# Great Connell SHD, Newbridge, Co. Kildare

Daylight and Sunlight Assessment Report Applicant: Aston Limited



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### 1.0 Executive Summary

### 1.1 Summary of Assessment

3D Design Bureau were commissioned to carry out a comprehensive BRE daylight and sunlight assessment, along with an accompanying shadow study for the Great Connell SHD, Newbridge, Co. Kildare.

The assessment has been broken down into the following two main categories, of which there are sub categories summarised further below:

- Impact assessment: Effect on the surrounding environment and properties, which includes VSC, APSH and sunlighting analysis. The effects were assessed in the baseline state versus the proposed state;
- Scheme Performance: Daylight and sunlight assessment of the proposed development, which includes sunlighting to the proposed amenity spaces and internal daylighting (ADF) to the habitable rooms.

The impact assessment that was carried out for the purpose of this report has studied the potential levels of effect the surrounding existing environment and/or properties would sustain should the proposed development be built as proposed.

This impact assessment covers the following categories:

- Effect on daylight (VSC) to surrounding properties. The effect to the VSC of the windows of the following neighbouring properties was assessed:
  - 71-73 Wellesley Manor
  - 81-87 Wellesley Manor
  - 12-13 Wellesley Manor
  - Great Connell
- Effect on sunlight (APSH) to surrounding properties. The effect to the APSH (annual and winter) of the windows of the following neighbouring properties was assessed:
  - 71-72 Wellesley Manor
  - 81-87 Wellesley Manor
  - 12-13 Wellesley Manor
  - Great Connell
- Effect on sunlight to surrounding external amenity spaces such as gardens:
  - 71-73 Wellesley Manor
  - 81-87 Wellesley Manor
  - 12-13 Wellesley Manor
  - Great Connell

The BRE Guidelines recommend that if any part of a new building or extension, measured in a vertical section perpendicular to a main window wall of an existing building, from the centre of the lowest window, does not subtend an angle of more than 25° to the horizontal, then the daylighting and sunlighting of the existing building are unlikely to be adversely affected. Using this guidance as a rule of thumb, the surrounding context was carefully considered to ensure all properties and amenity spaces that may potentially experience a level of effect were included in the study.



Figure 1.1: Scope of surrounding properties and environment assessed.



Figure 1.2: Scope of Area of the Development assessed.

The daylight and sunlight assessment of the proposed development included an analysis of the levels of sunlight to the proposed amenity spaces, as well as access to daylight (ADF) in the habitable rooms of the proposed buildings/units within the most constrained area of the development (Figure 1.2). Within the area being assessed, all the external amenity spaces as identified by the architect were assessed for sunlight. ADF assessment was carried out across all habitable rooms on all floors of the proposed buildings within the area assessed. Please see Page 4 for a detailed breakdown of results.



### 1.2 Impact Assessment Results Overview:

#### Effect to Vertical Sky Component (VSC) on neighbouring properties:

- · Windows Assessed: 82
  - · Imperceptible: 82

#### **Effect to Annual Probable Sunlight Hours (APSH):**

- · Windows Assessed: 60
  - · Imperceptible: 60

#### **Effect to Winter Probable Sunlight Hours (WPSH):**

- · Windows Assessed: 60
  - · Imperceptible: 60

#### Effect to Sun On Ground (SOG) in existing neighbouring gardens / amenity areas:

- · Gardens Assessed: 12
  - · Imperceptible: 12

### 1.3 Scheme Performance Results Overview:

#### Sun On Ground (SOG) in proposed gardens / amenity areas:

- Areas Assessed: 17
  - · Meeting the guidelines: 16
  - · Not meeting the guidelines: 1 (creche outdoor area see supplmentary study on Page 54)

#### Average Daylight Factor (ADF) of internal proposed development:

· Rooms assessed: 791

With ADF target value of 2.0% applied to LKDs:

- · Rooms meeting the guidelines: 791
- Rooms not meeting the guidelines: 0
- · Compliance rate: 100%



#### **Glossary** 2.0

#### **Terms and Definitions** 2.1

#### Skylight

Non directional ambient light cast from the sky and environment.

#### Sunlight

Direct parallel rays of light emitted from the sun.

#### **Daylight**

Combined skylight and sunlight.

#### Overcast sky model

A completely overcast sky model, used for daylight calculation.

#### **Existing Baseline Model State**

The development site in its existing state. The proposed development has not been included. This model state has been used when generating the baseline results for all the existing neighbouring properties.

#### **Proposed Development Model State**

The proposed development has been modelled into the existing environment. This model state has been used when assessing the effect of the proposed development on the existing neighbouring properties, as well as assessments carried out within the proposed development itself.

#### **Vertical Sky Component (VSC)**

Ratio of that part of illuminance, at a point on a given vertical plane, that is received directly from an overcast sky model. 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.

#### Annual Probable Sunlight Hours (APSH) / Winter Probable Sunlight Hours (WPSH)

Annual Probable Sunlight Hours (APSH) and Winter Probable Sunlight Hours are a measure of sunlight that a given window may expect over a year period (1 Jan - 31 Dec), or the winter period (21 Sep - 21 Mar) respectively.

It can be defined as the ratio between the annual or winter sunlight hours in a specific location, and the hours of sunlight an assessment point on a window actually receives.

North facing windows may receive sunlight on only a handful of occasions in a year, and windows facing eastwards or westwards will receive sunlight only at certain times of the day. Taking this into account, the BRE Guidelines suggest that windows with an orientation within 90 degrees of due south should be assessed.

#### Sun On Ground (SOG)

Assessment of what portion of a garden or amenity space is capable of receiving 2 hours or more of direct sunlight on March 21st.

#### Average Daylight Factor (ADF)

Ratio of total daylight flux incident on the working plane to the area of the working plane, expressed as a percentage of the outdoor illuminance on a horizontal plane due to an unobstructed overcast sky model.

Thus a 1% ADF would mean that the average indoor illuminance would be one hundredth the outdoor unobstructed illuminance.

#### Working plane

Horizontal, vertical or inclined plane in which a visual task lies. Normally the working plane may be taken to be horizontal, 850 mm above the floor in houses and factories, 700 mm above the floor in offices. The plane is offset 500 mm from the room boundaries.

#### **LKD**

Living / Kitchen / Dining room.

#### **BRE Target Value**

When assessing the effect a proposed development would have on a neighbouring property, a target value will be applied. This applied target value is generated as per the criteria set out for each study in the BRE Guidelines.

#### **Alternative Target Value**

It could be appropriate to use alternative target values when conducting assessment of effect on existing properties. If such instances occur the rationale will be clearly explained and the instances where the alternative target values have been applied will be clearly identified.

#### **Level of BRE Compliance**

Each table in the study that has a column identified as "Level of BRE Compliance", identifies how an assessed instance performs in relation to the appropriate target value. If the instance is in compliance with the recommendations as made in the BRE Guidelines the value will be expressed as "BRE Compliant". If the instance does not meet the criteria as set out in the BRE Guidelines a percentage will be expressed to determine the level of compliance with the recommendation. This value determines the definition of effect.

#### **LUX**

Lux is a standardised unit of measurement of light level intensity. A measurement of 1 lux is equal to the illumination of a one metre square surface that is one metre away from a single candle.



### 2.2 Definition of Effects

In order to categorise the varying degrees of compliance with the BRE Guidelines when assessing the effect a proposed development would have on the daylight and sunlight of an existing property, 3DDB have assigned numerical values to the levels of effect as listed in 'Guidelines on the Information to be Contained in Environmental Impact Assessment Reports' prepared by the Environmental Protection Agency (Draft of 2017), and to Directive 2011/92/EU (as amended by Directive 2014/52/EU).

The list of definitions given below is taken from Table 3.3: Descriptions of Effects contained in the draft 'Guidelines on the Information to be Contained in Environmental Impact Assessment Reports' prepared by the Environmental Protection Agency. Some comment is also given below on what these definitions might imply in the case of sunlight access.

**Note:** There are many factors to be taken into consideration when determining levels of effect. We have included typical numerical values that we have used when assigning levels of effect. These values should not be applied rigidly, but rather as a guide. Circumstances may occur that lead to flexibility being sought in our interpretation of these definitions. Such cases are always explained in the Analysis of Results section, if and when they occur.

#### **Imperceptible**

An effect capable of measurement but without significant consequences. For the purposes of this Sunlight and Daylight Assessment Report an "imperceptible" level of effect will be stated if the level of effect is within the criteria as recommended in the BRE Guidelines and the applied target value has been achieved.

#### **Not Significant**

An effect which causes noticeable changes in the character of the environment but without significant consequences. For the purposes of this Sunlight and Daylight Assessment Report, a "not significant" level of effect will be stated if the level of effect is marginally outside of the criteria as stated in the BRE Guidelines. Typically a "not significant" level of effect will be applied if the level of daylight or sunlight is reduced to between 90-99% of the applied target value.

#### Slight

An effect which causes noticeable changes in the character of the environment without affecting its sensitivities. For the purposes of this Sunlight and Daylight Assessment Report, a "slight" level of effect will be stated if the level of daylight or sunlight is reduced to between 75-90% of the applied target value.

#### **Moderate**

An effect that alters the character of the environment in a manner that is consistent with existing and emerging trends. For the purposes of this Sunlight and Daylight Assessment Report, a "moderate" level of effect will be stated if the level of daylight or sunlight is reduced to between 50-75% of the applied target value. A "moderate" level of effect would be quite typical in instances where a proposed development is planned on an under-developed plot of land. The level of daylight and/or sunlight of an assessed property is reduced in a manner that is consistent with similar properties in the immediate surrounding area.

#### **Significant**

An effect which, by its character, magnitude, duration or intensity alters a sensitive aspect of the environment. For the purposes of this Sunlight and Daylight Assessment Report a "significant" level of effect will be stated if the proposed development reduces the availability of daylight or sunlight of a neighbouring property to a low level. Typically a "significant" level of effect will be stated if the level of daylight or sunlight is reduced to between 30-50% of the applied target value.

#### **Very Significant**

An effect which, by its character, magnitude, duration or intensity significantly alters most of a sensitive aspect of the environment. For the purposes of this Sunlight and Daylight Assessment Report a "very significant" level of effect will be stated if the proposed development reduces the availability of daylight or sunlight of a neighbouring property to a very low level. Typically a "very significant" level of effect will be stated if the level of daylight or sunlight is reduced to between 10-30% of the applied target value.

#### **Profound**

An effect which obliterates sensitive characteristics. For the purposes of this Sunlight and Daylight Assessment Report, a "profound" level of effect will only be stated if the proposed development reduces the availability of daylight or sunlight of a neighbouring property to a level that is less than 10% of the applied target value.

#### **Positive Effect**

In relation to sunlight or daylight access, it is conceivable that there could be positive effects, but this implies that a development would involve a reduction of the size or scale of built form (e.g. such as the demolition of a building, which might result in an increase in sunlight access). Though that is possible, it is usually unlikely as most development involves the construction of new obstructions to sunlight access.



### 2.3 Index of Tables

### 2.3.1 Impact Assessment: Vertical Sky Component

Below is an example of the table used to describe the effect on VSC.

	Table No. 2.1: Example of VSC Table for an Impact Assessment								
Window Number	Baseline VSC Value	Proposed VSC Value	Ratio of Proposed VSC to Baseline VSC	Recommended Minimum VSC	Level of Compliance with BRE Guidelines	Effect of Proposed Development			
House Number/Floor									
Α	В	С	D	E	F	O			

#### A: Window Number

The number in this column will identify the assessed window. All windows are represented visually in the corresponding figure.

#### **B:** Baseline VSC Value

The Baseline VSC Value represents the VSC value of the assessed window is calculated in the existing baseline model state (as explained in the "Glossary" on page 5).

#### **C: Proposed VSC Value**

The *Proposed VSC Value* represents the VSC value of the assessed window calculated in the proposed model state (as explained in the "Glossary" on page 5).

#### D: Ratio of Proposed VSC to Baseline VSC

This column expressed the ratio of change between the baseline VSC value and the proposed VSC value. The BRE Guidelines recommend that if the proposed value is less than 0.8 times the baseline value, then the reduction in daylight is more likely to be perceptible.

#### E: Recommended minimum VSC

The BRE Target Value for each window has been set according to the BRE Guidelines. The Guidelines state that a proposed development could possibly have a noticeable effect on the daylight received by an existing window, if the VSC value **both** drops below the guideline value of 27% **and** the VSC value is less than 0.8 times the baseline value.

Therefore, to determine the *recommended minimum Value*, 80% of the *Baseline VSC value* has been calculated. If this value is above the 27% threshold, a target value of 27% will be applied. If 80% of the baseline value is below 27%, then 80% of the baseline value is the appropriate target value.

#### F: Level of Compliance with the BRE Guidelines

This column states the compliance of the *Proposed VSC Value* with the *recommended minimum VSC* as per the BRE Guidelines. In essence, it shows whether or not the assessed window would experience a perceptible level of impact. If the window complies with the BRE Guidelines this cell will state "*BRE Compliant*". If the window does not meet the criteria as set out in the BRE Guidelines, a percentage of compliance with the *recommended minimum* will be stated.

#### **G: Effect of Proposed Development**

The levels of effect in this column describe the effect an assessed window will experience, based on its compliance with the BRE Target Value. The levels of effect used in this report have regard to the 'Guidelines on the Information to be Contained in Environmental Impact Assessment Reports' prepared by the Environmental Protection Agency (Draft of 2017), and to Directive 2011/92/EU (as amended by Directive 2014/52/EU) and a full list can be found in "Definition of Effects" on page 6.



### 2.3.2 Impact Assessment: to Annual/Winter Probable Sunlight Hours (APSH/WPSH)

Below is an example of the table used to describe the effect to the APSH/WPSH of existing windows.

	Table No. 2.2: Example of APSH/WPSH Impact Table for an Impact Assessment								
Window Number	Baseline APSH/ WPSH	Proposed APSH/ WPSH	Ratio of Proposed to Baseline APSH/ WPSH	Recommended Minimum APSH/WPSH	Level of Compliance with BRE Guidelines	Effect of Proposed Development			
House Number/Floor									
A	В	С	D	E	F	G			

#### **A: Window Number**

The number in this column will identify the assessed window. All windows are represented visually in the corresponding figure.

#### **B:** Baseline APSH/WPSH

The APSH/WPSH Value represents percentage of the probable sunlight hours that the assessed window can receive, calculated in the existing baseline model state (as explained in the "Glossary" on page 5). The <u>annual</u> and <u>winter</u> assessments will be represented in separate tables.

#### C: Proposed APSH/WPSH

The *Proposed APSH/WPSH Value* represents the percentage of probable sunlight hours that the assessed window can receive, calculated in the proposed model state (as explained in the "Glossary" on page 5).

#### D: Ratio of Proposed to Baseline APSH/WPSH

This column expressed the ratio of change between the baseline APSH/WPSH value and the proposed APSH/WPSH value. The BRE Guidelines recommend that if the proposed value is less than 0.8 times the baseline value, then the reduction to sunlight is more likely to be perceptible.

#### E: Recommended Minimum APSH/WPSH

The BRE Target Value for each window has been set according to the BRE Guidelines. The Guidelines state that a proposed development could possibly have a noticeable effect on the sunlight received by an existing window, if the APSH value drops below the annual (25%) or WPSH value below the winter (5%) guidelines; **and** the APSH/WPSH value is less than 0.8 times the baseline value; **and** there is a reduction of more than 4% to the APSH.

Therefore, to determine the recommended minimum APSH Value for the <u>annual</u> study, 80% of the <u>Baseline APSH value</u> has been calculated. If this value is above the 25% threshold, a target value of 25% will be applied. If 80% of the baseline value is below 25%, then 80% of the baseline value is the appropriate target value.

To determine the recommended minimum WPSH Value for the winter study, 80% of the Baseline winter APSH value has been calculated. If this value is above the 5% threshold, a target value of 5% will be applied. If 80% of the baseline value is below 5%, then 80% of the baseline value is the appropriate target value.

#### F: Level of Compliance with BRE Guidelines

This column states the compliance of the *Proposed APSH/WPSH Value* with the *recommended minimum APSH/WPSH* as per the BRE Guidelines. In essence, it shows whether or not the assessed window would experience a perceptible level of impact. If the window complies with the BRE Guidelines this cell will state "*BRE Compliant*". If the window does not meet the criteria as set out in the BRE Guidelines, a percentage of compliance with the *recommended minimum* will be stated.

#### G: Effect of Proposed Development

The levels of effect in this column describe the effect an assessed window will experience, based on its compliance with the BRE Target Value. The levels of effect used in this report have regard to the 'Guidelines on the Information to be Contained in Environmental Impact Assessment Reports' prepared by the Environmental Protection Agency (Draft of 2017), and to Directive 2011/92/EU (as amended by Directive 2014/52/EU) and a full list can be found in "Definition of Effects" on page 6.



#### 2.3.3 Impact Assessment: Sun On Ground

Below is an example of the table used to describe the effect on SOG in existing gardens and amenity spaces.

	Table No. 2.3: Example of SOG Table or an Impact Assessment										
	% of Area to Rece	eive Above 2 Hours	Level of	Effect of							
Address	Baseline	Proposed	Ratio of Proposed to Baseline	Recommended Minimum as per BRE Guidelines	Compliance with BRE Guidelines	Proposed Development					
A	В	С	D	E	F	G					

#### A: Address

This column contains the address of the assessed garden/amenity space. The locations of the gardens and amenity spaces assessed are visually represented in a corresponding figure.

#### **B:** Baseline

Baseline represents percentage of the assessed space's area that can receive more than 2 hours of sunlight on March 21st, calculated in the existing baseline model state (as explained in the "Glossary" on page 5).

#### C: Proposed

Proposed represents percentage of the assessed space's area that can receive more than 2 hours of sunlight on March 21st, calculated in the proposed model state (as explained in the "Glossary" on page 5).

#### D: Ratio of Proposed to Baseline

This column expressed the ratio of change between the baseline and the proposed values. The BRE Guidelines recommend that if the proposed value is less than 0.8 times the baseline value, then the reduction to sunlight is more likely to be perceptible.

#### E: Recommended Minimum as per the BRE Guidelines

The BRE Guidelines indicate that a proposed development could possibly have a noticeable effect on the sunlight received by an existing garden and/or amenity area, if half the area of the space does not receive at least two hours of sunlight during the spring equinox; **and** the area that receives more than two hours of sun on the spring equinox is less than 0.8 times its former value.

To determine the *recommended minimum*, 80% of the *Baseline* value has been calculated. If this value is above the 50% threshold, a target value of 50% will be applied. If 80% of the baseline value is below 50%, then 80% of the baseline value is the appropriate target value.

#### F: Level of BRE Compliance

This column states the compliance of the *Proposed* sunlight value with the *recommended minimum as* per the BRE Guidelines. In essence, it shows whether or not the assessed garden or amenity area would experience a perceptible level of impact. If the garden or amenity area complies with the BRE Guidelines this cell will state "BRE Compliant". If the garden or amenity area does not meet the criteria as set out in the BRE Guidelines, a percentage of compliance with the *recommended minimum* will be stated.

#### **G: Effect of Proposed Development**

The levels of effect in this column describe the effect an assessed garden or amenity space will experience, based on its compliance with the BRE Target Value. The levels of effect used in this report have regard to the 'Guidelines on the Information to be Contained in Environmental Impact Assessment Reports' prepared by the Environmental Protection Agency (Draft of 2017), and to Directive 2011/92/EU (as amended by Directive 2014/52/EU) and a full list can be found in "Definition of Effects" on page 6.



### 2.3.4 Scheme Performance: SOG in Proposed Gardens and Amenity Spaces

Below is an example of the table used to describe SOG in proposed gardens and amenity spaces.

Table No. 2.4: Example of SOG Table for Scheme Performance									
Assessed Area	Area Capable of Receiving 2 Hours of Sunlight on March 21st	Recommended Minimum	Level of Compliance with BRE Guidelines						
Α	В	С	D						

#### A: Assessed Area

This column identifies the assessed garden/amenity area.

#### B: Area Capable of Receiving 2 Hours of Sunlight on March 21st

The percentage of the proposed area that can receive more than 2 hours of sunlight on March 21st.

#### C: Recommended Minimum

The BRE Guidelines state that the percentage of a garden/amenity area that can receive more than 2 hours of sunlight on March 21st should be 50%. The target value for all spaces is set to 50%.

#### D: Level of Compliance with BRE Guidelines

This column states the compliance of the assessed space with the BRE Target Value. If the assessed garden or amenity area complies with the BRE Guidelines this cell will state "BRE Compliant". If the garden or amenity area does not meet the criteria as set out in the BRE Guidelines, a percentage of compliance with the recommended minimum will be stated.

### 2.3.5 Scheme Performance: Average Daylight Factor

Below is an example of the table used to describe the daylight factor in proposed units.

Table	Table No. 2.5: Example of ADF Results Table for Scheme Performance							
Unit Number	Unit Number Room Description Predicted ADF Value							
Α	A B C							

#### A: Unit Number

This column identifies the assessed unit. All unit numbers are determined by the architect's drawings, unless otherwise stated.

#### **B: Room Description**

Room Description details which room of the unit has been assessed, e.g. bedroom, living room, etc.

#### C: Predicted ADF Value

The average daylight factor calculated for an assessed room.



### 2.3.6 Alternative Daylight Standards

Below is an example of the table used to describe the alternative daylight standard results..

	Table No. 2.6: Example of Table for Alternative Daylight Standards Results for Scheme Performance									
		BS 8206-2		BS 8206-2 EN 17037		EN 17037 BS_E			BS_EN 1	7037
Unit Number	Room Description	Predicted ADF	Meets Criteria	% of area above 300 Lux (recommendation >50%)	% of area above 100 Lux (recommendation >95%)	Meets Criteria	% of area above target Lux (recommendation >50%)	Meets Criteria*		
	House Number/Floor									
Α	В	C	D	E	F	G	н	1		

#### **A: Unit Number**

This column identifies the assessed unit. All unit numbers are determined by the architect's drawings, unless otherwise stated.

#### **B: Room Description**

Room Description details which room of the unit has been assessed, e.g. bedroom, living room, etc.

#### **C: Predicted ADF Value**

The average daylight factor calculated for an assessed room.

#### D: Meets Criteria (BS 8206-2)

This column states if the assessed room achieves the ADF recommendation as per BS 8206-2: (An ADF above 2.0% for Kitchens, 1.5% for Living Rooms or above 1.0% for Bedrooms).

#### E: % of area above 300 Lux

EN 17037 recommends at least 50% of the work-plane receives above 300 lux for at least half the daylight hours.

This column states percentage of the work-plane of the assessed room that is capable of receiving more than 300 lux for at least half the daylight hours.

#### F: % of area above 100 Lux

EN 17037 recommends at least 95% of the work-plane receives above 100 lux for at least half the daylight hours.

This column states percentage of the work-plane of the assessed room that is capable of receiving more than 100 lux for at least half the daylight hours.

#### G: Meets Criteria (EN 17037)

This column states if the assessed room achieves the recommended level of daylight as per EN 17037. (300 lux across more than 50% of the work plane and 100 lux across more than 95% of the work-plane for half the daylight hours)

#### H: % of area above Target Lux

BS EN 17037 recommends target lux levels to be achieved across at least 50% of the work-plane for at least half the daylight hours. The target values differ depending on the room function, 200 lux for Kitchens, 150 lux for Living Rooms or 100 lux for Bedrooms.

This column states percentage of the work-plane of the assessed room that is capable of receiving more than 300 lux for at least half the daylight hours.

#### I: Meets Criteria (BS EN 17037)

This column states if the assessed room achieves the recommended level of daylight as per BS EN 17037. (Target lux levels achieved across more than 50% of the work plane).



#### 3.0 **Guidelines / Standards**

#### Sustainable Urban Housing: Design Standards for New Apartments Guidelines for Planning Authorities.

In December of 2020, the Department of Housing, Planning and Local Government published a guidance document for new apartments, Sustainable Urban Housing: Design Standards for New Apartments Guidelines for Planning Authorities. This document makes reference to the British Standard, BS 8206-2:2008: Lighting for Buildings - Part 2: Code of Practice for Daylighting (the British Standard) and to the Building Research Establishment's Site Layout Planning for Daylight and Sunlight: a Guide to Good Practice (the BRE Guidelines).

Paragraph 6.7 of the 2020 apartment guidelines states:

"Where an applicant cannot fully meet all of the requirements of the daylight provisions above, this must be clearly identified and a rationale for any alternative, compensatory design solutions must be set out, which planning authorities should apply their discretion in accepting taking account of its assessment of specific [sic]. This may arise due to a design constraints associated with the site or location and the balancing of that assessment against the desirability of achieving wider planning objectives. Such objectives might include securing comprehensive urban regeneration and or an effective urban design and streetscape solution."

A European Standard was published in 2018, entitled EN 17037 Daylight in Buildings. Furthermore, British authorities have published and adopted a national annex to the European standards, BS EN 17037. Neither EN 17037 nor BS EN 17037 are referenced in the Irish guidance and to the best of our knowledge is not referenced in any planning guidance document issued by Irish planning authorities. The BRE Guidelines have not been withdrawn. Until official guidance or instruction is published by a relevant authority on this matter, 3DDB will continue to reference the BRE Guidelines in our daylight and sunlight assessments.

#### BRE - Site Layout Planning for Daylight and Sunlight: a Guide to Good Practice

This document will be referred to as the BRE Guidelines. At the time of writing this report, the BRE Guidelines are in the second edition (BRE 209), with a third edition due for release. The BRE Guidelines aims to set out recommendations for appropriate levels of daylight and sunlight within a proposed development, as well as to provide guidance on impacts arising from a proposed development to surrounding properties and amenity areas.

The BRE Guidelines will be used as the primary guiding document in the assessments that are carried out for the purpose of this report, as they are referenced in the Irish guidance document titled: Sustainable Urban Housing: Design Standards for New Apartments, as published in December of 2020 by the Department of Housing, Planning and Local Government.

A detailed description of the various recommendations for impact assessment and scheme performance is contained in section "4.0 Assessment Overview" on page 14 of this report.

#### BS 8206-2:2008: Lighting for Buildings - Part 2: Code of Practice for Daylighting

BS 8206-2:2008 is referenced in the second edition of the BRE Guidelines. It sets out minimum ADF recommendations for daylight within dwellings.

It should be noted that although this document has been superseded by EN 17037 / BS EN 17037, it is still considered to be the primary reference document as it is referenced in the BRE Guidelines, as well as the Irish guidance document Sustainable Urban Housing: Design Standards for New Apartments. Recommended minimum ADF values differ depending on the function of a room. An ADF of 2.0% is recommended for kitchens, 1.5% for living rooms and 1.0% for bedrooms. If a space has dual purposes it is advised that the higher target value should be applied.

#### **EN 17037:2018 Daylight in Buildings**

EN 17037 is a European Standard that provides recommendations for daylight within spaces using a different methodology than the Average Daylight Factor as used in the previous British Standard (BS 8206-2:2008).

EN 17037:2018 recommends that 300 lux should be received across 50% of the reference plane of a room for half of the daylight hours of the year. with no less than 100 lux received across 95% of the reference plane. No distinction is made for the function of the room for target lux levels within this standard.

The target values given within EN 17037 are difficult to achieve, especially where increased density is desired.

The criteria for lux levels as recommended in EN 17037 have been calculated for the proposed habitable rooms across all floors of the proposed development, as per the BRE study, and are contained within section "7.5" Appendix Results - Alternative Daylight Standards" on page 107 of this report.

EN 17037 also makes recommendations related to sunlight, glare and quality of view. These aspects are not addressed in this report.



#### BS EN 17037:2018 Daylight in Buildings

BS EN 17037:2018 is the British Annex to the European Standard (see above). The British Annex acknowledges that a rigid application of the European Standard could prove to be a difficult task. It states "... it is the opinion of the UK committee that the recommendations for daylight provision in a space [...] may not be achievable for some buildings, particularly dwellings."

Similar to the recommendations made in BS 8206-2:2008, target values differ depending on the function of a room. Target lux levels are applied across 50% of the reference plane of a room for half of the daylight hours. The target lux levels are 200 lux for kitchens, 150 lux for living rooms and 100 lux for bedrooms. No minimum is stated to be achieved across 95% of the work plane. If a space has dual purposes it is advised that the higher target value should be applied.

The criteria for lux levels as recommended in BS EN 17037 have been calculated for the proposed habitable rooms across all floors of the proposed development, as per the BRE study, and are contained within section "7.5 Appendix Results - Alternative Daylight Standards" on page 107 of this report.

#### **Summary**

It should be noted that the European Standard (EN 17037:2018 Daylight in Buildings) had been published prior to the publication of Sustainable Urban Housing: Design Standards for New Apartments in December 2020. Furthermore, British authorities have published and adopted a national annex to the European standards, BS EN 17037. Neither EN 17037 nor BS EN 17037 are referenced in the 2020 apartment guidelines and to the best of our knowledge are not referenced in any planning guidance document issued by Irish planning authorities. Additionally, the BRE Guidelines have not been withdrawn. Until official guidance or instruction is published by a relevant Irish planning authority on this matter, 3DDB will continue to reference the BRE Guidelines in our daylight and sunlight assessments.

Neither the British Standard, European Standard, British Annex to the European Standard nor the BRE Guide set out rigid standards or limits. They are all considered advisory documents. The BRE Guide is preceded by the following very clear statement as to how the design advice contained therein should be used:

"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."

That the recommendations of the BRE Guide are not suitable for rigid application to all developments in all contexts, is of particular importance in the context of national and local policies for the consolidation and densification of urban areas or when assessing applications for highly constrained sites (e.g. lands in close proximity or immediately to the south of residential lands).



### 4.0 Assessment Overview

### 4.1 Development Description

The development will consist of the demolition of existing site structures (2,622.3 sqm) and the construction of 569 no. residential units, a neighbourhood centre with 11 no. units (commercial floor area 2,141 sqm) and a childcare facility (886 sqm), a circa 350 metre section of distributor road, and all ancillary and associated works on a site of 27.64 ha. The proposed development comprises:

- 1. Demolition of existing site structures (total 2,622.3 sqm) comprising; 'Great Connell' a two-storey dwelling of 331.9 sqm with detached single storey garage and outhouses of 48 sqm; 'Valencia Lodge' a single storey dwelling of 135.6 sqm with a single storey garage of 17.8 sqm; two no. single storey sheds of 1,440 sqm and 595 sqm, and a three-sided shed of 54 sqm.
- 2. Construction of 569 no. new residential dwellings (325 no. houses and 244 no. apartments) comprising:
- 64 no. two-bed houses; 173 no. three-bed houses; and 88 no. four-bed houses (ranging in height from 2 to 3 storeys).
- Apartment Block A (Part 3 and 4 Storeys): 5 no. one-bed apartments; 14 no. two-bed apartments; and 3 no. three-bed apartments. These proposed units have private balconies or terraces, and access to a community roof terrace of 112.4 sqm.
- Apartment Block B (Part 3 and 4 Storeys): 5 no. one-bed apartments; 14 no. two-bed apartments; and 3 no. three-bed apartments. These proposed units have private balconies or terraces, and access to a community roof terrace of 112.4 sqm.
- Apartment Block C (Part 3 and 4 Storeys): 4 no. one-bed apartments; 19 no. two-bed apartments and 4 no. three-bed apartments. These proposed units have private balconies or terraces, and access to a community roof terrace of 87 sqm.
- 13 no. apartments above the proposed Neighbourhood Centre comprising; 4 no. own-door two-bed apartments; 3 no. shared-access one-bed apartments; and 6 no. shared-access two-bed apartments. These proposed units have private balconies or terraces.
- 160 no. own-door apartments in 2- and 3- storey buildings comprising; 16 no. one-bed apartments; 78 no. two-bed apartments, 66 no. three-bed duplex apartments. These units will have private amenity areas in the form of terraces, balconies and/or rear gardens.
- 3. Provision of Neighbourhood Centre (ranging in height between 2 and 4 storeys) with 11 no. commercial units comprising: a convenience shop of 909 sqm (unit 1); 3 no. doctor/dentist/physio units of 120 sqm, 120 sqm and 90 sqm (units 6, 7, and 8, respectively); a café of 125 sqm (unit 4); a restaurant of 213 sqm (unit 9); and 5 no. shop/convenience services units of 112 sqm, 49 sqm, 171 sqm, 100 sqm and 100 sqm (units 2, 3, 5,10 and 11, respectively). The proposed Neighbourhood Centre includes an external roof terrace of 176 sqm.
- 4. Provision of a childcare facility (886 sqm) within the Neighbourhood Centre with capacity for in the order of 154 no. children.
- 5. Provision of 1,008 no. car parking spaces comprising 650 no. spaces for the proposed houses; 312 no. spaces for the proposed apartments; and 46 no. spaces to serve the Neighbourhood Centre.
- 6. Provision of 732 bicycle parking spaces comprising 536 no. secure residential spaces, 134 no. residential visitor spaces, and 62 no. spaces to serve the Neighbourhood Centre.
- 7. A series of 18 no. public open spaces and pocket parks are proposed throughout the residential development (2.613 ha net area).
- 8. Provision of a 8.31 ha amenity area adjoining the River Liffey.
- 9. Vehicular access to the proposed development from Great Connell road via a circa 350 metre section of the Newbridge South Orbital Relief Road (NSOOR), including footpaths and cycle paths. It is proposed to upgrade the existing Great Connell Roundabout to a signalised junction, and provide footpaths and cycle paths within the subject site along the Great Connell Road.
- 10. Proposed development facilitates future potential pedestrian, cycle and vehicular links to adjoining residential development and undeveloped lands.
- 11. All enabling and site development works, landscaping, boundary treatments, lighting, services and connections, including connection to permitted wastewater pumping station, waste management, ESB substations, compensatory flood storage and all other ancillary works above and below ground on a site of 27.64 ha.
- 12. A 7 year permission is sought.



### 4.2 Effect on Vertical Sky Component (VSC)

A proposed development could potentially have a negative effect on the level of daylight that a neighbouring property receives, if the obstructing building is large in relation to their distance from the existing dwelling.

To ensure a neighbouring property is not adversely affected, the Vertical Sky Component (also referred to as VSC) is calculated and assessed. VSC can be defined as the amount of skylight that falls on a vertical wall or window.

This report assesses the percentage of direct sky illuminance that falls on the centre point of neighbouring windows that could be affected by the proposed development.

The BRE Guidelines state that if the VSC is:

- · At least 27%, then conventional window design will usually give reasonable results;
- Between 15% and 27%, then special measures (larger windows, changes to room layout) are usually needed to provide adequate daylight;
- Between 5% and 15%, then it is very difficult to provide adequate daylight unless very large windows are used;
- Less than 5%, then it is often impossible to achieve reasonable daylight, even if the whole window wall is glazed.

In this assessment, the VSC of the centre point on each of the assessed windows will be calculated, both in the 'baseline state' and in the 'proposed state'. The baseline state reflects the current VSC of the window, the proposed state will determine what the VSC of the window would be if the proposed development is built as planned.

A comparison between these values will determine the level of effect.

A proposed development could possibly have a noticeable effect on the daylight received by an existing window, if the following occurs:

- The VSC value drops below the guideline value of 27%; and
- The VSC value is less than 0.8 times the existing value.

The results for the study on the effect on VSC caused by the proposed development can be seen in section 6.1 on page 20.

### 4.3 Effect on Annual/Winter Probable Sunlight Hours (APSH/WPSH)

Annual/Winter Probable Sunlight Hours (APSH/WPSH) is a measure of sunlight that a given window may expect to receive over the period of a year. The percentage of APSH/WPSH that windows in existing properties receive might be affected by a proposed development.

Whether a window is considered for APSH/WPSH impact assessment is based on its orientation. A south-facing window will, in general, receive the most sunlight. North facing windows may receive sunlight on only a handful of occasions in a year, and windows facing eastwards or westwards will receive sunlight only at certain times of the day. Taking this into account, the BRE Guidelines suggest that windows with an orientation within 90 degrees of due south should be assessed.

If the assessment point of a window can receive more than 25% of APSH, including at least 5% of the WPSH, then the room should receive enough sunlight.

As with the VSC study, the APSH/WPSH will be calculated in the baseline state and the proposed state. A comparison of the results will determine the level of effect.

A proposed development could possibly have a noticeable effect on the sunlight received by an existing window, if the following occurs:

- The APSH value drops below the annual (25%) or winter (5%) guidelines; and
- The APSH value is less than 0.8 times the baseline value; and
- There is a reduction of more than 4% to the annual APSH.

The results of the study on APSH can be found in Section 6.2 on page 29.



### 4.4 Effect on Sun On Ground in Existing Gardens

The BRE Guidelines recommend that for a garden or amenity area to appear adequately sunlit throughout the year, at least half of it should receive at least two hours of sunlight on March 21st.

March 21st, also known as the spring equinox, is chosen as the assessment date as daytime and night-time are of approximately equal duration on this date.

The percentage of assessed areas which can receive two hours or more of direct sunlight on March 21st will be calculated in both the baseline and proposed states. A comparison between these values will determine the level of effect.

A proposed development could possibly have a noticeable effect on the sunlight received by an existing garden and/or amenity area, if the following occurs:

- · Half the area of the space does not receive at least two hours of sunlight during the spring equinox; **and**
- The area that receives more than two hours of sun on the spring equinox is less than 0.8 times its former value.

The results of the study on effect on sun on ground the in neighbouring gardens (including a visual representation in the form of 2-hour false colour plans) can be found in Section on page 3.

### 4.5 Shadow Study

A shadow study has been carried out on the baseline existing model state and the proposed model state. This visual representation of the shadows cast by the proposed development can be found in the hourly shadow diagrams in section 6.4 on page 43.

Hourly renderings have been shown from sunrise to sunset on the following dates:

Spring equinox: March 21st Sunrise 6:25 | Sunset 18:40.
 Summer solstice: June 21st. Sunrise 4:57 | Sunset 21:57.
 Winter solstice: December 21st Sunrise 8:38 | Sunset 16:08.

**Note:** Considering the spring equinox (March 21st) and autumn equinox (22nd September) yield similar results, only the spring equinox was generated.

### 4.6 Sun On Ground in Proposed Outdoor Amenity Areas

The BRE Guidelines recommend that for a garden or amenity area to appear adequately sunlit throughout the year, at least half of it should receive at least two hours of sunlight on March 21st.

March 21st, also known as the spring equinox, is chosen as the assessment date as daytime and night-time are of approximately equal duration on this date.

The portion of each space capable of receiving 2 hours of direct sunlight on March 21st will be calculated.

The results for the study on sun on ground in the proposed outdoor amenity areas (including a visual representation in the form of 2-hour false colour plans) can be found in section 7.0 on page 52.

### 4.7 Average Daylight Factor in Proposed Habitable Rooms (ADF)

The BRE Guidelines define the Average Daylight Factor as the average illuminance on the working plane in a room, divided by the illuminance on an unobstructed horizontal surface outdoors.

In housing, the working plane is considered to be 850 mm above the finished floor level and is offset 500 mm from the room boundaries.

BS 8206-2:2008 Code of Practice for Daylighting recommends an ADF of 5% for a well day lit space where no additional electric lighting is available, and 2% for a partly daylit space with supplementary electric lighting.

In terms of housing, *BS 8206-2:2008*, as referenced in the BRE Guidelines, also gives minimum values of ADF. These recommendations are considered to be the minimum value of ADF required for the following habitable spaces:

- · 2% for kitchens;
- 1.5% for living rooms;
- 1% for bedrooms.

This study has assessed the Average Daylight Factor (ADF) received in all habitable rooms across all floors of the most constrained portion of the proposed development.

Where ADF compliance rates are stated, target values of 2.0% have been considered for LKDs.

**Note:** non-habitable rooms and circulation spaces (e.g. bathrooms and corridors) do not require ADF assessment according to the BRE Guidelines.

For definition of spaces and target values applied, please see the methodology section of this report in section 5.0 on page 17.

The results for the study on ADF can be seen in section 7.4 on page 55.



### 5.0 Methodology

### 5.1 Building the Baseline and Proposed Models

In order to obtain the results of this assessments, 3D Design Bureau (3DDB) constructed a series of architectural digital 3D models using Revit 2021, a BIM software application made available by Autodesk.

O'Flynn Architects supplied 3DDB with 2D Cad drawings of the proposed development which were used in the creation of the digital 3D assessment models for the daylight and sunlight assessment.

A combination of survey information, aerial photography, available online photography and/or ordnance survey information were used to model the surrounding context and assessed buildings. **Note:** as the information gathered from online sources is not as accurate as surveyed information, some tolerance should be allowed to the placement of windows, boundary treatments and the results generated.

Normally trees and shrubs do not need to be included in the studies carried out in this report, partly because their shapes are almost impossible to predict, and partly because the dappled shade of a tree is more pleasant than the deep shadow of a building (this applies especially to deciduous trees). Where a dense belt or group of evergreens is specifically planned as a windbreak or for privacy purposes, it is better to include their shadow in the calculation of shaded area. If and when trees have been included as part of the study, it will be clearly stated. No trees have been included in this study for the reasons stated above.

#### **Baseline**

The baseline state reflects the existing environment. It includes the surrounding context and the subject site in their current standing. This includes any structures that are to be demolished as part of this application.

#### **Proposed**

The proposed state reflects the subject site if the development is built as proposed. This includes the demolishing of structures, landscaping etc.

### 5.2 Generating Results

The 3D models as stated above were brought into specialist software packages specifically designed for the purpose of daylight and sunlight analysis.

The results are generated and analysed considering the BRE Guidelines, as expanded on below.

#### 5.2.1 VSC

#### **Assessment Criteria**

The effect on Vertical Sky Component (VSC) has been calculated on 71-73 Wellesley Manor, 81-87 Wellesley Manor, 12-13 Wellesley Manor, and Great Connell.

Under BRE Guidelines, only habitable rooms need to be assessed for effect on daylight and sunlight. In the absence of design layouts or floor plans, or information pertaining to the internal 'as-built' layouts, assumptions have been made regarding the function of the windows of the existing surrounding properties (i.e. what room type is served by the window being assessed).

Typically, the effect on ground floor windows is greater than the effect on windows of subsequent floors. However, floors above ground floor level have been included in this study to give a more comprehensive assessment.

#### **Assessment Points**

The assessment points for measuring VSC or APSH are taken from the centre point of a standard window.

If the window being assessed is a full height window, the assessment point is taken at 1600 mm above the finished floor level.

If it can be determined that multiple windows are servicing the same room, each window will be assessed and the average value will be taken.

#### 5.2.2 APSH/WPSH

#### **Impact Assessment**

Effect on Annual/Winter Probable Sunlight Hours (APSH/WPSH) has been calculated on the windows assessed in the VSC study. The BRE Guidelines suggest that windows with an orientation within 90 degrees of due south should be assessed. Therefore, the APSH/WPSH of windows that do not have an orientation within 90° of due south have not been assessed for the purposes of this report.

If it can be determined that multiple windows are servicing the same room, the APSH/WPSH will be assessed for the room as opposed to each individual window.

The assessment points for APSH/WPSH are equivalent to the VSC study.



#### 5.2.3 Sun On Ground

#### **Assessment Criteria**

Effect on sunlight to existing neighbouring gardens and/or amenity areas has been assessed to the north of the proposed development, as areas located to the south are unlikely to be affected due to sun direction. Overshadowing is highly unlikely to occur in areas that are due south of any proposed development.

The levels of sunlighting to proposed amenity areas within the portion of site object of the study, as indicated by the architect, have been assessed. However, it should be noted that the numbering of these spaces in the Daylight and Sunlight Assessment Report has been assigned by 3DDB specifically for the purposes of this report. If other consultants are referencing these spaces in their own reports, it is unlikely they will be numbered the same.

A study of the average sun hours during the Equinox, March 21st; the summer solstice, June 21st & the winter solstice, December 21st has been carried out to give a better understanding of the potential sunlight the creche play area may receive throughout the year. These results along with a visual representation by way of false colour plans can be seen in section 7.3 on page 54.

#### **ADF**

#### **Recommended Minimum ADF**

The recommended minimum for Average Daylight Factor (ADF) is based on the function of the room being assessed.

The recommendations as per the BS 8206-2:2008 are as follows: 2% for kitchens; 1.5% for living rooms; and 1% for bedrooms. BS 8206-2:2008 also recommends that where a room serves more than one purpose, such as the modern day apartment design of the living/kitchen/dining (LKD) space, the minimum average daylight factor should be taken for the room with the highest value.

Following this advice, a target ADF value of 2.0% has been applied to LKDs within the proposed scheme. It could be argued that the primary function of these spaces is that of a living area, with the kitchens located towards the rear of the room with lower expectation of daylight. On this basis the compliance rate for LKDs with an ADF of 1.5% has relevance. However, all LKDs assessed are compliant with the higher value, therefore the compliance rate with the reduced ADF target value of 1.5% was omitted from this study.

In new developments, some internal spaces (e.g. studio apartments, shared communal areas etc.) can possibly be of a nature that do not have a predefined target value in the BS 8206-2:2008. In such instances, 3DDB have applied a target value they deem to be appropriate.

Whilst it is not typical for ADF to be assessed in an outdoor space, as the creche play area has not achieved the recommended minimum level of sunlight on March 21st, an ADF study has been carried out for this space to give a better understanding of the potential daylight that may be received. The results of this study can be found in section 7.3 on page 54

#### **Defining Areas**

Where rooms include a winter garden, the winter garden is deemed to be an extension to the interior space and will be included in the assessed area of the room. There are no winter gardens within this proposed development.

Circulation spaces, corridors, bathrooms etc. have not been assessed.

Indication of the assessed space in each room is provided in the floor plans that correspond to the ADF results in section "7.4 Average Daylight Factor" on page 55.

#### **Work Plane**

The calculation of ADF is carried out on a hypothetical work plane which lies 850 mm from the finished floor level in residential units and 700 mm in academic and office spaces. The work plane is offset 500 mm from the room boundaries. Room boundaries are taken from the inside face of the interior walls and the centre line of any main external windows.

