

Building Futures Together

Cranbrook Basement Design and Construction

31 Willoughby Rd, NW3 1RT
Proposed Basement

Design Philosophy Report

P24-0500

July 2024



Barker

Contents

Cranbrook Basement Design and Construction **Proposed Basement** **Design Philosophy** Report

Proposed Basement
31 Willoughby Rd, NW3 1RT
London
NW3 1RT

Prepared For and on Behalf of:

Cranbrook Basement Design and Construction
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BA Job Ref.	P24-0500
Document Typez	Design Philosophy Report
Version & Revision	Original
Date of printing	3 rd July 2024
Electronic File Name	P24-0500 Design Philosophy Report 2024-07-03
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Authorised for issue by	.
Date of issue	03 July 2024

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1 Introduction

1.1 Instruction

- 1.1.1 At the request of Mr David Kavanagh of Cranbrook Basement Design and Construction, Barker Associates have been appointed to produce a Structural Design Philosophy Report for the proposed construction of a single storey basement under the existing property at 31 Willoughby Road, London NW3 1RT

1.2 Basement Experience

- 1.2.1 Daniel Claydon is a Chartered Structural Engineer with over 25 years' experience. Working with Cranbrook Basements Daniel has completed over 100 basement projects over the last ten years, working on numerous other projects with basement elements including new build as well as the retrofit construction for other Specialist Contractors and Developers.

2 Site and Geology.

2.1 Location

- 2.1.1.1 The Site is located in Northwest London to the east of Hampstead Tube Station
- 2.1.1.2 The Property would appear to have originally been on of two semidetached properties, however, with newer attached properties on either side of the original pair, it is now in a terrace.
- 2.1.1.3 The property has a small garden to the front and a larger garden to the rear.

2.2 Geology

- 2.2.1.1 A Basement Impact Assessment has been undertaken by Card Geotechnic Limited, for the property, a copy of which will be included in the planning pack of information.
- 2.2.1.2 The above report noted that British Geological Survey (BGS) maps record the site to be underlain with Claygate Members.
- 2.2.1.3 Borehole Logs within a previous SI report undertaken by Geotechnical & Environmental Associates dated 11th July 2017 , extracts of which can be found in Appendix A. The logs indicate made ground to between 2.4-3.4m, over Clays, with clays noted to 10m within the deepest borehole.
- 2.2.1.4 The BIA assessment indicates that the proposed foundations should consist of a raft foundation, with detailed design based on a SGBP of 120kN/m².

3 Existing Structure

- 3.1.1 The existing property is period house, with four above ground levels and a partial basement under the existing footprint.
- 3.1.2 The property appears to be of traditional construction with loadbearing masonry walls providing support to the cut timber roof (assumed) and timber upper floors, with steel/ timber beams where required by the layouts at each floor level.
- 3.1.3 Appendix B contains copies of Cranbrook Basement Design and Construction drawings indicating the existing floor layouts, site plan and existing long section.
- 3.1.4 Trial pits undertaken by GEA appear to indicate relatively shallow strip footings, which would be consistent with the age of the property.

4 Proposed Works

4.1 Structural Works

- 4.1.1 Appendix C contains copies of the Cranbrook Basement Design and Construction proposed floor plans including a basement layout and amendments to the ground floor layouts.
- 4.1.2 Based on the proposed plans, it can be seen that the intention is to construct a new basement level under the existing lower ground floor level, with a lightwell to the front elevation.
- 4.1.3 The proposed basement works will require minor amendments to the ground floor layouts to incorporate a new stair to the proposed basement, but these will not require structural alteration to the superstructure.

4.2 Design Principles

- 4.2.1 Appendix D contains details of proposed layouts for the proposed basement structure.
- 4.2.2 Where Steel Beams are to be used to provide support for existing structure over, the steel beams are to be designed in accordance with the relevant British Standards, with serviceability deflections limited to span/500, this is an industry standard used to minimise the risk of cracking to walls and existing structure over.
- 4.2.3 It is proposed to retain the existing ground floor slab, to the rear of the property, this will be undertaken utilising a grillage of steel beams with precast lintels providing support at 400-600 horizontal centres. This system is a typical system for use with retrofitted basements.

To the front of the property the existing timber ground floor structure will be retained by providing steel beam support in the lines of the original masonry sleeper walls.
- 4.2.4 Deflections for the ground floor steel grillages will be limited to values not typically exceeding span / 500.
- 4.2.5 As the proposed basement extends towards the site boundary, surcharge loads from the adjacent land is to be considered as noted below:-

Gardens 5.0kN/m² (UDL)

Internal 2.5kN/m² (UDL)

The front garden boundary is sufficiently remote from the proposed basement such that highway loads will not be applied to the basement walls.

- 4.2.6 It is proposed to provide a special foundation under the perimeter Walls. The foundation thickness will match that of the wall over and the reinforced concrete section (min 300mm) and will be designed to provide support to the vertical loads over and retain the adjacent earth.
- 4.2.7 In addition to the earth loads the walls will be designed for Hydrostatic loads in accordance with BS8102:2009.
- 4.2.8 The special foundations are to be designed for a min two load cases, the first a temporary case prior to the installation of dry packing over the new foundation to the underside of the existing and allows for lateral loads only (this will not include hydrostatic loads). The second load case is a permanent case with both horizontal and vertical loads applied.
- 4.2.9 In designing the special foundation for two load cases there will be areas where temporary lateral propping will be provided to ensure suitable solutions for both conditions.
- 4.2.10 Proposed Factors of Safety for the propping forces are to be 2.0 and 1.5 for overturning and sliding respectively.

4.3 Ground Movement Assessment.

- 4.3.1 This analysis has been undertaken by CGL and can be found in their Basement Impact Assessment report.

5 Design.

- 5.1.1 Appendix D contains Scheme layouts for the proposed superstructure and substructure, based on the information currently available.
- 5.1.2 A method Statement will be produced by Cranbrook Basement Design and Construction and will be reviewed by Barker Associates.

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Appendix A: GEA Report Extracts – Borehole Logs

APPENDIX – PART 1B

Ground Investigation

Site Plan

Borehole Records

Dynamic Probe Results

Trial Pit Records

Laboratory Testing

Geotechnical Laboratory Test Results

SPT & Cohesion / Depth Graph

Chemical Analyses (Soil)

Generic Risk Based Screening Values

Groundwater Monitoring Records & Rising Head Tests

Site	31 Willoughby Road, London, NW3 1RT
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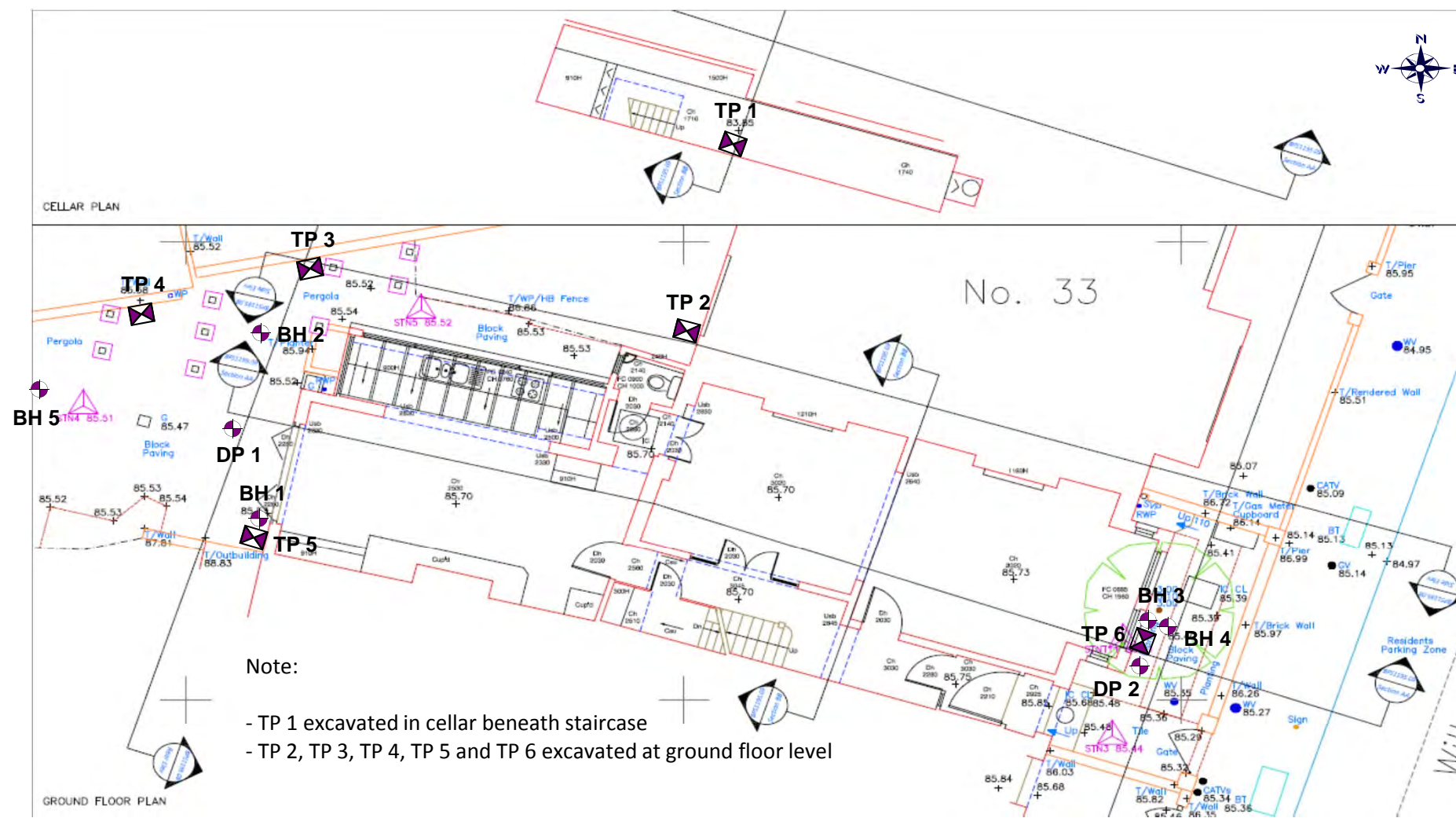
Client Manuela Eleuteri





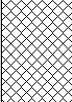
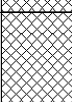
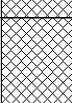

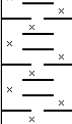
Engineer Richard Tant Associates

Job Number	J15315
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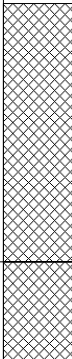
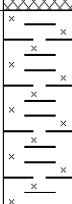

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

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				Widbury Barn Widbury Hill Ware, Herts SG12 7QE		Site 31 Willoughby Road, London, NW3 1RT		Number BH1	
Excavation Method Drive-in Windowless Sampler		Dimensions		Ground Level (mOD) 85.55		Client Manuela Eleuteri		Job Number J15315	
		Location		Dates 13/01/2016		Engineer Richard Tant Associates		Sheet 1/1	
Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	
				85.45	0.10	Brick Paving	       		
				85.40	0.15	Made Ground (yellowish brown sand with gravel)			
				85.25	0.30	Concrete			
					(1.10)	Made Ground (brown to dark brown silty sandy clay with gravel and occasional brick fragments)			
1.20	D1			84.15	1.40	Made Ground (pale greenish grey and orange-brown slightly sandy silty clay with occasional gravel, carbonaceous material and brick fragments)			
1.50	D2				(0.70)				
1.90	D3			83.45	2.10	Made Ground (orange-brown slightly sandy silty clay with gravel; dark grey between 2.7-2.8m)			
2.25	D4				(1.00)				
2.75	D5		Slow Inflow(1) at 3.00m, not sealed.	82.45	3.10	Firm becoming stiff brown becoming brownish grey silty CLAY			
					(0.90)				
3.50	D6			81.55	4.00	Terminated at 4.00m			
Remarks Groundwater monitoring standpipe installed to 3.1m Borehole completed from base of Trial Pit No 5								Scale (approx)	
								1:50	
								Logged By JS	
								Figure No. J15315.BH1	

