Signature Surveyors

LAND NORTH AND SOUTH OF GOLDSWORTH ROAD, WOKING GU21 6JT

DAYLIGHT & SUNLIGHT PROOF OF EVIDENCE

Gordon Ingram

Goldsworth Road Development LLP

2 November 2021

Planning Appeal Reference: Planning Application Reference: APP/A3655/W/21/3276474 PLAN/2020/0568

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Client	Goldsworth Road Development LLP
Architect	JTP Architects
Project Title	Land North and South of Goldsworth Road, Woking GU21 6JT
Project Number	15563
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Dated	2 November 2021
Prepared by	Gordon Ingram

Gordon Ingram MRICS

This document has been prepared by Gordon Ingram as evidence for the Public Inquiry at Land North and South of Goldsworth Road, Woking GU21 6JT.

Planning Application Reference: PLAN/2020/0568

Planning Appeal Reference: APP/A3655/W/21/3276474

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Fig. 01: CGI illustration of the proposed Goldsworth Road, Woking development designed by JTP Architects

EXPERT DECLARATION

My name is Gordon Robert Ingram. I am a member of the Royal Institution of Chartered Surveyors. I am the founding Partner of GIA (Gordon Ingram Associates), a company that specialises in Daylight and Sunlight matters. GIA is based at The Whitehouse, Belvedere Road, London SE1 8GA. The Practice has dealt with thousands of projects over the last two decades.

I specialise in dealing with Daylight and Sunlight (both internal and external), Overshadowing, Solar Glare, and Light Pollution. I have given numerous seminars and presentations on these subjects, as well as appearing as an Expert Witness at several Public Inquiries and Hearings.

I have personally advised many developers and institutions on these disciplines, in relation to major schemes and masterplans, since I started practising in 1985.

I have provided daylight and sunlight advice for numerous institutions and major companies on these areas.

I understand my duty to the Inquiry (PINS Ref: APP/A3655/W/21/3276474) is to help the Inspector on matters within my expertise and that this duty overrides any obligation to the person from whom I have received instructions or by whom I am paid. I have complied, and will continue to comply, with that duty. I confirm that the evidence in this note identifies all facts which I regard as being relevant to the opinion that I have expressed, and that the Inquiry's attention has been drawn to any matter which would affect the validity of that opinion. I believe that the facts stated within this proof are true and that the opinions expressed are correct.

I confirm that my report complies with the requirements of the professional institution of which I am a member, the Royal Institution of Chartered Surveyors ("RICS"), as set down in the RICS practice statement "Surveyors acting as expert witnesses".



SECTION 1 EXECUTIVE SUMMARY

1 EXECUTIVE SUMMARY

INSTRUCTION FROM GOLDSWORTH ROAD DEVELOPMENT LLP

- 1.1 GIA was originally appointed by the Appellant to address daylight and sunlight matters in respect of the development the subject of Planning Application Ref: PLAN/2020/0568 ("the Proposed Development") located at Land North and South of Goldsworth Road, Woking GU21 6JT ("the Site").
- 1.2 I have been instructed to provide evidence on the daylight and sunlight implications of the Proposed Development.
- 1.3 My Proof of Evidence deals specifically with the first reason for refusal of the Decision Notice dated 20th January 2021 by Woking Borough Council ("the Council") which can be found within the Core Documents (CD-6.1.4).
- 1.4 The Daylight & Sunlight ES Chapter (June 2020) (CD-4.1.7) submitted with the Planning Application demonstrated that while some impacts to neighbouring windows and rooms would fall outside the nationally applicable recommendations of the BRE Guidelines (CD-0.1.4), this would not give rise to significant harmful impacts given the site specific context.
- 1.5 This opinion was shared by Officers in their recommendation for approval in their Committee Report which can also be found within the Core Documents (CD-6.1.1).
- 1.6 As a result of the first reason for refusal citing the issue of daylight and sunlight, I have revisited the evidence.
- 1.7 The further work I have undertaken reinforces my original conclusions on these matters. My conclusions in relation to the Proposed Development remain unchanged. I conclude that there is no sustainable reason for refusal based on daylight and sunlight in the circumstances of the Site.

SCOPE AND STRUCTURE OF EVIDENCE IN THE REPORT

- 1.8 I have considered the evidence in two stages as per the High Court decision on the application of Melanie Rainbird and The Council of the London Borough of Tower Hamlets¹ (CD-15.1.2).
- 1.9 Within this Proof I have addressed any alterations in daylight and sunlight to neighbouring residential properties in two stages:
- ¹ By reference to the strict numerical guidelines outlined within section 2.2.21 and 3.2.11 of the BRE Guidelines which will illustrate whether the change in light is likely to be *"adversely affected"*²; and
- ² By reference to wider material considerations to determine whether there is a "significant harmful impact in terms of loss of...daylight and sunlight"³ arising from any adverse affects identified.

¹ Rainbird, R (on the application of) v The Council of the London Borough of Tower Hamlets [2018] EWHC 657 (Admin) (28 March 2018)

² Littlefair, P. (2011). Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice. Hertfordshire: HIS BRE Press, p 11, para 2.2.21

³ WBC. (2012). Woking Core Strategy (October 2012), p 102, Policy CS21: Design

- 1.10 This Proof is supported by several documents, drawings and tabulated results which are all enclosed within the Appendices as listed on the Contents Page.
- 1.11 All assumptions used in collating this report can be found in Appendix 01.



Fig. 02: CGI illustration of the Proposed Development designed by JTP Architects



SECTION 2 COMMITTEE REPORT & REASONS FOR REFUSAL

2 COMMITTEE REPORT & REASONS FOR REFUSAL

PLANNING APPLICATION

2.1 A detailed description of the Site and surrounding area is enclosed in the Appellant's Statement of Case (CD-10.1.1) and not repeated herein. The description of the Proposed Development is provided below:

Demolition of all existing buildings and redevelopment of the site for a phased mixeduse scheme, comprising 929 residential units (Class C3), communal residential and operational spaces, commercial uses (Classes A1/A2/A3/A4/B1/D1/D2) at ground floor and homeless shelter (sui generis) within 5 blocks of varying heights of between 9 and 37 storeys (including rooftop amenity) to the north and south sides of the site together with soft and hard landscaping including public realm works, highway alterations to Goldsworth Road, car parking, cycle parking, bin storage, ancillary facilities and plant (Environmental Statement submitted) (amended plans and reports received 13.11.2020).

- 2.2 GIA prepared a Daylight & Sunlight ES Chapter (June 2020) (CD-4.1.7) which was submitted in support of the Planning Application (the "Assessment"). It considered the daylight and sunlight impacts to neighbouring properties and focused on the closest neighbouring residential receptors.
- 2.3 The Assessment demonstrated that while the national numerical guidance on daylight and sunlight levels would not be achieved at some neighbouring properties, the Proposed Development was appropriate from a daylight, sunlight and overshadowing perspective given its urban location. As such, the Proposed Development would not give rise to a *"significant harmful impact in terms of loss of...daylight and sunlight"*⁴ to neighbouring properties.

4 WBC. (2012). Woking Core Strategy (October 2012), p 102, Policy CS21: Design

COMMITTEE REPORT

- 2.4 The Case Officer's recommendation to the Planning Committee was that planning permission be granted.
- 2.5 The Case Officer wrote a detailed section on the impact to surrounding properties in respect of daylight and sunlight within the Committee Report (CD-6.1.1).
- 2.6 In the summary at paragraphs 132–133 of the Committee Report, the Case Officer found that although there were significant changes in light, when considering the geographical and policy context of the Site and the benefits arising from the Proposed Development, there was no valid reason for refusal on daylight and sunlight grounds.

"...there is some significant loss of light impact to neighbours at Nankeville Court, Victoria House, Birchwood House and 11-13 Goldsworth. However when balanced with the BRE guidance and National Planning Practice Guidance, such impacts are considered unavoidable in a Town Centre location where development is designed to reflect its surroundings...315 of the 797 windows assessed for VSC would meet the BRE criteria and 380 of the 502 room assessed for NSL would meet the BRE criteria. The BRE guidance and National Planning Practice guidance states that lower daylight and sunlight levels may be unavoidable in urban locations where new development is designed to reflect its surroundings. It should also be noted that the amount of light that some units receive in the first place is already low due being sited below balconies or north facing and a number of the sites are proposed for redevelopment. Overall, the proposal does not amount to significant harmful impact when considered as a whole.

Balancing these points, along with the benefits of the proposal and the requirement to make efficient use of land as set out in Paragraph 123 of the NPPF (2019), overall the proposed development is considered to form an acceptable relationship with surrounding neighbours in terms of loss of light, overbearing and overlooking impacts."



PLANNING COMMITTEE MEETING

2.7 The Planning Application was considered by the Planning Committee on 12th January 2021 with the Case Officer recommending approval (CD-6.1.1), but which was refused by Members on four grounds.

DECISION NOTICE

2.8 The Decision Notice (CD-6.1.4) references the following reason for refusal (that relates to my discipline):

The proposed development would result in significantly harmful impacts by reason of loss of daylight, loss of sunlight and loss of privacy to neighbouring properties. The proposed development is therefore contrary to Policy CS21 of the Woking Core Strategy (2012), Supplementary Planning Document 'Outlook, Amenity, Privacy and Daylight' (2008) and the NPPF (2019).

2.9 This reason for refusal refers to the perceived loss of daylight and sunlight to residential buildings which gives rise to significant harm. My Proof addresses this and demonstrates with technical evidence that while a loss of daylight and sunlight occurs (an inevitable consequence of developing a site allocated for development in an urban context), the Proposed Development would not give rise to a "significant harmful impact in terms of loss of...daylight and sunlight"⁵ to neighbouring properties.

⁵ WBC. (2012). Woking Core Strategy (October 2012), p 102, Policy CS21: Design

WOKING BOROUGH COUNCIL STATEMENT OF CASE

- ^{2.10} The Council issued their Statement of Case (CD-10.1.2) to the Planning Inspectorate and Appellant on 5th August 2021. At paragraph 6.5, the Council lists the properties which it considers to be "detrimentally" impacted by the Proposed Development. With a view to further narrowing the areas of dispute, the Council has indicated whether the impacts are to either daylight or sunlight or both. Impacts to privacy are noted for three properties and this matter is dealt with in the evidence of Mr Bidwell and summarised at paragraph 6.41-6.42.
- 2.11 With a view to streamlining the evidence and assisting the inquiry on daylight and sunlight matters, I will focus on the specific issue taken by the Council on each property albeit the technical results for daylight and sunlight for all properties are enclosed within Appendices 04-07.

OAKS & VALE FARM ROAD RESIDENTS' GROUP STATEMENT OF CASE

- 2.12 The Oaks & Vale Farm Road Residents' Group ("the Rule 6 Party") issued their Statement of Case (CD-10.1.3) to the Planning Inspectorate on 16th August 2021. At paragraphs 6.66-6.73, the Rule 6 Party make their case in relation to daylight and sunlight impacts on neighbouring properties. My proof responds on the points raised in detail in the following chapters.
- 2.13 At paragraph 6.74-6.77, the Rule 6 Party consider the impact on residential properties within the site i.e. the daylight amenity within the proposed dwellings. This matter is not listed as a reason for refusal in the Decision Notice (CD-6.1.4) nor is it raised as an issue by the Council in their Statement of Case (CD-10.1.2). To respond on this point and for completeness, the Internal Daylight and Sunlight Report (Addendum dated November 2020) which was submitted in support of the planning application is enclosed within the Core Documents at CD-3.1.5. I have considered this matter at paragraphs 6.35-6.40.



SECTION 3 THE SITE & WIDER CONTEXT

З THE SITE & WIDER CONTEXT

THE SITE

- 3.1 The Site is located on Goldsworth Road to the north of the rail line. It is split over two parcels of land to the north and south of Goldsworth Road. The Site also comprises 20-32 Goldsworth Road and 8 Church Street West.
- 3.2 The Site comprises a number of buildings which are generally a mix of two-four storey offices. Some of the buildings are occupied whilst some are vacant.
- 3.3 Figure 03 illustrates the site in the existing context.



Fig. 03: Existing Site within the wider site context

- 3.4 The Proposed Development comprises the demolition of existing buildings and erection of a phased mixed-use development containing residential, retail and community uses and a new homeless shelter for the York Road Project ("the Proposed Development"). The full description of development can be referred to at paragraph 2.1 above.
- 3.5 The Proposed Development is illustrated in Figure 04.
- 3.6 Further drawings of the existing site and Proposed Development are enclosed at Appendix 03.



Fig. 04: The Proposed Development within the wider site context



- 3.7 A number of planning applications have been submitted in respect of the Site. The planning application references are listed below:
- PLAN/1991/0050
- PLAN/2007/0688
- PLAN/2008/1350
- PLAN/2011/0120
- PLAN/2016/0742
- 3.8 The most pertinent planning application is the most recent (Ref: PLAN/2016/0742) which relates to the 20-32 Goldsworth Road site. The application was considered by the Planning Committee in October 2016 with Members resolving to grant planning permission subject to a signed legal agreement. The draft decision notice is enclosed at CD-8.1.7 ("RTG").
- 3.9 The RTG scheme comprised the demolition and clearance of 20-32 Goldsworth Road and erection of a phased development comprising residential, retail and other uses. This proposal included 31 and 37-storey towers.

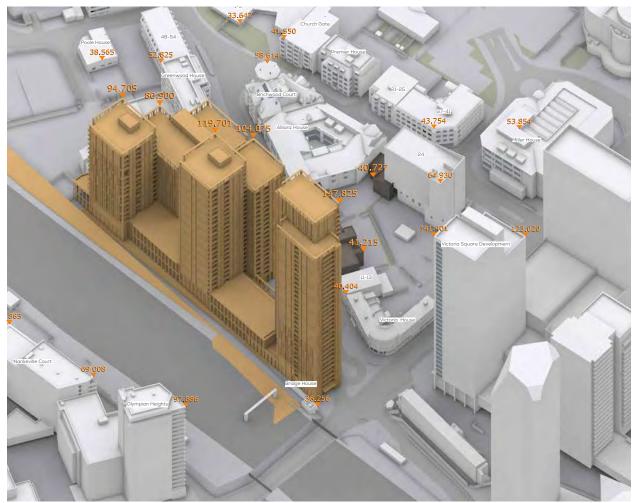


Fig. 05: Resolution to Grant ("RTG") Scheme

- 3.10 Figure 05 below illustrates my understanding of the RTG scheme. It should be noted that the RTG scheme was issued to GIA by the Appellant and this massing has not been constructed by GIA.
- 3.11 The RTG was considered by Members against the policies within the Core Strategy 2012 (CD-1.1.1) and the now superseded National Planning Policy Framework 2012. The Core Strategy 2012 remains the local development plan for the borough and the 2021 update to the NPPF (CD-0.1.1) makes specific reference to policies and guidance on daylight and sunlight which should be applied flexibly. In summary, the local policy position has not changed while national policy now calls for greater flexibility in relation to daylight and sunlight in order to achieve appropriate densities.
- 3.12 In light of the above, it is clear that were the RTG scheme determined against today's policies, the outcome would be unchanged. Consequently, Member's approval of the scheme against a more flexible policy context means that it is an appropriate benchmark for what the Council consider to be acceptable in terms of daylight and sunlight amenity. Therefore, its comparison with the Proposed Development is relevant and a material consideration.
- 3.13 We have therefore run a comparative analysis of the retained values of the RTG scheme against the retained values arising from the Proposed Development (Appendix 04).
- ^{3.14} The results demonstrate that there is a betterment and in some cases a worsening of daylight and sunlight amenity by the Proposed Development when compared with the RTG. However, the RTG is evidence of the fact that the Council envisage large scale redevelopment of the Site and anticipate appreciable reductions in daylight and sunlight amenity to neighbouring properties.
- 3.15 The RTG (in tandem with the policy allocation for the Site) confirm the Council's expectation for high density development on the Site and the consequences on daylight and sunlight amenity to neighbouring properties as a result.



SECTION 4 POLICY CONTEXT & GUIDANCE (DAYLIGHT & SUNLIGHT)

4 POLICY CONTEXT & GUIDANCE (DAYLIGHT & SUNLIGHT)

INTRODUCTION

- ^{4.1} To understand whether the Proposed Development is appropriate in relation to daylight and sunlight matters, I have considered the methodology and criteria set out in the BRE Guidelines (CD-0.1.4).
- 4.2 This document should be read alongside the relevant Woking Development Plan policies and the relevant policies set out in the National Planning Policy Framework (NPPF).
- 4.3 The documents discussed within my Proof can be found in the Core Documents sections or within the Appendices.
- 4.4 Below I have detailed sections from the following documents as they are, in my opinion, the most pertinent in relation to daylight and sunlight matters and how I have approached the effects of the Proposed Development:
 - National Planning Policy Framework (July 2021) (CD-0.1.1);
 - National Planning Practice Guidance (updated October 2019) (CD-0.1.2);
 - Woking Core Strategy (October 2012) (CD-1.1.1);
 - Woking Proposals Map Insets (October 2016) (CD-1.1.2);
 - Site Allocations DPD (October 2021) (CD-1.1.7);
- Outlook, Amenity, Privacy and Daylight SPD (2008) (CD-1.1.8); and
- Building Research Establishment Guidelines 2011.
- ^{4.5} In addition to the above, I have also considered the emerging position in relation to the consultation draft of the Outlook, Amenity, Privacy and Daylight SPD (2021).