The Daylight Factor (DF) percentage has been calculated on the work plane across a series of points on a grid of approximately 100 mm.

The average of these figures determines the Average Daylight Factor (ADF).



#### **Material Palette**

Unless a material palette is provided by the architect the following values have been assumed for ADF calculations.

	Table No. 5.1: Material Palette for ADF Calculations									
Object	Material	Reflectance	Object	Material	Reflectance					
				1.10.001131	Transmittance					
	Standard Brick	0.3	Interior Walls	Off white paint	0.75					
	Light Brick	0.4	Interior Ceiling	White paint	0.8					
Exterior walls	Dark Brick	0.15	Interior Floor	Light timber	0.4					
	Render	0.6	Miscellaneous	Miscellaneous	0.5					
	Concrete	0.4		Double glazing	0.8					
	Paving	0.4	Class	Maintenance Factor	0.91					
Ground cover	Tarmac	0.2	Glass	Glass adjusted for maintenance	0.73					
	Grass	0.2		Frosted glass	0.5					

#### **Assumed Values**

Typically, ADF values increase in rooms located on higher floor levels, due to an improved relationship with adjacent obstructions. Where a room meets the guidelines for ADF, it can be reasonably assumed that similar rooms on subsequent floors will also meet the guidelines.

A combination of the calculated results and reasonable inference made from these results will be used to give an approximate compliance rate for the ADF for the proposed development as a whole. Where ADF compliance rates are stated both target values for LKDs (2% and 1.5%) have been considered. The appropriate ADF target value for LKDs is at the discretion of the planning authority.

### **5.2.4** Alternative Daylight Standards

Supplementary studies have been carried out on daylight performance using the daylight recommendations given in EN 17037 and BS EN 17037. The model used for the ADF study has been used for these additional studies. As the results published in this section are considered to form part of an appendix, no reference will be made to them in the circa compliance rates, summary of results or conclusion of this report.

### 5.3 Shadow Study

The shadow study renderings have been carried out in order to give a visual representation to the results set out in the sunlight assessment section of this report.

Hourly renderings have been shown from sunrise to sunset on the following dates:

Spring equinox: March 21st Sunrise 6:25 | Sunset 18:40.
 Summer solstice: June 21st. Sunrise 4:57 | Sunset 21:57.
 Winter solstice: December 21st Sunrise 8:38 | Sunset 16:08.

**Note:** Considering the spring equinox (March 21st) and autumn equinox (22nd September) yield similar results, only the spring equinox was generated.



### **6.0** Impact Assessment Results

### **6.1** Effect on Vertical Sky Component

### 6.1.1 Wellesley Manor

	Table No. 6.1: VSC Results Wellesley Manor										
Window Number	Baseline VSC Value	Proposed VSC Value	Ratio of Proposed VSC to Baseline VSC	Recommended minimum VSC*	Level of Compliance with BRE Guidelines	Effect of Proposed Development**					
			No	. 72							
72a	36.05%	35.66%	0.99	27.00%	BRE Compliant	Imperceptible					
72b	34.92%	34.55%	0.99	27.00%	BRE Compliant	Imperceptible					
72c	34.85%	34.47%	0.99	27.00%	BRE Compliant	Imperceptible					
72d	37.57%	36.93%	0.98	27.00%	BRE Compliant	Imperceptible					
72e	37.48%	36.97%	0.99	27.00%	BRE Compliant	Imperceptible					
			No	. 73							
73a	34.38%	34.13%	0.99	27.00%	BRE Compliant	Imperceptible					
73b	30.63%	30.33%	0.99	24.50%	BRE Compliant	Imperceptible					
73c	37.41%	37.00%	0.99	27.00%	BRE Compliant	Imperceptible					
73d	37.32%	37.00%	0.99	27.00%	BRE Compliant	Imperceptible					

<sup>\*</sup> The BRE Guidelines state that in order for a proposed development to have a noticeable effect on the VSC of an existing window, the value needs to both drop below the stated target value of 27% **and** be less than 0.8 times the baseline value.

<sup>\*\*</sup> For the interpretation of level of effects please refer to"2.2 Definition of Effects" on page 6.

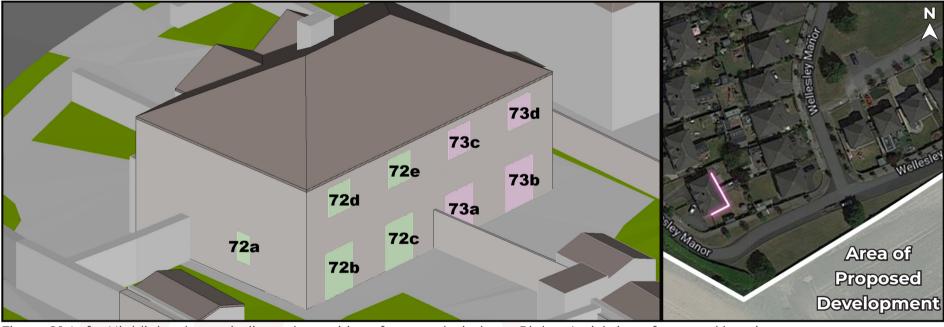


Figure 6.1: Left - Highlighted areas indicate the position of assessed windows., Right - Aerial view of assessed location



### 6.1.2 Wellesley Manor

	Table No. 6.2: VSC Results Wellesley Manor									
Window Number	Baseline VSC Value	Proposed VSC Value	Ratio of Proposed VSC to Baseline VSC	Recommended minimum VSC*	Level of Compliance with BRE Guidelines	Effect of Proposed Development**				
			No	. 71						
71a	37.37%	36.03%	0.96	27.00%	BRE Compliant	Imperceptible				
71b	35.08%	33.79%	0.96	27.00%	BRE Compliant	Imperceptible				
71c	35.12%	34.18%	0.97	27.00%	BRE Compliant	Imperceptible				
71d	37.12%	36.02%	0.97	27.00%	BRE Compliant	Imperceptible				
71e	38.83%	37.84%	0.97	27.00%	BRE Compliant	Imperceptible				
71f	38.82%	37.86%	0.98	27.00%	BRE Compliant	Imperceptible				
71g	38.81%	37.88%	0.98	27.00%	BRE Compliant	Imperceptible				
71h	38.79%	37.90%	0.98	27.00%	BRE Compliant	Imperceptible				
71i	38.76%	37.90%	0.98	27.00%	BRE Compliant	Imperceptible				
71j	35.11%	34.96%	1.00	27.00%	BRE Compliant	Imperceptible				
71k	35.18%	35.10%	1.00	27.00%	BRE Compliant	Imperceptible				
711	23.86%	23.85%	1.00	19.09%	BRE Compliant	Imperceptible				
71m	38.03%	37.63%	0.99	27.00%	BRE Compliant	Imperceptible				
71n	38.46%	37.97%	0.99	27.00%	BRE Compliant	Imperceptible				
710	39.41%	37.44%	0.95	27.00%	BRE Compliant	Imperceptible				

<sup>\*</sup> The BRE Guidelines state that in order for a proposed development to have a noticeable effect on the VSC of an existing window, the value needs to both drop below the stated target value of 27% **and** be less than 0.8 times the baseline value.

<sup>\*\*</sup> For the interpretation of level of effects please refer to"2.2 Definition of Effects" on page 6.

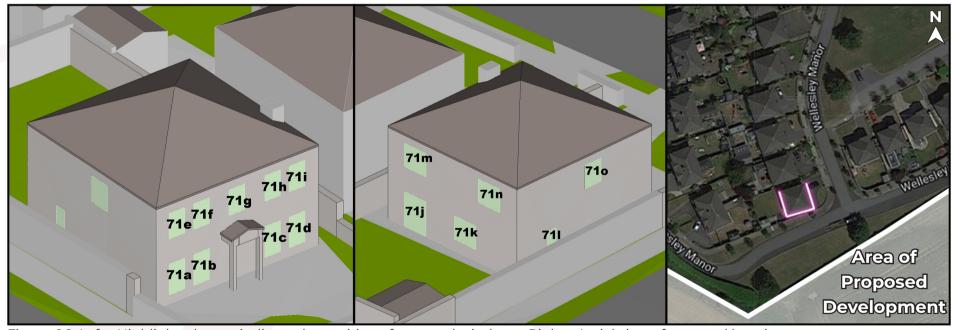


Figure 6.2: Left - Highlighted areas indicate the position of assessed windows., Right - Aerial view of assessed location



### 6.1.3 Wellesley Manor

	Table No. 6.3: VSC Results Wellesley Manor										
Window Number	Baseline VSC Value	Proposed VSC Value	Ratio of Proposed VSC to Baseline VSC	Recommended minimum VSC*	Level of Compliance with BRE Guidelines	Effect of Proposed Development**					
	No. 81										
81a	36.91%	35.23%	0.95	27.00%	BRE Compliant	Imperceptible					
81b	36.94%	35.13%	0.95	27.00%	BRE Compliant	Imperceptible					
81c	36.07%	34.62%	0.96	27.00%	BRE Compliant	Imperceptible					
81d	39.32%	37.11%	0.94	27.00%	BRE Compliant	Imperceptible					
81e	39.35%	37.03%	0.94	27.00%	BRE Compliant	Imperceptible					
			No.	. 82							
82a#1	24.84%	24.80%	1.00	19.87%	BRE Compliant	-					
82a#2	28.90%	28.87%	1.00	23.12%	BRE Compliant	-					
82a#3	36.74%	34.58%	0.94	27.00%	BRE Compliant	-					
82a#4	32.52%	31.67%	0.97	26.02%	BRE Compliant	-					
82a#5	25.93%	25.10%	0.97	20.74%	BRE Compliant	-					
82a#	29.79%	29.00%	0.97	23.83%	BRE Compliant	Imperceptible					
82b	32.37%	29.89%	0.92	25.90%	BRE Compliant	Imperceptible					
82c	36.96%	34.45%	0.93	27.00%	BRE Compliant	Imperceptible					
82d	39.36%	36.91%	0.94	27.00%	BRE Compliant	Imperceptible					
82e	39.37%	36.82%	0.94	27.00%	BRE Compliant	Imperceptible					

<sup>\*</sup> The BRE Guidelines state that in order for a proposed development to have a noticeable effect on the VSC of an existing window, the value needs to both drop below the stated target value of 27% **and** be less than 0.8 times the baseline value.

# If it can be determined or reasonably assumed that multiple windows are servicing the same room, each window will be assessed and the average value will be taken.

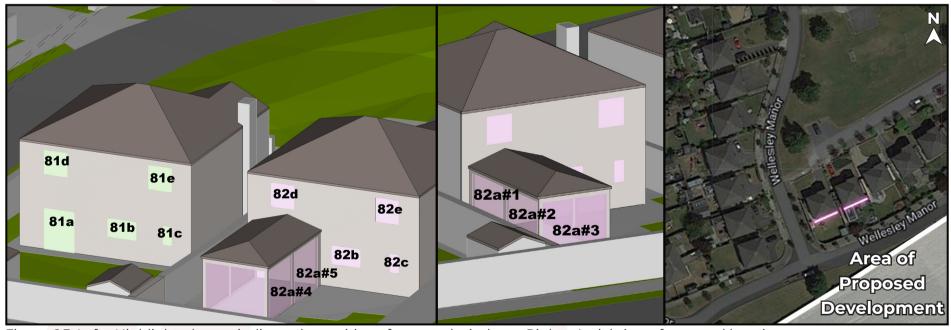


Figure 6.3: Left - Highlighted areas indicate the position of assessed windows., Right - Aerial view of assessed location

<sup>\*\*</sup> For the interpretation of level of effects please refer to"2.2 Definition of Effects" on page 6.



### 6.1.4 Wellesley Manor

		Ta	ble No. 6.4: VSC Res	sults Wellesley Mand	or				
Window Number	Baseline VSC Value	Proposed VSC Value	Ratio of Proposed VSC to Baseline VSC	Recommended minimum VSC*	Level of Compliance with BRE Guidelines	Effect of Proposed Development**			
	No. 83								
83a#1	26.29%	26.10%	0.99	21.03%	BRE Compliant	-			
83a#2	35.45%	34.04%	0.96	27.00%	BRE Compliant	-			
83a#3	37.22%	35.01%	0.94	27.00%	BRE Compliant	-			
83a#4	35.62%	34.19%	0.96	27.00%	BRE Compliant	-			
83a#5	23.44%	23.07%	0.98	18.75%	BRE Compliant	-			
83a#	31.60%	30.48%	0.96	25.28%	BRE Compliant	Imperceptible			
83b	34.49%	32.50%	0.94	27.00%	BRE Compliant	Imperceptible			
83c	36.41%	34.30%	0.94	27.00%	BRE Compliant	Imperceptible			
83d	39.36%	36.78%	0.93	27.00%	BRE Compliant	Imperceptible			
83e	39.37%	36.76%	0.93	27.00%	BRE Compliant	Imperceptible			
			No.	84					
84a#1	23.98%	23.90%	1.00	19.18%	BRE Compliant	-			
84a#2	26.01%	25.95%	1.00	20.81%	BRE Compliant	-			
84a#3	35.25%	34.29%	0.97	27.00%	BRE Compliant	-			
84a#4	35.74%	34.69%	0.97	27.00%	BRE Compliant	-			
84a#5	27.40%	27.25%	0.99	21.92%	BRE Compliant	-			
84a#6	21.33%	21.14%	0.99	17.06%	BRE Compliant	-			
84a#	28.29%	27.87%	0.99	22.63%	BRE Compliant	Imperceptible			
84b	27.61%	26.36%	0.95	22.09%	BRE Compliant	Imperceptible			
84c	31.67%	30.32%	0.96	25.34%	BRE Compliant	Imperceptible			
84d	39.36%	36.89%	0.94	27.00%	BRE Compliant	Imperceptible			
84e	39.36%	36.91%	0.94	27.00%	BRE Compliant	Imperceptible			

<sup>\*</sup> The BRE Guidelines state that in order for a proposed development to have a noticeable effect on the VSC of an existing window, the value needs to both drop below the stated target value of 27% **and** be less than 0.8 times the baseline value.

<sup>#</sup> If it can be determined or reasonably assumed that multiple windows are servicing the same room, each window will be assessed and the average value will be taken.

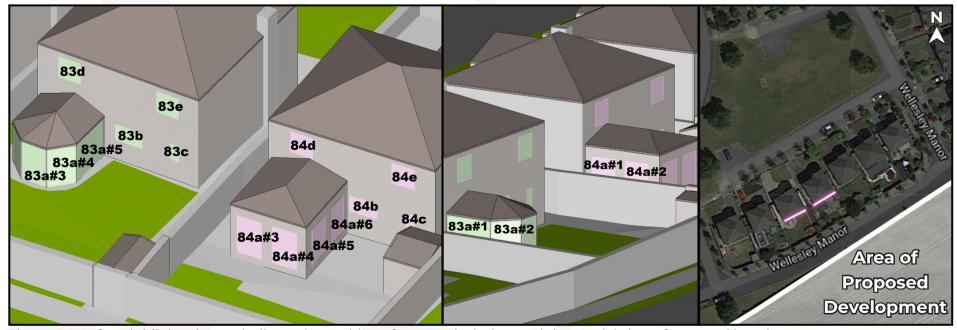


Figure 6.4: Left - Highlighted areas indicate the position of assessed windows., Right - Aerial view of assessed location

<sup>\*\*</sup> For the interpretation of level of effects please refer to"2.2 Definition of Effects" on page 6.



### 6.1.5 Wellesley Manor

		Ta	ble No. 6.5: VSC Res	sults Wellesley Mand	or	
Window Number	Baseline VSC Value	Proposed VSC Value	Ratio of Proposed VSC to Baseline VSC	Recommended minimum VSC*	Level of Compliance with BRE Guidelines	Effect of Proposed Development**
			No.	85		
85a	35.99%	34.95%	0.97	27.00%	BRE Compliant	Imperceptible
85b	36.75%	35.36%	0.96	27.00%	BRE Compliant	Imperceptible
85c	35.58%	34.17%	0.96	27.00%	BRE Compliant	Imperceptible
85d	39.32%	36.95%	0.94	27.00%	BRE Compliant	Imperceptible
85e	39.33%	37.00%	0.94	27.00%	BRE Compliant	Imperceptible
			No.	86		
86a#1	18.77%	18.73%	1.00	15.02%	BRE Compliant	-
86a#2	30.61%	30.07%	0.98	24.49%	BRE Compliant	-
86a#3	35.91%	35.04%	0.98	27.00%	BRE Compliant	-
86a#4	35.02%	34.48%	0.98	27.00%	BRE Compliant	-
86a#5	23.05%	22.97%	1.00	18.44%	BRE Compliant	-
86a#	28.67%	28.26%	0.99	22.94%	BRE Compliant	Imperceptible
86b	33.83%	32.59%	0.96	27.00%	BRE Compliant	Imperceptible
86c	34.99%	33.64%	0.96	27.00%	BRE Compliant	Imperceptible
86d	39.35%	37.17%	0.94	27.00%	BRE Compliant	Imperceptible
86e	39.35%	37.22%	0.95	27.00%	BRE Compliant	Imperceptible

<sup>\*</sup> The BRE Guidelines state that in order for a proposed development to have a noticeable effect on the VSC of an existing window, the value needs to both drop below the stated target value of 27% **and** be less than 0.8 times the baseline value.

# If it can be determined or reasonably assumed that multiple windows are servicing the same room, each window will be assessed and the average value will be taken.

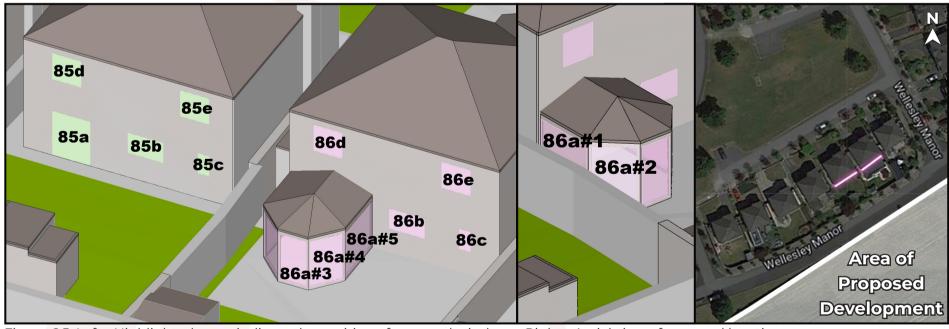


Figure 6.5: Left - Highlighted areas indicate the position of assessed windows., Right - Aerial view of assessed location

<sup>\*\*</sup> For the interpretation of level of effects please refer to"2.2 Definition of Effects" on page 6.



### 6.1.6 Wellesley Manor

		Ta	ble No. 6.6: VSC Res	sults Wellesley Mand	or	
Window Number	Baseline VSC Value	Proposed VSC Value	Ratio of Proposed VSC to Baseline VSC	Recommended minimum VSC*	Level of Compliance with BRE Guidelines	Effect of Proposed Development**
			No.	87		
87a#1	18.58%	18.56%	1.00	14.86%	BRE Compliant	-
87a#2	29.23%	29.22%	1.00	23.38%	BRE Compliant	-
87a#3	34.00%	33.80%	0.99	27.00%	BRE Compliant	-
87a#4	35.60%	35.22%	0.99	27.00%	BRE Compliant	-
87a#5	23.69%	23.56%	0.99	18.95%	BRE Compliant	-
87a#	28.22%	28.07%	0.99	22.58%	BRE Compliant	Imperceptible
87b	33.88%	32.90%	0.97	27.00%	BRE Compliant	Imperceptible
87c	34.92%	33.82%	0.97	27.00%	BRE Compliant	Imperceptible
87d	29.50%	29.50%	1.00	23.60%	BRE Compliant	Imperceptible
87e	39.33%	37.28%	0.95	27.00%	BRE Compliant	Imperceptible
87f	39.31%	37.34%	0.95	27.00%	BRE Compliant	Imperceptible
87g	37.84%	37.46%	0.99	27.00%	BRE Compliant	Imperceptible

<sup>\*</sup> The BRE Guidelines state that in order for a proposed development to have a noticeable effect on the VSC of an existing window, the value needs to both drop below the stated target value of 27% **and** be less than 0.8 times the baseline value.

<sup>#</sup> If it can be determined or reasonably assumed that multiple windows are servicing the same room, each window will be assessed and the average value will be taken.

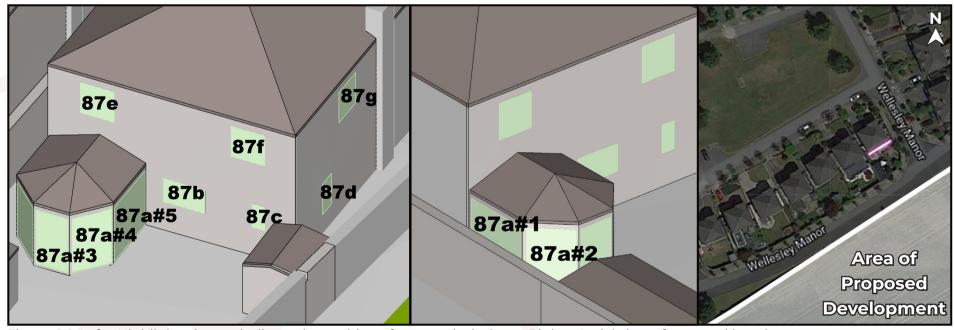


Figure 6.6: Left - Highlighted areas indicate the position of assessed windows., Right - Aerial view of assessed location

<sup>\*\*</sup> For the interpretation of level of effects please refer to"2.2 Definition of Effects" on page 6.



### 6.1.7 Wellesley Manor

	Table No. 6.7: VSC Results Wellesley Manor								
Window Number	Baseline VSC Value	Proposed VSC Value	Ratio of Proposed VSC to Baseline VSC	Recommended minimum VSC*	Level of Compliance with BRE Guidelines	Effect of Proposed Development**			
			No	. 13					
13a	37.52%	36.68%	0.98	27.00%	BRE Compliant	Imperceptible			
13b	38.84%	38.19%	0.98	27.00%	BRE Compliant	Imperceptible			
13c	38.16%	37.46%	0.98	27.00%	BRE Compliant	Imperceptible			
13d	32.59%	32.55%	1.00	26.07%	BRE Compliant	Imperceptible			
13e	30.27%	30.21%	1.00	24.22%	BRE Compliant	Imperceptible			
13f#1	28.58%	28.45%	1.00	22.86%	BRE Compliant	-			
13f#2	35.00%	34.82%	0.99	27.00%	BRE Compliant	-			
13f#3	34.15%	33.73%	0.99	27.00%	BRE Compliant	-			
13f#	32.58%	32.33%	0.99	26.06%	BRE Compliant	Imperceptible			
13g	38.64%	37.73%	0.98	27.00%	BRE Compliant	Imperceptible			
13h	38.56%	37.72%	0.98	27.00%	BRE Compliant	Imperceptible			

<sup>\*</sup> The BRE Guidelines state that in order for a proposed development to have a noticeable effect on the VSC of an existing window, the value needs to both drop below the stated target value of 27% **and** be less than 0.8 times the baseline value.

<sup>#</sup> If it can be determined or reasonably assumed that multiple windows are servicing the same room, each window will be assessed and the average value will be taken.

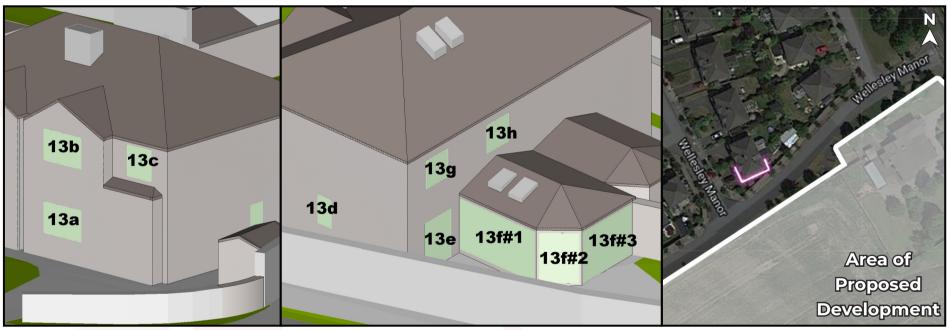


Figure 6.7: Left - Highlighted areas indicate the position of assessed windows., Right - Aerial view of assessed location

<sup>\*\*</sup> For the interpretation of level of effects please refer to"2.2 Definition of Effects" on page 6.



### 6.1.8 Wellesley Manor

	Table No. 6.8: VSC Results Wellesley Manor								
Window Number	Baseline VSC Value	Proposed VSC Value	Ratio of Proposed VSC to Baseline VSC	Recommended minimum VSC*	Level of Compliance with BRE Guidelines	Effect of Proposed Development**			
			No	. 12					
12a#1	30.39%	30.39%	1.00	24.31%	BRE Compliant	-			
12a#2	34.12%	34.11%	1.00	27.00%	BRE Compliant	-			
12a#3	34.84%	34.70%	1.00	27.00%	BRE Compliant	-			
12a#4	35.56%	35.14%	0.99	27.00%	BRE Compliant	-			
12a#5	24.18%	23.91%	0.99	19.34%	BRE Compliant	-			
12a#	31.82%	31.65%	0.99	25.45%	BRE Compliant	Imperceptible			
12b	33.24%	33.07%	0.99	26.59%	BRE Compliant	Imperceptible			
12c	35.67%	35.56%	1.00	27.00%	BRE Compliant	Imperceptible			
12d	32.37%	32.33%	1.00	25.90%	BRE Compliant	Imperceptible			
12e	38.32%	37.93%	0.99	27.00%	BRE Compliant	Imperceptible			
12f	38.51%	38.02%	0.99	27.00%	BRE Compliant	Imperceptible			
12g	39.22%	37.24%	0.95	27.00%	BRE Compliant	Imperceptible			

<sup>\*</sup> The BRE Guidelines state that in order for a proposed development to have a noticeable effect on the VSC of an existing window, the value needs to both drop below the stated target value of 27% **and** be less than 0.8 times the baseline value.

<sup>#</sup> If it can be determined or reasonably assumed that multiple windows are servicing the same room, each window will be assessed and the average value will be taken.

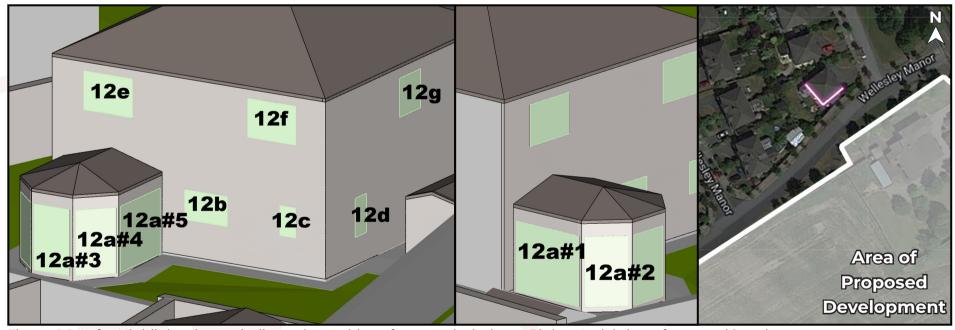


Figure 6.8: Left - Highlighted areas indicate the position of assessed windows., Right - Aerial view of assessed location

<sup>\*\*</sup> For the interpretation of level of effects please refer to"2.2 Definition of Effects" on page 6.



#### 6.1.9 Great Connell

	Table No. 6.9: VSC Results Great Connell									
Window Number	Baseline VSC Value	Proposed VSC Value	Ratio of Proposed VSC to Baseline VSC	Recommended minimum VSC*	Level of Compliance with BRE Guidelines	Effect of Proposed Development**				
	Greatconnell									
Та	37.63%	36.78%	0.98	27.00%	BRE Compliant	Imperceptible				
1b	34.32%	33.90%	0.99	27.00%	BRE Compliant	Imperceptible				
1c	37.73%	36.62%	0.97	27.00%	BRE Compliant	Imperceptible				
1d	37.76%	36.47%	0.97	27.00%	BRE Compliant	Imperceptible				
1е	36.92%	35.24%	0.95	27.00%	BRE Compliant	Imperceptible				
1f	38.56%	37.10%	0.96	27.00%	BRE Compliant	Imperceptible				

<sup>\*</sup> The BRE Guidelines state that in order for a proposed development to have a noticeable effect on the VSC of an existing window, the value needs to both drop below the stated target value of 27% **and** be less than 0.8 times the baseline value.

<sup>\*\*</sup> For the interpretation of level of effects please refer to"2.2 Definition of Effects" on page 6.



Figure 6.9: Left - Highlighted areas indicate the position of assessed windows., Right - Aerial view of assessed location



## 6.2 Effect on Annual Probable Sunlight Hours6.2.1 Wellesley Manor

### Annual

	Table No. 6.10: APSH Results Wellesley Manor								
Window Number	Baseline APSH	Proposed APSH	Ratio of Proposed APSH to Baseline APSH	Recommended minimum APSH*	Level of Compliance with BRE Guidelines	Effect of Proposed Development			
	No. 72								
72a	78.6%	77.9%	0.99	25.0%	BRE Compliant	Imperceptible			
			N	o. <b>7</b> 1					
71j	59.1%	59.1%	1.00	25.0%	BRE Compliant	Imperceptible			
71k	59.1%	59.1%	1.00	25.0%	BRE Compliant	Imperceptible			
711	56.7%	56.7%	1.00	25.0%	BRE Compliant	Imperceptible			
71m	59.2%	59.2%	1.00	25.0%	BRE Compliant	Imperceptible			
71n	59.2%	59.2%	1.00	25.0%	BRE Compliant	Imperceptible			
710	86.2%	84.6%	0.98	25.0%	BRE Compliant	Imperceptible			

<sup>\*</sup> The BRE Guidelines state that in order for a proposed development to have a noticeable effect on the APSH of an existing window, the value needs to drop below the stated target value of 25% (annual) / 5% (winter) **and** be less than 0.8 times the baseline value **and** it has to have a reduction in sunlight received over the whole year greater than 4% of annual probable sunlight hours.

<sup>\*\*</sup> For the interpretation of level of effects please refer to "2.2 Definition of Effects" on page 6.



Figure 6.10: Left - Highlighted areas indicate the position of assessed windows., Right - Aerial view of assessed location



#### Winter

	Table No. 6.11: WPSH Results Wellesley Manor								
Window Number	Baseline WPSH	Proposed WPSH	Ratio of Proposed WPSH to Baseline WPSH	Recommended minimum WPSH*	Level of Compliance with BRE Guidelines	Effect of Proposed Development			
			No	o. 72					
72a	27.8%	27.2%	0.98	5.0%	BRE Compliant	Imperceptible			
			No	o. <b>7</b> 1					
71j	19.0%	18.9%	1.00	5.0%	BRE Compliant	Imperceptible			
71k	19.0%	19.0%	1.00	5.0%	BRE Compliant	Imperceptible			
711	5.4%	5.4%	1.00	4.4%	BRE Compliant	Imperceptible			
71m	19.0%	19.0%	1.00	5.0%	BRE Compliant	Imperceptible			
71n	19.0%	19.0%	1.00	5.0%	BRE Compliant	Imperceptible			
710	32.1%	30.5%	0.95	5.0%	BRE Compliant	Imperceptible			

<sup>\*</sup> The BRE Guidelines state that in order for a proposed development to have a noticeable effect on the APSH of an existing window, the value needs to drop below the stated target value of 25% (annual) / 5% (winter) **and** be less than 0.8 times the baseline value **and** it has to have a reduction in sunlight received over the whole year greater than 4% of annual probable sunlight hours.

<sup>\*\*</sup> For the interpretation of level of effects please refer to "2.2 Definition of Effects" on page 6.



Figure 6.11: Left - Highlighted areas indicate the position of assessed windows., Right - Aerial view of assessed location



### 6.2.2 Wellesley Manor

#### **Annual**

	Table No. 6.12: APSH Results Wellesley Manor							
Window Number	Baseline APSH	Proposed APSH	Ratio of Proposed APSH to Baseline APSH	Recommended minimum APSH*	Level of Compliance with BRE Guidelines	Effect of Proposed Development		
			N	o. 81				
81a	83.3%	80.3%	0.96	25.0%	BRE Compliant	Imperceptible		
81b	82.4%	79.2%	0.96	25.0%	BRE Compliant	Imperceptible		
81c	77.9%	76.3%	0.98	25.0%	BRE Compliant	Imperceptible		
81d	86.0%	83.8%	0.97	25.0%	BRE Compliant	Imperceptible		
81e	86.0%	83.7%	0.97	25.0%	BRE Compliant	Imperceptible		
			N	o. 82				
82a#	94.9%	91.4%	0.96	25.0%	BRE Compliant	Imperceptible		
82b	66.6%	62.7%	0.94	25.0%	BRE Compliant	Imperceptible		
82c	80.6%	77.3%	0.96	25.0%	BRE Compliant	Imperceptible		
82d	86.0%	83.5%	0.97	25.0%	BRE Compliant	Imperceptible		
82e	86.0%	83.7%	0.97	25.0%	BRE Compliant	Imperceptible		

<sup>\*</sup> The BRE Guidelines state that in order for a proposed development to have a noticeable effect on the APSH of an existing window, the value needs to drop below the stated target value of 25% (annual) / 5% (winter) **and** be less than 0.8 times the baseline value **and** it has to have a reduction in sunlight received over the whole year greater than 4% of annual probable sunlight hours.



Figure 6.12: Left - Highlighted areas indicate the position of assessed windows., Right - Aerial view of assessed location

<sup>\*\*</sup> For the interpretation of level of effects please refer to "2.2 Definition of Effects" on page 6.



#### Winter

	Table No. 6.13: WPSH Results Wellesley Manor							
Window Number	Baseline WPSH	Proposed WPSH	Ratio of Proposed WPSH to Baseline WPSH	Recommended minimum WPSH*	Level of Compliance with BRE Guidelines	Effect of Proposed Development		
			No	o. 81				
81a	30.5%	27.5%	0.90	5.0%	BRE Compliant	Imperceptible		
81b	30.7%	27.6%	0.90	5.0%	BRE Compliant	Imperceptible		
81c	28.9%	27.3%	0.94	5.0%	BRE Compliant	Imperceptible		
81d	32.0%	29.8%	0.93	5.0%	BRE Compliant	Imperceptible		
81e	32.0%	29.7%	0.93	5.0%	BRE Compliant	Imperceptible		
			No	o. 82				
82a#	30.7%	27.2%	0.89	5.0%	BRE Compliant	Imperceptible		
82b	19.2%	15.2%	0.79	5.0%	BRE Compliant	Imperceptible		
82c	28.1%	24.9%	0.88	5.0%	BRE Compliant	Imperceptible		
82d	32.0%	29.5%	0.92	5.0%	BRE Compliant	Imperceptible		
82e	32.0%	29.7%	0.93	5.0%	BRE Compliant	Imperceptible		

<sup>\*</sup> The BRE Guidelines state that in order for a proposed development to have a noticeable effect on the APSH of an existing window, the value needs to drop below the stated target value of 25% (annual) / 5% (winter) **and** be less than 0.8 times the baseline value **and** it has to have a reduction in sunlight received over the whole year greater than 4% of annual probable sunlight hours.

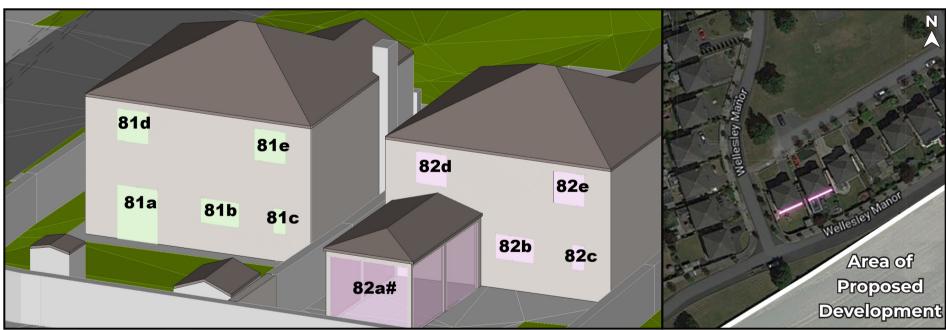


Figure 6.13: Left - Highlighted areas indicate the position of assessed windows., Right - Aerial view of assessed location

<sup>\*\*</sup> For the interpretation of level of effects please refer to "2.2 Definition of Effects" on page 6.



### 6.2.3 Wellesley Manor

#### **Annual**

	Table No. 6.14: APSH Results Wellesley Manor								
Window Number	Baseline APSH	Proposed APSH	Ratio of Proposed APSH to Baseline APSH	Recommended minimum APSH*	Level of Compliance with BRE Guidelines	Effect of Proposed Development			
			N	o. 83					
83a#	94.5%	91.5%	0.97	25.0%	BRE Compliant	Imperceptible			
83b	71.8%	69.4%	0.97	25.0%	BRE Compliant	Imperceptible			
83c	76.2%	74.8%	0.98	25.0%	BRE Compliant	Imperceptible			
83d	84.1%	81.6%	0.97	25.0%	BRE Compliant	Imperceptible			
83e	84.1%	82.5%	0.98	25.0%	BRE Compliant	Imperceptible			
			N	o. 84					
84a#	91.0%	88.2%	0.97	25.0%	BRE Compliant	Imperceptible			
84b	49.3%	46.5%	0.94	25.0%	BRE Compliant	Imperceptible			
84c	66.6%	65.0%	0.98	25.0%	BRE Compliant	Imperceptible			
84d	82.8%	80.5%	0.97	25.0%	BRE Compliant	Imperceptible			
84e	82.8%	80.8%	0.98	25.0%	BRE Compliant	Imperceptible			

<sup>\*</sup> The BRE Guidelines state that in order for a proposed development to have a noticeable effect on the APSH of an existing window, the value needs to drop below the stated target value of 25% (annual) / 5% (winter) **and** be less than 0.8 times the baseline value **and** it has to have a reduction in sunlight received over the whole year greater than 4% of annual probable sunlight hours.



Figure 6.14: Left - Highlighted areas indicate the position of assessed windows., Right - Aerial view of assessed location.

<sup>\*\*</sup> For the interpretation of level of effects please refer to "2.2 Definition of Effects" on page 6.



#### Winter

	Table No. 6.15: APSH Results Wellesley Manor							
Window Number	Baseline WPSH	Proposed WPSH	Ratio of Proposed WPSH to Baseline WPSH	Recommended minimum WPSH*	Level of Compliance with BRE Guidelines	Effect of Proposed Development		
			No	o. 83				
83a#	31.1%	28.1%	0.90	5.0%	BRE Compliant	Imperceptible		
83b	21.8%	19.4%	0.89	5.0%	BRE Compliant	Imperceptible		
83c	28.7%	27.4%	0.95	5.0%	BRE Compliant	Imperceptible		
83d	32.0%	29.5%	0.92	5.0%	BRE Compliant	Imperceptible		
83e	32.0%	30.5%	0.95	5.0%	BRE Compliant	Imperceptible		
			No	. 84				
84a#	29.9%	27.1%	0.91	5.0%	BRE Compliant	Imperceptible		
84b	12.5%	9.7%	0.78	5.0%	BRE Compliant	Imperceptible		
84c	20.6%	19.0%	0.92	5.0%	BRE Compliant	Imperceptible		
84d	31.5%	29.2%	0.93	5.0%	BRE Compliant	Imperceptible		
84e	31.5%	29.5%	0.94	5.0%	BRE Compliant	Imperceptible		

<sup>\*</sup> The BRE Guidelines state that in order for a proposed development to have a noticeable effect on the APSH of an existing window, the value needs to drop below the stated target value of 25% (annual) / 5% (winter) **and** be less than 0.8 times the baseline value **and** it has to have a reduction in sunlight received over the whole year greater than 4% of annual probable sunlight hours.



Figure 6.15: Left - Highlighted areas indicate the position of assessed windows., Right - Aerial view of assessed location

<sup>\*\*</sup> For the interpretation of level of effects please refer to "2.2 Definition of Effects" on page 6.



### 6.2.4 Wellesley Manor

#### **Annual**

	Table No. 6.16: APSH Results Wellesley Manor							
Window Number	Baseline APSH	Proposed APSH	Ratio of Proposed APSH to Baseline APSH	Recommended minimum APSH*	Level of Compliance with BRE Guidelines	Effect of Proposed Development		
			N	o. 85				
85a	77.0%	75.1%	0.98	25.0%	BRE Compliant	Imperceptible		
85b	78.7%	76.8%	0.98	25.0%	BRE Compliant	Imperceptible		
85c	74.0%	72.1%	0.97	25.0%	BRE Compliant	Imperceptible		
85d	81.4%	79.3%	0.98	25.0%	BRE Compliant	Imperceptible		
85e	81.4%	79.6%	0.98	25.0%	BRE Compliant	Imperceptible		
			N	o. 86				
86a#	88.3%	86.5%	0.98	25.0%	BRE Compliant	Imperceptible		
86b	68.1%	66.3%	0.97	25.0%	BRE Compliant	Imperceptible		
86c	71.9%	70.4%	0.98	25.0%	BRE Compliant	Imperceptible		
86d	82.1%	80.7%	0.98	25.0%	BRE Compliant	Imperceptible		
86e	82.1%	80.9%	0.99	25.0%	BRE Compliant	Imperceptible		

<sup>\*</sup> The BRE Guidelines state that in order for a proposed development to have a noticeable effect on the APSH of an existing window, the value needs to drop below the stated target value of 25% (annual) / 5% (winter) **and** be less than 0.8 times the baseline value **and** it has to have a reduction in sunlight received over the whole year greater than 4% of annual probable sunlight hours.



Figure 6.16: Left - Highlighted areas indicate the position of assessed windows., Right - Aerial view of assessed location

<sup>\*\*</sup> For the interpretation of level of effects please refer to "2.2 Definition of Effects" on page 6.



#### Winter

Table No. 6.17: APSH Results Wellesley Manor						
Window Number	Baseline WPSH	Proposed WPSH	Ratio of Proposed WPSH to Baseline WPSH	Recommended minimum WPSH*	Level of Compliance with BRE Guidelines	Effect of Proposed Development
No. 85						
85a	27.6%	25.7%	0.93	5.0%	BRE Compliant	Imperceptible
85b	30.1%	28.1%	0.94	5.0%	BRE Compliant	Imperceptible
85c	29.3%	27.4%	0.93	5.0%	BRE Compliant	Imperceptible
85d	31.5%	29.5%	0.94	5.0%	BRE Compliant	Imperceptible
85e	31.5%	29.8%	0.94	5.0%	BRE Compliant	Imperceptible
No. 86						
86a#	28.6%	26.7%	0.93	5.0%	BRE Compliant	Imperceptible
86b	20.3%	18.5%	0.91	5.0%	BRE Compliant	Imperceptible
86c	27.4%	26.0%	0.95	5.0%	BRE Compliant	Imperceptible
86d	31.5%	30.2%	0.96	5.0%	BRE Compliant	Imperceptible
86e	31.5%	30.4%	0.96	5.0%	BRE Compliant	Imperceptible

<sup>\*</sup> The BRE Guidelines state that in order for a proposed development to have a noticeable effect on the APSH of an existing window, the value needs to drop below the stated target value of 25% (annual) / 5% (winter) **and** be less than 0.8 times the baseline value **and** it has to have a reduction in sunlight received over the whole year greater than 4% of annual probable sunlight hours.

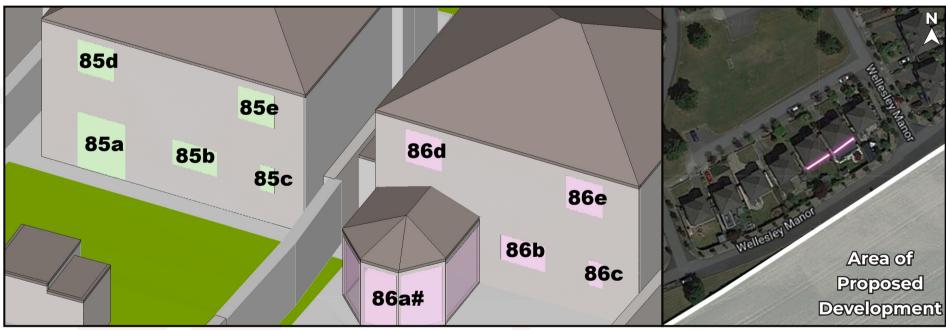


Figure 6.17: Left - Highlighted areas indicate the position of assessed windows., Right - Aerial view of assessed location

<sup>\*\*</sup> For the interpretation of level of effects please refer to "2.2 Definition of Effects" on page 6.



#### 6.2.5 Wellesley Manor

#### **Annual**

	Table No. 6.18: APSH Results Wellesley Manor									
Window Number	Baseline APSH	Proposed APSH	Ratio of Proposed APSH to Baseline APSH	Recommended minimum APSH*	Level of Compliance with BRE Guidelines	Effect of Proposed Development				
	No. 87									
87a#	85.8%	84.8%	0.99	25.0%	BRE Compliant	Imperceptible				
87b	68.5%	67.7%	0.99	25.0%	BRE Compliant	Imperceptible				
87c	71.0%	70.4%	0.99	25.0%	BRE Compliant	Imperceptible				
87e	81.8%	81.0%	0.99	25.0%	BRE Compliant	Imperceptible				
87f	81.1%	80.2%	0.99	25.0%	BRE Compliant	Imperceptible				

<sup>\*</sup> The BRE Guidelines state that in order for a proposed development to have a noticeable effect on the APSH of an existing window, the value needs to drop below the stated target value of 25% (annual) / 5% (winter) **and** be less than 0.8 times the baseline value **and** it has to have a reduction in sunlight received over the whole year greater than 4% of annual probable sunlight hours.

# If it can be determined or reasonably assumed that multiple windows are servicing the same room, APSH/WPSH will be calculated for the room rather than the individual windows.