<div><div>GEA</div><div>Geotechnical & Environmental Associates</div></div>				Widbury Barn Widbury Hill Ware, Herts SG12 7QE		Site 31 Willoughby Road, London, NW3 1RT		Number BH2	
Excavation Method Drive-in Windowless Sampler		Dimensions		Ground Level (mOD) 85.50		Client Manuela Eleuteri		Job Number J15315	
		Location		Dates 13/01/2016		Engineer Richard Tant Associates		Sheet 1/1	
Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description		Legend	Water
0.50	D1			85.40	0.10	Brick Paving			
				85.35	0.15	Made Ground (yellowish brown sand with gravel)			
				85.30	0.20	Concrete			
1.50	D2					Made Ground (brown, orange-brown and greenish grey silty sandy clay with gravel, rootlets and brick fragments)			
2.50	D3								
3.35	D4		Slow Inflow(1) at 3.00m, not sealed.	82.30	3.20	Firm greenish grey to orange-brown & dark grey slightly silty CLAY with gravel and carbonaceous material			
				82.00	3.50	Firm mottled pale grey to bluish & orange-brown slightly silty CLAY with occasional gravel			
				81.80	3.70	Firm becoming stiff brown becoming brownish grey silty CLAY			
4.50	D5								
				80.50	5.00	Terminated at 5.00m			
Remarks Groundwater monitoring standpipe installed to 4.0 m								Scale (approx) 1:50	Logged By JS
								Figure No. J15315.BH2	

<div><div>GEA</div><div>Geotechnical & Environmental Associates</div></div>				Widbury Barn Widbury Hill Ware, Herts SG12 7QE		Site 31 Willoughby Road, London, NW3 1RT		Number BH3	
Excavation Method Drive-in Windowless Sampler		Dimensions		Ground Level (mOD) 85.40		Client Manuela Eleuteri		Job Number J15315	
		Location		Dates 13/01/2016		Engineer Richard Tant Associates		Sheet 1/1	
Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description		Legend	Water
2.00	D1			83.70	(1.70)	Made Ground (brown to dark brown sandy silty clay with gravel, ash, charcoal, rootlets and brick fragments)			
					1.70 (0.70)	Made Ground (orange-brown & grey mottled slightly silty clay with rare brick fragments)			
3.00	D2			83.00	2.40 (1.35)	Firm greenish grey and orange-brown slightly silty CLAY with carbonaceous material and gravel			
4.00-4.50	D3			81.65	3.75 (0.75)	Firm becoming stiff pale orange-brown becoming brownish grey slightly silty CLAY			
					4.50	Terminated at 4.50m			
<div>Remarks</div> <div>Taken from base of TP6</div> <div>Groundwater not encountered</div> <div>Groundwater monitoring standpipe installed at 3.0m</div>								Scale (approx)	Logged By
								1:50	JS
								Figure No. J15315.BH3	

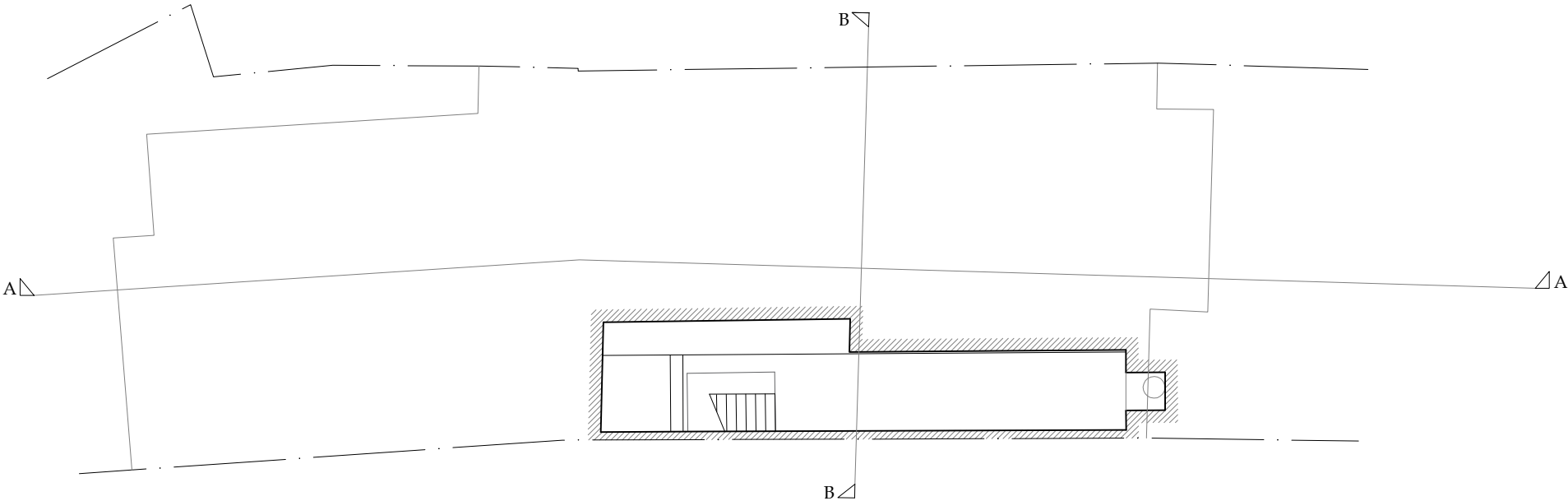
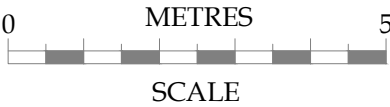
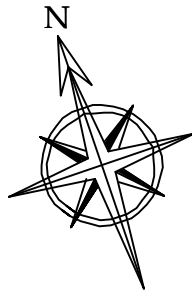
<div><div>GEA</div><div>Geotechnical & Environmental Associates</div></div>				Widbury Barn Widbury Hill Ware, Herts SG12 7QE		Site 31 Willoughby Road, London, NW3 1RT		Number BH4	
Excavation Method Opendrive lined percussive sampler		Dimensions 110mm to 1.00m		Ground Level (mOD) 85.40		Client Manuela Eleuteri		Job Number J15315	
		Location		Dates 20/01/2016		Engineer Richard Tant Associates		Sheet 1/1	
Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	
1.00-1.45	SPT N=7	1,2/2,1,2,2		85.35 85.30 85.25	(0.05)	Paving Stone			
					0.05	Made Ground (orange-brown sand)			
					0.10	Concrete			
					(0.05)				
2.00-2.45	SPT N=6	0,0/1,2,1,2		83.70	0.15	Made Ground (brown to orange brown mottled grey sandy silty clay with gravel, brick fragments, charcoal, ash and roots)			
					(1.55)				
					1.70	Made Ground (grey and orange-brown mottled slightly silty clay with rare brick fragments and rootlets)			
					(0.80)				
3.00-3.45	SPT N=7	0,0/1,2,2,2	Slow Inflow(1) at 3.30m, not sealed.	82.90	2.50	Firm pale orange-brown and greenish grey silty CLAY with occasional gravel and carbonaceous material; dark grey carbonaceous layers at 2.8 m to 3.0 m and 3.3 m to 3.4 m		V1	
					(1.00)				
					3.50	Firm pale orange-brown mottled grey slightly silty CLAY			
					(0.20)				
4.00-4.45	SPT N=7	2,1/2,1,2,2		81.90 81.70	3.70	Firm becoming stiff pale orange-brown becoming brownish grey slightly silty CLAY with rare selenite crystals and occasional partings of silt and sand			
					(1.30)				
					5.00	Stiff dark brownish grey slightly silty CLAY with occasional partings of silt and sand; claystone encountered at 6.5 m to 6.7 m			
4.50	D3								
5.00-5.45	SPT N=10	2,1/2,2,3,3		80.40					
5.50	D4								
6.00-6.45	SPT N=14	2,2/2,2,3,7							
6.50	D5								
7.00-7.45	SPT N=13	2,3/2,3,4,4							
7.50	D6				(5.00)				
8.00-8.45	SPT N=13	2,2/3,3,3,4							
8.50	D7								
9.00-9.45	SPT N=13	2,3/3,3,4,3							
9.50	D8								
10.00-10.45	SPT N=11	2,2/1,3,3,4		75.40	10.00				
Remarks Groundwater monitoring standpipe installed at 5.0m. SPT N results potentially impacted by proximity to BH3 and the potential effects of water softening in the base of the borehole, such that the results are not considered to represent the true in-situ strength. The assessment of the strength for the natural soils is therefore based on a combination of the test results together with the field observations, which indicated a firm becoming stiff consistency, and not just the SPT 'N' results alone.							Scale (approx)	Logged By	
							1:50	JS	
							Figure No. J15315.BH4		

<div><div>GEA</div><div>Geotechnical & Environmental Associates</div></div>				Widbury Barn Widbury Hill Ware, Herts SG12 7QE		Site 31 Willoughby Road, London, NW3 1RT		Number BH5	
Excavation Method Opendrive percussive lined sampler		Dimensions 110mm to 1.00m		Ground Level (mOD) 85.50		Client Manuela Eleuteri		Job Number J15315	
		Location		Dates 11/07/2017		Engineer Richard Tant Associates		Sheet 1/1	
Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description		Legend	Water
1.00-1.45	SPT(C) N=9	DRY	0,1/2,2,2,3	85.40	0.10	Brick Paving			
				85.35	0.15	Made Ground (yellowish brown sand)			
				85.30	0.20	Concrete			
					(2.00)	Made Ground (brown silty slightly sandy clay with occasional gravel, ash and small brick fragments)			
2.00-2.45	SPT(C) N=8	DRY	1,1/2,2,2,2	83.30	2.20	Made Ground (brown silty clay with rare brick fragments)			
					(0.75)				
3.00-3.45	SPT(C) N=8	DRY	0,0/0,3,2,3	82.55	2.95	Made Ground (greenish brown silty clay with very rare brick fragments)			
				82.10	3.40	Firm becoming stiff brownish grey silty CLAY with relic root traces			
4.00-4.45	SPT N=12	DRY	2,2/3,3,3,3		(2.05)				
5.00-5.45	SPT N=16	DRY	2,2/3,4,5,4	80.05	5.45	Complete at 5.45m			
Remarks Groundwater not encountered during drilling and borehole remained dry throughout an observation period of approximatley 4 hours.								Scale (approx) 1:50	Logged By MP
								Figure No. j15315.BH5	



Appendix B: Cranbrook Basement Design and Construction Drawings - Existing

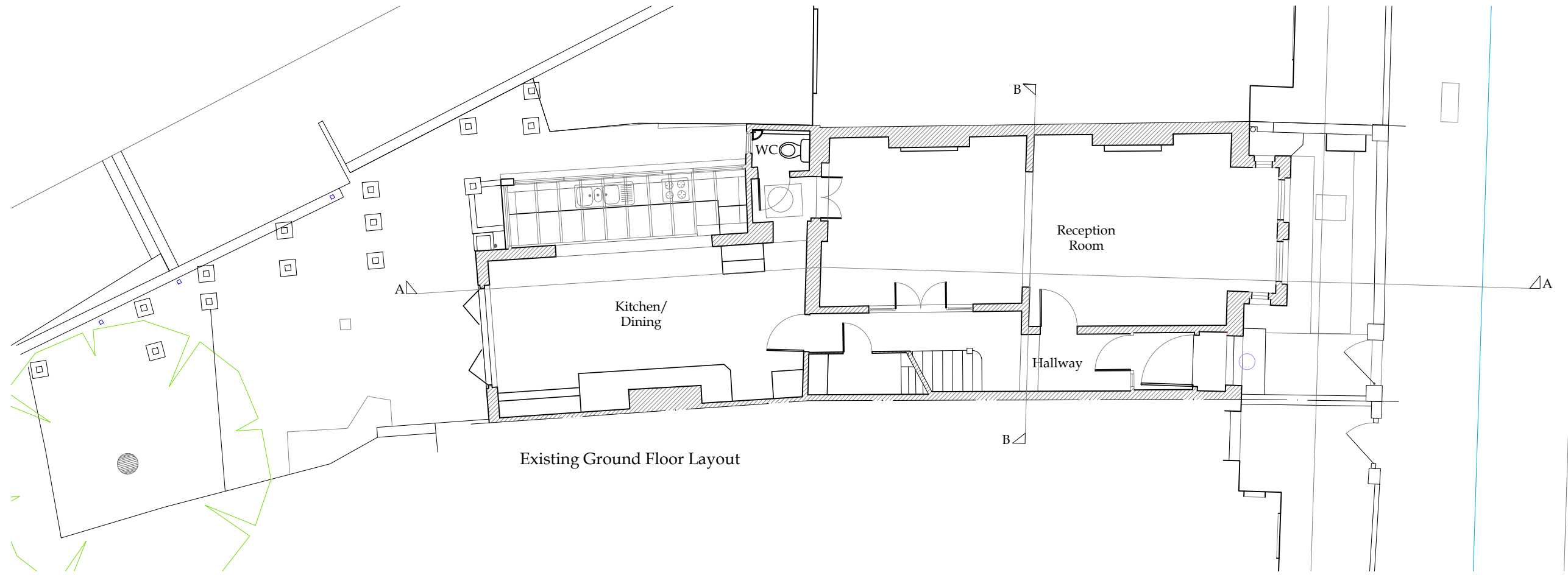
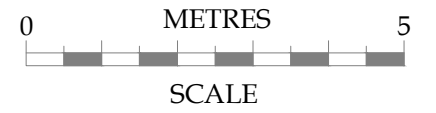
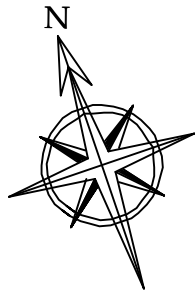


