Chapter 10: Daylight, Sunlight, Overshadowing and Solar Glare

DAYLIGHT, SUNLIGHT, OVERSHADOWING AND SOLAR GLARE	
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SUPPORTING APPENDIX	**ES Addendum Volume 3, Appendix: Daylight, Sunlight, Overshadowing and Solar Glare** Annex 1: Drawings; Annex 2: Daylight and sunlight results for neighbouring buildings; Annex 3: Without Balconies daylight and sunlight results for neighbouring buildings; Annex 4: Overshadowing (Sun on Ground); Annex 5: Solar Glare assessment; and Annex 6: Window Maps.
KEY CONSIDERATIONS	The key effects considered within this chapter include the following: • The effects of the Amended Proposed Development once completed on sensitive receptors in relation to daylight and sunlight; • The effects of the Amended Proposed Development once completed on surrounding sensitive receptors in relation to overshadowing; and • The solar glare effects of the Amended Proposed Development at nearby sensitive road locations.
CONSULTATION	An EIA Scoping Opinion Request Report ('EIA Scoping Report') was submitted to the London Borough of Camden (LBC) on 4 August 2023 (refer to **ES Volume 3, Appendix: EIA Methodology – Annex 1** of the December 2023 ES) which sets out the proposed scope and method proposed for this ES chapter. A draft of the 'EIA Scoping Report Review' (prepared by CBRE, the LBC's appointed EIA advisors) was issued on 4 October 2023 (refer to **ES Volume 3, Appendix: EIA Methodology – Annex 2** of the December 2023 ES), and a final EIA Scoping Opinion was subsequently issued on the 16 November 2023. The EIA Scoping Opinion confirms that the methodology outlined within the EIA Scoping Report is appropriate. The following point was raised as part of the EIA Scoping Opinion: *"In respect of the amenity spaces to be considered within the overshadowing assessment, the area shown for Tolmer's Square is limited to the area of green space. CBRE consider that all amenity space should be assessed, including the hardstanding. Additionally, there are areas adjacent to Tolmer's Square which are not shown in Figure 2, namely Foundry Mews which wraps around the outside of Tolmer's Square, as well as George Mews to the north. The Applicant should give consideration to these areas in the ES, clearly setting out the extent of the study area".* Therefore, the overshadowing scope was increased in response to LBC's above suggestion. The remainder of the scope set out for this ES chapter was considered to be appropriate. An ES Review Report was prepared by CBRE (on behalf of LBC) following the submission of the December 2023 ES. No additional points of clarification or requests for further information in accordance with Regulation 25 of the EIA Regulations[1] were made as part of this review.

COMPARISON AGAINST THE DECEMBER 2023 ASSESSMENT

10.1 Since the submission of the December 2023 ES, design changes have been made to the Proposed Development, including massing changes with the potential to impact the conclusions of the Daylight, Sunlight, Overshadowing and Solar Glare assessments.

10.2 A replacement ES chapter, rather than an ES Addendum, has been provided due to the fact that full re-assessment has been undertaken of the Proposed Amendments, which led to a large number of changes in the tabular data which was best presented in the form of an updated ES chapter.

10.3 To summarise the changes between the Proposed Development and the Amended Proposed Development, there were:

- Changes in daylight levels at 175 Drummond Street to Negligible (not significant) (previously Minor to Moderate Adverse (significant));
- Changes to the daylight levels at Schafer House, University College, 164-166 Drummond Street and the Triton Building which are Negligible (not significant) (previously Minor Adverse (not significant));
- Change to sunlight levels at 40-60 Hampstead Road which are Minor Adverse (not significant) (previously Negligible (not significant)); and
- A new viewpoint (Viewpoint 7) was considered along Hampstead Road in response to the revised massing, which resulted in a Minor Adverse (not significant) effect in relation to Solar Glare.

10.4 No additional cumulative schemes have been identified and therefore the cumulative effects assessment remains as presented in the December 2023 ES.

ASSESSMENT METHODOLOGY

Defining the Baseline

10.5 The assessment of daylight and sunlight amenity is governed principally by the extent that the sky is obscured by the existing and proposed structures (obstructions) which surround a sensitive receptor. Using professional judgment, the extent of the study area has been established by assessing the number of properties and open spaces within and surrounding the site which may be affected by any additional obstruction of the sky, as a result of the construction of the Amended Proposed Development.

10.6 The current baseline conditions are defined as the existing site conditions at the time of the planning submission. A detailed land survey was undertaken by Plowman Craven in October 2019 which surveyed each of the existing buildings and structures on the site, as well as the relevant surrounding buildings. Since that time the model has been updated to include relevant developments such as Stephenson House (Drummond Street) and site visits have been undertaken to confirm that there are no material changes to relevant buildings within the immediate vicinity of the site. The model has been used for the assessment of daylight, sunlight, overshadowing and solar glare.

10.7 Stephenson House, to the north of the site on Drummond Street, has been redeveloped since the time of the survey and therefore this building has been modelled for planning drawings obtained from the LBC planning portal.

Evolution of the Baseline

10.8 In relation to the built environment, any alterations made to the properties surrounding the site in the absence of the Amended Proposed Development (either in terms of massing, or window sizes and locations) would have the potential to change the baseline condition in relation to the altered property, and potentially certain other neighbouring properties.

10.9 The site has been qualitatively considered in the context of the Amended Proposed Development not being delivered, and the likely/expected natural evolution of the surrounding area. Presently, there are no cumulative schemes that would have a material bearing on the baseline conditions, so no evolution from the existing conditions in the absence of the Amended Proposed Development is assessed. Any future schemes that are proposed would be required to consider the cumulative effects of it with the Amended Proposed Development.

Impact Assessment Methodology

Deconstruction and Construction

10.10 During the deconstruction and construction activities, the daylight, sunlight, overshadowing and solar glare potential effects would be constantly changing and therefore, they would be similar to or less than the effects of the completed Amended Proposed Development. Accordingly, the effects to the surrounding properties and receptors during these phases have not been modelled and analysed.

[1] *HMSO, (2017); The Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (as amended)*

10.11 In some cases, scaffolding, cranes, and hoarding may marginally increase the size of the Proposal's maximum massing, however, this would be a temporary situation and it is unlikely to result in additional noticeable effects due to the scale of these temporary structures and their transient nature. On this basis, there is no need to separately consider the daylight and sunlight effects throughout the deconstruction and construction work within this ES chapter.

Completed Development

10.12 This scenario consists of considering the completed Amended Proposed Development in the context of the surrounding environment. This represents a worst-case scenario to assess the potential daylight, sunlight, overshadowing and solar glare effects on the surrounding residential receptors, amenity spaces and viewpoints.

10.13 Using a 3D computer model of the site and its surrounding context, the levels of daylight, sunlight and shadow in the existing situation have been analysed and compared to the levels of light following the construction of the Amended Proposed Development.

10.14 The results of the analysis have then been interpreted with reference to the BRE Guidelines, which are explained in detail within this ES chapter.

10.15 The BRE Guidelines provide different methods for assessing daylight for existing and proposed residential accommodation. The methods relevant to daylight (only) in this assessment are the Vertical Sky Component (VSC) and the No Sky Line (NSL).

10.16 Other methods detailed in the 2022 BRE Guidelines are of relevance to the other topics considered in this assessment (sunlight and overshadowing) which are outlined in Table 10.1 below.

10.17 An assessment of cumulative effects has not been undertaken within this ES chapter given the proximity of surrounding cumulative schemes, as the distance of the cumulative developments to the sensitive receptors is significant and thus they will have no in combination effect with the Amended Proposed Development.

Assessment Methodology

10.18 The criteria identified within the 2022 BRE Guidelines is shown in Table 10.1.

Table 10.1 2022 BRE Guidelines – Criteria

Topic	Method	2022 BRE Criteria
Daylight	Vertical Sky Component (VSC)	A window may be adversely affected if the VSC measured at the centre of the window is less than 27% and less than 0.8 times its former value.
	No Sky Line (NSL)	A room may be adversely affected if the daylight distribution (no sky line) is reduced beyond 0.8 times its existing area.
Sunlight	Annual Probable Sunlight Hours (APSH)	A window may be adversely affected if a point at the centre of the window receives for the whole year, less than 25% of the APSH including at least 5% of the APSH during the winter months (21 September to 21 March) and less than 0.8 times its former sunlight hours during either period, and (for existing neighbouring buildings), if there is a reduction in total APSH which is greater than 4%.
Overshadowing	Sun on Ground	An area of amenity space or garden may be adversely affected if less than half (50%) of the area is prevented by buildings from receiving two hours of sunlight on the 21 March and the area which can receive some sun on the 21 March is less than 0.8 times its former value.

10.19 The methodology for identifying effects upon sensitive receptors (in terms of magnitude of impact, effect scale and effect significance) is discussed below.

Daylight – Vertical Sky Component

10.20 VSC is a measure of the direct skylight reaching a point from an overcast sky. It is the ratio of the illuminance at a point on a given vertical plane to the illuminance at a point on a horizontal plane due to an unobstructed sky.

10.21 For existing buildings, the BRE Guidelines is based on the loss of VSC at a point at the centre of a window, on the outer plane of the wall.

10.22 The BRE Guidelines state that if the VSC at the centre of a window is less than 27%, and it is less than 0.8 times its former value (i.e. the proportional reduction is greater than 20%), then the reduction in skylight will be noticeable, and the existing building may be adversely affected.

Daylight – No Sky Line Method

10.23 The NSL method is a measure of the distribution of daylight at the 'working plane' within a room. In houses, the 'working plane' means a horizontal 'desktop' plane of 0.85 m in height. The NSL divides those areas of working plane in a room which receive direct sky light through the windows from those areas of the working plane which cannot. If a significant area of the working plane lies beyond the NSL (i.e. it receives no direct sky light) then the distribution of daylight in the room would be poor and supplementary electric lighting may be required.

10.24 The potential effect of the daylighting distribution in the surrounding existing buildings is established by plotting the NSL in each of the main rooms. For houses, this includes living rooms, dining rooms and kitchens. Bedrooms are also analysed although they are less important in terms of the amount of daylight received. The BRE Guidelines state that if the area of a room that does receive direct sky light is reduced to less than 0.8 times its former value, then this would be noticeable to its occupants.

Sunlight – Annual Probable Sunlight Hours

10.25 The BRE Guidelines state in Section 3.2.3 that:

"all main living rooms of dwellings and conservatories 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. Normally loss of sunlight need not be analysed to kitchens and bedrooms, except for bedrooms that also comprise a living space"

10.26 Section 3.2.5 continues:

"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."

10.27 The BRE Guidelines suggest that when assessing sunlight for existing neighbouring buildings, the point at the centre of the window on the outside window face can be used. Section 3.2.6 states:

"If a room can receive more than one quarter of annual probably sunlight hours (APSH), including at least 5% of APSH in the winter months between 21 September and 21 March, then it should still receive enough sunlight. Also, if the overall annual loss of APSH is 4% or less, the loss of sunlight is small."

