REPORT

4-8 MAPLE STREET LONDON W1T 5HD

DAYLIGHT & SUNLIGHT NEIGHBOURING RESIDENTIAL PROPERTIES

14 DECEMBER 2015



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14 December 2015

4-8 Maple Street, London W1

Daylight & Sunlight

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

Our report is based upon the scheme drawings prepared by Buckley Grey Yeoman, survey information, site inspection and photographs, plus daylight and sunlight studies.

1.0 <u>SUMMARY</u>

- 1.1 This report has been drafted by reference to the Building Research Establishment (BRE) publication (2011), *"Site Layout Planning for Daylight and Sunlight. A Guide to Good Practice"* and local planning policy.
- 1.2 Our studies have confirmed that in all locations the amenity values for daylight and sunlight to neighbouring residential properties would be appropriate for this inner London location and they therefore satisfy BRE criteria.
- 1.3 The proposal is to extend an existing commercial building in order to provide further commercial accommodation. There is therefore no need to consider daylight to the proposed accommodation.
- 1.4 In summary, BRE's values have been satisfied in the context of Camden's Policies regarding the impact of developments on neighbours.



2.0 PLANNING POLICY

London Borough of Camden

2.1 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, while detailing planning criteria are defined through its development policies which are detailed below:

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 DP26 – Managing the impact of development on occupiers and neighbours

"The Council will 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."

2.2 The London Plan (including all updates)

Camden Council also consider the London Plan (2011) as the basis for planning policy within the borough. Within the Supplementary Planning Guidance, of the London Plan, reference is made to the following:

Baseline Standards are those endorsed by the Mayor as addressing issues of particular strategic concern.

Good Practice Standards are those put forwards by the Mayor as representing general good practice.

The standards that are relevant to daylight and sunlight are detailed below:-

Baseline

Standard 5.2.1 – developments should avoid single aspect dwellings that are north facing, exposed to noise exposure Categories C or D, or contain three or more bedrooms.

Note: "north facing is usually defined as an orientation less than 45° either side of due north."

Good Practice

Standard 5.5.1 – glazing to all habitable rooms should be not less than 20% of the internal floor area of the room.

Standard 5.5.2 – all homes should provide for direct sunlight to enter at least one habitable room for part of the day. Living areas and kitchen dining spaces should preferably receive direct sunlight.

2.3 In any case the London Plan does not provide numerical values for daylight or sunlight. Those given in this report are based upon the methods referred to in the next item. It should also be noted that the London Plan does not define a standard for neighbouring properties.

3. METHOD OF CALCULATION

Building Research Establishment

3.1 The calculations and considerations within this report are based upon the Building Research Establishment (BRE) publication 2011 "Site Layout Planning to Daylight and Sunlight. A Guide To Good Practice" as a means of articulating their policy. BRE confirm that the Guide does not contain mandatory requirements and 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 this document 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, or in an area with high rise buildings, a higher degree of obstruction may be unavoidable if new developments are to match the height and proportions of existing buildings."

Modelling and Results

- 3.2 Our analysis and subsequent results are produced by the application of our specialist software on our three-dimensional model, images of which are included in Appendix 1. This is based upon survey information, supplemented by photographs, plus the architect's planning drawings also included in Appendix 1.
- 3.3 In this model, reference can be made to the colour-coded key on the right hand side of the diagram. The surrounding buildings are defined in green, the existing building in dark blue, the proposed scheme in magenta.

3.4 Within **Appendix 1** we also include window references that can again be crossreferenced to the body of our report and the results sheets.

Daylight

- 3.5 Daylight is not specific to a particular direction, as it is received from the dome of the sky.
- 3.6 Reference is made in the BRE report to various methods of assessing the effect a development will have on diffused daylight.
- 3.7 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.
- 3.8 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".

3.9 Where the VSC calculation has been used, BRE also seeks to consider daylight distribution within neighbouring rooms, once again defining an adverse effect as a result that is less than 0.8 the former value. Access is rarely available and we have therefore taken a reasoned approach.

