

DELVA PATMAN REDLER  
Chartered Surveyors



Thavies Inn House  
3-4 Holborn Circus  
London EC1N 2HA

020 7936 3668  
info@delvapatmanredler.co.uk  
www.delvapatmanredler.co.uk

**ARTHUR STANLEY HOUSE**  
**44 – 50 TOTTENHAM STREET, LONDON W1T 4NJ**  
**DAYLIGHT AND SUNLIGHT STUDY**

Ref: SG/sg/14238  
Date: January 2015

---

<b>CONTENTS</b>	<b>PAGE</b>
<b>INTRODUCTION</b>	<b>2</b>
<b>THE PROPOSAL</b>	<b>2</b>
<b>POLICY / GUIDELINES</b>	<b>2</b>
<b>METHODOLOGY</b>	<b>2</b>
<i>Daylight Standards</i>	
<i>Sunlight Standards</i>	
<i>Source Data</i>	
<b>SIGNIFICANCE CRITERIA</b>	<b>3</b>
<i>Daylight</i>	
<i>Sunlight</i>	
<b>BASELINE CONDITIONS</b>	<b>3</b>
<b>RESULTS - COMPLETED DEVELOPMENT</b>	<b>4</b>
<i>Vertical Sky Component Daylight Results</i>	
<i>No Sky Line Results</i>	
<i>ADF Results</i>	
<i>Annual Probable Sunlight Hours Results</i>	
<b>CONCLUSIONS</b>	<b>5</b>
<b>APPENDIX A – LOCATION DRAWINGS</b>	
14238/LOC/800B & 801 - 808	
14238/SPT/800	
<b>APPENDIX B – DAYLIGHT ANALYSIS</b>	
Daylight & Sunlight Tables	

## INTRODUCTION

Delva Patman Redler LLP have been instructed by UCLH to prepare a daylight and sunlight study to assess the likely impact of the proposed redevelopment of Arthur Stanley House, Tottenham Street by Llewelyn Davies 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" (BRE\_209).

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

## THE PROPOSAL

The proposals include the refurbishment of the existing building fronting Tottenham Street the inclusion of a new floor at roof level and the infill to the rear with a ground plus four storey mixed use building including two basement levels.

## 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 standard specifically identified in the London Borough of Camden Planning Policy by 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.

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.

## METHODOLOGY

The Daylight & 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. The report also makes reference to other property types, which may be regarded as 'sensitive receptors' such as schools, hospitals, hotels and hostels, small workshops and most offices.

## 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).

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 BRE Guide makes clear that where a room has two or more windows the mean of their VSC's can be taken.

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 takes into account 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 Day-lighting 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 analysis have been considered for the neighbouring residential properties surrounding the site.

## 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 21 March, being the spring equinox. Calculations of both summer and winter availability are made with the winter analysis covering the period from the 21 September to 21 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 the orientation of the site in relation to some of the neighbouring building elevations not all windows considered for daylight assessment will qualify for sunlight assessment because many of the main habitable reception room windows neighbouring the site do not face within 90° of due south.

#### SOURCE DATA

The studies have been undertaken by calculating the daylight and sunlight based on the template drawings provided within the BRE guidelines. The studies have been undertaken with plan drawings derived from:

- Existing and surrounding buildings: Laser Surveys: Dwg No's: L L6302/E, L L6302/T/LRP, L L6302/FP/R
- Proposed Scheme: Llewelyn Davies Architects: Project No: LD13 002.00; Dwg No's: E\_00\_01, E\_00\_02, P\_A4\_B2-07 S\_A4\_AA, S\_A4\_DD, S\_A4\_FF, P\_A4\_00, P\_A4\_01, P\_A4\_02, P\_A4\_03, P\_A4\_04, P\_A4\_05, P\_A4\_06, P\_A4\_06, P\_A4\_07, P\_A4\_B1, P\_A4\_B2, P\_A4\_RP
- Site Photos taken by Delva Patman Redler LLP – October 2014

DPR are not aware of any neighbouring development sites within the vicinity of this site that will need to be taken into account for the purposes of these studies.

#### SIGNIFICANCE CRITERIA

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

*"...In special circumstances the developer or planning authority may wish to use different target values. For example, in an historic city centre a higher degree of obstruction may be unavoidable..."*

The report adds:

*"...Different criteria may be used, based on the requirements for daylighting in an area viewed against other site layout constraints."*

In consideration of the above, it is important to note that the Site is located in a dense urban centre that, in parts, currently experiences adverse daylight and sunlight levels. This is discussed within the 'Baseline Conditions' section of this report. Thus, in these instances the BRE guidance states that the:

*"...guidelines should be applied sensibly and flexibly"*

Under these circumstances, the less stringent, higher BRE target percentage loss values and significance criteria may be justifiable.

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
Neighbouring Daylight	A window may be affected if the vertical sky component ( <b>VSC</b> ) measured at the centre of the window is less than 27% and less than 0.8 times its former value.
	A room may be affected if the area of the working plane in a room which can receive direct skylight (No Sky Line) is reduced to less than 0.8 times its former value
Self-test Daylight	A room may be adversely affected if the average daylight factor ( <b>ADF</b> ) is less than 1% for a bedroom, 1.5% for a living room or 2% for a kitchen.
Neighbouring 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.

It is of note that for daylight calculations, total reliance upon numerical values and particularly percentage changes may be misleading particularly where baseline values are already comparatively low, as is often the case in dense urban locations such as this. A percentage change of more than 20% may well represent only a very small difference in actual light value.

Additionally, it should be borne in mind that Page 1 of the BRE guidance suggests that circumstances will exist where an alternative criteria value may be used, for example, in a city centre:

*"...where a higher degree of obstruction may be unavoidable if new developments are to match the height and proportions of existing buildings"*

In such instances, the BRE guidance advises that the numerical guidelines should be interpreted flexibly, and alternative numerical values may be used. The Site's dense urban location justifies this flexible interpretation of the BRE guidance.

#### BASELINE CONDITIONS

An analysis of the impact of the baseline conditions against which to compare any potential impact arising from the development has been undertaken based on Drawing 14475/SPT/800 in Appendix A.

Arthur Stanley House is a corner site which is bounded by Tottenham Street to the south and Tottenham Mews to the east. The analysis has taken into account the consented massing for the Tottenham Mews Mental Health Resource Centre. There are no windows in the south elevation of this scheme that could be directly affected by the Arthur Stanley House proposals. The analysis has also taken into account the consented scheme for 73 Charlotte Street which is bounded by Charlotte Street, Tottenham Street and Tottenham Mews. This is a residential scheme and has therefore the light to the habitable rooms of this scheme has been considered within this report.

All relevant neighbouring residential and commercial buildings within the vicinity of the site have been included as part of this assessment. For both daylight and where relevant sunlight as illustrated on site plan dwg no: 14238/LOC/800 and the window location drawings dwg no's: 14238/LOC/801 – 808.

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

## RESULTS - COMPLETED DEVELOPMENT

### 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	Number of Rooms Meeting BRE Guidelines for VSC	Number of Rooms Experiencing Adverse Impacts
6 Tottenham mews	4	4	0
27 Tottenham Street	3	3	0
29 Tottenham Street	3	3	0
31 Tottenham Street	3	3	0
33-35 Tottenham Street	3	3	0
37 Tottenham Street	3	3	0
39 Tottenham Street	3	3	0
73 Charlotte Street	9	9	0
<b>Total</b>	<b>31</b>	<b>31</b>	<b>0</b>

Table 2 above shows that all neighbouring rooms assessed in VSC terms will comfortably comply with the BRE guidelines.

