Copyright:

The enclosed Daylight report was commissioned by Madigan Browne Architects for the previously submitted Planning Application for the same site and similar proposal. (REF: 2011/0779) The current client has obtained copyright for the report to use it for this submission.

Validity:

The existing building and surroundings have not changed, therefore we assume the report is valid.

Council's comments and explanation:

An Appendix in the form of an email is attached to this report. This email responds to officer's request for additional information, which is attached to *Answers to questions raised by email 27 May 2011*.

Daylight report cover note

7 Fitzroy Square
London, W1T 5HL
October 2011

Brooks / Murray Architects

From: on behalf of Brooks / Murray Architects

To: Brooks / Murray Architects

Subject: FW: 7, Fitzroy Square

RE: 7, Fitzroy SquareStephanie

I have looked at the string of e-mails and the comments from the Planning Authority, and I am somewhat confused as it appears that the planning officer does not have a clear understanding of the methodology of the BRE Report nor has she properly read my report.

In the first instance, the assessments methods are progressive, in that if there is no obstruction subtending an angle of 25 degrees no further assessment is necessary, if there is an obstruction then the vertical sky component is assessed, and if the vertical sky component fails to meet the recommended values, then average daylight factor factor calculations need to be undertaken. If the vertical sky component is adequate, it automatically follows that the average daylight actor will also be adequate. We have done our analysis on the worst case window i.e. the one at the lowest level, which is most affected. This window has passed and therefore all the others will!

Turning to the report which I prepared, it addresses 9 Grafton Mews, 13 Grafton Mews, 8 Fitzroy Square and 6 Fitzroy Square (the planning officer refers to 6 Fitzroy Road which I assume is incorrect), and the proposed scheme satisfies the BRE vertical sky component requirements in respect of all these properties. Under the circumstances average daylight factor calculations are unnecessary and do not need to be undertaken.

This leaves only 8-12 Grafton Mews which are on the opposite side of Grafton Mews from the proposed development. These have not been assessed as it is extremely unlikely that there will be an unacceptable reduction in light solely by virtue of the proposed development and therefore doing any analysis on this building is complete and utter waste of time.

Rob

If you need to visit Grafton Mews to get the information regarding the width of the Mews and the heights, etc of 8-12 Grafton Mews, how soon can you do it?

Kind regards

Mike

From: Robert Maycox
Sent: Tuesday, June 07, 2011 5:59 PM
To: Mike Sindic
Subject: FW: 7, Fitzroy Square

Dear Mike

Please see the emails below. Sorry, I am unsure whether this will be possible. I would be grateful if you could let me know.

Regards

Robert

From: Brooks / Murray Architects [mailto:architects@brooksmurray.com]
Sent: 07 June 2011 17:38
To: Robert Maycox
Cc: Graham Madigan
Subject: RE: 7, Fitzroy Square

Mike Sindic
Chartered Surveyor

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7 February 2011

Fitzroy Development Limited
PO Box 957
Offshore Incorporations Limited
Road Town
Tortola
British Virgin Islands

Proposed development at 7 Fitzroy Square, London W1

In accordance with your instructions and on the basis of the drawings supplied, I have now visited the site and would report as follows.

Town and Country Planning

The latest guidance note on the subject of sunlight, daylight and other associated matters is the Building Research Establishment report "Site Layout Planning for Daylight and Sunlight: A Guide to Good Practice". The report sets out tests that can be applied to assess the impact of redevelopment or extensions on neighbouring properties.

Methodology

The properties which may be affected by the proposed development are 6 Fitzroy Square/ 9 Grafton Mews and 8 Fitzroy Square/13 Grafton Mews.

The assessment has been carried out to the window at the lowest floor level from which the proposed development can be seen, and nearest to the proposed development. If the results are compliant with the BRE Report, as the distance height ratio will increase to windows at higher levels or further from the proposed development, the values will also increase and any such windows have not been assessed.

