

Client: Noah's Ark Children's Hospice

Daylight and Sunlight Assessment for the Development at 25 Manor Road, Barnet EN5 2LE

January 2024

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This report has been issued and amended as follows:

Revision	Description	Date	Written by	Checked by
0	Draft Issue	30 th March 2023	SPH	LH
1	Final Issue	3 rd April 2023	SPH	LH
2	Updated Scheme	13 th April 2023	SPH	LH
3	Updated Scheme	22 nd January 2024	LH	NAV

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Template Rev – July 2022



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1 Background and Scope of Appraisal

1.1 Study Objectives

Herrington Consulting has been commissioned by Noah's Ark Children's Hospice to assess the potential impact of the proposed development at the site adjacent to 25 Manor Road, Barnet EN5 2LE, in relation to daylight, sunlight and overshadowing on the neighbouring buildings. The key objectives of the assessment are to:

- assess the baseline conditions at the site;
- analyse the potential impacts of the development on the daylight and sunlight currently received by the neighbouring building;
- assess these impacts in line with any relevant planning policies and best practice guidance.

1.2 Site Location

The site is situated in an urban area of north London and is located within administrative boundaries of the London Borough of Barnet. The location of the site is shown in Figure 1.1 and the site plan included in Appendix A.1 of this report gives a more detailed reference to the site location and layout.



Figure 1.1 – Location map (Contains Ordnance Survey data © Crown copyright and database right 2011)

1.3 The Development

The proposal for development is to demolish the existing garage and to build a new single residential development. Drawings of the proposed scheme are included in Appendix A.1 of this report.



2 Policy and Guidance

2.1 National Planning Policy

National Planning Policy Framework (Revised December 2023)

Paragraph 129 on 'Achieving appropriate densities' states that "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)."

Guidance on Effective Use of Land (Revised July 2019)

The guidance states that: 'Where a planning application is submitted, local planning authorities will need to consider whether the proposed development would have an unreasonable impact on the daylight and sunlight levels enjoyed by neighbouring occupiers, as well as assessing whether daylight and sunlight within the development itself will provide satisfactory living conditions for future occupants.'

Further to this, it also states that 'All developments should maintain acceptable living standards. What this means in practice, in relation to assessing appropriate levels of sunlight and daylight, will depend to some extent on the context for the development as well as its detailed design. For example in areas of high-density historic buildings, or city centre locations where tall modern buildings predominate, lower daylight and daylight and sunlight levels at some windows may be unavoidable if new developments are to be in keeping with the general form of their surroundings.

In such situations good design (such as giving careful consideration to a building's massing and layout of habitable rooms) will be necessary to help make the best use of the site and maintain acceptable living standards.'

2.2 Regional Planning Policy

The London Plan – The Spatial Development Strategy for Greater London – (March 2021)

Policy D6 on Housing quality and standards states that

^(D) The design of development should provide sufficient daylight and sunlight to new and surrounding housing that is appropriate for its context, whilst avoiding overheating, minimising overshadowing and maximising the usability of outside amenity space'.

The London Plan – Supplementary Planning Guidance on Housing (March 2016)

Policy 7.6Bd on 'Standards for privacy, daylight and sunlight' requires new development to avoid causing 'unacceptable harm' to the amenity of surrounding land and buildings, particularly in relation to privacy and overshadowing and where tall buildings are proposed'. It also states that 'An appropriate degree of flexibility needs to be applied when using BRE guidelines to assess the daylight and sunlight impacts of new development on surrounding properties, as well as within new developments themselves. Guidelines should be applied sensitively to higher density development, especially in opportunity areas, town centres,



large sites and accessible locations, where BRE advice suggests considering the use of alternative targets'

In the 'Standards for privacy, daylight and sunlight', Paragraph 1.3.46 states that 'The degree of harm on adjacent properties and the daylight targets within a proposed scheme should be assessed drawing on broadly comparable residential typologies within the area and of a similar nature across London'. Similarly, Paragraph 2.3.47 on 'Daylight and Sunlight' includes the following statement 'Quantitative standards on daylight and sunlight should not be applied rigidly, without carefully considering the location and context and standards experienced in broadly comparable housing typologies in London'.

2.3 Local Planning Policy

Barnet's Local Plan (Core Strategy) Development Plan Document (2012) This document makes reference to the need to be sensitive to existing buildings and surrounding areas and for development proposals to be designed to allow for adequate daylight, sunlight, privacy and outlook for adjoining and potential occupiers and users.

2.4 Best Practice Guidance

In the absence of official national planning guidance / legislation on daylight and sunlight, the most recognised guidance document is published by the Building Research Establishment and entitled 'Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice', Third Edition, 2022; herein referred to as the 'BRE Guidelines'.

The BRE Guidelines are not mandatory and themselves state that they should not be used as an instrument of planning policy, however in practice they are heavily relied upon as they provide a good guide to approach, methodology and evaluation of daylight and sunlight impacts.

Whilst the BRE Guidelines provide numerical guidance for daylight, sunlight and overshadowing, these criteria should not be seen as absolute targets. The document states that the intention of the guide is to aid rather than constrain the designer. The Guide is not an instrument of planning policy, therefore whilst the methods given are technically robust, it is acknowledged that some level of flexibility should be applied where appropriate.



3 Assessment Techniques

3.1 Background

Natural light refers to both daylight and sunlight. However, a distinction between these two concepts is required for the purpose of analysis and quantification of natural light in buildings. In this assessment, the term '*Daylight*' is used for natural light where the source is the sky in overcast conditions, whilst '*Sunlight*' refers specifically to the light coming directly from the sun.

The primary objective of this assessment is to quantify the impacts of the proposed development on the adjacent building[s] and therefore the methods employed by this study are focussed on this objective. These methodologies are described in the following sections of this report and follow the hierarchical approach set out by the BRE Guidelines. The 'decision chart' outlining this process (Figure 20 of the Guidelines) has been reproduced for clarity.

The BRE guidelines are primarily intended for use for residential rooms in adjoining dwellings. However, they may also be applied to any existing nondomestic buildings where the occupants have a reasonable expectation of daylight, which could include schools, hospitals, hotels and offices in specific circumstances. For dwellings, it states that living rooms, dining rooms and kitchens should be assessed. Bedrooms should also be checked, although it states that they are less important. Other rooms, such as bathrooms, toilets, storerooms, circulation areas and garages need not be assessed.





3.2 Vertical Sky Component (VSC)

The Vertical Sky Component (VSC) calculation is the ratio of the direct sky illuminance falling on the outside of a window, to the simultaneous horizontal illuminance under an unobstructed sky. The standard CIE (Commission Internationale d'Éclairage) Overcast Sky is used and the ratio is expressed as a percentage. For example, a window that has an unobstructed view over open fields would benefit from the maximum VSC, which would be close to 40%. For a window to be considered as having a reasonable amount of skylight reaching it, the BRE Guidelines suggests that a minimum VSC value of 27% should be achieved. When assessing the impact of a new development on an existing building the BRE Guidelines sets out the following specific requirement:

If the VSC with the new development in place is both less than 27% and less than 0.8 times its former value, then the reduction in light to the window is likely to be noticeable.

This means that a reduction in the VSC value of up to 20% its former value would be acceptable and thus the impact would be considered negligible. It is important to note that the VSC is a simple geometrical calculation, which provides an early indication of the potential for daylight entering the space. It does not, however, assess or quantify the actual daylight levels inside the rooms.

3.3 No Sky Line

The No Sky Line, or sometimes referred to as No Sky View method, describes the distribution of daylight within rooms by calculating the area of the 'working plane', which can receive a direct view of the sky. The working plane height is generally set at 850mm above floor level within a residential property and 700mm within a commercial property. When assessing the potential impacts on the daylight available to the neighbouring properties, the BRE Guidelines state that if the area within a room receiving direct skylight is reduced by less than 0.8 following the construction of a new development, the impact will be noticeable to the occupants. This is also true if the No Sky Line encroaches onto key areas like kitchen sinks and worktops.

The BRE Guidelines state that the main rooms should be tested, this would include living rooms, dining rooms and kitchens. While bedrooms should be included in the analysis, these are acknowledged as less important. If daylight is expected in non-domestic buildings, each of these rooms should be included in analysis.

