

40-68 SILVER STREET

READING, RG1

DAYLIGHT & SUNLIGHT STUDY

FEBRUARY 2019



CONTENTS	PAGE
1.0 INTRODUCTION	2
2.0 THE PROPOSAL	2
3.0 POLICY / GUIDELINES	2
4.0 METHODOLOGY	2
<i>Daylight Standard</i>	
<i>Sunlight Standard</i>	
5.0 ASSUMPTIONS MADE	3
6.0 SOURCE DATA	4
7.0 SIGNIFICANCE CRITERIA	4
<i>Daylight</i>	
<i>Sunlight</i>	
8.0 BASELINE CONDITIONS	5
9.0 RESULTS – COMPLETED DEVELOPMENT	5
<i>Neighbouring Vertical Sky Component Results</i>	
<i>Neighbouring No Sky Line Results</i>	
<i>Neighbouring Average Daylight Factor Results</i>	
<i>Neighbouring Annual Probable Sunlight Results</i>	
10.0 CONCLUSIONS	8
APPENDIX A – LOCATION DRAWINGS - 17440/LOC/DS/800 rev A, 17440/LOC/800-804 rev A & 805, 17440/SPT/803	
APPENDIX B – DAYLIGHT & SUNLIGHT ANALYSIS SUMMARY TABLES	
APPENDIX C – ALTERNATIVE BASELINE ANALYSIS - 17440/SPT/804	



1.0 INTRODUCTION

Delva Patman Redler LLP have been instructed by Silver Street Developments Ltd to prepare a daylight & sunlight study to assess the likely impact of the proposed development at 40-68 Silver Street by O'Connell East Architects on the neighbouring residential amenity adjacent to the site.

This study has been carried out in accordance with the recommendations of the Building Research Establishment Report "Site Layout Planning for Daylight & Sunlight 2011" (BRE209).

The template drawings, which are attached, illustrate the results for the daylight & sunlight assessments and identify the drawings used in these studies.

2.0 THE PROPOSAL

The development proposals include the demolition of the existing buildings and the construction of two purpose built student accommodation blocks comprising of 79 units.

3.0 POLICY / GUIDELINES

This study has been carried out in accordance with the recommendations of the Building Research Establishment report "Site Layout Planning for Daylight & Sunlight 2011". This is the recognised standard against which daylight and sunlight should be assessed.

The BRE 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 certain circumstances, the developer or planning authority may wish to use alternative target values.

Whilst technical analysis can be carried out in accordance with numerical guidelines and reported factually by comparison with those guidelines, the final assessment as to whether affected dwellings are left with acceptable amounts of daylight and sunlight in an inner-city context where the findings are to be interpreted in a flexible manner is a matter of subjective opinion.

4.0 METHODOLOGY

The daylight and sunlight assessments have been undertaken in accordance with the Building Research Establishment (BRE) guidelines "Site Layout Planning for Daylight & Sunlight. A Guide to Good Practice".

The BRE Report advises that daylight levels should be assessed for the main habitable rooms of neighbouring residential properties. Habitable rooms in residential properties are defined as kitchens, living rooms and dining rooms. Bedrooms are less important as they are mainly occupied at night time.

DAYLIGHT

The BRE Guide states that:

"If, for any part of the new development, the angle from the centre of the lowest affected window to the head of the new development is more than 25°, then a more detailed check is needed to find the loss of skylight to the existing buildings."



The BRE guidelines propose several methods for calculating daylight. The two main methods predominantly used are those involving the measurement of the total amount of skylight available (the vertical sky component (VSC)) and its distribution within the building (the No-Sky line or daylight distribution).

The VSC calculation is a general test of potential for daylight to a building, measuring the light available on the outside plane of windows.

The “No-Sky” Line divides those areas of the working plane which can receive direct skylight, from those which cannot. It provides an indication of how good the daylight distribution is within a room.

The third recognised method of assessment for daylight is the Average Daylight Factor (ADF) calculation which assesses the quality and distribution of light within a room served by a window and considers the VSC value, the size and number of the windows and room and the use to which the room is put. ADF assesses actual light distribution within a defined room area whereas the VSC considers potential light. British Standard 8206, Code of Practice for Daylighting recommends ADF values of 1% in bedrooms, 1.5% in living rooms and 2% in kitchens. For other uses, where it is expected that supplementary electric lighting will be used throughout the daytime, such as in offices, the ADF value should be 2%. There is no general requirement within the BRE guidelines to assess ADF values, other than for neighbouring residential buildings.

For the purposes of this report all three methods of assessment have been considered.

SUNLIGHT

The BRE have produced sunlight templates for London, Manchester and Edinburgh indicating the Annual Probable Sunlight Hours (APSH) for these regions. The London template has been selected for this study as the London indicator template is the closest of the three available from BRE in terms of latitude.

Sunlight analysis is undertaken by measuring annual probable sunlight hours (APSH) for the main windows of rooms which face within 90° of due south. The maximum number of annual probable sunlight hours for the London orientation is 1,486 hours. The BRE guidelines propose that the appropriate date for undertaking a sunlight assessment is on 21st March, being the spring equinox. Calculations of both summer and winter availability are made with the winter analysis covering the period from the 21st September to 21st March. For residential accommodation, the main requirement for sunlight is in living rooms and it is regarded as less important in bedrooms and kitchens.

Due to orientation and room use not all windows assessed for daylight qualify for sunlight assessment in accordance with BRE Guidance.

All relevant neighbouring residential buildings within the vicinity of the site have been included as part of these assessments. These buildings are illustrated on site plan dwg no: 17440/LOC/DS/800 rev A and the window location drawings dwg no's: 17440/LOC/800-804 rev A and 805.

5.0 ASSUMPTIONS MADE

- Access has not been sought into any of the neighbouring properties and we have made reasonable assumptions as to the room configurations and layouts of neighbouring properties. Where floor plans have been obtained these have been adopted for analysis purposes, and where they exist in part they have been utilised for the whole property. Properties where layouts have been obtained include:

Site	Address	Information Obtained
1	69 Upper Crown Street	Estate Agent Floor Plans for no. 67



2	Platinum Apartments	Estate Agent Floor Plans
3	Stirling House	Estate Agent Floor Plans
4	2-9 Hieatt Close	Estate Agent Floor Plans
5	Hawk Cottages	Estate Agent Floor Plans
6	Rimaud House	Estate Agent Floor Plans

- We have made reasonable assumptions and have adopted the layouts for 67 Upper Crown Street for no. 69.
- All layouts adopted are subject to confirmation following access.
- Floor levels for the neighbouring properties have been made using reasonable assumptions.
- All windows have been built into the model from site photos only.

6.0 SOURCE DATA

The studies have been undertaken by calculating the daylight & sunlight based on the template drawings provided within the BRE Guide. The study was undertaken with plan drawings derived from:

- Existing and surround buildings:
3D Zmapping model
Site photography taken 12/09/2017
- Proposed Scheme:
O'Connell East Architects:
3D model received February 2019
- Planning Appeal Scheme:
O'Connell East Architects:
3D model received March 2018

7.0 SIGNIFICANCE CRITERIA

The guidance given by BRE has been used as a basis for the criteria to assess the Development's potential effects.

In describing the significance criteria as set out below, it should be noted that they have been developed to protect residential properties, which are the most sensitive receptors.

TABLE 1: BRE DAYLIGHT GUIDANCE USED IN THE ASSESSMENT

Issue	Criteria
Daylight	A window may be affected if the vertical sky component (VSC) measured at the centre of the window is less than 27% and less than 0.8 times its former value.
	A room may be adversely affected if a significant area of the room is beyond the No-Sky Line and is less than 0.8 times its former value.
	A room may be adversely affected if the average daylight factor (ADF) is less than 1% for a bedroom, 1.5% for a living room or 2% for a kitchen.
Sunlight	A window may be adversely affected if a point at the centre of the window receives in the year less than 25% of the annual probable sunlight hours including at least 5% of the annual probable sunlight hours (APSH) during the winter months (21 September to 21 March) and less than 0.8 times its former sunlight hours during either period.



8.0 BASELINE CONDITIONS

An analysis of the impact of the existing buildings (the baseline conditions) against which to compare any potential impact arising from the development has been undertaken based on Drawing 17440/SPT/803 in Appendix A.

The site is in an urban location with residential properties surrounding the site.

The existing building at 40 Silver Street is a single storey warehouse with the building at 60-68 Silver Street being a two storey building set back from the Silver Street pavement line. They are of a size and scale so as to allow good levels of light to reach the majority of the neighbouring properties surrounding the site.

To the north of the site lies the Platinum Apartments fronting Silver Street and also no. 69 Upper Crown Street to the rear of the site. Stirling House sits to the north east of the site, with Hawk Cottages and 2-9 Hieatt Close to the south. Finally, to the west of the site is Rimaud House.

40 Silver Street was refused planning consent at appeal on the 09 February 2018. As this massing represents a reasonable precedent, we have assessed this as an alternative baseline condition for the adjacent Platinum Apartments and 69 Upper Crown Street. This can be seen on Drawing 17440/SPT/804, and in the daylight and sunlight summary table in Appendix C.

The findings from the technical assessments can be seen from the results, both in graphical and tabular form, in the Technical Appendices.

An analysis of the existing daylight and sunlight levels enjoyed by the neighbouring residential amenity has been undertaken to provide a baseline against which the impacts arising from the proposed development can be assessed.

9.0 RESULTS – COMPLETED DEVELOPMENT

NEIGHBOURING DAYLIGHT – VSC

The full results of the daylight analysis are presented in Appendix B in tabular form. A summary of the results of the Vertical Sky Component (VSC) analysis on the relevant overlooking windows are presented in the Table 2 below. This identifies where habitable rooms are left with adequate light.

TABLE 2: NUMBER OF ROOMS EXPERIENCING DAYLIGHT IMPACTS AS A RESULT OF THE DEVELOPMENT (VSC METHOD)

Address	Total Number of Rooms Tested	Rooms Meeting BRE Guidelines For VSC	Number of Rooms Experiencing Adverse Impacts		
			20-29.9% reduction (minor adverse impact)	30-39.9% reduction (moderate adverse impact)	>40% reduction (substantial adverse impact)
69 Upper Crown Street	4	3	0	1	0
Platinum Apartments	6	3	0	1	2
Stirling House	9	9	0	0	0
2-9 Hieatt Close	6	6	0	0	0
Hawk Cottages	6	6	0	0	0
Rimaud House	17	17	0	0	0
Total	48	44	0	2	2

Table 2 shows that 44 of the 48 (91.7%) rooms assessed will fully comply with the BRE Guidelines in Vertical Sky Component terms.

69 Upper Crown Street experiences reductions below the recommended BRE guidelines to 1 room tested. The ground floor dining room experiences a moderate adverse impact. This is an isolated instance should not be considered too material however, as the main living room located next to this room sees good levels of light due to its dual aspect nature.

There are 3 rooms within Platinum apartments that experience a reduction below the recommended BRE guidelines. These rooms are dual aspect, with 2 smaller secondary windows directly facing the site and 1 main larger window facing Silver Street. It should also be noted that all 3 rooms would experience daylight distribution results in excess of 72%, with 2 rooms being over 93% lit in the proposed scenario which is considered very good in an urban environment such as this.

