

24 LOWER MERTON RISE, LONDON, NW3 3SP.

Daylight and Sunlight Report

May 2022

Delva Patman Redler LLP

London	020 7936 3668
Liverpool	0151 242 0980
Bristol	0117 450 9703

info@delvapatmanredler.co.uk
delvapatmanredler.co.uk

DELVA PATMAN REDLER
Chartered Surveyors

PROJECT INFORMATION

Project: 24 Lower Merton Rise, London, NW3 3SP.

Job No: 22194

Client: Emma Chapman

DPR Contact: Veysel Karkin BA
T: 0207 936 3668
E: veysel.karkin@delvapatmanredler.co.uk

DPR Office: London

VERSION HISTORY

Version	Date	Details
1.0	06/05/2022	First issue

OFFICES

London	North West	South West
Thavies Inn House 3-4 Holborn Circus London EC1N 2HA	The Quay 12 Princes Quay Liverpool L3 1BG	40 Berkeley Square Bristol BS8 1HP
Tel: 020 7936 3668	Tel: 0151 242 0980	Tel: 0117 450 9703

DISCLAIMER

Delva Patman Redler LLP has prepared this report for the sole use of the above-named Client in accordance with generally accepted surveying practice. The report may contain confidential or legally privileged information. No liability for its content is extended to any third party without our written consent.

Statements and opinions in this report are expressed on behalf of Delva Patman Redler LLP.

© Delva Patman Redler LLP



CONTENTS

1. Introduction..... 3
2. Planning policy and guidance 4
3. Assessment methodology and numerical guidelines 6
4. Scope of the assessment..... 8
5. Information used in our technical study 9
6. Baseline condition for neighbouring properties..... 10
7. Effects of the proposed development on neighbouring properties 11
8. Conclusion..... 13

APPENDICES

- Appendix 1 - Assessment methodology and glossary
- Appendix 2 - Location drawings
- Appendix 3 - Daylight and sunlight results for neighbouring buildings

1. Introduction

- 1.1. Delva Patman Redler LLP (“we”) have been engaged by the Applicant to assess daylight and sunlight for a planning application of a proposed extension at 24 Lower Merton Rise, London, NW3 3SP. (“the Site”). We have been instructed to assess the potential effects on neighbouring properties.
- 1.2. Our daylight and sunlight study has been carried out using the assessment methodology recommended in the Building Research Establishment (BRE) Report 209, ‘*Site Layout Planning for Daylight and Sunlight: A guide to good practice*’ (second edition, 2011) (“the BRE guide”) and the Professional Guidance Note, ‘*Daylighting and sunlighting*’ (1st edition, 2012), published by the Royal Institution of Chartered Surveyors.
- 1.3. The Site is located within London Borough of Camden along the east side of Lower Merton Rise. The Site is shown outlined in red in the aerial photograph in Figure 1 below and on the location plan in Appendix 2.

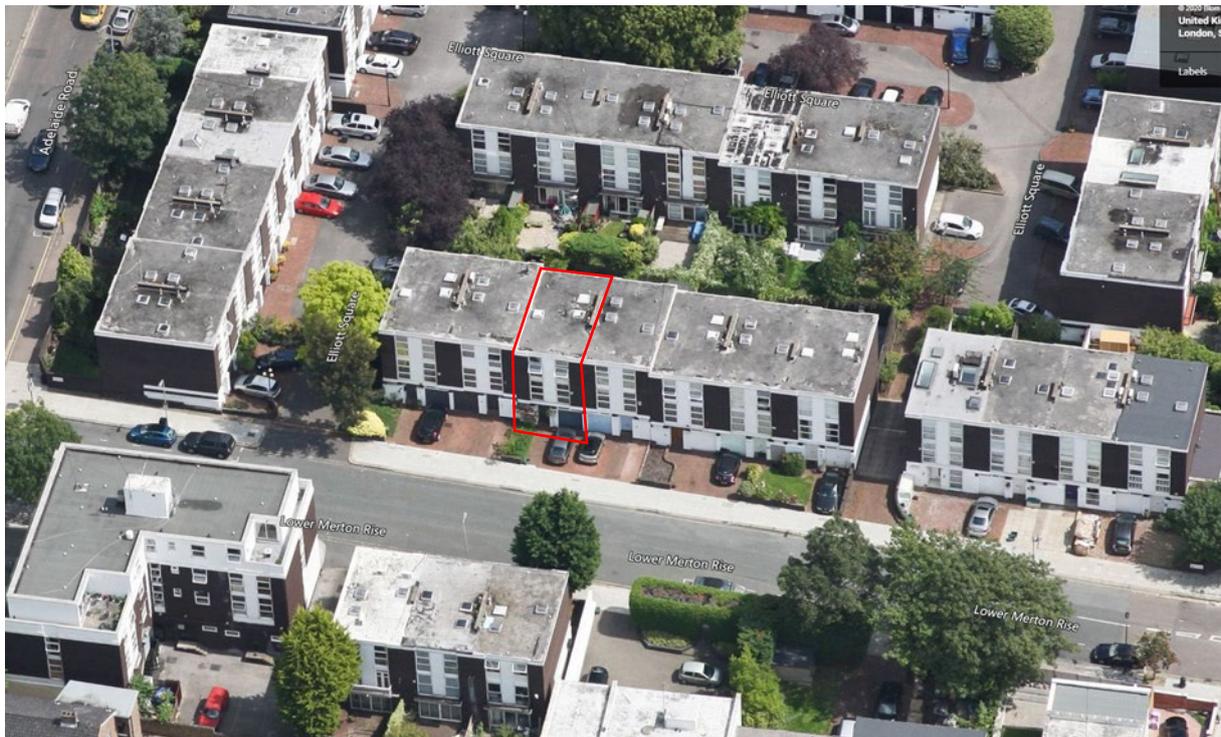


Figure 1 - Aerial photo of the Site and neighbouring buildings (©Bing)

- 1.4. The proposed extension is illustrated in spot-height drawings in Appendix 2. It comprises a single storey extension on top of the existing building.
- 1.5. This report is accompanied by Appendices explaining the BRE assessment methodology and containing drawings and tabulated results, as listed on the Contents page.

