gia CHARTERED SURVEYORS

DAYLIGHT & SUNLIGHT

IMPACT ON NEIGHBOURING PROPERTIES REPORT (INDICATIVE)

Beaufort Court, West Hampstead; 65 Maygrove Road, NW6 2DA

Brooks Murray Architects

11 March 2021

GIA No: **17412** Fee Quote: **FP01**

PROJECT DATA:

Client	**Brooks Murray Architects**
Architect	**Brooks Murray Architects**
Project Title	**Beaufort Court, West Hampstead; 65 Maygrove Road, NW6 2DA**
Project Number	**17412**

REPORT DATA:

Report Title	**Impact on Neighbouring Properties Report (Indicative)**
GIA Department	**Daylight and Sunlight**
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OS Data	**FIND Maps**

DISCLAIMER:

This report has been prepared for Brooks Murray Architects by GIA as their appointed Daylight & Sunlight consultants. It is accurate as at the time of publication and based upon the information we have been provided with as set out in the report. It does not take into account changes that have taken place since the report was written nor does it take into account private information on internal layouts and room uses of adjoining properties unless this information is publicly available.

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APPENDICES (BOUND SEPARATELY)

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1 EXECUTIVE SUMMARY

GIA have undertaken a desktop technical appraisal of the Brooks Murray Architects proposal for the Beaufort Court site utilising our bespoke software and the VU.CITY model to understand the potential changes in light to the relevant surrounding properties and potential for light within the proposal itself.

1.1 GIA have been instructed by Brooks Murray Architects to provide daylight and sunlight advice in relation to the massing proposal issued on 3 March 2021 by Brooks Murray Architects for the Beaufort Court, West Hampstead; 65 Maygrove Road, NW6 2DA site.

1.2 The assessments have been undertaken utilising the VuCity model of London and as such the analysis is indicative at this time. GIA have undertaken the technical assessments using bespoke software created by GIA to be specifically used within this platform.

1.3 The daylight and sunlight analysis has been considered by reference to the criteria and methodology within the Building Research Establishment Guidelines (2011), which when published, recognised that it should not form a mandatory set of criteria, rather it should be used to help and inform design.

1.4 In relation to daylight and sunlight matters, it is our opinion that there are no planning risks. All properties considered will adhere to the BRE guide.

2 THE SITE AND PROPOSAL

GIA have been instructed to review and advise on the potential daylight and sunlight impacts associated with the implementation of the Brooks Murray Architects massing on the Beaufort Court Site

THE SITE

2.1 The site is located in the London Borough of Camden.

2.2 Figure 01 below illustrates the site in its existing context.

Figure 01: Existing Site

PROPOSED DEVELOPMENT

2.3 GIA have been issued with a massing model of the proposal by Brooks Murray Architects.

2.4 GIAs understanding of the proposed development is illustrated in Figure 02 below.

Figure 02: The Proposed Scheme

3 BUILDING RESEARCH ESTABLISHMENT

'Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice' (2011)

3.1 The BRE Guidelines note that the document is intended to be used in conjunction with the interior daylight recommendations found within the British Standard BS8206-2:2008 and The Applications Manual on Window Design of the Chartered Institution of Building Services Engineers (CIBSE).

3.2 The BRE Guidelines provides three methodologies for daylight assessment of neighbouring properties, namely;

- The Vertical Sky Component (VSC);
- The No Sky Line (NSL); and
- The Average Daylight Factor (ADF).

3.3 For daylight to be compliant (in accordance with figure 20 of the Guide), both the VSC and NSL tests have to be met.

3.4 For the purpose of this appraisal, GIA have considered the VSC assessment to appreciate the potential impact on daylight. As per the BRE (paragraph F6 from Appendix F):

> *"in assessing the loss of light to an existing building, the VSC is generally recommended as the appropriate parameter to use."*

3.5 The BRE Guidelines suggest that the ADF assessment should only be used to "check that adequate daylight is provided in new rooms", rather than existing buildings.

3.6 Where layouts for proposed spaces are unknown undertaking a VSC facade study will illustrate where there is potential for daylight and thus the ability for a room to receive natural light.

3.7 In consideration of the potential for daylight within proposed spaces the BRE references that

> *The amount of daylight a room needs depends on what it is being used for. But roughly speaking, if theta is:*
>
> *• greater than 65° (obstruction angle less than 25° or VSC at least 27%) conventional window design will usually give reasonable results*
>
> *• between 45° and 65° (obstruction angle between 25° and 45°, VSC between 15% and 27%) special measures (larger windows, changes to room layout) are usually needed to provide adequate daylight*
>
> *• between 25° and 45° (obstruction angle between 45° and 65°, VSC between 5% and 15%) it is very difficult to provide adequate daylight unless very large windows are used*
>
> *• less than 25° (obstruction angle greater than 65°, VSC less than 5%) it is often impossible to achieve reasonable daylight, even if the whole window wall is glazed.*

3.8 There is one methodology provided by the BRE Guidelines for sunlight assessment, denoted as Annual Probable Sunlight Hours (APSH).

