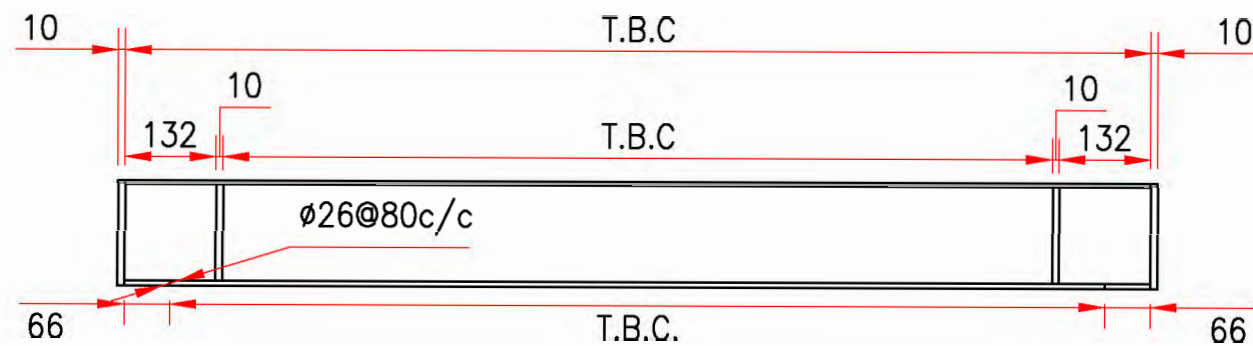
General Notes
All dimetres in millimetres UNO
All holes 22 dia. UNO
All material min. S275JR UNO
All weld leg length 25mm UNO
All butt weld full penetration UNO
All weld symbols to be in accordance with BS EN ISO 2553
Fabrication tolerance to be in accordance with BS EN1090-2 Annex B
Function tolerance class 1 UNO
Weld acceptance criteria to be BS EN 5817 class C
supplementary NDT to be in accordance with table 24 UNO
Hold times to be in accordance with table 23UNO

SCALE: N.T.S.

EXC 2	Welding Wire batch 12125212		
TITLE JN3323 / Mc Gee			
ADDRESS Euston Tower			
Draw by: G.K.	DRAWING No. 3323-11-02-22-0	Rev	ISSUE/DATE 11/020/2022

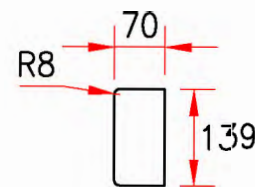
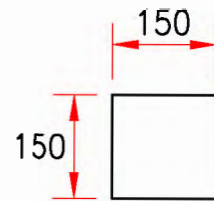


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5 ARKWRIGHT ROAD
COLNBROOK
SLOUGH
SL3 0HJ
TEL: 02085798922
g.kubala@mareth.co.uk