2. Planning policy and guidance

National Planning Policy and Guidance

National Planning Policy Framework (July 2021)

- 2.1. The National Planning Policy Framework (NPPF) sets out the Government's planning policies and how these should be applied. It provides a framework within which locally prepared plans for housing and other development can be produced. It places an emphasis on sustainable development and delivery of housing.
- 2.2. Chapter 11 of the NPPF, entitled "*Making effective use of land*", promotes the effective use of land in meeting the need for homes and other uses. It gives examples such as developing under-utilised land and buildings, especially if this would help to meet identified needs for housing where land supply is constrained and available sites could be used more effectively, and upward extensions to create new homes, where they would be consistent with the prevailing height and form of neighbouring properties and the overall street scene.
- 2.3. In particular, paragraph 125 of the NPPF states:

Area-based character assessments, design guides and codes and masterplans can be used to help ensure that land is used efficiently while also creating beautiful and sustainable places. Where there is an existing or anticipated shortage of land for meeting identified housing needs, it is especially important that planning policies and decisions avoid homes being built at low densities, and ensure that developments make optimal use of the potential of each site. In these circumstances:

c) local planning authorities should refuse applications which they consider fail to make efficient use of land, taking into account the policies in this Framework. In this context, when considering applications for housing, authorities should take a flexible approach in applying policies or guidance relating to daylight and sunlight, where they would otherwise inhibit making efficient use of a site (as long as the resulting scheme would provide acceptable living standards).

BRE Report 209, 'Site Layout Planning for Daylight and Sunlight: A guide to good practice' (2011)

- 2.4. The leading publication providing national guidance on the provision of daylight and sunlight to new development, and the impacts of development on daylight and sunlight to neighbouring buildings and open spaces, is BRE Report 209, '*Site Layout Planning for Daylight and Sunlight: A guide to good practice*' (second edition, 2011). It is referred to in the development plan documents or supplementary planning documents of most planning authorities.
- 2.5. The BRE guide states:

(Its) main aim is ... to help to ensure good conditions in the local environment, considered broadly, with enough sunlight and daylight on or between buildings for good interior and exterior conditions.

The guide is intended for building designers and their clients, consultants and planning officials. The advice given is not mandatory and the report should not be seen as a part of planning policy. Its aim is to help rather than constrain the designer.

Although it gives numerical guidelines, these should be interpreted flexibly because natural lighting is only one of the many factors in site layout design.

In special circumstances the developer or planning authority may wish to use different target values. For example, in a historic city centre, or in an area with modern high rise buildings, a higher degree of obstruction may be unavoidable if new developments are to match the height and proportions of existing buildings... The calculation methods ... are entirely flexible in this respect.

Local planning policy and guidance***Camden Local Plan 2017***

2.6. The Camden Local Plan (adopted 3 July 2017) contains the following policies that are relevant to daylight and sunlight.

2.7. Policy A1 'Managing the impact of development' states:

The Council will seek to protect the quality of life of occupiers and neighbours. We will grant permission for development unless this causes unacceptable harm to amenity.

We will:

a. seek to ensure that the amenity of communities, occupiers and neighbours is protected; ...

The factors we will consider include:

... f. sunlight, daylight and overshadowing;

2.8. The supporting text states, at paragraph 6.5:

Loss of daylight and sunlight can be caused if spaces are overshadowed by development. To assess whether acceptable levels of daylight and sunlight are available to habitable... spaces, the Council will take into account the most recent guidance published by the Building Research Establishment (currently the Building Research Establishment's Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice 2011). Further detail can be found within our supplementary planning document Camden Planning Guidance on amenity.

3. Assessment methodology and numerical guidelines

- 3.1. The technical assessments that underpin this daylight and sunlight study have been carried out in accordance with the assessment methodology recommended in the BRE guide.
- 3.2. The principal assessments and numerical criteria are summarised below. A fuller explanation of the assessment methodology is given at Appendix 1 of this report.

Existing neighbouring buildings

Daylight to neighbouring buildings

- 3.3. If the head of the new development subtends an angle of more than 25° measured from the centre of the lowest affected window in an existing neighbouring building in a plane perpendicular to the window wall, then a more detailed check is needed to find the loss of skylight.
- 3.4. The more detailed tests are:
 - i) vertical sky component (**VSC**) at the centre of each main window, which measures the total amount of skylight available; and
 - ii) no-sky line (**NSL**) on the working plane inside a room, where room layouts are known, which measures the area that can receive direct skylight and assesses the distribution of daylight around the room.
- 3.5. Loss of daylight resulting from development will be noticeable if either:
 - the VSC at the centre of the window will be reduced to both less than 27% and less than 0.8 times its former value, or
 - the area of the working plane in a room that is enclosed by the no-sky line (NSL) and can receive direct skylight will be reduced to less than 0.8 times its former value.
- 3.6. In respect of these numerical guidelines, the BRE guide states:

Note that numerical values given here are purely advisory. Different criteria may be used based on the requirements for daylighting in an area viewed against other site layout constraints.

- 3.7. In respect of the windows and rooms to be assessed, the BRE guide states:

The guidelines given here are intended for use for rooms in adjoining dwellings where daylight is required, including living rooms, kitchens and bedrooms.

- 3.8. In housing, living rooms, dining rooms and kitchens have a greater requirement for daylight. Bedrooms should also be analysed but are less important. Bathrooms, stairwells and other areas without a requirement for daylight need not be assessed.
- 3.9. For a bay window, the centre window facing directly outwards can be taken as the main window for the VSC calculation. If a room has two or more windows of equal size, the mean of their VSCs may be taken.

Sunlight to neighbouring buildings

- 3.10. In designing new development, care should be taken to safeguard the access to sunlight for existing dwellings and any nearby non-domestic buildings where there is a particular requirement for sunlight.
- 3.11. Obstruction to sunlight may become an issue if part of the development is situated within 90° of due south of a main window wall of an existing building, and in the section drawn perpendicular to this existing window wall, the new development subtends an angle greater than 25° to the horizontal measured from the centre of the lowest window to a main living room.
- 3.12. The amount of sunlight reaching a room is measured by calculating the percentage of annual probable sunlight hours (**APSH**) at the centre its windows.

- 3.13. If, following development, the APSH will be greater than 25%, including at least 5% of APSH in the winter months between 21 September and 21 March, then the room should still receive enough sunlight.
- 3.14. Sunlight will be adversely affected if the centre of the window will:
- receive less than 25% APSH or less than 5% APSH during the winter months (21 September to 21 March); and
 - less than 0.8 times its former sunlight hours during either period; and
 - the reduction in sunlight over the whole year will be greater than 4% APSH.
- 3.15. All main living rooms of dwellings, and conservatories, should be checked if they have a window facing within 90° of due south.
- 3.16. Our assessment has therefore assessed the loss of sunlight to living rooms.