3.4 Annual Probable Sunlight Hours

It is also possible to quantify the amount of sunlight available to a new development and the recognised methodology for undertaking this analysis is the Annual Probable Sunlight Hours (APSH) method.

To pass this test the centre point of the window will need to receive more than one quarter (25%) of the APSH, including at least 5% APSH in the winter months between 21st September and the 21st March. The BRE Guidelines state that if 'post-development' the available sunlight hours are both less than the amount above and less than 0.8 times their 'pre-development' value, either over the whole year or just within the winter months, then the occupants of the existing building will notice the loss of sunlight. In addition, if the overall annual loss is greater than 4% of APSH, the room may appear colder and less pleasant.



For new development and especially where existing buildings are being redeveloped, it is important to acknowledge that these are aspirational targets intended to aid and not constrain the designer.

These aspirational targets were derived to improve the amenity of single dwellings that typically comprise a living room, kitchen and bedrooms; the objective being to maximise sunlight in the main living areas. However, for buildings that contain multiple apartments, it is rarely possible to configure the internal layout such that all rooms receive direct sunlight as it is inevitable that some windows will be situated on an elevation that faces within 90 degrees of due north.

It is therefore important to understand that when assessing the provision of sunlight to a building containing multiple dwellings, the BRE Guidelines seek only to maximise the amount of sunlight received. They do not set absolute targets.

3.5 Overshadowing

The BRE Guidance suggests that where new development may affect one or more amenity areas, then analysis can be undertaken to quantify the loss of sunlight resulting from overshadowing. Typical examples of areas that could be considered as open spaces or amenity areas are main back gardens of houses, allotments, parks and playing fields, children's playgrounds, outdoor swimming pools, sitting-out areas, such as in public squares and focal points for views, such as a group of monuments or fountains. Amenity areas in the form of balconies are not recommended to be assessed under the BRE Guidelines due to their small size and often significant obstruction.

Sun Hours on Ground

The BRE Guidelines recommend that for a garden or amenity area to appear adequately sunlit throughout the year, at least 50% of an amenity area should receive at least 2 hours of sunlight on 21st March. The BRE Guidelines also suggest that if, as a result of a new development, an existing garden or amenity area does not meet these guidelines, and the area which can receive some sun on the 21st March is less than 0.8 times its former value, then the loss of sunlight is likely to be noticeable.

When undertaking this analysis, sunlight from an altitude of 10° or less has been ignored as this is likely to be obscured by planting and undulations in the surrounding topography. Driveways and hard standing for cars is also usually left out of the area used for this calculation. Fences or walls less than 1.5 metres high are also ignored. Front gardens which are relatively small and visible from public footpaths are omitted with only main back gardens needing to be analysed.

The Guidelines also state that "normally, trees and shrubs need not be included, partly because their shapes are almost impossible to predict, and partly because the dappled shade of a tree is more pleasant than a deep shadow of a building". This is especially the case for deciduous trees, which provide welcome shade in the summer whilst allowing sunlight to penetrate during the winter months.

Transient Overshadowing

The BRE Guidelines suggest that where large buildings are proposed, which may affect a number of open spaces or amenity areas, it is useful and illustrative to plot a shadow plan to show the location of shadows at different times of the day and at key times during the year. Typically, the 21st March, the 21st June, and 21st December are used to represent the annual variance of sun position, noting



that the position of the sun in the sky during the spring equinox (21st March) is equivalent to that of the autumn equinox.

The BRE Guidelines provide no criteria for the significance of transitory overshadowing other than to suggest that by establishing the different times of day and year when shadow would be cast over surrounding areas, provides an indication as to the significance of the likely effect of a new development. The assessment of transient overshadowing effects is therefore based upon expert judgment, taking into consideration the likely effects of the various baseline conditions and comparing them with the likely significant transient overshadowing effects of the redevelopment proposals.



4 Assessment Methodology

4.1 Method of Baseline Data Collation

The following data and information has been used to inform this study:

- OS Mastermap mapping
- Measured survey data (SMG London October 2021)
- Scheme drawings and measurements (LSI Architects January 2024)
- Aerial photography (Google Maps and Bing)

4.2 Identification of Key Sensitive Receptors

The BRE Guidelines are intended for use for rooms and adjoining dwellings where daylight is required, including living rooms, kitchens and bedrooms. Windows to bathrooms, toilets, storerooms circulation areas and garages are not deemed as requiring daylight and therefore are not identified as sensitive receptors. The BRE document also states that the guidelines may also be applied to any non-domestic building where the occupants have a reasonable expectation of daylight. This would normally include schools, hospitals, hotels, hostels, small workshops and some offices.

The first step in this process is to determine the key sensitive receptors, i.e. which windows may be affected by the proposed development. Key receptors are those windows that face, or are located broadly perpendicular to the proposed development.

If a window falls into this category, the second step is to measure the obstruction angle. This is the angle at the level of the centre of the lowest window between the horizontal plane and the line joining the highest point of nearest obstruction formed from any part of the proposed development. If this angle is less than 25° then it is unlikely to have a substantial effect on the diffuse daylight enjoyed by the existing window and the window is not deemed to be a sensitive receptor. A graphical representation of the 25° rule is illustrated in Figure 4.1 below.



Figure 4.1 – Graphical representation of the 25° Rule (indicative buildings used for illustration purposes only)

As part of this assessment a digital three-dimensional model of the study area has been created for both the 'pre' and 'post' development scenarios. Images of these models are shown by the drawings appended to this report.

Using the 3D model, it is possible to identify all windows having an obstruction angle no greater than 25°. Impacts to these windows are therefore deemed to be negligible in line with the criteria set out within the BRE Guidelines.



There are, however, circumstances where the 25°*degree* rule is not wholly appropriate, for example where the development facing the window does not create a uniform obstruction along the skyline, or where the proposals are not directly adjacent to the receptor window. In these situations, professional judgement is used to differentiate between windows that require more detailed analysis and those that will clearly not be impacted. Where any level of uncertainty exists, the window is taken forward for detailed analysis.

Windows serving non-habitable spaces are not included within the assessment as these are not identified by planning policy or by the BRE Guidelines to be sensitive to changes in daylight and sunlight. Therefore, as part of the identification of sensitive receptor process, the use of each room is, where possible, established and windows serving non-habitable spaces such as toilets, store rooms, stairwells and circulation spaces are identified. Typically kitchens that have a floor area less then 13m² are not considered to be habitable spaces in their own right.

Windows serving rooms within commercial premises are assumed to be nonhabitable and in accordance with the BRE Guidelines are not identified as sensitive receptors. However, there are special cases where it can be assumed that some non-domestic uses could be deemed to have a reasonable expectation of daylight and therefore could be taken forward for more detailed analysis. Typically, these could be school classrooms, hospital wards, art studios etc, but professional judgement is generally relied upon to determine this and where considered appropriate, windows serving commercial premises are included.

Drawings showing the location of all sensitive receptors that have been assessed as part of this study are included in Appendix A.2 of this report. In summary, habitable rooms in the following residential buildings have been identified as potential sensitive receptors and have therefore been tested.

- 25 Manor Road (Existing)
- 24 Manor Road
- 58 Manor Road
- 57 Manor Road
- 56 Manor Road
- 26 Manor Road

In addition to the existing residential neighbouring buildings, the consented scheme at no. 25 Manor Road has also been assessed.

4.3 Numerical Modelling

The numerical analysis used in this assessment has been undertaken using the Waldrum Tools (Version 6.0.0.15) software package.

4.4 Calculation Assumptions

The following assumptions have been made when undertaking the analysis:

- When assessing the VSC the calculation is based on the centre point of the window position.
- When assessing the daylighting for internal rooms and in the absence of specific information, the following parameters are assumed:



- For new buildings, the glazing type is assumed to be double glazing (Pilkington K Glass 4/16/4 Argon filled) with a light transmittance value of 0.78 (value for double glazed unit not per pane). For existing buildings, a value of 0.68 has been assumed.
- Correction factor for frames and glazing bars = 0.8
- Where information from the designer is not available, the following values are used to derive the Maintenance Factor applied to the transmittance values.