Drawings

Madigan Browne Chartered Architects

860 – PO1 Site Location

860 – P001 existing Lower Ground Floor
860 – P002 Existing Ground Floor
860 – P003 Existing First Floor
860 – P004 Existing Second Floor
860 – P005 Existing Third Floor
860 – P006 Existing Roof
860 – P007 Existing Section A-A
860 – P008 Existing Elevations
860 – P009 Existing Section B-B

860 – P100 Proposed Lower Ground Floor
860 – P101 Proposed Ground Floor
860 – P102 Proposed First Floor
860 – P103 Proposed Second Floor
860 – P104 Proposed Third Floor
860 – P105 Proposed Fourth Floor / Roof Plan
860 – P106 Proposed Roof Plan
860 – P107 Proposed Section A-A
860 – P108 Proposed Elevations
860 – P109 Proposed Section B-B

Light from the Sky

Building Research Establishment Report "Site layout planning for daylight and sunlight" deals with light from the sky in Section 2, and states in relation to existing buildings that:

"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 degrees to the horizontal, than the diffuse daylighting of the existing building may be adversely affected. This will be the case if either:

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;

and

the area of the working plane in a room which can receive direct skylight is reduced to less than 0.8 times its former value."

Report

The locations of the buildings and relevant windows are shown on the attached photographs. Appendix A shows the rear elevations of the Grafton Mews properties, and Appendix 2 shows the rear elevations of the Fitzroy Square properties.

The vertical sky component at the affected windows has been measured in accordance with Appendix A of the Report by plotting the obstruction created by existing buildings compared with the proposed development. The resulting plots are placed over the skylight indicator which has 80 crosses marked on it, each of which corresponds to 0.5% vertical sky component. The vertical sky component at the reference point (in %) is found by counting the unobstructed crosses and dividing by two.

The proposed development will be very slightly visible to the south east from the windows in the main rear elevation of 13 Grafton Mews and to the north west from the windows in the main rear elevation of 9 Grafton Mews, and although the changes are very minimal, the values are as follows:

Window	**Existing Sky Factor**	**Proposed Sky Factor**	**Loss**	**Percentage Loss**
9 Grafton Mews				
first floor	04.00%	04.00%	Nil	Nil
second floor	17.50%	17.50%	Nil	Nil
third floor	21.50%	21.50%	Nil	Nil

Sky visibility to these windows is already obstructed by the existing plant room, and as the proposed extension will not extend as far as the plant room presently does, there will in fact be a very small gain in the light received. However, it is too small to register on the charts.

Window	**Existing Sky Factor**	**Proposed Sky Factor**	**Loss**	**Percentage Loss**
13 Grafton Mews				
ground floor	05.75%	05.75%	Nil	Nil
first floor	07.50%	07.25%	0.25%	3.3%
second floor	12.50%	12.00%	0.50%	4.0%
third floor	18.25%	17.50%	0.75%	4.1%

Insofar as 6 and 8 Fitzroy Square are concerned, the proposed infill extension is not visible from the windows below first floor level, as it is obscured from these windows by the roof lines of the "link" buildings. The results calculated at the first floor windows nearest to the proposed development are as follows.

Window	Existing Sky Factor	Proposed Sky Factor	Loss	Percentage Loss
6 Fitzroy Square				
first floor rear	32.75%	31.25%	1.50%	4.6%
8 Fitzroy Square				
first floor rear	32.50%	30.50%	2.00%	6.2%

In respect of the previous application, the Local Planning Authority requested that the daylight to each habitable room of the proposed flats be assessed, including where relevant the calculation of the Average Daylight Factor. These calculations have been undertaken to all habitable rooms where the vertical sky component is below the recommended value.

Whilst it is interpreted that a 27% vertical sky component constitutes adequacy, this calculation only measures light reaching the outside plane of the window and is therefore potential light rather than actual. Depending upon the room and window size, the room may still be adequately lit with a lesser vertical sky component value than the target value referred to above.

Appendix C of the BRE Report sets out various more detailed tests that assess the interior daylight conditions of rooms. These include the calculation of the average daylight factor which determines the level of interior illumination that can be compared with the British Standard BS 8206: Part 2. This standard recommends a minimum average daylight factor of 1.5% for living rooms and 1.0% for bedrooms.

