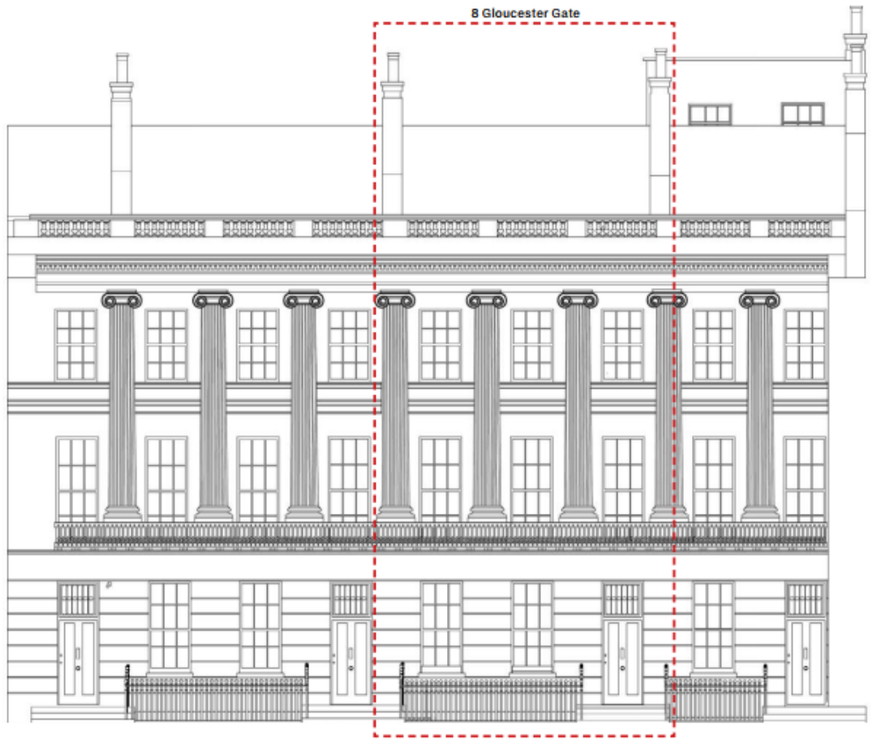


STRUCTURAL STATEMENT

ON

8 GLOUCESTER GATE
LONDON
NW1 4HG

FOR

PLANNING APPLICATION

PROJECT NO: P5720

AUGUST 2024

Version 1.1

Michael Alexander Consulting Engineers Limited
Berkeley House, 304 Regents Park Road, London N3 2JX
mail@maengineers.com
Tel 020 8445 9115

1.00 INTRODUCTION

1.01 Michael Alexander Consulting Engineers has been appointed by Mr Dory Gabbay, Owner of the 8 Gloucester Gate, London NW1 4HG, to advise on the structure of the property and the proposed structural alterations. This document provides a summary of the existing structure, exploratory works and proposals, and shall be read in conjunction with all other documents submitted with the Planning and Listed Building Applications.

1.02 Michael Alexander Limited has considerable experience of working on historic and listed buildings and has carried out refurbishment and renovation projects on properties in the vicinity of the site and around Regents Park, including nearby St Katherines Precinct, Cumberland Terrace, Hanover Terrace and York Terrace.

1.03 This report has been prepared by Mr John McSweeney BSc(Hons) CEng MICE MIStructE, a Chartered Engineer and Director of Michael Alexander Consulting Engineers. The report is for the sole use of the Client and his advisors.

2.00 EXISTING CONSTRUCTION

2.01 The Grade 1 Listed building is described in detail by Dowen Farmer Architects in their Design and Access Statement for Planning. The construction of the building is typical of a property of this age and nature; however, it has been subject to a number of past interventions and alterations, the most recent being the construction of the closet wing.

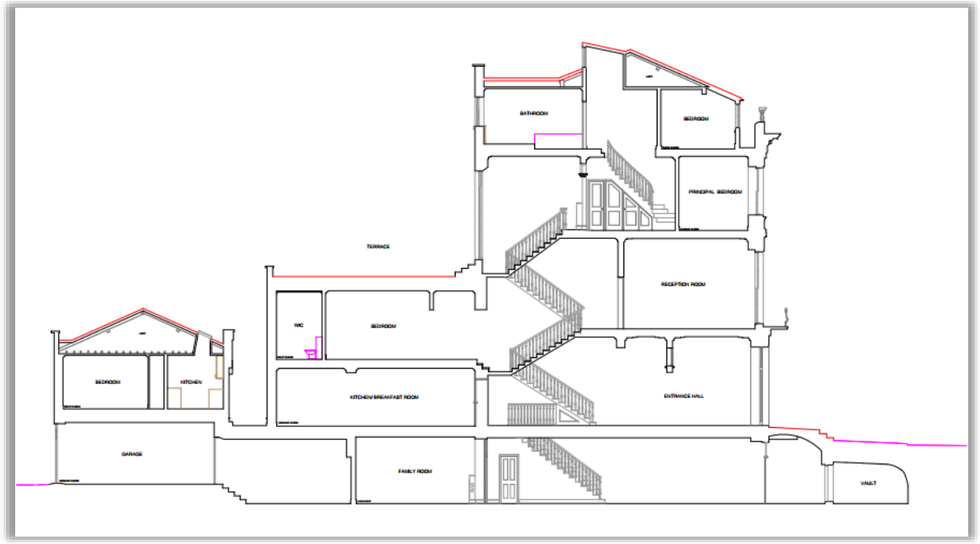
2.02 The details of the existing construction have been verified by exploratory works, which involved the careful removal of localised areas of the finishes and floor coverings and boarding to expose the floor joists and their bearings. Trial holes have been excavated to establish the details of the existing foundations and localised ground conditions.

2.03 The locations of the exploratory works are shown on the Michael Alexander drawings nos. P5720 EW 01 and EW02, which are included in **Appendix A**.

2.04 The exploratory works were carried out under the supervision of Michael Alexander and in such a manner to minimise disruption to the surrounding fabric of the building.

2.05 The photographic record and brief description of the findings of the exploratory works are included in **Appendix B**.

2.06 The floors of the building are predominately timber joisted construction, supported on the external masonry walls and on internal loadbearing timber and masonry walls. The lower ground floor is a ground bearing concrete slab. The ground conditions in the vicinity are known to be variable, and the original building is founded on shallow corbelled brick footings; there are mass concrete footings under the more recent rear extensions.



3.00 PROPOSED STRUCTURE

Refer to MA Drawings in **Appendix C**

3.01 Where the proposed alterations to the building shall require the removal of elements of the existing structure, the alterations to the historic fabric, and the installation of the proposed new structure, shall be designed using well establish conservation techniques to minimise the effect on the retained historic fabric.

Main House

3.02 The proposed interventions into the Main House are of a minimal structural nature and include the removal of non-load bearing partitions, many of which are additions to the original construction.

3.03 New openings are to be formed through masonry walls in the lower ground and ground floors, where precast concrete lintels shall be installed above the new openings. If sections of the retained brickwork are found to be in poor condition, or inadequate, they will be replaced with new brickwork bonded into the existing.

3.04 The existing floors appear to be sufficiently robust and commensurate with a building of this age and nature; however, it is inevitable that timber joists will have been cut, notched and drilled for past services installations. Where floor boarding is to be lifted, the joist shall be inspected and strengthened/supplemented, as necessary. The floors shall be levelled with the use of timber firring pieces on the existing joists and supplementary joists, where necessary.