4. Scope of the assessment

Neighbouring buildings

- 4.1. The principal recommendations in the BRE guide relate to residential buildings. Its guidelines on daylight are intended for use for rooms in neighbouring dwellings where daylight is required, including living rooms, kitchens and bedrooms (BRE paragraph 2.2.2). Its guidelines on sunlight apply to all main living rooms of neighbouring dwellings and conservatories that have a window facing within 90° of due south (BRE paragraph 3.2.3).
- 4.2. Consequently, our assessment has been scoped to include nearby residential accommodation, as is common practice for studies for planning applications.
- 4.3. We identified the properties that are in residential use from historic site inputs and online research.
- 4.4. We have run the BRE daylight and sunlight tests in the existing baseline and proposed development scenarios. This establishes the levels that would be retained in the proposed development condition and the degree to which they change from the existing baseline.

5. Information used in our technical study

- 5.1. We have undertaken our technical study using a 3D computer model built in AutoCAD and specialist analysis software, which runs the assessments recommended in the BRE guide.
- 5.2. We compiled our 3D computer model from the following information:
 - 5.2.1. 3D computer model of the existing buildings on the Site and the contextual massing produced from photogrammetry (aerial photography) supplied by ZMapping Ltd, subsequently enhanced by us with the more detailed information listed below
 - 5.2.2. Generic floor plans for neighbouring buildings, where available, utilised from existing set of similar neighbouring building floor plans.
 - 5.2.3. Proposed development: 2D drawings supplied by KW Architect in April 2022 (file name: LMR24 - extra floor.dwg)
- 5.3. To aid accuracy of the assessment and interpretation of the results, we carried out searches to obtain the floor plans for the neighbouring buildings referred to above. This is the approach recommended in the Professional Guidance Note, 'Daylighting and sunlighting' (1st edition, 2012), published by the Royal Institution of Chartered Surveyors.
- 5.4. We had been provided plans of the existing site building by the design consultants historically. Given that the form of neighbouring buildings is almost identical, we have based the room layouts and, where possible, the floor levels in our assessment model on these drawings for any similar neighbouring buildings.
- 5.5. Our 3D computer model is shown on our spot-height drawings at Appendix 2.

Limitations and assumptions

- 5.6. In compiling our 3D computer model for our technical study, we have sought to be as accurate as reasonably possible within the scope of our instruction. We have relied upon the information noted above.
- 5.7. Whilst we have used plans for neighbouring buildings where available, we have typically made reasonable assumptions as to their internal floor levels and wall thicknesses.
- 5.8. We have used proven and trusted specialist computer software (Waldram Tools for AutoCAD®) to run the calculations recommended in the BRE guide.
- 5.9. To the best of our knowledge, the information and advice contained in this report is accurate at the date of issue, based on the information provided to or procured by us prior to its production.

6. Baseline condition for neighbouring properties

- 6.1. We have assessed the impacts of the proposed development relative to the existing baseline condition.
- 6.2. The existing baseline scenario and the proposed development scenario are shown on our spot-height drawing at Appendix 2.
- 6.3. The daylight and sunlight levels in the existing baseline and proposed development conditions are shown in the results tables Appendix 3.
- 6.4. The levels in the proposed scenario are then compared with those in the baseline scenario so that the loss of natural light can be quantified and compared with the BRE numerical guidelines.
- 6.5. Window maps for the assessed buildings are attached at Appendix 2.

7. Effects of the proposed development on neighbouring properties

7.1. We assessed the effects of the proposed development on the following properties:

- 1 to 7 Elliot Square
- 33 to 39 Elliot Square
- 11 to 15 Lower Merton Rise

Daylight to neighbouring properties

VSC and NSL

7.2. The results of the VSC and NSL analyses of the neighbouring properties are tabulated in Appendix 3 and summarised in Table 1 below.

Table 1 – Summary of VSC and NSL effects as a result of the proposed development

Property address	No. of windows tested	No. of rooms tested	No. rooms inside VSC & NSL guidelines	VSC (windows)		NSL (rooms)	
				No. windows inside guidelines	No. windows outside guidelines	No. rooms inside guidelines	No. rooms outside guidelines
1 Elliot Square	6	2	2	6	-	2	-
2 Elliot Square	6	3	3	6	-	3	-
3 Elliot Square	6	2	2	6	-	2	-
4 Elliot Square	6	3	3	6	-	3	-
5 Elliot Square	6	2	2	6	-	2	-
6 Elliot Square	6	3	3	6	-	3	-
7 Elliot Square	6	2	2	6	-	2	-
39 Elliot Square	7	3	3	7	-	3	-
38 Elliot Square	7	4	4	7	-	4	-
37 Elliot Square	7	3	3	7	-	3	-
36 Elliot Square	7	4	4	7	-	4	-
35 Elliot Square	7	3	3	7	-	3	-
34 Elliot Square	7	4	4	7	-	4	-
33 Elliot Square	5	3	3	5	-	3	-
11 Lower Merton Rise	6	2	2	6	-	2	-
13 Lower Merton Rise	6	2	2	6	-	2	-
15 Lower Merton Rise	6	2	2	6	-	2	-
Totals:	107	47	47	107	0	47	0
			100%	100%	0%	100%	0%

7.3. Of the 107 habitable rooms assessed in the 17 neighbouring properties, all 107 rooms (100%) would satisfy both the VSC guidelines and the NSL guidelines.

7.4. Overall, the proposed extension will have negligible effect on daylight to neighbouring properties.

Sunlight to neighbouring properties

7.5. The results of the annual and winter sunlight analyses are tabulated in Appendix B and summarised [Table 2](#) below.

Table 2 – Number of rooms experiencing APSH effects as a result of the proposed development

Property address	No. of rooms tested	No. inside APSH annual & winter guidelines	APSH - annual (rooms)	APSH - winter (rooms)
			No. outside annual guidelines	No. outside winter guidelines
1 Elliot Square	1	1	-	-
2 Elliot Square	1	1	-	-
3 Elliot Square	1	1	-	-
4 Elliot Square	1	1	-	-
5 Elliot Square	1	1	-	-
6 Elliot Square	1	1	-	-
7 Elliot Square	2	2	-	-
39 Elliot Square	1	1	-	-
38 Elliot Square	1	1	-	-
37 Elliot Square	1	1	-	-
36 Elliot Square	1	1	-	-
35 Elliot Square	1	1	-	-
34 Elliot Square	1	1	-	-
33 Elliot Square	1	1	-	-
11 Lower Merton Rise	1	1	-	-
13 Lower Merton Rise	1	1	-	-
15 Lower Merton Rise	1	1	-	-
Totals:	18	18	0	0
		100%	0%	0%

- 7.6. **Table 2** shows that of the 18 windows assessed in 17 neighbouring properties, all 18 windows (100%) would satisfy the BRE guidelines for both annual and winter APSH.
- 7.7. Overall, the proposed extension will have negligible effect on sunlight to neighbouring properties.

