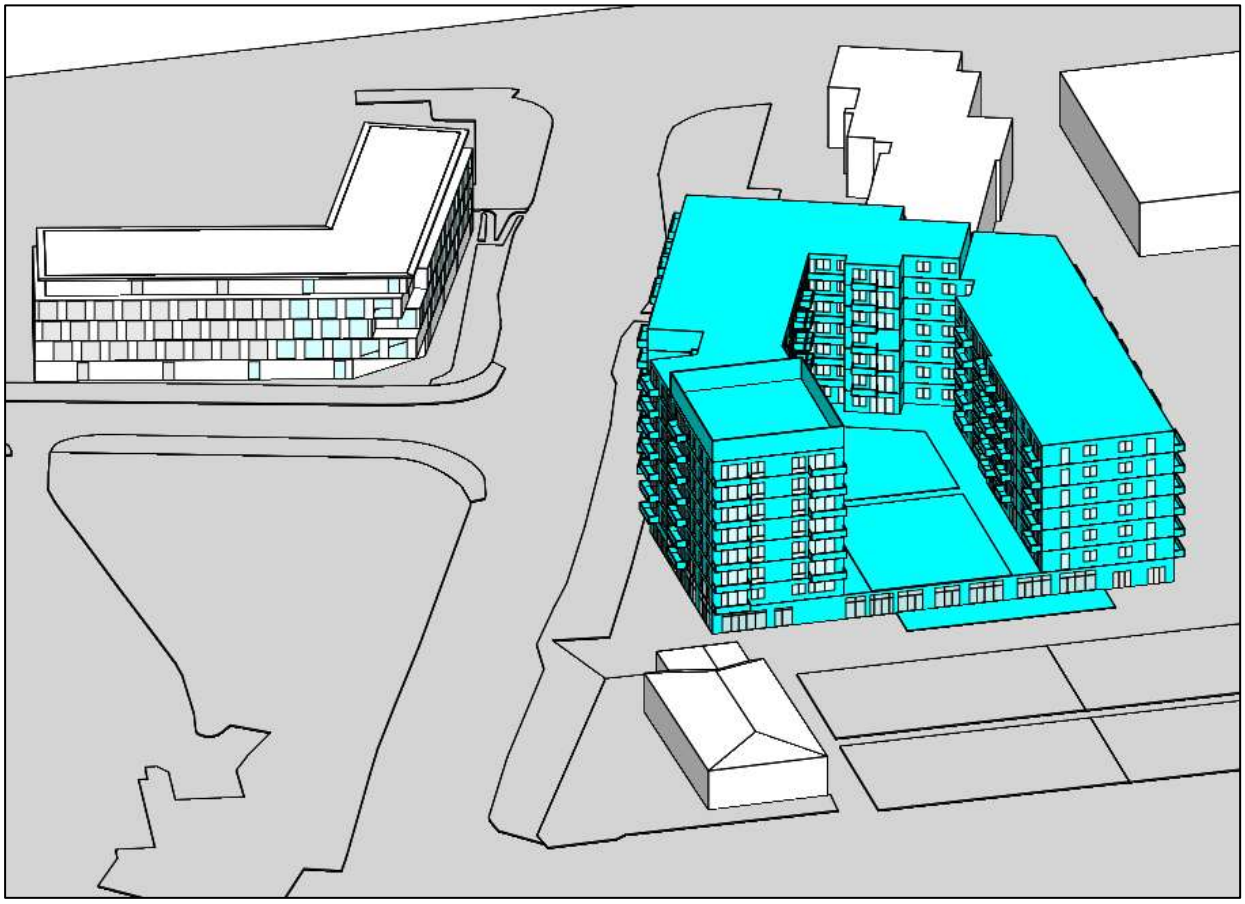
Project: Bancroft View SHD

Report Title: Daylight, Sunlight and Overshadowing Analysis



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Client: Greenhills Living Ltd.

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EXECUTIVE SUMMARY

A comprehensive Daylight, Sunlight and Overshadowing Assessment for this proposed project is presented in this report. This assessment makes reference to the prescribed methodologies of the BRE guide and applied the specific daylight / sunlight quantitative performance standards contained therein. The BRE guidance refers to the BRE document 'Site Layout Planning for Sunlight and Daylight: A Guide to Good Practice' (2011) (herein referred to as the "BRE Guide") by P J Littlefair, which is based on the previous British daylighting standard (BS 8206-2:2008) and has been accepted as good practice by Planning Authorities.

The BRE Guide gives advice on site layout to achieve provision of daylight and sunlight both within buildings, and in the open spaces between them. In general, it aims to aid designers in considering the relationship between new and existing buildings to ensure that each retains the potential to achieve good daylighting and sunlight levels. This authoritative document is widely used to provide guidance during the planning and design stages of building development in the UK and Ireland.

It is noted that BS 8206-2:2008: Lighting for Buildings - Part 2: Code of practice for daylighting was recently replaced with EN 17037:2018 Daylight in Buildings. BRE is currently revising the BRE Guide (BR209) to align their guidance with the new EN 17037:2018 however, this updated guidance document has not yet been published. Until the new BRE Guide is released, the position of BRE can be summarised from a post by Dr. Littlefair on the LinkedIn Planning Daylight & Sunlight Group (BRE BR209):

"BR209 currently refers to the former British Standard BS 8206 Part 2. For the time being, until BR209 is rewritten, we are adopting a flexible approach to applying the two standards, for example in assessing the daylight and sunlight available in new buildings. So for example if we were reviewing a daylight report for a local authority, we would consider it reasonable to accept either average daylight factor tables calculated using BS8206 or median daylight factors/median illuminances calculated using EN17037, provided they were calculated and presented properly.
EN17037 does not deal with loss of daylight or sunlight to existing buildings, so the current BR209 methodology can be used here, until the revised version is published.".

The British implementation of this standard (BS EN 17037) includes a "National Annex" with requirements for dwellings that mean it is comparable with the previous standard (BS8206). In

Ireland, there is only IS EN 17037:2018. Unlike the British Standard (BS EN 17037), the Irish implementation does not contain a National Annex. The 'Sustainable Urban Housing: Design Standards for New Apartments' (last revised 23 December 2020), the 'Urban Development and Building Heights Guidelines for Planning Authorities" (published December 2018) and the new 'Dún Laoghaire Rathdown County Development Plan 2022-2028' (adopted 10 March 2022, which will become operative on 21 April 2022) do not mention, address or require compliance with the European Standard (published 12 December 2018) or the Irish implementation (published 28 January 2019).

As a consequence of this, we have carried out a comprehensive daylighting analysis using both standards, providing daylighting results in terms of Average Daylight Factor (based on previous British Standard – BS 8206-2) and Spatial Daylight Autonomy (based on current European Standard – EN 17037) and the National Annex within the British implementation of the European Standard (BS EN 17037). The sunlight component of this assessment has been carried out in accordance with existing BRE guidance (BR209).

It is important that the guidelines that exist in relation to daylight and sunlight are read in the correct context and are not viewed as mandatory requirements. Requirements for daylight should be balanced against other elements of the design such as thermal performance (which is directly impacted by the size, shape and location of glazing) and the risk of overheating due to excessive glazing areas. This approach will ensure an optimal overall solution is reached for the development.

A summary of each component of the analysis is provided below:

Impact of loss of daylight to neighbouring properties
A simulation was run to quantify any reduction in VSC resulting from the proposed development massing. Where the VSC is greater than 27%, reasonable daylighting levels are available according to the BRE Industry standard. Even where the VSC is found to be less than 27%, if the reduction comparing the "before and after scenarios" is less than a 20% reduction daylighting is unlikely to be significantly affected / noticed. The Vertical Sky Component (VSC) Analysis is covered in *Section 8* of this report. A summary of the results are as follows; The analysis confirms that all windows of properties surrounding the proposed development will not incur a noticeable loss of skylight in accordance with BRE Guidance (openings shown in green and yellow in the model imagery within Section 8). The form of the building was altered during the design phase to ensure that the VSC of immediately adjacent buildings was protected. This iterative process resulted in the overall massing of the development ultimately being reduced in order to preserve sufficient access to skylight in surrounding properties. The exact VSC results of these spaces are tabulated and reviewed in Appendix E.

Average Daylight Factor within the proposed Apartments/Houses

Average Daylight Factor results are covered in detail in *Section 9* of this report. Daylight performance for this development has been assessed using BR209 (BRE guidance document based on the standards outlined in BS8206-2) and EN 17037 (latest European Standard which supersedes BS8206). A summary of the results are as follows;

Average Daylight Factor (BS8206-2: 2008)

Minimum recommended Average Daylight Factors (ADF) are:

- Bedrooms – 1.00 %
- Kitchen/Living/Dining– 2.00 %

Calculated ADF results for all rooms eligible for assessment are as follows:

- **99.7%** of Bedrooms achieve an ADF of ≥ 1.00%
- **85.3%** of Kitchen/Living/Dining spaces achieve an ADF of ≥ 2.00% (The BRE recommended ADF for kitchens)
- **93.4%** of Kitchen/Living/Dining spaces achieve an ADF of ≥ 1.50% (The BRE recommended for living spaces)

The calculated ADF results for each space assessed are presented in *Section 9* and Appendix B of this report.

Spatial Daylight Autonomy (EN 17037:2018)

In order to comply with the daylighting standard set out in EN 17037, each space assessed must achieve the following:

- 300 Lux over at least 50% of its floor area for over 50% of annual daylit hours, and
- 100 Lux over at least 95% of its floor area for over 50% of annual daylit hours

The results of this spatial daylight autonomy assessment are summarised below and tabulated in detail in Appendix C of this report in accordance with EN 17037.

- **91.40%** of the total number of spaces assessed achieve the annual required illuminance according to EN 17037 (Bedrooms and Kitchen/Living spaces assessed using the EN17037 metric outlined above)

Spatial Daylight Autonomy using British National Annex Illuminance Targets (BS EN 17037:2018)

The spaces were also assessed for spatial daylight autonomy using the British National Annex illuminance targets shown below. This BS EN standard includes a national annex which provides adjusted illuminance targets for each room type as shown in *Table NA.1 — Values of target illuminance for room types in UK dwellings*, the minimum target daylight provisions for bedrooms and kitchen/living/dining spaces are:

- Kitchen/Living/Dining – 200 Lux achieved over at least 50% of the reference plane (0.85m) and
- Bedrooms – 100 Lux achieved over at least 50% of the reference plane (0.85m)

Table NA.1 — Values of target illuminance for room types in UK dwellings

Room type	Target illuminance E_T (lx)
Bedroom	100
Living room	150
Kitchen	200

A summary of the results are as follows;

- 99.7% of bedrooms achieve the required annual illuminance according to BS EN 17037 (100 Lux test)
- 95.9% of kitchens/living/dining rooms achieve the required annual illuminance according to BS EN 17037 (200 Lux test)
- **98.3%** of the total number of spaces assessed achieve the annual required illuminance according to the National Annex within BS EN 17037.

The results of this spatial daylight autonomy assessment are summarised below and tabulated in detail in Appendix D of this report in accordance with EN 17037.

A number of compensatory factors exist within the spaces that do not meet the daylight performance criteria outlined above. These are described in *Section 12* of this report.

Sunlight availability – proposed living spaces

The BRE guidance document states that rooms will appear reasonably sunlit provided:

- at least one main window wall faces within 90° of due south and
- the centre of at least one window to a main living room can receive 25% of annual probable sunlight hours, including at least 5% of annual probable sunlight hours in the winter months between 21st September and 21st March.

This analysis confirms that the vast majority of eligible living space windows of the proposed development achieve the BRE target sunlight hours for annual and winter assessments, meaning these spaces will appear reasonably sunlit in line with BRE guidance.

All other eligible openings assessed meet the BRE recommendation for both annual and winter sunlight.

This information is presented in detail in *Section 10* of this report.

Sunlight availability – surrounding building living spaces

The BRE guidance document states that rooms will appear reasonably sunlit provided:

- at least one main window wall faces within 90° of due south and
- the centre of at least one window to a main living room can receive 25% of annual probable sunlight hours, including at least 5% of annual probable sunlight hours in the winter months between 21st September and 21st March.

All of surrounding building openings assessed achieve the BRE recommended 25% annual probable sunlight hours and 5% winter probable sunlight hours.

This information is presented in detail in *Section 10* of this report.

Sunlight availability within amenity spaces

Sunlight availability results are covered in detail in *Section 10* of this report. All proposed amenity areas were assessed for sunlight availability.

BRE Guidelines recommend that for an amenity space to appear adequately sunlit throughout the year, at least half of the amenity space should receive at least two hours of sunlight on the design day, March 21st. If, as a result of a new development, an existing garden or amenity area does not meet the above, and the area which can receive two hours of sun on March 21st is less than 0.8 times its former value, then the loss of sunlight is likely to be noticeable.

The analysis confirms that each of the individual amenity spaces assessed within the proposed development will achieve 2 hours of sunshine on the 21st of March over at least 50% of its area in line with BRE recommendations. The tabulated results for each individual space can be seen in Section 10.

This analysis verifies that the proposed development will not have an adverse impact on the sunlight availability in the amenity areas of its neighbouring properties. Each area assessed achieves sufficient sunlight over at least 50% of its area.

Overshadowing Analysis

March 21st

Partial overshadowing of the surrounding properties/gardens to the west limited to short time periods during the morning. Minor overshadowing to the open space of the adjacent apartments to the north limited to a short time period in the late afternoon. No other additional overshadowing impact was recorded.

June 21st

Partial overshadowing of the adjacent residential blocks to the east limited to short time periods in the evening. No other additional overshadowing impact was recorded.

December 21st

Partial overshadowing of the adjacent apartments and courtyard to the north during the afternoon. No other additional overshadowing impact was recorded.

Overshadowing assessment imagery is provided in Appendix A of this report.

1. INTRODUCTION

Passive Dynamics Sustainability Consultants has prepared this Daylight, Sunlight and Overshadowing report for and on behalf of Greenhills Living Ltd. to accompany the planning application for the proposed residential development at the lands on Greenhills Road (north of Bancroft Park, south/west of Hibernian Industrial Estate and east of Airton Road junction), Tallaght, Dublin 24, Co. Dublin. The scope of the assessment was to determine the following:

- Average Daylight Factor within the proposed apartments
- Sunlight availability within the proposed development andamenity spaces
- Overshadowing analysis and impact to neighbouring properties

Daylight and Sunlight calculations have been carried out in accordance with BRE's 'Site Layout Planning for Sunlight and Daylight: A Guide to Good Practice' (2011) (herein referred to as the "BRE Guide") by P J Littlefair, which is accepted as good practice by Planning Authorities. The Design Standards for New Apartments - Guidelines for Planning Authorities (March 2018) were also considered as part of this study.

The BRE Guide gives advice on site layout to achieve provision of daylight and sunlight both within buildings, and in the open spaces between them. In general, it aims to aid designers in considering the relationship between new and existing buildings to ensure that each retains the potential to achieve good daylighting and sunlight levels.

The BRE Guide states in the introduction that: "The guide is intended for building designers and their clients, consultants and planning officials. ***The advice given here is not mandatory and the guide should not be seen as an instrument of planning policy;*** *its aim is to help rather than constrain the designer. Although it gives numerical guidelines,* ***these should be interpreted flexibly since natural lighting is only one of many factors in site layout design.*** *In special circumstances the developer or planning authority may wish to use different target values. For example, in a historic city centre, or in an area with modern high-rise buildings, a higher degree of obstruction may be unavoidable if new developments are to match the height and proportions of existing buildings".* **It is therefore important that the guidelines that exist in relation to daylight and sunlight are read in the correct context and are not viewed as mandatory requirements.**

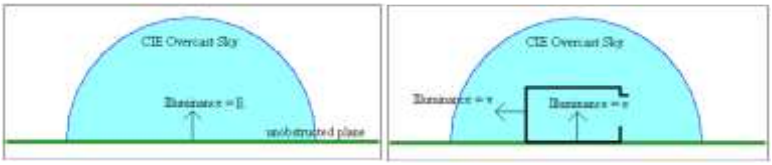
2. DEVELOPMENT LOCATION AND SURROUNDINGS

The proposed mixed-use development is located in Tallaght, Co. Dublin and is surrounded by:

Orientation	Name of the Surrounding Buildings	Type of Buildings
North	The Tanning shop and Pizza Hut takeout	Retail Unit
East	Liffey Providers - Builders Merchants serving both the Trade and Public	Retail Unit
East	D24 Crash Repairs	Retail Units
South	Astro Park, Tallaght (sports centre for family and community).	Sports Hall
North West	Kilnamanagh Tymon Primary Care Centre.	Primary Care centre

3. DEFINITIONS

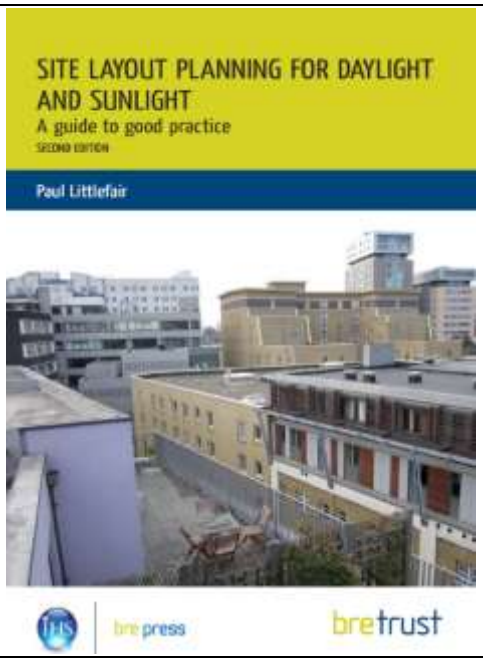
The technical definitions that are referred to in this report are explained below.

BRE	The Building Research Establishment (BRE) is a centre of building science in the United Kingdom, owned by charitable organisation the BRE Trust. It is a former UK government national laboratory that was privatised in 1997.
Vertical Sky Component (VSC)	The Vertical Sky Component (VSC) measures the amount of skylight available to a window. This represents the amount of daylight available to the window. The BRE Guide describes the VSC as the "Ratio of that part of illuminance, at a point on a given vertical plane that is received directly from a CIE standard overcast sky, to illuminance on a horizontal plane due to an unobstructed hemisphere of this sky. Usually the "given vertical plane" is the outside of a window wall. The VSC does not include reflected light, either from the ground or from other buildings."  E= illuminance on an unobstructed plane. (the amount of daylight available in an open space with no obstructions) v= illuminance at a point in the centre of a vertical opening (the amount of daylight available at a point in the centre of a vertical opening) Vertical Sky Component = v/E
CIE Standard Overcast Sky	CIE Standard Overcast Sky is a typical overcast sky used for daylight analysis. For this completely overcast sky, the ratio of its luminance Ly at an angle of elevation y above the horizontal to the luminance Lz at the zenith is given by: $L_y = L_z \frac{(1 + 2\sin y)}{3}$ The CIE standard overcast sky is darkest at the horizon and brightest at the zenith (vertically overhead).
Average Daylight Factor (ADF)	This is a measure of the amount of daylight available to a space relative to the level of light outside. The ratio of total daylight flux incident on a reference area to total area of reference area, expressed as a percentage of outdoor illuminance on a horizontal plane due to an unobstructed hemisphere of sky of assumed or known luminance distribution. Thus a 1% ADF would mean that the average indoor illuminance would be one hundredth the outdoor unobstructed illuminance.

Annual Probable Sunlight Hours (APSH)	Annual Probable Sun Hours (APSH) represents the sunlight that a given window may expect over a year period. APSH is expressed as the percentage of direct sunlight hours divided by number of hours when sky was clear with sun.
sDA	Spatial Daylight Autonomy (sDA) examines whether a space receives enough daylight during standard operating hours (8 a.m. to 6 p.m.) on an annual basis using hourly illuminance grids on the horizontal work plane. sDA is calculated virtually through computational simulation with precise parameters. It references a local climate file to run hourly illuminance maps in the lighting software package.
EN	European Norm (EN) abbreviation verifies that the technical standard referenced throughout this report (EN 17037) is drafted and maintained by the European Committee for Standardisation (CEN).

4. GUIDANCE DOCUMENTS REFERENCED DURING THIS STUDY

This Daylight, Sunlight and Overshadowing Assessment has been carried out in accordance with the following best practice standard as outlined by the BRE and cross referenced by the Department of Housing, Planning and Local Government.

	This document gives advice on site layout planning to achieve good sun lighting and daylighting, both within buildings and in the open spaces between them. This authoritative document is widely used to provide advice during the planning and design stages of building development in the UK and Ireland. Guidance is given on site layout for good sun lighting and daylighting; safeguarding of daylight and sunlight within existing buildings nearby; and the protection of daylighting of adjoining land for future development.
	Design Standards for New Apartments - Guidelines for Planning Authorities (December 2020). This document outlines the design guides that should be used to assess daylight provision for new apartments. 6.6 Planning authorities should have regard to quantitative performance approaches to daylight provision outlined in guides like the BRE guide *'Site Layout Planning for Daylight and Sunlight'* (2nd edition) or BS 8206-2: 2008 – *'Lighting for Buildings – Part 2: Code of Practice for Daylighting'* when undertaken by development proposers which offer the capability to satisfy minimum standards of daylight provision.

	**EN 17037:2018** This European standard provides target illumincance levels to be achieved within a horizontal plane in a space in order for the space to be considered adequately daylit. The standard "encourages building designers to assess and ensure successfully daylit spaces. It also allows building designers and developers to target ambitions with respect to daylighting, as well as addressing other issues related to daylight design". The document defines metrics used for the evaluation of daylighting conditions and gives principles of calculation and verification. These principles address the issue of variability of daylight over the days and the year.

It is noted that BS 8206-2:2008: Lighting for buildings - Part 2: Code of practice for daylighting was recently replaced with BS EN 17037:2018 Daylight in Buildings. BRE is currently looking to update and re-publish BR209 to align their guidance with the new EN 17037:2018 in 2020. Until then, the position of BRE can be summarised from a post by Dr. Littlefair on the LinkedIn Planning Daylight & Sunlight Group (BRE BR209):

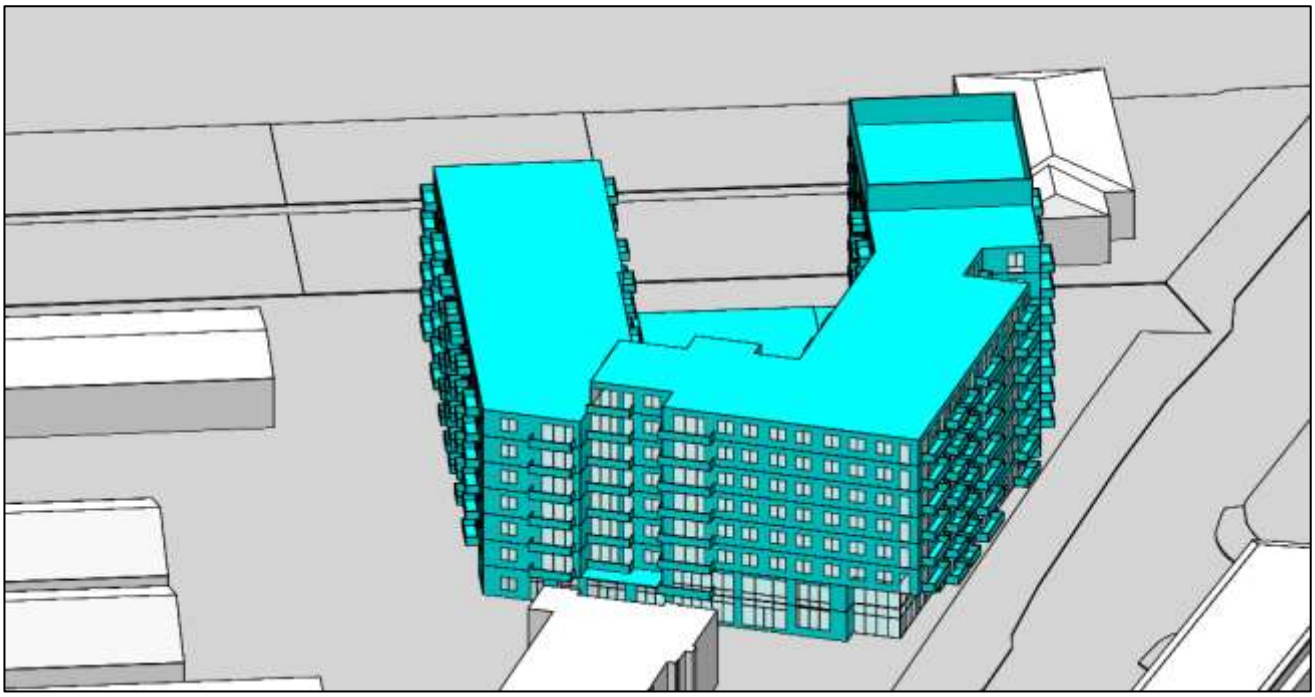
"BR209 currently refers to the former British Standard BS 8206 Part 2. For the time being, until BR209 is rewritten, we are adopting a flexible approach to applying the two standards, for example in assessing the daylight and sunlight available in new buildings. So for example if we were reviewing a daylight report for a local authority, we would consider it reasonable to accept either average daylight factor tables calculated using BS8206 or median daylight factors/median illuminances calculated using EN17037, provided they were calculated and presented properly.

EN17037 does not deal with loss of daylight or sunlight to existing buildings, so the current BR209 methodology can be used here, until the revised version is published.".

5. SIMULATION MODEL IMAGES

The following images show the simulation model used to analyse the daylight, sunlight, and overshadowing performance for this proposed scheme.

Site Model Imagery



Above: Mode viewed from the North

Above: Model viewed from the South

Above: Model viewed from the East

Above: Model viewed from the West

6. SIMULATION SOFTWARE DESCRIPTION

6.1. IES Virtual Environment

IES Virtual Environment is the world's leading building performance analysis tool. The software provides an in-depth suite of integrated analysis tools which allow an integrated design approach and highly detailed results.

6.2. IES Virtual Environment - Radiance

Radiance is a software package developed by the Lighting Systems Research group at the Lawrence Berkeley Laboratory in California, USA. Radiance was developed as a research tool for predicting the distribution of visible radiation in illuminated spaces.

