



Unlocking potential for a better built environment

DAYLIGHT AND SUNLIGHT

IMPACT ON NEIGHBOURING
PROPERTIES REPORT

Thamesfield Retirement Village

Retirement Villages Group (RVG)

22 November 2024

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DISCLAIMER:

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1 EXECUTIVE SUMMARY

GIA have assessed the Design Engine scheme at the Thamesfield Retirement Village, Henley-on-Thames to understand the potential changes in light to the relevant sensitive receptors.

- 1.1 GIA have been instructed by Retirement Villages Group to advise on impacts to daylight and sunlight in relation to the established and operational Thamesfield Integrated Retirement Community in the village of Remenham.
- 1.2 The proposed development is to include part demolition of an existing building and replacement with a three-storey extension to provide extra-care units ("The Proposed Development").
- 1.3 GIA have undertaken technical assessments on daylight and sunlight to understand the potential effect of the development on the amenity of the relevant neighbouring receptors.
- 1.4 The technical analysis has been considered by reference to the criteria and methodology within the Building Research Establishment (BRE) Guidance (BR209, 2022) which when published, recognised that it *"is advisory and the numerical target values within it may be varied to meet the needs of the development and its location"*¹.
- 1.5 The approach to be taken to daylight and sunlight issues has been considered carefully by a number of recent appeal decisions from the Inspectorate. A two-stage process is to be adopted. This was examined more recently at the appeal at Goldsworth Road, Woking with the Inspector fully endorsing the two stage approach (PINS Ref: APP/A3655/W/21/3276474), which stems from the High Court decision on the application of Melanie Rainbird and The Council of the London Borough of Tower Hamlets².
- 1.6 The key headlines from the relevant policy documents are summarised in Section 3 of this report.
- 1.7 Upon successful completion of the proposed scheme, four of the six properties assessed will meet the national numerical values identified in the BRE Guidance for daylight and sunlight.
- 1.8 For daylight, 82% (49/60) of windows will meet the BRE's recommendations for Vertical Sky Component ("VSC"), whilst 95% (18/19) of rooms will meet BRE guidance for No Sky Line ("NSL").
- 1.9 For sunlight, 97% (28/29) of south facing windows will meet BRE guidance for Annual Probable Sunlight Hours ("APSH").
- 1.10 The Proposed Development shows a high level of compliance against the BRE's daylight and sunlight tests. Where transgressions of the BRE Guidelines occur, it is in very isolated and constrained locations and entirely in line with what can be expected when delivering new development.
- 1.11 The main focus of the impacts associated with the Proposed Development are to the existing Thamesfield Retirement Village property, whereby the impacted windows are oriented directly into a courtyard, which makes achieving BRE recommended levels of light challenging in the proposed conditions. In this situation, dual aspect rooms have allowed for light to enter the rooms from alternative façades and therefore continues to provide the occupants with sufficient daylight amenity.
- 1.12 Having considered the relevant local policies and the Governments recognition for increased flexibility on daylight and sunlight matters, it is our view that the isolated daylight and sunlight impacts rising from the proposal are not detrimentally impacting the amenity of neighbouring occupiers, and therefore should be considered acceptable in context.
- 1.13 This report is supported by several documents, drawings and results which are all enclosed within the Appendices as listed on the Contents Page. All assumptions used in collating this report can be found in Appendix 01.

1 Littlefair, P. (2022). Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice. Hertfordshire: HIS BRE Press, p 85 para F1

2 Rainbird, R (on the application of) v The Council of the London Borough of Tower Hamlets [2018] EWHC 657 (Admin) (28 March 2018)

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2 THE SITE & PROPOSED DEVELOPMENT

GIA have been instructed to review and advise on the daylight and sunlight impacts associated with the implementation of the Proposed Development at Thamesfield Retirement Village, Henley-on-Thames.

THE SITE

- 2.1 The application Site is located within the village of Remenham, directly opposite Henley-on-Thames. The site is bordered by the River Thames to the south west, and Wargrave Road to the north east.
- 2.2 Thamesfield is an established and operational Integrated Retirement Community (IRC) providing extra care retirement accommodation and associated communal facilities. The Site currently comprises 37 extra care units (use class C2).
- 2.3 A detailed description of the Site and surrounding area is provided within the Design & Access Statement and not repeated herein.
- 2.4 Figure 01 below illustrates the Site in the existing scenario.