10.28 The BRE Guidelines go on to state that if these guidelines are not met, and a window receives less than 0.80 times its former value of total APSH or winter APSH, and if that window has a reduction in total APSH of more than 4% *"then the occupants of the existing building will notice the loss of sunlight".*

10.29 All main living rooms with a window facing within 90° of due south within residential properties surrounding the site have been assessed for sunlight. Even if all other additional windows serving the room are facing within 90º of due north.

10.30 Bedrooms and kitchens have not been analysed in accordance with paragraph 3.2.3 of the BRE Guidelines.

Balconies Over Windows and Projecting Wings

10.31 The BRE Guidelines also recognises that balconies and overhangs inherently restrict the quantum of daylight and sunlight. With regards to daylight, the BRE comments on page 16, paragraph 2.2.13:

"Existing windows with balconies above them typically receive less daylight. Because the balcony cuts out light from the top part of the sky, even modest obstruction opposite may result in a large relative impact on the VSC, and on the area receiving direct skylight. One way to demonstrate this would be to carry out an additional calculation of the VSC and area receiving direct skylight, for both the existing and proposed situations, without the balcony in place. For example, if the proposed VSC with the balcony was under 0.80 times the existing value with the balcony, but the same ratio for the values without the balcony was well over 0.8, this would show that the presence of the balcony, rather than the size of the new obstruction, was the main factor in the relative loss of light."

10.32 With regards to sunlight, the BRE comments on page 25, paragraph 3.2.11:

"Balconies and overhangs above an existing window tend to block sunlight, especially in summer above south facing windows. Even a modest obstruction opposite may result in a large relative impact on the sunlight received. One way to demonstrate this would be to carry out an additional calculation of the APSH, for both the existing and proposed situations, without the balcony in place. For example, if the proposed APSH with the balcony was under 0.80 times the existing value with the balcony, but the same ratio for the values without the balcony was well over 0.80, this would show that the presence of the balcony, rather than the size of the new obstruction, was the main factor in the relative loss of sunlight."

10.33 Where appropriate, additional calculations were carried out that exclude the limiting effect of the balcony to quantify whether it is the presence of the balcony or the obstruction (i.e. the Amended Proposed Development) that is the main factor in the alterations in daylight or sunlight.

Overshadowing

10.34 The BRE acknowledges, at paragraph 3.3.1 that sunlight in the spaces between buildings has an important impact on the overall appearance and ambience of a development. It states:

"…good site layout planning for daylight and sunlight should not limit itself to providing good natural lighting inside buildings. Sunlight in the spaces between buildings has an important impact on the overall appearance and ambience of a development."

10.35 The sun on ground assessment has been used to understand the overshadowing of amenity spaces.

Sun on Ground

10.36 Using specialist software, the path of the sun is tracked to determine where the sun would reach the ground and where it would not. This assessment reviews the total percentage of an area that receives at least two hours of direct sunlight on the March 21st.The BRE criteria for gardens or amenity areas are as follows:

'It is recommended that for it to appear adequately sunlit throughout the year, at least half of a garden or amenity space should receive at least two hours of sunlight on 21 March. If as a result of a new development an existing garden or amenity space does not meet the above, and the area which can receive two hours of sunlight on 21 march is less than 0.8 times its former value, then the loss of amenity is likely to be noticeable.' (3.3.17)

Solar Glare

10.37 The BRE Guidelines makes the following statement regarding the potential for reflected solar glare on a development:

"Glare or solar dazzle can occur when sunlight is reflected from a glazed façade or area of metal cladding. This can affect road users outside and the occupants of adjoining buildings. The problem can occur either when there are large areas of reflective tinted glass or cladding on the façade, or when there are areas of glass or cladding, which slope back so that high altitude sunlight can be reflected along the ground. Thus, solar dazzle is only a long-term problem for some heavily glazed (or mirror clad) buildings. Photovoltaic panels tend to dazzle because they are designed to absorb light."

10.38 The BRE Guidelines outline a brief methodology for evaluation of the scale of a solar glare issue:

"If it is likely that a building may cause solar dazzle the exact scale of the problem should be evaluated...by identifying key locations such as road junctions and windows of nearby buildings and working out the number of hours of the year that sunlight can be reflected to these points."

10.39 The assessment of solar glare is carried out using specialist software applied to a 3D AutoCAD model of the Amended Proposed Development and its surrounding context.

Annual Sequence Analysis

10.40 The Annual Sequence Analysis identifies the times and locations of all instances of solar reflection throughout the year. The reflective elements of the façade of the Amended Proposed Development are simulated with yellow-coloured mirrors in order to more easily identify possible incidents and locations.

10.41 The path of the sun for the entire year is then simulated around the Amended Proposed Development in order to identify where and when instances of solar reflections may affect sensitive viewpoints, with a particular focus on road users and railways. The images from the screening exercise can be found within **ES Addendum Volume 3, Appendix: Daylight, Sunlight, Overshadowing and Solar Glare – Annex 5**.

10.42 The screening exercise creates conditions for optimal reflectance i.e. a perfect reflective (specular) material and adopts an entirely clear sky. The objective is to identify all possible times and dates where solar glare could occur, however brief, under optimal conditions. An interrogation of historic climate data would demonstrate that the number of instances of solar glare identified would be less frequent than that established in this technical analysis.

10.43 Based upon the initial screening assessments, the location of the most sensitive viewpoints (which coincide with traffic lights, crossings and major road junctions) were identified.

10.44 In order to understand the overall solar glare effect of the Amended Proposed Development upon the surrounding sensitive viewpoints, at each viewpoint, all of the solar reflectance instances within a year, together with their durations and viewing angles are plotted onto a grid to create a calendar graph for each sensitive viewpoint. The calendar graphs for each of the sensitive viewpoints can also be seen in **ES Addendum Volume 3, Appendix: Daylight, Sunlight, Overshadowing and Solar Glare – Annex 5**.

10.45 The calendar graphs' axes capture the 365 days of the year along the X axis and the time of day on the Y axis. The Y axis is labelled as Greenwich Mean Time (GMT) on the left, and British Summer Time (BST) on the right. The time, duration and angle from the viewers focal point can be deduced from these Glare Calendars.

10.46 Glare can be divided into two distinct categories: Discomfort Glare and Disability Glare.

10.47 Discomfort glare is a difficulty in being able to see in order to carry out a task, or a reaction to avoid looking towards a bright source of light.

10.48 Disability glare is a reduction in visibility caused by light from bright sources being scattered within the eye, across the retina. The result is that vision towards the desired direction, is impaired by the veiling effect caused by the scattered light.

Solar Reflectance Instances/Images

10.49 If the Annual Sequence Analysis exercise identifies instances of solar reflections in sensitive locations a glare calendar is calculated to show the frequency, duration and angle from viewpoints across the whole year. The

glare calendars are used to identify lengthy periods of glare and, importantly, instances where the angle of glare is close to the view direction. The views of the glare situation at representative times are then visualised using Radiance in order the better understand the severity of the issue. Concentric circles are overlaid on the resulting image to show the angle from the observers view direction ranging from 10° from the centre of the visual axis and moving out in concentric circles from 20° to 90°. This provides a reference by which to judge the severity of any potential issues.

10.50 Please note that the analysis is based on a number of assumptions and therefore the images taken from certain viewpoints are representations of the position only.

10.51 The limits of a driver's windscreen or the possible use of driver's visor, which in reality could mitigate some glare instances, are not visible in the image nor accounted for in the assessment. Nevertheless, the visualisation allows a view to be formed on the likelihood of the use of a sun visor to mitigate the impact.

Assumptions and Limitations

10.52 The contextual model was produced from photogrammetry and updated with more accurate data from the 3D point cloud captured on-site by high-definition laser scanner.

10.53 Site and aerial photographs as well as planning drawings obtained from the LBC planning portal were used to supplement the model where necessary.

10.54 Floorplans have been obtained for the following properties from online resources and these layouts have been incorporated within the 3D model:

- 17-33 William Road;
- Schafer House, University College – Partial;
- 164-166 Drummond Street;
- The Triton Building;
- 175 Drummond Street – Outline;
- 1-6 Tolmers Square – Partial;
- Warren Court – Euston Road;
- Lizmans House – Partial;
- 63-68 Warren Street;
- 62 Warren Street – Partial;
- 60-61 Warren Street – Partial;
- 59 Warren Street – Partial;
- 57 Warren Street;
- 8 – 12 Warren Street;
- 16 Warren Street – Partial;
- 17 Warren Street – Partial;
- 13-14 &118-120 Whitfield Street – Partial;
- 15 Warren Street & 161 Whitfield Street; and
- Duchess House, 18-19 Warren Street – Partial.

10.55 Where plans were not available, reasonable assumptions have been made on the room sizes and layouts based on external visual inspection and professional judgment. This is industry standard practice when floorplan information is unavailable.

10.56 To identify if the buildings surrounding the site are in residential use, their post codes were checked against the Council Tax Valuation List produced by the Valuation Office Agency (VOA).

10.57 3XN (the project architect) supplied the 3D computer model of the Amended Proposed Development, which was received on the 15 October 2024. The computer model is illustrated in the drawings in **ES Addendum Volume 3, Appendix: Daylight, Sunlight, Overshadowing and Solar Glare – Annex 1**.

10.58 Since the issue of this model, there has been a slight reduction in massing to the southeast corner of the podium. These changes have been reviewed within Point 2's model and while there may be a slight improvement in results, it will not have a material bearing on the position or alter the conclusions outlined within this chapter.

10.59 For the solar glare assessment, when calculating the times when solar glare could potentially be reflected to the receptor locations, the façades were assumed to act like a mirror. No account was taken of the surface reflective properties of the external envelope of the Amended Proposed Development.

Methodology for Defining Effects

Receptors and Receptor Sensitivity

10.60 In respect of daylight and sunlight effects, the BRE Guidelines suggest that any existing residential properties including student accommodation need to be analysed and considered as sensitive receptors.

Magnitude of Impact

Daylight and Sunlight

10.61 It is generally acknowledged that the BRE Guidelines are predicated upon a suburban environment. Therefore, a degree of flexibility should be applied when assessing the significance of daylight and sunlight effects in urban locations. Appendix H of the 2022 BRE Guidelines states:

"Adverse impacts occur when there is a significant decrease in the amount of skylight and sunlight reaching an existing building where it is required, or in the amount of sunlight reaching an open space… The assessment of impact will depend on a combination of factors, and there is no simple rule of thumb that can be applied."

10.62 In view of the above, the interpretation of the daylight and sunlight results should be assessed in terms of the quantum of light lost or gained, not purely on the percentage of change. The percentage value may well be misleading, particularly where the baseline values are small. In these situations, a small change in the quantum of light could represent a high percentage change in the overall figure, implying that there would be a significant change in daylight and sunlight whereas in reality the difference would be negligible.

10.63 The starting point for assessing the daylight and sunlight impacts is against the criteria set out in the 2022 BRE Guidelines. One must however also observe the context in which the development is taking place and how this relates to daylight and sunlight and examine the factors which place limitations on the typical numerical parameters set out within the BRE Guidelines.

