#### **RICHARD W STAIG** CHARTERED BUILDING SURVEYOR

Jo Edwards

Edwards Rensen Architects 24 Sotheby Road London N5 2UR

Thursday, May 19, 2022 rs/ ROL.220208/1 Our ref:

Dear Ms Edwards

#### 47 MURRAY MEWS LONDON NW1 7RH DAYLIGHT AND SUNLIGHT

Further to your instructions of our mutual Client, I have been asked to produce a Daylight/Sunlight Report to support the Planning Permission Application for the proposals at the above and, specifically, to the effect upon the daylight/sunlight to the adjoining residential property at 49 Murray Mews.

For the avoidance of doubt, the proposals I have considered are as shown on your drawings referenced P-P-01-06; these drawings show the proposal construct a second floor extension to 47 Murray Mews.

Following the publication of the information paper entitled "Site Layout planning for daylight and sunlight: A guide to good practice" by the Building Research Establishment in 1991, the assessment of daylight and sunlight has been generally carried out in accordance with the criteria set by this publication and which is generally taken to be the accepted basis for such assessment and adopted by most Planning Authorities. This publication has been superseded by the Second Edition issued October 2011. The BRE Second Edition 2011 does give numerical guidelines, but recommends that these should be interpreted flexibly.

Paragraph 1.6 of the BRE Second Edition 2011 states in entirety 'The guide is intended for building designers and their clients, consultants and planning officials. The advice given here (sic BRE Second Edition 2011) is not mandatory and the guide should not be 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 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 values. For example, in a historic city centre, or on an area with modern high-rise buildings, a higher degree of obstruction may be unavoidable if new developments are to match the height and proportions of existing buildings. Alternatively, where natural light is of special importance in a building, less obstruction and hence more sunlight and daylight may be deemed necessary. The calculation methods in Appendices A, B and G are entirely flexible in this regard. Appendix F gives advice on how to develop a consistent set of target values for skylight under such circumstances, and Appendix C shows how to relate these to interior daylighting requirements.

The technical analysis undertaken demonstrates that the effect upon daylight will be de minimis to the first floor window of 49 Murray Mews with their second floor windows also having a de minimis effect, but also these windows retaining a VSC in excess of 27% which is a level deemed acceptable in any circumstance. With regard to sunlight, the windows to the rear elevations of the 49 Murray Mews do not face within 90° of south and therefore do not meet the criteria for detailed analysis.



Before providing my detailed advice, I would confirm that I am a Chartered Building Surveyor working predominately in the field of rights of light including daylight and sunlight assessments. I have an extensive and highly specialised knowledge, in these areas having worked in the past for both Anstey Horne & Co. for five years and Schatunowski Brooks (formerly known as Michael Brooks Associates as it was when I joined, then known as GVA Schatunowski Brooks and now part of Avison Young) for three years, as well as Delva Patman Associates - now known as Delva Patman Redler LLP - for four years prior to joining in Partnership Dixon Payne in 2001. All are acknowledged Experts in these fields; I now act under my own banner.

I regularly provide Expert Witness advice in respect of Planning Applications in respect of daylight and sunlight at Planning Inquiries acting for both Appellants and Planning Authorities. I was consulted by the *Building Research Establishment* prior to the revision of their guidelines in 2011 and am part of the further consultation about possible further revisions currently.

For the detailed technical analysis, in accordance with the *BRE Second Edition 2011*, I have used the 3D model of proposals prepared by the Architects with further contextual surrounding buildings constructed using Planning Permission record drawings. Using specialist computer programmes, calculated the quantum of daylight received to the existing fenestration of 49 Murray Way has been calculated by way of Waldram analysis.

By way of explanation, Percy J. Waldram invented the Waldram diagram as a method of showing on a 2d image the curved and three-dimensional view of the sky from a fixed point. The area of a Waldram diagram drawn to scale is 396cm² which represents the total amount of unobscured sky that can be seen from a vertical plane. The vertical edges of any obstructions are plotted as vertical lines on the diagrams by reference to their angle from the reference point. The head of any obstruction are plotted along the droop line corresponding to their altitudes above the horizontal measured in the section perpendicular to the reference point. With regard to daylight, the BRE Second Edition 2011 advises that if at the centre of a window the VSC is greater than 27% of the visible dome then enough skylight should be reaching the window. To put this into terms more readily understood, when looking at the sky dome within an open field you would be able to see 39.6% of the total sky dome.

With regard to daylight, the BRE Second Edition 2011 advises that if at the centre of a window the VSC is greater than 27% of the visible dome then enough skylight should be reaching the window. To put this into terms more readily understood, when looking at the sky dome within an open field you would be able to see 39.6% of the total sky dome.

