

REPORT

41 JUDD STREET
LONDON WC1

DAYLIGHT & SUNLIGHT

BVP

BROOKE VINCENT + PARTNERS



RICS

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Osel Architecture
26 Oldbury Place
London W1U 5PR

Our Ref: JC/SAU/9631

Date: 16th November 2011

Dear Sirs

41 Judd Street, London WC1

Daylight & Sunlight

We are instructed to report upon the daylight and sunlight aspects of this Planning Application, in relation to neighbouring properties and the proposed accommodation.

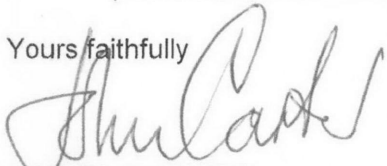
We shall also be commenting on the more subjective headings of Sense of Enclosure, Privacy & Overlooking.

Our report is based upon the scheme drawings prepared by Osel Architecture, site surveys and photographs, plus daylight and sunlight studies.

1.0 SUMMARY

- 1.1 This report has been drafted by reference to the Building Research Establishment (BRE) publication, "*Site layout planning for daylight and sunlight. A guide to good practice*", and the requirements of the London Borough of Camden's Unitary Development Plan (UDP).
- 1.2 The studies contained in this report confirm there would be no adverse affect to the daylight and sunlight received by neighbouring residential buildings.
- 1.3 Similarly daylighting to the proposed accommodation and that which already exists at 41 Judd Street would satisfy BRE criteria.
- 1.4 The evidence from these daylighting results and the evidence on site, supports our opinion that this proposal will not be the cause of an increased sense of enclosure, create a loss of privacy or overlooking.
- 1.5 With BRE recommendations satisfied in all respects, the same can be said for the relevant policies of the London Borough of Camden's UDP.

Yours faithfully



John Carter FRICS
for BROOKE VINCENT + PARTNERS

email: john.carter@brooke-vincent.co.uk

2.0 **INTRODUCTION**

- 2.1 This report is based upon the application drawings of Osel Architecture.
- 2.2 The London Borough of Camden's Local Development Framework (LDF), November 2010, sets out the key elements of the council's vision for the borough through its Core Strategy, whilst detailed planning criteria are defined through its Development Policies.

Core Strategy

POLICY CS5 - Managing the impact of growth and development

The second part of this policy confirms:

"The Council will protect the amenity of Camden's residents and those working in and visiting the borough by:

- (e) *Making sure that the impact of developments on their occupiers and neighbours is fully considered".*

In the explanatory notes following this policy item 5.8 confirms... *"We will expect development to avoid harmful effects on the amenity of existing and future occupiers and nearby properties or, where this is not possible, to take appropriate measures to minimise potential negative impacts".*

Development Policies

POLICY DP 26 - Managing the impact of development and occupiers and neighbours

"The Council protect the quality of life of occupiers and neighbours by only granting permission for development that does not cause harm to amenity. The factors we will consider include;

- (b) *Overshadowing and outlook.*
- (c) *Sunlight, daylight and artificial light levels".*

Thereafter, explanatory comment 6.3 confirms the Council will take into account the standards recommended in the British Research Establishment's (BRE report: Site layout planning for daylight and sunlight. A guide to good practice. 1991).

- 2.3 All calculations and considerations within this report are based upon the Building Research Establishment (BRE) publication *"Site Layout Planning for Daylight and Sunlight. A guide to good practice."* However the 1991 guide has just been superseded and it is the 2011 guidance that has been used for the purposes of this report. This Guide does not contain mandatory requirements, but in the Introduction provides a full explanation of its purpose:

"The Guide is intended for building designers and their clients, consultants and planning officials."

"The advice given here is not mandatory and the guide should not be seen as an instrument of planning policy."

"It aims to help rather than constrain the designer."

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

"In special circumstances the developer or planning authority may wish to use different target levels. For example, in an historic city centre, a high degree of obstruction may be unavoidable if new developments are to match the height and proportions of existing buildings."

