

# Sea Gardens, Phase 1 Block A

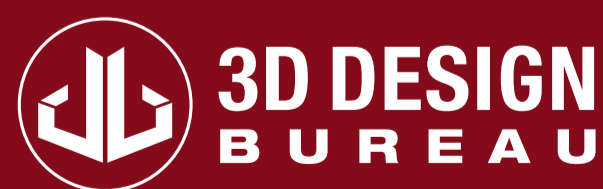
Daylight and Sunlight Assessment Report  
Applicant: Shankill Property Investments Ltd

*"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." - BR 209*

+353 (0) 1 288 0186

info@3ddesignbureau.com

www.3ddesignbureau.com



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The following report has been prepared by 3D Design Bureau (3DDB). 3DDB have over 7 years experience in producing daylight and sunlight assessments for large scale planning applications and are recognised as experts in the field. This report has been reviewed and overseen by Nicholas Polley and Richard Dalton. Nicholas is CEO of 3D Design Bureau and is a qualified Building Services Engineer (B.Sc.(Eng) Dip Eng) with over 25 years experience in the industry. Richard is Associate Director of 3DDB and has a bachelor's degree in Building Information Modelling (BIM) with over 20 years experience in the industry.

## 1.0 Executive Summary

### 1.1 Summary of Assessment

3D Design Bureau (3DDB) were commissioned to carry out a comprehensive daylight and sunlight assessment, along with an accompanying shadow study for the proposed Residential Development, Sea Gardens in Bray. This report focuses on proposed Phase 1 Block A which comprises two blocks (Block A1 and A2) and townhouses, all attached to the shared 2-level podium. Assessments have been broken down into the following two main categories, 'Impact Assessment' and 'Scheme Performance', of which there are subcategories as summarised below.

Assessments have been conducted for two scenarios, each involving a different version of Block B:

- The granted Block B (SHD 2: ABP 314686-22) was used for the **Impact Assessment** studies.
- A potential future proposed Block B was used for the **Scheme Performance** studies.

The impact assessment evaluates how the proposed new building will affect the amount of daylight and sunlight received by the existing neighbouring properties and granted Block B.

The scheme performance assessment measures how much daylight and sunlight the new building's own apartments and amenity areas will receive.

The rationale for using a potential future Block B for testing of scheme performance is to present the results for Block A in a more constrained state when a future application be made for the Block B site.

Additionally this report includes the comparison of Impact assessment results between the proposed Block A and the previously Granted Block A (under ABP-314686-22) model states, on the surrounding buildings. This follows on from the same approach for the pre-app stage.

Furthermore, it should be noted that Block B, though granted, is not constructed or intended to be constructed, and therefore there is currently no established expectation for daylight and sunlight levels within its units, as would be the case if it were built and occupied. Nevertheless, the design team has taken this into account when designing the proposed Block A. All of the model states are shown and described in section 1.2 on page 5.

#### Impact Assessment

Following advice within the BRE Guidelines, the surrounding context was carefully considered to ensure all properties and amenity spaces that may potentially experience a level of effect, due to the proposed development, are included in the study. These include three duplex blocks and Apartment Block B (Reg. Ref. ABP 314686-22), as shown in Figure 1.1. A more detailed explanation of the criterion applied can be found in section "4.1 Impact Assessment, Window Selection Criteria" on page 16.

In this report, the baseline model state includes the existing surrounding context and the granted Block B.

The impact assessment, in accordance with the BRE Guidelines, covered the effect on daylight through the effect to the Vertical Sky Component (VSC) to these windows. No APSH/WPSH assessment has been carried out on these windows on the basis that they are not orientated within 90° of due south. Furthermore, no SOG impact assessment was required as the proposed amendments are not located south of any existing amenity areas. However, a qualitative assessment of the SOG of the surrounding context can be made by reviewing the false colour plan images provided in section A.3 on page 51.

The assessed properties in the impact assessment are indicated in Figure 1.1.

The effects were assessed in the baseline state versus the proposed state. For definition of model states, including a visual representation of the model states, please refer to the 'Methodology' section on Page 17.



Figure 1.1: Scope of surrounding properties and environment assessed.

This impact assessment covers the following metrics:

- Effect on daylight to surrounding properties. The effect to the Vertical Sky Component (VSC) of the windows of the following neighbouring properties was assessed:
  - Duplex Units of the Phase 1
  - Granted apartment Block B SHD2: APB 314686-22
- Effect on sunlight to surrounding properties. The effect to the No Sky Line (NSL) of the windows of the following neighbouring properties was assessed:
  - Granted apartment Block B SHD2: APB 314686-22

The results of the impact assessments can be found in section A.0 on page 35. These results are summarised in section 1.3 on page 6, and explained in section “5.1 Analysis of Impact Assessment Results” on page 27.

### Scheme Performance

The Scheme Performance assessments focus on the proposed Block A, taking into account the potential future Block B as shown in Figure 1.2. This approach aims to present results under a more constrained scenario, should a future application be submitted for the Block B site.

- **Daylight access:** Assessed for the habitable rooms of the proposed development of Block A (apartments and townhouses) through a Spatial Daylight Autonomy (SDA) study.
- **Sunlight access:** Quantified through a Sunlight Exposure (SE) assessment for the same habitable rooms.
- **A Sun On Ground (SOG):** Assessed to indicate the level of sunlight on March 21st in the proposed external amenity spaces, which include Public Open Spaces and Communal Open Space (located on podium).



Figure 1.2: Model view of the proposed model state.

The results of these scheme performance assessments, which are in accordance with the BRE Guidelines, can be found in section D.0 on page 86. These results are summarised in section 1.4 and explained in section “5.2 Analysis of Scheme Performance Results” on page 28.

Supplementary scheme performance studies have also been carried out. These include an SDA assessment under the I.S. EN 17037 criterion, and a No Sky Line (NSL) study within proposed habitable rooms listed above. The results of the supplementary scheme performance assessments can be found in section E.0 on page 141.

### Qualitative Assessment

In addition to the quantitative assessments detailed in the ‘Impact Assessment’ and ‘Scheme Performance’ sections, this report includes a qualitative assessment. This is provided through the false colour plans of the proposed SOG assessment (section D.6 on page 120) and the hourly renderings of the shadow study (section B.0 on page 52).

## 1.2 Views of the model states used for calculations.



Figure 1.3: View of the **Baseline** model state.



Figure 1.4: Model View of the **Granted Block A** (beige) and **Granted Block B** (red). Model state used for Impact assessment for the comparison purposes. Results related to this model state are described as 'By **Granted Block A**' in section 1.3 tables.



Figure 1.5: Model View of the **Proposed Block A** (beige) and **Granted block B** (red). Model state used for Impact assessment. Results related to this model state are described as '**By Proposed Block A**' in section 1.3 tables.



Figure 1.6: Model View of the **Proposed Block A** (beige) and a potential future **Proposed Block B** (blue). Model state used for Scheme Performance for the proposed Block A.

Note: Trees have been omitted from the image to clearly illustrate the proposed buildings, however, they were included in all relevant calculations.

### 1.3 Impact Assessment Results Overview - Neighbouring Properties: Effect to Daylight - Vertical Sky Component (VSC) :

Effect to Vertical Sky Component (VSC)		
	By Granted Block A	By Proposed Block A
Windows/Rooms Assessed	138	138
Negligible	111	91
Minor Adverse	14	17
Moderate Adverse	13	29
Major Adverse	0	1
Beneficial Impact*	0	0
n.a.**	0	0

#### No Sky Line (NSL):

No Sky Line (NSL)		
	By Granted Block A	By Proposed Block A
Rooms Assessed	138	138
Negligible	120	103
Minor Adverse	15	12
Moderate Adverse	3	19
Major Adverse	0	4
Beneficial Impact*	0	0
n.a.**	0	0

\*'Beneficial Impact' will only be stated if the ratio of change is greater than 1.20 (an improvement of 20%). Should less perceptible improvements occur a 'Negligible' level of effect will be stated.

\*\*In instances where a baseline value is particularly low, levels of effects can appear exaggerated. To mitigate such occurrences, if the baseline value in the VSC, APSH/WPSH or SOG studies is below 1%, 3DDB have categorised the level of effect as n.a. (not applicable). Where windows/gardens/amenity areas are considered non-applicable, these instances are not included in the compliance rates calculation.

## 1.4 Scheme Performance Results Overview: Spatial Daylight Autonomy (SDA):

Spatial Daylight Autonomy (SDA) BRE 209 Criteria	
Unit Count	159
Rooms Assessed	499
Without Trees	
Compliant	480
Non-compliant	19
Compliance Rate*	c. 96%
With Trees (Proposed and Existing Trees)	
Compliant	467
Non-compliant	32
Compliance Rate*	c. 94%
Note: It is the expert opinion of 3DDB that the appropriate criteria for SDA assessments are that of the BRE Guidelines (BRE 209)	

\* Compliance rates stated for the SDA analysis are based on the rooms that have been assessed within the residential portion of the proposed development. Units which contain non-compliant rooms will have Compensatory Design Solutions provided by the project architects.

### Sunlight Exposure (SE):

Sunlight Exposure (SE)	
Units Assessed	159
SE without deciduous trees	
Non-Compliant	26
Minimum	29
Medium	6
High	98
Compliance Rate*	c. 84%
SE with trees as opaque objects	
Non-Compliant	30
Minimum	29
Medium	6
High	94
Compliance Rate*	c. 81%

\* Compliance rates stated for the SE analysis are based on the units that have been assessed.

### Sun On Ground (SOG) in amenity areas:

Sun On Ground (SOG) in proposed gardens / amenity areas	
Areas Assessed	3
Areas meeting the guidelines	3
Areas not meeting the guidelines	0
Compliance Rate*	100%

\* Compliance rates stated for the SOG assessment are based on the public and communal open spaces only.

## 1.5 Supplementary Assessment Results Overview

### Spatial Daylight Autonomy (SDA) under I.S. EN 17037 Criterion:

Spatial Daylight Autonomy (SDA) under I.S. EN 17037 Criterion	
Unit Count	159
Rooms Assessed	499
Without Trees	
Compliant	392
Non-compliant	107
Compliance Rate*	c. 79%
With Trees (Proposed and Existing Trees)	
Compliant	369
Non-compliant	130
Compliance Rate*	c. 74%

Note: The study under the I.S. EN 17037 criterion should be considered a supplementary assessment. It is the expert opinion of 3DDB that the appropriate criteria are that of the BRE Guidelines (BRE 209)

\* Compliance rates stated for the SDA analysis are based on the rooms that have been assessed.

### No Sky Line (NSL):

No Sky Line (NSL):	
Unit Count	159
Rooms Assessed	499
Yes	451
No	48
Compliance Rate**	c. 90%

\*\* As the BRE Guidelines do not provide a recommended minimum for NSL in proposed developments, compliance rates for NSL are calculated using a criteria applied by 3DDB.

\* Compliance rates stated for the NSL analysis are based on the rooms that have been assessed.

## 2.0 Guidelines / Standards

### Overview

Neither the British Standard, European Standard, British Annex to the European Standard nor the BRE Guidelines (BR 209) 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 Guidelines 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). A compromise may have to be made concerning daylight and sunlight compliance to achieve national or local planning objectives.

It is the expert opinion of 3D Design Bureau, that the BRE Guidelines (BR 209) are the most appropriate guiding document for daylight and sunlight assessment. For daylight within proposed developments, a supplementary study has also been carried out under the criteria of *I.S. EN 17037*. The rationale for this opinion is outlined below.

### **Sustainable Urban Housing: Design Standards for New Apartments Guidelines for Planning Authorities. (2023)**

In July 2023, the Department of Housing, Planning and Local Government published an updated guidance document for new apartments, *Sustainable Urban Housing: Design Standards for New Apartments*. This document makes reference to, *EN 17037:2018: Daylight in Buildings* (the European Standard), *BS EN 17037:2018: Daylight in Buildings* (the UK National Annex to the European Standard) and to the 3rd edition of Building Research Establishment's *Site Layout Planning for Daylight and Sunlight: a Guide to Good Practice* (BR 209 2022).

Paragraph 6.7 of the 2023 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. This may arise due to a design constraints [sic] 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.”*

As such, this report identifies where daylight and sunlight recommendations have and have not been achieved. Rationale and compensatory design solutions are the remits of the planning consultant and/or the project architect, these will also be included in this report where applicable.

Note: Section 3.2 of the Urban Development and Building Height Guidelines 2020, provides similar guidance as above. However, it should be noted that at the time of publication of the *Urban Development and Building Height Guidelines (2020)*, BR 209 was in the 2nd edition, first published in 2011. Since then, a 3rd edition of BR 209 has been published (June 2022) and the 2nd edition has been withdrawn. BR 209 no longer references *BS 8206-2:2008*, which has also been withdrawn. The standard used as reference in BR 209 edition 3 is *BS EN 17037*.

### **BR 209 - Site Layout Planning for Daylight and Sunlight: a Guide to Good Practice (2022)**

This document will be referred to as the *BRE Guidelines*, the *BRE Guide* or *BR 209* in this report.

At the time of writing this report, the BRE Guidelines are in the third edition (BR 209). The BRE Guidelines set out recommendations for appropriate levels of daylight and sunlight within a proposed development, as well as providing guidance on impacts arising from a proposed development to surrounding properties and amenity areas.

Upon publication of the 3rd Edition of the BR 209 (2022), the 2nd edition (2011) has been withdrawn. Among the updates from the 2nd to the 3rd edition are some changes in the recommended metrics to use for carrying out scheme performance assessments.

Daylight within proposed developments was previously assessed under the 2011 guidelines using an ‘Average Daylight Factor’ assessment (ADF). This has been replaced with a ‘target illuminance assessment’, also known as a ‘Spatial Daylight Autonomy’ assessment (SDA).

Sunlight within proposed developments was previously assessed under the 2011 guidelines using an ‘Annual / Winter Probable Sunlight Hours’ assessment (APSH/WPSH). This has been replaced with a ‘Sunlight Exposure’ assessment (SE). However, APSH/WPSH is still recommended for sunlight impact assessments.

As such, no ADF or APSH/WPSH assessment will be included as part of a scheme performance assessment under the updated guidelines.

Details of the criteria for new metrics, and all other relevant metrics, can be found in the methodology section on Page 16 of this report.

It is the expert opinion of 3D Design Bureau that the BRE Guidelines are the most appropriate guiding document for assessing daylight potential within a proposed development. The rationale for this opinion is outlined in the Dublin City Council development plan (2022-2028), which states:

*“Prior to 2018, Ireland had no standard for daylight. In 2018, the National Standards Authority of Ireland adopted EN 17037 to directly become IS EN 17037. It is important to note that no amendments were made to this document and unlike BS EN 317037, it does not contain a national annex. It offers only a single target for new buildings (there are no space by space targets – e.g. a kitchen would have the same target as a warehouse or office). It does not offer guidance on how new developments will impact on surrounding existing environments. These limitations make it unsuitable for use in planning policy or during planning applications. BR 209 must still be used for this purpose.”*

Whilst BRE Guidelines draws reference from BS EN 17037, there are some subtle differences between BR 209 and BS EN 17037. For the purposes of this report, the BRE Guidelines (BR 209) is considered the appropriate reference document.

A detailed description of the various recommendations for impact assessment and scheme performance is contained in section “4.3 Quantitative Impact Assessment Overview” on page 20 of this report.

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

*EN 17037* is a European Standard that provides recommendations for daylight within spaces. (Emphasis added)

EN 17037:2018 recommends that 300 lux should be received across 50% of a hypothetical reference plane of any 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.

It is the opinion of 3D Design Bureau that these target values are less appropriate for proposed residential developments than the recommendations made in the BRE Guidelines, which apply room-specific target values for appropriate LUX levels.

Recommendations made in EN 17037 regarding Sunlight Exposure for proposed developments have been incorporated into the BRE Guidelines. As such, Sunlight Exposure is deemed the appropriate assessment for sunlight within habitable rooms of the proposed development.

EN 17037 also makes recommendations related to glare and quality of view out. These aspects are not addressed in this report as these assessments have less relevance in a residential context where occupants have the freedom to move about in order to improve level of glare or alter the view out.

### **I.S. EN 17037:2018 Daylight in Buildings (2018)**

*I.S. EN 17037* is a direct adoption of the European Standard *EN 17037:2018* that provides recommendations for daylight within spaces.

The target values given within *I.S. EN 17037* are directly adopted from *EN 17037*. As such, there are no room-specific recommendations for daylight. Because of these limitations, it is the expert opinion of 3D Design Bureau, that the recommendations made in the *BRE Guidelines* are more appropriate to use than those within *I.S. EN 17037*.

Regardless, a supplementary SDA study has been carried out on the proposed development using the criterion of *I.S. EN 17037*, with compliance rates stated. However, this should be considered a supplementary study.

### **BS EN 17037:2018: Daylight in Buildings (2018)**

BS EN 17037 is the British Annex to the European Standard (see above). The British Annex acknowledges that a rigid application of the European Standard “may not be achievable”. 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.*”

In BS EN 17037, daylight recommendations 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
- 100 Lux for bedrooms

No minimum is stated to be achieved across 95% of the working plane. If a space has dual purposes it is advised that the higher target value should be applied.

### **Sustainable Residential Development and Compact Settlements Guidelines (2024)**

Often referred to as “The Compact Growth Guidelines” this document advises on compact growth principles as a means to promote sustainable development, efficient land use, and infrastructure while minimizing sprawl and environmental degradation, contributing to sustainable urban growth, enhance liveability and support broader planning objectives.

In regard to daylight, section 5.3.7 states:

*“The provision of acceptable levels of daylight in new residential developments is an important planning consideration, in the interests of ensuring a high quality living environment for future residents. It is also important to safeguard against a detrimental impact on the amenity of other sensitive occupiers of adjacent properties.*

*(a) The potential for poor daylight performance in a proposed development or for a material impact on neighbouring properties will generally arise in cases where the buildings are close together, where higher buildings are involved, or where there are other obstructions to daylight. Planning authorities do not need to undertake a detailed technical assessment in relation to daylight performance in all cases. It should be clear from the assessment of architectural drawings (including sections) in the case of low-rise housing with good separation from existing and proposed buildings that undue impact would not arise, and planning authorities may apply a level of discretion in this regard.*

*(b) In cases where a technical assessment of daylight performance is considered by the planning authority to be necessary regard should be had to quantitative performance approaches to daylight provision outlined in guides like A New European Standard for Daylighting in Buildings IS EN17037:2018, UK National Annex BS EN17037:2019 and the associated BRE Guide 209 2022 Edition (June 2022), or any relevant future standards or guidance specific to the Irish context.*

*In drawing conclusions in relation to daylight performance, planning authorities must weigh up the overall quality of the design and layout of the scheme and the measures proposed to maximise daylight provision, against the location of the site and the general presumption in favour of increased scales of urban residential development. Poor performance may arise due to design constraints associated with the site or location and there is a need to balance 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.”*

The Compact Growth Guidelines should be applied within statutory development plans and during the consideration of individual planning applications. Flexibility in interpretation allows planning authorities to tailor recommendations to specific local contexts and planning objectives.

### **Dun Laoghaire-Rathdown County Development Plan (2022-2028)**

The guidance provided in the Dun Laoghaire-Rathdown County Development Plan 2022-2028 (DLR) references the 2nd Edition of the BRE guidelines (BR 209).

Section 12.3.4.2 of the DLR Development Plan states:

*“Development shall be guided by the principles of Site Layout Planning for Daylight and Sunlight, A guide to good practice (Building Research Establishment Report, 2011) and/or any updated, or subsequent guidance, in this regard.”*

The DLR Development Plan allows for consideration of any updated or subsequent guidance and, therefore, the 3rd edition of the BRE guidelines (BR 209), which was released in 2022 after the publication of the DLR Development Plan, is considered as the primary document.

### **Wicklow County Development Plan (2022-2028)**

Regarding daylight and sunlight, Appendix 1 - ‘Development and Design Standards’ of the Wicklow development plan (2022-2028) states:

*“Layouts shall ensure adequate sunlight and daylight, in accordance with “Site layout planning for daylight and sunlight: a guide to best practice”, (BRE 1991).”*

The referenced document has been withdrawn and replaced with an updated edition, ‘BR 209 - Site Layout Planning for Daylight and Sunlight: a Guide to Good Practice (2022)’. The updated document will be used as reference as opposed to that which is referenced in the development plan.

### Summary

According to the aforementioned guiding documents, the following assessments are typically conducted for a daylight and sunlight study, depending on the specific requirements of the project.

#### Performance of the Proposed Development

Annual Probable Sunlight Hours (APSH) and Winter Probable Sunlight Hours (WPSH) on all relevant windows: APSH and WPSH are no longer recommended for scheme performance assessments under BR 209. They have been replaced with Sunlight Exposure (SE). When conducting a scheme performance assessment for sunlight in the habitable rooms of the proposed development, Sunlight Exposure is the relevant metric. An APSH/WPSH assessment will not be carried out in the scheme performance assessment of the proposed development.

Sunlight on Ground (SOG) in all amenity spaces: A SOG assessment will be carried out, where appropriate, for the amenity spaces of the proposed development.

Average Daylight Factor (ADF) in all habitable rooms: BR 209 (2022) states that ADF is no longer recommended as a relevant method of assessment. ADF has been replaced with a target illuminance assessment. (See below). As such, no ADF assessment will be carried out on the proposed development.

No Sky Line (NSL) in all habitable rooms: An NSL assessment will be conducted for the habitable rooms of the proposed development as a supplementary study as part of a scheme performance assessment.

Target Illuminance in all habitable rooms: A target illuminance assessment, also known as a Spatial Daylight Autonomy (SDA) assessment, has replaced ADF as the relevant metric for assessing daylight within proposed habitable spaces. The two recommended methodologies for this assessment are detailed in section 4.5.1 on page 24. In a scheme performance assessment, the SDA will be calculated for the habitable rooms of the proposed development.

#### Impact on the Surrounding Properties

Vertical Sky Component (VSC) on all relevant surrounding windows: A VSC impact assessment will be conducted, where appropriate, on the relevant surrounding windows determined by the BRE decision chart as illustrated in Figure 4.2 on page 16.

Annual Probable Sunlight Hours (APSH) and Winter Probable Sunlight Hours (WPSH) on all relevant surrounding windows: An APSH/WPSH impact assessment will be conducted, where appropriate, on the relevant surrounding windows/rooms that have an orientation within 90° of due south.

Sunlight on Ground (SOG) in all surrounding amenity spaces: A SOG impact assessment will be carried out, where appropriate, on the neighbouring gardens/amenity spaces located within close proximity and to the north of the subject site.

## 3.0 Glossary

### 3.1 Terms and Definitions

Below is a list of daylight and sunlight terminology that may be used in this report depending on the assessments carried out.

**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.

**Cloudless sky model**

A completely cloudless sky model, used for sunlight exposure calculation.

**Model State**

The model state is a term used to describe the configuration of the digital model used to run analysis. Model states will typically reflect a baseline state and a proposed or cumulative state. For a definition of the model states used in the analysis carried out in this report, please refer to "Preparing the analytical model" on page 17.

**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 (WPSH) 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.

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.

**Sunlight Exposure (SE)**

The number of hours of direct sunlight a room can expect to receive on a given date between February 1st and March 21st at a determined point on the windows.

**Spatial Daylight Autonomy (SDA)**

Spatial Daylight Autonomy assesses whether a space receives sufficient daylight on a working plane during standard operating hours on an annual basis. For compliance, the target value is achieved across 50% of the working plane for half of the occupied period.

**No Sky Line (NSL)**

The no sky line divides points on the working plane which can and cannot see the sky.

**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 300mm from the room boundaries under BR 209 criteria, and 500mm from the room boundaries under I.S. EN 17037 criteria.

**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.

## 3.2 Definition of Effects

The BRE Guidelines state that:

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

As such, planning authorities should consider a range of localised factors when making decisions. The terminology suggested in the BRE Guidelines is as listed below, whilst the assessment of impact should depend on a combination of factors. The BRE Guidelines also state:

*“Where a new development affects a number of existing buildings or open spaces, the clearest approach is usually to assess the impact on each one separately. It is also clearer to assess skylight and sunlight impacts separately.”*

Taking this advice, 3DDB have categorised the level of effect on each window/room/open space on an individual basis. In quantifying the levels of effect, 3DDB have assigned numerical values to the levels of compliance with the BRE recommendations. By applying a numerical logic to the terminology used in defining the levels of effect there is no ambiguity regarding how the levels of effect have been categorised within this report.

The list of definitions given below is taken from ‘Appendix H: Environmental impact assessment’ of the BR 209 with a clear indication of how they have been applied in the context of this report.

### **Negligible**

For the purposes of this Sunlight and Daylight Assessment Report a ‘*Negligible*’ 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.

### **Minor Adverse**

For the purposes of this Sunlight and Daylight Assessment Report, a ‘*Minor Adverse*’ 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 ‘*Minor Adverse*’ level of effect will be applied if the level of daylight or sunlight is reduced to equal or greater than 80% and less than 100% of the applied target value.

### **Moderate Adverse**

For the purposes of this Sunlight and Daylight Assessment Report, a ‘*Moderate Adverse*’ level of effect will be stated if the level of daylight or sunlight is reduced to equal or greater than 50% and less than 80% of the applied target value. ‘*Moderate Adverse*’ levels of effect are quite typical in instances where a proposed development is planned on an under-developed plot of land.

### **Major Adverse**

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 ‘*Major Adverse*’ level of effect will be stated if the proposed development reduces the availability of daylight or sunlight of a neighbouring property to significantly below a baseline level. A ‘*Major Adverse*’ level of effect will be stated if the level of daylight or sunlight is reduced to less than 50% of the applied target value.

### **Beneficial Impact**

In relation to sunlight or daylight access, it is conceivable that a proposed development could yield positive effects on the neighbouring properties. In such circumstances the development would typically involve a reduction to the size or scale of built form (e.g. such as the demolition of a building or the removal of a large belt of evergreen trees, which might result in an increase in light access). Where such improvements occur, a ‘*Beneficial Impact*’ will only be stated if the ratio of change is greater than 1.20 (an improvement of 20%). Should less perceptible improvements occur a ‘*Negligible*’ level of effect will be stated.

### **Not Applicable (n.a.)**

In instances where a baseline value is particularly low, levels of effects can appear exaggerated. To mitigate such occurrences, if the baseline value in the VSC, APSP/WPSH or SOG studies is below 1%, 3DDB have categorised the level of effect as n.a. (not applicable).

### **Averaged Windows (-)**

If it can be determined or reasonably assumed that multiple windows are servicing the same room, each window will be assessed and a weighted average will be calculated. In such instances the level of effect for the room will be stated, but the level of effect for the individual windows contributing towards the average will be left blank in the table. This will be indicated in the tables with the dash symbol. (-)

### 3.3 Definition of Levels of Sunlight Exposure

For interiors, access to sunlight can be quantified. BR 209 recommends that a space should receive a minimum of 1.5 hours of direct sunlight on a selected date between 1 February and 21 March with cloudless conditions. It is suggested that 21 March (equinox) be used. The medium level of recommendation is three hours and the high level of recommendation four hours. For dwellings, at least one habitable room, preferably a main living room, should meet at least the minimum criterion.

#### Level of Sunlight Exposure:

The level of sunlight exposure will be stated for each assessed room in the tables under section “D.5 Sunlight Exposure (SE) in Proposed Units” on page 119. Below is a list of the terms used to categorise the levels of sunlight exposure:

##### Below Minimum

Sunlight exposure will be categorised as ‘below minimum’ if the potential sunlight for the assessed room is less than 1.5 hours on March 21st. Note: the recommendation is that a room within a proposed unit is capable of receiving 1.5 hours of direct sunlight on March 21st. If an individual room of a proposed unit does not achieve this recommendation, it does not mean that the unit is non compliant.

##### Minimum

A ‘minimum’ level of sunlight exposure will be stated if the potential sunlight for the assessed room is between 1.5 hours and 3 hours on March 21st.

##### Medium

A ‘medium’ level of sunlight exposure will be stated if the potential sunlight for the assessed room is between 3 hours and 4 hours on March 21st.

##### High

A ‘high’ level of sunlight exposure will be stated if the potential sunlight for the assessed room is greater than 4 hours on March 21st.