NATIONAL PLANNING POLICY FRAMEWORK (JULY 2021)

4.6 The NPPF (July 2021) (CD-0.1.1) 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:

"Local planning authorities should refuse applications which they consider <u>fail</u> <u>to make efficient use of land</u>, taking into account the policies in this Framework. In this context, when considering applications for housing, authorities should take a <u>flexible</u> 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)".⁶ (my emphasis)

NATIONAL PLANNING PRACTICE GUIDANCE (JUNE 2021)

- 4.7 In light of the update to the Government's Planning Practice Guidance (CD-0.1.2), I have considered the relevant paragraphs which relate to my discipline, namely daylight and sunlight.
- 4.8 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"⁷.
- 4.9 Paragraph 7 (Ref ID: 66-007-20190722) refers to the wider planning considerations in assessing appropriate levels of daylight and sunlight. The test is whether living standards are 'acceptable' and recognises that acceptability will depend to some extent on context⁸.

⁸ MHCLG. (2021). National Planning Policy Guidance (2021), para 66-007-20190722



⁶ MHCLG. (2019). National Planning Policy Framework (2021), p 37, para 125(c)

⁷ MHCLG. (2021). National Planning Policy Guidance (2021), para 66-006-20190722

WOKING CORE STRATEGY (2012)

- 4.10 The Woking Core Strategy 2012 (CD-1.1.1) was adopted in October 2012 and covers the period up to 2027. The Core Strategy contains an analysis of the current state of the borough and the key challenges facing the area. It sets the vision of what the borough will look like by 2027 and a clear sense of direction for how it will be achieved.
- 4.11 Policy CS1 (A Spatial Strategy for Woking Borough) notes:

Most of the new development will be directed to previously developed land in the town, district and local centres, which offers the best access to a range of services and facilities. The scale of development that will be encouraged in these centres will reflect their respective functions and nature. The hierarchy of centres is defined in Table 2.

- 4.12 Table 2 lists Woking Town Centre as the top location in terms of hierarchy of centres in the whole of the administrative area.
- 4.13 Policy CS2 (Woking Town Centre) states that the town centre is "the preferred location for town centre uses and high density residential development". Policy CS10 (Housing Provision and Distribution) lists the net additional dwellings proposed for the borough between 2010 and 2027 with Woking Town Centre being in the highest density range. With increasing densities anticipated in this location, it is also anticipated that the expectation for daylight and sunlight will also change.
- 4.14 Policy CS21 (Design) states that proposals for new development should:

"Achieve a satisfactory relationship to adjoining properties avoiding significant harmful impact in terms of loss of privacy, daylight or sunlight, or an overbearing effect due to bulk, proximity or outlook."

4.15 The policy recognises that impacts will occur but avoid those which are significantly harmful. It continues that proposals for new development should:

"Be designed to avoid significant harm to the environment and general amenity, resulting from noise, dust, vibrations, light or other releases."

WOKING PROPOSAL MAP INSETS (2016)

^{4.16} The Woking Proposals Map Insets confirms that the Site is located within the Urban Area (Core Strategy Policy CS1) and the Town Centre (Core Strategy Policies CS1 and CS2).

OUTLOOK, AMENITY, PRIVACY & DAYLIGHT SPD (2008)

- 4.17 The Council adopted its Outlook, Amenity, Privacy and Daylight Supplementary Planning Document in July 2008. This document sets out guidance on achieving suitable, outlook, amenity, privacy and daylight in new residential developments whilst safeguarding those attributes of adjoining residential areas.
- 4.18 The adopted SPD is however based on the recommendations of the now superseded 1991 BRE Guidelines and does not therefore make reference to any of the later considerations and recommendations of the 2011 update. Neither does it reflect the more flexible approach reached by the NPPF and NPPG.

SITE ALLOCATIONS DPD & INSET MAPS (2021)

- 4.19 The Site Allocations DPD also takes a long term strategic view of the future and safeguards land to meet future development needs beyond the present Core Strategy period (between 2027 and 2040). The Site Allocations DPD, Proposals and Insets Maps were adopted by the Council on 14th October 2021.
- 4.20 The Inset Maps confirm that the Site remains within the Urban Area (Core Strategy Policy CS1) and the Town Centre (Core Strategy Policies CS1 and CS2). It also falls within or partly within the following site allocations:
 - UA11: 1-7 Victoria Way and 1-29 Goldsworth Road, Woking, GU21 6JZ
 - UA12: Synergy House, 8 Church Street West, Woking, GU21 6DJ
 - UA13: 30-32 Goldsworth Road, Woking Railway and Athletic Club, Systems House and Bridge House, Goldsworth Road, Woking GU21 6JT
- 4.21 Each of the site allocations is for mixed use development comprising office, retail and residential and generally require proposals to be informed by the local and wider Town Centre context and avoid adverse environmental impacts.
- 4.22 Site Allocation UA7 (Woking Railway Station, bus/rail interchange, railway flyover and Victoria Arch, High Street, Broadway, Station Approach and Victoria Way, Woking GU22 7AE) relates to essential infrastructure at Woking railway station. It is also envisaged that it will unlock additional housing capacity in neighbouring sites, including the Site.



DRAFT OUTLOOK, AMENITY, PRIVACY AND DAYLIGHT SPD CONSULTATION DRAFT (2021)

4.23 This document is a proposed revision to the 2008 version. It sets out sets out guidance on achieving suitable outlook, amenity, privacy, daylight and sunlight in new residential developments, whilst also safeguarding those attributes of adjoining residential areas. The document supplements Policy CS21: Design within the Core Strategy. The document notes that the BRE Guidelines (CD-0.1.4) are not mandatory:

The BRE makes a number of recommendations in its report 'Site Layout Planning for Daylight and Sunlight: A guide to good practice (2011)'. Although these recommendations are not mandatory they are clear indicators of achieving design quality in residential development schemes.⁹

4.24 This SPD cites the BRE Guidelines regarding daylight and sunlight considerations. This document notes that the impact on surrounding non-domestic buildings where occupants have a reasonable expectation of receiving daylight and sunlight should be tested. Additionally, the SPD states that:

'development proposals should be carefully designed to ensure that open spaces such as gardens, parks, playing fields and sitting out areas including public squares receive adequate amounts of sunlight¹⁰.

4.25 With regard to future development, the SPD notes that:

'a suitably designed development will site buildings sufficiently well back from any boundaries to allow future development of adjacent land to receive adequate access to daylight. This will also ensure that it retains sufficient space for daylighting its own accommodation which faces the boundary, should the adjoining land become developed'¹¹.

- 4.26 This document references the alternative daylight and sunlight assessments provided within the BRE Guidelines which are used to produce alternative target criteria, namely the Adjoining Land assessment¹² and hypothetical mirror assessment¹³.
- 4.27 It is therefore clear that the draft SPD supports the consideration of alternative target values.

⁹ WBC. (2019). Outlook, Amenity, Privacy and Daylight Supplementary Planning Document (SPD) (2019), p 17, para 5.1

¹⁰ WBC. (2019). Outlook, Amenity, Privacy and Daylight Supplementary Planning Document (SPD) (2019), p 19, para 5.11

¹¹ WBC. (2019). Outlook, Amenity, Privacy and Daylight Supplementary Planning Document (SPD) (2019), p 19, para 5.12

¹² Littlefair, P. (2011). Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice. Hertfordshire: HIS BRE Press, p 11, para 2.3.1

¹³ Littlefair, P. (2011). Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice. Hertfordshire: HIS BRE Press, p 11, para 2.3.1

BUILDING RESEARCH ESTABLISHMENT: SITE LAYOUT PLANNING FOR DAYLIGHT AND SUNLIGHT: A GUIDE TO GOOD PRACTICE 2ND EDITION (2011) (BRE GUIDELINES)

- 4.28 The following section details the numerical guidelines for assessing daylight and sunlight outlined within section 2.2.21 (and figure 20) and 3.2.11 of the BRE Guidelines (CD-0.1.4). I have provided some observations throughout this section which I believe are important to consider when using the BRE Guidelines to calculate changes in daylight and sunlight condition. In doing so, I will illustrate that while the BRE Guidelines offer a starting point to assess daylight and sunlight impacts, they do not provide an illustration of the "real life" light condition.
- 4.29 The BRE Guidelines provide three methodologies for daylight assessment, namely;
 - ¹ The Vertical Sky Component (VSC);
 - ² The No Sky Line (NSL);
 - ³ The Average Daylight Factor (ADF); and
- 4.30 The Average Daylight Factor (ADF), is more generally used for new development as opposed to existing properties.
- 4.31 The BRE Guidelines provides one method of sunlight assessment, the Annual Probable Sunlight Hours (APSH).
- 4.32 Each of the above assessments are discussed in detail within my Proof.



Vertical Sky Component (VSC)

4.33 The Vertical Sky Component (VSC) method is described in the BRE Guidelines (CD-0.1.4) as the;

"Ratio of that part of illuminance, at a point on a given vertical plane, that is received directly from a CIE standard overcast sky, to illuminance on a horizontal plane due to an unobstructed hemisphere of this sky. Usually the 'given vertical plane' is the outside of a window wall. The VSC does not include reflected light, either from the ground or from other buildings" ¹⁴

- 4.34 In simple terms, the VSC calculates the skylight falling on a vertical plane (i.e. window) in the circumstance of an overcast sky (CIE standard). The VSC is quantified as a percentage of the amount of light reaching a window straight from the sky.
- 4.35 The strict national numerical value target "ideal" for VSC is 27%. The BRE Guidelines advise that upon implementation of a development, a window should retain a VSC value of 27% or at least 0.8 of its former value (i.e. no more than a 20% change).¹⁵
- ^{4.36} The image in Figure 06 indicatively illustrates the VSC analysis. The existing buildings are solidly pictured with the proposed scheme semi-transparent in the foreground.
- 4.37 This form of assessment does not take account of context or detailed matters such as window size, room use, room size, window number or dual aspect rooms. This assessment also assumes that all obstructions to the sky are 100% non-reflective.
 - 14 Littlefair, P. (2011). Site Layout Planning for Daylight and Sunlight A Guide to Good Practice. Hertfordshire: HIS BRE Press, p viii
 - 15 Littlefair, P. (2011). Site Layout Planning for Daylight and Sunlight A Guide to Good Practice. Hertfordshire: HIS BRE Press, para 2.2.7 and 2.2.21



Fig. 06: Vertical Sky Component (VSC) indicative analysis

- 4.38 In the images below, I provide an example of how the VSC methodology does not necessarily paint an accurate picture of the experiential change in daylight condition. Figure 07 shows three windows of different size serving three rooms of identical size. In each case, the windows will have equal VSC values given that VSC is a measurement of the amount of sky visible from the centre point of a window.
- 4.39 The three rooms will experience a very different daylight environment because of the varying window sizes serving each one. Figure 08 depicts how window size affects the distribution of daylight within a room despite each window having an identical VSC value. This highlights that while the VSC methodology is a reasonable starting point to assess daylight, it does not accurately depict the change likely to be experienced with the room.

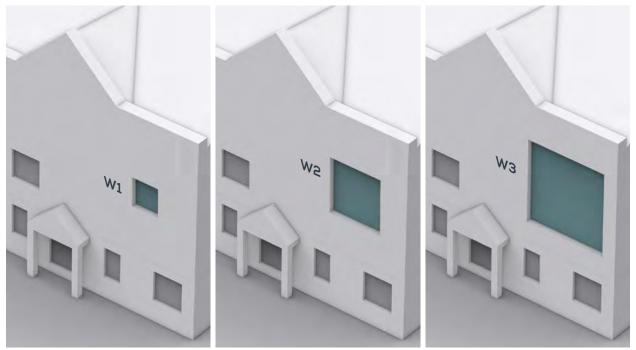


Fig. 07: Vertical Sky Component (VSC) indicative analysis

DAYLIGHT FACTOR STUDIES FOR SAMPLE ROOMS WITH SAME VSC

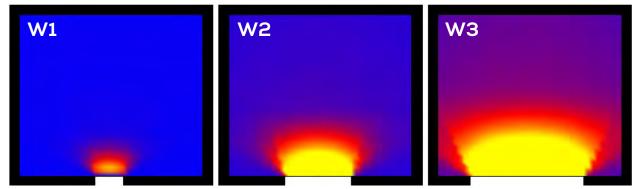


Fig. 08: Comparative radiance analysis



- 4.40 The BRE Guidelines (CD-0.1.4) state that a VSC of 27% VSC or more should mean that enough skylight is reaching the window of an existing building and that if windows retain at least 0.8 times its former value, occupants would not notice the reduction in skylight.
- 4.41 As an example, if a window with a retained VSC value of 27% experiences a reduction of 20% thus retaining 21.6% VSC (see Figure 09), the impact would meet the recommendations of the BRE Guidelines by reference to paragraph 2.2.7. This indicates logically that a retained value of 21.6% should be acceptable in principle. Of course, in urban areas, the threshold of what might be acceptable must for the reasons identified above be much more flexible.
- 4.42 If, however, a window has a higher existing value than 27% and it experiences a greater than 20% reduction (which still provides a retained value of 21.7% VSC) the reduction is technically outside of the recommendations of the BRE Guidelines despite an identical retained level of VSC (see Figure 09).
- 4.43 This was explored at the public inquiry for the redevelopment of Hertford Gasworks (PINS Ref: APP/J1915/W/19/3234842) (CD-15.1.1) in which the Inspector considered that a minimum value of 21.6% VSC would be acceptable:

"The appellant took this further and adopted (with explanation) an approach with a retained VSC of 21.6% as the minimum level. This was specifically accepted by the Council's witness in cross-examination. On that basis, there would be only a very small number of windows falling below that level, and those which did fail would only do so by a narrow margin."¹⁶

^{4.44} In this case, the Inspector considered that a minimum VSC value of 21.6% would be appropriate in the county town of Hertford.

16 PINS Ref: APP/J1915/W/19/3234842 (para 57)

VERTICAL SKY COMPONENT (VSC)

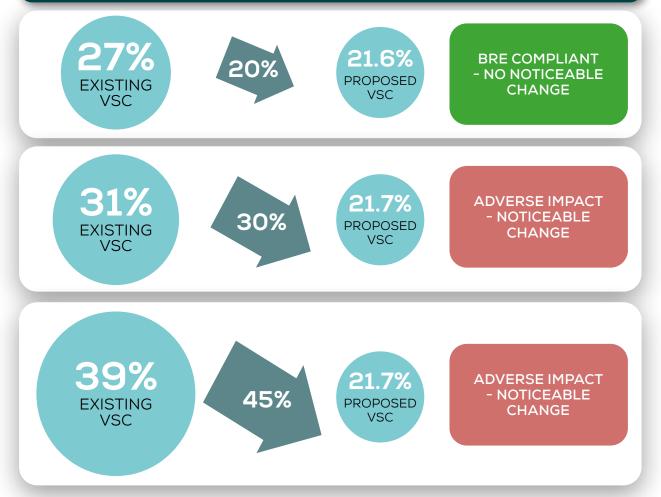


Fig. 09: Percentage reduction in VSC and retained VSC values



No Sky Line (NSL)

- ^{4.45} The No Sky Line (NSL) or Daylight Distribution (DD) method is described as "the outline on the working plane of the area from which no sky can be seen."¹⁷
- ^{4.46} In summary, the NSL calculation assesses where the sky can and cannot be seen from inside a room at the working plane, "*in houses the working plane is assumed to be horizontal and 0.85m high*" ¹⁸.
- 4.47 The Guidelines state that "where room layouts are known, the impact on the daylight distribution in the existing building can be found by plotting the 'no sky line' in each of the main rooms"¹⁹. While the NSL calculation considers the size and configuration of a room, it is not generally recommended where room layouts are unknown. It is industry practice, however, to assume room sizes and configurations in order to calculate any movement of the no sky line.
- ^{4.48} The change in position of the NSL between the existing and proposed scenario is then calculated. This change is illustrated on a contour plot, an example of which can be found in Figure 10.
- 4.49 The BRE Guidelines (CD-0.1.4) state at paragraph 2.2.9 that;

"If, following construction of a new development, the no sky line moves so that the area of the existing room, which does receive direct skylight, is reduced to less than 0.8 times its former value this will be noticeable to the occupants, and more of the room will appear poorly lit. This is also true if the no sky line encroaches on key areas like kitchen sinks and worktops." ²⁰

- 4.50 In simple terms this calculation plots where the sky can and cannot be seen within a room at table top height. If the NSL experiences more than a 20% change from the existing situation then, in accordance with the strict application of the national numerical values, the change in daylight would be noticeable to the occupants.
- ^{4.51} This assessment takes the number and size of windows serving a room into account however, there is no qualitative assessment of the light in the room, only where sky can or cannot be seen.
- ^{4.52} Figure 11 articulates that even a minor single storey extension may result in a significant reduction in NSL, but it does not accurately depict the change in light likely to be experienced within the room.