It is also noted that the light to the Tottenham Street properties will all experience gains to the light levels they will receive as a result of the development proposals.

### DAYLIGHT – NO SKY LINE (NSL)

The full results of the daylight analysis are presented in Appendix C 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 are left with adequate light.

**TABLE 3: NUMBER OF ROOMS EXPERIENCING DAYLIGHT IMPACTS AS A RESULT OF THE DEVELOPMENT (NO SKY LINE METHOD)**

Address	Total Number of Rooms Tested	Number of Rooms Meeting BRE Guidelines for No Sky Line	Number of Rooms Experiencing Adverse Impacts
6 Tottenham mews	4	3	1
27 Tottenham Street	3	3	0
29 Tottenham Street	3	3	0
31 Tottenham Street	3	3	0
33-35 Tottenham Street	3	3	0
37 Tottenham Street	3	3	0
39 Tottenham Street	3	3	0
73 Charlotte Street	9	9	0
<b>Total</b>	<b>31</b>	<b>30</b>	<b>1</b>

Table 3 shows that 30 of the 31 neighbouring rooms assessed in NSC terms will comfortably comply with the BRE Guidelines. The single infringement is to the ground floor of 6 Tottenham

Mews. This room is over 8.5m deep and so it is unrealistic, given the dense urban location of this site, for this neighbour to anticipate a good distribution of light over more than 50% of the room. In addition the VSC and ADF analyses demonstrate that both the quality and quantity of light as a whole will achieve the relevant daylight standards. This isolated infringement therefore is considered to be minor in overall daylight terms.

It is also noted that the light to the Tottenham Street properties will all experience gains to the light levels they will receive as a result of the development proposals.

### DAYLIGHT – AVERAGE DAYLIGHT FACTOR (ADF)

The full results of the daylight analysis are presented in Appendix D 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 3 below. This identifies where habitable rooms are left with adequate light.

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

Address	Total Number of Rooms Tested	Number of Rooms Meeting BRE Guidelines for Average Daylight Factor	Number of Rooms Experiencing Adverse Impacts
6 Tottenham mews	4	4	0
27 Tottenham Street	3	3	0
29 Tottenham Street	3	3	0
31 Tottenham Street	3	3	0
33-35 Tottenham Street	3	3	0
37 Tottenham Street	3	3	0
39 Tottenham Street	3	3	0
73 Charlotte Street	9	9	0
<b>Total</b>	<b>31</b>	<b>31</b>	<b>0</b>

Table 4 above shows that all neighbouring rooms assessed in ADF terms will comfortably comply with the BRE guidelines.

It is also noted that the light to the Tottenham Street properties will all experience gains to the light levels they will receive as a result of the development proposals.

### SUNLIGHT - APSH

The full results of the sunlight analysis are presented in Appendix C in tabular form with a sample attached. A summary of the results of the Annual Probable Sunlight Hours (APSH) analysis on the relevant overlooking windows are presented in Table 4 below. This identifies where habitable rooms are left with inadequate light.

Due to the orientation of the site and room uses, not all of the windows tested for the daylight analysis qualify for sunlight analysis.

**TABLE 6: NUMBER OF ROOMS EXPERIENCING NEGLIGIBLE AND ADVERSE SUNLIGHT IMPACTS AS A RESULT OF THE DEVELOPMENT (APSH METHOD)**

Address	Total Number of Rooms Tested	Rooms Meeting BRE Guidelines for APSH	Number of Rooms Experiencing Adverse Impacts
6 Tottenham mews	2	2	0
73 Charlotte Street	5	5	0
<b>Total</b>	<b>7</b>	<b>7</b>	<b>0</b>

Table 6 above shows that all neighbouring rooms assessed in APSH terms will comfortably comply with the APSH sunlight standards.

It is also noted that there will be infringements of the BRE Guidelines for sunlight during the winter months. This is when the sun is low in the sky and the smallest of reductions can result in a percentage difference beyond BRE Guidance. Given that the APSH for these rooms is BRE compliant then these winter reductions are not considered to be of material concern.

## CONCLUSIONS

Arthur Stanley House is a corner site which is bounded by Tottenham Street to the south and Tottenham Mews to the east.

To assess the potential impact of the Development on daylight on neighbouring properties a baseline assessment was undertaken. The method of assessment used was the Vertical Sky Component (VSC), No Sky Line (NSL) and Average Daylight Factor (ADF) for daylight and Annual Probable Sunlight Hours (APSH) for sunlight.

The London Borough of Camden Planning Policy identifies the Building Research Establishment report "Site Layout Planning for Daylight & Sunlight 2011" by which daylight and sunlight should be assessed.

The daylight and sunlight analysis demonstrates that despite a single isolated infringement of the NSC analysis that overall the quality, quantity and distribution of light received by the neighbouring properties as a result of the development proposals will remain fully BRE compliant.

It is noted that the light to the Tottenham Street properties will all experience gains to the light levels they will receive as a result of the development proposals.

Overall therefore Llewelyn Davies Architects have worked hard to minimise any adverse impact to neighbouring residential amenity on daylight and sunlight through their design process where reasonably practically possible with this design in this dense urban location.

The scheme proposals demonstrate minimal impact on neighbouring residential amenity with only a single highly localised infringement of the BRE Guidance. Where this infringement of the daylight criteria occurs the effects measured are not considered sufficiently adverse so as to make the light in rooms within the neighbouring properties unacceptable for their purpose.

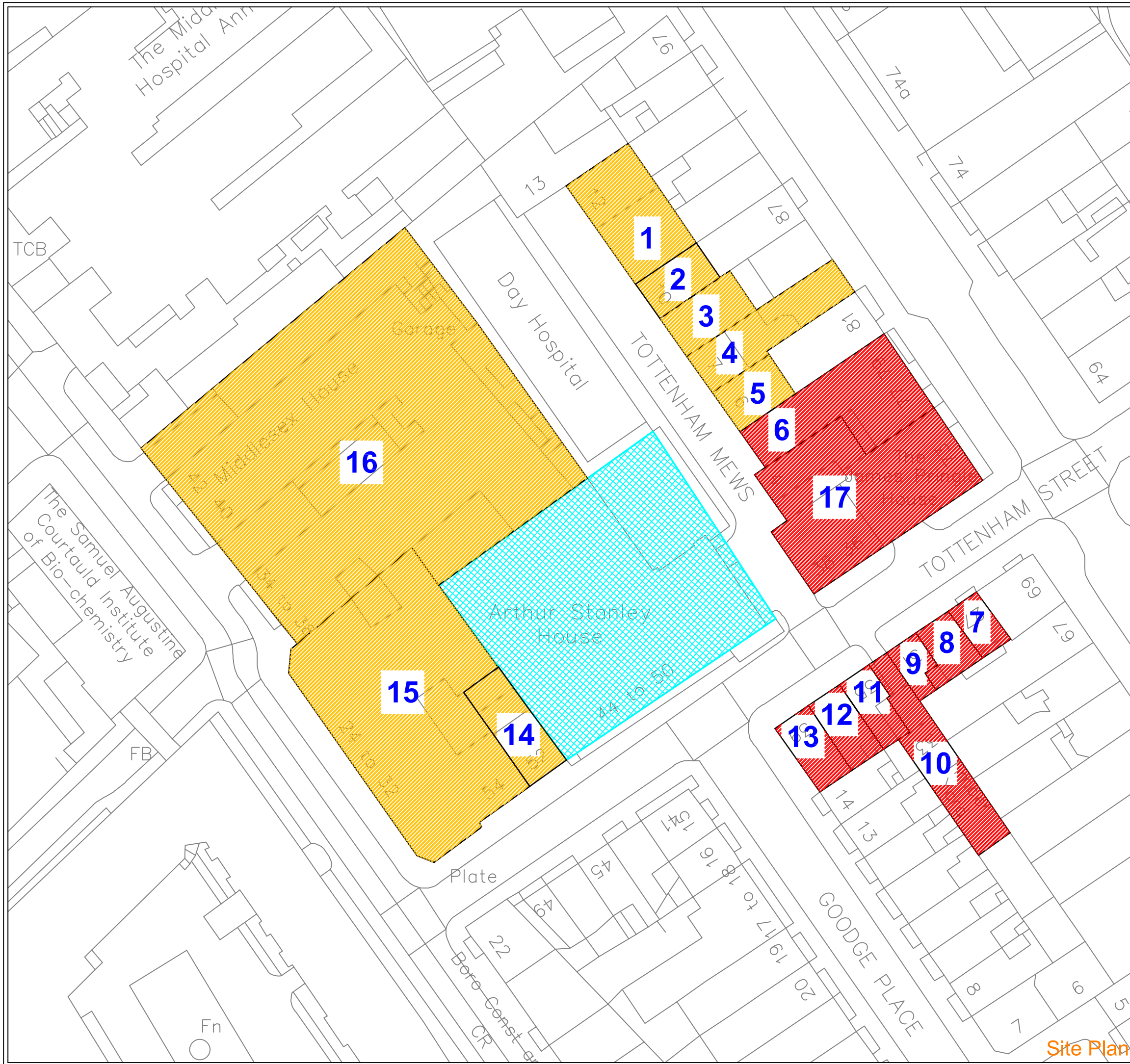
The development proposals by Llewelyn Davies Architects are therefore considered to recognise and observe the intentions of London Borough of Camden Planning Policy and BRE Guidance 209 and therefore should be considered to generally address the requirements of the London Borough of Camden Planning Policy in daylight and sunlight terms.