Type of window	Maintenance Factor		
	Rural/ suburban	Urban	
Vertical, no overhang	0.96	0.92	
Vertical, sheltered from rain by balcony/overhang	0.88	0.76	
Sloping rooflight	0.92	0.84	
Horizontal rooflight	0.88	0.76	

Table 4.1 – Parameters used for deriving Maintenance Factor

- Where information on internal room layouts of adjacent properties is not known, best estimates as to room layout and size have been made in order to undertake No Skyline analysis.
- Where the internal arrangements and room uses have been estimated, it should be noted that this has no bearing upon the tests for VSC or APSH because the reference point is at the centre of the window being tested and windows have been accurately drawn from the survey information where

possible. It is relevant to the daylight distribution assessment, but in the absence of suitable plans, estimation is a conventional approach.

- In areas where survey data has not been provided or needs to be supplemented with additional information, photographs, OS mapping and brick counts have been used in the process of building the 3D model of the surrounding and existing buildings.
- When analysing the effect of the new building on the existing buildings, the shading effect of the existing trees has been ignored. This is the recommended practice where deciduous trees that do not form a dense belt or tree line are present (BRE Guidelines – Appendix H). This is because daylight is at its scarcest and most valuable in the winter when most trees will not be in leaf.
- In situations where windows are deeply set-back beneath balconies or other overhanging features, it is common for these rooms to have low VSC values as a result of the obstruction caused by the balcony. It widely accepted and acknowledged within the BRE Guidelines that the presence of balconies can mask the impact of a proposed development when using the VSC test and therefore the Guidelines suggest that the window should be tested both 'with' and 'without' the balcony in place. If the ratio of change with the development in place, but with the balconies removed, remains above 0.8, then it can be concluded that it is the presence of the balcony rather than the introduction of a new building that is the main factor in the relative loss of light.



4.5 Assessment criteria

The numerical assessment criteria specified within the BRE Guidelines is designed to identify the threshold at which point a change in daylight or sunlight would become 'noticeable' to the occupants. Consequently, where the results of the daylight/sunlight analysis demonstrate compliance with the BRE criteria it can be concluded that the impact will be negligible. However, a point that should be stressed here is that 'noticeable' does not necessarily equate to 'unacceptable' and the BRE's standard target values should not always be considered as pass/fail criteria. Whilst the BRE Guidelines provide numerical guidance for daylight, sunlight and overshadowing, these criteria should not be seen as absolute targets since, as the document states, the intention of the guide is to help rather than constrain the designer. The Guide is not an instrument of planning policy, therefore whilst the methods given are technically robust, it is acknowledged that some level of flexibility should be applied where appropriate.

Consequently, based on the numerical assessment criteria set out with the BRE Guidelines and the use of professional judgment, the following assessment criteria have been established and are used in describing the impacts of the proposed development.

Significance	Description	Change Ratio
Negligible	No alteration or a small alteration from the existing scenario. Results demonstrate full compliance with the BRE assessment criteria and therefore occupants are unlikely to notice any change.	1.0 to 0.8
Minor adverse	An alteration from the existing scenario which may be marginally noticeable to the occupant. This may include a marginal infringement of the numerical levels suggested in the BRE Guidelines, which should be viewed in context. A typical change ratio for this level of significance would be 0.7	0.7 to 0.8
Moderate adverse	An alteration from the existing scenario which may cause a moderate noticeable change to the occupant. This may consist of a moderate infringement of the numerical BRE assessment criteria.	0.6 to 0.7
Major adverse	An alteration from the existing scenario which may cause a major noticeable change to the occupant. This may consist of a significant infringement of the numerical BRE assessment criteria.	Less than 0.6

Table 4.2 – Daylight & Sunlight Impact Descriptors



5 Discussion of Daylighting Impacts

Based on the results of the numerical analysis summarised in Appendix A.3, it is possible to draw conclusions on the impacts that the proposed development will have on the neighbouring buildings. These are based on the principle numerical tests that are discussed below.

5.1 Vertical Sky Component Assessment

The BRE Guidelines operate on the general principle that where the retained VSC is 27% or greater, or where the retained VSC has not reduced to less than 0.8 times its former value, then the reduction in daylight is unlikely to be noticeable to the building's occupants and thus the impact can be deemed negligible.

Where rooms have multiple windows that serve the same area of the room, the BRE Guidelines recommend calculating a 'weighted average' for each window VSC result.

The results of the VSC analysis are summarised in Table 5.1 and the detailed results for all window and room calculations are included in Appendix A.3.

	No	Windows VSC Window meeting BRE Guidelines Transgressions				r IS
Property	Windows Tested	No.	%	Minor adverse	Moderate adverse	Major adverse
25 Manor Road	6	6	100%	0	0	0
24 Manor Road	18	18	100%	0	0	0
58 Manor Road	2	2	100%	0	0	0
57 Manor Road	3	3	100%	0	0	0
56 Manor Road	5	5	100%	0	0	0
26 Manor Road	9	7	78%	0	0	2
Total	43	41	95%	0	0	2

Table 5.1 – Results of Veri	al Sky Componen	t (VSC) Analysis
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Inspection of the results of this test show that the majority of the windows either retain a VSC value greater than 27% post development, or have a ratio of change that is 0.8 or above and therefore are fully compliant. Consequently, in line with the assessment criteria set out within the BRE Guidelines it is possible to conclude that the impact will be **negligible**.

There are two windows serving the kitchen/diner of No. 26 Manor Road that are registering transgressional results. However, this room is lit by multiple windows and the affected windows are not the primary window. Consequently, the results of the VSC analysis in isolation are not necessarily indicative of the impact of the daylighting levels within the room itself.



One of the ways in which the BRE Guidelines recommends quantifying the potential impact in this situation is to take the average VSC value for the room under both the existing and proposed scenarios and base the ratio of change on the weighted average.

In this instance, when the weighted average of the two windows that serve this room is calculated, the resulting ratio of change is 0.87 which is above the 0.8 BRE Guideline value. This therefore demonstrates that when the impact on the room itself is examined in detail, the reduction in daylight will be within the permitted tolerances set out within the guidelines.

5.2 No Sky Line Assessment

In order to pass the No Sky Line Assessment, the BRE Guidelines state that the area of the working plane within the room that has a view of the sky should not be reduced to less than 0.8 times its former value as a result of new development. One benefit of the daylight distribution test is that the resulting contour plans show where the light falls within a room, for both the existing and proposed conditions, and a judgement can be made as to whether the room will retain light to a reasonable depth.

In Appendix D of the BRE guidance, it states in D3 that '*In most cases the position* of the no sky line has to be found from plans. The calculation can only be carried out where room layouts are known. Using estimated room layouts is likely to give inaccurate results and is not recommended. However, where plans are available, for example on the local authorities online planning portal, the calculation should be carried out'.

In this case, the dimensions and layouts of the habitable rooms of No. 58 Manor Road have been reproduced from information obtained via the planning portal (Ref: 21/2055/HSE). Nos. 26, 56 and 57 Manor Road have been modelled using information from estate agent details. For the remaining properties where there are no internal floor layouts available, an estimate of the room dimensions and layouts has been made.

The results of the No Sky Line/Daylight Distribution analysis are summarised below.

	Number	Room meet Guide	s that BRE elines	No Sky Line No. of Rooms Experiencing Transgressions		
Property	Rooms Tested	No.	%	Minor adverse	Moderate adverse	Major adverse
25 Manor Road	4	4	100%	0	0	0
24 Manor Road	3	3	100%	0	0	0
58 Manor Road	2	2	100%	0	0	0
57 Manor Road	2	2	100%	0	0	0
56 Manor Road	3	3	100%	0	0	0
26 Manor Road	3	3	100%	0	0	0
Total	17	17	100%	0	0	0

Table 5.2 – Results of No Sky Line (NSL) Analysis

From the results summarised above, it can be seen that as a result of the proposed development, the impact on the daylight distribution within the assessed rooms will be negligible. The reduction in the area of the working plane that has a direct view of the sky will be less than 20% therefore occupants are unlikely to notice any change.



5.3 Summary of Daylighting Impacts

The proposed development at 25 Manor Road, Barnet EN5 2LE has been evaluated against the criteria set out by the BRE Guidelines for the assessment of the potential impacts on the daylight of the neighbouring properties. Six neighbouring properties have been identified as sensitive receptors for this study and therefore the habitable rooms and the windows serving the rooms within these properties have been tested.

