

27-32 MARKET PLACE & 173-175 MARKET PLACE, READING

DAYLIGHT & SUNLIGHT STUDY

FEBRUARY 2018



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1.0 INTRODUCTION

Delva Patman Redler LLP have been instructed by Sonic Star Properties Limited to prepare a daylight & sunlight study to assess the likely impact of the proposed redevelopment of 27-32 Market Place, & 173-175 Friar Street site by Rodic Davidson 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 PROPOSALS

The proposals comprise the demolition of the main Friar Street buildings and the construction of a ground + seven storey mixed use development to include residential accommodation from fourth floor and above. The Listed Market Place buildings are also to be refurbished to provide additional residential accommodation on first, second and third floors.

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 urban 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. The report also refers 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 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.

Principally, 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. For both daylight and where relevant sunlight as illustrated on the window location drawing dwg no': 16107/LOC/817.

5.0 ASSUMPTIONS MADE

- Access has not been sought into any of the neighbouring properties at 37-42 Market Place to verify layouts but floor plans have been obtained from planning archives illustrating the extent of the residential accommodation at first to third floors.



- All layouts adopted, therefore are subject to confirmation following access.
- Floor levels for the neighbouring properties have been assumed from reasonable assumptions made.
- The analysis has been undertaken without the benefit of a full measured site survey of the neighbouring building elevations facing the development site and so the results can only be treated as illustrative rather than definitive at this stage

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 surrounding buildings:
Rodric Davidson Architects: 3D model of existing Received 12.04.2016.
- Survey Drawing Received: Friar Street Draft A.
- 3D Z Map Model
- Proposed Buildings: Rodric Davidson Architects
Dwg No's: 0899_SK.413 Rev.D, SK.414 Reb.B & SK.415 Rev.B.

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.
Overshadowing	At least half of the amenity areas should receive at least two hours of sunlight on 21st March, or the area which can receive two hours of sun on 21st March is less than 0.8 times than the baseline figure.



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 16107/SPT/801 in Appendix A.

The site currently comprises of a 4-storey commercial building on the northern part of the site facing Friar Street. The southern part of the development site currently consists of a part constructed concrete frame with empty commercial units on the ground floor.

The results of the baseline conditions can be seen from the technical results in tabular form in Appendix B.

An analysis of the existing daylight levels enjoyed by all relevant neighbouring properties has been undertaken in order to provide a baseline against which the impacts arising from the proposed development can be assessed. The detailed results of this analysis are presented in Technical Appendix B.

9.0 RESULTS – COMPLETED DEVELOPMENT

NEIGHBOURING DAYLIGHT – VSC

The full results of the daylight analysis for the development proposals 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)
Total	26	25	1	0	0

Table 2 shows that 25 (96.2%) of the 26 neighbouring habitable rooms assessed will fully comply with the BRE Guidelines in Vertical Sky Component terms.

It is also noted that the single infringement which presents a reduction of 23.03% is only just beyond the guidance and as such represents a minor adverse effect only.

NEIGHBOURING DAYLIGHT – NO SKY LINE (NSL)

The full results of the daylight analysis for the development proposals 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)
Total	26	26	0	0	0

Table 3 shows that all 26 neighbouring habitable rooms (100%) assessed will fully comply with the BRE Guidelines in Daylight Distribution terms.

This assessment illustrates that despite the potential for reduction to the light levels received that the retained light levels will all remain very good for an urban centre such as this.

NEIGHBOURING DAYLIGHT – AVERAGE DAYLIGHT FACTOR (ADF) – SITE 1 (BUILDING E)

The full results of the daylight analysis for the development proposals 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)
Total	26	26	0	0	0

Table 4 shows that all 26 neighbouring habitable rooms (100%) assessed will fully comply with the BRE Guidelines in ADF terms.

This assessment further illustrates that despite the potential for reduction to the light levels received that the retained light levels will all remain very good for an urban centre such as this.

Overall therefore, the daylight assessments clearly illustrate that despite only a very minor isolated infringement of the VSC assessment that all neighbouring habitable rooms considered for assessment will fully and comfortably comply with the BRE Guidelines in when considered against the No Sky Line and ADF assessments illustrating that the quality, quantity and distribution of light within these rooms will remain very good as a result of the development proposals.

NEIGHBOURING SUNLIGHT – APSH

Due to the orientation of the site in relation to the 36-43 Market Place neighbour and indeed more specifically the orientation of the rear elevation of the 36-43 Market Place rear elevation itself there is no need to consider this neighbour in APSH terms as the elevation faces north of the east west line in accordance with the BRE assessment criteria.