6.3. IES Virtual Environment - Suncast

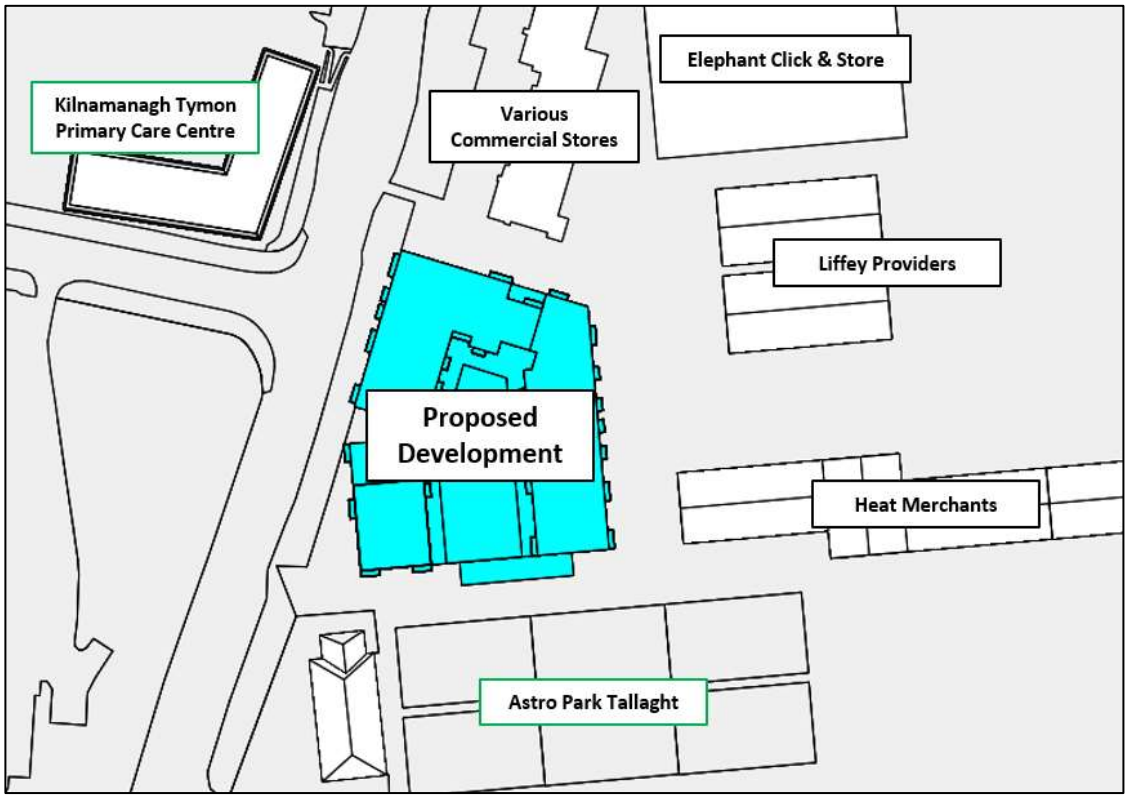
SunCast enables engineers to perform shading and solar insolation analysis studies and can generate images and animations. SunCast generates shadows and internal solar insolation from any sun position defined by date, time, orientation, site latitude and longitude. SunCast can be used at any stage of the design process from a model created by the IES Model Builder.

6.4. Lightstanza

LightStanza is a web-based application used for daylighting and glare simulations. The application runs on the validated Radiance engine to provide accurate daylighting results in terms of Average Daylight Factor (ADF) and Spatial Daylight Autonomy (sDA).

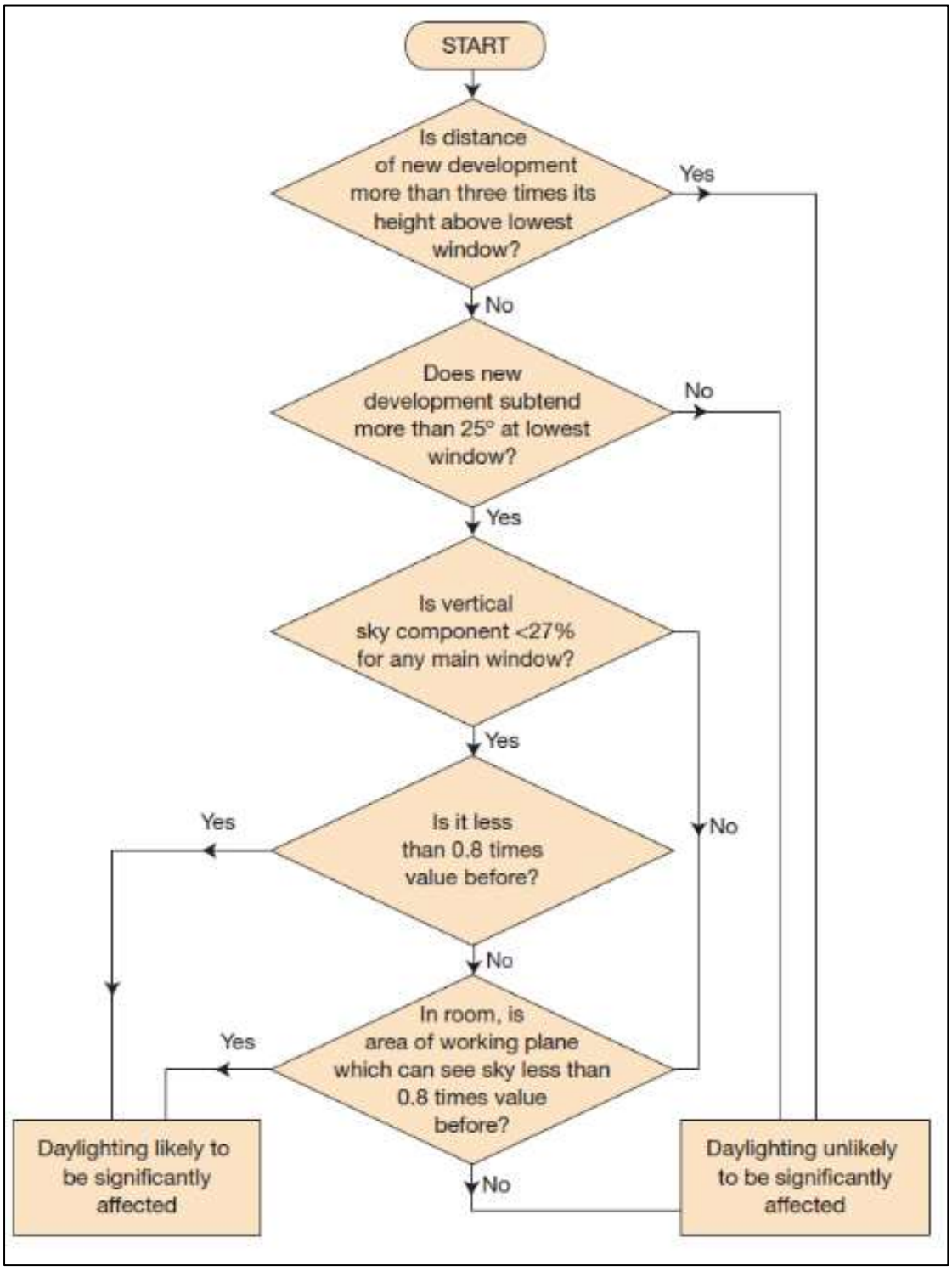
7. ASSESSMENT METHODOLOGY – DAYLIGHT ASSESSMENT NEIGHBOURING PROPERTIES

The guidelines given within the BRE Guide are intended for use for rooms in adjoining dwellings where daylight is required, including living rooms, kitchens, dining rooms and bedrooms. Windows to bathrooms, toilets, storerooms, and circulation areas need not be analysed. We have included within our analysis the adjacent primary care centre and astro park. It should be noted that the hospital is technically not a residential building, however its windows have been assessed for VSC and APSH as part of this analysis.



To analyse the effects of the proposed development on the adjacent applicable buildings in the immediate surrounding area, a Vertical Sky Component (VSC) simulation was carried out using the IES Radiance software package. For the VSC definition refer to Section 3 of this report. The VSC was calculated with the proposed development in place using a simulation model. In accordance with Section 2.2 of the BRE Guide, where a VSC of 27% or greater is achieved, “enough skylight should still be reaching the existing building” and therefore daylighting will not be significantly affected. Where a VSC less than 27% is achieved, further analysis is required to determine the likely daylight levels that will be achieved in affected spaces. Any reductions in VSC should be limited to 20%. The BRE methodology regarding VSC is summarised below.

7.1. Methodology (as referenced in Section 2.2 of the BRE Guide)



Above: *Decision chart / methodology used to quantify the impact of a new development on daylight levels of nearby buildings / dwellings.*

7.2. Daylight Assessment – Proposed Development

The assessment methodology used for this analysis is taken from the BRE Guidance document (BR209) based on the standards set out in the British Standard BS8206:2. This analysis also refers to the standards outlined in European Standard EN 17037:2018 and the British national annex provided in the BS EN 17037 standard for additional information.

7.3. Average Daylight Factor (ADF) Using BS 8206-2:2008 / BR209)

BRE's 2011 guidance document Site Layout Planning for Daylight and Sunlight states the following with respect to Average Daylight Factors (ADF).

> C4 If a predominantly daylit appearance is required, then the ADF should be 5% or more if there is no supplementary electric lighting, or 2% or more if supplementary electric lighting is provided. There are additional recommendations for dwellings of 2% for kitchens, 1.5% for living rooms and 1% for bedrooms. These additional recommendations are minimum values of ADF which should be attained even if a predominantly daylit appearance is not achievable.

Above: From BRE's 2011 guidance document Site Layout Planning for Daylight and Sunlight

Therefore, in line with this guidance, minimum recommended average daylight factors are:

- **Bedrooms – 1.00 %**
- **Kitchen/Living/Dining – 2.00 %**

The following assumptions have been applied in this study:

- Sky Conditions: Standard CIE overcast sky
- Time (24hr): 12:00
- Date: 21 September
- Working Plane: 0.85m

7.4. Spatial Daylight Autonomy (SDA) Using EN 17037:2018

EN 17037:2018 – Daylight in Buildings states the following with respect to daylight provision within a space:

> **5.1.2 Criteria for daylight provision**
>
> A space is considered to provide adequate daylight if a target illuminance level is achieved across a fraction of the reference plane within a space for at least half of the daylight hours.
>
> In addition, for spaces with vertical or inclined daylight openings, a minimum target illuminance level is also to be achieved across the reference plane.
>
> The reference plane of the space is located 0,85 m above the floor, unless otherwise specified. A small fraction of the reference plane may be disregarded to account for singularities.
>
> Values for target illuminances, minimum target illuminances and fractions of reference plane are given in Table A.1.

This assessment was carried out in accordance with *Method 2* which is described below:

> Method 2) Calculation method of illuminance levels on the reference plane using climatic data for the given site and an adequate time step. Annex A gives values for target illuminances and minimum target illuminances to be achieve.

Table A.1 – Recommendations of daylight provision by daylight openings in vertical and inclined surfaces provides target illuminance values which are required to meet the minimum level of recommendation for daylight provision.

In line with the European standard, the following targets were adopted for all spaces assessed during this analysis:

- **300 Lux achieved over at least 50% of the reference plane (0.85m) and**
- **100 Lux achieved over at least 95% of the reference plane (0.85m)**

A space is considered to provide adequate daylight if both target illuminance levels above are achieved across the specified fraction of the space (as per above) for at least 50% of the daylight hours.

Table A.1 — Recommendations of daylight provision by daylight openings in vertical and inclined surface

Level of recommendation for vertical and inclined daylight opening	Target illuminance E_T lx	Fraction of space for target level $F_{plane,\%}$	Minimum target illuminance E_{TM} lx	Fraction of space for minimum target level $F_{plane,\%}$	Fraction of daylight hours $F_{time,\%}$
Minimum	300	50 %	100	95 %	50 %
Medium	500	50 %	300	95 %	50 %
High	750	50 %	500	95 %	50 %
NOTE Table A.3 gives target daylight factor (D_T) and minimum target daylight factor (D_{TM}) corresponding to target illuminance level and minimum target illuminance, respectively, for the CEN capital cities.					

Above: *Table A.1 – Recommendations of daylight provision by daylight openings in vertical and inclined surfaces taken from EN 17037:2018*

The working plane has been set at 0.85m in accordance with EN17037.

7.5. SPATIAL DAYLIGHT AUTONOMY (sDA) USING BS EN 17037:2018

This study also assessed the daylight performance of the scheme using the British national annex within BS EN 17037. This National Annex recommends that the target illuminance values provided in *Table NA.1* are achieved over at least 50% of the area of the working plane (0.85m from floor level).

Table NA.1 — Values of target illuminance for room types in UK dwellings

Room type	Target illuminance E_T (lx)
Bedroom	100
Living room	150
Kitchen	200

Where one room in a UK dwelling serves more than a single purpose, the UK committee recommends that the target illuminance is that for the room type with the highest value – for example, in a space that combines a living room and a kitchen the target illuminance is recommended to be 200 lx.

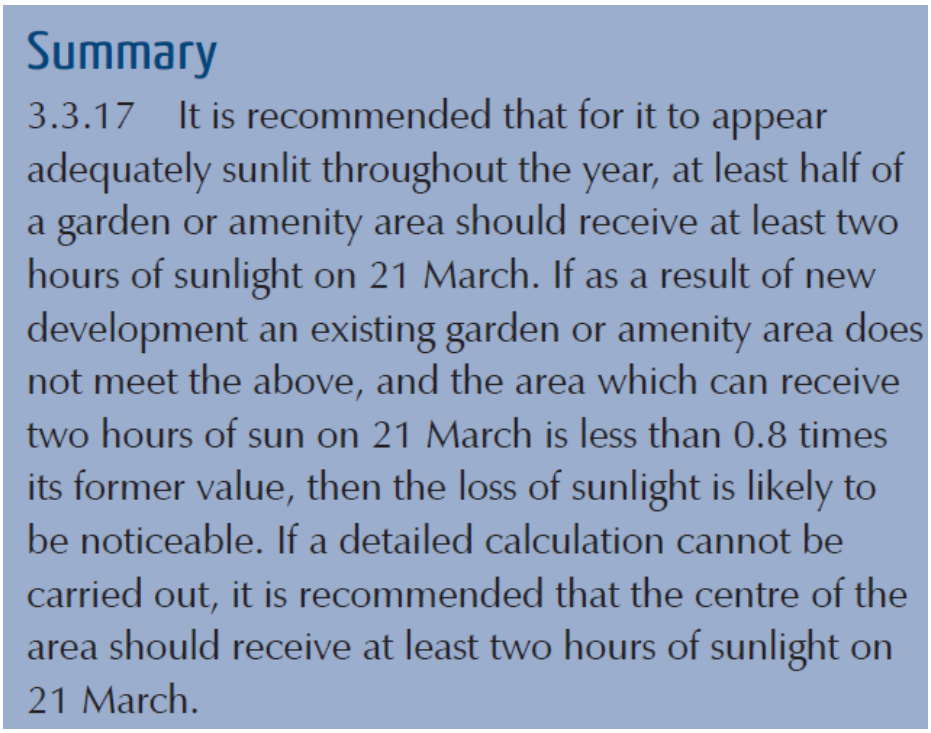
In line with the recommendation of the British National Annex, an additional spatial daylight autonomy assessment was carried out to assess the number of Bedrooms that achieve the target illuminance of 100 lux over 50% of their areas, as well as the percentage of Kitchen/Living/Dining spaces achieving 200 lux over at least 50% of the areas. Following the recommendation of the British national annex above, an illuminance test for 95% of the floor area of each space was not conducted. If the analysed rooms achieve the specified illuminance level over at least 50% of their area, they are deemed to be adequately daylit according to the British national annex.

The following surface reflectance's were applied in this study:

Material Surface	Reflectance Value	Glass/Window Details
External Wall	0.82	-
Internal Partition	0.82	-
Floor/Ceiling (Floor)	0.40	-
Floor/Ceiling (Ceiling)	0.88	-
Glass Light Transmittance	-	70%

7.6. Sunlight Assessment – Proposed And Surrounding Amenity Space

BRE Guidelines recommend that in order for an amenity space to appear adequately sunlit throughout the year, at least half of the amenity space should receive at least two hours of sunlight on the design day, March 21st. If, as a result of a new development, an existing garden or amenity area does not meet the above, and the area which can receive two hours of sun on March 21st is less than 0.8 times its former value, then the loss of sunlight is likely to be noticeable.



Summary

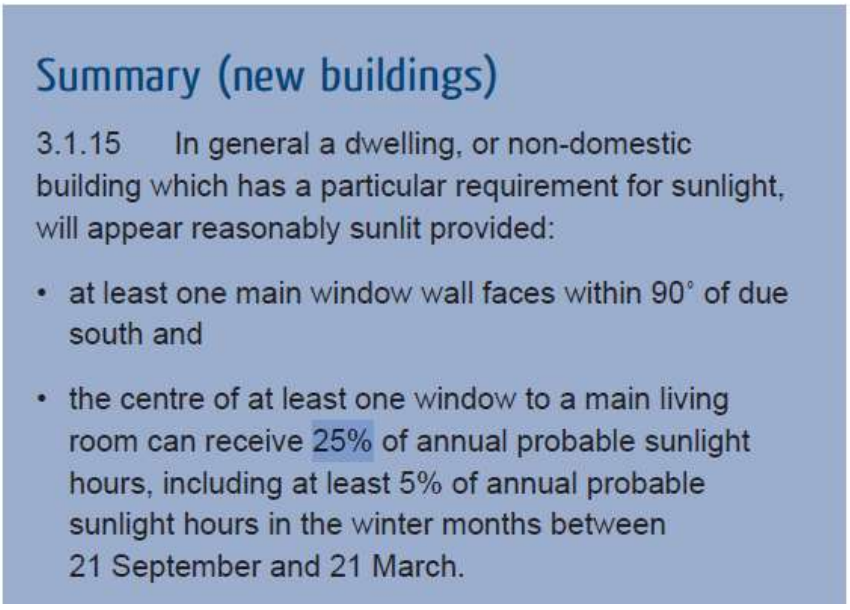
3.3.17 It is recommended that for it to appear adequately sunlit throughout the year, at least half of a garden or amenity area should receive at least two hours of sunlight on 21 March. If as a result of new development an existing garden or amenity area does not meet the above, and the area which can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

Above: *BRE Guidance in relation to protecting Sunlight in Gardens, Open Spaces and Amenity spaces.*

The amount of sunlight available to proposed and surrounding amenity spaces (proposed courtyard and surrounding astroturf areas) is assessed as part of this analysis.

7.7. Sunlight Assessment – Proposed And Adjacent Building Windows

According to the BRE guide, living spaces will appear reasonably sunlit if they receive 25% or more of their annual probable sunlight hours for the year, and 5% or more of their annual probable sunlight hours during the winter months. Analysis was carried out in line with BRE 209 guidance, ensuring that the proposed development receives adequate levels of sunlight, and no substantial loss of sunlight is incurred in the surrounding buildings.



Summary (new buildings)

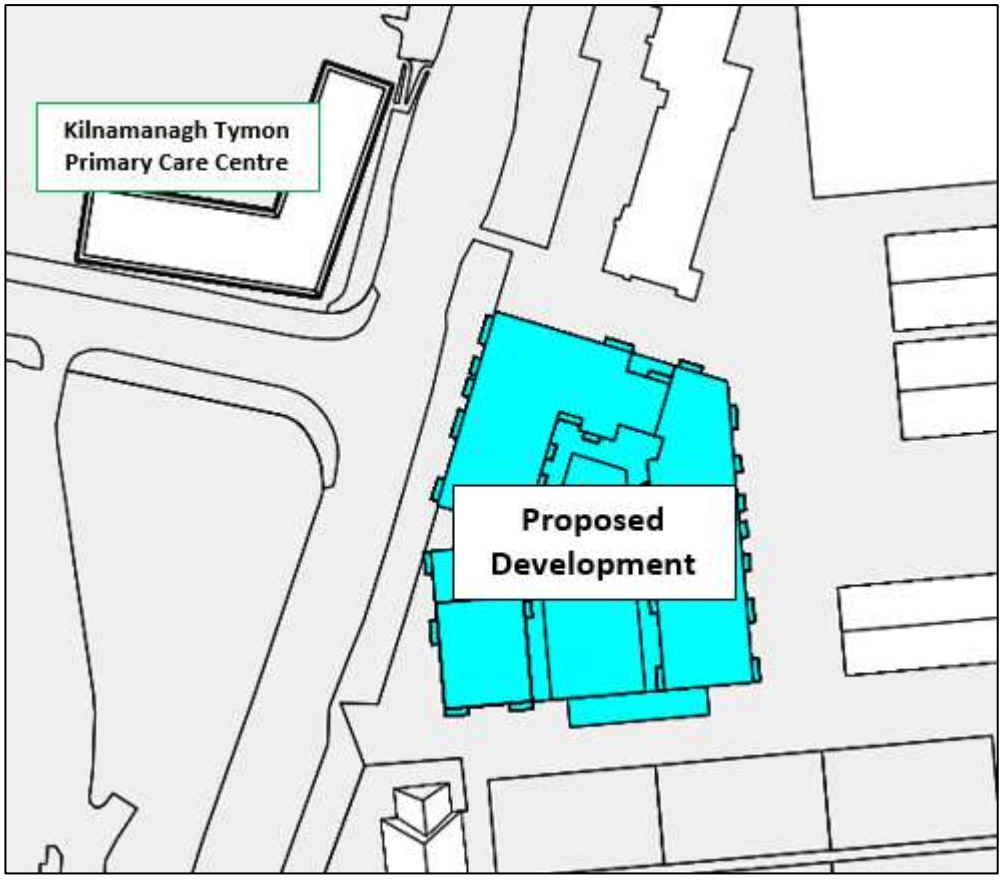
3.1.15 In general a dwelling, or non-domestic building which has a particular requirement for sunlight, will appear reasonably sunlit provided:

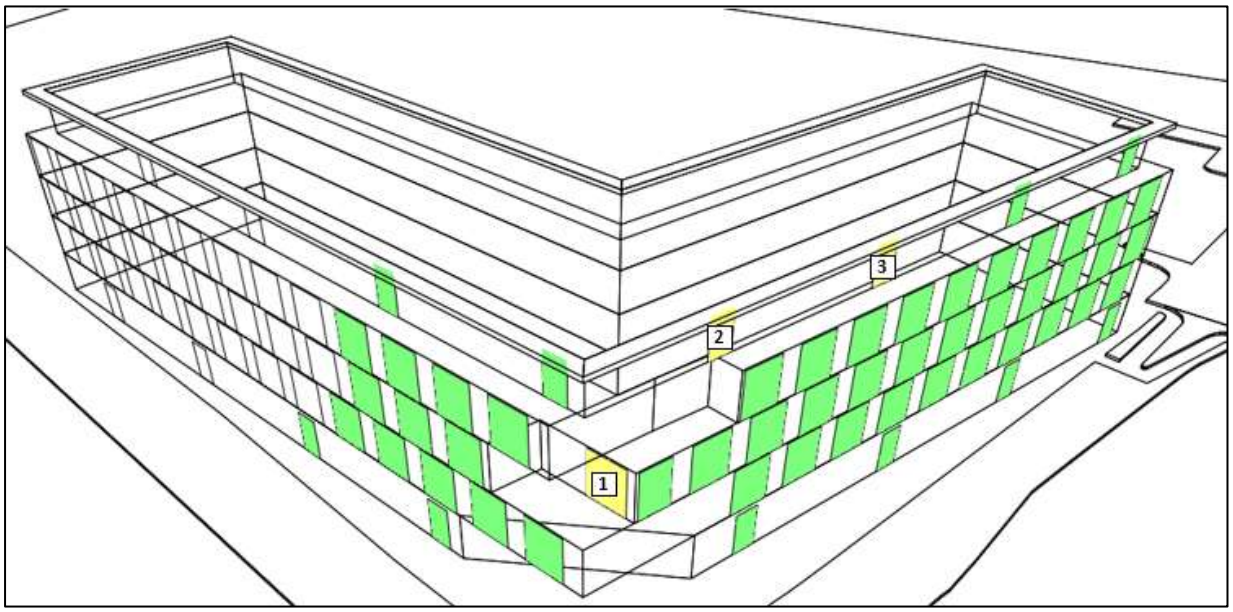
- at least one main window wall faces within 90° of due south and
- the centre of at least one window to a main living room can receive 25% of annual probable sunlight hours, including at least 5% of annual probable sunlight hours in the winter months between 21 September and 21 March.

Above: *BRE Guidance in relation to achieving adequate levels of sunlight in new buildings.*

8. VSC RESULTS

A simulation was run to quantify any reduction in VSC resulting from the proposed development massing. Where the VSC is greater than 27% reasonable daylighting levels are available according to the BRE Industry standard. Even where the VSC is found to be less than 27%, if the reduction comparing the “before and after scenarios” is less than a 20% reduction daylighting is unlikely to be significantly affected / noticed.





Above: *Kilnamanagh Tymon Primary Care Centre. Windows shown in green have achieved a VSC of ≥ 27%.*

If the VSC is greater than 27% then enough skylight should be reaching the window of the existing buildings. The windows in yellow achieve a VSC of less than 27% but the new VSC is greater than or equal to 80% of its initial value pre-development in line with the recommendation of the BRE Guide. As shown, all openings assessed are in line with the BRE recommended VSC targets.

A full breakdown of the VSC results for each opening analysed can be found in *Appendix E* of this report.

9. DAYLIGHT TO THE PROPOSED DEVELOPMENT RESULTS

9.1. ADF Results Summary

% of Bedrooms with an ADF ≥ 1.00	% of Kitchen/Living/Dining with an ADF ≥ 1.50	% of Kitchen/Living/Dining with an ADF ≥ 2.00
99.69%	**93.40%**	**85.28%**

9.2. sDA Results Summary (EN17037 and BS EN17037)

This scheme was also assessed using the latest European Standard EN17037 as well as the British national annex provided in BS EN17037.

Spatial Daylight Autonomy - EN17037 All spaces recommended to achieve 300 lux over 50% of area **and** 100 Lux over 95% of area for at least 50% of daylight hours			
Room Type	**Number of Rooms Assessed**	**Passing**	**Passing (%)**
Bedroom	326	307	94.17
KLD	197	171	86.80
Overall	**523**	**478**	**91.40**

Spatial Daylight Autonomy – BS EN17037 British National Annex KLD recommended to achieve 200 lux over 50% area for at least 50% of daylight hours Bedrooms recommended to achieve 100 lux over 50% area for at least 50% of daylight hours			
Room Type	**Number of Rooms Assessed**	**Passing**	**Passing (%)**
Bedroom	326	325	99.69
KLD	197	189	95.94
Overall	**523**	**514**	**98.28**

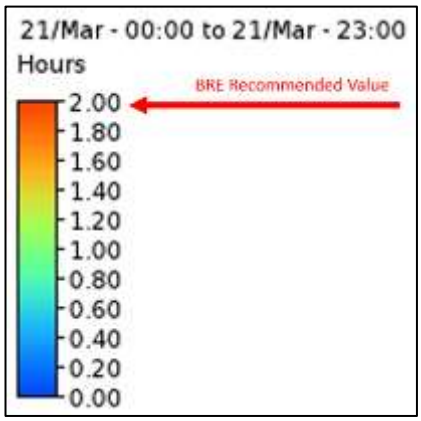
The results of these assessments are tabulated in detail in Appendix B, Appendix C, and Appendix D of this document.