8. Conclusion

- 8.1. The Site is in an urban location within NW London along the east side of Lower Merton Rise.
- 8.2. The existing buildings on site comprise mainly three-storey, low level residential building in terraced formation.
- 8.3. The proposal comprises a single storey extension on top of the existing building.
- 8.4. We have assessed the potential effects of the proposed extension on daylight and sunlight to surrounding residential properties.
- 8.5. We ran our assessments using methodologies recommended in the BRE guide.
- 8.6. Overall, the proposed extension would have negligible impact on daylight and sunlight to the neighbouring properties, with any effects fully adhering with the recommended methodology of the BRE guidelines.
- 8.7. In conclusion, it is submitted that the layout of the proposed extension is consistent with the Council's local planning policy on daylight and sunlight.

Delva Patman Redler LLP
Chartered Surveyors

Appendix 1**Assessment methodology and glossary**

1. This appendix explains the daylight and sunlight assessment methodology recommended in BRE Report 209, 'Site Layout Planning for Daylight and Sunlight: A guide to good practice' (2011) and provides a glossary of the terminology used.

Assessment methodology**Daylight and sunlight to neighbouring buildings**Daylight to neighbouring buildings

2. The BRE guide states:

In designing a new development or extension to a building, it is important to safeguard the daylight to nearby buildings.

The guidelines given here are intended for use for rooms in adjoining dwellings where daylight is required, including living rooms, kitchens and bedrooms. Windows to bathrooms, toilets, storerooms, circulation areas and garages need not be analysed. The guidelines may also be applied to any existing non-domestic building where the occupants have a reasonable expectation of daylight; this would normally include schools, hospitals, hotels and hostels, small workshops and some offices.

3. To quantify the impact of development on daylight to a building, the BRE guide recommends two tests:
 - a) calculating the vertical sky component (**VSC**) at the centre of each main window on the outside plane of the window wall, to measure the total amount of skylight available to the window; and
 - b) plotting the no-sky line (**NSL**) on the working plane inside a room, where layouts are known, and measuring the area that can receive direct skylight, to assess the distribution of daylight around the room.
4. The VSC measures the skylight available at the window. The guide states:

Any reduction in the total amount of skylight can be calculated by finding the VSC at the centre of each main window ... For a bay window, the centre window facing directly outwards can be taken as the main window. If a room has two or more windows of equal size, the mean of their VSCs may be taken. The reference point is in the external plane of the window wall. Windows to bathrooms, toilets, storerooms, circulation areas and garages need not be analysed.

5. The NSL test is described thus:

Where room layouts are known, the impact on the daylighting distribution in the existing building can be found by plotting the 'no sky line' in each of the main rooms. For houses this would include living rooms, dining rooms and kitchens; bedrooms should also be analysed although they are less important. In non-domestic buildings each main room where daylight is expected should be investigated. The no sky line divides points on the working plane which can and cannot see the sky.

6. If, following development, the VSC to a neighbouring window will be greater than 27% then enough skylight should still be reaching the window. Any reduction below this level should be kept to a minimum. If the VSC will be both less than 27% and less than 0.8 times its former value, occupants of the existing building will notice the reduction in the amount of skylight. The area lit by the window is likely to appear more gloomy and electric lighting will be needed more of the time.
7. If, following development, the no-sky line moves so that the area of the existing room that can receive direct skylight will be reduced to less than 0.8 times its former value, this will be noticeable to the

occupants and more of the room will appear poorly lit. This is also true if the no-sky line encroaches on key areas like kitchen sinks and worktops.

Sunlight to neighbouring buildings

8. The BRE guide states:

To assess loss of sunlight to an existing building, it is suggested that all main living rooms of dwellings, and conservatories, should be checked if they have a window facing within 90° of due south. Kitchens and bedrooms are less important, although care should be taken not to block too much sun.

A point at the centre of the window on the outside face of the window wall may be taken [as the calculation point].

9. To quantify the available sunlight, the BRE guide advises measuring the percentage of annual probable sunlight hours (**APSH**), which is defined as follows:

'probable sunlight hours' means the total number of hours in the year that the sun is expected to shine on unobstructed ground, allowing for average levels of cloudiness for the location in question.

10. The assessment calculates the percentage of APSH over the whole year (annual sunlight) and between 21 September and 21 March (winter sunlight).

11. If, following development, the APSH to a neighbouring window will be greater than 25%, including at least 5% of APSH in the winter months between 21 September and 21 March, then the room should still receive enough sunlight. Any reduction in sunlight access below this level should be kept to a minimum.

12. If the available sunlight hours will be both less than the above amounts and less than 0.8 times their former value, either over the whole year or just in the winter months, then the occupants of the building will notice the loss of sunlight; if the overall annual loss is greater than 4% of APSH, the room may appear colder and less cheerful and pleasant.

Glossary of terms

13. The daylight and sunlight terminology used in our report is explained below.

Term	Meaning
Annual probable sunlight hours (APSH)	The long-term average of the total number of hours during a year in which direct sunlight is expected to shine on the unobstructed ground, allowing for average levels of cloudiness for the location in question.
Daylight	Combined skylight and sunlight.
No-sky line (NSL)	The outline on the working plane of the area from which no sky can be seen. It divides points on the working plane which can and cannot see the sky.
Obstruction angle	The angular altitude of the top of an obstruction above the horizontal, measured from a reference point in a vertical plane in a section perpendicular to the vertical plane.
Sky factor	Ratio of the parts of illuminance at a point on a given plane that would be received directly through unglazed openings from a sky of uniform luminance, to illuminance on a horizontal plane due to an unobstructed hemisphere of this sky. The sky factor does not include reflected light, either from outdoor or indoor surfaces.
Vertical sky component (VSC)	<p>The amount of daylight falling on a vertical wall or window. It is the ratio of that part of illuminance, at a point on a given vertical plane (e.g. window), that is received directly from a CIE standard overcast sky, to simultaneous illuminance on a horizontal plane due to an unobstructed hemisphere of this sky. The VSC does not include reflected light, either from the ground or from other buildings.</p> <p>The ratio is usually expressed as a percentage. The maximum value is almost 40% for a completely unobstructed vertical wall.</p>
Working plane	Horizontal, vertical or inclined plane in which a visual task lies. Normally the working plane may be taken to be horizontal, 0.85 m above the floor in housing.