INTERNAL DAYLIGHT ADEQUACY – AVERAGE DAYLIGHT FACTOR (ADF)

The full results of the internal daylight adequacy analysis within the habitable rooms of the development proposals are presented in Appendix C in tabular form and graphical form in drawing 16107/LOC/814 - 817. A summary of the results of the Average Daylight Factor (ADF) analysis on the relevant habitable rooms within the development proposals are presented in the Table 5 below. This identifies where habitable rooms/windows are left with adequate light.

TABLE 5: NUMBER OF ROOMS EXPERIENCING DAYLIGHT IMPACTS AS A RESULT OF THE DEVELOPMENT (ADF METHOD)

Address	Total Number of Rooms Tested	Number of Rooms Meeting BRE Guidelines for ADF	Number of Rooms Experiencing Impacts beyond BRE Guidance
Listed Building Proposed Resi	8	6	2
New Proposed Resi	86	86	0



Total	94	92	2
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Table 5 shows that 92 (97.9%) out of the 94 proposed habitable rooms assessed will fully comply with the BRE Guidelines in ADF terms.

All rooms within the new build part of the development will fully comply and the two infringements actually occur within the Listed Buildings fronting Market Place. One infringement is to a first-floor bedroom and the other is to a third floor living room.

The design team have worked to enhance the internal daylight within these proposed units as much as they feel able to whilst operating within the constraints of the Listed Building status and the restrictions that this can bring.

It is noted that all of the proposed units within the Market Place Listed building will all have dual aspect and so whilst there will be 2 rooms which are below the BRE recommendations these are within units which will provide well-lit dual aspect living accommodation.

Overall the internal daylight adequacy analysis illustrates a high level of compliance with only a small number of infringements which are primarily due to the inherent restrictions placed on the development in achieving amenity standards.

10.0 CONCLUSIONS

The site currently comprises of a 4-storey commercial building on the northern part of the site facing Friar Street. The southern part of the development site currently consists of a part constructed concrete frame with empty commercial units on the ground floor.

To assess the potential impact of the Development on daylight and sunlight on neighbouring properties a baseline assessment was undertaken. 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 daylight assessments clearly illustrate that despite only a very minor isolated infringement of the VSC assessment that all neighbouring habitable rooms considered for assessment will fully and comfortably comply with the BRE Guidelines in when considered against the No Sky Line and ADF assessments illustrating that the quality, quantity and distribution of light within these rooms will remain very good as a result of the development proposals.

Due to the orientation of the site in relation to the 36-43 Market Place neighbour and indeed more specifically the orientation of the rear elevation of the 36-43 Market Place rear elevation itself there is no need to consider this neighbour in APSH terms as the elevation faces north of the east west line in accordance with the BRE assessment criteria.

Overall the internal daylight adequacy analysis illustrates a high level of compliance with only a small number of infringements which are primarily due to the inherent restrictions placed on the development in achieving amenity standards.

Given the urban town centre location of the site, the results demonstrate a very high level of compliance of the BRE Guidance.

Therefore, the scheme proposals by Rodic Davidson Architects will generally recognise and observe the intentions of the Local Planning Policy and BRE Guidance 209 in daylight and sunlight terms.