¹⁷ Littlefair, P. (2011). Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice. Hertfordshire: HIS BRE Press, p viii

¹⁸ Littlefair, P. (2011). Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice. Hertfordshire: HIS BRE Press, p 7 para 2.2.8

¹⁹ Littlefair, P. (2011). Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice. Hertfordshire: HIS BRE Press, p 7 para 2.2.8

²⁰ Littlefair, P. (2011). Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice. Hertfordshire: HIS BRE Press, p 8 para 2.2.9

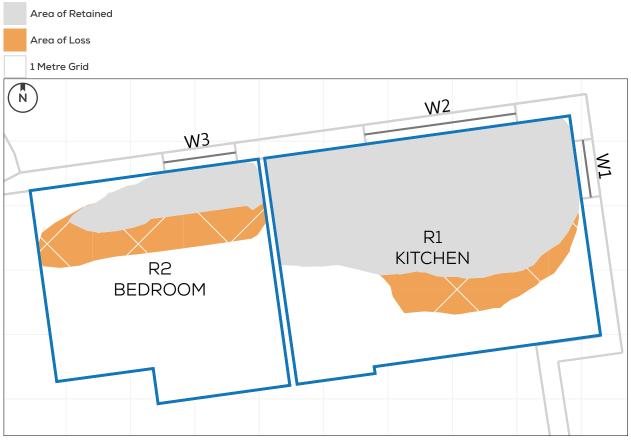


Fig. 10: Example NSL Contour Plot

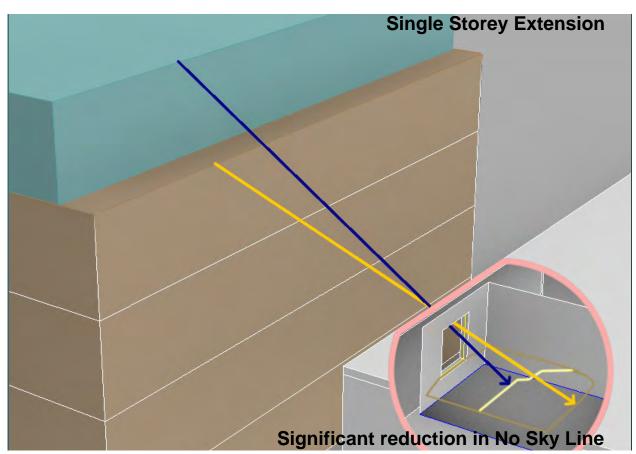


Fig. 11: Example of movement of NSL



Decision Chart (Figure 20 of the BRE Guide)

- ^{4.53} The flowchart in Figure 13²¹ illustrates the steps and criteria outlined within the BRE Guidelines (CD-0.1.4) to understand whether the daylighting (VSC and NSL) has been significantly affected.
- 4.54 Almost invariably when this methodology is applied in a town centre or more generally in an urban context the flowchart will point to *"daylight likely to be significantly affected"* when the real-life experiential change in light may not appear to be even noticeably affected.
- ^{3.55} The section at Figure 12²² provides an example of the angle measurement subtended by a new development. This is the starting point provided within the BRE Guidelines from which to assess whether daylighting is likely to be significantly affected by new development. It is clear from the image that this principle has not been developed with urban town centre locations in mind.²³

- 22 Littlefair, P. (2011). Site Layout Planning for Daylight and Sunlight A Guide to Good Practice. Hertfordshire: HIS BRE Press, Figure 14 p. 8
- 23 Appeal Ref: APP/E5900/W/17/3171437 para 108

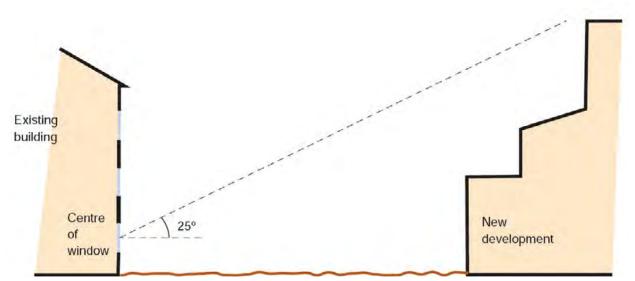


Fig. 12: BRE VSC diagram (Figure 14): Section in plane perpendicular to the affected window wall

²¹ Littlefair, P. (2011). Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice. Hertfordshire: HIS BRE Press, Figure 20 p. 10

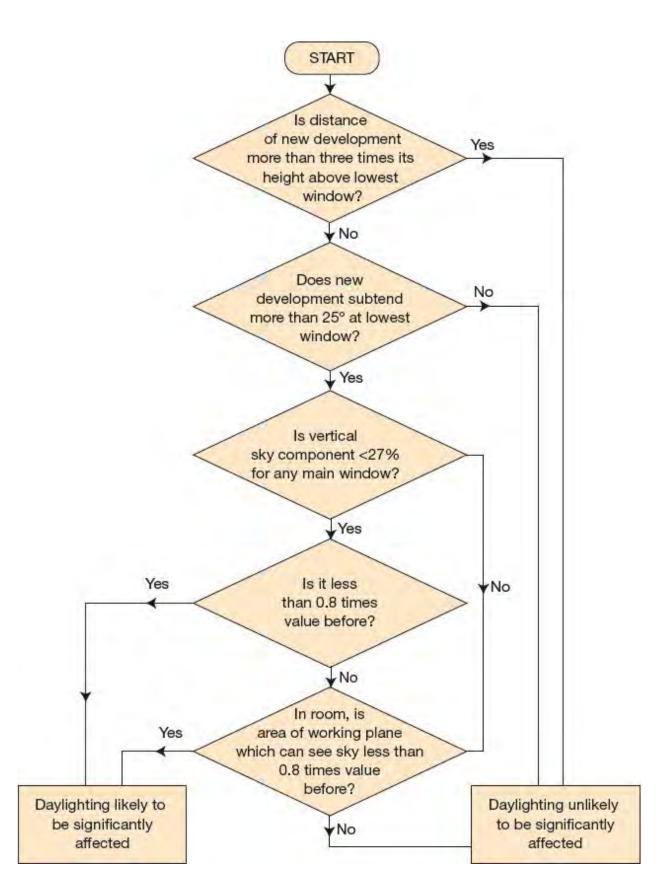


Fig. 13: BRE Decision Chart (Figure 20): diffuse daylight in existing buildings. This does not include an assessment of rights to light issues, which a developer may need to consider separately



Average Daylight Factor (ADF)

- ^{4.56} The Average Daylight Factor (ADF) calculation is a measure of the overall amount of daylight in a space. The BRE Guidelines (CD-0.1.4) do not generally recommend the use of ADF to determine loss of light to existing buildings²⁴ and suggest that the ADF assessment should be used to *"check that adequate daylight is provided in new rooms"* ²⁵.
- 4.57 This calculation considers not only the amount of skylight falling on the vertical face of the window, but also the glazing size and location, transmittance value, material reflectance, room area, room geometry and room use. It is therefore a more detailed analysis of the daylight levels within a room.
- 4.58 The ADF criterion is the prescribed methodology for evaluating the daylight within proposed accommodation, in conjunction with NSL and RDC, and the values referenced by the BRE Guidelines are:

2% ADF for a kitchen;

1.5% ADF for a living room; and

1.0% ADF for a bedroom.

4.59 The BRE Guidelines reference that:

The ADF is a measure of the overall amount of daylight in a space. BS 8206-2 Code of practice for daylighting recommends an ADF of 5% for a well daylit space and 2% for a partly daylit space. Below 2% the room will look dull and electric lighting is likely to be turned on. ²⁶

4.60 As per the British Standard Lighting for buildings - Part 2: Code of practice for daylighting the ADF value should be 5%+ for a well daylit space:

If electric lighting is not normally to be used during daytime, the average daylight factor should not be less than 5%.

If electric lighting is to be used throughout daytime, the average daylight factor should not be less than 2%. $^{\rm 27}$

- 4.61 As such, where the ADF is less than 2% it can be inferred that electric lighting is required.
- 4.62 Where developments are consented or under construction and not yet occupied the ADF analysis is considered to be the correct daylight test. As the properties are unoccupied, the change in daylight is less important than whether the retained daylight values will still fall within the values referenced within the BRE.
- ^{4.63} The ADF assumptions used for the purpose of my studies can be found in Appendix 01 of my Proof.

²⁴ Littlefair, P. (2011). Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice. Hertfordshire: HIS BRE Press, p. 64 F7

²⁵ Littlefair, P. (2011). Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice. Hertfordshire: HIS BRE Press, p 6 para 2.1.22

²⁶ BRE Para 2.1.8

²⁷ BS8206-2 para 5.5.2 and 5.5.3

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Annual Probable Sunlight Hours (APSH)

- 4.64 Sunlight is measured using a sun indicator which contains 100 spots, each representing 1% of Annual Probable Sunlight Hours (APSH) (Figure 14).
- 4.65 Where no obstruction exists the total annual unobstructed total number of sunlight hours in London is 1486 hours.
- ^{4.66} The number of spots is calculated for both the whole year and during the winter period (21st September to 21st March), prior to an obstruction and after the obstruction is put in place. This provides a percentage of APSH for each of the time periods for each window assessed.
- 4.67 The BRE Guidelines (CD-0.1.4) set out the overall methodology and criteria for the assessment of sunlight in Chapter 3. The BRE Guidelines state:

"all main living rooms of dwellings...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: and

If the main living room to a dwelling has a main window facing within 90° of due north, but a secondary window facing within 90° of due south, sunlight to the secondary window should be checked."²⁸

If this window reference point can receive more than one quarter of Annual Probable Sunlight Hours [25%], including at least 5% of APSH in the winter months between 21 September and 21 March, then the room should still receive enough sunlight.

Any reduction in sunlight access below this level should be kept to a minimum. If the available sunlight hours are both less than the amount above and less than 0.8 times their former value, either over the whole year or just during the winter months (21 September - 21 March), then the occupants of the existing building will notice the loss of sunlight; if the overall annual loss is greater than 4% of APSH, the room may appear colder and less cheerful and pleasant."²⁹

²⁸ Littlefair, P. (2011). Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice. Hertfordshire: HIS BRE Press, p 16

²⁹ Littlefair, P. (2011). Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice. Hertfordshire: HIS BRE Press, p 17

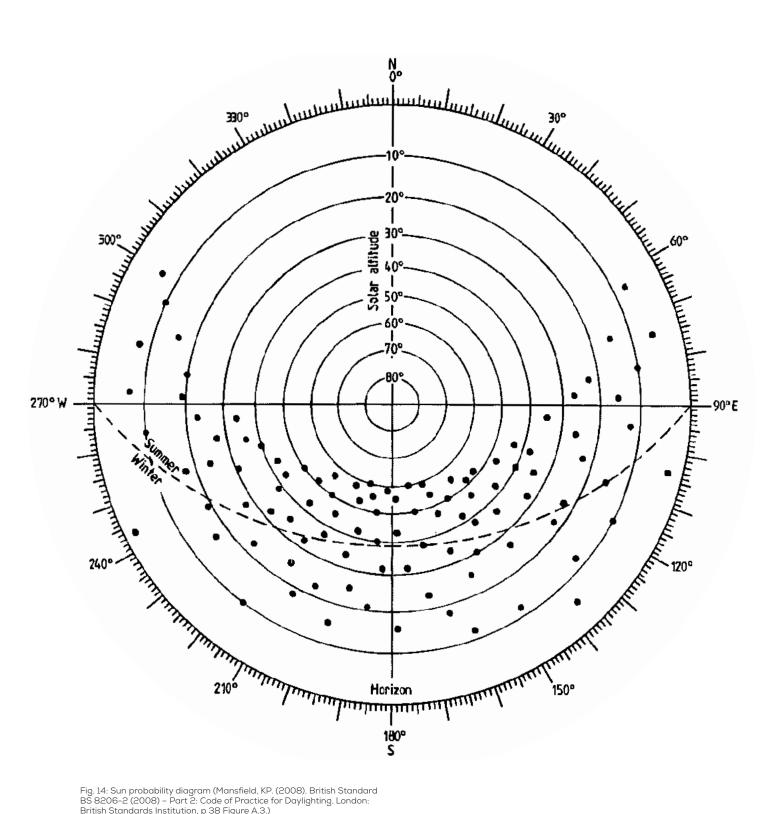


Fig. 14: Sun probability diagram (Mansfield, KP. (2008). British Standard BS 8206-2 (2008) – Part 2: Code of Practice for Daylighting. London: British Standards Institution, p 38 Figure A.3.)



- ^{4.68} The BRE Guidelines (CD-0.1.4) provide that for existing buildings, the Sunlight to a window may be adversely affected if a point at the centre of a window receives:
 - Less than 25% of the APSH during the whole year, of which 5% APSH must be in the winter period; and
 - Receives less than 0.8 times its former sunlight hours in either time period; and
 - Has a reduction in Sunlight for the whole year of more than 4% APSH.³⁰
- 4.69 In the images opposite, I have provided an example of how this is assessed through the practice of counting the sun spots.
- 4.70 In Figures 15 and 16, the number of spots is calculated for both the whole year and also during the winter period (21st September to 21st March) prior to an obstruction and after the obstruction is put in place.
- 4.71 In this scenario, the proposed development will result in a good level of APSH (37% against the BRE's target of 25%). It is only in the winter months where a transgression occurs given that the sun is lower in the sky. Despite good levels of retained sunlight throughout the year, the winter sunlight transgression results in a breach when strictly applying the methodology within the BRE Guidelines.
- 4.72 This test does not consider surrounding context or how sunlight is experienced in the remainder of the year.
- 4.73 In locations which have an urban character, it can be challenging to meet the target for sunlight within the BRE Guidelines.

Sun Analysis Key:

- Winter sun restricted by the existing buildings
- Summer sun restricted by the existing buildings
- No impact to Winter sun
- No impact to Summer sun
- Winter sun restricted by the Proposed Development
- Summer sun restricted by the Proposed Development

30 Littlefair, P. (2011). Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice. Hertfordshire: HIS BRE Press, p 17

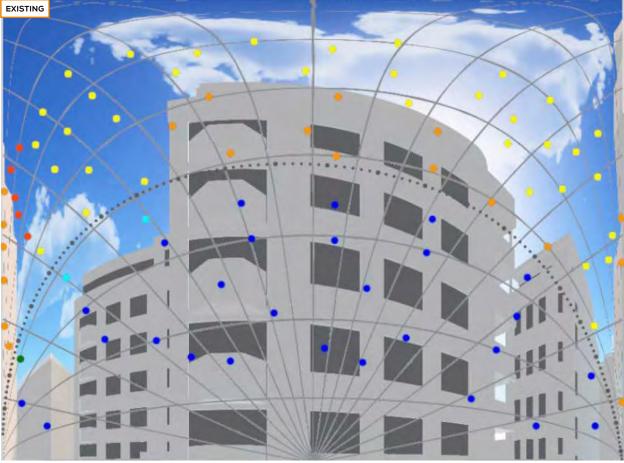


Fig. 15: Existing APSH: 43% Existing WPSH: 3%

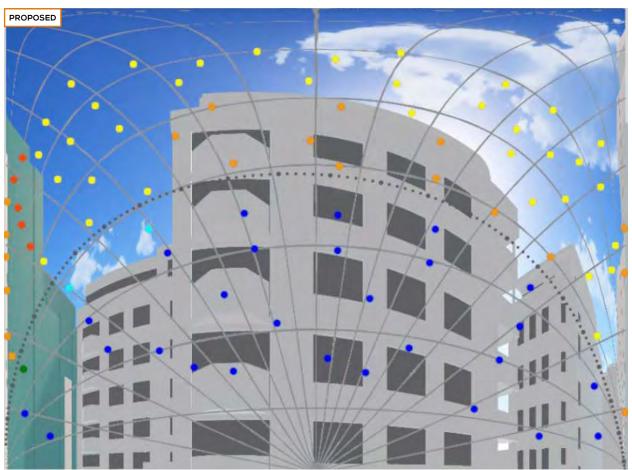


Fig. 16: Proposed APSH 37% Proposed WPSH: 2%



BRE GUIDELINES: ADDITIONAL DAYLIGHT & SUNLIGHT CONSIDERATIONS

- 4.74 The BRE Guidelines (CD-0.1.4) 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).
- 4.75 The BRE Guidelines also provide advice on site layout planning to determine the quality of daylight and sunlight within open spaces between buildings.
- 4.76 It is important to note, however, that this document is a guide and states that its aim *"is to help rather than constrain the designer"*.
- 4.77 The BRE Guidelines provide advice, but also clearly state that it "is not mandatory and this document should not be seen as an instrument of planning policy." The BRE Guidelines also acknowledge in its introduction that "it is purely advisory and the numerical target values within it may be varied to meet the needs of the development and its location."
- 4.78 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 other conflicting and potentially more important planning and urban design matters to consider other than just the provision of ideal levels of daylight and sunlight.
- 4.79 The BRE Guidelines provide alternative assessments to understand the impact on a neighbouring property in such situations.
- 4.80 The relevant assessments for the purpose of my Proof are detailed within the BRE Guidelines and summarised below.

Daylight and Sunlight - VSC and APSH to Rooms: specific examples

4.81 As outlined within the BRE Guidelines the VSC value is calculated for each window; however -

"If a room has two or more windows of equal size, the mean of their VSC's may be taken"³¹.

^{4.82} In cases where a room is served by two or more windows of the same or different sizes, the VSC value to the room has been calculated by applying an average weighting calculation to understand the VSC value to the room. The formula used is as follows;

Σ(Vn*An) / ΣAn

Where:

- V = window VSC
- A = window area
- n = the number of windows
- 4.83 It is my opinion that this is a reasonable method to follow in that it follows the principles of the BRE Guidelines.

