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INTERNAL DAYLIGHT REPORT

39 Priory Terrace

West Hampstead, London, NW6 4DG

June 2021

A photograph of a modern building facade with a glass and metal structure, featuring a prominent diagonal line and a blue sky with clouds in the background.

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1. Introduction

- 1.1. This practice has been instructed by Old Hampstead Estates Limited to provide an assessment of the internal daylighting levels to the proposed habitable rooms at the lower ground level flat within 39 Priory Terrace, London, MW6 4DG.
- 1.2. The proposals comprise a single storey rear extension and alterations of the lower ground level flat at 39 Priory Terrace to provide a 3-bedroom flat.
- 1.3. We have assessed the daylight levels to all of the proposed habitable rooms using the Average Daylight Factor (ADF) method set out in the Building Research Establishment Guidance Note 209: Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice (the BRE Guidelines) – this is detailed in section 2 below.

2. Technical Guidance

Site layout planning for daylight and sunlight: a guide to good practice, BRE 2011

- 2.1. As noted at 1.3 (above) the nationally recognised criteria used for quantifying daylight, sunlight and shading effects as a result of construction are provided by the Building Research Establishments guidance 'Site layout planning for daylight and sunlight: a guide to good practice' (BRE, 2011).
- 2.2. This document follows from previous guidance produced by Her Majesty's Stationary Office (HMSO) on daylight and sunlight in the built environment and is the accepted methodology used by local authorities for assessing daylight and sunlight in relation to new developments. It provides methods for the calculation of daylight and sunlight impacts of development upon existing surrounding properties and within proposed new dwellings.

Policy Context

- 2.3. It is important to note that the guidelines set out in the BRE document are to be applied flexibly and weighed in the balance against other design factors.
- 2.4. The opening paragraphs of the BRE guidelines state: -

"The guide is intended for building designers and their clients, consultants and planning officials. The advice given here is not mandatory and the document should not be seen as an instrument 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 many factors in site layout design."

- 2.5. The BRE guidelines for daylight and sunlight is not intended to be an absolute bar on amenity levels and the numerical values provided are purely advisory such that the guidelines should be interpreted 'sensibly and flexibly'. This flexible approach relating to daylight and sunlight is reflected in the National Planning Policy Framework (NPPF) 2019, and also in the Camden Planning Guidance – Amenity (2021):

National Planning Policy Framework, 2019

- 2.6. The National Planning Policy Framework 2019 (NPPF) paragraph 123 (c) states:

"123 c) local planning authorities should refuse applications which they consider fail to make efficient use of land, taking into account the policies in this Framework. In this context, when considering applications for housing, authorities should take a flexible approach in applying policies or guidance relating to daylight and sunlight, where they would otherwise inhibit making efficient use of a site."

Camden Planning Guidance - Amenity, 2021

- 2.7. Paragraph 3.14-3.15 of the Camden Planning Guidance 2021(CPG) refers to the flexible consideration of daylight and sunlight:

"3.14 The Council notes the intentions of the BRE document is to provide advice to developers and decision makers and therefore it should be regarded as a guide rather than policy."

3.15 While we support the aims of the BRE methodology for assessing sunlight and daylight we will consider the outcomes of the assessments flexibility where appropriate, taking into account site specific circumstances and context. For example, to enable new development to respect the existing layout and form in some historic areas, or dense urban environments, it may be necessary to consider exceptions to the recommendations cited in the BRE guidance. Any exceptions will assessed on a case-by-case basis."

Internal Amenity Assessment

- 2.8. In respect of diffuse daylight the Average Daylight Factor (ADF) method calculates the average illuminance within a room as a proportion of the illuminance available to an unobstructed point outdoors under a sky of known luminance and luminance distribution. This is the most detailed of the daylight calculations and considers the physical nature of the room behind the window, including; window transmittance, and surface reflectivity. The BRE guidance sets the following recommended ADF levels for habitable room uses: -

- Bedrooms – 1% ADF
- Main Living Rooms – 1.5% ADF
- Kitchens – 2% ADF

- 2.9. For multipurpose living / kitchen / diner arrangements the higher 2% 'kitchen'

target can be difficult to achieve due to the depth of the internal space. It is therefore generally accepted that the 1.5% target for a main living room is more appropriate given this is the predominant use of the space and the kitchens are generally reliant on task lighting given their position to the rear of the space. This approach has been confirmed as reasonable in recent peer reviews of our work by Dr Paul Littlefair, the author of the BRE guidance.