3.05 New partitions in the lower ground floor shall be of a lightweight, non-loadbearing construction and supported on the existing concrete slabs.

3.06 The partitions in the second and third floors appear to be non-loadbearing; these shall be further inspected by Michael Alexander prior to commencement of the works to ensure that they are providing no support to the floors and roof over.

3.07 The existing downstand beam below the ceiling of the principal second floor room shall be raised into the structural zone of the third floor over, to provide flush ceiling; alternatively, the beam shall be replaced by a beam of equivalent properties on new bearings, if required.

Closet Wing

3.08 The Closet Wing shall be dismantled and replaced with a new structure. The party wall separating No.8 from No.7 Gloucester Gate shall be temporarily retained during the works, which shall be subject to Notices under the Party Wall etc. Act 1996.

3.09 Temporary works to retain party wall shall be designed to ensure that there is no disruption to the subject or adjoining property and, where possible, the proposed permanent structure shall be installed prior to dismantling the existing structure and designed to provide temporary support to the party walls.

3.10 The new structure shall be steel framed with a concrete ground floor and timber first floor and roof. The new structure shall be supported on mass concrete foundations, founded into natural ground at a similar level to the existing.

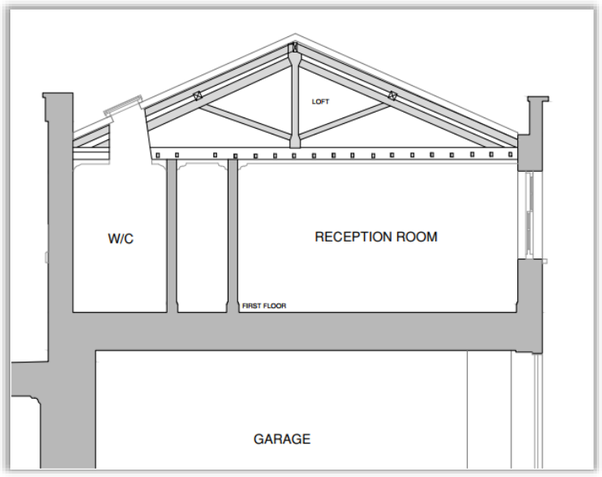
3.11 Steel columns and beams (channel sections) shall support the new structure adjacent to the Party Walls, to limit interventions into the historic fabric of the walls.

Mews

3.12 The structure of the Mews shall remain predominantly as existing, other than the forming of new openings in the rear (west) wall and the remodelling of the roof structure, which shall incorporate a new rooflight.

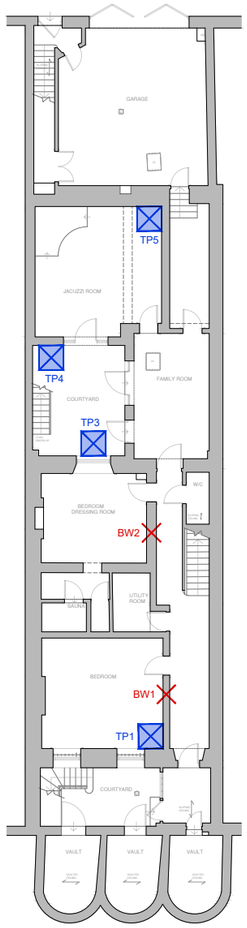
3.13 The original timber roof trusses would have been visible from the first floor prior to the, more recent, installation of the existing ceiling. The ceiling shall be removed to expose the trusses which shall be relocated to provide a larger open roof space.

3.14 Existing rafters and purlins shall be reused, where possible and new purlins to span the increased distance between the trusses shall comprise timber/steel flitch beams. The relocated trusses shall be supported on concrete spreaders to distribute the load of the roof onto the existing masonry walls.

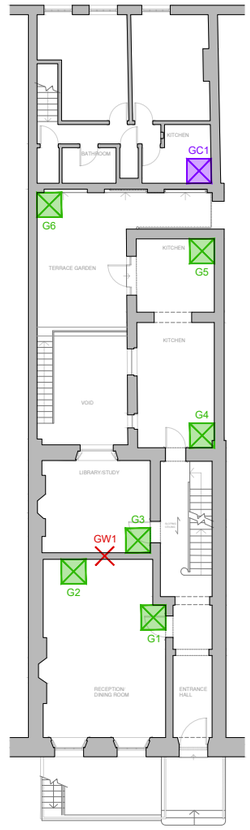


APPENDIX A

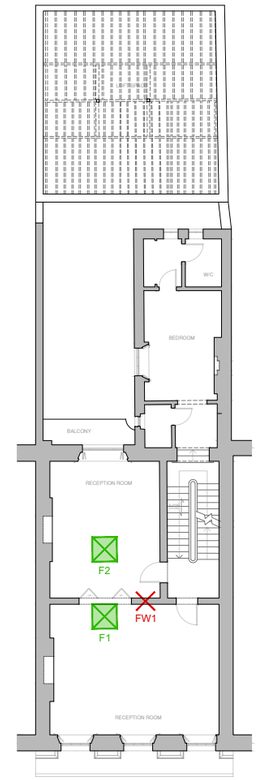
MA EXPLORATORY WORKS DRAWINGS



LOWER GROUND FLOOR PLAN



GROUND FLOOR PLAN



FIRST FLOOR PLAN

0 100mm WHEN PLOTTED @ 1:1 FOR A1 100 50mm WHEN PLOTTED @ 1:2 FOR A3 200

NOTES

1. This drawing shall be read in conjunction with all relevant Architects & Engineers drawings and specifications.
2. Do not scale any dimensions. All dimensions to be checked on site.
3. This drawing is based on a survey carried out by Mobile CAD Surveying Solutions.

LEGEND

- Indicates existing walls
- Indicates existing structure over
- Trial pit to expose the underside of existing foundation
- Exploratory hole to expose floor structure and top of wall below to ascertain the existing floor construction, span direction and bearing condition
- Exploratory hole in ceiling to establish whether plasterboard or lathe and plaster
- Exploratory works to expose structure of wall/partition
- Exploratory works to the underside of stair to expose structure

Rev.	Date	Description	By
P4	31.07.24	Updated following site inspection	RJC

EXPLORATORY WORKS

Client: MR & MRS GABBAY

Project Title: 8 GLOUCESTER GATE LONDON NW1 4HG

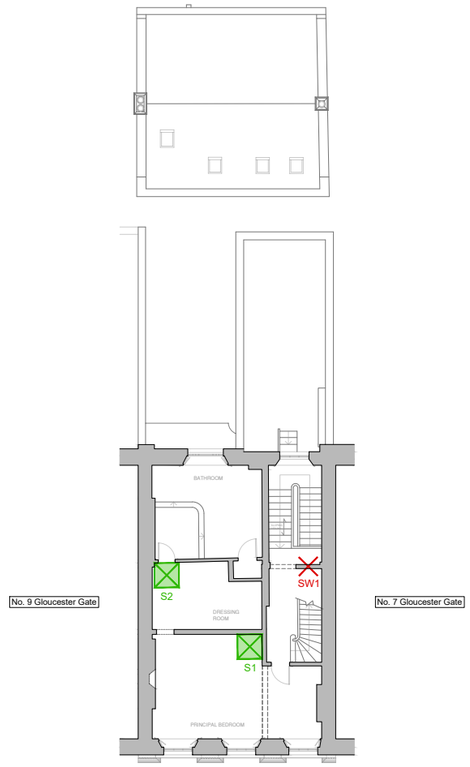
Drawing Title: EXPLORATORY WORKS LOWER GRND, GRND & FIRST