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

PROPOSED DEVELOPMENT

2.5 The Design Engine Architects proposal seeks “Part demolition of existing building and replacement with a three-storey extension to provide extra-care units (Use Class C2), with associated soft and hard landscaping works; provision of additional vehicle parking, bin stores and ancillary structures; and alterations to existing basement”.

2.6 Figure 02 below illustrates the Site in the proposed scenario.



Figure 02: 3D Perspective View of the Proposed Scheme

3 POLICY & GUIDANCE

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 (December 2023);
- Planning Practice Guidance (July 2019);
- Wokingham Borough Core Strategy (January 2010); and
- Building Research Establishment Guidelines 2022.

3.2 The key headlines from each of the documents can be summarised as follows:

- 1 The NPPF highlights the Government's recognition that increased flexibility is required on daylight and sunlight in response to the requirement for higher density development. By stating that *"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)"*¹ (our emphasis).
- 2 The PPG outlines that all developments should *"maintain acceptable living standards"* and that assessing appropriate daylight and sunlight amenity *"will depend to some degree on context"*².
- 3 Policy CP3 – General Principles for development of the Wokingham Borough Core Strategy (January 2010) states that:

Planning permission will be granted for proposals that:

a) Are of an appropriate scale of activity, mass, layout, built form, height, materials and character to the area together with a high quality of design without detriment to the amenities of adjoining land users including open spaces or occupiers and their quality of life.

- 4 Finally, the BRE Guidelines 2022 offer a numerical methodology to calculate changes in Daylight condition and are widely used in the industry. The key criteria within the BRE (Vertical Sky Component "VSC", No Sky Line "NSL" and Annual Probable Sunlight Hours "APSH") have been used to understand and compare the existing and retained levels of light once the Proposed Development has been implemented. A summary of the BRE Guidelines 2022 are provided within Appendix 02.

1 MHCLG. (2019). National Planning Policy Framework (2021), p 37, para 125(c)

2 MHCLG. (2021). National Planning Policy Guidance (2021), para 66-007-20190722

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4 DAYLIGHT & SUNLIGHT IMPACTS TO NEIGHBOURING PROPERTIES

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

MODELLING

- 4.1 A three-dimensional computer model of the Site and surrounding properties was produced based on a full measured survey undertaken by GIA on the 27th of June 2023. Where available we have included floor plans of the relevant properties and this context model has been used to carry out the technical assessments. All relevant assumptions made in producing this model can be found in Appendix 01.

TWO-STAGE APPROACH

- 4.2 We have considered the relevant neighbouring properties in two stages:

Stage 1 - Is there a strict compliance with the BRE Guidelines?

- We apply the national numerical assessments for daylight and sunlight as outlined in the BRE Guidelines. Where properties, windows and/or rooms meet the recommendations of the BRE Guidelines, these are not discussed further.

Stage 2 - Is there a detrimental impact to the amenity of neighbouring occupiers?

- Where properties, windows and rooms do not meet the recommendations of the BRE Guidelines, we examine wider material considerations to determine whether there is a detrimental impact to the amenity of neighbouring occupiers.

RELEVANT NEIGHBOURING PROPERTIES

- 4.3 GIA have identified the following properties as relevant for daylight and sunlight assessment. All results can be found in Appendix 04:
- Thamesfield Retirement Village
 - 1 - 5 Remenham Row
- 4.4 The following properties will meet the numerical recommendations set out within the BRE Guidelines (Stage 1) and are not discussed further:
- 2 - 5 Remenham Row

- 4.5 The remaining properties which do not meet the numerical recommendations set out within the BRE Guidelines are considered in further detail. The location of these properties are identified in Figure 03 overleaf with the associated land use of each property.

- 4.6 To assist the readers understanding of the surrounding properties and window locations, we have produced window maps which are enclosed at Appendix 05 of this report.

