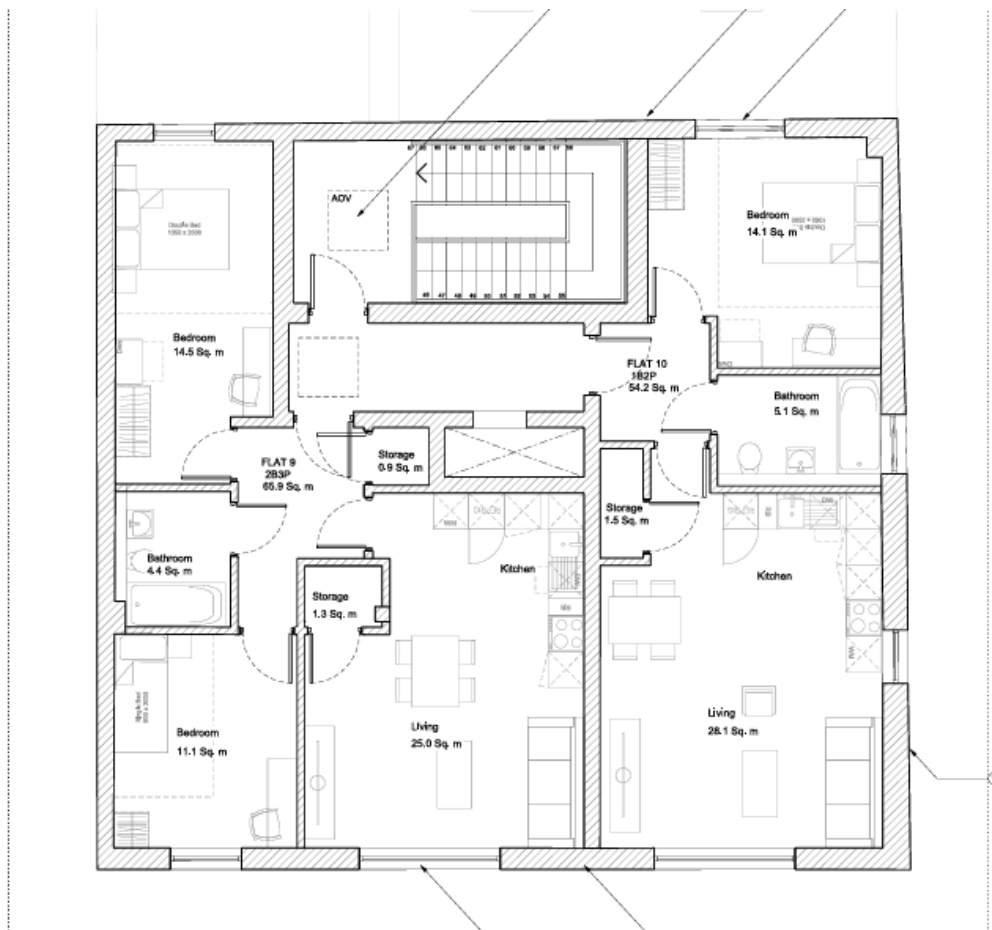


30 WEST STREET HORSHAM SUSSEX RH12 1PB
DAYLIGHT/SUNLIGHT

INTRODUCTION

This Report has been prepared on behalf of the Applicant to support a Planning Permission Application for the proposed works at the above. The works proposed by this Application are the construction of an additional floor to provide 2nr additional self-contained dwellings.

This Report examines the impact of daylight and sunlight on the adjacent residential property at 29 West Street as well as whether the proposed dwellings will have adequate internal illuminance having regard to BR209 (2022).



Development Site

PROFESSIONAL QUALIFICATIONS

I would confirm that I am a Chartered Building Surveyor working predominately in the field of rights of light including daylight and sunlight assessments. I have an extensive and highly specialised knowledge, in these areas having worked in the past for both Anstey Horne & Co. for five years and Schatunowski Brooks (formerly known as Michael Brooks Associates as it was when I joined, then known as GVA Schatunowski Brooks and now part of Avison Young) for three years, as well as Delva Patman Associates - now known as Delva Patman Redler LLP - for four years prior to joining in Partnership Dixon Payne in 2001. All are acknowledged Experts in these fields; I now act under my own banner.



I regularly provide Expert Witness advice in respect of Planning Applications in respect of daylight and sunlight at Planning Inquiries acting for both Appellants and Planning Authorities. I was consulted by the *Building Research Establishment* prior to the revision of their guidelines in 2011 and was part of the consultation about further revisions currently being considered following the publication of BS EN 17037:2018. Those discussions have resulted in the publication of the guidance BR209 (2022) in June 2022, although the method of assessment for the effect upon adjoining properties' daylight/sunlight remains the same as for the previous guidance.