When considering the alternative baseline condition at both 69 Upper Crown Street and Platinum Apartments, the results show gains in VSC to 7 of the 9 rooms at these properties and it is noted that in NSL and ADF terms the scheme performs well.

Overall, the VSC analysis illustrates that despite some isolated infringements, the majority of neighbouring rooms will remain fully BRE compliant.

NEIGHBOURING DAYLIGHT – NO SKY LINE (NSL)

The full results of the daylight analysis are presented in Appendix B in tabular form. A summary of the results of the No Sky Line (NSL) analysis on the relevant overlooking windows are presented in the Table 3 below. This identifies where habitable rooms/windows are left with adequate light.

TABLE 3: NUMBER OF ROOMS EXPERIENCING DAYLIGHT IMPACTS AS A RESULT OF THE DEVELOPMENT (NSL METHOD)

Address	Total Number of Rooms Tested	Rooms Meeting BRE Guidelines For NSL	Number of Rooms Experiencing Adverse Impacts		
			20-29.9% reduction (minor adverse impact)	30-39.9% reduction (moderate adverse impact)	>40% reduction (substantial adverse impact)
69 Upper Crown Street	4	3	0	0	1
Platinum Apartments	6	5	1	0	0
Stirling House	9	9	0	0	0
2-9 Hieatt Close	6	6	0	0	0
Hawk Cottages	6	6	0	0	0
Rimaud House	17	17	0	0	0
Total	48	46	1	0	1

Table 3 shows that 46 of the 48 (95.8%) rooms assessed will fully comply with the BRE Guidelines in Daylight Distribution terms.

Of the 2 rooms that fall below the recommended guidelines, 1 would still be left lit to over 72% of their area which is very good for an urban location such as this.

The remaining room is located within 69 Upper Crown Street and is a ground floor dining room. This room is located at the middle of this property, with a small window serving it. This isolated instance should not be considered too material however, as the main living area located next to this room sees good levels of light due to its dual aspect nature.

When considering the alternative baseline condition at both 69 Upper Crown Street and Platinum Apartments, the results show gains in NSL to 7 of the 9 rooms at these properties.

Overall, the NSL analysis illustrates that despite some isolated infringements, the majority of neighbouring rooms will remain fully BRE compliant.



NEIGHBOURING DAYLIGHT – AVERAGE DAYLIGHT FACTOR (ADF)

The full results of the daylight analysis are presented in Appendix B in tabular form. A summary of the results of the Average Daylight Factor (ADF) analysis on the relevant overlooking windows are presented in the Table 4 below. This identifies where habitable rooms/windows are left with adequate light.

TABLE 4: NUMBER OF ROOMS EXPERIENCING DAYLIGHT IMPACTS AS A RESULT OF THE DEVELOPMENT (ADF METHOD)

Address	Total Number of Rooms Tested	Rooms Meeting BRE Guidelines For ADF	Number of Rooms Experiencing Adverse Impacts		
			20-29.9% reduction (minor adverse impact)	30-39.9% reduction (moderate adverse impact)	>40% reduction (substantial adverse impact)
69 Upper Crown Street	4	3	1	0	0
Platinum Apartments	6	4	2	0	0
Stirling House	9	9	0	0	0
2-9 Hieatt Close	6	6	0	0	0
Hawk Cottages	6	6	0	0	0
Rimaud House	17	17	0	0	0
Total	48	45	3	0	0

Table 4 shows that 45 of the 48 (93.7%) rooms assessed will fully comply with the BRE Guidelines in ADF terms.

The ground floor dining room within 69 Upper Crown Street falls below the recommended guidelines. This room is located at the middle of this property, with a small window serving it. It must be noted that this room is already below the minimum ADF requirements in the existing scenario. This isolated instance should not be considered too material however, as the main living room located next to this room sees good levels of light due to its dual aspect nature.

There are 2 rooms within Platinum House that do not meet the guidelines, although the impact to these rooms are considered minor adverse. It should also be noted that both rooms would experience daylight distribution results in excess of 72% which is considered very good in an urban environment such as this.

When considering the alternative baseline condition at both 69 Upper Crown Street and Platinum Apartments, the results show gains in ADF to 7 of the 9 rooms at these properties.

Overall, the ADF analysis illustrates that despite some isolated infringements, the majority of neighbouring rooms will remain fully BRE compliant.

NEIGHBOURING SUNLIGHT – APSH

The full results of the sunlight analysis are presented in Appendix B in tabular form. A summary of the results of the Annual Probable Sunlight Hours (APSH) analysis on the relevant overlooking windows are presented in the Table 5 below. This identifies where habitable rooms are left with adequate light.

TABLE 5: NUMBER OF WINDOWS EXPERIENCING SUNLIGHT IMPACTS AS A RESULT OF THE DEVELOPMENT (APSH METHOD)

Address	Total Number of Windows Tested	Windows Meeting BRE Guidelines for APSH	Number of Windows Experiencing Impacts beyond BRE Guidance
69 Upper Crown Street	1	1	0

Platinum Apartments	3	1	2
Stirling House	3	3	0
Total	7	5	2

Table 5 shows that 5 of the 7 (71.4%) windows considered will fully comply with the BRE Guidelines in APSH terms.

The 2 windows that fall below the recommended guidelines are located within Platinum Apartments, the results of which improve when considering the alternative baseline condition. It should be noted that these windows are smaller secondary windows in a dual aspect room, with the main larger windows facing Silver Street which are not adversely affected.

Overall, the sunlight analysis illustrates that despite some isolated infringements, the majority of neighbouring rooms will remain fully BRE compliant.

10.0 CONCLUSIONS

The site is in an urban location with residential properties surrounding the site.

The existing building at 40 Silver Street is a single storey warehouse with the building at 60-68 Silver Street being a two storey building set back from the Silver Street pavement line. They are of a size and scale so as to allow good levels of light to reach the majority of the neighbouring properties surrounding the site.

To the north of the site lies the Platinum Apartments fronting Silver Street and also no. 69 Upper Crown Street to the rear of the site. Stirling House site to the north east of the site, with Hawk Cottages and 2-9 Hieatt Close to the south. Finally, to the west of the site is Rimaud House.

To assess the potential impact of the Development on daylight and sunlight on neighbouring properties a baseline assessment was undertaken. In addition, 40 Silver Street was refused planning consent at appeal on the 09 February 2018. As this massing represents a reasonable precedent, we have assessed this as an alternative baseline condition for the adjacent Platinum Apartments and 69 Upper Crown Street.

The methods of assessment used were the Vertical Sky Component (VSC), No Sky Line (NSL) and Average Daylight Factor (ADF) for daylight and Annual Probable Sunlight Hours (APSH) for sunlight.

Overall the neighbouring daylight analysis illustrates that despite some isolated infringements in the 3 methods of assessment, that generally the quality, quantity and distribution of light within the majority of neighbouring rooms will remain fully BRE compliant.

The sunlight analysis demonstrates that despite some isolated infringements, the majority of sunlight received by the neighbouring properties will remain fully BRE compliant.

Therefore, the scheme proposals by O'Connell East Architects will generally recognise and observe the intentions of Reading Borough Council Policies and BRE Guidance 209 in daylight and sunlight terms.

Delva Patman Redler LLP

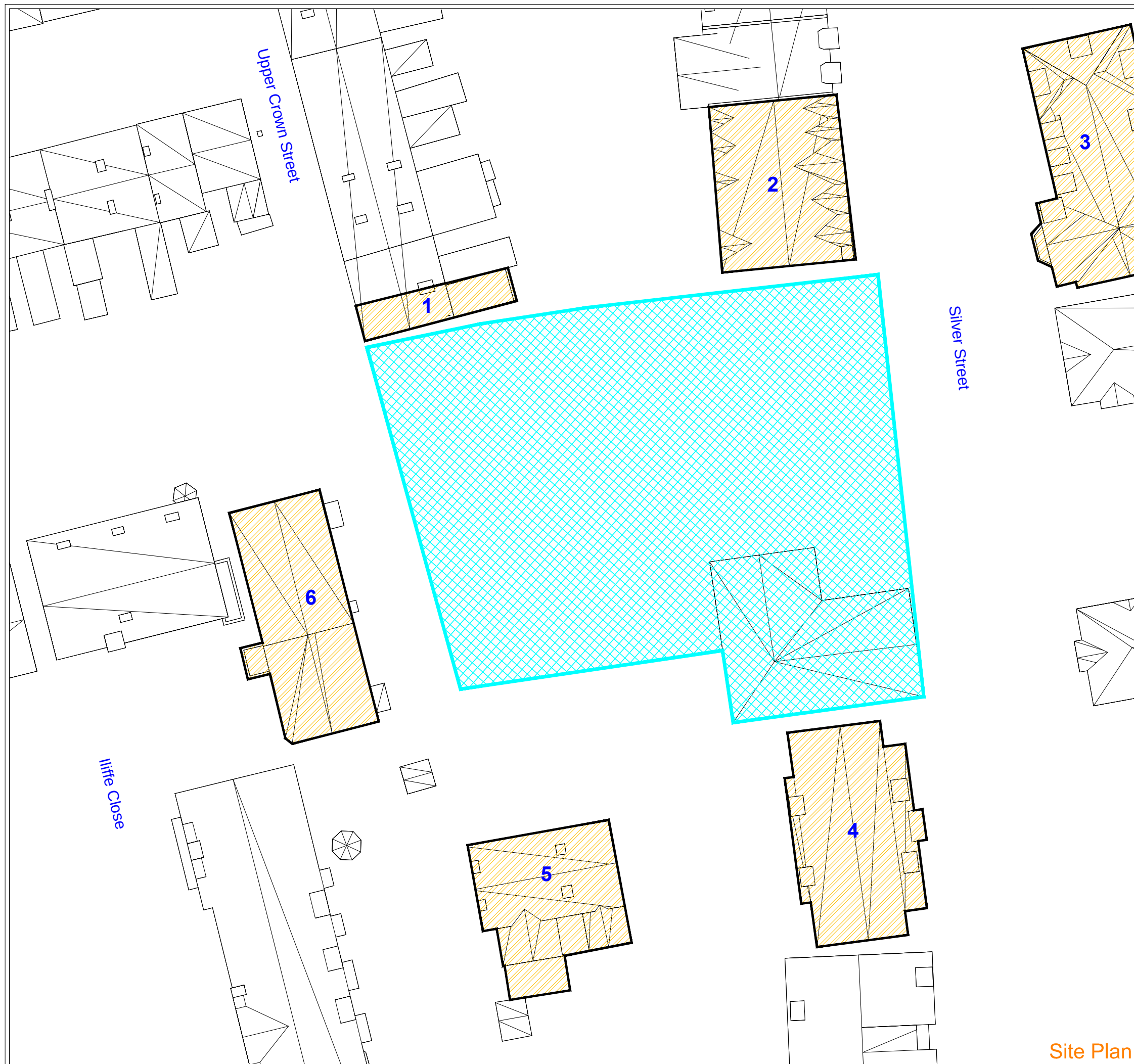
APPENDIX A

LOCATION DRAWINGS

17440/LOC/DS/800 REV A & 17440/LOC/800 – 804 REV A & 805

17440/SPT/803





1: 69 Upper Crown Street
Dwg No: 17440/LOC/800 Rev A

2: Platinum Apartments
Dwg No: 17440/LOC/801 Rev A

3: Stirling House
Dwg No: 17440/LOC/802 Rev A

4: 2-9 Hieatt Close
Dwg No: 17440/LOC/805

5: Hawk Cottages
Dwg No: 17440/LOC/803 Rev A

6: Rimaud House
Dwg No: 17440/LOC/804 Rev A

Indicative

NO DIMENSIONS TO BE SCALED
FROM THIS DRAWING:

 Site Boundary

 Residential Buildings

SOURCE DATA

Drawings Used:
Zmapping model

NOTES

All neighbouring properties considered for analysis.