DISCUSSION OF RESULTS

- 4.7 In order to establish whether the Proposed Development will result in unacceptable harm (Stage 2), we have examined and applied the following material considerations (where relevant):

- 1 If room layouts are unknown, then only the VSC methodology will be considered for daylight in line with paragraph 2.2.10 and Appendix D of the BRE Guidelines;
- 2 If room layouts are known, then a reduction in NSL to bedrooms is deemed 'less important' as stated within paragraph 2.2.10 of the BRE Guidelines;
- 3 If there is a loss of light to a window (VSC), but the room has one or more windows, an overall VSC can be derived to consider if the room as a whole would meet the guidelines, in accordance with paragraph 2.2.8 of the BRE Guidelines;
- 4 If architectural features (e.g. protruding side returns) exist which would restrict daylight or sunlight to rooms lit by windows beside them in accordance with paragraph 2.2.14 of the BRE Guidelines; and
- 5 Where windows and rooms overlooking the site currently benefit from high levels of daylight and sunlight, some degree of impact must be expected for any meaningful development of the site to come forward.



Figure 03: Sensitive receptors map by use

THAMESFIELD RETIREMENT VILLAGE

- 4.8 The existing Thamesfield Retirement Village is an established and operational IRC, distributed across two blocks of part two-storey and part three-storey residential apartments (see Figure 04).
- 4.9 The existing blocks are within the site boundary and gives the Proposed Development it's name. These blocks will be retained as part of the development and as such are relevant for assessment.
- 4.10 Internal layouts have been acquired from Design Engine Architects and can be found within Appendix 06 of this report. These layouts confirm that a total of nine flats face the site.
- 4.11 Existing buildings on the site which are to be demolished are currently single-storey. Consequently any windows and rooms overlooking the Site will currently benefit from high levels of daylight and sunlight. As such, some degree of impact must be expected if there is an increase in massing beyond what currently exists.

Stage 1 - Is there a strict compliance with the recommendations in the BRE Guidelines?

- 4.12 Of the nine flats tested, two remain fully BRE compliant for both daylight and sunlight.

No. of Windows	No. of Rooms	Compliant for VSC	Compliant for NSL	Compliant for APSH
37	19	27/37 (73%)	18/19 (95%)	10/11 (91%)

Daylight

- 4.13 Of the 37 windows tested for VSC, 27 (73%) will remain BRE compliant. For the 10 windows which do not meet recommendations, four will experience minor changes of between 24-26%, a further window will experience a moderate change of 37% and the remaining five windows will experience changes in excess of 40%.
- 4.14 19 rooms have been assessed for NSL, of which 18 (95%) will experience no noticeable alteration in daylight distribution. The remaining room (R5/



Figure 04: Site plan showing location of Thamesfield Retirement Village

F00) is a bedroom, which will experience a minor change of 22%.

Sunlight

- 4.15 10 of the 11 windows tested for APSH will remain BRE compliant in that they will see a change of 20% or less or will meet / exceed the target for annual sunlight. The remaining window serves an LKD (W14/F01). With respect to winter sunlight, all 11 windows will remain BRE compliant.

Stage 2 - Is there a detrimental impact to the amenity of neighbouring occupiers?

- 4.16 Of the seven flats which do not meet guidance, the most noticeable change in light condition is occurring to the four flats located to the north-east of the development (see Figure 05).
- 4.17 Of the 10 windows which do not meet the guidance for VSC, when considering the supplementary VSC to the room assessment, four of these windows are located within rooms which will remain compliant.
- 4.18 The remaining six windows are distributed across four rooms. Three of these rooms (F00/R3, F00/R5 & F01/R8) are single aspect bedrooms, which retain acceptable levels of light, ranging from 16.4-19.9%. The remaining room (F01/R6) is an LKD located within Flat 9, where three of the flats four windows, experience a change in light condition in excess of 40% (see Figure 05). This is an effect of looking directly onto the Proposed Development.