Appendix 2

Location drawings

Site location plan
Spot-height drawings
Window maps



NEIGHBOURING PROPERTIES CONSIDERED FOR ANALYSIS

- 1: 1 Elliott Square:
Dwg No: LOC-001
- 2: 2 Elliott Square:
Dwg No: LOC-001
- 3: 3 Elliott Square:
Dwg No: LOC-001
- 4: 4 Elliott Square:
Dwg No: LOC-001
- 5: 5 Elliott Square:
Dwg No: LOC-001
- 6: 6 Elliott Square:
Dwg No: LOC-001
- 7: 7 Elliott Square:
Dwg No: LOC-001
- 8: 39 Elliott Square:
Dwg No: LOC-001
- 9: 38 Elliott Square:
Dwg No: LOC-001
- 10: 37 Elliott Square:
Dwg No: LOC-001
- 11: 36 Elliott Square:
Dwg No: LOC-001
- 12: 35 Elliott Square:
Dwg No: LOC-001
- 13: 34 Elliott Square:
Dwg No: LOC-001
- 14: 33 Elliott Square:
Dwg No: LOC-001
- 15: 11 Lower Merton Rise:
Dwg No: LOC-001
- 16: 13 Lower Merton Rise:
Dwg No: LOC-001
- 17: 15 Lower Merton Rise:
Dwg No: LOC-001

NO DIMENSIONS TO BE SCALED
FROM THIS DRAWING

KEY:

	Existing
	Surrounding
	Neighbouring Property

SOURCE DATA:
Drawings Used:
Existing & Surrounding Buildings:
- ZMapping 3D Model.

NOTES:
Relevant neighbouring properties
considered for analysis

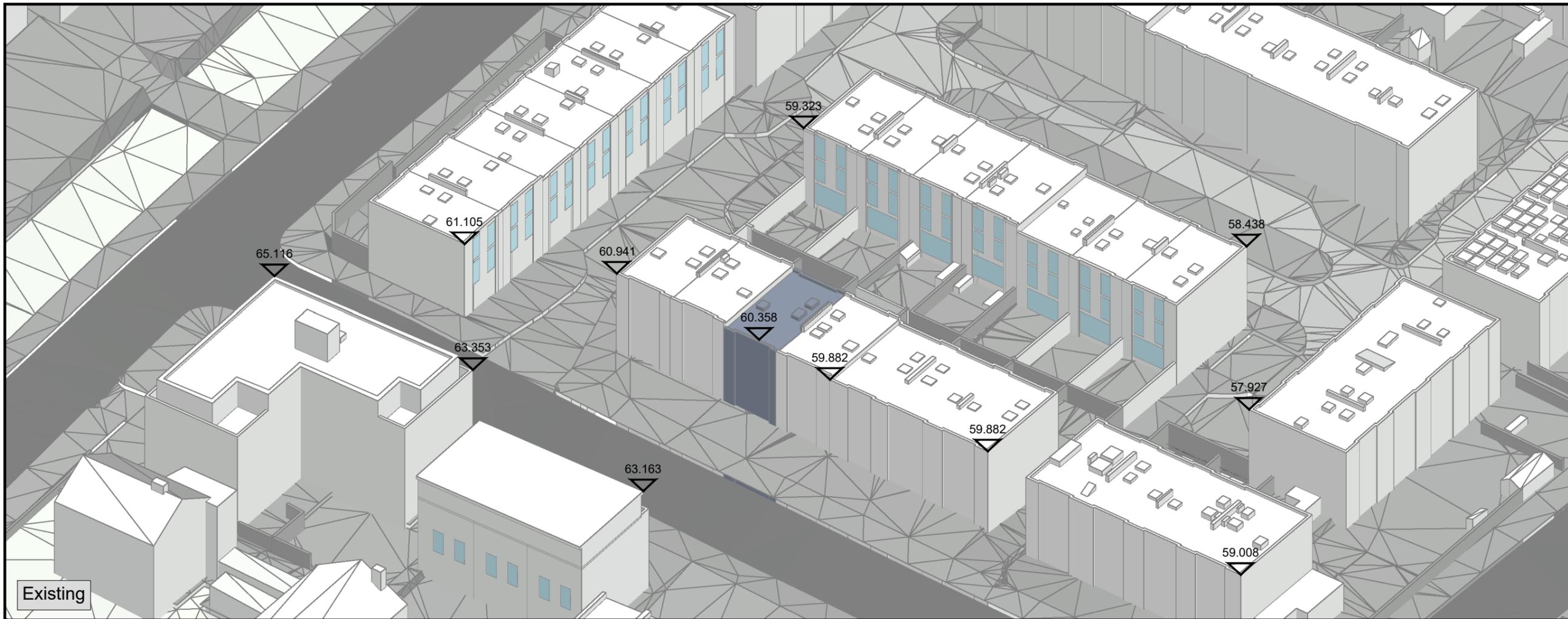
REV	Description	Drawn	Date

DELVA PATMAN REDLER
Chartered Surveyors
London 020 7936 3668
Liverpool 0151 242 0980
Bristol 0117 450 9703
www.delvapatmanredler.co.uk
info@delvapatmanredler.co.uk

TITLE:
24 LOWER MERTON RISE,
LONDON, NW3 3SP.

DRAWING:
LOCATION PLAN
Daylight and Sunlight

DRAWN: VK	JOB NBR:
SCALE: 1:500@A3	22194
DATE: 06/05/2022	
DWG NO:	REV:
LOC_DS_001	-



NO DIMENSIONS TO BE SCALED FROM THIS DRAWING

- KEY:
- Existing
 - Surrounding
 - Proposed

SOURCE DATA:
Drawings Used:
Existing & Surrounding Buildings:
- ZMapping 3D Model.
Proposed:
KASIA WHITFIELD DESIGN:
- Drawing File Name: (Received 28.04.2022)
- LMR24 - extra floor.dwg

NOTES:
All heights given in metres AOD



REV	Description	Drawn	Date

DELVA PATMAN REDLER
Chartered Surveyors
London 020 7936 3668
Liverpool 0151 242 0980
Bristol 0117 450 9703
www.delvapatmanredler.co.uk
info@delvapatmanredler.co.uk

