RIGHT OF LIGHT CONSULTING
Chartered Surveyors

Right of Light Consulting
Burley House
15-17 High Street
Rayleigh
Essex
SS6 7EW
TEL 0800 197 4836
E-MAIL enquiries@right-of-light.co.uk
WEBSITE www.right-of-light.co.uk

Daylight and Sunlight Study (Neighbouring Properties)

3 Leverton Place, London NW5 2PL

2 June 2017

Right of Light Consulting

Burley House
15-17 High Street
Rayleigh
Essex SS6 7EW

Tel: 0800 197 4836

CONTENTS

1 EXECUTIVE SUMMARY

1.1 Overview

1.1.1 Right of Light Consulting has been commissioned by Edward van der Wyck to undertake a daylight and sunlight study of the proposed development at 3 Leverton Place, London NW5 2PL.

1.1.2 The aim of the study is to assess the impact of the development on the light receivable by the neighbouring residential properties at 2, 7, 9 and 11 Leverton Street. The study is based on the various numerical tests laid down in the Building Research Establishment (BRE) guide 'Site Layout Planning for Daylight and Sunlight: a guide to good practice' by P J Littlefair 2011.

1.1.3 The window key in Appendix 1 identifies the windows analysed in this study. Appendix 2 gives the numerical results of the various daylight and sunlight tests. The results confirm that all neighbouring windows pass the BRE diffuse daylight and direct sunlight tests. The development also satisfies the BRE overshadowing to gardens and open spaces requirements.

1.1.4 In summary, the proposed development will have a low impact on the light receivable by its neighbouring properties. Right of Light Consulting confirms that the development design satisfies all of the requirements set out in the BRE guide 'Site Layout Planning for Daylight and Sunlight'.

2 INFORMATION SOURCES

2.1 Documents Considered

2.1.1 This report is based on drawings:

NATHANIEL MOSLEY ARRCHITECTS LTD

NMA15 01 000	Location Plan	Rev P5
NMA15 01 100	Existing Site Plan	Rev T1
NMA15 01 100	Existing Plan 00	Rev T1
NMA15 01 101	Existing Plan 01	Rev T1
NMA15 01 102	Existing Plan 02	Rev T1
NMA15 01 103	Existing Roof Plan	Rev T1
NMA15 01 200	Proposed Plan 00	Rev C3
NMA15 01 201	Proposed Plan 01	Rev C3
NMA15 01 202	Proposed Plan 02	Rev C3
NMA15 01 203	Proposed Roof Plan	Rev C3
NMA15 02 100	Existing Elevations	Rev T1
NMA15 02 200	Proposed Elevations	Rev C3
NMA15 03 100	Existing Section Demolition	Rev T1
NMA15 02 700	Proposed Rear Elevation, First Floor Plan and Screen Details Section	Rev C3
NMA15 02 200	Proposed Section AA	Rev C3

Loxford Surveying Services

C1140/16/01	Existing Floor Plans	Rev –
C1140/16/02	Existing Elevations & Sections	Rev –

3 METHODOLOGY OF THE STUDY

3.1 BRE Guide : Site Layout Planning for Daylight and Sunlight

3.1.1 The study is based on the various numerical tests laid down in the Building Research Establishment (BRE) guide 'Site Layout Planning for Daylight and Sunlight: a guide to good practice' by P J Littlefair 2011. In general, the BRE tests are based on the requirements of the British Standard, BS 8206 Part 2.

3.1.2 The standards set out in the BRE guide are intended to be used flexibly. The following statement is quoted directly from the BRE guide:

3.1.3 "The guide is intended for building designers and their clients, consultants and planning officials. The advice given here is not mandatory and the guide should not be seen as an instrument of planning policy; its aim is to help rather than constrain the designer. Although it gives numerical guidelines, these should be interpreted flexibly, since natural lighting is only one of many factors in site layout design."

3.2 Daylight to Windows

3.2.1 Diffuse daylight is the light received from the sun which has been diffused through the sky. Even on a cloudy day, when the sun is not visible, a room will continue to be lit with light from the sky. This is diffuse daylight.