10.64 When determining the overall scale of effect per property for daylight and sunlight, as per Appendix I of the BRE Guidelines, consideration has been given to the proportion of rooms/ windows affected, as well as the percentage alterations, absolute changes, existing levels, and retained levels.

10.65 As such, the assessment criteria/ thresholds are not applied mechanistically, and professional judgement must be applied to all numerical analyses prior to reaching a conclusion on the likely significance of effects. For example, if a window has a very low existing VSC value, even a very small absolute change in VSC could be

disproportionately represented as a percentage change, when in reality the change is immaterial and would have little if any bearing on the amenity to the room behind the window.

10.66 Finally, the VSC and NSL methodologies must be considered holistically, not in isolation. This is because the VSC tests consider a calculation spot in the centre of a window and does not account for the size of the window (i.e. the VSC could be the same with a postage stamp size window or curtain glazing), whereas the NSL calculation considers the area of a room receiving direct skylight through the whole window/ windows. A degree of professional judgement is therefore applied when categorising the impacts into the ascribed categories.

10.67 The nature of the effects may be either adverse (negative or detrimental) or beneficial (advantageous or positive).

10.68 The scale of each effect has been categorised as being:

- Major;
- Moderate;
- Minor; or
- Negligible.

10.69 More information on how the scale of effect has been determined for each type of assessment undertaken (including determining whether it is significant) is discussed in the following sections of this chapter.

Overshadowing

10.70 The results of the sun on ground analysis are compared against the criteria set out in the 2022 BRE Guidelines, as discussed further above.

10.71 On 21st March, which is the principle point of assessment recommended by the BRE, the sun does not rise above 40° in London. In urban environments, where buildings are taller and the obstruction angles between properties are regularly already in excess of 40°, sunlight penetration is harder to achieve, particularly in the winter months as the lower angles of sun are easily obstructed by modest obstructions. Nevertheless, the sun on ground analysis has been undertaken on the suggested March 21st date.

Solar Glare

10.72 The magnitude of impact in relation to solar glare effects is based on the scale set out in paragraph 10.68 and further discussion on the scale of these effects is set out in Table 10.4.

Defining the Effect

Daylight, Sunlight and Sun on Ground

10.73 The assessment criteria specified within the BRE only suggests where a change in daylight and sunlight may be noticeable to the occupants of buildings or users of an area of amenity. It does not further define effects beyond this apart from within Appendix H – Environmental Impact Assessment paragraphs H3-H4 in which it *states that:*

"Adverse impacts occur when there is a significant decrease in the amount of skylight and sunlight reaching an existing building where it is required, or in the amount of sunlight reaching an open space.

The assessment of impact will depend on a combination of factors, and there is no simple rule of thumb that can be applied."

10.74 Appendix H (paragraph H6) states that:

"where the loss of skylight or sunlight does not meet the guidelines in this book, the impact is assessed as minor, moderate or major adverse."

10.75 The Appendix H definitions of beneficial, negligible, minor adverse and major adverse effects are shown in Table 10.2 below. Moderate adverse effects are not specifically defined in the BRE.

Table 10.2 BRE Appendix H Daylight, Sunlight and Overshadowing Criteria

2022 BRE Criteria	
Beneficial (paragraph H8)	*"…a significant increase in the amount of skylight and sunlight reaching an existing building where it is required, or in the amount of sunlight reaching an open space."*
Negligible (paragraph H5)	*"Where the loss of light is well within the guidelines, or only a small number of windows or a limited area of open space lose light (within the guidelines)"*
Minor Adverse (Paragraphs H5-H6)	*"Where the loss of skylight or sunlight does not meet the guidelines in this document…factors tending towards a minor adverse impact include:* • *Only a small number of windows or limited area of open space are affected* • *The loss of light is only marginally outside the guidelines* • *An affected room has other sources of skylight or sunlight* • *The affected building or open space only has a low-level requirement for skylight or sunlight"*
Major Adverse (paragraph H7)	*"Factors tending towards a major adverse impact include:* • *A large number of windows or large area of open space are affected* • *The loss of light is substantially outside the guidelines* • *All the windows in a particular property are affected"*

10.76 The scale of these effects have been described as negligible, minor, moderate or major and in all instances are considered long term as they will be caused throughout the lifespan of the completed development. The classification for the scale of effects to individual windows/rooms are based on the relative change between the existing and proposed daylight and sunlight values and applying with professional judgement, which is used to assign an overall scale of effect to each property. This is outlined in more detail below.

10.77 Where there are relative changes to individual windows/rooms based on the relative changes they are classified as follows:

Table 10.3 Magnitude of Impact Descriptors – Daylight, Sunlight and Overshadowing

Impact Magnitude	Descriptor	
Major Adverse	Impact is outside BRE Guidelines	<0.60 times former value (>40% reduction)
Moderate Adverse		0.60-0.69 times former value (31% to 40% reduction)
Minor Adverse		0.70-0.79 times former value (21% to 30% reduction)
Negligible	Impact is inside BRE Guidelines	Typically >0.80 times former value (20% reduction or less)

10.78 Professional judgement is then used to establish the overall scale of the effect to the building. Relevant considerations include where windows and rooms are obstructed by architectural features and where baseline levels of daylight or sunlight were already low, for example, where the view of sky from a window was restricted by balconies or other parts of the host building, the magnitude of absolute reduction was considered when determining the significance of effect.

Solar Glare

10.79 There are no quantitative criteria within the 2022 BRE Guidelines regarding acceptable levels of solar glare. There is, however, research which suggests that the significance of a glare occurrence is largely dependent upon its angle from the line of sight, the strength of the glare and the relevance of this with respect to the human field of vision.

10.80 Glare occurrences that could encroach on the foveal view (3° from the visual axis) are likely to cause significant visual impairment or distraction. It is also likely that the viewer's line of sight would vary from the chosen view direction at each Viewpoint. To account for this, along with the likely range of movement of the eye, it is considered that lengthy occurrences within approximately 10° of the centre of the visual axis are potentially

hazardous. In this scenario, the adverse effect would, dependent upon the duration and veiling luminance of the instance, be considered Major Adverse (significant) and mitigation may be required.

10.81 Between 10° and 30° corresponds to Near Periphery field of view and therefore where glare occurs between these angles, the adverse effect would be considered Minor Adverse (not significant) or Moderate Adverse (significant) depending upon the location and use of the adjacent sensitive receptor and the period of time the glare occurs for.

10.82 An angle of greater than 30° from the view direction corresponds to the Far Periphery field of view and, therefore, the risk of the reflection causing a hazard is reduced. As such, the adverse effect would be considered to be Minor Adverse or Negligible (not significant).

Table 10.4 Solar Glare Criteria

Scale and Nature	Descriptor
Major Adverse	Glare angles < 3° & a Veiling Luminance of over 500 cd m-²
Moderate Adverse	Glare angles between 3° and 10° for long period of time & a Veiling Luminance of over 500 cd m-²
Minor Adverse	Glare angles between 10° and 30° for long period of time or between 3° and 10° for short period of time
Negligible	Glare angles > 30° or between 10° and 30° for short period of time

Categorising Likely Significant Effects

10.83 Negligible or Minor Adverse / Beneficial effects are considered not to be significant. Significant effects are considered to be Moderate to Major Adverse / Beneficial. All effects defined within this chapter are considered to be local, direct and permanent.

RECEPTOR AND RECEPTOR SENSITIVTY

10.84 All receptors considered in this assessment are considered to be of high sensitivity.

Daylight, Sunlight and Overshadowing

10.85 The residential properties included within our scope of analysis are highlighted green in Figure 10.1 while the student housing block (Schafer House) is highlighted orange (with the site outlined in dotted red). The areas relevant for overshadowing are outlined in yellow.

Key

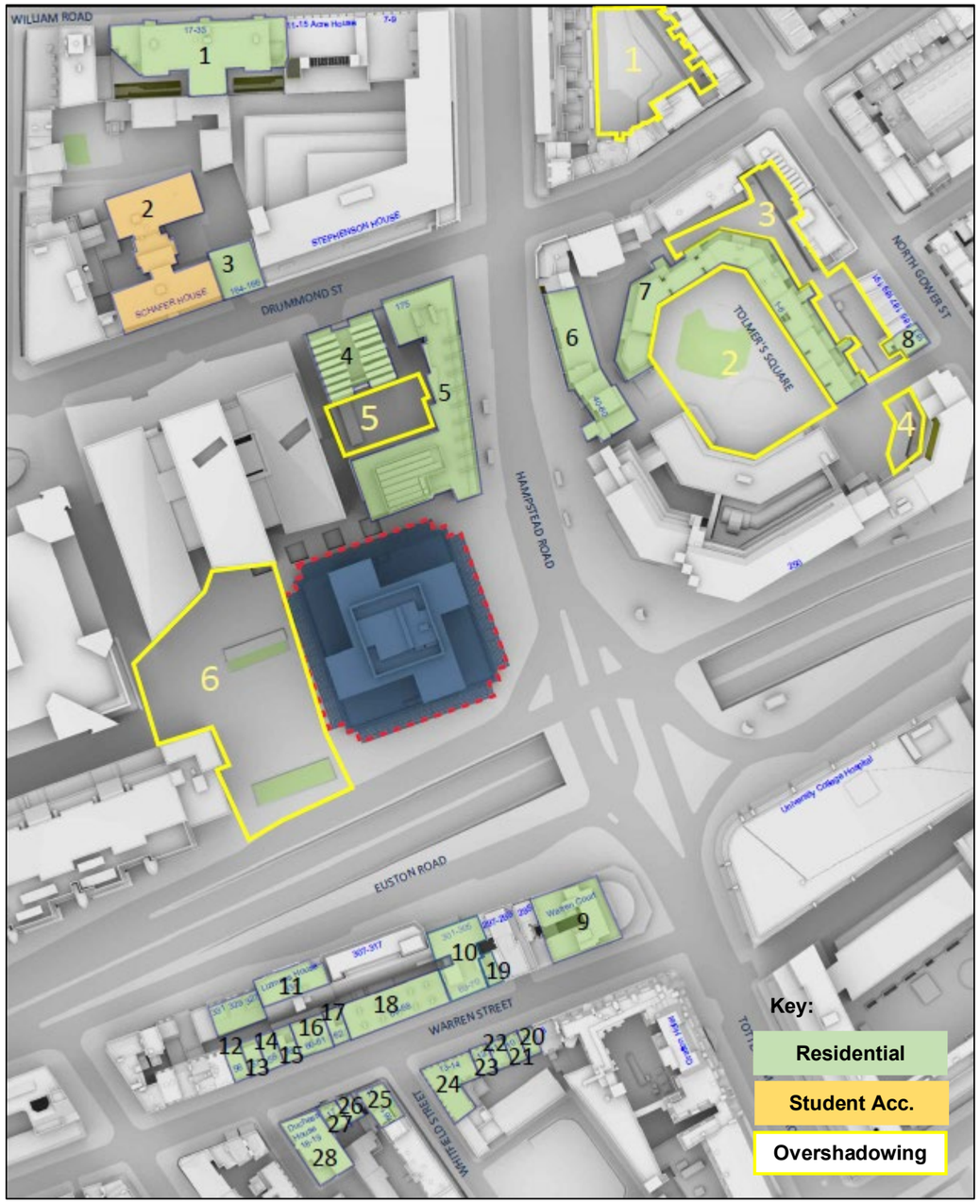
Daylight and Sunlight Receptors

1	17 to 33 William Road	**2**	Schafer House, University College	**3**	164-166 Drummond Street
4	Triton Building	**5**	175 Drummond Street	**6**	40-60 Hampstead Road
7	1-6 Tolmers Square	**8**	183 North Gower Street	**9**	Warren Court, Euston Road
10	301-305 Euston Road & 69-70 Warren Street	**11**	Lizmans House, 321 Euston Road	**12**	56 Warren Street (Assumed windows)
13	57 Warren Street (Assumed windows)	**14**	58 Warren Street (Assumed windows)	**15**	59 Warren Street
16	60-61 Warren Street	**17**	62 Warren Street	**18**	63-68 Warren Street
19	71 Warren Street	**20**	9 Warren Street	**21**	10 Warren Street
22	11 Warren Street	**23**	12 Warren Street	**24**	13-14 Warren Street & 118-120 Whitfield Street
25	15 Warren Street & 161 Whitfield Street	**26**	16 Warren Street	**27**	17 Warren Street
28	Duchess House, 18-19 Warren Street				