Michael Alexander
Berkeley House
304 Regents Park Road
London N3 2JX
tel +44 (0)20 8445 9115
email mail@maengineers.com
web www.maengineers.com

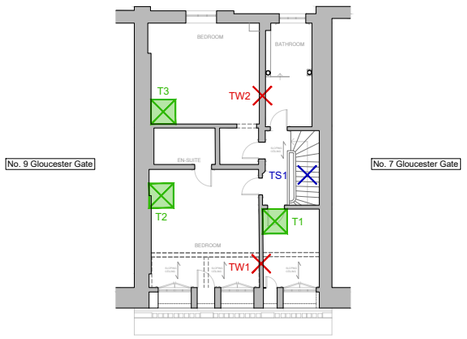
Drawn		Checked	
RJC	DEC. 2023	JMcS	DEC. 2023

Scale	Size
1:100	A1
1:200	A3

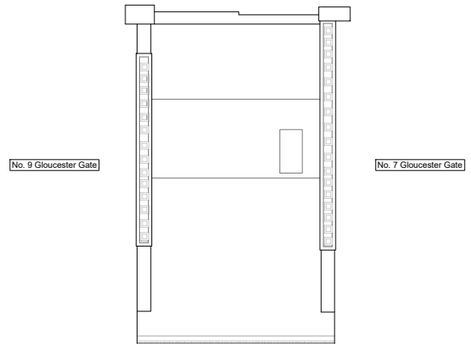
Project No.	Drawing No.	Rev.
P5720	EW01	P4



SECOND FLOOR PLAN



THIRD FLOOR PLAN



ROOF PLAN

0 100mm WHEN PLOTTED @ 1:1 FOR A1 100 50mm WHEN PLOTTED @ 1:2 FOR A3 200

NOTES

1. This drawing shall be read in conjunction with all relevant Architects & Engineers drawings and specifications.
2. Do not scale any dimensions. All dimensions to be checked on site.
3. This drawing is based on a survey carried out by Mobile CAD Surveying Solutions.

LEGEND

- Indicates existing walls
- Indicates existing structure over
- Exploratory hole to expose floor structure and top of wall below to ascertain the existing floor construction, span direction and bearing condition
- Exploratory hole in ceiling to establish whether plasterboard or lathe and plaster
- Exploratory works to expose structure of wall/partition
- Exploratory works to the underside of stair to expose structure

Rev.	Date	Description	By
P4	31.07.24	Updated following site inspection	RJC

EXPLORATORY WORKS

Client: MR & MRS GABBAY

Project Title: 8 GLOUCESTER GATE LONDON NW1 4HG

Drawing Title: EXPLORATORY WORKS SECOND, THIRD & ROOF

MichaelAlexander
Berkeley House
304 Regents Park Road
London N3 2JX
tel +44 (0)20 8445 9115
email mail@maengineers.com
web www.maengineers.com

Drawn		Checked	
RJC	DEC. 2023	JMcS	DEC. 2023

Scale: 1:100 A1, 1:200 A3

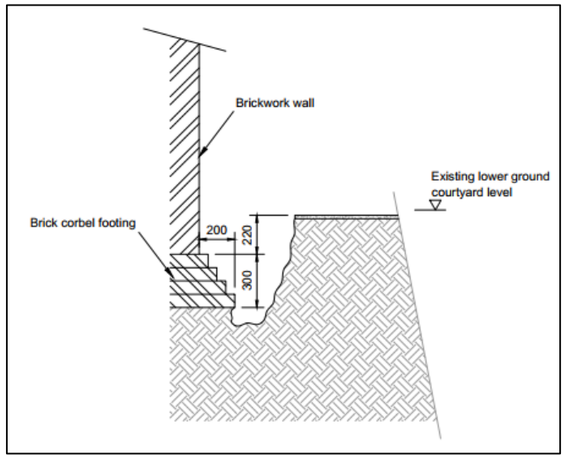
Size

Project No.	Drawing No.	Rev.
P5720	EW02	P4

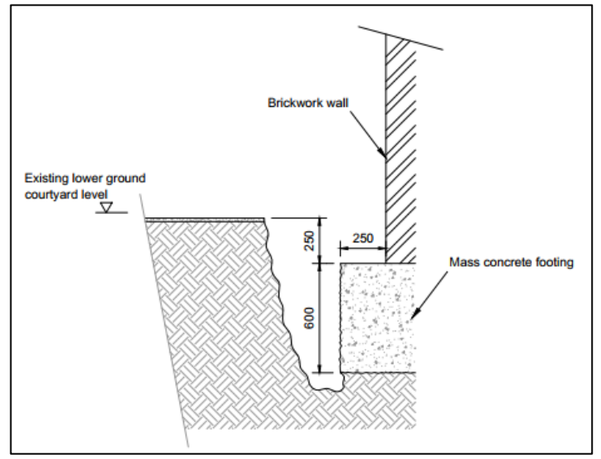
APPENDIX B

PHOTOGRAPHS AND DESCRIPTION

LOWER GROUND FLOOR TP1
75mm sand cement screed on 250mm thick concrete slab



LOWER GROUND FLOOR TP3
Corbelled brick footing



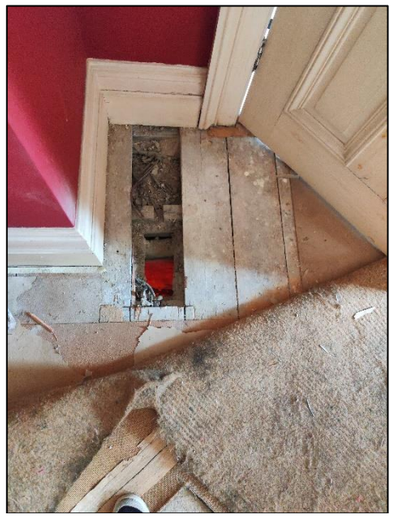
LOWER GROUND FLOOR TP4
Mass Concrete trench fill footing

LOWER GROUND FLOOR TP5
Concrete slab (depth not determined)

LOWER GROUND FLOOR BW1
Sand cement render on 215mm (9”) loadbearing brickwork wall

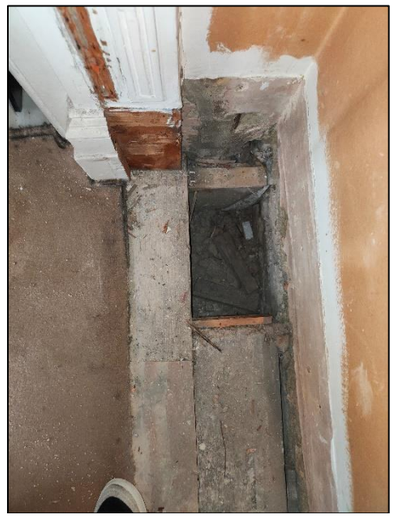
Sand cement render on 215mm (9”) loadbearing brickwork wall