Diffuse daylight calculations should be undertaken to all rooms where daylight is required, including living rooms, kitchens and bedrooms. Usually, if a kitchen is less than 13m^2, it is considered to be a non-habitable room and the daylight tests need not be applied. The BRE guide states that windows to bathrooms, toilets, storerooms, circulation areas and garages need not be analysed.

3.2.2 The BRE guide contains two tests which measure diffuse daylight:

3.2.3 <u>Test 1</u> Vertical Sky Component

The percentage of the sky visible from the centre of a window is known as the Vertical Sky Component. Diffuse daylight may be adversely affected if after a development the Vertical Sky Component is both less than 27% and less than 0.8 times its former value.

3.2.4 Test 2 Daylight Distribution

The BRE guide states that where room layouts are known, the impact on the daylighting distribution can be found by plotting the 'no sky line' in each of the main rooms. The no sky line is a line which separates areas of the working plane that do and do not have a direct view of the sky. Daylight may be adversely affected if, after the development, the area of the working plane in a room which can receive direct skylight is reduced to less than 0.8 times its former value.

3.3 Sunlight availability to Windows

3.3.1 The BRE sunlight tests should be applied to all main living rooms and conservatories which have a window which faces within 90 degrees of due south. The guide states that kitchens and bedrooms are less important, although care should be taken not to block too much sunlight.

3.3.2 The BRE guide states that sunlight availability may be adversely affected if the centre of the window:

- receives less than 25% of annual probable sunlight hours, or less than 5% of annual probable sunlight hours between 21 September and 21 March and
- receives less than 0.8 times its former sunlight hours during either period and
- has a reduction in sunlight received over the whole year greater than 4% of annual probable sunlight hours.

3.4 Overshadowing to Gardens and Open Spaces

3.4.1 The availability of sunlight should be checked for all open spaces where sunlight is required. This would normally include:

- Gardens, usually the main back garden of a house
- Parks and playing fields
- Children's playgrounds
- Outdoor swimming pools and paddling pools
- Sitting out areas, such as those between non-domestic buildings and in public squares
- Focal points for views such as a group of monuments or fountains.

3.4.2 The BRE guide recommends that at least 50% of the area of each amenity space listed above should receive at least two hours of sunlight on 21 March. If as a result of new development an existing garden or amenity area does not meet the above, and the area which can receive two hours of sunlight on 21 March is less than 0.8 times its former value, then the loss of light is likely to be noticeable.

4 RESULTS OF THE STUDY

4.1 Windows & Amenity Areas Considered

4.1.1 Appendix 1 provides a plan and photographs to indicate the positions of the windows and gardens analysed in this study.

4.2 Numerical Results

4.2.1 Appendix 2 lists the detailed numerical daylight and sunlight test results. The results are interpreted below.

4.3 Daylight to Windows

4.3.1 All windows pass the Vertical Sky Component and the Daylight Distribution test. The proposed development therefore satisfies the BRE daylight requirements.

4.4 Sunlight to Windows

4.4.1 All windows which face within 90 degrees of due south have been tested for direct sunlight. All windows pass both the total annual sunlight hours test and the winter sunlight hours test (annual probable sunlight hours between 21 September and 21 March). The proposed development therefore satisfies the BRE direct sunlight to windows requirements.

4.5 Overshadowing to Gardens and Open Spaces

4.5.1 The proposed development will not create any new areas which receive less than two hours of sunlight on 21 March. The before/after ratios are 1 (no loss) and the proposed development therefore passes the BRE overshadowing to gardens and open spaces test.

4.6 Conclusion

4.6.1 The proposed development will have a low impact on the light receivable by its neighbouring properties. Right of Light Consulting confirms that the development design satisfies all of the requirements set out in the BRE guide ‘Site Layout Planning for Daylight and Sunlight’.

5 CLARIFICATIONS

5.1 General

5.1.1 The report provided is solely for the use of the client and no liability to anyone else is accepted.

5.1.2 We have undertaken the survey following the guidelines of the RICS publication "Surveying Safely".

5.1.3 We have used our best endeavours to ensure all relevant windows within the neighbouring properties have been identified.