10. SUNLIGHT TO AMENITY AREA RESULTS

BRE Guidelines recommend that in order for an amenity space to appear adequately sunlit throughout the year, at least half of the amenity space should receive at least two hours of sunlight on the design day, 21st March. For the purpose of this assessment, all amenity areas within the proposed development were individually assessed for sunlight availability along with any existing adjacent amenity areas/gardens that could potentially be impacted by the proposed development.

Above: *Image of proposed site and relevant surrounding areas*

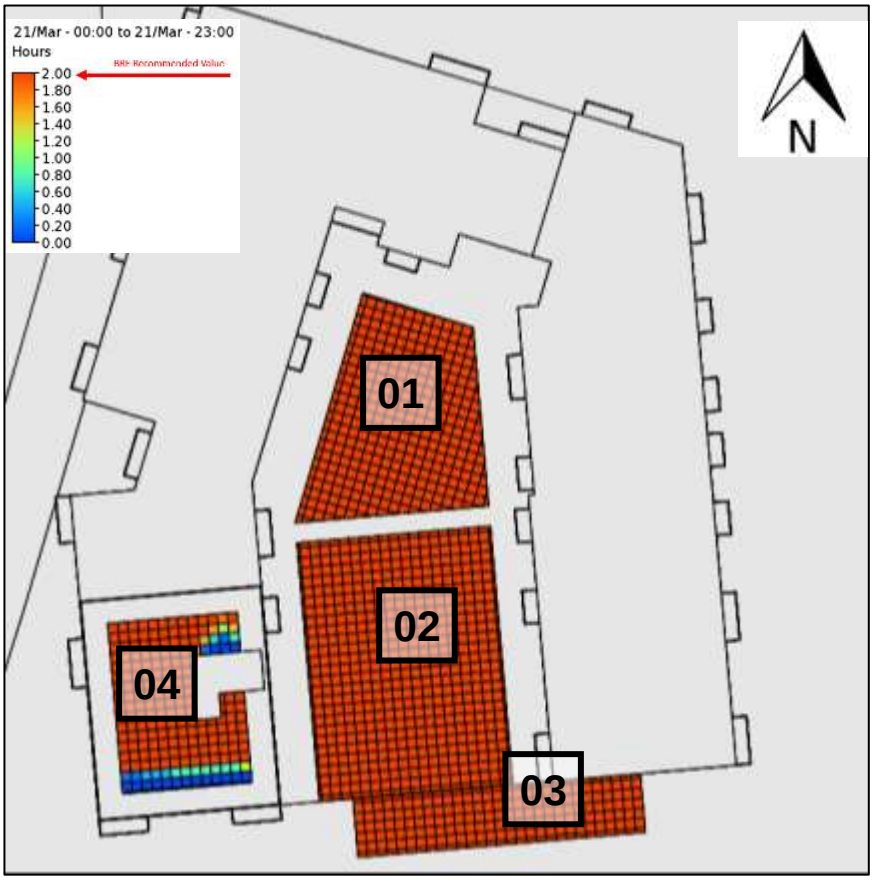
10.1. Probable Sunlight Hours – Amenity Spaces



Above: Probable sunlight hours on March 21st (hours) legend

Above: *Overview of the amenity areas of the proposed development and adjacent amenity areas*

10.2. Proposed Amenity Areas – Sunlight Assessment



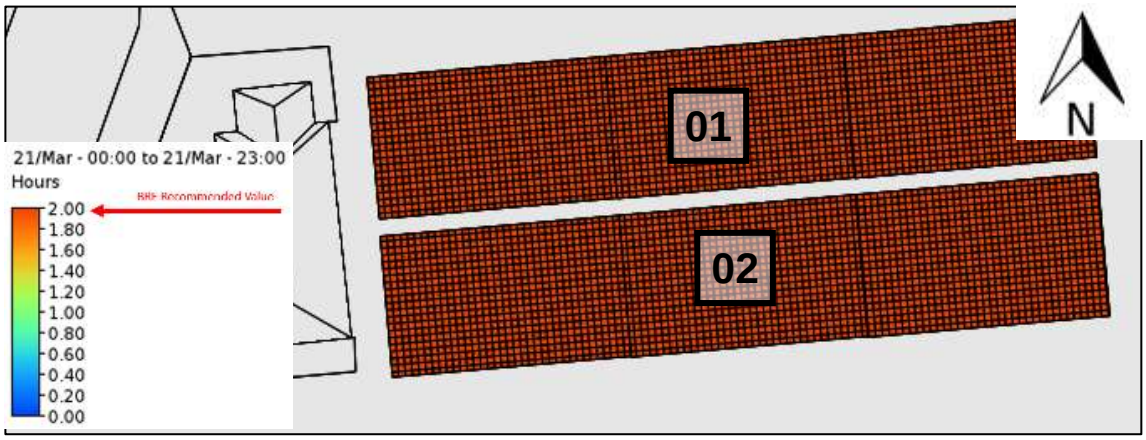
Above: *The amenity/garden areas shown in red above are achieving 2 hours of sunshine on the 21st March as per the BRE Industry Guidelines.*

Any area where 2 hours of sunshine is not available (shown in blue & green above) is due to shadows cast by elements of the proposed development itself.

Each of the individual amenity spaces assessed within the proposed development will achieve 2 hours of sunshine on the 21st of March over at least 50% of its area in line with BRE recommendations. The tabulated results for each individual space can be seen below.

Amenity Area	% area receiving at least 2 hours of sunshine on the 21st of March
Amenity Area 01	**100.0%**
Amenity Area 02	**100.0%**
Amenity Area 03	**100.0%**
Amenity Area 04	**78.9%**

10.3. Existing Adjacent Amenity Areas – Sunlight Assessment



Above: *The amenity/garden areas shown in red above are achieving 2 hours of sunshine on the 21st March as per the BRE Industry Guidelines.*

As shown, each of the surrounding amenity spaces assessed will achieve 2 hours of sunshine on the 21st of March over at least 50% of its area in line with BRE recommendations. Tabulated results showing the exact areas achieving the recommended level of sunlight are provided below.

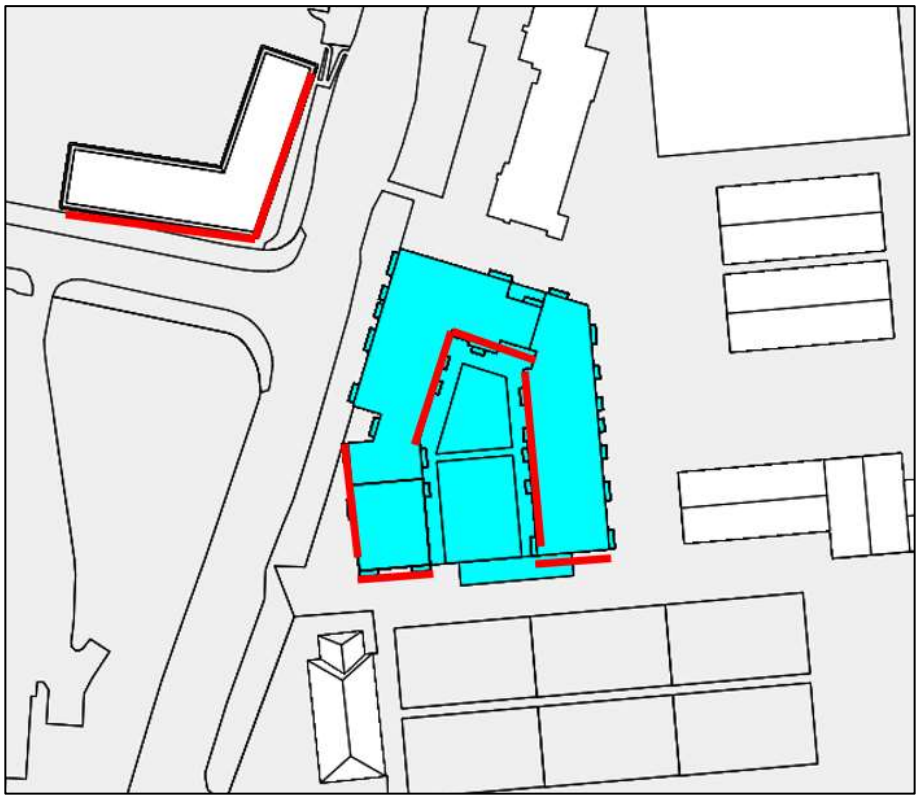
Amenity Area	% area receiving at least 2 hours of sunshine on the 21st of March
Astro Pitches 1-3	**100.0%**
Astro Pitches 4-6	**100.0%**

This analysis verifies that the proposed development will not have an adverse impact on the sunlight availability in its neighbouring amenity areas.

11. ANNUAL PROBABLE SUNLIGHT HOURS RESULTS

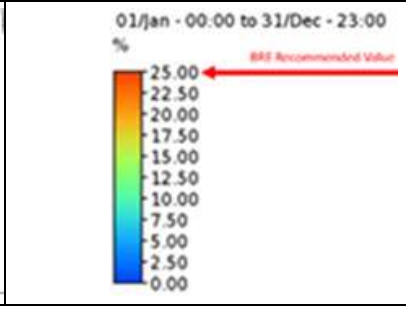
As outlined earlier in this report, the living spaces of these developments will appear adequately sunlit provided they receive 25% of their annual probable sunlight hours during the year and 5% of their probable sunlight hours during the winter months.

This analysis only applies to living room windows that face within 90 degrees of due South, as shown in the image below. Though it is technically not a residential space, the adjacent primary care facility has been included in this analysis.

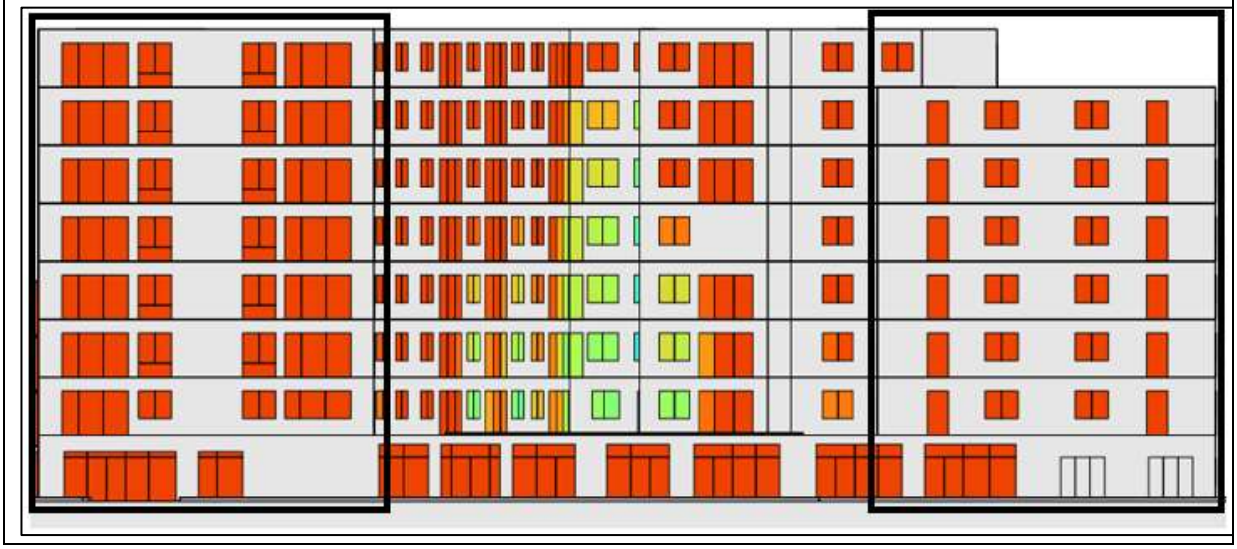


11.1. Annual Probable Sunlight Hours - Proposed Development

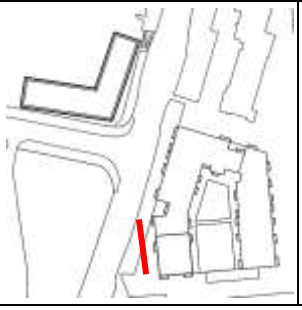
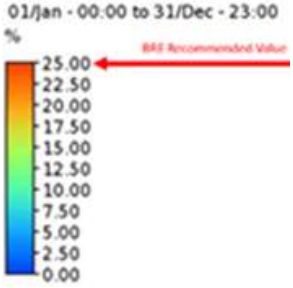
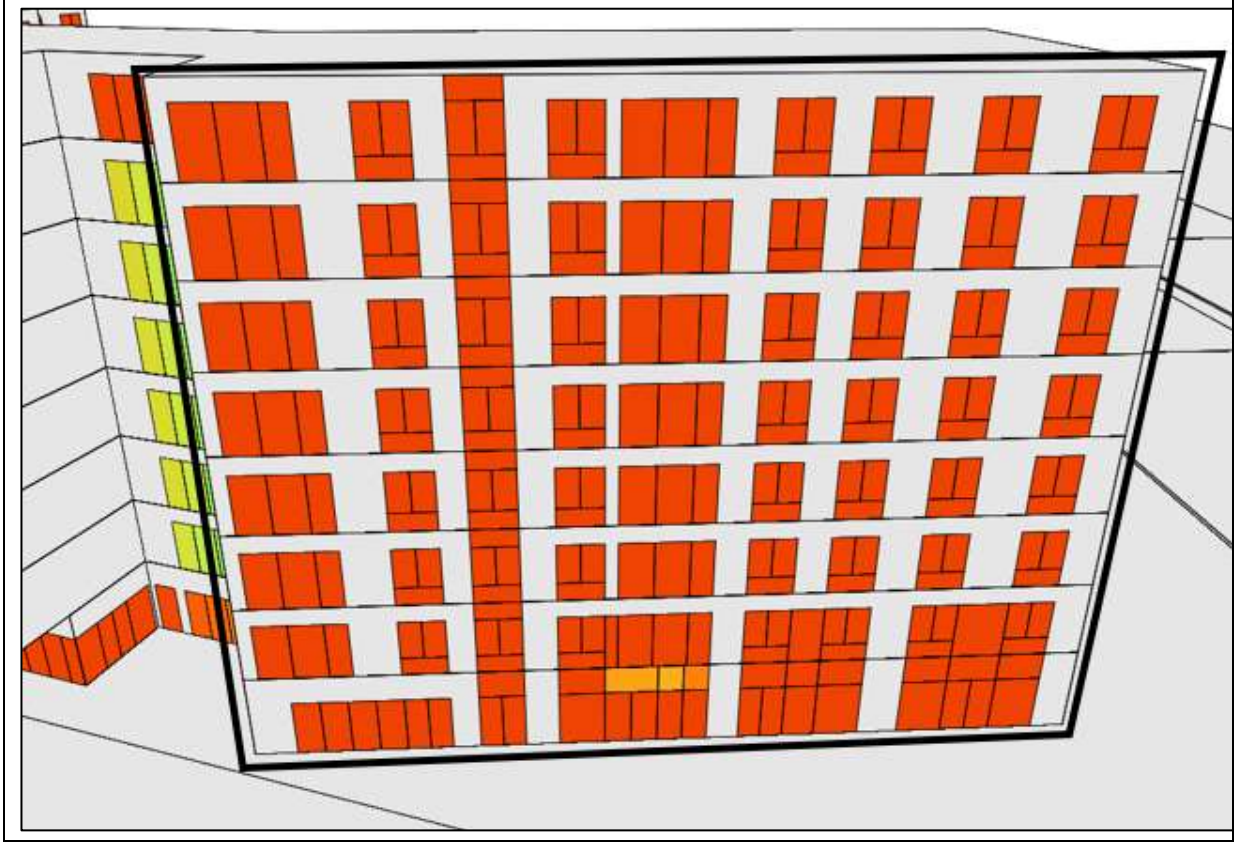
View 01: South Exterior Facade



The image below shows the proposed annual probable sunlight hours. Any **living room** windows that do not meet the annual or winter APSH requirement are listed in the table below.

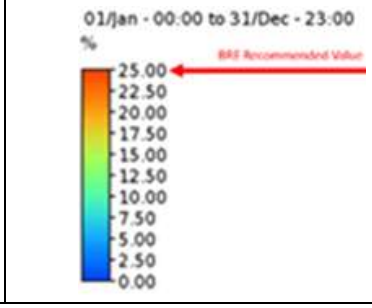


All 52 of the living room windows on these facades are receiving more than 25% of annual probable sunlight hours **and** more than 5% of winter probable sunlight hours.

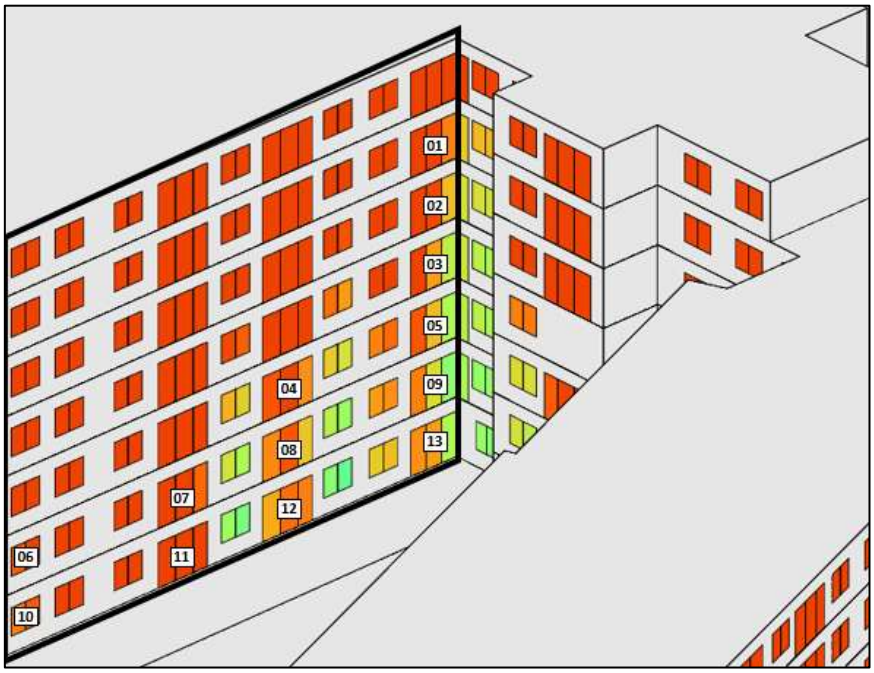
View 02: West Exterior Facade		
		The image below shows the proposed annual probable sunlight hours. Any **living room** windows that do not meet the annual or winter APSH requirement are listed in the table below.
		

All 21 of the living room windows on this facade are receiving more than 25% of annual probable sunlight hours AND more than 5% of winter probable sunlight hours.

View 03: East Interior Facade

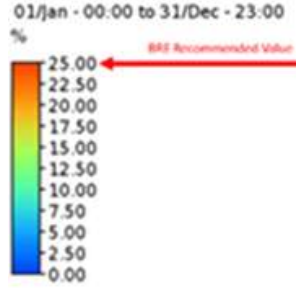


The image below shows the proposed annual probable sunlight hours. Any **living room** windows that do not meet the annual or winter APSH requirement are listed in the table below.



Point	Annual Probable Sunlight Hours	>25% of Annual Hours?	Winter Probable Sunlight Hours	>5% of Winter Hours?
1	24.49	-	6.46	Yes
2	23.96	-	10.76	Yes
3	24.43	-	10.87	Yes
4	22.83	-	7.63	Yes
5	22.83	-	9.82	Yes
6	24.24	-	8.85	Yes
7	22.00	-	7.22	Yes
8	19.77	-	7.61	Yes
9	20.45	-	7.89	Yes
10	21.99	-	8.85	Yes
11	24.23	-	9.89	Yes
12	17.95	-	7.10	Yes
13	19.87	-	7.39	Yes

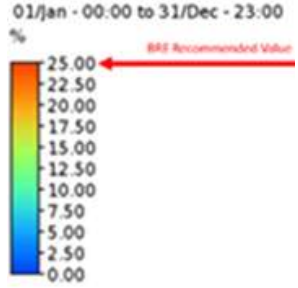
View 04: South Interior Facade



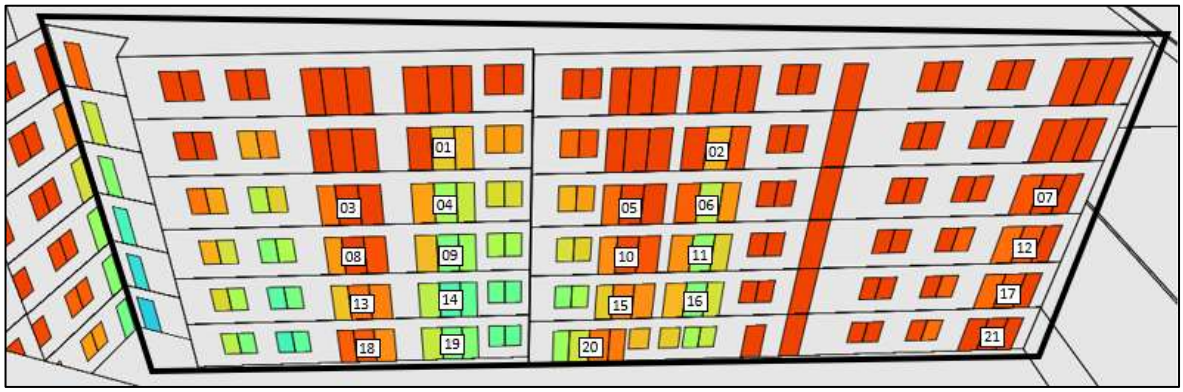
The image below shows the proposed annual probable sunlight hours. Any **living room** windows that do not meet the annual or winter APSH requirement are listed in the table below.

Point	Annual Probable Sunlight Hours	>25% of Annual Hours?	Winter Probable Sunlight Hours	>5% of Winter Hours?
1	21.93	-	8.71	Yes
2	24.23	-	9.32	Yes
3	24.45	-	8.97	Yes

View 05: West Interior Facade



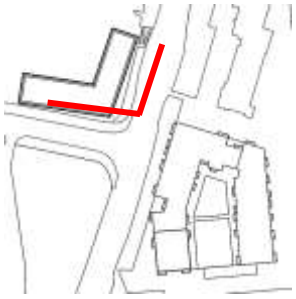
The image below shows the proposed annual probable sunlight hours. Any **living room** windows that do not meet the annual or winter APSH requirement are listed in the table below.

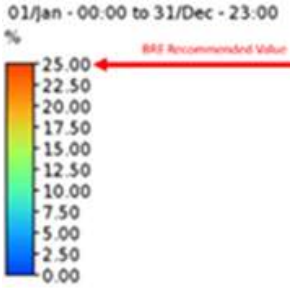


Point	Annual Probable Sunlight Hours	>25% of Annual Hours?	Winter Probable Sunlight Hours	>5% of Winter Hours?
1	17.24	-	4.79	-
2	19.08	-	7.73	Yes
3	20.57	-	5.49	Yes
4	13.21	-	3.57	-
5	22.47	-	7.37	Yes
6	15.38	-	7.13	Yes
7	23.41	-	14.18	Yes
8	24.14	-	7.67	Yes
9	11.21	-	3.57	-
10	24.46	-	9.57	Yes
11	12.41	-	6.99	Yes
12	23.55	-	14.88	Yes
13	21.05	-	7.00	Yes
14	8.44	-	3.13	-
15	21.12	-	9.45	Yes
16	11.38	-	6.99	Yes
17	23.36	-	14.88	Yes
18	20.94	-	7.34	Yes
19	10.75	-	5.55	Yes
20	21.38	-	10.21	Yes
21	24.96	-	16.57	Yes

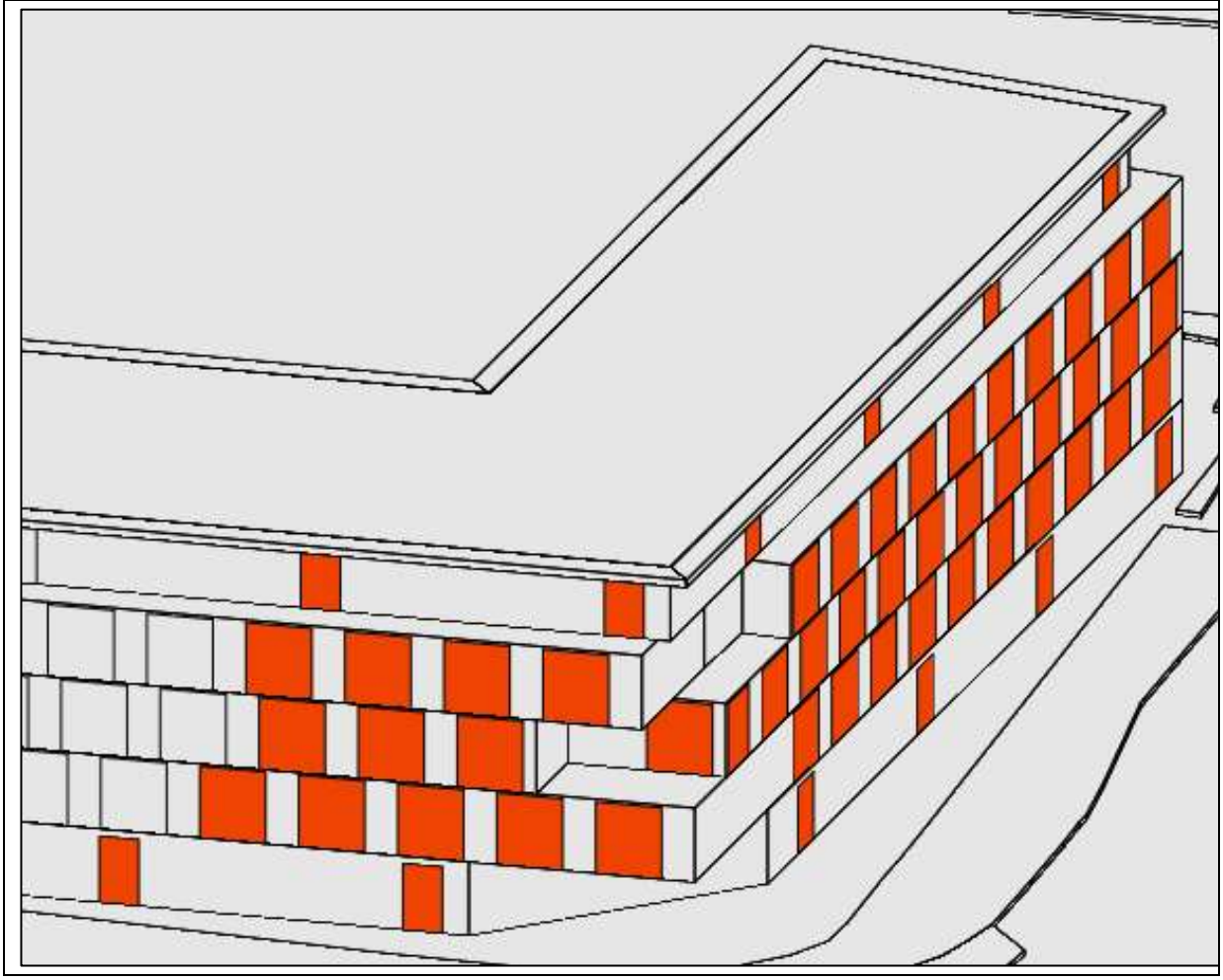
11.2. Annual Probable Sunlight Hours – Adjacent Development

View 01: South + East Facades





The image below shows the proposed annual probable sunlight hours. Any **living room** windows that do not meet the annual or winter APSH requirement are listed in the table below.