2.4 Reference is made in the BRE report to various methods of assessing the effect a development will have on diffused daylight.

2.5 The simplest methods are not appropriate in an urban environment, where the built form is invariably complex. Vertical Sky Component (VSC) is the calculation most readily adopted, as the principles of calculation can be established by relating the location of any particular window to the existing and proposed, built environment.

2.6 The BRE Guide states *"If any part of a new building or extension, measured in a vertical section perpendicular to a main window wall of an existing building, from the centre of the lowest window, subtends an angle of more than 25° to the horizontal, then the diffused daylighting of the existing building may be adversely affected."*

This will be the case if the Vertical Sky Component measured at the centre of an existing main window is less than 27% and less than 0.8 times its former value".

2.7 BRE also recommends consideration is given to Daylight Distribution (DD) within the rooms that are being tested for VSC at the face of the window. BRE recommends that Daylight Distribution should not be 0.8 the former value. Almost inevitably, access is not readily available to neighbouring properties and that proved to be the case in this instance.

2.8 The measurement of daylight within proposed accommodation is based upon a more comprehensive calculation known as Average Daylight Factor (ADF). This demands the input of more information, of a sort that is readily available in relation to new design.

2.9 ADF starts with the VSC calculation but, at the rear of the window plane, in order to confirm the angle of obstruction and visible sky. It then considers the area of glass receiving light and the transmittance qualities of that glass. This is then related to the surface area and reflectance value of the room beyond. The computed result is compared to the room's use.

2.10 With the rooms complemented by artificial lighting, the BRE guidance seeks ADFs at, or in excess, of:

2%	Kitchen
1.5%	Living room
1%	Bedroom

3.0 DAYLIGHT

3.1 Generally

- 3.1.1 Daylight is not specific to a particular direction, as it is received from the dome of the sky. It is therefore necessary to consider all neighbouring residential property facing the planning application site.
- 3.1.2 We define below the properties that neighbour the site and refer to the location of the windows we have further considered by calculating VSC. Each window is defined by a number, which is highlighted on the location plan and model in Appendix 1, and also by its floor level, when referring to the results.
- 3.1.3 The analysis and subsequent results, detailed in Appendix 2, are produced by the application of our specialist software on the three dimensional model included in Appendix 1 and based upon survey information and site inspection, supplemented by photographs.
- 3.1.4 In the model, neighbouring properties and the existing property at 41 Judd Street are represented by green and the proposed development in magenta.

Daylight To Neighbouring Properties

3.2 North

- 3.2.1 Immediately to the north of the site is Macnaghten House. This fronts Judd Street but then returns, in a westward direction, and it is this arm of the building that has windows facing directly towards the proposed extension. This is detailed in our model as Building 1.

We have analysed the vertical file of windows closest to the proposed extension, W1 and W2, together with the window file on a return elevation, that faces towards the proposed extension, window W3.

- 3.2.2 The results are detailed in Appendix 1 and confirm that even at the lowest residential level, there would be almost no variation in the daylight received. However VSC is below the BRE benchmark figure of 27% in both the existing and proposed conditions. When this occurs BRE provides the advice reiterated in item 2.6. This clearly states that an adverse affect would only occur if the VSC were not only less than 27% but also less than 0.8 the former (existing) value.
- 3.2.3 With values of between 0.95 and 0.98 at the lowest residential level and rising to 1.0, no variation, at third and fourth floor levels, there would be no adverse affect to these or neighbouring windows.

- 3.2.4 We have not analysed windows serving the rear parts of Macnaghten House, which are in the same plane as the rear parts of 41 Judd Street. Their view of the proposed extension would be masked by the fire escape which rises immediately adjacent to the line of boundary between the two buildings. This is not detailed in our model but can clearly be seen on the architect's Photosheet 1. See Appendix 3.
- 3.2.5 There are also windows in a recess at the junction of the two arms of Macnaghten House. These are just visible in the bottom right hand photograph of Appendix 3. They are untypical of windows that serve the remaining elevation and this is because they do not serve habitable space and there is no BRE criteria to consider.
- 3.2.6 The top photograph in Appendix 3 also defines the upper ground floor level windows of Macnaghten House. These serve a canteen or dining area and continue around the bay that can be seen. The space is not only non-habitable but also receives daylight from many directions.