When the magnitude of reduction is considered, it is evident that this will be within the acceptable limits set out within the BRE Guidelines. Consequently, it is possible to conclude that any changes to the daylight received by the habitable rooms of the neighbouring buildings will not be significant and is unlikely to be noticeable by the occupants.

5.4 Consented Scheme at No. 25 Manor Road

Planning permission has been granted for alterations to the existing property at No. 25 Manor Road and whilst this permission has not been implemented, for completeness, the impact of the proposals have been tested on this scheme.

The results of the VSC and NSL tests are included within the appendix to this report and from these it is possible to see that there will be no noticeable reductions in daylight to any of the habitable rooms within this property.



6 Sunlight and Overshadowing Analysis

6.1 Annual Probable Sunlight Hours Assessment

The Annual Probable Sunlight Hours (APSH) tests have been carried out using the numerical model described in Section 4.3. The assessment requirements for the APSH test, as set out in the BRE Guidelines, have been reiterated below. For the assessment to conclude that the sunlighting of the existing dwelling could be adversely affected, <u>all three</u> of the following tests need to have been failed:

Test A - Does the window receive less than 25% of the APSH, or less than 5% the APSH between 21st September and 21st March?

Test B - Does the assessed window receive less than 0.8 times its former sunlight hours during either the 'whole year' or 'winter' period?

Test C - Is the reduction in sunlight received over the whole of the year greater than 4% of the APSH?

However, these tests are only applicable to windows that face within 90 degrees of due south. Consequently, in line with the guidelines and assessment methodologies set out within the BRE document, the analysis of sunlight impacts has only been carried out for these windows. Windows facing within 90 degrees of due north are not analysed and impacts are deemed to be negligible.

It should also be noted that where rooms have windows on more than one elevation, it is acceptable to sum the non-coincident sunlight hours to achieve a 'room total'. This approach is acknowledged by the BRE Guidelines and facilitates a greater understanding of the sunlight received within a room by taking into account the fact that some windows will receive sunlight at different times during the day.

When examining the results of the three sunlight tests, it is first necessary to understand why there are three separate tests and more importantly, why it is not necessary to pass all three to demonstrate that there is no adverse impact. The BRE Guidelines clearly state that for the proposed development to be considered to have an adverse effect on the available sunlight to neighbouring windows, <u>all three</u> tests would need to have been failed.

This is because sunlight is not assessed in terms of its contribution to the overall lighting levels within the room. The value attributed to sunlight is its transient presence and the way in which it can make a room appear bright and cheerful. There are also therapeutic values associated with sunlight and therefore it can be seen that these are not quantitative metrics that can be assessed using a single pass/fail criteria test. It is also necessary to understand that the amount of sunlight received by a window is strongly influenced by the orientation of the window elevation and any surrounding obstructions.

As a consequence of these factors, the assessment methodology embodied within the three separate tests allows the change in sunlight to be assessed in terms of the magnitude of change, absolute change and the retained level of sunlight. To conclude that a new development has no adverse impact, all that is required is for <u>one</u> of the three tests to be passed. The APSH test has been carried out and the detailed results of the analysis are included in Appendix A.3 and a summary of the results are shown in Table 6.1 below.



			Annual		Winter			
Property	Number of Rooms	Rooms that meet BRE Guidelines		No. of Rooms	Rooms that meet BRE Guidelines		No. of Pooms	
	I estea	No.	%	Experiencing Adverse Impacts	No.	%	Experiencing Adverse Impacts	
25 Manor Road			*window	rs facing within 90 degrees of	due north*			
24 Manor Road	2	2	100%	0	2	100%	0	
58 Manor Road	2	2	100%	0	2	100%	0	
57 Manor Road	2	2	100%	0	3	100%	0	
56 Manor Road	3	3	100%	0	3	100%	0	
26 Manor Road	3	3	100%	0	3	100%	0	
Total	12	12	100%	0	12	100%	0	

Table 6.1 – Results of APSH Room-based Analysis

When the results of the APSH analysis summarised in Table 6.1 and Appendix A.3 are inspected, it can be seen that all rooms pass at least one of the three sunlight tests. Furthermore, upon consulting the results in Appendix A.3, it is evident that the room at the 25 Manor Road consented scheme will also pass at

least one of the sunlight tests. Consequently, it has been demonstrated that the proposed scheme will have a negligible impact on neighbouring buildings.



6.2 Sun on the Ground

The BRE Guidelines acknowledge that good site layout planning for daylight and sunlight should not limit itself to providing good natural light inside buildings. Sunlight in the space between buildings has an important effect on the overall appearance and ambiance of a development.

The 2022 BRE Guidelines suggest that the Spring Equinox (21st March) is a suitable date for the assessment and therefore using the specialist software described in Section 4.3, the path of the sun is tracked to determine where the sun would reach the ground and where it would not.

The BRE guidelines recommend that at least half of a garden or amenity area should receive at least 2 hours of sunlight on March 21st or the area which receives 2 hours of direct sunlight should not be reduced to less than 0.8 times its former value (i.e. there should be no more than a 20% reduction).

Typical examples of areas that could be considered as open spaces or amenity areas are main back gardens of houses, allotments, parks and playing fields, children's playgrounds, outdoor swimming pools, sitting-out areas, such as in public squares and focal points for views.

The gardens of the following properties have been identified as sensitive amenity areas and the results of the sun on the ground analysis are summarised in Table 6.2.

- Rear gardens to No. 24 Manor Road
- Rear gardens to No. 25 Manor Road
- Rear gardens to No. 26 Manor Road

The graphical results of the overshadowing analysis are included in Appendix A.2.

Amenity area	Percentage of area lit for 2 hours or more on the 21 st March		Percentage of area lit for 2 nours or more on the 21 st March Ratio of change		
	Existing	Proposed		cinteria :	
24 Manor Road	100%	100%	n/a	Yes	
25 Manor Road	78%	78%	n/a	Yes	
26 Manor Road	91%	86%	0.94	Yes	

Table 6.2 – Results of the Sun on Ground analysis

From the above results, it can be seen that with the proposed scheme in place, the amenity areas benefit from two hours or more of direct sunlight to well over 50% of their area on the 21st March. In addition, it can be seen that as a result of the proposed development, the sunlight available to these amenity areas will not be reduced by more than 20% which is the acceptable reduction limit prescribed by the BRE Guidelines.

From the results in appendix A.3 it is also evident that the rear garden for the consented scheme at 25 Manor Road will benefit from two hours or more of direct sunlight to over 50% of its area. Consequently, it can be concluded that the proposed development will not result in a noticeable increase in overshadowing to the neighbouring gardens.

6.3 Transient Overshadowing

Where amenity areas are used at specific times of day or year, it is useful and illustrative to comment on the overshadowing that will occur throughout the day



and at different times of the year. However, with traditional rear gardens and public open spaces that are potentially used all year round, it is acknowledged by the BRE Guidelines that the 21st March equinox is used, as this represents a much worst case than an assessment during the summer when shadows are shorter and impacts of new development are less magnified.

It is also worth highlighting that whilst the BRE Guidelines do not provide any thresholds or assessment criteria for overshadowing analysis carried out at any date other than the 21st March. All that is quoted in the Guidelines is an acknowledgement that some degree of transient overshadowing should be expected from new development. Consequently, unless there is a specific reason to assess overshadowing at a specific time of day, the use of transient shadow plots is not recommended by the BRE Guidelines.

In this situation, it is not considered that any of the amenity areas that are potentially affected by the proposed development would be described as being sensitive to overshadowing at any particular time of day. Consequently, transient overshadowing is not considered appropriate for this assessment.

6.4 Solar Glare

Solar glare or dazzle can affect neighbouring buildings and pose potential hazards for road users under certain circumstances. The BRE Guidelines highlight two particular cases where this can be a problem; these being where there are large areas of reflective glass or cladding on the façade, or where large areas of glass or cladding slope back such that high-altitude sunlight can be reflected along the ground.

When the proposed design is considered, it can be seen that the building does not slope back, nor does it include large areas of reflective glass or cladding. Given the building design and the BRE Guideline's stance on this matter, it is not considered necessary or appropriate to incorporate an analysis of solar glare.