PLANNING POLICY

National Planning Policy Framework

The revised National Planning Policy Framework ('NPPF') 2024 addresses the need for the flexible application of guidance relating to daylight and sunlight under Section 11 'Making effective use of land'. Paragraph 130(c) under subsection "Achieving appropriate densities" states the following;

- c) local planning authorities should refuse applications which they consider fail to make efficient use of land, taking into account the policies in this Framework. In this context, when considering applications for housing, authorities should take a flexible approach in applying policies or guidance relating to daylight and sunlight, where they would otherwise inhibit making efficient use of a site (as long as the resulting scheme would provide acceptable living standards).

HORSHAM DISTRICT COUNCIL

Development Management Local Information Requirements for Validation February 2024

Daylight/Sunlight Assessment

Where there is a potential for significant adverse impact upon the current levels of daylight/sunlight enjoyed by adjoining properties or buildings including garden or amenity space resulting from any increase in height of proposed development in regard to adjacent buildings. - Policy 33 of Horsham District Planning Framework

Policy 33

Development Principles

In order to conserve and enhance the natural and built environment developments shall be required to:

1. Make efficient use of land, and prioritise the use of previously developed land and buildings whilst respecting any constraints that exist;
2. Ensure that it is designed to avoid unacceptable harm to the amenity of occupiers/users of nearby property and land, for example through overlooking or noise, whilst having regard to the sensitivities of surrounding development;
3. Ensure that the scale, massing and appearance of the development is of a high standard of design and layout and where relevant relates sympathetically with the built surroundings, landscape, open spaces and routes within and adjoining the site, including any impact on the skyline and important views;
4. Are locally distinctive in character, respect the character of the surrounding area (including its overall setting, townscape features, views and green corridors) and, where available and applicable, take account of the recommendations/policies of the relevant Design Statements and Character Assessments;
5. Use high standards of building materials, finishes and landscaping; and includes the provision of street furniture and public art where appropriate;

6. Presume in favour of the retention of existing important landscape and natural features, for example trees, hedges, banks and watercourses. Development must relate sympathetically to the local landscape and justify and mitigate against any losses that may occur through the development; and,
7. Ensure buildings and spaces are orientated to gain maximum benefit from sunlight and passive solar energy, unless this conflicts with the character of the surrounding townscape, landscape or topography where it is of good quality.

Proposals will also need to take the following into account where relevant:

8. Incorporate where appropriate convenient, safe and visually attractive areas for the parking of vehicles and cycles, and the storage of bins/recycling facilities without dominating the development or its surroundings;
9. Incorporate measures to reduce any actual or perceived opportunities for crime or antisocial behaviour on the site and in the surrounding area; and create visually attractive frontages where adjoining streets and public spaces, including appropriate windows and doors to assist in the informal surveillance of public areas by occupants of the site;
10. Contribute to the removal of physical barriers; and,
11. Make a clear distinction between the public and private spaces within the site.

BR209 (2022) – DAYLIGHT/SUNLIGHT/INTERNAL ILLUMINANCE

Following the publication of the information paper entitled "*Site Layout planning for daylight and sunlight: A guide to good practice*" by the *Building Research Establishment* in 1991, the assessment of daylight and sunlight has been generally carried out in accordance with the criteria set by this publication and which is generally taken to be the accepted basis for such assessment and adopted by most Planning Authorities. This publication was superseded by the *Second Edition* issued *October 2011* which itself has been superseded by *BR209 (2022)* which is the guidance against which the proposed development was assessed.

The *BR209 (2022)* does give numerical guidelines, but recommends that these should be interpreted flexibly. Paragraph 1.6 of the *BR209 (2022)* states in entirety *The guide is intended for building designers and their clients, consultants, and planning officials. The advice given here is not mandatory and the guide should not be seen as an instrument of planning policy; its aim is to help rather than constrain the designer. Although it gives numerical guidelines, these should be interpreted flexibly since natural lighting is only one of many factors in site layout design (see Section 5). In special circumstances the developer or planning authority may wish to use different target values. For example, in a historic city centre, or in an area with modern high-rise buildings, a higher degree of obstruction may be unavoidable if new developments are to match the height and proportions of existing buildings. Alternatively, where natural light is of special importance, less obstruction and hence more sunlight and daylight may be deemed necessary. The calculation methods in Appendices A and B are entirely flexible in this respect. Appendix F gives advice on how to develop a consistent set of target values for skylight under such circumstances.*

Adjoining Property Daylight/Sunlight Analysis

With regard to the effect upon the daylight/sunlight of adjoining residential properties, the advice is detailed in paragraph 2.2.21 of *BR209 (2022)* and states:

If any part of a new building or extension, measured in a vertical section perpendicular to a main window wall of an existing building, from the centre of the lowest window, subtends an angle of more than 25° to the horizontal, then the diffuse daylighting of the existing building may be adversely affected. This will be the case if either:

- The VSC measured at the centre of an existing main window is less than 27%, and less than 0.8 times its former value

- the area of the working plane in a room which can receive direct skylight is reduced to less than 0.8 times its former value."

