16 October 2024

C1267/DSO

DRAFT REPORT

DAYLIGHT & SUNLIGHT

PROJECT DATA:

Client	**Mr Alexander James**
Architect	**Hayhurst & Co**
Project Title	**20 Murray Mews**
Project Number	**C1267**

SOURCES OF INFORMATION:

Information Received	**331 - Stage 2 Proposed 24/09/24**
Release Number	**Release 01**
Issue Number	**01**
Site Photos	**Hayhurst & Co/ Google**
3D Model/Survey	**Hayhurst & Co**
OS Data	**Get Mapping**

REPORT DATA:

Report Title	**Daylight and Sunlight Report**
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1 EXECUTIVE SUMMARY

1.1 The Chancery Group have undertaken a daylight, sunlight and overshadowing assessment for the redevelopment of 20 Murray Mews ("proposed development").

1.2 The methodology set out in this report is in accordance with the Building Research Establishment (BRE) Report 209: 'Site Layout Planning for Daylight and Sunlight, A Guide to Good Practice', Third Edition, 2022 ('the BRE Guidelines'), which is accepted as good practice by planning authorities throughout the country.

1.3 This report has considered the potential daylight, sunlight and overshadowing impacts to the surrounding residential properties, when compared to the existing building on the site (2024).

1.4 The results of our daylight, sunlight and overshadowing assessments show that all surrounding residential properties and the amenity area assessed within this report would be fully compliant with the BRE Guidelines and the effects of the proposed development would be negligible.

1.5 Overall, the proposed development is considered to be acceptable in daylight, sunlight and overshadowing terms.

2 INTRODUCTION

2.1 The Chancery Group have been instructed to undertake a daylight, sunlight and overshadowing assessment for the redevelopment of 20 Murray Mews ("proposed development").

2.2 The methodology set out in this report is in accordance with the Building Research Establishment (BRE) Report 209: 'Site Layout Planning for Daylight and Sunlight, A Guide to Good Practice', Third Edition, 2022 ('the BRE Guidelines'), which is accepted as good practice by planning authorities throughout the country.

2.3 Paragraph 1.6 in the Introduction of the BRE Guidelines states:

"The guide is intended for building designers and their clients, consultants, and planning officials. The advice given here 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 (see Section 5). In special circumstances the developer or planning authority may wish to use different target values. For example, in a historic city centre, or in 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."

2.4 This report has considered the potential daylight, sunlight and overshadowing effects of the proposed development on the key surrounding residential properties and amenity areas, when compared to the existing building (2024).

2.5 Unless otherwise stated within this report, access has not been sought to any of the surrounding properties. The internal configuration of the rooms has been assumed from external inspections, photographs and publicly available floor plans. This is normal practice where access to adjoining properties and/or detailed room layout information is not available. The floor levels are assumed for all properties. This dictates the level of the working plane, which is the height that the NSL assessment is carried out. Regarding room layouts, 4.2m room depths have been assumed for residential spaces, unless the building form dictated otherwise.

2.6 We have relied upon the 3D computer model of the proposed development, existing buildings and surrounding buildings supplied by Hayhurst & Co on the 24 September 2024 to undertake the daylight, sunlight and overshadowing assessments.

2.7 The results of our technical assessment are provided in Appendix 01.

3 METHODOLOGY

3.1 The methodology set out in this report is in accordance with the Building Research Establishment (BRE) Report 209: 'Site Layout Planning for Daylight and Sunlight, A Guide to Good Practice', Third Edition, 2022 which is accepted as good practice by planning authorities throughout the country.

3.2 The determination of whether the potential daylight, sunlight and overshadowing effects are significant are based on statistical data and professional judgement. Further details regarding the technical methodology of each assessment undertaken are set out below.

Daylight

3.3 Paragraph 2.2.3 of the BRE Guidelines states:

"Note that numerical values given here are purely advisory. Different criteria may be used based on the requirements for daylighting in an area viewed against other site layout constraints."

3.4 The BRE Guidelines provide two methods of assessing daylight in the existing situation; the Vertical Sky Component (VSC), which assesses the quantum of skylight and the No Sky Line (NSL), which considers the distribution of light within a building. Each method is described in more detail below.

VSC

3.5 The VSC test calculates the potential for daylight to a building and measures the amount of skylight available at a given point (normally the centre of the outside plane of a window) from an overcast sky.

3.6 The BRE Guidelines suggest that a noticeable effect would likely occur if the VSC with the development in place is both less than 27% and less than 0.8 times its former value.

NSL

3.7 The NSL test calculates the distribution of daylight at the working plane (i.e. 850 mm above floor level) within a room. The NSL divides those areas of the working plane which can receive direct sky light, from those which cannot. The BRE Guidelines suggest that a noticeable effect would likely occur if the area of a room that receives direct sky light is reduced to less than 0.8 times its former value.

