

DAYLIGHT & SUNLIGHT

IMPACT ON NEIGHBOURING PROPERTIES REPORT - DRAFT

Euston House

Arax Properties

27 January 2022 GIA No: **18204** Fee Quote: **FP01**



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CONTENTS

USER TIP: Click any heading to go directly to that content.

1	EXECUTIVE SUMMARY	. 2
2	THE SITE	. 3
З	POLICY & THE WIDER CONTEXT	. 5
4	BRE GUIDELINES & CONTEXT METHODOLOGY	6
5	DAYLIGHT & SUNLIGHT IMPACTS TO NEIGHBOURING PROPERTIES	7
6	OVERSHADOWING IMPACTS TO NEIGHBOURING AMENITY	9
7	CONCLUSIONS	10

APPENDICES (BOUND SEPARATELY)

APPENDIX 01 ASSUMPTIONS

APPENDIX 02 PRINCIPLES OF DAYLIGHT, SUNLIGHT & OVERSHADOWING

APPENDIX 03 DRAWINGS

APPENDIX 04 DAYLIGHT & SUNLIGHT RESULTS A: VSC, NSL & APSH B: NSL CONTOURS

APPENDIX 05 OVERSHADOWING STUDY

APPENDIX 06 WINDOW MAPS

USER TIP: Return to the contents list from any page by clicking on the GIA logo.



1 EXECUTIVE SUMMARY

GIA have undertaken a technical Daylight, Sunlight and Overshadowing Assessment of the Apt scheme at Euston House "the Site" to understand the potential effect of the development on the daylight and sunlight amenity of the relevant neighbouring properties.

- 1.1 The requirement in London boroughs for significantly more living and working spaces necessitates higher density development. The Site is located within the Local Borough of Camden.
- 1.2 The daylight, sunlight and overshadowing 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.
- 1.3 Upon successful completion of the proposed scheme all properties, with the exception of St Pancras Church House, and amenity areas assessed will meet the national numerical values identified in paragraphs 2.2.21 and 3.2.11 of the BRE handbook for daylight, sunlight and overshadowing.
- 1.4 St Pancras Church House is a residential property located directly south of the Proposed Development. It has windows and rooms that look directly over the Site which have low existing daylight values. Although there are BRE transgressions in daylight to this property, this is mainly due to the low levels experienced in the existing building whereby any losses trigger non-compliance. We do not consider any daylight reductions to this building as being significant.

2 THE SITE

GIA have been instructed to review and advise on the daylight and sunlight impacts associated with the implementation of the proposed development at Euston House.

THE SITE

- 2.1 The Site is located in the Local Borough of Camden and is bounded by Eversholt Street to the west, Doric Way to the north, Lancing Street to the south and residential properties that front Churchway to the east.
- 2.2 Figure 02 below illustrates the Site. Further drawings are enclosed at Appendix 03 of this report.



Figure 01: 3D model of the site and Existing Property



PROPOSED DEVELOPMENT

2.3 GIA's understanding of the Proposed Development is illustrated in Figure 03 and further drawings are enclosed at Appendix 03.



Figure 02: 3D Perspective View of the Proposed Scheme

3 POLICY & THE WIDER CONTEXT

- 3.1 Below we have detailed sections from the following documents as they are, in our opinion, the most pertinent in relation to daylight and sunlight matters and how we have approached the effects of the Proposed Development on the relevant neighbouring properties:
 - National Planning Policy Framework (NPPF) (June 2019) (Ministry of Housing Communities and Local Government (MHCLG));
 - National Planning Practice Guidance (NPPG) (updated October 2019) (MHCLG);
 - The London Plan (March 2021) (Greater London Authority); and
 - Camden Planning Guidance: Amenity (March 2021).

NATIONAL PLANNING POLICY FRAMEWORK (JUNE 2019)

3.2 The NPPF (Feb 2019) states that local planning authorities should refuse applications which they consider fail to make efficient use of land. The discussion in relation to daylight and sunlight highlights the Government's recognition that increased flexibility is required in response to the requirement for higher density development.

> "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 (as long as the resulting scheme would provide acceptable living standards)"

NATIONAL PLANNING PRACTICE GUIDANCE (UPDATED OCTOBER 2019)

- 3.3 In light of the update to the Government's Planning Practice Guidance, we have considered the relevant paragraphs on daylight and sunlight.
- 3.4 Paragraph 6 of the NPPG (Ref ID: 66-006-20190722) acknowledges that new development may cause an impact on daylight and sunlight levels enjoyed by neighbouring occupiers. It requires local authorities to assess whether the impact to neighbouring occupiers would be "unreasonable".

THE LONDON PLAN (MARCH 2021)

- 3.5 The London Plan was published in March 2021 and sets out the integrated economic, environmental, transport and social framework for the development of London over the next 20-25 years.
- 3.6 Part D of Policy D6 (Housing Quality and Standards) states that the design of development "should provide sufficient daylight and sunlight to new and surrounding housing that is appropriate for its context, whilst avoiding overheating, minimising overshadowing and maximising the usability of outside amenity space."
- 3.7 It is clear that the GLA's focus is on sufficient or retained daylight and sunlight to neighbouring properties and highlights that context will be a consideration to determine sufficiency.

CAMDEN PLANNING GUIDANCE: AMENITY (MARCH 2018)

- 3.8 This document discusses various aspects about daylight and sunlight however for the purposes of this report, we have only included the first key message, being:
- 3.9 The Council expects applicants to consider the impact of development schemes on daylight and sunlight levels. Where appropriate a daylight and sunlight assessment should submitted which should be follow the guidance in the BRE's Site layout planning for daylight and sunlight: A guide to good practice.