100% of the windows on these facades are receiving more than 25% of annual probable sunlight hours **and** more than 5% of winter probable sunlight hours.

11.3. Annual Probable Sunlight Hours Discussion

The images above show that 73% (99 out of 136) of the eligible living space windows in the proposed development achieve 25% of their annual probable sunlight hours, meaning these spaces will appear reasonably sunlit in line with BRE guidance. In some cases where individual window panels do not meet the recommended level of sunlight, the other openings to the living space exceed the recommended annual sunlight performance meaning the space will still have access to adequate levels of annual sunlight overall.

Furthermore, 100% (57 out of 57) of the tested adjacent primary care centre windows that face the proposed development achieve at least 25% of their annual probable sunlight hours. Any façade that is orientated more than 90° from due south is not expected to achieve the BRE recommended levels of sunlight and should not be considered as part of this assessment. These results are tabulated below:

Proposed Annual Probable Sunlight Hours			
Facade	**Total # Tested Windows**	**# Windows Receiving >25% of Annual Hours**	**# Windows Receiving >5% of Winter Hours**
View 1	52	52	52
View 2	21	21	21
View 3	28	15	28
View 4	6	3	6
View 5	29	8	25
Total #	**136**	**99**	**132**
Total %		**73%**	**97%**

12. COMPENSATORY MEASURES

Note: When assessing the significance of the departures identified in this study it is important to recognise a number of compensating factors:

Some of the key features of the proposed scheme which would contribute to the desirability of the building would be its proximity to Bancroft Park located to the south. The recreational amenity of the Astro pitches directly to the south further enhance the appeal as a residential community.

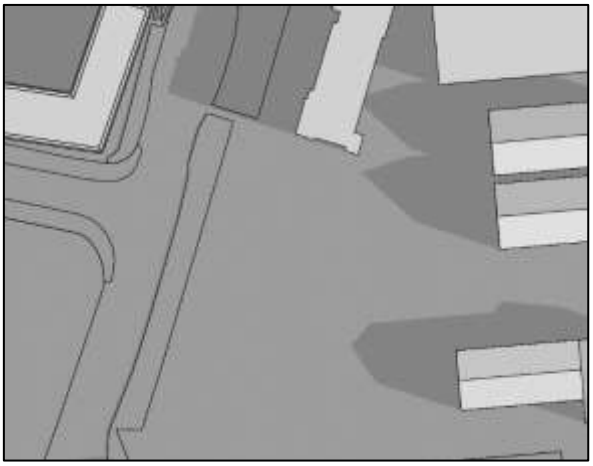
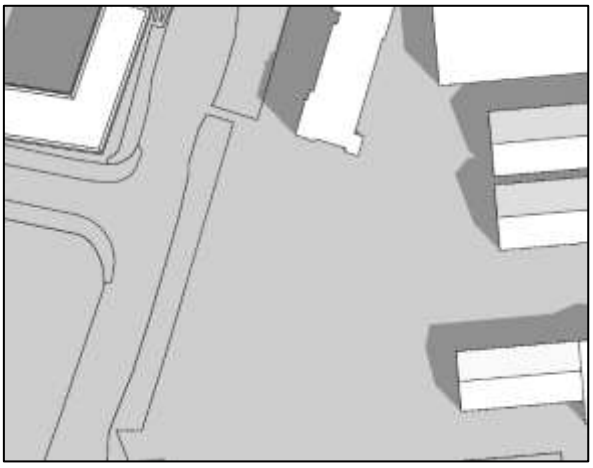
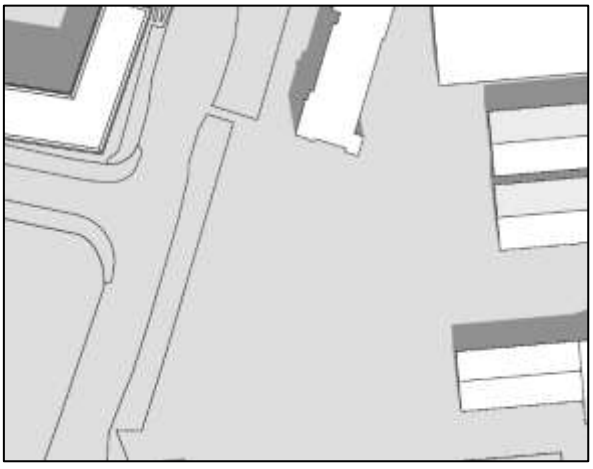
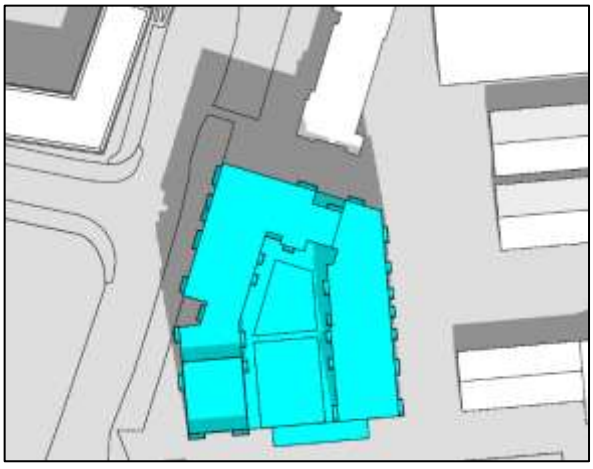
It is noted that 93.4% of Living/Kitchens achieve the BRE recommended ADF of ≥ 1.50% for living spaces. The spatial daylight autonomy results are also positive and show that 91.4% of spaces meet the new European Standard EN17037 overall. For the units which do not achieve 2.00% ADF for (85.3% of Living/Kitchens achieve the BRE recommended ADF of ≥ 2.00% for kitchens), it is noted that the following compensatory measures ensure a high quality living environment is provided.

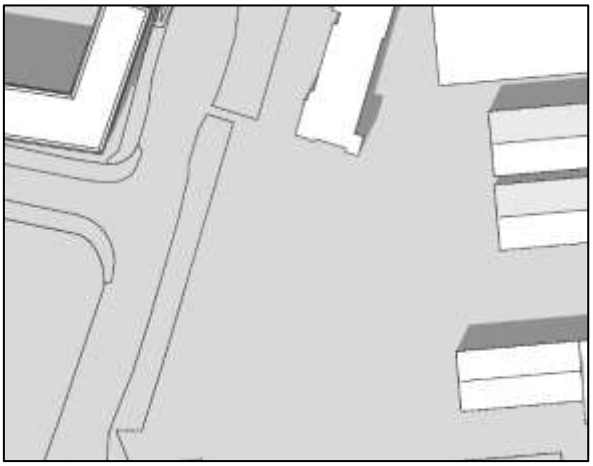
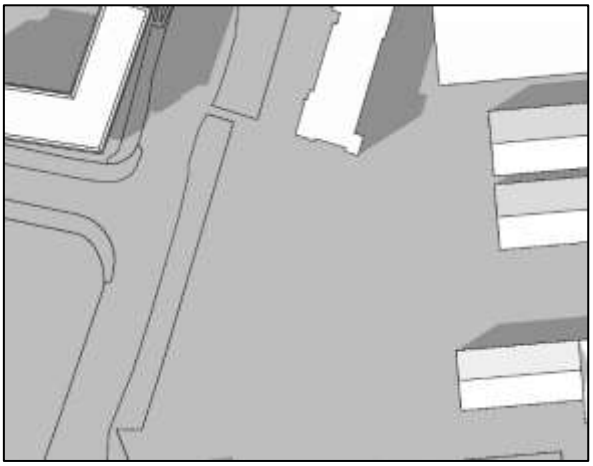
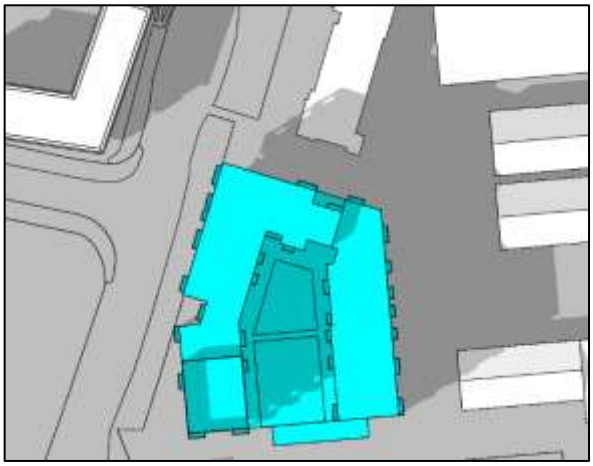
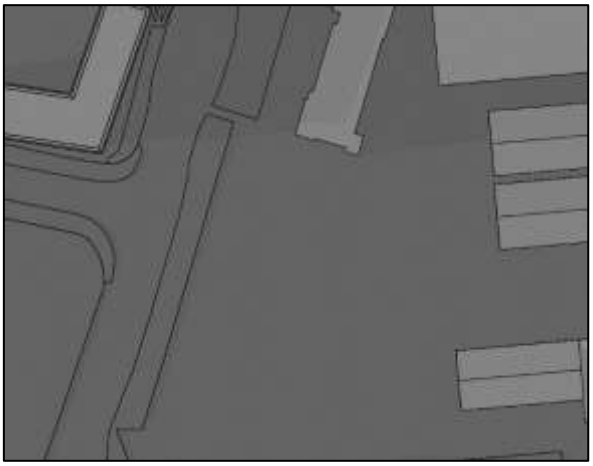
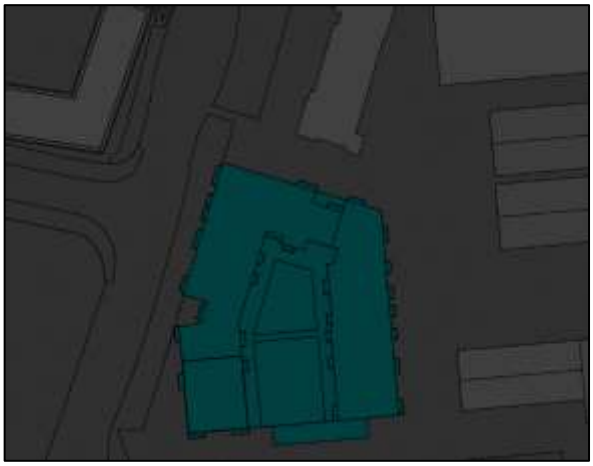
- The majority of the units exceed the minimum standards with 60% of the proposed units exceeding the minimum unit sizes by 10%.
- The scheme will includes a dedicated gym space and lounge areas as shared internal amenity spaces to complement the high standard dwelling units.
- All of the apartments have been provided with external private amenity terraces or balconies which meet or exceed the area requirements of the design standards for new apartments 2020 and the occupants will also have access to a generous south facing podium external communal amenity garden at the heart of the scheme and further roof top garden space to avail of the best sun penetration and wider views of the area.
- The commercial spaces located to the Ground Floor will add to the existing adjoining retail facilities, creating a prosperous neighbourhood with active fronatages.
- The provision of a creche facility with drop off and parking will provide easily accessible childcare facilities for young families.

APPENDIX A | OVERSHADOWING IMAGES

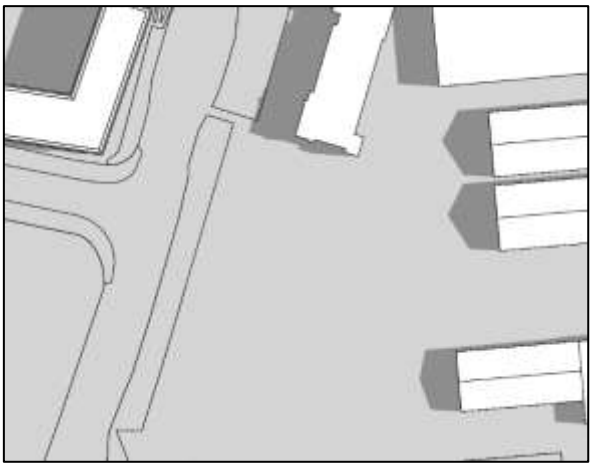
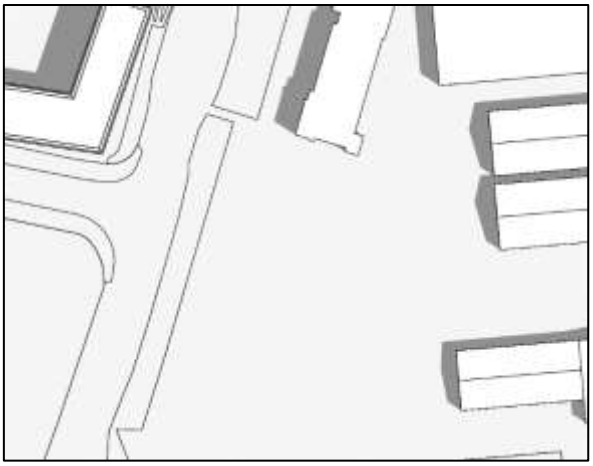
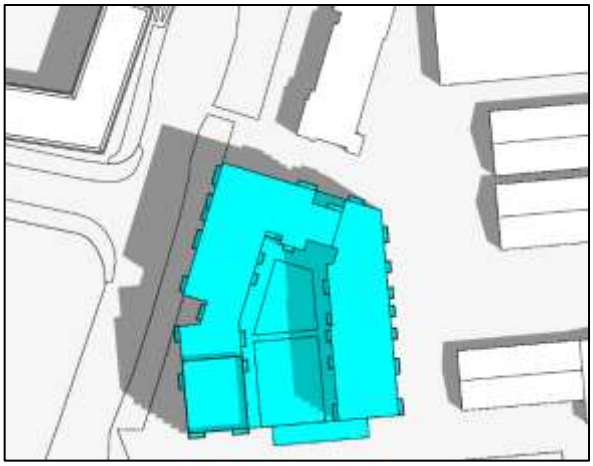
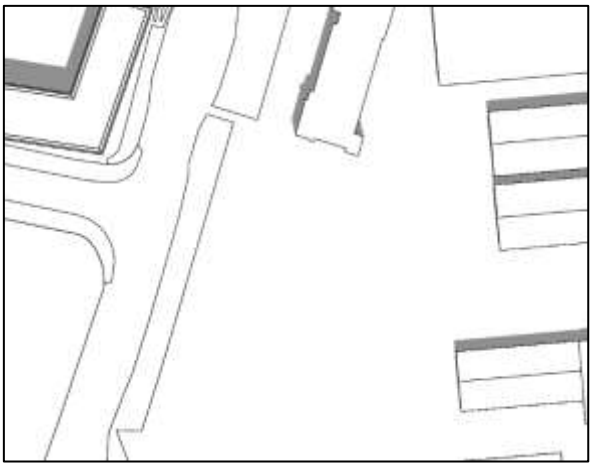
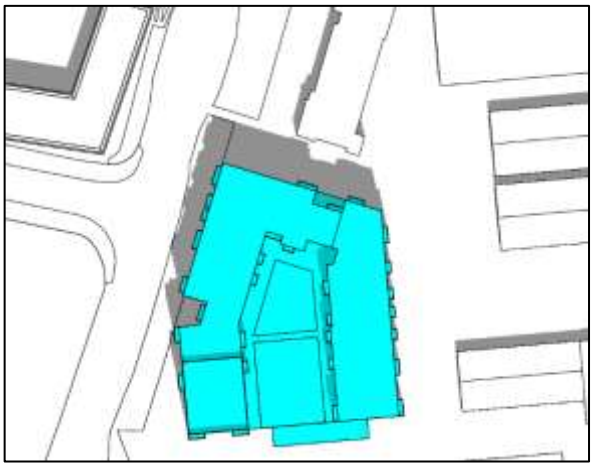
Plan View Images

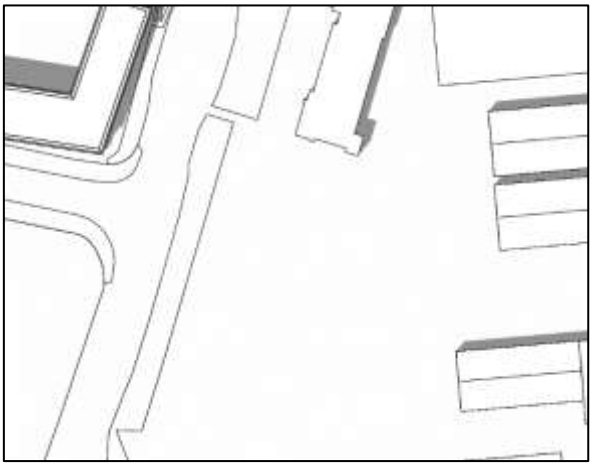
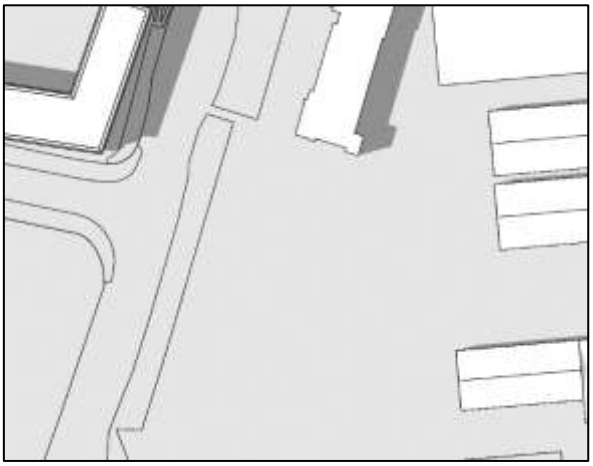
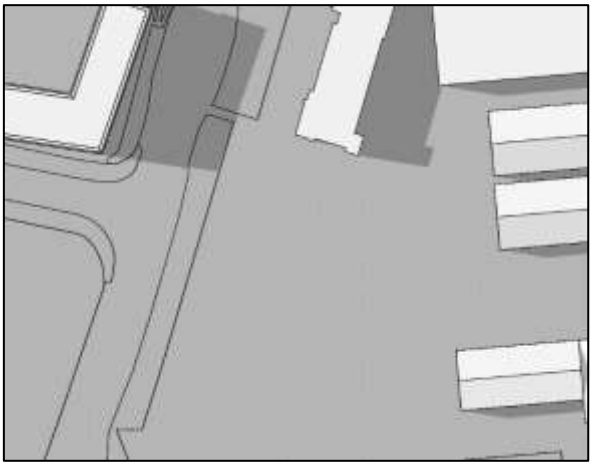
Plan View – 21st March

	Existing	Proposed
21st March (08:00):		
21st March (10:00):		
21st March (12:00):		

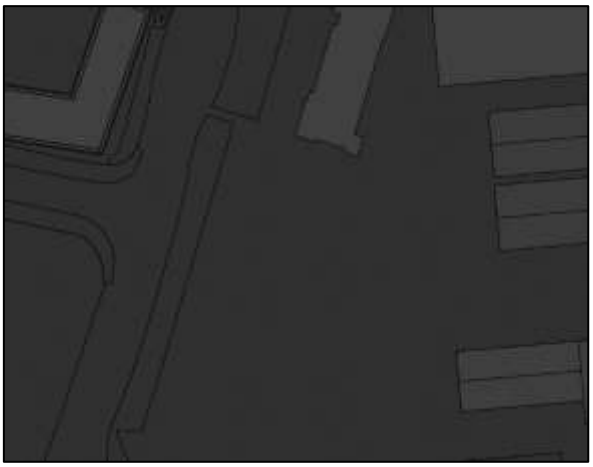
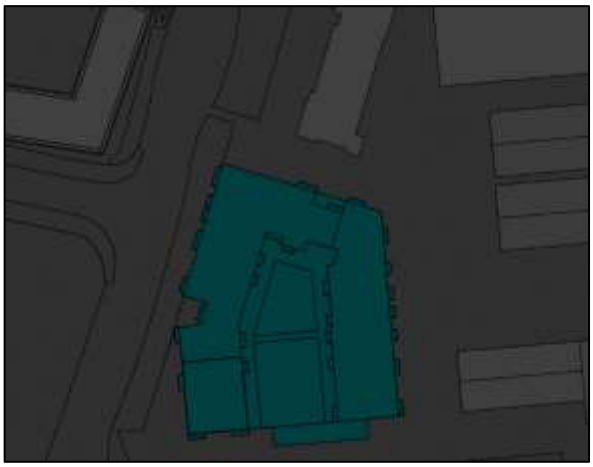
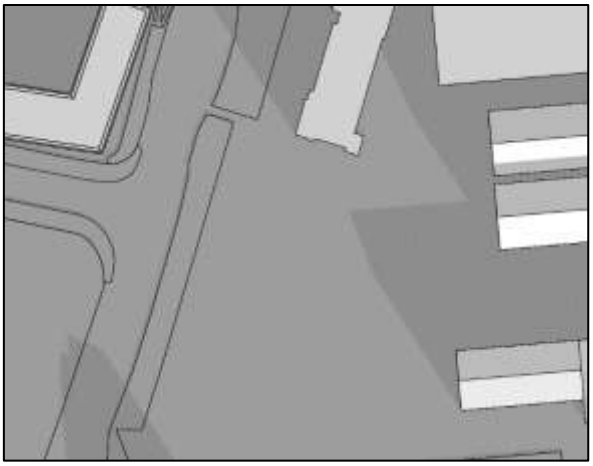
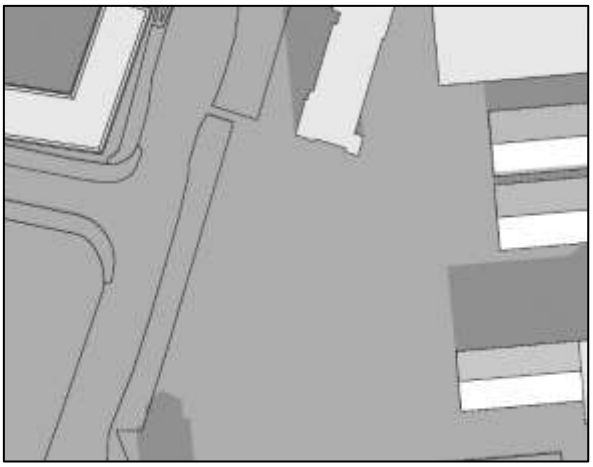
21st March (14:00):		
21st March (16:00):		
21st March (18:00):		

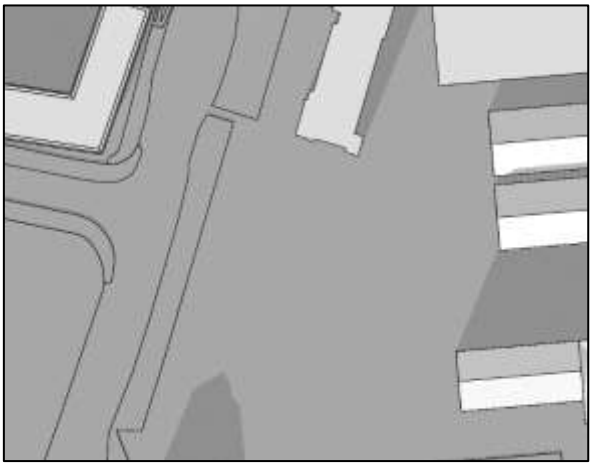
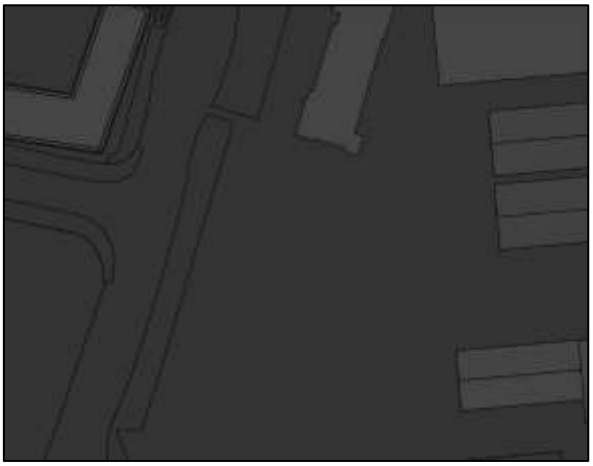
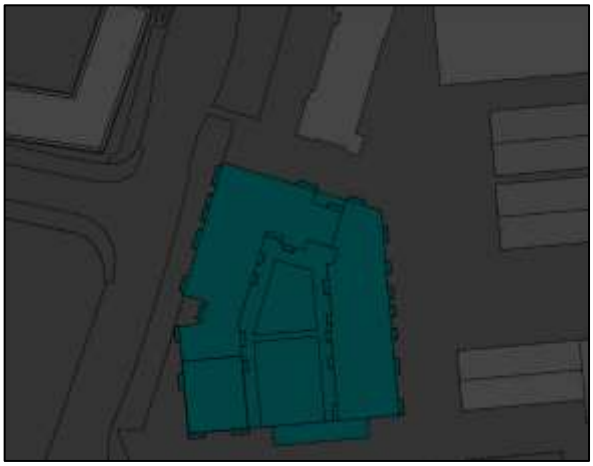
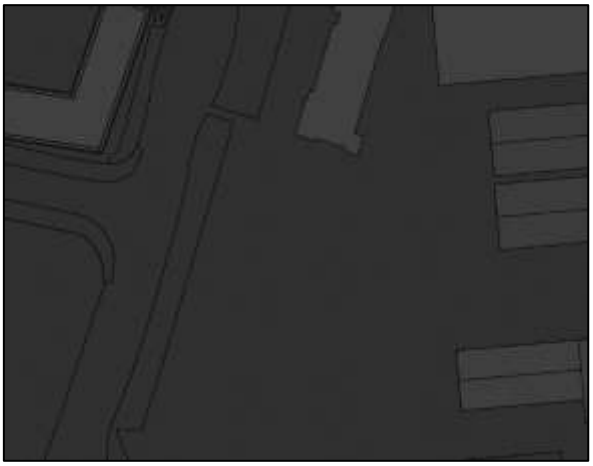
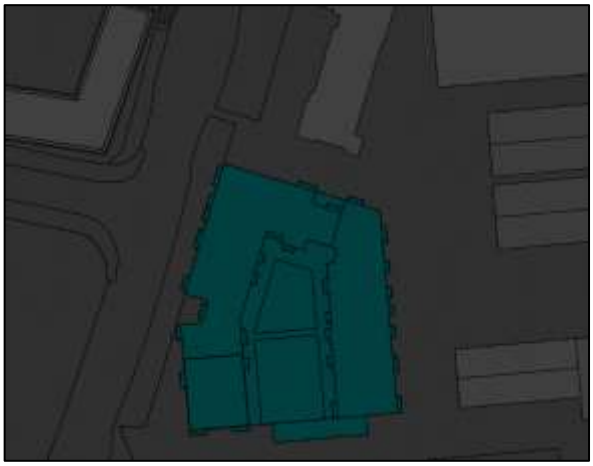
Plan View – 21st June