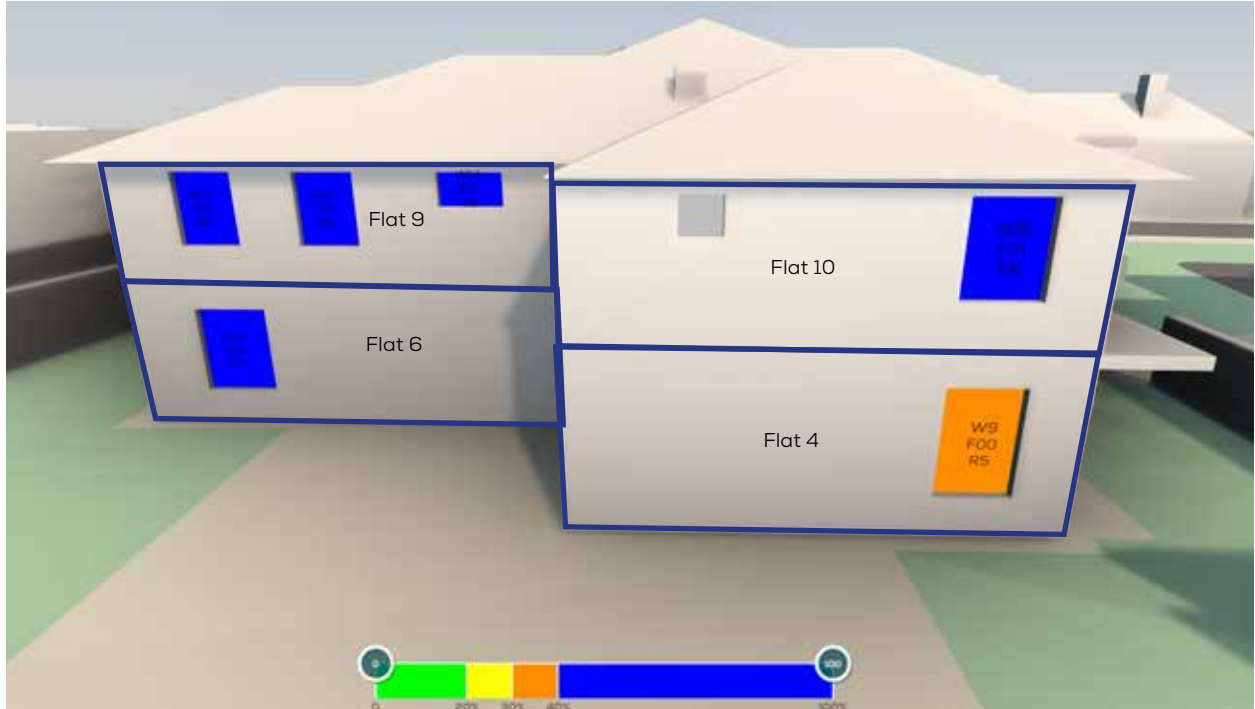


Figure 05: VSC % Change Window Map of Thamesfield Retirement Village

4.19 In regards to NSL within the above mentioned four rooms, only F00/R5 does not meet recommendations. This room has been identified as a bedroom and the BRE acknowledges that they *“should be analysed although they are less important”*.

4.20 In addition, the results demonstrate that there will be no noticeable alteration in daylight distribution for F01 / R6. This is because the room benefits from the inclusion of a glazed door to the rear of the room, which provides access onto a private balcony (see Figure 06 & Figure 07).



Figure 06: Site photograph of the rear of Flats 6 & 9.

4.21 When considering sunlight to rooms, the APSH values meet recommendation for all rooms and are not discussed further.



Figure 07: NSL contour plot for F01/R6.

Conclusion

- 4.22 In consideration of the above, although the nationally applicable BRE Guidelines are not met in relation to daylight upon 10 windows, we do not consider that the daylight amenity of this property would be detrimentally impacted.
- 4.23 The NSL test for daylight shows that nearly all of the rooms are adequately lit. The one room which may experience a minor change in light condition is to a ground floor, single aspect bedroom, that looks directly onto the development site. As such, some degree of impact will be expected.
- 4.24 The impact of the development upon sunlight amenity to the existing Thamesfield Retirement Village is isolated to one window. When considering sunlight to rooms, all rooms meet recommendations. We therefore do not consider that the sunlight amenity of this property would be a detrimentally impacted.

1 REMENHAM ROW

- 4.25 1 Remenham Row is part of a terrace of purpose built assisted living residential homes/apartments accessed via Wargrave Road. This property is located to the north-west of the development (see Figure 08).
- 4.26 Internal layouts have not been acquired and so reasonable assumptions have been made on the internal configuration from external observations and site photographs.
- 4.27 Only the VSC methodology has been assessed for daylight in line with paragraph 2.2.10 and Appendix D of the BRE Guidelines.

Stage 1 - Is there a strict compliance with the recommendations in the BRE Guidelines?

- 4.28 This property meets the recommendations for APSH and is not discussed further.

