BLDAconsultancy

Planning Daylight Report

At

No 2B Courthope Road
Hampstead
London
NW3 2LB

For

Aanya Property Development

12th April 2018

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6408/GO/JL

revision:	**0**	**12 APRIL 2018**

CONTENTS

1 Introduction

1.1 The development site is situated off Courthope Road, in Hampstead North-West London.

1.2 This report considers the Daylight adequacy within the proposed ground floor combined living/dining/kitchen area and the lower ground floor second bedroom, 'Bedroom 2', within the proposed dwelling at 2B Courthope Road, formerly known as Land to the Rear of 62 Mansfield Road.

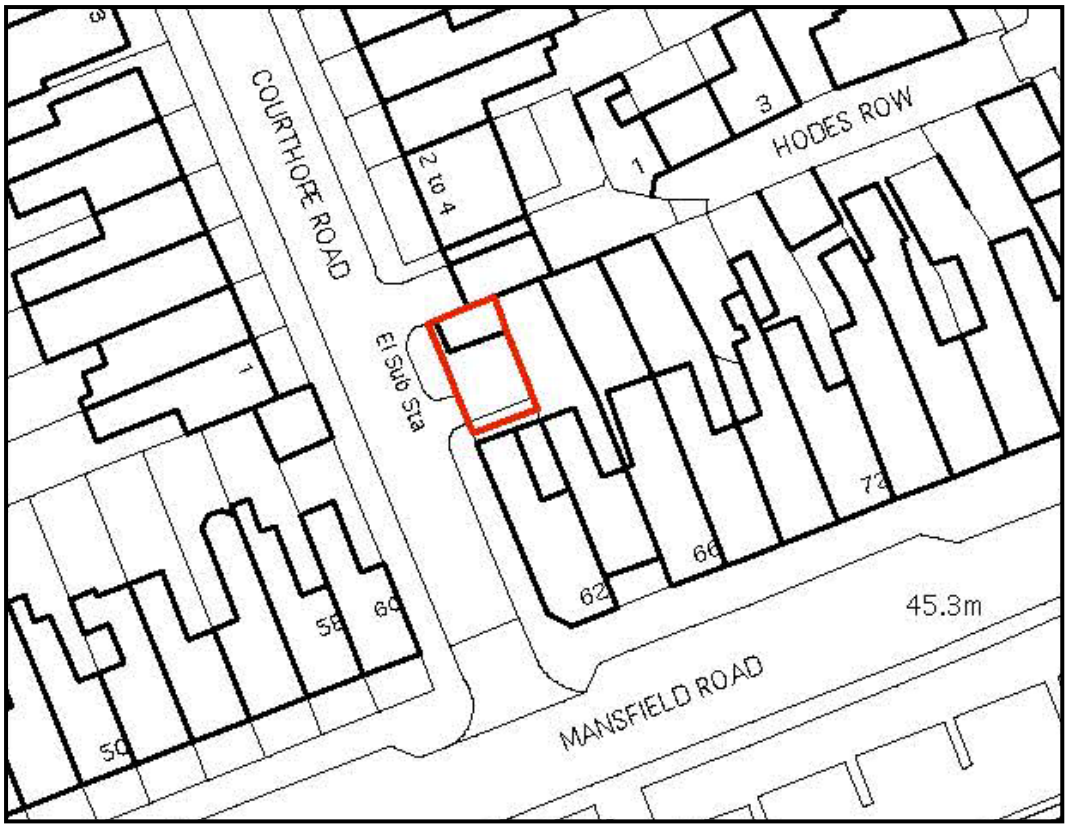

Figure 1. Location of 2B Courthope Road

2 Scope of this report

2.1 This report considers the daylight issues against the criteria set out for national discretionary guidance in the publication Site Layout Planning for Daylight and Sunlight[1] (SLP) published by the Building Research Establishment (BRE) in 2011. The document SLP refers both to particular amounts of daylight and sunlight and to a method of setting alternative target values for skylight. The LPA has not set such alternative target values. The document SLP states in its own introduction on page 1 that:

"The advice given here is not mandatory and this document should not be seen as an instrument of planning policy"

[1] Littlefair, P.J (2011) Site Layout Planning for Daylight and Sunlight, A guide to good practice, IHS and BRE

2.2 The British Standard current for this subject is BS 8206-2:2008 – code of practice for daylighting[2].

2.3 The analyses used in this report are:

2.3.1 **Daylight Average Daylight Factor (ADF)**: The principles set out in section 2 of SLP together with the concept of average daylight factor (***df***) as set out in both Appendix C of SLP - interior daylighting recommendations – and in BS 8206-2:2008:code of practice for daylighting. Also, an assessment of percentage loss.

3 Methodology

3.1 For Daylight at a Building

3.1.1 An accurate prediction is made of the amount of daylight within a room using the concept of Average Daylight factor. This assessment is carried out in accordance with section 2 and Appendix C of SLP - interior daylighting recommendations – and in accordance with BS 8206-2:2008:code of practice for daylighting. The reference levels for such daylighting are also given in these documents.

3.1.2 The procedure is to describe in terms of the Distance/Height ratio all physical obstructions to light paths with reference to a subject position. These obstructions are then plotted against the light distribution from a CIE Standard Overcast Sky[3] as defined by the Commission Internationale de l'Eclairage (CIE).

3.1.3 The resulting daylight at the external face of the building can be computed. This is known as the Vertical Sky Component (VSC). The parameters of window size, glass transmissivity, room size and internal surface reflectances are then evaluated against the VSC for the window location. The resulting assessment gives a measure of internal daylight as a *df* value known as Average Daylight Factor (ADF).

3.1.4 The Average Daylight Factor test takes into account the window size, room size, internal reflectances in addition to external light levels at the window. VSC is a measurement made externally only and does not describe daylight internally.

3.1.5 The suggested average daylight factor levels in SLP are:

- Bedrooms 1.0%df
- Living Room 1.5%df
- Kitchens 2.0%df

[2] Lighting for Buildings. Code of Practice for Daylighting BS 8206-2: 2008, British Standards Institution, 2008
[3] This is a completely overcast sky, the mathematical definition of which is given at Appendix H of SLP as a luminance ratio.

- Combined Kitchen/Living Room 2.0%df

3.1.6 The assessment of adequate light internally in general relates to the quantum of light remaining as set out in BS 8206-2:2008 (in this instance measured as average daylight factor – *df*) rather than how much light is taken away.

4 The Drawings

4.1 The 3D computer model we have simulated to assess the internal daylight conditions within proposed Bedroom 2, has used the following drawings by Material Architects, dated March 2018:

Drawing Title :	**Drawing Number**	**Date**
Existing Floor Plans	161_0200_PL	March 2018
Existing Front Elevation & Section AA	161_0300_ PL	March 2018
Proposed Floor Plans	161_1200_PL	March 2018
Proposed Front Elevation & Section AA	161_1300_PL	March 2018

5 The Scheme

5.1 The proposed dwelling at 2B Courthope Road is located to the rear of the existing property known as 62 Mansfield Road.

5.2 The original proposals for Land to the Rear of 62 Mansfield Road gained planning consent in 2015 (Camden Planning Ref: 2014/2514/P granted planning consent on 19th June 2015). The proposals consisted of the development a two storey dwelling which includes a basement level. The dwelling consists of a combined kitchen and living room, a hallway and W/C at ground floor level. At lower ground/basement level there is one master bedroom with a shower room, a study room, a bathroom and a patio garden area.

5.3 This report addresses the daylight adequacy of the ground floor living/dining/kitchen area and the second additional bedroom at lower ground floor level following the acquisition of the adjacent UKPN substation. Planning consent was gained to convert the substation to residential use, forming part of the original proposals (Camden Planning Ref: 2017/0386/P granted planning consent on 23rd March 2017).