³¹ Littlefair, P. (2011). Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice. Hertfordshire: HIS BRE Press, p 7 para 2.2.6

^{4.84} The BRE Guidelines (CD-0.1.4) provide a methodology to calculate APSH in relation to the room and window.

"If a room has multiple windows on the same walls or adjacent walls, the highest value of ASPH should be taken. If a room has two windows on opposite walls, the ASPH due to each can be added together."³²

- ^{4.85} The above extract from the BRE Guidelines is in relation to proposed units rather than existing buildings. It does, however, make sense to apply this methodology to existing rooms. A room served by multiple windows could receive the benefit of Sunlight entering from all of them and not just one.
- ^{4.86} Evaluating per-room Probable Sunlight Hours is meant to be carried out with diagrams and acetate overlays, which makes accounting for individual spots challenging, if not impossible. APSH assessments are now typically calculated using specialised computer software, assessing rooms with multiple windows is generally done somewhat differently (and more accurately) than what is suggested in the BRE Guidelines.
- 4.87 The APSH room assessment has been carried out by following the steps below:
 - ¹ The sunlight hours (both winter and annual) are calculated for each window. Instead of simply returning the overall per cent pass rate, i.e. one figure for winter, and one for the whole year, the yes/no result of each of the 100 sun spots is tracked. For this accounting to work, each sun dot needs to be assigned a unique identifier, e.g. from 1 to 100;
 - The sets of 100 sun spots are combined for each room using Boolean logic, i.e. conjunctions of yes/no values. The outcome of this step is a set of 100 yes/no values corresponding to the 100 sun spots, but on a per-room basis. Each per-room dot is counted if it is unobstructed for at least one of its windows; and
 - ³ The unobstructed sun dots for the room are summed up and expressed as a percentage of the total number of annual and winter spots. This returns the perroom pass rate consistent with Section 3.1.10 of BR 209.
- ^{4.88} I have applied the above methodology when considering APSH to rooms, which although not strictly in accordance with the BRE Guidelines is a reasonable approach.
- 4.89 For the purposes of my Proof, I have (where relevant) considered the impact on Daylight (VSC) and Sunlight (APSH) by reference to rooms.

32 Littlefair, P. (2011). Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice. Hertfordshire: HIS BRE Press, p 16 para 3.1.12



Setting Alternative Target Values for Skylight and Sunlight analysis

- 4.90 The BRE Guidelines (CD-0.1.4) dedicates a full appendix to alternative values and how they can be derived.
- 4.91 F1 notes:

Sections 2.1, 2.2 and 2.3 give numerical target values in assessing how much light form the sky is blocked by obstructing buildings. These values are purely advisory and different targets may be used based on the special requirements of the proposed development or its location. Such alternative targets may be generated from the layout dimensions of existing development.³³

- 4.92 Within this appendix, a table is provided which details how one could derive alternative VSC values. As is evident from paragraph F1, alternative values can be applied to the VSC, NSL and APSH studies.
- 4.93 Table F1 provides a method of deriving a VSC value based on an obstruction angle. Table F1 of the BRE Guidelines references the Equivalent VSCs, spacing-to-height ratios and boundary parameters corresponding to particular obstruction angles between rows of buildings.
- ^{4.94} Table F1 denotes that an obstruction angle of 25° equates to a VSC of 27%; to achieve a VSC value of 18%, the obstruction must subtend 40°.
- 4.95 This is a simple method that does not take account for the variation in height and distance of obstructions on an average streetscape.
- 4.96 On the basis of table F1, calculating the VSC, NSL and APSH values for an area to derive the appropriate alternative value is a more accurate process. This is also in line with the approach provided within Appendix F.

33 Littlefair, P. (2011). Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice. Hertfordshire: HIS BRE Press, p 62 para F1

APPLICATION OF POLICY & THE BRE GUIDELINES

4.97 Against the urban town centre background, I have applied the BRE Guidelines (CD-0.1.4) to determine whether an impact has occurred. I have then referred to wider contextual considerations to demonstrate that the Proposed Development does not give rise to *"significant harmful impacts"* and that the proposed daylight and sunlight amenity is appropriate in this context.

CONCLUSION

- 4.98 In my experience, very few consents in urban locations are able to strictly adhere to the BRE's national numerical "targets" and local authorities correctly take a holistic approach to amenity.
- 4.99 As noted above, a number of the documents recommend that acceptability is established by reference to "alternative values" which can be derived from comparable typologies and circumstances.
- 4.100 No specific alternative numerical values are provided within the BRE Guidelines or any of the other documents referenced.
- 4.101 In the context of the documents referred to within this section, detailed assessments have been undertaken within Woking to identify comparable character areas and prevalent daylight and sunlight levels in order to derive accurate alternative values.
- 4.102 In light of the above, in determining whether there is significant harm to the levels of daylight and sunlight retained following completion of the Proposed Development, any consideration of the daylight and sunlight values experienced by the properties assessed should have regard to and draw upon those currently achieved in the Town Centre.
- 4.103 As such, although there may be changes in light and values falling below the noncontextual or strict BRE levels, the retained levels will be shown to be appropriate when considered in the context of what is currently experienced in the Town Centre.
- 4.104 Section 05 of my proof will further discuss the contextual approach taken.



SECTION 5 CONTEXTUAL RESEARCH

5 CONTEXTUAL RESEARCH

APPROACH TO THE CONTEXT STUDY

- 5.1 As noted in the previous chapter, the NPPF (CD-0.1.1) and NPPG (CD-0.1.2) state that a flexible approach should be taken when considering policies or guidance relating to daylight and sunlight, and the question for local planning authorities to ask is whether the impact is *"unreasonable"*³⁴.
- 5.2 To establish what is *"unreasonable"*, the NPPG recognises that this will *"depend to some degree on context"*³⁵.
- 5.3 By reason of this, the application of the nationally applicable BRE Guidelines (CD-0.1.4) on a town centre location must be undertaken with care and flexibility.
- 5.4 The BRE Guidelines, when updated in 2011, expressly recognise that it should not form a mandatory set of criteria, rather it should be used to help inform design. The importance of this principle has significantly increased with the urgent and growing need for development and housing in particular in the South East of England.
- 5.5 If one were to design or strictly adhere to the values provided in the BRE Guidelines depicted in Figure 20 (extracted at Figure 12 above) and paragraph 3.2.11 of the BRE Guidelines, this would significantly reduce the development potential for urban sites and thus restrict the level of housing that could be built. This would fatally impact on the ability of sustainable sites and opportunity areas to deliver sufficient levels of housing.
- 5.6 As such and in considering the impact of the Proposed Development on daylight and sunlight levels, it is relevant to consider the levels of daylight and sunlight achieved in similar building typologies and similar spatial contexts.
- 5.7 In light of this, I have assessed the retained levels of daylight and sunlight as follows:
- 1 At various comparable properties in Woking Town Centre; and
- ² In relation to a specific and recent development located in Reading (Station Hill).
- 5.8 This exercise will help to illustrate how the impacts of the Proposed Development are acceptable when viewed in the context of Woking Town Centre and another area experiencing town centre redevelopment.

³⁴ MHCLG. (2021). National Planning Policy Guidance (2021), para 66-006-20190722

³⁵ MHCLG. (2021). National Planning Policy Guidance (2021), para 66-007-20190722

WOKING CONTEXT

5.9 As discussed in further detail in the proof of Katy Davis (CD-12.1.1), the spatial strategy for Woking is reflected in Policy CS1 of the Core Strategy (2012) and outlines that most of the new development within the borough will be directed to the built up area, particularly Woking Town Centre, which offers a range of services and facilities. Policy CS1 states that:

"The town centre is designated as a centre to undergo <u>significant change</u> and the provision of a range of shops, cultural facilities, jobs and housing to meet locally identified needs and the needs of modern businesses will be encouraged."³⁶ (my emphasis)

5.10 It goes on to outline that:

"In the town centre, well designed, <u>high density development</u> that could include <u>tall</u> <u>buildings</u> and which enhances its image will be encouraged, but without compromising on its character and appearance and that of nearby areas."³⁷ (my emphasis)

- 5.11 The Core Strategy places Woking Town Centre at the top of the town centre hierarchy³⁸ given that it is the borough's principal centre of economic activity and public transport accessibility. Policy CS2 recognises that mixed-use, high density development within Woking Town Centre makes the best use of urban land in the most sustainable locations.
- 5.12 As outlined at paragraph 4.14 above, policy CS21 (Design) states that proposals for new development should "achieve a satisfactory relationship to adjoining properties <u>avoiding significant harmful impact</u> in terms of loss of privacy, daylight or sunlight, or an overbearing effect due to bulk, proximity or outlook"³⁹ (my emphasis). The policy recognises that impacts will occur but avoid those which are significantly harmful.
- 5.13 It is clear that the Council's strategy is to direct development towards Woking Town Centre wherein the following principles for development are established:
 - "Significant change" is anticipated by reference to Policy CS1;
 - "High density development" is anticipated by reference to Policies CS1 and CS2;
 - "Tall Buildings" are anticipated by reference to Policy CS2; and
 - Impacts are anticipated which are not *significantly harmful* by reference to Policy CS21.



³⁶ WBC. (2012). Woking Core Strategy (2012), p 29, Policy CS1: A spatial strategy for Woking Borough

³⁷ WBC. (2012). Woking Core Strategy (2012), p 29, Policy CS1: A spatial strategy for Woking Borough

³⁸ WBC. (2012). Woking Core Strategy (2012), p 32, Table 2 (Hierarchy of Centres)

³⁹ WBC. (2012). Woking Core Strategy (2012), p 102, Policy CS21: Design



Fig. 17: Extract from Draft Proposal Map Insets

- 5.14 Against this backdrop, the Council adopted the Site Allocations DPD (CD-1.1.7) in October 2021 to allocate specific sites where development should be directed. An extract of the Site Allocations Insets Map is provided at Figure 17 above. The Site is split across three proposal sites – the 'Western Approach' sites of UA11 (1-7 Victoria Way and 1-29 Goldsworth Road), UA12 (Synergy House, 8 Church Street West) and UA13 (30-32 Goldsworth Road, WRAC, Systems House and Bridge House, Goldsworth Road). All three allocations require development to maximise the use of the sites taking into account the immediate context and the existing Victoria Square development.
- 5.15 In addition to this, Woking Town Centre has become the subject of a successful bid for the Housing Infrastructure Fund Forward Funding (HIF), which will deliver infrastructure improvements to enable the development of additional homes. The Council have produced a separate plan which identifies the anticipated housing capacity which could be achieved via the delivery of the infrastructure works (Figure 18).
- ^{5.16} The character of Woking Town Centre has changed considerably over the past decade with a recognised shift towards delivering <u>higher densities</u> given its strategic location in the borough wherein new development is focused and expected, particularly in light of the Green Belt constraints faced by the borough. Consequently, what is considered the 'norm' in terms of alterations in amenity to both proposed developments and the surrounding neighbouring properties has changed. Such change is required to enable the Council to meet their wider strategic aspirations for this area.
- 5.17 The character and appearance of the area surrounding the Site has evolved with a number of high density schemes in the vicinity having recently secured planning permission, under construction or fully implemented. This includes but is not limited to Victoria Square; Olympian Heights; and Nankeville Court. The images on the following pages (Figures 19-21) show the evolution of the character of sites surrounding the Proposed Development in terms of increased scale and massing with a CGI at Figure 22 illustrating the Proposed Development in the context of the recent developments in the Town Centre.
- ^{5.18} The evolution of the area surrounding the Site, as well as Woking Town Centre more generally, is discussed further within the proofs of evidence of Nigel Bidwell (CD-12.2.2) and Chris Miele (CD-12.2.3).

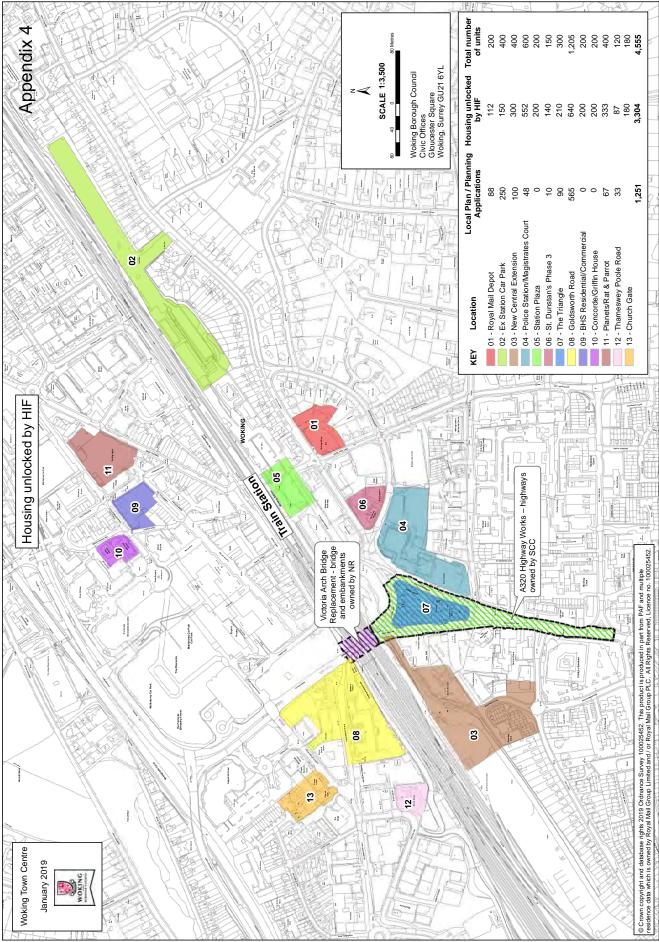


Fig. 18: Housing Unlocked by Housing Infrastructure Fund (HIF)



5 CONTEXTUAL RESEARCH (Continued)



Fig. 19: VU.CITY model showing wider context in 2016



Fig. 20: VU.CITY model showing wider context in 2021



Fig. 21: VU.CITY model showing wider context in 2021 and consents/ RTG scheme in yellow



Fig. 22: Illustration showing wider future Woking context including the Site



WOKING CONTEXT STUDY

- 5.19 National guidance states that acceptable living standards will depend to some degree on context⁴⁰. In a similar vein, Appendix F of the BRE Guidelines (CD-0.1.4) identifies that different daylight and sunlight targets may be applicable based on the location (or context) of a site⁴¹. In light of this I have examined:
 - 1 the daylight and sunlight values which exist in nearby properties in Woking unaffected by the Proposed Development; and
 - ² the daylight and sunlight values which will exist as a result of recently consented developments and by extension are considered acceptable by the Council.
- 5.20 This will illustrate how the changes in daylight and sunlight arising from the Proposed Development will not cause significantly harmful impacts to the identified properties and that the retained levels will be in line firstly, with existing values found elsewhere within Woking Town Centre and secondly, with schemes considered acceptable by the Council on daylight and sunlight grounds.

1. STUDY AREA OF EXISTING NEARBY PROPERTIES

- 5.21 To give an appreciation of the prevalent daylight and sunlight values which exist in Woking Town Centre, I have undertaken a detailed contextual analysis of the properties below. The properties are identified on Figure 23 and are collectively referred to as "the Appeal Study Area".
 - Cardinal Place;
 - Victoria House (fronting Victoria Way);
 - 3 -11 Guildford Road;
 - 14 Chapel Street;
 - 4b-4c-4d Chapel Street;
 - 4e Chapel Street;
 - 19 High Street;
 - 20 High Street;
 - 21a High Street;
 - 22a High Street;
 - 23-24 High Street;
 - 25 High Street; and
 - · 26a High Street.
- 5.22 I have selected the Appeal Study Area as the properties within it have a similar character, form, juxtaposition of heights to those properties impacted by the Proposed Development. As a result, the Appeal Study Area offers a reasonable selection from which to assess the ranges of daylight and sunlight values which can be found in the Woking Town Centre.