Delva Patman Redler LLP



APPENDIX A

**LOCATION DRAWINGS
16107/SPT/804**

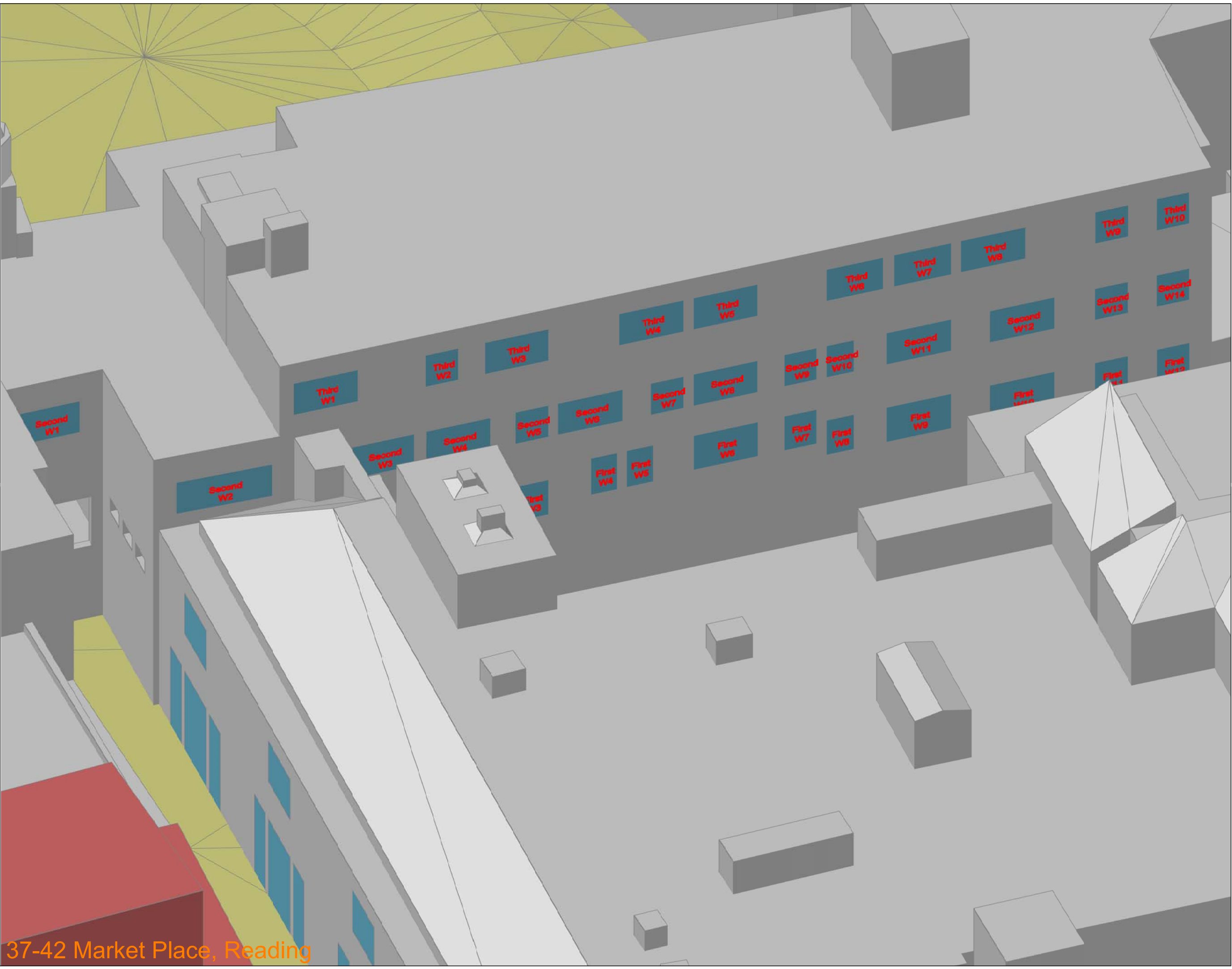


APPENDIX B

**DAYLIGHT & SUNLIGHT ANALYSIS SUMMARY TABLES
16107/LOC/818**



				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
36 - 43 Market Place	First	Bedsit/R1	W1	11.19	11.19	0.00%	0.00%	66.08%	66.08%	0.00%	0.61%	0.61%	0.00%	N/A	N/A	N/A	N/A	N/A	N/A
		Bedsit/R2	W2	18.34	18.29	-0.27%	-0.57%	79.48%	79.48%	0.00%	1.65%	1.65%	-0.36%	N/A	N/A	N/A	N/A	N/A	N/A
			W3	21.25	21.07	-0.86%								N/A	N/A	N/A	N/A	N/A	N/A
		Bedsit/R3	W4	24.16	23.98	-0.72%	-0.89%	90.53%	90.53%	0.00%	0.93%	0.92%	-0.69%	N/A	N/A	N/A	N/A	N/A	N/A
			W5	24.63	24.37	-1.05%								N/A	N/A	N/A	N/A	N/A	N/A
		Bedsit/R4	W6	25.26	24.55	-2.79%	-3.22%	91.69%	91.69%	0.00%	1.66%	1.62%	-2.22%	N/A	N/A	N/A	N/A	N/A	N/A
			W7	24.96	24.05	-3.64%								N/A	N/A	N/A	N/A	N/A	N/A
		Bedsit/R5	W8	22.99	22.14	-3.69%	-3.80%	76.61%	76.20%	-0.54%	1.68%	1.63%	-2.64%	N/A	N/A	N/A	N/A	N/A	N/A
			W9	22.11	21.24	-3.92%								N/A	N/A	N/A	N/A	N/A	N/A
		Bedroom/R6	W10	20.11	19.29	-4.10%	-4.10%	72.23%	72.23%	0.00%	1.69%	1.64%	-2.69%	N/A	N/A	N/A	N/A	N/A	N/A
	Second	LKD/R7	W11	18.68	18.17	-2.72%	-2.37%	44.79%	44.33%	-1.02%	0.92%	0.91%	-1.65%	N/A	N/A	N/A	N/A	N/A	N/A
			W12	17.49	17.14	-2.02%								N/A	N/A	N/A	N/A	N/A	N/A
		Bedroom/R1	W1	23.74	20.54	-13.48%	-13.48%	98.25%	80.25%	-18.32%	1.69%	1.53%	-9.26%	N/A	N/A	N/A	N/A	N/A	N/A
		Bedsit/R2	W2	31.04	23.89	-23.03%	-23.03%	99.93%	99.93%	0.00%	2.34%	1.93%	-17.47%	N/A	N/A	N/A	N/A	N/A	N/A
		Bedsit/R3	W3	22.93	22.03	-3.92%	-3.92%	86.01%	86.01%	0.00%	1.07%	1.04%	-2.67%	N/A	N/A	N/A	N/A	N/A	N/A
			W4	28.53	26.62	-6.69%								N/A	N/A	N/A	N/A	N/A	N/A
		Bedsit/R4	W5	30.44	29.17	-4.20%	-5.44%	99.84%	99.84%	0.00%	2.13%	2.04%	-4.55%	N/A	N/A	N/A	N/A	N/A	N/A
			W6	31.31	30.10	-3.85%								N/A	N/A	N/A	N/A	N/A	N/A
		Bedsit/R5	W7	31.78	30.43	-4.25%	-4.05%	97.78%	97.78%	0.00%	1.95%	1.89%	-3.31%	N/A	N/A	N/A	N/A	N/A	N/A
			W8	31.73	30.25	-4.67%								N/A	N/A	N/A	N/A	N/A	N/A
		Bedsit/R6	W9	31.32	29.83	-4.76%	-4.72%	96.62%	96.62%	0.00%	1.96%	1.88%	-3.86%	N/A	N/A	N/A	N/A	N/A	N/A