3.3 East

- 3.3.1 There are no neighbouring properties to the east of this extension.

3.4 South

- 3.4.1 Immediately to the south of the extension is a continuation of 41 Judd Street. Neighbouring the return along Tavistock Place and to the south west of the proposed extension is Knollys House. This is defined as Building 2 on our model and we have again considered the two closest windows with a view of the proposed extension.
- 3.4.2 The results in Appendix 2 confirm that once again both existing and proposed VSC would be below the benchmark figure of 27%. The relationship between the proposed and existing value would remain extremely high and the minute variation that would occur, would not be discernible to the occupant. There would be no adverse affect.

3.5 West

- 3.5.1 To the west of the proposed extension is a public highway and no further residential buildings to consider.

Daylight To Proposed Accommodation

3.6 Studio Apartments

- 3.6.1 The results in Appendix 4 confirm that each proposed studio would receive daylight that satisfies BRE's criteria. The second floor value of 1.48% when compared to the required value of 1.5% the difference is diminimus. The fourth floor ADF is lower than the third floor but is still satisfactory, due to the smaller windows for obvious architectural reasons.

3.7 **DAYLIGHT SUMMARY**

3.7.1 BRE's recommendations for daylighting to neighbouring properties and the proposed accommodation are fully satisfied. There would be no adverse affect to neighbouring properties and appropriate levels of daylight would be provided throughout the proposed accommodation.

3.7.2 Item 2.7 makes reference to BRE's recommendation with regard to daylight distribution. This requires access to the neighbouring properties, which is generally not available and has not been gained in relation to this matter. This does not devalue our conclusion. The variation in proposed VSC, daylight at the face of the window, is only fractionally different from the existing condition and that would translate to daylight distribution within the room. There would be no adverse affect.

3.7.3 We also take this opportunity of confirming that there would be no adverse affect on existing accommodation within 41 Judd Street. We refer you to the typical floor plan in Appendix 5. It can be seen that;

- The windows immediately neighbouring the proposed studio apartments serve a corridor, a non-habitable space, and will either be blocked up or continued to serve that purposes. There is no BRE criteria to consider.
- The accommodation in the adjoining extension and defined as "existing studio apartment" has windows in two elevations, with two windows in the elevation facing away from the proposed development towards a relatively open vista. These windows remain unaffected and there would be no adverse affect.
- Beyond this rear extension, existing accommodation would not have sight of the proposed studio apartments and there is nothing further to consider.

4.0 **SUNLIGHT**

4.1 **Generally**

4.1.1 The BRE *Guide to Good Practice* confirms:

- (i) Sunlight is only relevant to neighbouring residential windows which have a view of the proposed development and face within 90° of south, i.e. south of the east-west axis.
- (ii) If any part of a new development subtends an angle of more than 25° to the horizontal measured from the centre of the main living room window, a vertical section perpendicular to the window, then the sunlighting in the existing dwelling may be adversely affected.
- (iii) Similarly, the sunlighting of the existing dwelling may be adversely affected if the centre of the window receives less than 25% of the annual probable sunlight hours, of which 5% of the annual total should be received between 21st September and 21st March (winter) and less than 0.8 times its former sunlight hours during either period.
- (iv) Kitchens and bedrooms are less important, although care should be taken not to block too much sun.

4.2 **Sunlight Availability To Neighbouring Residential Properties**

4.2.1 Only the windows in McNaghten House (Building B1) face within 90° of south and even then only vertical window faces W1 and W2. The results in the two extreme right hand columns of Appendix 2 confirm that there would be almost no variation whatsoever and BRE criteria is automatically satisfied. There would be no adverse affect.