5.1.4 Where limited access is available, assumptions will have been made.

5.1.5 We have adopted the conventional approach of assessing all habitable rooms within domestic properties.

5.1.6 This report is based upon and subject to the scope of work set out in Right of Light Consulting's quotation and standard terms and conditions.

5.1.7 Right of Light Consulting have endeavoured to include in the report those matters, which they have knowledge of or of which they have been made aware, that might adversely affect the validity of the opinion given.

5.2 Project Specific

5.2.1 None

APPENDICES

APPENDIX 1

WINDOW & GARDEN KEY

Window & Garden Key

Key

- Window reference
- Development site
- Neighbouring Properties
- G1 Neighbouring Gardens and Amenity Areas

Project Name: 3 Leverton Place, London NW5 2PL

Drawing Title: Appendix 1 - Neighbouring Windows

Scale: Do not scale

Drawing No: 1 Rev. -

Rev.	Date	Details of revison

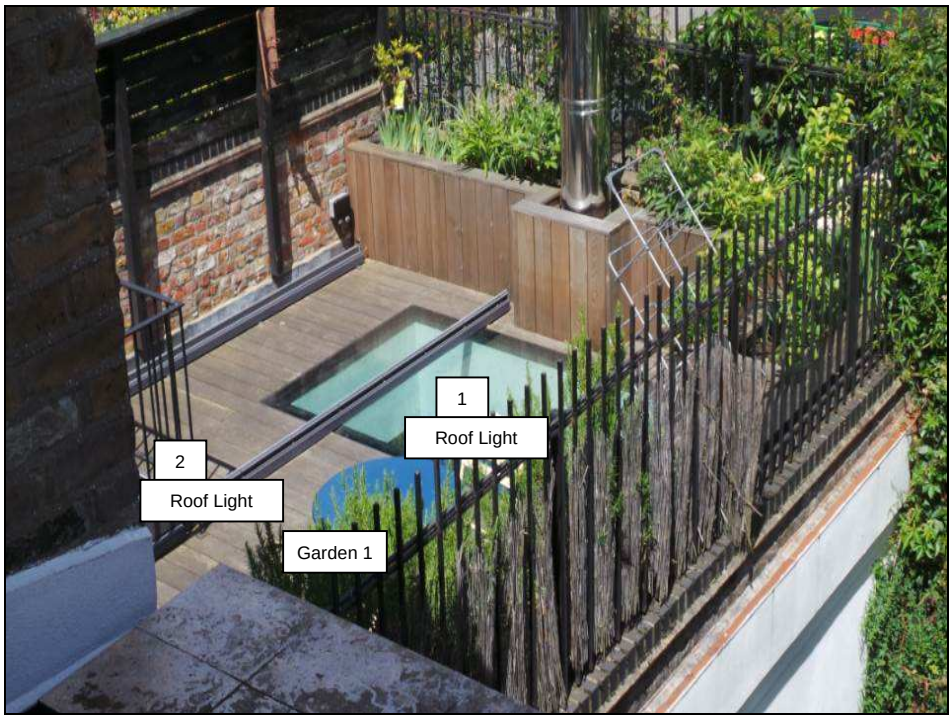
RIGHT OF LIGHT CONSULTING
Chartered Surveyors