			W10	31.01	29.55	-4.70%								N/A	N/A	N/A	N/A	N/A	N/A
		Bedsit/R7	W11	30.32	28.98	-4.41%	-4.56%	95.60%	95.60%	0.00%	2.07%	1.99%	-3.54%	N/A	N/A	N/A	N/A	N/A	N/A
			W12	29.44	28.26	-4.00%								N/A	N/A	N/A	N/A	N/A	N/A
		Bedroom/R8	W12	29.44	28.26	-4.00%	-4.00%	99.25%	99.25%	0.00%	2.15%	2.08%	-3.06%	N/A	N/A	N/A	N/A	N/A	N/A
		LKD/R9	W13	28.52	27.48	-3.64%	-3.48%	86.19%	86.05%	-0.16%	1.21%	1.18%	-2.60%	N/A	N/A	N/A	N/A	N/A	N/A
			W14	27.71	26.80	-3.32%								N/A	N/A	N/A	N/A	N/A	N/A
	Third	LKD/R1	W1	36.37	31.46	-13.50%	-13.50%	96.31%	95.08%	-1.27%	2.16%	1.90%	-12.23%	N/A	N/A	N/A	N/A	N/A	N/A
		Bedroom/R2	W2	36.62	32.81	-10.43%	-10.43%	98.33%	98.33%	0.00%	1.58%	1.42%	-9.74%	N/A	N/A	N/A	N/A	N/A	N/A
		Bedroom/R3	W3	36.63	33.53	-8.44%	-8.44%	99.66%	99.66%	0.00%	3.11%	2.86%	-7.93%	N/A	N/A	N/A	N/A	N/A	N/A
		LKD/R4	W4	36.49	34.18	-6.34%	-6.34%	96.10%	96.10%	0.00%	1.90%	1.79%	-5.99%	N/A	N/A	N/A	N/A	N/A	N/A
		LKD/R5	W5	36.37	34.34	-5.59%	-5.59%	95.84%	95.84%	0.00%	1.93%	1.83%	-5.27%	N/A	N/A	N/A	N/A	N/A	N/A
		Bedroom/R6	W6	36.06	34.46	-4.45%	-4.45%	99.71%	99.71%	0.00%	3.04%	2.91%	-4.21%	N/A	N/A	N/A	N/A	N/A	N/A
		Bedroom/R7	W7	35.66	34.26	-3.94%	-3.94%	99.78%	99.78%	0.00%	3.06%	2.95%	-3.67%	N/A	N/A	N/A	N/A	N/A	N/A
		LKD/R8	W8	35.25	34.02	-3.50%	-3.50%	89.46%	89.46%	0.00%	2.14%	2.07%	-3.26%	N/A	N/A	N/A	N/A	N/A	N/A
		Bedroom/R9	W9	34.31	33.32	-2.89%	-2.89%	96.62%	96.62%	0.00%	1.71%	1.67%	-2.65%	N/A	N/A	N/A	N/A	N/A	N/A
		LKD/R10	W10	33.62	32.74	-2.63%	-2.63%	93.39%	93.39%	0.00%	1.14%	1.11%	-2.31%	N/A	N/A	N/A	N/A	N/A	N/A



37-42 Market Place, Reading

NO DIMENSIONS TO BE SCALED FROM THIS DRAWING:

Existing

Proposed

Surrounding

SOURCE DATA

Drawings Used:

Existing:

Surveyors:

Dwg no's:

- Friar Street Draft A

Surrounding buildings:

Rodic Davidson Architects:

Model:

- Model Showing Existing(Received.12.04.16):

Rodic Davidson Architects:

Dwg No's: 2017_0810 Height Reduced

(Received 10.08.2017)

- Section AA

2017_0804_Plans

Proposed Scheme:

Rodic Davidson Architects:

Dwg No's: 0899 - SK.413 Rev.D

0899 - SK.414 Rev. B

0899 - SK.415 Rev.B

NOTES

All heights are measured in mm AOD.