4.3 **Sunlight To Proposed Accommodation**

4.3.1 The results in Appendix 4 (second sheet) confirm that one of the two windows will satisfy BRE criteria at each level. An unusually good result in central London as it confirms that each room would benefit from appropriate levels of sunlight availability.

4.4 **SUNLIGHT SUMMARY**

4.4.1 Sunlight to neighbouring residential windows that face within 90° of south would retain sunlight availability that is almost exactly the same as exists. BRE criteria is satisfied.

4.4.2 Sunlight to proposed accommodation would also satisfy BRE criteria.

5. **SENSE OF ENCLOSURE, OVERLOOKING & PRIVACY**

5.1 The BRE guide to good practice does refer to both "enclosure" and "privacy" but not in the sense these matters need to be considered in an existing and dense, urban environment.

5.2 It does however relate the quality of daylighting to the sense of enclosure. Our results have confirmed that there will be almost no variation whatsoever in daylighting conditions. This confirms the view we took when making our site inspection, that this proposal does not create an adverse sense of enclosure. The outlook from neighbouring windows would barely vary, especially as the existing outlook is already highly complex.

5.3 Overlooking and privacy are factors that relate to the location of new windows. Within 41 Judd Street there can be no interaction between existing and proposed accommodation because the proposed apartments are set behind an extended back addition. This is defined on the typical layout plan in Appendix 5 as an Existing Studio Apartment. There is a single window at each level that allows a theoretical view between existing and proposed studio apartments but in fact it is an unrealistic proposition. The narrowness of the relevant windows and the thickness of the reveals prevents the occupants from feeling there is any lack of privacy.

5.4 Similarly the new studio apartments are set almost at a right angle to the rear wing of Macnaghten House (Building 1) and combined with the distance between the windows, privacy is not a relevant issue. All other residential windows are far too distant.

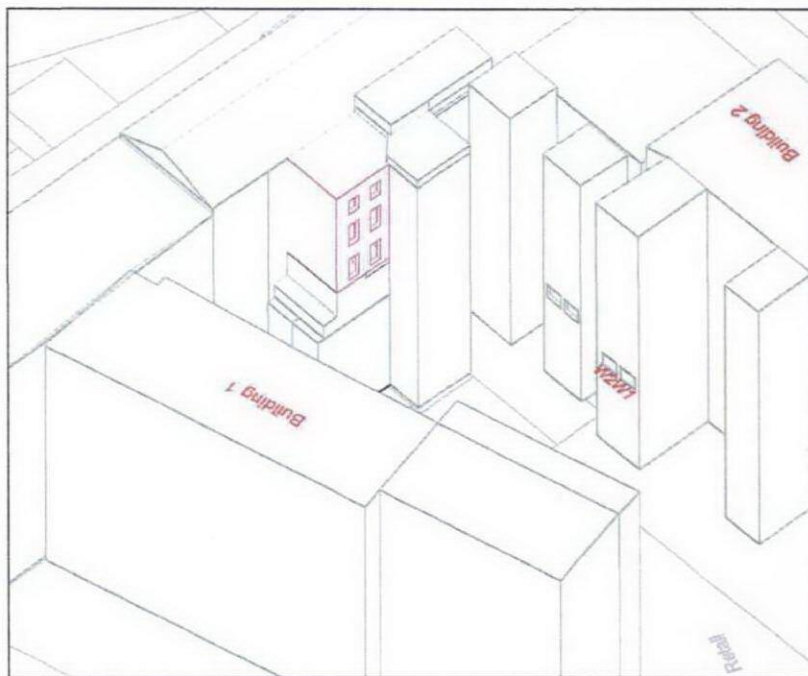
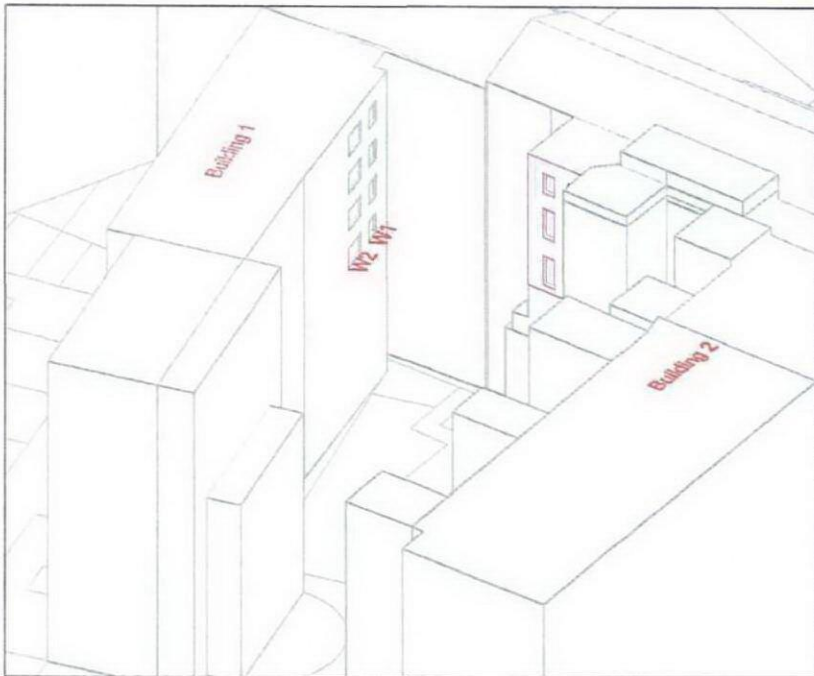
5.5 The proposed studio windows have a view along a public highway and have no direct view into amenity space. Overlooking is not a relevant issue.