Figure 6.18: Left - Highlighted areas indicate the position of assessed windows., Right - Aerial view of assessed location

#### Winter

	Table No. 6.19: APSH Results Wellesley Manor								
Window Number	Baseline WPSH	Proposed WPSH to Baseline WPSH		Recommended minimum WPSH*	Level of Compliance with BRE Guidelines	Effect of Proposed Development			
	No. 87								
87a#	27.4%	26.6%	0.97	5.0%	BRE Compliant	Imperceptible			
87b	20.0%	19.2%	0.96	5.0%	BRE Compliant	Imperceptible			
87c	27.5%	26.9%	0.98	5.0%	BRE Compliant	Imperceptible			
87e	31.5%	30.7%	0.97	5.0%	BRE Compliant	Imperceptible			
87f	31.5%	30.6%	0.97	5.0%	BRE Compliant	Imperceptible			

<sup>\*</sup> The BRE Guidelines state that in order for a proposed development to have a noticeable effect on the APSH of an existing window, the value needs to drop below the stated target value of 25% (annual) / 5% (winter) **and** be less than 0.8 times the baseline value **and** it has to have a reduction in sunlight received over the whole year greater than 4% of annual probable sunlight hours.

# If it can be determined or reasonably assumed that multiple windows are servicing the same room, APSH/WPSH will be calculated for the room rather than the individual windows.

<sup>\*\*</sup> For the interpretation of level of effects please refer to "2.2 Definition of Effects" on page 6.

<sup>\*\*</sup> For the interpretation of level of effects please refer to "2.2 Definition of Effects" on page 6.



#### 6.2.6 Wellesley Manor

#### **Annual**

	Table No. 6.20: APSH Results Wellesley Manor								
Window Number	Baseline APSH	Proposed Ratio of Proposed APSH to Baseline APSH		Recommended minimum APSH*	Level of Compliance with BRE Guidelines	Effect of Proposed Development			
	No. 13								
13a	61.6%	61.6%	1.00	25.0%	BRE Compliant	Imperceptible			
13b	61.7%	61.7%	1.00	25.0%	BRE Compliant	Imperceptible			
13c	61.7%	61.7%	1.00	25.0%	BRE Compliant	Imperceptible			
13d	74.2%	74.2%	1.00	25.0%	BRE Compliant	Imperceptible			
13f#	63.0%	62.2%	0.99	25.0%	BRE Compliant	Imperceptible			

<sup>\*</sup> The BRE Guidelines state that in order for a proposed development to have a noticeable effect on the APSH of an existing window, the value needs to drop below the stated target value of 25% (annual) / 5% (winter) and be less than 0.8 times the baseline value and it has to have a reduction in sunlight received over the whole year greater than 4% of annual probable sunlight hours.

<sup>#</sup> If it can be determined or reasonably assumed that multiple windows are servicing the same room, APSH/WPSH will be calculated for the room rather than the individual windows.



Figure 6.19: Left - Highlighted areas indicate the position of assessed windows., Right - Aerial view of assessed location

#### Winter

	Table No. 6.21: APSH Results Wellesley Manor									
Window Number	Baseline WPSH	Proposed WPSH Ratio of Proposed WPSH to Baseline WPSH		Recommended minimum WPSH*	Level of Compliance with BRE Guidelines	Effect of Proposed Development				
	No. 13									
13a	21.2%	21.2%	1.00	5.0%	BRE Compliant	Imperceptible				
13b	21.3%	21.3%	1.00	5.0%	BRE Compliant	Imperceptible				
13c	21.3%	21.3%	1.00	5.0%	BRE Compliant	Imperceptible				
13d	22.7%	22.7%	1.00	5.0%	BRE Compliant	Imperceptible				
13f#	23.5%	23.2%	0.99	5.0%	BRE Compliant	Imperceptible				

<sup>\*</sup> The BRE Guidelines state that in order for a proposed development to have a noticeable effect on the APSH of an existing window, the value needs to drop below the stated target value of 25% (annual) / 5% (winter) and be less than 0.8 times the baseline value and it has to have a reduction in sunlight received over the whole year greater than 4% of annual probable sunlight hours.

<sup>\*\*</sup> For the interpretation of level of effects please refer to "2.2 Definition of Effects" on page 6.

<sup>\*\*</sup> For the interpretation of level of effects please refer to "2.2 Definition of Effects" on page 6.

<sup>#</sup> If it can be determined or reasonably assumed that multiple windows are servicing the same room, APSH/WPSH will be calculated for the room rather than the individual windows.



#### 6.2.7 Wellesley Manor

#### **Annual**

	Table No. 6.22: APSH Results Wellesley Manor									
Window Number	Baseline APSH	Proposed APSH	Ratio of Proposed APSH to Baseline APSH	Recommended minimum APSH*	Level of Compliance with BRE Guidelines	Effect of Proposed Development				
	No. 12									
12a#	83.1%	82.0%	0.99	25.0%	BRE Compliant	Imperceptible				
12b	66.6%	66.6%	1.00	25.0%	BRE Compliant	Imperceptible				
12c	69.1%	69.1%	1.00	25.0%	BRE Compliant	Imperceptible				
12d	68.6%	68.5%	1.00	25.0%	BRE Compliant	Imperceptible				
12e	70.5%	70.5%	1.00	25.0%	BRE Compliant	Imperceptible				
12f	70.5%	70.5%	1.00	25.0%	BRE Compliant	Imperceptible				
12g	80.2%	78.1%	0.97	25.0%	BRE Compliant	Imperceptible				

<sup>\*</sup> The BRE Guidelines state that in order for a proposed development to have a noticeable effect on the APSH of an existing window, the value needs to drop below the stated target value of 25% (annual) / 5% (winter) **and** be less than 0.8 times the baseline value **and** it has to have a reduction in sunlight received over the whole year greater than 4% of annual probable sunlight hours.

# If it can be determined or reasonably assumed that multiple windows are servicing the same room, APSH/WPSH will be calculated for the room rather than the individual windows.



Figure 6.20: Left - Highlighted areas indicate the position of assessed windows., Right - Aerial view of assessed location

<sup>\*\*</sup> For the interpretation of level of effects please refer to "2.2 Definition of Effects" on page 6.



#### Winter

	Table No. 6.23: APSH Results Wellesley Manor								
Window Number	Baseline WPSH	Proposed WPSH	Ratio of Proposed WPSH to Baseline WPSH	Recommended minimum WPSH*	Level of Compliance with BRE Guidelines	Effect of Proposed Development			
	No. 12								
12a#	29.1%	28.0%	0.96	5.0%	BRE Compliant	Imperceptible			
12b	25.0%	25.0%	1.00	5.0%	BRE Compliant	Imperceptible			
12c	24.1%	24.1%	1.00	5.0%	BRE Compliant	Imperceptible			
12d	23.5%	23.5%	1.00	5.0%	BRE Compliant	Imperceptible			
12e	25.5%	25.5%	1.00	5.0%	BRE Compliant	Imperceptible			
12f	25.5%	25.5%	1.00	5.0%	BRE Compliant	Imperceptible			
12g	31.3%	29.2%	0.93	5.0%	BRE Compliant	Imperceptible			

<sup>\*</sup> The BRE Guidelines state that in order for a proposed development to have a noticeable effect on the APSH of an existing window, the value needs to drop below the stated target value of 25% (annual) / 5% (winter) and be less than 0.8 times the baseline value and it has to have a reduction in sunlight received over the whole year greater than 4% of annual probable sunlight hours.

<sup>#</sup> If it can be determined or reasonably assumed that multiple windows are servicing the same room, APSH/WPSH will be calculated for the room rather than the individual windows.

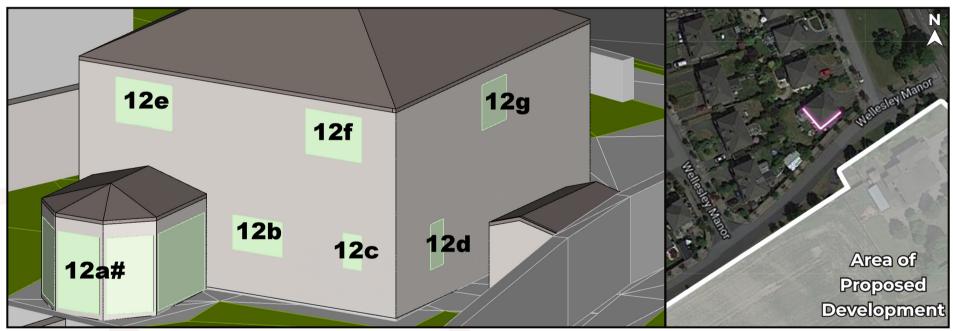


Figure 6.21: Left - Highlighted areas indicate the position of assessed windows., Right - Aerial view of assessed location

<sup>\*\*</sup> For the interpretation of level of effects please refer to "2.2 Definition of Effects" on page 6.



#### 6.2.8 Great Connell

#### **Annual**

	Table No. 6.24: APSH Results Greatconnell									
Window Number	Baseline APSH	Proposed APSH to Baseline APSH		Recommended minimum APSH*	Level of Compliance with BRE Guidelines	Effect of Proposed Development				
	No. 12									
Та	63.4%	63.4%	1.00	25.0%	BRE Compliant	Imperceptible				
1b	49.0%	49.0%	1.00	25.0%	BRE Compliant	Imperceptible				
1c	64.7%	64.5%	1.00	25.0%	BRE Compliant	Imperceptible				
1d	64.7%	64.1%	0.99	25.0%	BRE Compliant	Imperceptible				
1e	64.7%	63.9%	0.99	25.0%	BRE Compliant	Imperceptible				
1f	82.3%	81.6%	0.99	25.0%	BRE Compliant	Imperceptible				

<sup>\*</sup> The BRE Guidelines state that in order for a proposed development to have a noticeable effect on the APSH of an existing window, the value needs to drop below the stated target value of 25% (annual) / 5% (winter) **and** be less than 0.8 times the baseline value **and** it has to have a reduction in sunlight received over the whole year greater than 4% of annual probable sunlight hours.

<sup>\*\*</sup> For the interpretation of level of effects please refer to "2.2 Definition of Effects" on page 6.



Figure 6.22: Left - Highlighted areas indicate the position of assessed windows., Right - Aerial view of assessed location

#### Winter

	Table No. 6.25: APSH Results Greatconnell									
Window Number	Baseline WPSH	Proposed WPSH	Ratio of Proposed WPSH to Baseline WPSH	Recommended minimum WPSH*	Level of Compliance with BRE Guidelines	Effect of Proposed Development				
	No. 12									
la	21.1%	21.1%	1.00	5.0%	BRE Compliant	Imperceptible				
1b	9.5%	9.5%	1.00	5.0%	BRE Compliant	Imperceptible				
1c	22.4%	22.1%	0.99	5.0%	BRE Compliant	Imperceptible				
1d	22.4%	21.8%	0.97	5.0%	BRE Compliant	Imperceptible				
1e	22.4%	21.5%	0.96	5.0%	BRE Compliant	Imperceptible				
1f	30.6%	29.9%	0.98	5.0%	BRE Compliant	Imperceptible				

<sup>\*</sup> The BRE Guidelines state that in order for a proposed development to have a noticeable effect on the APSH of an existing window, the value needs to drop below the stated target value of 25% (annual) / 5% (winter) **and** be less than 0.8 times the baseline value **and** it has to have a reduction in sunlight received over the whole year greater than 4% of annual probable sunlight hours.

<sup>\*\*</sup> For the interpretation of level of effects please refer to "2.2 Definition of Effects" on page 6.



# 6.3 Effect on Sun On Ground in Existing Gardens

## 6.3.1 Wellesley Manor, Great Connell

	Table No. 6.26: SOG Results Wellesley Manor, Great Connell									
	% of Area to Re	eceive Above 2 H	n March 21st (Target	Level of	Effect of					
Address	Baseline	Proposed	Ratio of Proposed to Baseline	Recommended minimum	Compliance with BRE Guidelines	Proposed Development**				
72 Wellesley Manor	81.0%	80.9%	1.00	50.0%	BRE Compliant	Imperceptible				
71 Wellesley Manor	76.4%	76.4%	1.00	50.0%	BRE Compliant	Imperceptible				
81 Wellesley Manor	77.9%	77.9%	1.00	50.0%	BRE Compliant	Imperceptible				
82 Wellesley Manor	77.1%	77.1%	1.00	50.0%	BRE Compliant	Imperceptible				
83 Wellesley Manor	82.9%	82.8%	1.00	50.0%	BRE Compliant	Imperceptible				
84 Wellesley Manor	74.5%	74.5%	1.00	50.0%	BRE Compliant	Imperceptible				
85 Wellesley Manor	75.0%	74.5%	0.99	50.0%	BRE Compliant	Imperceptible				
86 Wellesley Manor	69.9%	69.9%	1.00	50.0%	BRE Compliant	Imperceptible				
87 Wellesley Manor	70.6%	70.6%	1.00	50.0%	BRE Compliant	Imperceptible				
13 Wellesley Manor	59.0%	58.2%	0.99	47.2%	BRE Compliant	Imperceptible				
12 Wellesley Manor	92.6%	92.6%	1.00	50.0%	BRE Compliant	Imperceptible				
Greatconnell	97.6%	97.4%	1.00	50.0%	BRE Compliant	Imperceptible				

<sup>\*</sup> The BRE guidelines state that in order for a proposed development to have a noticeable effect on the amount of sunlight received in an existing garden or amenity area, the value needs to both drop below the stated target value of 50% **and** be reduced by more than 20% of the existing value.

<sup>\*\*</sup> For the interpretation of level of effects please refer to "2.2 Definition of Effects" on page 6.

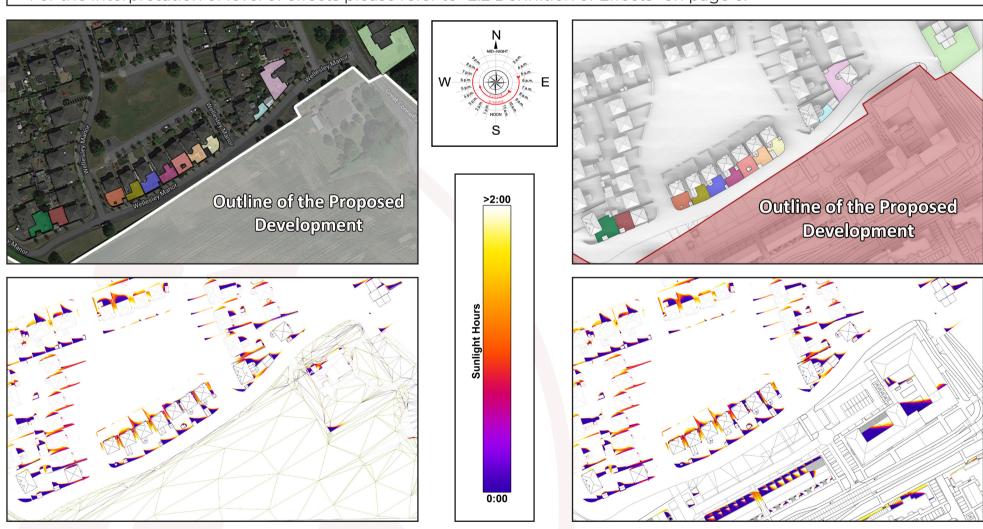
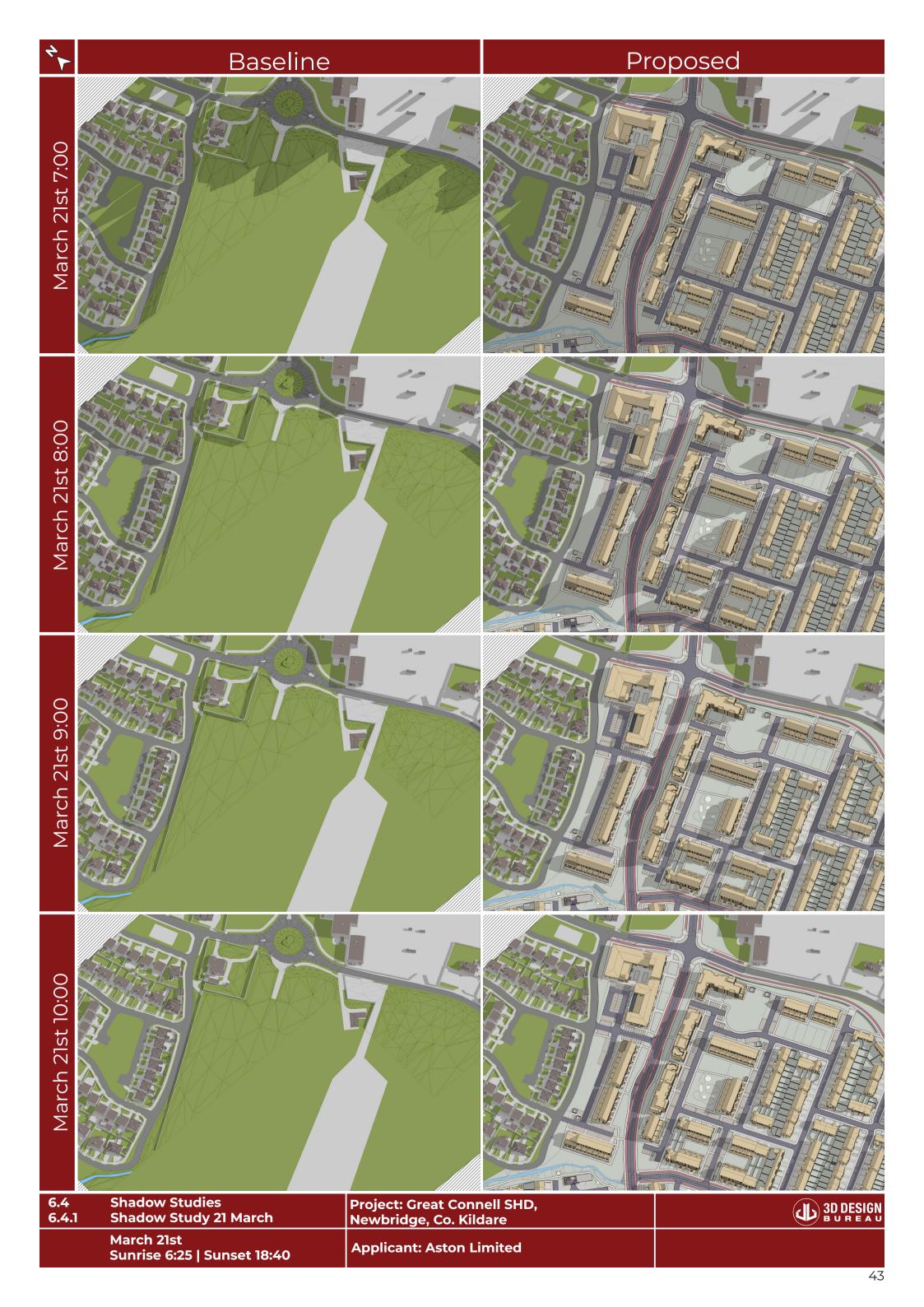
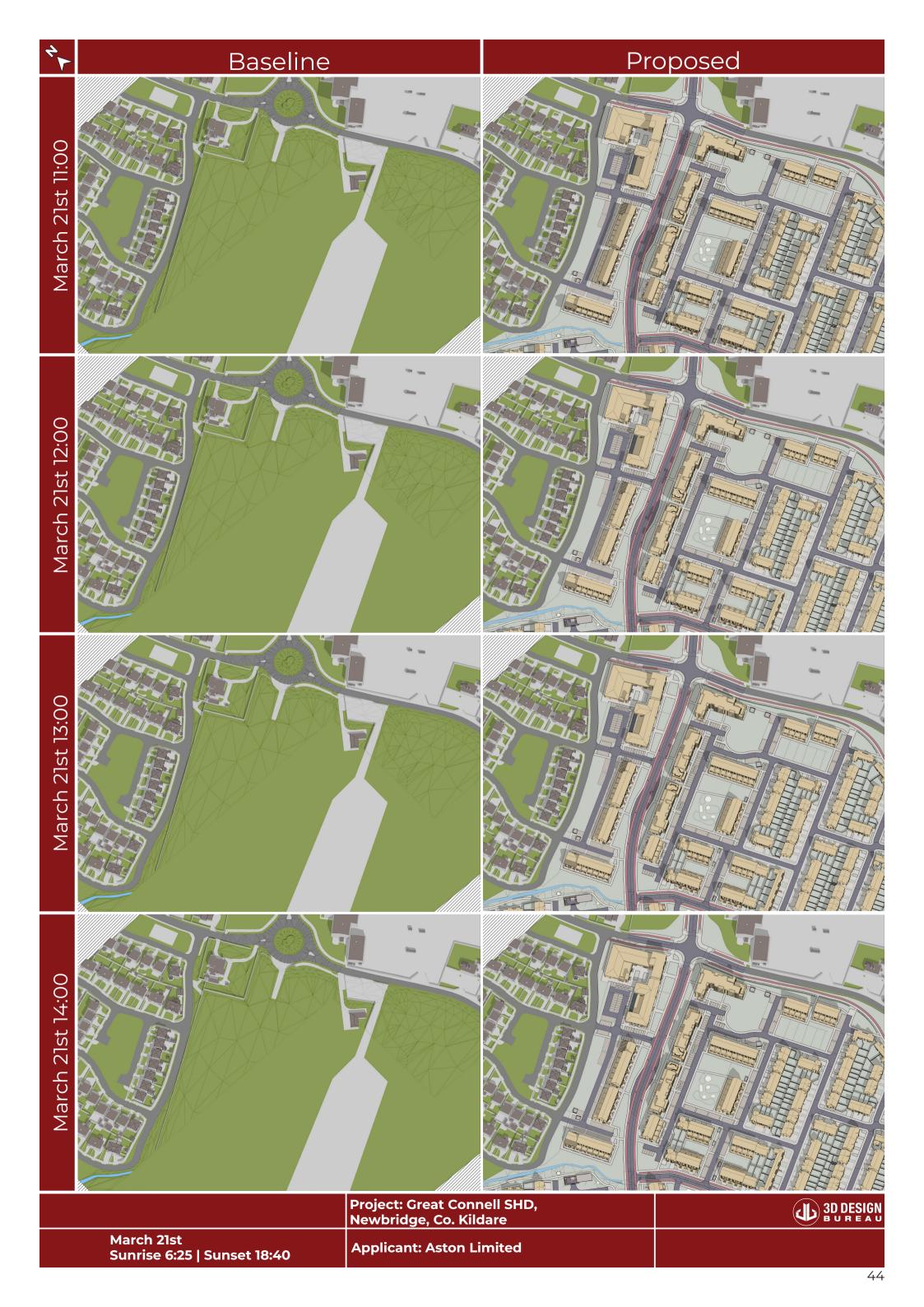


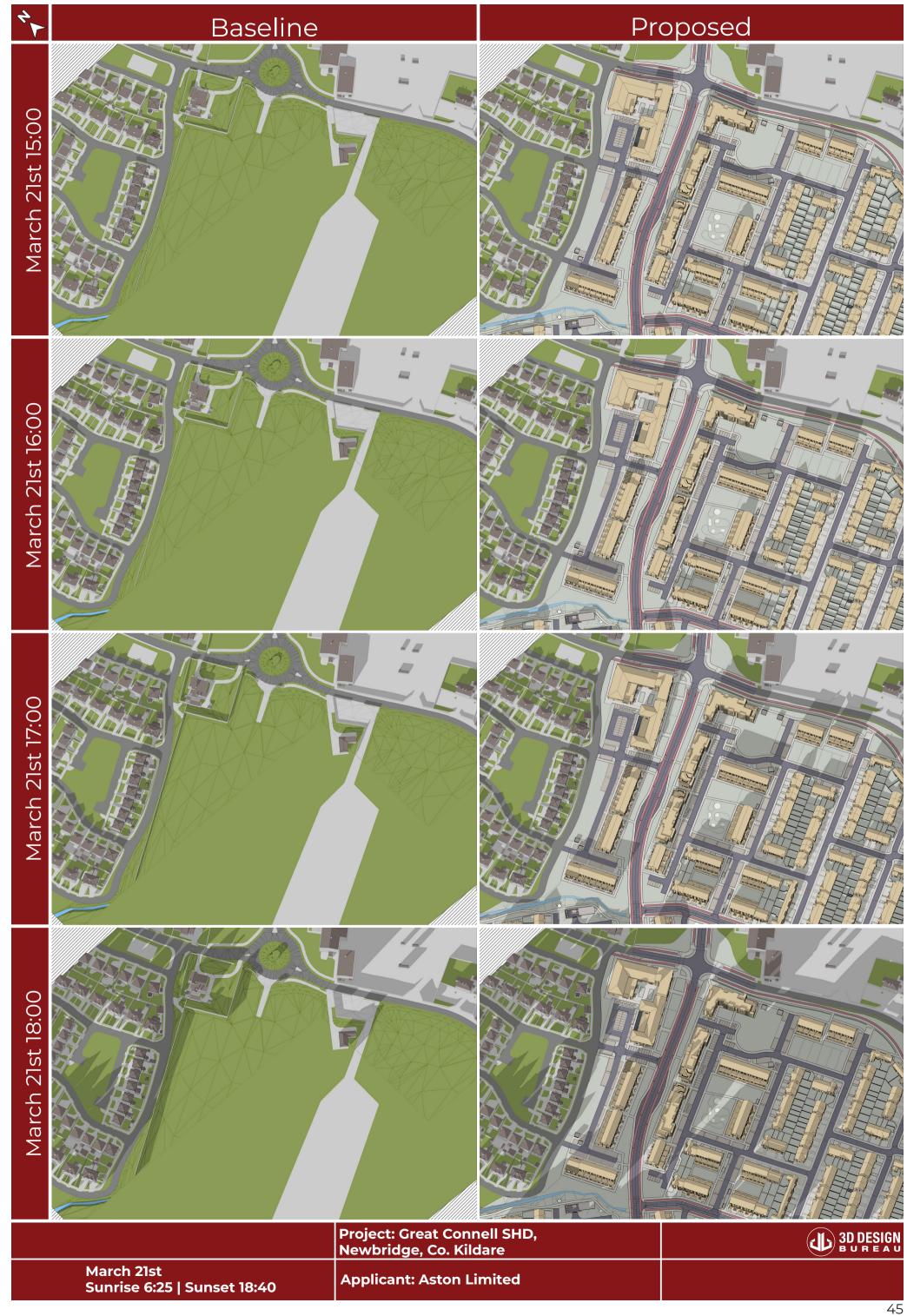
Figure 6.23: False colour plans. White area indicates the area capable of receiving 2 hours of sunlight on March 21st.

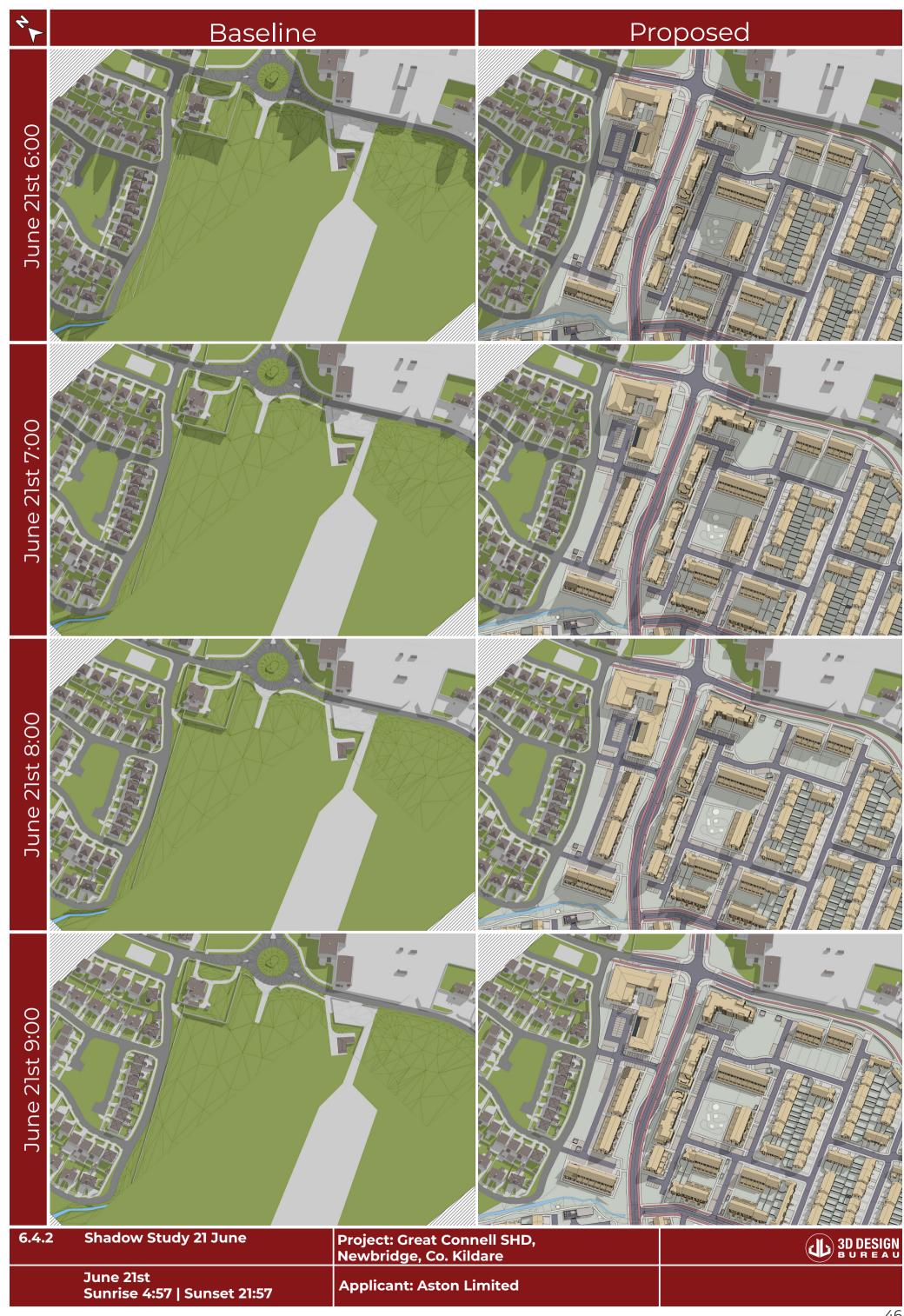
Proposed

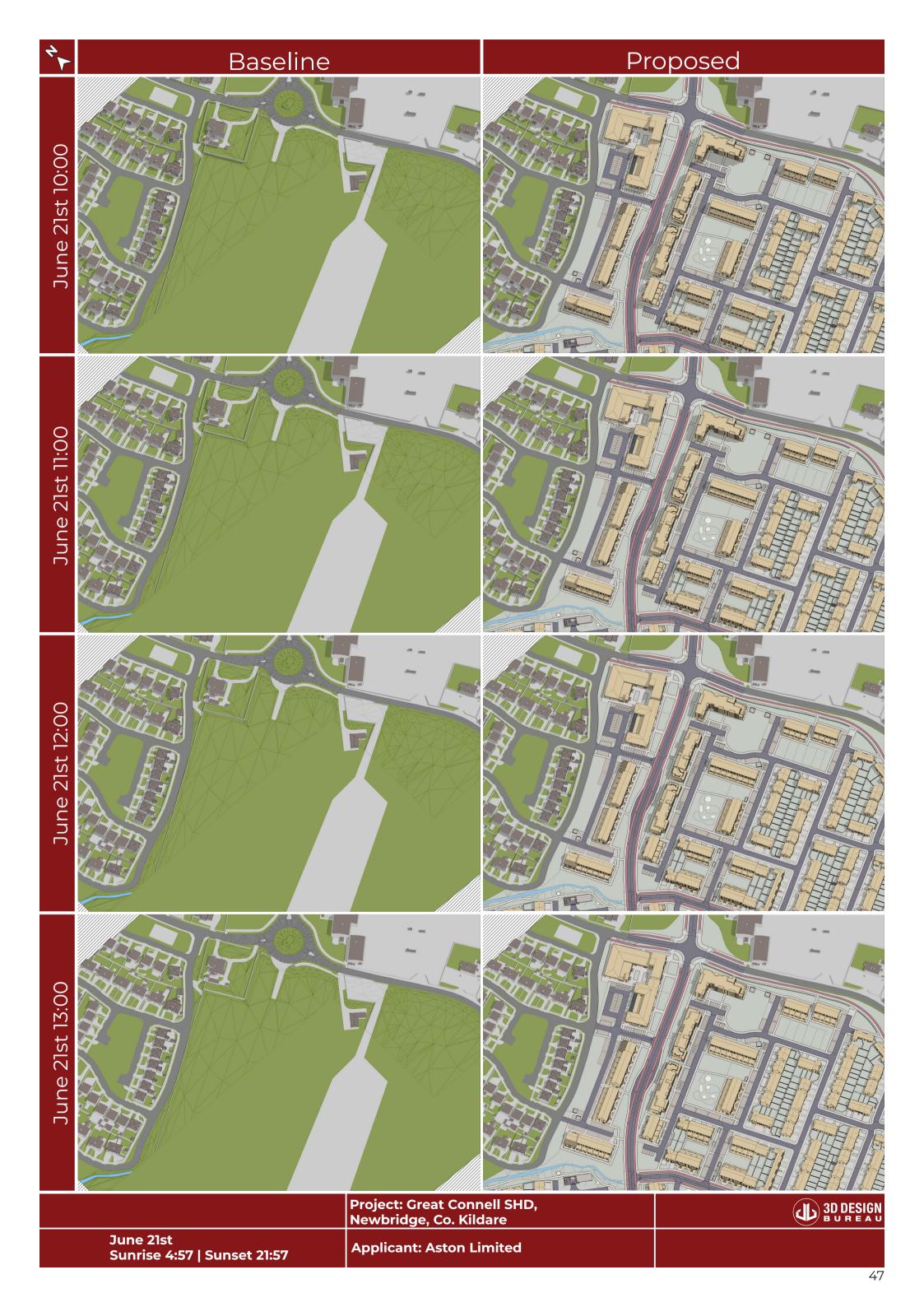
Baseline

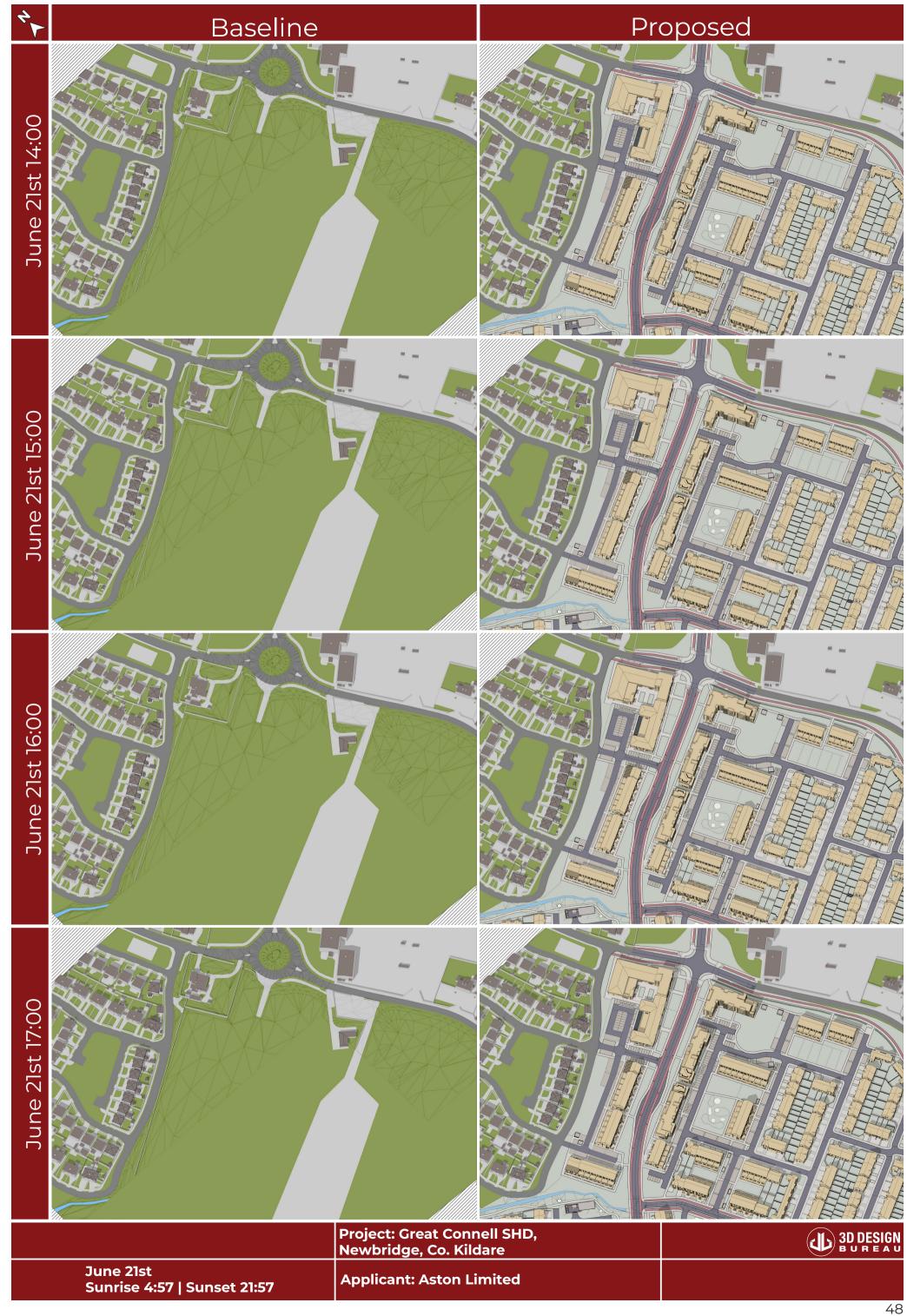


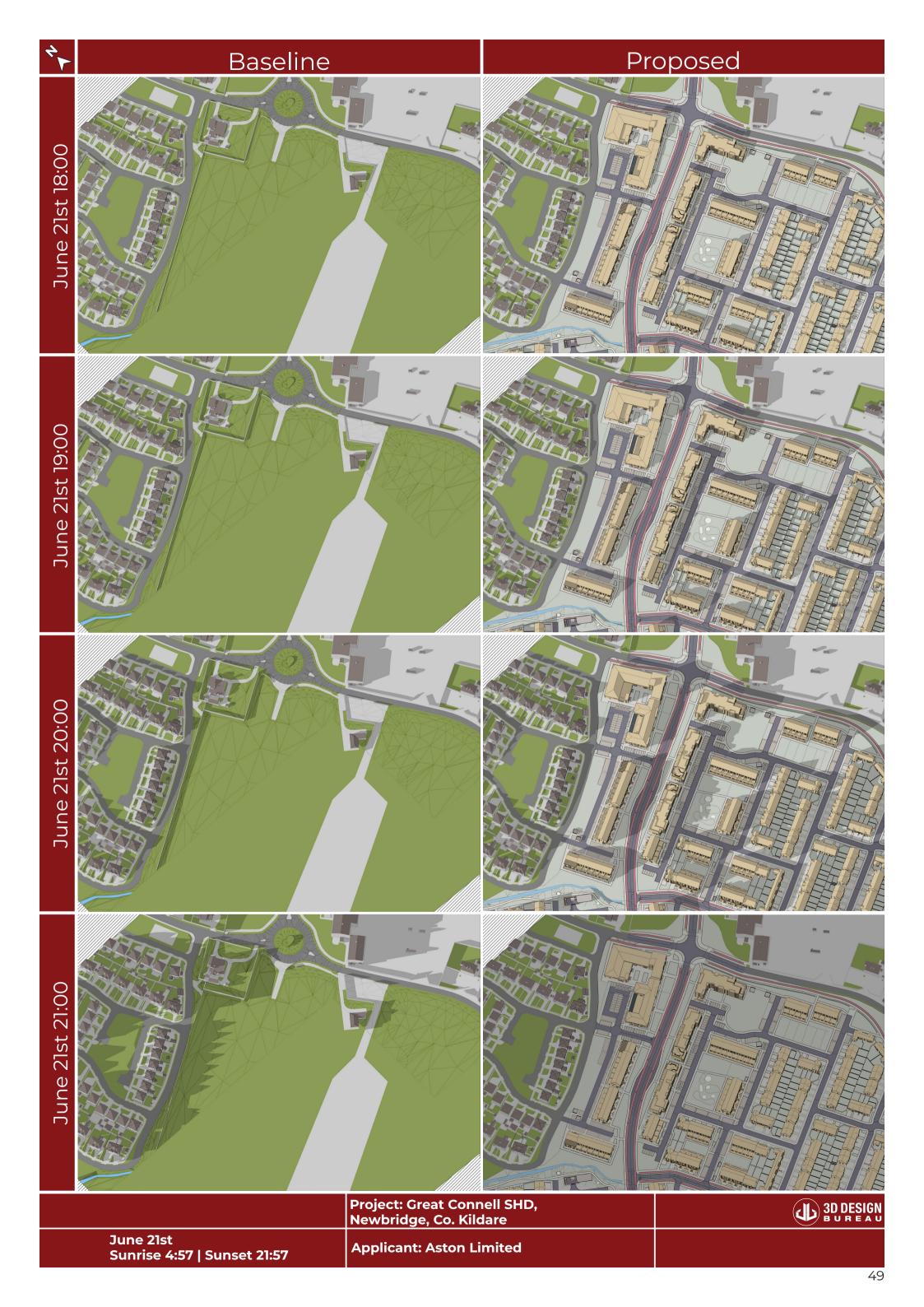


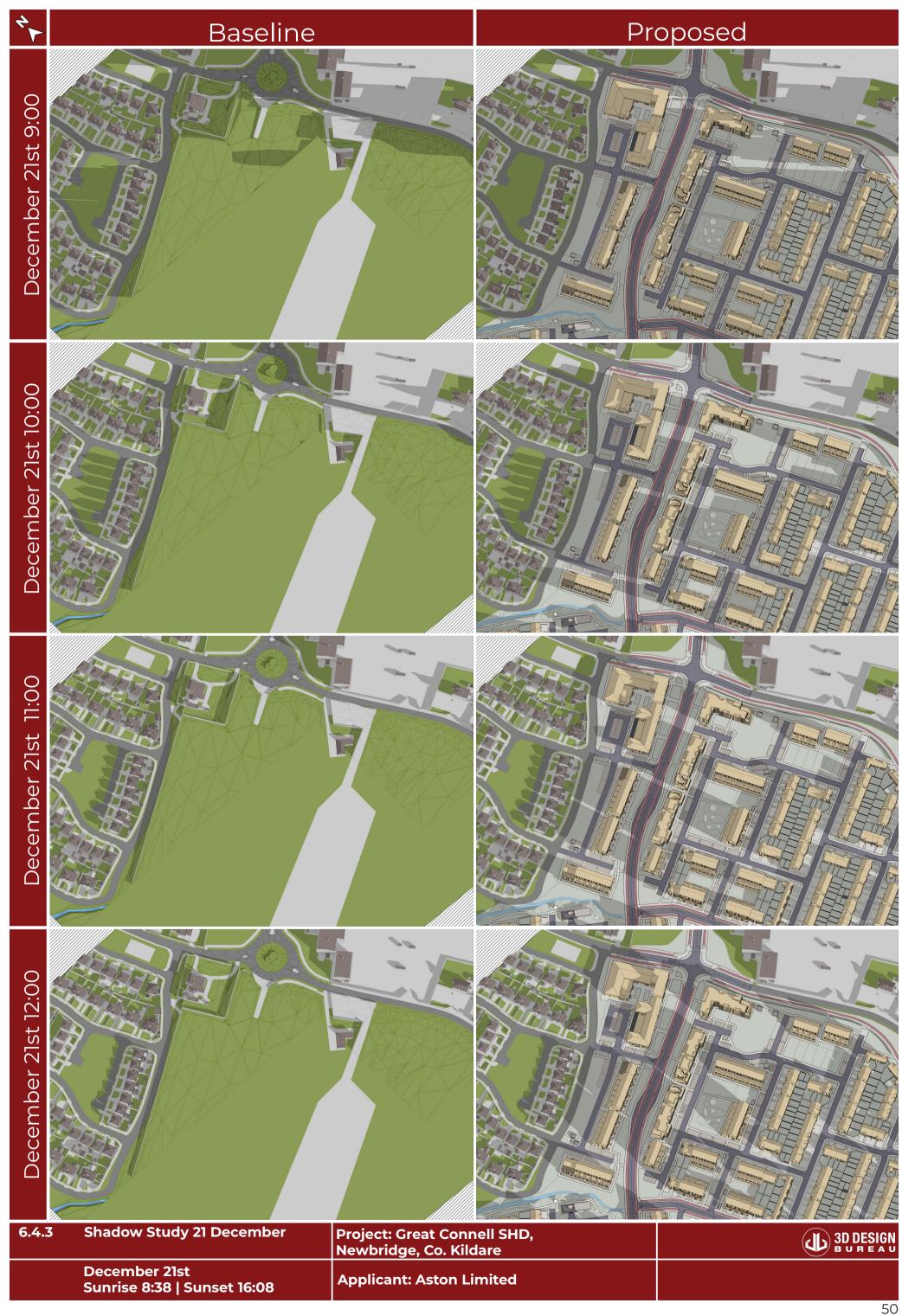


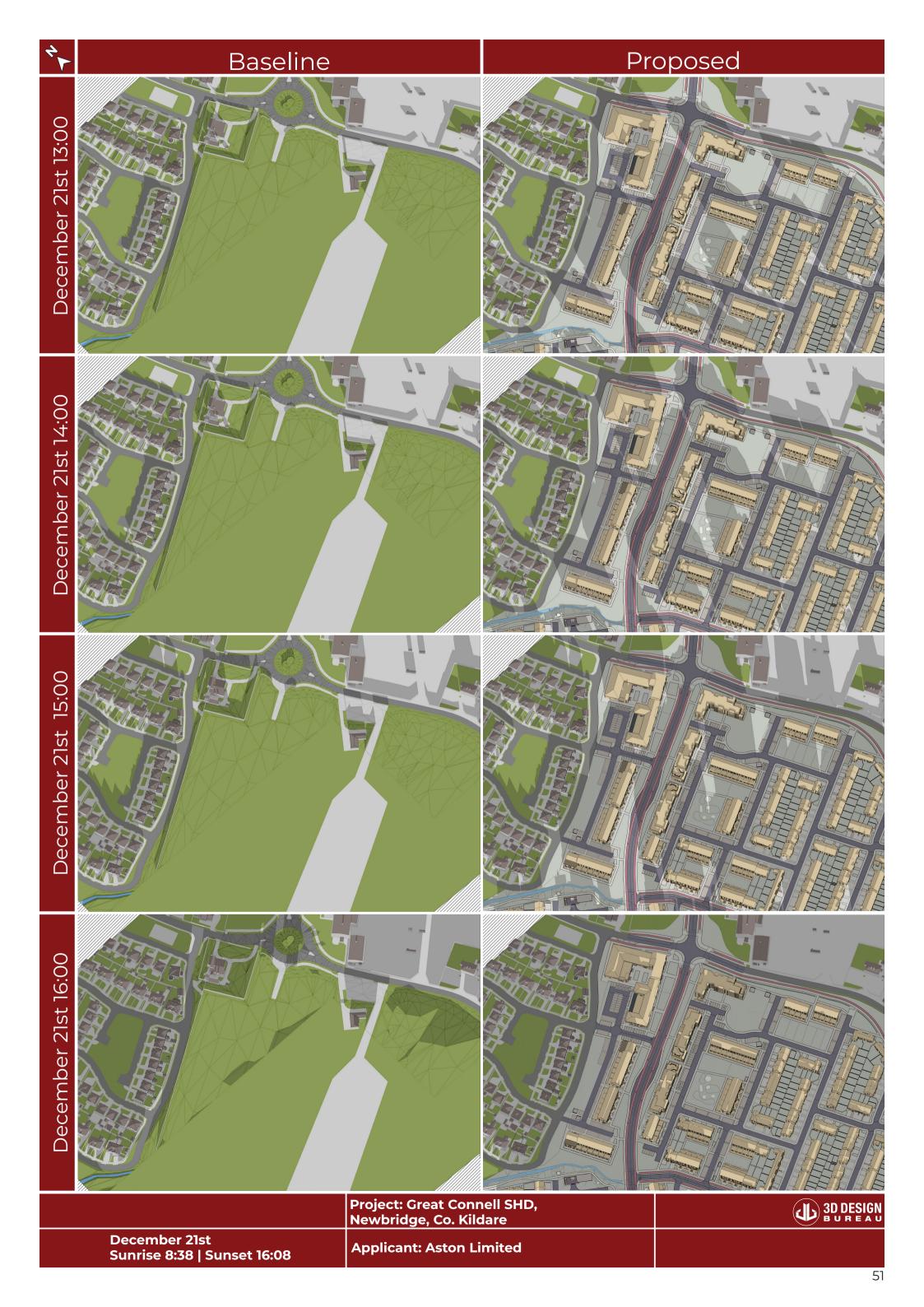














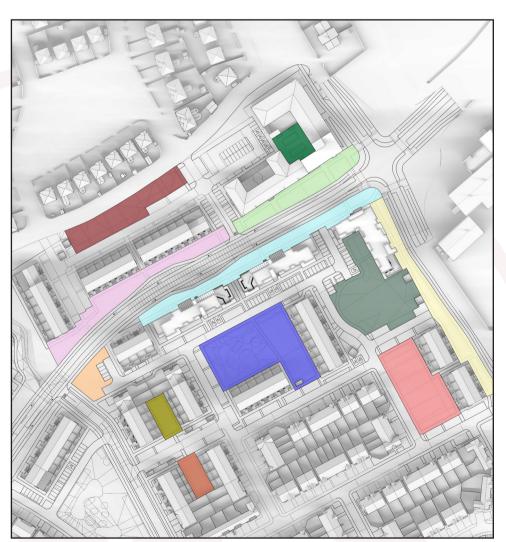
# 7.0 Scheme Performance Results

# 7.1 Sun On Ground in Proposed Outdoor Amenity Areas

Table No. '	Table No. 7.1: SOG in Proposed Outdoor Amenity Areas Results								
Assessed Area	Area Capable of Receiving 2 Hours of Sunlight on March 21st	Recommended minimum	Level of Compliance with BRE Guidelines						
Open Space A	100.0%	50.0%	BRE Compliant						
Open Space B	100.0%	50.0%	BRE Compliant						
Open Space D	89.2%	50.0%	BRE Compliant						
Open Space E	98.6%	50.0%	BRE Compliant						
Open Space 1	100.0%	50.0%	BRE Compliant						
Open Space 4	100.0%	50.0%	BRE Compliant						
Open Space 5	99.9%	50.0%	BRE Compliant						
Open Space 6	98.7%	50.0%	BRE Compliant						
Open Space 7	100.0%	50.0%	BRE Compliant						
Open Space 8	91.3%	50.0%	BRE Compliant						
Open Space 11	100.0%	50.0%	BRE Compliant						
Open Space 12	66.6%	50.0%	BRE Compliant						

<sup>\*</sup> The BRE Guidelines recommend that for a garden or amenity 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 March 21st.