Overshadowing Receptors

1	George Mews	**2**	Tolmer's Square (main square)	**3**	Tolmer's Square (private amenity areas)
4	Tolmer's Square (private amenity areas)	**5**	Triton Building Courtyard	**6**	Euston Square

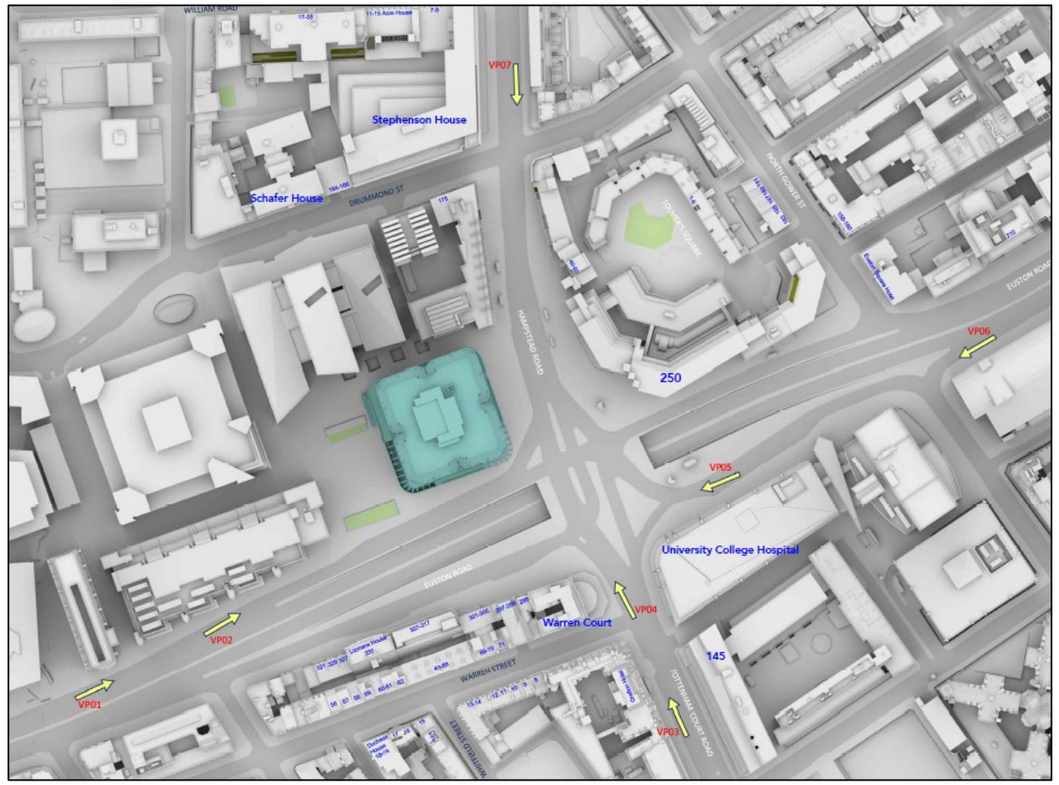
Figure 10.1 Location of Sensitive Receptors – Daylight, Sunlight and Overshadowing



Solar Glare

10.86 In relation to solar glare, the sensitive receptors include major road junctions, signals and pedestrian crossings within the immediate vicinity of the site (to the south), where drivers have the potential to be affected. The relevant areas sensitive to solar glare in the immediate vicinity of the site are identified in Figure 10.2 below.

Figure 10.2 Location of Sensitive Receptors – Solar Glare



VP01	Pedestrian crossing heading east on Euston Road (A501)	**VP02**	Changing lane to come off Euston Road (A501) heading east	**VP03**	Pedestrian crossing heading north on Tottenham Court Road
VP04	Traffic lights heading north on Tottenham Court Road	**VP05**	Traffic lights heading west on Euston Road	**VP06**	Pedestrian crossing heading west on Euston Road
VP07	Traffic lights heading south on Hampstead Road				

BASELINE CONDITIONS

10.87 The existing buildings and structures have been modelled from 3D Point Cloud survey data which form the baseline assessment conditions.

10.88 Detailed drawings of the existing baseline scenario can be found at **ES Addendum Volume 3, Appendix: Daylight, Sunlight, Overshadowing and Solar Glare – Annex 1**. The drawings indicate the position of the existing surrounding receptors in relation to the site.

Daylight

10.89 The existing baseline VSC and NSL daylight conditions were assessed. Full detailed results can be found in **ES Addendum Volume 3, Appendix: Daylight, Sunlight, Overshadowing and Solar Glare – Annex 2.**

10.90 The baseline daylight results for VSC and NSL are summarised in 10.90 and Table 10.5 respectively.

Figure 10.3 Summary Baseline VSC Results

BASELINE VSC SUMMARY		
Address	**No. of Windows**	**No. of Windows that meet VSC criterion (>27%)**
17 to 33 William Road	106	11
Schafer House, University College	162	0
164-166 Drummond Street	51	0
Triton Building	298	108
175 Drummond Street	14	0
40-60 Hampstead Road	62	2
1-6 Tolmers Square	95	12
183 North Gower Street	16	1
Warren Court, Euston Road	54	28
301-305 Euston Road & 69-70 Warren Street	2	0
Lizmans House, 321 Euston Road	42	0
56 Warren Street (Assumed windows)	3	0
57 Warren Street (Assumed windows)	6	0
58 Warren Street (Assumed windows)	6	0
59 Warren Street	8	0
60-61 Warren Street	15	0
62 Warren Street	11	0
63-68 Warren Street	52	0
71 Warren Street	3	0
9 Warren Street	1	0
10 Warren Street	1	0
11 Warren Street	1	0
12 Warren Street	1	0
13-14 Warren Street & 118-120 Whitfield Street	24	10
15 Warren Street & 161 Whitfield Street	19	16
16 Warren Street	16	10
17 Warren Street	17	11
Duchess House, 18-19 Warren Street	20	14
TOTAL	**1,106**	**223**

10.91 The baseline VSC results confirm that a total of 223 of the 1,106 (20%) habitable windows tested currently meet the BRE guideline target of at least 27% VSC.

10.92 It is clear from these results that a number of the surrounding properties experience lower levels of VSC in the existing condition. This is typical of a dense urban environment such as this, particularly where windows are located beneath overhangs which is the case for a number of the buildings included within the scope of analysis.

Table 10.5 Summary Baseline NSL Results

BASELINE NSL SUMMARY		
Address	**No. of Rooms**	**No. of Rooms that Receive NSL in excess of 80%**
17 to 33 William Road	83	46
Schafer House, University College	150	1
164-166 Drummond Street	17	0
Triton Building	140	95
175 Drummond Street	14	2
40-60 Hampstead Road	60	1
1-6 Tolmers Square	61	54
183 North Gower Street	16	4
Warren Court, Euston Road	37	29
301-305 Euston Road & 69-70 Warren Street	2	2
Lizmans House, 321 Euston Road	42	38
56 Warren Street (Assumed windows)	3	2
57 Warren Street (Assumed windows)	4	0
58 Warren Street (Assumed windows)	4	0
59 Warren Street	5	1
60-61 Warren Street	12	0
62 Warren Street	6	1
63-68 Warren Street	26	0
71 Warren Street	3	0
9 Warren Street	1	0
10 Warren Street	1	1
11 Warren Street	1	1
12 Warren Street	1	1
13-14 Warren Street & 118-120 Whitfield Street	9	9
15 Warren Street & 161 Whitfield Street	13	13
16 Warren Street	6	4
17 Warren Street	7	5
Duchess House, 18-19 Warren Street	9	9
TOTAL	**733**	**319**

10.93 The baseline NSL results confirm that a total of 319 of the 733 (44%) habitable rooms tested currently have daylight penetrating to in excess of 80% of the working plane. This is typical of a dense urban environment such as this, particularly where rooms are located beneath overhangs which is the case for a number of the buildings included within the scope of analysis.

Sunlight

10.94 The existing baseline APSH sunlight conditions were assessed. Full detailed results can be found in **ES Addendum Volume 3, Appendix: Daylight, Sunlight, Overshadowing and Solar Glare – Annex 2.**

10.95 The baseline results for the properties relevant for APSH are summarised in Table 10.6 below. Rooms known to be in use as bedrooms and kitchens have not been considered and are not included in the table.

Table 10.6 Summary Baseline APSH Results

BASELINE ROOM APSH SUMMARY		
Address	**No. of Rooms**	**No. of Rooms that Meet APSH Criteria**
17 to 33 William Road	36	13
Schafer House, University College	49	20
164-166 Drummond Street	11	0
175 Drummond Street	46	28
40-60 Hampstead Road	60	9
1-6 Tolmers Square	22	17
183 North Gower Street	16	10
13-14 Warren Street & 118-120 Whitfield Street	3	3
15 Warren Street & 161 Whitfield Street	2	2
16 Warren Street	1	1
17 Warren Street	1	1
Duchess House, 18-19 Warren Street	3	3
TOTAL	**250**	**107**

10.96 For sunlight, there are 250 main living rooms surrounding the site, which have a southerly orientation (i.e. at least one window that is orientated within 90 degrees of due south) and are therefore a consideration in sunlight terms. These have all been assessed in terms of both winter and annual APSH.

10.97 107 of the 250 rooms assessed (43%) will meet the APSH criteria in the existing condition, which is typical of a dense urban environment such as this.