LOWER GROUND FLOOR BW2

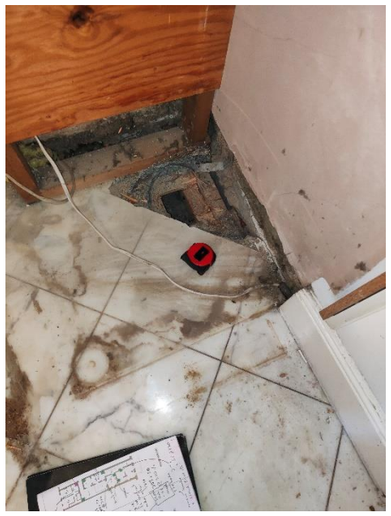


GROUND FLOOR G1
Timber boarding on timber joists (270mm x 50mm at 320mm centres)

GROUND FLOOR G2
Timber boarding on timber joists (250mm x 50mm at 300mm centres)

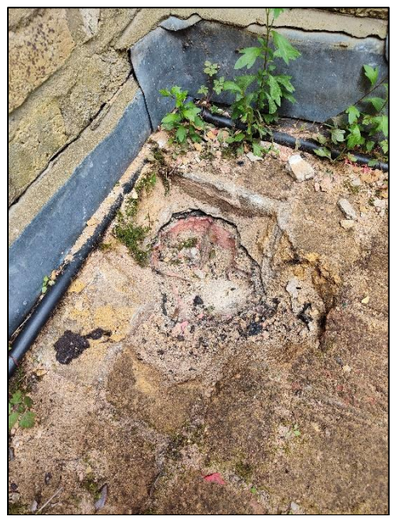


GROUND FLOOR G3
Timber boarding on timber joists (225mm x 50mm at 300mm centres)

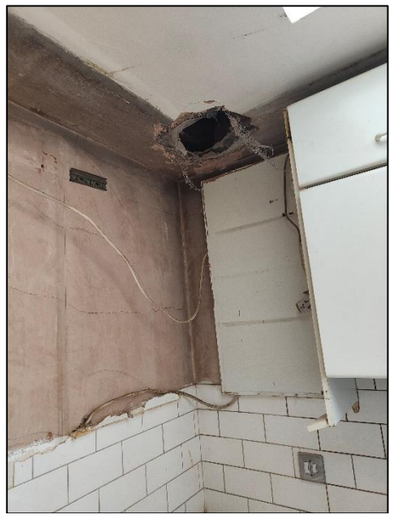


GROUND FLOOR G4
Timber boarding on timber joists (250mm deep)

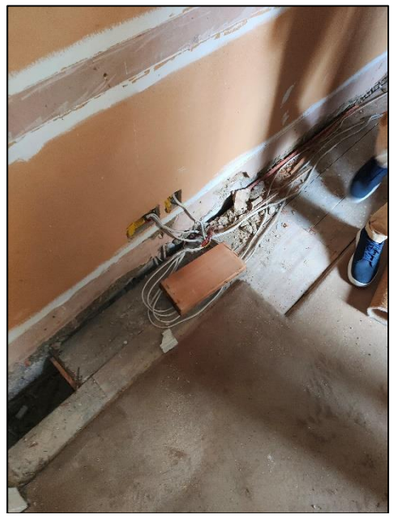
GROUND FLOOR G5
Timber boarding on timber joists (225mm x 50mm)



GROUND FLOOR G6
Paviors on asphalt on concrete slab



GROUND FLOOR GC1
Plasterboard ceiling on timber ceiling joists



GROUND FLOOR GW1
Plaster on brickwork partition

FIRST FLOOR F1
Timber boarding on timber joists

FIRST FLOOR F2
Timber boarding on timber joists

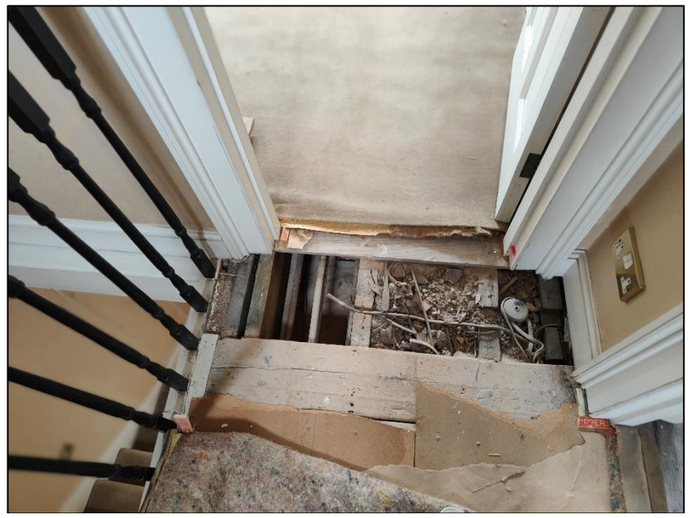
Plaster on timber studwork partition

FIRST FLOOR FW1

SECOND FLOOR S1
Timber boarding on timber joists with pugging

SECOND FLOOR S2
Timber boarding on timber joists

SECOND FLOOR SW1
Plaster on timber studwork partition



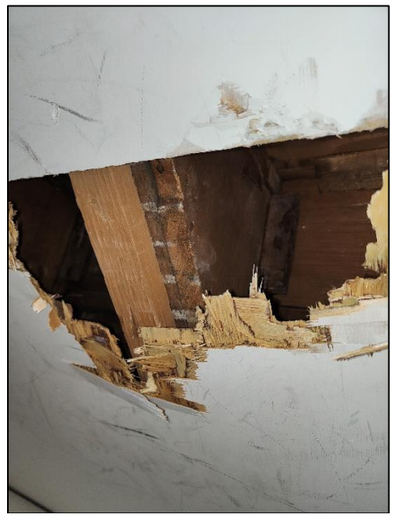
THIRD FLOOR T1
Timber boarding on timber joists