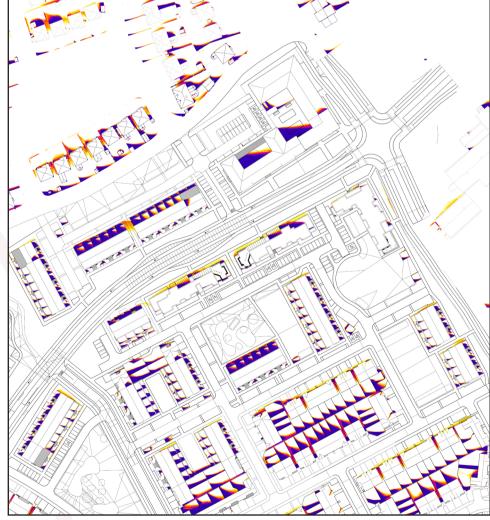


Figure 7.1: Left - Indication of the amenity areas that have been analysed, Right - Area capable of receiving 2 hours of sunlight on March 21st shown in white (R).



# 7.2 Sun On Ground in Proposed Outdoor Amenity Areas

Table No. 7.2: SOG in Proposed Outdoor Amenity Areas Results							
Assessed Area	Area Capable of Receiving 2 Hours of Sunlight on March 21st	Recommended minimum	Level of Compliance with BRE Guidelines				
Rooftop Block A	92.5%	50.0%	BRE Compliant				
Rooftop Block B	96.0%	50.0%	BRE Compliant				
Rooftop Block C	94.7%	50.0%	BRE Compliant				
Rooftop Neighbourhood Centre	81.6%	50.0%	BRE Compliant				
Creche Courtyard	31.8%	50.0%	63.7%				

<sup>\*</sup> The BRE Guidelines recommend that for a garden or amenity 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 March 21st.



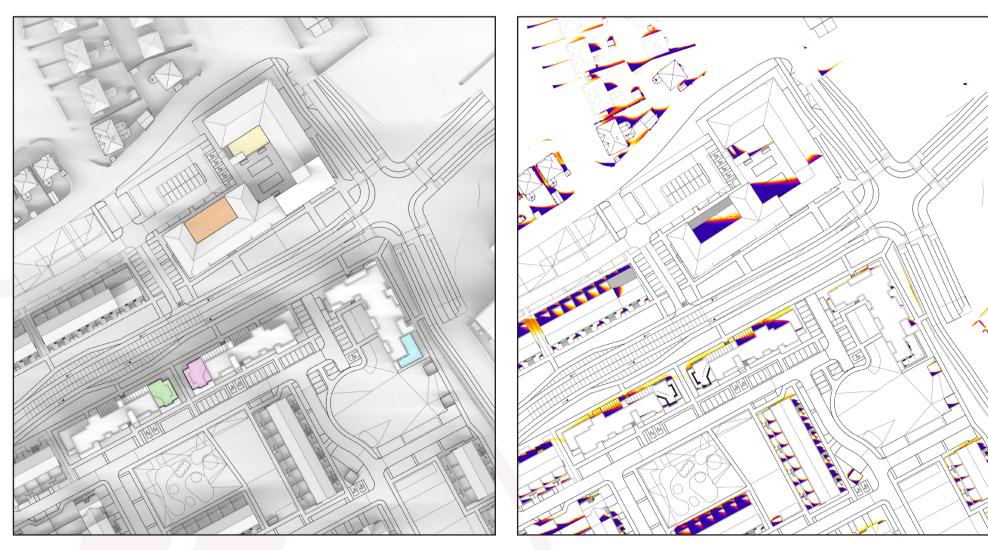
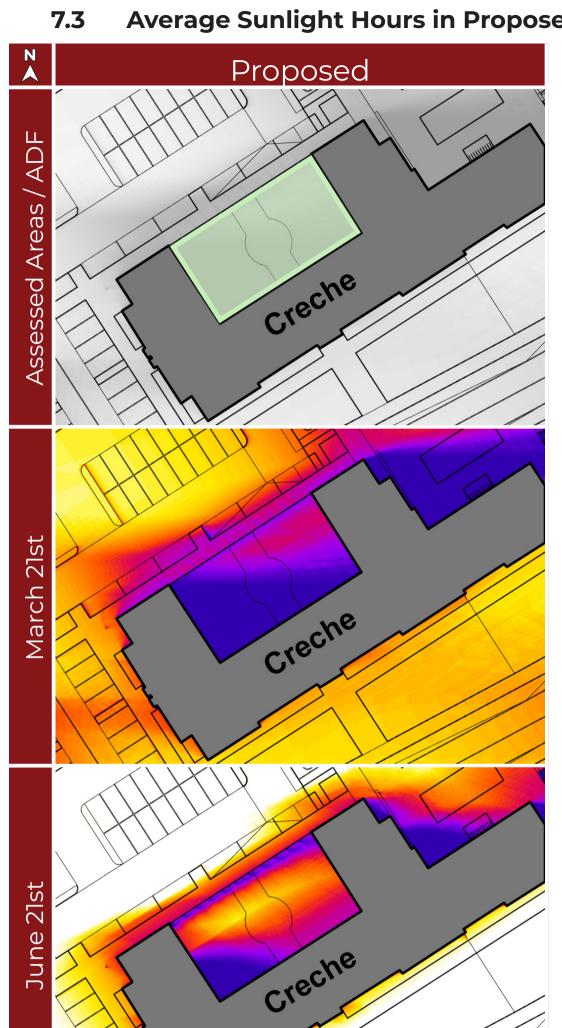


Figure 7.2: Left - Indication of the amenity areas that have been analysed, Right - Area capable of receiving 2 hours of sunlight on March 21st shown in white (R).

# **Average Sunlight Hours in Proposed Creche Play Area**



March 21st				
Amenity Area	Average Daylight Factor			
Creche Play Area	50.01%			











December 21st		
Amenity Area	Average Sunlight Hours	
Creche Play Area	0 Hours 00 Minutes	





# 7.4 Average Daylight Factor

## 7.4.1 Block A/Ground Floor

Table No. 7.3: ADF Results Block A/Ground Floor		
Unit Number	Room Description	Predicted ADF Value
A1	LKD	2.76%
A1	Bedroom 1	3.02%
Al	Bedroom 2	3.14%
Al	Bedroom 3	1.43%
A2	LKD	2.22%
A2	Bedroom 1	1.35%
A2	Bedroom 2	1.37%
A3	LKD	2.96%
A3	Bedroom 1	1.85%
A4	LKD	3.05%
A4	Bedroom 1	1.52%
A5	LKD	2.06%
A5	Bedroom 1	1.61%
A5	Bedroom 2	1.12%
A6	LKD	2.97%
A6	Bedroom 1	3.11%
A6	Bedroom 2	3.42%



Figure 7.3: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





#### 7.4.2 Block A/First Floor

Table No. 7.4: ADF Results Block A/First Floor		
Unit Number	Room Description	Predicted ADF Value
Α7	LKD	2.20%
A7	Bedroom 1	3.13%
A7	Bedroom 2	2.78%
A7	Bedroom 3	1.56%
A8	LKD	2.39%
A8	Bedroom 1	1.28%
A8	Bedroom 2	1.55%
А9	LKD	3.39%
A9	Bedroom 1	2.65%
А9	Bedroom 2	1.44%
A10	LKD	3.41%
AlO	Bedroom 1	1.69%
All	LKD	2.33%
All	Bedroom 1	1.78%
All	Bedroom 2	1.28%
A12	LKD	2.79%
A12	Bedroom 1	3.37%
A12	Bedroom 2	3.71%

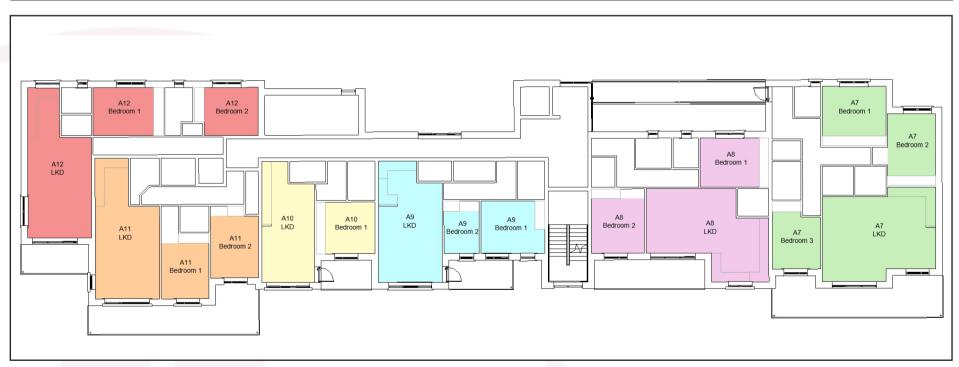


Figure 7.4: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





#### 7.4.3 Block A/Second Floor

Table No. 7.5: ADF Results Block A/Second Floor		
Unit Number	Room Description	Predicted ADF Value
A13	LKD	2.16%
A13	Bedroom 1	3.16%
A13	Bedroom 2	2.83%
A13	Bedroom 3	1.52%
A14	LKD	2.42%
A14	Bedroom 1	1.41%
A14	Bedroom 2	1.57%
A15	LKD	3.44%
A15	Bedroom 1	2.69%
A15	Bedroom 2	1.46%
A16	LKD	3.49%
A16	Bedroom 1	1.72%
A17	LKD	2.47%
A17	Bedroom 1	1.83%
A17	Bedroom 2	1.33%
A18	LKD	3.19%
A18	Bedroom 1	3.44%
A18	Bedroom 2	3.78%



Figure 7.5: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





#### 7.4.4 Block A/Third Floor

Table No. 7.6: ADF Results Block A/Third Floor		
Unit Number	Room Description	Predicted ADF Value
A19	LKD	2.40%
A19	Bedroom 1	1.05%
A19	Bedroom 2	1.51%
A20	LKD	3.43%
A20	Bedroom 1	2.70%
A20	Bedroom 2	1.40%
A21	LKD	3.56%
A21	Bedroom 1	1.67%
A22	LKD	2.81%
A22	Bedroom 1	1.78%
A22	Bedroom 2	1.25%

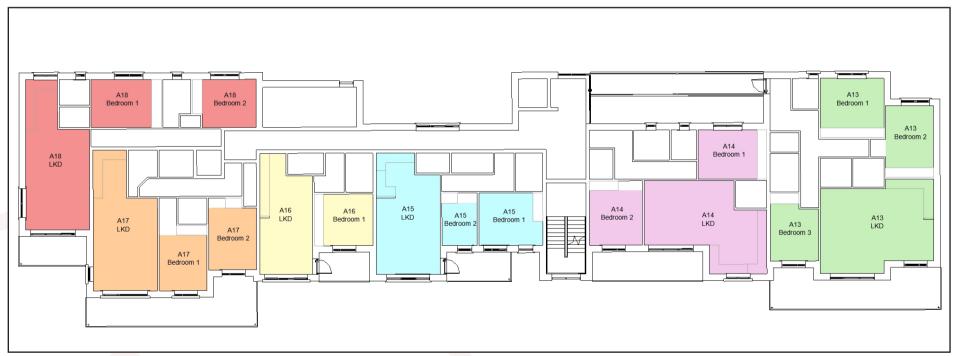


Figure 7.6: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





### 7.4.5 Block B/Ground Floor

Table No. 7.7: ADF Results Block B/Ground Floor		
Unit Number	Room Description	Predicted ADF Value
B1	LKD	2.74%
B1	Bedroom 1	3.05%
B1	Bedroom 2	3.17%
B1	Bedroom 3	1.39%
B2	LKD	2.11%
B2	Bedroom 1	1.44%
B2	Bedroom 2	1.30%
В3	LKD	2.82%
В3	Bedroom 1	1.69%
B4	LKD	2.98%
B4	Bedroom 1	1.43%
B5	LKD	2.19%
B5	Bedroom 1	1.60%
B5	Bedroom 2	1.09%
В6	LKD	4.10%
В6	Bedroom 1	3.10%
В6	Bedroom 2	3.45%



Figure 7.7: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





#### 7.4.6 Block B/First Floor

Table No. 7.8: ADF Results Block B/First Floor		
Unit Number	Room Description	Predicted ADF Value
В7	LKD	2.17%
В7	Bedroom 1	3.14%
В7	Bedroom 2	2.83%
В7	Bedroom 3	1.54%
B8	LKD	2.32%
B8	Bedroom 1	1.32%
B8	Bedroom 2	1.52%
В9	LKD	3.27%
В9	Bedroom 1	2.57%
В9	Bedroom 2	1.37%
B10	LKD	3.33%
B10	Bedroom 1	1.62%
ВП	LKD	2.40%
ВП	Bedroom 1	1.77%
ВП	Bedroom 2	1.27%
B12	LKD	4.72%
B12	Bedroom 1	3.36%
B12	Bedroom 2	3.74%



Figure 7.8: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





## 7.4.7 Block B/Second Floor

Table No. 7.9: ADF Results Block B/Second Floor		
Unit Number	Room Description	Predicted ADF Value
B13	LKD	2.14%
B13	Bedroom 1	3.17%
B13	Bedroom 2	2.88%
B13	Bedroom 3	1.51%
B14	LKD	2.37%
B14	Bedroom 1	1.43%
B14	Bedroom 2	1.56%
B15	LKD	3.36%
B15	Bedroom 1	2.66%
B15	Bedroom 2	1.43%
B16	LKD	3.41%
B16	Bedroom 1	1.69%
B17	LKD	2.49%
B17	Bedroom 1	1.80%
B17	Bedroom 2	1.32%
B18	LKD	4.85%
B18	Bedroom 1	3.42%
B18	Bedroom 2	3.81%



Figure 7.9: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





## 7.4.8 Block B/Third Floor

Table No. 7.10: ADF Results Block B/Third Floor		
Unit Number	Room Description	Predicted ADF Value
B19	LKD	2.36%
B19	Bedroom 1	1.06%
B19	Bedroom 2	1.51%
B20	LKD	3.37%
B20	Bedroom 1	2.68%
B20	Bedroom 2	1.39%
B21	LKD	3.50%
B21	Bedroom 1	1.65%
B22	LKD	2.83%
B22	Bedroom 1	1.75%
B22	Bedroom 2	1.60%



Figure 7.10: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





## 7.4.9 Block C/Ground Floor

l č	able No. 7.11: ADF Results Block C/Ground F	·loor
Unit Number	Room Description	Predicted ADF Value
C1	LKD	4.15%
C1	Bedroom 1	2.93%
Cl	Bedroom 2	2.83%
C2	LKD	2.30%
C2	Bedroom 1	1.07%
C3	LKD	3.13%
C3	Bedroom 1	2.57%
C3	Bedroom 2	3.48%
C4	LKD	2.07%
C4	Bedroom 1	2.17%
C4	Bedroom 2	3.51%
C4	Bedroom 3	3.37%
C5	LKD	3.41%
C5	Bedroom 1	1.65%
C5	Bedroom 2	1.67%
C6	LKD	3.80%
C6	Bedroom 1	2.90%
C6	Bedroom 2	1.52%
C7	LKD	3.16%
C7	Bedroom 1	3.45%
C7	Bedroom 2	2.77%



Figure 7.11: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).



### 7.4.10 Block C/First Floor

Ta	able No. 7.12: ADF Results Block C/First Flo	oor
Unit Number	Room Description	Predicted ADF Value
C8	LKD	3.66%
C8	Bedroom 1	3.23%
C8	Bedroom 2	3.88%
C9	LKD	2.28%
C9	Bedroom 1	1.07%
C10	LKD	3.11%
C10	Bedroom 1	2.90%
C10	Bedroom 2	3.75%
Cll	LKD	2.33%
Cll	Bedroom 1	2.13%
Cll	Bedroom 2	3.84%
C11	Bedroom 3	3.58%
C12	LKD	3.90%
C12	Bedroom 1	3.04%
C12	Bedroom 2	1.42%
C13	LKD	4.03%
C13	Bedroom 1	3.15%
C13	Bedroom 2	1.47%
C14	LKD	3.30%
C14	Bedroom 1	3.88%
C14	Bedroom 2	3.16%



Figure 7.12: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).



#### 7.4.11 Block C/Second Floor

Table No. 7.13: ADF Results Block C/Second Floor		
Unit Number	Room Description	Predicted ADF Value
C15	LKD	3.80%
C15	Bedroom 1	3.56%
C15	Bedroom 2	3.96%
C16	LKD	2.43%
C16	Bedroom 1	1.15%
C17	LKD	3.21%
C17	Bedroom 1	3.00%
C17	Bedroom 2	3.87%
C18	LKD	2.57%
C18	Bedroom 1	2.24%
C18	Bedroom 2	3.99%
C18	Bedroom 3	3.66%
C19	LKD	4.15%
C19	Bedroom 1	3.16%
C19	Bedroom 2	1.49%
C20	LKD	4.19%
C20	Bedroom 1	3.23%
C20	Bedroom 2	1.52%
C21	LKD	3.40%
C21	Bedroom 1	4.05%
C21	Bedroom 2	3.32%



Figure 7.13: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).



#### 7.4.12 Block C/Third Floor

Table No. 7.14: ADF Results Block C/Third Floor		
Unit Number	Room Description	Predicted ADF Value
C22	LKD	3.78%
C22	Bedroom 1	3.80%
C22	Bedroom 2	4.02%
C23	LKD	2.60%
C23	Bedroom 1	1.35%
C24	LKD	3.28%
C24	Bedroom 1	3.15%
C24	Bedroom 2	4.00%
C25	LKD	2.81%
C25	Bedroom 1	2.26%
C25	Bedroom 2	4.10%
C25	Bedroom 3	3.72%
C26	LKD	4.30%
C26	Bedroom 1	3.23%
C26	Bedroom 2	1.52%
C27	LKD	4.27%
C27	Bedroom 1	3.27%
C27	Bedroom 2	1.53%



Figure 7.14: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).



## 7.4.13 Neighbourhood Centre/Ground Floor

Table No. 7.15: ADF Results Neighbourhood Centre/Ground Floor		
Unit Number	Room Description	Predicted ADF Value
Creche	Classroom 1	2.76%
Creche	Classroom 2	3.37%
Creche	Classroom 3	2.85%
Creche	Classroom 4	1.81%
Creche	Classroom 5	1.76%
Creche	Classroom 6	2.10%
Creche	Classroom 7	3.67%



Figure 7.15: Floor plan of assessed building (Below), Keyplan highlighting the assessed building (Above).



## 7.4.14 Neighbourhood Centre/First Floor

Table No. 7.16: ADF Results Neighbourhood Centre/First Floor		
Unit Number	Room Description	Predicted ADF Value
Creche	Classroom 8	2.72%
C1	LKD	3.41%
C1	Bedroom 1	3.08%
C1	Bedroom 2	2.81%
C2	LKD	3.24%
C2	Bedroom 1	3.08%
C2	Bedroom 2	2.82%
C3	LKD	2.14%
C3	Bedroom 1	3.43%
C3	Bedroom 2	1.50%
C4	LKD	3.08%
C4	Bedroom 1	2.41%
C4	Bedroom 2	1.85%
NI	LKD	3.55%
N1	Bedroom 1	1.47%
N2	LKD	4.09%
N2	Bedroom 1	3.89%
N2	Bedroom 2	1.18%
N3	LKD	2.95%
N3	Bedroom 1	1.18%
N3	Bedroom 2	2.52%



Figure 7.16: Floor plan of assessed building (Below), Keyplan highlighting the assessed building (Above).



## 7.4.15 Neighbourhood Centre/Second Floor

Table No. 7.17: ADF Results Neighbourhood Centre/Second Floor		
Unit Number	Room Description	Predicted ADF Value
N4	LKD	3.61%
N4	Bedroom 1	1.71%
N5	LKD	4.39%
N5	Bedroom 1	3.98%
N5	Bedroom 2	1.38%
N6	LKD	3.30%
N6	Bedroom 1	1.40%
N6	Bedroom 2	2.57%

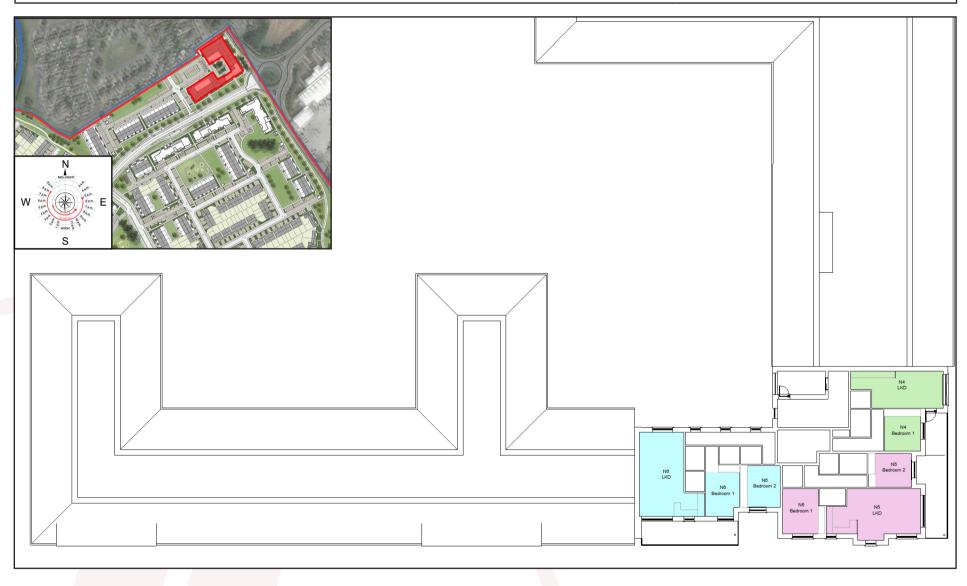


Figure 7.17: Floor plan of assessed building (Below), Keyplan highlighting the assessed building (Above).



## 7.4.16 Neighbourhood Centre/Third Floor

Table No. 7.18: ADF Results Neighbourhood Centre/Third Floor		
Unit Number	Room Description	Predicted ADF Value
N7	LKD	3.70%
N7	Bedroom 1	2.01%
N8	LKD	4.67%
N8	Bedroom 1	4.05%
N8	Bedroom 2	1.63%
N9	LKD	3.96%
N9	Bedroom 1	1.87%
N9	Bedroom 2	1.75%

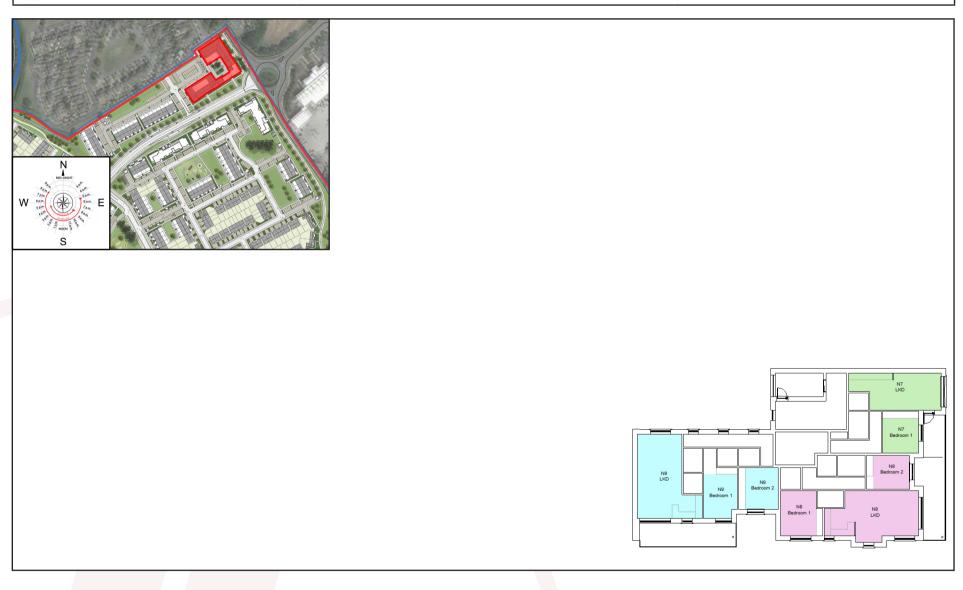


Figure 7.18: Floor plan of assessed building (Below), Keyplan highlighting the assessed building (Above).



### 7.4.17 Duplex Type 1 (No. 278-285), Ground Floor

Table No. 7.19: ADF Results Duplex Type 1 (No. 278-285), Ground Floor		
Unit Number	Room Description	Predicted ADF Value
278	LKD	3.09%
278	Bedroom 1	1.31%
278	Bedroom 2	2.68%
280	LKD	2.79%
280	Bedroom 1	1.26%
280	Bedroom 2	2.61%
282	LKD	2.77%
282	Bedroom 1	1.27%
282	Bedroom 2	2.60%
284	LKD	2.90%
284	Bedroom 1	1.25%
284	Bedroom 2	2.62%



Figure 7.19: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).



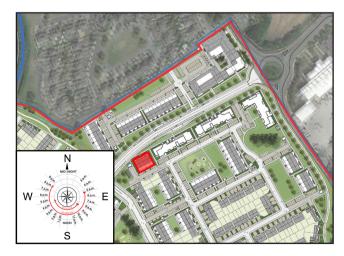


### 7.4.18 Duplex Type 1 (No. 278-285), First Floor

Table No. 7.20: ADF Results Duplex Type 1 (No. 278-285), First Floor		
Unit Number	Room Description	Predicted ADF Value
279	Kitchen	3.46%
279	Living Room	4.16%
281	Kitchen	3.02%
281	Living Room	3.12%
283	Kitchen	3.01%
283	Living Room	3.12%
285	Kitchen	2.96%
285	Living Room	3.09%



Figure 7.20: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





#### 7.4.19 Duplex Type 1 (No. 278-285), Second Floor

Table No. 7.21: ADF Results Duplex Type 1 (No. 278-285), Second Floor		
Unit Number	Room Description	Predicted ADF Value
279	Bedroom 1	2.68%
279	Bedroom 2	4.62%
279	Bedroom 3	4.04%
281	Bedroom 1	2.75%
281	Bedroom 2	3.47%
281	Bedroom 3	3.14%
283	Bedroom 1	2.68%
283	Bedroom 2	3.58%
283	Bedroom 3	3.11%
285	Bedroom 1	2.74%
285	Bedroom 2	3.46%
285	Bedroom 3	2.78%

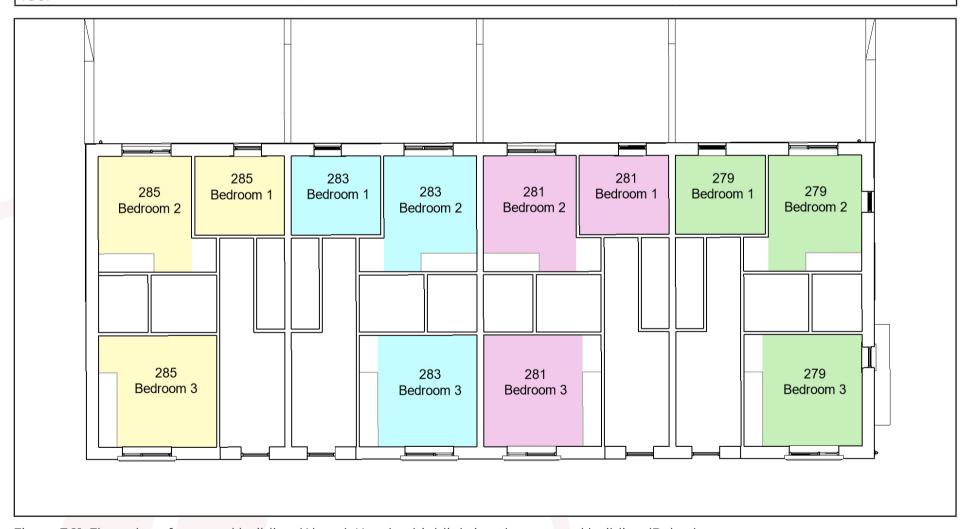


Figure 7.21: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





#### 7.4.20 Duplex Type 1 (No. 357-364), Ground Floor

Table No. 7.22: ADF Results Duplex Type 1 (No. 357-364), Ground Floor		
Unit Number	Room Description	Predicted ADF Value
357	LKD	3.24%
357	Bedroom 1	1.34%
357	Bedroom 2	2.76%
359	LKD	2.95%
359	Bedroom 1	1.33%
359	Bedroom 2	2.71%
361	LKD	2.95%
361	Bedroom 1	1.32%
361	Bedroom 2	2.71%
363	LKD	3.29%
363	Bedroom 1	1.31%
363	Bedroom 2	2.73%



Figure 7.22: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





#### 7.4.21 Duplex Type 1 (No. 357-364), First Floor

Table No. 7.23: ADF Results Duplex Type 1 (No. 357-364), First Floor		
Unit Number	Room Description	Predicted ADF Value
358	Kitchen	3.48%
358	Living Room	4.19%
360	Kitchen	3.07%
360	Living Room	3.21%
362	Kitchen	3.06%
362	Living Room	3.20%
364	Kitchen	3.05%
364	Living Room	3.20%

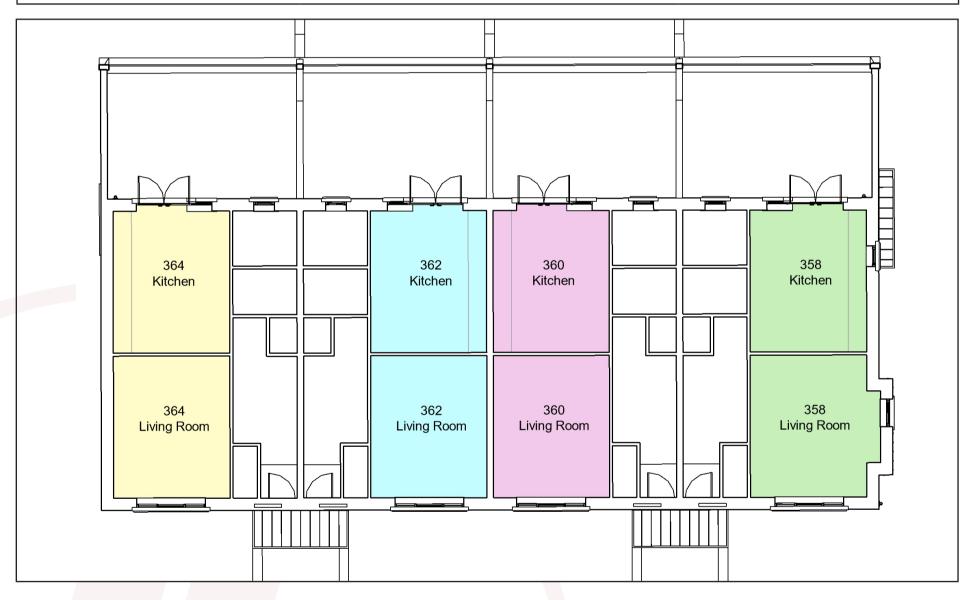
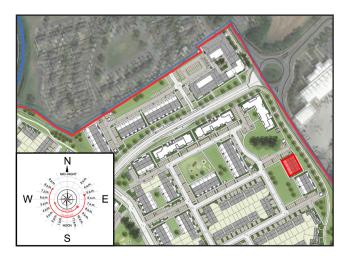


Figure 7.23: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





#### 7.4.22 Duplex Type 1 (No. 357-364), Second Floor

Table No. 7.24: ADF Results Duplex Type 1 (No. 357-364), Second Floor		
Unit Number	Room Description	Predicted ADF Value
358	Bedroom 1	2.74%
358	Bedroom 2	4.65%
358	Bedroom 3	4.14%
360	Bedroom 1	2.79%
360	Bedroom 2	3.53%
360	Bedroom 3	3.26%
362	Bedroom 1	2.72%
362	Bedroom 2	3.64%
362	Bedroom 3	3.25%
364	Bedroom 1	2.78%
364	Bedroom 2	3.51%
364	Bedroom 3	2.92%

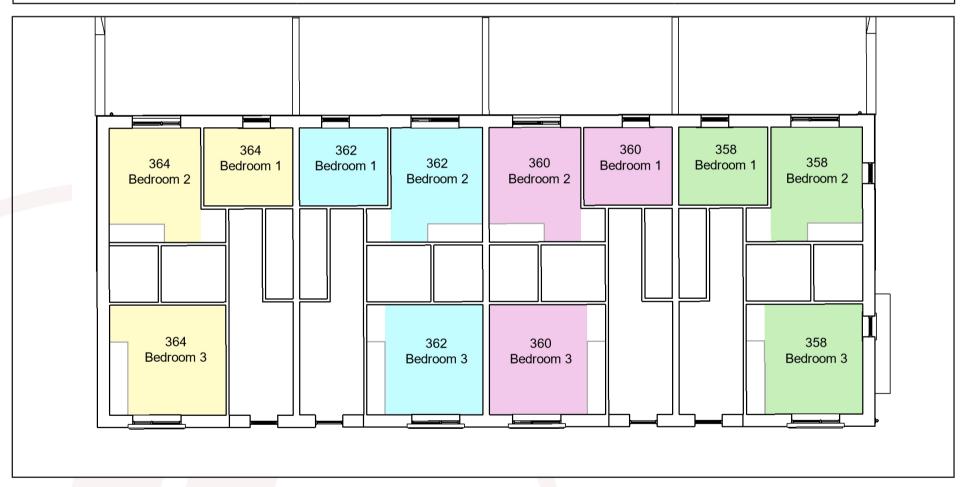
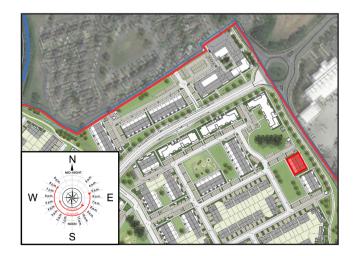


Figure 7.24: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).



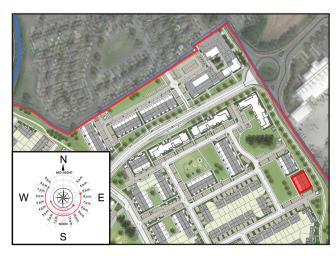


#### 7.4.23 Duplex Type 1 (No. 365-372), Ground Floor

Table No. 7.25: ADF Results Duplex Type 1 (No. 365-372), Ground Floor		
Unit Number	Room Description	Predicted ADF Value
365	LKD	2.90%
365	Bedroom 1	1.35%
365	Bedroom 2	2.76%
367	LKD	2.96%
367	Bedroom 1	1.33%
367	Bedroom 2	2.71%
369	LKD	2.96%
369	Bedroom 1	1.32%
369	Bedroom 2	2.71%
371	LKD	3.45%
371	Bedroom 1	1.34%
371	Bedroom 2	2.75%



Figure 7.25: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





#### 7.4.24 Duplex Type 1 (No. 365-372), First Floor

Table No. 7.26: ADF Results Duplex Type 1 (No. 365-372), First Floor		
Unit Number	Room Description	Predicted ADF Value
366	Kitchen	3.15%
366	Living Room	3.94%
368	Kitchen	3.07%
368	Living Room	3.23%
370	Kitchen	3.07%
370	Living Room	3.22%
372	Kitchen	3.06%
372	Living Room	3.24%

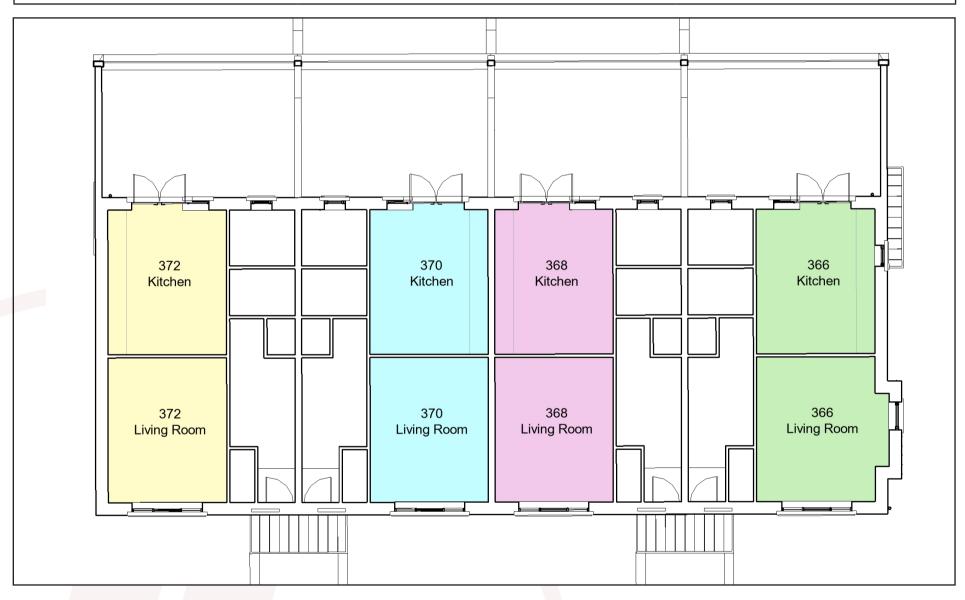
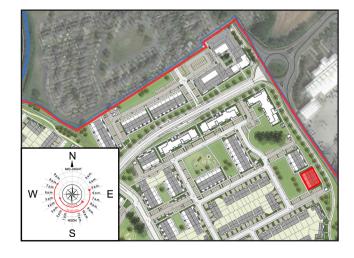


Figure 7.26: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).



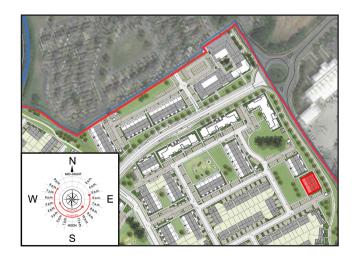


#### 7.4.25 Duplex Type 1 (No. 365-372), Second Floor

Table No. 7.27: ADF Results Duplex Type 1 (No. 365-372), Second Floor		
Unit Number	Room Description	Predicted ADF Value
366	Bedroom 1	2.72%
366	Bedroom 2	4.20%
366	Bedroom 3	4.09%
368	Bedroom 1	2.78%
368	Bedroom 2	3.53%
368	Bedroom 3	3.30%
370	Bedroom 1	2.74%
370	Bedroom 2	3.65%
370	Bedroom 3	3.28%
372	Bedroom 1	2.81%
372	Bedroom 2	3.58%
372	Bedroom 3	2.95%



Figure 7.27: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).