Table 10.7 Summary Baseline Overshadowing Results

BASELINE OVERSHADOWING SUMMARY		
Area	**Baseline Conditions (% of Area Receiving two Hours of sun on 21st March)**	**>50% of the Area in the Existing**
1. George Mews	70.5%	Yes
2. Tolmers Square (main square)	74.7%	Yes
3. Tolmers Square (private amenity areas 1)	62.8%	Yes
4. Tolmers Square (private amenity areas 2)	0.0%	No
5. Triton Building Courtyard	0.0%	No
6. Euston Square	98%	Yes

10.98 In terms of overshadowing, four of the six areas tested will achieve 2 hours of direct sunlight to over 50% of the area on the 21st March. The other two areas achieve 2 hours of direct sunlight to 0% of the area, this is not uncommon in dense urban environments, particularly where areas are surrounded by tall buildings.

POTENTIAL EFFECTS

Completed Development

Daylight and Sunlight

10.99 There are 1,106 windows serving 733 residential habitable rooms surrounding the site which are relevant for assessment in daylight terms. These have all been assessed in terms of both VSC and NSL. Full detailed results are available with **ES Addendum Volume 3, Appendix: Daylight, Sunlight, Overshadowing and Solar Glare – Annex 2,** and the daylight results are summarised in Table 10.8 and 10.9 below.

10.100 Rows shaded in green demonstrate full compliance with the BRE Guidelines.

Table 10.8 Existing Baseline + Amended Proposed Development VSC Summary

VSC SUMMARY						
Address	**Total**	**Total that Meet BRE Guidelines**	**Below BRE Guidelines**			
			20-29% Loss	**30-39.9% Loss**	**>=40% Loss**	**Total**
17 to 33 William Road	106	106	0	0	0	0
Schafer House, University College	162	162	0	0	0	0
164-166 Drummond Street	51	51	0	0	0	0
175 Drummond Street	14	14	0	0	0	0
Triton Building	298	286	12	0	0	12
40-60 Hampstead Road	62	50	0	2	10	12
1-6 Tolmers Square	95	89	4	1	1	6
183 North Gower Street	16	16	0	0	0	0
Warren Court, Euston Road	54	54	0	0	0	0
301-305 Euston Road & 69-70 Warren Street	2	2	0	0	0	0
Lizmans House, 321 Euston Road	42	42	0	0	0	0
56 Warren Street (Assumed windows)	3	3	0	0	0	0
57 Warren Street (Assumed windows)	6	6	0	0	0	0
58 Warren Street (Assumed windows)	6	6	0	0	0	0
59 Warren Street	8	8	0	0	0	0
60-61 Warren Street	15	15	0	0	0	0
62 Warren Street	11	11	0	0	0	0
63-68 Warren Street	52	52	0	0	0	0
71 Warren Street	3	3	0	0	0	0
9 Warren Street	1	1	0	0	0	0
10 Warren Street	1	1	0	0	0	0
11 Warren Street	1	1	0	0	0	0
12 Warren Street	1	1	0	0	0	0
13-14 Warren Street & 118-120 Whitfield Street	24	24	0	0	0	0

VSC SUMMARY						
Address	Total	Total that Meet BRE Guidelines	Below BRE Guidelines			
			20-29% Loss	30-39.9% Loss	>=40% Loss	Total
15 Warren Street & 161 Whitfield Street	19	19	0	0	0	0
16 Warren Street	16	16	0	0	0	0
17 Warren Street	17	17	0	0	0	0
Duchess House, 18-19 Warren Street	20	20	0	0	0	0
TOTAL	**1,106**	**1,076**	**16**	**3**	**11**	**30**

Table 10.9 Existing Baseline + Amended Proposed Development NSL Summary

NSL SUMMARY						
Address	Total No. of Rooms	Total that Meet BRE Guidelines	Below BRE Guidelines			
			20-29% Loss	30-39.9% Loss	>=40% Loss	Total
17 to 33 William Road	83	83	0	0	0	0
Schafer House, University College	150	149	1	0	0	1
164-166 Drummond Street	17	13	4	0	0	4
175 Drummond Street	14	10	4	0	0	4
Triton Building	140	140	0	0	0	0
40-60 Hampstead Road	60	49	1	2	8	11
1-6 Tolmers Square	61	61	0	0	0	0
183 North Gower Street	16	16	0	0	0	0
Warren Court, Euston Road	37	37	0	0	0	0
301-305 Euston Road & 69-70 Warren Street	2	2	0	0	0	0
Lizmans House, 321 Euston Road	42	42	0	0	0	0
56 Warren Street (Assumed windows)	3	3	0	0	0	0
57 Warren Street (Assumed windows)	4	4	0	0	0	0
58 Warren Street (Assumed windows)	4	4	0	0	0	0
59 Warren Street	5	5	0	0	0	0
60-61 Warren Street	12	12	0	0	0	0
62 Warren Street	6	6	0	0	0	0
63-68 Warren Street	26	26	0	0	0	0
71 Warren Street	3	3	0	0	0	0
9 Warren Street	1	1	0	0	0	0
10 Warren Street	1	1	0	0	0	0
11 Warren Street	1	1	0	0	0	0
12 Warren Street	1	1	0	0	0	0

NSL SUMMARY						
Address	Total No. of Rooms	Total that Meet BRE Guidelines	Below BRE Guidelines			
			20-29% Loss	30-39.9% Loss	>=40% Loss	Total
13-14 Warren Street & 118-120 Whitfield Street	9	9	0	0	0	0
15 Warren Street & 161 Whitfield Street	13	13	0	0	0	0
16 Warren Street	6	6	0	0	0	0
17 Warren Street	7	7	0	0	0	0
Duchess House, 18-19 Warren Street	9	9	0	0	0	0
TOTAL	**733**	**713**	**10**	**2**	**8**	**20**

10.101 The VSC results confirm that a total of 1,076 of the 1,106 (97%) habitable windows tested meet the BRE Guidelines so experience a Negligible effect (not significant). 16 (1%) of the remaining windows would experience a Minor Adverse (not significant) effect meaning 1,092 windows (99%) in total experience effects that are not significant.

10.102 3 (<1%) would experience a potentially Moderate Adverse effect (**significant**) and 11 (1%) would experience a potentially Major Adverse (**significant**) effect, prior to any professional judgement being applied.

10.103 The NSL results confirm that a total of 713 of the 733 (97%) habitable rooms tested meet the BRE guideline so experience a Negligible effect (not significant). 10 (1%) of the remaining rooms would experience a Minor Adverse (not significant) effect so 723 rooms (99%) in total would experience effects that are not significant.

10.104 2 (0%) rooms would experience a potentially Moderate Adverse (**significant**) effect and 8 (1%) would experience a potentially Major Adverse (**significant**) effect, prior to any professional judgement being applied.

10.105 For sunlight, there are 250 main living rooms surrounding the site, which have a southerly orientation (i.e. at least one window that is orientated within 90 degrees of due south) and are therefore a consideration in sunlight. These have all been assessed in terms of both winter and annual APSH.

10.106 Full detailed results are available within **ES Addendum Volume 3, Appendix: Daylight, Sunlight, Overshadowing and Solar Glare – Annex 2** and are summarised in Table 10.10 below. Rows shaded in green demonstrate full compliance with the BRE Guidelines

Table 10.10 Existing Baseline + Amended Proposed Development APSH Summary

APSH ROOM SUMMARY										
Address	Total No. Rooms	Meet BRE Guidelines	No. of rooms below the APSH stated in BRE Guidelines							
			Below Threshold for Winter APSH				Below Threshold for Annual APSH			
			20-30%	30-40%	>40%	Total	20-30%	30-40%	>40%	Total
17 to 33 William Road	36	36	0	0	0	0	0	0	0	0
Schafer House, University College	49	49	0	0	0	0	0	0	0	0

APSH ROOM SUMMARY										
Address	Total No. Rooms	Meet BRE Guidelines	No. of rooms below the APSH stated in BRE Guidelines							
			Below Threshold for Winter APSH				Below Threshold for Annual APSH			
			20-30%	30-40%	>40%	Total	20-30%	30-40%	>40%	Total
164-166 Drummond Street	11	11	0	0	0	0	0	0	0	0
Triton Building	46	46	0	0	0	0	0	0	0	0
40-60 Hampstead Road	60	59	0	0	1	1	1	0	0	1
1-6 Tolmers Square	22	22	0	0	0	0	0	0	0	0
183 North Gower Street	16	16	0	0	0	0	0	0	0	0
13-14 Warren Street & 118-120 Whitfield Street	3	3	0	0	0	0	0	0	0	0
15 Warren Street & 161 Whitfield Street	2	2	0	0	0	0	0	0	0	0
16 Warren Street	1	1	0	0	0	0	0	0	0	0
17 Warren Street	1	1	0	0	0	0	0	0	0	0
Duchess House, 18-19 Warren Street	3	3	0	0	0	0	0	0	0	0
TOTAL	**250**	**249**	**0**	**0**	**1**	**1**	**1**	**0**	**0**	**1**

10.107 The existing and Amended Proposed Development APSH results confirm that a total of 249 of the 250 (99%) southerly orientated main living rooms tested meet the BRE guideline so experience a Negligible (not significant) effect.

10.108 Of the 28 properties assessed, the effect to the daylight amenity of the 22 properties listed below would be permanent, direct, Negligible (not significant):

- 17 to 33 William Road;
- 183 North Gower Street;
- Warren Court, Euston Road;
- 301-305 Euston Road and 69-70 Warren Street;
- Lizmans House, 231 Euston Road;
- 56 Warren Street (Assumed Windows);
- 57 Warren Street (Assumed Windows);
- 58 Warren Street (Assumed Windows);
- 59 Warren Street;
- 60-61 Warren Street;
- 62 Warren Street;
- 63-68 Warren Street;
- 71 Warren Street;
- 9 Warren Street;
- 10 Warren Street;
- 11 Warren Street;
- 12 Warren Street;
- 13-14 Warren Street & 118-120 Whitfield Street;
- 15 Warren Street & 161 Whitfield Street;
- 16 Warren Street;
- 17 Warren Street; and
- Duchess House, 18-19 Warren Street.

10.109 The remaining six properties experience some effects that could be considered significant and are discussed below in more detail with a conclusion drawn on the overall impact and its significance on each property, once more detailed consideration and professional judgement has been given on a case-by-case basis.

Schafer House, University College

10.110 This building is in use as student accommodation. It was possible to obtain partial floorplans which have been incorporated within the model.

Daylight

10.111 A total of 162 windows serving 150 rooms are understood to face the site and have been included within the technical analysis.

10.112 All 162 windows (100%) will satisfy the typical BRE Guideline recommendations in terms of the VSC form of assessment and thus experience a Negligible effect (not significant).

10.113 149 of the 150 rooms (99%) will satisfy the typical BRE recommendations in regard to the NSL assessment and thus experience a Negligible effect (not significant).

10.114 The remaining bedroom experiences a relative change in NSL of 22%, which is Minor Adverse and fractionally beyond the 20% criteria suggested within the BRE Guidelines.

10.115 It should be noted that bedrooms are considered to be ‘less important’ by the BRE for NSL.

10.116 The building would remain fully BRE compliant for VSC and only one room experiences a fractional change in NSL which is considered Minor Adverse. Therefore, the overall effect to this property is considered to be permanent, direct and Negligible (not significant).