5.6 **Sense of Enclosure, Overshadowing & Privacy Summary**

5.6.1 The conclusion we reached on site is supported by a review of our daylighting results, the architects drawings and the location of existing accommodation/amenity spaces. This proposal does not create an increased sense of enclosure. Neither does it compromise privacy. Overlooking is not a relevant issue.

APPENDIX 1

**LOCATION PLAN
AND
CAD MODEL**



LEGEND

North

Existing buildings

Existing buildings to be demolished

Proposed new buildings

SOURCES OF DATA

Rev.	Date	Description

Brooke Vincent & Partners
 Chartered Building Surveyors
 Enterprise House The Crest London NW4 2HW
 Tel: 020 8202 1013 Fax: 020 8202 9498
 E-mail: info@brooke-vincent.co.uk

CLIENT / ARCHITECT:
 Osel Architecture

PROJECT:
 41 Judd Street
 WC1

DRAWING:
 Plan and Perspective
 Existing and Proposed

DRAWN: BS	PROJECT NO:
SCALE: NTS	9631
DATE: 11.07.2011	
DRAWING NO: 9631-01	REV: A

APPENDIX 2

**DAYLIGHT & SUNLIGHT -
NEIGHBOURING PROPERTIES**

41 Judd Street (D/S) 16.11.11

Floor Ref.	Window Ref.	VSC	Proposed / Existing	Available Sunlight Hours	
				Annual %	Winter %

Building 1

First	W1	Existing	14.72	0.94	39	9
		Proposed	13.90		38	9
First	W2	Existing	17.62	0.95	44	11
		Proposed	16.79		41	11
First	W3	Existing	13.34	0.98	N/A	N/A
		Proposed	13.05		N/A	N/A
Second	W1	Existing	18.27	0.96	46	14
		Proposed	17.58		44	12
Second	W2	Existing	21.75	0.97	52	15
		Proposed	21.04		51	15
Second	W3	Existing	16.05	0.99	N/A	N/A
		Proposed	15.85		N/A	N/A
Third	W1	Existing	23.31	0.98	54	18
		Proposed	22.91		54	18
Third	W2	Existing	27.13	0.98	64	21
		Proposed	26.72		63	20
Third	W3	Existing	19.42	1.00	N/A	N/A
		Proposed	19.35		N/A	N/A
Fourth	W1	Existing	31.49	1.00	72	25
		Proposed	31.42		72	25
Fourth	W2	Existing	33.50	1.00	74	24
		Proposed	33.41		74	24
Fourth	W3	Existing	25.72	1.00	N/A	N/A
		Proposed	25.72		N/A	N/A