⁴⁰ MHCLG. (2021). National Planning Policy Guidance (2021), para 66-007-20190722

⁴¹ Littlefair, P. (2011). Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice. Hertfordshire: HIS BRE Press, p 62 para F1

- 1. Cardinal Place Blocks E, F, K 11. 9 Guildford Road
- 2. Cardinal Place Block A
- 3. Victoria House
- 4. 11-13 Goldsworth Road
- 5. 3 Guildford Road
- 6. 4 Guildford Road
- 7. 5 Guildford Road
- 8. 6 Guildford Road
- 9. 7 Guildford Road
- 10. 8 Guildford Road

- 12. 10 Guildford Road
- 13. 11 Guildford Road
- 14. 4b-4c-4d Chapel Street
- 15. 4e Chapel Street
- 16. 20 High Street
- 17. 22a High Street
- 18. 23-24 High Street
- 19. 25 High Street

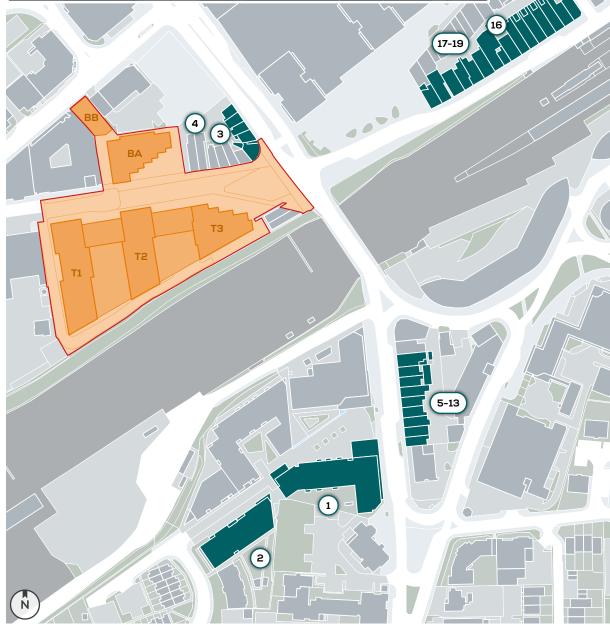


Fig. 23: Location of context study properties



14-15

ANALYSIS PARAMETERS

- 5.23 To accurately establish the levels of light that are experienced within the Appeal Study Area, GIA have modelled the identified properties utilising point cloud data, photogrammetric techniques and accurate floor plans (where available).
- 5.24 The daylight and sunlight values are calculated without the Proposed Development in situ. As such, the values recorded are what could be considered typical in Woking Town Centre and values which will continue to prevail with or without the Proposed Development.
- 5.25 I have assessed the VSC, and APSH levels in the properties within the Appeal Study Area.
- 5.26 The BRE Guidelines (CD-0.1.4) states that the NSL test should be considered where floor plans are known. The NSL has been calculated for the following properties as I have obtained floor plans via online searches:
 - Cardinal Place;
 - Cardinal Place-Block A;
 - Victoria House (fronting Victoria Way);
 - 4b-4c-4d Chapel Street;
 - 4e Chapel Street;
 - 20 High Street (partial floor plans);
 - 22a High Street;
 - 23-24 High Street; and
 - 25 High Street.

5.27 The results and illustrative window maps can be found in Appendix 10.

Vertical Sky Component (VSC)

- 5.28 The data ranges used to present the VSC results reflect those provided within the BRE Guidelines at paragraph 2.1.6. For levels between:
 - 0% 5% VSC it is often impossible to achieve reasonable daylight levels indoors
 - 5+% 15 VSC it is hard to achieve adequate light levels unless the fenestration is generous
 - 15+% 27 VSC larger windows than typical may be necessary to provide adequate daylight
 - 27+% VSC conventional window design will usually give reasonable results.

No Sky Line (NSL)

5.29 The BRE Guidelines (CD-0.1.4) do not provide commentary on NSL value ranges as it does with VSC (above). The BRE Guidelines do however state that:

"According to the BS 8206-2, supplementary electric lighting will be needed if a significant part of the working plane lies beyond the no sky line."⁴²

- 5.30 To capture the NSL results in a clear and concise format, I have considered it reasonable and appropriate to use the following value ranges which represent the percentage of the room area that can see the sky:
 - 0-20%;
 - 20-40%;
 - 40-60%;
 - 60-80%; and
 - 80-100%.

Annual Probable Sunlight Hours (APSH)

- 5.31 As with NSL, the BRE Guidelines do not provide any commentary on APSH value ranges. I have therefore collated the APSH results using the following ranges which I believe are reasonable and illustrate the results in a clear and concise format.
 - 0-5%
 - 5-15%
 - 15-20%
 - 20-25+%.
- 5.32 As outlined above, the results and illustrative window maps for the properties within the Appeal Study Area can be found in Appendix 10. I have however provided a comparative VSC analysis of the Appeal Study Area with the Proposed Development overleaf.

42 Littlefair, P. (2011). Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice. Hertfordshire: HIS BRE Press, p 7 para 2.2.8



COMPARATIVE VSC ANALYSIS OF APPEAL STUDY AREA

- 5.33 Having considered all of the data derived from the Appeal Study Area, I have collated the percentage proportion of windows which fall within the VSC ranges listed at paragraph 5.28 above.
- 5.34 I have focused on the VSC values as the BRE Guidelines (CD-0.1.4) states that "in assessing the loss of light to an existing building, the VSC is generally recommended as the appropriate parameter to use"⁴³.
- 5.35 In the table below, I have compared the retained VSC values arising from the Proposed Development with the existing VSC values which currently exist in the Appeal Study Area.

VSC Ranges	Proposed Development	Appeal Study Area
0-5%	2%	4%
5-15%	34%	30%
15-27%	39%	44%
27+%	25%	22%

- 5.36 Figure 24 clearly illustrates that the retained values arising from the Proposed Development are reflective of those which already exist within the Appeal Study Area.
- 5.37 The Proposed Development results in a smaller proportion of windows in the lowest VSC bracket of 0-5% VSC. The Proposed Development will also result in a larger proportion of windows in the highest bracket of 27%+ VSC. The proportion of windows in the mid-range brackets in both areas are comparable. It is clear therefore that the Proposed Development is not out of context with the existing environment.

43 Littlefair, P. (2011). Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice. Hertfordshire: HIS BRE Press, p 62 para F1

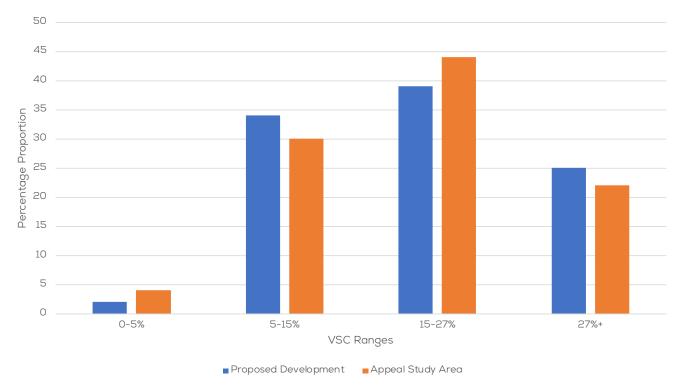


Fig. 24: Comparative analysis of retained VSC values from the Proposed Development with existing VSC values in the Appeal Study Area



2. VICTORIA SQUARE DEVELOPMENT

- 5.38 The Victoria Square development was approved in 2014 (WBC Ref: PLAN/2014/0014) with subsequent S.73 amendments approved in 2018 and 2019 (WBC Refs: PLAN/2017/0006 and PLAN/2018/0444).
- 5.39 In light of its town centre location and proximity to the Site, I consider the retained daylight and sunlight levels at Victoria House to be a relevant comparison given it was considered to be acceptable by the Council when determining the Victoria Square application.
- 5.40 The 2018 variation (WBC Ref: PLAN/2018/0444) to the 2014 Planning Permission comprised of the provision of 37 additional residential units and associated alterations to housing mix along with various internal and external alterations to the building. The Committee Report and Decision Notice are enclosed with the Core Documents (CD-8.1.3 and CD-8.1.4). The proposed additional units were contained within the consented building envelope with no additional external volume with the exception of additional balconies.
- 5.41 The 2014 scheme comprised:

Erection of new shops (10,967 sq.m. in Use Classes A1, A2, A3, A5) and medical or commercial floorspace (526 sq.m. in Use Classes D1, D2, B1 or A2). 190 bed hotel of 23 storeys (including plant) (95.5 metres) (Class C1) with conference facilities, basement level spa and gym. 392 residential apartments (Class C3) with Tower 1, 34 storeys (112 metres) and Tower 2, 30 storeys (100 metres). Construction of a new local energy centre at the Red Car Park, changes and extension to the Red and Yellow Car Park together with a new Green car park to provide 380 (net) new parking spaces. Creation of a new public square and new civic space and highway works including servicing to Wolsey Place and delivery provision. Closure of Cawsey Way and Church Street West, new all movements junction at Goldsworth Road/Victoria Way and High Street to be one way west with new bus stops and cycle lane. Demolition of the Fire Station, Globe House and part of the existing Wolsey Place Shopping centre (Boots unit - to be re-provided).

- 5.42 Impacts to neighbouring daylight and sunlight amenity is considered at paragraphs 78-84 of the Planning Committee Report for the 2014 scheme (CD-8.1.1). At paragraph 81, the Case Officer recognised that in terms of VSC "there will be a major effect on 27 windows, a moderate effect on 18 windows, a minor effect on 23 windows and a negligible effect on 73 windows".
- 5.43 The Case Officer concludes their assessment at paragraph 84 stating that "whilst the BRE criteria are not strictly met for all windows, if the development is taken in its urban context then the daylight levels are considered overall to be acceptable in accordance with Policy CS21".
- 5.44 The application was presented to the Planning Committee on 4th November 2014 and subsequently approved illustrating that the retained daylight values outlined above were, in the Council's view, contextually appropriate and in accordance with Policy CS21.
- 5.45 The Victoria Square development gives an understanding of how the Council have applied its development strategy to direct proposals towards Woking Town Centre

by reference to the four principles discussed at paragraph 5.13:

- "Significant change" is anticipated by reference to Policy CS1;
- "High density development" is anticipated by reference to Policies CS1 and CS2;
- "Tall Buildings" are anticipated by reference to Policy CS2; and
- Impacts are anticipated which are not *significantly harmful* by reference to Policy CS21.

VICTORIA HOUSE (FRONTING VICTORIA WAY)

- 5.46 This section illustrates the VSC, NSL and APSH values which exist in Victoria House (fronting Victoria Way) as a result of the Victoria Square development. The windows considered at Victoria House front Victoria Way and are therefore not affected by the Proposed Development.
- 5.47 The results provide a clear indication as to daylight values that are acceptable to the Council as a result of high density development. Furthermore, the values are not dissimilar to the other street locations chosen within the Appeal Study Area. Sunlight values have been provided despite windows not facing within 90-degrees of due south.
- 5.48 As illustrated in the images below a number of the windows and rooms tested fall short of the recommended values in the BRE Guidelines (CD-0.1.4) in the existing situation. Of the windows and rooms tested in Victoria House:

VSC

- 3% fall in the 0-5% bracket;
- 22% fall in the 5-15% bracket;
- 64% fall in the 15-27% bracket; and
- 11% fall in the 27%+ bracket.

NSL

- 95% fall in the 0-20% bracket;
- 55% fall in the 20-40% bracket;
- 0% fall in the 40-60% bracket;
- 0% fall in the 60-80% bracket; and
- 0% fall in the 80-100% bracket.

APSH

- 0% fall in the 0-5% bracket;
- 10% fall in the 5-15% bracket;
- 25% fall in the 15-27% bracket; and
- 65% fall in the 20-25+% bracket.





Fig. 25: Victoria House VSC

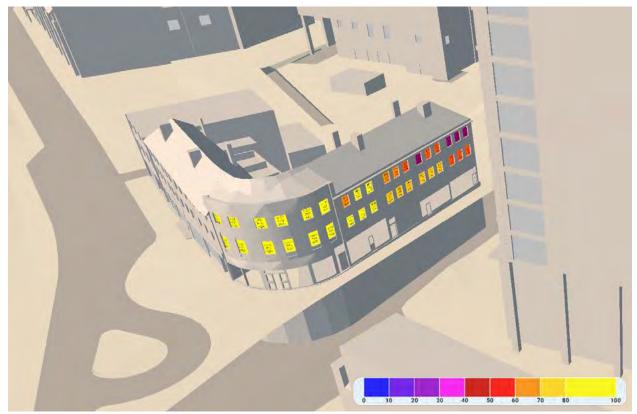


Fig. 26: Victoria House NSL

LAND NORTH AND SOUTH OF GOLDSWORTH ROAD, WOKING GU21 6JT DAYLIGHT & SUNLIGHT PROOF OF EVIDENCE (15563)

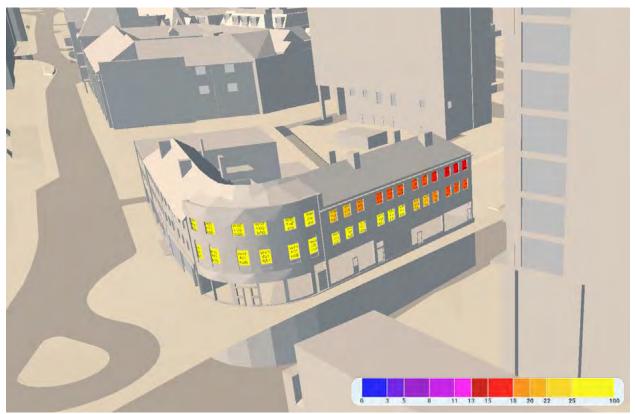


Fig. 27: Victoria House APSH



COMPARABLE TOWN CENTRE

- To illustrate that properties located within Woking Town Centre are not unique, in that they experience a range of VSC values, some of which are lower than the target value provided in the BRE Guidelines (CD-0.1.4), I have considered another town centre which is also undergoing substantial regeneration.
- 5.50 The town of Reading is considered to be an appropriate case study to review given its geographical location and strategic role as a satellite commuter town near London, similar to Woking. In addition, substantial regenerative development is currently underway in the town centre at Station Hill to support its strategic role as a commuter town.
- 5.51 The Housing Market Analysis of Woking Town Centre (dated November 2019)⁴⁴ (CD-7.1.6) prepared by GL Hearn on behalf of the Council cites Croydon, Stratford and Wembley as comparable growth areas on the basis of the rapid scale of growth and their connectivity to Central London. As such, the Council consider case studies to offer relevant context in terms of the trends experienced in other areas and, in the case of the housing market analysis, in higher density areas in London.
- 5.52 It is acknowledged that there are spatial differences between both Reading and Woking and that the developments within Woking are a result of more recent transformative change which Reading has been subject to for the past 20 years. However, the values derived from both schemes are an indicator that a range of values occur in both locations.

44 GL Hearn. (2019). Woking Town Centre Housing Market Analysis: GL Hearn, p 9 para 1.38



Fig. 28: Station Hill, Reading Design and Access Statement

READING

- 5.53 The plan-led redevelopment of Reading Town Centre has been ongoing for 20 years, driven by the requirement to expand the capacity of the train station to accommodate forecasted future demand and the arrival of the Elizabeth Line.
- 5.54 With the adoption of policy documents such as the Core Strategy 2008 (now superseded), Station Hill South Planning & Urban Design Brief 2007, the Reading Central Area Action Plan 2009 and the Reading Station Area Framework in December 2010, it has been anticipated that the area would change in the coming years to accommodate new infrastructure and investment. These documents set out the principles to guide the evolving character and role of Reading Town Centre and the area surrounding the station
- 5.55 In seeking to illustrate the levels of daylight and sunlight deemed acceptable in town centres earmarked for regeneration (such as Reading) I have considered the recently consented Station Hill development. The development is located within the Station / River Major Opportunity Area Strategy (see Figure 29). The Station / River Major Opportunity Area is anticipated to deliver new homes plus a hotel, retail, leisure and expansive office accommodation.

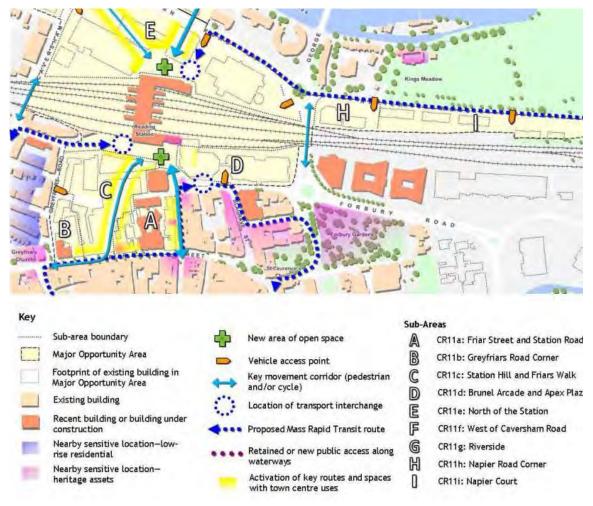


Fig. 29: Station/River Major Opportunity Area Strategy (Fig 5.3 - Reading Borough Local Plan 2019)



VSC ANALYSIS OF STATION HILL

- 5.56 Planning permission was granted for the Station Hill development on 22nd July 2021 (RBC Ref: 192032/HYB) (Appendix 11).
- 5.57 There were daylight and sunlight impacts identified within the planning application submitted in respect of the Station Hill development. Notwithstanding this, the report to committee recommended approval of the scheme. In relation to daylight and sunlight matters the report to committee noted:

"Most of those affected would suffer negligible or only minor adverse affects as defined in the ES. Others would suffer moderate to major adverse effects.⁴⁵

Hollis advise that the majority of the surrounding properties will be moderately affected in terms of daylight and sunlight levels during each phases of the development.⁴⁶

The 'light' aspects of the proposals are considered to be in accordance with Policies CC8 and CR10 on this basis.⁴⁷

- 5.58 Within Appendix 11 I have included images illustrating the retained daylight values within the properties neighbouring the Station Hill development on the basis that the development is in situ.
- 5.59 As one would expect in a dense urban environment, there are a number of windows within the properties neighbouring the Station Hill development that receive lower levels of VSC.
- 5.60 The percentage proportion of windows falling into each VSC bracket in relation to the Station Hill development (based on the properties considered within the planning application) and the Proposed Development are provided in the table below and illustrated in the graph at Figure 30.
- 5.61 As can be seen from both the table and graph, the retained values from both the Proposed Development and Station Hill indicate that a range of values will be achieved. In both areas, the prevalent VSC values are in the mid ranges of 5–15% and 15–27% VSC.