Site Plan

REV	Description	Drawn	Ch'kd	Date

DELVA PATMAN REDLER

Chartered Surveyors

Thavies Inn House

3-4 Holborn Circus

London EC1N 2HA

020 7936 3668

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The Plaza

100 Old Hall Street

Liverpool L3 9QU

0151 242 0980

info@delvapatmanredler.co.uk

TITLE:

27-32 MARKET PLACE, &

173-175 FRIAR STREET,

READING, RG1 2EF.

-

AUGUST 2017 ANALYSIS

DRAWING:

37-42 Market Place, Reading

Neighbouring Daylight & Sunlight

Key Window Locations

-

-

-

DRAWN: SG	JOB NO:
SCALE: NTS	16107
DATE: 19/02/2018	
DWG NO:	REV:
LOC/818	-

APPENDIX C

**INTERNAL DAYLIGHT ADEQUACY ANALYSIS SUMMARY TABLES
161707/LOC/814 - 817**



Dwg No	Address	Floor Level	Room Name	Window ID	ADF (Room) %age	Pass Rate %age	Condition
-	173-175 Friar Street	Fourth	Living Room/R1	W1	5.99%	1.50%	Pass
-				W2			
-				W3			
-				W94			
-				W95			
-				W96			
-			Bedroom/R2	W4	3.59%	1.00%	Pass
-			Bedroom/R3	W5	3.65%	1.00%	Pass
-				W6			
-			Bedroom/R4	W7	2.97%	1.00%	Pass
-				W8			
-			Bedroom/R5	W9	2.70%	1.00%	Pass
-				W10			
-			Living Room/R6	W11	7.23%	1.50%	Pass
-				W12			
-				W13			
-				W14			
-				W15			
-				W16			
-			Living Room/R7	W17	6.39%	1.50%	Pass
-				W18			
-				W19			
-				W20			
-				W21			
-				W22			
-			Bedroom/R8	W23	3.27%	1.00%	Pass
-				W24			
-				W25			
-			Bedroom/R9	W26	1.39%	1.00%	Pass
-				W27			
-			Living Room/R10	W28	3.63%	1.50%	Pass
-				W29			
-				W30			
-				W31			
-			Bedroom/R11	W32	4.41%	1.00%	Pass
-				W33			
-			Living Room/R12	W34	4.96%	1.50%	Pass
-				W35			
-				W36			
-				W37			
-			Bedroom/R13	W38	3.30%	1.00%	Pass
-				W39			
-			Bedroom/R14	W40	3.11%	1.00%	Pass
-				W41			
-			Living Room/R15	W43	4.45%	1.50%	Pass
-				W44			
-				W45			
-				W46			

Dwg No	Address	Floor Level	Room Name	Window ID	ADF (Room) %age	Pass Rate %age	Condition
-	173-175 Friar Street	Fourth	Living Room/R16	W47	7.46%	1.50%	Pass
-				W48			
-				W49			
-				W50			
-				W51			
-				W52			
-			Bedroom/R17	W53	3.07%	1.00%	Pass
-				W54			
-			Living Room/R18	W55	5.25%	1.50%	Pass
-				W56			
-				W57			
-				W58			
-			Bedroom/R19	W59	4.47%	1.00%	Pass
-				W60			
-				W61			
-			Bedroom/R20	W62	4.73%	1.00%	Pass
-				W63			
-			Living Room/R21	W64	6.82%	1.50%	Pass
-				W65			
-				W66			
-				W67			
-				W68			
-				W69			
-			Living Room/R22	W70	5.62%	1.50%	Pass
-				W71			
-				W72			
-				W73			
-			Bedroom/R23	W74	4.60%	1.00%	Pass
-				W75			
-			Living Room/R24	W76	4.51%	1.50%	Pass
-				W77			
-				W78			
-				W79			
-			Bedroom/R25	W80	6.38%	1.00%	Pass
-				W81			
-			Bedroom/R26	W82	5.62%	1.00%	Pass
-				W83			
-			Living Room/R27	W84	7.59%	1.50%	Pass
-				W85			
-				W86			
-			Bedroom/R28	W87	3.69%	1.00%	Pass
-				W88			
-			Bedroom/R29	W89	2.99%	1.00%	Pass
-				W90			
-			Living Room/R30	W91	5.72%	1.50%	Pass
-				W92			
-				W93			
-				W94			
-		Fifth	Living Room/R1	W1	6.86%	1.50%	Pass
-				W2			
-				W3			
-				W70			
-				W71			