Burley House
15 - 17 High Street
Rayleigh
Essex SS6 7EW

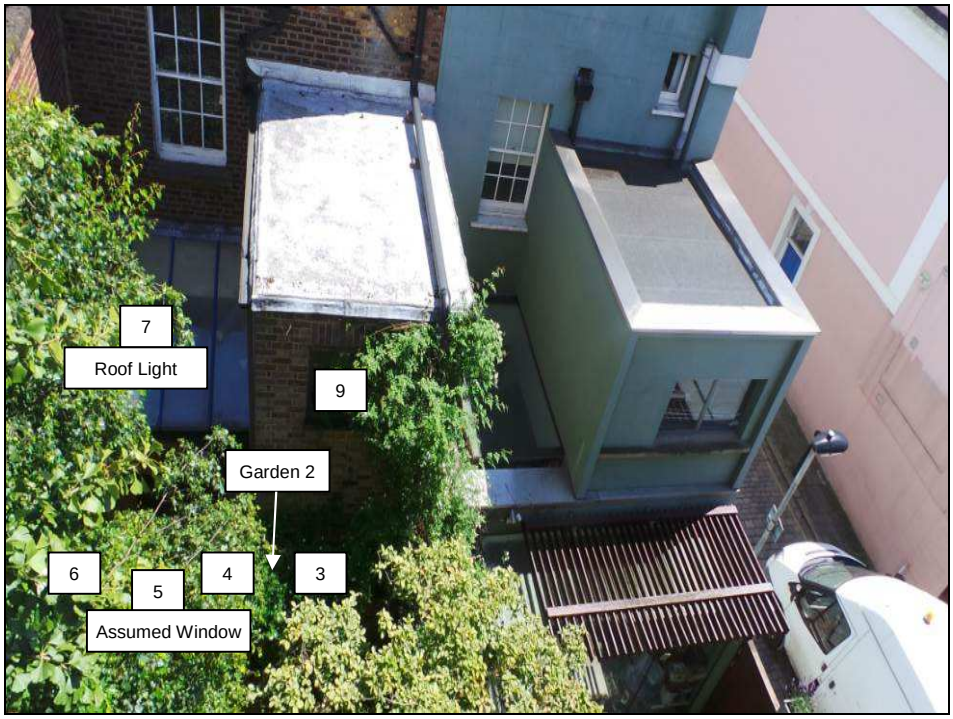
Tel. 0800 197 4836

enquiries@right-of-light.co.uk
www.right-of-light-consulting.com

Neighbouring Windows



2 Leverton Place



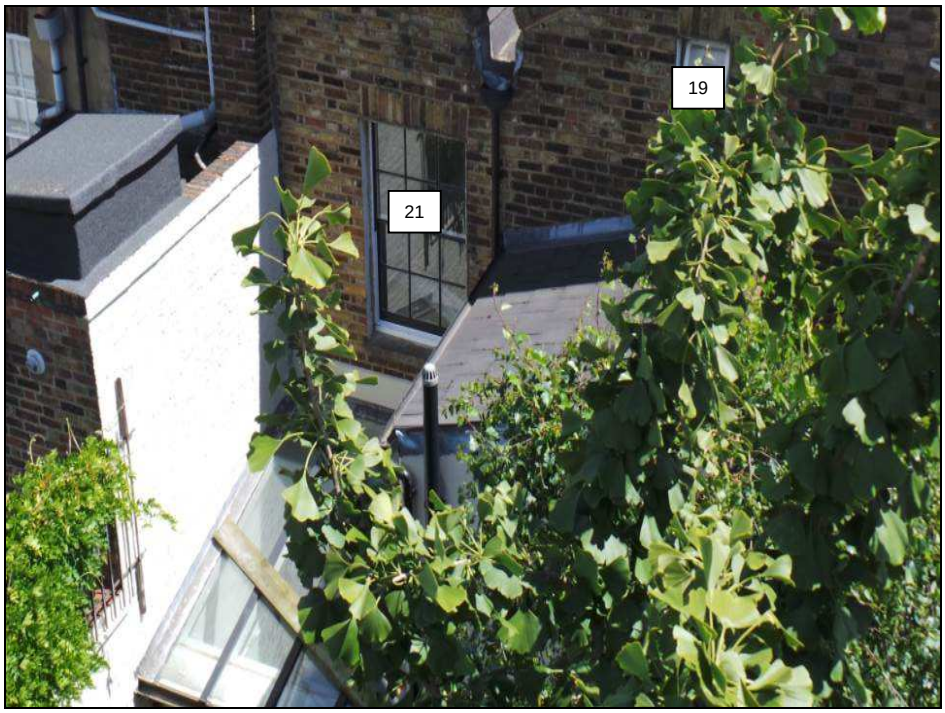
7 Leverton Street

7 Leverton Street

7 Leverton Street

9 Leverton Street

9 Leverton Street



9 Leverton Street

11 Leverton Street

11 Leverton Street

11 Leverton Street

11 Leverton Street

APPENDIX 2

DAYLIGHT AND SUNLIGHT RESULTS

Appendix 2 - Vertical Sky Component
3 Leverton Place, London NW5 2PL

Reference	Use Class	Vertical Sky Component			
		Before	After	Loss	Ratio
2 Leverton Place					
Window 1	Dining/Kitchen	83.6%	81.1%	2.5%	0.97
Window 2	Dining/Kitchen	55.9%	55.3%	0.6%	0.99
7 Leverton Street					
Window 3	Kitchen/Dining	18.1%	16.7%	1.4%	0.92
Window 4	Kitchen/Dining	13.7%	12.4%	1.3%	0.91
Window 5	Kitchen/Dining	16.0%	14.7%	1.3%	0.92
Window 6	Kitchen/Dining	15.8%	14.9%	0.9%	0.94
Window 7	Kitchen/Dining	37.4%	37.1%	0.3%	0.99
Window 8	Bath Room	19.1%	18.9%	0.2%	0.99
Window 9	Bath Room	22.4%	21.6%	0.8%	0.96
Window 10	Bedroom	28.4%	28.2%	0.2%	0.99