THIRD FLOOR T2
Timber boarding on timber joists

THIRD FLOOR T3
Timber boarding on timber joists

THIRD FLOOR TW1
Plaster on metal lathe on timber studwork

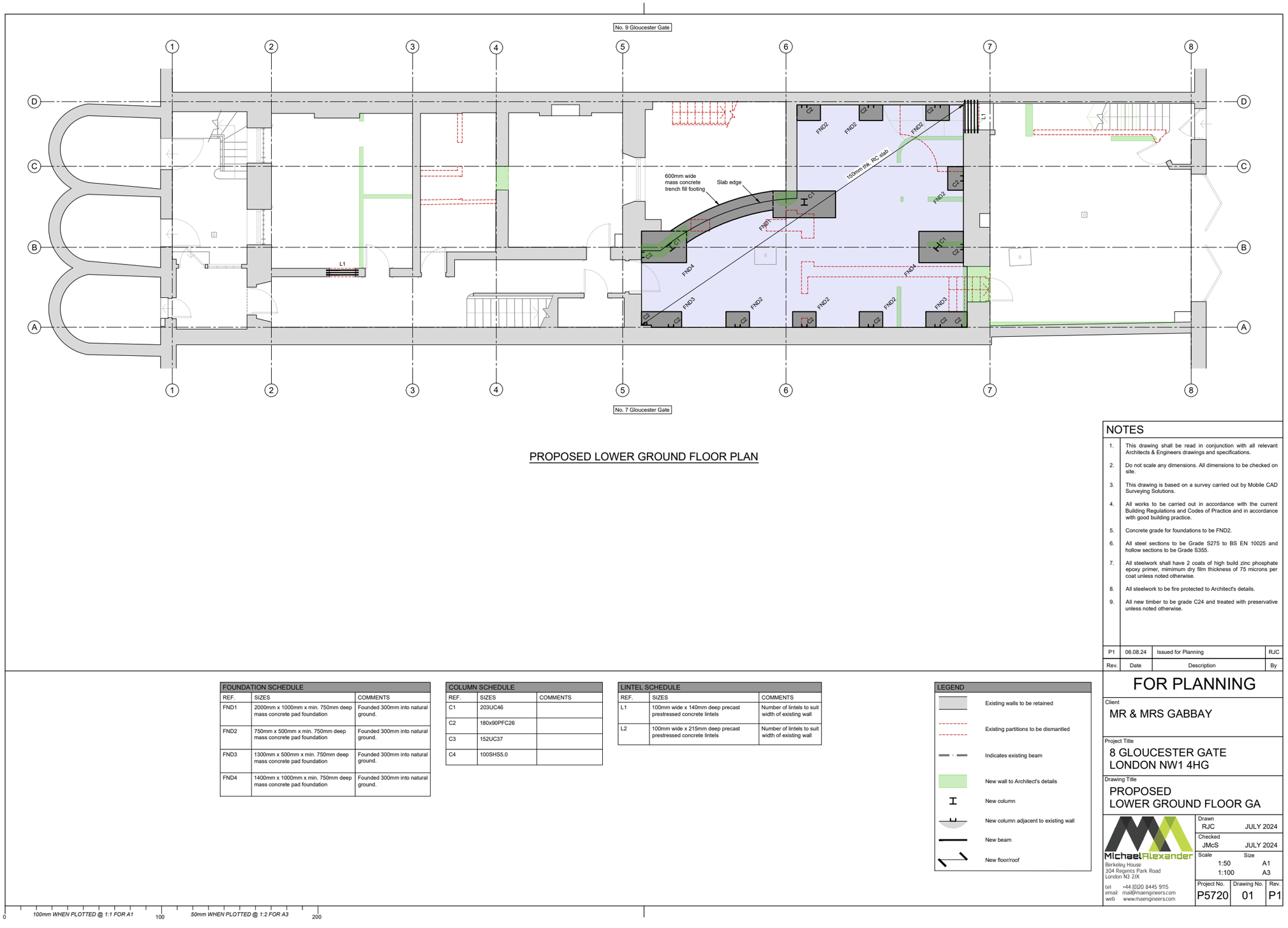
THIRD FLOOR TW2
Render on brickwork partition



THIRD FLOOR STAIR
Timber boarding on stair soffit

APPENDIX C

MA PROPOSED DRAWINGS



PROPOSED LOWER GROUND FLOOR PLAN

FOUNDATION SCHEDULE		
REF.	SIZES	COMMENTS
FND1	2000mm x 1000mm x min. 750mm deep mass concrete pad foundation	Founded 300mm into natural ground.
FND2	750mm x 500mm x min. 750mm deep mass concrete pad foundation	Founded 300mm into natural ground.
FND3	1300mm x 500mm x min. 750mm deep mass concrete pad foundation	Founded 300mm into natural ground.
FND4	1400mm x 1000mm x min. 750mm deep mass concrete pad foundation	Founded 300mm into natural ground.

COLUMN SCHEDULE		
REF.	SIZES	COMMENTS
C1	203UC46	
C2	180x90PFC26	
C3	152UC37	
C4	100SHS5.0	

LINTEL SCHEDULE		
REF.	SIZES	COMMENTS
L1	100mm wide x 140mm deep precast prestressed concrete lintels	Number of lintels to suit width of existing wall
L2	100mm wide x 215mm deep precast prestressed concrete lintels	Number of lintels to suit width of existing wall

LEGEND

- Existing walls to be retained
- Existing partitions to be dismantled
- Indicates existing beam
- New wall to Architect's details
- New column
- New column adjacent to existing wall
- New beam
- New floor/roof

NOTES

1. This drawing shall be read in conjunction with all relevant Architects & Engineers drawings and specifications.
2. Do not scale any dimensions. All dimensions to be checked on site.
3. This drawing is based on a survey carried out by Mobile CAD Surveying Solutions.
4. All works to be carried out in accordance with the current Building Regulations and Codes of Practice and in accordance with good building practice.
5. Concrete grade for foundations to be FND2.
6. All steel sections to be Grade S275 to BS EN 10025 and hollow sections to be Grade S355.
7. All steelwork shall have 2 coats of high build zinc phosphate epoxy primer, mimimum dry film thickness of 75 microns per coat unless noted otherwise.
8. All steelwork to be fire protected to Architect's details.
9. All new timber to be grade C24 and treated with preservative unless noted otherwise.

Rev.	Date	Description	By
P1	06.08.24	Issued for Planning	RJC

FOR PLANNING

Client
MR & MRS GABBAY

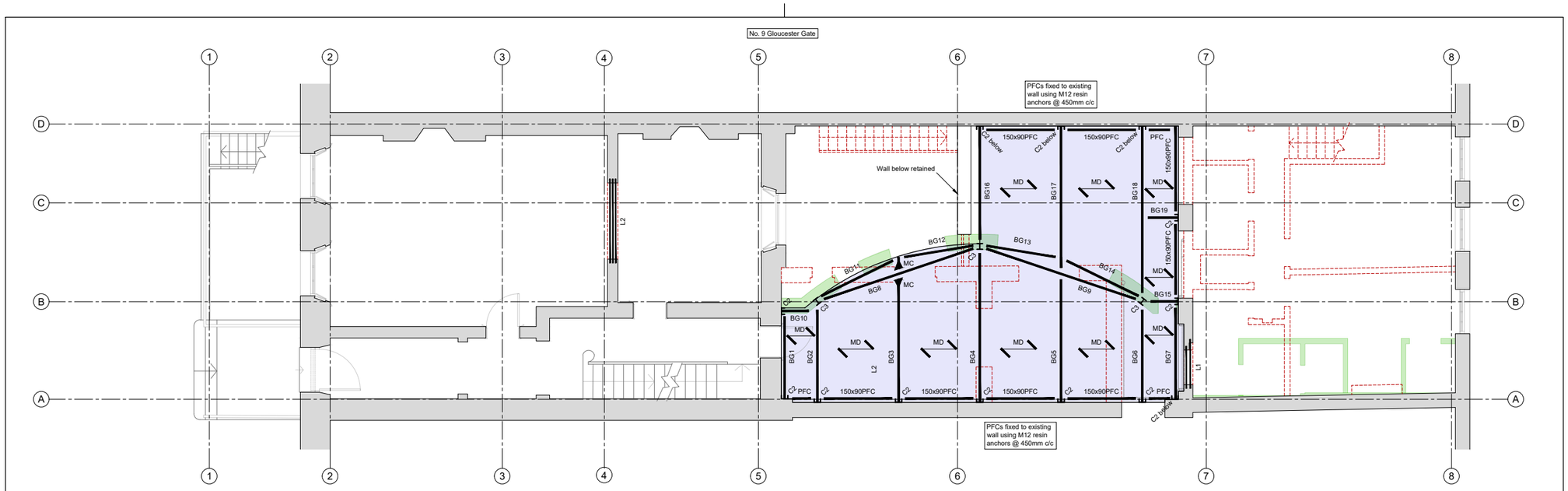
Project Title
8 GLOUCESTER GATE
LONDON NW1 4HG

Drawing Title
PROPOSED
LOWER GROUND FLOOR GA

MichaelAlexander
Berkeley House
304 Regents Park Road
London N3 2JX
tel +44 (0)20 8445 9115
email mail@maengineers.com
web www.maengineers.com