VSC Ranges	Proposed Development	Station Hill
0-5%	2%	21%
5-15%	34%	30%
15-27%	39%	33%
27+%	25%	16%

45 Station Hill Committee Report (13 January 2021). Application Ref: 192032/HYB (para 6.190)

46 Station Hill Committee Report (13 January 2021). Application Ref: 192032/HYB (para 6.193)

47 Station Hill Committee Report (13 January 2021). Application Ref: 192032/HYB (para 6.194)

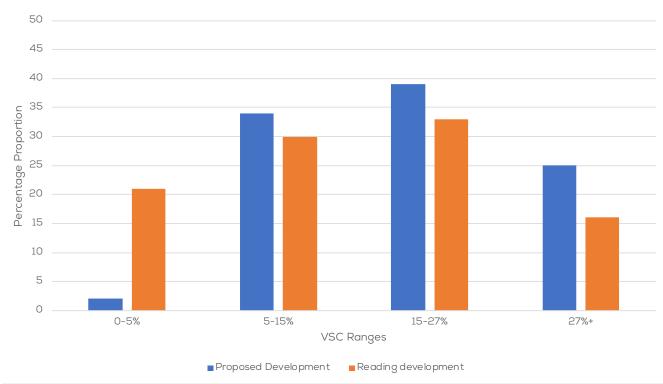


Fig. 30: Comparative analysis of retained VSC values from the Proposed Development with retained VSC values in the Reading Study Area



CONTEXT SUMMARY

- 5.62 It is clear from the studies undertaken that in town centre locations which are earmarked for new development and where change is anticipated, there will be a range of VSC values which reflect the urban environment. Put simply, designing to achieve a universal retained level of 27% is unachievable in the context of the spatial characteristics of a town centre.
- ^{5.63} The NPPF and NPPG state that a flexible approach should be taken when considering policies or guidance relating to daylight and sunlight, and the question for local planning authorities to ask is whether the impact is "unreasonable"⁴⁸. To establish what is "unreasonable", the NPPG recognises that this will "depend to some degree on context"⁴⁹.
- ^{5.64} The need for flexibility has been applied by the Council in their consideration of the recently approved Victoria Square development which states that "whilst the BRE criteria are not strictly met for all windows, if the development is taken in its urban context then the daylight levels are considered overall to be acceptable in accordance with Policy CS21"⁵⁰. Furthermore, this provides an indication as to what Officers consider to be acceptable levels of VSC within Woking.
- 5.65 By considering another town centre which is undergoing similar redevelopment, it is clear that the levels of VSC accepted in Woking and which result from the Proposed Development are not out of kilter with what is considered acceptable elsewhere i.e. the Proposed Development does not produce VSC values which are now unique to Woking. The graph provided at Figure 31 illustrates how the Proposed Development, Appeal Study Area and Reading development perform.
- 5.66 In light of the above, I have concluded that:
 - ¹ The character of the Site reflects the typical urban grain of Woking.
 - 2 The Site juxtaposes tall buildings and low to mid-rise buildings which is not atypical of the wider Town Centre area or indeed the other satellite town of Reading.
 - ³ The prevailing VSC levels as a result of the Proposed Development are aligned with those already found within Woking Town Centre and those within Reading and as such, are commensurate with the expected levels of daylight for a development of this nature in a town centre.
 - ⁴ The façades tested within the two study areas include substantial proportions which receive VSC levels which are below the target 27% VSC recommended by the BRE Guidelines (CD-0.1.4).
 - The results derived from the Contextual Analysis demonstrate that within Woking and in comparable urban areas, a range of VSC values exist and the retained VSC values which result from the Proposed Development are in line with or better than what has been considered acceptable in these areas.

⁴⁸ MHCLG. (2021). National Planning Policy Guidance (2021), para 66-006-20190722

⁴⁹ MHCLG. (2021). National Planning Policy Guidance (2021), para 66-007-20190722

⁵⁰ Victoria Square Committee Report (4 November 2014). Application Ref: PLAN/2014/0014 (para 84)

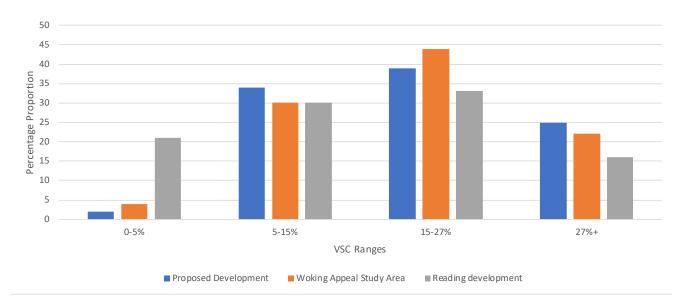


Fig. 31: Comparative analysis of retained VSC values from the Proposed Development with retained VSC values in the Study Areas



SECTION 6 AMENITY TO NEIGHBOURING PROPERTIES

6 AMENITY TO NEIGHBOURING PROPERTIES

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

MODELLING

6.2 A three-dimensional computer model of the Proposed Development and surrounding properties was produced based on a point cloud measured survey undertaken by GIA in January 2020. Where available we have included floor plans of the relevant properties (see paragraph 6.3) 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.

SURROUNDING PROPERTIES

- 6.3 I have identified twelve residential properties which I consider to be relevant for daylight and sunlight assessment. These properties are listed below and collectively referred to as the "Assessed Properties":
 - 1 & 1a Guildford Road;
 - 2 Guildford Road;
 - Olympian Heights;
 - Nankeville Court Existing Flats;
 - Nankeville Court Roof Extension;
 - Greenwood House (Woking Fire Station);
 - Birchwood Court;
 - 1-5 Church Street West (Welcome Church);
 - 9-11 Church Street (Church Gate);
 - 15-19 Church Street (Premier House);
 - Victoria House;
 - 11-13 Goldsworth Road; and
 - Victoria Square.
- 6.4 The Assessed Properties are identified in Figure 32.
- 6.5 Where there are changes in daylight and/or sunlight to the Assessed Properties I have fully discussed the impacts within this section of my Proof. All results can be found in Appendices 04-07.
- 6.6 However, and as outlined at paragraph 2.10 above, the Council issued their Statement of Case (CD-10.1.2) to the Planning Inspectorate and Appellant on 5th August 2021. At paragraph 6.5, the Council lists the properties which it considers to be "detrimentally impacted" by the Proposed Development. In order to narrow the areas of dispute further, the Council has indicated whether the impacts are to either daylight or sunlight or both.

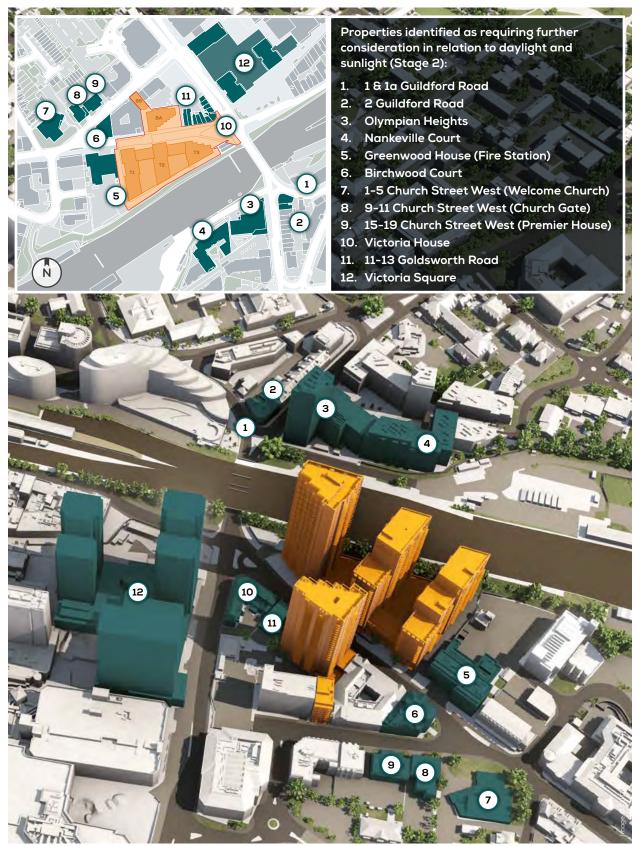


Fig. 32: VU.CITY image showing the proposed scheme shown in orange, and relevant properties numbered.



- 6.7 With a view to streamlining the assessment of daylight and sunlight to the Assessed Properties, I will focus on the specific issue taken by the Council on each property.
- 6.8 Since completing the technical assessments enclosed with the Daylight & Sunlight ES Chapter (June 2020) (CD-4.1.7) to support the 2020 planning application, a number of changes have occurred to neighbouring properties which alters the scope of my original assessment. These are detailed below overleaf.

CHANGES FOLLOWING ISSUE OF THE DAYLIGHT & SUNLIGHT EIA REPORT (JUNE 2020)

a) 21-25 Church Street West

- 6.9 The Daylight and Sunlight ES Chapter (June 2020) submitted in support of the Planning Application for the Proposed Development considered the daylight and sunlight impact to 21-25 Church Street West which is located to the north of the Site.
- 6.10 Prior Notification to convert the property to 19 apartments was approved on 3rd April 2018 (WBC Ref: PLAN/2018/0176). The Prior Approval Notice states that:

Development is permitted subject to it being completed within a period of 3 years starting with the Prior Approval date.

6.11 As the Prior Approval has not been implemented and completed before 3rd April 2021, it is deemed to have expired. As such, the lawful use of the property is an office and so it no longer forms part of my assessment.

b) Nankeville Court

- 6.12 In November 2019, a planning application was refused for the erection of rooftop extensions and modifications to the internal layouts at seventh and tenth floors (WBC Ref: PLAN/2019/0753). The application was refused on townscape and highway grounds. Matters relating to daylight and sunlight amenity were considered acceptable.
- 6.13 The scheme was subsequently allowed at appeal and Planning Permission granted in May 2021 (PINS Ref: APP/A3655/W/20/325346). In the Appeal Decision, the Inspector noted that the extension resulted in minor reductions in NSL to bedrooms or single aspect, deep set living rooms and concluded that:

"In such circumstances the BRE Guide states that target reductions may be unavoidable. On this basis, there would be no significant loss of light to the existing occupiers."⁵¹

- 6.14 As the permission has yet to be implemented, I have considered the ADF assessment in relation to the new apartments granted at appeal as there are no occupants who can experience a relative impact in VSC and NSL.
- 6.15 The existing properties at Nankeville Court have been assessed separately using the relative impacts tests of VSC, NSL and APSH.

c) 9-11 Church Street West (Church Gate) and 15-19 Church Street West (Premier House)

- 6.16 The above properties formed part of a planning application for demolition and comprehensive redevelopment to provide a part five / part 17-storey apartment block comprising 243 units (WBC Ref: PLAN/2020/1201). The application was refused on 8th April 2021. As such, the extant consents which exist are set out below.
- 6.17 Prior Notification to convert Church Gate to 31 apartments was approved on 20th December 2019 (WBC Ref: PLAN/2019/1090) following the expiration of an earlier

51 PINS Appeal Decision APP/A3655/W/20/3252346 (para 44)



Prior Notification approved in June 2016 (WBC Ref: PLAN/2016/0438). Separately, Planning Permission was granted in August 2019 for a two storey extension (WBC Ref: PLAN/2018/0741). Neither of the approved schemes have been implemented but as they remain extant have been included in the model and the results of the technical assessments.

- 6.18 Prior Notification to convert Premier House to 29 apartments was approved on 20th March 2020 (WBC Ref: PLAN/2020/0020). This follows an earlier (now expired) Prior Approval (WBC Ref: PLAN/2017/0165). Separately, Planning Permission was granted in August 2019 for a two storey extension to provide nine flats (WBC Ref: PLAN/2018/0918). As with Church Gate, neither of the approved schemes have been implemented but have been included in the model and the results of the technical assessments as the permissions remain extant.
- 6.19 As above, I have considered the ADF assessment in relation to the new apartments as the schemes have yet to be implemented.

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DISCUSSION OF RESULTS

- 6.20 In cases where there are multiple windows and rooms within a property which are affected by the Proposed Development, I have selected the flats which I consider to be the most and least affected. This will help to assist the inquiry with understanding the range of impact which occurs within the relevant property.
- 6.21 I have considered the Assessed Properties in two stages:

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

• I apply the national numerical assessments for daylight and sunlight as outlined in the BRE Guidelines (CD-0.1.4). Where properties, windows and rooms meet the recommendations of the BRE Guidelines, these are not discussed further.

Stage 2 - Is there a "significant harmful impact" in terms of loss of daylight and/or sunlight to the property?

- Where properties, windows and rooms do not meet the recommendations of the BRE Guidelines, I examine the wider material considerations listed at paragraph 6.23 overleaf to determine whether the impact to daylight and/or sunlight amenity is "significantly harmful" by reference to Policy CS21.
- 6.22 At both stages, I have focused on the specific issue taken by the Council on each property in order to streamline the assessment.

Assessment Methodology

- 6.23 In order to establish whether the change in daylight and/or sunlight amenity will give rise to a "significant harmful" impact (Stage 2), I have examined and applied the following material considerations (where relevant):
 - ¹ If the change in daylight (NSL) is to a bedroom; this is *"less important"* in accordance with paragraph 2.2.8 of the BRE Guidelines (CD-0.1.4);
 - If the change in sunlight is to a bedroom or kitchen; the BRE Guidelines note that the receipt of Sunlight is less important in bedrooms and kitchens. Paragraph 3.1.2 of the BRE Guidelines states: "It is viewed as less important in bedrooms and in kitchens, where people prefer it in the morning rather than in the afternoon". In such situations I consider the impact on sunlight to be acceptable as the room use is less important;
 - ³ If architectural features (overhanging balconies or protruding side returns) exist which would restrict daylight or sunlight to rooms lit by windows beneath them in accordance with paragraph 2.2.11 of the BRE Guidelines;
 - ⁴ If the change in VSC or APSH to a room is less than 20% (where a room is served by more than one window);
 - 5 Where relevant, whether the retained level of light is in line with the minimum ADF value recommended for that particular room use as outlined at paragraph 2.1.8 of the BRE Guidelines i.e. minimum values of ADF of 2% for kitchens, 1.5% for living rooms and 1% for bedrooms. The common industry practice to apply 1.5% ADF to LKDs will also be considered;
 - 6 Where relevant, if artificial lighting is already likely to be in use in the existing situation. This assumption will be based on the BRE Guidelines which reference that below a 2% ADF electric lighting is likely to be required. This is outlined at paragraph 2.1.8 of the BRE Guidelines;
 - 7 Where there are low existing VSC values I have reviewed whether the change in daylight will be perceptible to the occupant i.e. where there is less than a 3% VSC change, it is my opinion that this will not be perceptible;
 - ⁸ Where the retained VSC value is in excess of 21.6%; and
 - ⁹ If the post-development retained VSC values are commensurate with the prevalent levels which exist within the Appeal Study Area.
- 6.24 In the summary table overleaf, I have captured the comments of the Case Officer in the Committee Report (dated 12 January 2021) (CD-6.1.1) who found that although there were significant changes in light, the impacts to neighbouring properties were acceptable when considering the geographical and policy context of the Site and the benefits arising from the Proposed Development.



6.25 It is important to note that the commentary in the Committee Report (dated 12 January 2021) (CD-6.1.1) is based on the original submission scheme with Building T3 at 41 storeys as opposed to the determined scheme in which the height of Building T3 was reduced to 37 storeys. As a result, there would an improvement upon the figures presented to Planning Committee and summarised below:

DAYLIGHT

1 Guildford Road

The overall impact to No.1 Guildford Road would be minor adverse and are similar to those that would have been retained by reference to the 2016 resolution to grant scheme.

2 Guildford Road

The overall impact to No.2 Guildford Road would be minor adverse and are similar to those that would have been retained by reference to the 2016 resolution to grant scheme.

Olympian Heights

There is no material additional impact arising from the current proposals on this development from the 2016 resolution to grant scheme.

Nankeville Court

The proposal would result in an alteration to daylight that would be noticeable to the occupants. The assessment notes that the retained VSC values of the proposed development are similar to those from the 2016 resolution to grant scheme.

Greenwood House

Overall, it is considered that Greenwood House would retain an acceptable level of daylight.

Birchwood Court

The applicant has advised that given its location in relation to the site, the south facing orientation of sensitive windows which are already obstructed by recessed and protruding balconies, the magnitude of reductions would be unavoidable with any development coming forward on the site.

21-25 Church Street

The assessment advises that overall, given BRE compliance, number of rooms obstructed in the baseline by architectural features of the property as well as the number of affected rooms being bedrooms, the overall daylight effect is considered Moderate Negative.

Victoria House

There would be a change in daylight to some rooms within this property, however, this is typical of urban locations, and in some cases considered unavoidable. Victoria House is also within the Compulsory Purchase Order boundary to enable the Council to deliver the Housing Infrastructure Fund (HIF) Island Site. The retained daylight values of the proposed development are similar to those from the 2016 resolution to grant scheme.

Goldsworth Road

There would be a change in daylight to some rooms within this property, however, this is typical of urban locations, and in some cases considered unavoidable.