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

Dwg No	Address	Floor Level	Room Name	Window ID	ADF (Room) %age	Pass Rate %age	Condition
-	173-175 Friar Street	Fifth	Living Room/R2	W4	5.28%	1.50%	Pass
-				W5			
-				W6			
-				W7			
-				W8			
-			Bedroom/R3	W9	5.37%	1.00%	Pass
-				W10			
-			Bedroom/R4	W11	3.01%	1.00%	Pass
-				W12			
-			Bedroom/R5	W13	4.59%	1.00%	Pass
-				W14			
-			Living Room/R6	W15	4.64%	1.50%	Pass
-				W16			
-				W17			
-				W18			
-			Living Room/R7	W19	5.22%	1.50%	Pass
-				W20			
-				W21			
-				W22			
-			Bedroom/R8	W23	3.17%	1.00%	Pass
-				W24			
-			Bedroom/R9	W25	3.00%	1.00%	Pass
-				W26			
-			Living Room/R10	W27	3.98%	1.50%	Pass
-				W28			
-			Living Room/R11	W29	8.35%	1.50%	Pass
-				W30			
-				W31			
-				W32			
-				W33			
-				W34			
-			Bedroom/R12	W35	3.19%	1.00%	Pass
-				W36			
-			Living Room/R13	W37	4.51%	1.50%	Pass
-				W38			
-				W39			
-			Bedroom/R14	W40	4.37%	1.00%	Pass
-				W41			
-			Bedroom/R15	W42	4.42%	1.00%	Pass
-				W43			
-			Living Room/R16	W44	6.67%	1.50%	Pass
-				W45			
-				W46			
-				W47			
-				W48			
-				W49			
-			Living Room/R17	W50	5.84%	1.50%	Pass
-				W51			
-				W52			
-				W53			
-				W54			
-				W55			

Dwg No	Address	Floor Level	Room Name	Window ID	ADF (Room) %age	Pass Rate %age	Condition
-	173-175 Friar Street	Fifth	Bedroom/R18	W56	4.47%	1.00%	Pass
-				W57			
-			Living Room/R19	W58	4.74%	1.50%	Pass
-				W59			
-				W60			
-			Bedroom/R20	W61	5.88%	1.00%	Pass
-				W62			
-			Bedroom/R21	W63	5.16%	1.00%	Pass
-				W64			
-			Living Room/R22	W65	7.82%	1.50%	Pass
-				W66			
-				W67			
-			Bedroom/R23	W68	3.43%	1.00%	Pass
-				W69			
-		Sixth	Living Room/R1	W1	6.26%	1.50%	Pass
-				W2			
-				W46			
-				W47			
-			Bedroom/R2	W3	2.89%	1.00%	Pass
-			Living Room/R3	W4	6.61%	1.50%	Pass
-				W5			
-				W6			
-				W7			
-				W8			
-			Bedroom/R4	W9	3.57%	1.00%	Pass
-				W10			
-				W11			
-				W12			
-			Living Room/R5	W13	3.32%	1.50%	Pass
-				W14			
-			Bedroom/R6	W15	5.96%	1.00%	Pass
-				W16			
-			Bedroom/R7	W17	3.75%	1.00%	Pass
-				W19			
-			Bedroom/R8	W20	3.16%	1.00%	Pass
-				W21			
-			Living Room/R9	W22	5.29%	1.50%	Pass
-				W23			
-				W24			
-				W25			
-			Bedroom/R10	W26	2.65%	1.00%	Pass
-				W27			
-				W28			
-				W29			
-				W30			
-			Bedroom/R12	W31	2.04%	1.00%	Pass
-				W32			
-			Living Room/R13	W33	3.93%	1.50%	Pass
-				W34			