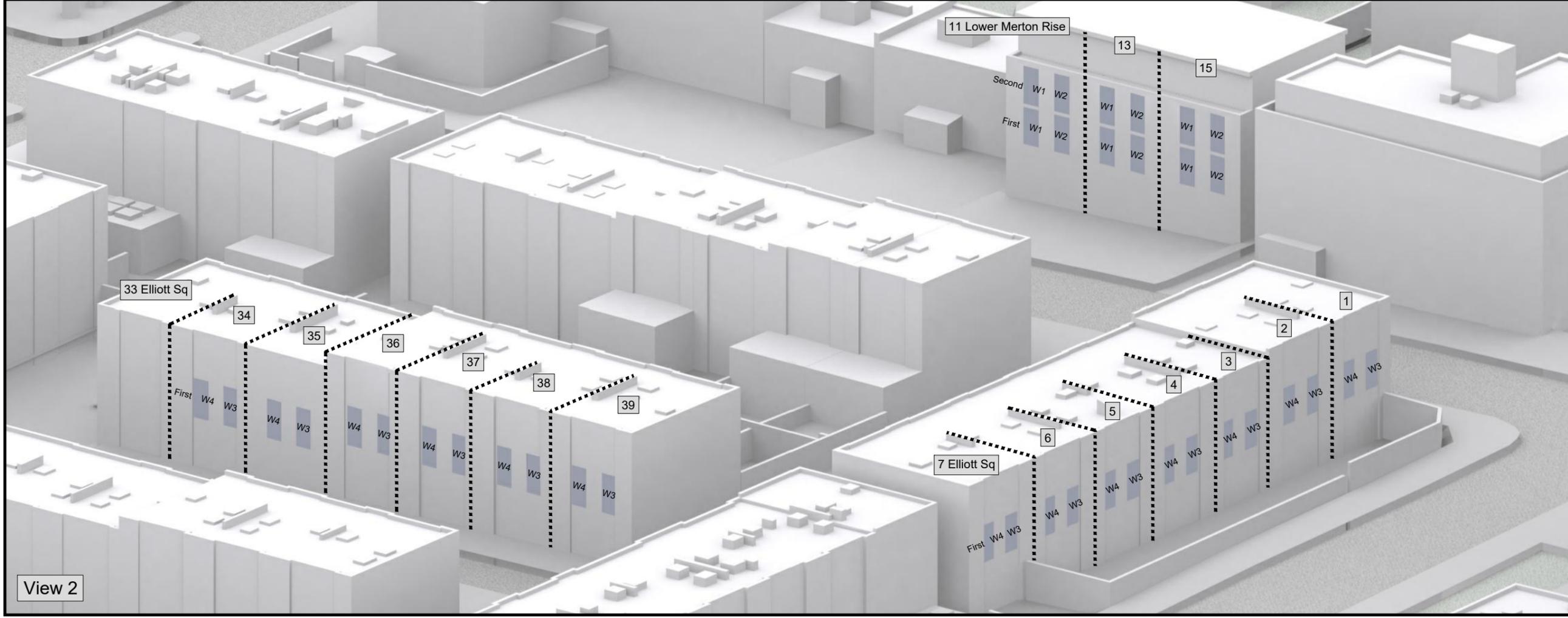
TITLE:
24 LOWER MERTON RISE,
LONDON, NW3 3SP.

DRAWING:
EXISTING & PROPOSED SCENARIOS
Plan and 3D Views

DRAWN: VK	JOB NBR:
SCALE: NTS	22194
DATE: 06/05/2022	
DWG NO:	REV:
SPT_001	-



View 1



View 2

NO DIMENSIONS TO BE SCALED FROM THIS DRAWING

KEY:

	Surrounding		W1 Windows tested Daylight only
	Neighbouring Property		W2 Windows tested Daylight & Sunlight
	Notional Partition		

SOURCE DATA:
 Drawings Used:
 Existing & Surrounding Buildings:
 - ZMapping 3D Model.

NOTES:
 -



REV	Description	Drawn	Date

DELVA PATMAN REDLER
 Chartered Surveyors
 London 020 7936 3668
 Liverpool 0151 242 0980
 Bristol 0117 450 9703
 www.delvapatmanredler.co.uk
 info@delvapatmanredler.co.uk

TITLE:
24 LOWER MERTON RISE,
 LONDON, NW3 3SP.

DRAWING:
KEY WINDOW LOCATIONS
 Plan and 3D Views

DRAWN: VK	JOB NBR:
SCALE: NTS	22194
DATE: 06/05/2022	
DWG NO: LOC_001	REV: -

Appendix 3

Daylight and sunlight results for neighbouring buildings

Property, room & window attributes				VSC				NSL				APSH (room)							
Floor	Room	Room use	Window Ref./Orientation	Exis. (% VSC)	Prop. (% VSC)	Loss (% VSC)	Pro./Ex. ratio	Exis. (% rm)	Prop. (% rm)	Loss (m ²)	Pro./Ex. ratio	Annual (%APSH)				Winter (%APSH)			
												Exis.	Prop.	Loss	Pro./Ex.	Exis.	Prop.	Pro./Ex.	
1 Elliot Square																			
First	R1	Living room	W1 ↓	34.2	34.1	N/A	N/A												
		Living room	W2 ↓	34.2	34.2	N/A	N/A												
		Living room	W3 ↑	25.6	25.6	0.0	1.00												
		Living room	W4 ↑	25.4	25.4	0.0	1.00	100%	100%	0.00	1.00	92	92	N/A	N/A	26	26	N/A	
Second	R1	Bedroom	W1 ↓	37.3	37.0	N/A	N/A												
		Bedroom	W2 ↓	37.4	37.1	N/A	N/A	99%	99%	0.00	1.00	N/R	N/R	N/R	N/R	N/R	N/R	N/R	
2 Elliot Square																			
First	R1	Living room	W1 ↓	33.9	33.9	N/A	N/A												
		Living room	W2 ↓	33.9	33.9	N/A	N/A												
		Living room	W3 ↑	25.5	25.5	0.0	1.00												
		Living room	W4 ↑	25.6	25.6	0.0	1.00	99%	99%	0.00	1.00	92	92	N/A	N/A	25	25	N/A	
Second	R1	Bedroom	W1 ↓	37.4	37.1	N/A	N/A	99%	99%	0.00	1.00	N/R	N/R	N/R	N/R	N/R	N/R	N/R	
		R2	Bedroom	W2 ↓	37.5	37.2	N/A	N/A	99%	99%	0.00	1.00	N/R	N/R	N/R	N/R	N/R	N/R	N/R
3 Elliot Square																			
First	R1	Living room	W1 ↓	33.6	33.6	N/A	N/A												
		Living room	W2 ↓	34.1	34.1	N/A	N/A												
		Living room	W3 ↑	25.6	25.6	0.0	1.00												
		Living room	W4 ↑	25.7	25.7	0.0	1.00	99%	99%	0.00	1.00	89	89	N/A	N/A	24	24	N/A	
Second	R1	Bedroom	W1 ↓	37.1	37.0	N/A	N/A												
		Bedroom	W2 ↓	37.4	37.2	N/A	N/A	99%	99%	0.00	1.00	N/R	N/R	N/R	N/R	N/R	N/R	N/R	
4 Elliot Square																			
First	R1	Living room	W1 ↓	34.5	34.4	N/A	N/A												
		Living room	W2 ↓	34.8	34.6	N/A	N/A												