Drawn		
RJC	JULY 2024	
Checked		
JMcS	JULY 2024	
Scale	Size	
1:50	A1	
1:100	A3	
Project No.	Drawing No.	Rev.
P5720	01	P1

0 — 100mm WHEN PLOTTED @ 1:1 FOR A1 — 100 — 50mm WHEN PLOTTED @ 1:2 FOR A3 — 200



PROPOSED GROUND FLOOR PLAN

COLUMN SCHEDULE

REF.	SIZES	COMMENTS
C1	203UC46	
C2	180x90PFC26	
C3	152UC37	
C4	100SHS5.0	

BEAM SCHEDULE (GROUND FLOOR)

REF.	SIZES	COMMENTS
BG1	200x90PFC30	
BG2	254x146UB37	
BG3	254x146UB37	Connected to BG8 with Moment Connection MC
BG4	254x146UB43	
BG5	254x146UB37	
BG6	254x146UB37	
BG7	200x90PFC30	
BG8	305x165UB54	
BG9	305x165UB54	
BG10	203x133UB23	

BEAM SCHEDULE (GROUND FLOOR)

REF.	SIZES	COMMENTS
BG11	203x133UB23	
BG12	203x133UB23	
BG13	203x133UB23	
BG14	203x133UB23	
BG15	203x133UB23	
BG16	254x146UB37	
BG17	254x146UB37	
BG18	254x146UB43	
BG19	203x133UB23	

NEW FLOOR/ROOF SCHEDULE

REF.	SIZES	COMMENTS
MD	Span direction of 130thk. normal weight concrete slab on Multideck 50 V3 1.2mm guage with A142 mesh at top and supplementary reinforcement in ribs	
TJ	Span direction of 200mm x 50mm timber joists (C24) at 400mm centres	
FRJ	Span direction of 200mm x 50mm timber flat roof joists (C24) at 400mm centres	

LINTEL SCHEDULE

REF.	SIZES	COMMENTS
L1	100mm wide x 140mm deep precast prestressed concrete lintels	Number of lintels to suit width of existing wall
L2	100mm wide x 215mm deep precast prestressed concrete lintels	Number of lintels to suit width of existing wall

LEGEND

- Existing walls to be retained
- Existing partitions to be dismantled
- Indicates existing beam
- New wall to Architect's details
- New column
- New column adjacent to existing wall
- New beam
- New floor/roof

NOTES

1. This drawing shall be read in conjunction with all relevant Architects & Engineers drawings and specifications.
2. Do not scale any dimensions. All dimensions to be checked on site.
3. For notes refer to drawing no. P5720/01.

Rev.	Date	Description	By
P1	06.08.24	Issued for Planning	RJC

FOR PLANNING

Client: MR & MRS GABBAY

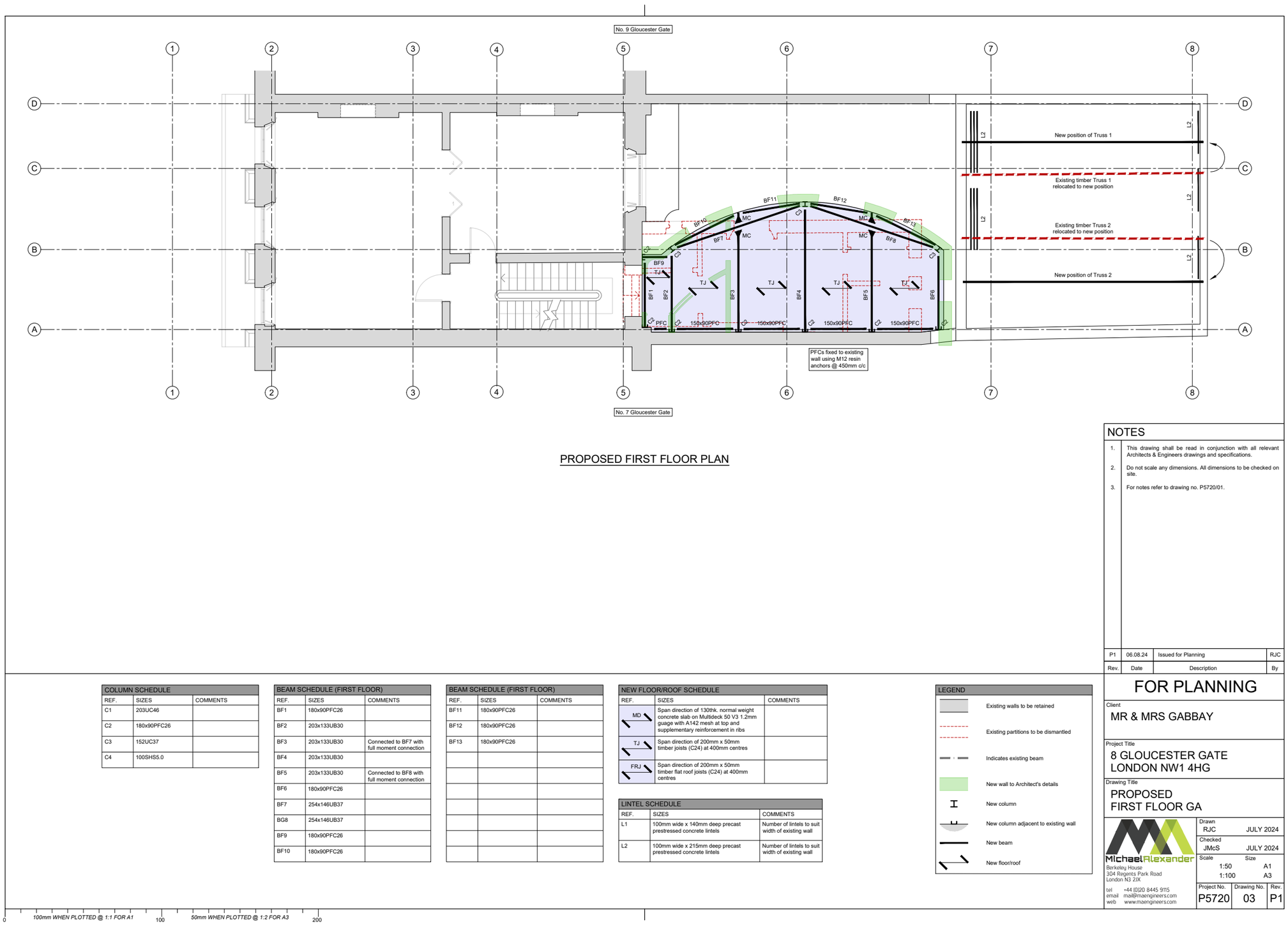
Project Title: 8 GLOUCESTER GATE LONDON NW1 4HG

Drawing Title: PROPOSED GROUND FLOOR GA

MichaelAlexander
Berkeley House
304 Regents Park Road
London N3 2JX
tel +44 (0)20 8445 9115
email mail@maengineers.com
web www.maengineers.com