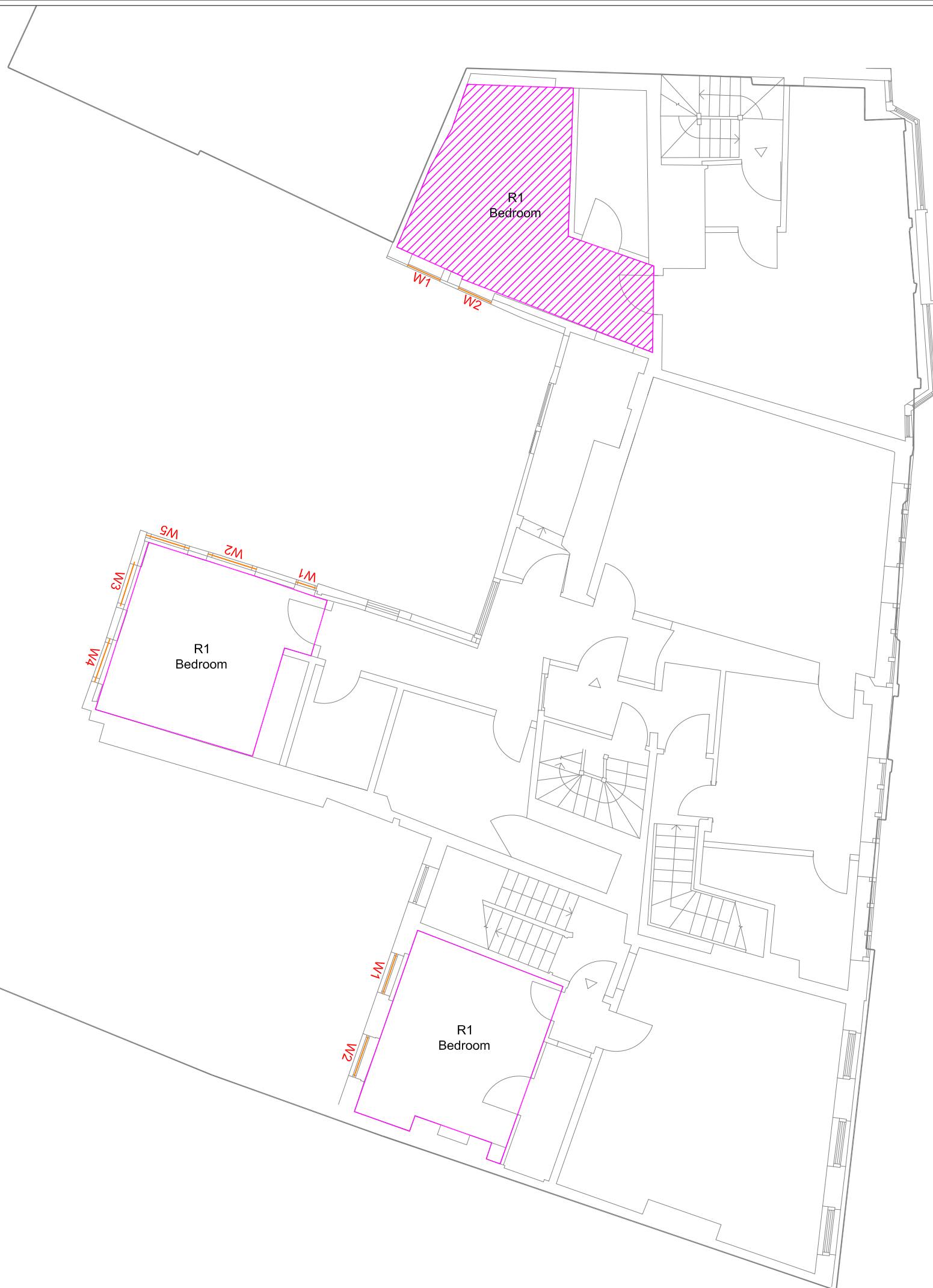
Dwg No	Address	Floor Level	Room Name	Window ID	ADF (Room) %age	Pass Rate %age	Condition
-	173-175 Friar Street	Sixth	Living Room/R16	W35	5.34%	1.50%	Pass
-				W36			
-				W37			
-				W38			
-			Bedroom/R17	W39	3.24%	1.00%	Pass
-			Bedroom/R18	W40	3.23%	1.00%	Pass
-			Bedroom/R19	W41	3.87%	1.00%	Pass
-				W42			
-			Bedroom/R20	W43	3.25%	1.00%	Pass
-				W44			
-			Bedroom/R21	W45	3.29%	1.00%	Pass
-		Seventh	Bedroom/R1	W1	6.88%	1.00%	Pass
-				W30			
-				W31			
-				W32			
-			Bedroom/R2	W2	2.32%	1.00%	Pass
-				W3			
-				W4			
-				W5			
-				W6			
-			Living Room/R3	W7	7.34%	1.50%	Pass
-				W8			
-				W9			
-				W10			
-				W11			
-			Living Room/R4	W12	6.74%	1.50%	Pass
-				W13			
-				W14			
-			Bedroom/R5	W15	7.38%	1.50%	Pass
-				W16			
-				W17			
-				W18			
-				W19			
-			Bedroom/R6	W20	5.31%	1.00%	Pass
-				W21			
-				W22			
-			Living Room/R7	W23	5.62%	1.50%	Pass
-				W24			
-				W25			
-				W26			
-			Bedroom/R8	W27	3.25%	1.00%	Pass
-				W28			
-				W29			

Dwg No	Address	Floor Level	Room Name	Window ID	ADF (Room) %age	Pass Rate %age	Condition