56no. 152x152x23 UC Top/Bottom


Plates Details

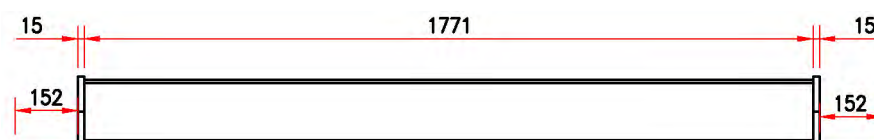


112no. 150x150x10 PLT

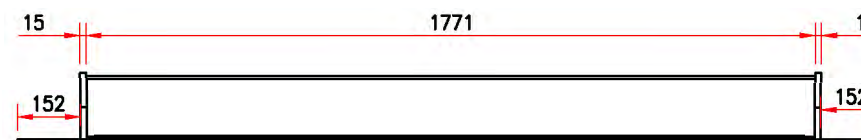
224no. 139x73x10 PLT

Beams (B) Plates (P)	Sizes:	P/O no. or Cast No.	Initial	Date

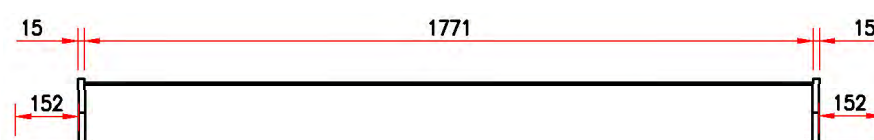
Fabrication Status										
Saw by	Date:	<div>General Notes</div> <div>All dimetres in millimetres UNO All holes 22 dia. UNO All material min. S275 JR UNO All weld leg lenght z6mm UNO All butt weld full penetration UNO All weld symbols to be in accordance with BS EN ISO 2553 Fabrication tolerance to be in accordance with BS EN1090-2 Annex B Function tolerance class 1 UNO Weld acceptance criteria to be BS EN 5817 class C suplementary NDT to be in accordance with table 24 UNO Hold times to be in accordance with table 23UNO</div>	EXC 2		Welding Wire batch 12125212					
Drill by	Date:		TITLE JN3323 / Mc Gee							
Fab by	Date:		ADDRESS Euston Tower							
Weld by	Date:									
Painted by	Date:									
Check by	Date:									
		SCALE: N.T.S.	Draw by: G.K.	DRAWING No. 3323-11-02-22-1	Rev	ISSUE/DATE 11/020/2022	<div></div> <div>MARETH FABRICATIONS LTD. 5 ARKWRIGHT ROAD COLNBROOK SLOUGH SL3 0HJ TEL: 02085798922 g.kubala@mareth.co.uk</div>			



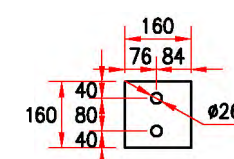
28no. 152x152x23 UC P1



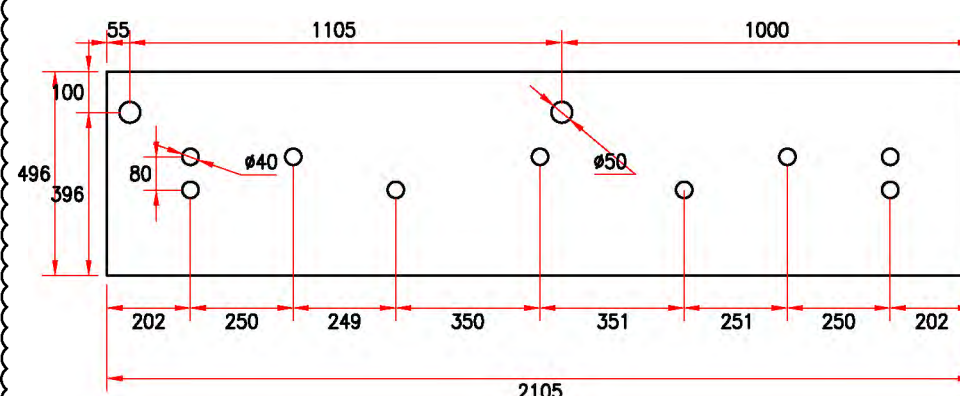
14no. 152x152x23 UC P3



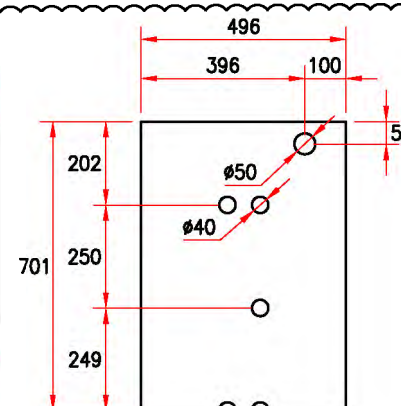
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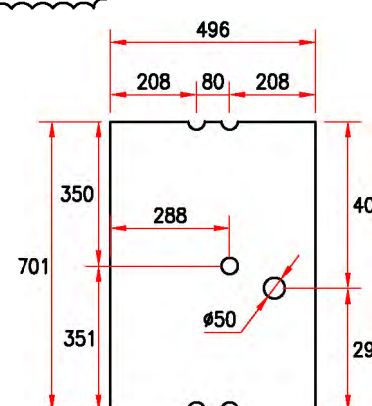
112no. 160x160x15 PLT



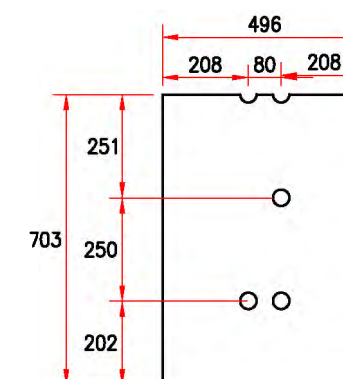
42no. 496x2105x4 PLT SP



14no. 496x2105x4 PLT
TP



14no. 496x2105x4 PLT
MP



14no. 496x2105x4 PLT
BP

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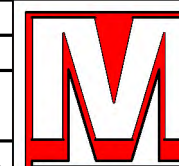
Fabrication Status	
Saw by	Date:
Drill by	Date:
Fab by	Date:
Weld by	Date:
Painted by	Date:
Check by	Date:

General Notes	
All diameters in millimetres UNO	
All holes 22 dia. UNO	
All material min. S275 JR UNO	
All weld leg length: z6mm UNO	
All butt weld full penetration UNO	
All weld symbols to be in accordance with BS EN ISO 2553	
Fabrication tolerance to be in accordance with BS EN1090-2 Annex	
Function tolerance class 1 UNO	
Weld acceptance criteria to be BS EN 5817 class C	
supplementary NDT to be in accordance with table 24 UNO	
Hold times to be in accordance with table 23UNO	

SCALE: N.T.S.