Drawn		Checked		Scale	Size
RJC	JULY 2024	JMcS	JULY 2024	1:50	A1
				1:100	A3

Project No.	Drawing No.	Rev.
P5720	02	P1



PROPOSED FIRST FLOOR PLAN

COLUMN SCHEDULE		
REF.	SIZES	COMMENTS
C1	203UC46	
C2	180x90PFC26	
C3	152UC37	
C4	100SHS5.0	

BEAM SCHEDULE (FIRST FLOOR)		
REF.	SIZES	COMMENTS
BF1	180x90PFC26	
BF2	203x133UB30	
BF3	203x133UB30	Connected to BF7 with full moment connection
BF4	203x133UB30	
BF5	203x133UB30	Connected to BF8 with full moment connection
BF6	180x90PFC26	
BF7	254x146UB37	
BG8	254x146UB37	
BF9	180x90PFC26	
BF10	180x90PFC26	

BEAM SCHEDULE (FIRST FLOOR)		
REF.	SIZES	COMMENTS
BF11	180x90PFC26	
BF12	180x90PFC26	
BF13	180x90PFC26	

NEW FLOOR/ROOF SCHEDULE		
REF.	SIZES	COMMENTS
MD	Span direction of 130thk. normal weight concrete slab on Multideck 50 V3 1.2mm guage with A142 mesh at top and supplementary reinforcement in ribs	
TJ	Span direction of 200mm x 50mm timber joists (C24) at 400mm centres	
FRJ	Span direction of 200mm x 50mm timber flat roof joists (C24) at 400mm centres	

LINTEL SCHEDULE		
REF.	SIZES	COMMENTS
L1	100mm wide x 140mm deep precast prestressed concrete lintels	Number of lintels to suit width of existing wall
L2	100mm wide x 215mm deep precast prestressed concrete lintels	Number of lintels to suit width of existing wall

LEGEND

- Existing walls to be retained
- Existing partitions to be dismantled
- Indicates existing beam
- New wall to Architect's details
- New column
- New column adjacent to existing wall
- New beam
- New floor/roof

NOTES

1. This drawing shall be read in conjunction with all relevant Architects & Engineers drawings and specifications.
2. Do not scale any dimensions. All dimensions to be checked on site.
3. For notes refer to drawing no. P5720/01.

Rev.	Date	Description	By
P1	06.08.24	Issued for Planning	RJC

FOR PLANNING

Client
MR & MRS GABBAY

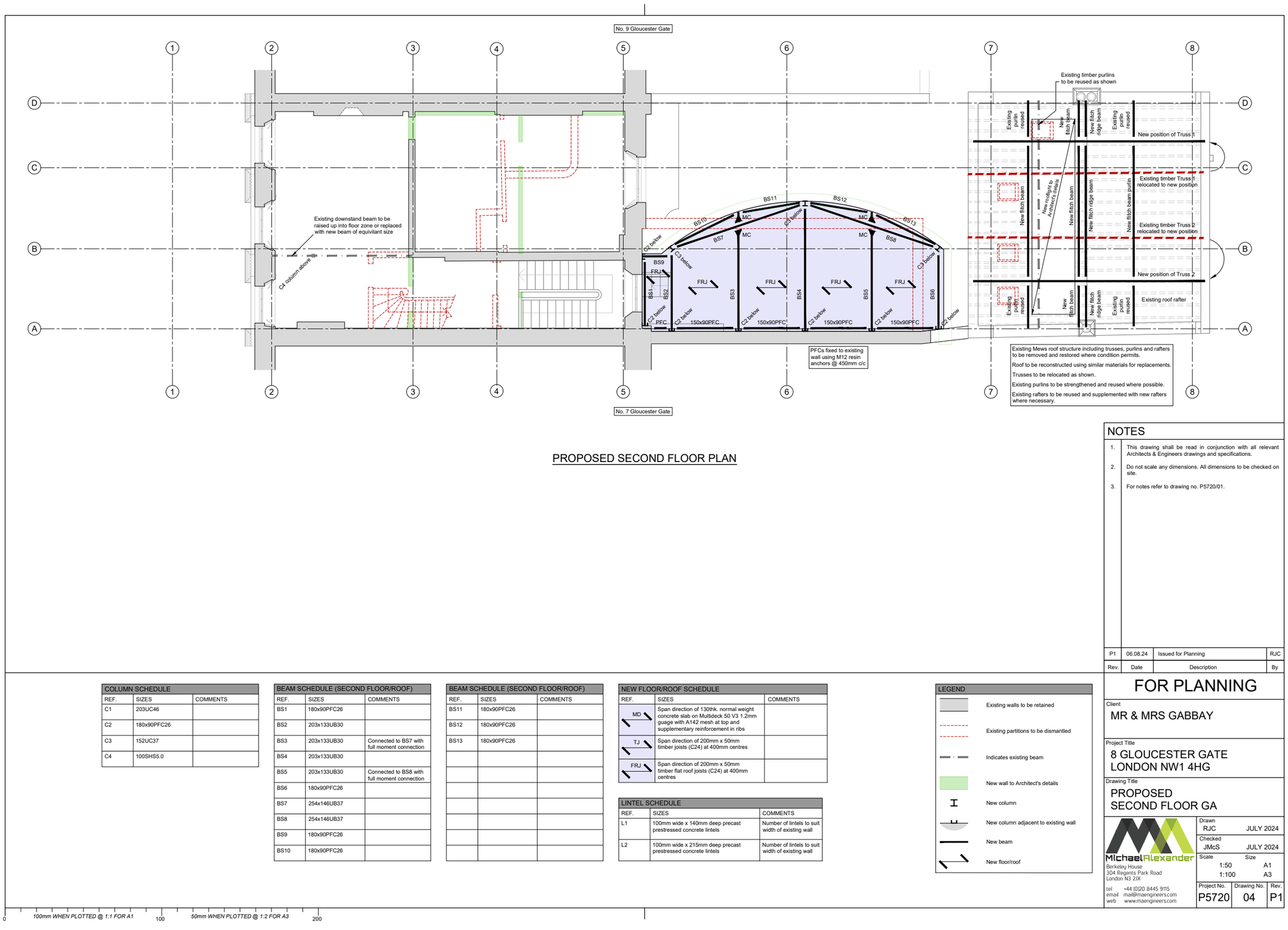
Project Title
8 GLOUCESTER GATE
LONDON NW1 4HG

Drawing Title
PROPOSED
FIRST FLOOR GA

MichaelAlexander
Berkeley House
304 Regents Park Road
London N3 2JX
tel +44 (0)20 8445 9115
email mail@maengineers.com
web www.maengineers.com

Drawn RJC JULY 2024
Checked JMcS JULY 2024
Scale 1:50 1:100 Size A1 A3
Project No. P5720 Drawing No. 03 Rev. P1

0 100mm WHEN PLOTTED @ 1:1 FOR A1 100 50mm WHEN PLOTTED @ 1:2 FOR A3 200



PROPOSED SECOND FLOOR PLAN

COLUMN SCHEDULE		
REF.	SIZES	COMMENTS
C1	203UC46	
C2	180x90PFC26	
C3	152UC37	
C4	100SHS5.0	

BEAM SCHEDULE (SECOND FLOOR/ROOF)		
REF.	SIZES	COMMENTS
BS1	180x90PFC26	
BS2	203x133UB30	
BS3	203x133UB30	Connected to BS7 with full moment connection
BS4	203x133UB30	
BS5	203x133UB30	Connected to BS8 with full moment connection
BS6	180x90PFC26	
BS7	254x146UB37	
BS8	254x146UB37	
BS9	180x90PFC26	
BS10	180x90PFC26	