Victoria Square

A total of 177 rooms have been assessed for daylight. A total of 112 rooms meet the target ADF criteria within the BRE. 5 of the rooms that do not meet the BRE criteria would serve bedrooms, which would have a 0.9% value which is just below the 1% standard. The remaining 60 rooms are LKDs, the ADF target values for a number of rooms are not met with the existing situation. 174 of the 177 rooms would pass the BRE criteria for NSL.

Table. 01: Case Officer's assessment of the impact to surrounding properties as per the Committee Report (CD-6.1.1)

SUNLIGHT

201 rooms have been assessed for daylight with 130 rooms meeting the BRE criteria for both total and winter probable sunlight hours (PSH). The proposed development is considered to have a negligible effect on 1 Guildford Road, 2 Guildford Road, Greenwood House and 21-25 Church Street.

Birchwood Court

For Annual PSH 19 of the 25 assessed rooms would meet the BREs criteria. The remaining 6 rooms would have a major negative effect, 4 of these would affect bedrooms and 2 would affect LKDs which are located behind recessed balconies.

Victoria House

8 of the 26 assessed rooms would meet the BRE criteria for Annual PSH. The remaining 18 rooms would have a major negative effect, but retain between 9% and 21% APSH. 9 of the affected rooms are located beneath a roof overhang, shading the rooms from direct sunlight.

11-13 Goldsworth Road

For Annual PSH 4 of the 8 assessed rooms would meet the BREs criteria. The remaining 4 rooms would have a major negative effect, these rooms currently overlook low level massing and therefore any increase in built form would have an impact on these rooms.

Victoria Square

97 of the 177 assessed rooms would meet the BRE criteria for Annual PSH. Of the 80 rooms effected annually, 12 would have a minor negative effect, 30 would have a moderate negative effect and 38 would have a major negative effect. All the rooms are located beneath or diagonally beneath balconies which would shade the rooms.

SUMMARY:

As set out above there is some significant loss of light impact to neighbours at Nankeville Court, Victoria House, Birchwood House and 11-13 Goldsworth. However when balanced with the BRE guidance and National Planning Practice Guidance, such impacts are considered unavoidable in a Town Centre location where development is designed to reflect its surroundings. As set out in Figure 3 above, 315 of the 797 windows assessed for VSC would meet the BRE criteria and 380 of the 502 room assessed for NSL would meet the BRE criteria. The BRE guidance and National Planning Practice guidance states that lower daylight and sunlight levels may be unavoidable in urban locations where new development is designed to reflect its surroundings. It should also be noted that the amount of light that some units receive in the first place is already low due being sited below balconies or north facing and a number of the sites are proposed for redevelopment. Overall, the proposal does not amount to significant harmful impact when considered as a whole.

Balancing these points, along with the benefits of the proposal and the requirement to make efficient use of land as set out in Paragraph 123 of the NPPF (2019), overall the proposed development is considered to form an acceptable relationship with surrounding neighbours in terms of loss of light, overbearing and overlooking impacts.



THIRD PARTY REPRESENTATIONS

- 6.26 I have reviewed all third-party representations to the Proposed Development that relate to my discipline which have been submitted both at planning application stage and in relation to the appeal.
- 6.27 Some of the objections refer generically to loss of light or impacts to daylight and sunlight. Where this is the case, I have not responded specifically as this matter is addressed generally within my evidence.
- 6.28 As there is some overlap with other points raised, I have considered these under the following headings:
 - Overshadowing
 - Light pollution
 - Solar glare
 - Daylight and sunlight amenity within the Site
 - · Privacy and overlooking

Overshadowing

- 6.29 The Overshadowing assessments that were submitted in support of the Planning Application (CD-3.1.5) demonstrate that the Proposed Development would not give rise to a "significant harmful impact" by reason of overshadowing through loss of sunlight.
- 6.30 The Committee Report (CD-6.1.1) outlines at paragraph 131 that:

Overshadowing to rear gardens at Nos.5-29 (odds) Oak Road, Nos.17 to 29 Vale Farm Road and Nos.30-36 Vale Farm Road have been assessed as well as the Millennium Place playground. On 21st June and 21st December no sensitive amenity areas are affected by the proposed development. On 21st March from 08.00 there would be a shadow over the rear gardens of Oak Road and Vale Farm Road and Millennium Place, however this would clear by 10.00 and remain unaffected for the rest of the day.

Light Pollution

- 6.31 Light pollution is typically considered an issue where light is omitted from artificial sources, such as highly glazed commercial offices, into residential accommodation where this would cause a nuisance to occupants. Light levels drop with distance from the source and generally beyond 20m light pollution effects become negligible.
- 6.32 Light pollution assessments are normally not considered relevant for residential schemes, which typically do not include large window-walls serving spaces continuously artificially lit throughout the day or evenings. As such, light pollutions assessments are not considered relevant for the Proposed Development.

Solar Glare

6.33 The Solar Glare Assessment (CD-4.1.7) submitted in support of the Planning Application assessed 34 locations for solar glare impacts, of which 15 were considered to experience a negligible effect and 19 were considered to have a minor negative effect.

6.34 The Committee Report outlines at paragraph 214 that:

The Solar Glare Assessment concluded that there are instances where solar reflections will occur within 30 degrees of the line of sight, however these instances occur for a short period of time and the reflective portions of the façade is broken up by solid elements or behind recessed balconies. It is considered the proposed development would not affect a road or rail user's responsiveness.

Daylight & Sunlight Amenity within the Site

6.35 Local residents have outlined their concerns in relation to the daylight and sunlight performance of the Proposed Development. In their consideration of internal daylight amenity at paragraph 141 of the Committee Report (CD-6.1.1), Officers summarised the performance of the Proposed Development in relation to ADF:

Overall 1747 (82.5%) out of all 2114 proposed habitable rooms meet or exceed the BRE recommendation for daylight quantum (ADF) where all neighbouring schemes currently under construction are considered as built. In total 369 do not meet the BRE criteria for ADF, however 29 living rooms and 40 bedrooms only fail ADF criteria by 0.1-0.2% and are therefore considered to receive adequate daylight. Of the remaining 214 rooms, 53 are LKDs, 64 are living rooms and 97 are bedrooms. These rooms are all of a generous size and have balconies, which has an impact on daylight levels as balconies typically reduce the light ingress and the areas to the rear of the room are generally less well lit which reduces the overall ADF.

6.36 Almost 86% of all rooms assessed meet the target ADF value for that room use or are within 0.1–0.2% of the target. At paragraph 141 of the Committee Report (CD–6.1.1), Officers concluded that:

Considering the high density nature of the proposed development and the town centre location of the proposal site, the proposal is considered to achieve an acceptable quality of daylight for future residents.

6.37 I agree with Officers who confirm at paragraph 146 of the Committee Report that:

Overall the proposal is considered to offer a high standard of accommodation for future residents.

- 6.38 Daylight and sunlight is only one of the many factors influencing people's decision of where to live. It should be considered alongside a range of other amenities such as; location, access to public transport, open space, shops and recreation facilities.
- 6.39 In the case of the Proposed Development, daylight and sunlight availability forms part of the overall approach to amenity which includes the provision of private outdoor amenity space and balconies; the pedestrianisation of Goldsworth Road; and the associated landscape strategy which will enhance future occupants connection to biophilia.
- 6.40 It is my view that taken together, the Proposed Development opens the door to alternative forms of amenity which enhance the overall experience for future occupants.

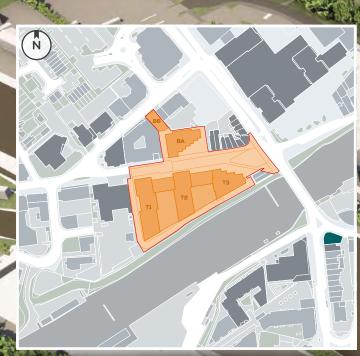


Privacy & Overlooking

- 6.41 At paragraph 6.5 of their Statement of Case (CD-10.1.2), the Council notes the impact to privacy to three properties. It has also been raised more generally in some of the third party representations.
- 6.42 This matter is dealt with in the evidence of Mr Bidwell (CD-12.2.2) which demonstrates that the design of the Proposed Development is of exemplary quality and that separation distances to neighbouring properties are well-considered and appropriate for a new development within Woking Town Centre. The separation distances have also been found to be comparable with other recent high-density schemes close to the Site.

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Location plan showing 1 & 1a Guildford Road (green)

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SECTION 6: AMENITY TO NEIGHBOURING PROPERTIES 1&1A GUILDFORD ROAD

1 1 & 1A GUILDFORD ROAD

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6.1 1 & 1A GUILDFORD ROAD

- 6.1.1 This property is located to the south east of the Site and falls within the freehold ownership of the Council. There are nine rooms that include windows that face the Site.
- 6.1.2 No floor plans are available for this property. I have therefore made reasoned assumptions as to the internal layouts which will affect the NSL test. All assumptions can be found in Appendix 01.
- 6.1.3 It should be noted that the ground floor of these properties are in commercial use and the residential elements are understood to be located on the 1st to 3rd floors. As a result I have only considered those windows and rooms that are located on the 1st to 3rd floors.



Fig. 33: Property location key plan (green)

6.1.4 Paragraph 6.5 of the Council's Statement of Case (CD-10.1.2) states that the issue in relation to this property is the impact to daylight amenity. The focus of my assessment will therefore be on daylight albeit both the daylight and sunlight results of the property are enclosed at Appendices 04-05.

Proposed Demolition

6.1.5 Prior Notification to demolish this property along with adjoining properties at 2–11 Guildford Road was approved in December 2020 (WBC Ref: PLAN/2020/1017). In their application documents, the Council outline the justification for the demolition as follows:

WBC has been successful in securing a significant grant from the Government's Housing Infrastructure Fund to complete the acquisition of The Triangle site, undertake major highway improvement works within the town centre and widen the Victoria Arch bridge. Clearance of The Triangle is a key step in the delivery of the wider project which will include the removal of the one-way gyratory system and introduction of a two-way dual carriageway, shared pedestrian and cycle paths and crossing points for pedestrians and cyclists. Traffic flow will be further improved via the widening of the Victoria Arch railway bridge. The overall aim of the improvements is to remove restrictions to support growth and enable the delivery of housing to meet the needs of Woking.



Fig. 34: Site photograph of 1 & 1a Guildford Road



Fig. 35: Site photograph of 2-7 Guildford Road



Fig. 36: Window map

CHARTERED SURVEYORS



ROOM USES KEY:

Unknown Residential



- 6.1.6 The demolition of this property is for the purposes of extending the road infrastructure. It is currently scaffolded with ground floor windows covered with timber hoarding as a security measure. As outlined in the Covering Letter submitted with the Council's application for Prior Approval (dated 12th November 2020), demolition is anticipated to commence in February 2021 or July 2022.
- 6.1.7 In September 2021, Ardent Management Limited (on behalf of the Council) issued a Section 16 Notice (Appendix 12) to establish the details of the parties with an interest in the land and properties which will be affected by the proposed highway enhancement scheme. The Notice identifies properties within the project area which includes 1&1a Guildford Road and others discussed later in my proof. This is recent evidence of the Council's clear intention to demolish the buildings which fall within the highway enhancement areas.
- 6.1.8 In light of the above, it is entirely reasonable to assume that the property is unlikely to be occupied again as residential accommodation. It is my opinion that the impact to this property is negligible as there will be no direct impact on an occupant now or in the future based on the current plans.
- 6.1.9 Notwithstanding the above, the property has been assessed against both the Stage 1 and Stage 2 considerations.

Stage 1 – Is there a strict compliance with the BRE Guidelines in respect of daylight?

6.1.10 Of the nine rooms assessed, five will adhere to the BRE Guidelines (CD-0.1.4) in relation to daylight (R1/F01, R2/F01, R2/F01, R1/F02 and R1/F03) and have not been considered further.



Stage 2 – Is there a "significant harmful impact" in terms of loss of daylight to the property?

VSC

- 6.1.11 Where there are changes in VSC the percentage reduction is between 23-35.3% from the existing value. The retained values range from 8.8-17.4% VSC. The absolute reduction in VSC is c.5%.
- 6.1.12 As shown in Appendix 10, the retained VSC values are similar to those that currently exist in the first third floors of windows in the following neighbouring properties which are unaffected by the Proposed Development:
 - Cardinal Place Blocks E, F, K
 - Cardinal Place Block A
 - Victoria House
 - 3-5 Guildford Road
 - 14 Chapel Street
 - 26a High Street
- 6.1.13 I have also considered the effect of the Proposed Development against the RTG scheme. The Proposed Development results in marginally higher VSC values when compared with the RTG scheme (an improvement of up to 1% VSC in absolute terms) (Appendix 04).

NSL

- 6.1.14 Three rooms will experience a reduction in NSL beyond the recommendations of the BRE Guidelines (CD-0.1.4). The percentage reduction is between 26.7-39.5% from the existing value. The retained values range from 40-60% NSL.
- 6.1.15 As shown in Appendix 10, the retained NSL values are similar to those that are currently exist in first third floor rooms in the following neighbouring properties which are unaffected by the Proposed Development:
 - Cardinal Place Blocks E, F, K
 - Cardinal Place Block A
 - Victoria House
 - 3-4 Guildford Road
 - 25 High Street
 - 26a High Street



Summary

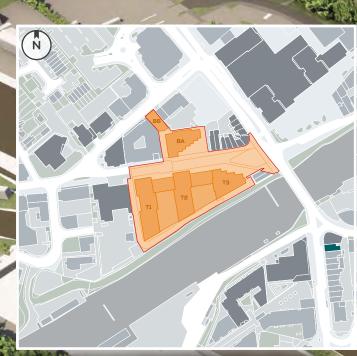
- 6.1.16 The property is vacant and unlikely to be occupied as residential accommodation in the future as it is due to be demolished by July 2022 for the purpose of major highway improvement works in Woking utilising the HIF. In recent correspondence with local landowners, the Council have confirmed their intention to progress with proposals for the highway enhancement works.
- 6.1.17 Notwithstanding the above, the retained daylight values are similar to those that are currently experienced by properties in the Appeal Study Area which are unaffected by the Proposed Development.
- 6.1.18 The retained VSC daylight values arising from the Proposed Development are marginally higher when compared with the RTG scheme.
- 6.1.19 In consideration of the above factors, although the nationally applicable BRE Guidelines (CD-0.1.4) are not met in relation to daylight, I do not consider that the impacts to the daylight amenity of this property would be significantly harmful.



					VSC (\	WINDO\	N)		VSC (F	ROOM)			NSL			
FLOOR	ROOM	PROPERTY TYPE	ROOM USE	WINDOW	EX. %	PR. %	LOSS	LOSS %	EX. %	PR. %	LOSS	LOSS %	EX. %	PR. %	LOSS SQM	LOSS %
1&1A GU	ILDFORD	ROAD														
F01	R1	Residential	Unknown	W1/F01	24.8	24.2	0.6	2.4	24.8	24.2	0.6	2.4	87.3	87.3	0	0
	R2	Residential	Unknown	W2/F01	25.4	24.8	0.6	2.4	25.4	24.8	0.6	2.4	93.8	93.7	0	0.1
	R3	Residential	Unknown	W3/F01	27.2	24.8	2.4	8.8	26.5	21.2	5.3	20	99.7	99.7	0	0
				W4/F01	29.2	24.6	4.6	15.8								
				W5/F01	29.4	23.2	6.2	21.1								
				W6/F01	27.3	20.3	7	25.6								
				W7/F01	22.1	15	7.1	32.1								
	R4	Residential	Unknown	W8/F01	13.6	8.8	4.8	35.3	13.6	8.8	4.8	35.3	85.1	62.4	6.1	26.7
F02	R1	Residential	Unknown	W1/F02	21.9	21.5	0.4	1.8	21.9	21.5	0.4	1.8	95.7	94.5	0.2	1.2
	R2	Residential	Unknown	W2/F02	23.5	21.2	2.3	9.8	22.6	17.4	5.2	23	99.7	99.7	0	0
				W3/F02	25.5	19.3	6.2	24.3								
				W4/F02	18.7	11.6	7	37.4								
	R3	Residential	Unknown	W5/F02	15.1	10.4	4.7	31.1	15.1	10.4	4.7	31.1	79.9	48.4	8.5	39.5
F03	R1	Residential	Unknown	W1/F03	28.3	25.9	2.4	8.5	25	20.4	4.6	18.4	77.1	76.5	0.2	0.8
				W2/F03	21.3	14.4	6.9	32.4								
	R2	Residential	Unknown	W3/F03*	14.3	9.4	4.9	34.3	14.3	9.4	4.9	34.3	66	42.3	6.1	35.9

Fig. 37: Existing v proposed daylight results





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Location plan showing 2 Guildford Road (green)

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SECTION 6: AMENITY TO NEIGHBOURING PROPERTIES 2 GUILDFORD ROAD

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6 AMENITY TO NEIGHBOURING PROPERTIES

6.2 2 GUILDFORD ROAD

- 6.2.1 This property is located to the south east of the Site and falls within the freehold ownership of the Council. There are five rooms that include windows which face the Site.
- 6.2.2 Floor plans have been obtained for this property and all rooms assessed are bedrooms. All assumptions can be found in Appendix 09.
- 6.2.3 It should be noted that the ground floor of this property is commercial in use and the residential elements are located on the 1st to 3rd floors. As a result I have only considered those windows and rooms that are located on the 1st to 3rd floors.