EXC 2	Welding Wire batch 12125212
TITLE JN3323 / Mc Gee	
ADDRESS Euston Tower	

Draw by: G.K.	DRAWING No. 3323-11-02-22-2	Rev	ISSUE/DATE 11/020/202
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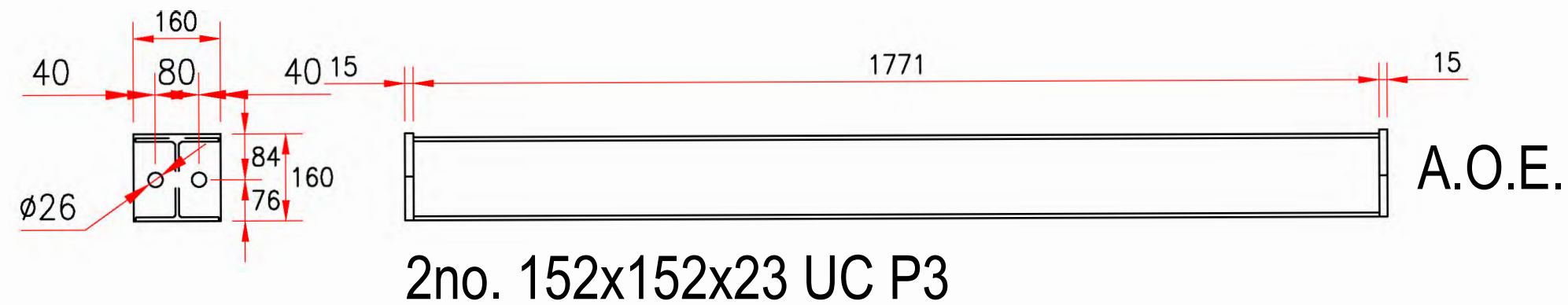
MARETH FABRICATIONS LTD
5 ARKWRIGHT ROAD
COLNBROOK
SLOUGH
SL3 0HJ
TEL: 02085798922
g.kubala@mareth.co.uk



Technical drawing of a rectangular plate. The width is 70 and the height is 139. A fillet with a radius of R8 is shown at the top edge.

224no. 139x73x10 PLT

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5 ARKWRIGHT ROAD
COLNBROOK
SLOUGH
SL3 0HJ
TEL: 02085798922
g.kubala@mareth.co.uk



Beams (B) Plates (P)	Sizes:	P/O no. or Cast No.	Initial	Date

Fabrication Status	
Saw by	Date:
Drill by	Date:
Fab by	Date:
Weld by	Date:
Painted by	Date:
Check by	Date:

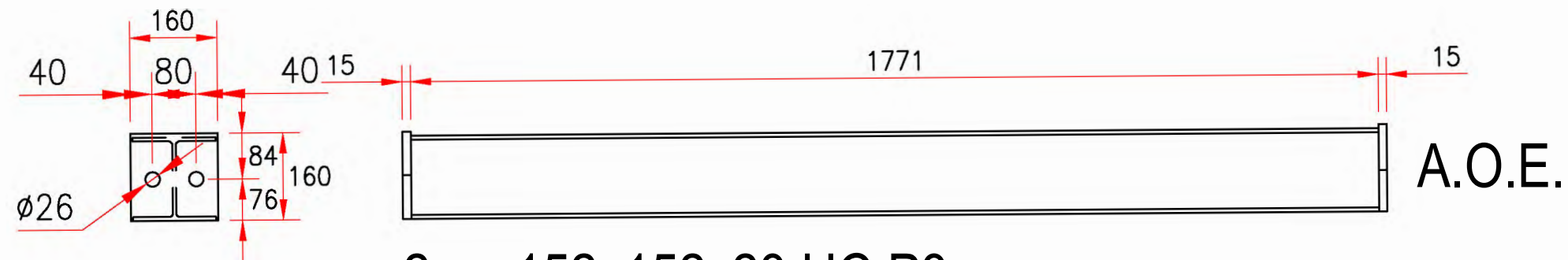
General Notes
 All dimetres in millimetres UNO
 All holes 22 dia. UNO
 All material min. S275 JR UNO
 All weld leg lenght z6mm UNO
 All butt weld full penetration UNO
 All weld symbols to be in accordance with BS EN ISO 2553
 Fabrication tolerance to be in accordance with BS EN1090-2 Annex B
 Function tolerance class 1 UNO
 Weld acceptance criteria to be BS EN 5817 class C
 supplementary NDT to be in accordance with table 24 UNO
 Hold times to be in accordance with table 23UNO

SCALE: N.T.S.