Sunlight

10.117 There are 49 southernly oriented rooms that have been considered for sunlight.

10.118 All 49 rooms (100%) will satisfy the typical BRE recommendations for both winter and total APSH assessment. Therefore, the effect of the Amended Proposed Development on the sunlight amenity to this property is considered to be permanent, direct and Negligible (not significant).

164-166 Drummond Street

10.119 This building is in use as residential accommodation. It was possible to obtain floorplans from the LBC planning portal which have been incorporated within the model.

Daylight

10.120 A total of 51 windows serving 17 rooms are understood to face the site and have been included within the technical analysis.

10.121 All 51 windows (100%) will satisfy the typical BRE Guideline recommendations in terms of the VSC form of assessment and thus experience a Negligible effect (not significant).

10.122 13 of the 17 rooms (76%) will satisfy the typical BRE recommendations in regard to the NSL assessment and thus experience a Negligible effect (not significant).

10.123 The remaining four bedrooms that do not meet the typical BRE recommendations for NSL would experience a relative change of 21 to 26%, with two of the rooms experiencing alterations that are fractionally beyond the 20% allowed for in the BRE. It should also be noted that these rooms are bedrooms that are considered 'less important' in NSL terms.

10.124 The building would remain fully BRE compliant for VSC and only a handful of bedrooms which are considered by the BRE to be 'less important' experience Minor adverse alterations in NSL. Therefore, the overall effect to this property is considered to be permanent, direct and Negligible (not significant).

Sunlight

10.125 There are 11 southernly oriented rooms that have been considered for sunlight.

10.126 All 11 rooms (100%) will satisfy the typical BRE recommendations for both winter and total APSH assessment. Therefore, the effect of the Amended Proposed Development on the sunlight amenity to this property is considered to be permanent, direct and Negligible (not significant).

Triton Building

10.127 It is understood that this residential building is made up of multiple flats. Layouts have been modelled from floorplans obtained from LBC planning records.

10.128 This building contains numerous, large external projecting balconies along the southern façade, directly facing the site. For the reasons explained in paragraphs 10.31 to 10.33 above, these balconies materially limit the access of skylight to the windows below making them particularly sensitive to changes in massing opposite. Subsequently, a detailed examination of the effects is required in advance of reaching a conclusion on the significance of the effects.

Daylight

10.129 A total of 298 windows serving 140 rooms have been included within the technical analysis.

10.130 286 of the 298 (96%) windows will satisfy the typical BRE Guideline recommendations in terms of the VSC form of assessment and thus experience a Negligible effect (not significant).

10.131 The remaining 12 windows, that do not meet the BRE recommendations, experience a relative change of between 20-23% which is fractionally beyond guidance and considered to be Minor Adverse. Therefore, all of the windows experience alterations in VSC that are not significant. It is also worth noting that the vast majority of these windows are located beneath balconies which restricts their receipt of daylight. As outlined within the BRE Guidelines an additional assessment which negates the limiting effect of the balconies has been undertaken which is discussed further below.

10.132 In regard to NSL, all 140 of the rooms (100%) will satisfy the typical BRE recommendations and thus experience a negligible effect (not significant).

10.133 An additional assessment has been undertaken which negates the limiting effect of the balconies. As outlined within the BRE Guideline, additional calculations have been taken for VSC

10.134 In this assessment, all of the windows assessed would satisfy the BRE Guidelines for VSC. In accordance with the recommendation of the BRE, this additional assessment demonstrates that the relative changes in VSC beyond the BRE Guideline targets, as a result of the Amended Proposed Development, is almost exclusively attributable to the existing architectural features of the building rather than the proposed massing itself.

10.135 Overall, the daylight effect to this property is considered to be permanent, direct and Negligible (not significant).

Sunlight

10.136 There are 46 southernly oriented rooms that have been considered for sunlight.

10.137 All 46 rooms (100%) will satisfy the typical BRE recommendations for both winter and total APSH assessment. Therefore, the effect of the Amended Proposed Development on the sunlight amenity to this property is considered to be permanent, direct and Negligible (not significant).

175 Drummond Street

10.138 It is understood that this residential building is made up of multiple flats. Layouts have been modelled from outline floorplans obtained from LBC planning records.

10.139 On the basis of this information, it appears that bedrooms face towards the site with the main habitable living spaces facing away from the site towards Drummond Street.

Daylight

10.140 A total of 14 windows serving 14 bedrooms face the site and have been included within the technical analysis.

10.141 All of the 14 windows (100%) will satisfy the typical BRE Guideline recommendations in terms of the VSC form of assessment and thus experience a Negligible effect (not significant).

10.142 In terms of NSL, 10 of the 14 rooms (71%) will satisfy the typical BRE recommendations and thus experience a Negligible effect (not significant).

10.143 The remaining four bedrooms that do not meet the typical BRE recommendations for NSL would experience a relative change of between 22% and 28%, which is considered Minor Adverse. It should be noted that these rooms are 'less important' bedrooms and relate to flats where the main living accommodation faces away from the site and remain unaffected by the Amended Proposed Development.

10.144 Overall, the daylight effect to this property is considered to be permanent, direct and Negligible (not significant).

Sunlight

10.145 All of the rooms that face towards the site that serve this property are in use as a bedroom, which the BRE Guidelines state do not need to be considered for sunlight.

40-60 Hampstead Road

10.146 It is understood this residential building is made up of multiple flats. Room layouts/uses have been assumed in the absence of any publicly available information.

10.147 Many of the windows serving the front of this building are located beneath deep external walkways which heavily restrict the receipt of daylight to the windows and rooms below. This is evidenced by the average VSC level for the windows on the 1st floor being just 5% and the average VSC level for the windows on the 2nd floor being less than 1%. A number of windows on both floors (12) currently achieve a VSC level of 0%. In situations such as this, where there are very low existing values, small absolute changes in daylight can easily result in large relative changes however these results must be treated with caution when arriving at a conclusion on the significance of effects

Daylight

10.148 A total of 62 windows serving 60 rooms are understood to face the site and have been included within the technical analysis.

10.149 50 of the 62 windows (81%) will satisfy the typical BRE Guideline recommendations in terms of the VSC form of assessment and thus experience a Negligible effect (not significant).

10.150 The remaining 12 windows, have an existing VSC value of 1% or less with all but two of the windows achieving a VSC of less than 0.2%. This is not a measurable or a useful level of VSC to provide internal illuminance to the rooms behind the windows. The majority of the windows experience an absolute change of less than 0.1% VSC and no more than a 0.4% change. Such fractional changes are clearly imperceptible and should effectively be discounted.

10.151 49 of the 60 rooms (81%) will satisfy the typical BRE recommendations in regard to the NSL assessment and thus experience a Negligible effect (not significant).

10.152 The remaining 11 rooms achieve sky visibility to just 18% of the room area or less in the existing condition, with the majority of rooms achieving sky visibility to between 0%-5% of the room. This is not a measurable or useful level of light and therefore the rooms will currently be reliant on artificial lighting for most if not all times of the year. Subsequently, the change recorded in the technical assessment will have little bearing on the light amenity within these rooms.

10.153 An additional assessment has been undertaken to demonstrate the limiting effect of the overhangs. As outlined within the BRE Guideline, additional calculations have been taken for VSC and NSL which negates the limiting effect of the balconies.

10.154 In this assessment, all of the windows and rooms would satisfy the BRE Guidelines for VSC and NSL demonstrating that the relative changes in daylight can be attributed to the existing architectural features of the building rather than the proposed massing itself.

10.155 In consideration of the above, the overall effect to this property is considered to be permanent, direct and Minor Adverse (not significant).

Sunlight

10.156 There are 60 southernly oriented rooms that have been considered for sunlight.

10.157 59 of the 60 rooms (98%) will satisfy the typical BRE recommendations for both winter and total APSH assessment and thus experience a Negligible effect (not significant).

10.158 The remaining room that does not meet the typical BRE recommendations for APSH is located on the 4th floor and will experience an absolute reduction in annual APSH of 5%, which is just beyond the 4% allowed for by the BRE. This room will retain a winter APSH of 3% and an annual APSH of 18%, which is typically considered to be a reasonable level of retained sunlight in a dense urban environment. Therefore, the effect of the Amended Proposed Development on the sunlight amenity to these property is considered to be permanent, direct and Minor Adverse (not significant).

1-6 Tolmers Square

10.159 It is understood that this is a residential building made up of multiple flats. It was possible to obtain partial floorplans which have been incorporated within the model. Where layouts are not known reasonable assumptions have been made.

10.160 There are a number of windows and rooms within this building that are located beneath deep recessed balconies and therefore experience very low levels of daylight in the existing condition of between 0% and 1.9% VSC. In situation such as this, small absolute changes in daylight levels can easily result in larger relative changes

Daylight

10.161 A total of 95 windows serving 61 rooms are understood to face the site and have been included within the technical analysis.

10.162 89 of the 95 windows (94%) will satisfy the typical BRE Guideline recommendations in terms of the VSC form of assessment and thus experience a Negligible effect (not significant).

10.163 Five of the remaining six windows, that do not meet the BRE recommendations, experience a relative change of between 22% and 33%. While these alterations could be considered Minor to Moderate Adverse, the absolute change in VSC as a result of the Amended Proposed Development does not exceed 0.11% VSC, which is an immaterial change and will not be noticeable to the occupants.

10.164 The remaining window will experience a relative change of 40%. This window, however, only achieves a existing VSC of 0.1% which is not a measurable or a useful level of VSC to provide internal illuminance to the rooms behind the windows. The absolute change to this window is 0.04%. Such fractional changes are clearly imperceptible and should effectively be discounted. The effects are therefore the effects are considered to be Minor Adverse.

10.165 An additional assessment has been undertaken to demonstrate the limiting effect of the balconies. In this assessment all of the windows and rooms would satisfy the BRE Guidelines, demonstrating that the relative changes in VSC can be partly attributed to the existing architectural features of the building rather than the proposed massing itself.

10.166 All 61 rooms (100%) will satisfy the typical BRE recommendations in regard to the NSL assessment and thus experience a Negligible effect (not significant).

10.167 In consideration of the above, the overall effect to this property is considered to be permanent, direct and Negligible (not significant).

Sunlight

10.168 There are 22 southernly oriented rooms that have been considered for sunlight.

10.169 All 22 rooms (100%) will satisfy the typical BRE recommendations for both winter and total APSH assessment. Therefore, the effect of the Amended Proposed Development on the sunlight amenity to this property is considered to be permanent, direct and Negligible (not significant).

Overshadowing (Sun on Ground)

10.170 Full detailed sun on the ground assessment results can be found at **ES Addendum Volume 3, Appendix: Daylight, Sunlight, Overshadowing and Solar Glare – Annex 4**.

10.171 As discussed at paragraph 10.36, the typical date for assessing sun on ground recommended by the BRE is 21 March. A summary of the sun on ground results for the six surrounding amenity spaces relevant for assessment is presented in Table 10.11 below.