This said, a VSC of 27% is the ideal, but in most urban situations unlikely to be achieved. The guidance states, however, that if the VSC is below 27%, and as long as any reduction is within 0.8 of the original value, no significant loss will occur (a reduction which is deemed to be of no consequence and not readily identifiable).

In respect of sunlight, the *BRE Second Edition 2011* details the assessment of this by way of calculating the number of probable sunlight hours. Probable sunlight hours take into account the total number of hours a year that the sun is expected to shine taking into account average levels of cloud cover for the geographical location. Only windows which face within 90° of south meet the criteria for assessment.

As the windows to the rear elevation of the 49 Murray Mews face north of south they do not meet the criteria for detailed analysis as provided before.

The attached results shows that the effect upon daylight will be *de minimis* to the first floor window of 49 Murray Mews (existing VSC 20.8% which reduces in the proposed condition to 19.32% or 0.93 of the original with their second floor windows also having a *de minimis* effect, but also these windows retaining a VSC in excess of 27% which is a level deemed acceptable in any circumstance.

I have also considered the effect upon the daylight distribution within the first floor of 49 Murray Mews; *BRE Second Edition 2011 Appendix C C16* provides that the area of the working plane of a room receiving direct skylight should be in excess of 80% or, having regard to paragraph 2.2.21 that only where the area of the working plane of a room which can receive direct skylight is reduced to less than 0.8 times its former value will there be an adverse effect. The area of the room retaining direct skylight on the working plane is 93.13%.

Finally, for the sake of completeness, I have also considered the effect upon direct sunlight to the rear first floor terrace of 49 Murray Mews; In respect of overshadowing, the advice of the BRE Second Edition 2011 is:-

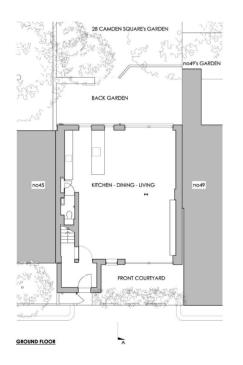
3.3.17 It is recommended that for it to appear adequately sunlit throughout the year, at least half of a garden or amenity area shall receive at least two bours of sunlight on 21 March?.

With regard to the effect upon sun to the first floor amenity area, at the analysis point of March 21, in the existing condition, none of the amenity area receives 2 hours of direct sunlight' the analysis has been undertaken having regard to Appendix G of the BRE Second Edition 2011.

To conclude, within Paragraph 1.6 of the BRE Second Edition 2011 it states, inter alia, 'The advice given here (sic BRE Second Edition 2011) is not mandatory and the guide 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 since natural lighting is only one of many factors in site layout design'. The detailed analysis demonstrates that the proposals entirely accord with the guidance of the BRE Second Edition 2011.

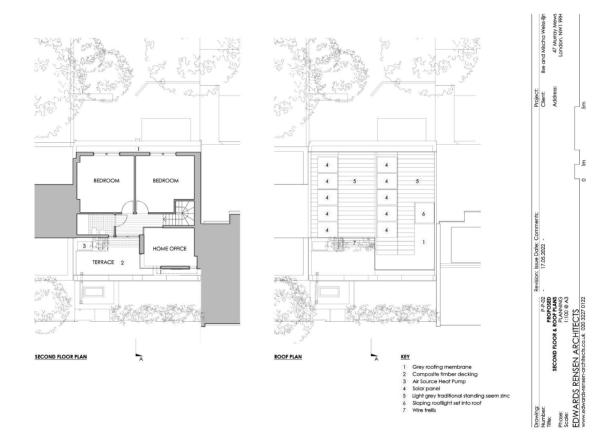
I hope that the foregoing clarifies matters, but if you have any queries, please do not hesitate to contact me.

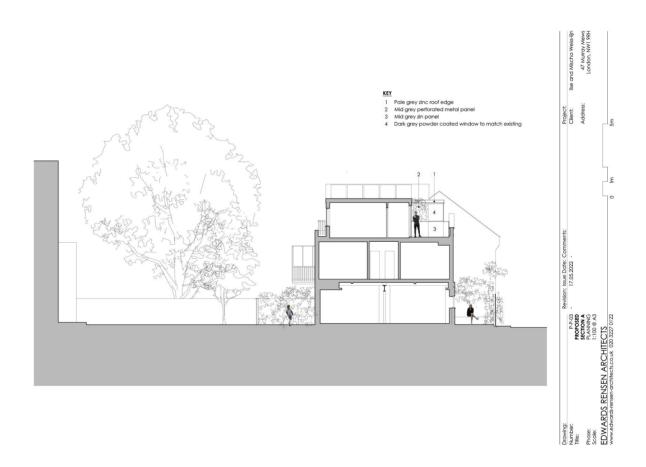
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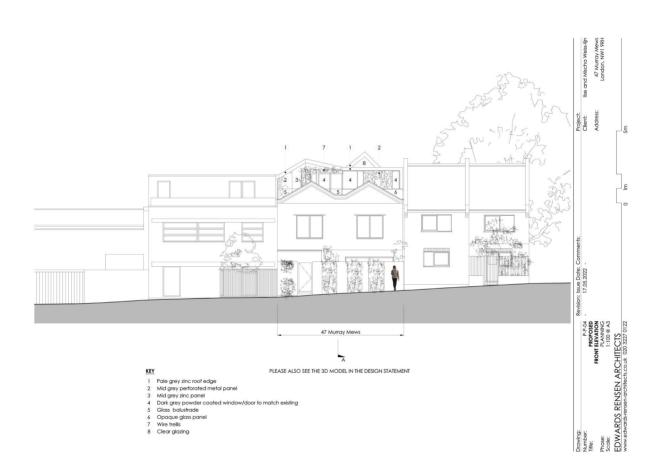