[Insert Hyperlink](#)

A	Annotation Amendments	LT		20/02/2019
REV	Description	Drawn	Ch'kd	Date

DELVA PATMAN REDLER
Chartered Surveyors



Thavies Inn House
3-4 Holborn Circus
London EC1N 2HA
020 7936 3668
www.delvapatmanredler.co.uk

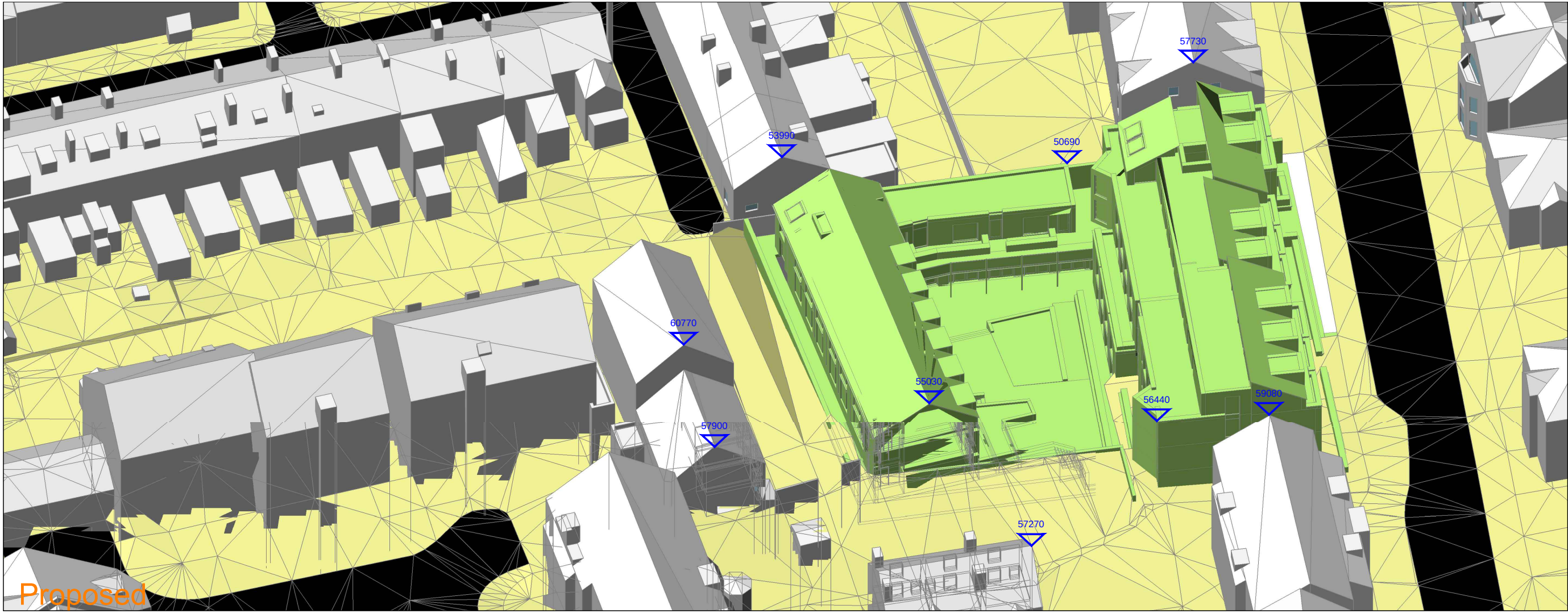
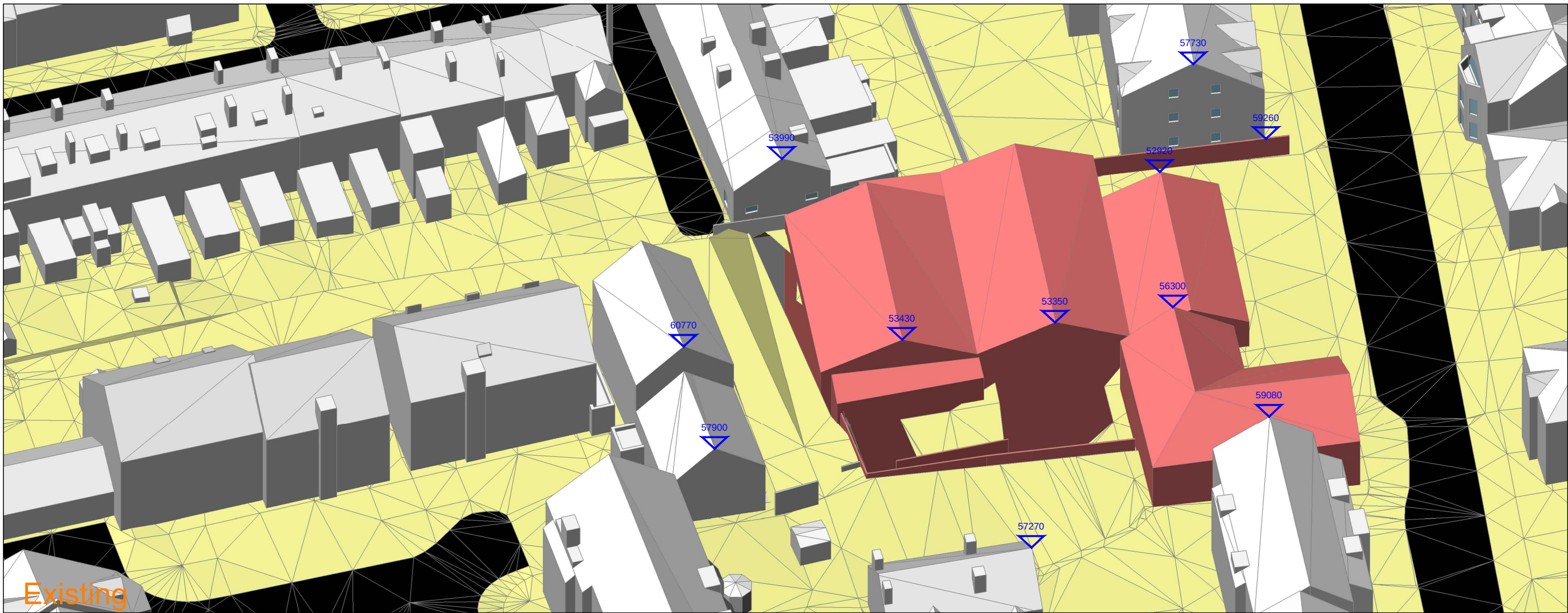
The Plaza
100 Old Hall Street
Liverpool L3 9QJ
0151 242 0980
info@delvapatmanredler.co.uk

TITLE: 40-68 SILVER STREET
READING
-
-
DAYLIGHT / SUNLIGHT ANALYSIS

DRAWING:
40-68 Silver Street - Property Location Plan
Daylight and Sunlight Analysis
Existing & Proposed Scheme

DRAWN: AD	JOB NO: 17440
SCALE: NTS	
DATE: 10/11/2017	

DWG NO:	REV:
LOC/DS/800	A



NO DIMENSIONS TO BE SCALED FROM THIS DRAWING:

Existing

Proposed

Surrounding

SOURCE DATA

Drawings Used:
Surrounding buildings:
Zmapping model

Site photography taken 12/09/2017

Proposed Scheme:
O'Connell East Architects:
3D model received February 2019

Planning Appeal Scheme:
O'Connell East Architects:
3D model received March 2018

NOTES

All heights are measured in mm AOD.

Site Plan

REV	Description	Drawn	Chk'd	Date

DELVA PATMAN REDLER
Chartered Surveyors

Thavies Inn House
3-4 Holborn Circus
London EC1N 2HA
020 7356 3668
www.delvapatmanredler.co.uk

The Plaza
100 Old Hall Street
Liverpool L3 9QJ
0151 242 0980
info@delvapatmanredler.co.uk

TITLE:

40-68 SILVER STREET
READING
-
DAYLIGHT / SUNLIGHT ANALYSIS

DRAWING:

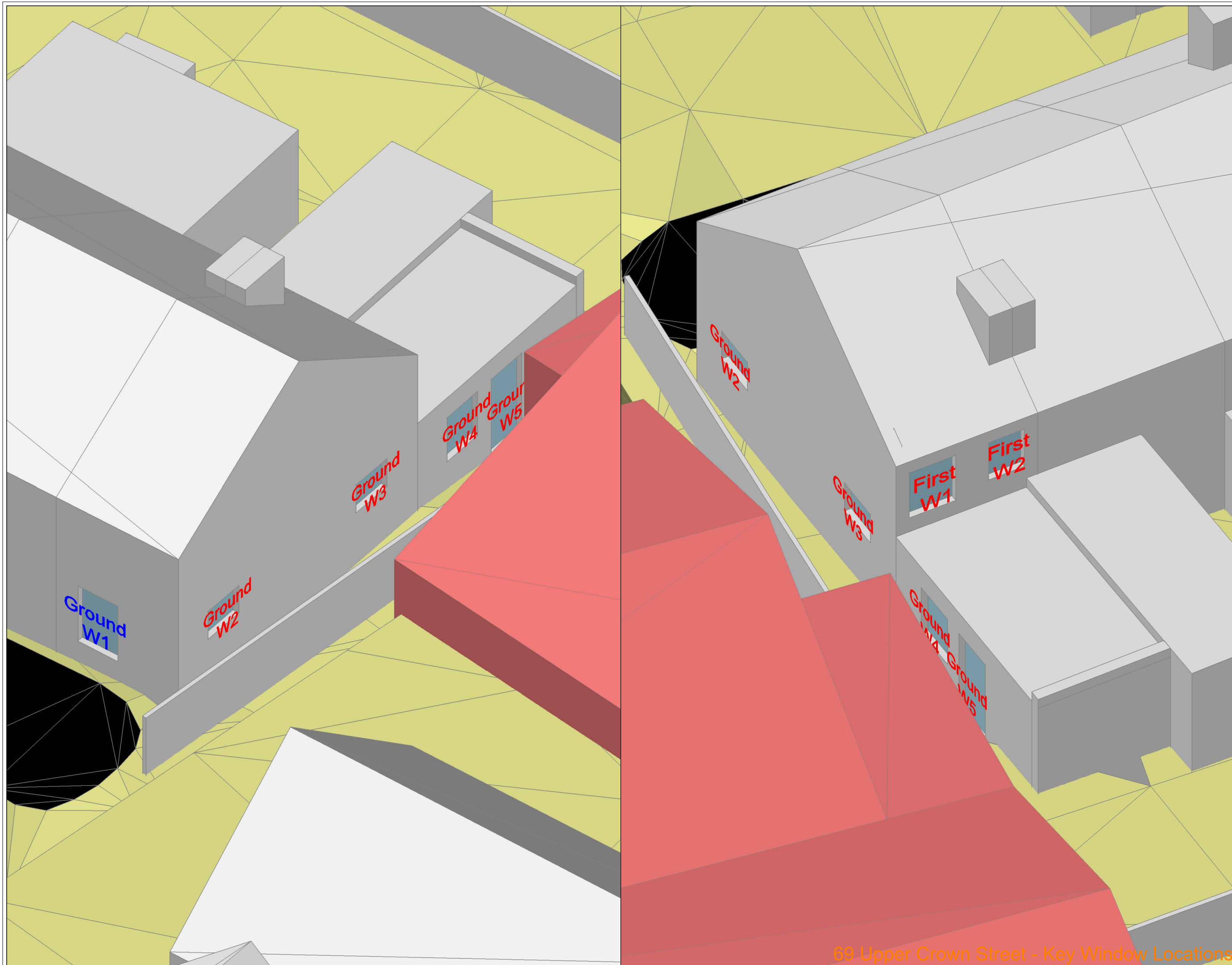
40-68 Silver Street, Reading
Existing & Proposed Schemes
Key Building Heights
-
-

DRAWN: LT
SCALE: NTS
DATE: 20/02/2019

DWG NO:
SPT/803

JOB NO:
17440

REV:
-




 NO DIMENSIONS TO BE SCALED
 FROM THIS DRAWING:

 Existing
 Proposed
 Surrounding

SOURCE DATA

Drawings Used:
Existing and surrounding buildings:
Zmapping model

Site photography taken 12/09/2017

NOTES

Building not accessed to assess internal configuration - room uses assumed.