**APPENDIX A**

**LOCATION DRAWINGS**

**14238/LOC/800B & 801 - 808**

**14238/SPT/800**



- Development Site**  
**Arthur Stanley House**  
 Freehold: 36 Golden Square LLP  
 Title: NGL619577
- 1: 11 & 12 Tottenham Mews**  
 Freehold: Bryan Myer Fugler and Carol Gillian Fugler  
 Title: 166461
- 2: 10 Tottenham Mews**  
 Freehold: Paul Crockford  
 Title: NGL919873
- 3: 8 Tottenham Mews**  
 Freehold: Helen Sarah Elizabeth Havelock Orsich and Clare patrica Timms  
 Title: LN129442
- 4: 7 Tottenham Mews**  
 Freehold: Searchgrade Limited  
 Title: 266435
- 5: 6 Tottenham Mews**  
 Freehold: H&F Capital Partners limited  
 Title: 43297
- 6: 77-79 Charlotte Street**  
 Freehold: Charlotte Street Property Limited  
 Title: LN122166  
 Title: LN123864
- 7: 27 Tottenham Street**  
 Freehold: Fastlane Productions Limited  
 Title: LN39884
- 8: 29 Tottenham Street**  
 Freehold: Gianni Palermo  
 Title: LN60491
- 9: 31 Tottenham Street**  
 Freehold: Legal & General (Portfolio Management Service) Limited  
 Title: 107581
- 10: 33 Tottenham Street**  
 Freehold: Betty Jackson and David Cohen  
 Title: NGL434872
- 11: 35 Tottenham Street**  
 Freehold: Yiannoulla Georgiou and Sergios Georgiou  
 Title: 47608
- 12: 37 Tottenham Street**  
 Freehold: Richard Edgar Bethel Solomons  
 Title: 362019
- 13: 39 Tottenham Street**  
 Freehold: The Mayor and Burgesses of the London Borough of Camden  
 Title: LN177149
- 14: 52 Tottenham Street**  
 Freehold: T.V. Antoni Properties & Investments Limited  
 Title: 29364
- 15: 32 to 34 Cleveland Street**  
 Freehold: BC Noho Limited  
 Title: LN144393
- 16: 38 - 42 Cleveland Street, Middlesex House**  
 Freehold: Derwent Valley Property Investment Limited  
 Title: 233586
- 17: 4 Tottenham Mews & 73 Charlotte Street**  
 Freehold: Derwent London Charlotte Street Limited  
 Title: NGL941677

NO DIMENSIONS TO BE SCALED FROM THIS DRAWING:

Site Boundary  
 Buildings Highlighted  
 Daylight & Sunlight

**SOURCE DATA**

Drawings Used:  
OS Plan

**NOTES**

All neighbouring properties considered for analysis.

## Site Plan

REV	Description	Drawn	CHK'd	Date
A	Revised Site Footprint	SG	DP	14/07/2014

**DELVA PATMAN REDLER**  
Chartered Surveyors

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

**TITLE:**  
ARTHUR STANLEY HOUSE  
TOTTENHAM STREET  
LONDON W1T

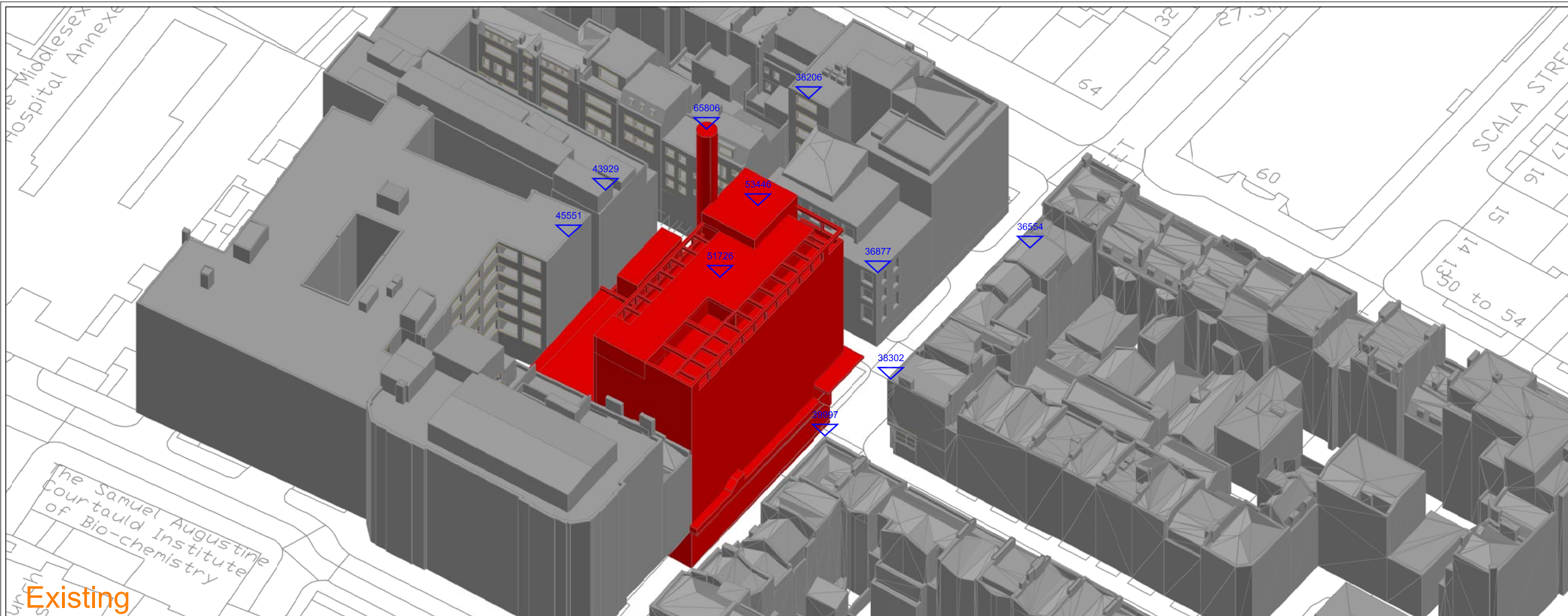
**RIGHTS TO LIGHT ANALYSIS**

**DRAWING:**  
Arthur Stanley House - Property Location Plan  
Rights To Light Analysis  
Existing & Proposed Schemes  
.  
.  
.