Barker





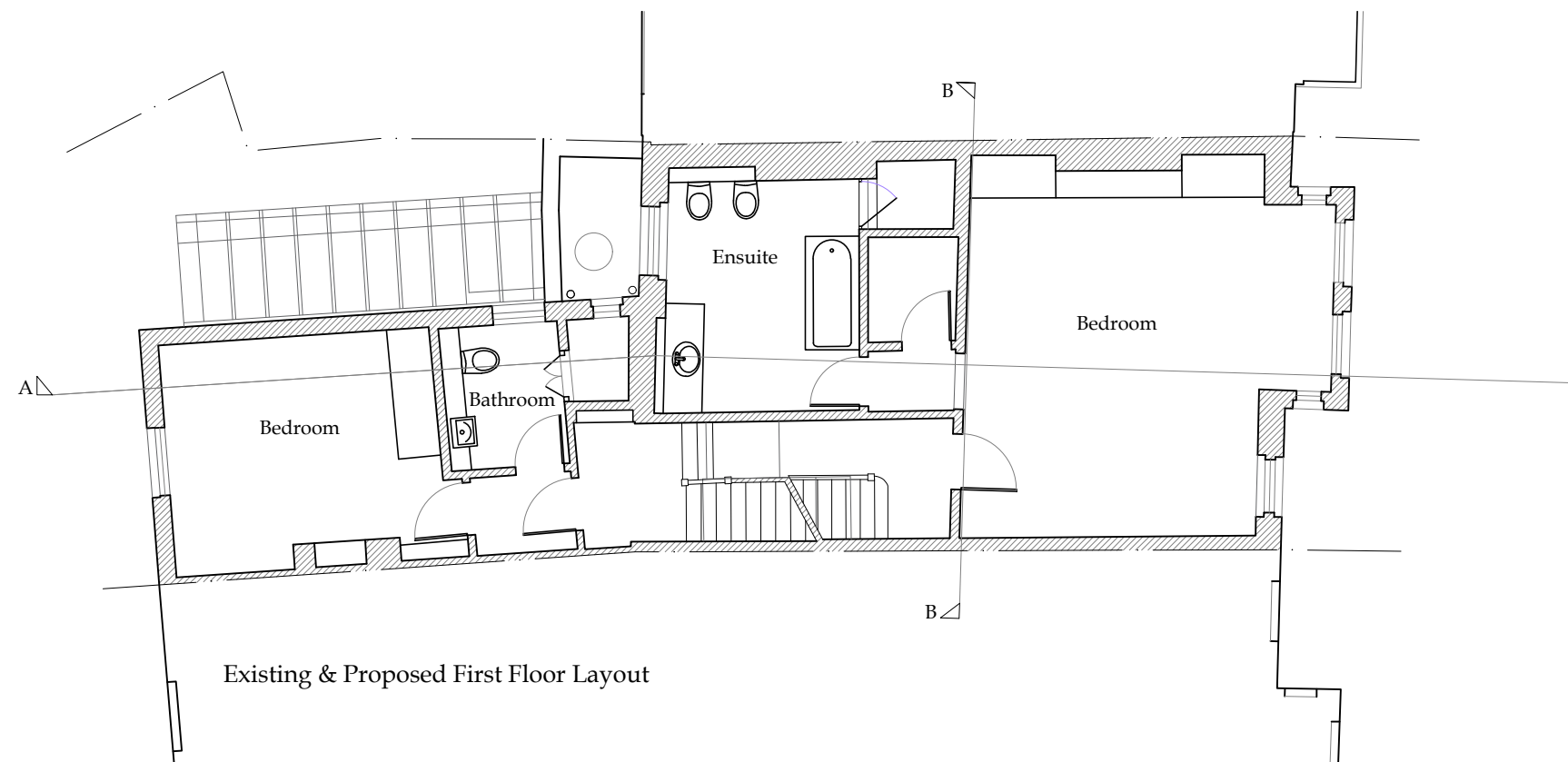
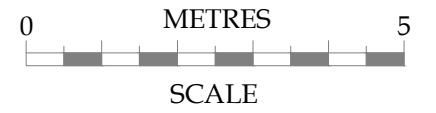
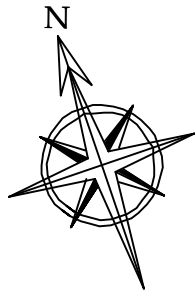
Existing Basement Layout

No.	Date	Amendment	Initials	
Client : Mr J Przewozniak & Ms M Eleuteri			<div> <small>Cranbrook Basements 26-28 Hammersmith Grove, Hammersmith, London, W7 7BA T +44 (0)208 551 5555 F +44 (0)208 551 1580 admin@cranbrook.co.uk www.cranbrook.co.uk</small></div> <div></div>	
Project : 31 Willoughby Road London NW3 1RT				
Drawing : Existing Basement Layout				
Scale :	1:100 @ A3	Status : PLANNING		Rev :
Date :	12 Apr 24	Dwg No : 2362-100.01		
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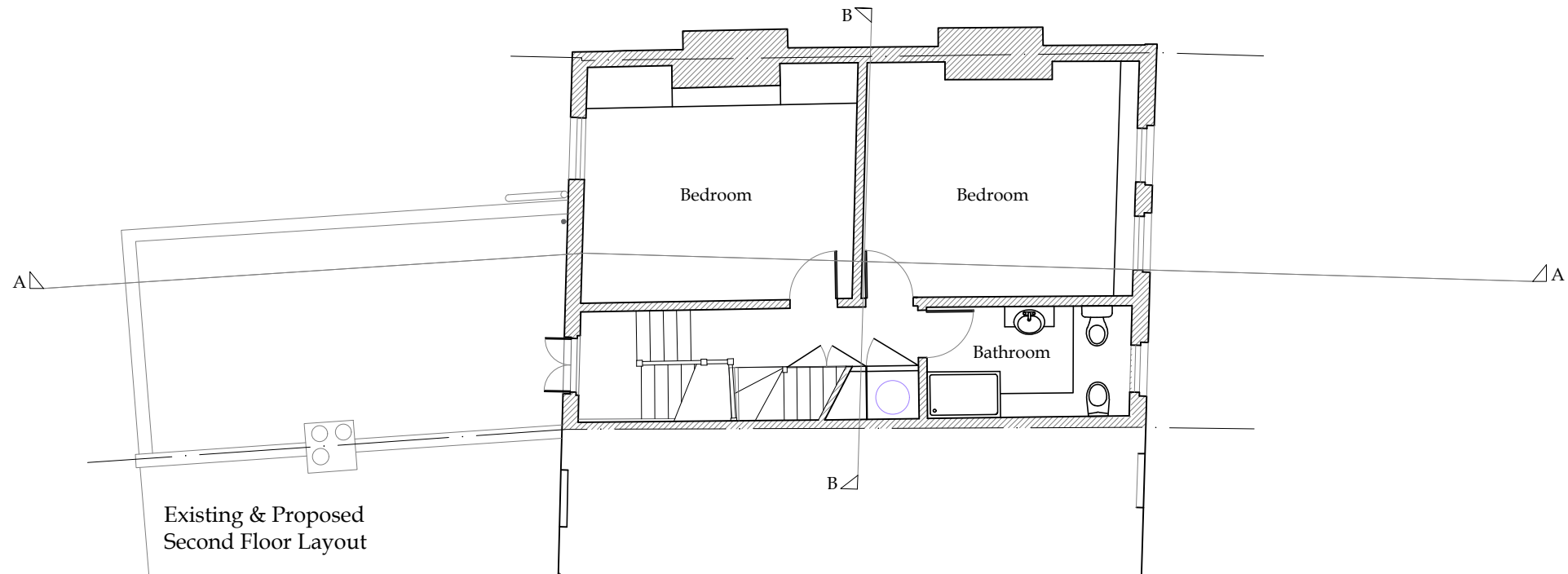
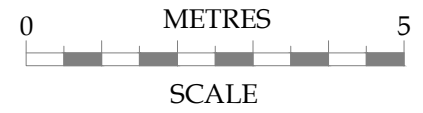
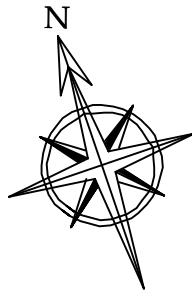
Existing Ground Floor Layout

No.	Date	Amendment	Initials
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Project : 31 Willoughby Road London NW3 1RT			
Drawing : Existing Ground Floor Layout			
Scale :	1:100 @ A3	Status : PLANNING	
Date :	12 Apr 24	Dwg No : 2362-101.01	
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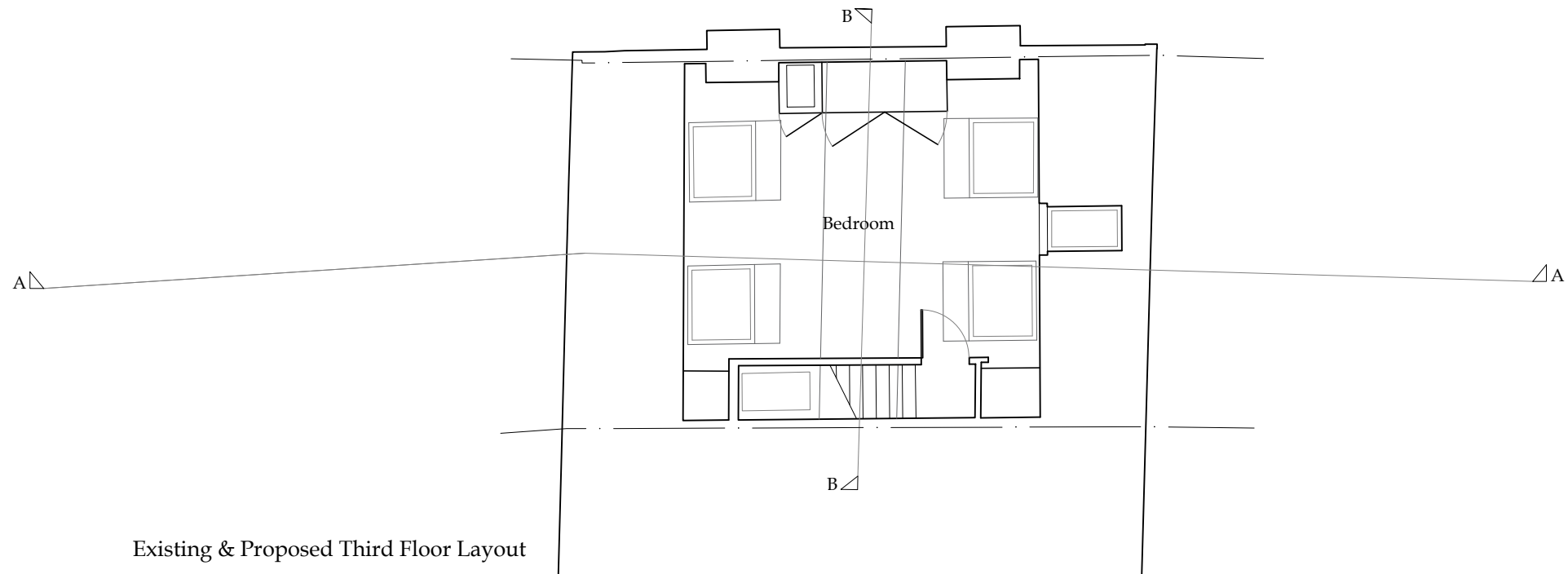
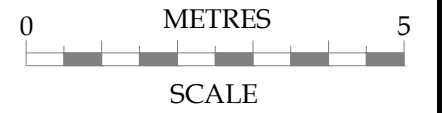
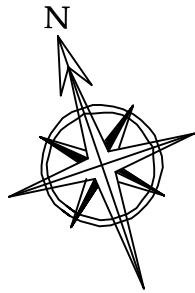