Building 2

First	W1	Existing	20.45	0.99	N/A	N/A
		Proposed	20.27		N/A	N/A
First	W2	Existing	20.01	0.99	N/A	N/A
		Proposed	19.80		N/A	N/A

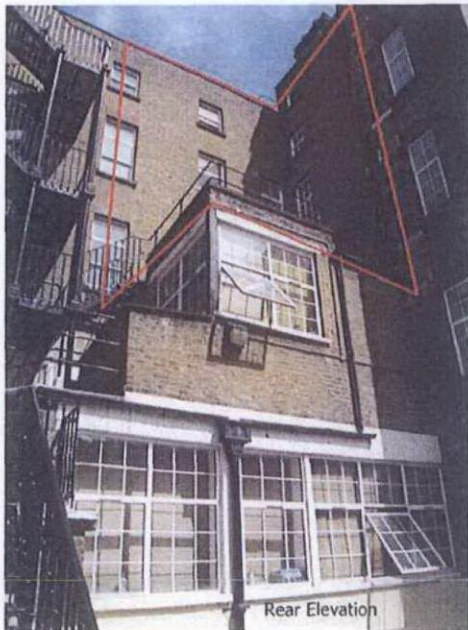
APPENDIX 3

PHOTO SHEET



View down
onto flat roof

Site of
rear extension



Rear Elevation



Rear Elevation

Photosheet 1
New Rear Extension
Albany House
41 Judd Street
London WC1H 9QS

APPENDIX 4

**DAYLIGHT & SUNLIGHT
PROPOSED ACCOMMODATION**

41 Judd Street (ADF)

Floor Ref.	Room Ref.	Room Use	Window Ref.	ADF Proposed	Req'd Value
------------	-----------	----------	-------------	--------------	-------------

Proposed Extention

Second	R1	Living room	W1	0.78	
			W2	0.70	
				1.48	1.5
Third	R1	Living room	W1	0.88	
			W2	0.77	
				1.65	1.5
Fourth	R1	Living room	W1	0.81	
			W2	0.69	
				1.51	1.5