<b>DRAWN:</b> SG	<b>JOB NO:</b>
<b>SCALE:</b> NTS	<b>14238</b>
<b>DATE:</b> 10/07/2014	
<b>DWG NO:</b> LOC/800	<b>REV:</b> B

Site Plan





Existing

NO DIMENSIONS TO BE SCALED FROM THIS DRAWING:

■ Existing     ■ Surrounding  
■ Proposed  
■ Buildings Highlighted

**SOURCE DATA**

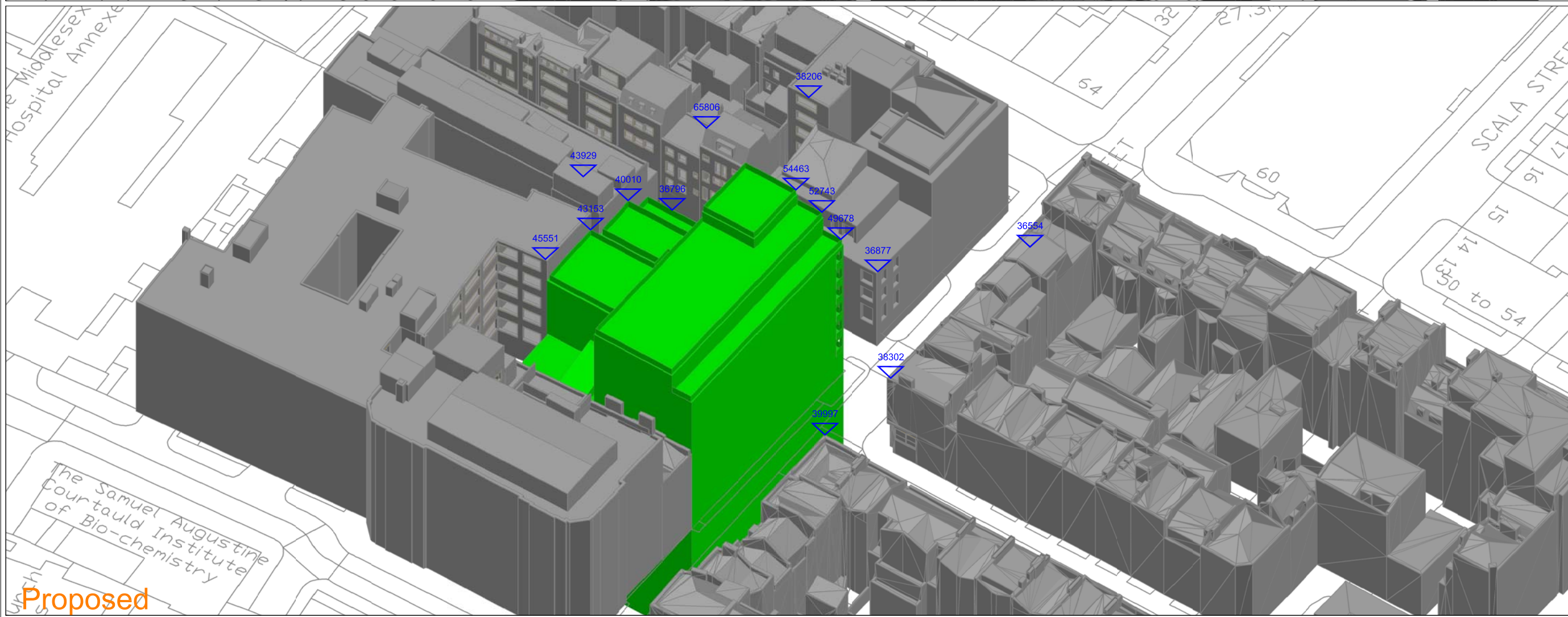
Drawings Used:  
 Existing and surrounding buildings:  
 OS Map  
 3D Model  
 Laser Surveys:  
 Dwg No's: L L6302/E, L L6302/T/LRP, L L6302/FP/R

Proposed Scheme:  
 Llewelyn Davies Architects:  
 Project No: LD13 002.00  
 Dwg No's: E\_00\_01, E\_00\_02, P\_A4\_B2-07, S\_A4\_AA, S\_A4\_DD, S\_A4\_FF, P\_A4\_00, P\_A4\_01, P\_A4\_02, P\_A4\_03, P\_A4\_04, P\_A4\_05, P\_A4\_06, P\_A4\_06, P\_A4\_07, P\_A4\_B1, P\_A4\_B2, P\_A4\_RP

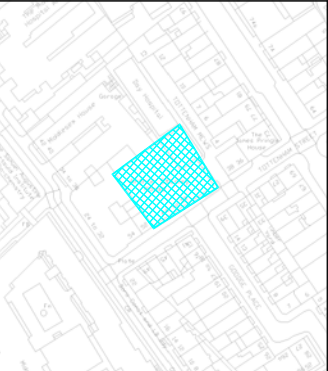
**NOTES**

All heights are measured in mm AOD.

Site Plan



Proposed



REV	Description	Drawn	Ch'kd	Date

**DELVA PATMAN REDLER**  
 Chartered Surveyors

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

**TITLE:**  
 ARTHUR STANLEY HOUSE  
 TOTTENHAM STREET  
 LONDON W1T  
 DAYLIGHT / SUNLIGHT ANALYSIS

**DRAWING:**  
 Arthur Stanley House  
 Daylight / Sunlight Analysis  
 Key Building Heights  
 Existing & Proposed Schemes  
 .  
 .  
 .

DRAWN: SA	JOB NO:
SCALE: NTS	14238
DATE: 04/12/2014	
DWG NO: SPT/800	REV: -



NO DIMENSIONS TO BE SCALED FROM THIS DRAWING:

Indicative

Existing	Window Tested Daylight only
Proposed	Window Tested Daylight & Sunlight
Surrounding	

W1/08

**SOURCE DATA**

Drawings Used:  
 Existing and surrounding buildings:  
 OS Map  
 3D Model  
 Laser Surveys:  
 Dwg No's: L L6302/E, L L6302/T/LRP, L L6302/FP/R

Proposed Scheme:  
 Llewelyn Davies Architects:  
 Project No: LD13 002.00  
 Dwg No's: E\_00\_01, E\_00\_02, P\_A4\_B2-07, S\_A4\_AA, S\_A4\_DD, S\_A4\_FF, P\_A4\_00, P\_A4\_01, P\_A4\_02, P\_A4\_03, P\_A4\_04, P\_A4\_05, P\_A4\_06, P\_A4\_06, P\_A4\_07, P\_A4\_B1, P\_A4\_B2, P\_A4\_RP