Existing & Proposed First Floor Layout



No.	Date	Amendment	Initials
Client : Mr J Przewozniak & Ms M Eleuteri			 Cranbrook Basements 26-28 Hammersmith Grove, Hammersmith, London, W7 7BA T +44 (0)208 551 5555 F +44 (0)208 551 1580 admin@cranbrook.co.uk www.cranbrook.co.uk 
Project : 31 Willoughby Road London NW3 1RT			
Drawing : Existing & Proposed First Floor Layout			
Scale : 1:100 @ A3	Status : PLANNING	Rev :	
Date : 12 Apr 24	Dwg No : 2362-102.01		
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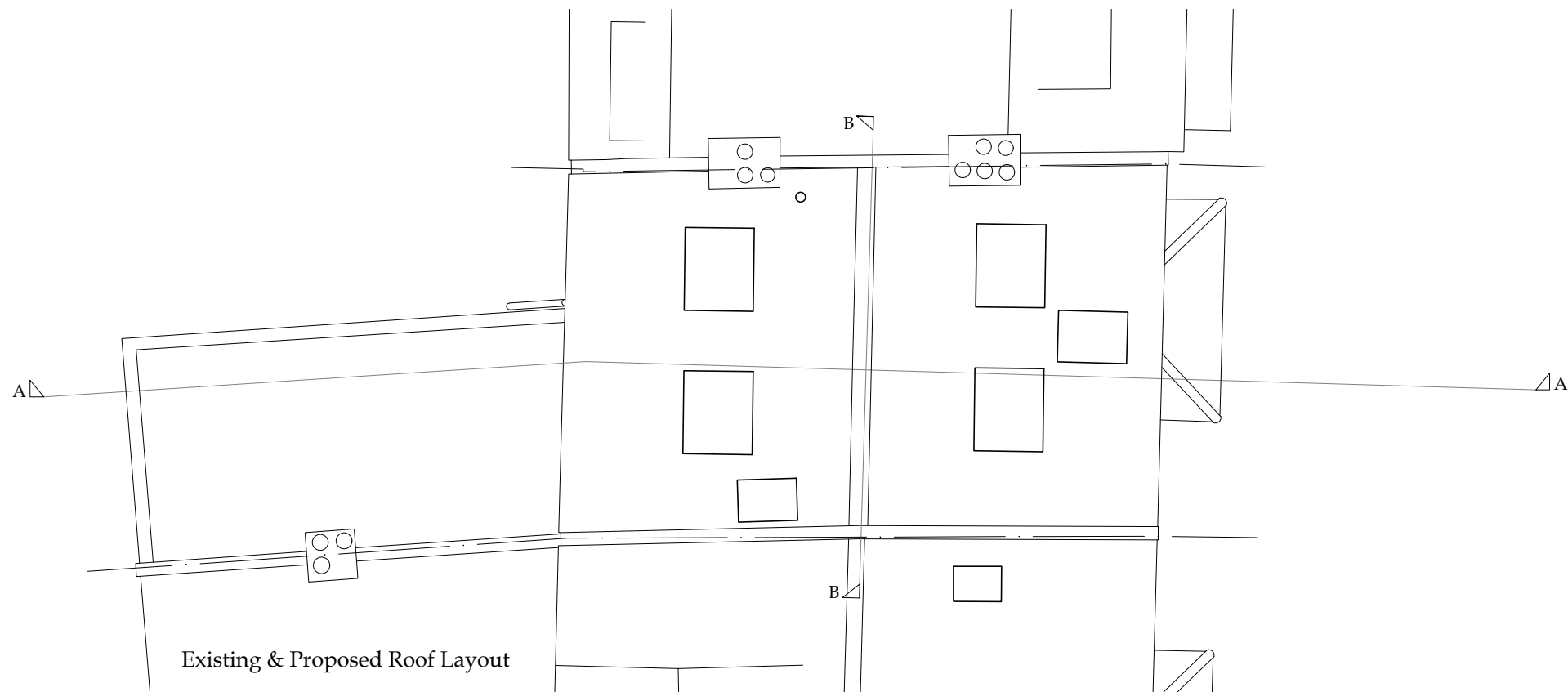
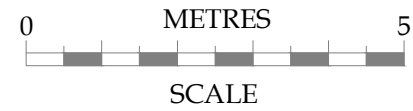
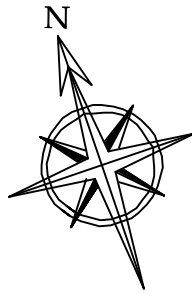


No.	Date	Amendment	Initials	
Client : Mr J Przewozniak & Ms M Eleuteri			<div> <small>Cranbrook Basements 26-28 Hammersmith Grove, Hammersmith, London, W7 7BA T +44 (0)208 551 5555 F +44 (0)208 551 1580 admin@cranbrook.co.uk www.cranbrook.co.uk</small></div> <div></div>	
Project : 31 Willoughby Road London NW3 1RT				
Drawing : Existing & Proposed Second Floor Layout				
Scale :	1:100 @ A3	Status : PLANNING		Rev :
Date :	12 Apr 24	Dwg No : 2362-103.01		
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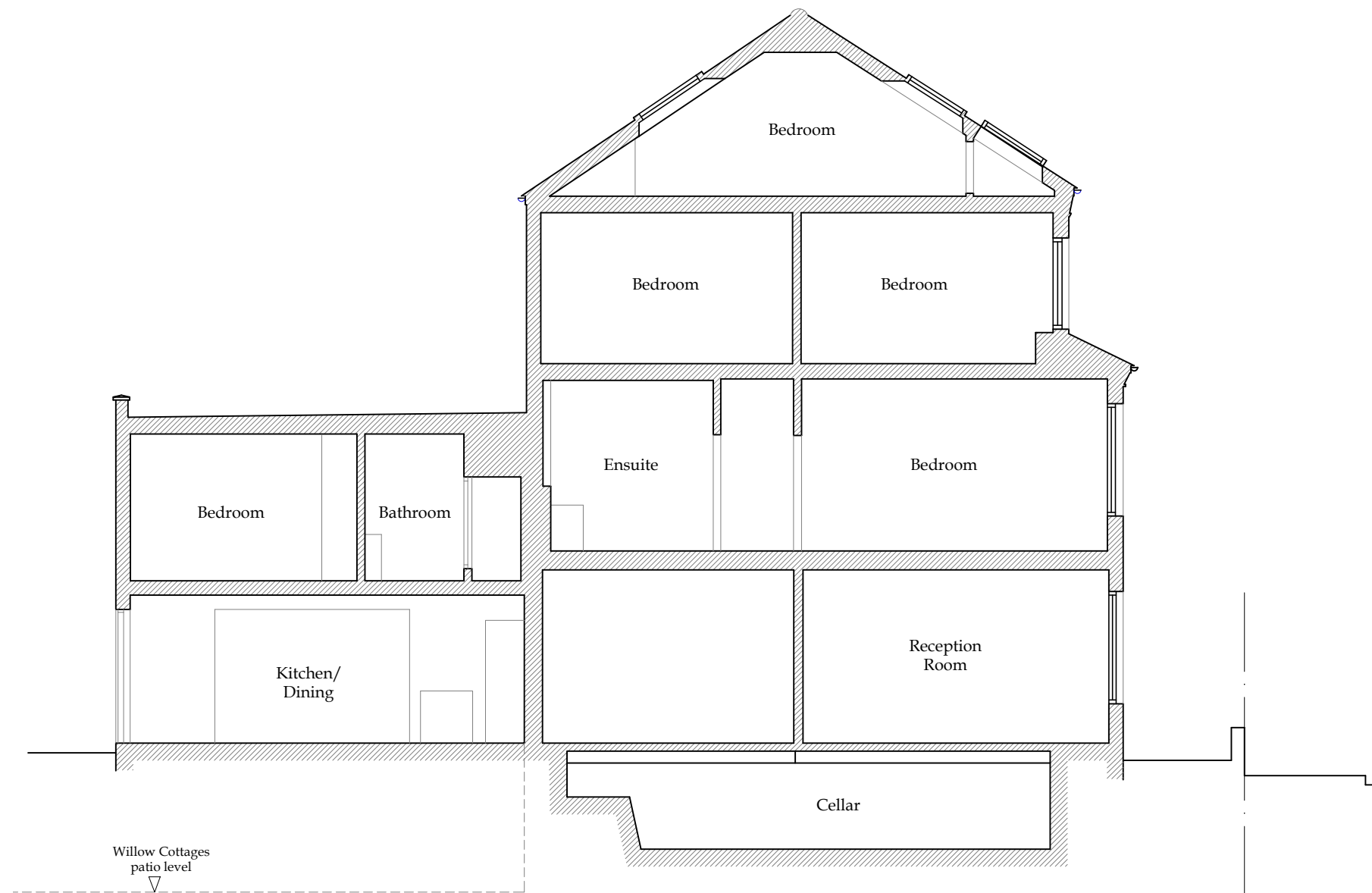
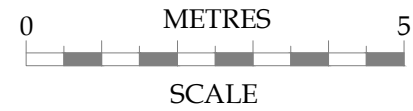
Existing & Proposed Third Floor Layout

No.	Date	Amendment	Initials
Client : Mr J Przewozniak & Ms M Eleuteri			<div> <small>Cranbrook Basements 26-28 Hammersmith Grove, Hammersmith, London, W7 7BA T +44 (0)208 551 5555 F +44 (0)208 551 1580 admin@cranbrook.co.uk www.cranbrook.co.uk</small></div> <div></div>
Project : 31 Willoughby Road London NW3 1RT			
Drawing : Existing & Proposed Third Floor Layout			
Scale :	1:100 @ A3	Status : PLANNING	Rev :
Date :	12 Apr 24	Dwg No : 2362-104.01	
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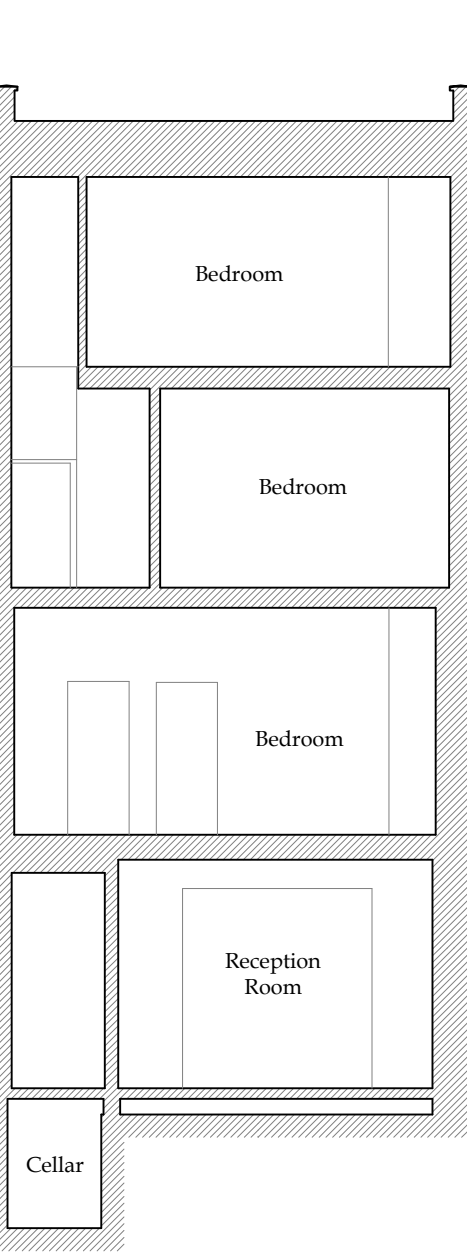
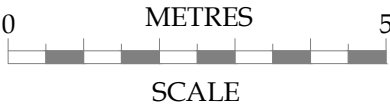
Existing & Proposed Roof Layout