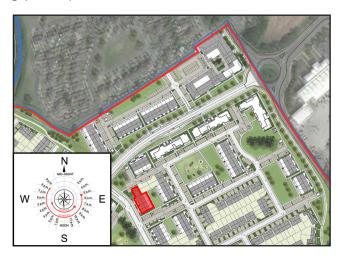


#### 7.4.26 Duplex Type 3A, Ground Floor

Table No. 7.28: ADF Results Duplex Type 3A, Ground Floor		
Unit Number	Room Description	Predicted ADF Value
248	LKD	3.34%
248	Bedroom 1	1.50%
248	Bedroom 2	2.73%
250	LKD	2.85%
250	Bedroom 1	1.53%
250	Bedroom 2	2.04%
252	LKD	2.83%
252	Bedroom 1	1.48%
252	Bedroom 2	2.02%
254	LKD	2.81%
254	Bedroom 1	1.51%
254	Bedroom 2	2.05%
256	Kitchen	2.05%
256	Living Room	3.79%
257	Kitchen	6.31%
257	Living Room	5.05%



Figure 7.28: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





# 7.4.27 Duplex Type 3A, First Floor

Table No. 7.29: ADF Results Duplex Type 3A, First Floor		
Unit Number	Room Description	Predicted ADF Value
249	Kitchen	3.40%
249	Living Room	4.15%
251	Kitchen	2.96%
251	Living Room	3.17%
253	Kitchen	2.94%
253	Living Room	3.16%
255	Kitchen	2.94%
255	Living Room	3.17%
256	Bedroom 1	1.86%
256	Bedroom 2	2.30%
256	Bedroom 3	2.87%
257	Bedroom 1	3.95%
257	Bedroom 2	4.10%



Figure 7.29: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





#### 7.4.28 Duplex Type 3A, Second Floor

Table No. 7.30: ADF Results Duplex Type 3A, Second Floor		
Unit Number	Room Description	Predicted ADF Value
249	Bedroom 1	2.68%
249	Bedroom 2	4.59%
249	Bedroom 3	3.67%
251	Bedroom 1	2.72%
251	Bedroom 2	3.54%
251	Bedroom 3	3.16%
253	Bedroom 1	2.64%
253	Bedroom 2	3.54%
253	Bedroom 3	3.13%
255	Bedroom 1	2.70%
255	Bedroom 2	3.50%
255	Bedroom 3	3.17%
257	Bedroom 3	2.07%
257	Bedroom 4	1.84%
257	Study Room	2.51%

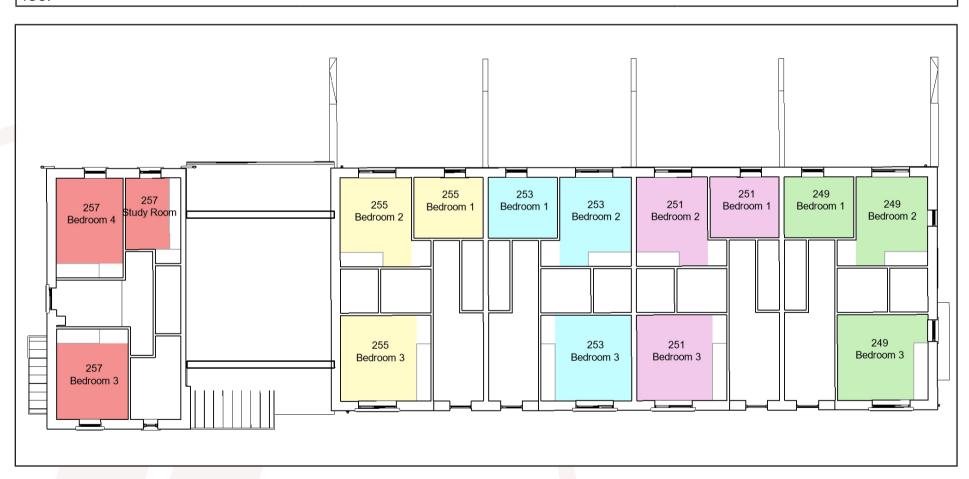
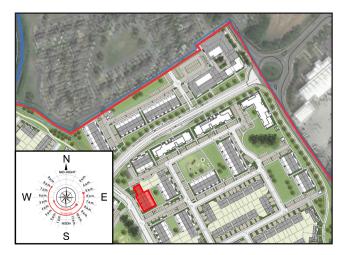


Figure 7.30: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





#### 7.4.29 Duplex Type 3B, Ground Floor

Table No. 7.31: ADF Results Duplex Type 3B, Ground Floor		
Unit Number	Room Description	Predicted ADF Value
258	Kitchen	6.06%
258	Living Room	4.52%
259	Kitchen	2.04%
259	Living Room	3.63%
260	LKD	2.61%
260	Bedroom 1	1.29%
260	Bedroom 2	2.63%
262	LKD	2.60%
262	Bedroom 1	1.29%
262	Bedroom 2	2.63%
264	LKD	2.63%
264	Bedroom 1	1.29%
264	Bedroom 2	2.61%
266	LKD	3.14%
266	Bedroom 1	1.24%
266	Bedroom 2	2.57%

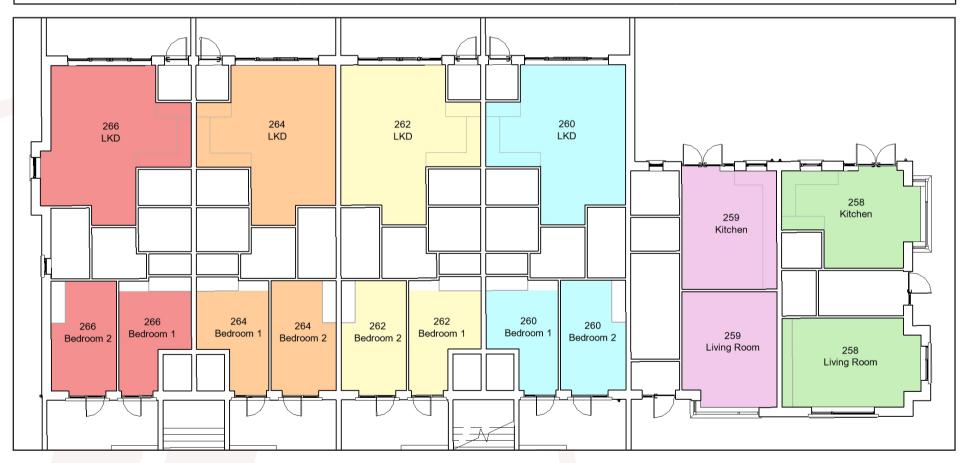


Figure 7.31: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).



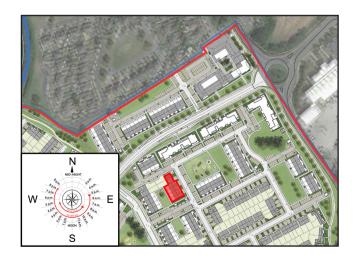


# 7.4.30 Duplex Type 3B, First Floor

Table No. 7.32: ADF Results Duplex Type 3B, First Floor		
Unit Number	Room Description	Predicted ADF Value
258	Bedroom 1	3.35%
258	Bedroom 2	3.83%
259	Bedroom 1	1.87%
259	Bedroom 2	2.33%
259	Bedroom 3	2.86%
261	Kitchen	2.91%
261	Living Room	3.13%
263	Kitchen	2.93%
263	Living Room	3.13%
265	Kitchen	2.93%
265	Living Room	3.12%
267	Kitchen	3.46%
267	Living Room	4.01%



Figure 7.32: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





#### 7.4.31 Duplex Type 3B, Second Floor

Table No. 7.33: ADF Results Duplex Type 3B, Second Floor		
Unit Number	Room Description	Predicted ADF Value
258	Bedroom 3	1.94%
258	Bedroom 4	1.87%
258	Study Room	2.47%
261	Bedroom 1	2.65%
261	Bedroom 2	3.54%
261	Bedroom 3	3.14%
263	Bedroom 1	2.70%
263	Bedroom 2	3.54%
263	Bedroom 3	3.14%
265	Bedroom 1	2.66%
265	Bedroom 2	3.56%
265	Bedroom 3	3.14%
267	Bedroom 1	2.73%
267	Bedroom 2	4.76%
267	Bedroom 3	3.62%

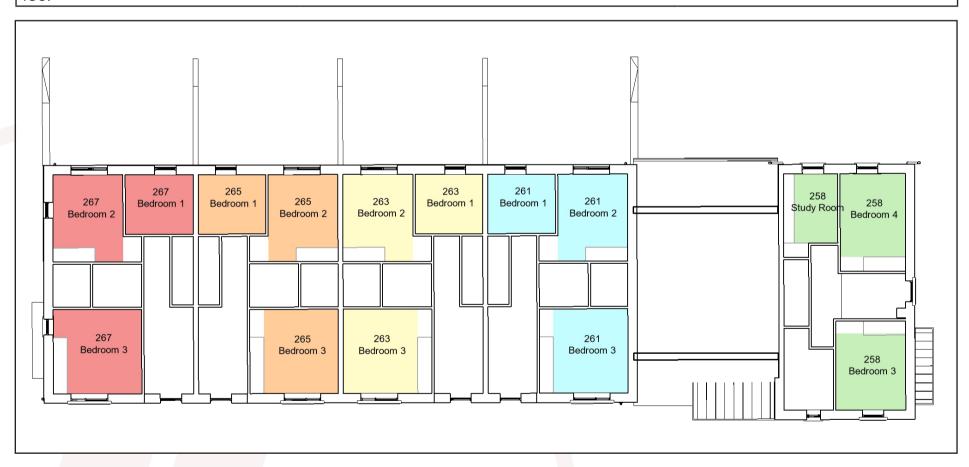
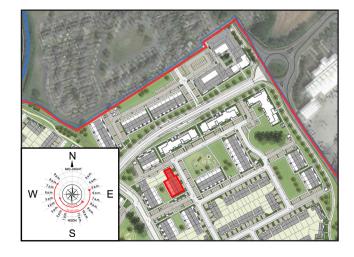


Figure 7.33: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





#### 7.4.32 Duplex Type 4A, Ground Floor

Table No. 7.34: ADF Results Duplex Type 4A, Ground Floor		
Unit Number	Room Description	Predicted ADF Value
238	Kitchen	2.40%
238	Living Room	3.98%
239	Kitchen	2.10%
239	Living Room	3.84%
240	LKD	2.84%
240	Bedroom 1	1.50%
240	Bedroom 2	2.07%
242	LKD	2.89%
242	Bedroom 1	1.55%
242	Bedroom 2	2.05%
244	LKD	2.89%
244	Bedroom 1	1.52%
244	Bedroom 2	2.06%
246	LKD	3.41%
246	Bedroom 1	1.57%
246	Bedroom 2	2.79%



Figure 7.34: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





# 7.4.33 Duplex Type 4A, First Floor

Table No. 7.35: ADF Results Duplex Type 4A, First Floor		
Unit Number	Room Description	Predicted ADF Value
238	Bedroom 1	1.86%
238	Bedroom 2	2.37%
238	Bedroom 3	2.95%
239	Bedroom 1	1.87%
239	Bedroom 2	2.35%
239	Bedroom 3	2.94%
241	Kitchen	2.96%
241	Living Room	3.21%
243	Kitchen	2.97%
243	Living Room	3.19%
245	Kitchen	2.96%
245	Living Room	3.19%
247	Kitchen	3.49%
247	Living Room	4.09%

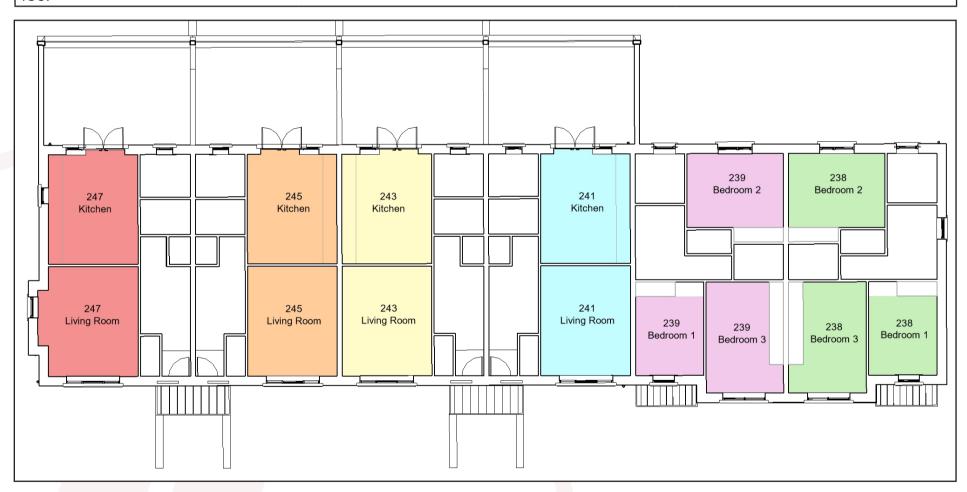


Figure 7.35: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).



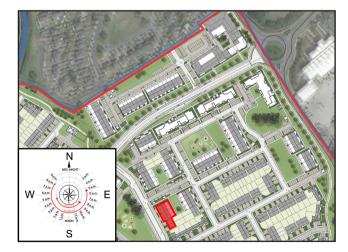


#### 7.4.34 Duplex Type 4A, Second Floor

Table No. 7.36: ADF Results Duplex Type 4A, Second Floor		
Unit Number	Room Description	Predicted ADF Value
241	Bedroom 1	2.64%
241	Bedroom 2	3.53%
241	Bedroom 3	3.12%
243	Bedroom 1	2.69%
243	Bedroom 2	3.51%
243	Bedroom 3	3.12%
245	Bedroom 1	2.65%
245	Bedroom 2	3.53%
245	Bedroom 3	3.11%
247	Bedroom 1	2.72%
247	Bedroom 2	4.68%
247	Bedroom 3	3.58%



Figure 7.36: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





#### 7.4.35 Duplex Type 4B, Ground Floor

Table No. 7.37: ADF Results Duplex Type 4B, Ground Floor		
Unit Number	Room Description	Predicted ADF Value
268	LKD	2.95%
268	Bedroom 1	1.29%
268	Bedroom 2	2.64%
270	LKD	2.61%
270	Bedroom 1	1.22%
270	Bedroom 2	2.52%
272	LKD	2.59%
272	Bedroom 1	1.19%
272	Bedroom 2	2.50%
274	LKD	2.59%
274	Bedroom 1	1.21%
274	Bedroom 2	2.47%
276	Kitchen	2.07%
276	Living Room	3.66%
277	Kitchen	2.28%
277	Living Room	3.58%



Figure 7.37: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





#### 7.4.36 Duplex Type 4B, First Floor

Table No. 7.38: ADF Results Duplex Type 4B, First Floor		
Unit Number	Room Description	Predicted ADF Value
269	Kitchen	3.34%
269	Living Room	4.10%
271	Kitchen	2.94%
271	Living Room	3.10%
273	Kitchen	2.92%
273	Living Room	3.09%
275	Kitchen	2.92%
275	Living Room	3.10%
276	Bedroom 1	1.80%
276	Bedroom 2	2.32%
276	Bedroom 3	2.79%
277	Bedroom 1	1.84%
277	Bedroom 2	2.34%
277	Bedroom 3	2.81%



Figure 7.38: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





#### 7.4.37 Duplex Type 4B, Second Floor

Table No. 7.39: ADF Results Duplex Type 4B, Second Floor		
Unit Number	Room Description	Predicted ADF Value
269	Bedroom 1	2.64%
269	Bedroom 2	4.58%
269	Bedroom 3	3.43%
271	Bedroom 1	2.69%
271	Bedroom 2	3.51%
271	Bedroom 3	3.11%
273	Bedroom 1	2.63%
273	Bedroom 2	3.51%
273	Bedroom 3	3.11%
275	Bedroom 1	2.68%
275	Bedroom 2	3.51%
275	Bedroom 3	3.13%



Figure 7.39: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





#### 7.4.38 Duplex Type 5, Ground Floor

Table No. 7.40: ADF Results Duplex Type 5, Ground Floor		
Unit Number	Room Description	Predicted ADF Value
373	LKD	3.27%
373	Bedroom 1	1.79%
373	Bedroom 2	3.18%
375	LKD	2.70%
375	Bedroom 1	1.74%
375	Bedroom 2	2.35%
377	LKD	2.72%
377	Bedroom 1	1.80%
377	Bedroom 2	2.35%
379	LKD	2.74%
379	Bedroom 1	1.74%
379	Bedroom 2	2.36%
381	LKD	2.73%
381	Bedroom 1	1.81%
381	Bedroom 2	2.36%
383	LKD	3.22%
383	Bedroom 1	1.75%
383	Bedroom 2	3.00%



Figure 7.40: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





# 7.4.39 Duplex Type 5, First Floor

Table No. 7.41: ADF Results Duplex Type 5, First Floor		
Unit Number	Room Description	Predicted ADF Value
374	Kitchen	3.49%
374	Living Room	4.08%
376	Kitchen	2.97%
376	Living Room	3.14%
378	Kitchen	2.98%
378	Living Room	3.15%
380	Kitchen	2.98%
380	Living Room	3.16%
382	Kitchen	2.99%
382	Living Room	3.16%
384	Kitchen	3.38%
384	Living Room	4.09%

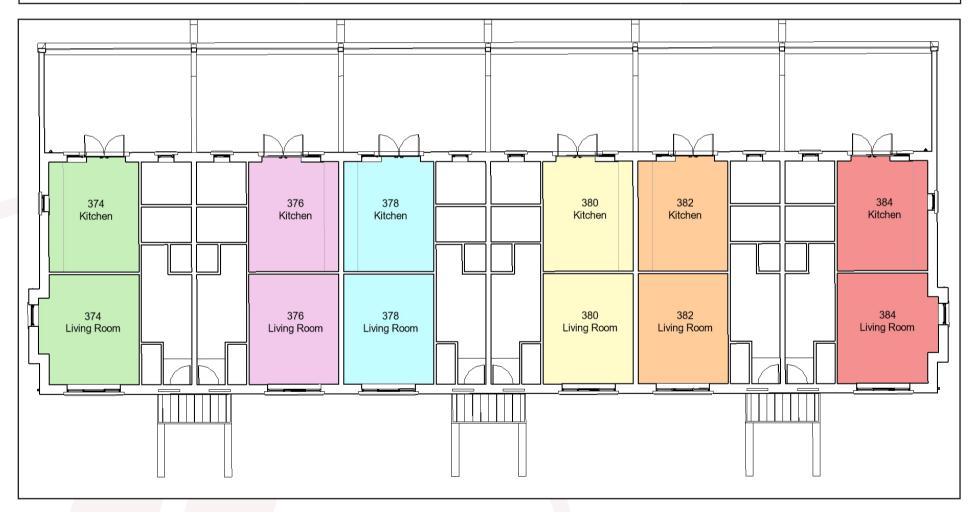
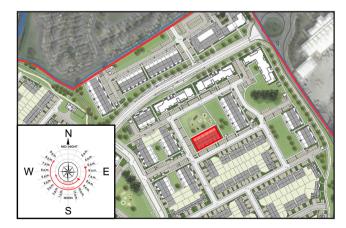


Figure 7.41: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





#### 7.4.40 Duplex Type 5, Second Floor

Table No. 7.42: ADF Results Duplex Type 5, Second Floor		
Unit Number	Room Description	Predicted ADF Value
374	Bedroom 1	2.71%
374	Bedroom 2	4.70%
374	Bedroom 3	3.81%
376	Bedroom 1	2.65%
376	Bedroom 2	3.54%
376	Bedroom 3	3.17%
378	Bedroom 1	2.70%
378	Bedroom 2	3.52%
378	Bedroom 3	3.18%
380	Bedroom 1	2.64%
380	Bedroom 2	3.53%
380	Bedroom 3	3.19%
382	Bedroom 1	2.70%
382	Bedroom 2	3.51%
382	Bedroom 3	3.21%
384	Bedroom 1	2.65%
384	Bedroom 2	4.47%
384	Bedroom 3	4.42%



Figure 7.42: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





# 7.4.41 Duplex Type 6, Ground Floor

Table No. 7.43: ADF Results Duplex Type 6, Ground Floor		
Unit Number	Room Description	Predicted ADF Value
385	LKD	3.19%
385	Bedroom 1	1.32%
385	Bedroom 2	2.71%
387	LKD	2.75%
387	Bedroom 1	1.31%
387	Bedroom 2	2.69%
389	LKD	2.77%
389	Bedroom 1	1.33%
389	Bedroom 2	2.69%
391	LKD	2.81%
391	Bedroom 1	1.28%
391	Bedroom 2	2.67%
393	LKD	2.84%
393	Bedroom 1	1.32%
393	Bedroom 2	2.65%
395	LKD	2.86%
395	Bedroom 1	1.25%
395	Bedroom 2	2.63%
397	LKD	2.86%
397	Bedroom 1	1.29%
397	Bedroom 2	2.61%
399	LKD	2.99%
399	Bedroom 1	1.22%
399	Bedroom 2	2.61%

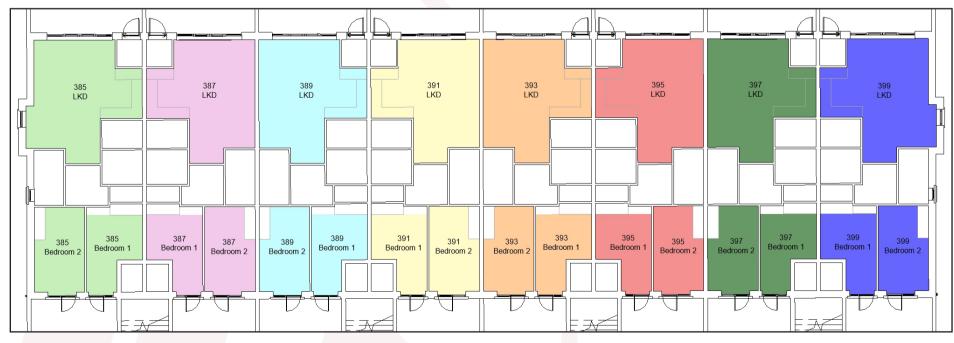


Figure 7.43: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).



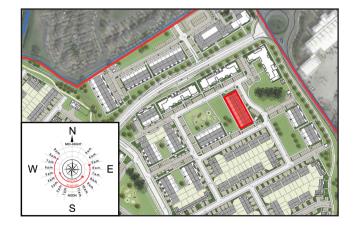


# 7.4.42 Duplex Type 6, First Floor

Table No. 7.44: ADF Results Duplex Type 6, First Floor		
Unit Number	Room Description	Predicted ADF Value
386	Kitchen	3.50%
386	Living Room	4.09%
388	Kitchen	2.99%
388	Living Room	3.17%
390	Kitchen	3.00%
390	Living Room	3.18%
392	Kitchen	3.01%
392	Living Room	3.14%
394	Kitchen	3.03%
394	Living Room	3.13%
396	Kitchen	3.02%
396	Living Room	3.12%
398	Kitchen	3.03%
398	Living Room	3.11%
400	Kitchen	3.35%
400	Living Room	3.82%



Figure 7.44: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





#### 7.4.43 Duplex Type 6, Second Floor

	No. 7.45: ADF Results Duplex Type 6, Secon	na Floor		
Unit Number	Room Description	Predicted ADF Value		
386	Bedroom 1 2.70			
386	Bedroom 2 4.77%			
386	Bedroom 3	3.66%		
388	Bedroom 1	2.69%		
388	Bedroom 2	3.58%		
388	Bedroom 3	3.17%		
390	Bedroom 1	2.73%		
390	Bedroom 2	3.57%		
390	Bedroom 3	3.17%		
392	Bedroom 1	2.67% 3.57%		
392	Bedroom 2			
392	392 Bedroom 3			
394	Bedroom 1	2.73%		
394	Bedroom 2			
394	Bedroom 3	3.10%		
396	Bedroom 1	2.67%		
396	Bedroom 2	3.57%		
396	Bedroom 3	3.10%		
398	Bedroom 1	2.73%		
398	Bedroom 2	3.56%		
398	Bedroom 3	3.09%		
400	Bedroom 1	2.67%		
400	Bedroom 2	4.42%		
400	Bedroom 3	3.28%		

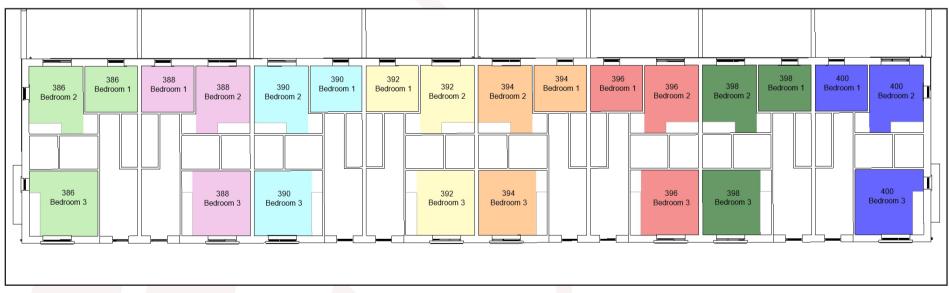


Figure 7.45: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





#### 7.4.44 Duplex Type 7, Ground Floor

Table	No. 7.46: ADF Results Duplex Type 7, Grou	nd Floor	
Unit Number	Room Description	Predicted ADF Value	
513	LKD	3.34%	
513	Bedroom 1	1.28%	
513	Bedroom 2	2.60%	
515	LKD	3.32%	
515	Bedroom 1	1.22%	
515	Bedroom 2	2.57%	
517	LKD	3.00%	
517	Bedroom 1	1.33%	
517	Bedroom 2	2.68%	
519	LKD	3.01%	
519	Bedroom 1	1.21%	
519		2.55%	
521		3.01%	
521	Bedroom 1	1.19%	
521	Bedroom 2	2.51%	
523	LKD	3.00%	
523	Bedroom 1	1.25%	
523	Bedroom 2	2.58%	
525	LKD	3.00%	
525	Bedroom 1	1.25%	
525	Bedroom 2	2.61%	
527	LKD	3.46%	
527	Bedroom 1	1.32%	
527	Bedroom 2	2.69%	



Figure 7.46: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





#### 7.4.45 Duplex Type 7, First Floor

Tal	ole No. 7.47: ADF Results Duplex Type 7, First	Floor
Unit Number	Room Description	Predicted ADF Value
514	LKD	3.93%
514	Bedroom 1	1.41%
514	Bedroom 2	1.81%
516	LKD	3.35%
516	Bedroom 1	1.46%
516	Bedroom 2	1.86%
518	Kitchen	2.69%
518	Living Room	3.25%
520	Kitchen	3.08%
520	Living Room	3.18%
522	Kitchen	3.07%
522	Living Room	3.14%
524	Kitchen	3.08%
524	Living Room	3.16%
526	Kitchen	3.07%
526	Living Room	3.18%
528	Kitchen	3.57%
528	Living Room	4.08%

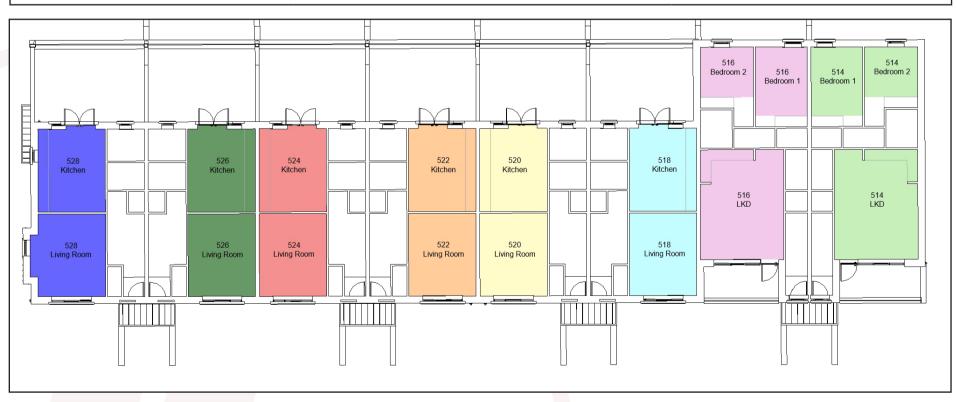


Figure 7.47: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





#### 7.4.46 Duplex Type 7, Second Floor

Table	No. 7.48: ADF Results Duplex Type 7, Seco	nd Floor	
Unit Number	Room Description	Predicted ADF Value	
518	Bedroom 1	2.72%	
518	Bedroom 2	3.64%	
518	Bedroom 3	3.21%	
520	Bedroom 1	2.79%	
520	Bedroom 2	3.63%	
520	Bedroom 3	3.19%	
522	Bedroom 1	2.74%	
522	Bedroom 2	3.66%	
522	Bedroom 3	3.15% 2.80%	
524	Bedroom 1		
524	Bedroom 2	3.64%	
524	Bedroom 3	3.17%	
526	Bedroom 1	2.74%	
526	Bedroom 2	3.67%	
526	Bedroom 3	3.18%	
528	Bedroom 1	2.79%	
528	Bedroom 2	4.74%	
528	Bedroom 3	3.63%	

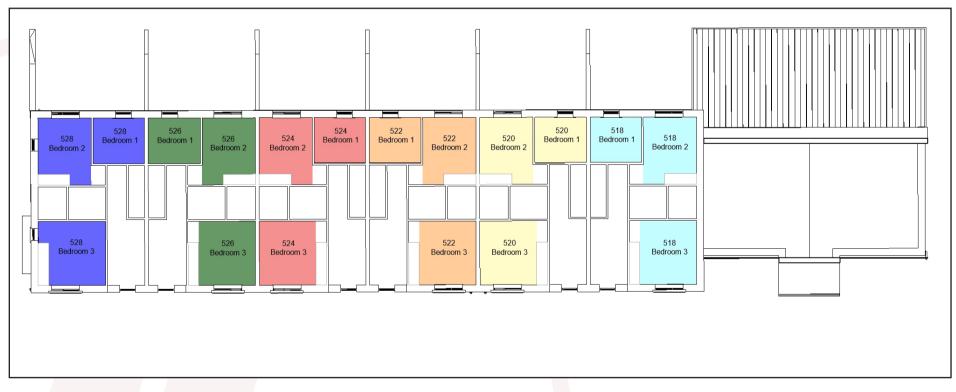


Figure 7.48: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





#### 7.4.47 Duplex Type 8, Ground Floor

Table	e No. 7.49: ADF Results Duplex Type 8, Grou	nd Floor
Unit Number	Room Description	Predicted ADF Value
529	LKD	3.22%
529	Bedroom 1	1.72%
529	Bedroom 2	3.01%
531	LKD	2.73%
531	Bedroom 1	1.68%
531	Bedroom 2	2.27%
533	LKD	2.73%
533	Bedroom 1	1.72%
533	Bedroom 2	2.27%
535	LKD	2.70%
535	Bedroom 1	1.67%
535	Bedroom 2	2.28%
537	LKD	2.70%
537	Bedroom 1	1.72%
537	Bedroom 2	2.27%
539	LKD	2.82%
539	Bedroom 1	1.67%
539	Bedroom 2	2.51%



Figure 7.49: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





# 7.4.48 Duplex Type 8, First Floor

Tak	Table No. 7.50: ADF Results Duplex Type 8, First Floor					
Unit Number	Room Description	Predicted ADF Value				
530	Kitchen	3.59%				
530	Living Room	3.98%				
532	Kitchen	3.09%				
532	Living Room	3.03%				
534	Kitchen	3.09%				
534	Living Room	3.03%				
536	Kitchen	3.09%				
536	Living Room	3.00%				
538	Kitchen	3.09%				
538	Living Room	3.00%				
540	Kitchen	3.07%				
540	Living Room	3.00%				

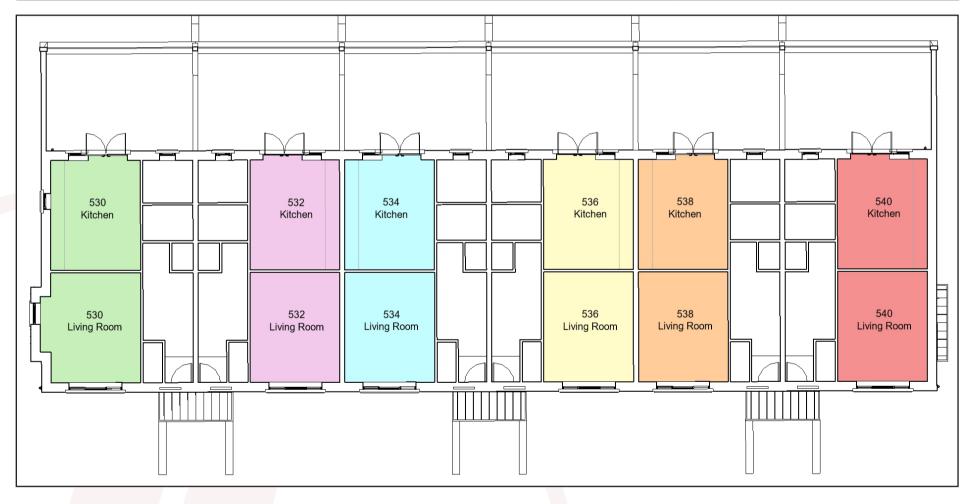


Figure 7.50: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





# 7.4.49 Duplex Type 8, Second Floor

Tabl	Table No. 7.51: ADF Results Duplex Type 8, Second Floor						
Unit Number	Room Description	Predicted ADF Value					
530	Bedroom 1	2.85%					
530	Bedroom 2	4.80%					
530	Bedroom 3	3.74%					
532	Bedroom 1	2.79%					
532	Bedroom 2	3.70%					
532	Bedroom 3	3.06%					
534	Bedroom 1	2.83%					
534	Bedroom 2	3.68%					
534	Bedroom 3	3.05%					
536	Bedroom 1	2.77%					
536	Bedroom 2	3.69%					
536	Bedroom 3	3.03%					
538	Bedroom 1	2.83%					
538	Bedroom 2	3.67%					
538	Bedroom 3	3.03%					
540	Bedroom 1	2.77%					
540	Bedroom 2	3.69%					
540	Bedroom 3	3.03%					



Figure 7.51: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





#### 7.4.50 Duplex Type 9, Ground Floor

Table	No. 7.52: ADF Results Duplex Type 9, Grour	nd Floor			
Unit Number	Room Description	Predicted ADF Value			
541	LKD	2.86%			
541	Bedroom 1 1.73%				
541	Bedroom 2	2.68%			
543	LKD	2.61%			
543	Bedroom 1	1.68%			
543	Bedroom 2	2.28%			
545	LKD	2.61%			
545	Bedroom 1	1.73%			
545	Bedroom 2	2.28%			
547	LKD	2.60%			
547 547 549	Bedroom 1	1.68%			
	Bedroom 2	2.28%			
	LKD	2.61%			
549	Bedroom 1	1.73%			
549	Bedroom 2	2.28%			
551	LKD	2.65%			
551	Bedroom 1	1.68%			
551	Bedroom 2	2.28%			
553	LKD	2.55%			
553	Bedroom 1	1.86%			
553	Bedroom 2	2.46%			
555	LKD	3.06%			
555	Bedroom 1	1.81%			
555	Bedroom 2	3.15%			

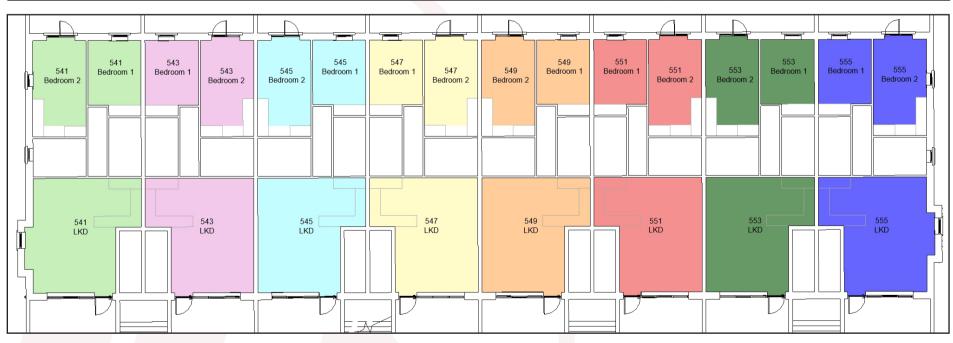


Figure 7.52: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





# 7.4.51 Duplex Type 9, First Floor

Tabl	e No. 7.53: ADF Results Duplex Type 9, First	t Floor	
Unit Number	Room Description	Predicted ADF Value	
542	Kitchen	3.08%	
542	Living Room	3.00%	
544	Kitchen	3.09%	
544	Living Room	2.96%	
546	Kitchen	3.10%	
546	Living Room	2.95%	
548	Kitchen	3.09%	
548	Living Room	2.94% 3.10% 2.94%	
550	Kitchen		
550	Living Room		
552	Kitchen	2.71%	
552	Living Room	2.97%	
554	Bedroom 1	1.68%	
554	Bedroom 2	3.12%	
554	Bedroom 2	1.82%	
556	Bedroom 1	1.67%	
556	Bedroom 2	4.44%	
556	Bedroom 2	2.87%	

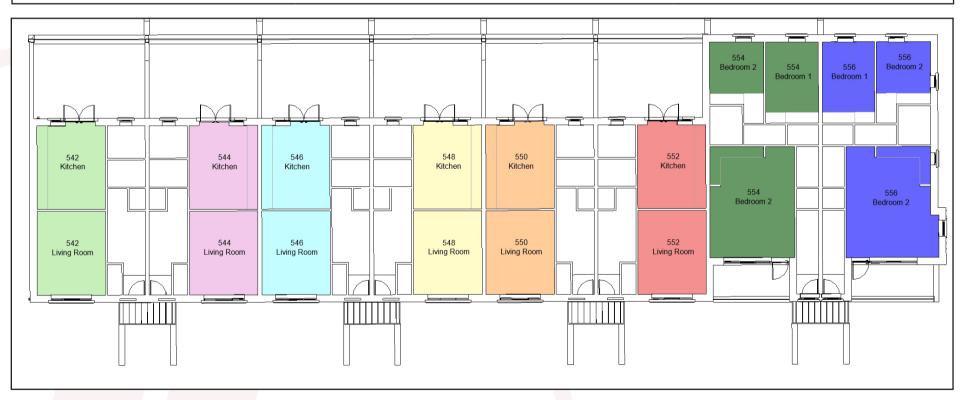


Figure 7.53: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





#### 7.4.52 Duplex Type 9, Second Floor

Table N	No. 7.54: ADF Results Duplex Type 9, Seco	nd Floor		
Unit Number	Room Description	Predicted ADF Value		
542	542 Bedroom 1			
542	Bedroom 2	3.67%		
542	Bedroom 3	3.03%		
544	Bedroom 1	2.77%		
544	Bedroom 2	3.70%		
544	Bedroom 3	3.00%		
546	Bedroom 1	2.85%		
546	Bedroom 2	3.69%		
546	Bedroom 3	3.00%		
548	Bedroom 1	2.79%		
548	Bedroom 2 3.72%			
548	Bedroom 3	2.98%		
550	Bedroom 1	2.86%		
550	Bedroom 2	3.71%		
550	Bedroom 3	2.99%		
552	Bedroom 1	2.79%		
552	Bedroom 2	3.70%		
552	Bedroom 3	3.00%		

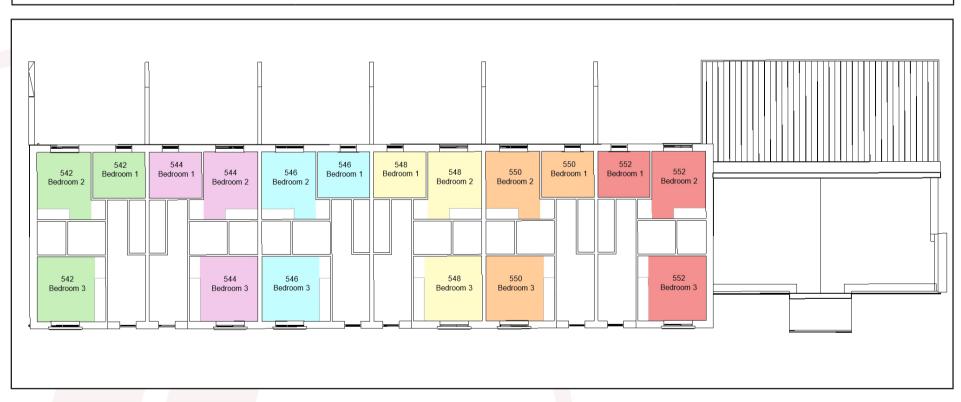


Figure 7.54: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





# 7.5 Appendix Results - Alternative Daylight Standards7.5.1 Block A/Ground Floor

	Ta	able No. 7.55:	Alternative	——————————————————————————————————————	rds Results Bloc	k A/Ground	l Floor	
		BS 8206-2		EN 17037			BS_EN 1'	7037
Unit Number	Room Description	Predicted ADF	Meets Criteria*	% of area above 300 Lux (recommendation >50%)	% of area above 100 Lux (recommendation >95%)	Meets Criteria*	% of area above target Lux* (recommendation >50%)	Meets Criteria*
Al	LKD	2.76%	Yes	100%	100%	Yes	100%	Yes
Al	Bedroom 1	3.02%	Yes	81%	100%	Yes	100%	Yes
Al	Bedroom 2	3.14%	Yes	96%	100%	Yes	100%	Yes
Al	Bedroom 3	1.43%	Yes	73%	100%	Yes	100%	Yes
A2	LKD	2.22%	Yes	97%	100%	Yes	100%	Yes
A2	Bedroom 1	1.35%	Yes	24%	100%	No	100%	Yes
A2	Bedroom 2	1.37%	Yes	52%	100%	Yes	100%	Yes
A3	LKD	2.96%	Yes	83%	100%	Yes	99%	Yes
A3	Bedroom 1	1.85%	Yes	100%	100%	Yes	100%	Yes
A4	LKD	3.05%	Yes	85%	100%	Yes	97%	Yes
A4	Bedroom 1	1.52%	Yes	69%	100%	Yes	100%	Yes
A5	LKD	2.06%	Yes	73%	100%	Yes	84%	Yes
A5	Bedroom 1	1.61%	Yes	73%	100%	Yes	100%	Yes
A5	Bedroom 2	1.12%	Yes	33%	100%	No	100%	Yes
A6	LKD	2.97%	Yes	100%	100%	Yes	100%	Yes
A6	Bedroom 1	3.11%	Yes	94%	100%	Yes	100%	Yes
A6	Bedroom 2	3.42%	Yes	100%	100%	Yes	100%	Yes
*For inforn	nation regardi	ng the criteria	under the va	rious guidelines p	olease refer to sec	tion 3.0 on p	age 12.	

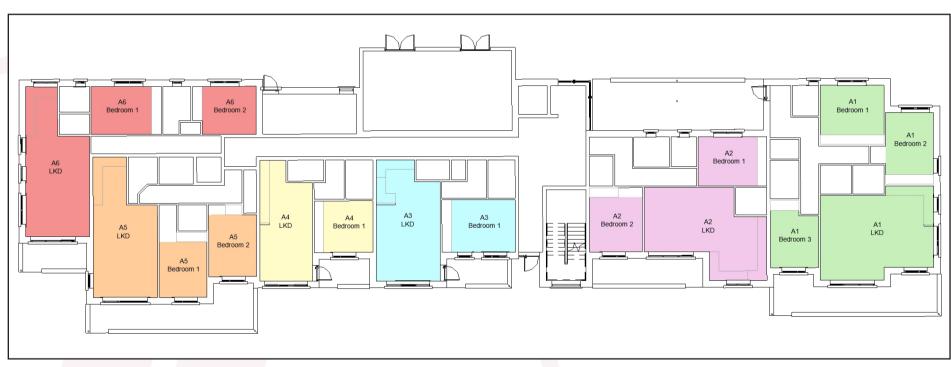


Figure 7.55: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





# 7.5.2 Block A/First Floor

	1			e Daylight Stand I				
		BS 82	.06-2		EN 17037		BS_EN 17	7037
Unit Room Number Description	Predicted ADF	Meets Criteria*	% of area above 300 Lux (recommendation >50%)	% of area above 100 Lux (recommendation >95%)	Meets Criteria*	% of area above target Lux* (recommendation >50%)	Meets Criteria*	
A7	LKD	2.20%	Yes	100%	100%	Yes	100%	Yes
A7	Bedroom 1	3.13%	Yes	93%	100%	Yes	100%	Yes
A7	Bedroom 2	2.78%	Yes	64%	100%	Yes	100%	Yes
A7	Bedroom 3	1.56%	Yes	89%	100%	Yes	100%	Yes
A8	LKD	2.39%	Yes	99%	100%	Yes	100%	Yes
A8	Bedroom 1	1.28%	Yes	17%	100%	No	100%	Yes
A8	Bedroom 2	1.55%	Yes	72%	100%	Yes	100%	Yes
A9	LKD	3.39%	Yes	90%	100%	Yes	100%	Yes
A9	Bedroom 1	2.65%	Yes	100%	100%	Yes	100%	Yes
A9	Bedroom 2	1.44%	Yes	65%	100%	Yes	100%	Yes
A10	LKD	3.41%	Yes	93%	100%	Yes	100%	Yes
A10	Bedroom 1	1.69%	Yes	96%	100%	Yes	100%	Yes
A11	LKD	2.33%	Yes	80%	100%	Yes	87%	Yes
A11	Bedroom 1	1.78%	Yes	93%	100%	Yes	100%	Yes
A11	Bedroom 2	1.28%	Yes	51%	100%	Yes	100%	Yes
A12	LKD	2.79%	Yes	100%	100%	Yes	100%	Yes
A12	Bedroom 1	3.37%	Yes	100%	100%	Yes	100%	Yes
A12	Bedroom 2	3.71%	Yes	100%	100%	Yes	100%	Yes



Figure 7.56: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





## 7.5.3 Block A/Second Floor

	T;	able No. 7.57:	Alternative	——————————————————————————————————————	rds Results Bloc	k A/Second	Floor	
		BS 82	06-2		EN 17037			7037
Unit Number	Room Description	Predicted ADF	Meets Criteria*	% of area above 300 Lux (recommendation >50%)	% of area above 100 Lux (recommendation >95%)	Meets Criteria*	% of area above target Lux* (recommendation >50%)	Meets Criteria*
A13	LKD	2.16%	Yes	100%	100%	Yes	100%	Yes
A13	Bedroom 1	3.16%	Yes	99%	100%	Yes	100%	Yes
A13	Bedroom 2	2.83%	Yes	67%	100%	Yes	100%	Yes
A13	Bedroom 3	1.52%	Yes	89%	100%	Yes	100%	Yes
A14	LKD	2.42%	Yes	100%	100%	Yes	100%	Yes
A14	Bedroom 1	1.41%	Yes	25%	100%	No	100%	Yes
A14	Bedroom 2	1.57%	Yes	77%	100%	Yes	100%	Yes
A15	LKD	3.44%	Yes	92%	100%	Yes	100%	Yes
A15	Bedroom 1	2.69%	Yes	100%	100%	Yes	100%	Yes
A15	Bedroom 2	1.46%	Yes	70%	100%	Yes	100%	Yes
A16	LKD	3.49%	Yes	95%	100%	Yes	100%	Yes
A16	Bedroom 1	1.72%	Yes	100%	100%	Yes	100%	Yes
A17	LKD	2.47%	Yes	82%	100%	Yes	89%	Yes
A17	Bedroom 1	1.83%	Yes	100%	100%	Yes	100%	Yes
A17	Bedroom 2	1.33%	Yes	60%	100%	Yes	100%	Yes
A18	LKD	3.19%	Yes	100%	100%	Yes	100%	Yes
A18	Bedroom 1	3.44%	Yes	100%	100%	Yes	100%	Yes
A18	Bedroom 2	3.78%	Yes	100%	100%	Yes	100%	Yes
*For inforn	nation regardii	ng the criteria	under the va	rious guidelines p	olease refer to sec	tion 3.0 on p	age 12.	