Drawing:	Revision: Issue Date: Comments:		Project:	
Number: P-P-01	- 17.05.2022 -		Client:	llse and Mischa Weiss-lij
GROUND & FIRST FLO			Address:	47 Murray Mew
Phase: PLANNING Scale: 1:100 @ A3				London, NW1 9RH
EDWARDS RENSEN ARCHITECTS www.edwards-rensen-architects.co.uk 020 3227 0122		- O	L <sub>ms</sub>	

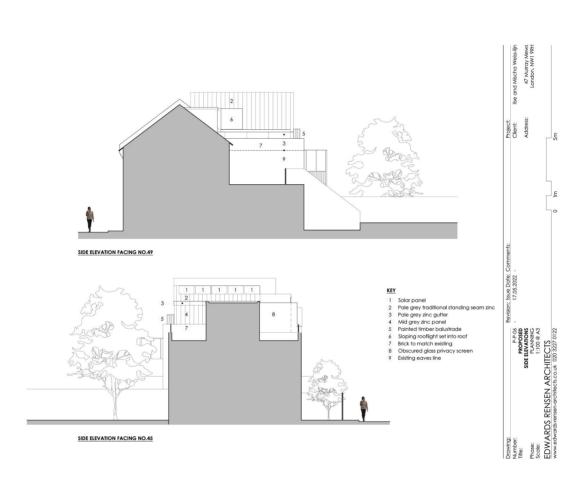






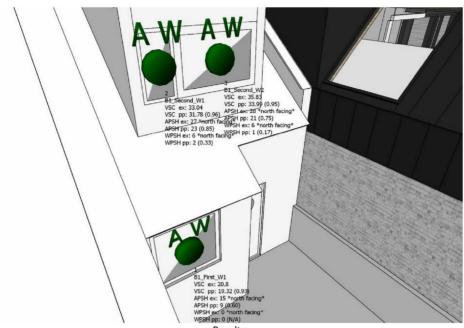


47 Murray Mews London, NW1 9RH Ilse and Mischa Weiss-Iijn



### BRE SECOND EDITION 2011 47 MURRAY MEWS LONDON NW1 7RH DAYLIGHT AND SUNLIGHT

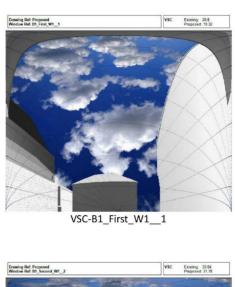
# **49 MURRAY MEWS RESULTS**

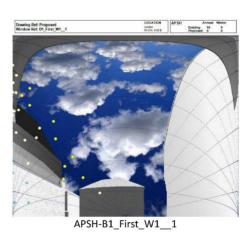


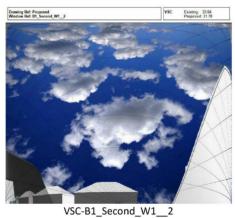
Results

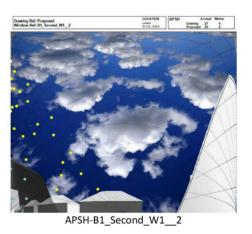
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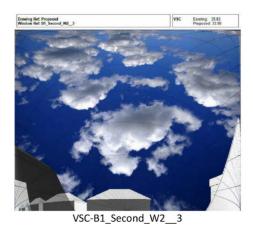
# **49 MURRAY MEWS WALDRAM DIAGRAMS**

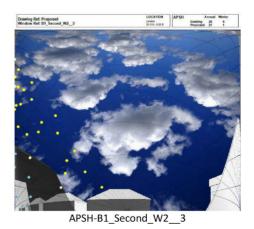












#### BRE SECOND EDITION 2011 47 MURRAY MEWS LONDON NW1 7RH DAYLIGHT AND SUNLIGHT

## 49 MURRAY MEWS AMENITY TO TERRACE (SUN ON GROUND)