**NOTES**

Downloaded from Camden Planning Portal:  
 6 Tottenham Mews:  
 5092.2\_01\_120, 5092.2\_01\_111, 5092.2\_01\_112, 5092.2\_01\_100, 5092.2\_01\_101, 5092.2\_01\_110, 5092.2\_02\_120, 5092.2\_02\_111, 5092.2\_02\_110, 5092.2\_02\_112, 5092.2\_02\_101, 5092.2\_02\_100



REV	Description	Drawn	Ch/kd	Date

**DELVA PATMAN REDLER**  
 Chartered Surveyors

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

TITLE:  
 ARTHUR STANLEY HOUSE  
 TOTTENHAM STREET  
 LONDON W1T  
 DAYLIGHT / SUNLIGHT ANALYSIS

DRAWING:  
 6 Tottenham Mews  
 Daylight / Sunlight Analysis  
 Key Window Locations

DRAWN: SA JOB NO: 14238  
 SCALE: 1:50@A3  
 DATE: 21/01/2015

DWG NO: LOC/801 REV: -

6 Tottenham Mews - Key Window Locations

View 1

View 2

NO DIMENSIONS TO BE SCALED FROM THIS DRAWING:

Indicative

Existing  
Proposed  
Surrounding

Window Tested Daylight only  
Window Tested Daylight & Sunlight

SOURCE DATA

Drawings Used:  
Existing and surrounding buildings:  
OS Map  
3D Model  
Laser Surveys:  
Dwg No's: L L6302/E, L L6302/T/LRP, L L6302/FP/R

Proposed Scheme:  
Llewelyn Davies Architects:  
Project No: LD13 002.00  
Dwg No's: E\_00\_01, E\_00\_02, P\_A4\_B2-07, S\_A4\_AA, S\_A4\_DD, S\_A4\_FF, P\_A4\_00, P\_A4\_01, P\_A4\_02, P\_A4\_03, P\_A4\_04, P\_A4\_05, P\_A4\_06, P\_A4\_06, P\_A4\_07, P\_A4\_B1, P\_A4\_B2, P\_A4\_RP

NOTES

Downloaded from Camden Planning Portal:  
4 Tottenham Mews:  
205\_P20.10, 205\_P20.11, 205\_P20.12, 205\_P20.13, 205\_P20.14, 205\_P20.15, 205\_P20.16, 205\_P20.17, 205\_P30.01, 205\_P30.02, 205\_P30.03, 205\_P20.04, 205\_P40.01, 205\_P40.02

Site Plan



DELVA PATMAN REDLER  
Chartered Surveyors

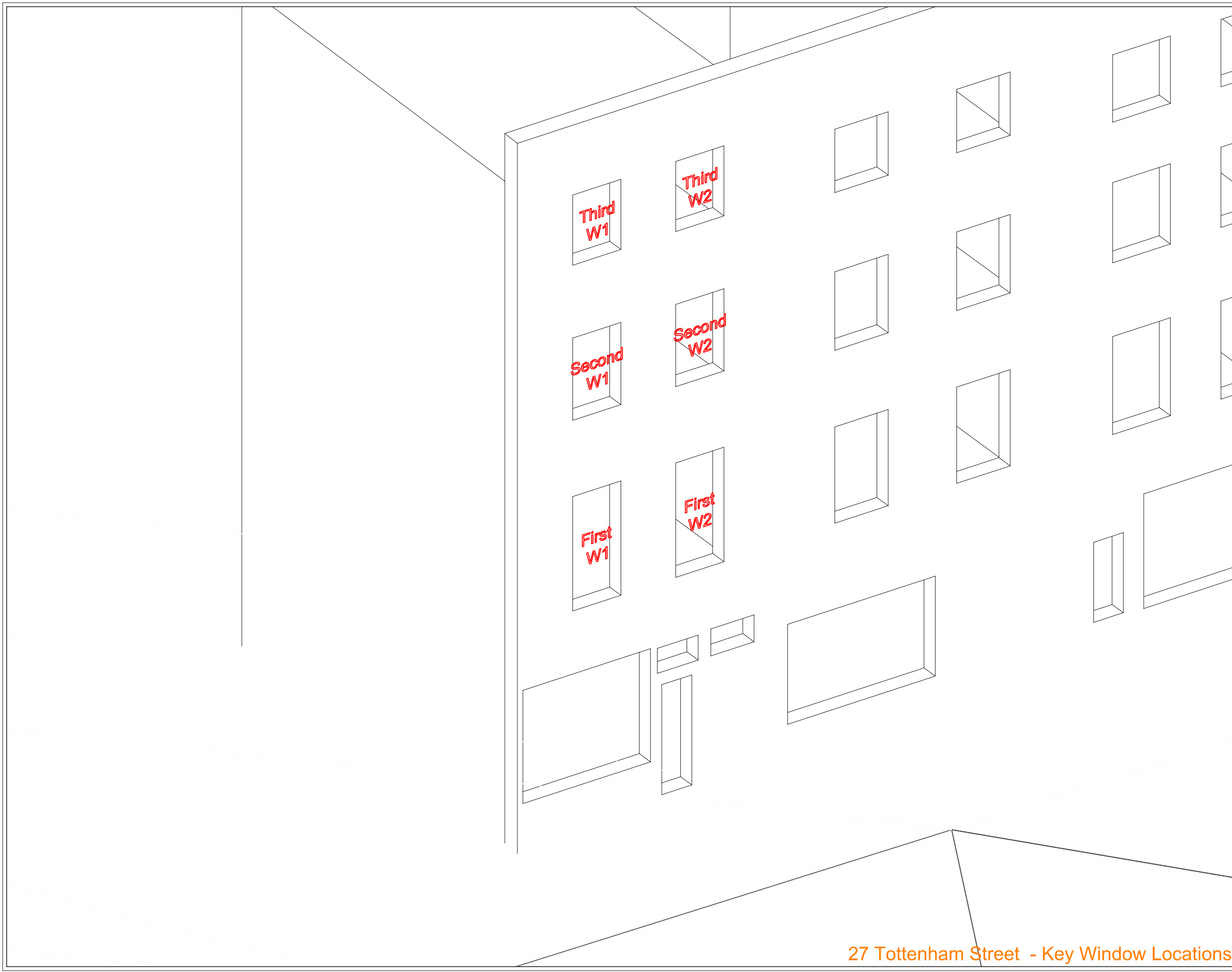
Thavies Inn House 020 7936 3668  
3-4 Holborn Circus info@delvapatmanredler.co.uk  
London EC1N 2HA www.delvapatmanredler.co.uk

TITLE:  
ARTHUR STANLEY HOUSE  
TOTTENHAM STREET  
LONDON W1T  
DAYLIGHT / SUNLIGHT ANALYSIS

DRAWING:  
4 Tottenham Mews & 73 Charlotte Street  
Daylight / Sunlight Analysis  
Key Window Locations

DRAWN: SA JOB NO: 14238  
SCALE: 1:100@A3  
DATE: 21/01/2015

DWG NO: LOC/802 REV: -



NO DIMENSIONS TO BE SCALED FROM THIS DRAWING:

Indicative

	Existing	W1/08	Window Tested Daylight only
	Proposed	W1/08	Window Tested Daylight & Sunlight
	Surrounding		

**SOURCE DATA**

Drawings Used:  
 Existing and surrounding buildings:  
 OS Map  
 3D Model  
 Laser Surveys:  
 Dwg No's: L L6302/E, L L6302/T/LRP, L L6302/FP/R