6 Description of the Surroundings

6.1 The immediate surrounding buildings consist of typically three to four storey residential dwellings, with a mixture of large town houses and a si-storey purpose-built block of flats across from Mansfield Road.

7 Daylight

7.1 Daylight to Proposed Ground Floor Living/Dining/Kitchen Area

7.1.1 The BRE discretionary guidance recommends that for habitable rooms the minimum Average Daylight Factor (ADF) levels should be:

- Combined Kitchen/Living Room 2.0%

7.1.2 We have carried out daylight assessments on the proposed extended ground floor combined living/dining/kitchen area. The results of the daylight ADF study show that following development of the combined living/dining/kitchen area, as shown on the drawings listed at section 4.1 and at Appendix 1, the daylight received from the large windows specified would allow generous amounts of daylight to enter the room. The daylight levels within the proposed combined living/dining/kitchen area would meet and exceed the BRE recommendations. The results of the daylight test are shown in Table 1 below.

Project Name: 2B Courthope Road
Project No.: 6408
Report Title: Average Daylight Analysis - Daylight Within Living/Dining/Kitchen

Floor Ref.	Room Ref and Use.	Window Ref.	Glazed Area	ADF Proposed	BRE Req'd Value	Meets BRE Criteria
2B Courthope Road						
Ground	Living/Dining/Kitchen	W1-L	1.97	0.19		
		W1-U	3.70	0.95		
		W2-L	0.19	0.03		
		W2-U	1.25	0.53		
		W3-L	0.19	0.03		
		W3-U	1.25	0.53		
		W4-L	1.05	0.06		
		W4-U	1.86	0.30		
		W5	1.60	1.38		
		W6	0.86	0.79		
				4.79	2.00	YES

Table 2. Daylight ADF to Proposed Ground Floor Living/Dining/Kitchen Area

7.2 Daylight to Proposed Lower Ground Floor Bedroom 2

7.2.1 The BRE discretionary guidance recommends that for habitable rooms the minimum Average Daylight Factor (ADF) levels should be:

- Bedrooms 1.0%df

7.2.2 We have carried out daylight assessments on the proposed lower ground floor second bedroom. The results of the daylight ADF study show that following development of the second bedroom, as shown on the drawings listed at section 4.1 and at Appendix 1, the daylight received through the light well at ground floor level, combined with the large windows specified to the bedroom, would allow enough daylight to enter the room. The daylight levels show that the second bedroom would meet the required daylight level recommended by the BRE. The results of the daylight test are shown in Table 2 below.

Project Name: 2B Courthope Road Project No.: 6408 Report Title: Average Daylight Analysis - Daylight Within Proposed Bedroom 2						
Floor Ref.	Room Ref and Use.	Window Ref.	Glazed Area	ADF Proposed	BRE Req'd Value	Meets BRE Criteria
2B Courthope Road						
Lower Ground	Bedroom 2	W1-L	2.02	0.14		
		W1-U	3.55	0.99		
				1.13	1.00	YES

Table 2. Daylight ADF to Proposed Lower Ground Floor Bedroom 2

8 Conclusion

8.1 This report considers the Daylight adequacy within the proposed ground floor combined living/dining/kitchen area and the lower ground floor second bedroom, 'Bedroom 2', within the proposed dwelling at 2B Courthope Road, formerly known as Land to the Rear of 62 Mansfield Road.

8.2 The results of the Daylight assessment conclude that following development the proposed ground floor combined living/dining/kitchen area and the lower ground floor second bedroom would both achieve daylight levels that would meet or exceed the BRE recommendations for daylight.