No.	Date	Amendment	Initials
Client : Mr J Przewozniak & Ms M Eleuteri			<div> <small>Cranbrook Basements 26-28 Hammersmith Grove, Hammersmith, London, W7 7BA T +44 (0)208 551 5555 F +44 (0)208 551 1580 admin@cranbrook.co.uk www.cranbrook.co.uk</small></div> <div></div>
Project : 31 Willoughby Road London NW3 1RT			
Drawing : Existing & Proposed Third Floor Layout			
Scale :	1:100 @ A3	Status : PLANNING	
Date :	12 Apr 24	Dwg No : 2362-105.01	
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Existing Section AA

No.	Date	Amendment	Initials
Client : Mr J Przewozniak & Ms M Eleuteri			 Cranbrook Basements 26-28 Hammersmith Grove, Hammersmith, London, W7 7BA T +44 (0)208 551 5555 F +44 (0)208 551 1580 admin@cranbrook.co.uk www.cranbrook.co.uk 
Project : 31 Willoughby Road London NW3 1RT			
Drawing : Existing Section AA			
Scale :	1:100 @ A3	Status : PLANNING	Rev :
Date :	12 Apr 24	Dwg No : 2362-108.01	
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Existing Section BB

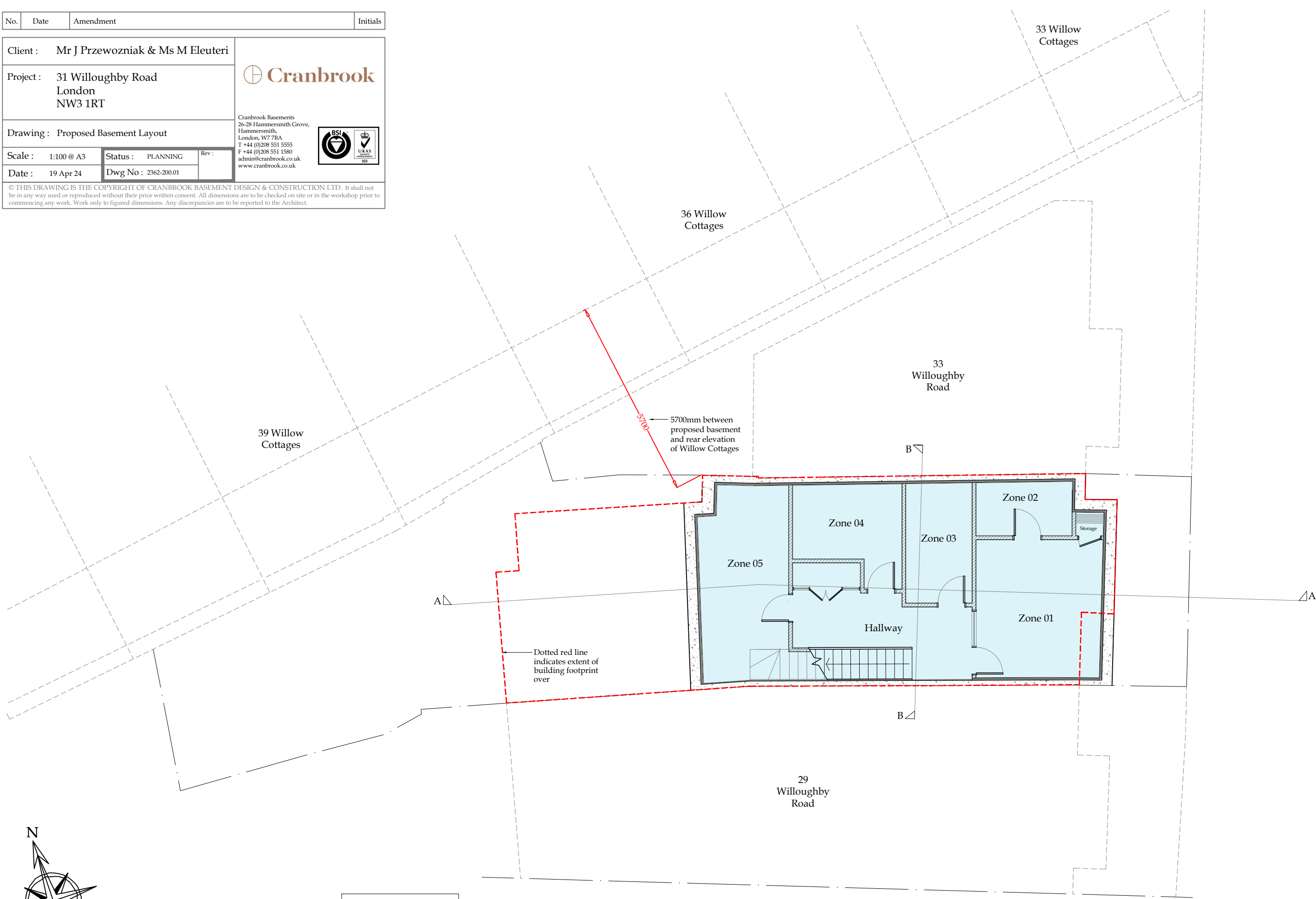
No.	Date	Amendment	Initials
Client : Mr J Przewozniak & Ms M Eleuteri			<div> <small>Cranbrook Basements 26-28 Hammersmith Grove, Hammersmith, London, W7 7BA T +44 (0)208 551 5555 F +44 (0)208 551 1580 admin@cranbrook.co.uk www.cranbrook.co.uk</small></div> <div></div>
Project : 31 Willoughby Road London NW3 1RT			
Drawing : Existing Section BB			
Scale :	1:100 @ A3	Status : PLANNING	Rev :
Date :	12 Apr 24	Dwg No : 2362-109.01	
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Appendix C: Cranbrook Basement Design and Construction Drawings - Proposed



Barker

No.	Date	Amendment	Initials
Client : Mr J Przewozniak & Ms M Eleuteri			
Project : 31 Willoughby Road London NW3 1RT			
Drawing : Proposed Basement Layout			
Scale : 1:100 @ A3	Status : PLANNING	Rev :	<div>Cranbrook Basements 26-28 Hammersmith Grove, Hammersmith, London, W7 7BA T +44 (0)208 551 5555 F +44 (0)208 551 1580 admin@cranbrook.co.uk www.cranbrook.co.uk</div> <div></div>
Date : 19 Apr 24	Dwg No : 2362-200.01		
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0 METRES 5