7 Conclusions

The detailed analysis undertaken as part of this assessment has examined the impact of the proposed development at 25 Manor Road, Barnet EN5 2LE, on the amount of daylight enjoyed by the neighbouring buildings. Six properties have been identified as sensitive receptors for this study, 24, 25, 26, 56, 57 and 58 Manor Road, and therefore, the habitable rooms and the windows serving the rooms within these properties have been tested.

In addition to the existing neighbouring properties, the potential impact of the proposed scheme has also been tested on the consented scheme at No.25 Manor Road.

In line with the assessment criteria prescribed by the BRE Guideline, it has been shown that the reduction in daylighting to the rooms of the neighbouring buildings will be within the acceptable limits set out within the BRE Guidelines. Consequently, it is possible to conclude that any changes to the daylight received by the habitable rooms of the neighbouring buildings will not be significant and is unlikely to be noticeable by the occupants.

The assessment of the impact of the proposed development on the sunlight enjoyed by the neighbouring buildings has also shown that despite some reductions seen in the number of probable sunlight hours enjoyed by these rooms, these are again within the limits prescribed by the BRE Guidelines as being acceptable. Furthermore, the assessment of the sunlight available to the neighbouring amenity areas indicates that all of the amenity areas will experience no change to the excellent sunlight levels they currently enjoy.

In summary, the development proposals have been appraised in line with the guidelines set out in the BRE document. When assessed against the criteria for establishing whether the proposed development will have a significant impact, it has been possible to conclude that the development will not result in a notable reduction in the amount of either daylight or sunlight enjoyed by the neighbouring buildings.



A Appendices

Appendix A.1 – Scheme Drawings

Appendix A.2 – Graphical Model Outputs

Appendix A.3 – Tabulated Results for Daylight & Sunlight Calculations



Appendix A.1 – Scheme Drawings













were -

Proposed Roof Plan

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P10 AJ	11/01/24	Building footprint and openings dimensioned
P09 AJ	01/12/23	Updated site boundary line and roof plan
P08 AJ	28/11/23	Updated to single occupancy house
P07 LE	15/08/23	Seperate gardens indicated
P06 LE	25/05/23	Consented scheme indicated
P05 H\	N 20/03/23	Adjustments to car parking arrangement & East facing dormers
P04 H\	N 05/09/22	Adjustment to dormer widths & rooflight sizes. Parking bays indicated.
P03 KE	3C 28/04/22	Roof plan amended in line with design updates. Addition of roof lights.
P02 KE	3C 21/04/22	Roof amended to an asymmetrical pitched roof. Ground floor and first floor layout amended to show 45° natural light splay from the existing neighbouring windows.
P01 KE	3C 30/03/22	Preliminary issue - issued for comments
Rev Ini	Date	Revision
0m	1 2	3 4 5 6 7



NORWICH The Old Drill Hall 23a Cattle Market Street Norwich NR1 3DY +44(0)1603 660711 LONDON Floor 2 50-54 Clerkenwell Road London EC1M 5PS +44(0)20 7278 1739

Client Abbeytown Developments Ltd Project

25 Manor Road, Barnet

Title New Build Planning

Proposed General Arrangement - Floor Plans

Scale @ A1	Date	Drawn								
1:100	30/03/22	KBC								
Purpose of issue										
Suitable for Planning										
Drawing Code		Suit. Rev.								
21245-LSI-AAA->	S2 P10									



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P04 AJ 28/11/23 P03 LE 25/05/23 P02 HW 20/03/23 P01 HW 05/09/22	Updated to single occupancy house No. 26 'Garage' notation removed Added detail to existing context Initail Issue											
Rev Init Date	Revision											
0m 1 2	3 4 5 6 7 Scale 1:100											
NORWICH The Old Drill Hall 23a Cattle Market Street Norwich NR1 3DY +44(0)1603 660711 LONDON Floor 2 50-54 Clerkenwell Road London EC1M 5PS +44(0)20 7278 1739												

ARCHITECTS

Client Abbeytown Developments Ltd Project

25 Manor Road, Barnet Title New Build Planning

Existing Street Elevation

Scale @ A1 1:50 Date 05/09/22 Drawn HW Purpose of issue Suitable for Planning Drawing Code 21245-LSI-AAA-ZZ-DR-A-1340 Suit. Rev.

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P06	AJ	01/12/23	Roof level amended
P06	AJ	28/11/23	Updated to single occupancy house
P05	LE	25/05/23	No. 26 'Garage' notation removed
P04	HW	20/03/23	Added detail to existing context
P03	KBC	28/04/22	Roof amended in line with design updates. Addition of roof lights.
P02	КВС	21/04/22	Roof amended to an asymmetrical pitched roof
P01	КВС	30/03/22	Preliminary issue - issued for comments
Rev	Init	Date	Revision
0m	1	2	3 4 5 6 7



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Scale 1:100

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Client

Abbeytown Developments Ltd Project 25 Manor Road, Barnet

Title New Build Planning

Proposed Street Elevation

Scale @ A1 1:50, 1:100 Date 30/03/22 Drawn KBC Purpose of issue Suitable for Planning Drawing Code 21245-LSI-AAA-ZZ-DR-A-1350 Suit. Rev.







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er	26	
11	Patio	

Existing Number 26

P08	AJ	01/12/23	Roof level amended
P07	AJ	28/11/23	Updated to single occupancy house
P06	LE	25/05/23	No. 26 'Garage' notation removed
P05	HW	20/03/23	E-01 windows updated & soldier coursing added
P04	HW	05/09/22	Adjustments made to dormers & roof lights. Eaves increased and roof ridge reduced in height.
P03	KBC	28/04/22	Roof amended in line with design updates. Addition of roof lights.
Rev	Init	Date	Revision







Floor 2 50-54 Clerkenwell Road London EC1M 5PS +44(0)20 7278 1739

Suit. Rev. S2 P08

Scale 1:100

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Drawing Code

21245-LSI-AAA-ZZ-DR-A-1351



Client Abbeytown Developments Ltd Project 25 Manor Road, Barnet Title New Build Planning Proposed General Arrangement Elevations Scale @ A2 Date Drawn 30/03/22 KBC 1:100 Purpose of issue Suitable for Planning





Section S-01

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Drawing to be read in conjunction with the project specification

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P07	AJ	16/01/24	Dimensions added										
P06	AJ	11/01/24	Dimensions added										
P05	AJ	01/12/23	Roof level and section line amended										
P04	AJ	28/11/23	Updated to single occupancy house										
P03	LE	25/05/23	No. 26 'Garage' notation removed										
P02	НW	20/03/23	Revised East elevation										
P01	НW	06/09/22	Initial Issue										
Rev	Init	Date	Revision										
0m 	1	2	3 4 5 6 7										
			NORWICH										





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Abbeytown Developments Ltd

Project 25 Manor Road, Barnet

Title

Client

New Build Planning

Proposed General Arrangement Sections

Scale @ A2	Date 06/09/22	Drawn							
Purpose of issue Suitable for P	lanning	1100							
Drawing Code Suit. Rev 21245-LSI-AAA-ZZ-DR-A-1370 S3 P07									



Appendix A.2 – Graphical Model Outputs















Location Plan	Legend	01 Second issue 22/01/2024
	Existing Buildings	00 First issue 30/03/2023
	Surrounding Buildings	Rev Description Date
		CLIENT
		Abbey Town Ltd
		PROJECT
		25 Manor Road, Barnet
		SCALE
		Not to scale 3699 LH JP
		DWG REF.
		3D Model - Existing Site Scenarios 3699_03















Location Plan	Legend Proposed Buildings	01 Second issue 22/01/2024 00 First issue 30/03/2023
	Surrounding Buildings	Rev Description Date CLIENT
		PROJECT
		Scale PROJ REF ANALYST DRAWN BY Not to scale 3699 LH JP
		DWG REF. 3D Model - Proposed Site Scenarios





