4 BRE GUIDELINES & CONTEXT METHODOLOGY

The Building Research Establishment (BRE) have set out in their handbook 'Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice (2011)', guidelines and methodology for the measurement and assessment of daylight and sunlight.

BUILDING RESEARCH ESTABLISHMENT GUIDELINES 2011

- 4.1 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).
- 4.2 The BRE Guidelines provides three methodologies for daylight assessment of neighbouring properties, namely;
 - 1 The Vertical Sky Component (VSC);
 - 2 The No Sky Line (NSL); and
 - ³ The Average Daylight Factor (ADF).
- 4.3 For daylight to be compliant (in accordance with figure 20 of the Guide), both the VSC and NSL tests have to be met.
- 4.4 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. We have not considered this assessment within this report.
- 4.5 There is one methodology provided by the BRE Guidelines for sunlight assessment, denoted as Annual Probable Sunlight Hours (APSH).
- 4.6 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.
- 4.7 The BRE Guide provides two methods of overshadowing assessment, the Sun Hours on Ground and Transient Overshadowing studies.
- 4.8 Appendix 02 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.

5 DAYLIGHT & SUNLIGHT IMPACTS TO NEIGHBOURING PROPERTIES

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

- 5.1 A three-dimensional computer model of the Site and surrounding properties was produced to carry out the relevant technical studies. All relevant assumptions made in producing this model can be found in Appendix 01.
- 5.2 The table below outlines the VSC, NSL and APSH results for all the surrounding properties:

Property	VSC Total no. of windows	BRE compliant	NSL Total no. of rooms	BRE compliant	APSH Total no. of windows	BRE compliant
Royal George Public House-8 Eversholt Street	16	16	12	12	14	14
1-9 Ian Hamilton House	12	12	12	12	8	8
42 Doric Way	10	10	5	5	5	5
40 Doric Way	17	17	15	15	17	17
34-38 Eversholt Street	16	16	12	12	16	16
1-31 Churchway	39	39	39	39	39	39
St Pancras Church House	21	11	15	13	NA	NA
1-79 Doric Way	80	80	80	80	80	80
Wellesley House	141	141	94	94	24	24
St. Anne's Flats	78	78	68	68	76	76
St. Mary's Flat	42	42	25	25	31	31

Table 01: Daylight and Sunlight Compliance Rates of all Adjoining Properties

- 5.3 Following implementation of the Proposed Development, all properties assessed, with the exception of St Pancras Church House, would achieve BRE compliance for all daylight tests and sunlight. The impacts to St Pancras Church House are discussed in further detail below.
- 5.4 All results are located within Appendix 04.



ST PANCRAS CHURCH HOUSE

- 5.5 This property is located to the south of the Site and has 21 windows serving 15 rooms. We have not been able to source floor plans for this property so have assumed all Site facing windows and rooms serve habitable space.
- 5.6 Window maps of this property are located in Appendix 06.
- 5.7 Of the 21 windows assessed, 11 achieve BRE compliance for VSC following implementation of the Proposed Development. There are six windows that would experience reductions of between 20-30% and four between 30-40%. All windows that exceed guidance have very low existing VSC levels of between 3.9% -7.3% (from a target of 27%). This means that these windows are extremely sensitive to any losses in VSC which will trigger a BRE breach. The absolute VSC losses in reality are between 1.3% 1.5% and it is questioned whether these small losses would be noticed by an occupier of this property.
- 5.8 Of the 15 rooms assessed for NSL, all but two achieve BRE compliance. The two rooms that exceed the suggested guidance would lose 24.6% and 28.7% NSL which is just in excess of the BRE guidance of 20%. Again, the NSL values of these rooms are low so any loss in NSL triggers a BRE transgression. The absolute NSL losses to these rooms are only 0.4 and 0.6 sq. m.
- 5.9 There are no windows that are located within 90 degrees of due south that require an APSH assessment.

Conclusions

5.10 Given the close proximity of this property to the Site, the majority of windows and rooms all experience low levels of daylight in the existing condition. Therefore, small losses to these values results in BRE transgressions. In reality, we would question whether such small reductions would be noticeable to occupiers. We do not consider the daylight impacts to this property as being significant.



Figure 03: Google Image of St Pancras Church House

6 OVERSHADOWING IMPACTS TO NEIGHBOURING AMENITY

GIA have assessed the SHOG impacts to the five amenity areas located around the site.

- 6.1 GIA have assessed the SHOG impacts to the five immediate amenity areas located around the Site.
- 6.2 Four of the amenity areas assessed would not experience any change in their SHOG levels following implementation of the Proposed Development. The one area that would experience a change is located directly north of the Site and would experience a reduction from 62.9% to 57.6%, which is well within the parameters as set by the BRE guidelines.
- 6.3 Therefore, following successful construction of the Proposed Development, all amenity areas assessed would achieve BRE compliance for SHOG.
- 6.4 The SHOG results are located within Appendix 05.



7 CONCLUSIONS

GIA have undertaken a daylight, sunlight and overshadowing assessment in relation to the Proposed Development at Euston House. The technical analysis has been undertaken in accordance with the BRE Guidelines.

- 7.1 GIA have undertaken a daylight, sunlight and overshadowing assessment in relation to the Proposed Development at Euston House. The technical analysis has been undertaken in accordance with the BRE Guidelines.
- 7.2 Following successful implementation of the Proposed Development, 97.9% of windows tested would achieve BRE compliance for VSC, 99.55% of rooms would achieve BRE compliance for NSL and 100% of windows would achieve compliance for APSH.The daylight reductions beyond the BRE criteria are to St Pancras Church House. The windows and rooms within this property are poorly lit so are sensitive to changes in massing on the Site. We do not consider the daylight reductions to this property as being material. All amenity areas assessed would achieve BRE compliance for SHOG.





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