#### Unit Compliance:

In addition to the level of sunlight exposure expressed for each room, compliance will be stated on a unit-by-unit basis. A proposed unit is considered to be compliant if any habitable room within the unit is capable of receiving at least 1.5 hours of sunlight on the assessment date.

##### Non-Compliant

If no habitable rooms within a proposed unit can receive 1.5 hours of sunlight on the assessment date, the unit will be categorised as ‘Non-Compliant’.

##### Compliant

If at least one habitable room within a proposed unit can receive 1.5 hours or more of sunlight on the assessment date, the unit will be categorised as ‘Compliant’.

Typically unit compliance will be stated for the best performing room per unit only, with lesser performing rooms indicated with a dash (-). However, if more than one room in a given unit is considered to be the best performing room (i.e. they have the same number of SE hours on March 21st), then the unit compliance column will be populated in the first instance only.

## 4.0 Methodology

### 4.1 Impact Assessment, Window Selection Criteria

To determine the properties to be included in the impact assessment, the decision chart taken from the BRE Guidelines has been followed, as shown in Figure 4.2.

Accordingly, all properties within a distance of three times the height of the proposed development, as illustrated in Figure 4.1, have been considered for impact assessment.

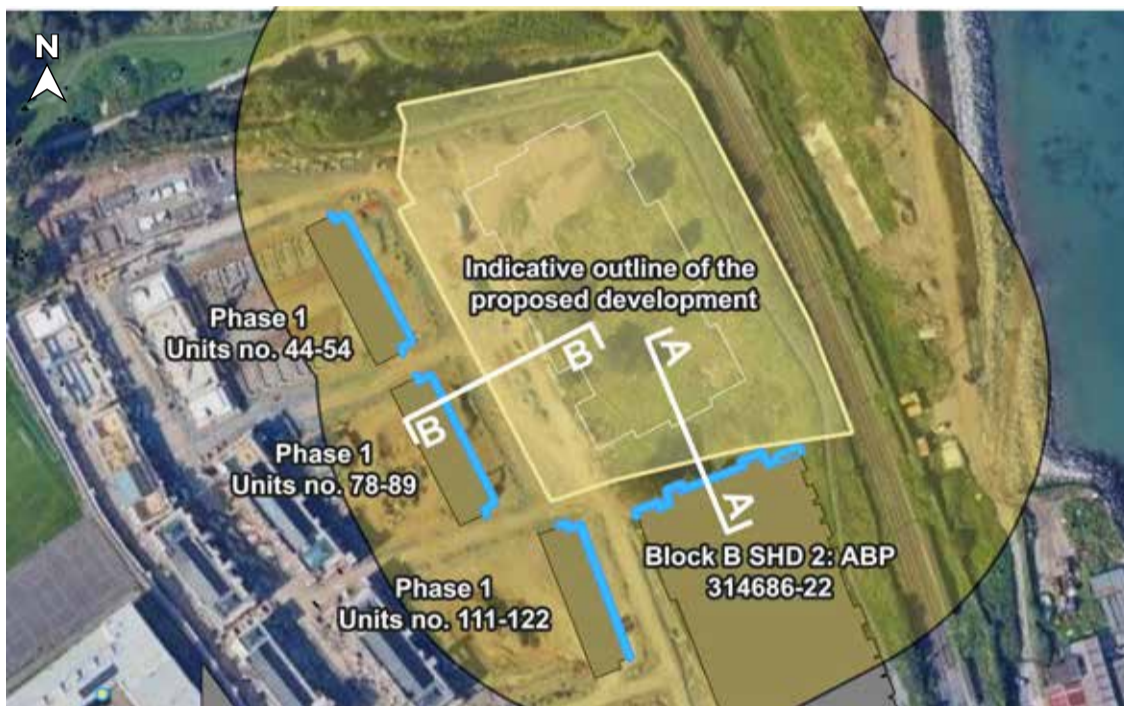


Figure 4.1: Properties within three times the height of the proposed development

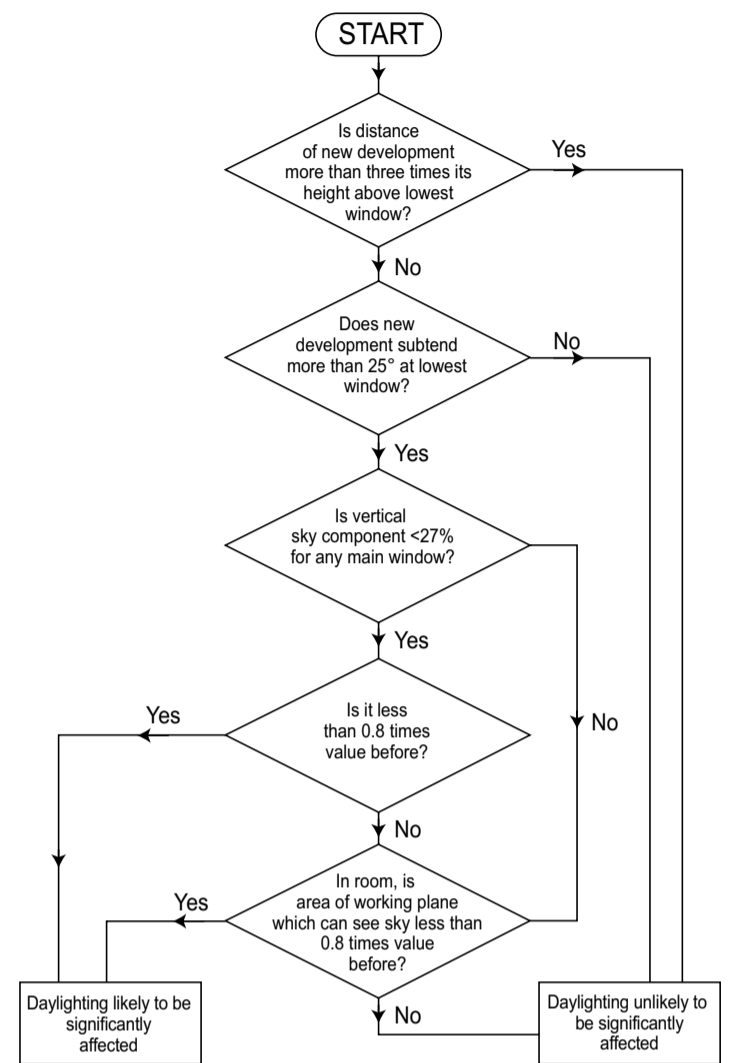


Figure 4.2: VSC decision chart, taken from BR 209.

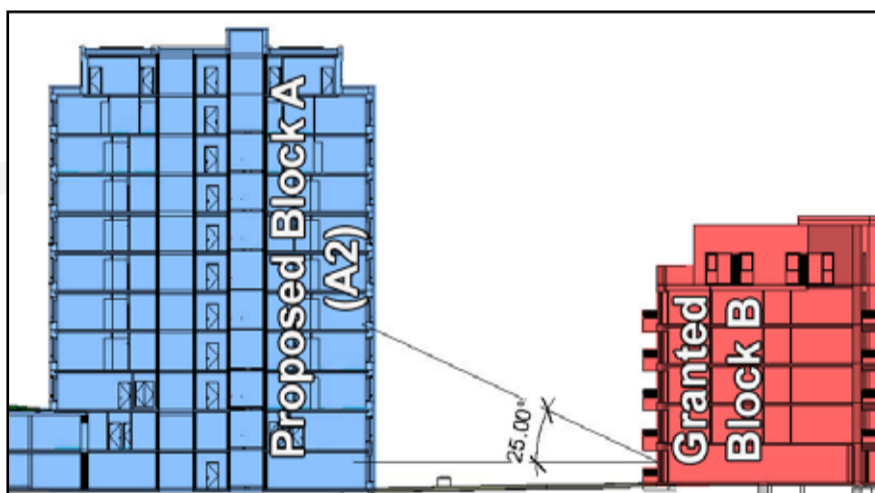


Figure 4.3: Example Section A-A taken through Granted Block B



Figure 4.4: Example Section B-B taken through Phase 1 Duplexes

As per the BRE Guidelines, a perpendicular section has been drawn from the main window wall of the potentially affected properties to determine if the proposed development subtends an angle of more than 25° at the lowest window.

If the proposed development subtends 25° in this section, then a VSC assessment should be conducted. Figure 4.3 shows a perpendicular section taken through Granted Block B which provides an example of where the proposed development subtends 25° when measured in a perpendicular section through an existing window.

However, if the proposed development does not subtend 25° in a perpendicular section, daylight is unlikely to be significantly affected and no further assessment will be carried out. Figure 4.4 shows a perpendicular section taken through one of the granted duplexes in front of the proposed townhouses which provides an example of where an existing window is within three times the height of the proposed development but the proposed development does not subtend 25° when measured in a perpendicular section. In order to satisfy the planning authority, an extended selection of windows has been assessed, consistent with the approach taken in the pre-planning report. This includes all façades highlighted in blue in Figure 4.1.

A detailed description regarding the methodology of the VSC assessment can be found in 4.3.1 on page 20.

It is advisable that where VSC assessments are conducted, that a no sky line (NSL) assessment should also be carried out. However, an NSL assessment requires accurate dimensions and layouts of the existing rooms and windows. Due to a common lack of availability regarding the required information, NSL assessments are often not feasible when assessing impact on existing properties. In the case of this report, NSL studies have been carried out for the Granted Block B and three duplex blocks as floor plans were available due to it being part of the overall master plan site.

The BRE Guidelines also apply the 25° rule to determine the need for an impact assessment for loss of sunlight (APSH/WPSH). They also advise that only windows with an orientation within 90° of due south should be assessed. As this condition does not apply in this case, APSH/WPSH studies have not been conducted.

While the BRE Guidelines recommend conducting an impact assessment on the lowest window where daylight/sunlight is needed, if a property is found to have a window potentially affected by the proposed development, based on the previously explained criteria, other windows facing the proposed development on that property may also be assessed. This approach provides a more comprehensive understanding of the overall impact on the property.

## 4.2 Preparing the analytical model

### 4.2.1 Building the Model States

The project architect, Howells supplied 3DDB with 3D models of the proposed development from which a 3D analytical model was created. Landscape drawings were issued by Bernard Seymour Landscape Architects.

The granted portion of the model used in the baseline state has been prepared based on information provided by the project architects for both the current and previous design proposals.

A site visit has not been conducted. 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, a reasonable tolerance should be allowed to the placement of windows, boundary treatments and the results generated.

#### Baseline model state

In this report, the baseline model state included not only the surrounding and demolished elements but also the granted Block B. Consequently, “baseline” have been considered the “alternative baseline” throughout the report.

As illustrated in Figure 4.5, the baseline model state reflects the existing environment and the granted parts of the development. It includes the surrounding context and the subject site in particular scenarios as presented in section 1.2 on page 5, as well as structures that are to be demolished as part of this application. Existing trees were placed using photogrammetry information, with assumptions made regarding exact size, position and species. The trees being a part of the granted model have been modelled based on the information provided by the project architects and landscape architects both the current and previous design proposals.

As explained in section 4.1, the BRE Guidelines recommend that impact assessments should be carried out if any part of a new building or extension, measured in a vertical section perpendicular to a main window wall of an existing building, from the centre of the lowest window, subtends an angle of more than 25° to the horizontal. This criteria has been used to ensure all windows that could possibly sustain an adverse level of effect have been included in the model when running VSC and NSL assessments.



Figure 4.5: Model view of the **baseline** model state

### Proposed model state

As illustrated in Figure 4.6, the proposed model state reflects the subject site if the development is built as proposed. This includes proposed landscaping on the subject site and the demolition of existing structures, etc. Proposed buildings have been positioned in their location on the subject site with relevant surrounding context included.

The proposed model state includes a potential future development of Block B as shown in Figure 4.6. below. This approach aims to present scheme performance results of the proposed Block A under a more constrained scenario, should a future application be submitted for the Block B site.

Note that no impact assessment on this potential future Block B has been carried out but from results generated from the Granted Block B, the design of the proposed Block A has been considered by the design team with regard to potential future impact.

The proposed trees have been modelled based on the information provided by the landscape architect.

All of the above information was subsequently used to prepare a digital analytical model in software specifically designed for daylight and sunlight analysis.

Relevant weather and climatic data has been obtained for this report using a localised EnergyPlus Weather File (IRL\_EM\_Casement.AP039670\_TMYx.epw).



Figure 4.6: Model view of the proposed model state.

## 4.2.2 Trees

As referenced in the BRE Guidelines, the exact shapes of trees are “almost impossible to predict”. When modelling trees for this assessment tree geometry has been simplified. Where tree survey information was not provided, the position and size of existing trees have been estimated using photogrammetry information. The shape of the trees have been simplified and an average transmittance value has been applied using information from table G1 from the BRE Guidelines. Simplified models of proposed trees within the development have also been included according to the information provided by the landscape architect.

BR 209 provides guidance on how trees should be treated depending on the study being carried out, as summarised below:

**Impact to Vertical Sky Component (VSC)** The BRE Guidelines state that when assessing the effect a new development would have on existing buildings, it is usual to ignore the effect of deciduous trees. This is because daylight is at its scarcest and most valuable in winter when most trees will not be in leaf. Evergreen trees should be included, particularly where a dense belt or group of evergreens is specifically planned as a windbreak or for privacy purposes.

### **Sun On Ground (SOG)**

Regarding SOG assessments, the BRE Guidelines states:

*“...trees and shrubs are not normally included in the calculation unless a dense belt or group of evergreens is specifically planned as a windbreak or for privacy purposes. This is partly because the dappled shade of a tree is more pleasant than the deep shadow of a building (this applies especially to deciduous trees).”*

As such, deciduous trees have not been included in the calculation of SOG, unless there is a dense belt present or a group of trees specifically planned as a windbreak or for privacy purposes. Evergreen trees are included in the SOG assessment.

### **Sunlight Exposure (SE)**

The BRE Guidelines state that as deciduous trees would not be in full leaf on the recommended assessment date (March 21st), sunlight would be expected to penetrate deciduous trees. However, as trees have so many variables, it is impossible to accurately represent how they would affect sunlight at a given time. The suggested methodology (BR 209) to allow for this is to run the sunlight exposure study in two states. Once with trees as opaque objects and secondly without deciduous trees in the assessment model. This gives a range of potential sunlight hours.

### **Spatial Daylight Autonomy (SDA)**

BR 209 recommends when assessing daylight in a proposed building, it is appropriate to run the assessment with trees represented over the course of the whole year. Light transmittance values for the modelled trees are varied to account for summer and winter foliage.

Taking average dates from *BRE Digest 350*, appropriate light transmittance values have been applied to deciduous trees to represent the ‘full leaf’ and ‘bare branch’ states.

Evergreen trees are represented as ‘full leaf’ throughout the year.

The BRE Guidelines also state:

*“The calculation model should account for the obstruction to daylight caused by the trees. This needs to be done by modelling a representative shape of the trees. Often trees are irregularly shaped and simple modelling, using height and spread data and assuming a circular tree, will give inaccurate results. A special survey on site is generally required to produce the required data on the tree profile, using a clinometer or other device to measure tree height. Buildings and other solid objects should also be taken into account.”*

In the absence of a ‘special survey’ being conducted, as mentioned above, simplified models representing trees have been used. The information for these trees has been taken from photogrammetry information and an arborist report when available. A reasonable tolerance should be applied to the results generated to account for trees not being represented exactly as they appear on site.

Units have also been assessed without trees to give an understanding of how the architecture performs should trees not be factored into the calculation.

I.S. EN 17037 does not give any guidance on how trees should be represented. For the purpose of this report, the SDA calculation under the I.S. EN 17037 criteria has been carried out with trees represented in the same manner as the BR 209 assessment. Units have also been assessed without trees to give an understanding of how the architecture performs should trees not be factored into the calculation.

### **No Sky Line (NSL)**

Because some sky can usually be seen through a tree canopy, deciduous trees are not included in the No Sky Line assessment model. Evergreen trees may be included in this assessment, particularly if there is a dense belt or group planned for windbreak or for privacy purposes.

### **Shadow Study**

The hourly renderings of the shadow study will be generated with evergreen trees represented as opaque objects, where applicable, and without deciduous trees. This method best represents the methodology used for the impact assessment and allows for a better understanding of potential shadows cast by the proposed development through the tree canopy.

## 4.3 Quantitative Impact Assessment Overview

### 4.3.1 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.

Section 4.1 outlines the decision process which was used to determine the appropriate properties to be included in the VSC impact assessment.

For proposed developments, all properties within a radius of three times the height of the proposed development are considered with regards to an impact assessment. Should the angle from the windows to the proposed development subtend  $25^\circ$  in a perpendicular section, then VSC is calculated in both the baseline and proposed model states, and a comparison made.

A no skyline assessment requires accurate dimensions and layouts of both rooms and windows. However, the required information is rarely available for existing dwellings. As such, it is not common practice to carry out a no sky line (NSL) impact assessment.

VSC can be defined as the amount of skylight that falls on a vertical wall or window.

Where applicable, this report assesses the percentage of direct sky illuminance that falls on the assessment 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.

Where a VSC assessment is warranted, the values for each relevant window/room may be calculated in the corresponding model states, as outlined in section 4.2 on page 17. A comparison of these results can be used to indicate 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.

In instances where a baseline value is less than 1%, the impact will be considered '*non-applicable*' (n.a.).

Under BRE Guidelines, only habitable rooms need to be assessed for effect to VSC. 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 may be included in this study to give a more comprehensive assessment.

#### Assessment Points

The VSC impact assessment are carried out on the windows/rooms of the neighbouring properties that could be affected by the proposed development as highlighted in Figure 1.1 on page 3.

The assessment points for measuring VSC 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.

#### Weighted Averages

If it can be determined or reasonably assumed that multiple windows are servicing the same room, each window has been assessed and a room VSC will be calculated by applying a weighted average calculation to the results.

When calculating weighted averages the proportion of the total glazing area represented for each window is taken into account. It should be noted that assumptions typically need to be made regarding window sizes, so a tolerance should be applied regarding calculated weighted averages.

In instances where weighted averages have been calculated, the VSC figures will be stated for each window on an individual basis as well as the calculated figure to be applied to the room, but the level of effect will only be stated for the room.

#### Project Assessment

Following the BRE decision chart, as illustrated in Figure 4.2 on page 16, a VSC impact assessment has been carried out on the windows/rooms of the neighbouring properties that could be affected by the proposed development as indicated in Figure 1.1 on page 3.

The assessed properties are the Phase 1 Duplexes ( 3 Buildings) and granted Apartment Block B (SHD2: APB 314686-22)

The results for the VSC assessment can be found in the appendix results section A.1 on page 35, with analysis of the results in section 5.1.1 on page 27.

### 4.3.2 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.

A proposed development could potentially have a negative effect on the level of sunlight that a neighbouring property receives, if the obstructing building is located to the south and is large in relation to their distance from the existing dwelling. This can be determined if the distance of a proposed development is less than three times its height from an existing dwelling, or if the angle from an existing window to the proposed development subtends  $25^\circ$  to the horizontal when measured in a perpendicular section.

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.

Section 4.1 outlines the decision process which is used to determine the appropriate properties to be included in a APSH/WPSH impact assessment.

The APSH/WPSH for each of the assessed windows should be calculated in the relevant model states, as outlined in section 4.2 on page 17. A comparison between the results generated using these model states can be used to determine the level of effect.

If it can be determined or reasonably assumed that multiple windows are servicing the same room, the APSH/WPSH will be assessed for the room as opposed to each individual window. When APSH/WPSH is assessed for a room it considers sunlight coming from all windows, but does not double count if sunlight is reaching multiple windows at the same time.

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

A proposed development could possibly have a noticeable effect on the sunlight received by an existing window/room, 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.

In some circumstances, the available sunlight during the winter period (WPSH) may both drop below the recommended minimum of 5% with a proposed value of less than 0.8 times the baseline value, but the reduction to annual probable sunlight (APSH) is less than 4%. Such occurrences are considered compliant with the BRE Guidelines, and the impact to WPSH will be stated as 'n.a.' on that basis.

Additionally, where a baseline value is less than 1%, the impact will be considered '*non-applicable*' (n.a.)

Under BRE Guidelines, only main living-rooms need to be assessed for effect on sunlight. In the absence of design layouts or floor plans, or information pertaining to the internal 'as-built' layouts, all windows assumed to be servicing habitable rooms will be included in the APSH/WPSH assessment provided they are orientated within  $90^\circ$  of due south and are in relative close proximity to the proposed development.

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

#### Assessment Points

The assessment points for measuring APSH/WPSH 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.

#### Project Assessment

No APSH/WPSH assessment has been conducted for the granted duplexes and Block B on the basis that the windows of this property that face the subject site do not have an orientation within  $90^\circ$  of due south.

Following the BRE decision chart, as illustrated in Figure 4.2 on page 16, no APSH/WPSH impact assessment has been carried out on the windows/rooms of the neighbouring properties as the proposed development does not subtend  $25^\circ$  when measured in a perpendicular section from any of the existing windows.

This indicates that the proposed development would not have an adverse effect on the sunlight of any of the existing properties.

### 4.3.3 Effect on Sun On Ground in Existing Gardens/Amenity Areas (SOG)

The BRE Guidelines recommend that for a garden or amenity area to appear adequately sunlit throughout the year, at least half the area should receive at least two hours of sunlight on March 21st. As the BRE Guidelines does not provide a clear criteria on which neighbouring properties should be included in an impact on SOG study, 3DDB have carefully considered the neighbouring properties that may be affected when running the impact assessment. Gardens or amenity areas included in this study are typically located within close proximity, to the north of the proposed development.

Where a quantitative assessment has not been carried out it is on the basis that the omitted areas are unlikely to be adversely affected. Such instances may be because the areas are not deemed to be in close proximity to the proposed development or because they are located to the south. Should there be any concerns over the potential impact on any areas that have not been included in the quantitative assessment, a qualitative assessment may be carried out using a shadow study and/or false colour plans.

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 analytical model for SOG impact assessment includes evergreen trees, where applicable, in accordance with the BRE Guidelines. Typically deciduous trees will not be included unless there is a particularly dense belt.

Where applicable, the percentage of assessed areas which can receive two hours or more of direct sunlight on March 21st is calculated in the relevant model states, as outlined in section 4.2 on page 17. A comparison between the results generated with these model states can be used to 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.

In instances where a baseline value is less than 1%, the impact will be considered '*non-applicable*' (n.a.)

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.

#### **Project Assessment**

The SOG impact assessment has been carried out on the neighbouring gardens/amenity areas that could be affected by the proposed development as outlined above.

No quantitative SOG impact assessment has been carried out on the areas surrounding the subject site. The areas considered for assessment are either located to the south of the proposed development, meaning shadows will be cast in the opposite direction, or they have sufficient separation distance from the proposed development, making overshadowing highly unlikely.

The false colour plans of the proposed SOG assessment can be found in section A.3 on page 51 and the hourly renderings of the shadow study in section B.0 on page 52, allow for a qualitative sunlight assessment of the surrounding areas.

#### 4.3.4 Effect on No Sky Line (NSL)

No Sky Line (NSL) is a study of whether or not the sky is visible from a hypothetical working plane within a room. In residential properties the working plane is assumed to be 850mm above the finished floor level, and for offices, it is set at 700mm.

The BRE advises that if, following the construction of a new development, the no sky line moves in such a way that the area of the existing room, which currently receives direct skylight, is reduced to less than 0.80 times its former value, this change will be noticeable to the occupants, and more of the room will appear poorly lit.

NSL assessment is recommended for main rooms where daylight is expected. In residential properties these include living rooms, dining rooms, and kitchens. The BRE Guidelines state that “bedrooms should also be analysed although they are less important.”

A No Sky Line (NSL) assessment has been carried out in instances where impacts to VSC are above the recommended level and room layouts are known.

3D Design Bureau asserts that the No Sky Line (NSL) assessment is more informative than a Vertical Sky Component (VSC) assessment. This is because a VSC assessment considers only the light reaching a single point on a window, whereas an NSL assessment evaluates daylight distribution throughout the room. If a window or room fails to meet the BRE recommendation for VSC impact but meets the criteria for NSL impact, it indicates that while light intensity is reduced, its distribution will not be adversely affected.

##### Project Assessment

The daylight distribution assessment NSL is independent of the VSC and should be carried out where information on surrounding property layouts allows. In the case of this report, the NSL study was carried out for the granted Block B and Phase 1 Duplex units.

The results for the NSL assessment can be found in the appendix results section A.2 on page 45, with analysis of the results in section 5.1.2 on page 28.

#### 4.4 Qualitative Assessment - Shadow Study

A shadow study has been carried out to allow a qualitative comparison between the relevant model states, as outlined in section 4.2 on page 17. This visual representation of the shadows cast by the proposed development can be found in the hourly shadow diagrams in the appendix results section B.0 on page 52.

Hourly renderings have been shown from sunrise to sunset on the following dates in 2025:

- Spring equinox:                      March 21st                      Sunrise 6:33 | Sunset 18:31. (GMT)
- Summer solstice:                      June 21st.                      Sunrise 5:04 | Sunset 21:48. (BST)
- Winter solstice:                      December 21st                      Sunrise 8:44 | Sunset 16:01. (GMT)

The shadow study has been generated using the same model states as described in section 4.2.1. In certain cases, assumptions or estimations may have been made when modelling elements of the surrounding context and/or proposed site details when creating the various model states. Therefore, it is advisable for a reasonable tolerance to be applied when interpreting shadows in the qualitative assessment.

The hourly renderings of the shadow study will be generated without deciduous trees and with evergreen trees, where applicable, represented as opaque objects when present in the model states.

**Note:** The spring equinox (March 21st) and autumn equinox (21st September) yield similar shadows, albeit with a one hour difference as daylight saving time (BST) would be in effect. Only the spring equinox was included in the shadow study images in accordance with the BRE Guidelines.

## 4.5 Quantitative Scheme Performance Assessment Overview

### 4.5.1 Spatial Daylight Autonomy in Proposed Habitable Rooms (SDA)

Since the publication of the 3rd edition of the BRE Guidelines (BR 209 - 2022), Spatial Daylight Autonomy (SDA) is the recommended metric for assessing daylight access within a proposed development. Spatial Daylight Autonomy replaces Average Daylight Factor (ADF) in this regard, which was the recommended metric under the 2nd edition of the BRE Guidelines (BR 209 - 2011).

Spatial Daylight Autonomy assesses whether a room receives sufficient daylight on a working plane during standard operating hours on an annual basis. A given target value should be achieved across 50% of the working plane for half of the daylight hours.

There are two methods for calculating SDA:

- **Calculation method using illuminance level:** This requires the use of a detailed daylight calculation method where hourly (or sub-hourly) internal daylight illuminance values for a typical year are computed using hourly (or sub-hourly) sky and sun conditions derived from climate data appropriate to the site. This calculation method determines daylight provision directly from simulated illuminance values on the reference plane. The illuminance value of at least half the required area of the space should equal or exceed the target values.
- **Calculation method using daylight factor:** The daylight factor method assumes a constant ratio between internal and external illuminance. The daylight factors in the space shall be calculated by any reliable method that is based on the ISO 15469:2004 standard overcast sky (TYPE 1 or TYPE 16). Daylight factors are to be predicted across grid of points on a plane 0.85m above the floor of the space. The daylight factor of at least half the required area of the space should equal or exceed the target values.

It is the opinion of 3DDB that the calculation method using illuminance level better represents a real-world scenario as it accounts for the quality of daylight based on orientation. As such, the illuminance methodology has been adopted as the preferred SDA assessment methodology by 3DDB. A localised EnergyPlus Weather File is used to apply the relevant climate information. In the case of this report, the weather file used is IRL\_EM\_Casement.AP039670\_TMYx.epw.

In terms of housing, *BR 209* provides target SDA values to be received across at least 50% of the working plane for at least half the daylight hours. The target values differ based on the function of the room assessed:

- 200 Lux for kitchens
- 150 Lux for living rooms
- 100 Lux for bedrooms

Where rooms serve more than one function, the higher SDA target value should be taken. 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 *BR 209*. In such instances, 3DDB have applied a target value they deem to be appropriate. In the case of the proposed development there is a communal room that has been assessed. 3DDB recommend that an SDA target value of 150 Lux be applied to these space as considered relevant to living rooms. This room have not been included in the calculated compliance rates.