	Existing	Proposed
21st June (08:00):		
21st June (10:00):		
21st June (12:00):		

21st June (14:00):		
21st June (16:00):		
21st June (18:00):		

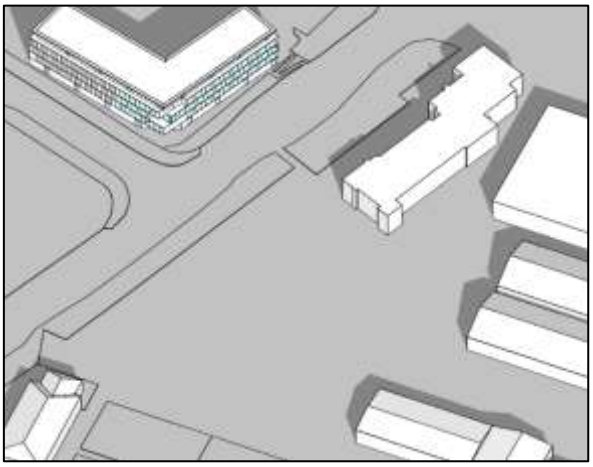
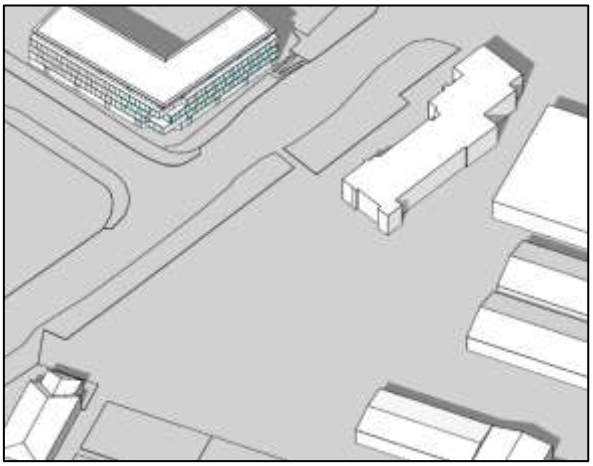
Plan View – 21st December

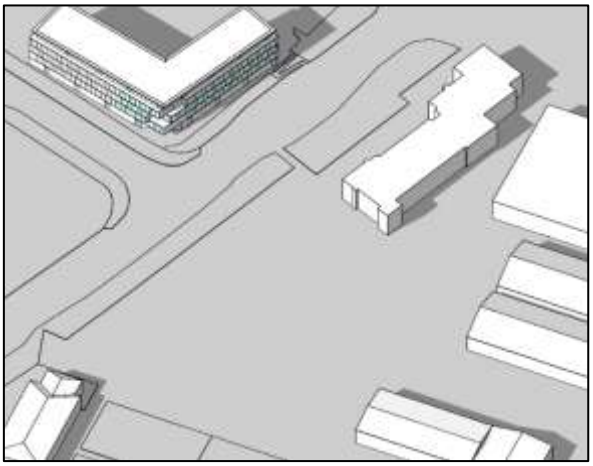
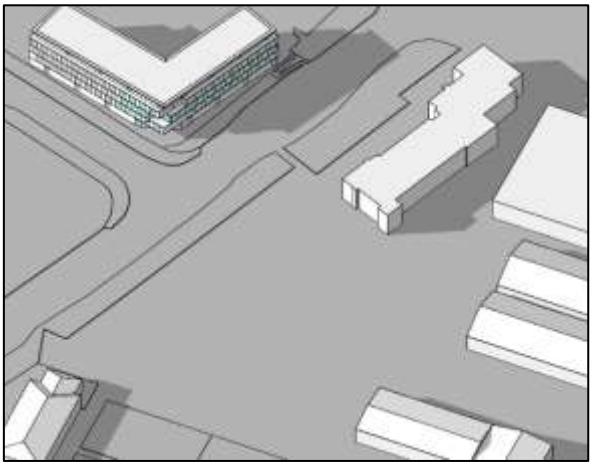
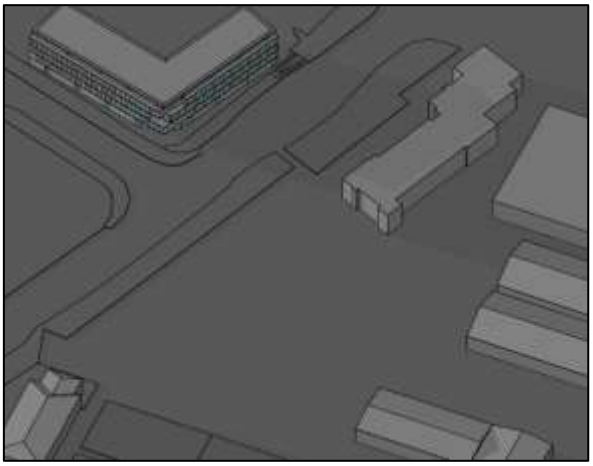
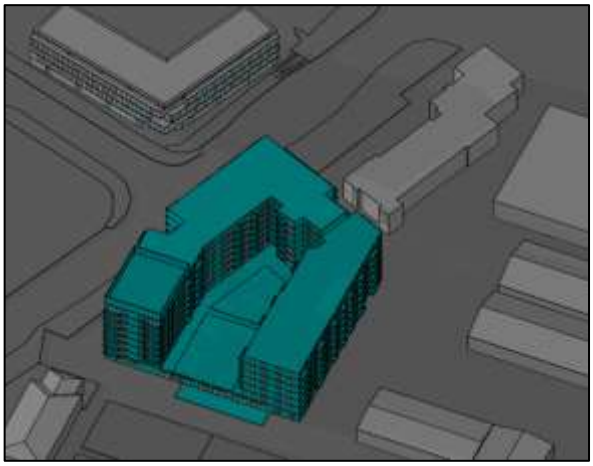
	Existing	Proposed
21st December (08:00):		
21st December (10:00):		
21st December (12:00):		

21st December (14:00):		
21st December (16:00):		
21st December (18:00):		

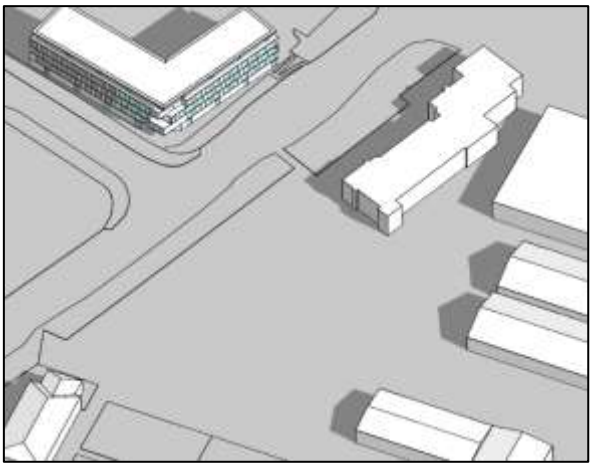
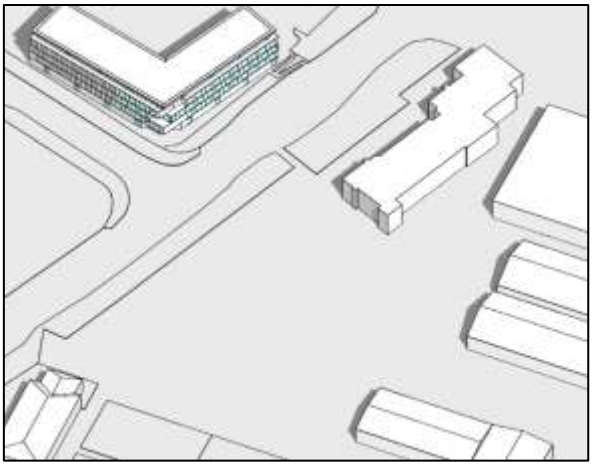
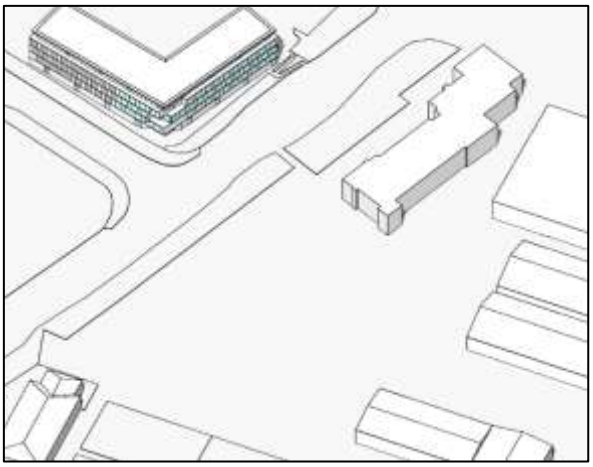
3D View Images

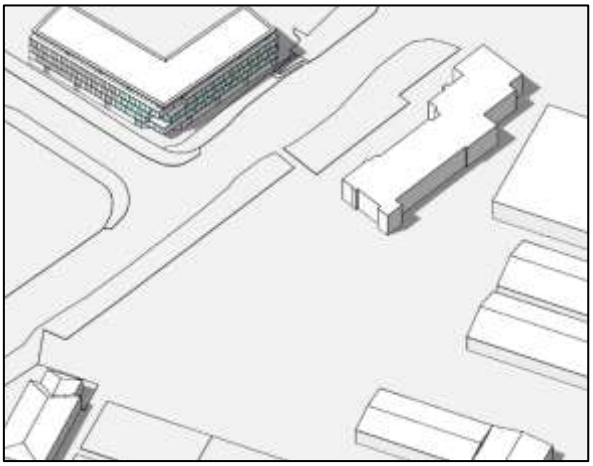
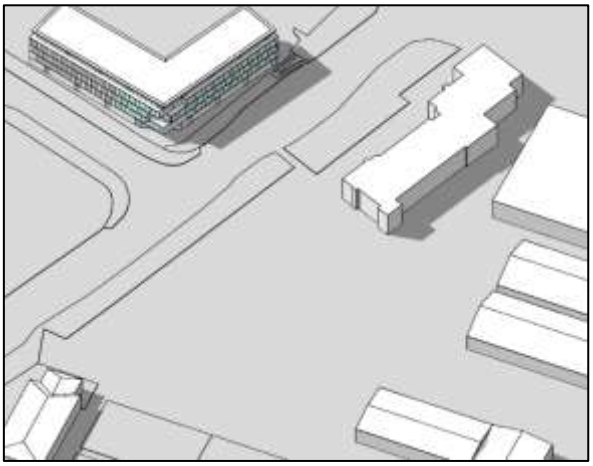
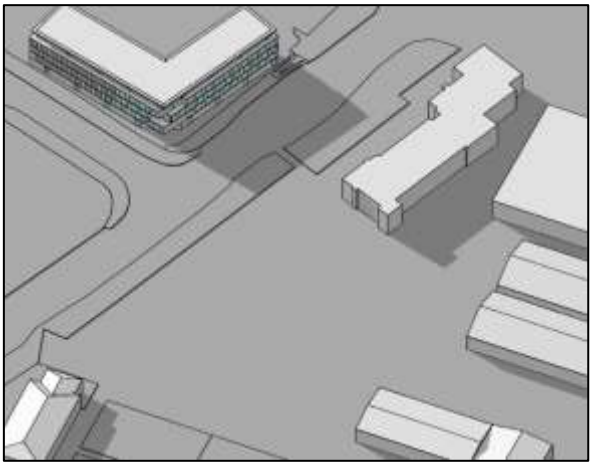
3D View – 21st March

	Existing	Proposed
21st March (08:00):		
21st March (10:00):		
21st March (12:00):		

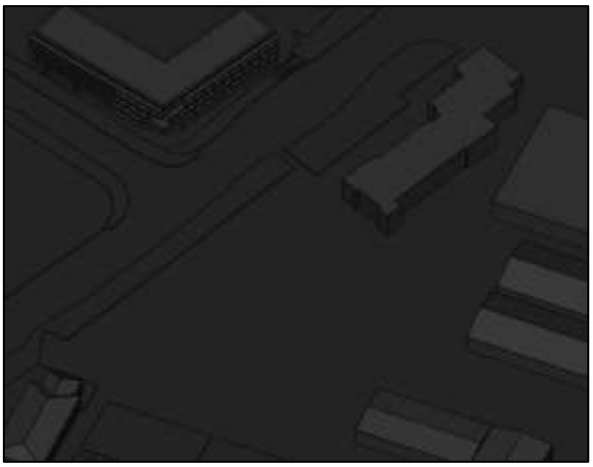
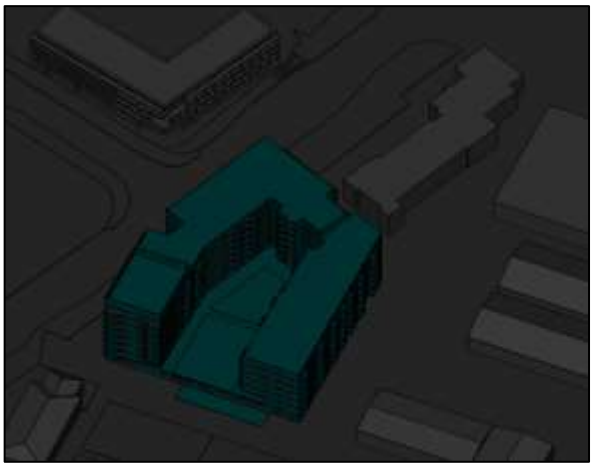
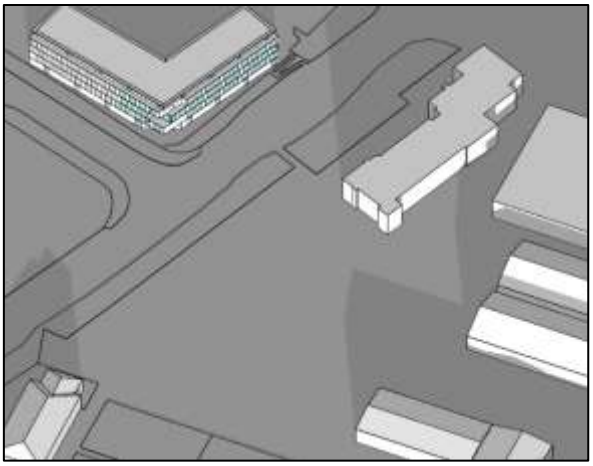
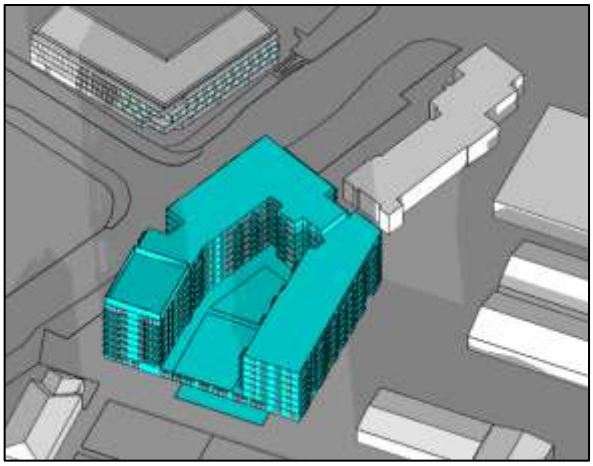
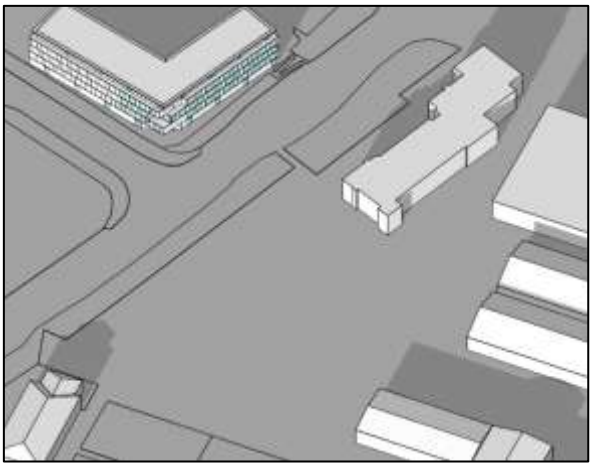
21st March (14:00):		
21st March (16:00):		
21st March (18:00):		

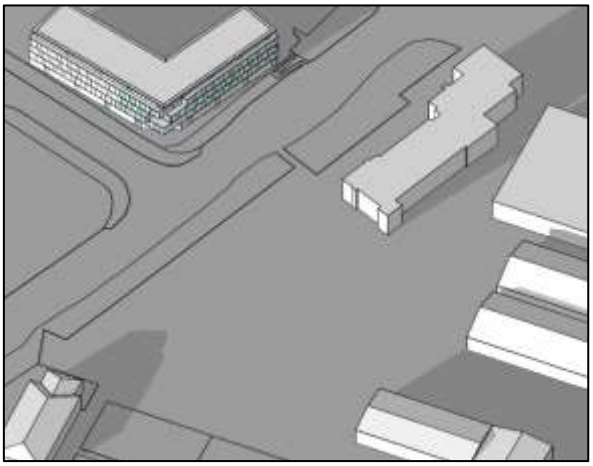
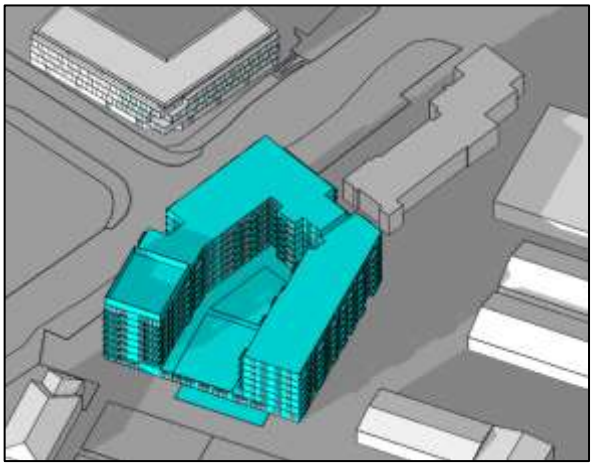
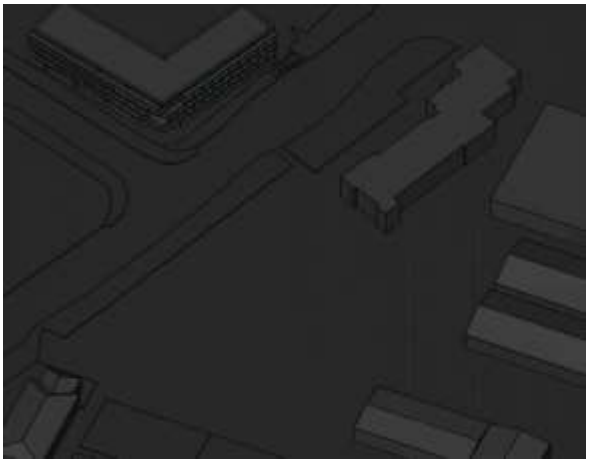
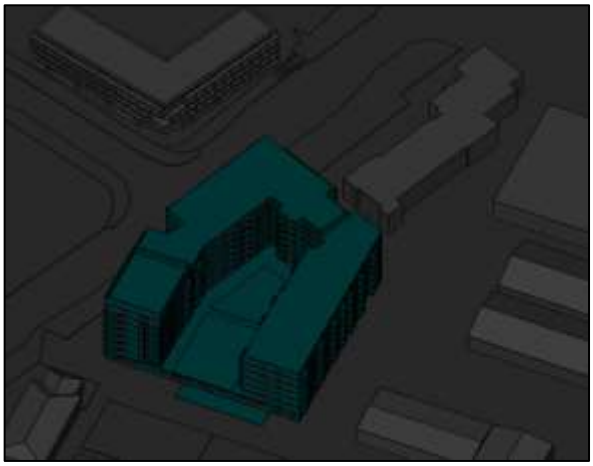
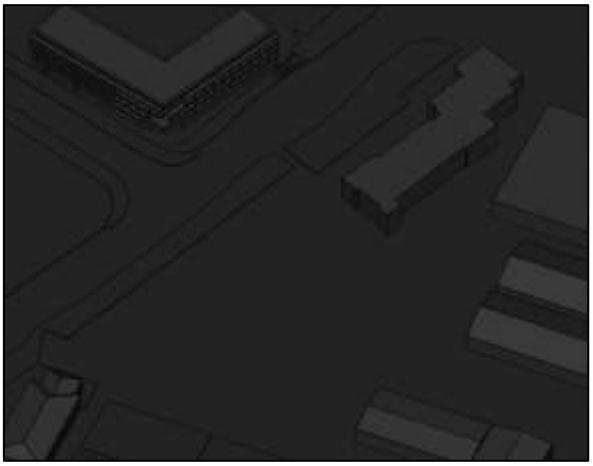
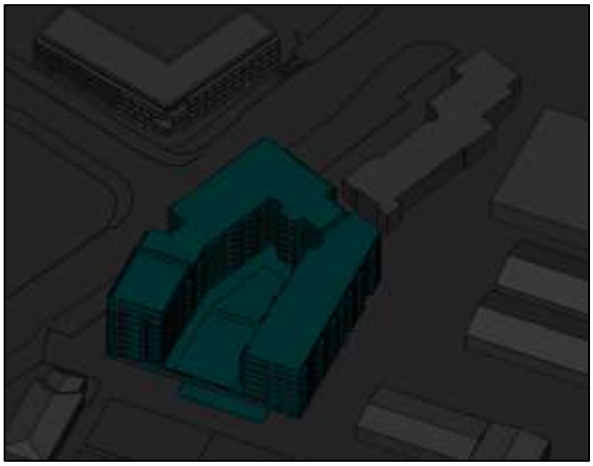
3D View – 21st June

	Existing	Proposed
21st June (08:00):		
21st June (10:00):		
21st June (12:00):		

21st June (14:00):		
21st June (16:00):		
21st June (18:00):		

3D View – 21st December

	Existing	Proposed
21st December (08:00):		
21st December (10:00):		
21st December (12:00):		

21st December (14:00):		
21st December (16:00):		
21st December (18:00):		

APPENDIX B | ADF RESULTS (BS8206-2)

Bedrooms

Reference Number	Room Name	% ADF	Achieves the BRE Best Practice Guidelines
1	A0101 Bed 1	4.40	Yes
2	A0101 Bed 2	4.88	Yes
3	A0102 Bed 1	3.34	Yes
4	A0102 Bed 2	2.14	Yes
5	A0103 Bed 1	5.04	Yes
6	A0103 Bed 2	4.77	Yes
7	A0104 Bed 1	1.56	Yes
8	A0104 Bed 2	3.45	Yes
9	A0104 Bed 3	2.41	Yes
10	A0105 Bed 1	4.07	Yes
11	A0105 Bed 2	4.59	Yes
12	A0201 BED 1	3.97	Yes
13	A0201 BED 2	3.44	Yes
14	A0202 BED 1	3.32	Yes
15	A0202 BED 2	2.32	Yes
16	A0203 BED 1	3.68	Yes
17	A0203 BED 2	4.16	Yes
18	A0204 BED 1	2.15	Yes
19	A0205 BED 1	4.22	Yes
20	A0205 BED 2	4.50	Yes
21	A0206 BED 1	1.76	Yes
22	A0206 BED 2	3.12	Yes
23	A0301 Bed 1	3.91	Yes
24	A0301 Bed 2	3.35	Yes
25	A0302 Bed 1	4.09	Yes
26	A0302 Bed 2	2.90	Yes
27	A0303 Bed 1	3.68	Yes
28	A0303 Bed 2	4.06	Yes
29	A0304 Bed 1	2.57	Yes
30	A0305 Bed 1	4.27	Yes
31	A0305 Bed 2	4.25	Yes
32	A0306 Bed 1	3.62	Yes
33	A0306 Bed 2	2.64	Yes
34	A0401 Bed 1	3.86	Yes
35	A0401 Bed 2	3.45	Yes
36	A0402 Bed 1	3.96	Yes
37	A0402 Bed 2	2.93	Yes
38	A0403 Bed 1	3.97	Yes
39	A0404 Bed 1	2.80	Yes

Reference Number	Room Name	% ADF	Achieves the BRE Best Practice Guidelines
40	A0405 Bed 1	4.20	Yes
41	A0405 Bed 2	4.37	Yes
42	A0406 Bed 1	3.59	Yes
43	A0406 Bed 2	3.37	Yes
44	A0501 Bed 1	3.89	Yes
45	A0501 Bed 1	4.84	Yes
46	A0501 Bed 2	3.07	Yes
47	A0501 Bed 2	3.38	Yes
48	A0503 Bed 1	3.74	Yes
49	A0503 Bed 2	4.02	Yes
50	A0504 Bed 1	3.30	Yes
51	A0505 Bed 1	4.16	Yes
52	A0505 Bed 2	3.98	Yes
53	A0506 Bed 1	4.10	Yes
54	A0506 Bed 2	3.14	Yes
55	A0601 Bed 1	3.69	Yes
56	A0601 Bed 2	3.42	Yes
57	A0602 Bed 1	3.10	Yes
58	A0602 Bed 2	4.23	Yes
59	A0603 Bed 1	3.67	Yes
60	A0603 Bed 2	3.95	Yes
61	A0604 Bed 1	3.24	Yes
62	A0605 Bed 1	4.26	Yes
63	A0605 Bed 2	3.96	Yes
64	A0606 Bed 1	3.30	Yes
65	A0606 Bed 2	4.87	Yes
66	A0701 Bed 1	3.88	Yes
67	A0701 Bed 2	3.44	Yes
68	A0702 Bed 1	4.31	Yes
69	A0702 Bed 2	3.17	Yes
70	A0703 Bed 1	3.95	Yes
71	A0703 Bed 2	4.14	Yes
72	A0704 Bed 1	4.57	Yes
73	A0705 Bed 1	4.85	Yes
74	A0706 Bed 1	4.61	Yes
75	A0706 Bed 2	4.62	Yes
76	B0101 Bed 1	3.73	Yes
77	B0101 Bed 2	4.92	Yes
78	B0102 Bed 1	2.36	Yes
79	B0102 Bed 2	1.94	Yes
80	B0103 Bed 1	6.19	Yes