3. Sources of Information

3.1. To calculate the Average Daylight Factor to the proposed rooms within the lower ground level flat we have used the proposed floorplans provided by SHH Architects on the 03/06/21 to determine the room surface areas and the measured survey drawings to determine the window glazing areas and the external obstruction angles.

3.2. When considering the room surface reflectance and window transmittance, these are as follows:

Reflectance Values:

- Floor reflectance – 0.4 (light wood veneer)
- Wall reflectance – 0.81 (Pale Cream)
- Ceiling reflectance – 0.85 (white)

Transmittance Value:

- Window transmittance: 0.68 (double glazing)

3.3. Plots showing the location of each habitable room considered within the proposal are attached at appendix 1.

4. The Site and Proposal

4.1. The application seeks approval for the internal alterations and single storey rear extension of the lower ground level flat within 39 Priory Terrace converting the existing 2-bedroom flat into a 3-bedroom flat.

4.2. We have worked with the architects providing design steering advice in respect the proposals in order to maximise the amenity for the future occupants. This included ensuring the appropriate window to room allocation within the existing building fabric to optimise the daylighting to the proposed habitable rooms within the flank and rear elevations.

4.3. The neighbouring site to the north of 39 Priory Terrace recently received planning consent for a 2-storey plus basement dwelling on the 14/04/21 (planning ref: 2020/2839/P) and our internal daylight assessments have considered the internal

daylight provision with this consented scheme in place.

5. Results

- 5.1. The results of our internal daylight calculations in respect of each of the proposed habitable rooms are attached at appendix 1.
- 5.2. The results of our ADF calculations show that all of the proposed habitable rooms within the flank and rear elevations will exceed the BRE target recommendations of 1.5% for a main living space and 1% for a bedroom. Here, the main living space to the rear achieves an ADF of 5.1% with the flank bedrooms between 1.3-1.8% ADF thus satisfying the BRE guidelines for internal daylight provision.
- 5.3. This is an excellent level of compliance for a proposal within an urban location and is indicative of the high quality of the design.