Under I.S. EN 17037 at least 50% of the working plane should receive above 300 lux for at least half the daylight hours, with 95% of the working plane receiving above 100 Lux for all rooms. The target SDA values do not vary depending on the room function under this criteria.

This study has assessed the Spatial Daylight Autonomy (SDA) received in the habitable rooms of the proposed development under the *BR 209* criterion. The SDA of the proposed development has been calculated under the I.S. EN 17037 criterion as part of a supplementary assessment.

#### Defining Rooms

Definition of rooms are typically taken directly from the architectural drawings supplied by the project architect. Sometimes, the applied names of rooms may differ slightly. e.g. A "Kitchen / Living / Dining room (KLD)" may be referred to as a "Living / Kitchen / Dining room (LKD).

In accordance with the BRE Guidelines circulation spaces, corridors, bathrooms etc. need not be assessed.

Where SDA assessment has been conducted, an indication of the assessed space in each room will be indicated in the floor plans that correspond to the SDA results in the appendix section "Proposed Apartment Block A Floor Plans Block A1" on page 86.

#### Working Plane

The calculation of SDA is carried out on a hypothetical working plane which lies 850 mm from the finished floor level in residential units and 700 mm in academic and office spaces.

In the *BR 209* study the working plane is offset 300 mm from the room boundaries. Under the I.S. EN 17037 criteria the working plane is offset 500 mm from the room boundaries. The working plane has a grid density of c. 300 mm.

## Material Palette

Following consultation with the design team, material values used for SDA calculations are as per the table below:

Object	Material	Reflectance	Object	Material	Reflectance
					Transmittance
Exterior walls	Standard Brick	0.3	Interior Walls	Pastel paint	0.7
	Light Brick	0.4	Interior Ceiling	White paint	0.8
	Dark Brick	0.15	Interior Floor	Light timber	0.4
	Render/White Brick	0.6	Miscellaneous	Miscellaneous	0.5
	Concrete	0.4	Glass	Glass transmittance value	0.68
Ground cover	Paving	0.4		Maintenance factor	0.91
	Tarmac	0.2		Glass adjusted for maintenance	0.62
	Grass	0.2		Frosted glass	0.5

## Project Assessment

The results for the study on SDA can be found in the appendix results section D.4 on page 99.

Analysis of the results can be found in section 5.2.1 on page 28.

The results of the supplementary SDA study under the I.S. EN 17037 criterion can be found in section E.0 on page 141.

## 4.5.2 Sunlight Exposure in Proposed Habitable Rooms (SE)

Since the publication of the 3rd edition of the BRE Guidelines (BR 209 - 2022), Sunlight Exposure (SE) is the recommended metric for assessing sunlight access within a proposed development. Sunlight Exposure replaces APSH/WPSH in this regard, which was the recommended metric under the 2nd edition of the BRE Guidelines (BR 209 - 2011).

Sunlight exposure (SE) is a measure of sunlight that a given window may expect to receive on a given date between the 1st of February and the 21st of March. The BRE guidelines suggest that March 21st (equinox) is used as the assessment date.

In the presence of trees, SE results have been generated, both with deciduous trees as opaque objects and without the inclusion of deciduous trees, in accordance with the BRE Guidelines. Evergreen trees have been included as opaque objects, where applicable, in both states.

The level of sunlight exposure is categorised as follows:

- 1.5 Hours - Minimum
- 3 Hours - Medium
- 4 Hours - High

The recommendation for dwellings is that at least one habitable room, preferably a main living room, should receive at least the minimum criterion. Should no room within a given unit meet the recommended minimum level of sunlight exposure, it will be stated as non-compliant.

Sunlight exposure is carried out on habitable rooms within a proposed development. The assessment point for windows is 1.2m above the finished floor level, or 0.3m above the sill level (whichever is higher). If a room has multiple windows, the amount of sunlight received by each can be added together provided they occur at different times and sunlight hours are not double counted.

The criterion applies to rooms of all orientations, although if a room faces significantly north of due east or west it is unlikely to be met. As such, it is not always possible to achieve full compliance, especially in developments that contain single aspect units.

The sunlight exposure assessment focuses on habitable residential rooms. Unless sunlight access is deemed important for the functionality of a non-residential room in a proposed development, it will not be included in the study, which remains limited to residential rooms.

## Project Assessment

The results for the study on sunlight exposure can be found in the appendix results section D.5 on page 119, with analysis of the results in section 5.2.2 on page 31.

### 4.5.3 Sun On Ground in Proposed Outdoor Amenity Areas (SOG)

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 analytical model for SOG assessment in proposed amenity areas includes evergreen trees, where applicable, as per the BRE Guidelines. Typically deciduous trees will not be included unless there is a particularly dense belt.

A quantitative SOG assessment may be carried out on the areas as indicated by the project architect. Shadow studies and false colour plans can allow for a qualitative assessment for all other areas.

The portion of each assessed space capable of receiving 2 hours of direct sunlight on March 21st should be calculated individually. These areas can be combined to give the development average where appropriate.

#### **Project Assessment**

The levels of sunlighting to proposed amenity areas, 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.

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 the appendix results section D.6 on page 120, with analysis of the results in section 5.2.3 on page 31.

### 4.5.4 No Sky Line in Proposed Habitable Rooms (NSL)

The no sky line divides the areas of the working plane which can receive direct skylight, from those which cannot. It indicates the distribution of direct daylight within a room.

The BRE Guidelines recommend the No Sky Line study as an appropriate metric for an impact assessment to daylight, but only where room layouts are known.

*“The calculation can only be carried out where room layouts are known. Using estimated room layouts is likely to give inaccurate results and is not recommended.”*

All advice regarding NSL in the BRE Guidelines is in relation to impact assessments. NSL is not mentioned in the BRE section regarding daylight in new developments. Nevertheless, an NSL assessment was carried out on the proposed development as a supplementary study as it is requested in the DCC Development Plan 2022-2028 (Section 5.1, Appendix 16). Although the proposed development is not under Dublin City Council’s jurisdiction, the NSL study has been included to provide consistency across 3DDB daylight and sunlight assessments.

As the BRE Guidelines does not give advice on target NSL values for proposed rooms, no compliance rate has been stated. However a no skyline of 80% could be considered an appropriate figure given that the BRE Guidelines state that supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line.

The results of the supplementary NSL study can be found in section E.0 on page 141.

## 5.0 Analysis of Results

### 5.1 Analysis of Impact Assessment Results

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

The effect of VSC, by the proposed Block A, has been assessed for 138 no. windows/rooms across the surrounding properties such as the duplexes and granted Block B. 60 no. of these windows/room are related to granted Block B.

Using the rationale explained in section 3.2 on page 14, the effect on the VSC of these windows (or rooms if an average of multiple windows has been taken) would be considered:

- negligible: 91 no.
- minor adverse: 17 no.
- moderate adverse: 29 no.
- major adverse: 1 no.

The analysis of results shows that all habitable windows on the granted duplexes to the south are fully compliant. The only impacted property is the granted Block B. This granted Block B was tested in two scenarios: 1) When the Proposed Block A was taken into consideration (results above), 2) with the granted Block A as shown in the figure 5.1 and Figure 5.2. below.



Figure 5.1: Model View of the **Proposed Block A** (beige) and **Granted Block B** (red).

Model state used for Impact assessment.

Results related to this model state are described as 'By Proposed Block A' in section 1.3 tables.



Figure 5.2: Model View of the **Granted Block A** (beige) and **Granted block B** (red).

Model state used for Impact assessment for the comparison purposes.

Results related to this model state are described as 'By Granted Block A' in section 1.3 tables.

The impact study shows that the granted Block B would experience adverse levels of impact in both scenarios of Block A (granted and proposed). Whilst there would be more levels of impact from the proposed Block A, when compared to the granted Block A (as listed below), the design team have worked to mitigate this increase.

The effect on the VSC, by the "granted" Block A on the granted Block B would be considered:

- negligible: 111 no.
- minor adverse: 14 no.
- moderate adverse: 13 no.

The results of the study on VSC can be found in section A.1 on page 35.

Supplementary Impact Assessment Results ("Granted" study) can be found in section C.1 on page 70.

## 5.1.2 Effect on No Sky Line (NSL)

A No Sky Line (NSL) impact assessment was conducted for the same windows/rooms on the granted Block B and Phase 1 duplex units as was tested for VSC impact. As these buildings are within the applicant control and previously worked on by 3DDB, floor plans were readily available.

The effect on NSL has been assessed for 138 rooms.

Using the rationale explained in 3.2 on page 14, the effect on the NSL of these rooms would be considered:

- negligible: 103 no.
- minor adverse: 12 no.
- moderate adverse: 19 no.
- major adverse: 4 no.

3D Design Bureau asserts that the No Sky Line (NSL) assessment is more informative than a Vertical Sky Component (VSC) assessment. This is because a VSC assessment considers only the light reaching a single point on a window, whereas an NSL assessment evaluates daylight distribution throughout the room. If a window or room fails to meet the BRE recommendation for VSC impact but meets the criteria for NSL impact, it indicates that while light intensity is reduced, its distribution will not be adversely affected.

Considering the specific characteristics of this particular facade of the granted Block B, it is the opinion of 3DDB that achieving a lower level of impact would be challenging.

The effect on the NSL of the windows when tested against the “granted” Block A would be considered:

- negligible: 120 no.
- minor adverse: 15 no.
- moderate adverse: 3 no.

The results of the study on NSL can be found in section A.2 on page 45.

Supplementary Impact Assessment Results (“Granted” study) can be found in section C.2 on page 80.

## 5.2 Analysis of Scheme Performance Results

### 5.2.1 Spatial Daylight Autonomy (SDA)

This study has assessed the Spatial Daylight Autonomy (SDA) received in all habitable rooms within the residential portion of the proposed development (Block A - apartment and townhouses) both with and without trees. This has ensured that a clear understanding has been obtained regarding the daylight performance of the proposed development.

This proposed development consists of 159 no. units, which makes up approximately 499 no. habitable rooms.

Under the criteria as set out in the BR 209 considering trees, the SDA value in 467 no. habitable rooms meets or exceeds the appropriate target values. This gives a circa compliance rate of 94%. For a scheme of this size, this could be considered a very good level of compliance.

Furthermore, the additional SDA assessment that does not include trees has shown a compliance rate of 96%.

Although the proposed trees have been shown to reduce daylight access within the development, extensive collaboration with the landscape architect ensured a balanced approach between daylight/sunlight performance and the benefits of landscaping. The design team explored options such as relocating or removing some trees to improve daylight levels; however, further more extensive changes to landscaping, were not considered an appropriate mitigation measure. Trees are a vital element of the scheme, contributing to environmental quality, planning requirements, and biodiversity. Achieving compliance rates of approximately 94% with the trees in place is therefore considered a positive outcome. Although trees may slightly reduce daylight in certain units, they help mitigate potential heat gain and offer a more pleasant outlook for residents.

I.S. EN 17037 sets out more onerous recommendations for SDA. As such, the number of habitable rooms achieving compliance under this standard is 369 in the assessment that includes trees. This gives a reduced circa compliance rate of c. 74%. The additional SDA assessment, under this standard, that does not include trees has shown a compliance rate of c. 79%.

In cases where rooms comply with the criteria of BR 209 but do not meet the criteria of I.S. EN 17037, it is the recommendation of 3D Design Bureau that these rooms will appear adequately daylit. This recommendation is based on the fact that BR 209 provides room-specific criteria, unlike I.S. EN 17037. BR 209 considers the varying daylight requirements for different room types, which I.S. EN 17037 does not account for.

With regards to internal daylighting, Section 6.7 of the Sustainable Urban Housing: Design Standards for New Apartments July 2023, states the following:

*“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. This may arise due to a design constraints [sic] 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.”*

Based on the above statements, compensatory design solutions have been provided by the project architect where rooms do not achieve the daylight provision targets as set out in the BRE Guidelines.

The following list indicates all units / rooms that do not achieve the recommended level of daylight with regards to BR 209 and the compensatory design solution for each:

**A1\_00\_001 (LKD)**

- Private amenity space is ~40% larger than the minimum.
- Living/Kitchen/Dining (LKD) area is 50% larger than the minimum.
- Daylight is negatively impacted by defensible planting used for privacy.

**A1\_00\_002 (LKD)**

- Benefits from generous landscaping as a ground-floor apartment.
- Daylight is reduced by defensible planting used for privacy.

**A1\_00\_003 (Bedroom)**

- Benefits from generous landscaping as a ground-floor apartment.
- Daylight is reduced by defensible planting used for privacy.

**A1\_01\_004 (LKD)**

- LKD is 30% larger than the minimum area requirement.
- Daylight is reduced by defensible planting installed for privacy.

**A1\_01\_005 (LKD)**

- Private amenity space is ~40% larger than the minimum.
- LKD area is 50% larger than the minimum.
- Daylight is negatively impacted by defensible planting used for privacy.

**A1\_01\_006 (LKD)**

- Private amenity space is ~40% larger than the minimum.
- LKD area is 50% larger than the minimum.
- Daylight is negatively impacted by defensible planting used for privacy.

**A1\_02\_007 (LKD)**

- Private amenity space is ~40% larger than the minimum.
- LKD area is 50% larger than the minimum.
- Daylight is negatively impacted by defensible planting used for privacy.

**A1\_M01\_003 (LKD)**

- LKD is 30% larger than the minimum area requirement.
- Daylight is reduced by defensible planting installed for privacy.

**A1\_M01\_004 (LKD)**

- LKD is 30% larger than the minimum area requirement.
- Daylight is reduced by defensible planting installed for privacy.

**A2\_00\_001 (LKD)**

- Private amenity space is ~40% larger than the minimum.
- LKD area is 50% larger than the minimum.
- Design rationale emphasizes the associated balcony and outdoor space.

**A2\_00\_002 (LKD and Bedroom)**

- Benefits from generous landscaping as a ground-floor apartment.
- LKD is 30% larger than the minimum area requirement.
- Daylight is reduced by defensible planting.
- It is overshadowed by the adjacent plot to the south.

**A2\_00\_004 (Bedroom)**

- Benefits from generous landscaping as a ground-floor apartment.
- Daylight is reduced by defensible planting used for privacy.

**A2\_01\_001 (LKD)**

- Private amenity space is ~40% larger than the minimum.
- LKD area is 50% larger than the minimum.
- Design rationale emphasizes the associated balcony and outdoor space.

**A2\_01\_002 (LKD)**

- LKD is 30% larger than the minimum area requirement.
- Daylight is reduced by defensible planting installed for privacy.

**A2\_01\_005 (LKD)**

- LKD is 30% larger than the minimum area requirement.
- No specific reason for limited daylight is provided for this unit.

**A2\_01\_006 (LKD)**

- Private amenity space is ~40% larger than the minimum.
- LKD area is 50% larger than the minimum.
- Design rationale emphasizes the associated balcony and outdoor space.

**A2\_01\_009 (LKD)**

- LKD is 30% larger than the minimum area requirement.
- No specific reason for limited daylight is provided for this unit.

**A2\_02\_001 (LKD)**

- Private amenity space is ~40% larger than the minimum.
- LKD area is 50% larger than the minimum.
- Design rationale emphasizes the associated balcony and outdoor space.

**A2\_02\_005 (LKD)**

- LKD is 30% larger than the minimum area requirement.
- Daylight is reduced by defensible planting installed for privacy.

**A2\_02\_006 (LKD)**

- Private amenity space is ~40% larger than the minimum.
- LKD area is 50% larger than the minimum.
- Design rationale emphasizes the associated balcony and outdoor space.

**A2\_02\_007 (LKD)**

- Private amenity space is ~40% larger than the minimum.
- LKD area is 50% larger than the minimum.
- Design rationale emphasizes the associated balcony and outdoor space.

**A2\_02\_010 (LKD)**

- Private amenity space is ~40% larger than the minimum.
- LKD area is 50% larger than the minimum.
- Design rationale emphasizes the associated balcony and outdoor space.

**A2\_03\_001 (LKD)**

- Private amenity space is ~40% larger than the minimum.
- LKD area is 50% larger than the minimum.
- Design rationale emphasizes the associated balcony and outdoor space.

**A2\_03\_007 (LKD)**

- Private amenity space is ~40% larger than the minimum.
- LKD area is 50% larger than the minimum.
- Design rationale emphasizes the associated balcony and outdoor space.

**A2\_03\_010 (LKD)**

- Private amenity space is ~40% larger than the minimum.
- LKD area is 50% larger than the minimum.
- Design rationale emphasizes the associated balcony and outdoor space.

**A2\_04\_001 (LKD)**

- Private amenity space is ~40% larger than the minimum.
- LKD area is 50% larger than the minimum.
- Design rationale emphasizes the associated balcony and outdoor space.

**A2\_04\_010 (LKD)**

- Private amenity space is ~40% larger than the minimum.
- LKD area is 50% larger than the minimum.
- Design rationale emphasizes the associated balcony and outdoor space.

**A2\_05\_010 (LKD)**

- Private amenity space is ~40% larger than the minimum.
- LKD area is 50% larger than the minimum.
- Design rationale emphasizes the associated balcony and outdoor space.

**A2\_M01\_001 (LKD)**

- LKD is 30% larger than the minimum area requirement.
- No specific reason for limited daylight is provided for this unit.

**A2\_M01\_002 (LKD)**

- LKD is 30% larger than the minimum area requirement.
- No specific reason for limited daylight is provided for this unit.

**A2\_M01\_004 (LKD)**

- Private amenity space is ~40% larger than the minimum.
- LKD area is 50% larger than the minimum.
- Design rationale emphasizes the associated balcony and outdoor space.

Given the site constraints on the proposed site and the fact that an appropriate level of density is being targeted, the results of the SDA study could be considered to be favourable.

In cases where rooms comply with the criteria of BR 209 but do not meet the criteria of I.S. EN 17037, it is the recommendation of 3D Design Bureau that these rooms will appear adequately daylight. This recommendation is based on the fact that BR 209 provides room-specific criteria, unlike I.S. EN 17037. BR 209 considers the varying daylight requirements for different room types, which I.S. EN 17037 does not account for.

The overall high SDA compliance has been achieved through careful design collaboration, which led to the optimisation of specific units to achieve higher SDA values. Beside changes in tree plan, action taken included widening the windows. The results for the study on SDA can be seen in section D.4 on page 99.

## 5.2.2 Sunlight Exposure (SE)

A sunlight exposure assessment has been carried out on all habitable rooms within the residential portion of the proposed development. For these assessments, trees have been included in the analytical model as opaque objects. The assessments have been carried out in two states:

- All trees (evergreen and deciduous) included in assessment model.
- Only evergreen trees included in the assessment model.

This approach is in accordance with the BRE Guidelines.

In total, 159 no. units have been assessed. Using the rationale explained in section 3.3 on page 15, the level of sunlight exposure for the assessed units is as follows:

In the assessment carried out with all trees considered as opaque objects, 94 no. units are considered *high*, 6 no. *medium*, 29 no. have reached the *minimum* recommendation with 30 units below the *minimum* recommendation.

When deciduous trees are not factored into the assessment model, 98 no. units are considered *high*, 6 no. *medium*, 29 no. have reached the *minimum* recommendation with 26 units below the *minimum* recommendation.

The SE assessment has shown that, depending on the effect of trees, the circa compliance rate for the assessed units, in accordance with the BRE Guidelines, is between 81% & 84%.

**Note:** For a unit to be compliant under BR 209, only one habitable room within the unit needs to meet the guideline values.

Whilst the criterion applies to rooms of all orientations, it should be noted that if a room faces significantly north of due east or west it is unlikely to be met. As such, it is not always possible to achieve full compliance, especially in developments that contain single aspect units. This is relevant to the proposed development where the majority of non compliant units are the single aspect units located on north façades of Block A1 and A2. The townhouses are fully compliant which is a positive outcome.

No recommendation is made regarding the performance of a development as a whole for SE performance within the BRE Guidelines. However, it is the opinion of 3DDB that the proposed development performs favourably/in this regard.

The results for the study on SE in the habitable rooms of the proposed units can be seen in section D.5 on page 119.

## 5.2.3 Sun On Ground in Proposed Outdoor Amenity Areas

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

In total 3 no. spaces have been assessed, 3 no. of which would meet the criteria as set out in the BRE Guidelines.

The assessed external spaces include a Communal Amenity Space located on podium, and two Public Open Spaces.

All of these amenity areas receive very good sunlight access, with only minimal overshadowing. Despite being located near the taller parts of the buildings, sunlight reaches these spaces through wide openings between the blocks, particularly from the south-west.

The results for the study on sunlighting in the proposed outdoor amenity spaces can be found in section D.6 on page 120.

A visual representation of these readings can be seen in the false colour plan in section D.6 and in the hourly shadow diagrams for March 21st in section B.1 on page 52 of the appendix section of this report.

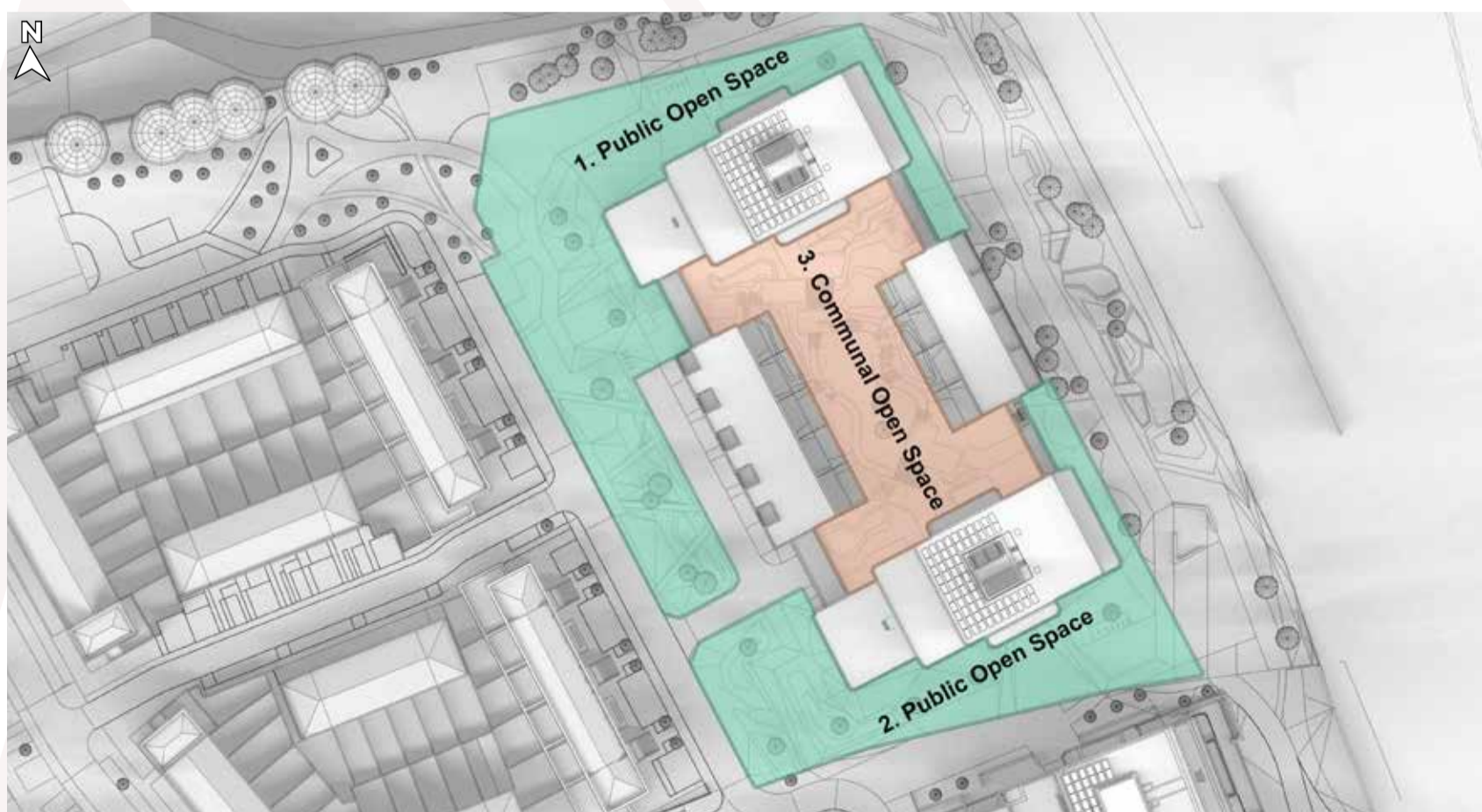


Figure 5.3: Areas of SOG assessment of the proposed amenity spaces

## 6.0 Conclusion

3D Design Bureau (3DDB) were commissioned to carry out a daylight assessment, sunlight assessment and shadow study for Residential Development Sea Gardens, (Phase 1 Block A) in Bray.

The impact assessment for this report has quantified the effect the proposed development would have on the level of daylight and sunlight received by neighbouring properties/environment that fall under the criteria outlined in section “4.1 Impact Assessment, Window Selection Criteria” on page 16. These include the granted duplexes and the granted Block B as shown in Figure 6.1 below.



Figure 6.1: Scope of surrounding properties and environment assessed.

The Vertical Sky Component (VSC) analysis indicates that the proposed development will have an adverse daylight impact on the adjacent, already granted, Block B. Impact was also recorded when testing against the lower-profile granted Block A. This demonstrates that the granted Block B is going to be subjected to levels of impact if the subject site is developed to a desired/ required density, even in a lower density state than what is being proposed under this application. However, the VSC impact on all assessed neighbouring duplexes is considered negligible, which is a positive outcome.

The No Sky Line (NSL) study corroborates the findings of the Vertical Sky Component (VSC) analysis, confirming that the granted Block A also affects the natural light distribution within Block B. However, the NSL results are more favourable overall, identifying 12 additional rooms with a “negligible” classification compared to the VSC results.

Within the proposed development, the scheme’s daylight and sunlight performance was comprehensively assessed in a more constrained state using a potentially larger scale Block B in-situ. Despite the density and scale of the proposed Block A, effective collaboration with the design team has resulted in high SDA compliance rates and favourable Sunlight Exposure (SE) outcomes.

The SDA results demonstrate very good compliance across all metrics. In the Spatial Daylight Autonomy (SDA) assessment, only 32 of 499 fall below the recommended minimum threshold with even better results when the trees are not considered. For those units falling below the recommended SDA, the project architect has provided compensatory design solutions. To compensate for the SDA shortfall, each of the affected units incorporates one or more high-quality design features. These include private amenity spaces approximately 40% larger than required, living areas (LKD) between 30-50% larger than guideline sizes, and for ground-floor units, generous landscaping that creates a buffer from the public footpath.

In terms of Sunlight Exposure (SE), the development achieves an 81% compliance rate. In the opinion of 3DDB, this represents a favourable outcome considering the scale of the proposed development, the overall masterplan, and the orientation of the blocks and their units.

Finally, the SOG study confirms that all assessed external areas including the Communal Open Space and two Public Open Spaces, receive sunlight levels that meet or exceed compliance standards

It is concluded by 3DDB, taking into consideration the overall planning and development objectives, that the scheme is performing favourably from a daylight and sunlight perspective.

# Appendix - Results



+353 (0) 1 288 0186

info@3ddesignbureau.com

www.3ddesignbureau.com



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<b>C.0</b>	<b>Supplementary Impact Assessment Results: Granted Block A</b> .....	<b>70</b>
C.1	<i>Effect on Vertical Sky Component (VSC) - Supplementary</i> .....	<b>70</b>
C.2	<i>Effect on No Sky Line (NSL)- Supplementary</i> .....	<b>80</b>
<b>D.0</b>	<b>Scheme Performance</b> .....	<b>86</b>
D.1	<i>Proposed Apartment Block A Floor Plans Block A1</i> .....	<b>86</b>
D.2	<i>Proposed Apartment Block A Floor Plans -Block A2</i> .....	<b>91</b>
D.3	<i>Proposed Apartment Block A Floor Plans - Townhouses</i> .....	<b>96</b>
D.4	<i>Spatial Daylight Autonomy (SDA) in Proposed Units</i> .....	<b>99</b>
D.5	<i>Sunlight Exposure (SE) in Proposed Units</i> .....	<b>119</b>
D.6	<i>Sun On Ground (SOG) in Proposed Outdoor Amenity Areas</i> .....	<b>120</b>
<b>E.0</b>	<b>Supplementary Study Results</b> .....	<b>141</b>
E.1	<i>SDA study, under the I.S. EN 17037 criteria</i> .....	<b>141</b>
E.2	<i>Supplementary No Sky Line (NSL) assessment in proposed units</i> .....	<b>161</b>

Assessment criteria and detailed analysis of results can be found in the accompanying report.