SCALE

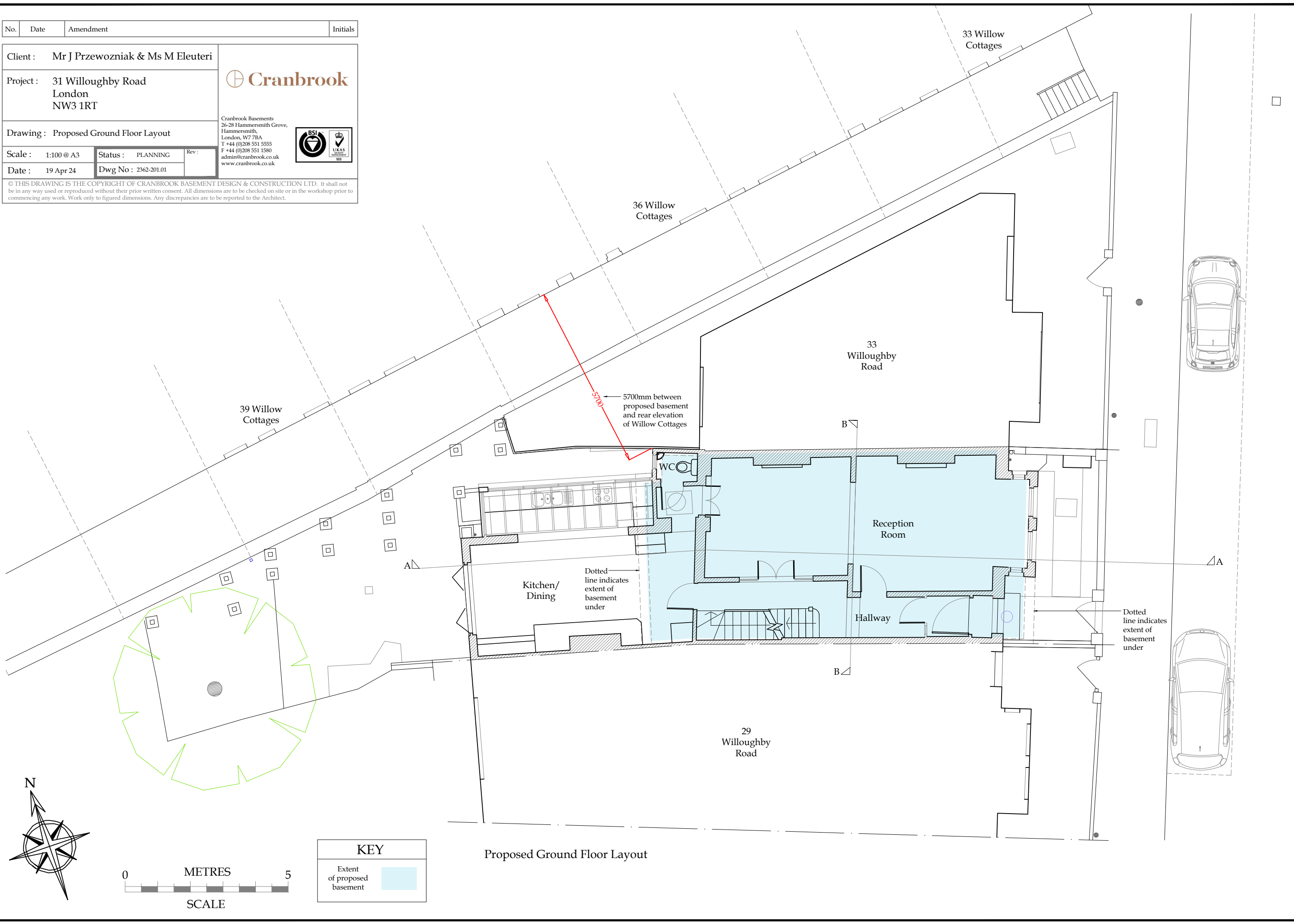
KEY	
Extent of proposed basement	

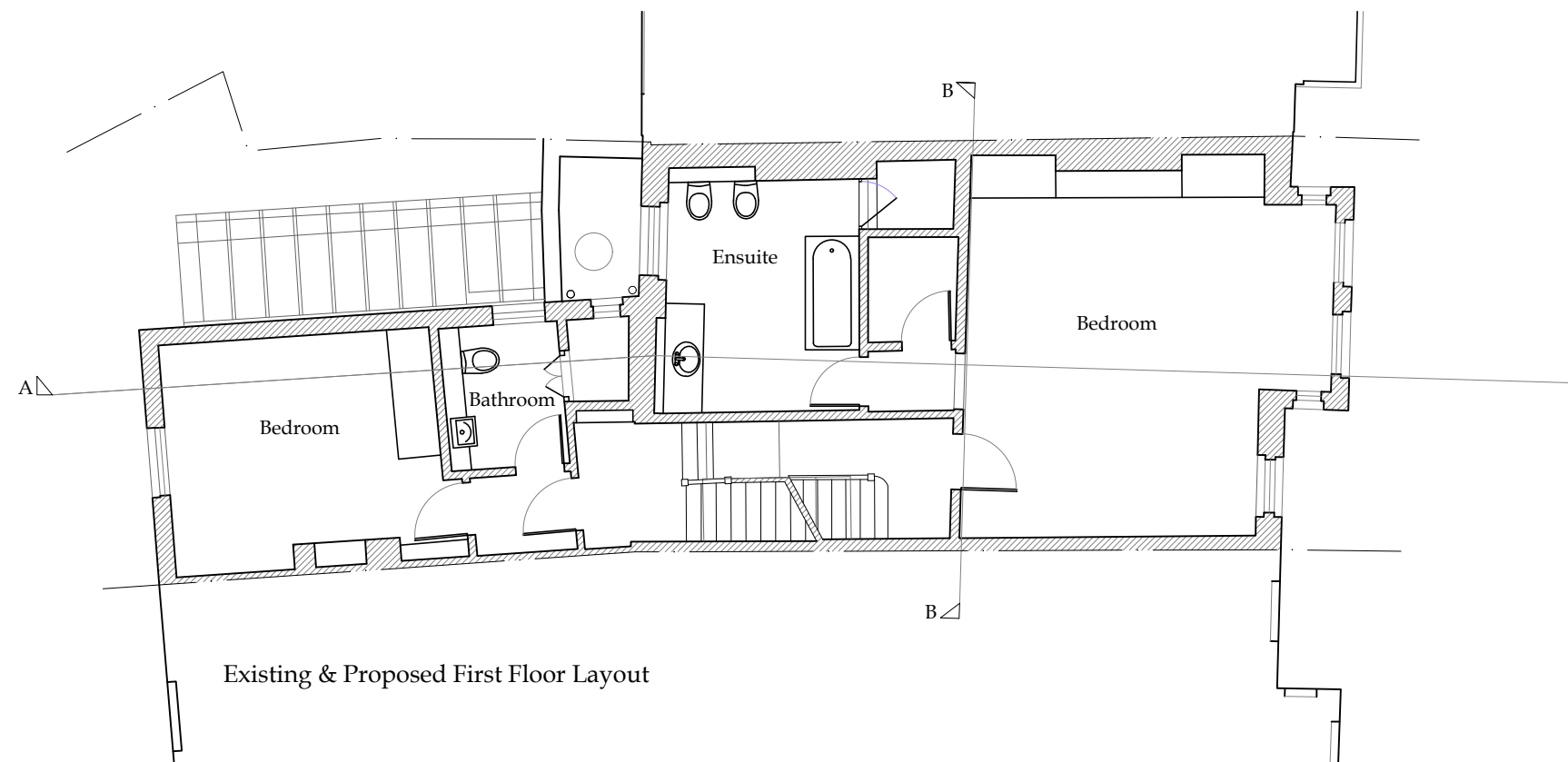
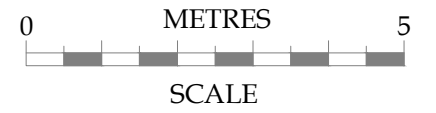
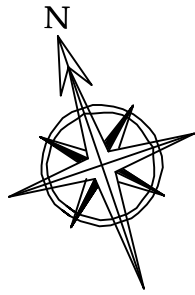
Proposed Basement Layout



No.	Date	Amendment	Initials
Client : Mr J Przewozniak & Ms M Eleuteri			
Project : 31 Willoughby Road London NW3 1RT			
Drawing : Proposed Ground Floor Layout			
Scale : 1:100 @ A3	Status : PLANNING	Rev :	
Date : 19 Apr 24	Dwg No : 2362-201.01		

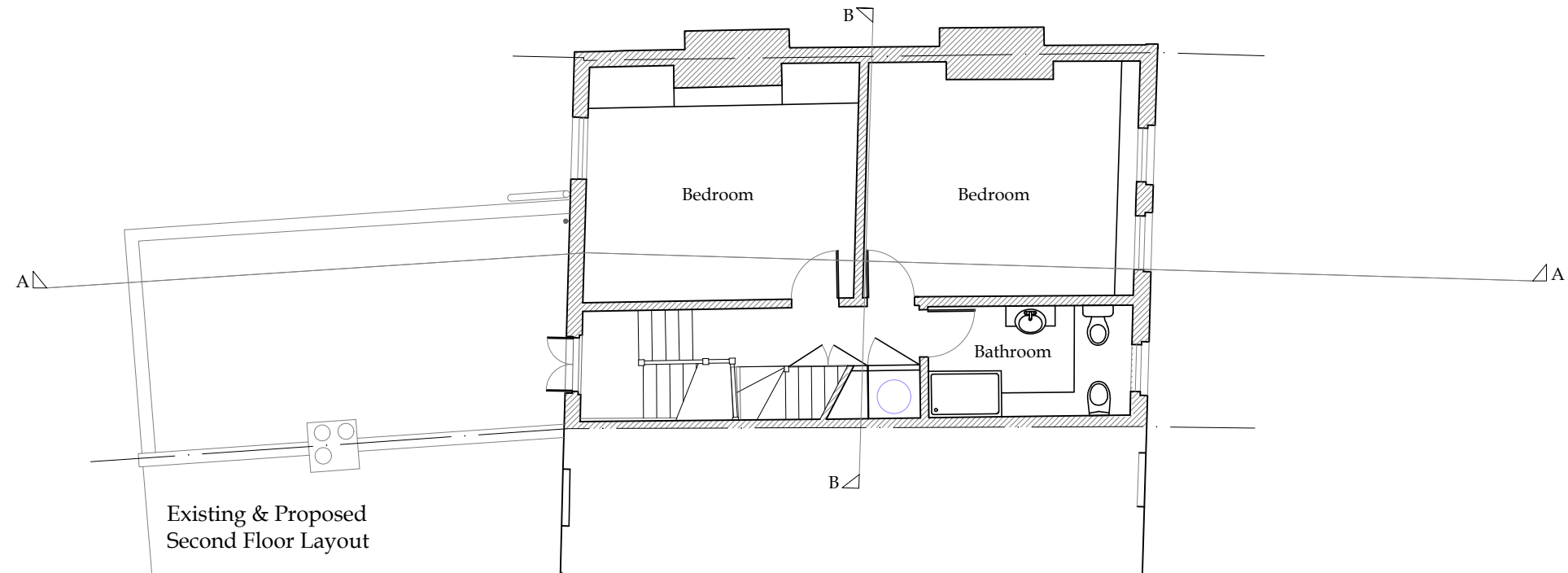
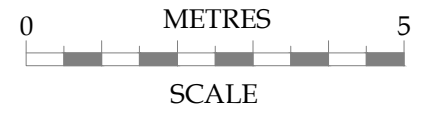
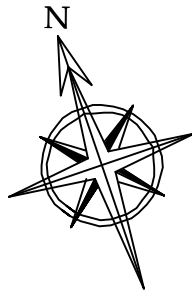
Cranbrook Basements
26-28 Hammersmith Grove,
Hammersmith,
London, W7 7BA
T +44 (0)208 551 5555
F +44 (0)208 551 1580
admin@cranbrook.co.uk
www.cranbrook.co.uk


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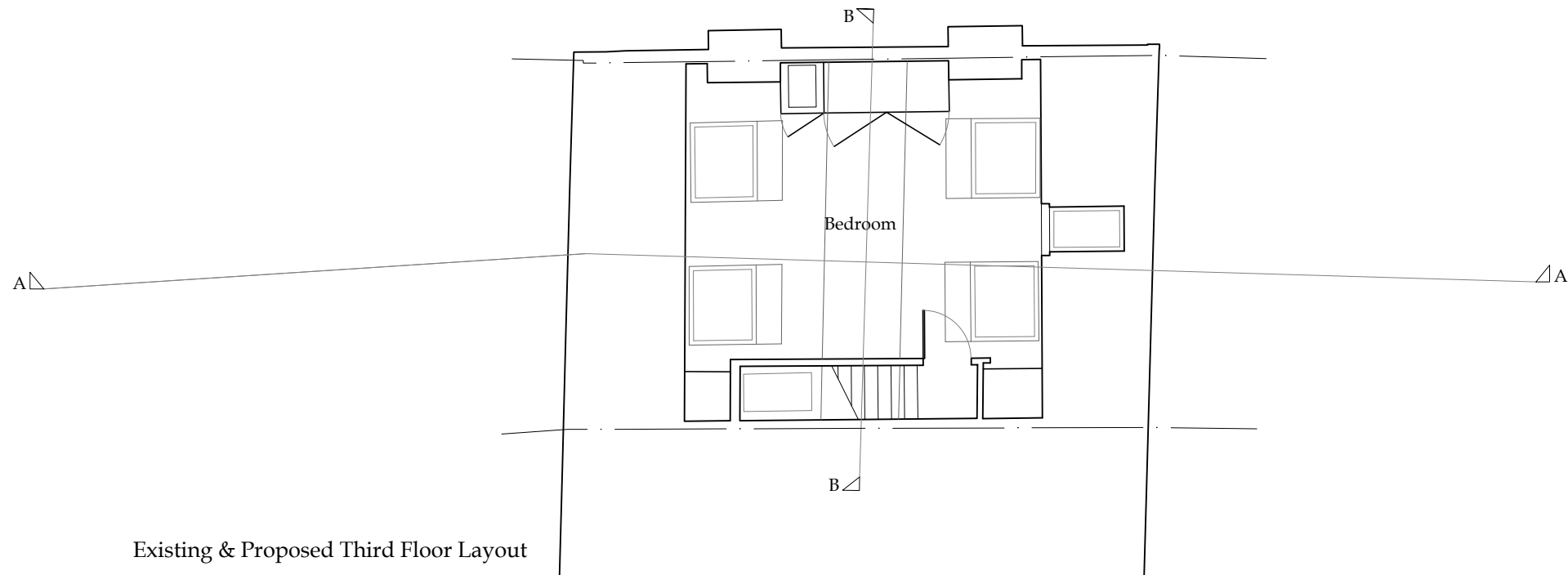
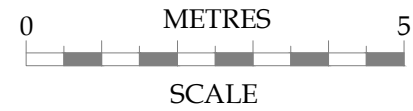
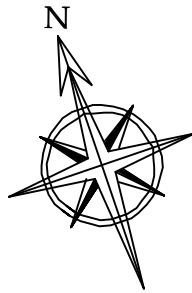