Proposed Scheme:  
 Llewelyn Davies Architects:  
 Project No: LD13 002.00  
 Dwg No's: E\_00\_01, E\_00\_02, P\_A4\_B2-07, S\_A4\_AA, S\_A4\_DD, S\_A4\_FF, P\_A4\_00, P\_A4\_01, P\_A4\_02, P\_A4\_03, P\_A4\_04, P\_A4\_05, P\_A4\_06, P\_A4\_06, P\_A4\_07, P\_A4\_B1, P\_A4\_B2, P\_A4\_RP

**NOTES**

Downloaded from Camden Planning Portal:  
 27 Tottenham Street:  
 12-313-13, 12-313-14, 12-313-15, 12-313-16, 12-313-11, 12-313-19, 12-313-12, 12-313-17, 12-313-20, 12-313-21, 12-313-22, 12-313-03, 12-313-01, 12-313-07-1, 12-313-02, 12-313-06, 12-313-08, 12-313-09



REV	Description	Drawn	Ch/kd	Date

**DELVA PATMAN REDLER**  
 Chartered Surveyors

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

TITLE:  
 ARTHUR STANLEY HOUSE  
 TOTTENHAM STREET  
 LONDON W1T  
 DAYLIGHT / SUNLIGHT ANALYSIS

DRAWING:  
 27 Tottenham Street  
 Daylight / Sunlight Analysis  
 Key Window Locations

DRAWN: SA JOB NO:  
 SCALE: 1:50@A3 14238  
 DATE: 21/01/2015

DWG NO: LOC/803 REV: -

27 Tottenham Street - Key Window Locations



NO DIMENSIONS TO BE SCALED FROM THIS DRAWING:

Indicative

<span style="color: red;">■</span> Existing	<span style="color: red;">W1/08</span> Window Tested Daylight only
<span style="color: green;">■</span> Proposed	<span style="color: blue;">W1/08</span> Window Tested Daylight & Sunlight
<span style="color: black;">■</span> Surrounding	

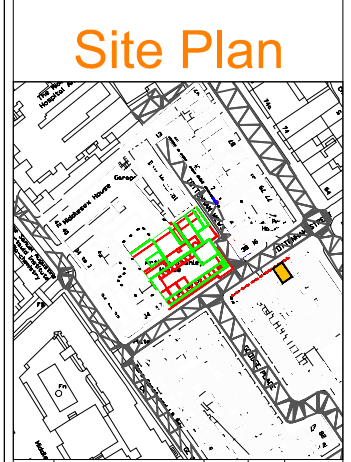
**SOURCE DATA**

Drawings Used:  
 Existing and surrounding buildings:  
 OS Map  
 3D Model  
 Laser Surveys:  
 Dwg No's: L L6302/E, L L6302/T/LRP, L L6302/FP/R

Proposed Scheme:  
 Llewelyn Davies Architects:  
 Project No: LD13 002.00  
 Dwg No's: E\_00\_01, E\_00\_02, P\_A4\_B2-07, S\_A4\_AA, S\_A4\_DD, S\_A4\_FF, P\_A4\_00, P\_A4\_01, P\_A4\_02, P\_A4\_03, P\_A4\_04, P\_A4\_05, P\_A4\_06, P\_A4\_06, P\_A4\_07, P\_A4\_B1, P\_A4\_B2, P\_A4\_RP

**NOTES**

Downloaded from Camden Planning Portal:  
 29 Tottenham Street:  
 Existing:  
 First Floor Plan, Second Floor Plan, Street Elevation, Rear Elevation, Tottenham Street Section A-A  
 Proposed:  
 First Floor Plan, Second Floor Plan, Street Elevation, Rear Elevation, Tottenham Street Section A-A.



REV	Description	Drawn	Ch/kd	Date

**DELVA PATMAN REDLER**  
 Chartered Surveyors

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

TITLE:  
 ARTHUR STANLEY HOUSE  
 TOTTENHAM STREET  
 LONDON W1T  
 DAYLIGHT / SUNLIGHT ANALYSIS

DRAWING:  
 29 Charlotte Street  
 Daylight / Sunlight Analysis  
 Key Window Locations  
 -  
 -  
 -

DRAWN: SA JOB NO:  
 SCALE: 1:50@A3 14238  
 DATE: 21/01/2015

DWG NO: LOC/804 REV: -

29 Tottenham Street - Key Window Locations



Indicative

NO DIMENSIONS TO BE SCALED FROM THIS DRAWING:

	Existing	W1/08	Window Tested Daylight only
	Proposed	W1/08	Window Tested Daylight & Sunlight
	Surrounding		

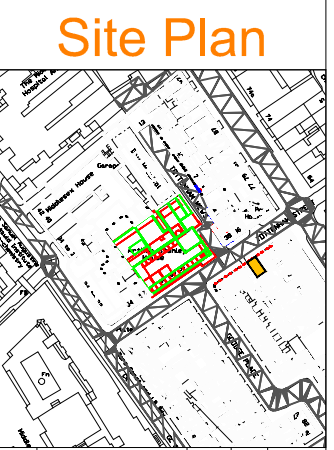
**SOURCE DATA**

Drawings Used:  
 Existing and surrounding buildings:  
 OS Map  
 3D Model  
 Laser Surveys:  
 Dwg No's: L L6302/E, L L6302/T/LRP, L L6302/FP/R

Proposed Scheme:  
 Llewelyn Davies Architects:  
 Project No: LD13 002.00  
 Dwg No's: E\_00\_01, E\_00\_02, P\_A4\_B2-07, S\_A4\_AA, S\_A4\_DD, S\_A4\_FF, P\_A4\_00, P\_A4\_01, P\_A4\_02, P\_A4\_03, P\_A4\_04, P\_A4\_05, P\_A4\_06, P\_A4\_06, P\_A4\_07, P\_A4\_B1, P\_A4\_B2, P\_A4\_RP

**NOTES**

Downloaded from Camden Planning Portal:  
 31 Tottenham Street:  
 Form Design & Architecture  
 584.001, 584.002



REV	Description	Drawn	Ch/kd	Date

**DELVA PATMAN REDLER**  
 Chartered Surveyors

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

TITLE:  
 ARTHUR STANLEY HOUSE  
 TOTTENHAM STREET  
 LONDON W1T  
 DAYLIGHT / SUNLIGHT ANALYSIS

DRAWING:  
 31 Charlotte Street  
 Daylight / Sunlight Analysis  
 Key Window Locations  
 -  
 -  
 -

DRAWN: SA	JOB NO:
SCALE: 1:50@A3	14238
DATE: 21/01/2015	
DWG NO: LOC/805	REV: -

31 Tottenham Street - Key Window Locations



Indicative

NO DIMENSIONS TO BE SCALED FROM THIS DRAWING:

	Existing	W1/08	Window Tested Daylight only
	Proposed	W1/08	Window Tested Daylight & Sunlight
	Surrounding		

**SOURCE DATA**

Drawings Used:  
 Existing and surrounding buildings:  
 OS Map  
 3D Model  
 Laser Surveys:  
 Dwg No's: L L6302/E, L L6302/T/LRP, L L6302/FP/R

Proposed Scheme:  
 Llewelyn Davies Architects:  
 Project No: LD13 002.00  
 Dwg No's: E\_00\_01, E\_00\_02, P\_A4\_B2-07, S\_A4\_AA, S\_A4\_DD, S\_A4\_FF, P\_A4\_00, P\_A4\_01, P\_A4\_02, P\_A4\_03, P\_A4\_04, P\_A4\_05, P\_A4\_06, P\_A4\_06\_P\_A4\_07, P\_A4\_B1, P\_A4\_B2, P\_A4\_RP