Table 10.11 Completed Development Sun on Ground summary (Surround Areas)

Area	Pre-Deconstruction Baseline Conditions (% of Area Receiving two Hours of sun on 21st March)	With Amended Proposed Development Conditions (% of area receiving two hours of sun on 21st March)	% Alteration between Baseline and With Development Conditions	Scale of Effect
1. George Mews	70.5%	68%	2.5%	Negligible
2. Tolmers Square (main square)	74.7%	74.4%	0.3%	Negligible
3. Tolmers Square (private amenity areas 1)	62.8%	62.8%	0.0%	Negligible
4. Tolmers Square (private amenity areas 2)	0.0%	0.0%	0.0%	Negligible
5. Triton Building Courtyard	0.0%	0.0%	0.0%	Negligible
6. Euston Square	97.5%	96.4%	1.1%	Negligible

10.172 Table 10.11 shows that on the 21st March all six amenity spaces assessed will either meet the BRE criteria or experience no change and therefore will experience Negligible effects (not significant).

Solar Glare

10.173 In order to accurately understand the overall effect throughout the year at each assessment point, two assessment scenarios have been considered:

Solar reflections as a result of the existing Euston Tower; and

Solar reflections as a result of the Amended Proposed Development.

10.174 As the existing building on the site is significant it is important to understand, if there is any potential for glare, how this compares to the existing situation.

10.175 To understand the overall effect throughout the year at each assessment point, all of the potential instances of glare, their duration, and their relative angle as seen from the assessment point are plotted onto a grid, creating the Calendar Graphs for each point, as shown in **ES Addendum Volume 3, Appendix: Daylight, Sunlight, Overshadowing and Solar Glare – Annex 5.**

10.176 The light grey illustrates the times of daylight during each day and the dark grey illustrates the times of night. The yellow, green, orange and red colours indicate when solar glare may occur, and, depending on the colour, the angle at which it is likely to occur from the receptor. If a band of colour is tall, it means that solar glare is likely to occur for an extended period of time during that day. If the band of colour is thin and horizontal on the graph, it means solar glare may occur on each day but only for a limited time.

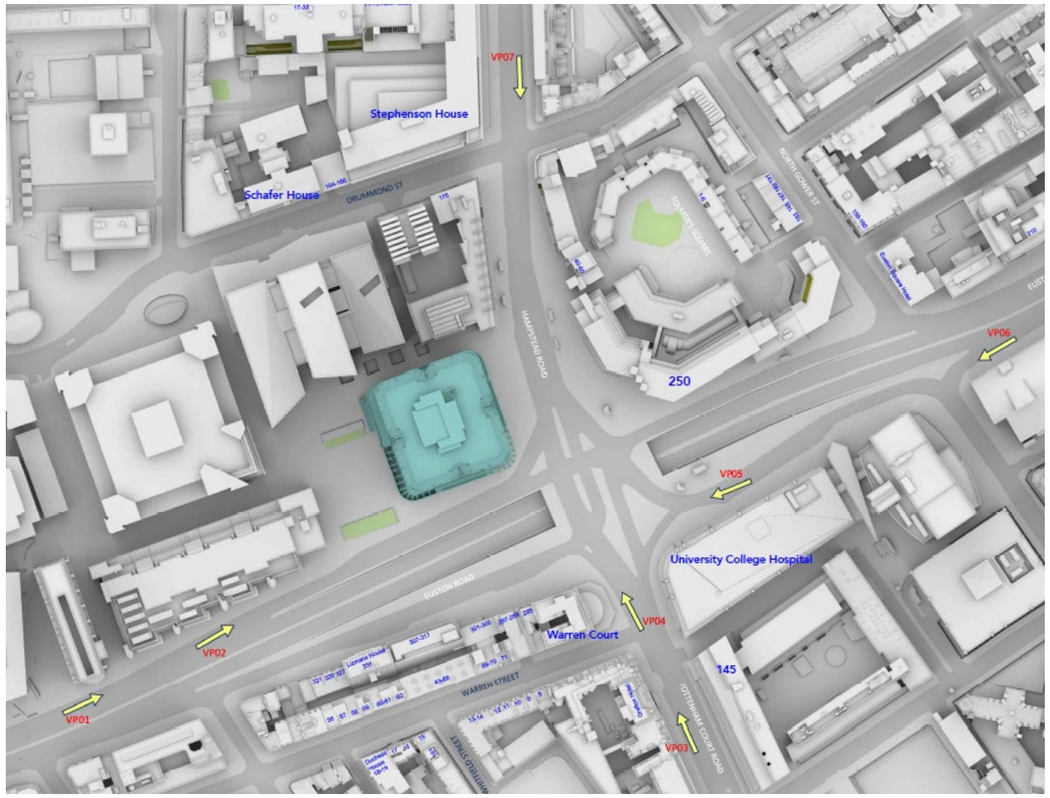
10.177 The duration of each glare occurrence as shown on the Calendar Graphs assumes a stationary viewer at the specified viewpoint. In relation to this study, however, the viewer (driver) would in fact move through the reflected beam, and this would potentially reduce the significance of the impact. Conversely the impact could be more significant if the driver is travelling along the path of a long, reflected beam.

10.178 The Calendar Graphs for the glare analysis undertaken in relation to the Amended Proposed Development are shown in drawings P3293/GC/13-20 and the Calendar Graphs for the glare analysis undertaken in relation to the existing Euston Tower are shown in drawings P3293/GC/01-06. Both are located in **ES Addendum Volume 3, Appendix: Daylight, Sunlight, Overshadowing and Solar Glare – Annex 5**.

10.179 These Calendar Graphs illustrate that there will be some instances of reflections (less than 30 degrees from the line of view) in both the existing and proposed condition.

10.180 Visualisations showing the existing and proposed position have been created for each of the relevant times at the viewpoints identified in Figure 10.4 below. These visualisations are shown in drawings P2193/GI/07-20 and seek to illustrate the worst dates/times for glare for both the existing building and the Amended Proposed Development. They also include the focal point and concentric circles indicating the angle from the line of sight. These provide a reference from which potential issues can be judged.

Figure 10.4 Scope of Analysis – Solar Glare



Viewpoint 1: Pedestrian crossing heading east on Euston Road (A501)

Viewpoint 2: Changing lane to come off Euston Road (A501) heading east

Viewpoint 3: Pedestrian crossing heading north on Tottenham Court Road

Viewpoint 4: Traffic lights heading north on Tottenham Court Road

Viewpoint 5: Traffic lights heading west on Euston Road

Viewpoint 6: Pedestrian crossing heading west on Euston Road

Viewpoint 7: Traffic lights heading south on Hampstead Road

10.181 The effects on each assessment viewpoint are discussed below.

Viewpoint 1

10.182 Viewpoint 1 considers the drivers view at a pedestrian crossing heading east on Euston Road (A501). It therefore considers whether the drivers view of the crossing would be affected.

Existing

10.183 The Calendar Graph for the existing scheme shows that there will be some solar reflections between 17:20 and 18:00 (BST) between the 9th April and the 23rd May. The majority of the instances will, however, occur for c. 5 minutes of the day.

Proposed

10.184 The Calendar Graph for the Amended Proposed Development shows that there will be some solar reflections for approximately 25 minutes between 17:15 and 17:50 (BST) between the 16th May to the 29th July. These instances will, however, have a reflection angle of more than 30 degrees and therefore the effect is considered to be Negligible (not significant).

10.185 There will be some very fleeting instances that occur between 3 degrees and 10 degrees between the 18th and 23rd April between 06:46 - 06:49 (BST). However, as this is such a short period of time the effect is considered to be Negligible (not significant).

10.186 Two dates/times where the glare angle is less than 30 degrees have been selected and the glare images produced. These are the 14th May 17:33 (BST) and the 29th April 06:56 (BST).

10.187 The May visualisation shows that the reflection of the sun is just inside of the 30 degree circle and therefore could readily be mitigated by use of the car's sun visor.

10.188 The April visualisation shows that there is a small reflection of the sun from the Amended Proposed Development however, the main source of glare will be coming directly from the sun and therefore would be identical between the existing building and the Amended Proposed Development.

10.189 It is important to note that these views are based on optimal conditions with a clear sky whereas in reality the number of instances of solar glare identified would be less frequent than that established in this technical analysis.

10.190 Based on the scale of effect criteria given in the *''Defining the Effect'* section, the overall effect on this assessment point is considered Minor Adverse (not significant). As the impacts are small and could readily be mitigated by a sun visor a more detailed assessment of the intensity of the reflections is not required.

Viewpoint 2

10.191 Viewpoint 2 considers the drivers view as they change lane to come off of Euston Road (heading east). It therefore considers whether the drivers view changing lanes would be affected.

Existing

10.192 The Calendar Graph shows that there will be some solar reflections between approximately 17:10 and 18:30pm (BST) between early April and early September in the existing condition.

10.193 There will also be some fleeting instances of solar reflections (<30 degrees) between 06.00 and 07.00 between the end of April and the middle of August. The solar reflections between approximately the 21st May and the 24th July have a reflection angle of more than 30 degrees and therefore the effect is considered to be Negligible (not significant).

Proposed

10.194 The Calendar Graph shows that there will be some solar reflections between 16:30 and 17:10 (BST) between the start of May and the end of August however, these instances will occur at an angle of over 30 degrees and therefore the effect is considered to be Negligible (not significant).

10.195 There will be some solar reflections (<30 degrees) at various times throughout the year however the vast majority of these are over a short period of time and therefore the effect is considered to be Negligible (not significant).

10.196 The 1st May at 07:07 (BST) has been selected as it appears to experience solar reflections (less than 30 degrees) for the longest period approximately 5-7 mins.

10.197 Visualisation image P2193_GI_11 shows that there is a small reflection of the sun from the Amended Proposed Development however, the main source of glare will be coming directly from the sun which is clearly unchanged from what is being experienced now.

10.198 Based on the scale of effect criteria given in the *''Defining the Effect'* section, the overall effect on this assessment point is considered Minor Adverse (not significant). The position will however not materially change from the existing.

Viewpoint 3

10.199 Viewpoint 3 considers the pedestrian crossing heading north on Tottenham Court Road. It therefore considers whether the drivers view of the crossing would be affected.

Existing

10.200 The Calendar Graph shows that there will be some solar reflections between 12:00pm and 1:30pm between early October and mid-March in the existing condition. Where there are longer periods of solar reflection they typically occur at an angle of >30 degrees.

Proposed

10.201 The Calendar Graph shows that there will be some solar reflections for a similar portion of the year between 12:20 and 13:30 and of a similar angle.

10.202 A visualisation has been prepared for a sample time of 12:05pm on the 10th February in both the existing and proposed condition. This time has been identified from the Calendar Graphs as an instance where the reflection angle is less than 30 degrees.

10.203 It can be seen from both views that the reflection of the sun is between 20 and 30 degree circle and therefore could readily be mitigated by use of the car's sun visor. Furthermore, there is unlikely to be a noticeable difference between the existing and proposed condition.