Figure 7.57: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





#### 7.5.4 Block A/Third Floor

	-	Table No. 7.58	:: Alternative	e Daylight Stand	ards Results Blo	ck A/Third I	=loor	
		BS 82	06-2	EN 17037			BS_EN 17037	
Unit Number	Room Description	Predicted ADF	Meets Criteria*	% of area above 300 Lux (recommendation >50%)	% of area above 100 Lux (recommendation >95%)	Meets Criteria*	% of area above target Lux* (recommendation >50%)	Meets Criteria*
A19	LKD	2.40%	Yes	100%	100%	Yes	100%	Yes
A19	Bedroom 1	1.05%	Yes	8%	100%	No	100%	Yes
A19	Bedroom 2	1.51%	Yes	77%	100%	Yes	100%	Yes
A20	LKD	3.43%	Yes	95%	100%	Yes	100%	Yes
A20	Bedroom 1	2.70%	Yes	100%	100%	Yes	100%	Yes
A20	Bedroom 2	1.40%	Yes	65%	100%	Yes	100%	Yes
A21	LKD	3.56%	Yes	95%	100%	Yes	100%	Yes
A21	Bedroom 1	1.67%	Yes	100%	100%	Yes	100%	Yes
A22	LKD	2.81%	Yes	100%	100%	Yes	100%	Yes
A22	Bedroom 1	1.78%	Yes	100%	100%	Yes	100%	Yes
A22	Bedroom 2	1.25%	Yes	56%	100%	Yes	100%	Yes
*For inforr	nation regardi	ng the criteria	under the va	rious guidelines p	olease refer to sec	tion 3.0 on p	age 12.	_



Figure 7.58: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





#### 7.5.5 Block B/Ground Floor

	Ta	able No. 7.59:	Alternative	Daylight Standa	ırds Results Bloc	k B/Ground	l Floor	
		BS 82	.06-2		EN 17037		BS_EN 17	7037
Unit Number	Room Description	Predicted ADF	Meets Criteria*	% of area above 300 Lux (recommendation >50%)	% of area above 100 Lux (recommendation >95%)	Meets Criteria*	% of area above target Lux* (recommendation >50%)	Meets Criteria*
B1	LKD	2.74%	Yes	100%	100%	Yes	100%	Yes
B1	Bedroom 1	3.05%	Yes	86%	100%	Yes	100%	Yes
B1	Bedroom 2	3.17%	Yes	96%	100%	Yes	100%	Yes
B1	Bedroom 3	1.39%	Yes	71%	100%	Yes	100%	Yes
B2	LKD	2.11%	Yes	97%	100%	Yes	100%	Yes
B2	Bedroom 1	1.44%	Yes	25%	100%	No	100%	Yes
B2	Bedroom 2	1.30%	Yes	45%	100%	No	100%	Yes
ВЗ	LKD	2.82%	Yes	81%	100%	Yes	95%	Yes
ВЗ	Bedroom 1	1.69%	Yes	97%	100%	Yes	100%	Yes
B4	LKD	2.98%	Yes	89%	100%	Yes	97%	Yes
В4	Bedroom 1	1.43%	Yes	63%	100%	Yes	100%	Yes
B5	LKD	2.19%	Yes	75%	100%	Yes	84%	Yes
B5	Bedroom 1	1.60%	Yes	77%	100%	Yes	100%	Yes
B5	Bedroom 2	1.09%	Yes	40%	100%	No	100%	Yes
В6	LKD	4.10%	Yes	100%	100%	Yes	100%	Yes
В6	Bedroom 1	3.10%	Yes	97%	100%	Yes	100%	Yes
В6	Bedroom 2	3.45%	Yes	100%	100%	Yes	100%	Yes



Figure 7.59: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





## 7.5.6 Block B/First Floor

		Table No. 7.60	D: Alternativ	e Daylight Stand	dards Results Blo	ock B/First F	Floor	
		BS 82	.06-2		EN 17037		BS_EN 17037	
Unit Number	Room Description	Predicted ADF	Meets Criteria*	% of area above 300 Lux (recommendation >50%)	% of area above 100 Lux (recommendation >95%)	Meets Criteria*	% of area above target Lux* (recommendation >50%)	Meets Criteria*
B7	LKD	2.17%	Yes	100%	100%	Yes	100%	Yes
B7	Bedroom 1	3.14%	Yes	94%	100%	Yes	100%	Yes
B7	Bedroom 2	2.83%	Yes	67%	100%	Yes	100%	Yes
B7	Bedroom 3	1.54%	Yes	85%	100%	Yes	100%	Yes
В8	LKD	2.32%	Yes	100%	100%	Yes	100%	Yes
В8	Bedroom 1	1.32%	Yes	17%	100%	No	100%	Yes
В8	Bedroom 2	1.52%	Yes	69%	100%	Yes	100%	Yes
В9	LKD	3.27%	Yes	87%	100%	Yes	100%	Yes
В9	Bedroom 1	2.57%	Yes	100%	100%	Yes	100%	Yes
В9	Bedroom 2	1.37%	Yes	55%	100%	Yes	100%	Yes
B10	LKD	3.33%	Yes	92%	100%	Yes	99%	Yes
B10	Bedroom 1	1.62%	Yes	92%	100%	Yes	100%	Yes
B11	LKD	2.40%	Yes	79%	100%	Yes	86%	Yes
B11	Bedroom 1	1.77%	Yes	95%	100%	Yes	100%	Yes
B11	Bedroom 2	1.27%	Yes	56%	100%	Yes	100%	Yes
B12	LKD	4.72%	Yes	100%	100%	Yes	100%	Yes
B12	Bedroom 1	3.36%	Yes	100%	100%	Yes	100%	Yes
B12	Bedroom 2	3.74%	Yes	100%	100%	Yes	100%	Yes

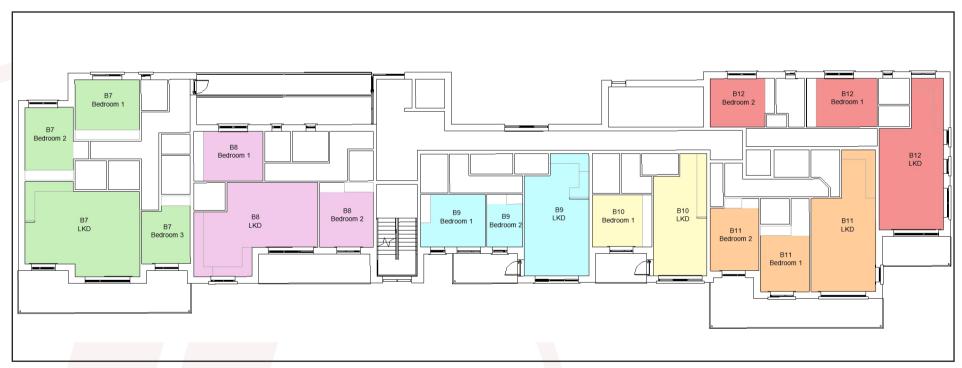


Figure 7.60: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





## 7.5.7 Block B/Second Floor

	Т	able No. 7.61:	Alternative	Daylight Standa	rds Results Bloc	k B/Second	Floor	
		BS 82	.06-2		EN 17037		BS_EN 17037	
Unit Number	Room Description	Predicted ADF	Meets Criteria*	% of area above 300 Lux (recommendation >50%)	% of area above 100 Lux (recommendation >95%)	Meets Criteria*	% of area above target Lux* (recommendation >50%)	Meets Criteria*
B13	LKD	2.14%	Yes	100%	100%	Yes	100%	Yes
B13	Bedroom 1	3.17%	Yes	99%	100%	Yes	100%	Yes
B13	Bedroom 2	2.88%	Yes	69%	100%	Yes	100%	Yes
B13	Bedroom 3	1.51%	Yes	91%	100%	Yes	100%	Yes
B14	LKD	2.37%	Yes	100%	100%	Yes	100%	Yes
B14	Bedroom 1	1.43%	Yes	25%	100%	No	100%	Yes
B14	Bedroom 2	1.56%	Yes	80%	100%	Yes	100%	Yes
B15	LKD	3.36%	Yes	90%	100%	Yes	100%	Yes
B15	Bedroom 1	2.66%	Yes	100%	100%	Yes	100%	Yes
B15	Bedroom 2	1.43%	Yes	75%	100%	Yes	100%	Yes
B16	LKD	3.41%	Yes	93%	100%	Yes	100%	Yes
B16	Bedroom 1	1.69%	Yes	100%	100%	Yes	100%	Yes
B17	LKD	2.49%	Yes	80%	100%	Yes	88%	Yes
B17	Bedroom 1	1.80%	Yes	96%	100%	Yes	100%	Yes
B17	Bedroom 2	1.32%	Yes	66%	100%	Yes	100%	Yes
B18	LKD	4.85%	Yes	100%	100%	Yes	100%	Yes
B18	Bedroom 1	3.42%	Yes	100%	100%	Yes	100%	Yes
B18	Bedroom 2	3.81%	Yes	100%	100%	Yes	100%	Yes
B17 B18 B18 B18	Bedroom 2 LKD Bedroom 1 Bedroom 2	1.32% 4.85% 3.42% 3.81%	Yes Yes Yes Yes	66% 100% 100% 100%	100% 100% 100%	Yes Yes Yes Yes	100% 100% 100% 100%	Yes Yes Yes



Figure 7.61: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





#### 7.5.8 Block B/Third Floor

	-	Table No. 7.62	:: Alternative	e Daylight Stand	ards Results Blo	ck B/Third	Floor		
		BS 82	BS 8206-2		EN 17037			BS_EN 17037	
Unit Number	Room Description	Predicted ADF	Meets Criteria*	% of area above 300 Lux (recommendation >50%)	% of area above 100 Lux (recommendation >95%)	Meets Criteria*	% of area above target Lux* (recommendation >50%)	Meets Criteria*	
B19	LKD	2.36%	Yes	100%	100%	Yes	100%	Yes	
B19	Bedroom 1	1.06%	Yes	10%	100%	No	100%	Yes	
B19	Bedroom 2	1.51%	Yes	84%	100%	Yes	100%	Yes	
B20	LKD	3.37%	Yes	94%	100%	Yes	100%	Yes	
B20	Bedroom 1	2.68%	Yes	100%	100%	Yes	100%	Yes	
B20	Bedroom 2	1.39%	Yes	70%	100%	Yes	100%	Yes	
B21	LKD	3.50%	Yes	95%	100%	Yes	100%	Yes	
B21	Bedroom 1	1.65%	Yes	100%	100%	Yes	100%	Yes	
B22	LKD	2.83%	Yes	100%	100%	Yes	100%	Yes	
B22	Bedroom 1	1.75%	Yes	98%	100%	Yes	100%	Yes	
B22	Bedroom 2	1.60%	Yes	80%	100%	Yes	100%	Yes	



Figure 7.62: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





## 7.5.9 Block C/Ground Floor

	Ta	able No. 7.63:	Alternative	Daylight Standa	ırds Results Bloc	k C/Ground	Floor	
		BS 82	06-2		EN 17037		BS_EN 17	7037
Unit Number	Room Description	Predicted ADF	Meets Criteria*	% of area above 300 Lux (recommendation >50%)	% of area above 100 Lux (recommendation >95%)	Meets Criteria*	% of area above target Lux* (recommendation >50%)	Meets Criteria*
C1	LKD	4.15%	Yes	100%	100%	Yes	100%	Yes
C1	Bedroom 1	2.93%	Yes	91%	100%	Yes	100%	Yes
C1	Bedroom 2	2.83%	Yes	100%	100%	Yes	100%	Yes
C2	LKD	2.30%	Yes	88%	100%	Yes	100%	Yes
C2	Bedroom 1	1.07%	Yes	28%	98%	No	98%	Yes
C3	LKD	3.13%	Yes	75%	100%	Yes	98%	Yes
C3	Bedroom 1	2.57%	Yes	67%	100%	Yes	100%	Yes
C3	Bedroom 2	3.48%	Yes	100%	100%	Yes	100%	Yes
C4	LKD	2.07%	Yes	97%	100%	Yes	100%	Yes
C4	Bedroom 1	2.17%	Yes	78%	100%	Yes	100%	Yes
C4	Bedroom 2	3.51%	Yes	100%	100%	Yes	100%	Yes
C4	Bedroom 3	3.37%	Yes	100%	100%	Yes	100%	Yes
C5	LKD	3.41%	Yes	100%	100%	Yes	100%	Yes
C5	Bedroom 1	1.65%	Yes	63%	100%	Yes	100%	Yes
C5	Bedroom 2	1.67%	Yes	75%	100%	Yes	100%	Yes
C6	LKD	3.80%	Yes	100%	100%	Yes	100%	Yes
C6	Bedroom 1	2.90%	Yes	93%	100%	Yes	100%	Yes
C6	Bedroom 2	1.52%	Yes	60%	100%	Yes	100%	Yes
C7	LKD	3.16%	Yes	100%	100%	Yes	100%	Yes
C7	Bedroom 1	3.45%	Yes	100%	100%	Yes	100%	Yes
C7	Bedroom 2	2.77%	Yes	78%	100%	Yes	100%	Yes
*For inform	nation regardi	ng the criteria	under the va	rious guidelines p	olease refer to sec	tion 3.0 on p	age 12.	

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Figure 7.63: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).



#### 7.5.10 Block C/First Floor

		Table No. 7.6	4: Alternativ	e Daylight Stand	dards Results Blo	ock C/First F	Floor	
		BS 82	06-2		EN 17037		BS_EN 17	7037
Unit Number	Room Description	Predicted ADF	Meets Criteria*	% of area above 300 Lux (recommendation >50%)	% of area above 100 Lux (recommendation >95%)	Meets Criteria*	% of area above target Lux* (recommendation >50%)	Meets Criteria*
C8	LKD	3.66%	Yes	100%	100%	Yes	100%	Yes
C8	Bedroom 1	3.23%	Yes	100%	100%	Yes	100%	Yes
C8	Bedroom 2	3.88%	Yes	100%	100%	Yes	100%	Yes
C9	LKD	2.28%	Yes	96%	100%	Yes	100%	Yes
C9	Bedroom 1	1.07%	Yes	28%	100%	No	100%	Yes
C10	LKD	3.11%	Yes	77%	100%	Yes	98%	Yes
C10	Bedroom 1	2.90%	Yes	87%	100%	Yes	100%	Yes
C10	Bedroom 2	3.75%	Yes	100%	100%	Yes	100%	Yes
C11	LKD	2.33%	Yes	100%	100%	Yes	100%	Yes
C11	Bedroom 1	2.13%	Yes	88%	100%	Yes	100%	Yes
C11	Bedroom 2	3.84%	Yes	100%	100%	Yes	100%	Yes
C11	Bedroom 3	3.58%	Yes	100%	100%	Yes	100%	Yes
C12	LKD	3.90%	Yes	100%	100%	Yes	100%	Yes
C12	Bedroom 1	3.04%	Yes	99%	100%	Yes	100%	Yes
C12	Bedroom 2	1.42%	Yes	54%	100%	Yes	100%	Yes
C13	LKD	4.03%	Yes	100%	100%	Yes	100%	Yes
C13	Bedroom 1	3.15%	Yes	99%	100%	Yes	100%	Yes
C13	Bedroom 2	1.47%	Yes	63%	100%	Yes	100%	Yes
C14	LKD	3.30%	Yes	100%	100%	Yes	100%	Yes
C14	Bedroom 1	3.88%	Yes	100%	100%	Yes	100%	Yes
C14	Bedroom 2	3.16%	Yes	100%	100%	Yes	100%	Yes



Figure 7.64: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).



#### 7.5.11 Block C/Second Floor

	Ta	able No. 7.65:	Alternative	Daylight Standa	ırds Results Bloc	k C/Second	Floor	
		BS 82	06-2		EN 17037		BS_EN 17	7037
Unit Number	Room Description	Predicted ADF	Meets Criteria*	% of area above 300 Lux (recommendation >50%)	% of area above 100 Lux (recommendation >95%)	Meets Criteria*	% of area above target Lux* (recommendation >50%)	Meets Criteria*
C15	LKD	3.80%	Yes	100%	100%	Yes	100%	Yes
C15	Bedroom 1	3.56%	Yes	100%	100%	Yes	100%	Yes
C15	Bedroom 2	3.96%	Yes	100%	100%	Yes	100%	Yes
C16	LKD	2.43%	Yes	100%	100%	Yes	100%	Yes
C16	Bedroom 1	1.15%	Yes	34%	100%	No	100%	Yes
C17	LKD	3.21%	Yes	80%	100%	Yes	100%	Yes
C17	Bedroom 1	3.00%	Yes	100%	100%	Yes	100%	Yes
C17	Bedroom 2	3.87%	Yes	100%	100%	Yes	100%	Yes
C18	LKD	2.57%	Yes	100%	100%	Yes	100%	Yes
C18	Bedroom 1	2.24%	Yes	97%	100%	Yes	100%	Yes
C18	Bedroom 2	3.99%	Yes	100%	100%	Yes	100%	Yes
C18	Bedroom 3	3.66%	Yes	100%	100%	Yes	100%	Yes
C19	LKD	4.15%	Yes	100%	100%	Yes	100%	Yes
C19	Bedroom 1	3.16%	Yes	100%	100%	Yes	100%	Yes
C19	Bedroom 2	1.49%	Yes	62%	100%	Yes	100%	Yes
C20	LKD	4.19%	Yes	100%	100%	Yes	100%	Yes
C20	Bedroom 1	3.23%	Yes	100%	100%	Yes	100%	Yes
C20	Bedroom 2	1.52%	Yes	71%	100%	Yes	100%	Yes
C21	LKD	3.40%	Yes	100%	100%	Yes	100%	Yes
C21	Bedroom 1	4.05%	Yes	100%	100%	Yes	100%	Yes
C21	Bedroom 2	3.32%	Yes	100%	100%	Yes	100%	Yes



Figure 7.65: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).



#### 7.5.12 Block C/Third Floor

	-	Table No. 7.66	S: Alternative	e Daylight Stanc	lards Results Blo	ck C/Third	Floor		
		BS 82	.06-2		EN 17037			BS_EN 17037	
Unit Number	Room Description	Predicted ADF	Meets Criteria*	% of area above 300 Lux (recommendation >50%)	% of area above 100 Lux (recommendation >95%)	Meets Criteria*	% of area above target Lux* (recommendation >50%)	Meets Criteria*	
C22	LKD	3.78%	Yes	100%	100%	Yes	100%	Yes	
C22	Bedroom 1	3.80%	Yes	100%	100%	Yes	100%	Yes	
C22	Bedroom 2	4.02%	Yes	100%	100%	Yes	100%	Yes	
C23	LKD	2.60%	Yes	100%	100%	Yes	100%	Yes	
C23	Bedroom 1	1.35%	Yes	55%	100%	Yes	100%	Yes	
C24	LKD	3.28%	Yes	82%	100%	Yes	100%	Yes	
C24	Bedroom 1	3.15%	Yes	100%	100%	Yes	100%	Yes	
C24	Bedroom 2	4.00%	Yes	100%	100%	Yes	100%	Yes	
C25	LKD	2.81%	Yes	100%	100%	Yes	100%	Yes	
C25	Bedroom 1	2.26%	Yes	100%	100%	Yes	100%	Yes	
C25	Bedroom 2	4.10%	Yes	100%	100%	Yes	100%	Yes	
C25	Bedroom 3	3.72%	Yes	100%	100%	Yes	100%	Yes	
C26	LKD	4.30%	Yes	100%	100%	Yes	100%	Yes	
C26	Bedroom 1	3.23%	Yes	100%	100%	Yes	100%	Yes	
C26	Bedroom 2	1.52%	Yes	70%	100%	Yes	100%	Yes	
C27	LKD	4.27%	Yes	100%	100%	Yes	100%	Yes	
C27	Bedroom 1	3.27%	Yes	100%	100%	Yes	100%	Yes	
C27	Bedroom 2	1.53%	Yes	75%	100%	Yes	100%	Yes	



Figure 7.66: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).



# 7.5.13 Neighbourhood Centre/Ground Floor

	Table No.	7.67: Alternat	ive Daylight	Standards Res	ults Neighbourh	ood Centre,	/Ground Floor			
		BS 82	06-2		EN 17037		BS_EN 17037			
Unit Number	Room Description	Predicted ADF	Meets Criteria*	% of area above 300 Lux (recommendation >50%)	% of area above 100 Lux (recommendation >95%)	Meets Criteria*	% of area above target Lux* (recommendation >50%)	Meets Criteria*		
Creche	Classroom 1	2.76%	Yes	72%	100%	Yes	100%	Yes		
Creche	Classroom 2	3.37%	Yes	97%	100%	Yes	100%	Yes		
Creche	Classroom 3	2.85%	Yes	85%	97%	Yes	96%	Yes		
Creche	Classroom 4	1.81%	Yes	41%	100%	No	99%	Yes		
Creche	Classroom 5	1.76%	Yes	45%	100%	No	100%	Yes		
Creche	Classroom 6	2.10%	Yes	35%	87%	No	71%	Yes		
Creche	Classroom 7	3.67%	Yes	93%	96%	Yes	95%	Yes		
*For inforn	*For information regarding the criteria under the various guidelines please refer to section 3.0 on page 12.									



Figure 7.67: Floor plan of assessed building (Below), Keyplan highlighting the assessed building (Above).



# 7.5.14 Neighbourhood Centre/First Floor

	Table No	o. 7.68: Altern	ative Daylig	ht Standards Re	esults Neighbour	hood Centi	e/First Floor	
		BS 82	.06-2		EN 17037		BS_EN 17	7037
Unit Number	Room Description	Predicted ADF	Meets Criteria*	% of area above 300 Lux (recommendation >50%)	% of area above 100 Lux (recommendation >95%)	Meets Criteria*	% of area above target Lux* (recommendation >50%)	Meets Criteria*
Creche	Classroom 8	2.72%	Yes	100%	100%	Yes	100%	Yes
C1	LKD	3.41%	Yes	100%	100%	Yes	100%	Yes
C1	Bedroom 1	3.08%	Yes	100%	100%	Yes	100%	Yes
C1	Bedroom 2	2.81%	Yes	97%	100%	Yes	100%	Yes
C2	LKD	3.24%	Yes	100%	100%	Yes	100%	Yes
C2	Bedroom 1	3.08%	Yes	100%	100%	Yes	100%	Yes
C2	Bedroom 2	2.82%	Yes	100%	100%	Yes	100%	Yes
C3	LKD	2.14%	Yes	72%	100%	Yes	100%	Yes
C3	Bedroom 1	3.43%	Yes	100%	100%	Yes	100%	Yes
C3	Bedroom 2	1.50%	Yes	53%	100%	Yes	100%	Yes
C4	LKD	3.08%	Yes	95%	100%	Yes	100%	Yes
C4	Bedroom 1	2.41%	Yes	55%	100%	Yes	100%	Yes
C4	Bedroom 2	1.85%	Yes	31%	100%	No	100%	Yes
N1	LKD	3.55%	Yes	85%	100%	Yes	93%	Yes
N1	Bedroom 1	1.47%	Yes	37%	100%	No	100%	Yes
N2	LKD	4.09%	Yes	100%	100%	Yes	100%	Yes
N2	Bedroom 1	3.89%	Yes	100%	100%	Yes	100%	Yes
N2	Bedroom 2	1.18%	Yes	16%	100%	No	100%	Yes
N3	LKD	2.95%	Yes	100%	100%	Yes	100%	Yes
N3	Bedroom 1	1.18%	Yes	44%	100%	No	100%	Yes
N3	Bedroom 2	2.52%	Yes	100%	100%	Yes	100%	Yes



Figure 7.68: Floor plan of assessed building (Below), Keyplan highlighting the assessed building (Above).



# 7.5.15 Neighbourhood Centre/Second Floor

	Table No.	7.69: Alternat	ive Daylight	t Standards Res	ults Neighbourh	ood Centre	/Second Floor		
		BS 82	06-2		EN 17037			BS_EN 17037	
Unit Number	Room Description	Predicted ADF	Meets Criteria*	% of area above 300 Lux (recommendation >50%)	% of area above 100 Lux (recommendation >95%)	Meets Criteria*	% of area above target Lux* (recommendation >50%)	Meets Criteria*	
N4	LKD	3.61%	Yes	86%	100%	Yes	98%	Yes	
N4	Bedroom 1	1.71%	Yes	61%	100%	Yes	100%	Yes	
N5	LKD	4.39%	Yes	100%	100%	Yes	100%	Yes	
N5	Bedroom 1	3.98%	Yes	100%	100%	Yes	100%	Yes	
N5	Bedroom 2	1.38%	Yes	37%	100%	No	100%	Yes	
N6	LKD	3.30%	Yes	100%	100%	Yes	100%	Yes	
N6	Bedroom 1	1.40%	Yes	63%	100%	Yes	100%	Yes	
N6	Bedroom 2	2.57%	Yes	100%	100%	Yes	100%	Yes	
					lease refer to sec			yes	

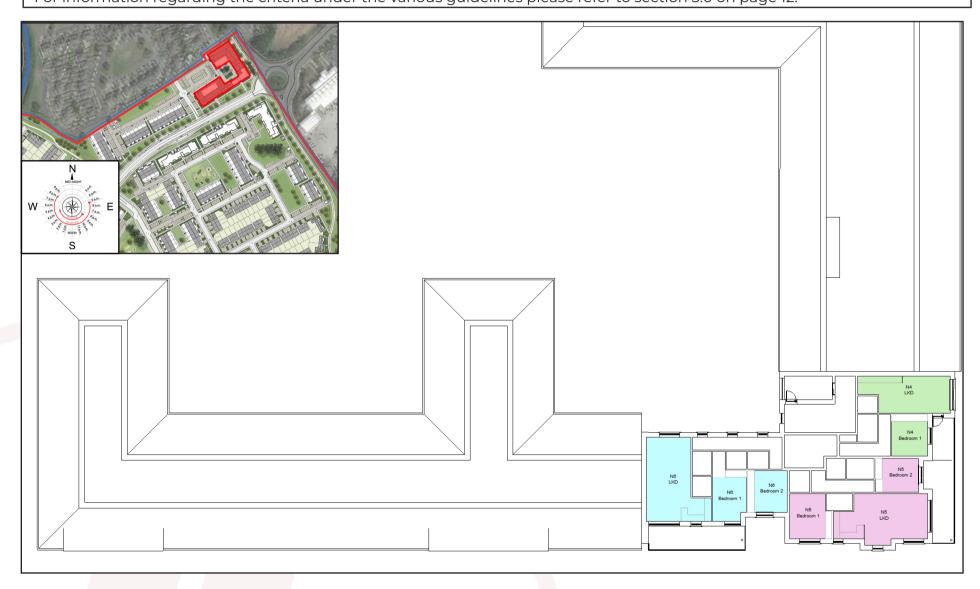


Figure 7.69: Floor plan of assessed building (Below), Keyplan highlighting the assessed building (Above).



# 7.5.16 Neighbourhood Centre/Third Floor

	Table No	o. 7.70: Alterna	ative Dayligh	nt Standards Re	sults Neighbourl	hood Centr	e/Third Floor	
		BS 82	06-2		EN 17037		BS_EN 17037	
Unit Number	Room Description	Predicted ADF	Meets Criteria*	% of area above 300 Lux (recommendation >50%)	% of area above 100 Lux (recommendation >95%)	Meets Criteria*	% of area above target Lux* (recommendation >50%)	Meets Criteria*
N7	LKD	3.70%	Yes	89%	100%	Yes	100%	Yes
N7	Bedroom 1	2.01%	Yes	96%	100%	Yes	100%	Yes
N8	LKD	4.67%	Yes	100%	100%	Yes	100%	Yes
N8	Bedroom 1	4.05%	Yes	100%	100%	Yes	100%	Yes
N8	Bedroom 2	1.63%	Yes	57%	100%	Yes	100%	Yes
N9	LKD	3.96%	Yes	100%	100%	Yes	100%	Yes
N9	Bedroom 1	1.87%	Yes	83%	100%	Yes	100%	Yes
N9	Bedroom 2	1.75%	Yes	100%	100%	Yes	100%	Yes

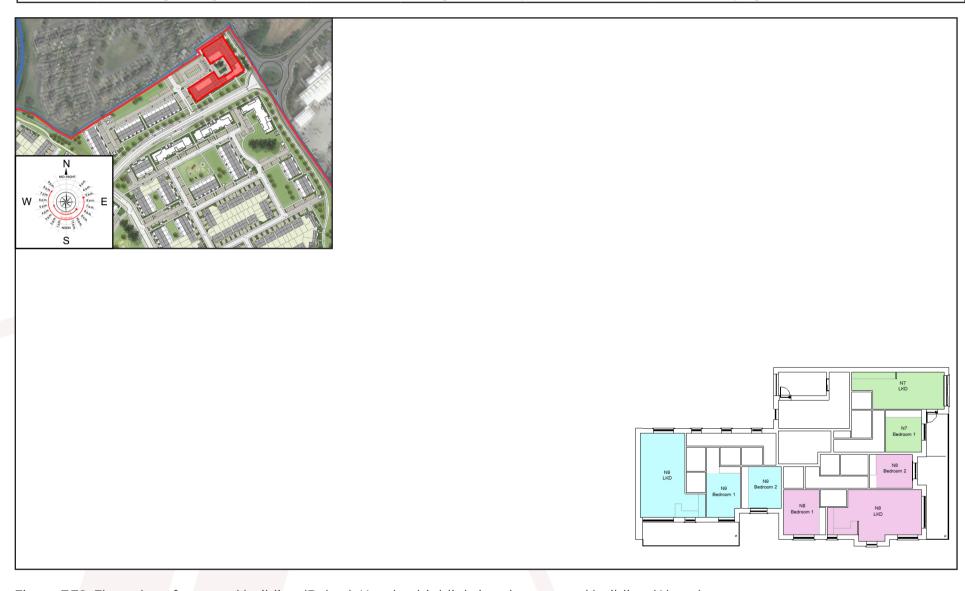


Figure 7.70: Floor plan of assessed building (Below), Keyplan highlighting the assessed building (Above).



## 7.5.17 Duplex Type 1 (No. 278-285), Ground Floor

	Table No. 7.	71: Alternative	e Daylight S	tandards Result	s Duplex Type 1	(No. 278-28	5), Ground Floor		
		BS 82	06-2		EN 17037			BS_EN 17037	
Unit Number	Room Description	Predicted ADF	Meets Criteria*	% of area above 300 Lux (recommendation >50%)	% of area above 100 Lux (recommendation >95%)	Meets Criteria*	% of area above target Lux* (recommendation >50%)	Meets Criteria*	
278	LKD	3.09%	Yes	99%	100%	Yes	100%	Yes	
278	Bedroom 1	1.31%	Yes	19%	79%	No	79%	Yes	
278	Bedroom 2	2.68%	Yes	62%	100%	Yes	100%	Yes	
280	LKD	2.79%	Yes	83%	100%	Yes	100%	Yes	
280	Bedroom 1	1.26%	Yes	17%	74%	No	74%	Yes	
280	Bedroom 2	2.61%	Yes	60%	100%	Yes	100%	Yes	
282	LKD	2.77%	Yes	81%	100%	Yes	100%	Yes	
282	Bedroom 1	1.27%	Yes	17%	77%	No	77%	Yes	
282	Bedroom 2	2.60%	Yes	60%	100%	Yes	100%	Yes	
284	LKD	2.90%	Yes	93%	100%	Yes	100%	Yes	
284	Bedroom 1	1.25%	Yes	17%	74%	No	74%	Yes	
284	Bedroom 2	2.62%	Yes	60%	100%	Yes	100%	Yes	
*For inform	mation regardi	ng the criteria	under the va	rious guidelines p	olease refer to sec	tion 3.0 on p	age 12.	·	



Figure 7.71: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





## 7.5.18 Duplex Type 1 (No. 278-285), First Floor

	Table No.	7.72: Alternat	ive Daylight	Standards Resu	ılts Duplex Type	1 (No. 278-2	85), First Floor			
		BS 82	06-2		EN 17037			BS_EN 17037		
Unit Number	Room Description	Predicted ADF	Meets Criteria*	% of area above 300 Lux (recommendation >50%)	% of area above 100 Lux (recommendation >95%)	Meets Criteria*	% of area above target Lux* (recommendation >50%)	Meets Criteria*		
279	Kitchen	3.46%	Yes	100%	100%	Yes	100%	Yes		
279	Living Room	4.16%	Yes	100%	100%	Yes	100%	Yes		
281	Kitchen	3.02%	Yes	100%	100%	Yes	100%	Yes		
281	Living Room	3.12%	Yes	97%	100%	Yes	100%	Yes		
283	Kitchen	3.01%	Yes	100%	100%	Yes	100%	Yes		
283	Living Room	3.12%	Yes	98%	100%	Yes	100%	Yes		
285	Kitchen	2.96%	Yes	100%	100%	Yes	100%	Yes		
285	Living Room	3.09%	Yes	94%	100%	Yes	100%	Yes		
*For inform	*For information regarding the criteria under the various guidelines please refer to section 3.0 on page 12.									

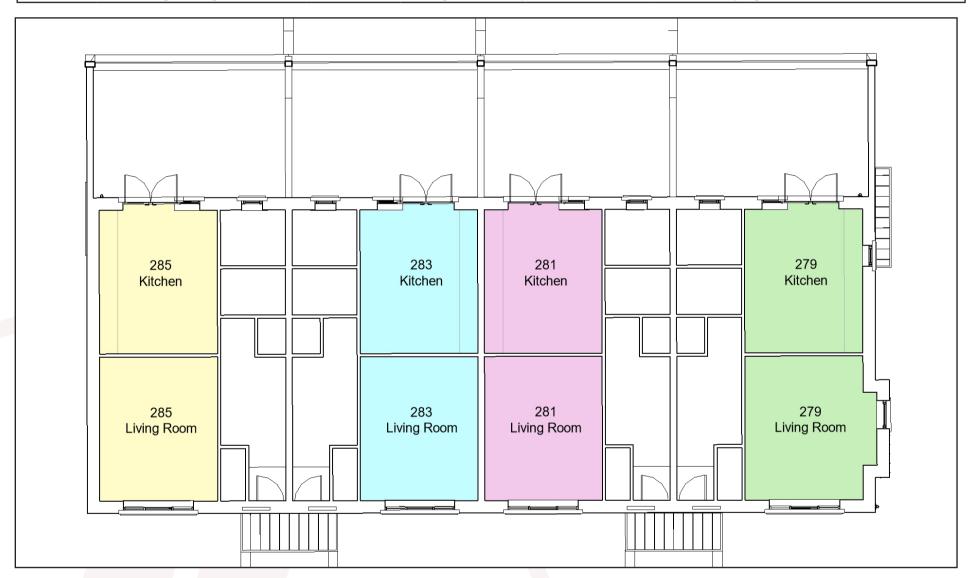
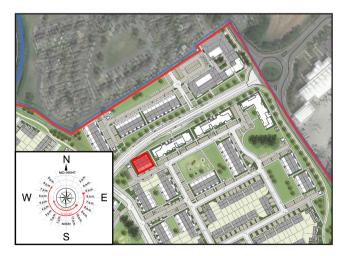


Figure 7.72: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





# 7.5.19 Duplex Type 1 (No. 278-285), Second Floor

	Table No. 7.	73: Alternativ	e Daylight S	tandards Result	s Duplex Type 1	(No. 278-28	5), Second Floor		
		BS 82	06-2		EN 17037			BS_EN 17037	
Unit Number	Room Description	Predicted ADF	Meets Criteria*	% of area above 300 Lux (recommendation >50%)	% of area above 100 Lux (recommendation >95%)	Meets Criteria*	% of area above target Lux* (recommendation >50%)	Meets Criteria*	
279	Bedroom 1	2.68%	Yes	100%	100%	Yes	100%	Yes	
279	Bedroom 2	4.62%	Yes	100%	100%	Yes	100%	Yes	
279	Bedroom 3	4.04%	Yes	100%	100%	Yes	100%	Yes	
281	Bedroom 1	2.75%	Yes	100%	100%	Yes	100%	Yes	
281	Bedroom 2	3.47%	Yes	100%	100%	Yes	100%	Yes	
281	Bedroom 3	3.14%	Yes	100%	100%	Yes	100%	Yes	
283	Bedroom 1	2.68%	Yes	100%	100%	Yes	100%	Yes	
283	Bedroom 2	3.58%	Yes	100%	100%	Yes	100%	Yes	
283	Bedroom 3	3.11%	Yes	98%	100%	Yes	100%	Yes	
285	Bedroom 1	2.74%	Yes	100%	100%	Yes	100%	Yes	
285	Bedroom 2	3.46%	Yes	100%	100%	Yes	100%	Yes	
285	Bedroom 3	2.78%	Yes	91%	100%	Yes	100%	Yes	
*For inform	nation regardi	ng the criteria	under the va	rious guidelines p	olease refer to sec	tion 3.0 on p	age 12.	·	

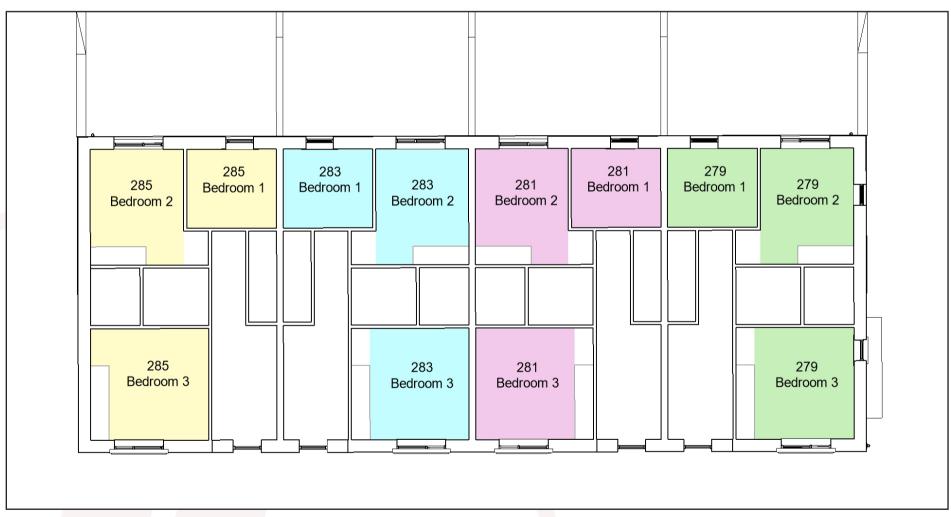
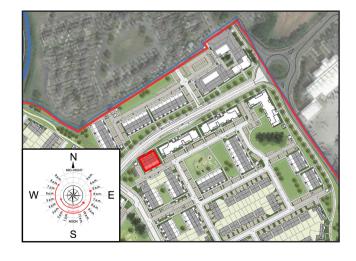


Figure 7.73: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).



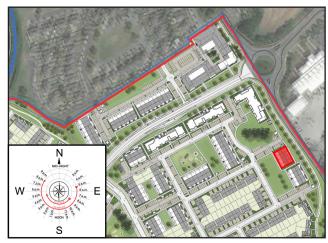


## 7.5.20 Duplex Type 1 (No. 357-364), Ground Floor

	Table No. 7.	74: Alternativ	e Daylight S	tandards Result	s Duplex Type 1	(No. 357-36	4), Ground Floor		
		BS 82	06-2		EN 17037			BS_EN 17037	
Unit Number	Room Description	Predicted ADF	Meets Criteria*	% of area above 300 Lux (recommendation >50%)	% of area above 100 Lux (recommendation >95%)	Meets Criteria*	% of area above target Lux* (recommendation >50%)	Meets Criteria*	
357	LKD	3.24%	Yes	98%	100%	Yes	100%	Yes	
357	Bedroom 1	1.34%	Yes	19%	81%	No	81%	Yes	
357	Bedroom 2	2.76%	Yes	67%	100%	Yes	100%	Yes	
359	LKD	2.95%	Yes	88%	100%	Yes	100%	Yes	
359	Bedroom 1	1.33%	Yes	21%	87%	No	87%	Yes	
359	Bedroom 2	2.71%	Yes	67%	100%	Yes	100%	Yes	
361	LKD	2.95%	Yes	87%	100%	Yes	100%	Yes	
361	Bedroom 1	1.32%	Yes	19%	79%	No	79%	Yes	
361	Bedroom 2	2.71%	Yes	67%	100%	Yes	100%	Yes	
363	LKD	3.29%	Yes	97%	100%	Yes	100%	Yes	
363	Bedroom 1	1.31%	Yes	21%	85%	No	85%	Yes	
363	Bedroom 2	2.73%	Yes	67%	100%	Yes	100%	Yes	
*For inform	nation regardi	ng the criteria	under the va	rious guidelines p	olease refer to sec	tion 3.0 on p	age 12.		



Figure 7.74: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





## 7.5.21 Duplex Type 1 (No. 357-364), First Floor

	Table No.	7.75: Alternat	ive Daylight	: Standards Resi	ultsDuplex Type	1 (No. 357-3	64), First Floor		
		BS 82	06-2		EN 17037			BS_EN 17037	
Unit Number	Room Description	Predicted ADF	Meets Criteria*	% of area above 300 Lux (recommendation >50%)	% of area above 100 Lux (recommendation >95%)	Meets Criteria*	% of area above target Lux* (recommendation >50%)	Meets Criteria*	
358	Kitchen	3.48%	Yes	100%	100%	Yes	100%	Yes	
358	Living Room	4.19%	Yes	100%	100%	Yes	100%	Yes	
360	Kitchen	3.07%	Yes	100%	100%	Yes	100%	Yes	
360	Living Room	3.21%	Yes	100%	100%	Yes	100%	Yes	
362	Kitchen	3.06%	Yes	100%	100%	Yes	100%	Yes	
362	Living Room	3.20%	Yes	100%	100%	Yes	100%	Yes	
364	Kitchen	3.05%	Yes	100%	100%	Yes	100%	Yes	
364	Living Room	3.20%	Yes	100%	100%	Yes	100%	Yes	
*For inform	nation regarding	na the criteria	under the va	rious quidalinas r	olease refer to sec	tion 30 on n	age 12		

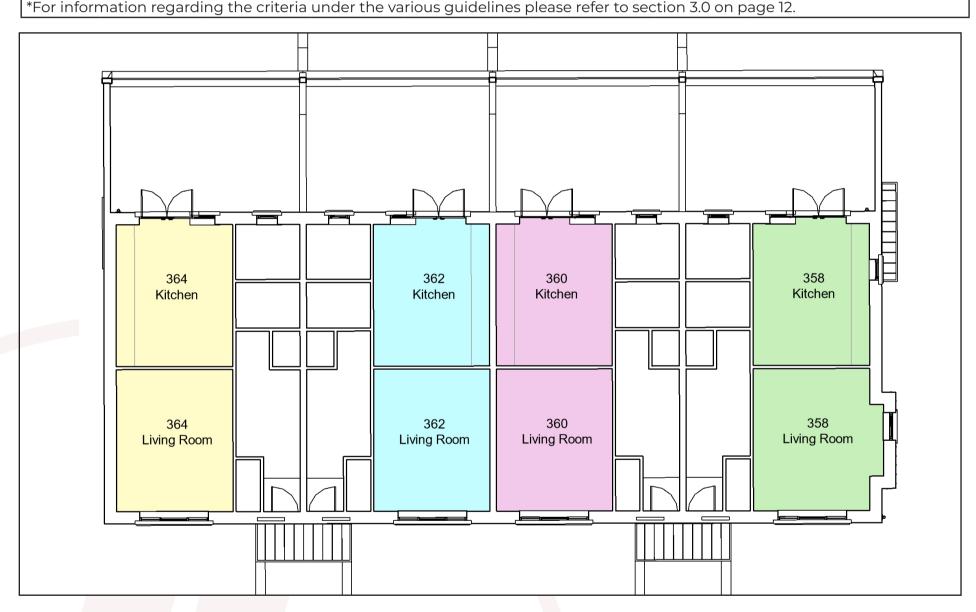


Figure 7.75: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





## 7.5.22 Duplex Type 1 (No. 357-364), Second Floor

	Table No. 7.	76: Alternativ	e Daylight S	tandards Result	s Duplex Type 1	(No. 357-364	4), Second Floor	
		BS 82	06-2		EN 17037		BS_EN 17037	
Unit Number	Room Description	Predicted ADF	Meets Criteria*	% of area above 300 Lux (recommendation >50%)	% of area above 100 Lux (recommendation >95%)	Meets Criteria*	% of area above target Lux* (recommendation >50%)	Meets Criteria*
358	Bedroom 1	2.74%	Yes	100%	100%	Yes	100%	Yes
358	Bedroom 2	4.65%	Yes	100%	100%	Yes	100%	Yes
358	Bedroom 3	4.14%	Yes	100%	100%	Yes	100%	Yes
360	Bedroom 1	2.79%	Yes	100%	100%	Yes	100%	Yes
360	Bedroom 2	3.53%	Yes	100%	100%	Yes	100%	Yes
360	Bedroom 3	3.26%	Yes	100%	100%	Yes	100%	Yes
362	Bedroom 1	2.72%	Yes	100%	100%	Yes	100%	Yes
362	Bedroom 2	3.64%	Yes	100%	100%	Yes	100%	Yes
362	Bedroom 3	3.25%	Yes	100%	100%	Yes	100%	Yes
364	Bedroom 1	2.78%	Yes	100%	100%	Yes	100%	Yes
364	Bedroom 2	3.51%	Yes	100%	100%	Yes	100%	Yes
364	Bedroom 3	2.92%	Yes	100%	100%	Yes	100%	Yes
*For inform	nation regardii	ng the criteria	under the va	rious guidelines p	olease refer to sec	tion 3.0 on p	age 12.	