Reference Number	Room Name	% ADF	Achieves the BRE Best Practice Guidelines
81	B0103 Bed 2	4.06	Yes
82	B0104 Bed 1	1.47	Yes
83	B0105 Bed 1	4.41	Yes
84	B0106 Bed 1	1.18	Yes
85	B0107 Bed 1	4.18	Yes
86	B0108 Bed 1	1.32	Yes
87	B0109 Bed 1	1.43	Yes
88	B011 Bed 1	4.19	Yes
89	B011 Bed 2	4.63	Yes
90	B011 Bed 3	4.38	Yes
91	B0110 Bed 1	6.30	Yes
92	B0111 Bed 1	2.41	Yes
93	B0111 Bed 2	2.32	Yes
94	B0201 BED 1	2.64	Yes
95	B0201 BED 2	3.83	Yes
96	B0202 BED 1	2.60	Yes
97	B0202 BED 2	2.10	Yes
98	B0203 BED 1	3.29	Yes
99	B0203 BED 2	2.76	Yes
100	B0204 BED 1	1.78	Yes
101	B0205 BED 1	2.43	Yes
102	B0206 BED 1	1.25	Yes
103	B0207 BED1	2.33	Yes
104	B0208 BED 1	1.34	Yes
105	B0208 BED 2	1.10	Yes
106	B0209 BED 1	4.51	Yes
107	B0209 BED 2	4.63	Yes
108	B0209 BED 3	3.88	Yes
109	B0210 BED 1	2.41	Yes
110	B0211 BED 1	4.25	Yes
111	B0211 BED 2	4.62	Yes
112	B0211 BED 3	4.33	Yes
113	B0212 BED 1	2.75	Yes
114	B0212 BED 2	2.47	Yes
115	B0301 Bed 1	3.95	Yes
116	B0301 Bed 2	2.60	Yes
117	B0302 Bed 1	2.87	Yes
118	B0302 Bed 2	2.45	Yes
119	B0303 Bed 1	3.38	Yes
120	B0303 Bed 2	2.73	Yes
121	B0304 Bed 1	2.30	Yes

Reference Number	Room Name	% ADF	Achieves the BRE Best Practice Guidelines
122	B0305 Bed 1	2.26	Yes
123	B0306 Bed 1	1.50	Yes
124	B0307 Bed 1	2.39	Yes
125	B0308 Bed 1	1.66	Yes
126	B0308 Bed 2	1.33	Yes
127	B0309 Bed 1	4.61	Yes
128	B0309 Bed 2	4.54	Yes
129	B0309 Bed 3	3.73	Yes
130	B0310 Bed 1	2.54	Yes
131	B0312 Bed 1	2.78	Yes
132	B0312 Bed 2	2.77	Yes
133	B0401 Bed 1	2.63	Yes
134	B0401 Bed 2	3.97	Yes
135	B0402 Bed 1	3.10	Yes
136	B0402 Bed 2	2.54	Yes
137	B0403 Bed 1	3.34	Yes
138	B0403 Bed 2	2.76	Yes
139	B0404 Bed 1	2.36	Yes
140	B0405 Bed 1	2.37	Yes
141	B0406 Bed 1	1.70	Yes
142	B0407 Bed 1	2.38	Yes
143	B0408 Bed 1	1.83	Yes
144	B0408 Bed 2	1.34	Yes
145	B0409 Bed 1	4.41	Yes
146	B0409 Bed 2	4.49	Yes
147	B0409 Bed 3	3.76	Yes
148	B0410 Bed 1	2.19	Yes
149	B0411 Bed 1	4.31	Yes
150	B0411 Bed 2	4.64	Yes
151	B0411 Bed 3	4.25	Yes
152	B0412 Bed 1	3.07	Yes
153	B0412 Bed 2	3.03	Yes
154	B0501 Bed 1	3.94	Yes
155	B0501 Bed 2	3.62	Yes
156	B0502 Bed 1	3.38	Yes
157	B0502 Bed 2	3.05	Yes
158	B0503 Bed 1	3.13	Yes
159	B0503 Bed 2	3.47	Yes
160	B0504 Bed 1	3.09	Yes
161	B0505 Bed 1	3.17	Yes
162	B0506 Bed 1	1.95	Yes

Reference Number	Room Name	% ADF	Achieves the BRE Best Practice Guidelines
163	B0507 Bed 1	3.26	Yes
164	B0508 Bed 1	2.01	Yes
165	B0508 Bed 2	1.32	Yes
166	B0509 Bed 1	4.42	Yes
167	B0509 Bed 2	4.36	Yes
168	B0509 Bed 3	3.61	Yes
169	B0510 Bed 1	2.02	Yes
170	B0511 Bed 1	3.92	Yes
171	B0511 Bed 2	4.31	Yes
172	B0511 Bed 3	4.01	Yes
173	B0512 Bed 1	4.47	Yes
174	B0512 Bed 2	3.42	Yes
175	B0601 Bed 1	2.76	Yes
176	B0601 Bed 2	2.82	Yes
177	B0602 Bed 1	3.29	Yes
178	B0602 Bed 2	3.03	Yes
179	B0603 Bed 1	3.41	Yes
180	B0603 Bed 2	3.40	Yes
181	B0604 Bed 1	3.04	Yes
182	B0605 Bed 1	4.38	Yes
183	B0605 Bed 2	4.31	Yes
184	B0605 Bed 3	3.52	Yes
185	B0606 Bed 1	2.37	Yes
186	B0607 Bed 1	3.87	Yes
187	B0607 Bed 2	4.30	Yes
188	B0607 Bed 3	4.08	Yes
189	B0608 Bed 1	2.99	Yes
190	B0608 Bed 2	1.62	Yes
191	B0609 Bed 1	4.19	Yes
192	B0609 Bed 2	4.11	Yes
193	B0610 Bed 1	2.67	Yes
194	B0701 Bed 1	2.79	Yes
195	B0701 Bed 2	2.67	Yes
196	B0702 Bed 1	3.46	Yes
197	B0702 Bed 2	3.10	Yes
198	B0703 Bed 1	3.55	Yes
199	B0703 Bed 2	3.29	Yes
200	B0704 Bed 1	4.47	Yes
201	B0705 Bed 1	4.32	Yes
202	B0705 Bed 2	4.36	Yes
203	B0705 Bed 2	4.40	Yes

Reference Number	Room Name	% ADF	Achieves the BRE Best Practice Guidelines
204	B0705 Bed 3	3.58	Yes
205	B0706 Bed 1	4.17	Yes
206	B0707 Bed 1	3.91	Yes
207	B0707 Bed 2	4.40	Yes
208	B0707 Bed 3	4.34	Yes
209	B0708 Bed 1	4.30	Yes
210	B0708 Bed 2	3.52	Yes
211	B0709 Bed 1	4.49	Yes
212	B0709 Bed 2	4.85	Yes
213	B0710 Bed 1	4.03	Yes
214	C0101 Bed 1	3.80	Yes
215	C0101 Bed 2	4.26	Yes
216	C0102 Bed 1	3.43	Yes
217	C0102 Bed 2	3.42	Yes
218	C0103 Bed 1	3.50	Yes
219	C0104 Bed 1	1.55	Yes
220	C0104 Bed 2	1.12	Yes
221	C0105 Bed 1	4.34	Yes
222	C0106 Bed 1	1.51	Yes
223	C0107 Bed 1	3.40	Yes
224	C0201 BED 1	3.69	Yes
225	C0201 BED 2	4.11	Yes
226	C0202 BED 1	3.41	Yes
227	C0202 BED 2	3.43	Yes
228	C0203 BED 1	3.48	Yes
229	C0204 BED 1	1.74	Yes
230	C0204 BED 2	1.30	Yes
231	C0205 BED 1	4.25	Yes
232	C0206 BED 1	1.68	Yes
233	C0207 BED 1	3.58	Yes
234	C0301 Bed 1	3.68	Yes
235	C0301 Bed 2	4.11	Yes
236	C0302 Bed 1	3.49	Yes
237	C0302 Bed 2	3.27	Yes
238	C0303 Bed 1	1.75	Yes
239	C0304 Bed 1	2.11	Yes
240	C0304 Bed 2	1.52	Yes
241	C0305 Bed 1	1.81	Yes
242	C0306 Bed 1	0.69	No
243	C0323 Bed 1	2.25	Yes
244	C0401 Bed 1	4.07	Yes

Reference Number	Room Name	% ADF	Achieves the BRE Best Practice Guidelines
245	C0401 Bed 2	3.71	Yes
246	C0402 Bed 1	3.39	Yes
247	C0402 Bed 2	3.50	Yes
248	C0403 Bed 1	3.39	Yes
249	C0404 Bed 1	3.19	Yes
250	C0404 Bed 2	2.70	Yes
251	C0405 Bed 1	4.16	Yes
252	C0406 Bed 1	2.17	Yes
253	C0407 Bed 1	3.46	Yes
254	C0501 Bed 1	3.69	Yes
255	C0501 Bed 2	4.07	Yes
256	C0502 Bed 2	3.48	Yes
257	C0502 Bed1	3.27	Yes
258	C0503 Bed 1	3.45	Yes
259	C0504 Bed 1	2.56	Yes
260	C0504 Bed 2	3.03	Yes
261	C0505 Bed 1	4.19	Yes
262	C0506 Bed 1	2.47	Yes
263	C0507 Bed 1	3.46	Yes
264	C0601 Bed 1	4.19	Yes
265	C0602 Bed 1	3.52	Yes
266	C0602 Bed 2	5.15	Yes
267	C0603 Bed 1	4.39	Yes
268	C0604 Bed 1	3.21	Yes
269	C0604 Bed 2	4.10	Yes
270	C0605 Bed 1	4.58	Yes
271	C0606 Bed 1	4.28	Yes
272	C0607 Bed 1	4.86	Yes
273	D0101 Bed 1	3.63	Yes
274	D0102 Bed 1	2.24	Yes
275	D0102 Bed 2	1.56	Yes
276	D0103 Bed 1	4.51	Yes
277	D0103 Bed 2	3.45	Yes
278	D0104 Bed 1	2.53	Yes
279	D0104 Bed 2	2.76	Yes
280	D0105 Bed 1	4.33	Yes
281	D0105 Bed 2	3.46	Yes
282	D0201 BED 1	3.63	Yes
283	D0202 BED 1	1.64	Yes
284	D0203 BED 1	4.27	Yes
285	D0203 BED 2	3.61	Yes

Reference Number	Room Name	% ADF	Achieves the BRE Best Practice Guidelines
286	D0204 BED 1	2.33	Yes
287	D0205 BED 1	3.44	Yes
288	D0205 BED 2	4.18	Yes
289	D0206 BED 1	2.91	Yes
290	D0206 BED 2	2.65	Yes
291	D0301 Bed 1	1.85	Yes
292	D0302 Bed 1	1.36	Yes
293	D0303 Bed 1	2.28	Yes
294	D0303 Bed 2	3.41	Yes
295	D0304 Bed 1	2.58	Yes
296	D0305 Bed 1	3.51	Yes
297	D0305 Bed 2	4.41	Yes
298	D0306 Bed 1	2.98	Yes
299	D0306 Bed 2	3.05	Yes
300	D0401 Bed 1	3.62	Yes
301	D0402 Bed 1	2.50	Yes
302	D0403 Bed 1	4.39	Yes
303	D0403 Bed 2	3.50	Yes
304	D0404 Bed 1	2.83	Yes
305	D0405 Bed 1	3.50	Yes
306	D0405 Bed 2	4.41	Yes
307	D0406 Bed 1	3.16	Yes
308	D0406 Bed 2	3.21	Yes
309	D0501 Bed 1	3.59	Yes
310	D0502 Bed 1	2.77	Yes
311	D0503 Bed 1	4.35	Yes
312	D0503 Bed 2	3.58	Yes
313	D0504 Bed 1	3.09	Yes
314	D0505 Bed 1	3.61	Yes
315	D0505 Bed 2	4.28	Yes
316	D0506 Bed 1	3.63	Yes
317	D0506 Bed 2	3.32	Yes
318	D0601 Bed 1	4.50	Yes
319	D0602 Bed 1	4.13	Yes
320	D0603 Bed 1	4.73	Yes
321	D0603 Bed 2	4.50	Yes
322	D0604 Bed 1	4.11	Yes
323	D0605 Bed 1	3.57	Yes
324	D0605 Bed 2	4.37	Yes
325	D0606 Bed 1	3.34	Yes
326	D0606 Bed 2	3.63	Yes

Kitchen/Living/Dining

Reference Number	Room Name	% ADF	Achieves the BRE Best Practice Guidelines
1	A0201 KLD	5.77	Yes
2	A0203 KLD	2.64	Yes
3	A0202 KLD	5.37	Yes
4	A0204 KLD	1.76	*Note 1
5	A0205 KLD	3.75	Yes
6	A0206 KLD	1.65	*Note 1
7	B0202 KLD	2.54	Yes
8	B0201 KLD	2.74	Yes
9	B0204 KLD	2.06	Yes
10	B0206 KLD	1.77	*Note 1
11	B0203 KLD	2.17	Yes
12	B0205 KLD	2.98	Yes
13	B0208 KLD	0.86	No
14	B0209 KLD	5.38	Yes
15	B0211 KLD	2.41	Yes
16	B0210 KLD	2.00	Yes
17	B0212 KLD	3.26	Yes
18	C0201 KLD	2.82	Yes
19	C0202 KLD	2.13	Yes
20	C0204 KLD	1.52	*Note 1
21	C0205 KLD	2.25	Yes
22	C0203 KLD	2.35	Yes
23	C0207 KLD	2.35	Yes
24	C0206 KLD	1.54	*Note 1
25	D0202 KLD	1.88	*Note 1
26	D0201 KLD	2.23	Yes
27	D0204 KLD	1.86	*Note 1
28	D0203 KLD	2.25	Yes
29	D0206 KLD	4.52	Yes
30	D0205 KLD	5.22	Yes
31	A0102 KLD	5.51	Yes
32	A0103 KLD	2.87	Yes
33	A0104 KLD	1.19	No
34	A0105 KLD	3.75	Yes
35	B0102 KLD	2.69	Yes
36	B0101 KLD	2.70	Yes
37	B0103 KLD	1.96	*Note 1
38	B0104 KLD	1.88	*Note 1

Reference Number	Room Name	% ADF	Achieves the BRE Best Practice Guidelines
39	B0106 KLD	1.60	*Note 1
40	B0105 KLD	2.97	Yes
41	B0107 KLD	3.74	Yes
42	B0108 KLD	0.66	No
43	B0109 KLD	1.89	*Note 1
44	B0110 KLD	2.57	Yes
45	B0111 KLD	3.08	Yes
46	C0101 KLD	2.82	Yes
47	C0102 KLD	2.16	Yes
48	C0103 KLD	2.47	Yes
49	C0104 KLD	1.26	No
50	C0105 KLD	2.27	Yes
51	C0106 KLD	1.24	No
52	C0107 KLD	2.45	Yes
53	D0101 KLD	2.32	Yes
54	D0102 KLD	1.28	No
55	D0103 KLD	2.27	Yes
56	D0104 KLD	4.48	Yes
57	D0105 KLD	5.32	Yes
58	A0301 KLD	5.83	Yes
59	A0302 KLD	5.51	Yes
60	A0303 KLD	2.73	Yes
61	A0304 KLD	2.15	Yes
62	A0305 KLD	3.92	Yes
63	A0306 KLD	1.86	*Note 1
64	B0302 KLD	2.71	Yes
65	B0301 KLD	2.74	Yes
66	B0303 KLD	2.18	Yes
67	B0304 KLD	2.31	Yes
68	B0306 KLD	2.06	Yes
69	B0305 KLD	2.92	Yes
70	B0308 KLD	1.01	No
71	B0307 KLD	2.96	Yes
72	B0309 KLD	5.30	Yes
73	B011 KLD	2.47	Yes
74	B0310 KLD	2.31	Yes
75	B0312 KLD	3.46	Yes
76	C0301 KLD	2.80	Yes
77	C0302 KLD	2.15	Yes
78	C0303 KLD	2.40	Yes
79	C0304 KLD	1.67	*Note 1

Reference Number	Room Name	% ADF	Achieves the BRE Best Practice Guidelines
80	C0323 KLD	0.94	No
81	C0305 KLD	0.96	No
82	C0306 KLD	1.59	*Note 1
83	D0302 KLD	2.04	Yes
84	D0301 KLD	0.90	No
85	D0304 KLD	2.01	Yes
86	D0303 KLD	1.98	*Note 1
87	D0306 KLD	4.43	Yes
88	D0305 KLD	5.20	Yes
89	A0501 KLD	5.59	Yes
90	A0501 KLD	5.49	Yes
91	A0503 KLD	2.58	Yes
92	A0504 KLD	2.69	Yes
93	A0506 KLD	2.38	Yes
94	A0505 KLD	3.88	Yes
95	B0502 KLD	3.15	Yes
96	B0501 KLD	3.06	Yes
97	B0504 KLD	2.76	Yes
98	B0503 KLD	2.98	Yes
99	B0506 KLD	2.41	Yes
100	B0505 KLD	3.18	Yes
101	B0508 KLD	1.17	No
102	B0507 KLD	3.23	Yes
103	B0509 KLD	5.16	Yes
104	B0511 KLD	2.51	Yes
105	B0510 KLD	2.55	Yes
106	B0512 KLD	3.29	Yes
107	C0501 KLD	2.80	Yes
108	C0502 KLD	2.08	Yes
109	C0503 KLD	2.43	Yes
110	C0504 KLD	2.16	Yes
111	C0505 KLD	2.15	Yes
112	C0507 KLD	2.31	Yes
113	C0506 KLD	2.10	Yes
114	D0502 KLD	2.34	Yes
115	D0501 KLD	2.43	Yes
116	D0504 KLD	2.39	Yes
117	D0503 KLD	2.49	Yes
118	D0506 KLD	4.55	Yes
119	D0505 KLD	5.20	Yes
120	A0601 KLD	5.55	Yes

Reference Number	Room Name	% ADF	Achieves the BRE Best Practice Guidelines
121	A0602 KLD	5.51	Yes
122	A0603 KLD	2.61	Yes
123	A0605 KLD	4.04	Yes
124	A0604 KLD	2.57	Yes
125	A0606 KLD	2.43	Yes
126	B0602 KLD	3.04	Yes
127	B0601 KLD	2.86	Yes
128	B0604 KLD	2.86	Yes
129	B0606 KLD	2.70	Yes
130	B0608 KLD	1.38	No
131	B0603 KLD	2.22	Yes
132	B0605 KLD	4.99	Yes
133	B0607 KLD	2.44	Yes
134	B0610 KLD	2.83	Yes
135	B0609 KLD	3.41	Yes
136	C0601 KLD	3.93	Yes
137	C0602 KLD	2.50	Yes
138	C0604 KLD	2.74	Yes
139	C0603 KLD	2.85	Yes
140	C0605 KLD	2.97	Yes
141	C0606 KLD	2.74	Yes
142	C0607 KLD	2.91	Yes
143	C0602 KLD	2.95	Yes
144	D0601 KLD	2.92	Yes
145	D0604 KLD	2.97	Yes
146	D0603 KLD	2.90	Yes
147	D0605 KLD	6.29	Yes
148	D0606 KLD	5.50	Yes
149	A0701 KLD	6.70	Yes
150	A0702 KLD	6.81	Yes
151	A0703 KLD	3.90	Yes
152	B0705 KLD	5.37	Yes
153	A0704 KLD	2.98	Yes
154	A0706 KLD	2.63	Yes
155	B0702 KLD	3.95	Yes
156	B0701 KLD	4.88	Yes
157	B0704 KLD	3.27	Yes
158	B0706 KLD	3.27	Yes
159	B0703 KLD	3.71	Yes
160	B0708 KLD	2.27	Yes
161	B0705 KLD	6.08	Yes

Reference Number	Room Name	% ADF	Achieves the BRE Best Practice Guidelines
162	B0707 KLD	4.01	Yes
163	B0710 KLD	3.48	Yes
164	B0709 KLD	5.38	Yes
165	A0401 KLD	5.61	Yes
166	A0402 KLD	5.45	Yes
167	A0403 KLD	3.69	Yes
168	A0403 KLD	2.61	Yes
169	A0404 KLD	2.19	Yes
170	A0405 KLD	3.86	Yes
171	A0406 KLD	2.15	Yes
172	B0402 KLD	2.88	Yes
173	B0401 KLD	2.66	Yes
174	B0404 KLD	2.53	Yes
175	B0406 KLD	2.18	Yes
176	B0403 KLD	2.14	Yes
177	B0408 KLD	1.04	No
178	B0405 KLD	3.00	Yes
179	B0407 KLD	2.98	Yes
180	B0409 KLD	5.27	Yes
181	B0411 KLD	2.47	Yes
182	B0410 KLD	2.41	Yes
183	B0412 KLD	3.27	Yes
184	C0401 KLD	2.81	Yes
185	C0402 KLD	2.05	Yes
186	C0403 KLD	2.36	Yes
187	C0405 KLD	2.28	Yes
188	C0404 KLD	2.04	Yes
189	C0406 KLD	1.93	*Note 1
190	C0407 KLD	2.35	Yes
191	D0401 KLD	2.37	Yes
192	D0402 KLD	2.31	Yes
193	D0404 KLD	2.30	Yes
194	D0403 KLD	2.40	Yes
195	D0406 KLD	4.57	Yes
196	D0405 KLD	5.28	Yes
197	A0101 BED 1	7.42	Yes

***Note 1: The room does not achieve the BRE recommended target of 2.00% for a kitchen/living/dining space, however the room achieves the BRE Target ADF for Living Room spaces (for example, not a combined kitchen/living/dining space) of 1.50%.**

APPENDIX C | SPATIAL DAYLIGHT AUTONOMY (sDA) RESULTS – EN17037

All Rooms

Reference Number	Room	% Area achieving 300 Lux	% Area achieving 100 Lux	EN 17037 Compliant
1	A0101 Bed 1	100.00	100.00	Yes
2	A0101 Bed 2	100.00	100.00	Yes
3	A0101 KLD	100.00	100.00	Yes
4	A0102 Bed 1	100.00	100.00	Yes
5	A0102 Bed 2	71.43	100.00	Yes
6	A0102 KLD	100.00	100.00	Yes
7	A0103 Bed 1	100.00	100.00	Yes
8	A0103 Bed 2	100.00	100.00	Yes
9	A0103 KLD	69.47	98.95	Yes
10	A0104 Bed 1	65.63	100.00	Yes
11	A0104 Bedroom 2	93.75	100.00	Yes
12	A0104 Bedroom 3	86.49	100.00	Yes
13	A0104 KLD	33.71	96.63	No
14	A0105 Bed 1	100.00	100.00	Yes
15	A0105 Bed 2	96.97	100.00	Yes
16	A0105 KLD	88.61	100.00	Yes
17	A0201 BED 1	100.00	100.00	Yes
18	A0201 BED 2	100.00	100.00	Yes
19	A0201 KLD	100.00	100.00	Yes
20	A0202 BED 1	100.00	100.00	Yes
21	A0202 BED 2	82.86	100.00	Yes
22	A0202 KLD	100.00	100.00	Yes
23	A0203 BED 1	100.00	100.00	Yes
24	A0203 BED 2	100.00	100.00	Yes
25	A0203 KLD	71.58	100.00	Yes
26	A0204 BED 1	100.00	100.00	Yes
27	A0204 KLD	50.85	86.44	Yes
28	A0205 BED 1	96.97	100.00	Yes
29	A0205 BED 2	100.00	100.00	Yes
30	A0205 KLD	88.61	100.00	Yes
31	A0206 BED 1	86.21	100.00	Yes
32	A0206 BED 2	77.14	100.00	Yes
33	A0206 KLD	47.37	100.00	No
34	A0301 Bed 1	100.00	100.00	Yes
35	A0301 Bed 2	100.00	100.00	Yes
36	A0301 KLD	100.00	100.00	Yes
37	A0302 Bed 1	100.00	100.00	Yes
38	A0302 Bed 2	88.57	100.00	Yes

Reference Number	Room	% Area achieving 300 Lux	% Area achieving 100 Lux	EN 17037 Compliant
39	A0302 KLD	100.00	100.00	Yes
40	A0303 Bed 1	100.00	100.00	Yes
41	A0303 Bed 2	100.00	100.00	Yes
42	A0303 KLD	67.37	100.00	Yes
43	A0304 Bed 1	100.00	100.00	Yes
44	A0304 KLD	50.85	94.92	Yes
45	A0305 Bed 1	96.97	100.00	Yes
46	A0305 Bed 2	100.00	100.00	Yes
47	A0305 KLD	87.34	100.00	Yes
48	A0306 Bed 1	77.14	100.00	Yes
49	A0306 Bed 2	86.21	100.00	Yes
50	A0306 KLD	52.63	100.00	Yes
51	A0401 Bed 1	100.00	100.00	Yes
52	A0401 Bed 2	100.00	100.00	Yes
53	A0401 KLD	100.00	100.00	Yes
54	A0402 Bed 1	100.00	100.00	Yes
55	A0402 Bed 2	97.14	100.00	Yes
56	A0402 KLD	100.00	100.00	Yes
57	A0403 Bed 1	100.00	100.00	Yes
58	A0403 KLD	100.00	100.00	Yes
59	A0403 KLD	66.32	98.95	Yes
60	A0404 Bed 1	100.00	100.00	Yes
61	A0404 KLD	57.63	96.61	Yes
62	A0405 Bed 1	96.97	100.00	Yes
63	A0405 Bed 2	100.00	100.00	Yes
64	A0405 KLD	89.87	100.00	Yes
65	A0406 Bed 1	82.86	100.00	Yes
66	A0406 Bed 2	93.10	100.00	Yes
67	A0406 KLD	63.16	100.00	Yes
68	A0501 Bed 1	100.00	100.00	Yes
69	A0501 Bed 1	100.00	100.00	Yes
70	A0501 Bed 2	100.00	100.00	Yes
71	A0501 Bed 2	94.29	100.00	Yes
72	A0501 KLD	100.00	100.00	Yes
73	A0501 KLD	100.00	100.00	Yes
74	A0503 Bed 1	100.00	100.00	Yes
75	A0503 Bed 2	100.00	100.00	Yes
76	A0503 KLD	66.32	100.00	Yes
77	A0504 Bed 1	100.00	100.00	Yes
78	A0504 KLD	59.32	96.61	Yes
79	A0505 Bed 1	96.97	100.00	Yes

Reference Number	Room	% Area achieving 300 Lux	% Area achieving 100 Lux	EN 17037 Compliant
80	A0505 Bed 2	100.00	100.00	Yes
81	A0505 KLD	92.41	100.00	Yes
82	A0506 Bed 1	82.86	100.00	Yes
83	A0506 Bed 2	96.55	100.00	Yes
84	A0506 KLD	69.74	100.00	Yes
85	A0601 Bed 1	100.00	100.00	Yes
86	A0601 Bed 2	100.00	100.00	Yes
87	A0601 KLD	100.00	100.00	Yes
88	A0602 Bed 1	97.14	100.00	Yes
89	A0602 Bed 2	100.00	100.00	Yes
90	A0602 KLD	100.00	100.00	Yes
91	A0603 Bed 1	100.00	100.00	Yes
92	A0603 Bed 2	100.00	100.00	Yes
93	A0603 KLD	67.37	100.00	Yes
94	A0604 Bed 1	100.00	100.00	Yes
95	A0604 KLD	62.71	96.61	Yes
96	A0605 Bed 1	96.97	100.00	Yes
97	A0605 Bed 2	100.00	100.00	Yes
98	A0605 KLD	96.20	100.00	Yes
99	A0606 Bed 1	100.00	100.00	Yes
100	A0606 Bed 2	82.86	100.00	Yes
101	A0606 KLD	76.32	100.00	Yes
102	A0701 Bed 1	100.00	100.00	Yes
103	A0701 Bed 2	100.00	100.00	Yes
104	A0701 KLD	100.00	100.00	Yes
105	A0702 Bed 1	100.00	100.00	Yes
106	A0702 Bed 2	100.00	100.00	Yes
107	A0702 KLD	100.00	100.00	Yes
108	A0703 Bed 1	100.00	100.00	Yes
109	A0703 Bed 2	100.00	100.00	Yes
110	A0703 KLD	71.58	100.00	Yes
111	A0704 Bed 1	100.00	100.00	Yes
112	A0704 KLD	66.10	100.00	Yes
113	A0705 Bed 1	96.97	100.00	Yes
114	A0706 Bed 1	97.14	100.00	Yes
115	A0706 Bed 2	100.00	100.00	Yes
116	A0706 KLD	76.32	100.00	Yes
117	B0101 Bed 1	100.00	100.00	Yes
118	B0101 Bed 2	100.00	100.00	Yes
119	B0101 KLD	70.79	100.00	Yes
120	B0102 Bed 1	84.00	100.00	Yes