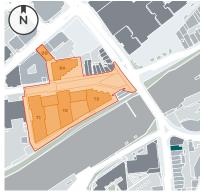


Fig. 39: Property location key plan (green)

6.2.4 Paragraph 6.5 of the Council's Statement of Case (CD-10.1.2) states that the issue in relation to this property is the impact to daylight amenity. The focus of my assessment will therefore be on daylight albeit both the daylight and sunlight results of the property are enclosed at Appendices 04 and 05.

Proposed Demolition

- 6.2.5 As outlined at paragraph 6.1.5–6.1.8 above, Prior Notification to demolish this property along with adjoining properties was approved in December 2020 (WBC Ref: PLAN/2020/1017). As with 1&1a Guildford Road, it is reasonable to assume that the property will not be occupied as residential accommodation in the future given the anticipated date for demolition in July 2022 to facilitate highway improvement works.
- 6.2.6 It is my opinion that the impact to this property is negligible as there will be no direct impact on an occupant now or in the future based on the current plans
- 6.2.7 Notwithstanding the above, the property has been assessed against both the Stage 1 and Stage 2 considerations.



Fig. 38: Google Streetview image of Guildford Road



Fig. 40: Site photograph of 2-7 Guildford Road

ROOM USES KEY:

Bedroom







Fig. 41: Window map



Stage 1 – Is there a strict compliance with the BRE Guidelines in respect of daylight?

6.2.8 Of the five rooms assessed, none will adhere to the BRE Guidelines in relation to daylight.

Stage 2 – Is there a "significant harmful impact" in terms of loss of daylight to the property?

VSC

- 6.2.9 Three of the seven windows will fall outside the recommendations for VSC in the BRE Guidelines. Where there are changes in VSC the percentage reduction is c.20.6-29% from the existing value.
- 6.2.10 When considering VSC to the room, three of the five rooms meet the recommendations of the BRE Guidelines. One room (R1/F01) will see a percentage reduction of 20.2% which I do not consider to be a noticeable change in VSC.
- 6.2.11 The remaining window (W1/F02) will see a percentage reduction in 29%. The retained VSC value to the window will be 6.6%. The absolute reduction will be 2.7% and in my view unlikely to result in a perceptible change given the low existing VSC value (9.3%).
- 6.2.12 I have also considered the effect of the Proposed Development against the RTG scheme. The Proposed Development results in marginally higher VSC values when compared with the RTG scheme (an improvement of up to 1% VSC in absolute terms) (Appendix 4).

NSL

- 6.2.13 All five rooms will fall outside the recommendations for NSL in the BRE Guidelines. Where there are changes in NSL beyond the recommendations of the BRE Guidelines, the percentage reductions are all minor and in the region of 22-27%.
- 6.2.14 The BRE Guidelines (CD-0.1.4) outline at paragraph 2.2.8 that when considering daylight distribution *"bedrooms should be analysed although they are less important"*. Given the primary use of all of the five rooms is for sleeping, they will have a lesser requirement for natural light.



					VSC (V	VINDOV	V)		VSC(R	OOM)			NSL					
FLOOR	ROOM	PROPERTY TYPE	ROOM USE	WINDOW	EX. %	PR. %	LOSS	LOSS %	EX. %	PR. %	LOSS	LOSS %	EX. %	PR. %	LOSS SQM	LOSS %		
2 GUILD	FORD RC	DAD																
F01	R1	Residential	Bedroom	W1/F01	13.3	9.8	3.5	26.3	12.5	9.9	2.6	20.8	67.8	52.6	2.3	22.4		
				W2/F01	12.6	10	2.6	20.6										
				W4/F01	11.3	9.9	1.4	12.4										
	R2	Residential	Bedroom	W3/F01	10.8	9.3	1.5	13.9	10.8	9.3	1.5	13.9	60.4	44.3	2.2	26.7		
F02	R1	Residential	Bedroom	W1/F02	9.3	6.6	2.7	29	9.3	6.6	2.7	29	56.4	41.3	2.3	26.7		
	R2	Residential	Bedroom	W2/F02	8.3	6.7	1.6	19.3	8.3	6.7	1.6	19.3	62.8	45.7	2.3	27.2		
F03	R1	Residential	Bedroom	W1/F03	13.2	11	2.2	16.7	13.2	11	2.2	16.7	42.7	31.6	1.7	26		

Fig. 42: Existing v proposed daylight results

Summary

- 6.2.15 The property is vacant and unlikely to be occupied as residential accommodation in the future as it is due to be demolished by July 2022 for the purpose of major highway improvement works in Woking utilising the HIF. In recent correspondence with local landowners, the Council have confirmed their intention to progress with proposals for the highway enhancement works.
- 6.2.16 The absolute VSC reduction within the only room which does not meet the BRE Guidelines is less than 3%. In my view, this is unlikely to result in a perceptible change.
- 6.2.17 Where impacts to NSL occur, the percentage reductions are minor. In any event, the BRE Guidelines outline at paragraph 2.2.8 that when considering daylight distribution *"bedrooms should be analysed although they are less important"*. Given the primary use of all of the impacted rooms is for sleeping, they will have a lesser requirement for natural light.
- 6.2.18 The retained VSC daylight values arising from the Proposed Development are marginally higher when compared with the RTG scheme.
- 6.2.19 In consideration of the above factors, although the nationally applicable BRE Guidelines are not met in relation to daylight, I do not consider that the impacts to the daylight amenity of this property would be significantly harmful.





Location plan showing Olympian Heights (green)

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SECTION 6: AMENITY TO NEIGHBOURING PROPERTIES OLYMPIAN HEIGHTS

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6 AMENITY TO NEIGHBOURING PROPERTIES

6.3 OLYMPIAN HEIGHTS

- 6.3.1 Olympian Heights is located to the south of the Site. Floor plans have been obtained for this property which have formed the basis of our technical assessments and can be found in Appendix 09.
- 6.3.2 As the floor plans did not include flat numbers, I have used alternative number references in order to aid the discussion on individual units. These alternative numbers may not reflect the true flat number assigned to individual addresses.
- 6.3.3 I have identified 40 flats which have windows that face the Site. All 40 flats have been technically assessed to understand the daylight and sunlight impacts and retained values.

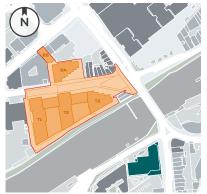


Fig. 43: Property location key plan (green)

- 6.3.4 Paragraph 6.5 of the Council's Statement of Case (CD-10.1.2) states that the issue in relation to this property is the impact to daylight amenity. The focus of my assessment will therefore be on daylight albeit both the daylight and sunlight results of the property are enclosed at Appendices 04 and 05.
- 6.3.5 The following 24 flats would meet the recommendations of the BRE Guidelines (Stage 1). Their location can be identified on the window map at Figures 45-46:
 - Flats 17-40
- 6.3.6 The following 16 flats do not meet the recommendations of the BRE Guidelines and have been examined against the wider material considerations (Stage 2):
 - Flat 1-16
- 6.3.7 Of the flats which do not meet the Stage 1 requirements, I have identified Flat 16 to be the least affected and Flat 2 as the most affected.
- 6.3.8 I have considered the impact on these two flats against the Stage 1 and Stage 2 considerations.



Fig. 44: Aerial image of Olympian Heights

WINDOW MAP KEY:

Living Room / LKD / LD / Conservatory Bedroom







21 ST		Flat 40	.21 ST
20 TH	Fed Fed Fed Wa	Flat 39	20 TH
19 TH	F18 F19	Flat 37	19 TH
18 TH		Flat 35	18 TH
17 TH	F17 W2	Flat 33	17 TH
16 TH	FIB WI W2	Flat 31	16 TH
15 TH		Flat 29	15 TH
14 TH		Flat 27	14 TH
13 TH		Flat 25	13 TH
12.TH		Flat 23	12 TH
іі тн		Flat 21	п тн
10 TH		Flat 19	10 TH
9 TH	F09 W1 W2	Flat 17	9 TH
8 TH		Flat 15	8 TH
7 TH		Flat 13	7 TH
6 ТН		Flat 11	6 TH
5 TH		Flat 9	5 TH
4 TH	F04 W6 W7 W1	Flat 7	4 TH
3 RD	Hend With With With With	Flat 5	3 RD
2 ND		Flat 3	S ND
1ST		Flat 1	157
			continue
FLOOR			GROUND FLOOR

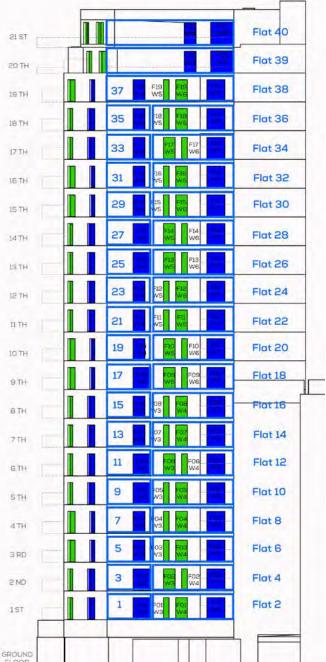


Fig. 45: Flat reference window map



Fig. 46: Flat reference window map

FLAT 16 (LEAST AFFECTED)

6.3.9 This eighth floor flat contains two habitable rooms (an LKD and bedroom), both of which face the Site.

<u>Stage 1 – Is there a strict compliance with the</u> BRE Guidelines in respect of daylight?

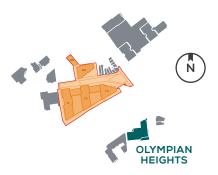
- 6.3.10 The living-kitchen-diner ("LKD") (R3/F08) will comply with the BRE Guidelines in relation to the daylight tests (VSC & NSL).
- 6.3.11 The bedroom (R4/F08) is served by one window. The bedroom will comply with the BRE Guidelines in relation to NSL; however, it is against the VSC test that a breach of the BRE Guidelines occur.

Stage 2 – Is there a "significant harmful impact" in terms of loss of daylight to the property?

- 6.3.12 The bedroom will see a reduction in the VSC value of c.24%, a minor percentage reduction. The absolute change in VSC is 3% which is, in my opinion, imperceptible.
- 6.3.13 I have also considered the effect of the Proposed Development against the RTG scheme. The Proposed Development results in a marginally lower VSC value to the bedroom when compared with the RTG scheme (a loss of 1% VSC in absolute terms). It is my view that this is not a perceptible change from the RTG scheme.

Summary

- 6.3.14 The LKD (R3/F08) will not experience a noticeable loss in daylight.
- 6.3.15 The bedroom is unlikely to experience a perceptible change in VSC both in the existing v proposed scenario and when compared with the RTG scheme.
- 6.3.16 In consideration of the above factors, although the nationally applicable BRE Guidelines are not met in relation to daylight, I do not consider that the impacts to the daylight amenity of this property would be significantly harmful.



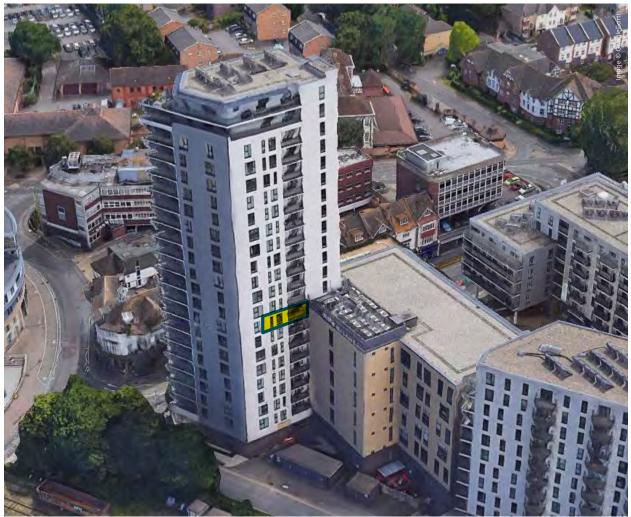


Fig. 47: Flat 16 (Least Affected) location

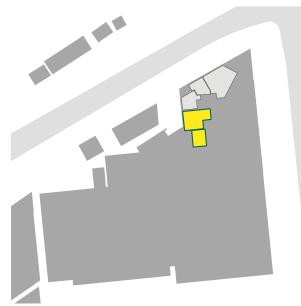


Fig. 48: Flat 16 (Least Affected) location key plan



Fig. 49: Flat 16 (Least Affected) NSL contour plot



FLAT 2 (MOST AFFECTED)

6.3.17 This first floor flat contains two habitable rooms (an LKD and bedroom), both of which face the Site.

<u>Stage 1 – Is there a strict compliance with the</u> BRE Guidelines in respect of daylight?

6.3.18 Neither room will comply with the BRE Guidelines in relation to VSC but will both adhere to the recommendations for NSL.

<u>Stage 2 – Is there a "significant harmful impact" in</u> terms of loss of daylight to the property?

- 6.3.19 The window serving the bedroom (R4/F01) will see a 38% reduction in VSC with a retained VSC value of 4.9%. The absolute change in VSC is 3% which is unlikely to be perceptible to the occupant.
- 6.3.20 As shown in Appendix 10, the retained VSC value to the bedroom is similar to those that currently exist in the first floor windows of Cardinal Place (Block A) which is unaffected by the Proposed Development. Furthermore, similar values found in windows in Cardinal Place serve LKDs as opposed to bedrooms in which the prime use of the room is for sleeping.
- 6.3.21 Turning to the LKD (R3/F01) which is served by two windows and will see a reduction in VSC of c.29-30% with retained values of 17.5-18.9% VSC.
- 6.3.22 The retained VSC values are similar or higher to those that are currently exist in the first floor windows serving LKDs or living rooms in the following neighbouring properties which are unaffected by the Proposed Development:
 - Cardinal Place Block A
 - Victoria House
 - 3-8 and 11 Guildford Road
 - 4e Chapel Street
 - 14 Chapel Street
 - 23-26a High Street
- 6.3.23 I have also considered the effect of the Proposed Development against the RTG scheme. The Proposed Development results in a marginally lower VSC value when compared with the RTG scheme (in absolute terms, it is a loss of 0.8% VSC to the bedroom and 1.4% VSC to the LKD). It is my view that this is not a perceptible change from the RTG scheme.
- 6.3.24 It is clear from Figures 50 and 51 that the flat is obstructed primarily by its existing form. It is located on the first floor of the building and positioned next to a projecting wing which serves the stair and lift core. The bedroom benefits from a balcony which, through its inherent design, restricts the receipt of daylight to the window beneath it the bedroom has a proposed VSC value of 4.9%. It is therefore likely that the VSC to the obstructed bedroom window would be in line with the VSC values of the unobstructed windows serving the LKD of c.17-18%.





Fig. 50: Flat 2 (Most Affected) location image

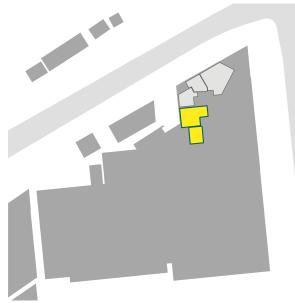


Fig. 51: Flat 2 (Most Affected) location key plan

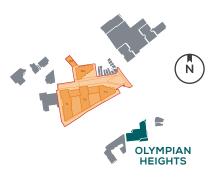


Fig. 52: Flat 2 (Most Affected) NSL contour plot



Summary

- 6.3.25 The retained VSC values to the bedroom and LKD are similar to windows in the first floor of other properties within the Appeal Study Area.
- 6.3.26 The retained VSC values are within 1.4% of the RTG scheme which in my view is imperceptible.
- 6.3.27 The provision of balconies has restricted the receipt of daylight to the bedroom window.
- 6.2.28 In consideration of the above factors, although the nationally applicable BRE Guidelines are not met in relation to daylight, I do not consider that the impacts to the daylight amenity of this property would be significantly harmful.



	VSC (ROOM)		NSL				
FLOOR ROOM WINDOW LOSS	EX. PR. % %	LOSS KOSS				LOSS %	

OLYMPIA	OLYMPIAN HEIGHTS																
16	F08	RЗ	Residential	LKD	W3/F08	36.3	29.4	6.9	19	35.6	28.9	6.7	18.8	98.7	98.4	0.1	0.3
					W4/F08	35.3	28.6	6.7	19								
		R4	Residential	Bedroom	W5/F08	12.4	9.4	3	24.2	12.4	9.4	3	24.2	91.6	90.1	0.1	1.6

Fig. 54: Existing v proposed results (Flat 16 - least affected)

						VSC (WINDOW)				VSC (R	00M)			NSL				
	FLAT REF.	FLOOR	ROOM		ROOM USE	WINDOW	EX. %	PR. %	1055			PR. %	LOSS	LOSS %				LOSS %

OLIMPIA		0															
2	F01	R3	Residential	LKD	W3/F01	26.6	18.9	7.7	28.9	25.6	18	7.6	29.7	96.3	93.3	0.6	3.1
					W4/F01	25.1	17.5	7.6	30.3								
		R4	Residential	Bedroom	W5/F01	7.9	4.9	3	38	7.9	4.9	3	38	78.8	71.8	0.7	9

Fig. 53: Existing v proposed results (Flat 2 - most affected)





Location plan showing Nankeville Court (green)

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SECTION 6: AMENITY TO NEIGHBOURING PROPERTIES

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