Appendix A.3 – Tabulated Results for Daylight and Sunlight Calculations

roject Name: Manor Road, Barnet

Floor Ref.	Room Ref.	Property Type	Room Use	Window Ref.		VSC	Pr/Ex	Meets BRE Criteria	Window Orientation	Room VSC	Pr/Ex	Meets BRE Criteria	Annual	Pr/Ex	Meets BRE Criteria	Winter Pr/Ex	Meets BRE Criteria	Total Suns per Room Annual	Pr/Ex	Meets BRE Criteria	Total Suns per Room Winter	Pr/Ex	Meets BRE Criteria
										25 1	Manor Road	I											
Ground	R1	Residential	Utility Room	W4	Existing Proposed			n/a	0°N					*North	*North	*North	*North						
												n/a							*North	*North		*North	*North
	R2	Residential	Utility Room	W5	Existing Proposed			n/a	0°N					*North	*North	*North	*North						
				W6	Existing Proposed			n/a	0°N					*North	*North	*North	North						
				W7	Existing Proposed			n/a	0°N					*North	*North	*North	n *North						
								,				n/a			,		,		*North	*North		*North	*North
	K3	Residential	WC	W8	Proposed			n/a	91-						n/a		n/a						
				W9	Proposed			n/a							n/a		n/a						
				WIO	Proposed			II/d	0 N IIIC			n/a			11/d		II/d						
	R4	Residential	Kitchen	W11	Existing	37 78	0.92	VES	270°N			ii a		*North	*North	*North	*North			n/a			n/a
					Proposed	34.84				37.78	0.92	YES											
	R5	Residential	Dining Room	W1	Existing	35.67	0.98	YES	270°N	34.84				*North	*North	*North	*North		*North	*North		*North	*North
				W2	Proposed Existing	34.81 35.35	0.96	YES	270°N					*North	*North	*North	*North						
				W3	Proposed Existing	34.05 37.12	0.97	YES	270°N					*North	*North	*North	*North						
					Proposed	35.83				35.86	0.97	YES											
First	R1	Residential	Bedroom	W1	Existing	15.19	0.99	YES	270°N	34.67				*North	*North	*North	*North		*North	*North		*North	*North
					Proposed	15.05				15.19	0.99	YES								*** .*			***
	R2	Residential	Hall	W2	Existing			n/a	0°N	15.05				*North	*North	*North	*North		*North	*North		*North	*North
					Proposeu							n/a							*North	*North		*North	*North
	R3	Residential	WC	W3	Existing			n/a	0°N					*North	*North	*North	*North		North	North		North	North
					Toposed							n/a							*North	*North		*North	*North
	R4	Residential	Bathroom	W4	Existing Proposed			n/a	0°N					*North	*North	*North	*North						
												n/a							*North	*North		*North	*North
	R5	Residential	Bedroom	W5	Existing Proposed	36.71 35.50	0.97	YES	270°N					*North	*North	*North	*North						
										36.71 35.50	0.97	YES							*North	*North		*North	*North

roject Name: Manor Road, Barnet

Floor Ref.	Room Ref.	Property Type	Room Use	Window Ref.		vsc	Pr/Ex	Meets BRE Criteria	Window Orientation	Room VSC	Pr/Ex	Meets BRE Criteria	Annual	Pr/Ex	Meets BRE Criteria	Winter	Pr/Ex	Meets BRE Criteria	Total Suns per Room Annual	Pr/Ex	Meets BRE Criteria	Total Suns per Room Winter	Pr/Ex	Meets BRE Criteria
										24 N	Aanor Road	i												
Ground	R1	Residential	Dining Room	W1	Existing	31.01	1.00	YES	270°N				45.00	*North	*North	15.00	*North	*North						
					Proposed	31.01							45.00			15.00								
				W2	Existing	35.31	1.00	YES	270°N				47.00	*North	*North	15.00	*North	*North						
					Proposed	35.31		100					47.00	***	***	15.00	***	***						
				W3	Existing	0.66	1.00	YES	0°N				2.00	*North	*North	0.00	*North	*North						
				W4	Existing	36.60	1.00	YES	270°N				47.00	*North	*North	15.00	*North	*North						
					Proposed	36.60							47.00			15.00								
				W5	Existing	1.06	1.00	YES	0°N				2.00	*North	*North	0.00	*North	*North						
					Proposed	1.06							2.00			0.00								
				W6	Existing	2.14	1.00	YES	0°N				2.00	*North	*North	0.00	*North	*North						
				W7	Existing	2.14	1.00	YES	0°N				2.00	*North	*North	0.00	*North	*North						
				,	Proposed	5.69	1.00	125	υN				1.00	North	North	0.00	North	North						
				W8	Existing	30.25	1.00	YES	180°				59.00	1.00	YES	24.00	1.00	YES						
					Proposed	30.25							59.00			24.00								
				W9	Existing	8.17	1.00	YES	0°N				4.00	*North	*North	0.00	*North	*North						
				14/10	Proposed	8.17	1.00	VEC	1000				4.00	1.00	VEC	0.00	1.00	VEC						
				VV10	Proposed	25.81	1.00	163	100				51.00	1.00	163	20.00	1.00	163						
				W13	Existing	21.50	1.00	YES	180°				44.00	1.00	YES	16.00	1.00	YES						
					Proposed	21.50							44.00			16.00								
				W18	Existing	33.79	1.00	YES	180°				64.00	1.00	YES	25.00	1.00	YES						
					Proposed	33.79		100	070011				64.00	***	***	25.00	***	***						
				W19	Existing	37.21	1.00	YES	270°N				50.00	*North	*North	15.00	*North	*North						
					Proposeu	57.21				21.34	1.00	YES	50.00			15.00			71.00			25.00		
										21.34	1.00	125							71.00	1.00	YES	25.00	1.00	YES
	R2	Residential	Unknown	W1	Existing	31.01	1.00	YES	270°N				45.00	*North	*North	15.00	*North	*North						
					Proposed	31.01							45.00			15.00								
				W2	Existing	35.31	1.00	YES	270°N				47.00	*North	*North	15.00	*North	*North						
				14/2	Proposed	35.31	1.00	VEC	0°N				47.00	*North	*North	15.00	*North	*North						
				VV3	Proposed	0.66	1.00	TL3	UN				2.00	NOTUT	NOT	0.00	North	NOTI						
				W4	Existing	36.60	1.00	YES	270°N				47.00	*North	*North	15.00	*North	*North						
					Proposed	36.60							47.00			15.00								
				W5	Existing	1.06	1.00	YES	0°N				2.00	*North	*North	0.00	*North	*North						
				ME	Proposed	1.06	1.00	VEC	0°N				2.00	*North	*North	0.00	*North	*North						
				000	Proposed	2.14	1.00	163	UN				2.00	North	NOTI	0.00	NOTUI	NOTUT						
				W7	Existing	5.69	1.00	YES	0°N				1.00	*North	*North	0.00	*North	*North						
					Proposed	5.69							1.00			0.00								
				W8	Existing	30.25	1.00	YES	180°				59.00	1.00	YES	24.00	1.00	YES						
					Proposed	30.25		100					59.00	***	***	24.00	***	***						
				W9	Existing	8.17	1.00	YES	0°N				4.00	*North	*North	0.00	*North	*North						
				W10	Existing	25.81	1.00	YES	180°				51.00	1.00	YES	20.00	1.00	YES						
					Proposed	25.81	1.00	125	100				51.00	1.00	125	20.00	2.00	125						
				W11	Existing	5.76	0.99	YES	270°N				7.43	*North	*North	5.79	*North	*North						
					Proposed	5.69							7.43			5.79								
				W12	Existing	6.72	0.99	YES	270°N				13.95	*North	*North	8.41	*North	*North						
				W/13	Proposed Existing	6.66 21.50	1.00	YES	180°				13.95 44 00	1.00	YES	8.41 16.00	1.00	YES						
				**15	Proposed	21.50	1.00	125	100				44.00	1.00	125	16.00	1.00	125						
				W18	Existing	33.79	1.00	YES	180°				64.00	1.00	YES	25.00	1.00	YES						
					Proposed	33.79							64.00			25.00								
				W19	Existing	37.21	1.00	YES	270°N				50.00	*North	*North	15.00	*North	*North						
					Proposed	37.21				18 36	1.00	VES	50.00			15.00			71.00			25.00		
										18.35	1.00	113							71.00	1.00	YES	25.00	1.00	YES
													1											