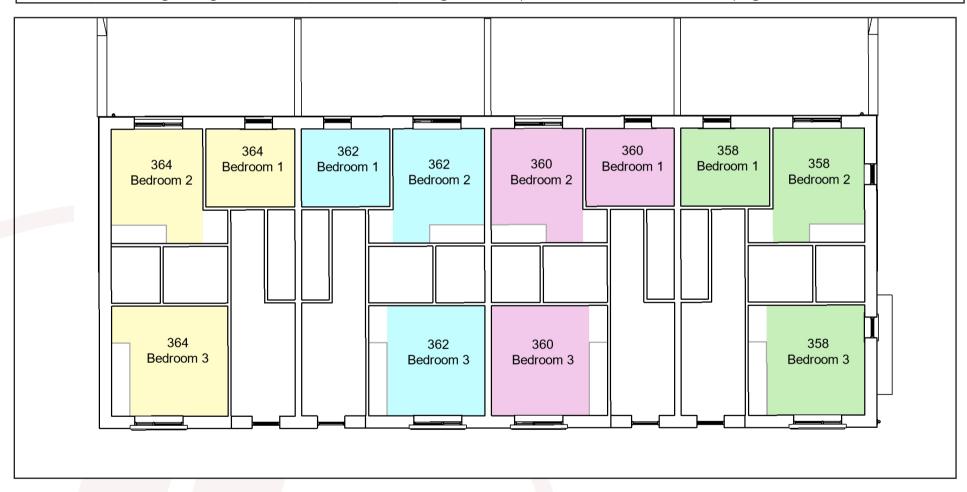
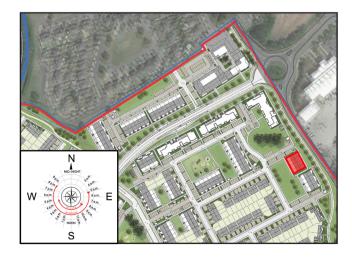


Figure 7.76: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).



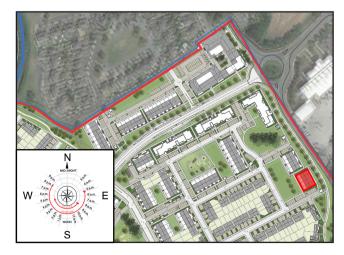


## 7.5.23 Duplex Type 1 (No. 365-372), Ground Floor

	Table No. 7.	77: Alternativ	e Daylight S	tandards Result	s Duplex Type 1	(No. 365-372	2), Ground Floor		
		BS 82	06-2		EN 17037			BS_EN 17037	
Unit Number	Room Description	Predicted ADF	Meets Criteria*	% of area above 300 Lux (recommendation >50%)	% of area above 100 Lux (recommendation >95%)	Meets Criteria*	% of area above target Lux* (recommendation >50%)	Meets Criteria*	
365	LKD	2.90%	Yes	94%	100%	Yes	100%	Yes	
365	Bedroom 1	1.35%	Yes	19%	83%	No	83%	Yes	
365	Bedroom 2	2.76%	Yes	67%	100%	Yes	100%	Yes	
367	LKD	2.96%	Yes	87%	100%	Yes	100%	Yes	
367	Bedroom 1	1.33%	Yes	21%	87%	No	87%	Yes	
367	Bedroom 2	2.71%	Yes	67%	100%	Yes	100%	Yes	
369	LKD	2.96%	Yes	87%	100%	Yes	100%	Yes	
369	Bedroom 1	1.32%	Yes	19%	79%	No	79%	Yes	
369	Bedroom 2	2.71%	Yes	67%	100%	Yes	100%	Yes	
371	LKD	3.45%	Yes	100%	100%	Yes	100%	Yes	
371	Bedroom 1	1.34%	Yes	21%	87%	No	87%	Yes	
371	Bedroom 2	2.75%	Yes	67%	100%	Yes	100%	Yes	
*For inform	mation regardi	ng the criteria	under the va	rious guidelines p	olease refer to sec	tion 3.0 on p	age 12.	·	



Figure 7.77: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





## 7.5.24 Duplex Type 1 (No. 365-372), First Floor

	Table No.	7.78: Alternat	ive Daylight	Standards Resu	ılts Duplex Type	1 (No. 365-3	72), First Floor		
		BS 82	06-2		EN 17037			BS_EN 17037	
Unit Number	Room Description	Predicted ADF	Meets Criteria*	% of area above 300 Lux (recommendation >50%)	% of area above 100 Lux (recommendation >95%)	Meets Criteria*	% of area above target Lux* (recommendation >50%)	Meets Criteria*	
366	Kitchen	3.15%	Yes	100%	100%	Yes	100%	Yes	
366	Living Room	3.94%	Yes	100%	100%	Yes	100%	Yes	
368	Kitchen	3.07%	Yes	100%	100%	Yes	100%	Yes	
368	Living Room	3.23%	Yes	100%	100%	Yes	100%	Yes	
370	Kitchen	3.07%	Yes	100%	100%	Yes	100%	Yes	
370	Living Room	3.22%	Yes	100%	100%	Yes	100%	Yes	
372	Kitchen	3.06%	Yes	100%	100%	Yes	100%	Yes	
372	Living Room	3.24%	Yes	100%	100%	Yes	100%	Yes	

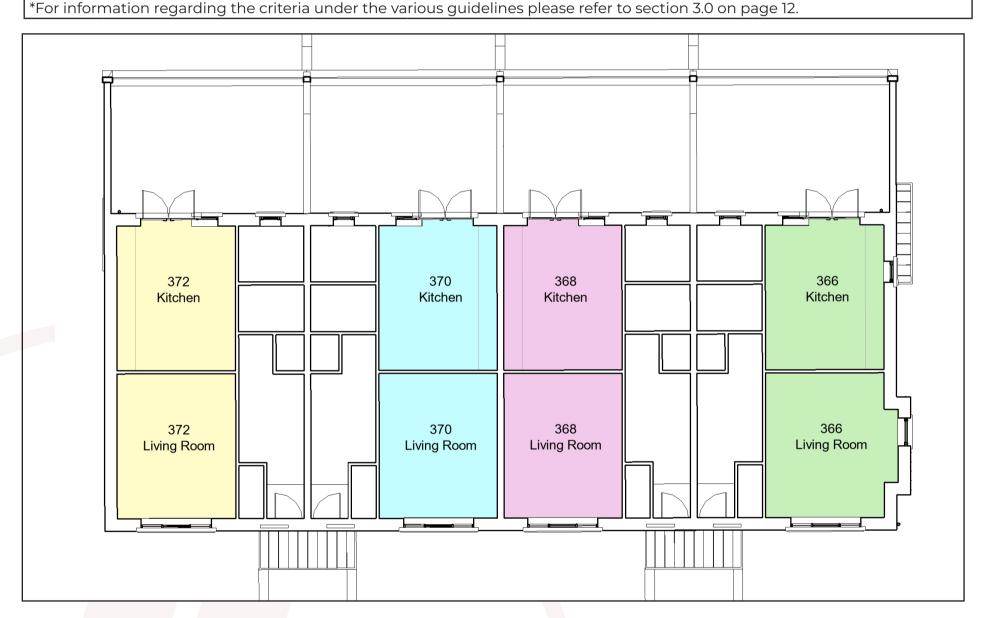
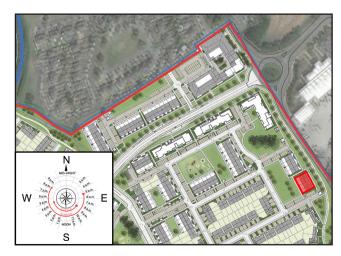


Figure 7.78: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





## 7.5.25 Duplex Type 1 (No. 365-372), Second Floor

	Table No. 7.	79: Alternativ	e Daylight S	itandards Result	ts Duplex Type 1	(No. 365-372	2), Second Floor		
		BS 82	06-2		EN 17037			BS_EN 17037	
Unit Number	Room Description	Predicted ADF	Meets Criteria*	% of area above 300 Lux (recommendation >50%)	% of area above 100 Lux (recommendation >95%)	Meets Criteria*	% of area above target Lux* (recommendation >50%)	Meets Criteria*	
366	Bedroom 1	2.72%	Yes	100%	100%	Yes	100%	Yes	
366	Bedroom 2	4.20%	Yes	100%	100%	Yes	100%	Yes	
366	Bedroom 3	4.09%	Yes	100%	100%	Yes	100%	Yes	
368	Bedroom 1	2.78%	Yes	100%	100%	Yes	100%	Yes	
368	Bedroom 2	3.53%	Yes	100%	100%	Yes	100%	Yes	
368	Bedroom 3	3.30%	Yes	100%	100%	Yes	100%	Yes	
370	Bedroom 1	2.74%	Yes	100%	100%	Yes	100%	Yes	
370	Bedroom 2	3.65%	Yes	100%	100%	Yes	100%	Yes	
370	Bedroom 3	3.28%	Yes	100%	100%	Yes	100%	Yes	
372	Bedroom 1	2.81%	Yes	100%	100%	Yes	100%	Yes	
372	Bedroom 2	3.58%	Yes	100%	100%	Yes	100%	Yes	
372	Bedroom 3	2.95%	Yes	100%	100%	Yes	100%	Yes	
*For inform	nation regardii	ng the criteria	under the va	rious guidelines p	olease refer to sec	tion 3.0 on p	age 12.		



Figure 7.79: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





#### 7.5.26 Duplex Type 3A, Ground Floor

	Table	No. 7.80: Alte	rnative Day	light Standards	Results Duplex 1	Type 3A, Gro	ound Floor		
		BS 82	.06-2		EN 17037			BS_EN 17037	
Unit Number	Room Description	Predicted ADF	Meets Criteria*	% of area above 300 Lux (recommendation >50%)	% of area above 100 Lux (recommendation >95%)	Meets Criteria*	% of area above target Lux* (recommendation >50%)	Meets Criteria*	
248	LKD	3.34%	Yes	95%	100%	Yes	100%	Yes	
248	Bedroom 1	1.50%	Yes	25%	100%	No	100%	Yes	
248	Bedroom 2	2.73%	Yes	81%	100%	Yes	100%	Yes	
250	LKD	2.85%	Yes	79%	100%	Yes	95%	Yes	
250	Bedroom 1	1.53%	Yes	29%	100%	No	100%	Yes	
250	Bedroom 2	2.04%	Yes	45%	98%	No	98%	Yes	
252	LKD	2.83%	Yes	83%	100%	Yes	96%	Yes	
252	Bedroom 1	1.48%	Yes	25%	100%	No	100%	Yes	
252	Bedroom 2	2.02%	Yes	42%	95%	No	95%	Yes	
254	LKD	2.81%	Yes	76%	100%	Yes	93%	Yes	
254	Bedroom 1	1.51%	Yes	29%	100%	No	100%	Yes	
254	Bedroom 2	2.05%	Yes	44%	100%	No	100%	Yes	
256	Kitchen	2.05%	Yes	42%	100%	No	69%	Yes	
256	Living Room	3.79%	Yes	100%	100%	Yes	100%	Yes	
257	Kitchen	6.31%	Yes	100%	100%	Yes	100%	Yes	
257	Living Room	5.05%	Yes	100%	100%	Yes	100%	Yes	



Figure 7.80: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).



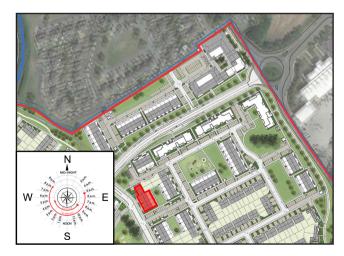


# 7.5.27 Duplex Type 3A, First Floor

	Tab	le No. 7.81: Alt	ernative Da	ylight Standard	s Results Duplex	Type 3A, Fi	rst Floor		
		BS 82	06-2		EN 17037			BS_EN 17037	
Unit Number	Room Description	Predicted ADF	Meets Criteria*	% of area above 300 Lux (recommendation >50%)	% of area above 100 Lux (recommendation >95%)	Meets Criteria*	% of area above target Lux* (recommendation >50%)	Meets Criteria*	
249	Kitchen	3.40%	Yes	100%	100%	Yes	100%	Yes	
249	Living Room	4.15%	Yes	100%	100%	Yes	100%	Yes	
251	Kitchen	2.96%	Yes	80%	100%	Yes	100%	Yes	
251	Living Room	3.17%	Yes	100%	100%	Yes	100%	Yes	
253	Kitchen	2.94%	Yes	75%	100%	Yes	100%	Yes	
253	Living Room	3.16%	Yes	100%	100%	Yes	100%	Yes	
255	Kitchen	2.94%	Yes	78%	100%	Yes	100%	Yes	
255	Living Room	3.17%	Yes	100%	100%	Yes	100%	Yes	
256	Bedroom 1	1.86%	Yes	63%	100%	Yes	100%	Yes	
256	Bedroom 2	2.30%	Yes	63%	100%	Yes	100%	Yes	
256	Bedroom 3	2.87%	Yes	85%	100%	Yes	100%	Yes	
257	Bedroom 1	3.95%	Yes	100%	100%	Yes	100%	Yes	
257	Bedroom 2	4.10%	Yes	100%	100%	Yes	100%	Yes	
256 256 256 257 257	Bedroom 1 Bedroom 3 Bedroom 1 Bedroom 2	1.86% 2.30% 2.87% 3.95% 4.10%	Yes Yes Yes Yes Yes	63% 63% 85% 100%	100% 100% 100% 100%	Yes Yes Yes Yes Yes	100% 100% 100% 100%	Yes Yes Yes Yes	



Figure 7.81: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





## 7.5.28 Duplex Type 3A, Second Floor

	Table	No. 7.82: Alte	rnative Dayl	ight Standards	Results Duplex 1	Type 3A, Sec	ond Floor	
		BS 82	.06-2		EN 17037	BS_EN 17037		
Unit Number	Room Description	Predicted ADF	Meets Criteria*	% of area above 300 Lux (recommendation >50%)	% of area above 100 Lux (recommendation >95%)	Meets Criteria*	% of area above target Lux* (recommendation >50%)	Meets Criteria*
249	Bedroom 1	2.68%	Yes	100%	100%	Yes	100%	Yes
249	Bedroom 2	4.59%	Yes	100%	100%	Yes	100%	Yes
249	Bedroom 3	3.67%	Yes	100%	100%	Yes	100%	Yes
251	Bedroom 1	2.72%	Yes	100%	100%	Yes	100%	Yes
251	Bedroom 2	3.54%	Yes	98%	100%	Yes	100%	Yes
251	Bedroom 3	3.16%	Yes	100%	100%	Yes	100%	Yes
253	Bedroom 1	2.64%	Yes	100%	100%	Yes	100%	Yes
253	Bedroom 2	3.54%	Yes	98%	100%	Yes	100%	Yes
253	Bedroom 3	3.13%	Yes	100%	100%	Yes	100%	Yes
255	Bedroom 1	2.70%	Yes	100%	100%	Yes	100%	Yes
255	Bedroom 2	3.50%	Yes	100%	100%	Yes	100%	Yes
255	Bedroom 3	3.17%	Yes	100%	100%	Yes	100%	Yes
257	Bedroom 3	2.07%	Yes	82%	100%	Yes	100%	Yes
257	Bedroom 4	1.84%	Yes	46%	100%	No	78%	Yes
257	Study Room	2.51%	Yes	71%	100%	Yes	100%	Yes
*For inform	nation regardir	ng the criteria	under the va	rious guidelines p	olease refer to sec	tion 3.0 on p	age 12.	

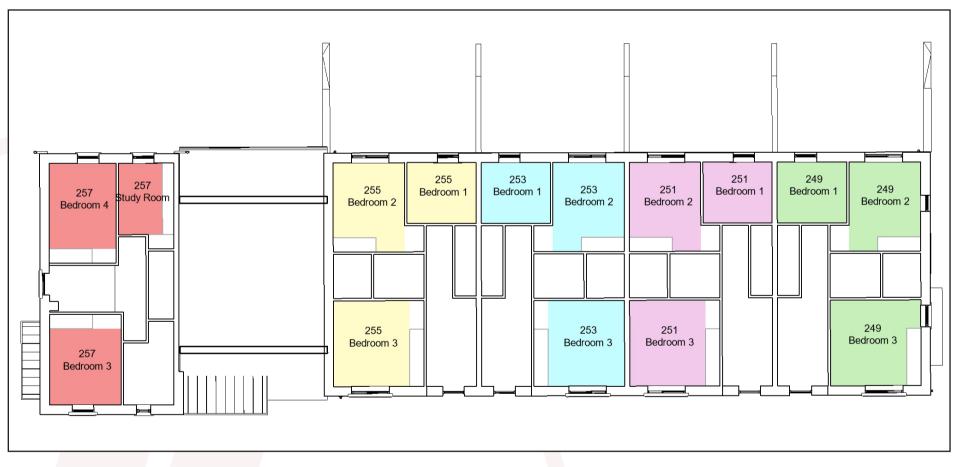
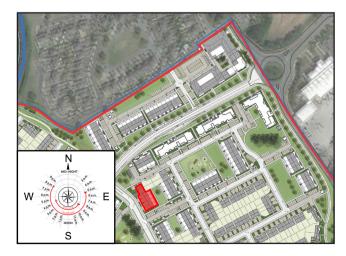


Figure 7.82: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





# 7.5.29 Duplex Type 3B, Ground Floor

	Table	No. 7.83: Alte	rnative Day	light Standards	Results Duplex T	ype 3B, Gro	ound Floor	
		BS 82	.06-2	EN 17037			BS_EN 17	7037
Unit Number	Room Description	Predicted ADF	Meets Criteria*	% of area above 300 Lux (recommendation >50%)	% of area above 100 Lux (recommendation >95%)	Meets Criteria*	% of area above target Lux* (recommendation >50%)	Meets Criteria*
258	Kitchen	6.06%	Yes	100%	100%	Yes	100%	Yes
258	Living Room	4.52%	Yes	100%	100%	Yes	100%	Yes
259	Kitchen	2.04%	Yes	49%	100%	No	80%	Yes
259	Living Room	3.63%	Yes	100%	100%	Yes	100%	Yes
260	LKD	2.61%	Yes	61%	100%	Yes	94%	Yes
260	Bedroom 1	1.29%	Yes	17%	79%	No	79%	Yes
260	Bedroom 2	2.63%	Yes	60%	100%	Yes	100%	Yes
262	LKD	2.60%	Yes	62%	100%	Yes	94%	Yes
262	Bedroom 1	1.29%	Yes	19%	81%	No	81%	Yes
262	Bedroom 2	2.63%	Yes	60%	100%	Yes	100%	Yes
264	LKD	2.63%	Yes	62%	100%	Yes	96%	Yes
264	Bedroom 1	1.29%	Yes	19%	79%	No	79%	Yes
264	Bedroom 2	2.61%	Yes	62%	100%	Yes	100%	Yes
266	LKD	3.14%	Yes	97%	100%	Yes	100%	Yes
266	Bedroom 1	1.24%	Yes	19%	79%	No	79%	Yes
266	Bedroom 2	2.57%	Yes	60%	100%	Yes	100%	Yes

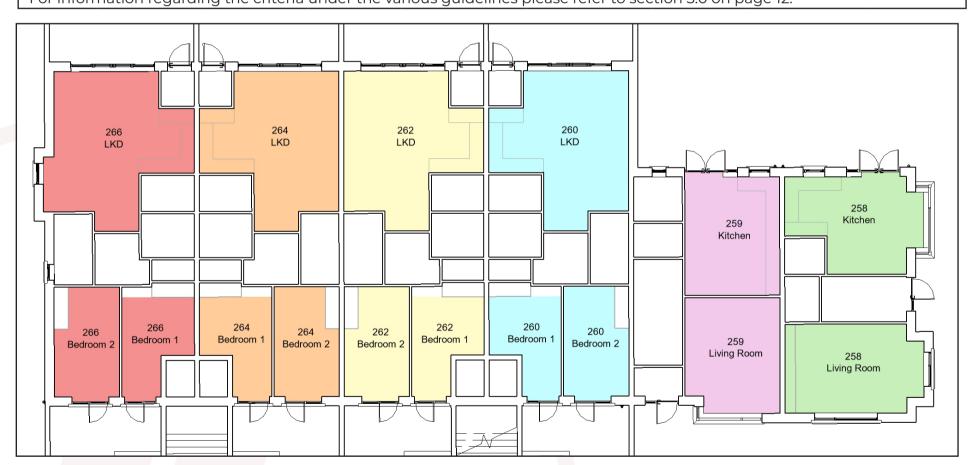
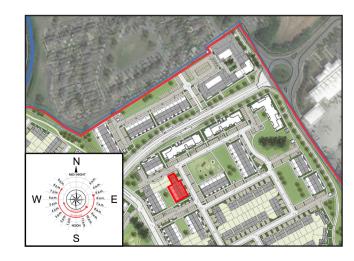


Figure 7.83: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).



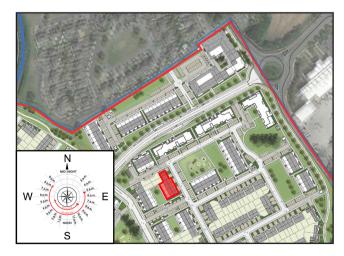


# 7.5.30 Duplex Type 3B, First Floor

	Tabl	e No. 7.84: Al	ternative Da	aylight Standard	s Results Duple	Type 3B, F	irst Floor		
		BS 82	BS 8206-2		EN 17037			BS_EN 17037	
Unit Number	Room Description	Predicted ADF	Meets Criteria*	% of area above 300 Lux (recommendation >50%)	% of area above 100 Lux (recommendation >95%)	Meets Criteria*	% of area above target Lux* (recommendation >50%)	Meets Criteria*	
258	Bedroom 1	3.35%	Yes	97%	100%	Yes	100%	Yes	
258	Bedroom 2	3.83%	Yes	100%	100%	Yes	100%	Yes	
259	Bedroom 1	1.87%	Yes	46%	100%	No	77%	Yes	
259	Bedroom 2	2.33%	Yes	89%	100%	Yes	100%	Yes	
259	Bedroom 3	2.86%	Yes	66%	100%	Yes	100%	Yes	
261	Kitchen	2.91%	Yes	99%	100%	Yes	100%	Yes	
261	Living Room	3.13%	Yes	100%	100%	Yes	100%	Yes	
263	Kitchen	2.93%	Yes	92%	100%	Yes	100%	Yes	
263	Living Room	3.13%	Yes	100%	100%	Yes	100%	Yes	
265	Kitchen	2.93%	Yes	100%	100%	Yes	100%	Yes	
265	Living Room	3.12%	Yes	100%	100%	Yes	100%	Yes	
267	Kitchen	3.46%	Yes	100%	100%	Yes	100%	Yes	
267	Living Room	4.01%	Yes	100%	100%	Yes	100%	Yes	



Figure 7.84: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).



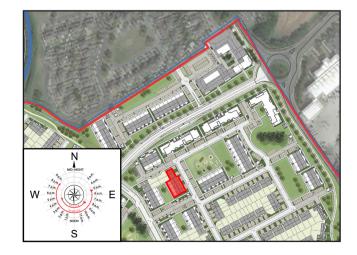


# 7.5.31 Duplex Type 3B, Second Floor

	Table	No. 7.85: Alte	rnative Day	light Standards	Results Duplex 1	Гуре 3В, Ѕес	ond Floor	
		BS 82	06-2		EN 17037	BS_EN 17037		
Unit Number	Room Description	Predicted ADF	Meets Criteria*	% of area above 300 Lux (recommendation >50%)	% of area above 100 Lux (recommendation >95%)	Meets Criteria*	% of area above target Lux* (recommendation >50%)	Meets Criteria*
258	Bedroom 3	1.94%	Yes	50%	100%	Yes	88%	Yes
258	Bedroom 4	1.87%	Yes	61%	100%	Yes	98%	Yes
258	Study Room	2.47%	Yes	90%	100%	Yes	100%	Yes
261	Bedroom 1	2.65%	Yes	100%	100%	Yes	100%	Yes
261	Bedroom 2	3.54%	Yes	100%	100%	Yes	100%	Yes
261	Bedroom 3	3.14%	Yes	100%	100%	Yes	100%	Yes
263	Bedroom 1	2.70%	Yes	100%	100%	Yes	100%	Yes
263	Bedroom 2	3.54%	Yes	100%	100%	Yes	100%	Yes
263	Bedroom 3	3.14%	Yes	100%	100%	Yes	100%	Yes
265	Bedroom 1	2.66%	Yes	100%	100%	Yes	100%	Yes
265	Bedroom 2	3.56%	Yes	100%	100%	Yes	100%	Yes
265	Bedroom 3	3.14%	Yes	100%	100%	Yes	100%	Yes
267	Bedroom 1	2.73%	Yes	100%	100%	Yes	100%	Yes
267	Bedroom 2	4.76%	Yes	100%	100%	Yes	100%	Yes
267	Bedroom 3	3.62%	Yes	100%	100%	Yes	100%	Yes

258 263 Bedroom 2 261 267 265 Bedroom 1 Bedroom 1 Bedroom 1 Bedroom 1 258 Study Room Bedroom 2 Bedroom 2 Bedroom 4 Bedroom 2 267 263 261 Bedroom 3 Bedroom 3 Bedroom 3 Bedroom 3 258 Bedroom 3

Figure 7.85: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





## 7.5.32 Duplex Type 4A, Ground Floor

	Table	No. 7.86: Alte	rnative Day	light Standards	Results Duplex T	ype 4A, Gro	ound Floor		
		BS 82	.06-2		EN 17037			BS_EN 17037	
Unit Number	Room Description	Predicted ADF	Meets Criteria*	% of area above 300 Lux (recommendation >50%)	% of area above 100 Lux (recommendation >95%)	Meets Criteria*	% of area above target Lux* (recommendation >50%)	Meets Criteria*	
238	Kitchen	2.40%	Yes	55%	100%	Yes	99%	Yes	
238	Living Room	3.98%	Yes	100%	100%	Yes	100%	Yes	
239	Kitchen	2.10%	Yes	46%	100%	No	78%	Yes	
239	Living Room	3.84%	Yes	100%	100%	Yes	100%	Yes	
240	LKD	2.84%	Yes	83%	100%	Yes	96%	Yes	
240	Bedroom 1	1.50%	Yes	27%	100%	No	100%	Yes	
240	Bedroom 2	2.07%	Yes	44%	97%	No	97%	Yes	
242	LKD	2.89%	Yes	80%	100%	Yes	96%	Yes	
242	Bedroom 1	1.55%	Yes	29%	100%	No	100%	Yes	
242	Bedroom 2	2.05%	Yes	45%	98%	No	98%	Yes	
244	LKD	2.89%	Yes	85%	100%	Yes	97%	Yes	
244	Bedroom 1	1.52%	Yes	27%	100%	No	100%	Yes	
244	Bedroom 2	2.06%	Yes	47%	98%	No	98%	Yes	
246	LKD	3.41%	Yes	90%	100%	Yes	100%	Yes	
246	Bedroom 1	1.57%	Yes	29%	100%	No	100%	Yes	
246	Bedroom 2	2.79%	Yes	71%	100%	Yes	100%	Yes	



Figure 7.86: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





## 7.5.33 Duplex Type 4A, First Floor

	Tabl	e No. 7.87: Alt	ernative Da	ylight Standard	s Results Duplex	Type 4A, F	irst Floor		
		BS 82	06-2		EN 17037			BS_EN 17037	
Unit Number	Room Description	Predicted ADF	Meets Criteria*	% of area above 300 Lux (recommendation >50%)	% of area above 100 Lux (recommendation >95%)	Meets Criteria*	% of area above target Lux* (recommendation >50%)	Meets Criteria*	
238	Bedroom 1	1.86%	Yes	65%	100%	Yes	100%	Yes	
238	Bedroom 2	2.37%	Yes	70%	100%	Yes	100%	Yes	
238	Bedroom 3	2.95%	Yes	96%	100%	Yes	100%	Yes	
239	Bedroom 1	1.87%	Yes	58%	100%	Yes	100%	Yes	
239	Bedroom 2	2.35%	Yes	67%	100%	Yes	100%	Yes	
239	Bedroom 3	2.94%	Yes	96%	100%	Yes	100%	Yes	
241	Kitchen	2.96%	Yes	79%	100%	Yes	100%	Yes	
241	Living Room	3.21%	Yes	100%	100%	Yes	100%	Yes	
243	Kitchen	2.97%	Yes	81%	100%	Yes	100%	Yes	
243	Living Room	3.19%	Yes	100%	100%	Yes	100%	Yes	
245	Kitchen	2.96%	Yes	77%	100%	Yes	100%	Yes	
245	Living Room	3.19%	Yes	100%	100%	Yes	100%	Yes	
247	Kitchen	3.49%	Yes	98%	100%	Yes	100%	Yes	
247	Living Room	4.09%	Yes	100%	100%	Yes	100%	Yes	

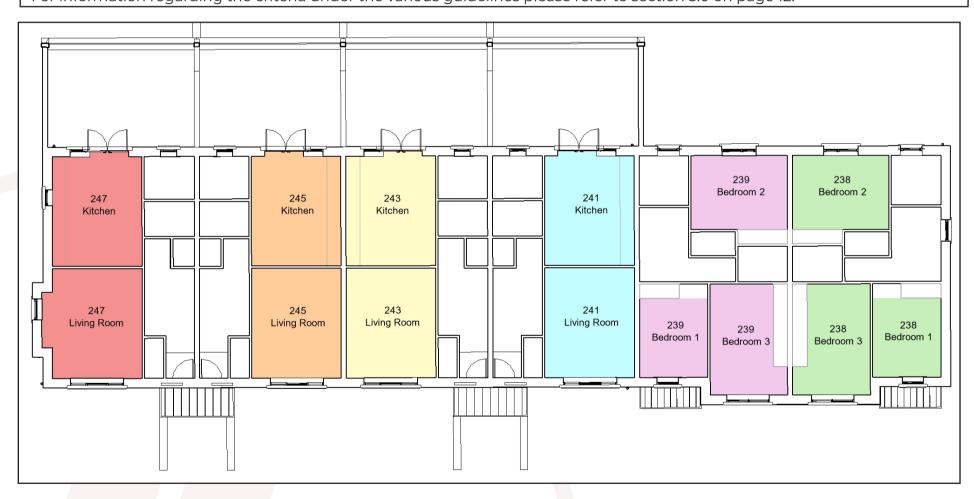
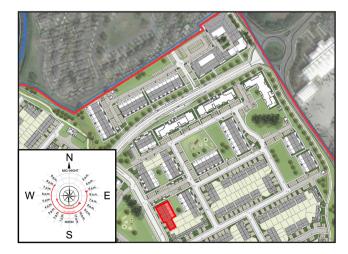


Figure 7.87: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





## 7.5.34 Duplex Type 4A, Second Floor

	Table	No. 7.88: Alte	rnative Dayl	ight Standards	Results Duplex 7	Гуре 4A, Sed	cond Floor		
		BS 82	06-2		EN 17037			BS_EN 17037	
Unit Number	Room Description	Predicted ADF	Meets Criteria*	% of area above 300 Lux (recommendation >50%)	% of area above 100 Lux (recommendation >95%)	Meets Criteria*	% of area above target Lux* (recommendation >50%)	Meets Criteria*	
241	Bedroom 1	2.64%	Yes	100%	100%	Yes	100%	Yes	
241	Bedroom 2	3.53%	Yes	100%	100%	Yes	100%	Yes	
241	Bedroom 3	3.12%	Yes	100%	100%	Yes	100%	Yes	
243	Bedroom 1	2.69%	Yes	100%	100%	Yes	100%	Yes	
243	Bedroom 2	3.51%	Yes	98%	100%	Yes	100%	Yes	
243	Bedroom 3	3.12%	Yes	100%	100%	Yes	100%	Yes	
245	Bedroom 1	2.65%	Yes	100%	100%	Yes	100%	Yes	
245	Bedroom 2	3.53%	Yes	98%	100%	Yes	100%	Yes	
245	Bedroom 3	3.11%	Yes	100%	100%	Yes	100%	Yes	
247	Bedroom 1	2.72%	Yes	100%	100%	Yes	100%	Yes	
247	Bedroom 2	4.68%	Yes	100%	100%	Yes	100%	Yes	
247	Bedroom 3	3.58%	Yes	100%	100%	Yes	100%	Yes	
*For inform	nation regardi	ng the criteria	under the va	rious guidelines p	olease refer to sec	tion 3.0 on p	age 12.		



Figure 7.88: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





## 7.5.35 Duplex Type 4B, Ground Floor

	Table	No. 7.89: Alte	rnative Dayl	ight Standards	Results Duplex T	ype 4B, Gro	ound Floor	
		BS 82	.06-2		EN 17037		BS_EN 17037	
Unit Number	Room Description	Predicted ADF	Meets Criteria*	% of area above 300 Lux (recommendation >50%)	% of area above 100 Lux (recommendation >95%)	Meets Criteria*	% of area above target Lux* (recommendation >50%)	Meets Criteria*
268	LKD	2.95%	Yes	94%	100%	Yes	100%	Yes
268	Bedroom 1	1.29%	Yes	19%	79%	No	79%	Yes
268	Bedroom 2	2.64%	Yes	67%	100%	Yes	100%	Yes
270	LKD	2.61%	Yes	62%	100%	Yes	95%	Yes
270	Bedroom 1	1.22%	Yes	19%	77%	No	77%	Yes
270	Bedroom 2	2.52%	Yes	60%	100%	Yes	100%	Yes
272	LKD	2.59%	Yes	58%	100%	Yes	93%	Yes
272	Bedroom 1	1.19%	Yes	17%	70%	No	70%	Yes
272	Bedroom 2	2.50%	Yes	60%	100%	Yes	100%	Yes
274	LKD	2.59%	Yes	60%	100%	Yes	92%	Yes
274	Bedroom 1	1.21%	Yes	17%	74%	No	74%	Yes
274	Bedroom 2	2.47%	Yes	60%	100%	Yes	100%	Yes
276	Kitchen	2.07%	Yes	55%	100%	Yes	97%	Yes
276	Living Room	3.66%	Yes	100%	100%	Yes	100%	Yes
277	Kitchen	2.28%	Yes	59%	100%	Yes	100%	Yes
277	Living Room	3.58%	Yes	100%	100%	Yes	100%	Yes
*For inforr	mation regardir	ng the criteria	under the va	rious quidelines r	olease refer to sec	tion 3.0 on p	age 12.	

\*For information regarding the criteria under the various guidelines please refer to section 3.0 on page 12.



Figure 7.89: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





## 7.5.36 Duplex Type 4B, First Floor

	Tabl	e No. 7.90: Alt	ernative Da	ylight Standard	s Results Duplex	Type 4B, F	irst Floor	
		BS 82	06-2		EN 17037		BS_EN 17	7037
Unit Number	Room Description	Predicted ADF	Meets Criteria*	% of area above 300 Lux (recommendation >50%)	% of area above 100 Lux (recommendation >95%)	Meets Criteria*	% of area above target Lux* (recommendation >50%)	Meets Criteria*
269	Kitchen	3.34%	Yes	100%	100%	Yes	100%	Yes
269	Living Room	4.10%	Yes	100%	100%	Yes	100%	Yes
271	Kitchen	2.94%	Yes	95%	100%	Yes	100%	Yes
271	Living Room	3.10%	Yes	100%	100%	Yes	100%	Yes
273	Kitchen	2.92%	Yes	99%	100%	Yes	100%	Yes
273	Living Room	3.09%	Yes	100%	100%	Yes	100%	Yes
275	Kitchen	2.92%	Yes	96%	100%	Yes	100%	Yes
275	Living Room	3.10%	Yes	100%	100%	Yes	100%	Yes
276	Bedroom 1	1.80%	Yes	38%	100%	No	100%	Yes
276	Bedroom 2	2.32%	Yes	91%	100%	Yes	100%	Yes
276	Bedroom 3	2.79%	Yes	66%	100%	Yes	100%	Yes
277	Bedroom 1	1.84%	Yes	46%	100%	No	100%	Yes
277	Bedroom 2	2.34%	Yes	89%	100%	Yes	100%	Yes
277	Bedroom 3	2.81%	Yes	68%	100%	Yes	100%	Yes



Figure 7.90: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





## 7.5.37 Duplex Type 4B, Second Floor

	Table	No. 7.91: Alte	rnative Dayl	ight Standards	ResultsDuplex T	ype 4B, Sec	ond Floor	
		BS 82	06-2		EN 17037		BS_EN 17037	
Unit Number	Room Description	Predicted ADF	Meets Criteria*	% of area above 300 Lux (recommendation >50%)	% of area above 100 Lux (recommendation >95%)	Meets Criteria*	% of area above target Lux* (recommendation >50%)	Meets Criteria*
269	Bedroom 1	2.64%	Yes	100%	100%	Yes	100%	Yes
269	Bedroom 2	4.58%	Yes	100%	100%	Yes	100%	Yes
269	Bedroom 3	3.43%	Yes	100%	100%	Yes	100%	Yes
271	Bedroom 1	2.69%	Yes	100%	100%	Yes	100%	Yes
271	Bedroom 2	3.51%	Yes	100%	100%	Yes	100%	Yes
271	Bedroom 3	3.11%	Yes	100%	100%	Yes	100%	Yes
273	Bedroom 1	2.63%	Yes	100%	100%	Yes	100%	Yes
273	Bedroom 2	3.51%	Yes	100%	100%	Yes	100%	Yes
273	Bedroom 3	3.11%	Yes	100%	100%	Yes	100%	Yes
275	Bedroom 1	2.68%	Yes	100%	100%	Yes	100%	Yes
275	Bedroom 2	3.51%	Yes	100%	100%	Yes	100%	Yes
275	Bedroom 3	3.13%	Yes	100%	100%	Yes	100%	Yes
*For inform	nation regardii	ng the criteria	under the va	rious guidelines p	olease refer to sec	tion 3.0 on p	age 12.	



Figure 7.91: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





#### 7.5.38 Duplex Type 5, Ground Floor

	Table	e No. 7.92: Alte	ernative Day	light Standards	Results Duplex	Type 5, Gro	und Floor		
		BS 82	.06-2		EN 17037			BS_EN 17037	
Unit Number	Room Description	Predicted ADF	Meets Criteria*	% of area above 300 Lux (recommendation >50%)	% of area above 100 Lux (recommendation >95%)	Meets Criteria*	% of area above target Lux* (recommendation >50%)	Meets Criteria*	
373	LKD	3.27%	Yes	90%	100%	Yes	100%	Yes	
373	Bedroom 1	1.79%	Yes	31%	100%	No	100%	Yes	
373	Bedroom 2	3.18%	Yes	77%	100%	Yes	100%	Yes	
375	LKD	2.70%	Yes	69%	100%	Yes	94%	Yes	
375	Bedroom 1	1.74%	Yes	29%	100%	No	100%	Yes	
375	Bedroom 2	2.35%	Yes	48%	100%	No	100%	Yes	
377	LKD	2.72%	Yes	72%	100%	Yes	92%	Yes	
377	Bedroom 1	1.80%	Yes	31%	100%	No	100%	Yes	
377	Bedroom 2	2.35%	Yes	48%	100%	No	100%	Yes	
379	LKD	2.74%	Yes	70%	100%	Yes	93%	Yes	
379	Bedroom 1	1.74%	Yes	29%	100%	No	100%	Yes	
379	Bedroom 2	2.36%	Yes	48%	100%	No	100%	Yes	
381	LKD	2.73%	Yes	70%	100%	Yes	92%	Yes	
381	Bedroom 1	1.81%	Yes	31%	100%	No	100%	Yes	
381	Bedroom 2	2.36%	Yes	48%	100%	No	100%	Yes	
383	LKD	3.22%	Yes	83%	100%	Yes	97%	Yes	
383	Bedroom 1	1.75%	Yes	29%	100%	No	100%	Yes	
383	Bedroom 2	3.00%	Yes	76%	100%	Yes	100%	Yes	



Figure 7.92: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





# 7.5.39 Duplex Type 5, First Floor

	Tab	ole No. 7.93: Al	ternative Da	aylight Standard	ds Results Duple	x Type 5, Fir	st Floor		
		BS 82	06-2		EN 17037			BS_EN 17037	
Unit Number	Room Description	Predicted ADF	Meets Criteria*	% of area above 300 Lux (recommendation >50%)	% of area above 100 Lux (recommendation >95%)	Meets Criteria*	% of area above target Lux* (recommendation >50%)	Meets Criteria*	
374	Kitchen	3.49%	Yes	92%	100%	Yes	100%	Yes	
374	Living Room	4.08%	Yes	100%	100%	Yes	100%	Yes	
376	Kitchen	2.97%	Yes	69%	100%	Yes	100%	Yes	
376	Living Room	3.14%	Yes	100%	100%	Yes	100%	Yes	
378	Kitchen	2.98%	Yes	69%	100%	Yes	100%	Yes	
378	Living Room	3.15%	Yes	100%	100%	Yes	100%	Yes	
380	Kitchen	2.98%	Yes	71%	100%	Yes	100%	Yes	
380	Living Room	3.16%	Yes	100%	100%	Yes	100%	Yes	
382	Kitchen	2.99%	Yes	70%	100%	Yes	100%	Yes	
382	Living Room	3.16%	Yes	100%	100%	Yes	100%	Yes	
384	Kitchen	3.38%	Yes	93%	100%	Yes	100%	Yes	
384	Living Room	4.09%	Yes	100%	100%	Yes	100%	Yes	
*For inform	nation regardir	ng the criteria	under the va	rious guidelines p	olease refer to sec	tion 3.0 on p	age 12.		