Sunlight - Annual Probable Sunlight Hours (APSH)

3.8 Paragraph 3.2.3 of the BRE Guidelines states:

"To assess loss of sunlight to an existing building, it is suggested that all main living rooms of dwellings, and conservatories, should be checked if they have a window facing within 90° of due south. Kitchens and bedrooms are less important, although care should be taken not to block too much sun.

Normally loss of sunlight need not be analysed to kitchens and bedrooms, except for bedrooms that also comprise a living space, for example a bed sitting room in an old people's home."

3.9 Paragraph 3.2.4 of the BRE Guidelines states:

"To calculate the loss of sunlight over the year, a different metric, the annual probable sunlight hours (APSH), is used. Here 'probable sunlight hours' means the total number of hours in the year that the sun is expected to shine on unobstructed ground, allowing for average levels of cloudiness for the location in question (based on sunshine probability data). The sunlight reaching a window is quantified as a percent age of this unobstructed annual total."

3.10 The APSH calculation is assessed on the centre of a main window located within 90° of due south. The BRE Guidelines recommend windows should receive at least 25% APSH and 5% APSH in the winter months. It is suggested that a noticeable effect would likely occur if the window receives less than 0.8 times its former sunlight hours and if there is a reduction in total APSH which is greater than 4%.

3.11 For the purposes of this assessment, the results and effects have been presented on a room basis and have focused upon the APSH.

Overshadowing - Sun Hours

3.12 The BRE Guidelines recommend that at least half of a garden or amenity area should receive at least 2 hours of direct sunlight on March 21st. Furthermore, if the area which receives 2 hours of direct sunlight is less than 0.8 times its former value, then the loss of sunlight is likely to be noticeable. This assessment uses specialist software to track the path of the sun to determine the percentage of an amenity area which receives 2 hours of direct sunlight.

4 DAYLIGHT AND SUNLIGHT ASSESSMENT RESULTS

4.1 We have undertaken an assessment upon the following properties, which are understood to be in residential use.

1. 22 St Augustine's Road
2. 18 Murray Mews
3. 21A Murray Mews
4. 23A Murray Mews
5. 23B Murray Mews
6. 22 Murray Mews