12th April 2018

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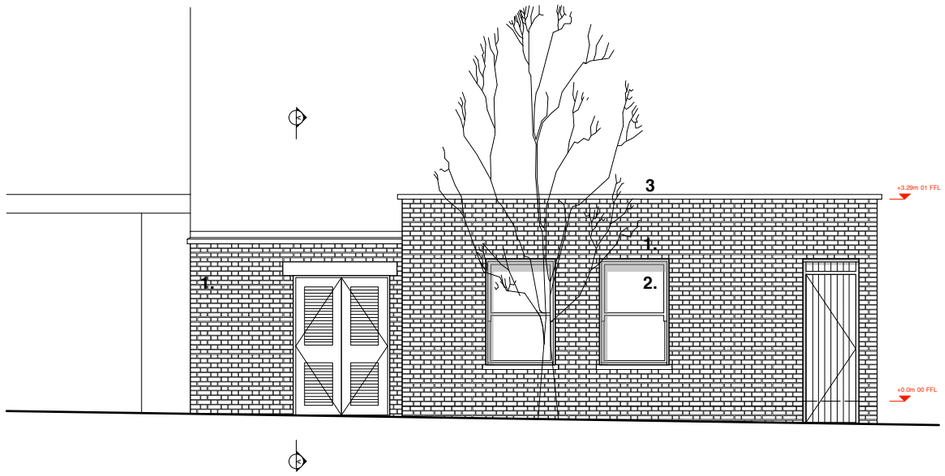
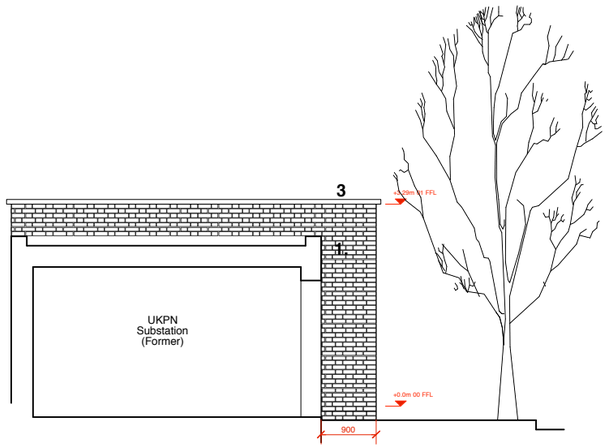
APPENDIX 1