Site Plan



Insert Hyperlink

A	Annotation Amendments	LT		20/02/2019
REV	Description	Drawn	Ch'kd	Date

DELVA PATMAN REDLER
Chartered Surveyors

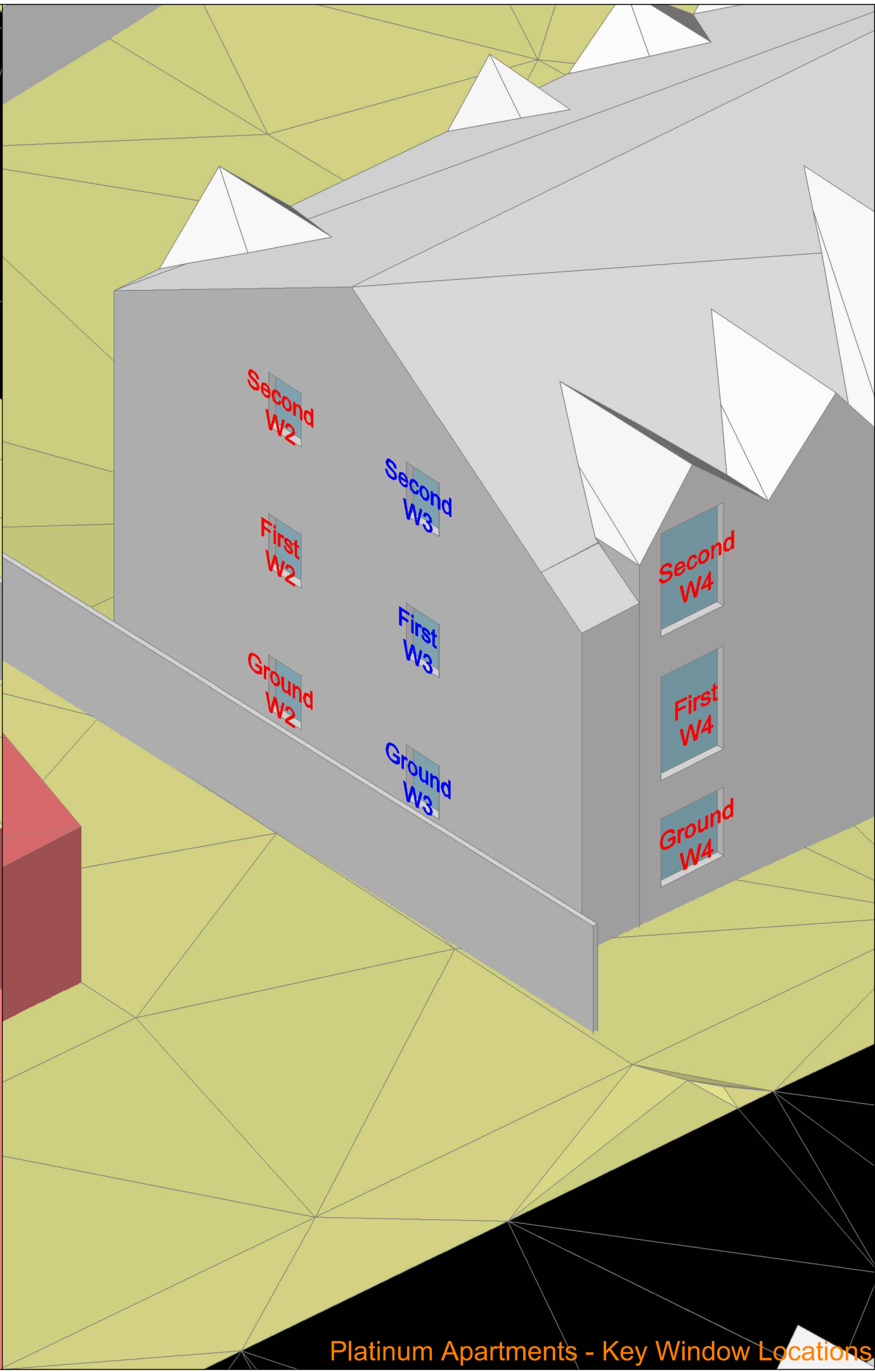
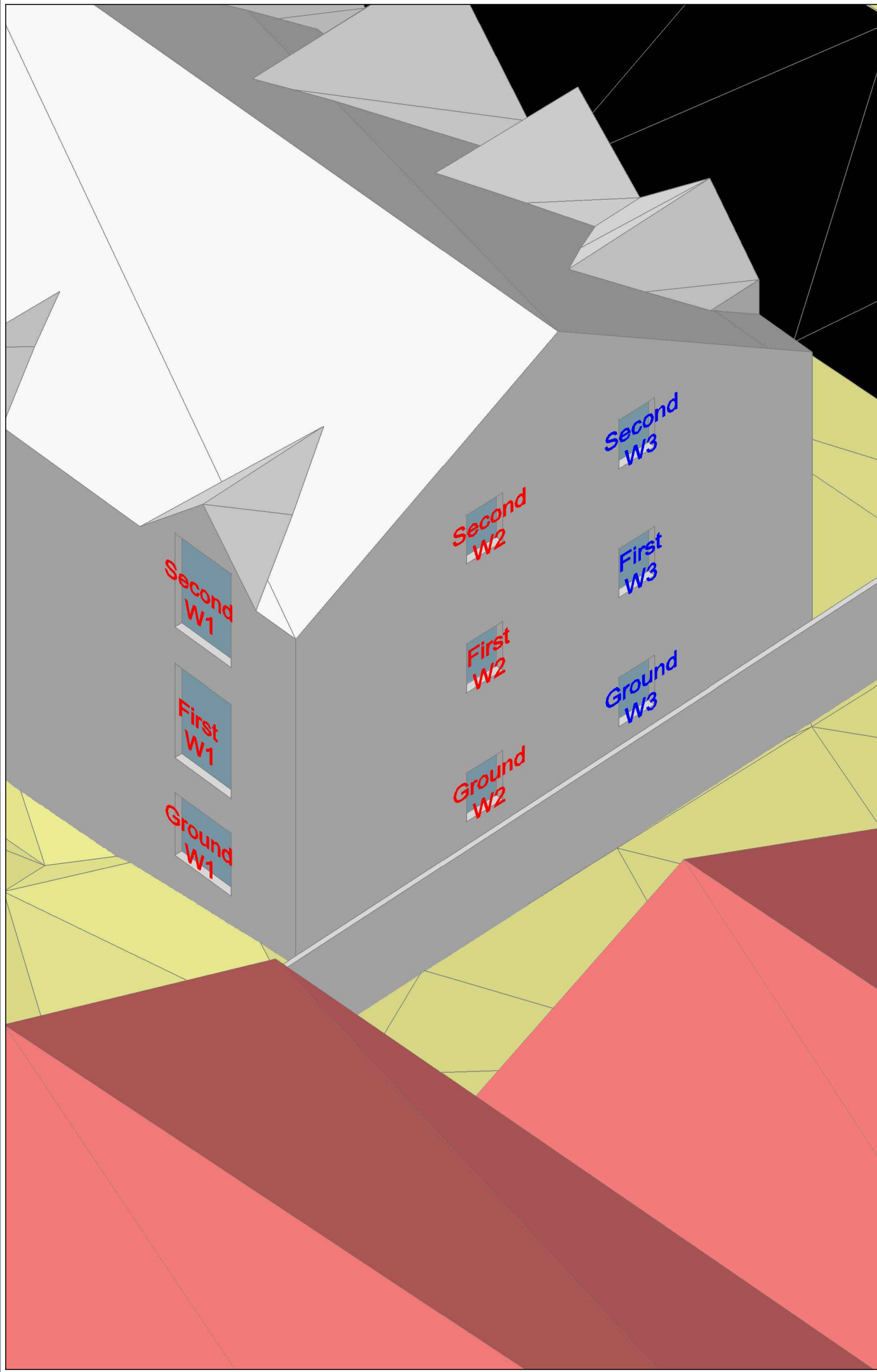
Thavies Inn House
3-4 Holborn Circus
London EC1N 2HA
020 7936 3668
www.delvapatmanredler.co.uk

The Plaza
100 Old Hall Street
Liverpool L3 9QJ
0151 242 0980
info@delvapatmanredler.co.uk

TITLE: 40-68 SILVER STREET
READING
-
-
DAYLIGHT / SUNLIGHT ANALYSIS

DRAWING:
69 Upper Crown Street
Daylight / Sunlight Analysis
Key Window Locations

DRAWN: AD	JOB NO: 17440	
SCALE: NTS		
DATE: 10/11/2017		
DWG NO: LOC/800		REV: A



Platinum Apartments - Key Window Locations

Indicative

NO DIMENSIONS TO BE SCALED
FROM THIS DRAWING:

Existing

Proposed

Surrounding

Window Tested
Daylight only

Window Tested
Daylight &
Sunlight

SOURCE DATA

Drawings Used:
Existing and surrounding buildings:
Zmapping model

Site photography taken 12/09/2017

NOTES

Building not accessed to assess internal
configuration - room uses assumed/obtained
from estate agent particulars.