The results in respect of the rooms assessed are as follows:

7 Fitzroy Square

As there are no obstructions measured from the centre of any of the windows to the front elevation which subtend an angle of more than 25 degrees to the horizontal, the diffuse daylighting of the windows on the front elevation will not be adversely affected.

Window	Sky Factor	Daylight Factor
Rear Elevation		
basement	8.00%	1.54%
ground floor	14.00%	1.60%
first floor	19.50%	2.88%
second floor	37.00%	N/A

11 Grafton Mews

Front Elevation		
first floor bedroom	31.25%	N/A
Rear Elevation		
basement bedroom	6.00%	1.07%
basement living room	5.50%	1.59%
ground floor bedroom	3.25%	1.71%
ground floor living room	9.75%	1.72%
first floor bedroom	7.75%	2.60%
first floor living room	12.25%	1.97%
second floor bedroom	7.75%	2.69%
second floor living room	14.00%	2.11%
third floor bedroom	14.50%	3.66%
third floor master bedroom	21.50%	2.70%

Conclusion

Insofar as light from the sky to the neighbouring properties is concerned, the scheme is fully BRE compliant in that the retained sky component will either be unaffected, or it will be not less than 27% and more than 0.8 times its former value.

Insofar as the habitable rooms to the proposed development are concerned, the scheme is fully BRE compliant in that the sky component will be either in excess of 27%, or that the average daylight factor will be not less than 1% to bedrooms and 1.5% to living rooms.

Sunlighting

Building Research Establishment Report "Site layout planning for daylight and sunlight" deals with sunlight in section 3, and states in relation to existing buildings that:

"Obstruction to sunlight may become an issue if:

some part of a new development is situated within 90 degrees of due south of a main window wall of an existing building;

and

in the section drawn perpendicular to this existing window wall, the new development subtends an angle greater than 25 degrees to the horizontal measured from a point 2m above the ground."

Report

The British Standard referred to in the Report recommends that at least 25% of annual probable sunlight hours be available at the reference point, including at least 5% of annual probable sunlight hours in the winter months between 21st September and 21st March. The sunlight availability indicator has 100 spots on it representing 1% of sunlight availability for each spot which remains unobstructed, and the calculation for probable sunlight hours in the winter months is carried out by only taking into account those spots below the Equinox line. The results calculated at the same windows as the vertical sky component are as follows.

9 Grafton Mews

No part of the proposed development is situated within 90 degrees of due south of the main rear wall of 9 Grafton Mews.

Window	**Existing**		**Proposed**	
	Annual	**Winter**	**Annual**	**Winter**
13 Grafton Mews				
ground floor	08.0%	Nil	08.0%	Nil
first floor	10.5%	Nil	10.5%	Nil
second floor	24.0%	01.0%	23.5%	01.0%
third floor	43.5%	10.0%	39.5%	06.0%
6 Fitzroy Square				
first floor rear	30.0%	05.0%	29.0%	05.0%
8 Fitzroy Square				
first floor rear	32.5%	06.0%	32.0%	06.0%