Sunlight

- 3.10 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 sunlight availability to an existing dwelling may be adversely affected if the Annual Probable Sunlight Hours (APSH), when measured at the centre of the window is reduced by more than 4%.
- (iv) Should the loss be greater than 4%, then sunlight availability 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 21 September and 21 March (winter) and less than 0.8 times its former sunlight hours during either period.
- (v) Kitchens and bedrooms are less important, although care should be taken not to block too much sun.

4.0 DAYLIGHT ANALYSIS

Neighbouring Residential Buildings

4.1 **North**

6 Midford Place

- 4.2 Immediately to the north of the site are two residential properties, 6A and 6B Midford Place. These are connected to the development site and are part of the same freehold title. For reasons connected with ownership and internal arrangement, residential accommodation is at first and second floor only. The Vertical Sky Component (VSC) and daylight distribution results are detailed in **Appendix 2**.
- 4.3 At first floor level, we have defined all four windows serving living accommodation but it may be a combination of living and kitchen space or similar. Whatever the outlay, we have designated a room per window.
- 4.4 With one very minor exception, the VSC values are all in accordance with BRE Guidelines. These state, as repeated in item 3.8 of this report that an adverse effect would only occur if the VSC in the proposed condition was not only less than 27% but also less than 0.8 the former (existing) value. Three results confirm the proposed value would be 0.8 of the existing value or better. One value, Window W3, is, at 0.79 the equivalent of a 0.8 reading as only computer analysis can tell the difference. In any case, this window's VSC value of 15.96 is higher than the other three windows.
- 4.5 The daylight distribution values are variable but this is typical in a central London location and it is VSC that is considered to be the primary consideration.
- 4.6 At second floor, there are five windows. Proposed readings for two windows would be 22.87% and 23.2% which are in excess of 0.8 the former value. The remaining three would have values close to 0.8 and with proposed VSCs of 22.6% to 22.88%, of no practical difference to the first two readings. These are all good readings for a bedroom in central London.
- 4.7 The daylight distribution values are all less than 0.8 the former value, but BRE Guidance specifically states that due to the room use, this is of less importance.

7 Midford Place

- 4.8 This also stands immediately to the north of the development site. There are garages only at ground floor level with residential above at first, second and third floor levels.
- 4.9 Four out of five of the VSC readings in the proposed condition are above 0.8 the former value. The fifth, at 0.79 the former value is equivalent to 0.8 and in any case provides the second highest VSC reading. There would be no adverse effect.
- 4.10 Daylight distribution is equally acceptable. Again, just one room falls below the 0.8 test but as this is bedroom accommodation, it is of little relevance.

8 Midford Place

- 4.11 This has garages only at ground floor level with residential accommodation above.
- 4.12 VSC and daylight distribution readings are satisfactory in all locations.

9 Midford Place

4.13 This building has commercial use at ground floor level and three storeys of residential above. This building only has a peripheral view of the proposed development and unsurprisingly both VSC and daylight distribution values remain either the same as or only fractionally difference from existing values.

41/47 Grafton Way

4.14 These residential properties stand beyond Midford Place and are at a significant distance from the proposed development but are worthy of consideration. The results in **Appendix 2** confirm that in all locations, whether or not room descriptions are wholly accurate, VSC and daylight distribution values would not vary.

East

1-5 Midford Place and 100/113 Tottenham Court Road

4.15 Both of these large premises are wholly commercial and do not require further consideration for the purposes of this Report.

109 Tottenham Court Road

4.16 This property has commercial use at ground floor and residential above. Again, it is possible that not all room uses are bedrooms as defined in the results but this is not important as in all locations both VSC and daylight distribution satisfies BRE guidelines and there would be no adverse effect.

108-108A Tottenham Court Road

4.17 Like 109 Tottenham Court Road, the rear elevation of 108A is extremely slim and is an integral part of 108 Tottenham Court Road. The two buildings are joined by a Public House at ground level. Once again, there would be only small variations to existing VSC levels and to only one daylight distribution value. There is certainly no adverse effect.

South

Maple Street

4.18 The building on the southern side of Maple Street is wholly commercial and not relevant to this Report. In any case, the massing on the Maple Street frontage of the development site would not vary and there could be no effect on daylight availability.