## A.0 Impact Assessment Results

### A.1 Effect on Vertical Sky Component (VSC)

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

Table Example. A.1 - VSC 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
A	B	C	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 VSC Value

The *Baseline VSC Value* represents the VSC value of the assessed window which is calculated in the existing baseline model state (as explained in the “Building the Model States” on page 17).

#### C: Proposed VSC Value

The *Proposed VSC Value* represents the VSC value of the assessed window which is calculated in the proposed model state (as explained in the “Building the Model States” on page 17).

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

This column expresses 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*. A full list of definitions and a numerical rationale for each can be found in the section “*Definition of Effects*” on page 14.

It should be noted that the figures displayed in the table of results have been rounded off. A manual calculation of these figures may yield a negligible difference and should not be considered an error.

## A.1.1 Granted Block B



Figure A.1: Highlighted areas indicate the position of assessed windows (L), Aerial view of assessed location (R)

Table No. A.1.1 - VSC Results:

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**
B1_13a	22.12%	12.80%	0.58	17.70%	72%	Moderate Adverse
B1_13b#1	7.61%	1.96%	0.26	6.09%	32%	-
B1_13b#2	5.28%	5.16%	0.98	4.22%	BRE Compliant	-
B1_13b#	6.39%	3.63%	0.57	5.11%	71%	Moderate Adverse
B1_14a	37.25%	16.37%	0.44	27.00%	61%	Moderate Adverse
B1_14b	35.32%	14.63%	0.41	27.00%	54%	Moderate Adverse
B1_14c#1	12.06%	2.47%	0.20	9.65%	26%	-
B1_14c#2	14.53%	12.97%	0.89	11.62%	BRE Compliant	-
B1_14c#	12.71%	5.22%	0.41	10.17%	51%	Moderate Adverse
B1_16a#1	15.02%	14.79%	0.98	12.02%	BRE Compliant	-
B1_16a#2	8.59%	4.11%	0.48	6.87%	60%	-
B1_16a#	10.27%	6.91%	0.67	8.22%	84%	Minor Adverse
B1_16b	10.98%	4.48%	0.41	8.78%	51%	Moderate Adverse
B1_16c	30.45%	14.64%	0.48	24.36%	60%	Moderate Adverse
B1_16d	32.47%	16.65%	0.51	25.98%	64%	Moderate Adverse
B1_1a#1	12.76%	12.25%	0.96	10.21%	BRE Compliant	-
B1_1a#2	7.26%	4.57%	0.63	5.81%	79%	-
B1_1a#	10.15%	8.60%	0.85	8.12%	BRE Compliant	Negligible
B1_1b	23.01%	15.07%	0.65	18.41%	82%	Minor Adverse
B1_2b	26.58%	18.78%	0.71	21.26%	88%	Minor Adverse

\* 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.

\*\* For the interpretation of level of effects please refer to "3.2 Definition of Effects" on page 14.

# If it can be determined or reasonably assumed that multiple windows serve the same room, each individual window is labelled with a hash-tag and a serial number (e.g. Xa#1, Xa#2). Each window is assessed, and a weighted average is calculated to determine the level of effect on the room. Rooms are identified with a hash-tag at the end (e.g. Xa#). In such cases, the 'effect of proposed development' column will display a dash (-) for the individual windows, with the overall level of effect indicated in the row corresponding to the room.

## A.1.2 Granted Block B

Table No. A.1.2 - VSC Results:						
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**
B2_13a	27.39%	15.79%	0.58	21.91%	72%	Moderate Adverse
B2_13b#1	11.38%	3.39%	0.30	9.10%	37%	-
B2_13b#2	8.29%	8.23%	0.99	6.63%	BRE Compliant	-
B2_13b#	9.76%	5.92%	0.61	7.81%	76%	Moderate Adverse
B2_14a	37.96%	18.37%	0.48	27.00%	68%	Moderate Adverse
B2_14b	35.98%	16.60%	0.46	27.00%	61%	Moderate Adverse
B2_14c#1	12.86%	3.22%	0.25	10.29%	31%	-
B2_14c#2	21.42%	19.95%	0.93	17.14%	BRE Compliant	-
B2_14c#	15.10%	7.60%	0.50	12.08%	63%	Moderate Adverse
B2_15a	38.80%	19.09%	0.49	27.00%	71%	Moderate Adverse
B2_16a	38.77%	19.47%	0.50	27.00%	72%	Moderate Adverse
B2_17a#1	17.91%	17.78%	0.99	14.33%	BRE Compliant	-
B2_17a#2	12.55%	5.28%	0.42	10.04%	53%	-
B2_17a#	13.95%	8.55%	0.61	11.16%	77%	Moderate Adverse
B2_17b	15.68%	6.11%	0.39	12.54%	49%	Major Adverse
B2_17c	36.19%	18.34%	0.51	27.00%	68%	Moderate Adverse
B2_17d	37.95%	19.54%	0.51	27.00%	72%	Moderate Adverse
B2_1a#1	12.90%	12.85%	1.00	10.32%	BRE Compliant	-
B2_1a#2	11.90%	6.94%	0.58	9.52%	73%	-
B2_1a#	12.42%	10.04%	0.81	9.94%	BRE Compliant	Negligible
B3_13a	30.33%	19.70%	0.65	24.26%	81%	Minor Adverse
B3_13b#1	37.88%	25.66%	0.68	27.00%	95%	-
B3_13b#2	37.55%	37.39%	1.00	27.00%	BRE Compliant	-
B3_13b#	37.71%	31.79%	0.84	27.00%	BRE Compliant	Negligible
B3_14a	38.76%	20.64%	0.53	27.00%	76%	Moderate Adverse
B3_14b	37.17%	19.29%	0.52	27.00%	71%	Moderate Adverse
B3_14c#1	13.19%	3.45%	0.26	10.55%	33%	-
B3_14c#2	27.98%	26.73%	0.96	22.38%	BRE Compliant	-
B3_14c#	17.06%	9.54%	0.56	13.65%	70%	Moderate Adverse
B3_15a	39.22%	20.89%	0.53	27.00%	77%	Moderate Adverse
B3_16a	39.15%	21.13%	0.54	27.00%	78%	Moderate Adverse
B3_17a#1	18.26%	18.18%	1.00	14.61%	BRE Compliant	-
B3_17a#2	12.76%	5.37%	0.42	10.21%	53%	-
B3_17a#	14.20%	8.72%	0.61	11.36%	77%	Moderate Adverse
B3_17b	15.92%	6.48%	0.41	12.74%	51%	Moderate Adverse
B3_17c	36.63%	19.91%	0.54	27.00%	74%	Moderate Adverse
B3_17d	38.40%	21.16%	0.55	27.00%	78%	Moderate Adverse
B3_1a#1	12.90%	12.90%	1.00	10.32%	BRE Compliant	-
B3_1a#2	12.05%	7.05%	0.59	9.64%	73%	-
B3_1a#	12.50%	10.12%	0.81	10.00%	BRE Compliant	Negligible
B3_1b	26.94%	19.63%	0.73	21.55%	91%	Minor Adverse

\* 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.

\*\* For the interpretation of level of effects please refer to "3.2 Definition of Effects" on page 14.

# If it can be determined or reasonably assumed that multiple windows serve the same room, each individual window is labelled with a hash-tag and a serial number (e.g. Xa#1, Xa#2). Each window is assessed, and a weighted average is calculated to determine the level of effect on the room. Rooms are identified with a hash-tag at the end (e.g. Xa#). In such cases, the 'effect of proposed development' column will display a dash (-) for the individual windows, with the overall level of effect indicated in the row corresponding to the room.

### A.1.3 Granted Block B

Table No. A.1.3 - VSC Results:						
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**
B4_11a#1	33.83%	25.70%	0.76	27.00%	95%	-
B4_11a#2	35.76%	35.55%	0.99	27.00%	BRE Compliant	-
B4_11a#	34.84%	30.85%	0.89	27.00%	BRE Compliant	Negligible
B4_12a	39.54%	23.18%	0.59	27.00%	86%	Minor Adverse
B4_12b	39.54%	23.47%	0.59	27.00%	87%	Minor Adverse
B4_12c#1	39.54%	24.51%	0.62	27.00%	91%	-
B4_12c#2	34.49%	33.50%	0.97	27.00%	BRE Compliant	-
B4_12c#	38.22%	26.86%	0.70	27.00%	99%	Minor Adverse
B4_13a	39.54%	22.88%	0.58	27.00%	85%	Minor Adverse
B4_14a	39.48%	23.01%	0.58	27.00%	85%	Minor Adverse
B4_15a#1	19.23%	19.16%	1.00	15.38%	BRE Compliant	-
B4_15a#2	12.91%	5.42%	0.42	10.33%	52%	-
B4_15a#	14.56%	9.02%	0.62	11.65%	77%	Moderate Adverse
B4_15b	16.09%	6.82%	0.42	12.87%	53%	Moderate Adverse
B4_15c	37.67%	22.33%	0.59	27.00%	83%	Minor Adverse
B4_15d	39.06%	23.25%	0.60	27.00%	86%	Minor Adverse
B4_1a#1	12.89%	12.89%	1.00	10.31%	BRE Compliant	-
B4_1a#2	12.18%	7.09%	0.58	9.74%	73%	-
B4_1a#	12.55%	10.13%	0.81	10.04%	BRE Compliant	Negligible
B4_1b	27.85%	21.11%	0.76	22.28%	95%	Minor Adverse
B5_10a#1	21.96%	21.90%	1.00	17.57%	BRE Compliant	-
B5_10a#2	39.61%	27.91%	0.70	27.00%	BRE Compliant	-
B5_10a#	34.99%	26.34%	0.75	27.00%	98%	Minor Adverse
B5_10b	39.61%	26.90%	0.68	27.00%	>99%	Negligible
B5_10c	39.61%	25.97%	0.66	27.00%	96%	Minor Adverse
B5_10d	39.61%	25.57%	0.65	27.00%	95%	Minor Adverse
B5_1a#1	12.93%	12.93%	1.00	10.34%	BRE Compliant	-
B5_1a#2	12.52%	7.37%	0.59	10.02%	74%	-
B5_1b	30.74%	24.11%	0.78	24.59%	98%	Minor Adverse
B5_9a#1	39.61%	25.04%	0.63	27.00%	93%	-
B5_9a#2	39.42%	37.30%	0.95	27.00%	BRE Compliant	-
B5_9a#	39.53%	30.51%	0.77	27.00%	BRE Compliant	Negligible
B6_1a#1	39.62%	39.62%	1.00	27.00%	BRE Compliant	-
B6_1a#2	39.62%	33.43%	0.84	27.00%	BRE Compliant	-
B6_1a#	39.62%	36.68%	0.93	27.00%	BRE Compliant	Negligible
B6_1b	39.62%	32.10%	0.81	27.00%	BRE Compliant	Negligible
B6_7a	39.62%	30.90%	0.78	27.00%	BRE Compliant	Negligible
B6_7b#1	39.62%	30.19%	0.76	27.00%	BRE Compliant	-
B6_7b#2	39.62%	29.29%	0.74	27.00%	BRE Compliant	-
B6_7b#3	39.60%	37.79%	0.95	27.00%	BRE Compliant	-
B6_7b#4	39.60%	38.05%	0.96	27.00%	BRE Compliant	-
B6_7b#5	39.62%	29.57%	0.75	27.00%	BRE Compliant	-
B6_7b#	39.61%	33.22%	0.84	27.00%	BRE Compliant	Negligible

\* 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.

\*\* For the interpretation of level of effects please refer to "3.2 Definition of Effects" on page 14.

# If it can be determined or reasonably assumed that multiple windows serve the same room, each individual window is labelled with a hash-tag and a serial number (e.g. Xa#1, Xa#2). Each window is assessed, and a weighted average is calculated to determine the level of effect on the room. Rooms are identified with a hash-tag at the end (e.g. Xa#). In such cases, the 'effect of proposed development' column will display a dash (-) for the individual windows, with the overall level of effect indicated in the row corresponding to the room.

## A.1.4 Duplex, Units 44-55

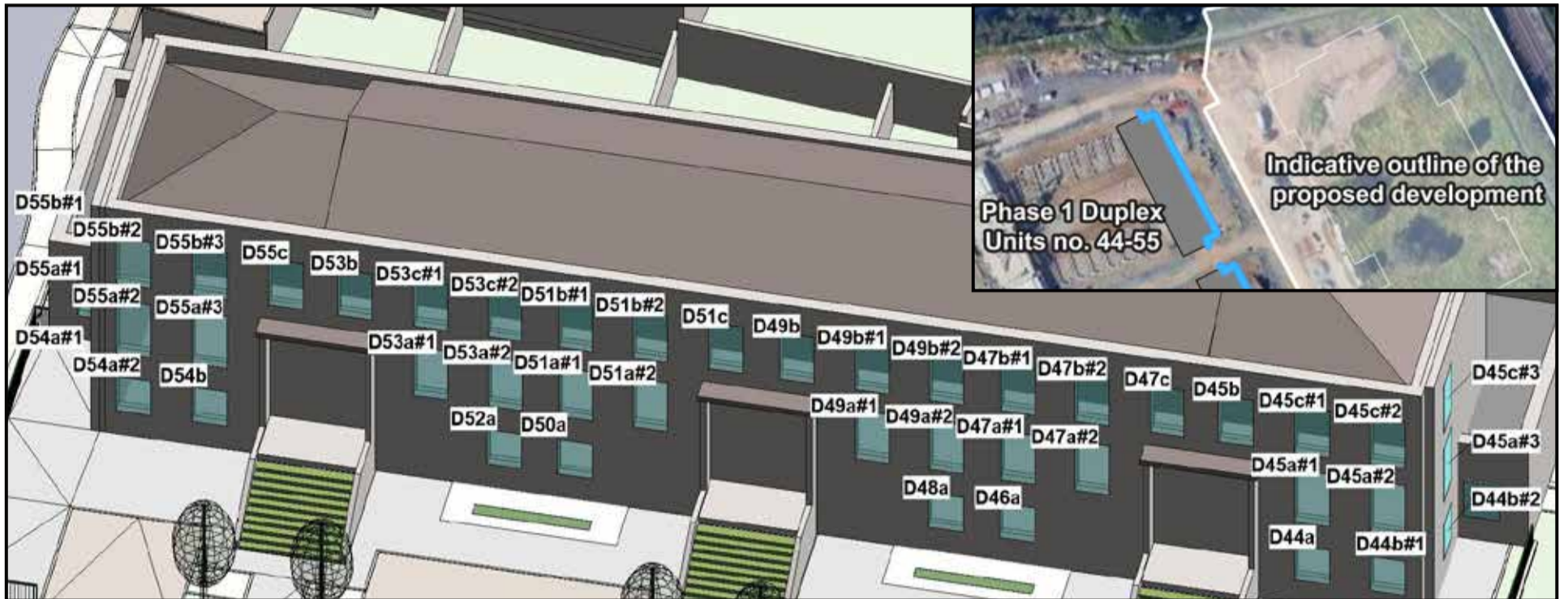


Figure A.2: Highlighted areas indicate the position of assessed windows (L), Aerial view of assessed location (R)

Table No. A.1.4 - VSC Results:

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**
D44a	34.65%	31.44%	0.91	27.00%	BRE Compliant	Negligible
D44b#1	36.01%	32.76%	0.91	27.00%	BRE Compliant	-
D44b#2	29.01%	28.99%	1.00	23.21%	BRE Compliant	-
D44b#	32.51%	30.88%	0.95	26.01%	BRE Compliant	Negligible
D45a#1	38.61%	34.59%	0.90	27.00%	BRE Compliant	-
D45a#2	39.13%	35.19%	0.90	27.00%	BRE Compliant	-
D45a#3	37.12%	37.11%	1.00	27.00%	BRE Compliant	-
D45a#	38.29%	35.63%	0.93	27.00%	BRE Compliant	Negligible
D45b	39.40%	35.97%	0.91	27.00%	BRE Compliant	Negligible
D45c#1	39.40%	36.04%	0.91	27.00%	BRE Compliant	-
D45c#2	39.40%	36.11%	0.92	27.00%	BRE Compliant	-
D45c#3	38.76%	38.76%	1.00	27.00%	BRE Compliant	-
D45c#	39.19%	36.97%	0.94	27.00%	BRE Compliant	Negligible
D46a	36.71%	31.94%	0.87	27.00%	BRE Compliant	Negligible
D47a#1	39.23%	34.86%	0.89	27.00%	BRE Compliant	-
D47a#2	38.77%	34.47%	0.89	27.00%	BRE Compliant	-
D47a#	39.00%	34.67%	0.89	27.00%	BRE Compliant	Negligible
D47b#1	39.40%	35.80%	0.91	27.00%	BRE Compliant	-
D47b#2	39.40%	35.85%	0.91	27.00%	BRE Compliant	-
D47b#	39.40%	35.83%	0.91	27.00%	BRE Compliant	Negligible
D47c	39.40%	35.91%	0.91	27.00%	BRE Compliant	Negligible
D48a	36.70%	32.13%	0.88	27.00%	BRE Compliant	Negligible

\* 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.

\*\* For the interpretation of level of effects please refer to "3.2 Definition of Effects" on page 14.

# If it can be determined or reasonably assumed that multiple windows serve the same room, each individual window is labelled with a hash-tag and a serial number (e.g. Xa#1, Xa#2). Each window is assessed, and a weighted average is calculated to determine the level of effect on the room. Rooms are identified with a hash-tag at the end (e.g. Xa#). In such cases, the 'effect of proposed development' column will display a dash (-) for the individual windows, with the overall level of effect indicated in the row corresponding to the room.

## A.1.5 Duplex, Units 44-55

Table No. A.1.5 - VSC Results:						
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**
D49a#1	38.74%	34.31%	0.89	27.00%	BRE Compliant	-
D49a#2	39.22%	34.83%	0.89	27.00%	BRE Compliant	-
D49a#	38.98%	34.57%	0.89	27.00%	BRE Compliant	Negligible
D49b	39.38%	35.60%	0.90	27.00%	BRE Compliant	Negligible
D49b#1	39.38%	35.77%	0.91	27.00%	BRE Compliant	-
D49b#2	39.39%	35.80%	0.91	27.00%	BRE Compliant	-
D49b#	39.39%	35.79%	0.91	27.00%	BRE Compliant	Negligible
D50a	36.93%	31.09%	0.84	27.00%	BRE Compliant	Negligible
D51a#1	39.20%	33.98%	0.87	27.00%	BRE Compliant	-
D51a#2	38.71%	33.66%	0.87	27.00%	BRE Compliant	-
D51a#	38.96%	33.82%	0.87	27.00%	BRE Compliant	Negligible
D51b#1	39.35%	35.16%	0.89	27.00%	BRE Compliant	-
D51b#2	39.36%	35.29%	0.90	27.00%	BRE Compliant	-
D51b#	39.36%	35.23%	0.90	27.00%	BRE Compliant	Negligible
D51c	39.37%	35.45%	0.90	27.00%	BRE Compliant	Negligible
D52a	36.88%	30.99%	0.84	27.00%	BRE Compliant	Negligible
D53a#1	38.68%	33.15%	0.86	27.00%	BRE Compliant	-
D53a#2	39.18%	33.82%	0.86	27.00%	BRE Compliant	-
D53a#	38.93%	33.49%	0.86	27.00%	BRE Compliant	Negligible
D53b	39.31%	34.80%	0.89	27.00%	BRE Compliant	Negligible
D53c#1	39.33%	34.92%	0.89	27.00%	BRE Compliant	-
D53c#2	39.34%	35.05%	0.89	27.00%	BRE Compliant	-
D53c#	39.34%	34.99%	0.89	27.00%	BRE Compliant	Negligible
D54a#1	26.06%	24.28%	0.93	20.85%	BRE Compliant	-
D54a#2	37.39%	30.46%	0.81	27.00%	BRE Compliant	-
D54a#	31.73%	27.37%	0.86	25.38%	BRE Compliant	Negligible
D54b	35.70%	29.52%	0.83	27.00%	BRE Compliant	Negligible
D55a#1	34.48%	32.84%	0.95	27.00%	BRE Compliant	-
D55a#2	39.10%	32.97%	0.84	27.00%	BRE Compliant	-
D55a#3	38.54%	32.56%	0.84	27.00%	BRE Compliant	-
D55a#	37.37%	32.79%	0.88	27.00%	BRE Compliant	Negligible
D55b#1	37.43%	36.07%	0.96	27.00%	BRE Compliant	-
D55b#2	39.27%	34.46%	0.88	27.00%	BRE Compliant	-
D55b#3	39.28%	34.56%	0.88	27.00%	BRE Compliant	-
D55b#	38.66%	35.03%	0.91	27.00%	BRE Compliant	Negligible
D55c	39.30%	34.68%	0.88	27.00%	BRE Compliant	Negligible

\* 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.

\*\* For the interpretation of level of effects please refer to "3.2 Definition of Effects" on page 14.

# If it can be determined or reasonably assumed that multiple windows serve the same room, each individual window is labelled with a hash-tag and a serial number (e.g. Xa#1, Xa#2). Each window is assessed, and a weighted average is calculated to determine the level of effect on the room. Rooms are identified with a hash-tag at the end (e.g. Xa#). In such cases, the 'effect of proposed development' column will display a dash (-) for the individual windows, with the overall level of effect indicated in the row corresponding to the room.

## A.1.6 Duplex, Units 78-89



Figure A.3: Highlighted areas indicate the position of assessed windows (L), Aerial view of assessed location (R)

Table No. A.1.6 - VSC Results:

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**
D78a	35.46%	28.88%	0.81	27.00%	BRE Compliant	Negligible
D78b#1	36.89%	30.36%	0.82	27.00%	BRE Compliant	-
D78b#2	27.27%	25.80%	0.95	21.82%	BRE Compliant	-
D78b#	32.08%	28.08%	0.88	25.66%	BRE Compliant	Negligible
D79a#1	38.38%	32.05%	0.84	27.00%	BRE Compliant	-
D79a#2	38.96%	32.63%	0.84	27.00%	BRE Compliant	-
D79a#3	35.97%	34.49%	0.96	27.00%	BRE Compliant	-
D79a#	37.78%	33.05%	0.87	27.00%	BRE Compliant	Negligible
D79b	39.11%	34.15%	0.87	27.00%	BRE Compliant	Negligible
D79c#1	39.13%	34.18%	0.87	27.00%	BRE Compliant	-
D79c#2	39.16%	34.22%	0.87	27.00%	BRE Compliant	-
D79c#3	38.41%	37.21%	0.97	27.00%	BRE Compliant	-
D79c#	38.90%	35.19%	0.90	27.00%	BRE Compliant	Negligible
D80a	36.94%	30.28%	0.82	27.00%	BRE Compliant	Negligible
D81a#1	38.78%	32.60%	0.84	27.00%	BRE Compliant	-
D81a#2	38.29%	32.01%	0.84	27.00%	BRE Compliant	-
D81a#	38.54%	32.31%	0.84	27.00%	BRE Compliant	Negligible
D81b#1	39.02%	34.14%	0.87	27.00%	BRE Compliant	-
D81b#2	39.05%	34.12%	0.87	27.00%	BRE Compliant	-
D81b#	39.04%	34.13%	0.87	27.00%	BRE Compliant	Negligible
D81c	39.08%	34.12%	0.87	27.00%	BRE Compliant	Negligible
D82a	36.71%	30.47%	0.83	27.00%	BRE Compliant	Negligible

\* 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.

\*\* For the interpretation of level of effects please refer to "3.2 Definition of Effects" on page 14.

# If it can be determined or reasonably assumed that multiple windows serve the same room, each individual window is labelled with a hash-tag and a serial number (e.g. Xa#1, Xa#2). Each window is assessed, and a weighted average is calculated to determine the level of effect on the room. Rooms are identified with a hash-tag at the end (e.g. Xa#). In such cases, the 'effect of proposed development' column will display a dash (-) for the individual windows, with the overall level of effect indicated in the row corresponding to the room.

## A.1.7 Duplex, Units 78-89

Table No. A.1.7 - VSC Results:						
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**
D83a#1	38.21%	32.23%	0.84	27.00%	BRE Compliant	-
D83a#2	38.74%	32.66%	0.84	27.00%	BRE Compliant	-
D83a#	38.48%	32.45%	0.84	27.00%	BRE Compliant	Negligible
D83b	38.93%	34.21%	0.88	27.00%	BRE Compliant	Negligible
D83c#1	38.96%	34.18%	0.88	27.00%	BRE Compliant	-
D83c#2	38.99%	34.16%	0.88	27.00%	BRE Compliant	-
D83c#	38.98%	34.17%	0.88	27.00%	BRE Compliant	Negligible
D84a	36.57%	30.73%	0.84	27.00%	BRE Compliant	Negligible
D85a#1	38.48%	33.04%	0.86	27.00%	BRE Compliant	-
D85a#2	38.01%	32.41%	0.85	27.00%	BRE Compliant	-
D85a#	38.25%	32.73%	0.86	27.00%	BRE Compliant	Negligible
D85b#1	38.81%	34.38%	0.89	27.00%	BRE Compliant	-
D85b#2	38.85%	34.32%	0.88	27.00%	BRE Compliant	-
D85b#	38.83%	34.35%	0.88	27.00%	BRE Compliant	Negligible
D85c	38.89%	34.25%	0.88	27.00%	BRE Compliant	Negligible
D86a	36.54%	30.73%	0.84	27.00%	BRE Compliant	Negligible
D87a#1	37.90%	32.84%	0.87	27.00%	BRE Compliant	-
D87a#2	38.43%	33.18%	0.86	27.00%	BRE Compliant	-
D87a#	38.17%	33.01%	0.86	27.00%	BRE Compliant	Negligible
D87b	38.68%	34.70%	0.90	27.00%	BRE Compliant	Negligible
D87c#1	38.73%	34.57%	0.89	27.00%	BRE Compliant	-
D87c#2	38.78%	34.48%	0.89	27.00%	BRE Compliant	-
D87c#	38.76%	34.53%	0.89	27.00%	BRE Compliant	Negligible
D88b	34.30%	30.14%	0.88	27.00%	BRE Compliant	Negligible
D88b#1	27.39%	27.35%	1.00	21.91%	BRE Compliant	-
D88b#2	35.97%	31.08%	0.86	27.00%	BRE Compliant	-
D88b#	31.68%	29.22%	0.92	25.34%	BRE Compliant	Negligible
D89a#1	35.58%	35.56%	1.00	27.00%	BRE Compliant	-
D89a#2	38.08%	33.44%	0.88	27.00%	BRE Compliant	-
D89a#3	37.58%	32.94%	0.88	27.00%	BRE Compliant	-
D89a#	37.09%	33.97%	0.92	27.00%	BRE Compliant	Negligible
D89b#1	37.70%	37.69%	1.00	27.00%	BRE Compliant	-
D89b#2	38.53%	34.66%	0.90	27.00%	BRE Compliant	-
D89b#3	38.59%	34.72%	0.90	27.00%	BRE Compliant	-
D89b#	38.28%	35.67%	0.93	27.00%	BRE Compliant	Negligible
D89c	38.64%	34.79%	0.90	27.00%	BRE Compliant	Negligible

\* 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.

\*\* For the interpretation of level of effects please refer to "3.2 Definition of Effects" on page 14.

# If it can be determined or reasonably assumed that multiple windows serve the same room, each individual window is labelled with a hash-tag and a serial number (e.g. Xa#1, Xa#2). Each window is assessed, and a weighted average is calculated to determine the level of effect on the room. Rooms are identified with a hash-tag at the end (e.g. Xa#). In such cases, the 'effect of proposed development' column will display a dash (-) for the individual windows, with the overall level of effect indicated in the row corresponding to the room.