Reference Number	Room	% Area achieving 300 Lux	% Area achieving 100 Lux	EN 17037 Compliant
121	B0102 Bed 2	54.05	94.59	Yes
122	B0102 KLD	77.92	100.00	Yes
123	B0103 Bed 1	100.00	100.00	Yes
124	B0103 Bed 2	100.00	100.00	Yes
125	B0103 KLD	63.64	97.73	Yes
126	B0104 Bed 1	51.43	100.00	Yes
127	B0104 KLD	42.25	74.65	No
128	B0105 Bed 1	100.00	100.00	Yes
129	B0105 KLD	59.15	98.59	Yes
130	B0106 Bed 1	31.43	100.00	No
131	B0106 KLD	38.03	69.01	No
132	B0107 Bed 1	100.00	100.00	Yes
133	B0107 KLD	93.83	100.00	Yes
134	B0108 Bed 1	37.14	100.00	No
135	B0108 KLD	17.20	51.61	No
136	B0109 Bed 1	54.29	100.00	Yes
137	B0109 KLD	49.38	93.83	No
138	B011 Bed 1	89.19	100.00	Yes
139	B011 Bed 2	100.00	100.00	Yes
140	B011 Bed 3	100.00	100.00	Yes
141	B011 KLD	70.45	100.00	Yes
142	B0110 Bed 1	100.00	100.00	Yes
143	B0110 KLD	64.71	100.00	Yes
144	B0111 Bed 1	65.63	100.00	Yes
145	B0111 Bed 2	80.00	100.00	Yes
146	B0111 KLD	100.00	100.00	Yes
147	B0201 BED 1	100.00	100.00	Yes
148	B0201 BED 2	100.00	100.00	Yes
149	B0201 KLD	64.52	100.00	Yes
150	B0202 BED 1	92.00	100.00	Yes
151	B0202 BED 2	56.76	94.59	Yes
152	B0202 KLD	80.52	100.00	Yes
153	B0203 BED 1	100.00	100.00	Yes
154	B0203 BED 2	100.00	100.00	Yes
155	B0203 KLD	62.37	97.85	Yes
156	B0204 BED 1	62.86	100.00	Yes
157	B0204 KLD	42.25	76.06	No
158	B0205 BED 1	100.00	100.00	Yes
159	B0205 KLD	57.75	94.37	Yes
160	B0206 BED 1	34.29	100.00	No
161	B0206 KLD	39.44	71.83	No

Reference Number	Room	% Area achieving 300 Lux	% Area achieving 100 Lux	EN 17037 Compliant
162	B0207 BED1	100.00	100.00	Yes
163	B0208 BED 1	42.86	100.00	No
164	B0208 BED 2	30.30	100.00	No
165	B0208 KLD	22.99	60.92	No
166	B0209 BED 1	100.00	100.00	Yes
167	B0209 BED 2	100.00	100.00	Yes
168	B0209 BED 3	80.49	100.00	Yes
169	B0209 KLD	100.00	100.00	Yes
170	B0210 BED 1	62.86	100.00	Yes
171	B0210 KLD	50.62	95.06	Yes
172	B0211 BED 1	100.00	100.00	Yes
173	B0211 BED 2	100.00	100.00	Yes
174	B0211 BED 3	89.19	100.00	Yes
175	B0211 KLD	69.32	100.00	Yes
176	B0212 BED 1	75.00	100.00	Yes
177	B0212 BED 2	76.67	100.00	Yes
178	B0212 KLD	100.00	100.00	Yes
179	B0301 Bed 1	100.00	100.00	Yes
180	B0301 Bed 2	100.00	100.00	Yes
181	B0301 KLD	64.52	98.92	Yes
182	B0302 Bed 1	96.00	100.00	Yes
183	B0302 Bed 2	67.57	94.59	Yes
184	B0302 KLD	81.82	100.00	Yes
185	B0303 Bed 1	100.00	100.00	Yes
186	B0303 Bed 2	100.00	100.00	Yes
187	B0303 KLD	61.29	97.85	Yes
188	B0304 Bed 1	82.86	100.00	Yes
189	B0304 KLD	47.89	78.87	No
190	B0305 Bed 1	100.00	100.00	Yes
191	B0305 KLD	56.34	95.77	Yes
192	B0306 Bed 1	51.43	100.00	Yes
193	B0306 KLD	43.66	77.46	No
194	B0307 Bed 1	100.00	100.00	Yes
195	B0307 KLD	56.34	97.18	Yes
196	B0308 Bed 1	54.29	100.00	Yes
197	B0308 Bed 2	36.36	100.00	No
198	B0308 KLD	28.74	64.37	No
199	B0309 Bed 1	100.00	100.00	Yes
200	B0309 Bed 2	100.00	100.00	Yes
201	B0309 Bed 3	87.80	100.00	Yes
202	B0309 KLD	100.00	100.00	Yes

Reference Number	Room	% Area achieving 300 Lux	% Area achieving 100 Lux	EN 17037 Compliant
203	B0310 Bed 1	80.00	100.00	Yes
204	B0310 KLD	53.09	95.06	Yes
205	B0312 Bed 1	86.67	100.00	Yes
206	B0312 Bed 2	81.25	100.00	Yes
207	B0312 KLD	100.00	100.00	Yes
208	B0401 Bed 1	100.00	100.00	Yes
209	B0401 Bed 2	100.00	100.00	Yes
210	B0401 KLD	65.59	100.00	Yes
211	B0402 Bed 1	100.00	100.00	Yes
212	B0402 Bed 2	72.97	94.59	Yes
213	B0402 KLD	98.70	100.00	Yes
214	B0403 Bed 1	100.00	100.00	Yes
215	B0403 Bed 2	100.00	100.00	Yes
216	B0403 KLD	62.37	97.85	Yes
217	B0404 Bed 1	94.29	100.00	Yes
218	B0404 KLD	50.70	84.51	Yes
219	B0405 Bed 1	100.00	100.00	Yes
220	B0405 KLD	57.75	95.77	Yes
221	B0406 Bed 1	65.71	100.00	Yes
222	B0406 KLD	49.30	81.69	No
223	B0407 Bed 1	100.00	100.00	Yes
224	B0407 KLD	59.15	95.77	Yes
225	B0408 Bed 1	68.57	100.00	Yes
226	B0408 Bed 2	39.39	100.00	No
227	B0408 KLD	34.48	72.41	No
228	B0409 Bed 1	100.00	100.00	Yes
229	B0409 Bed 2	100.00	100.00	Yes
230	B0409 Bed 3	80.49	100.00	Yes
231	B0409 KLD	100.00	100.00	Yes
232	B0410 Bed 1	88.57	100.00	Yes
233	B0410 KLD	55.56	96.30	Yes
234	B0411 Bed 1	100.00	100.00	Yes
235	B0411 Bed 2	100.00	100.00	Yes
236	B0411 Bed 3	89.19	100.00	Yes
237	B0411 KLD	69.32	100.00	Yes
238	B0412 Bed 1	81.25	100.00	Yes
239	B0412 Bed 2	96.67	100.00	Yes
240	B0412 KLD	100.00	100.00	Yes
241	B0501 Bed 1	100.00	100.00	Yes
242	B0501 Bed 2	100.00	100.00	Yes
243	B0501 KLD	66.67	98.92	Yes

Reference Number	Room	% Area achieving 300 Lux	% Area achieving 100 Lux	EN 17037 Compliant
244	B0502 Bed 1	100.00	100.00	Yes
245	B0502 Bed 2	78.38	94.59	Yes
246	B0502 KLD	98.70	100.00	Yes
247	B0503 Bed 1	100.00	100.00	Yes
248	B0503 Bed 2	100.00	100.00	Yes
249	B0503 KLD	67.74	100.00	Yes
250	B0504 Bed 1	100.00	100.00	Yes
251	B0504 KLD	56.34	92.96	Yes
252	B0505 Bed 1	100.00	100.00	Yes
253	B0505 KLD	60.56	97.18	Yes
254	B0506 Bed 1	94.29	100.00	Yes
255	B0506 KLD	56.34	91.55	Yes
256	B0507 Bed 1	100.00	100.00	Yes
257	B0507 KLD	60.56	97.18	Yes
258	B0508 Bed 1	91.43	100.00	Yes
259	B0508 Bed 2	51.52	100.00	Yes
260	B0508 KLD	39.08	88.51	No
261	B0509 Bed 1	100.00	100.00	Yes
262	B0509 Bed 2	100.00	100.00	Yes
263	B0509 Bed 3	80.49	100.00	Yes
264	B0509 KLD	100.00	100.00	Yes
265	B0510 Bed 1	97.14	100.00	Yes
266	B0510 KLD	61.73	97.53	Yes
267	B0511 Bed 1	83.78	100.00	Yes
268	B0511 Bed 2	100.00	100.00	Yes
269	B0511 Bed 3	100.00	100.00	Yes
270	B0511 KLD	70.45	100.00	Yes
271	B0512 Bed 1	96.88	100.00	Yes
272	B0512 Bed 2	100.00	100.00	Yes
273	B0512 KLD	100.00	100.00	Yes
274	B0601 Bed 1	100.00	100.00	Yes
275	B0601 Bed 2	90.91	100.00	Yes
276	B0601 KLD	100.00	100.00	Yes
277	B0602 Bed 1	100.00	100.00	Yes
278	B0602 Bed 2	81.08	97.30	Yes
279	B0602 KLD	100.00	100.00	Yes
280	B0603 Bed 1	90.91	100.00	Yes
281	B0603 Bed 2	100.00	100.00	Yes
282	B0603 KLD	100.00	100.00	Yes
283	B0604 Bed 1	100.00	100.00	Yes
284	B0604 KLD	56.34	95.77	Yes

Reference Number	Room	% Area achieving 300 Lux	% Area achieving 100 Lux	EN 17037 Compliant
285	B0605 Bed 1	100.00	100.00	Yes
286	B0605 Bed 2	100.00	100.00	Yes
287	B0605 Bed 3	80.49	100.00	Yes
288	B0605 KLD	100.00	100.00	Yes
289	B0606 Bed 1	100.00	100.00	Yes
290	B0606 KLD	56.34	95.77	Yes
291	B0607 Bed 1	86.49	100.00	Yes
292	B0607 Bed 2	100.00	100.00	Yes
293	B0607 Bed 3	100.00	100.00	Yes
294	B0607 KLD	69.32	100.00	Yes
295	B0608 Bed 1	100.00	100.00	Yes
296	B0608 Bed 2	57.58	100.00	Yes
297	B0608 KLD	45.98	89.66	No
298	B0609 Bed 1	100.00	100.00	Yes
299	B0609 Bed 2	100.00	100.00	Yes
300	B0609 KLD	100.00	100.00	Yes
301	B0610 Bed 1	100.00	100.00	Yes
302	B0610 KLD	66.67	100.00	Yes
303	B0701 Bed 1	90.91	100.00	Yes
304	B0701 Bed 2	100.00	100.00	Yes
305	B0701 KLD	100.00	100.00	Yes
306	B0702 Bed 1	100.00	100.00	Yes
307	B0702 Bed 2	89.19	97.30	Yes
308	B0702 KLD	100.00	100.00	Yes
309	B0703 Bed 1	90.91	100.00	Yes
310	B0703 Bed 2	100.00	100.00	Yes
311	B0703 KLD	100.00	100.00	Yes
312	B0704 Bed 1	100.00	100.00	Yes
313	B0704 KLD	61.97	98.59	Yes
314	B0705 Bed 1	100.00	100.00	Yes
315	B0705 Bed 2	100.00	100.00	Yes
316	B0705 Bed 2	100.00	100.00	Yes
317	B0705 Bed 3	78.05	100.00	Yes
318	B0705 KLD	97.47	100.00	Yes
319	B0705 KLD	100.00	100.00	Yes
320	B0706 Bed 1	100.00	100.00	Yes
321	B0706 KLD	63.38	98.59	Yes
322	B0707 Bed 1	91.89	100.00	Yes
323	B0707 Bed 2	100.00	100.00	Yes
324	B0707 Bed 3	100.00	100.00	Yes
325	B0707 KLD	82.95	100.00	Yes

Reference Number	Room	% Area achieving 300 Lux	% Area achieving 100 Lux	EN 17037 Compliant
326	B0708 Bed 1	100.00	100.00	Yes
327	B0708 Bed 2	96.97	100.00	Yes
328	B0708 KLD	58.62	96.55	Yes
329	B0709 Bed 1	100.00	100.00	Yes
330	B0709 Bed 2	100.00	100.00	Yes
331	B0709 KLD	100.00	100.00	Yes
332	B0710 Bed 1	100.00	100.00	Yes
333	B0710 KLD	75.31	100.00	Yes
334	C0101 Bed 1	76.67	100.00	Yes
335	C0101 Bed 2	100.00	100.00	Yes
336	C0101 KLD	77.01	87.36	Yes
337	C0102 Bed 1	100.00	100.00	Yes
338	C0102 Bed 2	100.00	100.00	Yes
339	C0102 KLD	57.38	95.08	Yes
340	C0103 Bed 1	100.00	100.00	Yes
341	C0103 KLD	59.32	98.31	Yes
342	C0104 Bed 1	37.78	82.22	No
343	C0104 Bed 2	40.63	100.00	No
344	C0104 KLD	45.21	98.63	No
345	C0105 Bed 1	100.00	100.00	Yes
346	C0105 KLD	64.41	98.31	Yes
347	C0106 Bed 1	65.71	100.00	Yes
348	C0106 KLD	38.24	92.65	No
349	C0107 Bed 1	100.00	100.00	Yes
350	C0107 KLD	67.65	100.00	Yes
351	C0201 BED 1	80.00	100.00	Yes
352	C0201 BED 2	100.00	100.00	Yes
353	C0201 KLD	77.01	88.51	Yes
354	C0202 BED 1	100.00	100.00	Yes
355	C0202 BED 2	100.00	100.00	Yes
356	C0202 KLD	57.38	95.08	Yes
357	C0203 BED 1	100.00	100.00	Yes
358	C0203 KLD	62.71	98.31	Yes
359	C0204 BED 1	40.00	93.33	No
360	C0204 BED 2	53.13	100.00	Yes
361	C0204 KLD	50.68	100.00	Yes
362	C0205 BED 1	100.00	100.00	Yes
363	C0205 KLD	67.80	100.00	Yes
364	C0206 BED 1	57.14	100.00	Yes
365	C0206 KLD	44.12	97.06	No
366	C0207 BED 1	100.00	100.00	Yes

Reference Number	Room	% Area achieving 300 Lux	% Area achieving 100 Lux	EN 17037 Compliant
367	C0207 KLD	70.59	100.00	Yes
368	C0301 Bed 1	80.00	100.00	Yes
369	C0301 Bed 2	100.00	100.00	Yes
370	C0301 KLD	77.01	88.51	Yes
371	C0302 Bed 1	100.00	100.00	Yes
372	C0302 Bed 2	100.00	100.00	Yes
373	C0302 KLD	60.66	95.08	Yes
374	C0303 Bed 1	28.57	88.57	No
375	C0303 KLD	66.10	96.61	Yes
376	C0304 Bed 1	44.44	95.56	No
377	C0304 Bed 2	65.63	100.00	Yes
378	C0304 KLD	54.79	91.78	Yes
379	C0305 Bed 1	25.71	82.86	No
380	C0305 KLD	25.00	52.94	No
381	C0306 Bed 1	8.57	34.29	No
382	C0306 KLD	44.12	73.53	No
383	C0323 Bed 1	25.71	91.43	No
384	C0323 KLD	23.73	50.85	No
385	C0401 Bed 1	100.00	100.00	Yes
386	C0401 Bed 2	73.33	100.00	Yes
387	C0401 KLD	75.86	88.51	Yes
388	C0402 Bed 1	100.00	100.00	Yes
389	C0402 Bed 2	100.00	100.00	Yes
390	C0402 KLD	60.66	98.36	Yes
391	C0403 Bed 1	100.00	100.00	Yes
392	C0403 KLD	59.32	98.31	Yes
393	C0404 Bed 1	51.11	100.00	Yes
394	C0404 Bed 2	81.25	100.00	Yes
395	C0404 KLD	63.01	100.00	Yes
396	C0405 Bed 1	100.00	100.00	Yes
397	C0405 KLD	67.80	100.00	Yes
398	C0406 Bed 1	94.29	100.00	Yes
399	C0406 KLD	55.88	100.00	Yes
400	C0407 Bed 1	100.00	100.00	Yes
401	C0407 KLD	69.12	100.00	Yes
402	C0501 Bed 1	76.67	100.00	Yes
403	C0501 Bed 2	100.00	100.00	Yes
404	C0501 KLD	77.01	88.51	Yes
405	C0502 Bed 2	100.00	100.00	Yes
406	C0502 Bed1	100.00	100.00	Yes
407	C0502 KLD	60.66	95.08	Yes

Reference Number	Room	% Area achieving 300 Lux	% Area achieving 100 Lux	EN 17037 Compliant
408	C0503 Bed 1	100.00	100.00	Yes
409	C0503 KLD	62.71	98.31	Yes
410	C0504 Bed 1	62.22	100.00	Yes
411	C0504 Bed 2	93.75	100.00	Yes
412	C0504 KLD	78.08	100.00	Yes
413	C0505 Bed 1	100.00	100.00	Yes
414	C0505 KLD	67.80	100.00	Yes
415	C0506 Bed 1	100.00	100.00	Yes
416	C0506 KLD	63.24	100.00	Yes
417	C0507 Bed 1	100.00	100.00	Yes
418	C0507 KLD	70.59	100.00	Yes
419	C0601 Bed 1	100.00	100.00	Yes
420	C0601 KLD	77.01	89.66	Yes
421	C0602 Bed 1	100.00	100.00	Yes
422	C0602 Bed 2	100.00	100.00	Yes
423	C0602 KLD	65.57	98.36	Yes
424	C0602 KLD	63.10	100.00	Yes
425	C0603 Bed 1	100.00	100.00	Yes
426	C0603 KLD	64.41	98.31	Yes
427	C0604 Bed 1	73.33	100.00	Yes
428	C0604 Bed 2	100.00	100.00	Yes
429	C0604 KLD	89.04	100.00	Yes
430	C0605 Bed 1	100.00	100.00	Yes
431	C0605 KLD	69.49	100.00	Yes
432	C0606 Bed 1	100.00	100.00	Yes
433	C0606 KLD	72.06	100.00	Yes
434	C0607 Bed 1	100.00	100.00	Yes
435	C0607 KLD	73.53	100.00	Yes
436	D0101 Bed 1	100.00	100.00	Yes
437	D0101 KLD	61.76	100.00	Yes
438	D0102 Bed 1	62.50	100.00	Yes
439	D0102 Bed 2	45.24	100.00	No
440	D0102 KLD	42.57	89.11	No
441	D0103 Bed 1	100.00	100.00	Yes
442	D0103 Bed 2	100.00	100.00	Yes
443	D0103 KLD	65.75	97.26	Yes
444	D0104 Bed 1	100.00	100.00	Yes
445	D0104 Bed 2	65.12	100.00	Yes
446	D0104 KLD	100.00	100.00	Yes
447	D0105 Bed 1	100.00	100.00	Yes
448	D0105 Bed 2	80.49	100.00	Yes

Reference Number	Room	% Area achieving 300 Lux	% Area achieving 100 Lux	EN 17037 Compliant
449	D0105 KLD	100.00	100.00	Yes
450	D0201 BED 1	100.00	100.00	Yes
451	D0201 KLD	66.18	100.00	Yes
452	D0202 BED 1	51.43	100.00	Yes
453	D0202 KLD	50.00	97.62	Yes
454	D0203 BED 1	100.00	100.00	Yes
455	D0203 BED 2	100.00	100.00	Yes
456	D0203 KLD	65.75	98.63	Yes
457	D0204 BED 1	100.00	100.00	Yes
458	D0204 KLD	47.62	88.10	No
459	D0205 BED 1	87.80	100.00	Yes
460	D0205 BED 2	100.00	100.00	Yes
461	D0205 KLD	100.00	100.00	Yes
462	D0206 BED 1	69.77	100.00	Yes
463	D0206 BED 2	100.00	100.00	Yes
464	D0206 KLD	100.00	100.00	Yes
465	D0301 Bed 1	25.71	82.86	No
466	D0301 KLD	26.47	48.53	No
467	D0302 Bed 1	28.57	68.57	No
468	D0302 KLD	50.00	89.29	Yes
469	D0303 Bed 1	28.57	100.00	No
470	D0303 Bed 2	100.00	100.00	Yes
471	D0303 KLD	57.53	93.15	Yes
472	D0304 Bed 1	100.00	100.00	Yes
473	D0304 KLD	46.43	84.52	No
474	D0305 Bed 1	92.68	100.00	Yes
475	D0305 Bed 2	100.00	100.00	Yes
476	D0305 KLD	100.00	100.00	Yes
477	D0306 Bed 1	69.77	100.00	Yes
478	D0306 Bed 2	100.00	100.00	Yes
479	D0306 KLD	100.00	100.00	Yes
480	D0401 Bed 1	100.00	100.00	Yes
481	D0401 KLD	66.18	100.00	Yes
482	D0402 Bed 1	77.14	100.00	Yes
483	D0402 KLD	52.38	100.00	Yes
484	D0403 Bed 1	100.00	100.00	Yes
485	D0403 Bed 2	100.00	100.00	Yes
486	D0403 KLD	65.75	98.63	Yes
487	D0404 Bed 1	100.00	100.00	Yes
488	D0404 KLD	50.00	98.81	Yes
489	D0405 Bed 1	87.80	100.00	Yes

Reference Number	Room	% Area achieving 300 Lux	% Area achieving 100 Lux	EN 17037 Compliant
490	D0405 Bed 2	100.00	100.00	Yes
491	D0405 KLD	100.00	100.00	Yes
492	D0406 Bed 1	69.77	100.00	Yes
493	D0406 Bed 2	100.00	100.00	Yes
494	D0406 KLD	100.00	100.00	Yes
495	D0501 Bed 1	100.00	100.00	Yes
496	D0501 KLD	66.18	100.00	Yes
497	D0502 Bed 1	100.00	100.00	Yes
498	D0502 KLD	57.14	100.00	Yes
499	D0503 Bed 1	100.00	100.00	Yes
500	D0503 Bed 2	100.00	100.00	Yes
501	D0503 KLD	65.75	97.26	Yes
502	D0504 Bed 1	100.00	100.00	Yes
503	D0504 KLD	55.95	100.00	Yes
504	D0505 Bed 1	87.80	100.00	Yes
505	D0505 Bed 2	100.00	100.00	Yes
506	D0505 KLD	100.00	100.00	Yes
507	D0506 Bed 1	100.00	100.00	Yes
508	D0506 Bed 2	79.07	100.00	Yes
509	D0506 KLD	100.00	100.00	Yes
510	D0601 Bed 1	100.00	100.00	Yes
511	D0601 KLD	70.59	100.00	Yes
512	D0602 Bed 1	100.00	100.00	Yes
513	D0603 Bed 1	100.00	100.00	Yes
514	D0603 Bed 2	100.00	100.00	Yes
515	D0603 KLD	65.75	100.00	Yes
516	D0604 Bed 1	100.00	100.00	Yes
517	D0604 KLD	63.10	100.00	Yes
518	D0605 Bed 1	95.12	100.00	Yes
519	D0605 Bed 2	100.00	100.00	Yes
520	D0605 KLD	100.00	100.00	Yes
521	D0606 Bed 1	86.05	100.00	Yes
522	D0606 Bed 2	100.00	100.00	Yes
523	D0606 KLD	100.00	100.00	Yes

APPENDIX D | SPATIAL DAYLIGHT AUTONOMY (sDA) RESULTS – BS EN17037 BRITISH NATIONAL ANNEX

Bedrooms

Reference Number	Room	% Area achieving 100 Lux	BS EN 17037 Compliant
1	A0201 BED 1	100	Yes
2	A0201 BED 2	100	Yes
3	A0203 BED 1	100	Yes
4	A0202 BED 1	100	Yes
5	A0202 BED 2	100	Yes
6	A0203 BED 2	100	Yes
7	A0205 BED 1	100	Yes
8	A0204 BED 1	100	Yes
9	A0206 BED 2	100	Yes
10	A0206 BED 1	100	Yes
11	A0205 BED 2	100	Yes
12	B0202 BED 1	100	Yes
13	B0202 BED 2	94.59	Yes
14	B0201 BED 1	100	Yes
15	B0201 BED 2	100	Yes
16	B0203 BED 1	100	Yes
17	B0204 BED 1	100	Yes
18	B0206 BED 1	100	Yes
19	B0208 BED 1	100	Yes
20	B0203 BED 2	100	Yes
21	B0205 BED 1	100	Yes
22	B0207 BED1	100	Yes
23	B0209 BED 1	100	Yes
24	B0209 BED 2	100	Yes
25	B0209 BED 3	100	Yes
26	B0211 BED 3	100	Yes
27	B0211 BED 2	100	Yes
28	B0211 BED 1	100	Yes
29	B0210 BED 1	100	Yes
30	B0208 BED 2	100	Yes
31	B0212 BED 1	100	Yes
32	B0212 BED 2	100	Yes
33	C0201 BED 1	100	Yes
34	C0201 BED 2	100	Yes
35	C0202 BED 1	100	Yes
36	C0202 BED 2	100	Yes
37	C0204 BED 1	93.33	Yes