EXISTING AND PROPOSED PLANS, ELEVATIONS AND SECTIONS

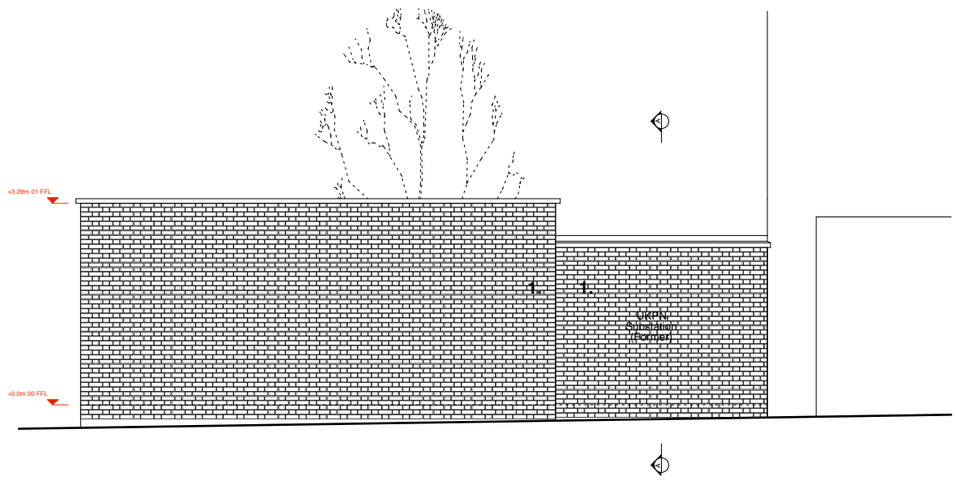
No.2B Courthope Road, Hampstead



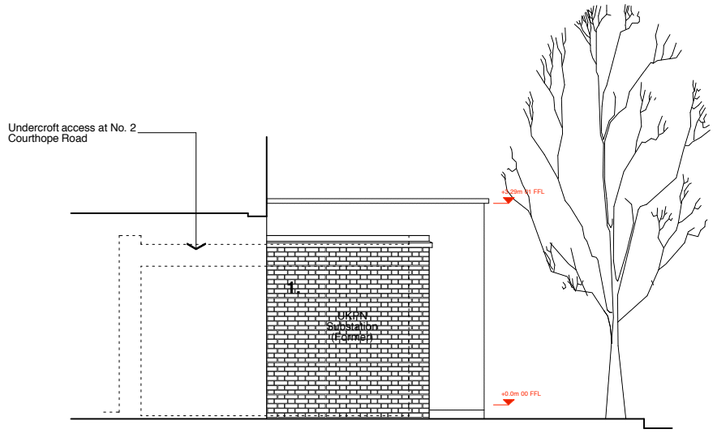
ELEVATION TO COURTHOPE ROAD



SECTION A A



REAR ELEVATION



SIDE ELEVATION [NORTHWEST]

Project:
2B Courthope Road
London
NW3 2LB

Drawing:
Existing
Front Elevation &
Section AA

Scale:
1:100@A3

Drawing Number:
0300

Date:
March 2018

Status:
PLANNING

Revisions:
A: 00.00.00 - Revisions.

NOTES:

1. Existing Brick
2. Timber sash windows
3. Reconsituted stone capping.

0 1.0m 4.0m

SECTIONS & ELEVATIONS - EXISTING

No.2B Courthope Road, Hampstead

Existing single storey, with basement, brick dwelling.

Existing single storey brick building. Former UKPN substation.

EXISTING SITE PLAN [1:500 @ A3]

0 5m 20m

Existing single storey, with basement, brick dwelling.

Existing single storey brick building converted and extended to form a new bedroom at basement level and a new kitchen at ground floor level.

PROPOSED SITE PLAN [1:500 @ A3]