Site Plan

[Insert Hyperlink](#)

A	Annotation Amendments	LT		20/02/2019
REV	Description	Drawn	Ch'kd	Date

DELVA PATMAN REDLER

Chartered Surveyors

Thavies Inn House
3-4 Holborn Circus
London EC1N 2HA
020 7336 3668
www.delvapatmanredler.co.uk

The Plaza
100 Old Hall Street
Liverpool L3 9QJ
0151 242 0980
info@delvapatmanredler.co.uk

TITLE:

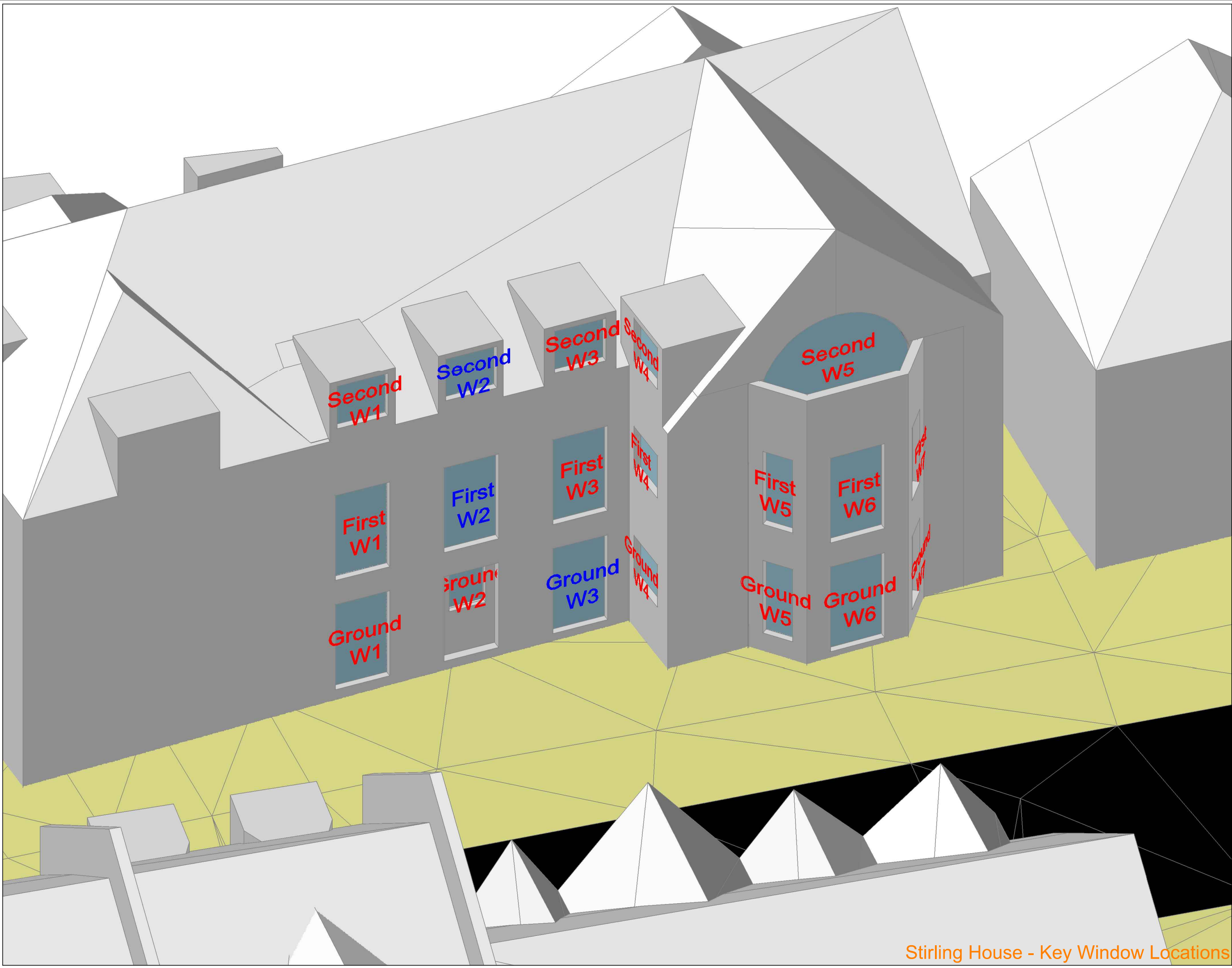
40-68 SILVER STREET
READING
-
DAYLIGHT / SUNLIGHT ANALYSIS

DRAWING:

Platinum Apartments
Daylight / Sunlight Analysis
Key Window Locations
-
-
-

DRAWN: AD	JOB NO:
SCALE: NTS	17440
DATE: 10/11/2017	

DWG NO:	LOC/801	REV:	A
---------	---------	------	---



Stirling House - Key Window Locations

Indicative

NO DIMENSIONS TO BE SCALED
FROM THIS DRAWING:

Existing

Proposed

Surrounding

Window Tested
Daylight only

Window Tested
Daylight &
Sunlight

SOURCE DATA

Drawings Used:
Existing and surrounding buildings:
Zmapping model

Site photography taken 12/09/2017

NOTES

Building not accessed to assess internal
configuration - room uses assumed/obtained
from estate agent particulars.

Site Plan

[Insert Hyperlink](#)

A	Annotation Amendments	LT		20/02/2019
REV	Description	Drawn	Ch'kd	Date

DELVA PATMAN REDLER

Chartered Surveyors

Thavies Inn House
3-4 Holborn Circus
London EC1N 2HA
020 7336 3668
www.delvapatmanredler.co.uk

The Plaza
100 Old Hall Street
Liverpool L3 9QJ
0151 242 0980
info@delvapatmanredler.co.uk

TITLE:

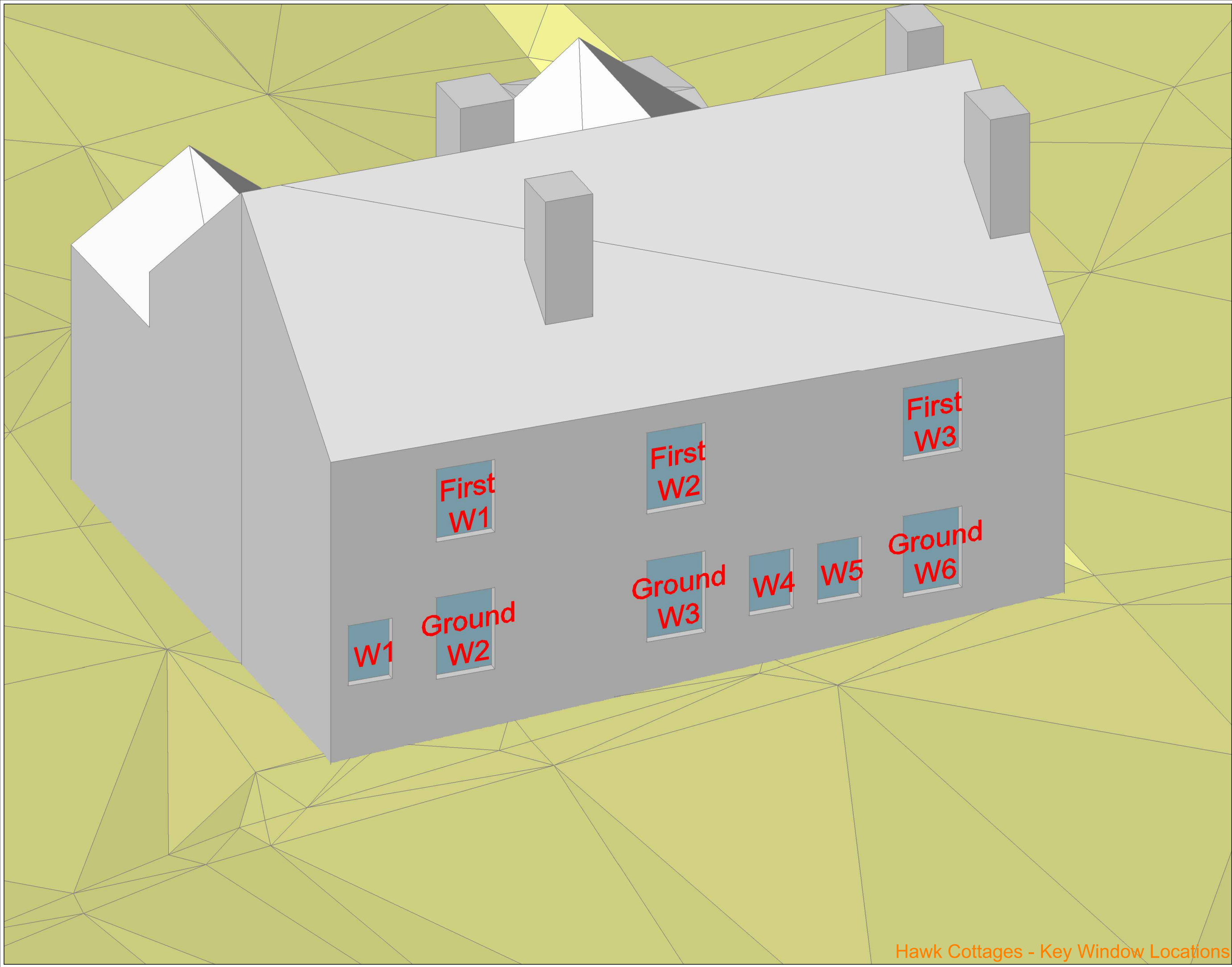
40-68 SILVER STREET
READING
-
DAYLIGHT / SUNLIGHT ANALYSIS

DRAWING:

Stirling House
Daylight / Sunlight Analysis
Key Window Locations
-
-
-

DRAWN: AD	JOB NO:
SCALE: NTS	17440
DATE: 10/11/2017	

DWG NO:	LOC/802	REV:	A
---------	---------	------	---



Hawk Cottages - Key Window Locations

Indicative

NO DIMENSIONS TO BE SCALED
FROM THIS DRAWING:

Existing

Proposed

Surrounding

Window Tested
Daylight only

Window Tested
Daylight &
Sunlight

SOURCE DATA

Drawings Used:
Existing and surrounding buildings:
Zmapping model

Site photography taken 12/09/2017

NOTES

Building not accessed to assess internal
configuration - room uses assumed/obtained
from estate agent particulars.