Conclusion

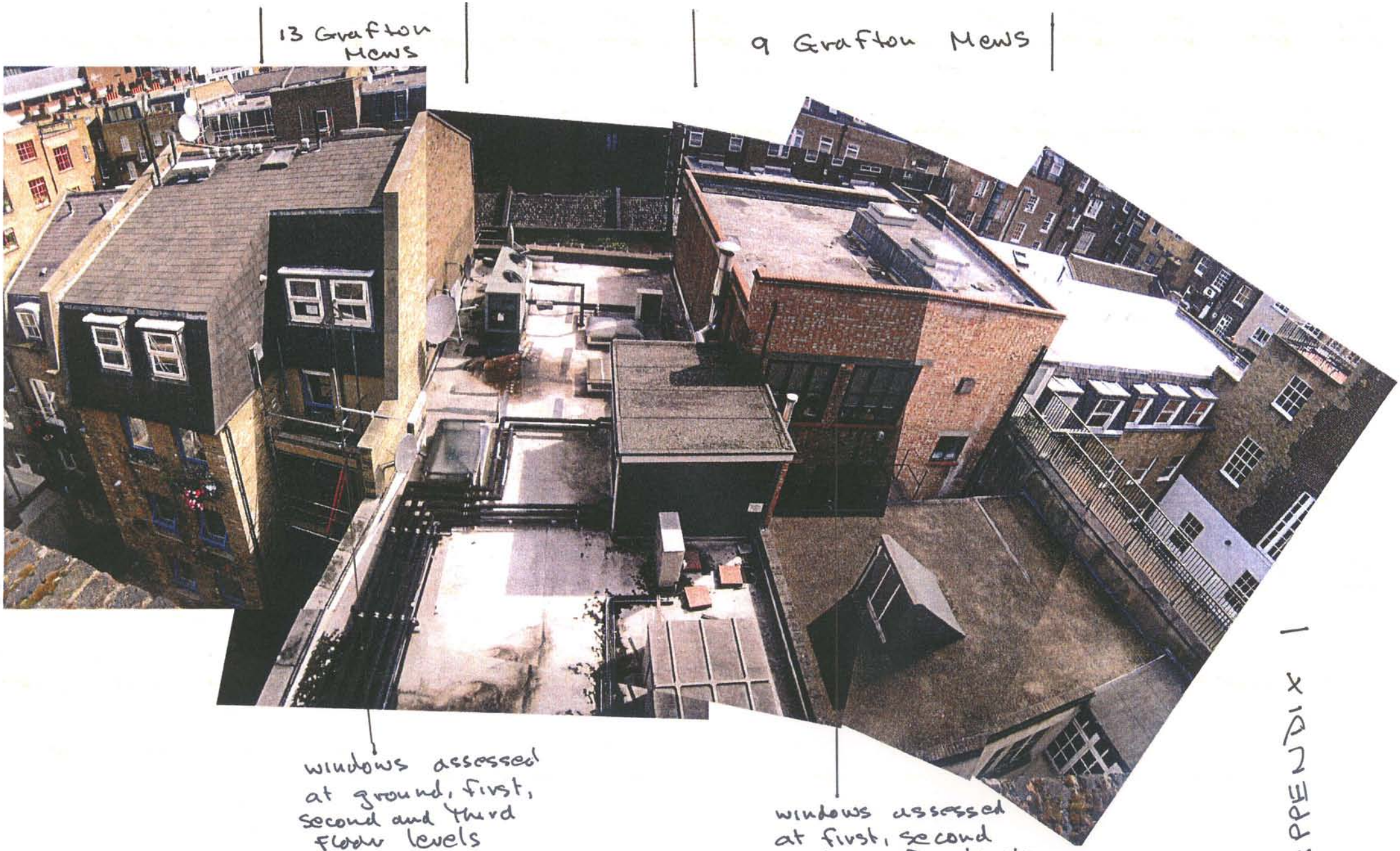
Insofar as sunlighting is concerned, the scheme is generally BRE compliant in that either the existing sunlighting will not be affected, or at least 25% of annual probable sunlight hours will be available at the affected windows, including at least 5% of annual probable sunlight hours in the winter months between 21st September and 21st march. The only exception is the second floor rear window to 13 Grafton Mews, where the sunlighting is below 25% of annual probable sunlight hours and will be reduced by 0.5%. The reduction is negligible and is unlikely to be noticeable.

Summary

The scheme is virtually wholly BRE compliant, with one very minor exception in respect of sunlighting as noted in the report. It is important to note that the BRE Report states that the numerical values are purely advisory, and that the advice given is not mandatory as the document must not be seen as an instrument of planning policy. The numerical guidelines should be interpreted flexibly, and it is accepted that in city centres a higher degree of obstruction is acceptable and may in fact be unavoidable. The calculation methods in Appendices A, B and G of the BRE Report are entirely flexible in this respect.

Whilst there is very slight failure to fully comply with the BRE guidelines in one instance, it is considered that the proposed development complies with the BRE Report as a whole.

Mike Sindic BA DipTP MRICS FCIOB


13 Grafton Mews
9 Grafton Mews
windows assessed at ground, first, second and third floor levels
windows assessed at first, second and third floor levels

APPENDIX 1

APPENDIX 2