0 5m 20m

Existing photographs taken from Courthope Road

SITE / BLOCK PLAN - EXISTING & PROPOSED

Project:
2B Courthope Road
London
NW3 2LB

Drawing:
Existing & Proposed
Site / Block Plans

Scale:
1:500@A3

Drawing Number:
1100

Date:
April 2018

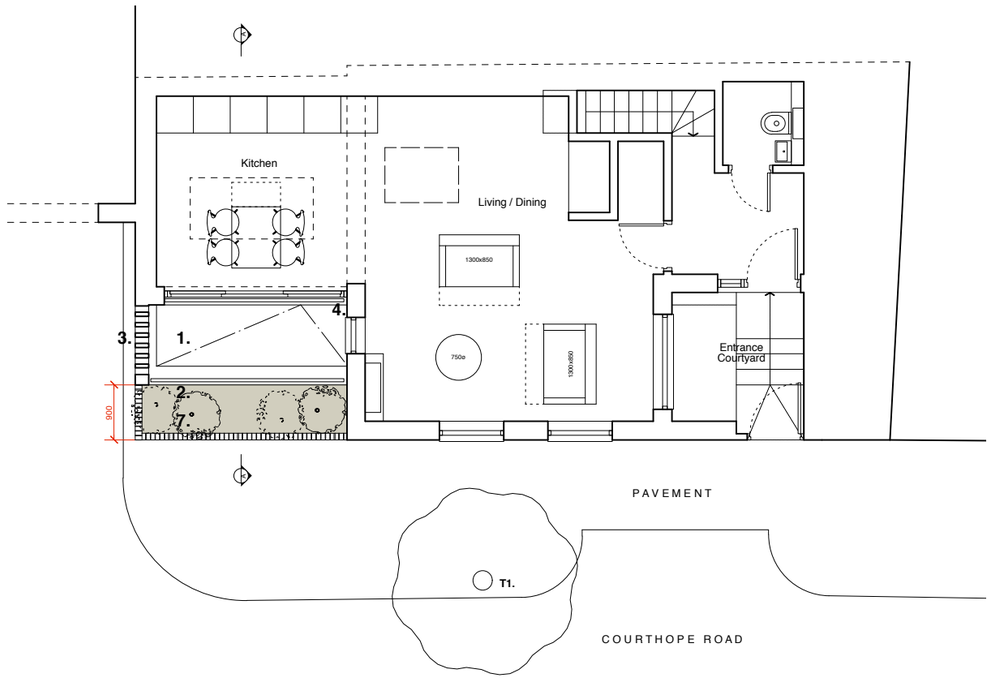
Status:
PLANNING

Revisions:
A: 00.00.00 - Revisions.

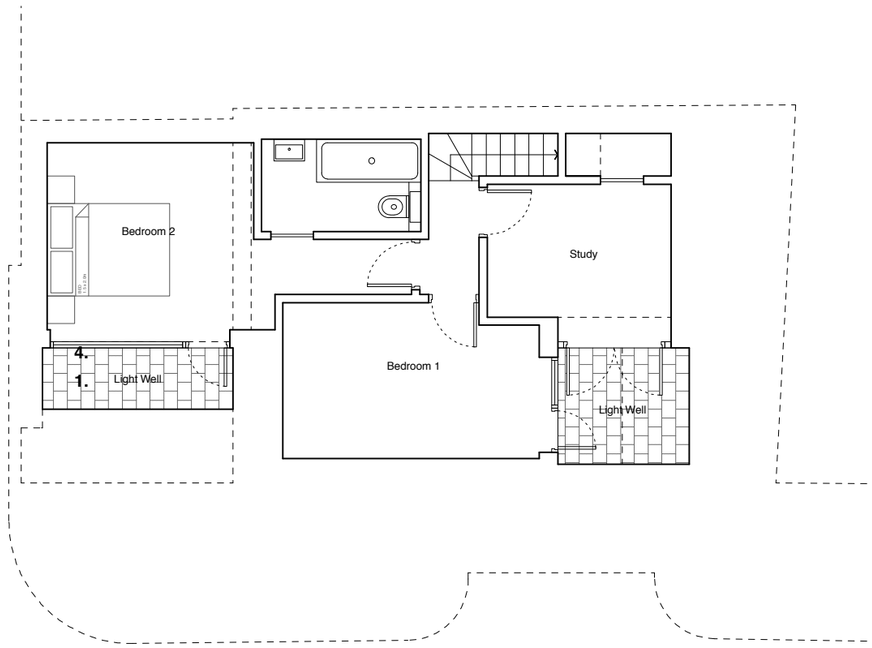
N

0 5m 20m

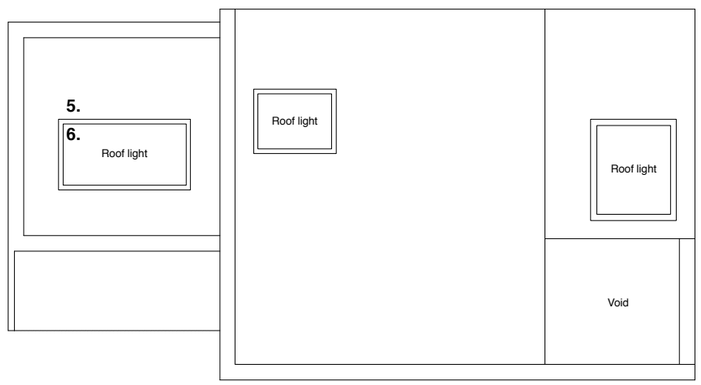
No.2B Courthope Road, Hampstead



GROUND FLOOR



LOWER GROUND FLOOR



ROOF PLAN

Project:
2B Courthope Road
London
NW3 2LB

Drawing:
Proposed
Floor Plans

Scale:
1:100@A3

Drawing Number:
1200

Date:
March 2018

Status:
PLANNING

Revisions:
A: 00.00.00 - Revisions.