Property, room & window attributes				VSC				NSL				APSH (room)						
Floor	Room	Room use	Window Ref./Orientation	Exis. (% VSC)	Prop. (% VSC)	Loss (% VSC)	Pro./Ex. ratio	Exis. (% rm)	Prop. (% rm)	Loss (m ²)	Pro./Ex. ratio	Annual (%APSH)				Winter (%APSH)		
												Exis.	Prop.	Loss	Pro./Ex.	Exis.	Prop.	Pro./Ex.
		Living room	W3 ↑	26.4	26.4	0.0	1.00											
		Living room	W4 ↑	26.6	26.6	0.0	1.00	100%	100%	0.00	1.00	90	90	N/A	N/A	25	25	N/A
Second	R1	Bedroom	W1 ↓	37.6	37.3	N/A	N/A	99%	99%	0.00	1.00	N/R	N/R	N/R	N/R	N/R	N/R	N/R
	R2	Bedroom	W2 ↓	37.8	37.5	N/A	N/A	99%	99%	0.00	1.00	N/R	N/R	N/R	N/R	N/R	N/R	N/R
5 Elliot Square																		
First	R1	Living room	W1 ↓	35.1	34.8	N/A	N/A											
		Living room	W2 ↓	35.2	34.9	N/A	N/A											
		Living room	W3 ↑	27.3	27.3	N/A	N/A											
		Living room	W4 ↑	27.5	27.5	N/A	N/A	100%	100%	0.00	1.00	91	91	N/A	N/A	26	26	N/A
Second	R1	Bedroom	W1 ↓	38.0	37.7	N/A	N/A											
		Bedroom	W2 ↓	38.2	37.9	N/A	N/A	98%	98%	0.00	1.00	N/R	N/R	N/R	N/R	N/R	N/R	N/R
6 Elliot Square																		
First	R1	Living room	W1 ↓	35.2	35.0	N/A	N/A											
		Living room	W2 ↓	35.2	35.0	N/A	N/A											
		Living room	W3 ↑	28.0	28.0	N/A	N/A											
		Living room	W4 ↑	28.2	28.2	N/A	N/A	99%	99%	0.00	1.00	92	92	N/A	N/A	27	27	N/A
Second	R1	Bedroom	W1 ↓	38.4	38.1	N/A	N/A	99%	99%	0.00	1.00	N/R	N/R	N/R	N/R	N/R	N/R	N/R
	R2	Bedroom	W2 ↓	38.5	38.2	N/A	N/A	99%	99%	0.00	1.00	N/R	N/R	N/R	N/R	N/R	N/R	N/R
7 Elliot Square																		
First	R1	Living room	W1 ↓	35.0	34.8	N/A	N/A											
		Living room	W2 ↓	35.0	34.8	N/A	N/A											
		Living room	W3 ↑	28.9	28.9	N/A	N/A											
		Living room	W4 ↑	29.0	29.0	N/A	N/A	100%	100%	0.00	1.00	93	92	N/A	N/A	28	27	N/A
Second	R1	Living room	W1 ↓	38.5	38.3	N/A	N/A											
		Living room	W2 ↓	38.5	38.3	N/A	N/A	99%	99%	0.00	1.00	85	85	N/A	N/A	29	29	N/A

Property, room & window attributes				VSC				NSL				APSH (room)						
Floor	Room	Room use	Window Ref./Orientation	Exis. (% VSC)	Prop. (% VSC)	Loss (% VSC)	Pro./Ex. ratio	Exis. (% rm)	Prop. (% rm)	Loss (m ²)	Pro./Ex. ratio	Annual (%APSH)				Winter (%APSH)		
												Exis.	Prop.	Loss	Pro./Ex.	Exis.	Prop.	Pro./Ex.
39 Elliot Square																		
Ground	R1	Kitchen	W1 ←	26.7	26.2	0.5	0.98	99%	99%	0.01	1.00	N/R	N/R	N/R	N/R	N/R	N/R	N/R
First	R1	Living room	W1 ←	30.3	29.8	N/A	N/A											
		Living room	W2 ←	30.1	29.5	N/A	N/A											
		Living room	W3 →	32.9	32.9	N/A	N/A											
		Living room	W4 →	32.9	32.9	N/A	N/A	99%	99%	0.00	1.00	87	86	N/A	N/A	21	20	N/A
Second	R1	Bedroom	W1 ←	33.7	33.2	N/A	N/A											
		Bedroom	W2 ←	33.6	33.0	N/A	N/A	98%	98%	0.00	1.00	N/R	N/R	N/R	N/R	N/R	N/R	N/R
38 Elliot Square																		
Ground	R1	Kitchen	W1 ←	26.9	26.2	0.7	0.97	100%	100%	0.00	1.00	N/R	N/R	N/R	N/R	N/R	N/R	N/R
First	R1	Living room	W1 ←	30.6	29.8	N/A	N/A											
		Living room	W2 ←	30.4	29.5	N/A	N/A											
		Living room	W3 →	33.1	33.1	N/A	N/A											
		Living room	W4 →	33.4	33.4	N/A	N/A	99%	99%	0.00	1.00	87	87	N/A	N/A	21	21	N/A
Second	R1	Bedroom	W1 ←	34.2	33.4	N/A	N/A	98%	98%	0.00	1.00	N/R	N/R	N/R	N/R	N/R	N/R	N/R
	R2	Bedroom	W2 ←	34.1	33.2	N/A	N/A	98%	98%	0.00	1.00	N/R	N/R	N/R	N/R	N/R	N/R	N/R
37 Elliot Square																		
Ground	R1	Kitchen	W1 ←	27.0	26.2	0.8	0.97	96%	96%	0.18	0.99	N/R	N/R	N/R	N/R	N/R	N/R	N/R
First	R1	Living room	W1 ←	30.8	29.9	N/A	N/A											
		Living room	W2 ←	30.6	29.7	N/A	N/A											
		Living room	W3 →	33.4	33.4	N/A	N/A											
		Living room	W4 →	33.6	33.6	N/A	N/A	99%	99%	0.00	1.00	86	86	N/A	N/A	21	21	N/A
Second	R1	Bedroom	W1 ←	34.6	33.7	N/A	N/A											
		Bedroom	W2 ←	34.4	33.5	N/A	N/A	99%	99%	0.00	1.00	N/R	N/R	N/R	N/R	N/R	N/R	N/R