Project Name: M Project No.: 369 Report Title: Day Date of Analysis:	anor Road, Barne) light & Sunlight A 22/01/2024	t malysis - Neighbour																						
Floor Ref.								Meets BRE Criteria	Window Orientation	Room VSC		Meets BRE Criteria	Annual		Meets BRE Criteria	Winter		Meets BRE Criteria	Total Suns per Room		Meets BRE Criteria	Total Suns per Room Winter		Meets BRE Criteria
First	R1	Residential	Unknown	W14	Existing	37.05	1.00	YES	270°N			Criteria		*North	*North		*North	*North	Annuar			winter		
				W15	Existing	37.05	1.00	YES	270°N					*North	*North		*North	*North						
				W16	Proposed Existing Proposed	36.96 37.05 36.98	1.00	YES	270°N					*North	*North		*North	*North						
										37.05 36.96	1.00	YES								*North	*North		*North	*North
										58 1	Manor Road	i												
Ground	R1	Residential	Study	W5	Existing	31.00	0.97	YES	269°				32.00	0.94	YES	1.00	1.00	YES						
					Proposed	29.96				31.00 29.96	0.97	YES	30.00			1.00			32.00	0.94	YES	1.00	1.00	YES
	R2	Residential	Living Room	W6	Existing	33.12	0.97	YES	269°				48.00	0.96	YES	14.00	1.00	YES						
					Toposcu	52.12				33.12	0.97	YES	40.00			14.00			48.00	0.06	VEC	14.00	1.00	VEC
	R3	Residential	Hallway	W1	Existing			n/a	269°	52.12					n/a			n/a	46.00	0.90	163	14.00	1.00	163
				W2	Proposed Existing			n/a	269°						n/a			n/a						
				W3	Proposed Existing			n/a	359°N						n/a			n/a						
				W4	Proposed Existing			n/a	359°N						n/a			n/a						
				W7	Proposed Existing			n/a	179°						n/a			n/a						
				W8	Proposed Existing			n/a	179°						n/a			n/a						
				W9	Proposed Existing			n/a	269°						n/a			n/a						
				W10	Proposed			n/a	269°						n/a			n/a						
				W10	Proposed			n/a	205						n/a			n/a						
				WII	Proposed			11/a	209						11/ d			11/a						
				W12	Existing Proposed			n/a	269°						n/a			n/a						
												n/a									n/a			n/a
										57 1	Manor Road	i												
Ground	R1	Residential	Kitchen	W1	Existing	7.88	0.87	YES	269°				6.00	1.00	YES	1.00	1.00	YES						
					Proposed	0.00				7.88	0.87	YES	0.00			1.00			6.00			1.00		
	R2	Residential	Living Room	W2	Existing	22.26	1.00	YES	179°	6.86			47.00	1.00	YES	14.00	1.00	YES	6.00	1.00	YES	1.00	1.00	YES
				W3	Proposed Existing	22.23 34.68	0.97	YES	269°				47.00 42.00	0.95	YES	14.00 12.00	1.00	YES						
					Proposed	33.48				31.58	0.97	YES	40.00			12.00			53.00			14.00		
	R3	Residential	Hallway	W4	Existing			n/a	269°	30.67					n/a			n/a	51.00	0.96	YES	14.00	1.00	YES
	-		/		Proposed							n/a												
												, u									n/a			n/a

roject Name: Manor Road, Barnet

eport Title: Davlight & Sunlight Analysis - Neigh

Floor Ref.								Meets BRE Criteria	Window Orientation	Room VSC		Meets BRE Criteria	Annual		Meets BRE Criteria	Winter		Meets BRE Criteria	Total Suns per Room		Meets BRE Criteria	Total Suns per Room Winter		Meets BRE Criteria
56 Manor Road																								
Ground	R1	Residential	Unknown	W1	Existing	29.84	0.97	YES	268°				45.00	0.96	YES	14.00	0.86	YES						
					Proposed	28.90							43.00			12.00								
										29.84	0.97	YES							45.00			14.00		
	00	Decidential	Unknown	14/2	Evicting	20.62	0.07	VEC	2600	28.90			20.00	0.02	VEC	2.00	0.00	VEC	43.00	0.96	YES	12.00	0.86	YES
	K2	Residential	UTIKITUWIT	VV 2	Proposed	20.05	0.97	TES	208				28.00	0.95	163	2.00	0.00	163						
					rioposeu	25.02				30.63	0.97	YES	20.00			0.00			30.00			2.00		
										29.82									28.00	0.93	YES	0.00	0.00	YES
	R3	Residential	Unknown	W3	Existing	22.02	1.00	YES	358°N				2.00	*North	*North	0.00	*North	*North						
					Proposed	22.02							2.00			0.00								
				W4	Existing	34.11	0.97	YES	268°				43.00	0.95	YES	14.00	0.86	YES						
					Proposed	33.13							41.00	0.05		12.00								
				W5	Existing	34.04	0.97	YES	268°				42.00	0.95	YES	14.00	0.86	YES						
					Proposed	55.11				20.20	0.98	VES	40.00			12.00			44.00			14.00		
										28.71	0.50	125							42.00	0.95	YES	12.00	0.86	YES
26 Manor Road																								
Ground	R1	Residential	WC	W1	Existing			n/a	179°						n/a			n/a						
					Proposed																			
												n/a												
																					n/a			n/a
	R2	Residential	Utility Room	W2	Existing			n/a	89°N					*North	*North		*North	*North						
					Proposed							n/a												
												17.0								*North	*North		*North	*North
	R3	Residential	KD	W3	Existing	34.47	1.00	YES	89°N				49.00	*North	*North	15.00	*North	*North						
					Proposed	34.32							47.00			13.00								
				W4	Existing	37.05	1.00	YES	89°N				48.00	*North	*North	13.00	*North	*North						
					Proposed	36.89							46.00			11.00								
				W5	Existing	23.14	0.49	NO	179°				60.00	0.72	YES	15.00	0.20	NO						
				14/5	Proposed	11.45	0.46	NO	1708				43.00	0.55	VEC	3.00	0.07							
				Wb	Existing	27.83	0.46	NO	1/9				26.00	0.55	TES	1.00	0.07	NO						
				W7	Existing	27.20	0.97	YES	269°				48.00	0.88	YES	15.00	0.60	YES						
				•••	Proposed	26.43	0.57	125	205				42.00	0.00	125	9.00	0.00	125						
										30.37	0.87	YES							99.00			30.00		
										26.45									90.00	0.91	YES	22.00	0.73	YES
	R4	Residential	Living Room	W8	Existing	32.87	0.97	YES	212°				54.00	0.98	YES	18.00	0.94	YES						
					Proposed	31.83							53.00			17.00								
				W9	Existing	39.62	1.00	YES	270°N				50.00	*North	*North	15.00	*North	*North						
					Proposed	39.62							50.00	***	***	15.00	***	***						
				VV10	Existing	31.00	1.00	TES	328 N				17.00	* North	*North	2.00	*North	*North						
					Proposed	51.00				36.80	0 99	VES	17.00			2.00			54.00			18.00		
										36.60	0.55	125							53.00	0.98	YES	17.00	0.94	YES
First	R1	Residential	Bathroom	W1	Existing			n/a	89°N						n/a			n/a						
					Proposed																			
				W2	Existing			n/a	179°						n/a			n/a						
					Proposed																			
												n/a												
	60	Posidontial	Podroom	14/3	Evicting	25 42	0.00	VEC	2600				20.00	0.07	VEC	12.00	0.02	VEC			n/a			n/a
	ĸz	residential	beuroom	VV.3	Proposed	25.43	0.99	165	209				37.00	0.97	165	11.00	0.92	165						
					. roposeu	20.10				25.43	0.99	YES	57.00			11.00			38.00			12.00		
										25.13									37.00	0.97	YES	11.00	0.92	YES
																								-