NOTES:

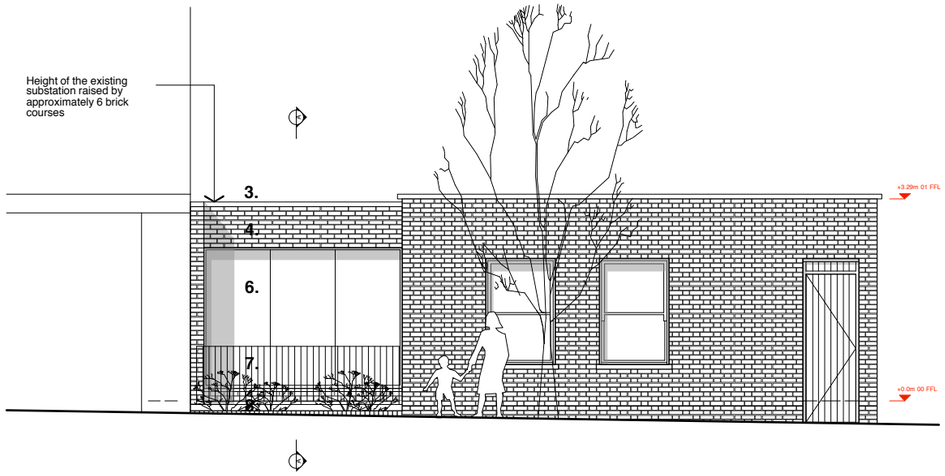
1. New light Well
2. Painted steel railings.
3. Perforated brick wall. Brick to match existing.
4. Powder coated aluminium doors and windows (full height)
5. Single ply membrane flat roof.
6. Roof window
7. Built-in low level brick planter.