**NOTES**

Downloaded from Camden Planning Portal:  
 BDA Partnership:  
 33 Tottenham Street:  
 872-3



REV	Description	Drawn	Chk'd	Date

**DELVA PATMAN REDLER**  
 Chartered Surveyors

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

TITLE:  
 ARTHUR STANLEY HOUSE  
 TOTTENHAM STREET  
 LONDON W1T  
 DAYLIGHT / SUNLIGHT ANALYSIS

DRAWING:  
 33-35 Tottenham Street  
 Daylight / Sunlight Analysis  
 Key Window Locations  
 -  
 -  
 -

DRAWN: SA	JOB NO:
SCALE: 1:50@A3	14238
DATE: 21/01/2015	REV:
DWG NO: LOC/806	-

33-35 Tottenham Street - Key Window Locations



NO DIMENSIONS TO BE SCALED FROM THIS DRAWING:

Indicative

<span style="color: red;">■</span> Existing	<span style="color: red;">W1/08</span> Window Tested Daylight only
<span style="color: green;">■</span> Proposed	<span style="color: blue;">W1/08</span> Window Tested Daylight & Sunlight
<span style="color: black;">■</span> Surrounding	

**SOURCE DATA**

Drawings Used:  
 Existing and surrounding buildings:  
 OS Map  
 3D Model  
 Laser Surveys:  
 Dwg No's: L L6302/E, L L6302/T/LRP, L L6302/FP/R

Proposed Scheme:  
 Llewelyn Davies Architects:  
 Project No: LD13 002.00  
 Dwg No's: E\_00\_01, E\_00\_02, P\_A4\_B2-07, S\_A4\_AA, S\_A4\_DD, S\_A4\_FF, P\_A4\_00, P\_A4\_01, P\_A4\_02, P\_A4\_03, P\_A4\_04, P\_A4\_05, P\_A4\_06, P\_A4\_06, P\_A4\_07, P\_A4\_B1, P\_A4\_B2, P\_A4\_RP


**NOTES**

Downloaded from Camden Planning Portal:  
 MEL Design Associates:  
 37 Tottenham Street:  
 02-926-01, 03-926-02



REV	Description	Drawn	Ch/kd	Date

**DELVA PATMAN REDLER**  
 Chartered Surveyors



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

TITLE:  
 ARTHUR STANLEY HOUSE  
 TOTTENHAM STREET  
 LONDON W1T  
 -  
 DAYLIGHT / SUNLIGHT ANALYSIS

DRAWING:  
 37 Tottenham Street  
 Daylight / Sunlight Analysis  
 Key Window Locations  
 -  
 -  
 -

DRAWN: SA	JOB NO:
SCALE: 1:50@A3	14238
DATE: 21/01/2015	REV:
DWG NO: LOC/807	-

37 Tottenham Street - Key Window Locations





NO DIMENSIONS TO BE SCALED FROM THIS DRAWING:

Indicative

	Existing	W1/08	Window Tested Daylight only
	Proposed	W1/08	Window Tested Daylight & Sunlight
	Surrounding		

**SOURCE DATA**

Drawings Used:  
 Existing and surrounding buildings:  
 OS Map  
 3D Model  
 Laser Surveys:  
 Dwg No's: L L6302/E, L L6302/T/LRP, L L6302/FP/R

Proposed Scheme:  
 Llewelyn Davies Architects:  
 Project No: LD13 002.00  
 Dwg No's: E\_00\_01, E\_00\_02, P\_A4\_B2-07, S\_A4\_AA, S\_A4\_DD, S\_A4\_FF, P\_A4\_00, P\_A4\_01, P\_A4\_02, P\_A4\_03, P\_A4\_04, P\_A4\_05, P\_A4\_06, P\_A4\_06, P\_A4\_07, P\_A4\_B1, P\_A4\_B2, P\_A4\_RP

**NOTES**

Downloaded from Camden Planning Portal:  
 Monahan Blythen:  
 39 Tottenham Street:  
 TSP-01, TSP-02, TSP-05, TSP-06, TSP-07