Project Name: N Project No.: 369 Report Title: Da Date of Analysis	Manor Road, Barne 99 Iylight & Sunlight A 5: 22/01/2024																							
Floor Ref.	Room Ref.	Property Type	Room Use	Window Ref.		vsc	Pr/Ex	Meets BRE Criteria	Window Orientation	Room VSC	Pr/Ex	Meets BRE Criteria	Annual	Pr/Ex	Meets BRE Criteria	Winter	Pr/Ex	Meets BRE Criteria	Total Suns per Room Annual	Pr/Ex	Meets BRE Criteria	Total Suns per Room Winter	Pr/Ex	Meets BRE Criteria
										25 Manor	Road (Con	sented)												
Ground	R1	Residential	Utility Room	W1	Existing Proposed			n/a	0°N			n/a		*North	*North		*North	*North						
	R2	Residential	WC	W2	Existing Proposed			n/a	0°N					*North	*North		*North	*North		*North	*North		*North	*North
	R3	Residential	LKD	W3	Existing	36.09	0.94	YES	270°N			n/a	46.00	*North	*North	13.00	*North	*North		*North	*North		*North	*North
				W4	Proposed Existing Proposed	34.05 80.59 74.26	0.92	YES	90° Hz				45.00 70.00 70.00	1.00	YES	13.00 22.00 22.00	1.00	YES						
										47.99 44.80	0.93	YES							70.00 70.00	1.00	YES	22.00 22.00	1.00	YES
First	R1	Residential	Bedroom	W1	Existing Proposed	17.55 17.51	1.00	YES	270°N	17.55	1.00	YES		*North	*North		*North	*North		***	White such		***	WAL
	R2	Residential	Hall	W2	Existing			n/a	0°N Inc	17.51				*North	*North		*North	*North		North	North		North	North
				W4	Existing Proposed			n/a	0°N			n/2		*North	*North		*North	*North						
	R3	Residential	Bathroom	W3	Existing			n/a	0°N Inc			ii/a		*North	*North		*North	*North		*North	*North		*North	*North
	R4	Residential	Bedroom	W5	Existing	36 72	0.97	YES	270°N			n/a		*North	*North		*North	*North		*North	*North		*North	*North
		hesidentia	bearbonn		Proposed	35.50	0.57	125	270 1	36.72	0.97	YES		norai	north		Hortin	North		*North	*North		*North	*North
Second	R1	Residential	Bedroom	W1	Existing Proposed	39.33 39.04	0.99	YES	270°N	39.33	0.99	YES		*North	*North		*North	*North		Hordi	north		noral	north
	R2	Residential	Hall	W2	Existing Proposed			n/a	270°N	39.04				*North	*North		*North	*North		*North	*North		*North	*North

n/a

*North

*North

*North

*North

Meets 25 Manor Road Ground R1 Residential Utility Room Area m2 1.40 % of room n/a R2 Residential Utility Room Area m2 4.17 % of room n/a R3 Residential WC Area m2 2.43 % of room n/a R4 Residential 10.67 10.55 Kitchen Area m2 10.44 % of room 98.89% 97.84% 0.99 YES 15.38 R5 Residential Dining Room Area m2 15.51 15.36 % of room 99.14% 99.03% 1.00 YES First R1 Residential Bedroom Area m2 15.51 15.33 15.28 1.00 % of room 98.81% 98.51% YES R2 Hall 6.38 Residential Area m2 % of room n/a R3 Residential WC Area m2 1.00 % of room n/a R4 Residential Bathroom Area m2 3.14 % of room n/a R5 Residential Bedroom Area m2 8.64 8.16 8.11 % of room 94.44% 93.81% 0.99 YES 24 Manor Road Ground R1 Residential Dining Room Area m2 9.78 9.78 9.78 % of room 100.00% 100.00% 1.00 YES R2 Residential Unknown Area m2 15.56 0.00 0.00 % of room 0.00% 0.00% 1.00 YES First R1 Residential Unknown Area m2 15.56 15.42 15.41 99.05% % of room 99.11% 1.00 YES 58 Manor Road Ground R1 Residential Study 5.65 5.57 5.57 Area m2 % of room 98.58% 98.58% 1.00 YES R2 Residential Living Room Area m2 12.79 12.74 12.74 % of room 99.65% 99.65% 1.00 YES R3 Residential Hallway Area m2 1.91 % of room n/a

ject Name: Ma ject No.: 3699 port Title: Dayli te of Analysis: 3	nor Road, Barnet ight Distribution A 22/01/2024	Analysis - Neighbou	r						
Floor Ref.	Room Ref	Property Type	Room Use		Room Area	Lit Area Existing	Lit Area Proposed	Pr/Ex	Meets BRE Criteria
			57 Mano	or Road					
Ground	R1	Residential	Kitchen	Area m2 % of room	6.23	5.91 94.91%	5.91 94.91%	1.00	YES
	R2	Residential	Living Room	Area m2 % of room	15.41	15.22 98.80%	15.22 98.80%	1.00	YES
	к3	Residential	панway	% of room	1.04				n/a
			56 Mano	or Road					
Ground	R1	Residential	Unknown	Area m2 % of room	16.25	16.16 99.46%	16.16 99.46%	1.00	YES
	R2	Residential	Unknown	Area m2 % of room	6.35	6.25 98.52%	6.25 98.52%	1.00	YES
	К3	Residential	Unknown	Area m2 % of room	2.27	2.27 99.97%	2.27 99.97%	1.00	YES
			26 Mano	or Road					
Ground	R1	Residential	WC	Area m2 % of room	2.88				n/a
	R2	Residential	Utility Room	Area m2 % of room	2.42	25.26	25.26		n/a
	R3	Residential	KD	Area m2 % of room	25.26	25.26 100.00%	25.26 100.00%	1.00	YES
First	N4 D1	Residential	Dathroom	% of room	7 1 2	24.59 99.57%	24.39 99.57%	1.00	YES
First	R1 R2	Residential	Bedroom	Area m2 % of room Area m2	9.26	7.31	7.31		n/a
				% of room		78.92%	78.91%	1.00	YES

Project Name: Ma Project No.: 3699 Report Title: Dayli Date of Analysis: i	oject Name: Manor Road, Barnet oject No.: 3699 eport Title: Daylight Distribution Analysis - Neighbour ate of Analysis: 22/01/2024													
Floor Ref.	Room Ref	Property Type	Room Use		Room Area	Lit Area Existing	Lit Area Proposed	Pr/Ex	Meets BRE Criteria					
25 Manor Road (Consented)														
Ground	R1	Residential	Utility Room	Area m2	2.26									
				% of room					n/a					
	R2	Residential	WC	Area m2	4.09									
				% of room					n/a					
	R3	Residential	LKD	Area m2	50.32	50.26	50.20							
				% of room		99.88%	99.76%	1.00	YES					
First	R1	Residential	Bedroom	Area m2	14.77	14.39	14.36							
	50			% of room		97.42%	97.18%	1.00	YES					
	R2	Residential	Hall	Area m2	7.84				. /.					
	52	Deside state	Detheres	% of room	2.45				n/a					
	K3	Residential	Bathroom	Area m2	2.15									
	D 4	Desidential	Deducers	% of room	0.74	0.20	0.20		n/a					
	K4	Residential	Beuroom	Area IIIZ	0.74	0.20	8.20 02 70%	0.00	VEC					
Second		Posidontial	Podroom	% 01 100/11	15.06	94.51% 1E 07	15 07	0.99	TES					
Second	KI	Residential	Beuroom	% of room	15.90	13.87	13.87	1.00	VES					
	D.	Pecidential	Hall	Area m2	1 22	33.4270	55.4270	1.00	TLJ					
	112	Residential	nan	% of room	4.22				n/a					

Project Name: Manor Road, Barnet Project No.: 3699 Report Title: Two hours Sunlight to Amenity Analysis - Neighbour Date of Analysis: 22/01/2024												
Floor Ref	Amenity Ref		Amenity Area	Lit Area Existing	Lit Area Proposed	Pr/Ex	Meets BRE Criteria					
25 Manor Road												
Ground	A1	Area m2 Percentage	117.99	92.04 78%	91.69 <mark>78%</mark>	1.00	YES					
	24 Manor Road											
Ground	A1	Area m2 Percentage	283.07	283.07 100%	283.07 100%	1.00	YES					
	26 Manor Road											
Ground	A1	Area m2 Percentage	418.31	381.25 91%	358.12 <mark>86%</mark>	0.94	YES					

Project Name: Manor Road, Barnet Project No.: 3699 Report Title: Two hours Sunlight to Amenity Analysis - Neighbour Date of Analysis: 22/01/2024												
Floor Ref	Amenity Ref		Amenity Area	Lit Area Existing	Lit Area Proposed	Pr/Ex	Meets BRE Criteria					
25 Manor Road (Consented)												
Ground	A1	Area m2 Percentage	110.23	78.98 72%	79.85 72%	1.01	YES					