Window 11	Habitable	35.7%	35.7%	0.0%	1.0
Window 12	Habitable	33.6%	33.5%	0.1%	1.0
Window 13	Habitable	35.1%	35.1%	0.0%	1.0
9 Leverton Street					
Window 14	Habitable	23.7%	22.3%	1.4%	0.94
Window 15	Habitable	23.1%	21.8%	1.3%	0.94
Window 16	Habitable	21.3%	20.1%	1.2%	0.94
Window 17	Habitable	36.1%	35.8%	0.3%	0.99
Window 18	Habitable	14.7%	14.6%	0.1%	0.99
Window 19	Habitable	34.7%	34.7%	0.0%	1.0
Window 20	Habitable	60.1%	60.1%	0.0%	1.0
Window 21	Habitable	29.3%	29.3%	0.0%	1.0
11 Leverton Street					
Window 22	Kitchen	24.4%	22.4%	2.0%	0.92
Window 23	Kitchen	14.6%	14.5%	0.1%	0.99
Window 24	Kitchen	5.7%	5.7%	0.0%	1.0
Window 25	Habitable	23.1%	22.5%	0.6%	0.97
Window 26	Habitable	36.0%	36.0%	0.0%	1.0
Window 27	Dining/Lounge	13.2%	12.8%	0.4%	0.97

Appendix 2 - Vertical Sky Component
3 Leverton Place, London NW5 2PL

Reference	Use Class	Vertical Sky Component			
		Before	After	Loss	Ratio
Window 28	Dining/Lounge	33.1%	33.1%	0.0%	1.0
Window 29	Bath Room	33.2%	33.0%	0.2%	0.99
Window 30	Bedroom	33.6%	33.6%	0.0%	1.0
Window 31	Bath Room	38.3%	38.3%	0.0%	1.0
Window 32	Bedroom	38.6%	38.6%	0.0%	1.0
Window 33	Bedroom	37.0%	37.0%	0.0%	1.0