The primary assessment of daylight is based on the calculation of the vertical sky component (VSC) to an affected window in both the existing and proposed condition. The VSC, simply put, is the amount of light received at the centre of a window with the maximum that can be received on a vertical face being 39.6%. It does not indicate distribution within a room for which other assessments are required. The guide states that if at the centre of a window the VSC is greater than 27% of the visible dome then enough skylight should be reaching the window.

This said, a VSC of 27% is the ideal, but in most urban situations, is unlikely to be achieved. The guide states, however, that if the VSC is below 27%, and if any reduction is within 0.8 of the original value, no significant loss will occur (a reduction which is deemed to be of no consequence and not readily identifiable).

Sunlight is considered important for living rooms, but less so for bedrooms and kitchens. If the assessment is appropriate, the guide states that a window should receive at least 25% of annual probable sunlight hours (APSH) with at least 5% of winter probable sunlight hours (WPSH), but no less than 0.8 times the former if the sunlight is originally below as well as a reduction in sunlight received over the whole year no greater than 4% of annual probable sunlight hours.

Internal Illuminance

Appendix C of BR209 (2022) provides guidance with regard to internal illuminance levels and the specific recommendations for daylight provision:

Specific recommendations for daylight provision in UK dwellings (Excerpt from Appendix C of BR209 (2022))

- C15 A UK National Annex gives specific minimum recommendations for habitable rooms in dwellings in the United Kingdom. These are intended for 'hard to light' dwellings, for example in basements or with significant external obstructions or with tall trees outside, or for existing buildings being refurbished or converted into dwellings. The National Annex therefore provides the UK guidance on minimum daylight provision in all UK dwellings.
- C16 The UK National Annex gives illuminance recommendations of 100 lux in bedrooms, 150 lux in living rooms and 200 lux in kitchens. These are the median illuminances, to be exceeded over at least 50% of the assessment points in the room for at least half of the daylight hours. The recommended levels over 95% of a reference plane need not apply to dwellings in the UK.
- C17 Where a room has a shared use, the highest target should apply. For example in a bed sitting room in student accommodation, the value for a living room should be used if students would often spend time in their rooms during the day. Local authorities could use discretion here. For example, the target for a living room could be used for a combined living/dining/kitchen area if the kitchens are not treated as habitable spaces, as it may avoid small separate kitchens in a design. The kitchen space would still need to be included in the assessment area (Figures C4 and C5). Alternatively, in rooms with a particular requirement for daylight, such as bed sitting rooms in homes for the elderly, higher values such as those in tables C1 and C2 may be taken.

ANALYSIS

For the technical analysis under Appendix A of the BR209 (2022), the 3D model of the existing site, the proposed extensions and the massing of adjacent property at 29 West Street has been constructed by way of reference to the Project Architects and the Planning Portal. The massing of the surrounding contextual buildings has been obtained by way of a 3D OS model.

Specialist computer programs have been used to calculate the quantum of daylight/sunlight received in the existing and proposed conditions to windows of the adjoining properties by way of Waldram analysis – Appendix B of the BR209 2022.

By way of explanation, Percy J. Waldram invented the Waldram diagram as a method of showing on a 2d image the curved and three-dimensional view of the sky from a fixed point. The area of a Waldram diagram drawn to scale is 396cm² which represents the total amount of unobscured sky that can be seen from a vertical plane. The vertical edges of any obstructions are plotted as vertical lines on the diagrams by reference to their angle from the reference point. The head of any obstruction are plotted along the droop line corresponding to their altitudes above the horizontal measured in the section perpendicular to the reference point.

