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Our Ref: DS/RM/11004

Date: 8th April 2021

16 Avenue Road, London NW8 6BP

**Daylight and Sunlight** 

BROOKE VINCENT + PARTNERS

INTRODUCTION

1. We are instructed to report on the daylight availability to the habitable rooms at lower

ground floor level. Our technical analysis found no cause for concern and we have written

this letter in place of a formal Report.

We have prepared the daylight and sunlight report dated 30 September 2016 in support

of the previous planning application for the site, planning reference number 2016/5375/P.

Our report is based upon the drawings prepared by SHH – Architecture & Interior Design

plus the daylight and sunlight study as further detailed.

PLANNING POLICY

2. **London Borough of Camden** 

2.1.1. The Camden Local Plan replaced the Council's Core Strategy and Development

Policies in July 2017. The relevant policy is listed below:

Policy A1 Managing the impact of developments.

The Council will seek to protect the quality of life of occupiers and neighbours. We will

grant permission for development unless this causes unacceptable harm to amenity.

We will:



a. seek to ensure that the amenity of communities, occupiers and neighbours is protected;

...

d. require mitigation measures where necessary.

The factors we will consider include:

. . .

e. visual privacy, outlook; f. sunlight, daylight and overshadowing;

...

Camden's Local Plan also refer to supplementary planning document Camden Planning Guidance CPG: Amenity, which states as follows:

#### **KEY MESSAGES:**

- The Council expects applicants to consider the impact of development schemes on daylight and sunlight levels. Where appropriate a daylight and sunlight assessment should be submitted which should be follow the guidance in the BRE's Site layout planning for daylight and sunlight: A guide to good practice.
- The 45° and 25° tests cited in the BRE guidance should be used to assess ('screen') whether a sunlight and daylight report is required.
- Levels of reported daylight and sunlight will be considered flexibly taking into account site-specific circumstances and context.
- The Council may seek independent verification of sunlight and daylight reports if necessary.

### The London Plan 2021

- 2.1.2. The relevant policy above must be read in conjunction with the other relevant plans and guidance, such as the London Plan.
- 2.1.3. The London Plan 2021 is the Spatial Development Strategy for Greater London. It sets out a framework for how London will develop over the next 20-25 years. The Plan is part of the statutory development plan for London and the policies in the Plan inform decisions on planning applications across the capital. We refer to the relevant policies with regard to daylight and sunlight and the respective explanatory notes.

### 3. METHOD OF CALCULATION

## **Building Research Establishment**

3.1 Like most Local Authorities, Westminster refers to the Building Research Establishment (BRE) publication 2011 "Site Layout Planning to Daylight and Sunlight. A Guide to Good Practice", in order to apply numerical values to its policy. It is within the terms of these guidelines that we have considered this matter and report below.

# 3.2 **Daylight**

- 3.2.1. Average Daylight Factor (ADF) is the most comprehensive of daylight calculations defined by BRE and is only appropriate when all relevant information is available.
- 3.2.2. The initial calculation is Vertical Sky Component which measures the value of daylight received at the centre of the window face. The area of glazing through which the light is transmitted and the transmission value of the glazing is then considered. Within the room the total surface area is calculated and a degree of reflection applied. The outcome is then compared to the values recommended by BRE. Assuming that the rooms are used in conjunction with artificial lighting the minimum recommended ADF levels are:

2% Kitchen or combined kitchen and living space (LKD)

1.5% Living room, living/dining room (LD), studio and study

1% Bedroom

- 3.2.3. Where a room is served by more than one window, ADF calculations are made in relation to each window and the individual results added together to provide the true ADF for that room.
- 3.2.4. With regard to the ADF calculations for proposed accommodation daylight, we have used the following values that the BRE guide has recommended, that together are computed to produce the ADF value:
  - Glazing transmittance 0.68 for the double glazing (BRE default reading)
    - 0.57 or higher for the glass bridge

- Net glazed area of the window 0.8 (BRE default reading)
- Maintenance Factor vertical glazing 8% which equates to 0.92 in the results
- Interior surface reflectance 0.67 (BRE default 0.5)

We have been informed by the architects that white or light-coloured painted walls and ceilings together with a light-coloured carpet floor will be implemented in all rooms. For this reason, we have adjusted the BRE default values as above.

#### 4. DAYLIGHT RESULTS

## **Proposed Accommodation**

- 4.1 We have analysed ADF for the proposed living room and bedroom at lower ground floor level; the results are detailed within Appendix 1.
- 4.2 The proposed design shows a glass bridge above the lightwell serving the living room R1. The software to calculate ADF does not allow for transparent objects except windows. Therefore, we have applied a reasonable procedure in order to allow for the transmission of an amount of light through the glass bridge. We have tested two scenarios: the first considering the bridge as a solid obstruction and the second one removing it. We have the applied the relevant glass transmittance value to the bridge and the final result confirms the BRE recommended value of 1.5% would be achieved.
- 4.3 The bedroom R2 would achieve a proposed ADF value of 1.09% meeting the BRE criterion.
- 4.4 Our assessment has confirmed that good daylight levels would be achieved within the proposed rooms satisfying the BRE criteria.

Yours sincerely

Roberta Mancini MArch
For Brooke Vincent + Partners

email: roberta.mancini@brooke-vincent.co.uk

Authorised by:

David Sirman MRICS
For Brooke Vincent + Partners

email: david.sirman@brooke-vincent.co.uk

# **APPENDIX 1**

Daylight Results
Proposed Accommodation
Rooms reference

Project Name: 16 Avenue Road Project No.: 11004														
Report Title:	Report Title: Average Daylight Analysis - Proposed accommodation Date: 11/02/2021													
Date: 11/02/2	021													
Floor Ref.	Room Ref.	Room Use.	Window Ref.	Glass Transmitta nce	Maintenance Factor	Glazed Area	Clear Sky Angle Proposed	Room Surface Area	Average Surface Reflectance	Below Working Plane Factor	ADF Proposed	Rec'd Value	Meets BRE Criteria	
					Propo	sed - with	nout bridge							
Lower Ground	R1	Living Room	W1	0.68	0.92	4.34	25.78	73.38	0.67	1.00	1.72 1.72	1.50	YES	
					Prop	oosed - so	lid bridge							
Lawar Crawad	D1	Living Deem	14/4	0.60	0.02	4.24	10.12	72.20	0.67	1.00	1 21			
Lower Ground	R1	Living Room	W1	0.68	0.92	4.34	18.12	73.38	0.67	1.00	1.21 1.21	1.50	NO	
						Propos	sed							
Lower Ground	R2	Bedroom	W2	0.68	0.92	4.34	14.48	64.74	0.67	1.00	1.09			

The ADF to the living room has been tested following the procedure explained below:

- ADF calculated through a traditional lightwell with no access bridge above;
- ADF calculated considering the bridge as solid obstruction.

The differences between the two sets of ADF values have been reduced by 0.57 that is the diffuse light transmission, reasonable value for a bridge in laminated glass.

1.09

1.00

YES

The obtained figure has then been added to the ADF figure which considered the bridge as a solid obstruction.

The ADF within the living room, comprehensive of all the elements above, would therefore be 1.50, in accordance with the BRE criteria.

## LOWER GROUND FLOOR - LIGHTWELLS

Lower Ground Floor Plan