Appendix 2 - Daylight Distribution
3 Leverton Place, London NW5 2PL

Reference	Use Class	Daylight Distribution			
		Before	After	Loss	Ratio
2 Leverton Place					
Window 1	Dining/Kitchen	92%	92%	0.0%	1.0
Window 2	Dining/Kitchen	92%	92%	0.0%	1.0
7 Leverton Street					
Window 3	Kitchen/Dining	99%	99%	0.0%	1.0
Window 4	Kitchen/Dining	99%	99%	0.0%	1.0
Window 5	Kitchen/Dining	99%	99%	0.0%	1.0
Window 6	Kitchen/Dining	99%	99%	0.0%	1.0
Window 7	Kitchen/Dining	99%	99%	0.0%	1.0
Window 8	Bath Room	90%	90%	0.0%	1.0
Window 9	Bath Room	90%	90%	0.0%	1.0
Window 10	Bedroom	92%	92%	0.0%	1.0
Window 11	Habitable	96%	96%	0.0%	1.0
Window 12	Habitable	98%	98%	0.0%	1.0
Window 13	Habitable	98%	98%	0.0%	1.0
11 Leverton Street					
Window 22	Kitchen	100%	99%	1.0%	0.99
Window 23	Kitchen	100%	99%	1.0%	0.99
Window 24	Kitchen	100%	99%	1.0%	0.99
Window 25	Habitable	99%	99%	0.0%	1.0
Window 26	Habitable	99%	99%	0.0%	1.0
Window 27	Dining/Lounge	96%	96%	0.0%	1.0
Window 28	Dining/Lounge	96%	96%	0.0%	1.0
Window 29	Bath Room	98%	98%	0.0%	1.0
Window 30	Bedroom	97%	97%	0.0%	1.0
Window 31	Bath Room	80%	80%	0.0%	1.0
Window 32	Bedroom	93%	93%	0.0%	1.0
Window 33	Bedroom	93%	93%	0.0%	1.0

Appendix 2 - Sunlight to Windows
3 Leverton Place, London NW5 2PL

Reference	Use Class	Sunlight to Windows							
		Total Sunlight Hours				Winter Sunlight Hours			
		Before	After	Loss	Ratio	Before	After	Loss	Ratio
2 Leverton Place									
Window 1	Dining/Kitchen	49%	43%	6%	0.88	1%	1%	0%	1.0
Window 2	Dining/Kitchen	5%	4%	1%	0.8	0%	0%	0%	1.0
7 Leverton Street									
Window 12	Habitable	46%	46%	0%	1.0	12%	12%	0%	1.0
9 Leverton Street									
Window 14	Habitable	24%	22%	2%	0.92	3%	3%	0%	1.0
Window 15	Habitable	29%	26%	3%	0.9	7%	7%	0%	1.0
Window 16	Habitable	30%	27%	3%	0.9	7%	7%	0%	1.0
Window 17	Habitable	19%	17%	2%	0.89	0%	0%	0%	1.0
11 Leverton Street									
Window 25	Habitable	25%	24%	1%	0.96	1%	1%	0%	1.0
Window 26	Habitable	28%	28%	0%	1.0	1%	1%	0%	1.0
Window 28	Dining/Lounge	46%	46%	0%	1.0	13%	13%	0%	1.0
Window 33	Bedroom	44%	44%	0%	1.0	9%	9%	0%	1.0