## A.1.8 Duplex, Units 111-122



Figure A.4: Highlighted areas indicate the position of assessed windows (L), Aerial view of assessed location (R)

Table No. A.1.8 - VSC Results:

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**
D111a	30.32%	24.45%	0.81	24.26%	BRE Compliant	Negligible
D111b#1	32.20%	25.79%	0.80	25.76%	BRE Compliant	-
D111b#2	34.32%	27.76%	0.81	27.00%	BRE Compliant	-
D111b#	33.25%	26.76%	0.80	26.60%	BRE Compliant	Negligible
D112a#1	33.35%	28.18%	0.84	26.68%	BRE Compliant	-
D112a#2	34.47%	28.81%	0.84	27.00%	BRE Compliant	-
D112a#3	37.95%	32.02%	0.84	27.00%	BRE Compliant	-
D112a#	35.23%	29.65%	0.84	27.00%	BRE Compliant	Negligible
D112b	35.49%	31.30%	0.88	27.00%	BRE Compliant	Negligible
D121b#1	19.29%	19.29%	1.00	15.43%	BRE Compliant	-
D121b#2	27.61%	26.88%	0.97	22.09%	BRE Compliant	-
D121b#	23.34%	22.99%	0.98	18.68%	BRE Compliant	Negligible
D112c#1	35.87%	31.31%	0.87	27.00%	BRE Compliant	-
D112c#2	36.21%	31.24%	0.86	27.00%	BRE Compliant	-
D112c#3	38.84%	33.69%	0.87	27.00%	BRE Compliant	-
D112c#	36.96%	32.07%	0.87	27.00%	BRE Compliant	Negligible
D114a	28.07%	24.02%	0.86	22.46%	BRE Compliant	Negligible
D115a	26.79%	23.18%	0.87	21.43%	BRE Compliant	Negligible
D115a#1	31.48%	27.80%	0.88	25.18%	BRE Compliant	-
D115a#2	31.44%	27.75%	0.88	25.15%	BRE Compliant	-
D115a#	31.46%	27.78%	0.88	25.17%	BRE Compliant	Negligible
D115b#1	34.40%	31.11%	0.90	27.00%	BRE Compliant	-
D115b#2	34.78%	31.20%	0.90	27.00%	BRE Compliant	-
D115b#	34.59%	31.16%	0.90	27.00%	BRE Compliant	Negligible
D115c	35.17%	31.28%	0.89	27.00%	BRE Compliant	Negligible

\* 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.

\*\* For the interpretation of level of effects please refer to "3.2 Definition of Effects" on page 14.

# If it can be determined or reasonably assumed that multiple windows serve the same room, each individual window is labelled with a hash-tag and a serial number (e.g. Xa#1, Xa#2). Each window is assessed, and a weighted average is calculated to determine the level of effect on the room. Rooms are identified with a hash-tag at the end (e.g. Xa#). In such cases, the 'effect of proposed development' column will display a dash (-) for the individual windows, with the overall level of effect indicated in the row corresponding to the room.

## A.1.9 Duplex, Units 111-122

Table No. A.1.8 - VSC Results:						
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**
D116a#1	29.42%	26.36%	0.90	23.54%	BRE Compliant	-
D116a#2	30.38%	26.95%	0.89	24.30%	BRE Compliant	-
D116a#	29.90%	26.66%	0.89	23.92%	BRE Compliant	Negligible
D116b#1	32.80%	30.26%	0.92	26.24%	BRE Compliant	-
D116b#2	33.05%	30.22%	0.91	26.44%	BRE Compliant	-
D116b#	32.92%	30.24%	0.92	26.34%	BRE Compliant	Negligible
D116c	33.37%	30.26%	0.91	26.70%	BRE Compliant	Negligible
D117a	25.55%	23.82%	0.93	20.44%	BRE Compliant	Negligible
D118a#1	29.23%	27.43%	0.94	23.38%	BRE Compliant	-
D118a#2	28.69%	26.92%	0.94	22.95%	BRE Compliant	-
D118a#	28.96%	27.18%	0.94	23.17%	BRE Compliant	Negligible
D118b#1	32.43%	30.62%	0.94	25.94%	BRE Compliant	-
D118b#2	32.51%	30.47%	0.94	26.01%	BRE Compliant	-
D118b#	32.47%	30.55%	0.94	25.98%	BRE Compliant	Negligible
D118c	32.64%	30.33%	0.93	26.11%	BRE Compliant	Negligible
D119a	24.94%	23.51%	0.94	19.95%	BRE Compliant	Negligible
D120a#1	28.21%	26.84%	0.95	22.57%	BRE Compliant	-
D120a#2	28.63%	27.04%	0.94	22.90%	BRE Compliant	-
D120a#	28.42%	26.94%	0.95	22.74%	BRE Compliant	Negligible
D120b	31.99%	30.75%	0.96	25.59%	BRE Compliant	Negligible
D120c#1	31.80%	30.40%	0.96	25.44%	BRE Compliant	-
D120c#2	31.77%	30.17%	0.95	25.42%	BRE Compliant	-
D120c#	31.79%	30.29%	0.95	25.43%	BRE Compliant	Negligible
D121c	26.08%	25.55%	0.98	20.86%	BRE Compliant	Negligible
D122a#1	26.90%	26.90%	1.00	21.52%	BRE Compliant	-
D122a#2	30.51%	29.71%	0.97	24.41%	BRE Compliant	-
D122a#3	29.63%	28.97%	0.98	23.70%	BRE Compliant	-
D122a#	28.98%	28.50%	0.98	23.18%	BRE Compliant	Negligible
D122b#1	30.23%	30.23%	1.00	24.18%	BRE Compliant	-
D122b#2	32.98%	32.09%	0.97	26.38%	BRE Compliant	-
D122b#3	32.79%	31.80%	0.97	26.23%	BRE Compliant	-
D122b#	31.99%	31.37%	0.98	25.59%	BRE Compliant	Negligible
D122c	32.36%	31.25%	0.97	25.89%	BRE Compliant	Negligible

\* 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.

\*\* For the interpretation of level of effects please refer to "3.2 Definition of Effects" on page 14.

# If it can be determined or reasonably assumed that multiple windows serve the same room, each individual window is labelled with a hash-tag and a serial number (e.g. Xa#1, Xa#2). Each window is assessed, and a weighted average is calculated to determine the level of effect on the room. Rooms are identified with a hash-tag at the end (e.g. Xa#). In such cases, the 'effect of proposed development' column will display a dash (-) for the individual windows, with the overall level of effect indicated in the row corresponding to the room.

## A.2 Effect on No Sky Line (NSL)

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

Table Example. A.2 - NSL Impact Assessment						
Room Number	Baseline NSL Value	Proposed NSL Value	Ratio of Proposed NSL to Baseline NSL	Recommended minimum NSL	Level of Compliance with BRE Guidelines	Effect of Proposed Development
A	B	C	D	E	F	G

### A: Room Number

The number in this column will identify the assessed room, which under-performs under the VSC criteria. The relevant façade of the assessed rooms are represented visually in the corresponding figure.

### B: Baseline NSL Value

The *Baseline NSL Value* represents the NSL value of the assessed room which is calculated in the existing baseline model state (as explained in the “Building the Model States” on page 17).

### C: Proposed NSL Value

The *Proposed NSL Value* represents the NSL value of the assessed room which is calculated in the proposed model state (as explained in the “Building the Model States” on page 17).

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

This column expressed the ratio of change between the baseline NSL value and the proposed NSL 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 NSL

The *BRE Target Value* for each room 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 room, if the NSL value **both** drops below the guideline value of 80% **and** the NSL value is less than 0.8 times the baseline value.

Therefore, to determine the *recommended minimum Value*, 80% of the *Baseline NSL value* has been calculated. If this value is above the 80% threshold, 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 NSL Value* with the *recommended minimum NSL* as per the BRE Guidelines. In essence, it shows whether or not the assessed room would experience a perceptible level of impact. If the room complies with the BRE Guidelines this cell will state “*BRE Compliant*”. If the room 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 room will experience, based on its compliance with the *BRE Target Value*. A full list of definitions and a numerical rationale for each can be found in the section “Definition of Effects” on page 14.

It should be noted that the figures displayed in the table of results have been rounded off. A manual calculation on these figures may yield a negligible difference and should not be considered an error.

## A.2.1 Granted Block B - No Sky Line (NSL)



Figure A.5: Highlighted areas indicate the position of assessed windows (L), Aerial view of assessed location (R)

Table No. A.2.1 - NSL Impact Assessment:

Room Number	Baseline NSL Value	Proposed NSL Value	Ratio of Proposed NSL to Baseline NSL	Recommended minimum NSL	Level of Compliance with BRE Guidelines**	Effect of Proposed Development
B1_a#	99.98%	99.98%	1.00	79.98%	BRE Compliant	Negligible
B1_16a	100.00%	80.87%	0.81	80.00%	BRE Compliant	Negligible
B1_14c#	100.00%	71.17%	0.71	80.00%	89%	Minor Adverse
B1_13b#	98.31%	98.30%	1.00	78.65%	BRE Compliant	Negligible
B1_1b	93.79%	91.08%	0.97	75.03%	BRE Compliant	Negligible
B1_16b	96.67%	70.40%	0.73	77.34%	91%	Minor Adverse
B1_16c	96.14%	32.29%	0.34	76.91%	42%	Major Adverse
B1_16d	95.79%	50.43%	0.53	76.63%	66%	Moderate Adverse
B1_14a	96.45%	31.98%	0.33	77.16%	41%	Major Adverse
B1_14b	90.27%	36.38%	0.40	72.22%	50%	Moderate Adverse
B1_13a	96.57%	58.31%	0.60	77.26%	75%	Moderate Adverse
B2_1a#	99.99%	99.99%	1.00	79.99%	BRE Compliant	Negligible
B2_17a#2	100.00%	80.87%	0.81	80.00%	BRE Compliant	Negligible
B2_14c#	100.00%	71.20%	0.71	80.00%	89%	Minor Adverse
B2_13b#	99.89%	99.88%	1.00	79.91%	BRE Compliant	Negligible
B1_2b	93.97%	91.47%	0.97	75.18%	BRE Compliant	Negligible

\* The BRE Guidelines state that in order for a proposed development to have a noticeable effect on the daylight received by an existing room, the value needs to both drop below the guideline value of 80% and be less than 0.8 times the baseline value.

\*\* For the interpretation of level of effects please refer to "3.2 Definition of Effects" on page 14..

# The calculations have been made for the rooms, as individual windows are not considered in the NSL study

## A.2.2 Granted Block B- No Sky Line (NSL)

Table No. A.2.2 - NSL Impact Assessment						
Room Number	Baseline NSL Value	Proposed NSL Value	Ratio of Proposed NSL to Baseline NSL	Recommended minimum NSL	Level of Compliance with BRE Guidelines**	Effect of Proposed Development
B2_17b	96.67%	71.08%	0.74	77.34%	92%	Minor Adverse
B2_17c	96.14%	34.68%	0.36	76.91%	45%	Major Adverse
B2_17d	95.79%	52.09%	0.54	76.63%	68%	Moderate Adverse
B2_14a	96.47%	38.59%	0.40	77.18%	50%	Moderate Adverse
B2_14b	90.27%	40.53%	0.45	72.22%	56%	Moderate Adverse
B2_13a	96.60%	62.54%	0.65	77.28%	81%	Minor Adverse
B2_16a	99.47%	56.02%	0.56	79.58%	70%	Moderate Adverse
B2_15a	99.09%	57.41%	0.58	79.27%	72%	Moderate Adverse
B3_1b	93.97%	91.63%	0.98	75.18%	BRE Compliant	Negligible
B3_17b	96.67%	71.46%	0.74	77.34%	92%	Minor Adverse
B3_17c	96.16%	37.48%	0.39	76.93%	49%	Major Adverse
B3_17d	95.78%	54.15%	0.57	76.62%	71%	Moderate Adverse
B3_14a	96.46%	47.79%	0.50	77.17%	62%	Moderate Adverse
B3_14b	90.39%	45.76%	0.51	72.31%	63%	Moderate Adverse
B3_13a	96.72%	70.52%	0.73	77.38%	91%	Minor Adverse
B3_16a	99.46%	60.29%	0.61	79.57%	76%	Moderate Adverse
B3_15a	99.09%	62.91%	0.63	79.27%	79%	Moderate Adverse
B3_1a#	99.99%	99.99%	1.00	79.99%	BRE Compliant	Negligible
B3_13b#	100.00%	99.99%	1.00	80.00%	BRE Compliant	Negligible
B3_14c#	100.00%	71.12%	0.71	80.00%	89%	Minor Adverse
B3_17a#	100.00%	80.87%	0.81	80.00%	BRE Compliant	Negligible
B4_1a#	99.99%	99.99%	1.00	79.99%	BRE Compliant	Negligible
B4_15a#	100.00%	80.99%	0.81	80.00%	BRE Compliant	Negligible
B4_12c#	100.00%	71.56%	0.72	80.00%	89%	Minor Adverse
B4_1b	93.79%	91.61%	0.98	75.03%	BRE Compliant	Negligible
B4_15b	96.67%	72.01%	0.74	77.34%	93%	Minor Adverse
B4_15c	96.14%	42.42%	0.44	76.91%	55%	Moderate Adverse
B4_15d	95.79%	56.75%	0.59	76.63%	74%	Moderate Adverse
B4_12a	96.45%	59.11%	0.61	77.16%	77%	Moderate Adverse
B4_12b	90.28%	51.22%	0.57	72.22%	71%	Moderate Adverse
B4_14a	99.46%	64.52%	0.65	79.57%	81%	Minor Adverse
B4_13a	99.14%	69.59%	0.70	79.31%	88%	Minor Adverse
B4_11a#	99.42%	99.29%	1.00	79.54%	BRE Compliant	Negligible
B5_1a#	99.99%	99.99%	1.00	79.99%	BRE Compliant	Negligible
B5_10a#	99.99%	80.49%	0.80	79.99%	BRE Compliant	Negligible
B5_1b	94.72%	92.65%	0.98	75.78%	BRE Compliant	Negligible
B5_10b	96.86%	81.47%	0.84	77.49%	BRE Compliant	Negligible
B5_10c	96.14%	49.18%	0.51	76.91%	64%	Moderate Adverse
B5_10d	95.79%	60.02%	0.63	76.63%	78%	Moderate Adverse
B5_9a#	97.14%	97.14%	1.00	77.71%	BRE Compliant	Negligible
B6_7b#	99.97%	99.97%	1.00	79.98%	BRE Compliant	Negligible
B6_1a#	99.99%	99.99%	1.00	79.99%	BRE Compliant	Negligible
B6_7a	100.00%	100.00%	1.00	80.00%	BRE Compliant	Negligible
B6_1b	93.99%	92.62%	0.99	75.19%	BRE Compliant	Negligible

\* The BRE Guidelines state that in order for a proposed development to have a noticeable effect on the daylight received by an existing room, the value needs to both drop below the guideline value of 80% and be less than 0.8 times the baseline value.

\*\* For the interpretation of level of effects please refer to "3.2 Definition of Effects" on page 14.

# The calculations have been made for the rooms, as individual windows are not considered in the NSL study.

### A.2.3 Duplex, Units 44-55- No Sky Line (NSL)

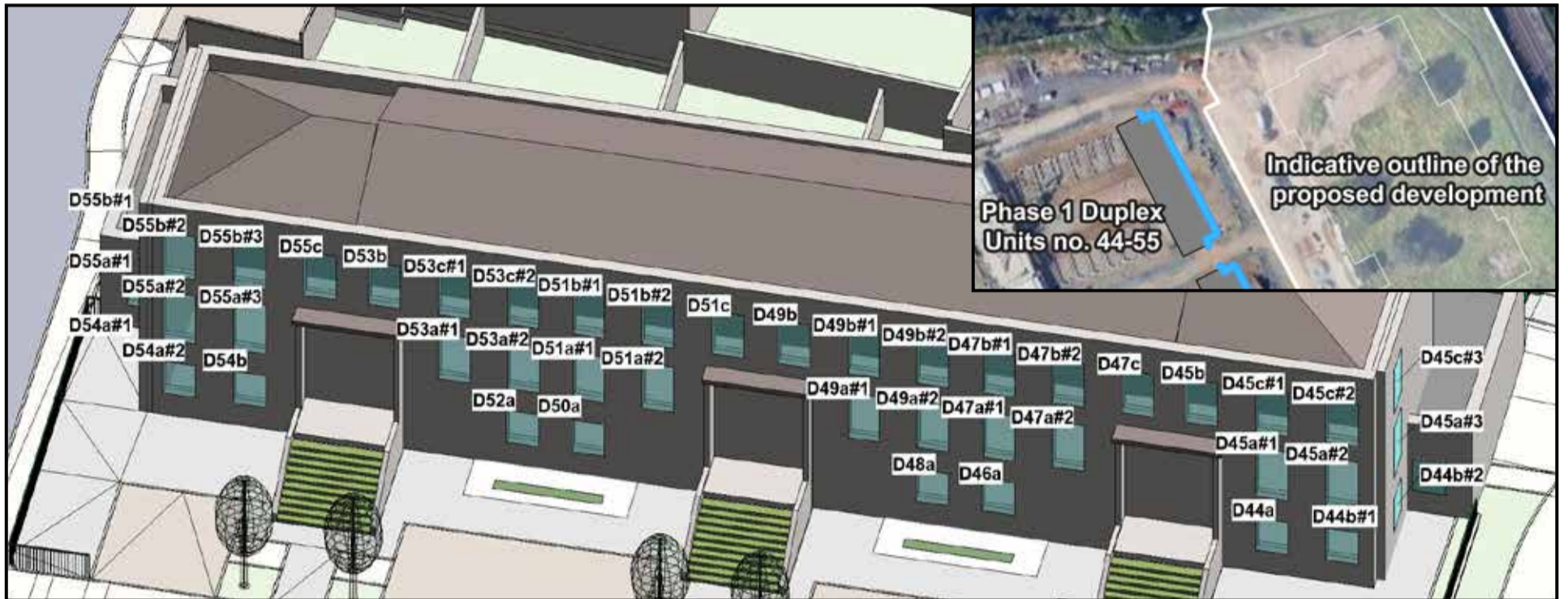


Figure A.6: Highlighted areas indicate the position of assessed windows (L), Aerial view of assessed location (R)

Table No. A.2.3 - NSL Impact Assessment

Room Number	Baseline NSL Value	Proposed NSL Value	Ratio of Proposed NSL to Baseline NSL	Recommended minimum NSL	Level of Compliance with BRE Guidelines**	Effect of Proposed Development
D44b#	99.33%	99.33%	1.00	79.46%	BRE Compliant	Negligible
D44a	97.71%	93.21%	0.95	78.17%	BRE Compliant	Negligible
D46a	97.55%	91.01%	0.93	78.04%	BRE Compliant	Negligible
D48a	97.59%	92.13%	0.94	78.07%	BRE Compliant	Negligible
D50a	97.55%	92.73%	0.95	78.04%	BRE Compliant	Negligible
D52a	97.63%	88.09%	0.90	78.10%	BRE Compliant	Negligible
D54b	97.57%	95.44%	0.98	78.06%	BRE Compliant	Negligible
D54a#	99.71%	99.71%	1.00	79.77%	BRE Compliant	Negligible
D45a#	98.60%	98.60%	1.00	78.88%	BRE Compliant	Negligible
D47a#	97.10%	97.10%	1.00	77.68%	BRE Compliant	Negligible
D49a#	96.88%	96.88%	1.00	77.50%	BRE Compliant	Negligible
D51a#	97.04%	97.04%	1.00	77.63%	BRE Compliant	Negligible
D53a#	96.90%	96.87%	1.00	77.52%	BRE Compliant	Negligible
D55a#	98.59%	98.59%	1.00	78.87%	BRE Compliant	Negligible
D45c#	98.25%	98.25%	1.00	78.60%	BRE Compliant	Negligible
D45b	99.15%	97.94%	0.99	79.32%	BRE Compliant	Negligible
D47c	99.04%	96.81%	0.98	79.23%	BRE Compliant	Negligible
D47b#	97.89%	97.89%	1.00	78.31%	BRE Compliant	Negligible
D49b#	98.01%	98.01%	1.00	78.41%	BRE Compliant	Negligible
D49b	98.99%	97.88%	0.99	79.19%	BRE Compliant	Negligible
D51c	99.01%	97.00%	0.98	79.21%	BRE Compliant	Negligible
D51b#	97.87%	97.87%	1.00	78.30%	BRE Compliant	Negligible
D53c#	98.02%	98.02%	1.00	78.42%	BRE Compliant	Negligible
D53b	98.99%	98.87%	1.00	79.19%	BRE Compliant	Negligible
D55c	99.05%	97.84%	0.99	79.24%	BRE Compliant	Negligible
D55b#	98.23%	98.23%	1.00	78.58%	BRE Compliant	Negligible

\* The BRE Guidelines state that in order for a proposed development to have a noticeable effect on the daylight received by an existing room, the value needs to both drop below the guideline value of 80% and be less than 0.8 times the baseline value.

\*\* For the interpretation of level of effects please refer to "3.2 Definition of Effects" on page 14..

# The calculations have been made for the rooms, as individual windows are not considered in the NSL study.

### A.2.4 Duplex, Units 78-89- No Sky Line (NSL)

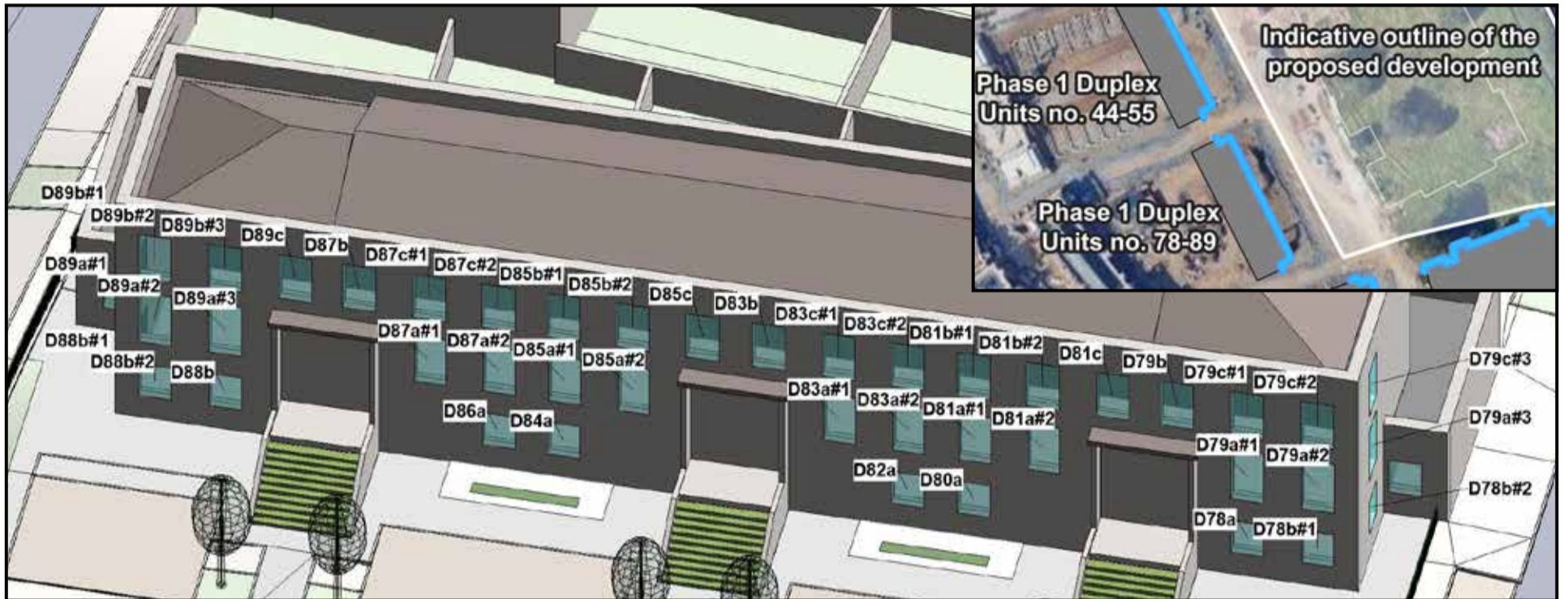


Figure A.7: Highlighted areas indicate the position of assessed windows (L), Aerial view of assessed location (R)

Table No. A.2.4 - NSL Impact Assessment

Room Number	Baseline NSL Value	Proposed NSL Value	Ratio of Proposed NSL to Baseline NSL	Recommended minimum NSL	Level of Compliance with BRE Guidelines**	Effect of Proposed Development
D78b#	99.72%	99.72%	1.00	79.78%	BRE Compliant	Negligible
D78a	97.71%	97.71%	1.00	78.17%	BRE Compliant	Negligible
D80a	97.58%	89.39%	0.92	78.06%	BRE Compliant	Negligible
D82a	97.59%	97.59%	1.00	78.07%	BRE Compliant	Negligible
D84a	97.55%	87.86%	0.90	78.04%	BRE Compliant	Negligible
D86a	97.59%	90.11%	0.92	78.07%	BRE Compliant	Negligible
D88b	97.57%	93.44%	0.96	78.06%	BRE Compliant	Negligible
D88b#	99.64%	98.01%	0.98	79.71%	BRE Compliant	Negligible
D79a#	99.86%	99.86%	1.00	79.89%	BRE Compliant	Negligible
D81a#	97.11%	94.09%	0.97	77.69%	BRE Compliant	Negligible
D83a#	96.90%	96.90%	1.00	77.52%	BRE Compliant	Negligible
D85a#	97.12%	95.06%	0.98	77.70%	BRE Compliant	Negligible
D87a#	96.89%	95.26%	0.98	77.51%	BRE Compliant	Negligible
D89a#	99.90%	99.90%	1.00	79.92%	BRE Compliant	Negligible
D79c#	99.87%	99.87%	1.00	79.90%	BRE Compliant	Negligible
D79b	98.79%	98.79%	1.00	79.03%	BRE Compliant	Negligible
D81c	99.16%	99.16%	1.00	79.33%	BRE Compliant	Negligible
D81b#	98.27%	98.27%	1.00	78.62%	BRE Compliant	Negligible
D83c#	98.25%	98.25%	1.00	78.60%	BRE Compliant	Negligible
D83b	99.12%	96.89%	0.98	79.30%	BRE Compliant	Negligible
D85c	99.14%	97.43%	0.98	79.31%	BRE Compliant	Negligible
D85b#	98.29%	98.29%	1.00	78.63%	BRE Compliant	Negligible
D87c#	98.27%	98.27%	1.00	78.62%	BRE Compliant	Negligible
D87b	99.11%	97.17%	0.98	79.29%	BRE Compliant	Negligible
D89c	99.06%	96.93%	0.98	79.25%	BRE Compliant	Negligible
D89b#	99.87%	99.87%	1.00	79.90%	BRE Compliant	Negligible

\* The BRE Guidelines state that in order for a proposed development to have a noticeable effect on the daylight received by an existing room, the value needs to both drop below the guideline value of 80% and be less than 0.8 times the baseline value.

\*\* For the interpretation of level of effects please refer to "3.2 Definition of Effects" on page 14.