6. Conclusions

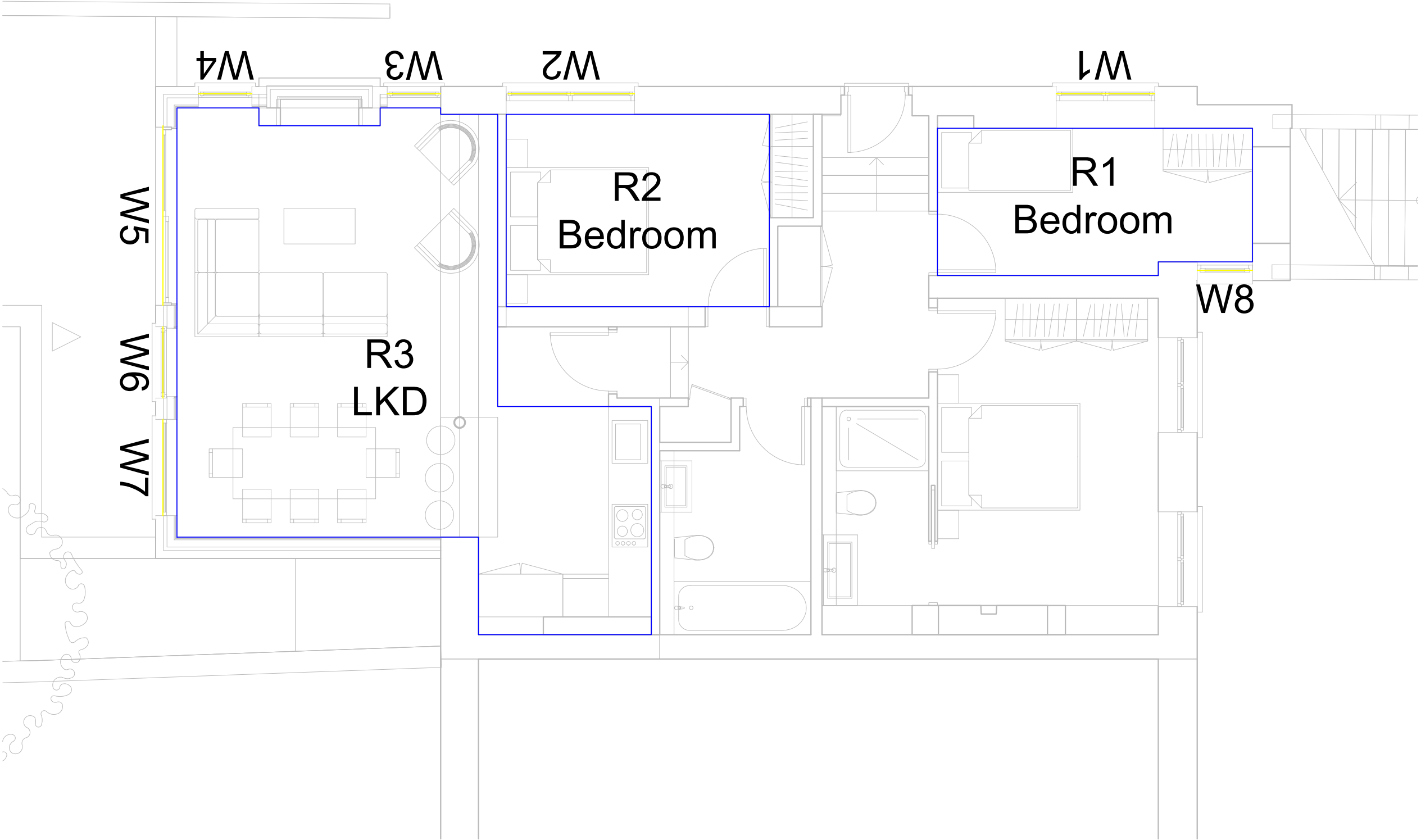
- 6.1. This practice has considered the internal daylight provision to the proposed residential conversion of the lower ground level flat at 39 Priory Terrace, London, NW6 4DG.
- 6.2. Our analysis considers the internal daylight levels against the Average Daylight Factor (ADF) criteria set out in the BRE guidelines.
- 6.3. Our technical assessments show that all of the proposed habitable rooms within the lower ground level flat are sufficiently in excess of the BRE recommendations under the Average Daylight Factor (ADF) criteria. As such, the proposals fully comply with the BRE guidelines as well as local and national planning policy.

EB7 LIMITED



Appendix 1

Results of the internal daylight assessments



Sources of information

- Greenhatch Group

33847_01-03_PES.dwg
Received 14/06/2020
- SHH Architect

(919)020_PL01 Proposed Floor Plan - WIP.dwg
(919)210_PL01 Side & Rear Elevations - WIP.dwg
Received 03/06/2021

SHH Architect
Site Photographs



Project	Land Adjacent to 39 Priory Terrace London		
Title	39 Priory Terrace Basement Floor Room Layout		
Drawn	YH	Checked	--
Date	06/06/2021	Project	3829
Rel no.	06	Prefix	ID01
		Page no.	01

Floor	Room ID	Window ID	Room Use	ADF	TOTAL ADF
39 Priory Terrace					
Lower Ground	R1	W1	Bedroom	0.7	
		W8-L	Bedroom	0.0	
		W8-U	Bedroom	1.1	1.8
Lower Ground	R2	W2	Bedroom	1.3	1.3
Lower Ground	R3	W3	LKD	0.2	
		W4	LKD	0.3	
		W5-L	LKD	0.3	
		W5-U	LKD	2.0	
		W6-L	LKD	0.1	
		W6-U	LKD	0.8	
		W7-L	LKD	0.2	
		W7-U	LKD	1.1	5.1