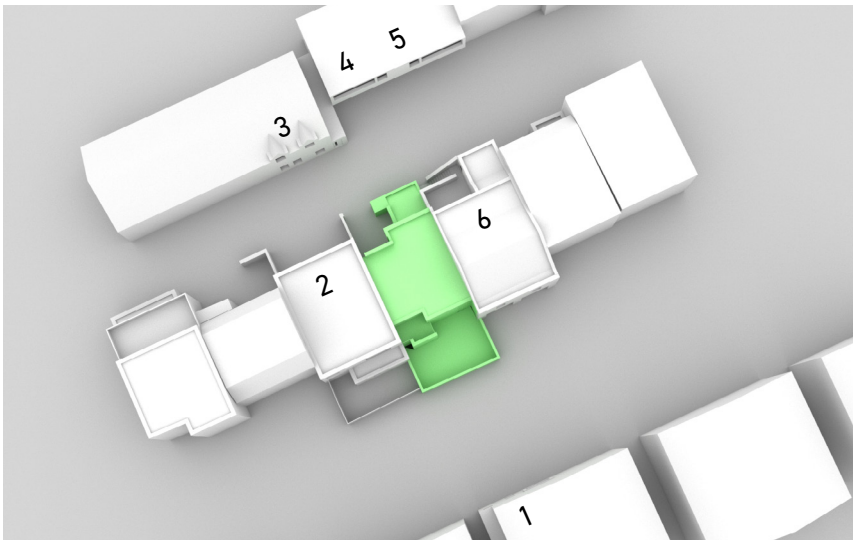

Fig 01 - Existing Buildings (Green) and Key Residential Properties

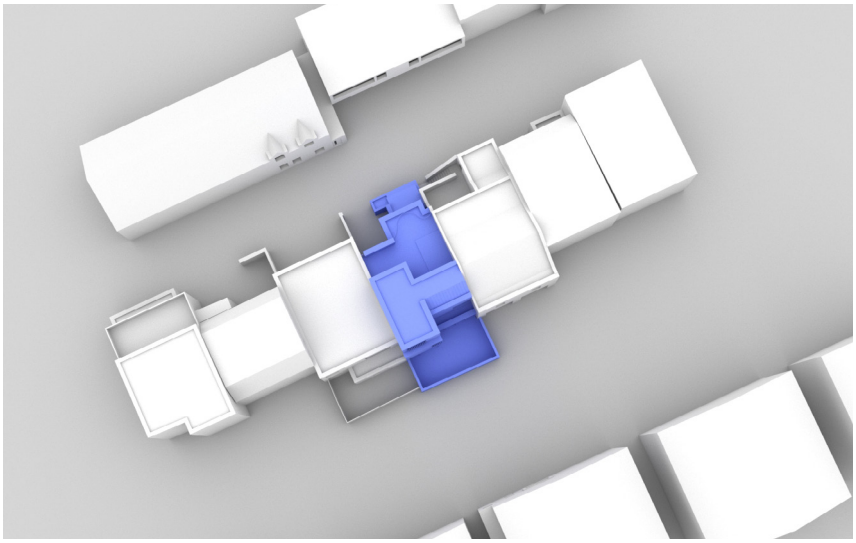

Fig 02 - Proposed Development (Blue)

4 DAYLIGHT AND SUNLIGHT ASSESSMENT RESULTS

4.2 Paragraph 2.2.2 of the BRE Guidelines states: *"...Windows to bathrooms, toilets, storerooms, circulation areas, and garages need not be analysed."*

4.3 As such, only habitable rooms and windows (i.e. bedrooms, living rooms and kitchens) have been considered for daylight and sunlight.

4.4 Appendix I of the BRE Guidelines states:

"Adverse effects occur when there is a significant decrease in the amount of skylight and sunlight reaching an existing building where it is required, or in the amount of sunlight reaching an open space... The assessment of effect will depend on a combination of factors, and there is no simple rule of thumb that can be applied."

4.5 The assessment results for each of the key surrounding properties have been detailed below.

22 St Augustine's Road

Daylight

4.6 The results of the VSC and NSL assessment show that all windows and rooms assessed would be fully compliant with the BRE Guidelines.

Sunlight

4.7 There are no windows facing within 90° of due south and therefore an APSH assessment is not required.

4.8 The effect of the proposed development on this property is negligible.

18 Murray Mews

Daylight

4.9 The results of the VSC and NSL assessment show that all windows and rooms assessed would be fully compliant with the BRE Guidelines.

Sunlight

4.10 All windows assessed would be fully compliant with the APSH criteria for both annual and winter sun light.

4.11 The effect of the proposed development on this property is negligible.

4 DAYLIGHT AND SUNLIGHT ASSESSMENT RESULTS

22 Murray Mews

Daylight

4.12 The results of the VSC and NSL assessment show that all windows and rooms assessed would be fully compliant with the BRE Guidelines.

Sunlight

4.13 All windows assessed would be fully compliant with the APSH criteria for both annual and winter sun light.

4.14 The effect of the proposed development on this property is negligible.

21A Murray Mews

Daylight

4.15 The results of the VSC and NSL assessment show that all windows and rooms assessed would be fully compliant with the BRE Guidelines.

Sunlight

4.16 All windows assessed would be fully compliant with the APSH criteria for both annual and winter sun light.

4.17 The effect of the proposed development on this property is negligible.

23A Murray Mews

Daylight

4.18 The results of the VSC and NSL assessment show that all windows and rooms assessed would be fully compliant with the BRE Guidelines.

Sunlight

4.19 All windows assessed would be fully compliant with the APSH criteria for both annual and winter sun light.

4.20 The effect of the proposed development on this property is negligible.

4 DAYLIGHT AND SUNLIGHT ASSESSMENT RESULTS

23B Murray Mews

Daylight

4.21 The results of the VSC and NSL assessment show that all windows and rooms assessed would be fully compliant with the BRE Guidelines.

Sunlight

4.22 All windows assessed would be fully compliant with the APSH criteria for both annual and winter sun light.

4.23 The effect of the proposed development on this property is negligible.

Overshadowing - Sun Hours

4.24 The only key amenity area relevant for a sun hours assessment is the rear garden at 22 Murray Mews.

4.25 The results of the assessment show that the rear garden would be fully compliant with the BRE Guideline criteria on March 21st.

4.26 The effect of the proposed development on this amenity area is negligible.

5 CONCLUSION

5.1 The Chancery Group have undertaken a daylight, sunlight and overshadowing assessment for the redevelopment of 20 Murray Mews ("proposed development").

5.2 This report has considered the potential daylight, sunlight and overshadowing impacts to the surrounding residential properties, when compared to the existing building on the site (2024).

5.3 The results of our daylight, sunlight and overshadowing assessments show that all surrounding residential properties and the amenity area assessed within this report would be fully compliant with the BRE Guidelines and the effects of the proposed development would be negligible.

5.4 Overall, the proposed development is considered to be acceptable in daylight, sunlight and overshadowing terms.

APPENDIX 1

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