BEAM SCHEDULE (SECOND FLOOR/ROOF)		
REF.	SIZES	COMMENTS
BS11	180x90PFC26	
BS12	180x90PFC26	
BS13	180x90PFC26	

NEW FLOOR/ROOF SCHEDULE		
REF.	SIZES	COMMENTS
MD	Span direction of 130thk. normal weight concrete slab on Multideck 50 V3 1.2mm guage with A142 mesh at top and supplementary reinforcement in ribs	
TJ	Span direction of 200mm x 50mm timber joists (C24) at 400mm centres	
FRJ	Span direction of 200mm x 50mm timber flat roof joists (C24) at 400mm centres	

LINTEL SCHEDULE		
REF.	SIZES	COMMENTS
L1	100mm wide x 140mm deep precast prestressed concrete lintels	Number of lintels to suit width of existing wall
L2	100mm wide x 215mm deep precast prestressed concrete lintels	Number of lintels to suit width of existing wall

LEGEND

- Existing walls to be retained
- Existing partitions to be dismantled
- Indicates existing beam
- New wall to Architect's details
- New column
- New column adjacent to existing wall
- New beam
- New floor/roof

NOTES

1. This drawing shall be read in conjunction with all relevant Architects & Engineers drawings and specifications.
2. Do not scale any dimensions. All dimensions to be checked on site.
3. For notes refer to drawing no. P5720/01.

Rev.	Date	Description	By
P1	06.08.24	Issued for Planning	RJC

0 — 100mm WHEN PLOTTED @ 1:1 FOR A1 — 100 — 50mm WHEN PLOTTED @ 1:2 FOR A3 — 200

FOR PLANNING

Client: MR & MRS GABBAY

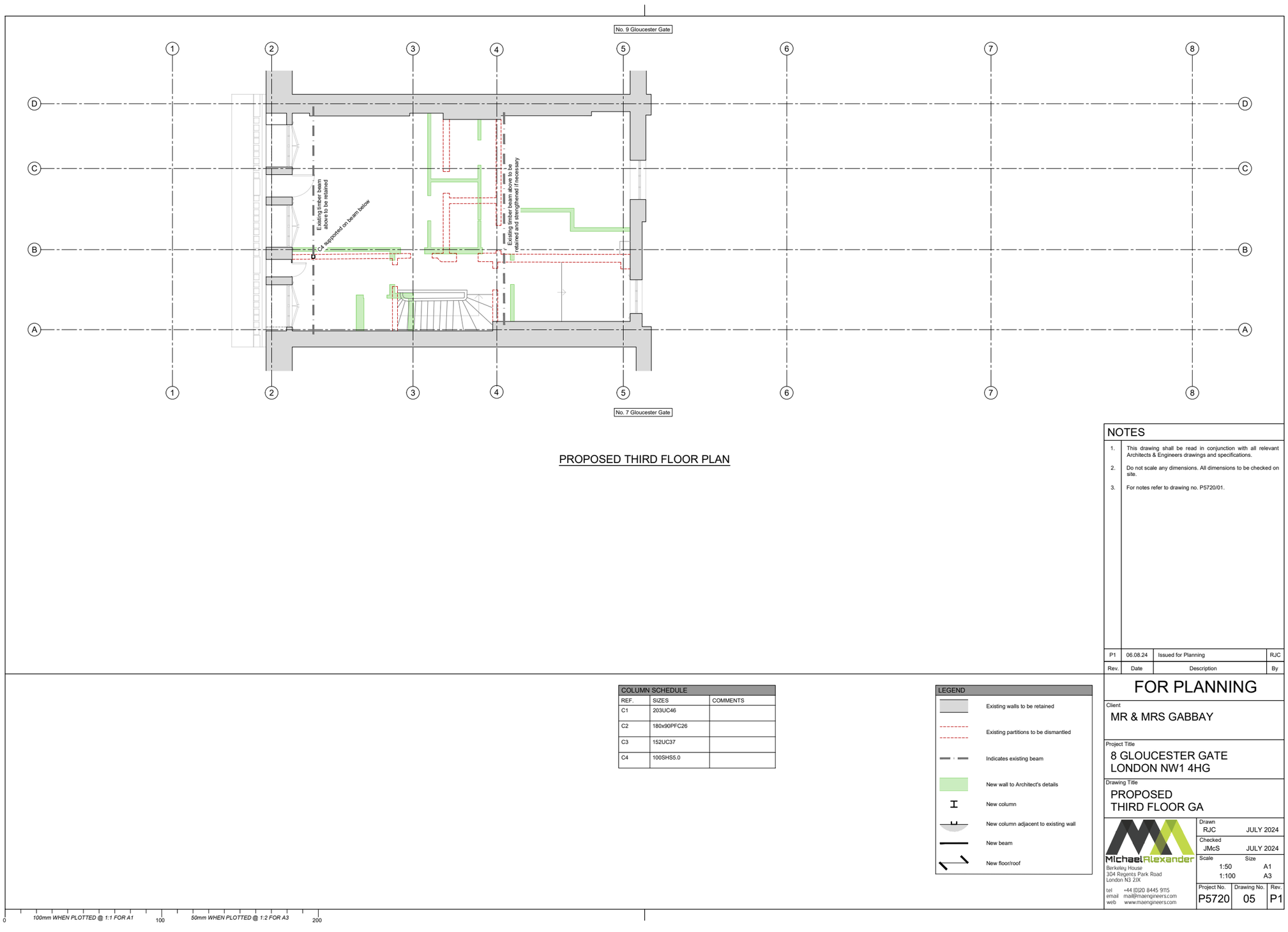
Project Title: 8 GLOUCESTER GATE LONDON NW1 4HG

Drawing Title: PROPOSED SECOND FLOOR GA

MichaelAlexander
Berkeley House
304 Regents Park Road
London N3 2JX
tel +44 (0)20 8445 9115
email mail@maengineers.com
web www.maengineers.com

Drawn		Checked		Scale	Size
RJC	JULY 2024	JMcS	JULY 2024	1:50	A1
				1:100	A3

Project No.	Drawing No.	Rev.
P5720	04	P1



PROPOSED THIRD FLOOR PLAN

COLUMN SCHEDULE		
REF.	SIZES	COMMENTS
C1	203UC46	
C2	180x90PFC26	
C3	152UC37	
C4	100SHS5.0	

LEGEND

- Existing walls to be retained
- Existing partitions to be dismantled
- Indicates existing beam
- New wall to Architect's details
- New column
- New column adjacent to existing wall
- New beam
- New floor/roof

NOTES

1. This drawing shall be read in conjunction with all relevant Architects & Engineers drawings and specifications.
2. Do not scale any dimensions. All dimensions to be checked on site.
3. For notes refer to drawing no. P5720/01.

Rev.	Date	Description	By
P1	06.08.24	Issued for Planning	RJC

FOR PLANNING

Client
MR & MRS GABBAY

Project Title
8 GLOUCESTER GATE
LONDON NW1 4HG

Drawing Title
PROPOSED
THIRD FLOOR GA

MichaelAlexander
Berkeley House
304 Regents Park Road
London N3 2JX
tel +44 (0)20 8445 9115
email mail@maengineers.com
web www.maengineers.com

Drawn		
RJC	JULY 2024	
Checked		
JMcS	JULY 2024	
Scale	Size	
1:50	A1	
1:100	A3	
Project No.	Drawing No.	Rev.
P5720	05	P1

0 100mm WHEN PLOTTED @ 1:1 FOR A1 100 50mm WHEN PLOTTED @ 1:2 FOR A3 200