Site Plan

Insert Hyperlink

A	Annotation Amendments	LT		20/02/2019
REV	Description	Drawn	Chk'd	Date

DELVA PATMAN REDLER
Chartered Surveyors

Thavies Inn House
3-4 Holborn Circus
London EC1N 2HA
020 7336 3668
www.delvapatmanredler.co.uk

The Plaza
100 Old Hall Street
Liverpool L3 9QJ
0151 242 0980
info@delvapatmanredler.co.uk

TITLE:
40-68 SILVER STREET
READING
-
DAYLIGHT / SUNLIGHT ANALYSIS

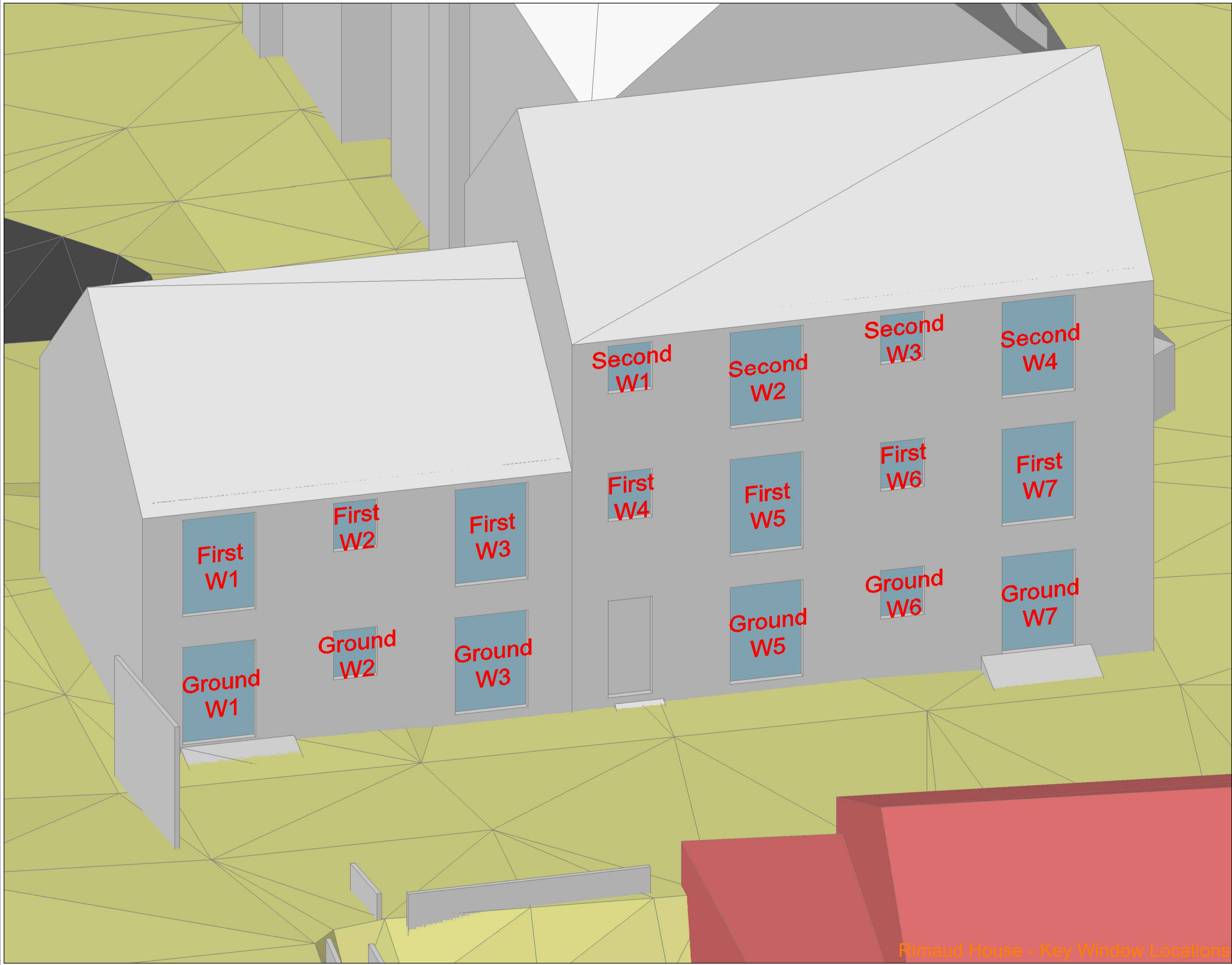
DRAWING:
Hawk Cottages
Daylight / Sunlight Analysis
Key Window Locations
-
-
-

DRAWN: AD
SCALE: NTS
DATE: 10/11/2017

DWG NO:

JOB NO:
17440

REV:
A



Rimaud House - Key Window Locations

Indicative

NO DIMENSIONS TO BE SCALED
FROM THIS DRAWING:

Existing

Proposed

Surrounding

W1106

W1108

Window Tested
Daylight only

Window Tested
Daylight &
Sunlight

SOURCE DATA

Drawings Used:
Existing and surrounding buildings:
Zmapping model

Site photography taken 12/09/2017

NOTES

Building not accessed to assess internal
configuration - room uses assumed/obtained
from estate agent particulars.

Site Plan

Insert Hyperlink

A	Annotation Amendments	LT		20/02/2019
REV	Description	Drawn	Ch'kd	Date

DELVA PATMAN REDLER

Chartered Surveyors

Thavies Inn House
3-4 Holborn Circus
London EC1N 2HA
020 7336 3668
www.delvapatmanredler.co.uk

The Plaza
100 Old Hall Street
Liverpool L3 9QJ
0151 242 0980
info@delvapatmanredler.co.uk

TITLE:

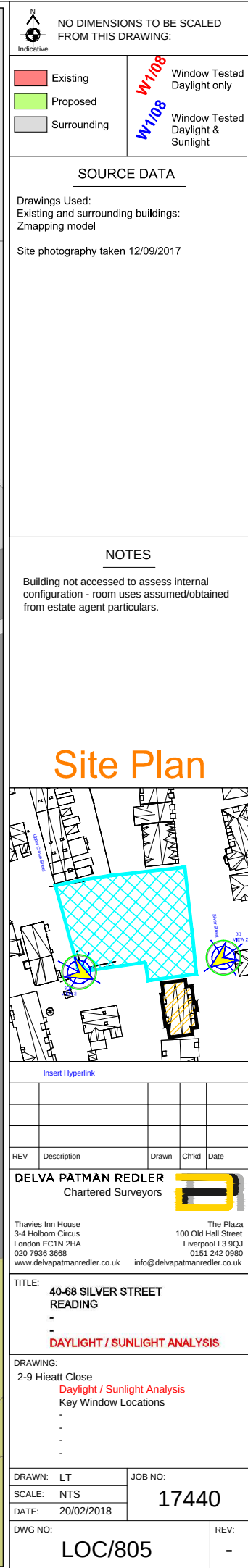
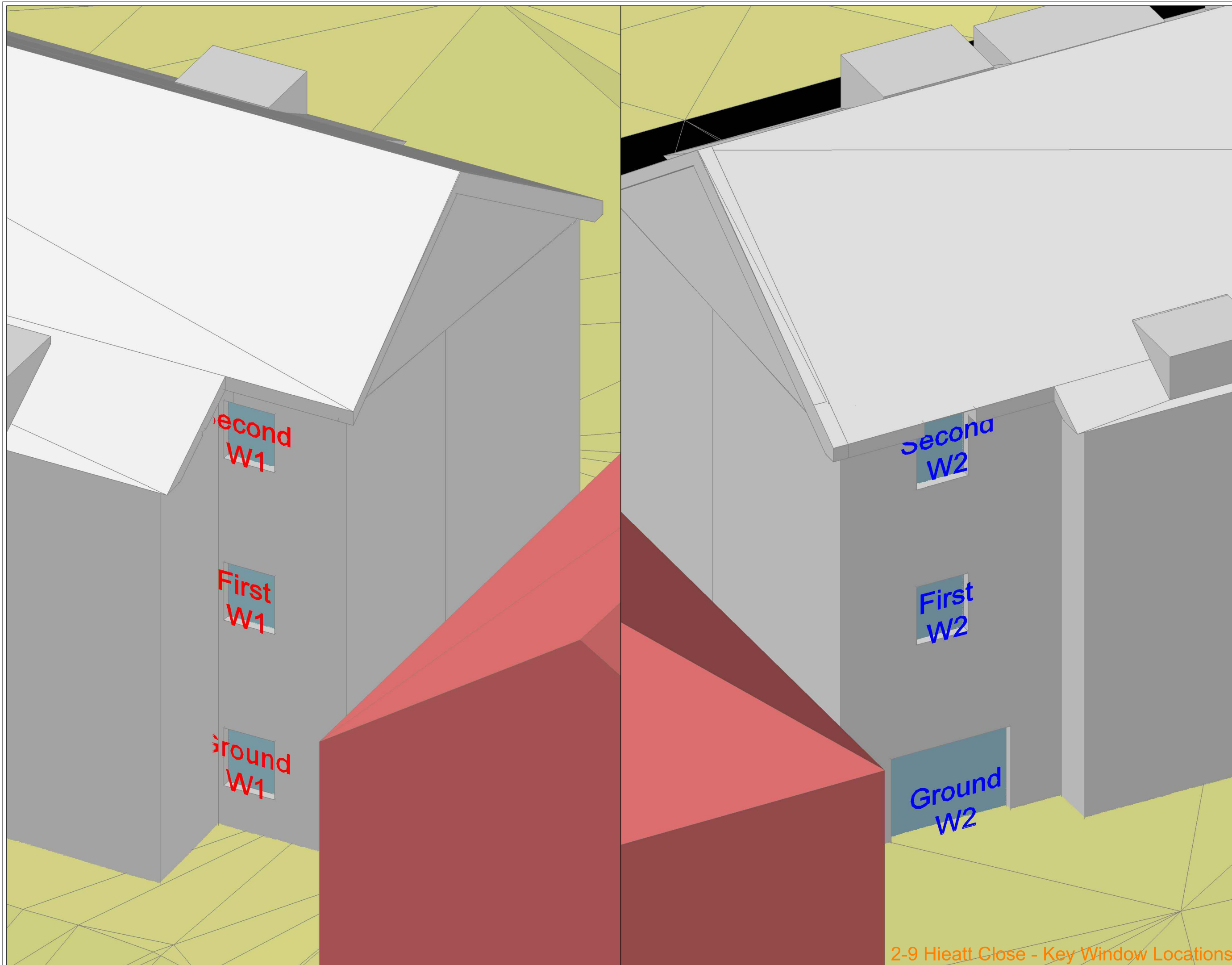
40-68 SILVER STREET
READING
-
DAYLIGHT / SUNLIGHT ANALYSIS

DRAWING:

Rimaud House
Daylight / Sunlight Analysis
Key Window Locations
-
-
-

DRAWN: AD	JOB NO:
SCALE: NTS	17440
DATE: 10/11/2017	

DWG NO:	REV:
LOC/804	A



APPENDIX B

DAYLIGHT & SUNLIGHT ANALYSIS SUMMARY TABLES



				VSC				Daylight Distribution			ADF			APSH						
Address	Floor Level	Room Name	Window ID	Existing	Proposed	Window %age Diff	Room %age Diff	Existing	Proposed	%age Diff	Existing	Proposed	%age Diff	APSH Existing	APSH Proposed	%age Diff	Winter Existing	Winter Proposed	%age Diff	
69 Upper Crown Street	Ground	Living Room/R1	W1	30.55	30.55	0.00%	-11.37%	98.92%	98.86%	-0.06%	2.02%	1.91%	-5.20%	30	30	0.00%	2	2	0.00%	
			W2	26.92	20.80	-22.73%								N/A	N/A	N/A	N/A	N/A	N/A	
		Dining Room/R2	W3	17.06	10.70	-37.29%	-37.29%	56.12%	32.66%	-41.81%	0.46%	0.32%	-29.91%	N/A	N/A	N/A	N/A	N/A	N/A	
			Kitchen/R3	W4	11.14	11.02								-1.08%	N/A	N/A	N/A	N/A	N/A	N/A
		W5		7.92	11.00	38.92%	18.92%	43.13%	66.54%	54.27%	1.36%	1.47%	7.79%	N/A	N/A	N/A	N/A	N/A	N/A	
	First	Bedroom/R1	W1	32.10	30.78	-4.10%	-4.10%	97.07%	93.82%	-3.35%	1.42%	1.37%	-3.28%	N/A	N/A	N/A	N/A	N/A	N/A	
			W2	33.12	31.76	-4.09%								N/A	N/A	N/A	N/A	N/A	N/A	
	Platinum Apartments	Ground	Bedroom/R1	W1	32.20	33.11	2.81%	2.81%	88.72%	93.76%	5.68%	1.22%	1.25%	2.80%	N/A	N/A	N/A	N/A	N/A	N/A
LKD/R2				W2	25.16	9.02	-64.17%								N/A	N/A	N/A	N/A	N/A	N/A
			W3	24.69	9.99	-59.54%	-41.27%	96.70%	72.37%	-25.16%	1.25%	0.95%	-23.92%	42	6	-85.71%	12	1	-91.67%	
			W4	30.69	30.66	-0.10%								N/A	N/A	N/A	N/A	N/A	N/A	
First		Bedroom/R1	W1	36.05	35.56	-1.37%	-1.37%	95.51%	93.89%	-1.70%	1.46%	1.45%	-0.71%	N/A	N/A	N/A	N/A	N/A	N/A	
			LKD/R2	W2	36.35	12.91								-64.48%	N/A	N/A	N/A	N/A	N/A	N/A
		W3		36.58	14.57	-60.18%	-41.55%	97.41%	93.66%	-3.85%	1.56%	1.16%	-25.49%	54	16	-70.37%	24	2	-91.67%	
		W4		34.12	34.13	0.02%								N/A	N/A	N/A	N/A	N/A	N/A	
Second		Bedroom/R1	W1	37.51	37.27	-0.63%	-0.63%	95.48%	95.27%	-0.21%	1.51%	1.51%	-0.28%	N/A	N/A	N/A	N/A	N/A	N/A	
			LKD/R2	W2	38.00	19.75								-48.02%	N/A	N/A	N/A	N/A	N/A	N/A
		W3		38.08	20.92	-45.07%	-31.03%	97.31%	97.14%	-0.17%	1.66%	1.35%	-18.60%	54	29	-46.30%	24	3	-87.50%	
		W4		37.38	37.39	0.01%								N/A	N/A	N/A	N/A	N/A	N/A	
Stirling House		Ground	Kitchen/R1	W1	28.31	26.57	-6.13%	-6.13%	97.86%	97.86%	0.00%	1.97%	1.89%	-4.35%	N/A	N/A	N/A	N/A	N/A	N/A
				LD/R2	W2	25.08	23.11								-7.85%	N/A	N/A	N/A	N/A	N/A
			W3		21.98	20.38	-7.27%	-7.56%	80.98%	71.40%	-11.83%	0.76%	0.73%	-4.89%	15	15	0.00%	1	1	0.00%
			Bedroom/R3	W4	17.66	17.66	0.00%								N/A	N/A	N/A	N/A	N/A	N/A
	W5			26.21	25.24	-3.69%	-7.08%	99.71%	98.54%	-1.17%	2.38%	2.24%	-5.96%	N/A	N/A	N/A	N/A	N/A	N/A	
	W6			31.07	27.23	-12.36%								N/A	N/A	N/A	N/A	N/A	N/A	
	W7			28.29	24.82	-12.27%								N/A	N/A	N/A	N/A	N/A	N/A	
	First			Kitchen/R1	W1	31.64								30.37	-4.02%	-4.02%	98.04%	98.04%	0.00%	2.14%
		W2	31.09		29.59	-4.82%	32	31	-3.13%	7	6	-14.29%								
		LD/R2	W3	24.76	23.66	-4.41%	-4.62%	96.55%	96.55%	0.00%	1.27%	1.23%	-3.22%	N/A	N/A	N/A	N/A	N/A	N/A	
			Bedroom/R3	W4	20.65	20.65								0.00%	N/A	N/A	N/A	N/A	N/A	N/A
		W5		29.20	28.50	-2.40%	-4.84%	99.88%	99.88%	0.00%	2.57%	2.45%	-4.42%	N/A	N/A	N/A	N/A	N/A	N/A	
		W6		33.67	30.77	-8.62%								N/A	N/A	N/A	N/A	N/A	N/A	
	W7	31.67		29.03	-8.33%	N/A								N/A	N/A	N/A	N/A	N/A		
	Second	Kitchen/R1	W1	35.28	34.66	-1.78%	-1.78%	88.38%	88.38%	0.00%	1.53%	1.51%	-1.66%	N/A	N/A	N/A	N/A	N/A	N/A	
			W2	35.33	34.59	-2.08%								34	34	0.00%	8	8	0.00%	
		LD/R2	W3	32.91	32.34	-1.74%	-1.91%	85.23%	85.23%	0.00%	0.97%	0.95%	-1.66%	N/A	N/A	N/A	N/A	N/A	N/A	
			Bedroom/R3	W4	31.12	31.12								0.00%	-2.22%	99.94%	99.94%	0.00%	4.14%	4.05%
	W5	35.98		34.38	-4.44%	N/A	N/A	N/A	N/A	N/A	N/A									
	Hawk Cottages	Ground	Living Room/R1	W1	34.53	32.40	-6.18%	-6.23%	98.70%	98.69%	-0.01%	1.61%	1.52%	-5.40%	N/A	N/A	N/A	N/A	N/A	N/A
W2				34.55	32.38	-6.29%	N/A								N/A	N/A	N/A	N/A	N/A	
Living Room/R2			W3	34.21	32.28	-5.65%	-5.37%	98.54%	98.54%	0.00%	1.59%	1.52%	-4.57%	N/A	N/A	N/A	N/A	N/A	N/A	
			W4	33.93	32.20	-5.10%								N/A	N/A	N/A	N/A	N/A	N/A	
Living Room/R3			W5	33.72	32.15	-4.67%	-4.39%	97.78%	97.76%	-0.01%	1.48%	1.42%	-3.52%	N/A	N/A	N/A	N/A	N/A	N/A	
			W6	33.40	32.03	-4.11%								N/A	N/A	N/A	N/A	N/A	N/A	
First		Bedroom/R1	W1	36.31	35.21	-3.05%	-3.05%	96.64%	96.63%	-0.01%	0.94%	0.91%	-2.83%	N/A	N/A	N/A	N/A	N/A	N/A	
		Bedroom/R2	W2	36.02	34.93	-3.04%	-3.04%	96.50%	96.48%	-0.03%	0.95%	0.92%	-2.72%	N/A	N/A	N/A	N/A	N/A	N/A	
		Bedroom/R3	W3	35.44	34.52	-2.58%	-2.58%	95.93%	95.92%	-0.01%	0.86%	0.84%	-2.28%	N/A	N/A	N/A	N/A	N/A	N/A	
Rimaud House	Ground	Living Room/R1	W1	32.77	30.32	-7.48%	-7.48%	99.45%	99.45%	0.00%	1.70%	1.60%	-5.89%	N/A	N/A	N/A	N/A	N/A	N/A	
		Bedroom/R2	W2	35.29	32.87	-6.86%	-6.86%	98.15%	98.15%	0.00%	1.09%	1.03%	-6.21%	N/A	N/A	N/A	N/A	N/A	N/A	
		Bedroom/R3	W3	34.87	31.85	-8.66%	-8.66%	98.68%	98.68%	0.00%	1.64%	1.53%	-7.08%	N/A	N/A	N/A	N/A	N/A	N/A	
		Bedroom/R5	W5	34.84	31.78	-8.80%	-8.80%	99.06%	99.06%	0.00%	1.78%	1.65%	-7.19%	N/A	N/A	N/A	N/A	N/A	N/A	
		Bedroom/R6	W6	35.34	32.81	-7.15%	-7.15%	98.10%	98.10%	0.00%	1.08%	1.01%	-6.42%	N/A	N/A	N/A	N/A	N/A	N/A	

				VSC				Daylight Distribution			ADF			APSH					
Address	Floor Level	Room Name	Window ID	Existing	Proposed	Window %age Diff	Room %age Diff	Existing	Proposed	%age Diff	Existing	Proposed	%age Diff	APSH Existing	APSH Proposed	%age Diff	Winter Existing	Winter Proposed	%age Diff
Rimaud House	Ground	Living Room/R7	W7	34.65	31.81	-8.21%	-8.21%	98.52%	98.52%	0.00%	1.35%	1.26%	-6.72%	N/A	N/A	N/A	N/A	N/A	N/A
	First	Living Room/R1	W1	36.85	35.58	-3.43%	-3.43%	99.45%	99.45%	0.00%	1.84%	1.78%	-3.06%	N/A	N/A	N/A	N/A	N/A	N/A
		Bedroom/R2	W2	37.40	36.10	-3.48%	-3.48%	98.15%	98.15%	0.00%	1.15%	1.12%	-3.38%	N/A	N/A	N/A	N/A	N/A	N/A
		Bedroom/R3	W3	37.18	35.72	-3.93%	-3.93%	98.68%	98.68%	0.00%	1.74%	1.68%	-3.53%	N/A	N/A	N/A	N/A	N/A	N/A
		Bedroom/R4	W4	37.65	36.26	-3.70%	-3.70%	97.90%	97.90%	0.00%	1.07%	1.03%	-3.63%	N/A	N/A	N/A	N/A	N/A	N/A
		Bedroom/R5	W5	37.44	35.90	-4.10%	-4.10%	98.80%	98.80%	0.00%	1.89%	1.82%	-3.63%	N/A	N/A	N/A	N/A	N/A	N/A
		Bedroom/R6	W6	37.76	36.38	-3.67%	-3.67%	98.13%	98.13%	0.00%	1.15%	1.11%	-3.62%	N/A	N/A	N/A	N/A	N/A	N/A
		Living Room/R7	W7	37.55	36.02	-4.05%	-4.05%	98.46%	98.46%	0.00%	1.45%	1.40%	-3.51%	N/A	N/A	N/A	N/A	N/A	N/A
	Second	Bedroom/R1	W1	38.91	38.04	-2.23%	-2.23%	97.74%	97.74%	0.00%	1.10%	1.08%	-2.20%	N/A	N/A	N/A	N/A	N/A	N/A
		Bedroom/R2	W2	38.73	37.74	-2.55%	-2.55%	98.82%	98.82%	0.00%	1.95%	1.90%	-2.22%	N/A	N/A	N/A	N/A	N/A	N/A
		Bedroom/R3	W3	38.92	38.09	-2.13%	-2.13%	98.13%	98.13%	0.00%	1.18%	1.16%	-2.10%	N/A	N/A	N/A	N/A	N/A	N/A
		Living Room/R4	W4	38.74	37.81	-2.40%	-2.40%	98.53%	98.53%	0.00%	1.49%	1.46%	-2.07%	N/A	N/A	N/A	N/A	N/A	N/A
2-9 Hieatt Close	Ground	Kitchen/R1	W1	18.04	21.57	19.56%	19.56%	78.80%	78.81%	0.01%	0.88%	0.99%	12.87%	N/A	N/A	N/A	N/A	N/A	N/A
		Living Room/R2	W2	26.12	27.65	5.84%	5.84%	99.30%	99.12%	-0.18%	1.82%	1.89%	3.86%	30	30	0.00%	6	6	0.00%
	First	Kitchen/R1	W1	21.61	22.73	5.21%	5.21%	78.80%	78.80%	0.00%	0.98%	1.02%	4.17%	N/A	N/A	N/A	N/A	N/A	N/A
		Living Room/R2	W2	32.37	31.54	-2.55%	-2.55%	96.04%	95.38%	-0.68%	0.64%	0.63%	-1.52%	33	33	0.00%	6	6	0.00%
	Second	Kitchen/R1	W1	23.47	23.49	0.06%	0.06%	88.74%	88.74%	0.00%	1.01%	1.02%	0.28%	N/A	N/A	N/A	N/A	N/A	N/A
		Living Room/R2	W2	31.69	31.25	-1.40%	-1.40%	96.21%	96.18%	-0.02%	0.75%	0.74%	-0.92%	25	25	0.00%	5	5	0.00%