Dwg No	Address	Floor Level	Room Name	Window ID	ADF (Room) %age	Pass Rate %age	Condition
-	27-28 MArket Place	First	Bedroom/R1	W1	0.67%	1.00%	Fail
-				W2			
-		Second	Bedroom/R1	W1	1.57%	1.00%	Pass
-				W2			
-				W3			
-	29-31 Market Place	First	Bedroom/R1	W1	3.41%	1.00%	Pass
-				W2			
-				W3			
-				W4			
-				W5			
-		Second	Living Room/R1	W1	1.79%	1.50%	Pass
-				W2			
-				W3			
-				W4			
-		Third	Living Room/R1	W1	1.30%	1.50%	Fail
-				W2			
-				W3			
-				W4			
-				W5			
-	32 Market Place	First	Bedroom/R1	W1	1.29%	1.00%	Pass
-				W2			
-		Second	Bedroom/R1	W1	1.92%	1.00%	Pass
-				W2			
-		Third	Bedroom/R1	W1	2.23%	1.00%	Pass
-				W2			

Dwg No	Address	Floor Level	Room Name	Window ID	ADF (Room) %age	Pass Rate %age	Condition

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



N
Indicative

NO DIMENSIONS TO BE SCALED
FROM THIS DRAWING:

Existing
Proposed
Surrounding

W1/08 Window Tested Daylight only

W1/08 Window Tested Daylight & Sunlight

SOURCE DATA

Drawings Used:
Existing:
Surveyors:
Dwg no's:
- Friar Street Draft A

Surrounding buildings:
Rodric Davidson Architects:
Model:
- Model Showing Existing(Received,12.04.16):
Rodric Davidson Architects:
Dwg No's: 2017_0810 Height Reduced
(Received 10.08.2017)
- Section AA
2017_0804_Plans

Proposed Scheme:
Rodric Davidson Architects:
Dwg No's: 0899 - SK,413 Rev.D
0899 - SK,414 Rev.B
0899 - SK,415 Rev.B

NOTES

Cross Hatched Rooms do not comply with BS 8206-2:2008.

Site Plan



DELVA PATMAN REDLER
Chartered Surveyors



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TITLE: 27-32 MARKET PLACE and
173-175 FRIAR STREET,
READING, RG1 2EF.

DRAWING:
27 - 32 Market Place
Daylight and Sunlight Analysis
Key Window Locations
-
-
-
-

DRAWN: EJ	JOB NO: 16107
SCALE: 1:100@A3	
DATE: 05/02/2018	
DWG NO: LOC/814	REV: -



 Indicative						NO DIMENSIONS TO BE SCALED FROM THIS DRAWING:															
Existing Proposed Surrounding <td colspan="3" rowspan="2"> W1108 Window Tested Daylight only W1108 Window Tested Daylight & Sunlight </td> <td colspan="6"></td>			W1108 Window Tested Daylight only W1108 Window Tested Daylight & Sunlight																		
SOURCE DATA																					
Drawings Used: Existing: Surveyors: Dwg no's: - Friar Street Draft A																					
Surrounding buildings: Rodric Davidson Architects: Model: - Model Showing Existing(Received.12.04.16): Rodric Davidson Architects: Dwg No's: 2017_0810 Height Reduced (Received 10.08.2017) - Section AA 2017_0804_Plans																					
Proposed Scheme: Rodric Davidson Architects: Dwg No's: 0899 - SK.413 Rev.D 0899 - SK.414 Rev.B 0899 - SK.415 Rev.B																					
NOTES																					
Cross Hatched Rooms do not comply with BS 8206-2:2008.																					
Site Plan																					
<table border="1" style="width: 100%; border-collapse: collapse;"><tr><td style="width: 5%;">REV</td><td style="width: 45%;">Description</td><td style="width: 15%;">Drawn</td><td style="width: 10%;">Ch'd</td><td style="width: 10%;">Date</td></tr><tr><td>A</td><td>Amendments to windows</td><td>MJ</td><td>SG</td><td>17/08/2017</td></tr></table>												REV	Description	Drawn	Ch'd	Date	A	Amendments to windows	MJ	SG	17/08/2017
REV	Description	Drawn	Ch'd	Date																	
A	Amendments to windows	MJ	SG	17/08/2017																	
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 9QU 0151 242 0980 Info@delvapatmanredler.co.uk															
TITLE: 27-32 MARKET PLACE and 173-175 FRIAR STREET, READING, RG1 2EF. - FEBRUARY 2018 ANALYSIS																					
DRAWING: 27 - 32 Market Place Daylight and Sunlight Analysis Key Window Locations - - - -																					
DRAWN: EJ				JOB NO:																	
SCALE: 1:100/@A3				16107																	
DATE: 05/02/2018																					
DWG NO:								REV:													
LOC/816								-													