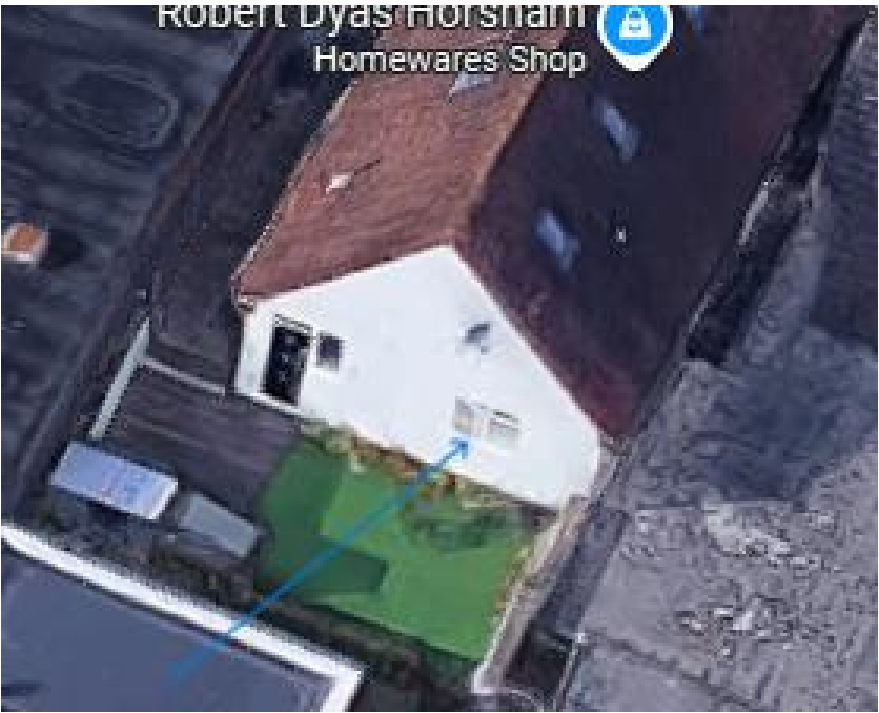
In respect of the internal illuminance of the proposals, these has been considered using the illuminance method of analysis – SDA – as detailed in Appendix C of BR209 (2022). This method involves using climatic data for the location of the site (via the use of an appropriate, typical or average year, weather file within the software) to calculate the illuminance from daylight at each point on an assessment grid on the reference plane at an at least hourly interval for a typical year. This provides a better overview of the internal illuminance of a room because it considers differing weather/cloud cover throughout the year.

The analysis has been undertaken with reflectance values of 0.80 for walls and ceilings and 0.40 for floors.

RESULTS

Adjoining Property

Analysis of 29 West Street



W1 ID55

Daylight

Floor Ref.	Window Ref.	Traffic Light Id	VSC
First	W1	55	24.76

Sunlight

Floor Ref.	Window Ref.	Traffic Light Id	Window Orientation	Annual	Meets BRE Criteria	Winter	Meets BRE Criteria	Meets Both Window Criteria
29WS								
First	W1	55	209°	53.00	YES	10.00	YES	First

DevelopmentInternal Illuminance Analysis for the Proposed Units

The analysis has been undertaken with reflectance values of 0.80 for walls/ceilings and 0.40 for floors.

								Criteria		
Floor Ref	Room Ref	Room Use	Room Area m2	Effective Area	Median Lux	Area Meeting Req Lux	% of Area Meeting Req Lux	Req Lux	Req % of Effective Area	Meets Criteria
Flat 9										
Second	R1	LKD	22.86	16.76	248	11.35	68%	200	50%	YES
	R2	Bedroom	11.06	7.41	281	7.41	100%	100	50%	YES
	R3	Bedroom	14.04	9.40	108	5.00	53%	100	50%	YES
Flat 10										
Second	R1	LKD	31.69	24.86	220	13.84	56%	200	50%	YES
	R2	Bedroom	14.08	9.76	197	9.76	100%	100	50%	YES

CONCLUSION

A two-stage process is used to evaluate the results above. This approach involves considering both the technical impacts and the broader contextual factors at the same time. This is based on the High Court's decision in the Case of *Rainbird, R (on the application of) v The London Borough of Tower Hamlets*.

The analysis conducted according to Appendix A of BR209 (2022) indicates that the assessed window at 29 West Street will retain a Vertical Sky Component (VSC) of 24.76%. Although BR209 (2022) states that an ideal VSC is 27%, this level is often unattainable in most urban settings. Therefore, a VSC of 24.76% should be considered acceptable. Additionally, the retained sunlight to this window exceeds the minimum standards deemed acceptable in any situation.

The proposed dwellings will exceed the internal illuminance levels stated in Appendix C of BR209 (2022).

Paragraph 130(c) of NPPF 2024 states that when considering applications for housing, authorities should take a flexible approach in applying policies or guidance relating to daylight and sunlight, where they would otherwise inhibit making efficient use of a site (as long as the resulting scheme would provide acceptable living standards). This scheme provides acceptable living standards.

These proposals comply with the guidance outlined in BR209 (2022) regarding both internal illuminance and the impact on daylight and sunlight for the adjacent property. Additionally, they align with the National Planning Policy Framework (NPPF), as the resulting scheme will ensure acceptable living standards, and they adhere to Policy 33 of the Horsham District Planning Framework.

It is therefore my Expert opinion that Planning Permission should not be obstructed in respect of daylight or sunlight matters.

August 7, 2026

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