Reference Number	Room	% Area achieving 100 Lux	BS EN 17037 Compliant
38	C0204 BED 2	100	Yes
39	C0205 BED 1	100	Yes
40	C0203 BED 1	100	Yes
41	C0206 BED 1	100	Yes
42	C0207 BED 1	100	Yes
43	D0201 BED 1	100	Yes
44	D0202 BED 1	100	Yes
45	D0203 BED 1	100	Yes
46	D0204 BED 1	100	Yes
47	D0203 BED 2	100	Yes
48	D0206 BED 1	100	Yes
49	D0206 BED 2	100	Yes
50	D0205 BED 2	100	Yes
51	D0205 BED 1	100	Yes
52	A0101 BED 1	100	Yes
53	A0101 BED 1	100	Yes
54	A0101 Bed 2	100	Yes
55	A0102 Bed 1	100	Yes
56	A0102 Bed 2	100	Yes
57	A0103 Bed 2	100	Yes
58	A0103 Bed 1	100	Yes
59	A0104 Bedroom 3	100	Yes
60	A0104 Bedroom 2	100	Yes
61	A0104 Bed 1	100	Yes
62	A0105 Bed 1	100	Yes
63	A0105 Bed 2	100	Yes
64	B0102 Bed 2	94.59	Yes
65	B0102 Bed 1	100	Yes
66	B0101 Bed 1	100	Yes
67	B0101 Bed 2	100	Yes
68	B0103 Bed 2	100	Yes
69	B0103 Bed 1	100	Yes
70	B0104 Bed 1	100	Yes
71	B0106 Bed 1	100	Yes
72	B0105 Bed 1	100	Yes
73	B0107 Bed 1	100	Yes
74	B0108 Bed 1	100	Yes
75	B0109 Bed 1	100	Yes
76	B0110 Bed 1	100	Yes
77	B0111 Bed 1	100	Yes
78	B0111 Bed 2	100	Yes

Reference Number	Room	% Area achieving 100 Lux	BS EN 17037 Compliant
79	C0101 Bed 1	100	Yes
80	C0101 Bed 2	100	Yes
81	C0102 Bed 2	100	Yes
82	C0102 Bed 1	100	Yes
83	C0103 Bed 1	100	Yes
84	C0104 Bed 1	82.22	Yes
85	C0104 Bed 2	100	Yes
86	C0105 Bed 1	100	Yes
87	C0106 Bed 1	100	Yes
88	C0107 Bed 1	100	Yes
89	D0101 Bed 1	100	Yes
90	D0102 Bed 1	100	Yes
91	D0102 Bed 2	100	Yes
92	D0103 Bed 1	100	Yes
93	D0103 Bed 2	100	Yes
94	D0104 Bed 2	100	Yes
95	D0104 Bed 1	100	Yes
96	D0105 Bed 1	100	Yes
97	D0105 Bed 2	100	Yes
98	A0301 Bed 2	100	Yes
99	A0301 Bed 1	100	Yes
100	A0302 Bed 1	100	Yes
101	A0302 Bed 2	100	Yes
102	A0303 Bed 2	100	Yes
103	A0303 Bed 1	100	Yes
104	A0305 Bed 1	100	Yes
105	A0305 Bed 2	100	Yes
106	A0304 Bed 1	100	Yes
107	A0306 Bed 1	100	Yes
108	A0306 Bed 2	100	Yes
109	B0302 Bed 1	100	Yes
110	B0302 Bed 2	94.59	Yes
111	B0301 Bed 2	100	Yes
112	B0301 Bed 1	100	Yes
113	B0303 Bed 1	100	Yes
114	B0303 Bed 2	100	Yes
115	B0304 Bed 1	100	Yes
116	B0306 Bed 1	100	Yes
117	B0305 Bed 1	100	Yes
118	B0308 Bed 1	100	Yes
119	B0308 Bed 2	100	Yes

Reference Number	Room	% Area achieving 100 Lux	BS EN 17037 Compliant
120	B0307 Bed 1	100	Yes
121	B0309 Bed 1	100	Yes
122	B0309 Bed 2	100	Yes
123	B0309 Bed 3	100	Yes
124	B011 Bed 1	100	Yes
125	B011 Bed 2	100	Yes
126	B011 Bed 3	100	Yes
127	B0310 Bed 1	100	Yes
128	B0312 Bed 1	100	Yes
129	B0312 Bed 2	100	Yes
130	C0301 Bed 2	100	Yes
131	C0301 Bed 1	100	Yes
132	C0302 Bed 2	100	Yes
133	C0302 Bed 1	100	Yes
134	C0303 Bed 1	88.57	Yes
135	C0304 Bed 2	100	Yes
136	C0304 Bed 1	95.56	Yes
137	C0323 Bed 1	91.43	Yes
138	C0306 Bed 1	34.29	No
139	C0305 Bed 1	82.86	Yes
140	D0301 Bed 1	82.86	Yes
141	D0302 Bed 1	68.57	Yes
142	D0303 Bed 1	100	Yes
143	D0304 Bed 1	100	Yes
144	D0303 Bed 2	100	Yes
145	D0306 Bed 1	100	Yes
146	D0305 Bed 1	100	Yes
147	D0305 Bed 2	100	Yes
148	D0306 Bed 2	100	Yes
149	A0501 Bed 1	100	Yes
150	A0501 Bed 1	100	Yes
151	A0501 Bed 2	100	Yes
152	A0501 Bed 2	100	Yes
153	A0503 Bed 1	100	Yes
154	A0504 Bed 1	100	Yes
155	A0503 Bed 2	100	Yes
156	A0505 Bed 1	100	Yes
157	A0505 Bed 2	100	Yes
158	A0506 Bed 1	100	Yes
159	A0506 Bed 2	100	Yes
160	B0502 Bed 1	100	Yes

Reference Number	Room	% Area achieving 100 Lux	BS EN 17037 Compliant
161	B0502 Bed 2	94.59	Yes
162	B0501 Bed 1	100	Yes
163	B0504 Bed 1	100	Yes
164	B0501 Bed 2	100	Yes
165	B0503 Bed 1	100	Yes
166	B0506 Bed 1	100	Yes
167	B0508 Bed 1	100	Yes
168	B0503 Bed 2	100	Yes
169	B0505 Bed 1	100	Yes
170	B0507 Bed 1	100	Yes
171	B0509 Bed 1	100	Yes
172	B0509 Bed 2	100	Yes
173	B0509 Bed 3	100	Yes
174	B0511 Bed 1	100	Yes
175	B0511 Bed 2	100	Yes
176	B0511 Bed 3	100	Yes
177	B0508 Bed 2	100	Yes
178	B0510 Bed 1	100	Yes
179	B0512 Bed 1	100	Yes
180	B0512 Bed 2	100	Yes
181	C0501 Bed 1	100	Yes
182	C0501 Bed 2	100	Yes
183	C0502 Bed1	100	Yes
184	C0502 Bed 2	100	Yes
185	C0504 Bed 1	100	Yes
186	C0503 Bed 1	100	Yes
187	C0505 Bed 1	100	Yes
188	C0504 Bed 2	100	Yes
189	C0506 Bed 1	100	Yes
190	C0507 Bed 1	100	Yes
191	D0501 Bed 1	100	Yes
192	D0502 Bed 1	100	Yes
193	D0503 Bed 1	100	Yes
194	D0504 Bed 1	100	Yes
195	D0503 Bed 2	100	Yes
196	D0505 Bed 1	100	Yes
197	D0505 Bed 2	100	Yes
198	D0506 Bed 2	100	Yes
199	D0506 Bed 1	100	Yes
200	A0602 Bed 2	100	Yes
201	A0602 Bed 1	100	Yes

Reference Number	Room	% Area achieving 100 Lux	BS EN 17037 Compliant
202	A0601 Bed 1	100	Yes
203	A0601 Bed 2	100	Yes
204	A0603 Bed 1	100	Yes
205	A0603 Bed 2	100	Yes
206	A0605 Bed 1	100	Yes
207	A0605 Bed 2	100	Yes
208	A0604 Bed 1	100	Yes
209	A0606 Bed 2	100	Yes
210	A0606 Bed 1	100	Yes
211	B0602 Bed 1	100	Yes
212	B0602 Bed 2	97.3	Yes
213	B0604 Bed 1	100	Yes
214	B0601 Bed 1	100	Yes
215	B0606 Bed 1	100	Yes
216	B0601 Bed 2	100	Yes
217	B0603 Bed 1	100	Yes
218	B0603 Bed 2	100	Yes
219	B0608 Bed 1	100	Yes
220	B0605 Bed 1	100	Yes
221	B0605 Bed 2	100	Yes
222	B0605 Bed 3	100	Yes
223	B0607 Bed 1	100	Yes
224	B0607 Bed 2	100	Yes
225	B0607 Bed 3	100	Yes
226	B0608 Bed 2	100	Yes
227	B0610 Bed 1	100	Yes
228	B0609 Bed 1	100	Yes
229	B0609 Bed 2	100	Yes
230	C0601 Bed 1	100	Yes
231	C0602 Bed 2	100	Yes
232	C0602 Bed 1	100	Yes
233	C0604 Bed 1	100	Yes
234	C0604 Bed 2	100	Yes
235	C0603 Bed 1	100	Yes
236	C0605 Bed 1	100	Yes
237	C0606 Bed 1	100	Yes
238	C0607 Bed 1	100	Yes
239	D0601 Bed 1	100	Yes
240	D0602 Bed 1	100	Yes
241	D0603 Bed 1	100	Yes
242	D0604 Bed 1	100	Yes

Reference Number	Room	% Area achieving 100 Lux	BS EN 17037 Compliant
243	D0603 Bed 2	100	Yes
244	D0606 Bed 1	100	Yes
245	D0606 Bed 2	100	Yes
246	D0605 Bed 1	100	Yes
247	D0605 Bed 2	100	Yes
248	A0702 Bed 1	100	Yes
249	A0702 Bed 2	100	Yes
250	A0701 Bed 1	100	Yes
251	A0701 Bed 2	100	Yes
252	A0703 Bed 1	100	Yes
253	A0703 Bed 2	100	Yes
254	A0705 Bed 1	100	Yes
255	B0705 Bed 2	100	Yes
256	A0704 Bed 1	100	Yes
257	A0706 Bed 1	100	Yes
258	A0706 Bed 2	100	Yes
259	B0702 Bed 1	100	Yes
260	B0702 Bed 2	97.3	Yes
261	B0704 Bed 1	100	Yes
262	B0701 Bed 2	100	Yes
263	B0701 Bed 1	100	Yes
264	B0706 Bed 1	100	Yes
265	B0703 Bed 1	100	Yes
266	B0708 Bed 1	100	Yes
267	B0703 Bed 2	100	Yes
268	B0705 Bed 1	100	Yes
269	B0705 Bed 2	100	Yes
270	B0705 Bed 3	100	Yes
271	B0707 Bed 1	100	Yes
272	B0707 Bed 2	100	Yes
273	B0707 Bed 3	100	Yes
274	B0708 Bed 2	100	Yes
275	B0710 Bed 1	100	Yes
276	B0709 Bed 1	100	Yes
277	B0709 Bed 2	100	Yes
278	A0402 Bed 1	100	Yes
279	A0402 Bed 2	100	Yes
280	A0401 Bed 1	100	Yes
281	A0401 Bed 2	100	Yes
282	A0403 Bed 1	100	Yes
283	A0405 Bed 1	100	Yes

Reference Number	Room	% Area achieving 100 Lux	BS EN 17037 Compliant
284	A0404 Bed 1	100	Yes
285	A0406 Bed 1	100	Yes
286	A0406 Bed 2	100	Yes
287	A0405 Bed 2	100	Yes
288	B0402 Bed 1	100	Yes
289	B0402 Bed 2	94.59	Yes
290	B0401 Bed 1	100	Yes
291	B0401 Bed 2	100	Yes
292	B0403 Bed 1	100	Yes
293	B0404 Bed 1	100	Yes
294	B0406 Bed 1	100	Yes
295	B0403 Bed 2	100	Yes
296	B0408 Bed 1	100	Yes
297	B0405 Bed 1	100	Yes
298	B0407 Bed 1	100	Yes
299	B0409 Bed 1	100	Yes
300	B0409 Bed 2	100	Yes
301	B0409 Bed 3	100	Yes
302	B0411 Bed 3	100	Yes
303	B0411 Bed 2	100	Yes
304	B0411 Bed 1	100	Yes
305	B0408 Bed 2	100	Yes
306	B0410 Bed 1	100	Yes
307	B0412 Bed 1	100	Yes
308	B0412 Bed 2	100	Yes
309	C0401 Bed 1	100	Yes
310	C0402 Bed 1	100	Yes
311	C0402 Bed 2	100	Yes
312	C0404 Bed 1	100	Yes
313	C0404 Bed 2	100	Yes
314	C0403 Bed 1	100	Yes
315	C0405 Bed 1	100	Yes
316	C0406 Bed 1	100	Yes
317	C0407 Bed 1	100	Yes
318	D0401 Bed 1	100	Yes
319	D0402 Bed 1	100	Yes
320	D0403 Bed 1	100	Yes
321	D0404 Bed 1	100	Yes
322	D0405 Bed 2	100	Yes
323	D0405 Bed 1	100	Yes
324	D0403 Bed 2	100	Yes

Reference Number	Room	% Area achieving 100 Lux	BS EN 17037 Compliant
325	D0406 Bed 1	100	Yes
326	D0406 Bed 2	100	Yes
327	C0401 Bed 2	100	Yes

Living/Kitchen/Dining

Reference Number	Room	% Area achieving 200 Lux	BS EN 17037 Compliant
1	A0201 KLD	100.00	Yes
2	A0203 KLD	86.32	Yes
3	A0202 KLD	100.00	Yes
4	A0204 KLD	64.41	Yes
5	A0205 KLD	100.00	Yes
6	A0206 KLD	75.00	Yes
7	B0202 KLD	100.00	Yes
8	B0201 KLD	78.49	Yes
9	B0204 KLD	53.52	Yes
10	B0206 KLD	50.70	Yes
11	B0203 KLD	76.34	Yes
12	B0205 KLD	69.01	Yes
13	B0208 KLD	37.93	No
14	B0209 KLD	100.00	Yes
15	B0211 KLD	90.91	Yes
16	B0210 KLD	66.67	Yes
17	B0212 KLD	100.00	Yes
18	C0201 KLD	81.61	Yes
19	C0202 KLD	72.13	Yes
20	C0204 KLD	82.19	Yes
21	C0205 KLD	84.75	Yes
22	C0203 KLD	76.27	Yes
23	C0207 KLD	83.82	Yes
24	C0206 KLD	64.71	Yes
25	D0202 KLD	63.10	Yes
26	D0201 KLD	79.41	Yes
27	D0204 KLD	57.14	Yes
28	D0203 KLD	80.82	Yes
29	D0206 KLD	100.00	Yes
30	D0205 KLD	100.00	Yes
31	A0101 KLD	100.00	Yes
32	A0102 KLD	100.00	Yes

Reference Number	Room	% Area achieving 200 Lux	BS EN 17037 Compliant
33	A0103 KLD	82.11	Yes
34	A0104 KLD	50.56	Yes
35	A0105 KLD	100.00	Yes
36	B0102 KLD	98.70	Yes
37	B0101 KLD	86.52	Yes
38	B0103 KLD	76.14	Yes
39	B0104 KLD	50.70	Yes
40	B0106 KLD	47.89	No
41	B0105 KLD	71.83	Yes
42	B0107 KLD	100.00	Yes
43	B0108 KLD	25.81	No
44	B0109 KLD	61.73	Yes
45	B0110 KLD	80.88	Yes
46	B0111 KLD	100.00	Yes
47	C0101 KLD	80.46	Yes
48	C0102 KLD	78.69	Yes
49	C0103 KLD	76.27	Yes
50	C0104 KLD	63.01	Yes
51	C0105 KLD	83.05	Yes
52	C0106 KLD	55.88	Yes
53	C0107 KLD	85.29	Yes
54	D0101 KLD	76.47	Yes
55	D0102 KLD	55.45	Yes
56	D0103 KLD	76.71	Yes
57	D0104 KLD	100.00	Yes
58	D0105 KLD	100.00	Yes
59	A0301 KLD	100.00	Yes
60	A0302 KLD	100.00	Yes
61	A0303 KLD	84.21	Yes
62	A0304 KLD	64.41	Yes
63	A0305 KLD	100.00	Yes
64	A0306 KLD	71.05	Yes
65	B0302 KLD	100.00	Yes
66	B0301 KLD	78.49	Yes
67	B0303 KLD	76.34	Yes
68	B0304 KLD	56.34	Yes
69	B0306 KLD	56.34	Yes
70	B0305 KLD	70.42	Yes
71	B0308 KLD	42.53	No
72	B0307 KLD	69.01	Yes
73	B0309 KLD	100.00	Yes

Reference Number	Room	% Area achieving 200 Lux	BS EN 17037 Compliant
74	B011 KLD	90.91	Yes
75	B0310 KLD	69.14	Yes
76	B0312 KLD	100.00	Yes
77	C0301 KLD	81.61	Yes
78	C0302 KLD	77.05	Yes
79	C0303 KLD	76.27	Yes
80	C0304 KLD	71.23	Yes
81	C0323 KLD	32.20	No
82	C0305 KLD	33.82	No
83	C0306 KLD	61.76	Yes
84	D0302 KLD	63.10	Yes
85	D0301 KLD	33.82	No
86	D0304 KLD	59.52	Yes
87	D0303 KLD	69.86	Yes
88	D0306 KLD	100.00	Yes
89	D0305 KLD	100.00	Yes
90	A0501 KLD	100.00	Yes
91	A0501 KLD	100.00	Yes
92	A0503 KLD	84.21	Yes
93	A0504 KLD	72.88	Yes
94	A0506 KLD	97.37	Yes
95	A0505 KLD	100.00	Yes
96	B0502 KLD	100.00	Yes
97	B0501 KLD	80.65	Yes
98	B0504 KLD	67.61	Yes
99	B0503 KLD	79.57	Yes
100	B0506 KLD	66.20	Yes
101	B0505 KLD	70.42	Yes
102	B0508 KLD	52.87	Yes
103	B0507 KLD	70.42	Yes
104	B0509 KLD	100.00	Yes
105	B0511 KLD	93.18	Yes
106	B0510 KLD	74.07	Yes
107	B0512 KLD	100.00	Yes
108	C0501 KLD	81.61	Yes
109	C0502 KLD	77.05	Yes
110	C0503 KLD	76.27	Yes
111	C0504 KLD	94.52	Yes
112	C0505 KLD	84.75	Yes
113	C0507 KLD	88.24	Yes
114	C0506 KLD	82.35	Yes

Reference Number	Room	% Area achieving 200 Lux	BS EN 17037 Compliant
115	D0502 KLD	73.81	Yes
116	D0501 KLD	85.29	Yes
117	D0504 KLD	67.86	Yes
118	D0503 KLD	82.19	Yes
119	D0506 KLD	100.00	Yes
120	D0505 KLD	100.00	Yes
121	A0601 KLD	100.00	Yes
122	A0602 KLD	100.00	Yes
123	A0603 KLD	85.26	Yes
124	A0605 KLD	100.00	Yes
125	A0604 KLD	77.97	Yes
126	A0606 KLD	98.68	Yes
127	B0602 KLD	100.00	Yes
128	B0601 KLD	100.00	Yes
129	B0604 KLD	69.01	Yes
130	B0606 KLD	71.83	Yes
131	B0608 KLD	58.62	Yes
132	B0603 KLD	100.00	Yes
133	B0605 KLD	100.00	Yes
134	B0607 KLD	90.91	Yes
135	B0610 KLD	79.01	Yes
136	B0609 KLD	100.00	Yes
137	C0601 KLD	81.61	Yes
138	C0602 KLD	77.05	Yes
139	C0604 KLD	100.00	Yes
140	C0603 KLD	76.27	Yes
141	C0605 KLD	84.75	Yes
142	C0606 KLD	91.18	Yes
143	C0607 KLD	91.18	Yes
144	C0602 KLD	83.33	Yes
145	D0601 KLD	86.76	Yes
146	D0604 KLD	77.38	Yes
147	D0603 KLD	82.19	Yes
148	D0605 KLD	100.00	Yes
149	D0606 KLD	100.00	Yes
150	A0701 KLD	100.00	Yes
151	A0702 KLD	100.00	Yes
152	A0703 KLD	89.47	Yes
153	B0705 KLD	100.00	Yes
154	A0704 KLD	83.05	Yes
155	A0706 KLD	100.00	Yes

Reference Number	Room	% Area achieving 200 Lux	BS EN 17037 Compliant
156	B0702 KLD	100.00	Yes
157	B0701 KLD	100.00	Yes
158	B0704 KLD	73.24	Yes
159	B0706 KLD	77.46	Yes
160	B0703 KLD	100.00	Yes
161	B0708 KLD	87.36	Yes
162	B0705 KLD	100.00	Yes
163	B0707 KLD	100.00	Yes
164	B0710 KLD	90.12	Yes
165	B0709 KLD	100.00	Yes
166	A0401 KLD	100.00	Yes
167	A0402 KLD	100.00	Yes
168	A0403 KLD	100.00	Yes
169	A0403 KLD	86.32	Yes
170	A0404 KLD	67.80	Yes
171	A0405 KLD	100.00	Yes
172	A0406 KLD	90.79	Yes
173	B0402 KLD	100.00	Yes
174	B0401 KLD	79.57	Yes
175	B0404 KLD	61.97	Yes
176	B0406 KLD	59.15	Yes
177	B0403 KLD	76.34	Yes
178	B0408 KLD	48.28	No
179	B0405 KLD	69.01	Yes
180	B0407 KLD	69.01	Yes
181	B0409 KLD	100.00	Yes
182	B0411 KLD	89.77	Yes
183	B0410 KLD	72.84	Yes
184	B0412 KLD	100.00	Yes
185	C0401 KLD	81.61	Yes
186	C0402 KLD	73.77	Yes
187	C0403 KLD	74.58	Yes
188	C0405 KLD	84.75	Yes
189	C0404 KLD	90.41	Yes
190	C0406 KLD	72.06	Yes
191	C0407 KLD	85.29	Yes
192	D0401 KLD	80.88	Yes
193	D0402 KLD	69.05	Yes
194	D0404 KLD	64.29	Yes
195	D0403 KLD	80.82	Yes
196	D0406 KLD	100.00	Yes
197	D0405 KLD	100.00	Yes

APPENDIX E | VERTICAL SKY COMPONENT RESULTS

Ref No.	Surrounding Building	Surface	Opening	Resultant VSC (Post-Development)	Existing VSC (Pre-Development)	Status	% of Existing VSC Maintained
1	Primary Care Centre	3	0	33.77	36.84	Pass	**91.67**
2	Primary Care Centre	3	1	32.54	37.19	Pass	**87.50**
3	Primary Care Centre	3	2	31.41	37.66	Pass	**83.40**
4	Primary Care Centre	3	3	29.58	37.83	Pass	**78.19**
5	Primary Care Centre	4	0	35.55	39.04	Pass	**91.06**
6	Primary Care Centre	4	1	36.77	39.04	Pass	**94.19**
7	Primary Care Centre	0	0	35.23	39.08	Pass	**90.15**
8	Primary Care Centre	0	1	35.71	39.13	Pass	**91.26**
9	Primary Care Centre	0	2	36.11	39.16	Pass	**92.21**
10	Primary Care Centre	0	3	36.5	39.05	Pass	**93.47**
11	Primary Care Centre	0	4	36.8	39.31	Pass	**93.61**
12	Primary Care Centre	1	0	35.03	37.98	Pass	**92.23**
13	Primary Care Centre	1	1	34.95	37.91	Pass	**92.19**
14	Primary Care Centre	1	2	34.39	37.92	Pass	**90.69**
15	Primary Care Centre	1	3	34.17	38.08	Pass	**89.73**
16	Primary Care Centre	1	4	33.79	38.07	Pass	**88.76**
17	Primary Care Centre	1	5	33.53	38.29	Pass	**87.57**
18	Primary Care Centre	1	6	32.87	38.25	Pass	**85.93**
19	Primary Care Centre	1	7	32.27	38.25	Pass	**84.37**
20	Primary Care Centre	1	8	31.89	38.36	Pass	**83.13**
21	Primary Care Centre	1	9	31.45	38.35	Pass	**82.01**
22	Primary Care Centre	0	0	36.44	38.62	Pass	**94.36**
23	Primary Care Centre	0	1	36.24	38.74	Pass	**93.55**
24	Primary Care Centre	0	2	35.95	38.92	Pass	**92.37**
25	Primary Care Centre	0	3	35.58	38.73	Pass	**91.87**
26	Primary Care Centre	0	4	35.15	38.74	Pass	**90.73**
27	Primary Care Centre	0	5	34.94	38.79	Pass	**90.07**
28	Primary Care Centre	0	6	34.47	38.84	Pass	**88.75**
29	Primary Care Centre	0	7	33.87	38.88	Pass	**87.11**
30	Primary Care Centre	0	8	33.63	38.89	Pass	**86.47**
31	Primary Care Centre	0	9	32.8	38.86	Pass	**84.41**
32	Primary Care Centre	0	10	32.44	38.91	Pass	**83.37**
33	Primary Care Centre	0	11	31.79	39.03	Pass	**81.45**
34	Primary Care Centre	5	0	36.3	39.05	Pass	**92.96**
35	Primary Care Centre	5	1	36.71	39.07	Pass	**93.96**
36	Primary Care Centre	5	2	37.14	39.13	Pass	**94.91**
37	Primary Care Centre	7	0	25.09	28.4	Pass2	**88.35**
38	Primary Care Centre	4	0	37.12	39.23	Pass	**94.62**

Ref No.	Surrounding Building	Surface	Opening	Resultant VSC (Post-Development)	Existing VSC (Pre-Development)	Status	% of Existing VSC Maintained
39	Primary Care Centre	4	1	36.87	39.25	Pass	**93.94**
40	Primary Care Centre	4	2	36.71	39.24	Pass	**93.55**
41	Primary Care Centre	4	3	36.38	38.99	Pass	**93.31**
42	Primary Care Centre	4	4	36.36	39.03	Pass	**93.16**
43	Primary Care Centre	4	5	35.65	39.12	Pass	**91.13**
44	Primary Care Centre	4	6	35.4	39.13	Pass	**90.47**
45	Primary Care Centre	4	7	35.1	39.16	Pass	**89.63**
46	Primary Care Centre	4	8	34.66	39.13	Pass	**88.58**
47	Primary Care Centre	4	9	34.27	39.19	Pass	**87.45**
48	Primary Care Centre	10	0	36.56	39.2	Pass	**93.27**
49	Primary Care Centre	10	1	37.04	39.25	Pass	**94.37**
50	Primary Care Centre	10	2	37.14	39.18	Pass	**94.79**
51	Primary Care Centre	10	3	37.6	39.2	Pass	**95.92**
52	Primary Care Centre	4	0	27.77	30.04	Pass	**92.44**
53	Primary Care Centre	4	1	28.27	29.5	Pass	**95.83**
54	Primary Care Centre	5	0	27.99	29.86	Pass	**93.74**
55	Primary Care Centre	5	1	27.68	29.45	Pass	**93.99**
56	Primary Care Centre	5	2	26.51	29.38	Pass2	**90.23**
57	Primary Care Centre	5	3	25.36	29.71	Pass2	**85.36**

**Pass2: VSC value is below target of 27% but has not been reduced to less than 80% of its pre-development value.*