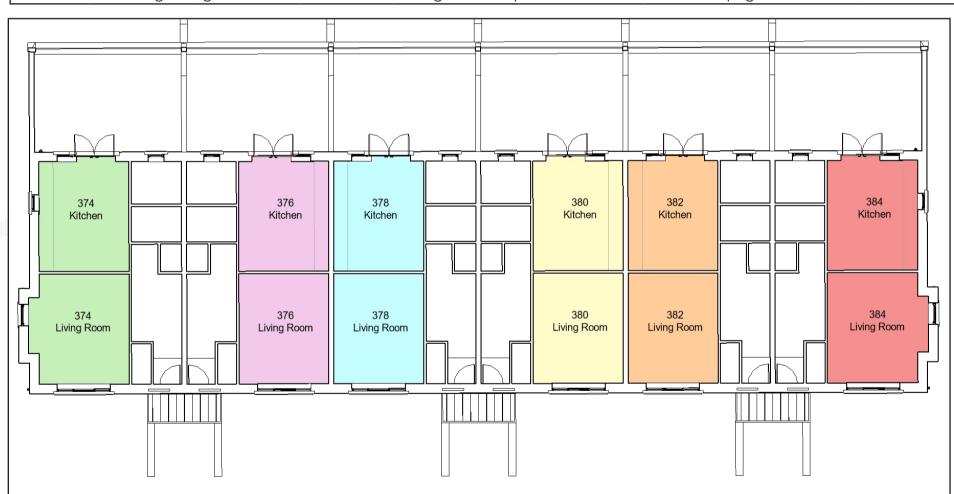
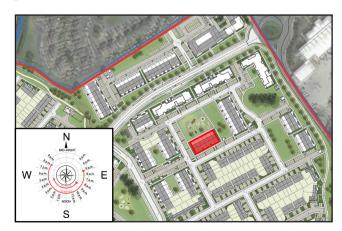


Figure 7.93: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





# 7.5.40 Duplex Type 5, Second Floor

	Table	e No. 7.94: Alto	ernative Day	/light Standards	Results Duplex	Type 5, Sec	ond Floor		
		BS 82	06-2		EN 17037			BS_EN 17037	
Unit Number	Room Description	Predicted ADF	Meets Criteria*	% of area above 300 Lux (recommendation >50%)	% of area above 100 Lux (recommendation >95%)	Meets Criteria*	% of area above target Lux* (recommendation >50%)	Meets Criteria*	
374	Bedroom 1	2.71%	Yes	100%	100%	Yes	100%	Yes	
374	Bedroom 2	4.70%	Yes	100%	100%	Yes	100%	Yes	
374	Bedroom 3	3.81%	Yes	100%	100%	Yes	100%	Yes	
376	Bedroom 1	2.65%	Yes	93%	100%	Yes	100%	Yes	
376	Bedroom 2	3.54%	Yes	96%	100%	Yes	100%	Yes	
376	Bedroom 3	3.17%	Yes	100%	100%	Yes	100%	Yes	
378	Bedroom 1	2.70%	Yes	97%	100%	Yes	100%	Yes	
378	Bedroom 2	3.52%	Yes	96%	100%	Yes	100%	Yes	
378	Bedroom 3	3.18%	Yes	100%	100%	Yes	100%	Yes	
380	Bedroom 1	2.64%	Yes	93%	100%	Yes	100%	Yes	
380	Bedroom 2	3.53%	Yes	96%	100%	Yes	100%	Yes	
380	Bedroom 3	3.19%	Yes	100%	100%	Yes	100%	Yes	
382	Bedroom 1	2.70%	Yes	97%	100%	Yes	100%	Yes	
382	Bedroom 2	3.51%	Yes	98%	100%	Yes	100%	Yes	
382	Bedroom 3	3.21%	Yes	100%	100%	Yes	100%	Yes	
384	Bedroom 1	2.65%	Yes	97%	100%	Yes	100%	Yes	
384	Bedroom 2	4.47%	Yes	100%	100%	Yes	100%	Yes	
384	Bedroom 3	4.42%	Yes	100%	100%	Yes	100%	Yes	



Figure 7.94: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





# 7.5.41 Duplex Type 6, Ground Floor

	Table	e No. 7.95: Alte	ernative Day	light Standards	Results Duplex	Type 6, Gro	und Floor	
		BS 82	06-2		EN 17037		BS_EN 17	7037
Unit Number	Room Description	Predicted ADF	Meets Criteria*	% of area above 300 Lux (recommendation >50%)	% of area above 100 Lux (recommendation >95%)	Meets Criteria*	% of area above target Lux* (recommendation >50%)	Meets Criteria*
385	LKD	3.19%	Yes	97%	100%	Yes	100%	Yes
385	Bedroom 1	1.32%	Yes	21%	85%	No	85%	Yes
385	Bedroom 2	2.71%	Yes	67%	100%	Yes	100%	Yes
387	LKD	2.75%	Yes	74%	100%	Yes	99%	Yes
387	Bedroom 1	1.31%	Yes	19%	79%	No	79%	Yes
387	Bedroom 2	2.69%	Yes	67%	100%	Yes	100%	Yes
389	LKD	2.77%	Yes	75%	100%	Yes	100%	Yes
389	Bedroom 1	1.33%	Yes	21%	83%	No	83%	Yes
389	Bedroom 2	2.69%	Yes	67%	100%	Yes	100%	Yes
391	LKD	2.81%	Yes	76%	100%	Yes	99%	Yes
391	Bedroom 1	1.28%	Yes	19%	79%	No	79%	Yes
391	Bedroom 2	2.67%	Yes	63%	100%	Yes	100%	Yes
393	LKD	2.84%	Yes	79%	100%	Yes	100%	Yes
393	Bedroom 1	1.32%	Yes	19%	85%	No	85%	Yes
393	Bedroom 2	2.65%	Yes	62%	100%	Yes	100%	Yes
395	LKD	2.86%	Yes	81%	100%	Yes	99%	Yes
395	Bedroom 1	1.25%	Yes	17%	77%	No	77%	Yes
395	Bedroom 2	2.63%	Yes	62%	100%	Yes	100%	Yes
397	LKD	2.86%	Yes	82%	100%	Yes	100%	Yes
397	Bedroom 1	1.29%	Yes	19%	85%	No	85%	Yes
397	Bedroom 2	2.61%	Yes	60%	100%	Yes	100%	Yes
399	LKD	2.99%	Yes	96%	100%	Yes	100%	Yes
399	Bedroom 1	1.22%	Yes	17%	72%	No	72%	Yes
399	Bedroom 2	2.61%	Yes	60%	100%	Yes	100%	Yes

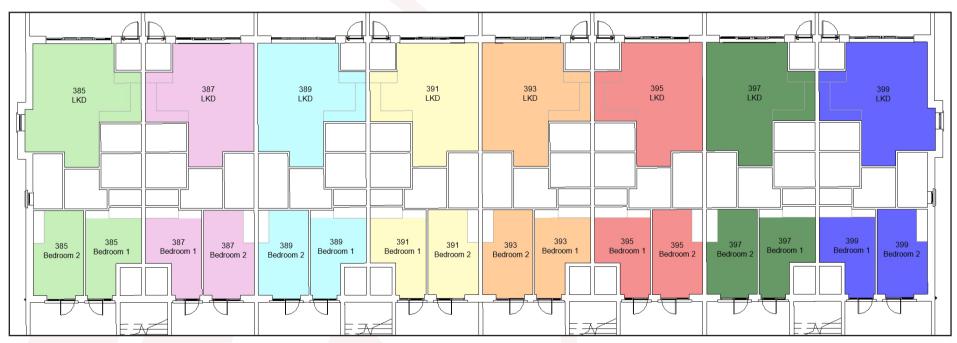
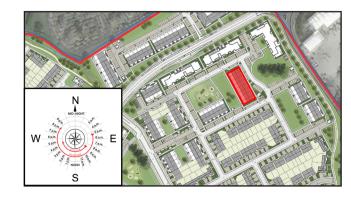


Figure 7.95: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





# 7.5.42 Duplex Type 6, First Floor

	Table	No. 7.96: Alte	ernative Day	light Standards/	Results Duplex	Type 6, Gro	und Floor	
		BS 82	.06-2		EN 17037		BS_EN 17	7037
Unit Number	Room Description	Predicted ADF	Meets Criteria*	% of area above 300 Lux (recommendation >50%)	% of area above 100 Lux (recommendation >95%)	Meets Criteria*	% of area above target Lux* (recommendation >50%)	Meets Criteria*
386	Kitchen	3.50%	Yes	100%	100%	Yes	100%	Yes
386	Living Room	4.09%	Yes	100%	100%	Yes	100%	Yes
388	Kitchen	2.99%	Yes	100%	100%	Yes	100%	Yes
388	Living Room	3.17%	Yes	100%	100%	Yes	100%	Yes
390	Kitchen	3.00%	Yes	100%	100%	Yes	100%	Yes
390	Living Room	3.18%	Yes	100%	100%	Yes	100%	Yes
392	Kitchen	3.01%	Yes	100%	100%	Yes	100%	Yes
392	Living Room	3.14%	Yes	100%	100%	Yes	100%	Yes
394	Kitchen	3.03%	Yes	100%	100%	Yes	100%	Yes
394	Living Room	3.13%	Yes	99%	100%	Yes	100%	Yes
396	Kitchen	3.02%	Yes	100%	100%	Yes	100%	Yes
396	Living Room	3.12%	Yes	98%	100%	Yes	100%	Yes
398	Kitchen	3.03%	Yes	100%	100%	Yes	100%	Yes
398	Living Room	3.11%	Yes	96%	100%	Yes	100%	Yes
400	Kitchen	3.35%	Yes	100%	100%	Yes	100%	Yes
400	Living Room	3.82%	Yes	100%	100%	Yes	100%	Yes

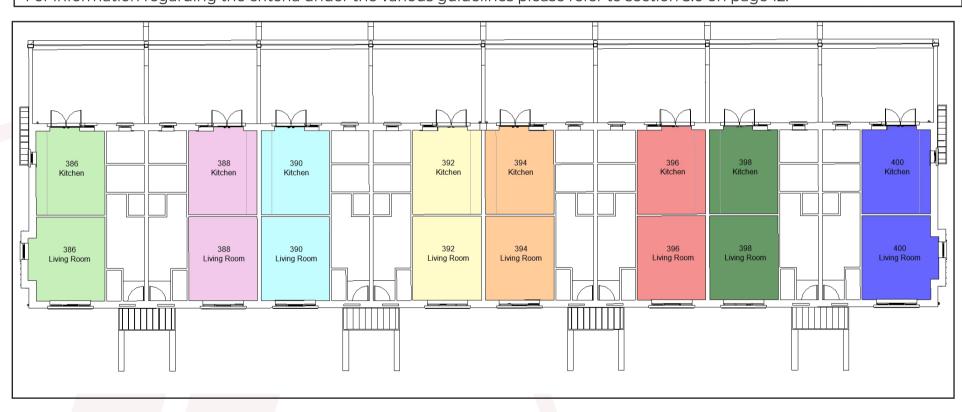
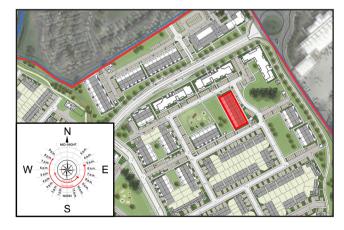


Figure 7.96: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





## 7.5.43 Duplex Type 6, First Floor

	Tab	ole No. 7.97: A	ternative D	aylight Standard	ds Results Duple:	x Type 6, Fi	rst Floor	
		BS 82	06-2		EN 17037			7037
Unit Number	Room Description	Predicted ADF	Meets Criteria*	% of area above 300 Lux (recommendation >50%)	% of area above 100 Lux (recommendation >95%)	Meets Criteria*	% of area above target Lux* (recommendation >50%)	Meets Criteria*
386	Bedroom 1	2.76%	Yes	100%	100%	Yes	100%	Yes
386	Bedroom 2	4.77%	Yes	100%	100%	Yes	100%	Yes
386	Bedroom 3	3.66%	Yes	100%	100%	Yes	100%	Yes
388	Bedroom 1	2.69%	Yes	100%	100%	Yes	100%	Yes
388	Bedroom 2	3.58%	Yes	100%	100%	Yes	100%	Yes
388	Bedroom 3	3.17%	Yes	100%	100%	Yes	100%	Yes
390	Bedroom 1	2.73%	Yes	100%	100%	Yes	100%	Yes
390	Bedroom 2	3.57%	Yes	100%	100%	Yes	100%	Yes
390	Bedroom 3	3.17%	Yes	100%	100%	Yes	100%	Yes
392	Bedroom 1	2.67%	Yes	100%	100%	Yes	100%	Yes
392	Bedroom 2	3.57%	Yes	100%	100%	Yes	100%	Yes
392	Bedroom 3	3.12%	Yes	100%	100%	Yes	100%	Yes
394	Bedroom 1	2.73%	Yes	100%	100%	Yes	100%	Yes
394	Bedroom 2	3.56%	Yes	100%	100%	Yes	100%	Yes
394	Bedroom 3	3.10%	Yes	100%	100%	Yes	100%	Yes
396	Bedroom 1	2.67%	Yes	100%	100%	Yes	100%	Yes
396	Bedroom 2	3.57%	Yes	100%	100%	Yes	100%	Yes
396	Bedroom 3	3.10%	Yes	100%	100%	Yes	100%	Yes
398	Bedroom 1	2.73%	Yes	100%	100%	Yes	100%	Yes
398	Bedroom 2	3.56%	Yes	100%	100%	Yes	100%	Yes
398	Bedroom 3	3.09%	Yes	100%	100%	Yes	100%	Yes
400	Bedroom 1	2.67%	Yes	100%	100%	Yes	100%	Yes
400	Bedroom 2	4.42%	Yes	100%	100%	Yes	100%	Yes
400	Bedroom 3	3.28%	Yes	100%	100%	Yes	100%	Yes

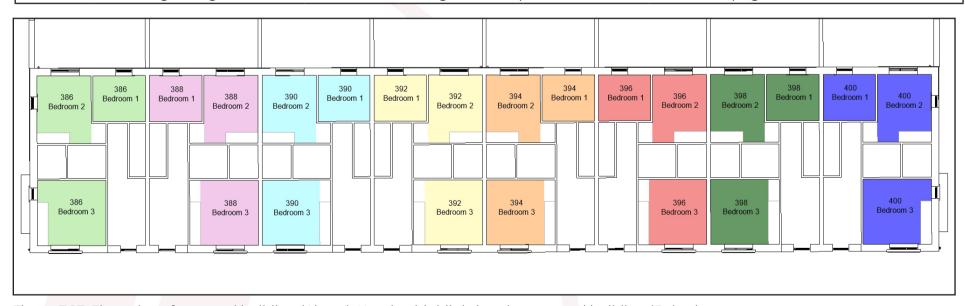
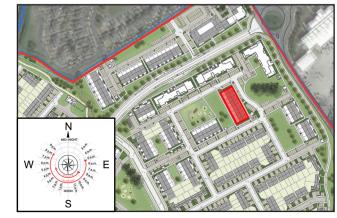


Figure 7.97: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





# 7.5.44 Duplex Type 7, Ground Floor

	Table	e No. 7.98: Alt	ernative Day	ylight Standards	ResultsDuplex	Type 7, Grou	und Floor	
		BS 82	06-2		EN 17037		BS_EN 17	7037
Unit Number	Room Description	Predicted ADF	Meets Criteria*	% of area above 300 Lux (recommendation >50%)	% of area above 100 Lux (recommendation >95%)	Meets Criteria*	% of area above target Lux* (recommendation >50%)	Meets Criteria*
513	LKD	3.34%	Yes	97%	100%	Yes	100%	Yes
513	Bedroom 1	1.28%	Yes	17%	79%	No	79%	Yes
513	Bedroom 2	2.60%	Yes	62%	100%	Yes	100%	Yes
515	LKD	3.32%	Yes	99%	100%	Yes	100%	Yes
515	Bedroom 1	1.22%	Yes	17%	79%	No	79%	Yes
515	Bedroom 2	2.57%	Yes	62%	100%	Yes	100%	Yes
517	LKD	3.00%	Yes	91%	100%	Yes	100%	Yes
517	Bedroom 1	1.33%	Yes	19%	79%	No	79%	Yes
517	Bedroom 2	2.68%	Yes	67%	100%	Yes	100%	Yes
519	LKD	3.01%	Yes	92%	100%	Yes	100%	Yes
519	Bedroom 1	1.21%	Yes	17%	74%	No	74%	Yes
519	Bedroom 2	2.55%	Yes	60%	100%	Yes	100%	Yes
521	LKD	3.01%	Yes	91%	100%	Yes	100%	Yes
521	Bedroom 1	1.19%	Yes	17%	72%	No	72%	Yes
521	Bedroom 2	2.51%	Yes	60%	100%	Yes	100%	Yes
523	LKD	3.00%	Yes	91%	100%	Yes	100%	Yes
523	Bedroom 1	1.25%	Yes	19%	79%	No	79%	Yes
523	Bedroom 2	2.58%	Yes	62%	100%	Yes	100%	Yes
525	LKD	3.00%	Yes	91%	100%	Yes	100%	Yes
525	Bedroom 1	1.25%	Yes	17%	77%	No	77%	Yes
525	Bedroom 2	2.61%	Yes	62%	100%	Yes	100%	Yes
527	LKD	3.46%	Yes	100%	100%	Yes	100%	Yes
527	Bedroom 1	1.32%	Yes	21%	85%	No	85%	Yes
527	Bedroom 2	2.69%	Yes	65%	100%	Yes	100%	Yes

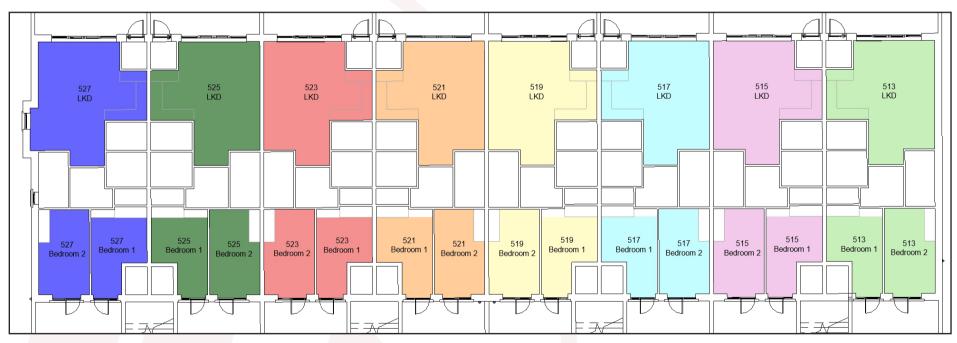


Figure 7.98: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





## 7.5.45 Duplex Type 7, First Floor

	Tab	ole No. 7.99: A	lternative D	aylight Standard	ds Results Duple	x Type 7, Fir	rst Floor	
		BS 82	BS 8206-2		EN 17037		BS_EN 17	7037
Unit Number	Room Description	Predicted ADF	Meets Criteria*	% of area above 300 Lux (recommendation >50%)	% of area above 100 Lux (recommendation >95%)	Meets Criteria*	% of area above target Lux* (recommendation >50%)	Meets Criteria*
514	LKD	3.93%	Yes	94%	100%	Yes	100%	Yes
514	Bedroom 1	1.41%	Yes	35%	100%	No	100%	Yes
514	Bedroom 2	1.81%	Yes	52%	100%	Yes	100%	Yes
516	LKD	3.35%	Yes	79%	100%	Yes	100%	Yes
516	Bedroom 1	1.46%	Yes	37%	100%	No	100%	Yes
516	Bedroom 2	1.86%	Yes	62%	100%	Yes	100%	Yes
518	Kitchen	2.69%	Yes	100%	100%	Yes	100%	Yes
518	Living Room	3.25%	Yes	100%	100%	Yes	100%	Yes
520	Kitchen	3.08%	Yes	100%	100%	Yes	100%	Yes
520	Living Room	3.18%	Yes	100%	100%	Yes	100%	Yes
522	Kitchen	3.07%	Yes	100%	100%	Yes	100%	Yes
522	Living Room	3.14%	Yes	100%	100%	Yes	100%	Yes
524	Kitchen	3.08%	Yes	100%	100%	Yes	100%	Yes
524	Living Room	3.16%	Yes	100%	100%	Yes	100%	Yes
526	Kitchen	3.07%	Yes	100%	100%	Yes	100%	Yes
526	Living Room	3.18%	Yes	100%	100%	Yes	100%	Yes
528	Kitchen	3.57%	Yes	100%	100%	Yes	100%	Yes
528	Living Room	4.08%	Yes	100%	100%	Yes	100%	Yes

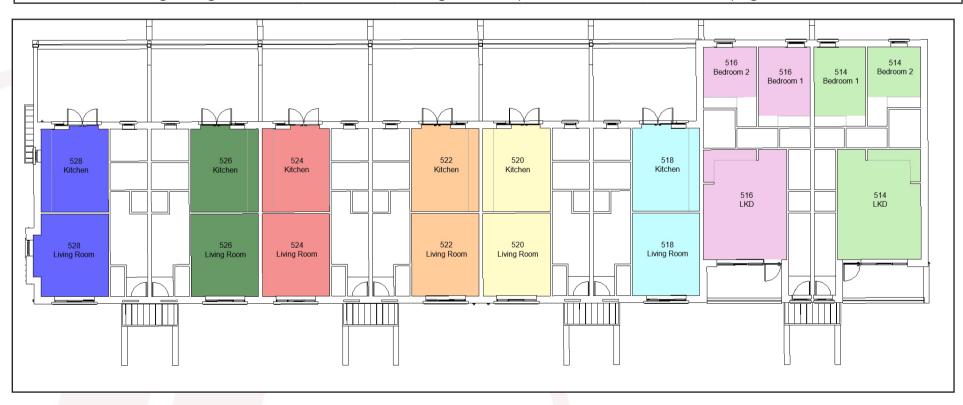
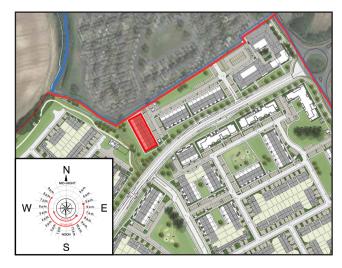


Figure 7.99: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





# 7.5.46 Duplex Type 7, Second Floor

	Table	No. 7.100: Alt	ernative Da	ylight Standard:	s Results Duplex	Type 7, Sec	ond Floor		
		BS 82	.06-2		EN 17037			BS_EN 17037	
Unit Number	Room Description	Predicted ADF	Meets Criteria*	% of area above 300 Lux (recommendation >50%)	% of area above 100 Lux (recommendation >95%)	Meets Criteria*	% of area above target Lux* (recommendation >50%)	Meets Criteria*	
518	Bedroom 1	2.72%	Yes	100%	100%	Yes	100%	Yes	
518	Bedroom 2	3.64%	Yes	100%	100%	Yes	100%	Yes	
518	Bedroom 3	3.21%	Yes	100%	100%	Yes	100%	Yes	
520	Bedroom 1	2.79%	Yes	100%	100%	Yes	100%	Yes	
520	Bedroom 2	3.63%	Yes	100%	100%	Yes	100%	Yes	
520	Bedroom 3	3.19%	Yes	100%	100%	Yes	100%	Yes	
522	Bedroom 1	2.74%	Yes	100%	100%	Yes	100%	Yes	
522	Bedroom 2	3.66%	Yes	100%	100%	Yes	100%	Yes	
522	Bedroom 3	3.15%	Yes	100%	100%	Yes	100%	Yes	
524	Bedroom 1	2.80%	Yes	100%	100%	Yes	100%	Yes	
524	Bedroom 2	3.64%	Yes	100%	100%	Yes	100%	Yes	
524	Bedroom 3	3.17%	Yes	100%	100%	Yes	100%	Yes	
526	Bedroom 1	2.74%	Yes	100%	100%	Yes	100%	Yes	
526	Bedroom 2	3.67%	Yes	100%	100%	Yes	100%	Yes	
526	Bedroom 3	3.18%	Yes	100%	100%	Yes	100%	Yes	
528	Bedroom 1	2.79%	Yes	100%	100%	Yes	100%	Yes	
528	Bedroom 2	4.74%	Yes	100%	100%	Yes	100%	Yes	
528	Bedroom 3	3.63%	Yes	100%	100%	Yes	100%	Yes	

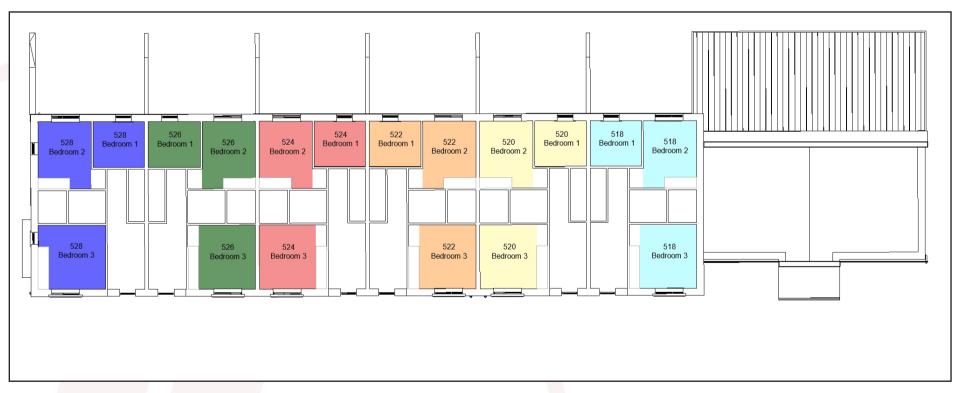


Figure 7.100: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





## 7.5.47 Duplex Type 8, Ground Floor

	Table	No. 7.101: Alt	ernative Day	light Standards	Results Duplex	Type 8, Gro	und Floor	
		BS 82	.06-2		EN 17037		BS_EN 17037	
Unit Number	Room Description	Predicted ADF	Meets Criteria*	% of area above 300 Lux (recommendation >50%)	% of area above 100 Lux (recommendation >95%)	Meets Criteria*	% of area above target Lux* (recommendation >50%)	Meets Criteria*
529	LKD	3.22%	Yes	91%	100%	Yes	100%	Yes
529	Bedroom 1	1.72%	Yes	29%	100%	No	100%	Yes
529	Bedroom 2	3.01%	Yes	77%	100%	Yes	100%	Yes
531	LKD	2.73%	Yes	71%	100%	Yes	94%	Yes
531	Bedroom 1	1.68%	Yes	29%	100%	No	100%	Yes
531	Bedroom 2	2.27%	Yes	48%	100%	No	100%	Yes
533	LKD	2.73%	Yes	73%	100%	Yes	94%	Yes
533	Bedroom 1	1.72%	Yes	29%	100%	No	100%	Yes
533	Bedroom 2	2.27%	Yes	48%	100%	No	100%	Yes
535	LKD	2.70%	Yes	69%	100%	Yes	92%	Yes
535	Bedroom 1	1.67%	Yes	29%	100%	No	100%	Yes
535	Bedroom 2	2.28%	Yes	48%	100%	No	100%	Yes
537	LKD	2.70%	Yes	71%	100%	Yes	92%	Yes
537	Bedroom 1	1.72%	Yes	29%	100%	No	100%	Yes
537	Bedroom 2	2.27%	Yes	48%	100%	No	100%	Yes
539	LKD	2.82%	Yes	72%	100%	Yes	94%	Yes
539	Bedroom 1	1.67%	Yes	29%	100%	No	100%	Yes
539	Bedroom 2	2.51%	Yes	60%	100%	Yes	100%	Yes



Figure 7.101: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





# 7.5.48 Duplex Type 8, First Floor

	Tab	le No. 7.102: A	lternative D	aylight Standard	ds Results Duple	ex Type 8, Fi	rst Floor	
		BS 82	06-2		EN 17037		BS_EN 1	7037
Unit Number	Room Description	Predicted ADF	Meets Criteria*	% of area above 300 Lux (recommendation >50%)	% of area above 100 Lux (recommendation >95%)	Meets Criteria*	% of area above target Lux* (recommendation >50%)	Meets Criteria*
530	Kitchen	3.59%	Yes	100%	100%	Yes	100%	Yes
530	Living Room	3.98%	Yes	100%	100%	Yes	100%	Yes
532	Kitchen	3.09%	Yes	85%	100%	Yes	100%	Yes
532	Living Room	3.03%	Yes	100%	100%	Yes	100%	Yes
534	Kitchen	3.09%	Yes	81%	100%	Yes	100%	Yes
534	Living Room	3.03%	Yes	100%	100%	Yes	100%	Yes
536	Kitchen	3.09%	Yes	84%	100%	Yes	100%	Yes
536	Living Room	3.00%	Yes	100%	100%	Yes	100%	Yes
538	Kitchen	3.09%	Yes	81%	100%	Yes	100%	Yes
538	Living Room	3.00%	Yes	100%	100%	Yes	100%	Yes
540	Kitchen	3.07%	Yes	85%	100%	Yes	100%	Yes
540	Living Room	3.00%	Yes	100%	100%	Yes	100%	Yes
				100% rious guidelines p				Yes

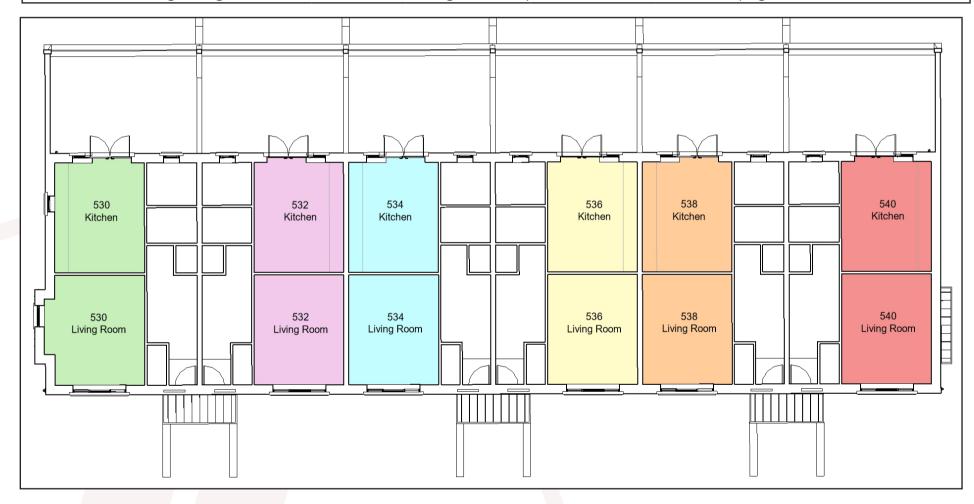


Figure 7.102: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





### 7.5.49 Duplex Type 8, Second Floor

	Table	No. 7.103: Alt	ernative Day	ylight Standards	Results Duplex	Type 8, Sec	ond Floor		
		BS 82	.06-2		EN 17037			BS_EN 17037	
Unit Number	Room Description	Predicted ADF	Meets Criteria*	% of area above 300 Lux (recommendation >50%)	% of area above 100 Lux (recommendation >95%)	Meets Criteria*	% of area above target Lux* (recommendation >50%)	Meets Criteria*	
530	Bedroom 1	2.85%	Yes	100%	100%	Yes	100%	Yes	
530	Bedroom 2	4.80%	Yes	100%	100%	Yes	100%	Yes	
530	Bedroom 3	3.74%	Yes	100%	100%	Yes	100%	Yes	
532	Bedroom 1	2.79%	Yes	100%	100%	Yes	100%	Yes	
532	Bedroom 2	3.70%	Yes	100%	100%	Yes	100%	Yes	
532	Bedroom 3	3.06%	Yes	100%	100%	Yes	100%	Yes	
534	Bedroom 1	2.83%	Yes	100%	100%	Yes	100%	Yes	
534	Bedroom 2	3.68%	Yes	100%	100%	Yes	100%	Yes	
534	Bedroom 3	3.05%	Yes	100%	100%	Yes	100%	Yes	
536	Bedroom 1	2.77%	Yes	100%	100%	Yes	100%	Yes	
536	Bedroom 2	3.69%	Yes	100%	100%	Yes	100%	Yes	
536	Bedroom 3	3.03%	Yes	100%	100%	Yes	100%	Yes	
538	Bedroom 1	2.83%	Yes	100%	100%	Yes	100%	Yes	
538	Bedroom 2	3.67%	Yes	100%	100%	Yes	100%	Yes	
538	Bedroom 3	3.03%	Yes	100%	100%	Yes	100%	Yes	
540	Bedroom 1	2.77%	Yes	100%	100%	Yes	100%	Yes	
540	Bedroom 2	3.69%	Yes	100%	100%	Yes	100%	Yes	
540	Bedroom 3	3.03%	Yes	100%	100%	Yes	100%	Yes	



Figure 7.103: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





# 7.5.50 Duplex Type 9, Ground Floor

	Table	No. 7.104: Alt	ernative Da	ylight Standards	Results Duplex	Type 9, Gro	und Floor	
		BS 82	.06-2		EN 17037		BS_EN 17	7037
Unit Number	Room Description	Predicted ADF	Meets Criteria*	% of area above 300 Lux (recommendation >50%)	% of area above 100 Lux (recommendation >95%)	Meets Criteria*	% of area above target Lux* (recommendation >50%)	Meets Criteria*
541	LKD	2.86%	Yes	73%	100%	Yes	94%	Yes
541	Bedroom 1	1.73%	Yes	29%	100%	No	100%	Yes
541	Bedroom 2	2.68%	Yes	68%	100%	Yes	100%	Yes
543	LKD	2.61%	Yes	63%	100%	Yes	89%	Yes
543	Bedroom 1	1.68%	Yes	29%	100%	No	100%	Yes
543	Bedroom 2	2.28%	Yes	48%	100%	No	100%	Yes
545	LKD	2.61%	Yes	63%	100%	Yes	90%	Yes
545	Bedroom 1	1.73%	Yes	29%	100%	No	100%	Yes
545	Bedroom 2	2.28%	Yes	48%	100%	No	100%	Yes
547	LKD	2.60%	Yes	63%	100%	Yes	91%	Yes
547	Bedroom 1	1.68%	Yes	29%	100%	No	100%	Yes
547	Bedroom 2	2.28%	Yes	48%	100%	No	100%	Yes
549	LKD	2.61%	Yes	65%	100%	Yes	89%	Yes
549	Bedroom 1	1.73%	Yes	29%	100%	No	100%	Yes
549	Bedroom 2	2.28%	Yes	48%	100%	No	100%	Yes
551	LKD	2.65%	Yes	67%	100%	Yes	93%	Yes
551	Bedroom 1	1.68%	Yes	29%	100%	No	100%	Yes
551	Bedroom 2	2.28%	Yes	48%	100%	No	100%	Yes
553	LKD	2.55%	Yes	68%	100%	Yes	89%	Yes
553	Bedroom 1	1.86%	Yes	35%	100%	No	100%	Yes
553	Bedroom 2	2.46%	Yes	58%	100%	Yes	100%	Yes
555	LKD	3.06%	Yes	86%	100%	Yes	96%	Yes
555	Bedroom 1	1.81%	Yes	31%	100%	No	100%	Yes
555	Bedroom 2	3.15%	Yes	79%	100%	Yes	100%	Yes

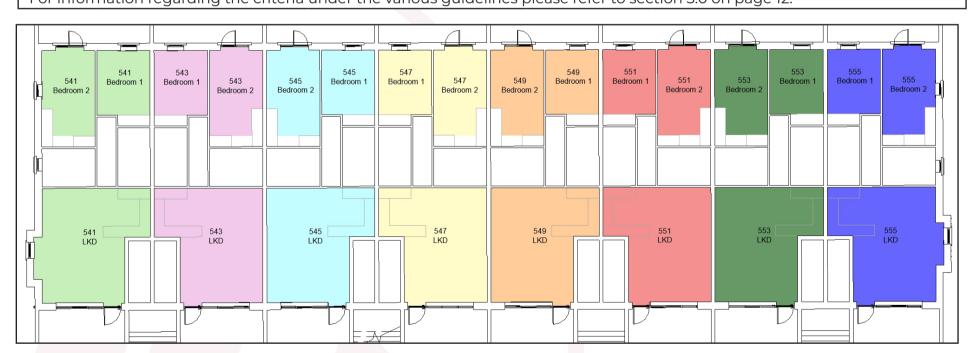


Figure 7.104: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





## 7.5.51 Duplex Type 9, First Floor

		Table No. 7.10	)5: Alternativ	ve Daylight Stan	dards Results Ty	pe 9, First F	loor	
Unit Number	Room Description	BS 8206-2		EN 17037			BS_EN 17037	
		Predicted ADF	Meets Criteria*	% of area above 300 Lux (recommendation >50%)	% of area above 100 Lux (recommendation >95%)	Meets Criteria*	% of area above target Lux* (recommendation >50%)	Meets Criteria*
542	Kitchen	3.08%	Yes	80%	100%	Yes	100%	Yes
542	Living Room	3.00%	Yes	100%	100%	Yes	100%	Yes
544	Kitchen	3.09%	Yes	86%	100%	Yes	100%	Yes
544	Living Room	2.96%	Yes	100%	100%	Yes	100%	Yes
546	Kitchen	3.10%	Yes	82%	100%	Yes	100%	Yes
546	Living Room	2.95%	Yes	100%	100%	Yes	100%	Yes
548	Kitchen	3.09%	Yes	87%	100%	Yes	100%	Yes
548	Living Room	2.94%	Yes	100%	100%	Yes	100%	Yes
550	Kitchen	3.10%	Yes	82%	100%	Yes	100%	Yes
550	Living Room	2.94%	Yes	100%	100%	Yes	100%	Yes
552	Kitchen	2.71%	Yes	69%	100%	Yes	100%	Yes
552	Living Room	2.97%	Yes	100%	100%	Yes	100%	Yes
554	Bedroom 1	1.68%	Yes	35%	100%	No	100%	Yes
554	Bedroom 2	3.12%	Yes	96%	100%	Yes	100%	Yes
554	Bedroom 2	1.82%	Yes	33%	100%	No	100%	Yes
556	Bedroom 1	1.67%	Yes	37%	100%	No	100%	Yes
556	Bedroom 2	4.44%	Yes	100%	100%	Yes	100%	Yes
556	Bedroom 2	2.87%	Yes	98%	100%	Yes	100%	Yes

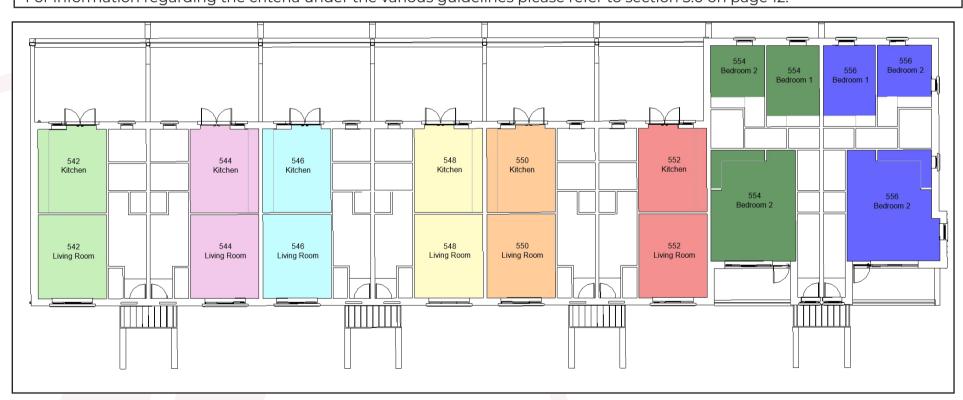
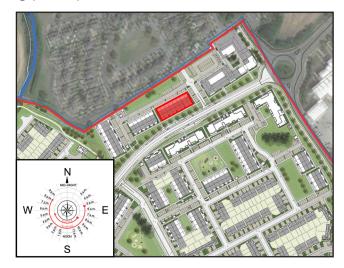


Figure 7.105: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





## 7.5.52 Duplex Type 9, Second Floor

	Table	No. 7.106: Alt	ernative Da	ylight Standards	s Results Duplex	Type 9, Sec	ond Floor	
Unit Number	Room Description	BS 8206-2		EN 17037			BS_EN 17037	
		Predicted ADF	Meets Criteria*	% of area above 300 Lux (recommendation >50%)	% of area above 100 Lux (recommendation >95%)	Meets Criteria*	% of area above target Lux* (recommendation >50%)	Meets Criteria*
542	Bedroom 1	2.83%	Yes	100%	100%	Yes	100%	Yes
542	Bedroom 2	3.67%	Yes	100%	100%	Yes	100%	Yes
542	Bedroom 3	3.03%	Yes	100%	100%	Yes	100%	Yes
544	Bedroom 1	2.77%	Yes	100%	100%	Yes	100%	Yes
544	Bedroom 2	3.70%	Yes	100%	100%	Yes	100%	Yes
544	Bedroom 3	3.00%	Yes	100%	100%	Yes	100%	Yes
546	Bedroom 1	2.85%	Yes	100%	100%	Yes	100%	Yes
546	Bedroom 2	3.69%	Yes	100%	100%	Yes	100%	Yes
546	Bedroom 3	3.00%	Yes	100%	100%	Yes	100%	Yes
548	Bedroom 1	2.79%	Yes	100%	100%	Yes	100%	Yes
548	Bedroom 2	3.72%	Yes	100%	100%	Yes	100%	Yes
548	Bedroom 3	2.98%	Yes	100%	100%	Yes	100%	Yes
550	Bedroom 1	2.86%	Yes	100%	100%	Yes	100%	Yes
550	Bedroom 2	3.71%	Yes	100%	100%	Yes	100%	Yes
550	Bedroom 3	2.99%	Yes	100%	100%	Yes	100%	Yes
552	Bedroom 1	2.79%	Yes	100%	100%	Yes	100%	Yes
552	Bedroom 2	3.70%	Yes	100%	100%	Yes	100%	Yes
552	Bedroom 3	3.00%	Yes	100%	100%	Yes	100%	Yes

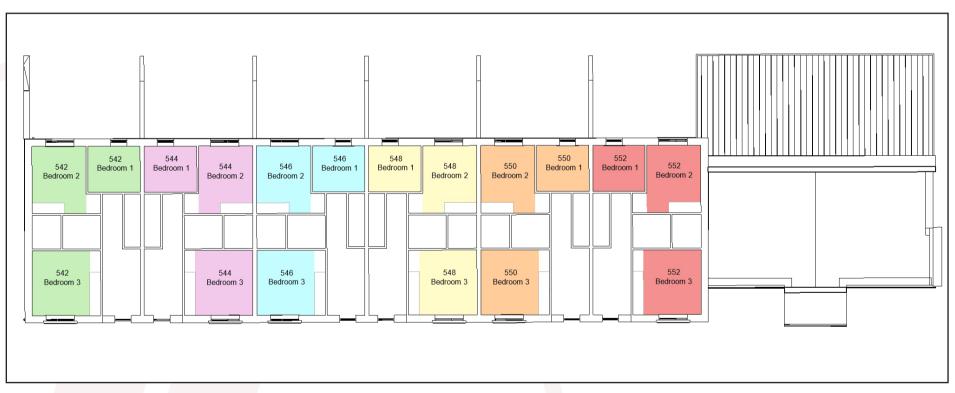


Figure 7.106: Floor plan of assessed building (Above), Keyplan highlighting the assessed building (Below).





# 8.0 Analysis of Results

Results were generated and analysed for the following studies:

- · Vertical Sky Component
  - · 71-73 Wellesley Manor
  - · 81-87 Wellesley Manor
  - 12-13 Wellesley Manor
  - · Great Connell
- · Annual Probable Sunlight Hours
  - 71-72 Wellesley Manor
  - · 81-87 Wellesley Manor
  - 12-13 Wellesley Manor
  - Great Connell
- · Sunlighting in Existing Gardens/Amenity Spaces
  - · 71-73 Wellesley Manor
  - · 81-87 Wellesley Manor
  - · 12-13 Wellesley Manor
  - · Great Connell
- Sunlighting in Proposed Gardens/Amenity Spaces
  - · 17 No. spaces in the proposed development.
- · Average Daylight Factor
  - · 791 No. spaces in the proposed development.

## 8.1 Analysis of Impact Assessment Results

#### 8.1.1 Effect on Vertical Sky Component (VSC)

The effect on VSC has been assessed for 82 No. windows across the surrounding properties. Using the rationale explained in section 2.2 on page 6, the effect to VSC on 82 no. of these windows would be considered imperceptible.

This shows that all the assessed windows will experience an imperceptible level of effect, which is an excellent result.

The complete results for the study on the effect on VSC caused by the proposed development can be found in Section 6.1 on page 20.

#### 8.1.2 Effect on Annual/Winter Probable Sunlight Hours (APSH/WPSH)

The APSH/WPSH assessment has been carried out on the relevant windows of the surrounding properties that have an orientation within 90 degrees of due south.

The effect on APSH has been assessed for 60 no. of windows of the surrounding existing properties across 71-72 Wellesley Manor, 81-87 Wellesley Manor, 12-13 Wellesley Manor, and Great Connell.

Using the rationale explained in section 2.2 on page 6, the effect on the APSH of 60 no. of these windows would be considered *imperceptible*.

100% of these windows have met the criteria for effect on APSH as set out in the BRE Guidelines.

The effect on WPSH has been assessed for 60 no. of windows of the surrounding existing properties across 71-72 Wellesley Manor, 81-87 Wellesley Manor, 12-13 Wellesley Manor, and Great Connell. The effect on the WPSH of 60 no. of these windows would be considered *imperceptible*. These effects have been assigned per the rationale explained in section 2.2 on page 6.

All of these windows have met the criteria for effect on WPSH as set out in the BRE Guidelines, which is an excellent result.

The results of the study on APSH can be found in Section 6.2 on page 29.



#### 8.1.3 Effect on Sun On Ground in Existing Gardens

This study has assessed the effect the proposed development would have on the level of sunlight on March 21st in the rear gardens of the neighbouring properties that are located along 71-73 Wellesley Manor, 81-87 Wellesley Manor, 12-13 Wellesley Manor, and Great Connell.

In total 12 no. spaces have been assessed. Using the rationale explained in section 2.2 on page 6, 12 no. of which would experience an *imperceptible* level of effect.

All of these outdoor spaces have met the criteria for effect on sunlighting as set out in the BRE Guidelines, which is an excellent result.

The complete results of the study on effect on sunlight the neighbouring gardens can be found in section 6.3 on page 42.

A visual representation of these readings can be seen in the 2 hour false colour plans in section 6.3 and in the hourly shadow diagrams for March 21st in section 6.4.1 on page 43.

#### 8.2 Analysis of Scheme Performance Results

#### 8.2.1 Sun On Ground in Proposed Outdoor Amenity Areas

This study has assessed the level of sunlight on March 21st with in the proposed amenity areas.

In total 17 No. spaces have been assessed, 16 No. of which would meet the criteria as set out in the BRE Guidelines.

All the shared outdoor amenity areas perform particularly well, indicating that the proposed buildings have sufficient separation distances allowing for good access to sunlight. The future occupants will enjoy excellent levels of sunlight throughout the year.

Also, the private outdoor amenity areas have been analyzed, including the creche play area and the rooftops of the apartment blocks.

The creche play does not achieve the minimum recommended level of sunlight on March 21st as per the BRE Guidelines. This is due to site constraints and the most appropriate location for the creche play area, facing the internal courtyard to the north rather than facing the public realm to the south and adjacent to a main road.

Although the level of sunlight in this area is lower than the BRE recommendations, an ADF study has shown that this space will be capable of receiving excellent levels of daylight. Furthermore, the average sun hours study that has been carried out on this space has shown a favourable outcome during the summer solstice, June 21st, when sunlight is most likely to be enjoyed. This can be seen in the hourly renderings within the shadow study, where there is a good sunlight access between 12:00 and 17:00 on June 21st. Shading in this area after this time is not likely to affect the quality of the space as it would be expected that the creche would not be occupied.

The rooftops of the apartment blocks perform very well, and future residents will enjoy excellent levels of sunlight throughout the year.

The complete results for the study on sunlighting in the proposed outdoor amenity spaces can be found in section 7.0 on page 52.

A visual representation of these readings can be seen in the false colour plan in section 7.0 and in the hourly shadow diagrams for March 21st in section 6.4.1 on page 43.

#### 8.2.2 Average Daylight Factor (ADF)

This study has assessed the Average Daylight Factor (ADF) received in all habitable rooms across all the floors of the proposed buildings/units within the area of the development assessed. This has ensured that where unit types differ by way of layout and/or floor to ceiling heights, a clear understanding has been obtained of the performance of the scheme with regard to ADF.

The proposed development analyzed consists of 16 no. buildings, including apartment blocks and duplexes.

With a 2.0% ADF target value for LKDs, the ADF value in 791 no. habitable rooms meet or exceed their target values. This gives a compliance rate of 100%. For a scheme of this size, this has to be considered an excellent level of compliance.

Given the favourable outcome on the most constrained area of the proposed site, it's reasonable to assume that all the other less constrainted units within the site would also have favourable levels of daylight and sunlight.

The complete results for the study on ADF can be seen in section 7.4 on page 55.



#### Conclusion 9.0

3D Design Bureau (3DDB) were commissioned to carry out a daylight assessment, sunlight assessment and shadow study for Great Connell SHD, Newbridge, Co. Kildare.

The impact assessment has studied the effect the proposed development would have on the level of daylight and sunlight received by the neighbouring residential properties that are in close proximity to the proposed development, whilst the scheme performance has assessed daylight & sunlight within the proposed development itself. For the scheme performance the most constrained area of the site was analysed.

From the results generated in this study it can be seen that the proposed scheme design is sympathetic on the existing neighbouring properties to the North of the site where height and position of proposed buildings has been limited. These factors ensured that all the existing windows assessed will experience an imperceptible level of effect. Furthermore none of the surrounding gardens will experience a perceptible reduction in their sunlighting on March 21st, as per BRE Guidelines. Therefore the level of effect on daylight and sunlight to the surrounding existing properties can be considered very favourable.

With regard to the scheme itself, it is clear that the layout, arrangement and design of the proposed buildings have been carefully considered leading to access to good levels of daylight & sunlight. 3DDB worked closely with the design team throughout the project and design interventions were carried out to ensure a 100% compliance rate for daylighting inside the units. All of the proposed private and shared residential amenity spaces are also displaying excellent levels of sunlight for future occupants of the scheme, which again can be contributed to good architectural design.

It has been noted that whilst the internal daylighting of the creche is all very positive, its outdoor space is the one amenity space tested that does not meet the BRE guidelines. It falls below the recommended levels of sunlight but for good reason. It has been located North of the creche building itself giving priority to the security and privacy of children and staff of the creche over access to direct sunlight. Should it be located to the opposite side of the building it would be experience higher levels of direct sunlight but would be adjacent to a main road and thus increase the level of risk to health and safety. 3DDB carried out a supplementary assessment on this area, which shows excellent levels of daylight and good sunlight access during the afternoon in summer time.

Finally, for a scheme of this size and associated complexities, the daylight and sunlight assessment should be considered very favourable.