N

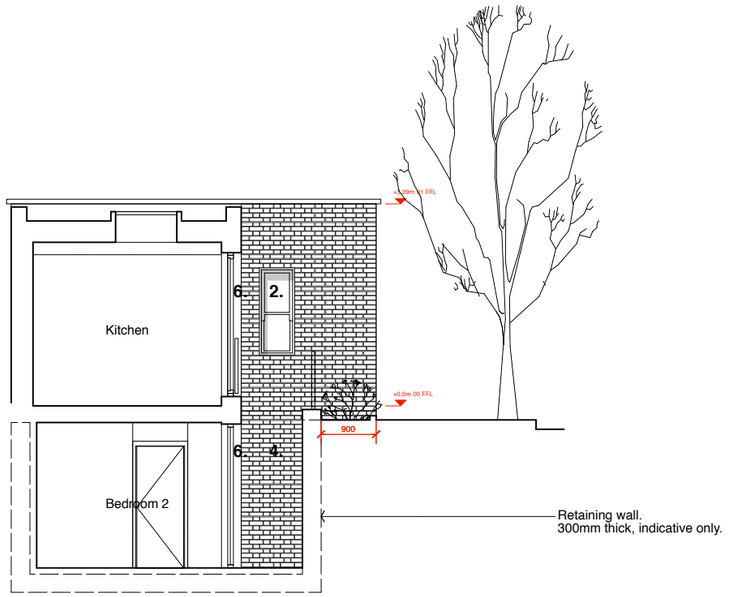
0 1.0m 4.0m

PLANS - PROPOSED

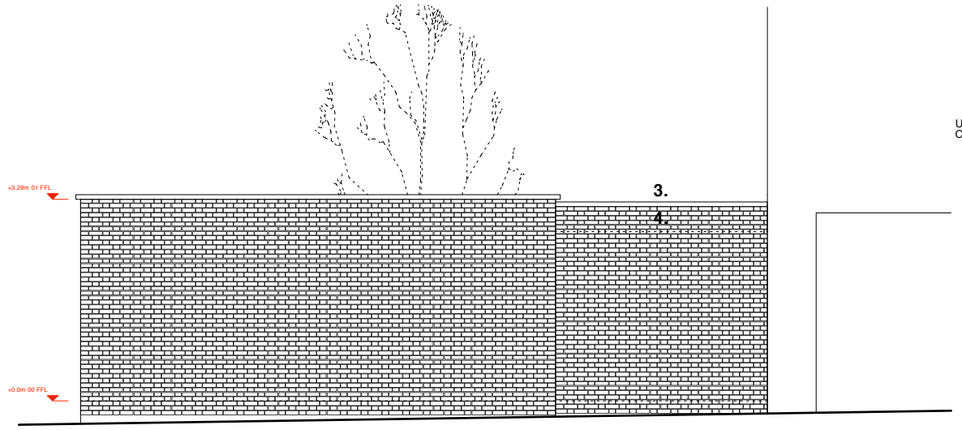
No.2B Courthope Road, Hampstead



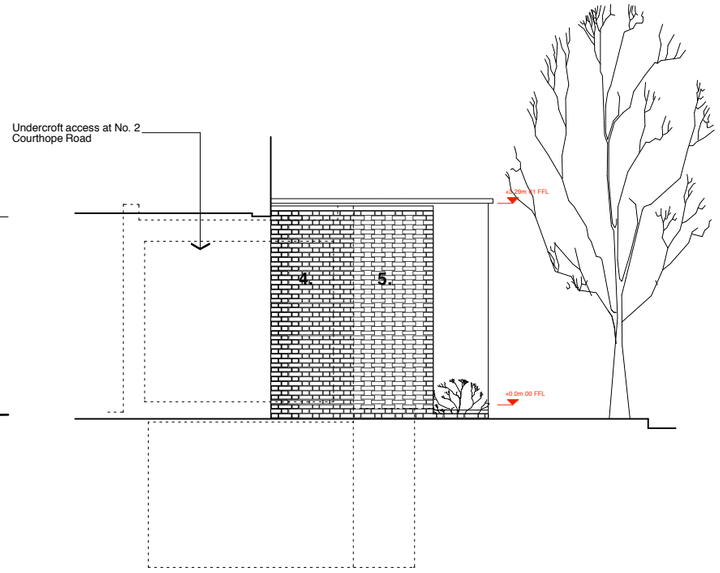
ELEVATION TO COURTHOPE ROAD



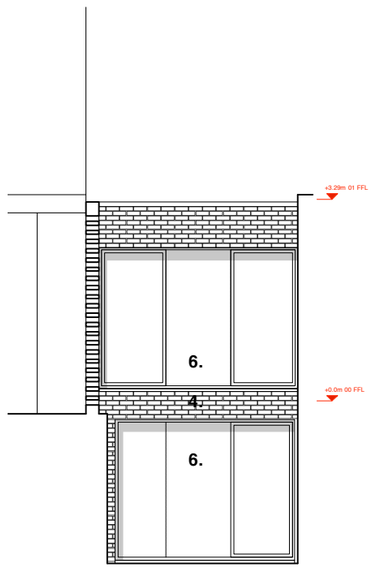
SECTION A A



REAR ELEVATION



SIDE ELEVATION [NORTHWEST]



LIGHT WELL ELEVATION [NORTHWEST]

Project:
2B Courthope Road
London
NW3 2LB

Drawing:
Proposed
Front Elevation &
Section AA

Scale:
1:100@A3

Drawing Number:
1300

Date:
March 2018

Status:
PLANNING

Revisions:
A: 00.00.00 - Revisions.

NOTES:

1. Existing Brick
2. Timber sash windows
3. Reconsituted stone capping.
4. Brick to match existing.
5. Perforated brick wall.
6. Powder coated aluminium doors and windows (full height)
7. Painted steel railings.
8. Built-in low level brick planter.

0 1.0m 4.0m

SECTIONS & ELEVATIONS - PROPOSED