EXC 2	Welding Wire batch 12125212
TITLE JN3323 / Mc Gee	
ADDRESS Euston Tower	
Draw by: G.K.	DRAWING No. 3323-11-02-22-4
Rev	ISSUE/DATE 11/020/2022




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 SLOUGH
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 g.kubala@mareth.co.uk



2no. 152x152x23 UC P3

Beams (B) Plates (P)	Sizes:	P/O no. or Cast No	Initial	Date

Fabrication Status										
Saw by	Date:	<div>General Notes</div> <div>All dimetres in millimetres UNO</div> <div>All holes 22 dia. UNO</div> <div>All material min. S275 JR UNO</div> <div>All weld leg lenght z6mm UNO</div> <div>All butt weld full penetration UNO</div> <div>All weld symbols to be in accordance with BS EN ISO 2553</div> <div>Fabrication tolerance to be in accordance with BS EN1090-2 Annex B</div> <div>Function tolerance class 1 UNO</div> <div>Weld acceptance criteria to be BS EN 5817 class C</div> <div>supplementary NDT to be in accordance with table 24 UNO</div> <div>Hold times to be in accordance with table 23UNO</div>	EXC 2	Welding Wire batch 12125212				MARETH FABRICATIONS LTD. 5 ARKWRIGHT ROAD COLNBROOK SLOUGH SL3 0HJ TEL: 02085798922 g.kubala@mareth.co.uk		
Drill by	Date:		TITLE JN3323 / Mc Gee							
Fab by	Date:		ADDRESS Euston Tower							
Weld by	Date:									
Painted by	Date:									
Check by	Date:									
		SCALE: N.T.S.	Draw by: G.K.	DRAWING No. 3323-11-02-22-5	Rev	ISSUE/DATE 26/02/2022				

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Technical drawing of a rectangular plate. The width is 70 and the height is 139. A fillet with a radius of R8 is shown at the top corners. The drawing includes dimension lines and arrows indicating the measurements.

224no. 139x73x10 PLT

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TEL: 02085798922
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Technical drawing of a rectangular plate. The width is 70 and the height is 139. A fillet with a radius of R8 is shown at the top corners. The drawing includes dimension lines and arrows indicating the measurements.

224no. 139x73x10 PLT

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A square is shown with a side length of 150. The top and left sides are labeled with the number 150 and red dimension lines.

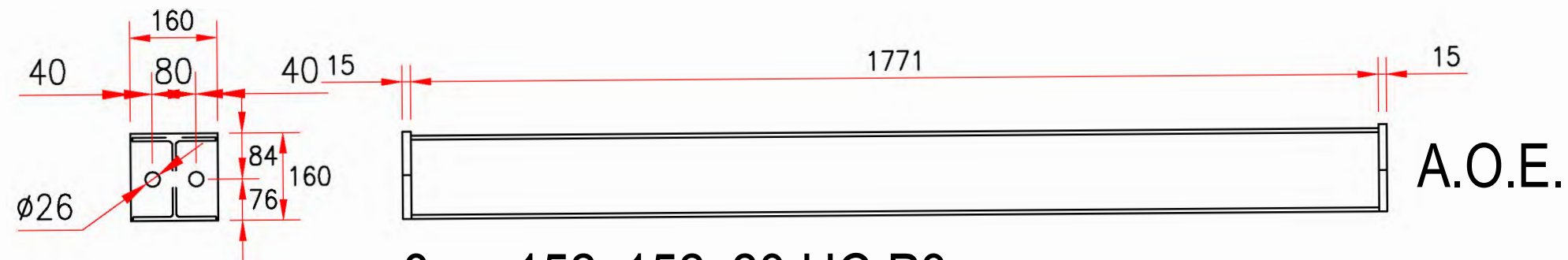
Technical drawing of a rectangular plate. The width is 70 and the height is 139. A fillet with a radius of R8 is shown at the top edge.