# The calculations have been made for the rooms, as individual windows are not considered in the NSL study.

## A.2.5 Duplex, Units 111-122- No Sky Line (NSL)

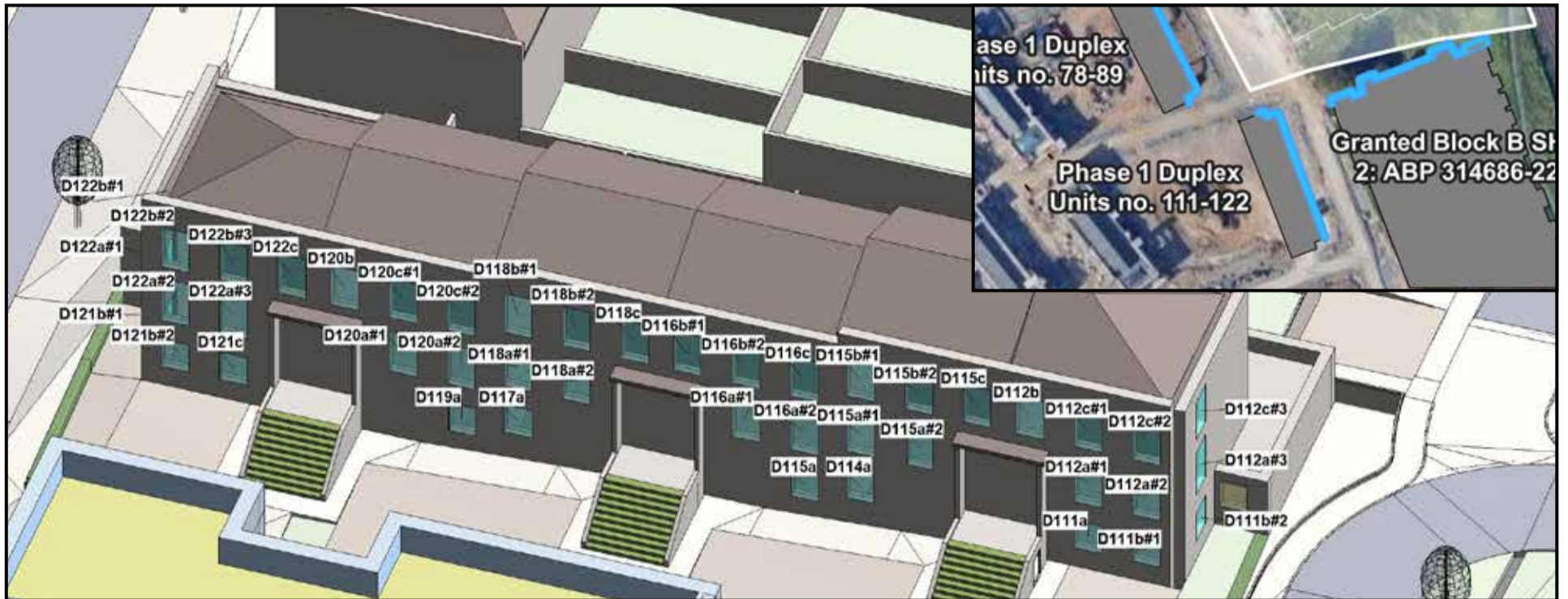


Figure A.8: Highlighted areas indicate the position of assessed windows (L), Aerial view of assessed location (R)

Table No. A.2.5 - NSL Impact Assessment

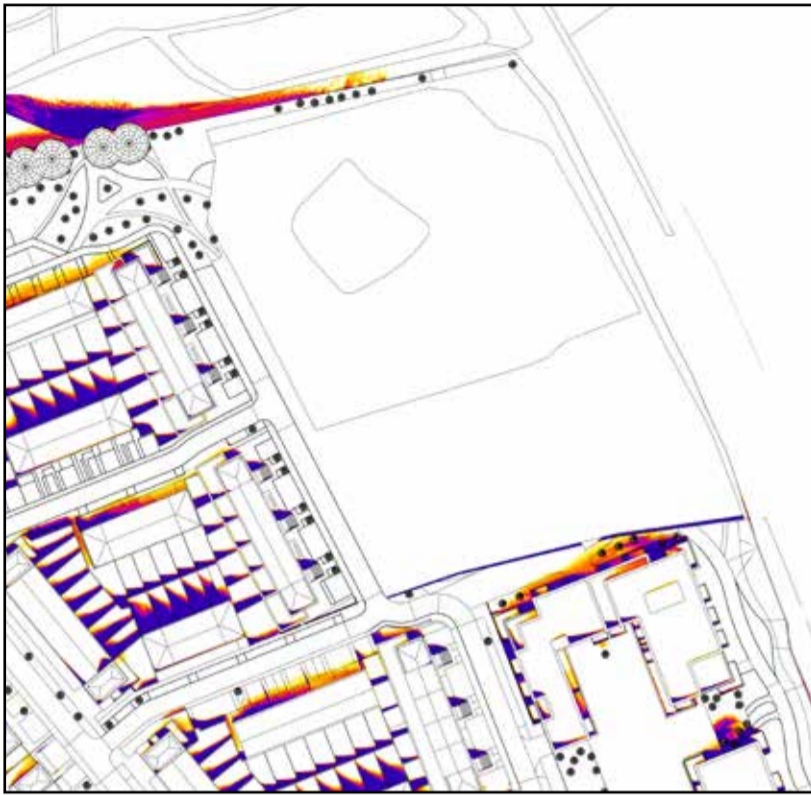
Room Number	Baseline NSL Value	Proposed NSL Value	Ratio of Proposed NSL to Baseline NSL	Recommended minimum NSL	Level of Compliance with BRE Guidelines**	Effect of Proposed Development
D111b#	94.83%	94.76%	1.00	75.86%	BRE Compliant	Negligible
D111a	77.81%	77.80%	1.00	62.25%	BRE Compliant	Negligible
D114a	70.19%	70.19%	1.00	56.15%	BRE Compliant	Negligible
D112a#	99.87%	99.87%	1.00	79.90%	BRE Compliant	Negligible
D115a#	96.36%	89.61%	0.93	77.09%	BRE Compliant	Negligible
D112c#	99.80%	99.80%	1.00	79.84%	BRE Compliant	Negligible
D112b	76.65%	76.65%	1.00	61.32%	BRE Compliant	Negligible
D115c	82.62%	82.61%	1.00	66.10%	BRE Compliant	Negligible
D115b#	98.31%	94.51%	0.96	78.65%	BRE Compliant	Negligible
D115a	70.18%	70.14%	1.00	56.14%	BRE Compliant	Negligible
D117a	89.11%	89.11%	1.00	71.29%	BRE Compliant	Negligible
D116a#	97.30%	87.90%	0.90	77.84%	BRE Compliant	Negligible
D118a#	97.48%	97.47%	1.00	77.98%	BRE Compliant	Negligible
D116b#	98.25%	93.31%	0.95	78.60%	BRE Compliant	Negligible
D118b#	98.37%	98.33%	1.00	78.70%	BRE Compliant	Negligible
D116c	83.81%	83.81%	1.00	67.05%	BRE Compliant	Negligible
D118c	80.06%	79.78%	1.00	64.05%	BRE Compliant	Negligible
D119a	71.24%	70.87%	0.99	56.99%	BRE Compliant	Negligible
D121c	61.41%	61.41%	1.00	49.13%	BRE Compliant	Negligible
D121b#	95.59%	95.59%	1.00	76.47%	BRE Compliant	Negligible
D120a#	97.48%	97.47%	1.00	77.98%	BRE Compliant	Negligible
D122a#	97.51%	97.50%	1.00	78.01%	BRE Compliant	Negligible
D120c#	98.23%	96.01%	0.98	78.58%	BRE Compliant	Negligible
D120b	99.24%	99.24%	1.00	79.39%	BRE Compliant	Negligible
D122c	97.82%	97.82%	1.00	78.26%	BRE Compliant	Negligible
D122b#	99.43%	99.43%	1.00	79.54%	BRE Compliant	Negligible

\* The BRE Guidelines state that in order for a proposed development to have a noticeable effect on the daylight received by an existing room, the value needs to both drop below the guideline value of 80% and be less than 0.8 times the baseline value.

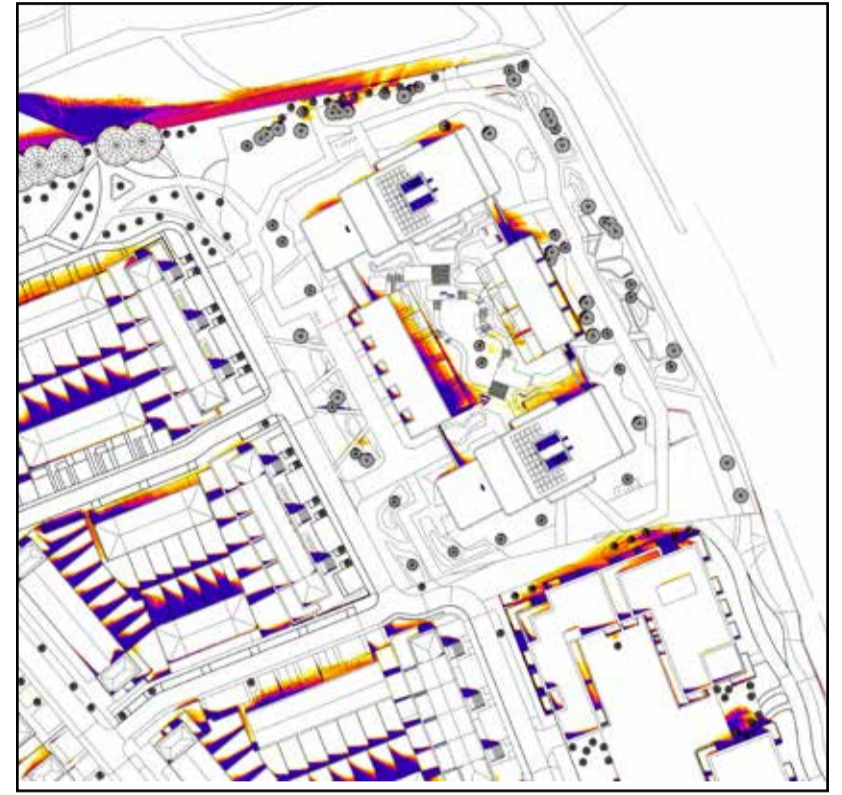
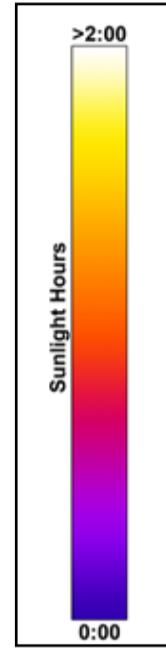
\*\* For the interpretation of level of effects please refer to "3.2 Definition of Effects" on page 14.

# The calculations have been made for the rooms, as individual windows are not considered in the NSL study.

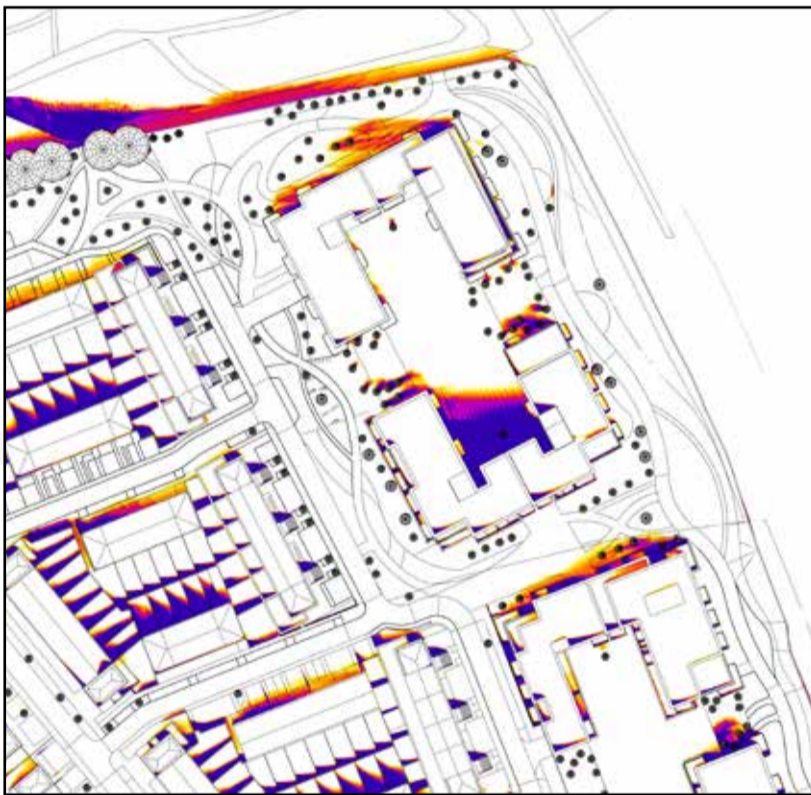
### A.3 Sun on Ground



Baseline



Proposed Block A



Granted Block A

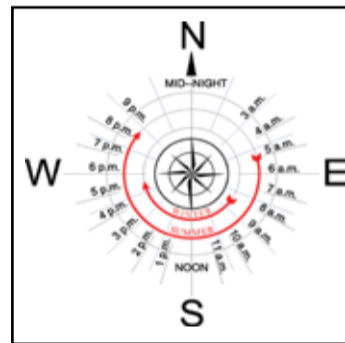
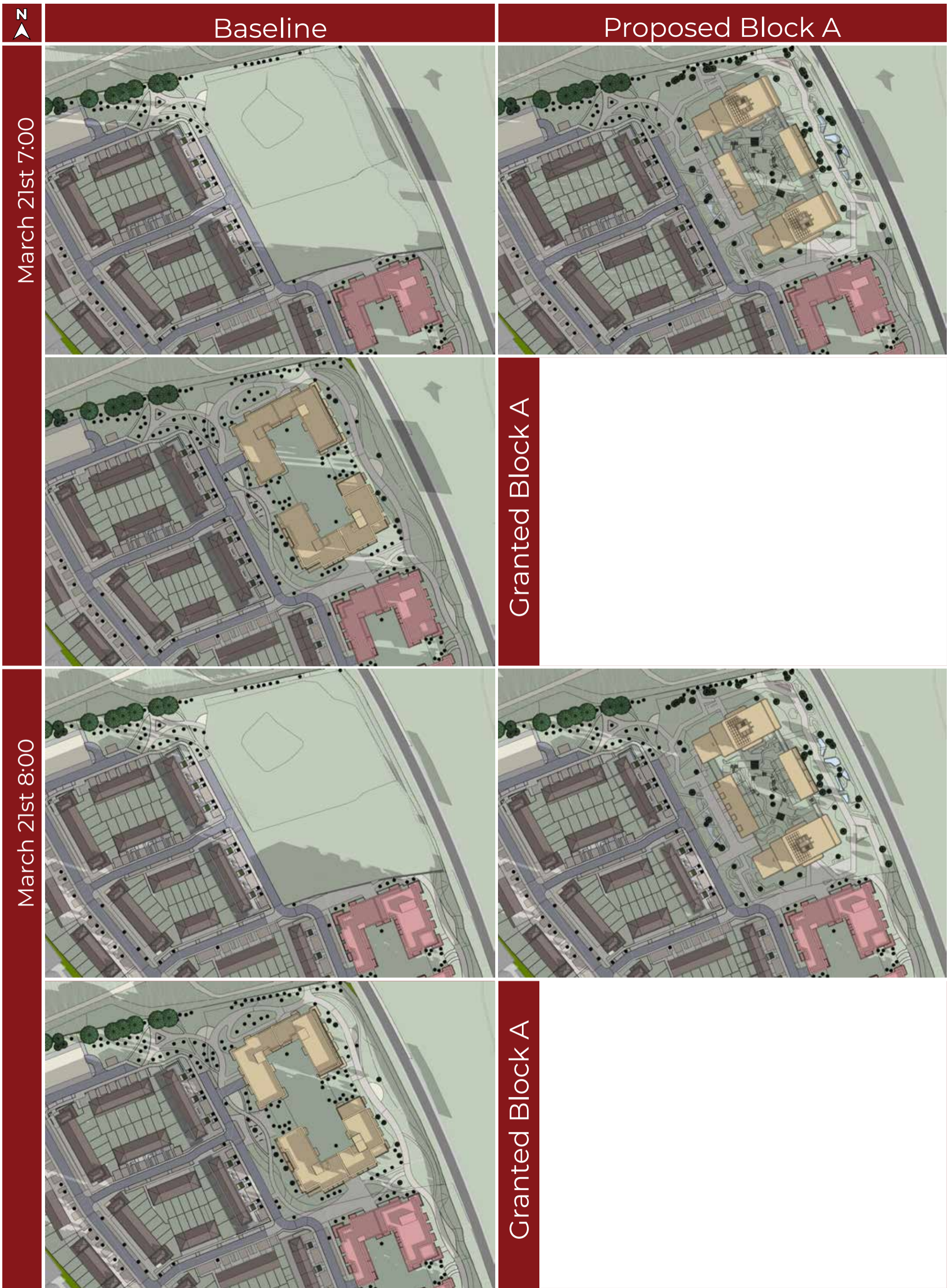



Figure A.9: False colour plans. White area indicates the area capable of receiving 2 hours of sunlight on March 21st.



B.0	Shadow Studies	Project: Sea Gardens, Phase 1 Block A	Block B	Block A
B.1	Shadow Study 21 March			
March 21st Sunrise 6:33   Sunset 18:31		Applicant: Shankill Property Investments Ltd		