No.	Date	Amendment	Initials
Client : Mr J Przewozniak & Ms M Eleuteri			<div> <small>Cranbrook Basements 26-28 Hammersmith Grove, Hammersmith, London, W7 7BA T +44 (0)208 551 5555 F +44 (0)208 551 1580 admin@cranbrook.co.uk www.cranbrook.co.uk</small></div> <div></div>
Project : 31 Willoughby Road London NW3 1RT			
Drawing : Existing & Proposed First Floor Layout			
Scale : 1:100 @ A3	Status : PLANNING	Rev :	
Date : 12 Apr 24	Dwg No : 2362-102.01		
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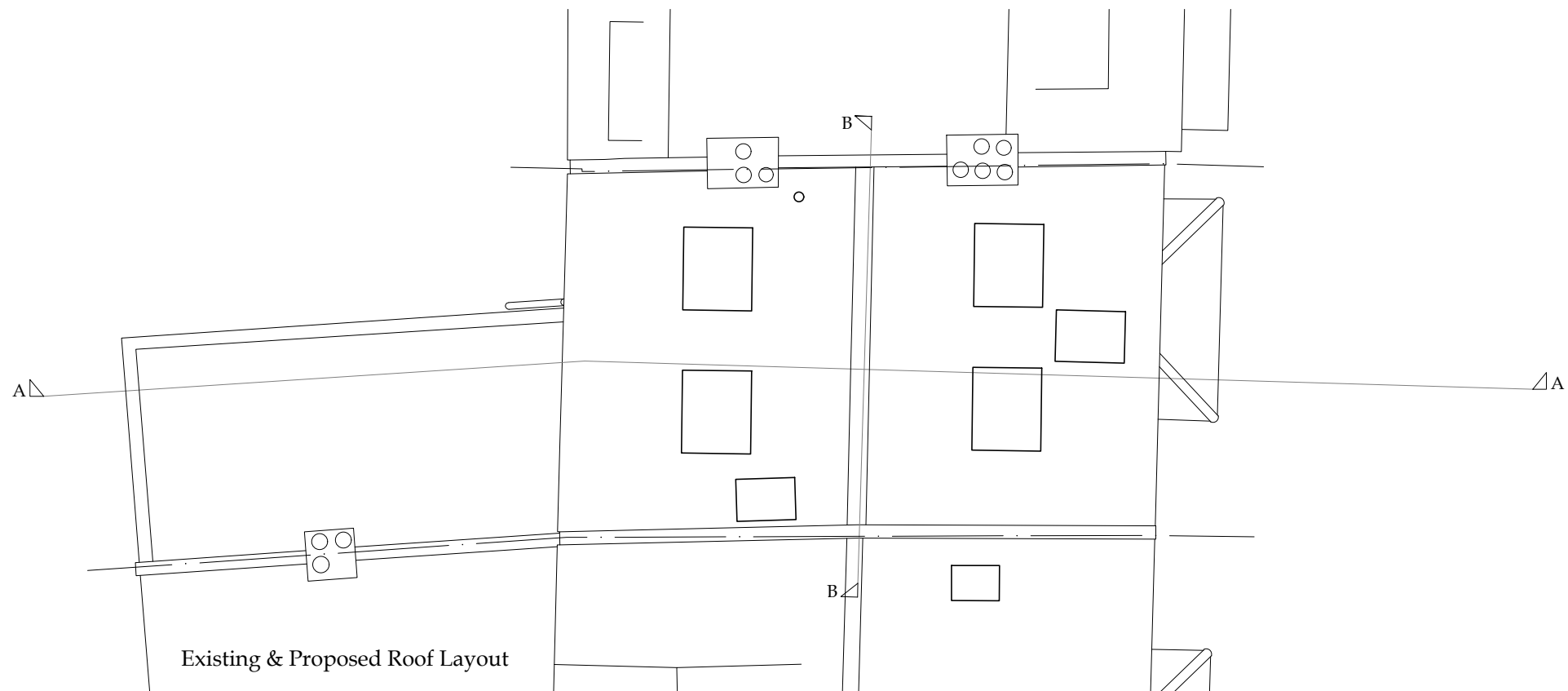
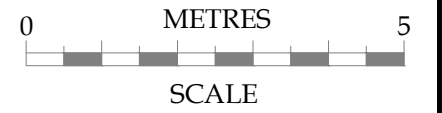
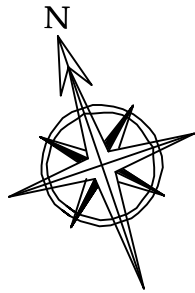


No.	Date	Amendment	Initials
Client : Mr J Przewozniak & Ms M Eleuteri			<div> <small>Cranbrook Basements 26-28 Hammersmith Grove, Hammersmith, London, W7 7BA T +44 (0)208 551 5555 F +44 (0)208 551 1580 admin@cranbrook.co.uk www.cranbrook.co.uk</small></div> <div></div>
Project : 31 Willoughby Road London NW3 1RT			
Drawing : Existing & Proposed Second Floor Layout			
Scale :	1:100 @ A3	Status : PLANNING	Rev :
Date :	12 Apr 24	Dwg No : 2362-103.01	
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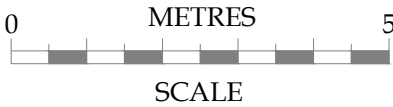
Existing & Proposed Third Floor Layout

No.	Date	Amendment	Initials	
Client : Mr J Przewozniak & Ms M Eleuteri			<div> <small>Cranbrook Basements 26-28 Hammersmith Grove, Hammersmith, London, W7 7BA T +44 (0)208 551 5555 F +44 (0)208 551 1580 admin@cranbrook.co.uk www.cranbrook.co.uk</small></div> <div></div>	
Project : 31 Willoughby Road London NW3 1RT				
Drawing : Existing & Proposed Third Floor Layout				
Scale :	1:100 @ A3	Status : PLANNING		Rev :
Date :	12 Apr 24	Dwg No : 2362-104.01		
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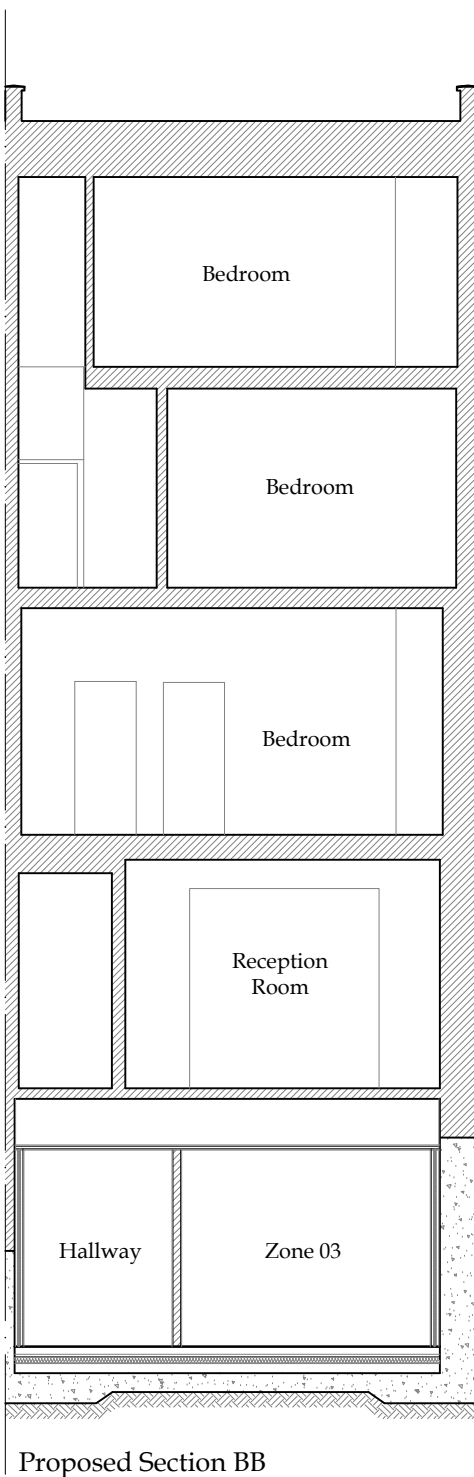
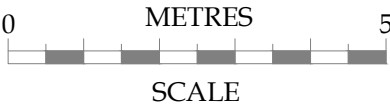
Existing & Proposed Roof Layout



No.	Date	Amendment	Initials
Client : Mr J Przewozniak & Ms M Eleuteri			<div> <small>Cranbrook Basements 26-28 Hammersmith Grove, Hammersmith, London, W7 7BA T +44 (0)208 551 5555 F +44 (0)208 551 1580 admin@cranbrook.co.uk www.cranbrook.co.uk</small></div> <div></div>
Project : 31 Willoughby Road London NW3 1RT			
Drawing : Existing & Proposed Third Floor Layout			
Scale :	1:100 @ A3	Status : PLANNING	
Date :	12 Apr 24	Dwg No : 2362-105.01	
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Proposed Section AA

No.	Date	Amendment	Initials	
Client : Mr J Przewozniak & Ms M Eleuteri			<div></div> <div>Cranbrook Basements 26-28 Hammersmith Grove, Hammersmith, London, W7 7BA T +44 (0)208 551 5555 F +44 (0)208 551 1580 admin@cranbrook.co.uk www.cranbrook.co.uk</div> <div></div>	
Project : 31 Willoughby Road London NW3 1RT				
Drawing : Proposed Section AA				
Scale :	1:100 @ A3	Status : PLANNING		Rev :
Date :	19 Apr 24	Dwg No : 2362-203.01		
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No.	Date	Amendment	Initials	
Client : Mr J Przewozniak & Ms M Eleuteri			<div> <small>Cranbrook Basements 26-28 Hammersmith Grove, Hammersmith, London, W7 7BA T +44 (0)208 551 5555 F +44 (0)208 551 1580 admin@cranbrook.co.uk www.cranbrook.co.uk</small></div> <div></div>	
Project : 31 Willoughby Road London NW3 1RT				
Drawing : Proposed Section BB				
Scale :	1:100 @ A3	Status : PLANNING		Rev :
Date :	19 Apr 24	Dwg No : 2362-204.01		
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Appendix D: Barker Associates Scheme Drawings



Barker

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LEVELS, ANGLES AND DIMENSIONS TO BE
CHECKED ON SITE PRIOR TO COMMENCEMENT
OF WORKS.

THIS DRAWING IS TO BE READ IN CONJUNCTION
WITH ALL RELEVANT STRUCTURAL ENGINEERS
AND MECHANICAL AND ELECTRICAL ENGINEERS
DRAWINGS, DETAILS AND SPECIFICATIONS.



Note:

Note:

Drawing Status:			
FEASIBILITY STUDY			
P01	PRELIMINARY ISSUE	12/06/24	SH
Rev	Description	Date	By



Client
CRANBROOK BASEMENT DESIGN

Project Title

31 WILLOUGHBY ROAD,
LONDON, NW3 1RT

Drawing Title

PROPOSED BASEMENT LAYOUT

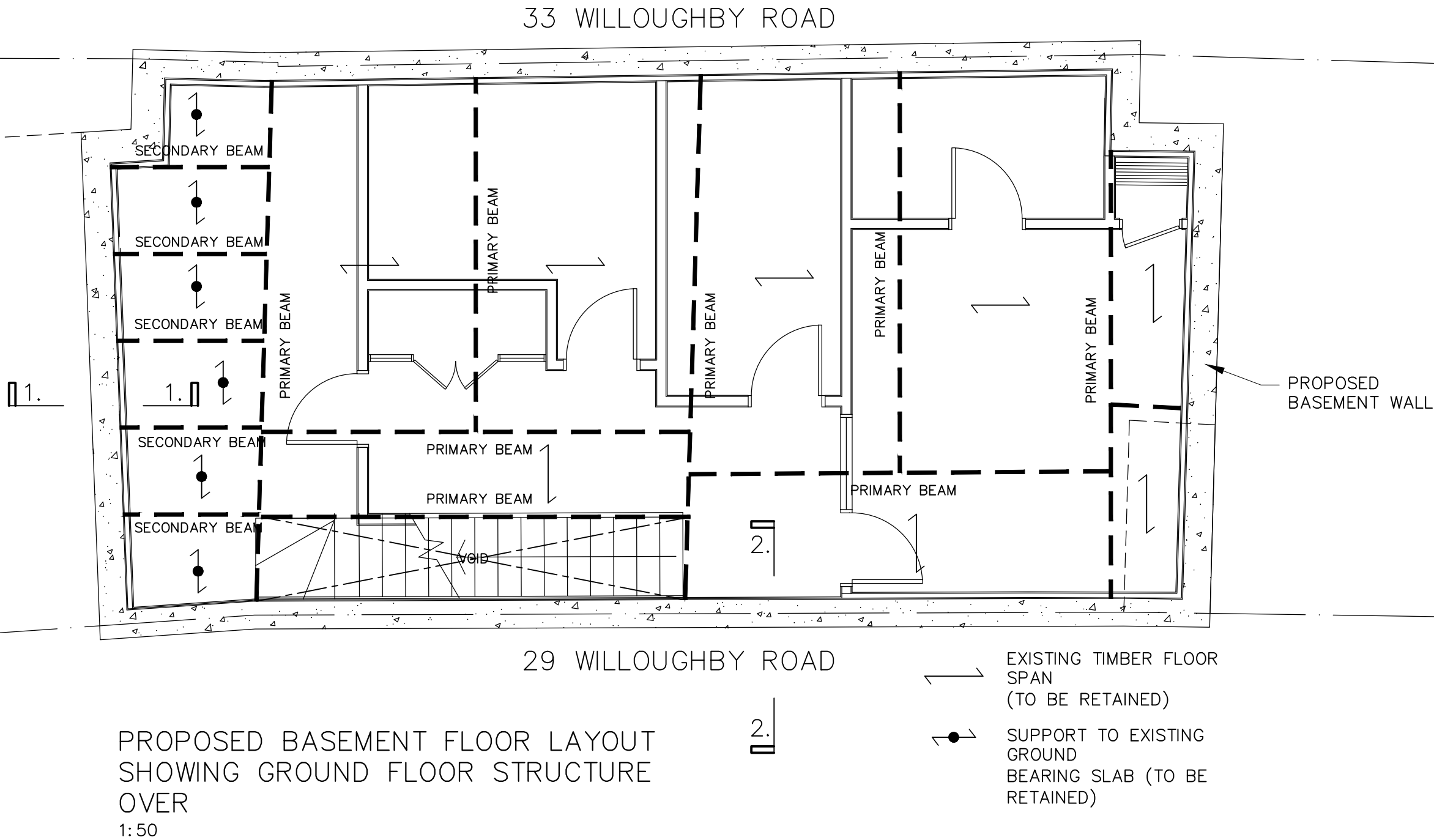
STRUCTURAL

Project No	P24-0500	Date	JUNE 24	Drawn	SH	Checked	DC
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Drawing Number							
P24500-BA-A1-B1-DR-S-2000							