224no. 139x73x10 PLT

Fabrication Status	
Saw by	Date:
Drill by	Date:
Fab by	Date:
Weld by	Date:
Painted by	Date:
Check by	Date:



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8no. 152x152x23 UC P3

Beams (B) Plates (P)	Sizes:	P/O no. or Cast No	Initial	Date

Fabrication Status	
Saw by	Date:
Drill by	Date:
Fab by	Date:
Weld by	Date:
Painted by	Date:
Check by	Date:

General Notes
All dimetres in millimetres UNO
All holes 22 dia. UNO
All material min. S275 JR UNO
All weld leg lenght z6mm UNO
All butt weld full penetration UNO
All weld symbols to be in accordance with BS EN ISO 2553
Fabrication tolerance to be in accordance with BS EN1090-2 Annex B
Function tolerance class 1 UNO
Weld acceptance criteria to be BS EN 5817 class C
supplementary NDT to be in accordance with table 24 UNO
Hold times to be in accordance with table 23UNO

SCALE: N.T.S.

EXC 2 Welding Wire batch 12125212

TITLE JN3323 / Mc Gee

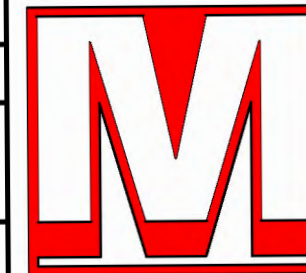
ADDRESS Euston Tower

Draw by: G.K.

DRAWING No.
3323-11-02-22-9

Rev

ISSUE/DATE
08/03/2022



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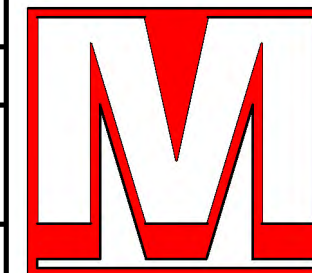
A square is shown with a side length of 150. The top and left sides are labeled with the number 150 and red dimension lines.

Technical drawing of a rectangular plate. The width is 70 and the height is 139. A fillet with a radius of R8 is shown at the top edge.

224no. 139x73x10 PLT

Fabrication Status	
Saw by	Date:
Drill by	Date:
Fab by	Date:
Weld by	Date:
Painted by	Date:
Check by	Date:

ISSUE/DATE	14/03/2022
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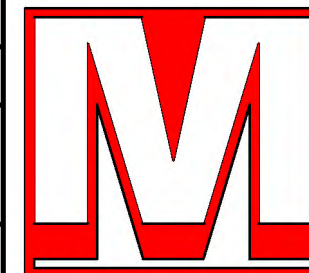
A diagram of a square with side length 150. The top side is labeled 150 with a horizontal double-headed arrow. The left side is labeled 150 with a vertical double-headed arrow.

Technical drawing of a rectangular plate. The width is 70 and the height is 139. A fillet with a radius of R8 is shown at the top corners.

224no. 139x73x10 PLT

Fabrication Status	
Saw by	Date:
Drill by	Date:
Fab by	Date:
Weld by	Date:
Painted by	Date:
Check by	Date:

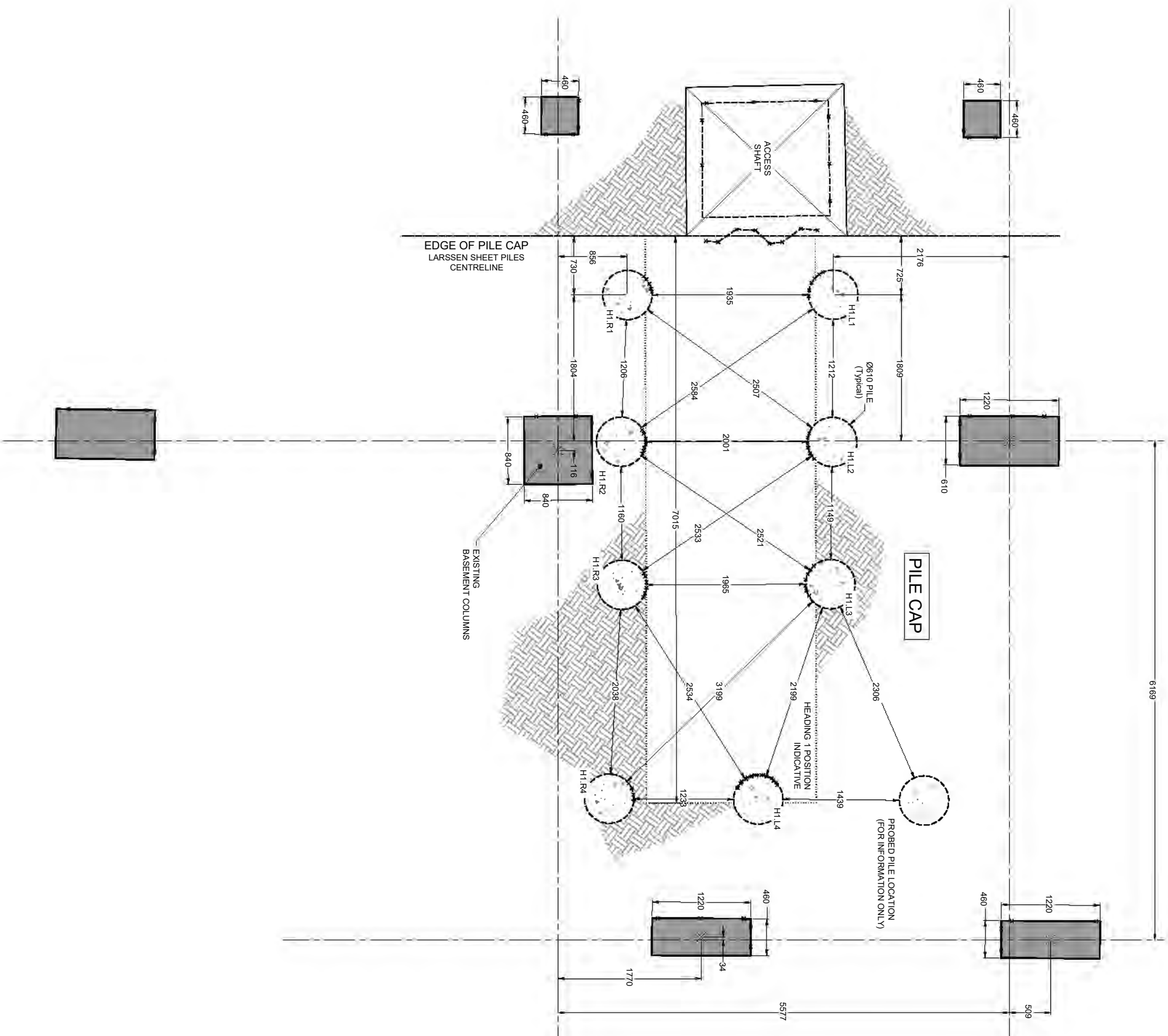
Rev	ISSUE/DATE 17/03/2022
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Notes:

1. Do not scale this drawing.
2. All dimensions are in millimeter unless noted otherwise.
3. Shown grillages are arbitrary and to be used for the purpose of this survey only.
4. Position of piles surveyed in relation to existing columns at basement level (no visible cladding to RC elements).
5. Accuracy of survey below pile cap ± 5 mm due to irregular pile location. Pile diameter estimated from fully exposed pile at location 2.
6. Access shaft formed as per McGee sketch ET/149-SK-003b (Rev. -). For heading frame information refer to geometry sketch ET/149-SK-004 (Rev. -) and fabrication drawings 3323-11-02-22-0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 and 11.
7. Total number of heading frames installed within Heading 1:
 - Standard 11 No @ 500mm c/c
 - Special 01 No.
8. Dry-packing thickness varies between 25 and 75mm, heading frames installed at approximate 500mm c/c.



B	21-06-22	Temporary works notes added	DF	-
A	01-06-22	ARUP comments addressed	DF	-
Rev.	Date		By	Checked



