## JIM GARLAND ARCHITECTS LIMITED

# WHITESTONE HOUSE WHITESTONE LANE LONDON NW3 1EA

## DAYLIGHT STUDY ON BEHALF OF

## Mr G Edwards

JIM GARLAND RIBA

February 2014

#### 1. Introduction

1.1 We have been instructed by the owner, Mr G Edwards, to undertake a day and sunlighting study for the proposed development at Whitestone House on the windows in the shared lightwell to the adjoining property "The Cottage".

#### 2 Information Sources

- 2.1 The assessment is based on the following drawings provided by the applicant, Bentheim:
  - 643-105 Existing roof plan
  - 643-306 Proposed roof plan
  - 643-310 Proposed Section DD

#### 3. Existing context



Figure 1: View into lightwell from the West. W2/01 is visible on the left.

3.1 There is a central lightwell which serves a number of rooms to the adjoining property "The Cottage". The windows which have been investigated are WG/01 serving a dining room on the ground floor, W1/01 serving a bedroom and W2/01 also serving a bedroom. The windows face NNE and a sunlighting study is not therefore required.

3.2 The proposed works to Whitestone House will result in the raising of the parapet to the east and the eaves to the north. The roof ridge to the west is also raised and impacts on the daylighting.

#### 4. Methodology & guidance

- 4.1 Analysis was conducted in accordance with both the BRE guide to good practice Site layout planning for daylight and sunlight (2<sup>nd</sup> Edition), and BS 8206 : Part 2 : 1992 Code of practice for daylighting.
- 4.2 The following extract from the BRE's Site Layout Planning for Daylight and Sunlight should be noted:

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

4.3 The BRE guidance further states.

"If this vertical sky component is greater than 27% then enough skylight should still be reaching the window of the existing building. Any reduction below this level should be kept to a minimum. If the VSC, with the new development in place, is both less than 27% and less than 0.8 times its former value, then the occupants of the existing building will notice the reduction in the amount of skylight. The area lit by the window is likely to appear more gloomy, and electric lighting will be needed more of the time."<sup>1</sup>

#### 5. Impact on existing windows

5.2 Calculations have been undertaken utilising the BRE skylight indicator, and return the following results for vertical sky component:

Ref	Location	VSC existing	VSC proposed	Percentage of former value
W0/01	Ground floor kitchen (Gangmore)	0%	0%	100%
WI/01	First floor bedroom (The Cottage)	2.5%	1.25%	50%
W2/01	Second floor bedroom (The Cottage)	17.5%	14.75%	84%

It can be seen that the windows on the ground and first floors already have extremely low values of daylighting, to the extent that artificial lighting would be required when these rooms are in use, and the proposed development would not alter this situation.

More sensitive is the daylighting to the second floor window, which is currently below the recommended 27%. Nevertheless, it would still have a VSC of 84% of its former value after the proposed works, and is therefore considered to be within the BRE guidelines for acceptable development.

<sup>&</sup>lt;sup>1</sup> Site layout planning for daylight and sunlight, BRE, Page 5

#### 6. Conclusion

- 8.1 The proposed raising of the parapet and eaves will have no appreciable impact on the windows WG/01 and W1/01 to the ground and first floor rooms.
- 8.2 The modifications would impact to some degree on the daylighting to window W2/01 to the second floor bedroom, but are found to be acceptable within the terms of the guidance.

#### Jim Garland RIBA

For and on behalf of Jim Garland Architects Ltd

#### **Drawings**

1401/W1-01/P1	Skylight indicator for Window W1/01
1401/W2-01/P1	Skylight indicator for Window W2/01
1401/W3-01/P1	Skylight indicator for Window W3/01