3.9 The BRE Guide provides two methods of overshadowing assessment, the Sun Hours on Ground and Transient Overshadowing studies.

3.10 It is an inevitable consequence of the built-up urban environment that daylight and sunlight will be more limited in dense urban areas. It is well acknowledged that in such situations there may be many planning and urban design matters to consider other than daylight and sunlight.

3.11 Appendix 01 of this report elaborates on the mechanics of each of the above assessment criteria, explains the appropriateness of their use and the parameters of each specific recommendation.

4 DAYLIGHT & SUNLIGHT IMPACTS TO NEIGHBOURING PROPERTIES

This section details the daylight and sunlight impacts in relation to the relevant properties neighbouring the Site.

4.1 A three-dimensional computer model of the Site and surrounding properties was produced utilising our the VU.CITY model of London.

4.2 We have utilised the planning search function and our due diligence to create the most accurate base context model to undertake the relevant indicative technical assessments.

4.3 Using automated generative processes, within our VU.CITY platform, we have inserted windows which will indicatively indicate the potential daylight and sunlight impacts to neighbouring building façades.

4.4 The windows are generically placed within the model and the analysis of these properties is highly indicative.

4.5 The scope of buildings assessed has been determined as a reasonable zone which considers both the scale of the proposed scheme and the proximity of those buildings which surround and face the site.

4.6 GIA have identified a number of properties neighbouring the site that require assessment:

4.7 The property uses have been ascertained by reference to a Valuation Office Agency search carried out in March 2021.

SURROUNDING PROPERTIES

4.8 In accordance with GIA's technical assessment all properties will adhere to the BRE Guide in relation to daylight (VSC) and sunlight (APSH) assessment.

4.9 We have included images that illustrate the BRE compliance by reference to the VSC, NSL and APSH studies.

4.10 Where the windows on the BRE images are highlighted green BRE compliance is achieved.

Figure 03: Window Map illustrating BRE compliance (VSC)

Figure 04: Window Map illustrating BRE compliance (VSC)

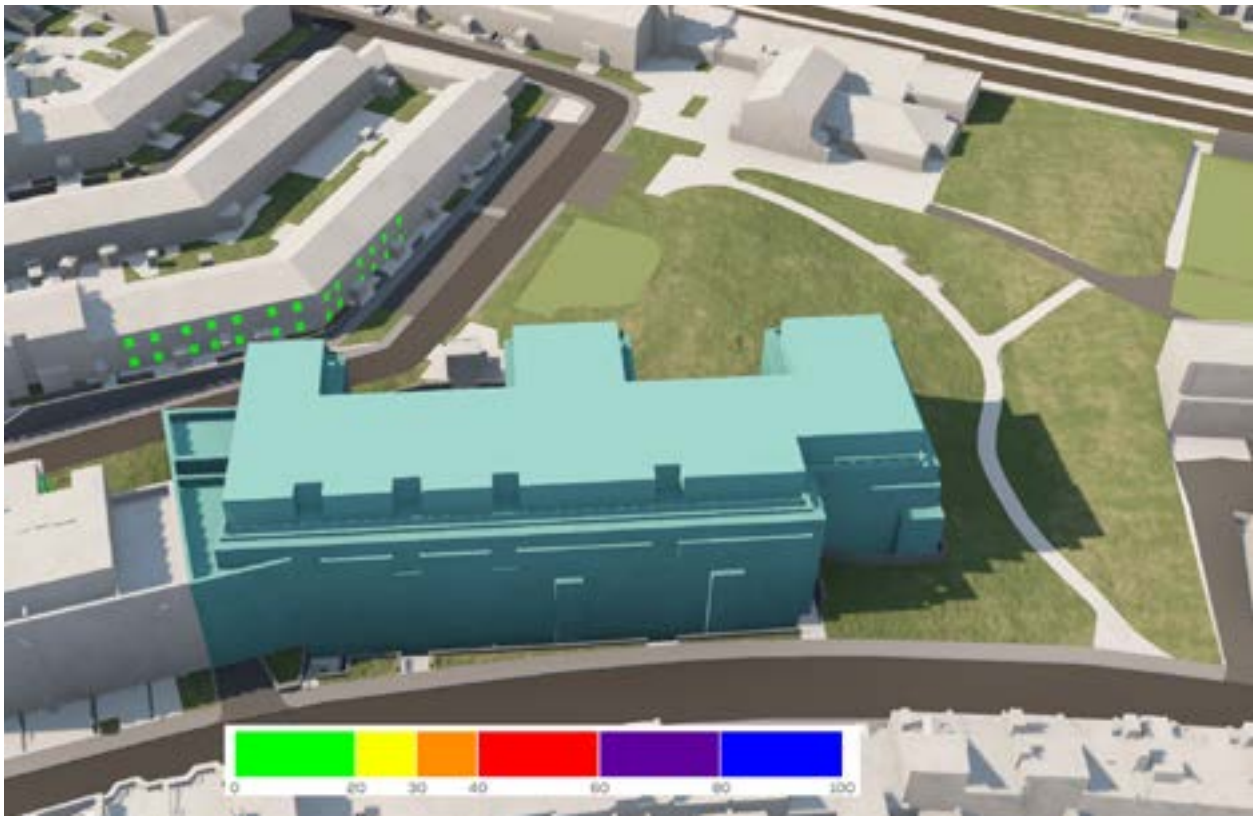

Figure 05: Window Map illustrating BRE compliance (APSH)

DAYLIGHT & SUNLIGHT : INTERNAL DAYLIGHT

4.11 GIA understand that the extension is on top of an existing residential building. As such we have looked at the potential changes in daylight to the lower levels to understand whether the extension will cause a daylight impact within the site itself.