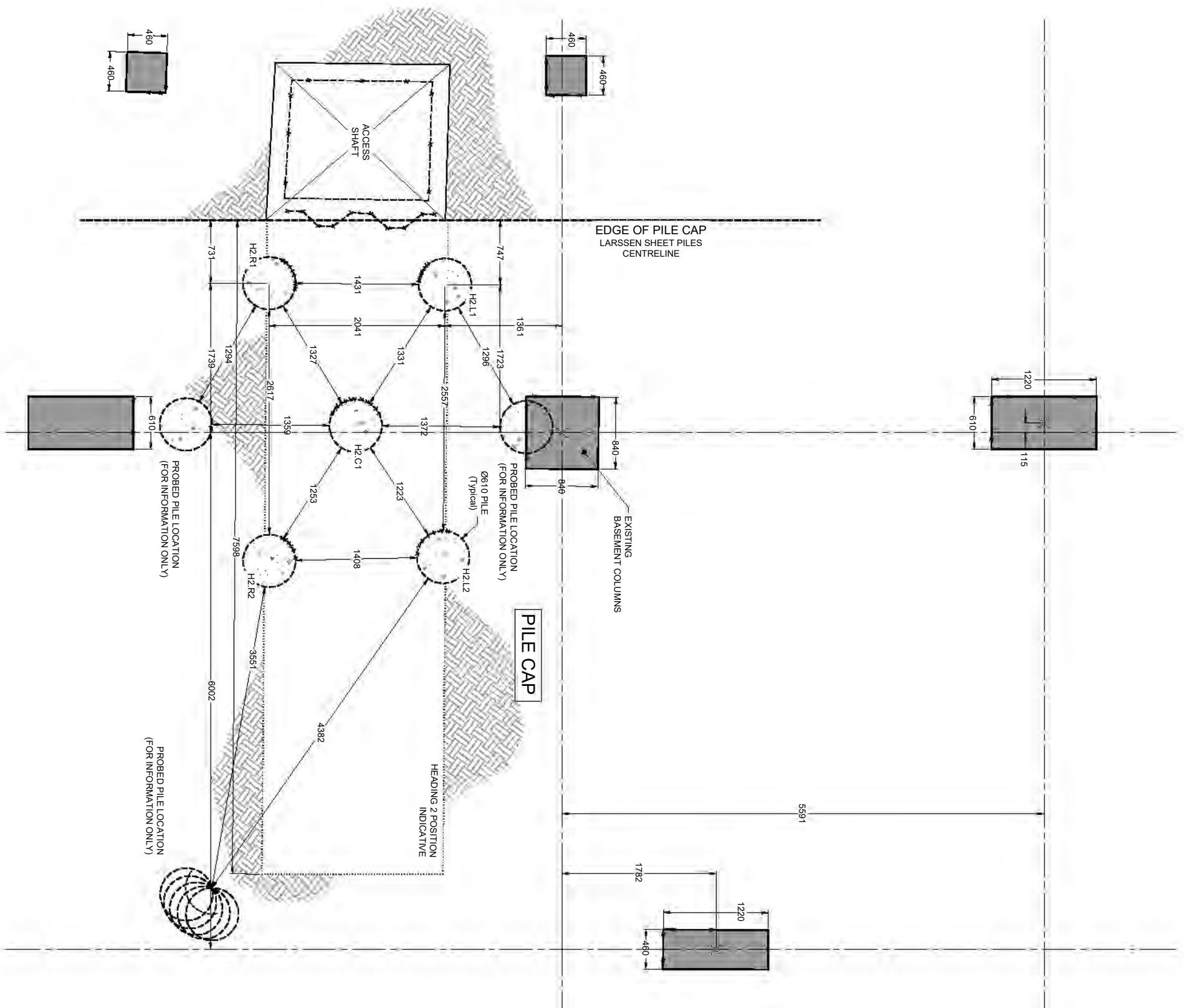
EUSTON TOWER

FOUNDATION SI WORK
LOCATION 1
SURVEY OF EXISTING PILES

Drawn	Date	Contract	Revised
DF	22-04-2022	=	
Scale	Proj No		
NTS	ETF149-SK005a		B

Notes:

1. Do not scale this drawing.
2. All dimensions are in millimeter unless noted otherwise.
3. Shown grillages are arbitrary and to be used for the purpose of this survey only.
4. Position of piles surveyed in relation to existing columns at basement level (no visible cladding to RC elements).
5. Accuracy of survey below pile cap ± 25 mm due to irregular pile surface. Pile diameter estimated from fully exposed pile at Location 2.
6. Access shaft formed as per McGee sketch ETT149-SK-003b (Rev -) for heading frame information refer to geometry sketch ETT149-SK-004 (Rev -) and fabrication drawings 33323-11-02-22-0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 and 11.
7. Total number of heading frames installed within Heading 2:
 - Standard 10 No.
 - Special 2 No.
8. Dry-packing thickness varies between 25 and 75mm, heading frames installed at approximate 500mm c/c.



B	21-05-22	Temporary works notes added ARUP comments addressed	DF	-
A	01-06-22		DF	-
Rev.	Date		By	Checked