West

10 Maple Street

4.19 This is a commercial building that stands immediately to the east of the development site. A few windows in the north elevation would have a view of the variation at roof level but all the accommodation is non-residential and is not relevant to this Report.

100-102 Whitfield Street

- 4.20 The great majority of windows in the elevation looking towards the proposed development serve stairwell and hallway/landing. These are non-habitable spaces and BRE is specific in confirming that there is no daylighting requirement to these areas.
- 4.21 The occasional kitchen window are all in a vertical line and defined as Windows W6 or W7 at each floor level. In each location, the proposed VSC value would be between 0.79 and 0.92. A couple of daylight distribution values fall below 0.8 but as VSC is the primary indicator, it is a good set of values in this location, where the windows are set back in to a recess and are by design, prone to limited daylight.
- 4.22 At fifth floor level, there is a mixture of bedrooms as well as a bathroom and stairwell. There will be almost no variation in daylight to the bedrooms and therefore no adverse effect.

104 Whitfield Street

4.23 Again, we cannot be absolutely certain that all rooms are bedrooms, as designated by our results. However, this is of little importance as the proposed VSC readings would remain close to existing, being between 0.86 and 0.98 of the existing values. The values are closely followed by the daylight distribution results and the combination confirms there would be no adverse effect.

106, 108 & 110 Whitfield Street

4.24 These three residential properties are significantly offset from the proposed development but would have a peripheral view of the proposal. The results confirm that both VSC and daylight distribution results would barely change from the existing condition and there would be no adverse effect.

Daylight Summary

- 4.25 The vast majority of results confirm that daylight availability to neighbouring residential properties would, with the proposed development in situ, satisfy BRE's headline numerical values. In many locations, there would be next to no or no variation.
- 4.26 In a few locations, the difference between BRE's guidance which, as is well known, is based upon the ideal solution for suburban or garden city premises, would be equivalent to or only marginally different from BRE's recommended VSC. The daylight distribution value would occasionally be less than the recommended value. However, it is the former, VSC, value that is the primary indicator and when consideration is also given to a location in central London, this is an entirely satisfactory set of results.
- 4.27 BRE's Guidance confirms that whilst: *"it gives numerical guidelines, these should be interpreted flexibly since natural lighting is only one of many factors in site layout design."* We have often spoken to the author of the BRE Guidance and there is no doubt that he expects a degree of flexibility to be shown in central London. The minor variations from guidance should not undermine a good set of results.

5.0 SUNLIGHT ANALYSIS

Neighbouring Residential Buildings

Generally

- 5.1 The Available Probable Sunlight Hours (APSH) values are also detailed in **Appendix 2** to the right of the daylight values.
- 5.2 In many locations there are no values, simply a statement "*north facing*". This is because sunlight availability is only relevant to windows that face within 90° of south i.e. south of the east west access. Windows with a view of the development site but do not face within 90° of south are simply stated as north facing.

6, 7, 8 & 9 Midford Place

5.3 Sunlight availability to all these buildings satisfies BRE's recommendations. This includes the minor variations to winter values where the typically low values in central London are disproportionately affected by very small variations from existing to proposed. However, BRE has recognised this fact and any variations below 4% are considered acceptable.

41, 43, 45 & 47 Grafton Way

5.4 There will be no variation to sunlight availability between existing and proposed conditions.

109 Tottenham Court Road

5.5 There will be only minor variations to sunlight availability but as there is no requirement for sunlight to bedrooms, because BRE Guidance is given in relation to living rooms, there would be no adverse effect.

Sunlight Summary

- 5.6 A great many of the neighbouring residential windows with a view of the proposed development would not be south facing and there is no sunlight criteria to satisfy.
- 5.7 Those windows that are south facing would retain sunlight the same as or, extremely close to the existing values and there would be no adverse effect.

APPENDIX 1

LOCATION PLAN, CAD MODEL

APPENDIX 2

DAYLIGHT AND SUNLIGHT RESULTS NEIGHBOURING PROPERTIES