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PROPOSED BASEMENT FLOOR LAYOUT
SHOWING GROUND FLOOR STRUCTURE
OVER
1: 50

Note:
ALL CONCRETE TO BE RC28/35N CONCRETE MIX

Note:
FOR SECTIONS 1-1 TO 2-2 REFER TO DRAWNGS P24500-BA-A1-ZZ-DR-S-3000 & 3001

Drawing Status: FEASIBILITY STUDY			
P01	PRELIMINARY ISSUE	12/06/24	SH
Rev	Description	Date	By



MAJESTY HOUSE, AVENUE WEST
SKYLINE 120, BRAINTREE
ESSEX, CM77 7AA
T: 01279 647111
W: www.barker-associates.co.uk
E: mail@barker-associates.co.uk

Client
CRANBROOK BASEMENT DESIGN

Project Title
31 WILLOUGHBY ROAD,
LONDON, NW3 1RT

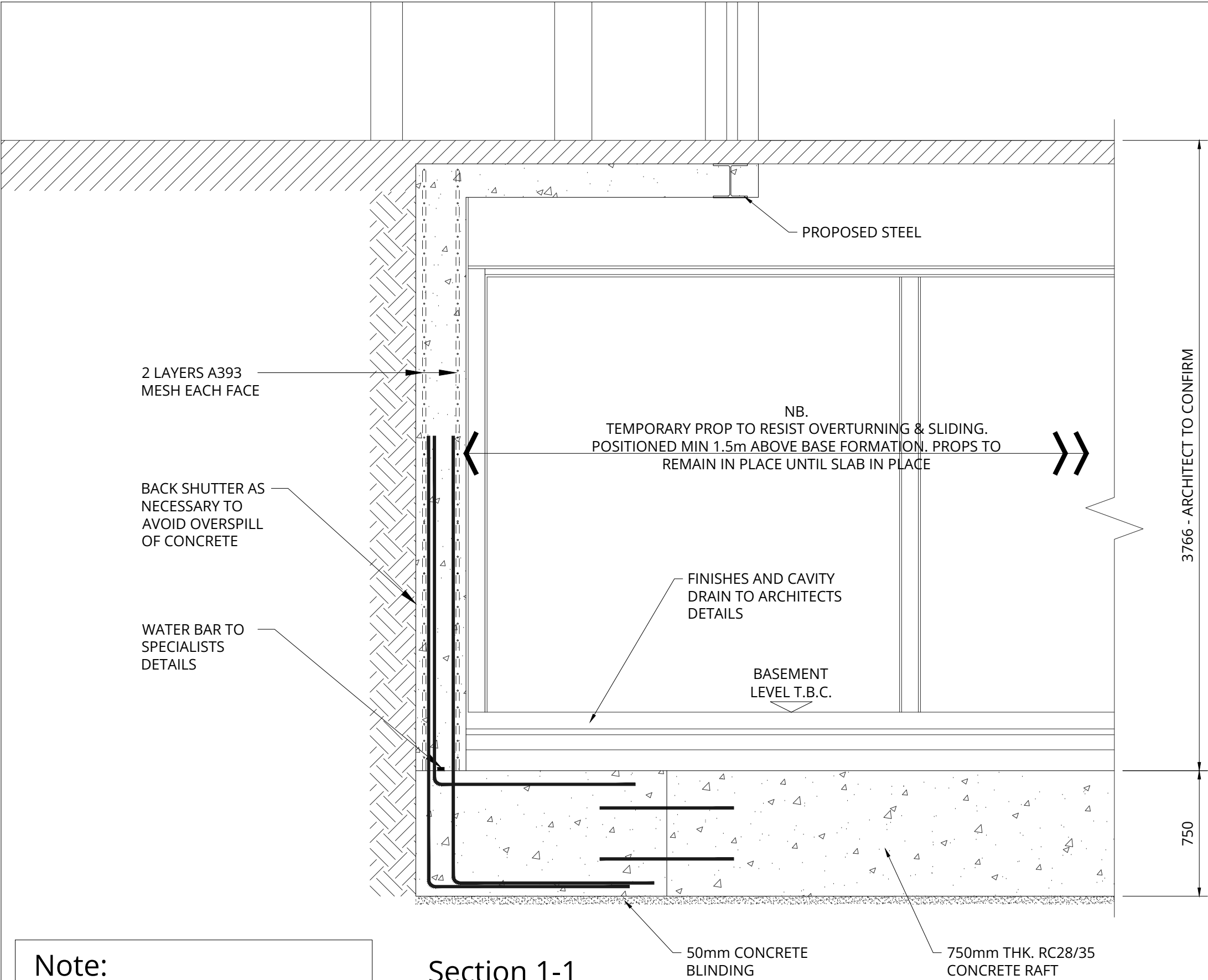
Drawing Title
PROPOSED BASEMENT
LAYOUT
SHOWING GROUND FLOOR
STRUCTURE OVER

STRUCTURAL

Project No	P24-0500	Date	JUNE 24	Drawn	SH	Checked	DC
Scale:	1:50 @ A3	Status	S0	Revision	P01		
Drawing Number				P24500-BA-A1-GF-DR-S-2001			

NOTES:
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ANGLES AND DIMENSIONS TO BE CHECKED ON SITE
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DETAILS AND SPECIFICATIONS.



Note:
ALL CONCRETE TO BE RC28/35N CONCRETE MIX

Note:
FOR SECTION LOCATION REFER TO DRAWING P24500-BA-A1-B1-DR-S-2000

Section 1-1
1:25

Drawing Status:

FEASIBILITY STUDY

P01	PRELIMINARY ISSUE	12/06/24	SH
-----	-------------------	----------	----

Rev	Description	Date	By



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Client

CRANBROOK BASEMENT DESIGN

Project Title

31 WILLOUGHBY ROAD,
LONDON, NW3 1RT

Drawing Title

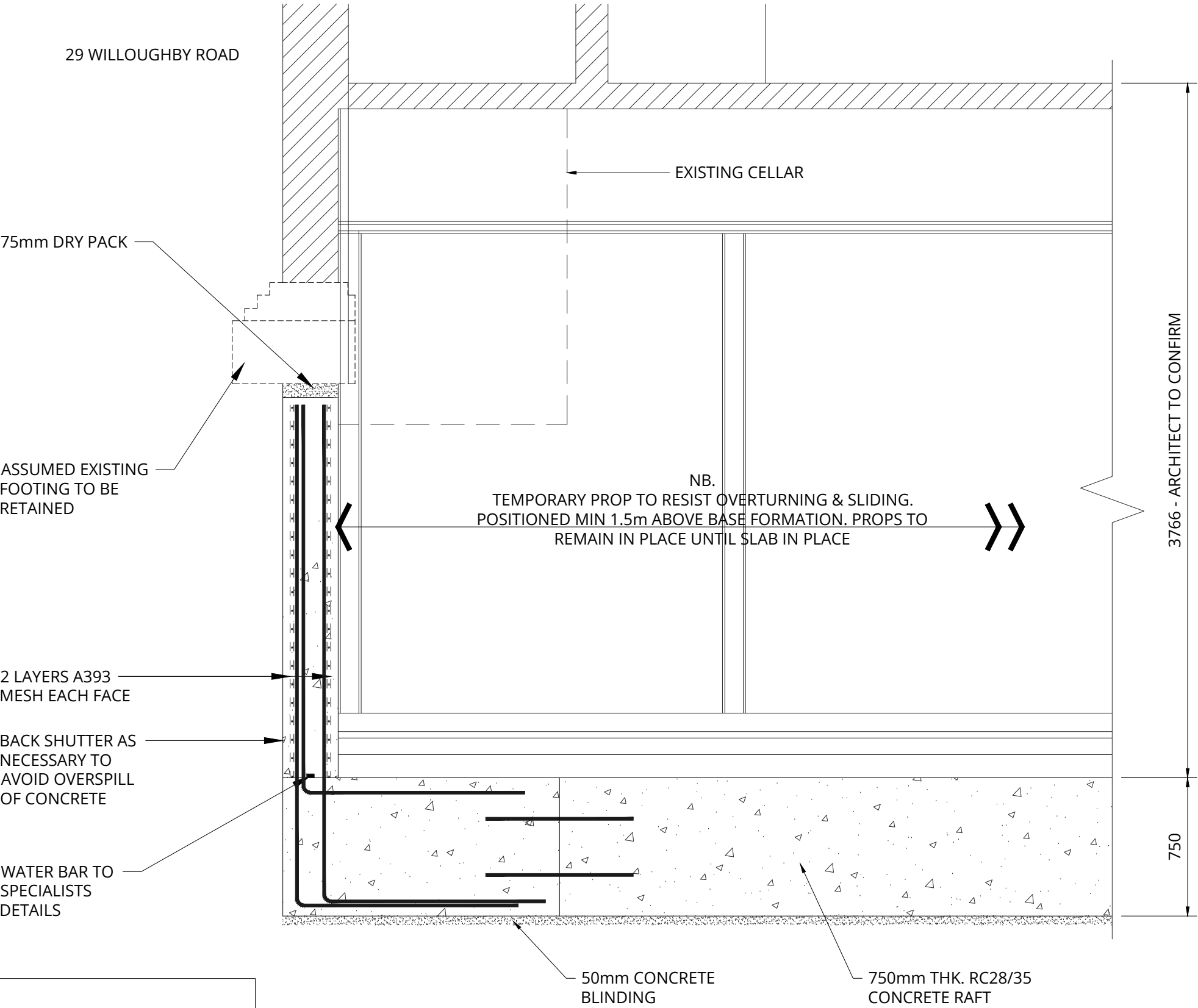
PROPOSED SECTIONS SHEET 1 OF 2

STRUCTURAL

Project No.	P24-0500	Date	JUNE 24	Drawn	SH	Checked	DC
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Drawing Number							
P24500-BA-A1-ZZ-DR-S-3000							

NOTES:
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THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT STRUCTURAL ENGINEERS AND MECHANICAL AND ELECTRICAL ENGINEERS DRAWINGS, DETAILS AND SPECIFICATIONS.



Note:

ALL CONCRETE TO BE RC28/35N CONCRETE MIX

Note:

FOR SECTION LOCATION REFER TO DRAWING P24500-BA-A1-B1-DR-S-2000

Drawing Status:			
FEASIBILITY STUDY			
P01	PRELIMINARY ISSUE	12/06/24	SH
Rev	Description	Date	By
 MAJESTY HOUSE, AVENUE WEST SKYLINE 120, BRAINTREE ESSEX, CM77 7AA T: 01279 647111 W: www.barker-associates.co.uk E: mail@barker-associates.co.uk			
Client CRANBROOK BASEMENT DESIGN			
Project Title 31 WILLOUGHBY ROAD, LONDON, NW3 1RT			
Drawing Title PROPOSED SECTIONS SHEET 2 OF 2			
STRUCTURAL			
Project No. P24-0500	Date JUNE 24	Drawn SH	Checked DC
Scale: 1:25 @ A3	Status S0	Revision P01	
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