REV	Description	Drawn	Ch/kd	Date

**DELVA PATMAN REDLER**  
 Chartered Surveyors

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

**TITLE:**  
 ARTHUR STANLEY HOUSE  
 TOTTENHAM STREET  
 LONDON W1T  
 -  
 DAYLIGHT / SUNLIGHT ANALYSIS

**DRAWING:**  
 39 Tottenham Street  
 Daylight / Sunlight Analysis  
 Key Window Locations  
 -  
 -  
 -

DRAWN: SA	JOB NO:
SCALE: 1:50@A3	14238
DATE: 21/01/2015	REV:
DWG NO: LOC/808	-

39 Tottenham Street - Key Window Locations

**APPENDIX B**  
**DAYLIGHT & SUNLIGHT ANALYSIS**

				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
6 Tottenham Mews	Ground	R1	W1	14.28	12.40	-13.17%	-12.63%	49.32%	30.47%	-38.21%	1.15%	1.07%	-7.56%	13	11	-15.38%	1	0	-100.00%
			W2	14.92	13.11	-12.08%								15	12	-20.00%	1	0	-100.00%
	First	R1	W1	17.44	16.44	-5.74%	-5.52%	97.71%	91.08%	-6.79%	3.33%	3.22%	-3.38%	N/A	N/A	N/A	N/A	N/A	N/A
			W2	17.83	16.87	-5.37%								N/A	N/A	N/A	N/A	N/A	N/A
			W3	17.88	16.91	-5.44%								N/A	N/A	N/A	N/A	N/A	N/A
	Second	R1	W1	21.89	21.84	-0.20%	-0.63%	86.64%	75.30%	-13.09%	2.09%	2.09%	-0.23%	23	22	-4.35%	5	3	-40.00%
			W2	20.84	20.66	-0.89%								21	21	0.00%	3	2	-33.33%
			W3	20.80	20.64	-0.79%								21	22	4.76%	2	2	0.00%
	Third	R1	W1	25.48	25.87	1.53%	1.53%	81.02%	81.50%	0.59%	2.67%	2.70%	1.05%	N/A	N/A	N/A	N/A	N/A	N/A
	27 Tottenham Street	First	R1	W1	19.49	19.59	0.52%	0.54%	88.00%	88.00%	0.00%	2.18%	2.19%	0.33%	N/A	N/A	N/A	N/A	N/A
W2				19.36	19.47	0.56%	N/A								N/A	N/A	N/A	N/A	N/A
Second		R1	W1	23.23	23.35	0.52%	0.54%	87.83%	87.83%	0.00%	2.00%	2.01%	0.36%	N/A	N/A	N/A	N/A	N/A	N/A
			W2	23.24	23.37	0.56%								N/A	N/A	N/A	N/A	N/A	N/A
Third		R1	W1	27.05	27.19	0.49%	0.52%	87.65%	87.65%	0.00%	1.93%	1.94%	0.39%	N/A	N/A	N/A	N/A	N/A	N/A
			W2	27.08	27.23	0.54%								N/A	N/A	N/A	N/A	N/A	N/A
29 Tottenham Street	First	R1	W1	19.43	19.56	0.66%	0.69%	95.32%	95.32%	0.00%	1.97%	1.98%	0.45%	N/A	N/A	N/A	N/A	N/A	N/A
			W2	19.58	19.72	0.72%								N/A	N/A	N/A	N/A	N/A	N/A
	Second	R1	W1	23.21	23.36	0.64%	0.68%	95.27%	95.28%	0.00%	1.80%	1.80%	0.45%	N/A	N/A	N/A	N/A	N/A	N/A
			W2	23.48	23.65	0.71%								N/A	N/A	N/A	N/A	N/A	N/A
	Third	R1	W1	26.96	27.13	0.64%	0.68%	95.12%	95.11%	-0.01%	1.66%	1.67%	0.49%	N/A	N/A	N/A	N/A	N/A	N/A
			W2	27.15	27.35	0.73%								N/A	N/A	N/A	N/A	N/A	N/A
31 Tottenham Street	First	R1	W1	19.66	19.83	0.88%	0.96%	98.91%	98.91%	0.00%	2.34%	2.35%	0.61%	N/A	N/A	N/A	N/A	N/A	N/A
			W2	19.67	19.88	1.04%								N/A	N/A	N/A	N/A	N/A	N/A
	Second	R1	W1	23.68	23.89	0.86%	0.96%	98.71%	98.76%	0.05%	2.13%	2.14%	0.65%	N/A	N/A	N/A	N/A	N/A	N/A
			W2	23.75	24.00	1.05%								N/A	N/A	N/A	N/A	N/A	N/A
	Third	R1	W1	26.83	27.07	0.88%	0.98%	97.99%	98.04%	0.05%	1.50%	1.51%	0.70%	N/A	N/A	N/A	N/A	N/A	N/A
			W2	26.82	27.11	1.07%								N/A	N/A	N/A	N/A	N/A	N/A
33 35 Tottenham Street	First	R1	W1	19.92	20.18	1.31%	1.63%	98.37%	98.41%	0.04%	2.83%	2.86%	1.03%	N/A	N/A	N/A	N/A	N/A	N/A
			W2	20.17	20.49	1.58%								N/A	N/A	N/A	N/A	N/A	N/A
			W3	20.11	20.51	2.00%								N/A	N/A	N/A	N/A	N/A	N/A
	Second	R1	W1	23.27	23.59	1.36%	1.68%	97.40%	97.43%	0.04%	1.96%	1.98%	1.13%	N/A	N/A	N/A	N/A	N/A	N/A
			W2	23.15	23.52	1.62%								N/A	N/A	N/A	N/A	N/A	N/A
			W3	22.83	23.30	2.06%								N/A	N/A	N/A	N/A	N/A	N/A
	Third	R1	W1	26.87	27.26	1.44%	1.80%	97.28%	97.32%	0.04%	1.72%	1.75%	1.25%	N/A	N/A	N/A	N/A	N/A	N/A
			W2	26.49	26.95	1.74%								N/A	N/A	N/A	N/A	N/A	N/A
			W3	25.85	26.43	2.22%								N/A	N/A	N/A	N/A	N/A	N/A
37 Tottenham Street	First	R1	W1	19.53	20.03	2.57%	2.80%	91.29%	91.30%	0.02%	2.11%	2.14%	1.71%	N/A	N/A	N/A	N/A	N/A	N/A
			W2	18.64	19.20	3.02%								N/A	N/A	N/A	N/A	N/A	N/A
	Second	R1	W1	22.19	22.82	2.84%	3.14%	89.94%	90.16%	0.25%	1.70%	1.74%	2.06%	N/A	N/A	N/A	N/A	N/A	N/A
			W2	21.08	21.80	3.45%								N/A	N/A	N/A	N/A	N/A	N/A
	Third	R1	W1	24.47	25.23	3.10%	3.47%	87.01%	87.10%	0.10%	1.08%	1.11%	2.36%	N/A	N/A	N/A	N/A	N/A	N/A
			W2	23.21	24.10	3.84%								N/A	N/A	N/A	N/A	N/A	N/A
39 Tottenham Street	First	R1	W1	15.66	16.34	4.35%	5.19%	78.65%	79.21%	0.72%	1.78%	1.83%	3.05%	N/A	N/A	N/A	N/A	N/A	N/A
			W2	13.48	14.29	6.03%								N/A	N/A	N/A	N/A	N/A	N/A
	Second	R1	W1	18.01	18.89	4.91%	5.77%	78.06%	79.01%	1.22%	1.67%	1.73%	3.43%	N/A	N/A	N/A	N/A	N/A	N/A
			W2	15.74	16.79	6.63%								N/A	N/A	N/A	N/A	N/A	N/A
	Third	R1	W1	20.24	21.35	5.51%	6.34%	72.18%	74.56%	3.30%	1.31%	1.36%	3.94%	N/A	N/A	N/A	N/A	N/A	N/A
			W2	17.98	19.27	7.17%								N/A	N/A	N/A	N/A	N/A	N/A
73 Charlotte Street	First	R1	W1	19.69	19.36	-1.64%	-1.63%	87.27%	60.73%	-30.41%	4.09%	4.06%	-0.63%	1	1	0.00%	0	0	N/A
			W2	11.35	11.17	-1.62%								10	8	-20.00%	0	0	N/A
		R2	W3	15.16	14.91	-1.60%	-1.15%	63.18%	60.83%	-3.73%	1.96%	1.95%	-0.60%	N/A	N/A	N/A	N/A	N/A	N/A
			W4	8.68	8.62	-0.70%								N/A	N/A	N/A	N/A	N/A	N/A

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

				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
73 Charlotte Street	First	R3	W5	14.47	14.49	0.11%	0.04%	89.45%	89.45%	0.00%	3.12%	3.12%	0.02%	25	25	0.00%	10	10	0.00%
			W6	24.69	24.69	0.01%								46	46	0.00%	10	10	0.00%
			W7	24.78	24.78	0.01%								45	45	0.00%	9	9	0.00%
	Second	R1	W1	25.96	25.83	-0.49%	1.04%	94.80%	91.04%	-3.96%	4.84%	4.90%	1.21%	2	2	0.00%	0	0	N/A
			W2	15.17	15.56	2.57%								15	16	6.67%	2	2	0.00%
		R2	W3	18.31	18.24	-0.41%	0.06%	75.46%	75.05%	-0.55%	2.23%	2.23%	0.02%	N/A	N/A	N/A	N/A	N/A	N/A
			W4	10.31	10.37	0.54%								N/A	N/A	N/A	N/A	N/A	N/A
			W5	16.78	16.77	-0.02%								30	30	0.00%	14	14	0.00%
		R3	W6	30.55	30.56	0.01%	0.00%	96.19%	96.19%	0.00%	3.73%	3.73%	0.00%	57	57	0.00%	18	18	0.00%
			W7	30.52	30.53	0.02%								56	56	0.00%	16	16	0.00%
			W8	33.97	34.02	0.16%								0	0	N/A	0	0	N/A
		Third	R1	W1	6.89	6.89	0.00%	2.05%	85.06%	91.43%	7.48%	4.32%	4.43%	2.51%	0	0	N/A	0	0
	W2			7.63	7.63	0.00%	0								0	N/A	0	0	N/A
	W3			33.11	33.08	-0.09%	3								3	0.00%	0	0	N/A
	W4			19.77	21.40	8.28%	26								26	0.00%	6	6	0.00%
	R2		W5	18.56	18.33	-1.28%	-1.28%	65.17%	66.06%	1.36%	1.87%	1.86%	-0.70%	20	20	0.00%	5	5	0.00%
			W6	17.49	17.34	-0.85%								N/A	N/A	N/A	N/A	N/A	N/A
	R3		W7	17.96	17.81	-0.81%	-0.50%	90.34%	90.71%	0.42%	6.28%	6.27%	-0.26%	N/A	N/A	N/A	N/A	N/A	N/A
			W8	33.97	34.02	0.16%								N/A	N/A	N/A	N/A	N/A	N/A

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