4.12 As illustrated in Figure 06 and Figure 07 the additional storeys will not cause transgressions in relation to the VSC study.

Figure 06: Window Map of - illustrating VSC Facade Study

Figure 07: Window Map of - illustrating VSC Facade Study

OVERSHADOWING

4.13 GIA have undertaken a Sun Hours on Ground Assessment (SHOG) in relation to the amenity area to the north of the development site.

4.14 As illustrated in Figures 08 and 09, there will be a slight change to the area of shadow, however, more than 50% of the area will still retain two hours of direct sunlight on the 21st March and as such it is our opinion that this small alteration is not material.

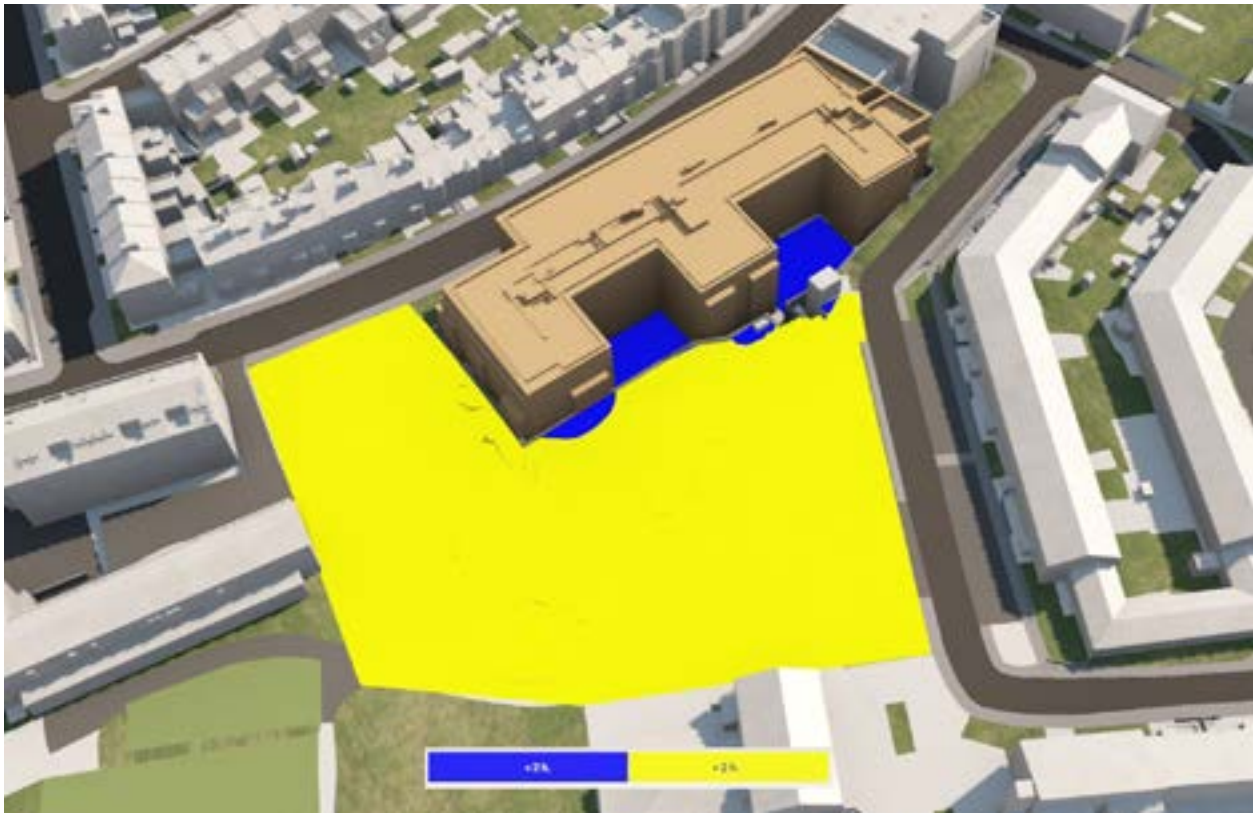

Figure 08: Sun Hours on Ground - Existing

Figure 09: Sun Hours on Ground - Proposed

CONCLUSION

4.15 In association with the current massing proposal we do not believe there is a planning risk as all properties considered will adhere to the BRE guide and full compliance is met.

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