41 Judd Street (Sunlight)

Available Sunlight Hours

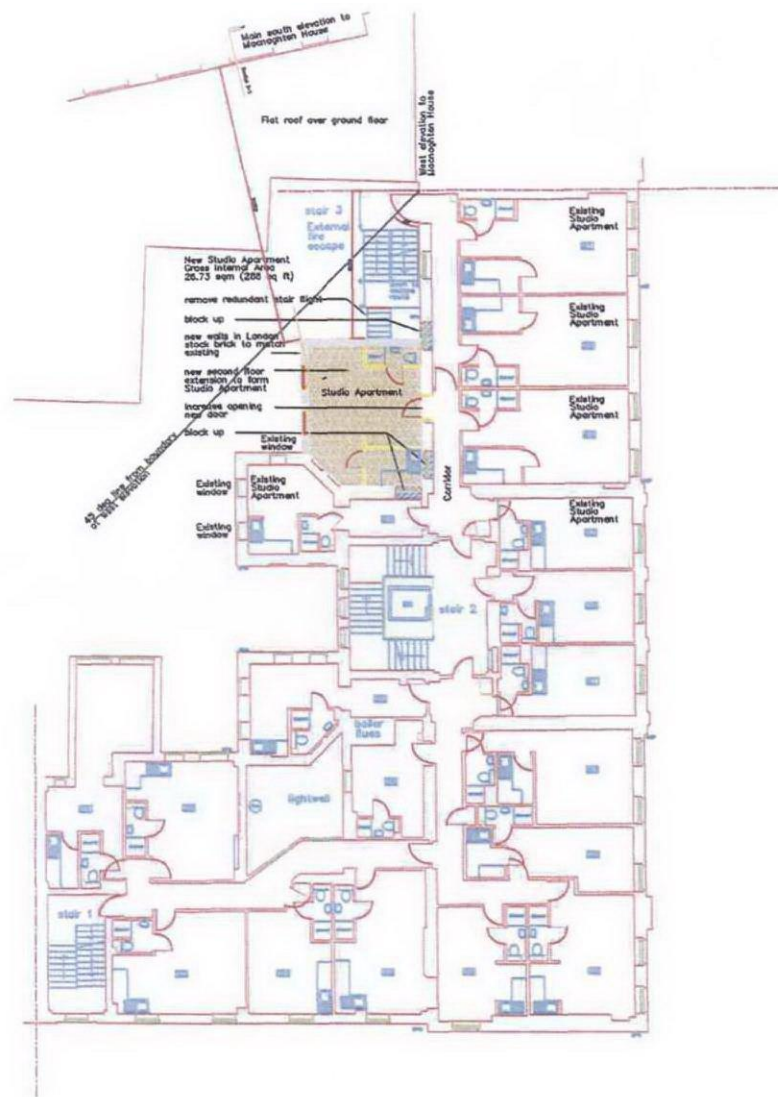
Floor Ref.	Window Ref.	Annual %	Winter %
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Proposed Extention

First	W1	27	5
		27	5
First	W2	18	3
		18	3
Second	W1	35	7
		35	7
Second	W2	21	3
		21	3
Third	W1	47	8
		47	8
Third	W2	27	4
		27	4

APPENDIX 5

TYPICAL FLOOR PLAN



THE CONTRACTOR MUST VERIFY ALL DIMENSIONS ON SITE BEFORE FIXING
 THEIR DIMENSIONS TO CORRECTIVE MEASUREMENTS.
 NO DIMENSIONS TO BE SCALED FROM THIS DRAWING.

REV. DATE REVISION

Osel
 architects and
 development consultants

Rear Extension
 Albany House
 41 Judd St, London WC2H 9QS

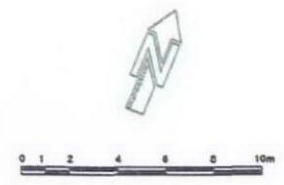
Callard Hosen Ltd

2nd Floor Plan
 As Proposed

960059/14

1:200(A3)
 0/0

15.11.2011
 08.09.2011



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APPENDIX 6

CREDENTIALS

A Founding Partner of Brooke Vincent + Partners in 1974, a Director from May 2007 and a Fellow of the Royal Institution of Chartered Surveyors since 1981.

Professional experience covers most aspects of a Chartered Building Surveyor's workload. Now almost exclusively Rights to Light and Daylighting but occasionally Party Wall legislation, boundary disputes and building surveys of a wide variety of building styles and ages.

Past Chairman of the Pyramus & Thisbe Club (a club for surveyors advising on boundary related disciplines) and Honorary Secretary from 2000 to 2007. Previously a member of two of the Institution's skills panels (residential surveys and geodetics) and a consulting member to the boundaries panel.

Whilst with the residential survey panel, co-opted onto the working party responsible for revising and extending the RICS Good Practice Note for Residential Building Surveys and thereafter scripting and presenting an educational tape on the same subject.

For many years an independent assessor of candidates undertaking their RICS Assessment of Professional Competence. In 1999, received CEDR accreditation as a mediator and became a member of the RICS panel of mediators (both now lapsed).

Previously a frequent speaker on Party Wall issues and building surveys but now speaking almost exclusively on Right of Light, Daylight and related topics. During the last few years, providing the knowledge based background to the production of new software that has now gained widespread acceptance for the analysis of natural light in the built environment.