Project: Sea Gardens, Phase 1 Block A

Block B

Block A

March 21st  
Sunrise 6:33 | Sunset 18:31

Applicant: Shankill Property Investments Ltd





▶ Z

Baseline

Proposed Block A

March 21st 11:00



Granted Block A

March 21st 12:00



Granted Block A

Project: Sea Gardens, Phase 1 Block A

Block B

Block A

March 21st  
Sunrise 6:33 | Sunset 18:31

Applicant: Shankill Property Investments Ltd





Project: Sea Gardens, Phase 1 Block A

Block B

Block A

March 21st  
Sunrise 6:33 | Sunset 18:31

Applicant: Shankill Property Investments Ltd





z

Baseline

Proposed Block A

March 21st 15:00

March 21st 16:00

Granted Block A

Granted Block A

Project: Sea Gardens, Phase 1 Block A

Block B

Block A

March 21st  
Sunrise 6:33 | Sunset 18:31

Applicant: Shankill Property Investments Ltd





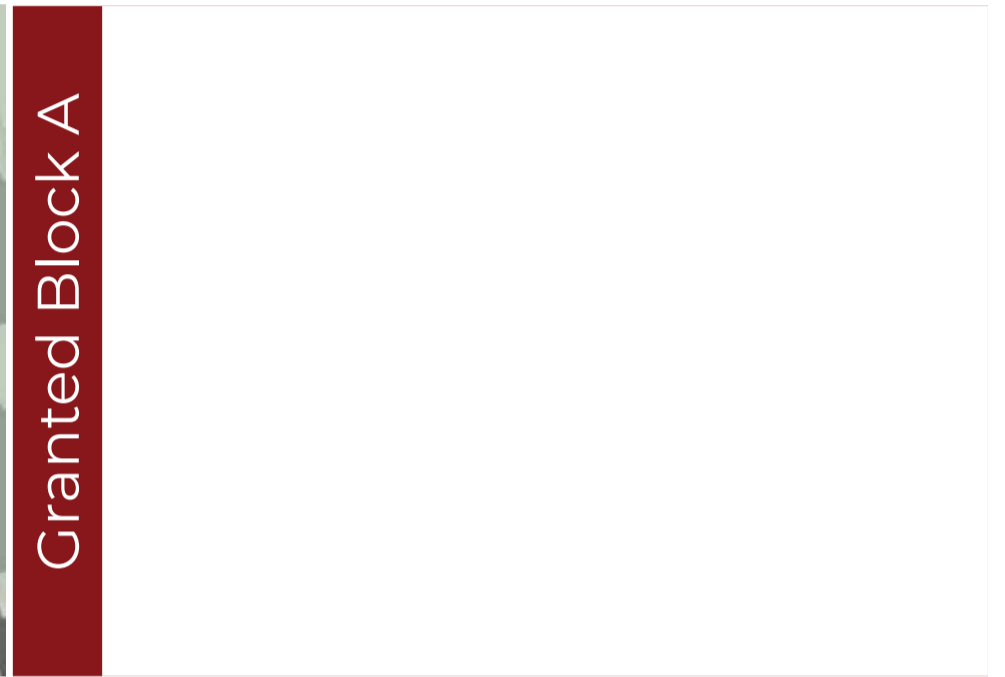
# Baseline

# Proposed Block A

March 21st 17:00



March 21st 18:00



Granted Block A

Granted Block A

Project: Sea Gardens, Phase 1 Block A

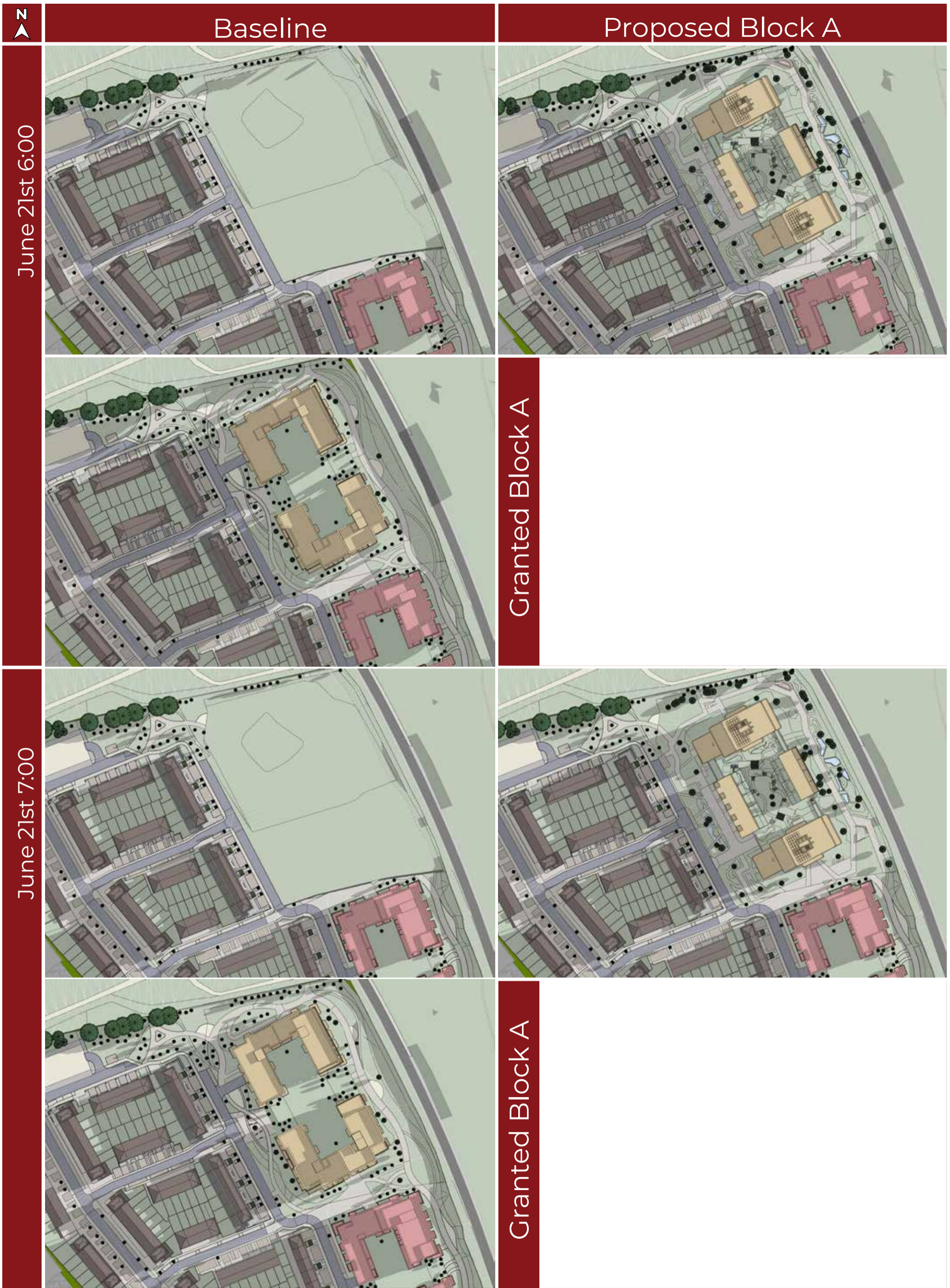
Block B

Block A

March 21st  
Sunrise 6:33 | Sunset 18:31

Applicant: Shankill Property Investments Ltd





B.2 Shadow Study 21 June

Project: Sea Gardens, Phase 1 Block A

Block B

Block A

June 21st  
Sunrise 5:04 | Sunset 21:48

Applicant: Shankill Property Investments Ltd





▶ z

Baseline

Proposed Block A

June 21st 8:00



June 21st 9:00



Granted Block A

Granted Block A

Project: Sea Gardens, Phase 1 Block A

Block B

Block A

June 21st  
Sunrise 5:04 | Sunset 21:48

Applicant: Shankill Property Investments Ltd





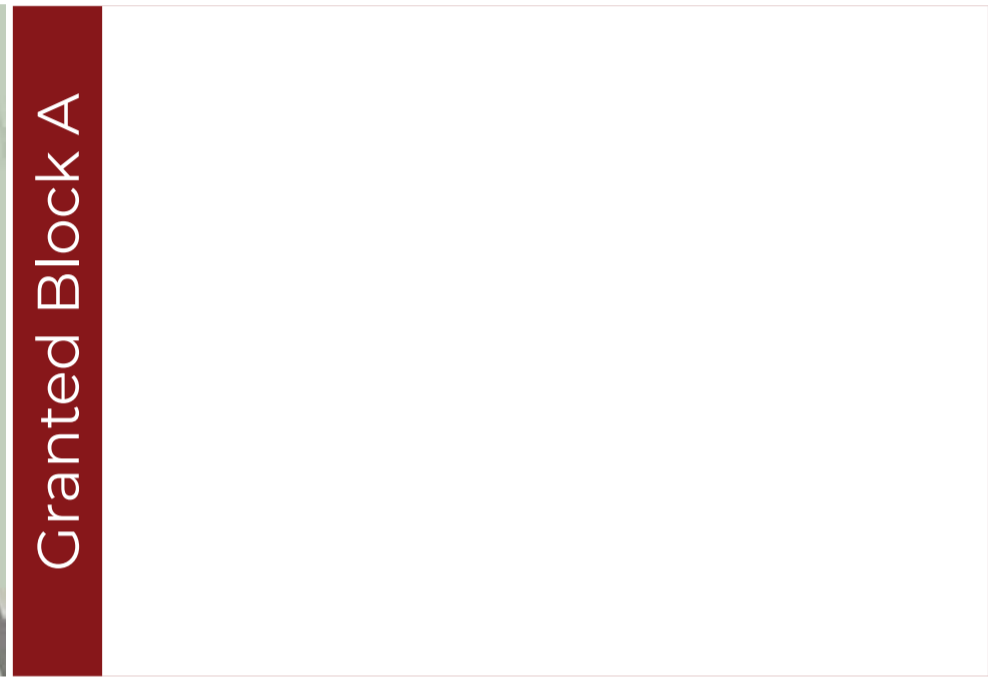
Baseline

Proposed Block A

June 21st 10:00



June 21st 11:00



Granted Block A



Granted Block A



Project: Sea Gardens, Phase 1 Block A

Block B

Block A

June 21st  
Sunrise 5:04 | Sunset 21:48

Applicant: Shankill Property Investments Ltd





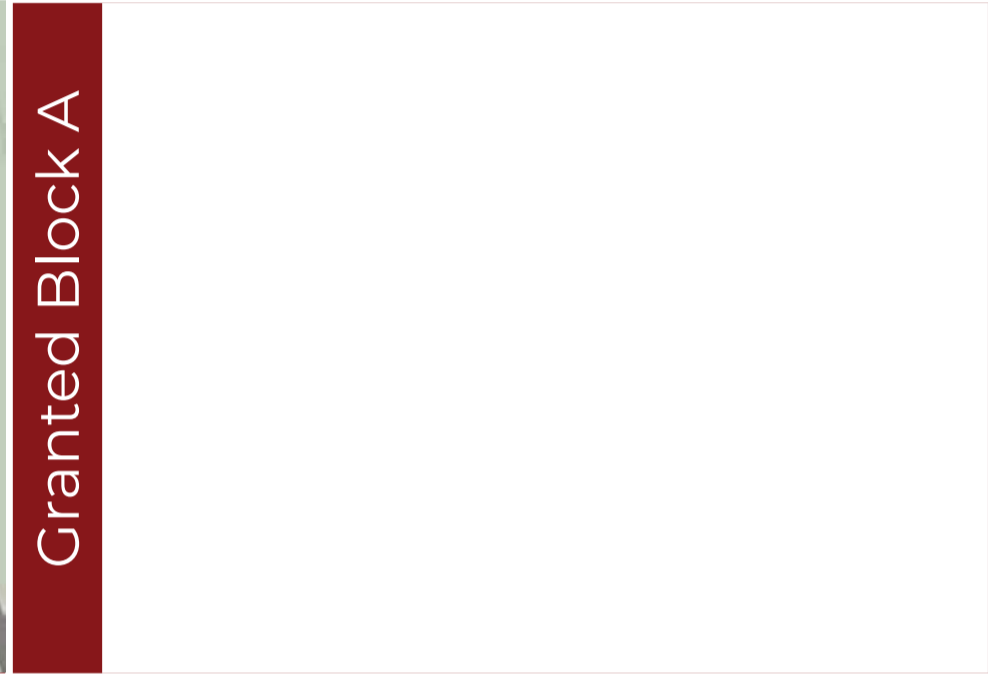
Baseline

Proposed Block A

June 21st 12:00



June 21st 13:00



Granted Block A

Granted Block A

Project: Sea Gardens, Phase 1 Block A

Block B

Block A

June 21st  
Sunrise 5:04 | Sunset 21:48

Applicant: Shankill Property Investments Ltd





▶ Z

Baseline

Proposed Block A

June 21st 14:00



Granted Block A

June 21st 15:00



Granted Block A

Project: Sea Gardens, Phase 1 Block A

Block B

Block A

Applicant: Shankill Property Investments Ltd

June 21st  
Sunrise 5:04 | Sunset 21:48

3D DESIGN BUREAU

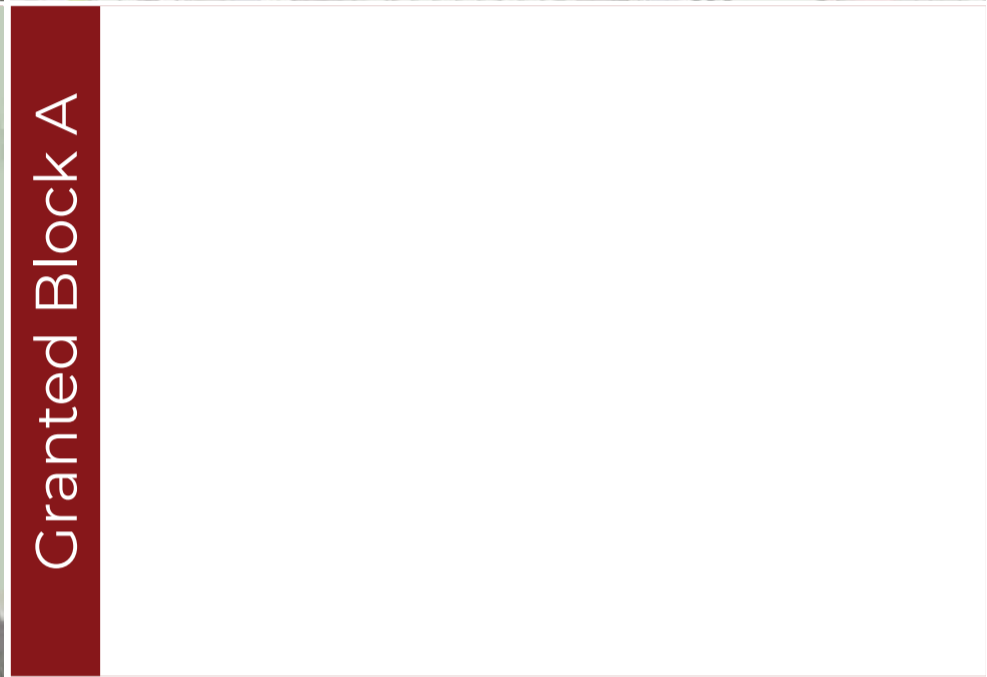


▶ Z

Baseline

Proposed Block A

June 21st 16:00



Granted Block A

June 21st 17:00



Granted Block A

Project: Sea Gardens, Phase 1 Block A

Block B

Block A

Applicant: Shankill Property Investments Ltd

June 21st  
Sunrise 5:04 | Sunset 21:48

3D DESIGN BUREAU



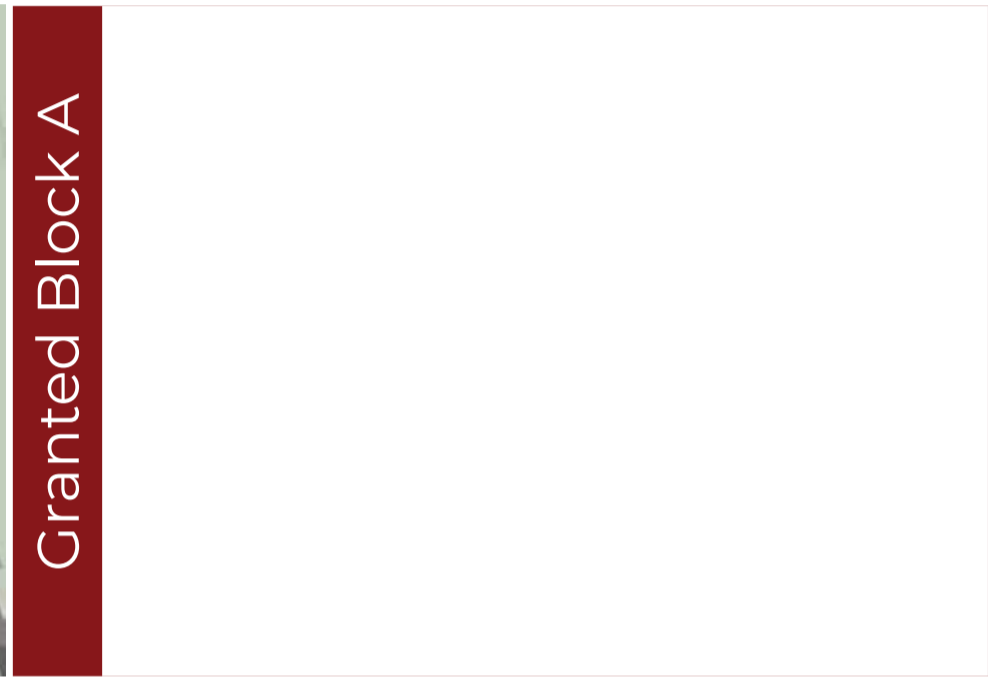
Baseline

Proposed Block A

June 21st 18:00



June 21st 19:00



Granted Block A

Granted Block A



Project: Sea Gardens, Phase 1 Block A

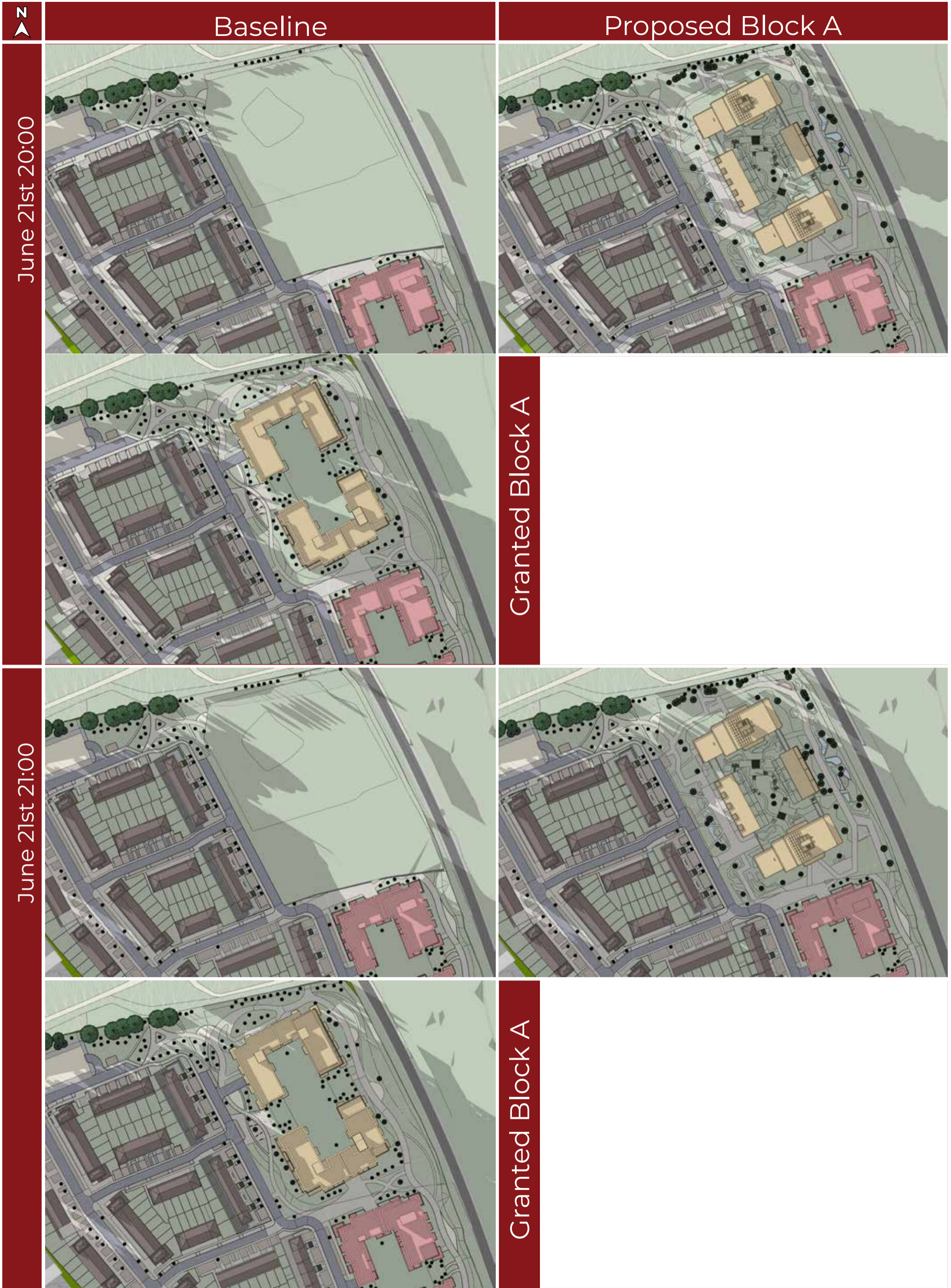
Block B

Block A

June 21st  
Sunrise 5:04 | Sunset 21:48

Applicant: Shankill Property Investments Ltd



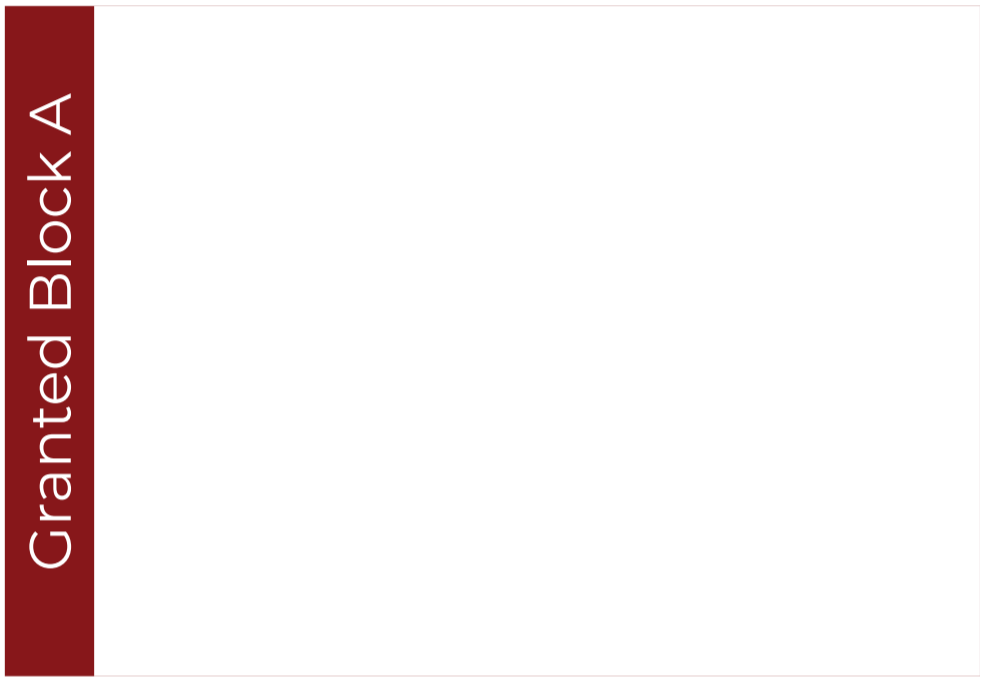


▲ Z

Baseline

Proposed Block A

June 21st 20:00



Granted Block A

June 21st 21:00



Granted Block A

Project: Sea Gardens, Phase 1 Block A

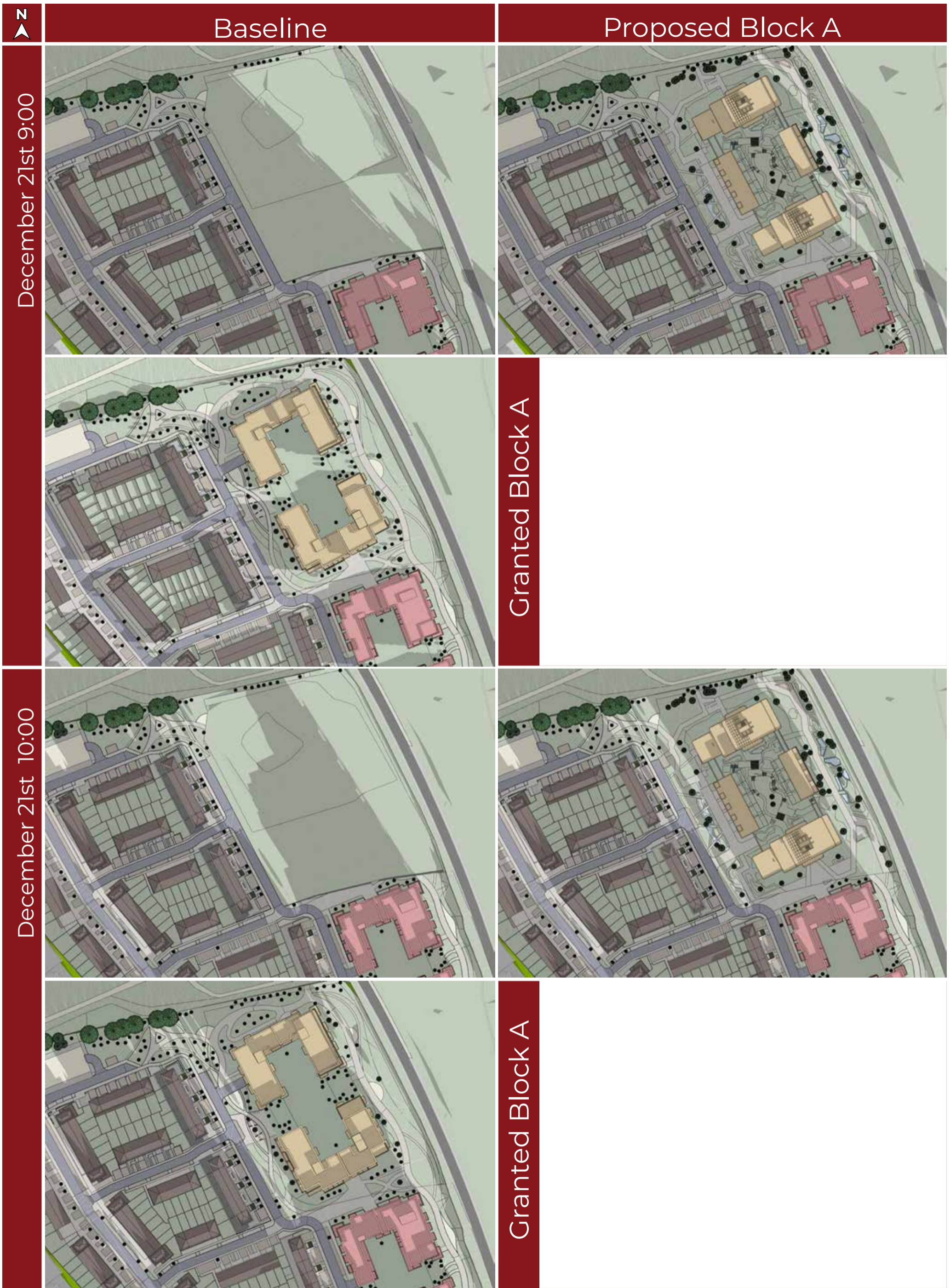
Block B

Block A

June 21st  
Sunrise 5:04 | Sunset 21:48

Applicant: Shankill Property Investments Ltd





B.3 Shadow Study 21 December

Project: Sea Gardens, Phase 1 Block A

Block B

Block A

December 21st  
Sunrise 8:44 | Sunset 16:01

Applicant: Shankill Property Investments Ltd





Baseline

Proposed Block A

December 21st 11:00

December 21st 12:00

Project: Sea Gardens, Phase 1 Block A

Block B

Block A

December 21st  
Sunrise 8:44 | Sunset 16:01

Applicant: Shankill Property Investments Ltd





▶ z

Baseline

Proposed Block A

December 21st 13:00

December 21st 14:00

Granted Block A

Granted Block A

Project: Sea Gardens, Phase 1 Block A

Block B

Block A

December 21st  
Sunrise 8:44 | Sunset 16:01

Applicant: Shankill Property Investments Ltd





<b>Project: Sea Gardens, Phase 1 Block A</b>	<b>Block B</b>	<b>Block A</b>
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**December 21st**  
 Sunrise 8:44 | Sunset 16:01

**Applicant: Shankill Property Investments Ltd**



## C.0 Supplementary Impact Assessment Results: Granted Block A

### C.1 Effect on Vertical Sky Component (VSC) - Supplementary

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

Table Example. C.1 - VSC 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
A	B	C	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 VSC Value

The *Baseline VSC Value* represents the VSC value of the assessed window which is calculated in the existing baseline model state (as explained in the “Building the Model States” on page 17).

#### C: Proposed VSC Value

The *Proposed VSC Value* represents the VSC value of the assessed window which is calculated in the proposed model state (as explained in the “Building the Model States” on page 17).

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

This column expresses 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*. A full list of definitions and a numerical rationale for each can be found in the section “*Definition of Effects*” on page 14.

It should be noted that the figures displayed in the table of results have been rounded off. A manual calculation of these figures may yield a negligible difference and should not be considered an error.

### C.1.1 Granted Block B

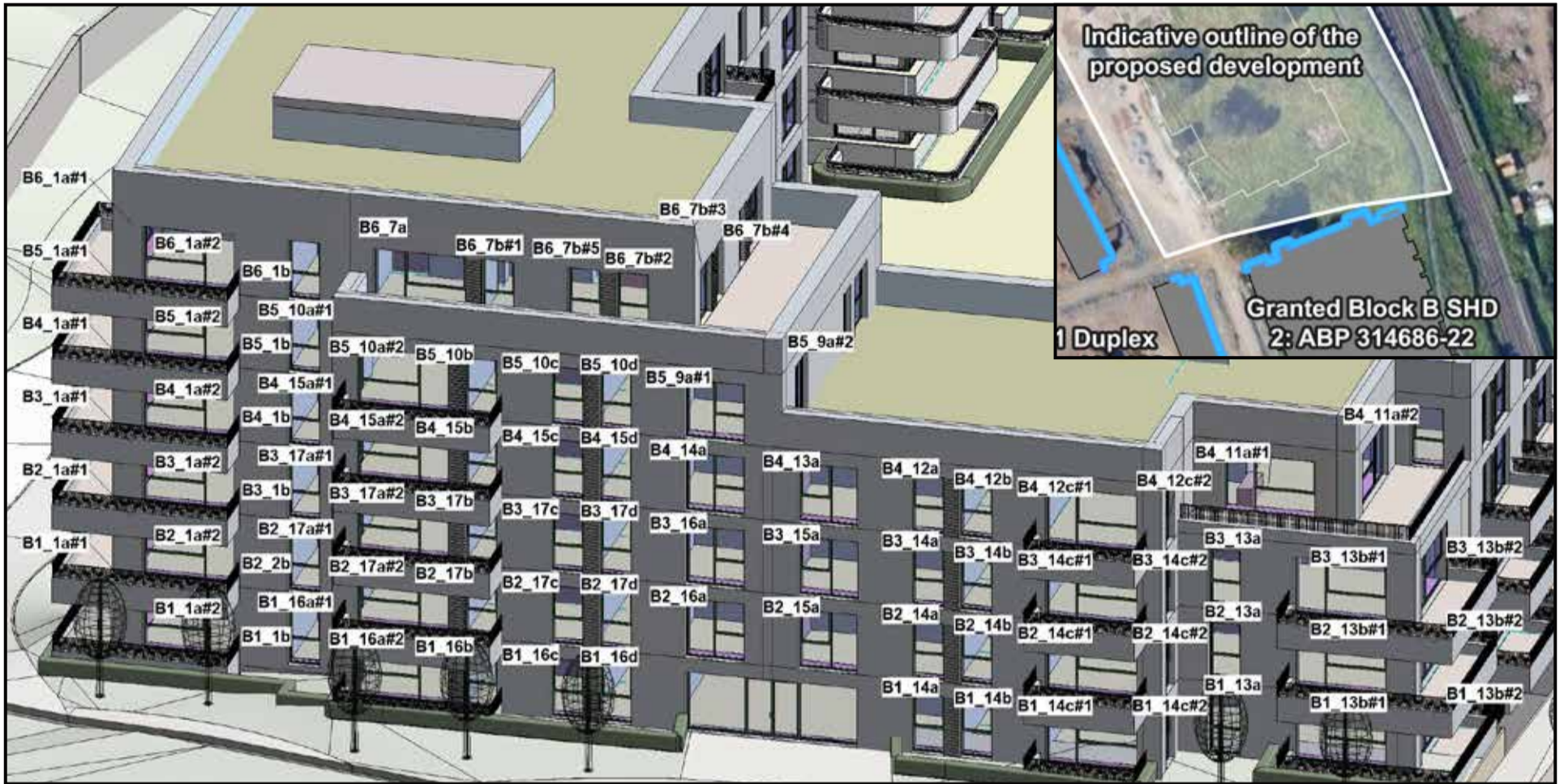


Figure C.1: Highlighted areas indicate the position of assessed windows (L), Aerial view of assessed location (R)

Table No. C.1.1 - VSC Results: Supplementary

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**
B1_13a	22.12%	15.12%	0.68	17.70%	85%	Minor Adverse
B1_13b#1	7.61%	1.98%	0.26	6.09%	33%	-
B1_13b#2	5.28%	5.14%	0.97	4.22%	BRE Compliant	-
B1_13b#	6.39%	3.63%	0.57	5.11%	71%	Moderate Adverse
B1_14a	37.25%	21.86%	0.59	27.00%	81%	Minor Adverse
B1_14b	35.32%	19.99%	0.57	27.00%	74%	Moderate Adverse
B1_14c#1	12.06%	2.16%	0.18	9.65%	22%	-
B1_14c#2	14.53%	13.27%	0.91	11.62%	BRE Compliant	-
B1_14c#	12.71%	5.07%	0.40	10.17%	50%	Moderate Adverse
B1_16a#1	15.02%	14.66%	0.98	12.02%	BRE Compliant	-
B1_16a#2	8.59%	3.39%	0.39	6.87%	49%	-
B1_16a#	10.27%	6.34%	0.62	8.22%	77%	Moderate Adverse
B1_16b	10.98%	4.84%	0.44	8.78%	55%	Moderate Adverse
B1_16c	30.45%	19.68%	0.65	24.36%	81%	Minor Adverse
B1_16d	32.47%	21.83%	0.67	25.98%	84%	Minor Adverse
B1_1a#1	12.76%	12.75%	1.00	10.21%	BRE Compliant	-
B1_1a#2	7.26%	4.57%	0.63	5.81%	79%	-
B1_1a#	10.15%	8.86%	0.87	8.12%	BRE Compliant	Negligible
B1_1b	23.01%	17.02%	0.74	18.41%	92%	Minor Adverse
B1_2b	26.58%	21.44%	0.81	21.26%	BRE Compliant	Negligible

\* 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.

\*\* For the interpretation of level of effects please refer to "3.2 Definition of Effects" on page 14.

# If it can be determined or reasonably assumed that multiple windows serve the same room, each individual window is labelled with a hash-tag and a serial number (e.g. Xa#1, Xa#2). Each window is assessed, and a weighted average is calculated to determine the level of effect on the room. Rooms are identified with a hash-tag at the end (e.g. Xa#). In such cases, the 'effect of proposed development' column will display a dash (-) for the individual windows, with the overall level of effect indicated in the row corresponding to the room.

## C.1.2 Granted Block B

Table No. C.1.1 - VSC Results: Supplementary						
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**
B2_13a	27.39%	19.49%	0.71	21.91%	89%	Minor Adverse
B2_13b#1	11.38%	3.10%	0.27	9.10%	34%	-
B2_13b#2	8.29%	8.15%	0.98	6.63%	BRE Compliant	-
B2_13b#	9.76%	5.74%	0.59	7.81%	73%	Moderate Adverse
B2_14a	37.96%	24.91%	0.66	27.00%	92%	Minor Adverse
B2_14b	35.98%	23.04%	0.64	27.00%	85%	Minor Adverse
B2_14c#1	12.86%	3.00%	0.23	10.29%	29%	-
B2_14c#2	21.42%	20.15%	0.94	17.14%	BRE Compliant	-
B2_14c#	15.10%	7.49%	0.50	12.08%	62%	Moderate Adverse
B2_15a	38.80%	25.72%	0.66	27.00%	95%	Minor Adverse
B2_16a	38.77%	25.92%	0.67	27.00%	96%	Minor Adverse
B2_17a#1	17.91%	17.83%	1.00	14.33%	BRE Compliant	-
B2_17a#2	12.55%	5.11%	0.41	10.04%	51%	-
B2_17a#	13.95%	8.44%	0.60	11.16%	76%	Moderate Adverse
B2_17b	15.68%	7.00%	0.45	12.54%	56%	Moderate Adverse
B2_17c	36.19%	24.27%	0.67	27.00%	90%	Minor Adverse
B2_17d	37.95%	25.67%	0.68	27.00%	95%	Minor Adverse
B2_1a#1	12.90%	12.90%	1.00	10.32%	BRE Compliant	-
B2_1a#2	11.90%	6.77%	0.57	9.52%	71%	-
B2_1a#	12.42%	9.99%	0.80	9.94%	BRE Compliant	Negligible
B3_13a	30.33%	24.20%	0.80	24.26%	>99%	Negligible
B3_13b#1	37.88%	30.63%	0.81	27.00%	BRE Compliant	-
B3_13b#2	37.55%	37.35%	0.99	27.00%	BRE Compliant	-
B3_13b#	37.71%	34.14%	0.91	27.00%	BRE Compliant	Negligible
B3_14a	38.76%	28.22%	0.73	27.00%	BRE Compliant	Negligible
B3_14b	37.17%	27.09%	0.73	27.00%	BRE Compliant	Negligible
B3_14c#1	13.19%	4.38%	0.33	10.55%	42%	-
B3_14c#2	27.98%	27.04%	0.97	22.38%	BRE Compliant	-
B3_14c#	17.06%	10.31%	0.60	13.65%	76%	Moderate Adverse
B3_15a	39.22%	28.53%	0.73	27.00%	BRE Compliant	Negligible
B3_16a	39.15%	28.51%	0.73	27.00%	BRE Compliant	Negligible
B3_17a#1	18.26%	18.20%	1.00	14.61%	BRE Compliant	-
B3_17a#2	12.76%	5.56%	0.44	10.21%	54%	-
B3_17a#	14.20%	8.87%	0.62	11.36%	78%	Moderate Adverse
B3_17b	15.92%	7.76%	0.49	12.74%	61%	Moderate Adverse
B3_17c	36.63%	26.65%	0.73	27.00%	99%	Minor Adverse
B3_17d	38.40%	28.14%	0.73	27.00%	BRE Compliant	Negligible
B3_1a#1	12.90%	12.90%	1.00	10.32%	BRE Compliant	-
B3_1a#2	12.05%	7.19%	0.60	9.64%	75%	-
B3_1a#	12.50%	10.19%	0.82	10.00%	BRE Compliant	Negligible
B3_1b	26.94%	22.65%	0.84	21.55%	BRE Compliant	Negligible

\* 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.