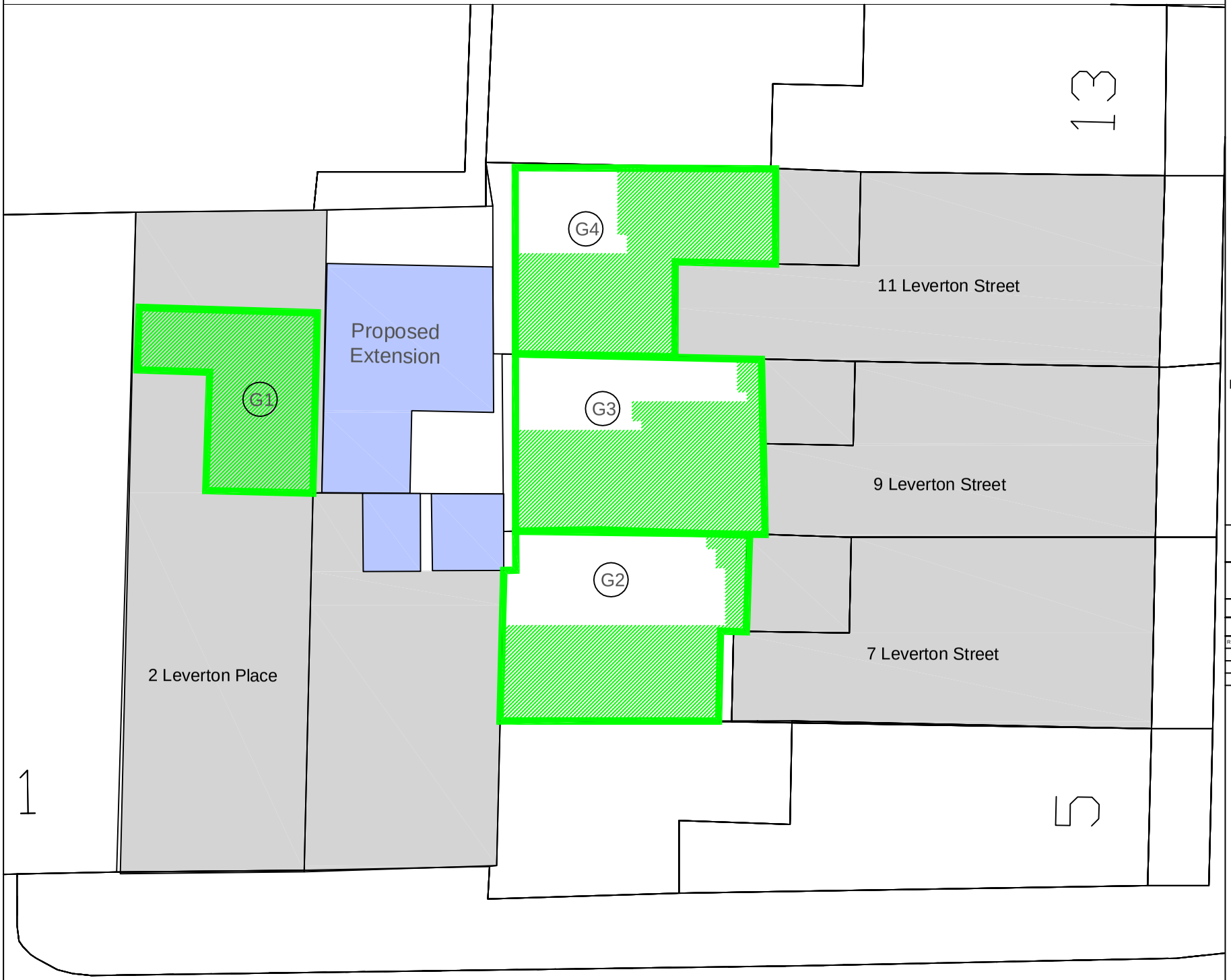
Appendix 2 - Overshadowing to Gardens and Open Spaces
3 Leverton Place, London NW5 2PL

Reference	Total Area	Area receiving at least two hours of sunlight on 21st March						
		Before		After		Loss		Ratio
2 Leverton Place								
Garden 1	16.23 m2	0.0 m2	0%	0.0 m2	0%	0.0 m2	0%	1.0
7 Leverton Street								
Garden 2	29.71 m2	13.63 m2	46%	13.63 m2	46%	0.0 m2	0%	1.0
9 Leverton Street								
Garden 3	29.6 m2	9.24 m2	31%	9.24 m2	31%	0.0 m2	0%	1.0
11 Leverton Street								
Garden 4	27.02 m2	6.15 m2	23%	6.15 m2	23%	0.0 m2	0%	1.0

APPENDIX 3

OVERSHADOWING TO GARDENS AND OPEN SPACES

Appendix 3 : Overshadowing to Gardens and Open Spaces



Key

Receives under two hours sunlight on 21st March before and after the development.

Receives under two hours sunlight on 21st March before the development; but will receive at least two hours sunlight on 21st March after the development (light improved).

Receives at least two hours sunlight on 21st March before the development; but will receive under two hours sunlight after the development (light loss).

Receives at least two hours sunlight on 21st March before and after the development.

Notes:

1. Contours derived in accordance with BRE Guide : Site Layout Planning for Daylight and Sunlight

Project Name:	4 Christopher Mews, London W11 4QX
Drawing Title:	Appendix 3 - Overshadowing to Gardens and Open Spaces
Scale:	Do not scale
Drawing No:	1 of 1
Rev.	-

Rev.	Date	Details of revison

RIGHT OF LIGHT CONSULTING
Chartered Surveyors

Burley House
15 - 17 High Street
Rayleigh
Essex SS6 7EW

Tel. 0800 197 4836

enquiries@right-of-light.co.uk
www.right-of-light-consulting.com