10.204 The overall effect on this assessment point is considered Minor Adverse (not significant). The position will however not materially change from the existing.

Viewpoint 4

10.205 Viewpoint 4 considers the view heading north on Tottenham Court Road facing the traffic lights. It therefore considers whether the drivers view of the traffic lights would be affected.

Existing

10.206 The Calendar Graph shows that there will be some solar reflections between 12:20 and 14:15 (BST) between the end of August and mid-April in the existing condition.

Proposed

10.207 The Calendar Graph shows that the solar reflections will be more spread out through the year.

10.208 A visualisation has been prepared for a sample time of 12:30 (GMT) on the 14th January in both the existing and proposed condition. This time has been identified from the Calendar Graphs as an instance where the reflection angle is less than 30 degrees.

10.209 It can be seen in the existing and proposed views that the reflection of the sun is between 20 and 30 degrees and therefore could readily be mitigated by use of the car's sun visor. Furthermore, there is unlikely to be a noticeable difference between the existing and proposed condition.

10.210 The overall effect on this assessment point is considered Minor Adverse (not significant). The position will however not materially change from the existing.

Viewpoint 5

10.211 Viewpoint 5 considers the traffic lights heading west on Euston Road. It therefore considers whether the drivers view of the traffic lights would be affected.

10.212 The Calendar Graphs show that there will be more instances of solar reflection as a result of the Amended Proposed Development albeit they will be for shorter periods of time.

10.213 A visualisation has been prepared for a sample time of 15:25 (GMT) on the 15th February in both the existing and proposed condition. This time has been identified from the Calendar Graphs as an instance where the reflection angle is less than 30 degrees for approximately15 minutes.

10.214 It can be seen in the existing and proposed views that the reflection of the sun is between the 20 and 30 degree circle and therefore could readily be mitigated by use of the car's sun visor. Furthermore, there is unlikely to be a noticeable difference between the existing and proposed condition.

10.215 The overall effect on this assessment point is considered Minor Adverse (not significant). The position will however not materially change from the existing.

Viewpoint 6

10.216 Viewpoint 6 considers pedestrian crossing heading west on Euston Road. It therefore considers whether the drivers view of the crossing would be affected.

Existing

10.217 The Calendar Graph shows that there will be some solar reflections (<30 degrees) between 5:35am and 6:00am (BST) between the end of May and mid-July in the existing condition.

Proposed

10.218 The Calendar Graph shows that the solar reflections will be more spread out through the year.

10.219 Visualisations have been prepared for a sample times of 05:50 (BST) on the 8th July and 05:51 (BST) on the 21st June in both the existing and proposed conditions. This time has been identified from the Calendar Graphs as an instance where the reflection angle is less than 30 degrees.

10.220 It can be seen from both visualisations that the reflections of the sun are approximately 20 degrees in both the existing and proposed condition and therefore could readily be mitigated by the car's sun visor. There is unlikely to be a noticeable difference between the existing and proposed condition.

10.221 The overall effect on this assessment point is considered Minor Adverse (not significant). The position will however not materially change from the existing.

Viewpoint 7

10.222 Viewpoint 7 considers the drivers view at the traffic lights heading south on Hampstead Road

Existing

10.223 The Calendar Graph shows that there will be some solar reflections (<30 degrees) between 08:50 and 09:40 (GMT) between mid-January and the end of March and 09:40 to 10:25 (BST) between the end of September and the end of November, in the existing condition.

Proposed

10.224 The Calendar Graph shows that the solar reflections will be similar in the proposed scenario albeit more spread out.

10.225 A visualisation has been prepared for a sample time of 08:51 (GMT) on the 13th November in both the existing and proposed conditions. This time has been identified from the Calendar Graphs as an instance where the reflection angle is less than 30 degrees.

10.226 It can be seen from the view in the visualisation that the reflection of the sun is between 10 and 20 degrees in the proposed condition and therefore could readily be mitigated by the car's sun visor. This reflection is also over a short period of time.

10.227 The overall effect on this assessment point is considered Minor Adverse (not significant).

MITIGATION, MONITORING AND RESIDUAL EFFECTS

Residual Effects

10.228 The residual effects resulting from the Amended Proposed Development are presented in Table 10.12, identifying whether the effect is significant or not.

Table 10.12 Residual Effects

Receptor	Description of the Residual Effect	Scale and Nature	Significant / Not Significant	Geo	D I	P T	St Mt Lt
Completed Development							
17 to 33 William Road	Reduction in Daylight	Negligible	Not Significant	L	D	P	Lt
	Reduction in Sunlight	Negligible	Not Significant	L	D	P	Lt
Schafer House, University College	Reduction in Daylight	Negligible	Not Significant	L	D	P	Lt
	Reduction in Sunlight	Negligible	Not Significant	L	D	P	Lt
164-166 Drummond Street	Reduction in Daylight	Negligible	Not Significant	L	D	P	Lt
	Reduction in Sunlight	Negligible	Not Significant	L	D	P	Lt
Triton Building	Reduction in Daylight	Negligible	Not Significant	L	D	P	Lt
	Reduction in Sunlight	Negligible	Not Significant	L	D	P	Lt
175 Drummond Street	Reduction in Daylight	Negligible	Significant	L	D	P	Lt
	Reduction in Sunlight	n/a	n/a				
40-60 Hampstead Road	Reduction in Daylight	Minor Adverse	Not Significant	L	D	P	Lt
	Reduction in Sunlight	Minor Adverse	Not Significant	L	D	P	Lt
1-6 Tolmers Square	Reduction in Daylight	Negligible	Not Significant	L	D	P	Lt
	Reduction in Sunlight	Negligible	Not Significant	L	D	P	Lt
183 North Gower Street	Reduction in Daylight	Negligible	Not Significant	L	D	P	Lt

Receptor	Description of the Residual Effect	Scale and Nature	Significant / Not Significant	Geo	D I	P T	St Mt Lt
	Reduction in Sunlight	Negligible	Not Significant	L	D	P	Lt
Warren Court, Euston Road	Reduction in Daylight	Negligible	Not Significant	L	D	P	Lt
	Reduction in Sunlight	n/a	n/a				
301-305 Euston Road & 69-70 Warren Street	Reduction in Daylight	Negligible	Not Significant	L	D	P	Lt
	Reduction in Sunlight	n/a	n/a				
Lizmans House, 321 Euston Road	Reduction in Daylight	Negligible	Not Significant	L	D	P	Lt
	Reduction in Sunlight	n/a	n/a				
56 Warren Street (Assumed windows)	Reduction in Daylight	Negligible	Not Significant	L	D	P	Lt
	Reduction in Sunlight	n/a	n/a				
57 Warren Street (Assumed windows)	Reduction in Daylight	Negligible	Not Significant	L	D	P	Lt
	Reduction in Sunlight	n/a	n/a				
58 Warren Street (Assumed windows)	Reduction in Daylight	Negligible	Not Significant	L	D	P	Lt
	Reduction in Sunlight	n/a	n/a				
59 Warren Street	Reduction in Daylight	Negligible	Not Significant	L	D	P	Lt
	Reduction in Sunlight	n/a	n/a				
60-61 Warren Street	Reduction in Daylight	Negligible	Not Significant	L	D	P	Lt
	Reduction in Sunlight	n/a	n/a				
62 Warren Street	Reduction in Daylight	Negligible	Not Significant	L	D	P	Lt
	Reduction in Sunlight	n/a	n/a				
63-68 Warren Street	Reduction in Daylight	Negligible	Not Significant	L	D	P	Lt
	Reduction in Sunlight	n/a	n/a				
71 Warren Street	Reduction in Daylight	Negligible	Not Significant	L	D	P	Lt
	Reduction in Sunlight	n/a	n/a				
9 Warren Street	Reduction in Daylight	Negligible	Not Significant	L	D	P	Lt
	Reduction in Sunlight	n/a	n/a				
10 Warren Street	Reduction in Daylight	Negligible	Not Significant	L	D	P	Lt
	Reduction in Sunlight	n/a	n/a				
11 Warren Street	Reduction in Daylight	Negligible	Not Significant	L	D	P	Lt
	Reduction in Sunlight	n/a	n/a				
12 Warren Street	Reduction in Daylight	Negligible	Not Significant	L	D	P	Lt
	Reduction in Sunlight	n/a	n/a				
13-14 Warren Street & 118-120 Whitfield Street	Reduction in Daylight	Negligible	Not Significant	L	D	P	Lt
	Reduction in Sunlight	Negligible	Not Significant	L	D	P	Lt
15 Warren Street & 161 Whitfield Street	Reduction in Daylight	Negligible	Not Significant	L	D	P	Lt
	Reduction in Sunlight	Negligible	Not Significant	L	D	P	Lt
16 Warren Street	Reduction in Daylight	Negligible	Not Significant	L	D	P	Lt
	Reduction in Sunlight	Negligible	Not Significant	L	D	P	Lt
17 Warren Street	Reduction in Daylight	Negligible	Not Significant	L	D	P	Lt
	Reduction in Sunlight	Negligible	Not Significant	L	D	P	Lt
Duchess House, 18-19 Warren Street	Reduction in Daylight	Negligible	Not Significant	L	D	P	Lt
	Reduction in Sunlight	Negligible	Not Significant	L	D	P	Lt
George Mews	Reduction in Sun on Ground	Negligible	Not Significant	L	D	P	Lt
Tolmers Square (main square)	Reduction in Sun on Ground	Negligible	Not Significant	L	D	P	Lt
Tolmers Square (private amenity areas	Reduction in Sun on Ground	Negligible	Not Significant	L	D	P	Lt
Tolmers Square (private amenity areas	Reduction in Sun on Ground	Negligible	Not Significant	L	D	P	Lt
Triton Building Courtyard	Reduction in Sun on Ground	Negligible	Not Significant	L	D	P	Lt
Euston Square	Reduction in Sun on Ground	Negligible	Not Significant	L	D	P	Lt
Viewpoint 1	Solar Glare	Minor Adverse	Not Significant	L	D	T	Mt
Viewpoint 2	Solar Glare	Minor Adverse	Not Significant	L	D	T	Mt
Viewpoint 3	Solar Glare	Minor Adverse	Not Significant	L	D	T	Mt
Viewpoint 4	Solar Glare	Minor Adverse	Not Significant	L	D	T	Mt
Viewpoint 5	Solar Glare	Minor Adverse	Not Significant	L	D	T	Mt
Viewpoint 6	Solar Glare	Minor Adverse	Not Significant	L	D	T	Mt
Viewpoint 7	Solar Glare	Minor Adverse	Not Significant	L	D	T	Mt

Notes:
Residual Effect Scale = Negligible / Minor / Moderate / Major
Nature = Beneficial or Adverse
Geo (Geographic Extent) = Local (L), Borough (B), Regional (R), National (N)
D = Direct / I = Indirect P = Permanent / T = Temporary St = Short Term / Mt = Medium Term / Lt = Long Term
N/A = not applicable / not assessed

LIKELY SIGNIFICANT EFFECTS

10.229 There are no likely significant effects identified as a result of the implementation of the Amended Proposed Development.