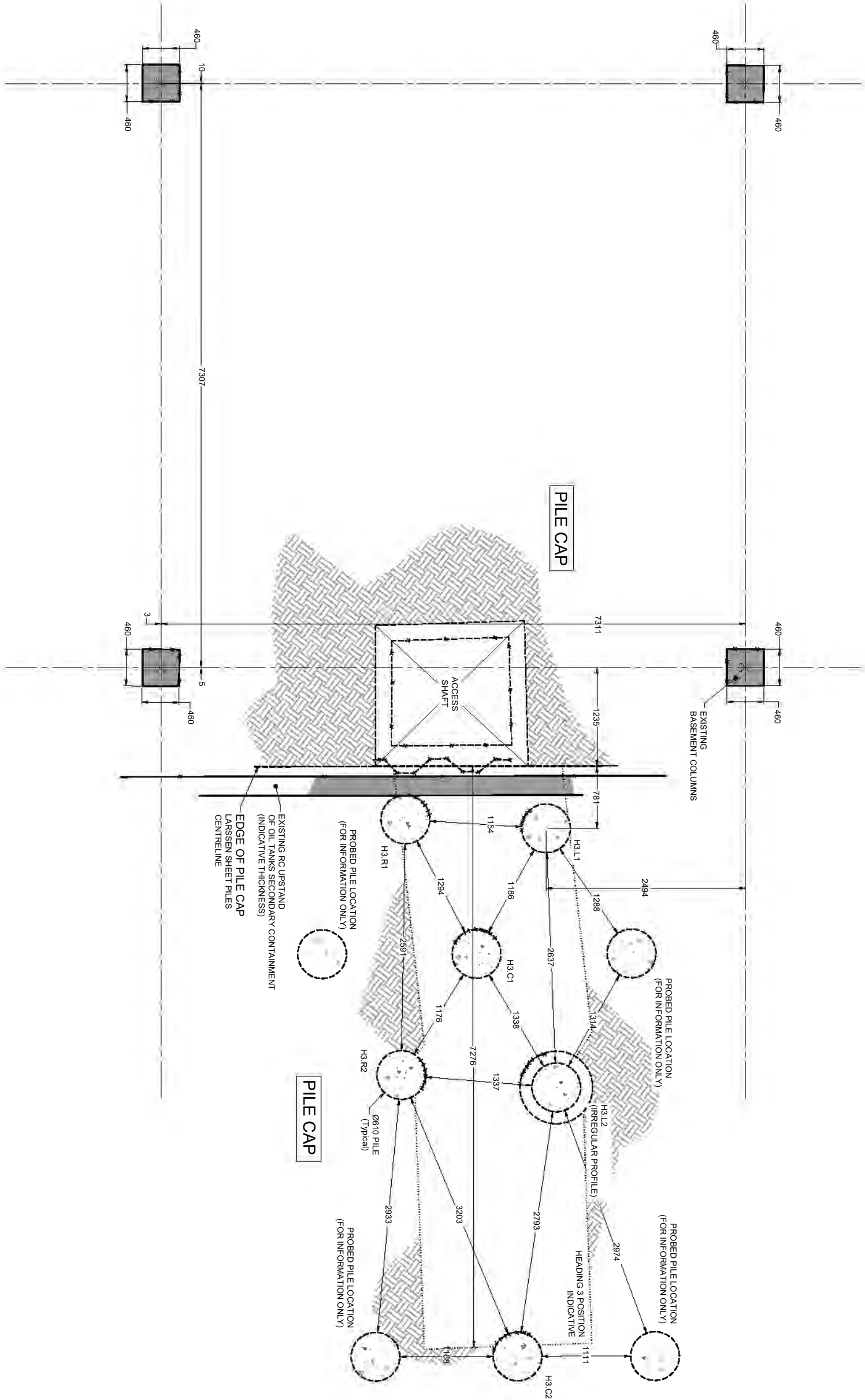
EUSTON TOWER

FOUNDATION SI WORK
LOCATION 2
SURVEY OF EXISTING PILES

Chart:	Date:	Contract:	Revised:
DF	22-04-2022	=	
Scale:	Day for:		
NTS	ETF149-SK005b		B

Notes:

1. Do not scale this drawing
2. All dimensions are in millimeter unless noted otherwise.
3. Shown gridlines are arbitrary and to be used for the purpose of this survey only.
4. Position of piles surveyed in relation to existing columns at basement level (no visible cladding to RC elements).
5. Accuracy of survey below pile cap ± 25 mm due to irregular pile surface. Pile diameter estimated from fully exposed pile at Location 2.
6. Access shaft formed as per McGee sketch ETF149-SK-003b (Rev -). For heading frame information refer to geometry sketch ETF149-SK-004 (Rev -) and fabrication drawings 3323-11-02-22-0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 and 11.
7. Total number of heading frames installed within Heading 3:
 - Standard 0 No.
 - Special 10 No.
8. Dry-packing thickness varies between 25 and 75mm, heading frames installed at approximate 500mm c/c.



EUSTON TOWER

FOUNDATION SI WORK
LOCATION 3
SURVEY OF EXISTING PILES

Drawing Information			Revision	
Drawn	Date	Checked	By	Checked
DF	21-05-2022	-		
Scale				
NTS	ETF149-SK005c	B		