Property, room & window attributes				VSC				NSL				APSH (room)							
Floor	Room	Room use	Window Ref./Orientation	Exis. (% VSC)	Prop. (% VSC)	Loss (% VSC)	Pro./Ex. ratio	Exis. (% rm)	Prop. (% rm)	Loss (m ²)	Pro./Ex. ratio	Annual (%APSH)				Winter (%APSH)			
												Exis.	Prop.	Loss	Pro./Ex.	Exis.	Prop.	Pro./Ex.	
36 Elliot Square																			
Ground	R1	Kitchen	W1 ←	27.3	26.5	0.8	0.97	100%	100%	0.00	1.00	N/R	N/R	N/R	N/R	N/R	N/R	N/R	
First	R1	Living room	W1 ←	31.3	30.4	N/A	N/A												
		Living room	W2 ←	31.2	30.4	N/A	N/A												
		Living room	W3 →	33.7	33.7	N/A	N/A												
		Living room	W4 →	34.0	34.0	N/A	N/A	99%	99%	0.00	1.00	85	84	N/A	N/A	21	21	N/A	
Second	R1	Bedroom	W1 ←	34.9	34.1	N/A	N/A	98%	98%	0.00	1.00	N/R	N/R	N/R	N/R	N/R	N/R	N/R	
	R2	Bedroom	W2 ←	34.8	34.0	N/A	N/A	98%	98%	0.00	1.00	N/R	N/R	N/R	N/R	N/R	N/R	N/R	
35 Elliot Square																			
Ground	R1	Kitchen	W1 ←	26.3	25.8	0.6	0.98	88%	88%	0.03	1.00	N/R	N/R	N/R	N/R	N/R	N/R	N/R	
First	R1	Living room	W1 ←	30.4	29.8	N/A	N/A												
		Living room	W2 ←	30.6	30.0	N/A	N/A												
		Living room	W3 →	33.6	33.6	N/A	N/A												
		Living room	W4 →	33.7	33.7	N/A	N/A	99%	99%	0.00	1.00	91	91	N/A	N/A	26	26	N/A	
Second	R1	Bedroom	W1 ←	34.4	33.7	N/A	N/A												
		Bedroom	W2 ←	34.6	33.9	N/A	N/A	98%	98%	0.00	1.00	N/R	N/R	N/R	N/R	N/R	N/R	N/R	
34 Elliot Square																			
Ground	R1	Kitchen	W1 ←	26.7	26.3	0.4	0.99	100%	100%	0.00	1.00	N/R	N/R	N/R	N/R	N/R	N/R	N/R	
First	R1	Living room	W1 ←	30.6	30.2	N/A	N/A												
		Living room	W2 ←	30.7	30.3	N/A	N/A												
		Living room	W3 →	33.2	33.2	N/A	N/A												
		Living room	W4 →	33.2	33.2	N/A	N/A	99%	99%	0.00	1.00	85	85	N/A	N/A	21	21	N/A	
Second	R1	Bedroom	W1 ←	34.6	34.1	N/A	N/A	98%	98%	0.00	1.00	N/R	N/R	N/R	N/R	N/R	N/R	N/R	
	R2	Bedroom	W2 ←	34.6	34.2	N/A	N/A	98%	98%	0.00	1.00	N/R	N/R	N/R	N/R	N/R	N/R	N/R	
33 Elliot Square																			

Property, room & window attributes				VSC				NSL				APSH (room)						
Floor	Room	Room use	Window Ref./Orientation	Exis. (% VSC)	Prop. (% VSC)	Loss (% VSC)	Pro./Ex. ratio	Exis. (% rm)	Prop. (% rm)	Loss (m ²)	Pro./Ex. ratio	Annual (%APSH)				Winter (%APSH)		
												Exis.	Prop.	Loss	Pro./Ex.	Exis.	Prop.	Pro./Ex.
Ground	R1	Kitchen	W1 ←	27.3	27.1	N/A	N/A	96%	96%	0.00	1.00	N/R	N/R	N/R	N/R	N/R	N/R	N/R
First	R1	Living room	W1 ←	31.1	30.8	N/A	N/A											
		Living room	W2 ←	31.2	30.9	N/A	N/A	99%	99%	0.00	1.00	46	46	N/A	N/A	14	14	N/A
Second	R1	Bedroom	W1 ←	34.9	34.6	N/A	N/A											
		Bedroom	W2 ←	35.0	34.7	N/A	N/A	99%	99%	0.00	1.00	N/R	N/R	N/R	N/R	N/R	N/R	N/R
11 Lower Merton Rise																		
First	R1	Living room	W1 →	34.6	34.1	N/A	N/A											
		Living room	W2 →	34.4	34.0	N/A	N/A											
		Living room	W3 ←	35.3	35.3	N/A	N/A											
		Living room	W4 ←	34.9	34.9	N/A	N/A	100%	100%	0.00	1.00	96	96	N/A	N/A	30	30	N/A
Second	R1	Bedroom	W1 →	36.9	36.4	N/A	N/A											
		Bedroom	W2 →	36.7	36.3	N/A	N/A	98%	98%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
13 Lower Merton Rise																		
First	R1	Living room	W1 →	34.2	33.8	N/A	N/A											
		Living room	W2 →	34.1	33.7	N/A	N/A											
		Living room	W3 ←	34.0	34.0	N/A	N/A											
		Living room	W4 ←	33.3	33.3	N/A	N/A	99%	99%	0.00	1.00	94	93	N/A	N/A	30	30	N/A
Second	R1	Bedroom	W1 →	36.5	36.1	N/A	N/A											
		Bedroom	W2 →	36.4	36.0	N/A	N/A	98%	98%	0.00	1.00	North	North	N/A	N/A	North	North	N/A
15 Lower Merton Rise																		
First	R1	Living room	W1 →	33.9	33.5	N/A	N/A											
		Living room	W2 →	33.0	32.6	N/A	N/A											
		Living room	W3 ←	32.3	32.3	N/A	N/A											
		Living room	W4 ←	31.9	31.9	N/A	N/A	99%	99%	0.02	1.00	95	95	N/A	N/A	27	27	N/A
Second	R1	Bedroom	W1 →	36.1	35.7	N/A	N/A											

Property, room & window attributes				VSC				NSL				APSH (room)						
Floor	Room	Room use	Window Ref./Orientation	Exis. (%) VSC	Prop. (%) VSC	Loss (%) VSC	Pro./Ex. ratio	Exis. (% rm)	Prop. (% rm)	Loss (m ²)	Pro./Ex. ratio	Annual (%APSH)				Winter (%APSH)		
										Exis.	Prop.	Loss	Pro./Ex.	Exis.	Prop.	Pro./Ex.		
		Bedroom	W2 →	35.6	35.2	N/A	N/A	98%	98%	0.00	1.00	North	North	N/A	N/A	North	North	N/A