Red Text Cells do not meet the BRE recommendations
Positive %age figures indicate an improvement
in the natural lighting conditions

APPENDIX C

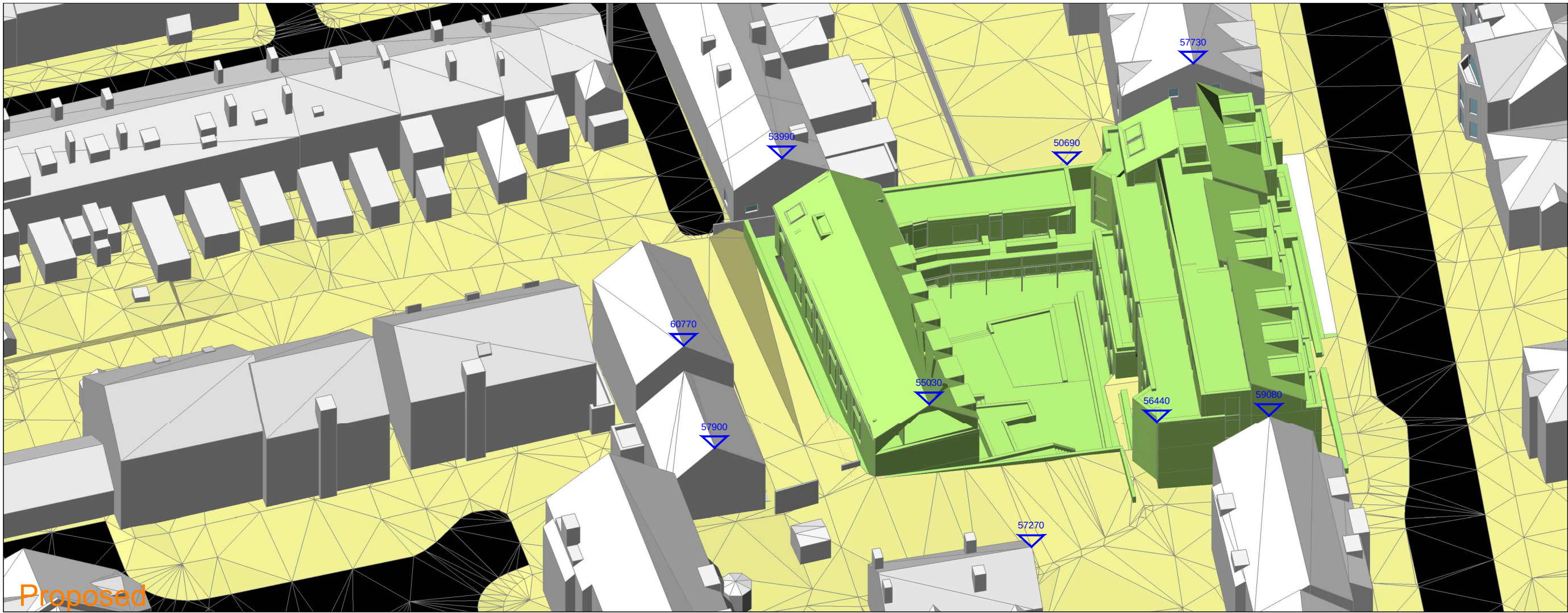
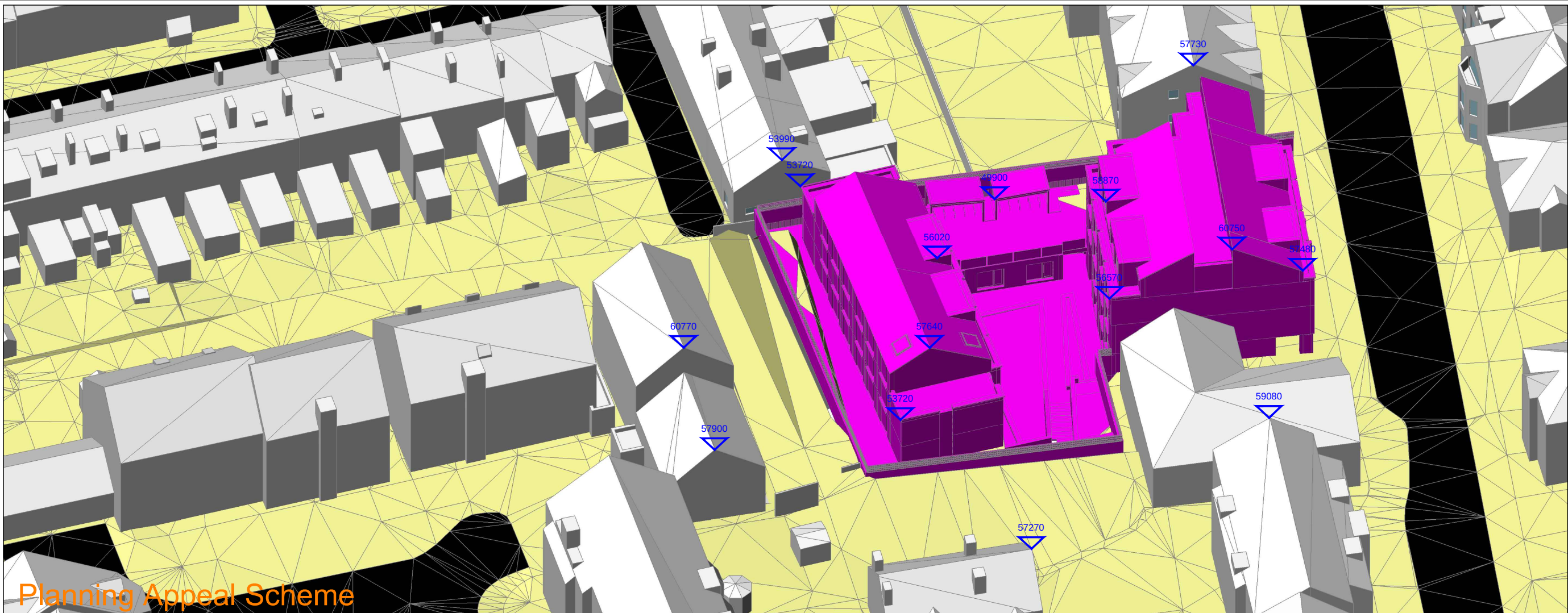
ALTERNATIVE BASELINE ANALYSIS

17440/SPT/804



				VSC				Daylight Distribution			ADF			APSH					
Address	Floor Level	Room Name	Window ID	Existing	Proposed	Window %age Diff	Room %age Diff	Existing	Proposed	%age Diff	Existing	Proposed	%age Diff	APSH Existing	APSH Proposed	%age Diff	Winter Existing	Winter Proposed	%age Diff
69 Upper Crown Street	Ground	Living Room/R1	W1	30.55	30.55	0.00%	8.40%	98.86%	98.86%	0.00%	1.87%	1.91%	2.32%	N/A	N/A	N/A	N/A	N/A	N/A
			W2	17.81	20.80	16.79%								14	16	14.29%	7	7	0.00%
		Dining Room/R2	W3	9.13	10.70	17.21%	17.21%	30.12%	32.66%	8.42%	0.29%	0.32%	10.80%	1	4	300.00%	0	0	0.00%
		Kitchen/R3	W4	7.79	11.02	41.32%	45.89%	52.50%	66.54%	26.74%	1.18%	1.47%	24.33%	N/A	N/A	N/A	N/A	N/A	N/A
			W5	7.31	11.00	50.46%								N/A	N/A	N/A	N/A	N/A	N/A
	First	Bedroom/R1	W1	29.02	30.78	6.07%	4.91%	93.79%	93.84%	0.05%	1.33%	1.37%	3.62%	N/A	N/A	N/A	N/A	N/A	N/A
			W2	30.62	31.76	3.74%								N/A	N/A	N/A	N/A	N/A	N/A
Platinum Apartments	Ground	Bedroom/R1	W1	32.29	33.11	2.54%	2.54%	89.27%	93.76%	5.04%	1.22%	1.25%	2.35%	N/A	N/A	N/A	N/A	N/A	N/A
		LKD/R2	W2	9.34	9.02	-3.49%	-1.16%	63.58%	72.37%	13.82%	0.95%	0.95%	-0.44%	N/A	N/A	N/A	N/A	N/A	N/A
			W3	10.11	9.99	-1.17%								12	6	-50.00%	0	1	N/A
			W4	30.30	30.66	1.19%								N/A	N/A	N/A	N/A	N/A	N/A
	First	Bedroom/R1	W1	35.18	35.56	1.06%	1.06%	93.98%	93.89%	-0.10%	1.44%	1.45%	0.88%	N/A	N/A	N/A	N/A	N/A	N/A
		LKD/R2	W2	15.32	12.91	-15.70%	-10.72%	95.92%	93.66%	-2.36%	1.21%	1.16%	-4.13%	N/A	N/A	N/A	N/A	N/A	N/A
			W3	17.46	14.57	-16.56%								20	16	-20.00%	5	2	-60.00%
			W4	34.09	34.13	0.11%								N/A	N/A	N/A	N/A	N/A	N/A
	Second	Bedroom/R1	W1	37.24	37.27	0.10%	0.10%	95.04%	95.27%	0.24%	1.50%	1.51%	0.06%	N/A	N/A	N/A	N/A	N/A	N/A
		LKD/R2	W2	21.32	19.75	-7.37%	-3.80%	97.18%	97.14%	-0.04%	1.37%	1.35%	-1.48%	N/A	N/A	N/A	N/A	N/A	N/A
			W3	21.81	20.92	-4.09%								29	29	0.00%	5	3	-40.00%
			W4	37.37	37.39	0.05%								N/A	N/A	N/A	N/A	N/A	N/A

Red Text Cells do not meet the BRE recommendations
Positive %age figures indicate an improvement
in the natural lighting conditions



NO DIMENSIONS TO BE SCALED
FROM THIS DRAWING:

Planning Appeal Scheme

Proposed

Surrounding

SOURCE DATA

Drawings Used:
Surrounding buildings:
Zmapping model

Site photography taken 12/09/2017

Proposed Scheme:
O'Connell East Architects:
3D model received February 2019

Planning Appeal Scheme:
O'Connell East Architects:
3D model received March 2018

NOTES

All heights are measured in mm AOD.

Site Plan

REV	Description	Drawn	Chk'd	Date

DELVA PATMAN REDLER
Chartered Surveyors

Thavies Inn House
3-4 Holborn Circus
London EC1N 2HA
020 7336 3668
www.delvapatmanredler.co.uk

The Plaza
100 Old Hall Street
Liverpool L3 9QJ
0151 242 0980
info@delvapatmanredler.co.uk

TITLE:

40-68 SILVER STREET
READING

DAYLIGHT / SUNLIGHT ANALYSIS

DRAWING:

40-68 Silver Street, Reading
Planning Appeal & Proposed Schemes
Key Building Heights

DRAWN: LT	JOB NO:
SCALE: NTS	17440
DATE: 20/02/2019	
DWG NO:	REV:

SPT/804

-