No. of Windows	No. of Rooms	Compliant for VSC	Compliant for NSL	Compliant for APSH
8	4	7/8 (88%)	N/A	6/6 (100%)

VSC

- 4.29 Of the eight windows tested for VSC, seven (88%) will remain BRE compliant. The one window (W1/F01) which does not meet recommendations will experience a minor change in light condition of 24%.

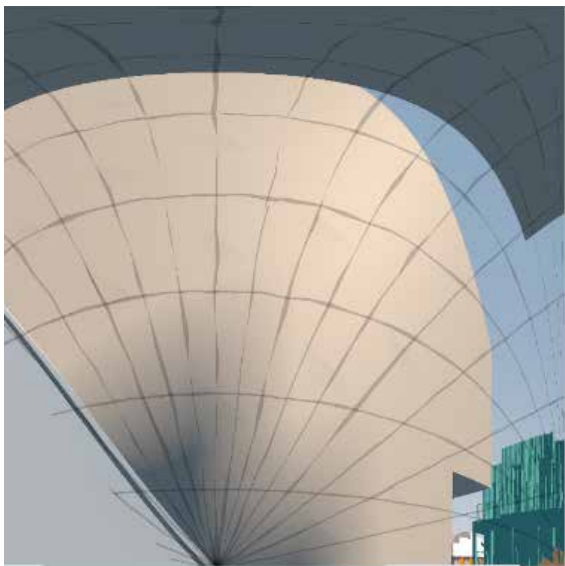


Figure 09: VSC Waldram image of W1 / F01



Figure 08: Site plan showing location of 1 Remenham Row.

Stage 2 - Is there a detrimental impact to the amenity of neighbouring occupiers?

- 4.30 The one impacted window for VSC, is one of three windows which forms a protruding dormer on the first floor. The window is heavily constrained in the existing scenario due to its north-east orientation, looking directly onto the side return of 2 Remenham Row. The BRE recognises in paragraph 2.2.14 of the Guidelines that this restricts the receipt of daylight to this individual window, which is exemplified by the low existing VSC value (2.9%). This obstruction is illustrated in the Waldram diagram within Figure 09.
- 4.31 When considering the supplementary VSC to the room assessment, the remaining windows within the dormer ensure that this room (F01 / R1) overall VSC remains compliant.

Conclusion

- 4.32 In consideration of the above, although the nationally applicable BRE Guidelines are not met in relation to daylight upon one window, we do not consider that the daylight amenity of this property would be detrimentally impacted.

5 CONCLUSIONS

GIA have undertaken a daylight and sunlight assessment in relation to the Proposed Development at the Thamesfield Retirement Village, Henley-on-Thames. The technical analysis has been undertaken in accordance with the BRE Guidelines.

- 5.1 GIA have completed a comprehensive technical analysis of the daylight and sunlight impacts produced by the Proposed Development at the Thamesfield Retirement Village, Henley-on-Thames.
- 5.2 When constructing buildings, alterations in light to adjoining properties are often unavoidable and the numerical guidance given in the BRE document can be treated flexibly in consideration of site specifics.
- 5.3 Upon successful completion of the proposed scheme, four of the six properties assessed will meet the national numerical values identified in the BRE Guidance for daylight and sunlight.
- 5.4 Our technical analysis demonstrates that the overall compliance rates for the surrounding properties are 49/60 (82%) for VSC and 18/19 (95%) for NSL (daylight). 28/29 (97%) south facing windows will meet BRE guidance for APSH.
- 5.5 Furthermore, Section 1.6 of the BRE suggests that: *"Although, it gives numerical guidelines, these should be interpreted flexibly since natural lighting is only one of many factors in site layout design".*
- 5.6 Where transgressions from guidance occur, these are mostly isolated to individual windows. When reviewing the performance of the rooms which these windows serve, the results show that the retained daylight and sunlight amenity is sufficient in this context.
- 5.7 It is GIAs opinion that the impacts to the neighbouring properties is considered to be within the intention and flexible application of the BRE Guidelines.
- 5.8 Having considered the relevant local policies and the Governments recognition for increased flexibility on daylight and sunlight matters, it is our view that the isolated daylight and sunlight impacts rising from the proposal are not detrimentally impacting the amenity of neighbouring occupiers, and therefore should be considered acceptable.



What we do:

Building Surveying
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Measured Surveys
Party Wall & Neighbourly Matters
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