\*\* For the interpretation of level of effects please refer to "3.2 Definition of Effects" on page 14.

# If it can be determined or reasonably assumed that multiple windows serve the same room, each individual window is labelled with a hash-tag and a serial number (e.g. Xa#1, Xa#2). Each window is assessed, and a weighted average is calculated to determine the level of effect on the room. Rooms are identified with a hash-tag at the end (e.g. Xa#). In such cases, the 'effect of proposed development' column will display a dash (-) for the individual windows, with the overall level of effect indicated in the row corresponding to the room.

### C.1.3 Granted Block B

Table No. C.1.2 - VSC Results: Supplementary						
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**
B4_11a#1	33.83%	30.08%	0.89	27.00%	BRE Compliant	-
B4_11a#2	35.76%	35.60%	1.00	27.00%	BRE Compliant	-
B4_11a#	34.84%	32.97%	0.95	27.00%	BRE Compliant	Negligible
B4_12a	39.54%	31.74%	0.80	27.00%	BRE Compliant	Negligible
B4_12b	39.54%	31.89%	0.81	27.00%	BRE Compliant	Negligible
B4_12c#1	39.54%	32.34%	0.82	27.00%	BRE Compliant	-
B4_12c#2	34.49%	33.90%	0.98	27.00%	BRE Compliant	-
B4_12c#	38.22%	32.75%	0.86	27.00%	BRE Compliant	Negligible
B4_13a	39.54%	31.47%	0.80	27.00%	BRE Compliant	Negligible
B4_14a	39.48%	31.28%	0.79	27.00%	BRE Compliant	Negligible
B4_15a#1	19.23%	19.19%	1.00	15.38%	BRE Compliant	-
B4_15a#2	12.91%	6.43%	0.50	10.33%	62%	-
B4_15a#	14.56%	9.77%	0.67	11.65%	84%	Minor Adverse
B4_15b	16.09%	8.94%	0.56	12.87%	69%	Moderate Adverse
B4_15c	37.67%	29.86%	0.79	27.00%	BRE Compliant	Negligible
B4_15d	39.06%	31.06%	0.80	27.00%	BRE Compliant	Negligible
B4_1a#1	12.89%	12.89%	1.00	10.31%	BRE Compliant	-
B4_1a#2	12.18%	7.94%	0.65	9.74%	81%	-
B4_1a#	12.55%	10.54%	0.84	10.04%	BRE Compliant	Negligible
B4_1b	27.85%	24.40%	0.88	22.28%	BRE Compliant	Negligible
B5_10a#1	21.96%	21.93%	1.00	17.57%	BRE Compliant	-
B5_10a#2	39.61%	34.84%	0.88	27.00%	BRE Compliant	-
B5_10a#	34.99%	31.46%	0.90	27.00%	BRE Compliant	Negligible
B5_10b	39.61%	34.45%	0.87	27.00%	BRE Compliant	Negligible
B5_10c	39.61%	34.14%	0.86	27.00%	BRE Compliant	Negligible
B5_10d	39.61%	34.04%	0.86	27.00%	BRE Compliant	Negligible
B5_1a#1	12.93%	12.93%	1.00	10.34%	BRE Compliant	-
B5_1a#2	12.52%	9.50%	0.76	10.02%	95%	-
B5_1b	12.74%	11.30%	0.89	10.19%	BRE Compliant	Negligible
B5_9a#1	30.74%	27.92%	0.91	24.59%	BRE Compliant	Negligible
B5_9a#2	39.61%	33.73%	0.85	27.00%	BRE Compliant	-
B5_9a#	39.42%	38.89%	0.99	27.00%	BRE Compliant	-
B6_1a#1	39.53%	36.03%	0.91	27.00%	BRE Compliant	Negligible
B6_1a#2	39.62%	39.62%	1.00	27.00%	BRE Compliant	-
B6_1a#	39.62%	37.78%	0.95	27.00%	BRE Compliant	-
B6_1b	39.62%	38.75%	0.98	27.00%	BRE Compliant	Negligible
B6_7a	39.62%	37.46%	0.95	27.00%	BRE Compliant	Negligible
B6_7b#1	39.62%	37.17%	0.94	27.00%	BRE Compliant	Negligible
B6_7b#2	39.62%	37.03%	0.93	27.00%	BRE Compliant	-
B6_7b#3	39.62%	36.92%	0.93	27.00%	BRE Compliant	-
B6_7b#4	39.60%	39.39%	0.99	27.00%	BRE Compliant	-
B6_7b#5	39.60%	39.42%	1.00	27.00%	BRE Compliant	-
B6_7b#	39.62%	36.93%	0.93	27.00%	BRE Compliant	-

\* 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.

\*\* For the interpretation of level of effects please refer to "3.2 Definition of Effects" on page 14.

# If it can be determined or reasonably assumed that multiple windows serve the same room, each individual window is labelled with a hash-tag and a serial number (e.g. Xa#1, Xa#2). Each window is assessed, and a weighted average is calculated to determine the level of effect on the room. Rooms are identified with a hash-tag at the end (e.g. Xa#). In such cases, the 'effect of proposed development' column will display a dash (-) for the individual windows, with the overall level of effect indicated in the row corresponding to the room.

### C.1.4 Duplex, Units 44-55

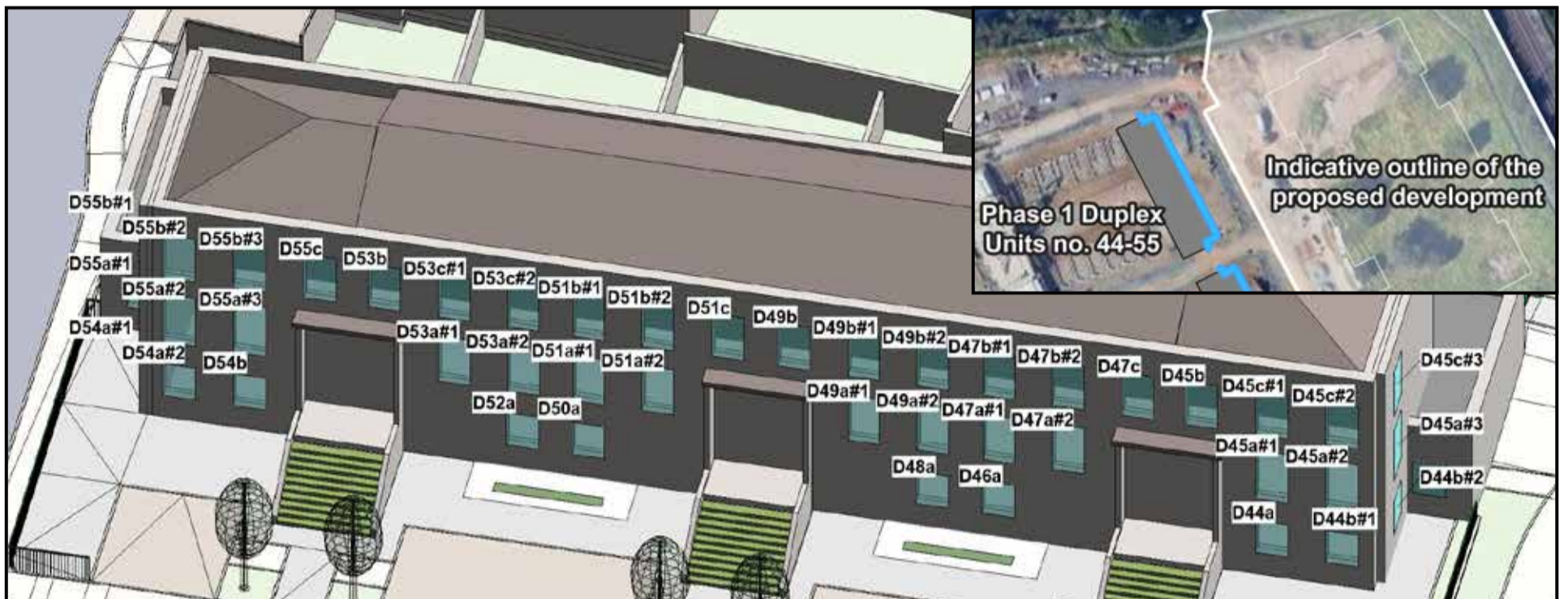


Figure C.2: Highlighted areas indicate the position of assessed windows (L), Aerial view of assessed location (R)

Table No. C.1.3 - VSC Results: Supplementary

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**
D44a	39.61%	38.01%	0.96	27.00%	BRE Compliant	Negligible
D44b#1	34.65%	32.51%	0.94	27.00%	BRE Compliant	Negligible
D44b#2	36.01%	33.73%	0.94	27.00%	BRE Compliant	-
D44b#	29.01%	28.97%	1.00	23.21%	BRE Compliant	-
D45a#1	32.51%	31.35%	0.96	26.01%	BRE Compliant	Negligible
D45a#2	38.61%	36.07%	0.93	27.00%	BRE Compliant	-
D45a#3	39.13%	36.71%	0.94	27.00%	BRE Compliant	-
D45a#	37.12%	37.12%	1.00	27.00%	BRE Compliant	-
D45b	38.29%	36.63%	0.96	27.00%	BRE Compliant	Negligible
D45c#1	39.40%	37.57%	0.95	27.00%	BRE Compliant	Negligible
D45c#2	39.40%	37.67%	0.96	27.00%	BRE Compliant	-
D45c#3	39.40%	37.73%	0.96	27.00%	BRE Compliant	-
D45c#	38.76%	38.76%	1.00	27.00%	BRE Compliant	-
D46a	39.19%	38.05%	0.97	27.00%	BRE Compliant	Negligible
D47a#1	36.71%	32.29%	0.88	27.00%	BRE Compliant	Negligible
D47a#2	39.23%	35.91%	0.92	27.00%	BRE Compliant	-
D47a#	38.77%	35.65%	0.92	27.00%	BRE Compliant	-
D47b#1	39.00%	35.78%	0.92	27.00%	BRE Compliant	Negligible
D47b#2	39.40%	37.20%	0.94	27.00%	BRE Compliant	-
D47b#	39.40%	37.33%	0.95	27.00%	BRE Compliant	-
D47c	39.40%	37.27%	0.95	27.00%	BRE Compliant	Negligible
D48a	39.40%	37.46%	0.95	27.00%	BRE Compliant	Negligible

\* 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.

\*\* For the interpretation of level of effects please refer to "3.2 Definition of Effects" on page 14.

# If it can be determined or reasonably assumed that multiple windows serve the same room, each individual window is labelled with a hash-tag and a serial number (e.g. Xa#1, Xa#2). Each window is assessed, and a weighted average is calculated to determine the level of effect on the room. Rooms are identified with a hash-tag at the end (e.g. Xa#). In such cases, the 'effect of proposed development' column will display a dash (-) for the individual windows, with the overall level of effect indicated in the row corresponding to the room.

## C.1.5 Duplex, Units 44-55

Table No. C.1.4 - VSC Results: Supplementary						
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**
D49a#1	36.70%	32.39%	0.88	27.00%	BRE Compliant	Negligible
D49a#2	38.74%	35.05%	0.90	27.00%	BRE Compliant	-
D49a#	39.22%	35.72%	0.91	27.00%	BRE Compliant	-
D49b	38.98%	35.39%	0.91	27.00%	BRE Compliant	Negligible
D49b#1	39.38%	36.82%	0.93	27.00%	BRE Compliant	Negligible
D49b#2	39.38%	36.95%	0.94	27.00%	BRE Compliant	-
D49b#	39.39%	37.08%	0.94	27.00%	BRE Compliant	-
D50a	39.39%	37.02%	0.94	27.00%	BRE Compliant	Negligible
D51a#1	36.93%	31.69%	0.86	27.00%	BRE Compliant	Negligible
D51a#2	39.20%	34.89%	0.89	27.00%	BRE Compliant	-
D51a#	38.71%	34.53%	0.89	27.00%	BRE Compliant	-
D51b#1	38.96%	34.71%	0.89	27.00%	BRE Compliant	Negligible
D51b#2	39.35%	36.50%	0.93	27.00%	BRE Compliant	-
D51b#	39.36%	36.60%	0.93	27.00%	BRE Compliant	-
D51c	39.36%	36.55%	0.93	27.00%	BRE Compliant	Negligible
D52a	39.37%	36.72%	0.93	27.00%	BRE Compliant	Negligible
D53a#1	36.88%	31.45%	0.85	27.00%	BRE Compliant	Negligible
D53a#2	38.68%	34.25%	0.89	27.00%	BRE Compliant	-
D53a#	39.18%	34.80%	0.89	27.00%	BRE Compliant	-
D53b	38.93%	34.53%	0.89	27.00%	BRE Compliant	Negligible
D53c#1	39.31%	36.38%	0.93	27.00%	BRE Compliant	Negligible
D53c#2	39.33%	36.39%	0.93	27.00%	BRE Compliant	-
D53c#	39.34%	36.43%	0.93	27.00%	BRE Compliant	-
D54a#1	39.34%	36.41%	0.93	27.00%	BRE Compliant	Negligible
D54a#2	26.06%	24.77%	0.95	20.85%	BRE Compliant	-
D54a#	37.39%	32.12%	0.86	27.00%	BRE Compliant	-
D54b	31.73%	28.45%	0.90	25.38%	BRE Compliant	Negligible
D55a#1	35.70%	30.97%	0.87	27.00%	BRE Compliant	Negligible
D55a#2	34.48%	33.43%	0.97	27.00%	BRE Compliant	-
D55a#3	39.10%	34.86%	0.89	27.00%	BRE Compliant	-
D55a#	38.54%	34.22%	0.89	27.00%	BRE Compliant	-
D55b#1	37.37%	34.17%	0.91	27.00%	BRE Compliant	Negligible
D55b#2	37.43%	36.67%	0.98	27.00%	BRE Compliant	-
D55b#3	39.27%	36.43%	0.93	27.00%	BRE Compliant	-
D55b#	39.28%	36.40%	0.93	27.00%	BRE Compliant	-
D55c	38.66%	36.50%	0.94	27.00%	BRE Compliant	Negligible

\* 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.

\*\* For the interpretation of level of effects please refer to "3.2 Definition of Effects" on page 14.

# If it can be determined or reasonably assumed that multiple windows serve the same room, each individual window is labelled with a hash-tag and a serial number (e.g. Xa#1, Xa#2). Each window is assessed, and a weighted average is calculated to determine the level of effect on the room. Rooms are identified with a hash-tag at the end (e.g. Xa#). In such cases, the 'effect of proposed development' column will display a dash (-) for the individual windows, with the overall level of effect indicated in the row corresponding to the room.

## C.1.6 Duplex, Units 78-89

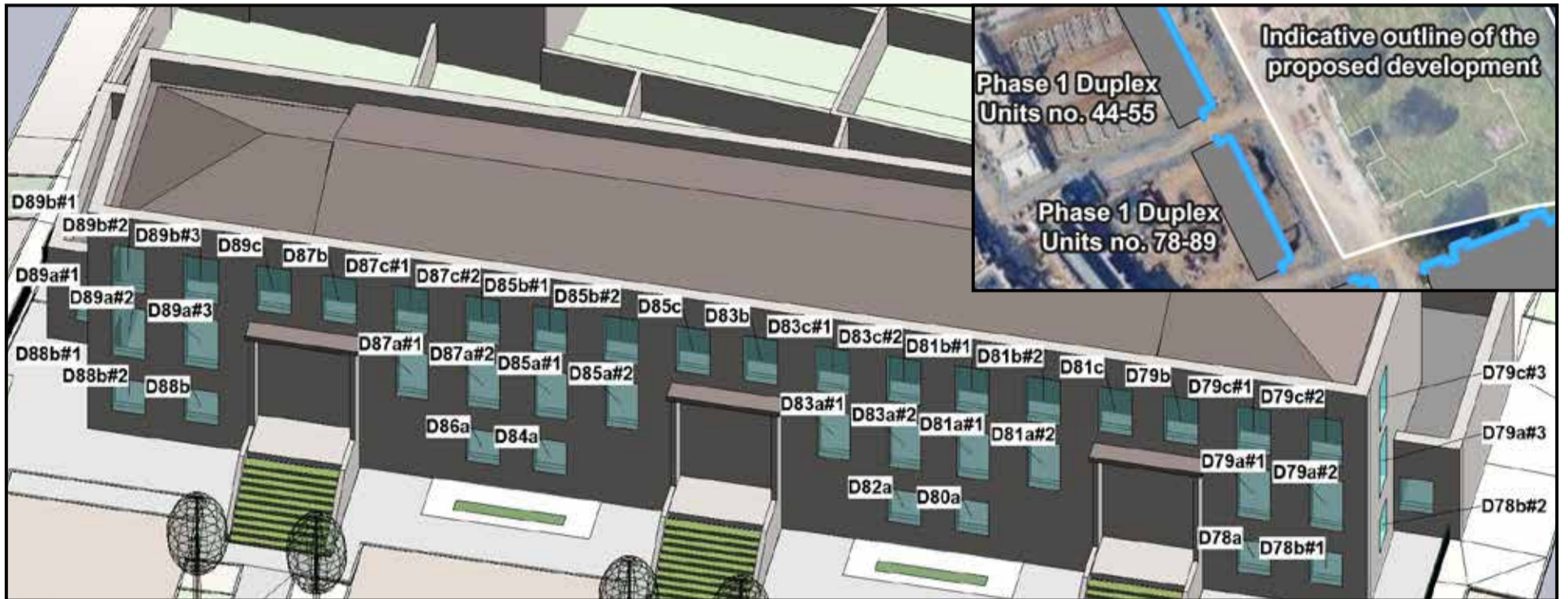


Figure C.3: Highlighted areas indicate the position of assessed windows (L), Aerial view of assessed location (R)

Table No. C.1.5 - VSC Results: Supplementary

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**
D78a	39.30%	36.39%	0.93	27.00%	BRE Compliant	Negligible
D78b#1	35.46%	31.16%	0.88	27.00%	BRE Compliant	Negligible
D78b#2	36.89%	32.22%	0.87	27.00%	BRE Compliant	-
D78b#	27.27%	26.18%	0.96	21.82%	BRE Compliant	-
D79a#1	32.08%	29.20%	0.91	25.66%	BRE Compliant	Negligible
D79a#2	38.38%	34.09%	0.89	27.00%	BRE Compliant	-
D79a#3	38.96%	34.73%	0.89	27.00%	BRE Compliant	-
D79a#	35.97%	35.04%	0.97	27.00%	BRE Compliant	-
D79b	37.78%	34.62%	0.92	27.00%	BRE Compliant	Negligible
D79c#1	39.11%	36.06%	0.92	27.00%	BRE Compliant	Negligible
D79c#2	39.13%	36.13%	0.92	27.00%	BRE Compliant	-
D79c#3	39.16%	36.22%	0.92	27.00%	BRE Compliant	-
D79c#	38.41%	37.82%	0.98	27.00%	BRE Compliant	-
D80a	38.90%	36.71%	0.94	27.00%	BRE Compliant	Negligible
D81a#1	36.94%	31.30%	0.85	27.00%	BRE Compliant	Negligible
D81a#2	38.78%	33.94%	0.88	27.00%	BRE Compliant	-
D81a#	38.29%	33.63%	0.88	27.00%	BRE Compliant	-
D81b#1	38.54%	33.79%	0.88	27.00%	BRE Compliant	Negligible
D81b#2	39.02%	35.62%	0.91	27.00%	BRE Compliant	-
D81b#	39.05%	35.78%	0.92	27.00%	BRE Compliant	-
D81c	39.04%	35.70%	0.91	27.00%	BRE Compliant	Negligible
D82a	39.08%	35.94%	0.92	27.00%	BRE Compliant	Negligible

\* 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.

\*\* For the interpretation of level of effects please refer to "3.2 Definition of Effects" on page 14.

# If it can be determined or reasonably assumed that multiple windows serve the same room, each individual window is labelled with a hash-tag and a serial number (e.g. Xa#1, Xa#2). Each window is assessed, and a weighted average is calculated to determine the level of effect on the room. Rooms are identified with a hash-tag at the end (e.g. Xa#). In such cases, the 'effect of proposed development' column will display a dash (-) for the individual windows, with the overall level of effect indicated in the row corresponding to the room.

### C.1.7 Duplex, Units 78-89

Table No. C.1.6 - VSC Results: Supplementary						
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**
D83a#1	36.71%	31.24%	0.85	27.00%	BRE Compliant	Negligible
D83a#2	38.21%	33.10%	0.87	27.00%	BRE Compliant	-
D83a#	38.74%	33.76%	0.87	27.00%	BRE Compliant	-
D83b	38.48%	33.43%	0.87	27.00%	BRE Compliant	Negligible
D83c#1	38.93%	35.26%	0.91	27.00%	BRE Compliant	Negligible
D83c#2	38.96%	35.35%	0.91	27.00%	BRE Compliant	-
D83c#	38.99%	35.48%	0.91	27.00%	BRE Compliant	-
D84a	38.98%	35.42%	0.91	27.00%	BRE Compliant	Negligible
D85a#1	36.57%	30.67%	0.84	27.00%	BRE Compliant	Negligible
D85a#2	38.48%	33.45%	0.87	27.00%	BRE Compliant	-
D85a#	38.01%	32.86%	0.86	27.00%	BRE Compliant	-
D85b#1	38.25%	33.16%	0.87	27.00%	BRE Compliant	Negligible
D85b#2	38.81%	35.27%	0.91	27.00%	BRE Compliant	-
D85b#	38.85%	35.23%	0.91	27.00%	BRE Compliant	-
D85c	38.83%	35.25%	0.91	27.00%	BRE Compliant	Negligible
D86a	38.89%	35.22%	0.91	27.00%	BRE Compliant	Negligible
D87a#1	36.54%	30.47%	0.83	27.00%	BRE Compliant	Negligible
D87a#2	37.90%	33.18%	0.88	27.00%	BRE Compliant	-
D87a#	38.43%	33.54%	0.87	27.00%	BRE Compliant	-
D87b	38.17%	33.36%	0.87	27.00%	BRE Compliant	Negligible
D87c#1	38.68%	35.51%	0.92	27.00%	BRE Compliant	Negligible
D87c#2	38.73%	35.42%	0.91	27.00%	BRE Compliant	-
D87c#	38.78%	35.34%	0.91	27.00%	BRE Compliant	-
D88b	38.76%	35.38%	0.91	27.00%	BRE Compliant	Negligible
D88b#1	34.30%	30.45%	0.89	27.00%	BRE Compliant	Negligible
D88b#2	27.39%	27.37%	1.00	21.91%	BRE Compliant	-
D88b#	35.97%	31.73%	0.88	27.00%	BRE Compliant	-
D89a#1	31.68%	29.55%	0.93	25.34%	BRE Compliant	Negligible
D89a#2	35.58%	35.56%	1.00	27.00%	BRE Compliant	-
D89a#3	38.08%	34.16%	0.90	27.00%	BRE Compliant	-
D89a#	37.58%	33.46%	0.89	27.00%	BRE Compliant	-
D89b#1	37.09%	34.39%	0.93	27.00%	BRE Compliant	Negligible
D89b#2	37.70%	37.69%	1.00	27.00%	BRE Compliant	-
D89b#3	38.53%	35.75%	0.93	27.00%	BRE Compliant	-
D89b#	38.59%	35.66%	0.92	27.00%	BRE Compliant	-
D89c	38.28%	36.36%	0.95	27.00%	BRE Compliant	Negligible

\* 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.

\*\* For the interpretation of level of effects please refer to "3.2 Definition of Effects" on page 14.

# If it can be determined or reasonably assumed that multiple windows serve the same room, each individual window is labelled with a hash-tag and a serial number (e.g. Xa#1, Xa#2). Each window is assessed, and a weighted average is calculated to determine the level of effect on the room. Rooms are identified with a hash-tag at the end (e.g. Xa#). In such cases, the 'effect of proposed development' column will display a dash (-) for the individual windows, with the overall level of effect indicated in the row corresponding to the room.

## C.1.8 Duplex, Units 111-122

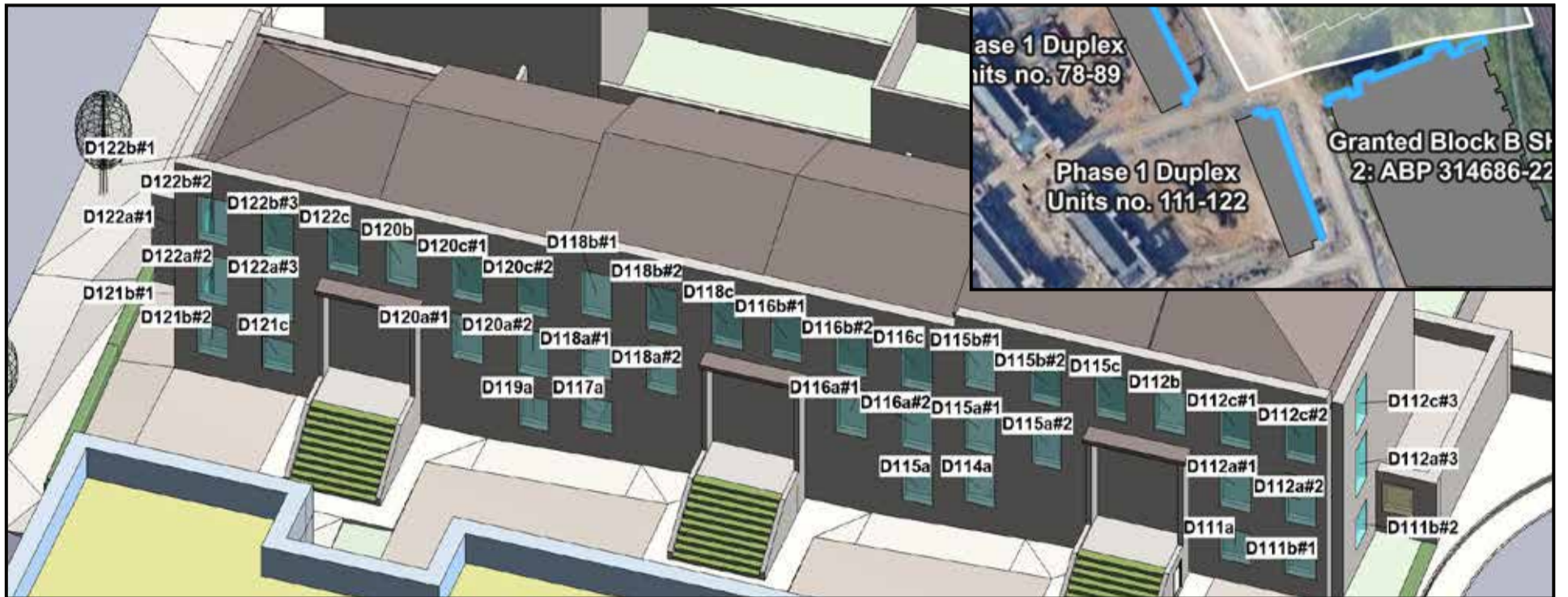


Figure C.4: Highlighted areas indicate the position of assessed windows (L), Aerial view of assessed location (R)

Table No. C.1.7 - VSC Results: Supplementary

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**
D111a	38.64%	35.58%	0.92	27.00%	BRE Compliant	Negligible
D111b#1	30.32%	26.13%	0.86	24.26%	BRE Compliant	Negligible
D111b#2	32.20%	27.55%	0.86	25.76%	BRE Compliant	-
D111b#	34.32%	28.78%	0.84	27.00%	BRE Compliant	-
D112a#1	33.25%	28.16%	0.85	26.60%	BRE Compliant	Negligible
D112a#2	33.35%	30.06%	0.90	26.68%	BRE Compliant	-
D112a#3	34.47%	30.81%	0.89	27.00%	BRE Compliant	-
D112a#	37.95%	33.48%	0.88	27.00%	BRE Compliant	-
D112b	35.23%	31.43%	0.89	27.00%	BRE Compliant	Negligible
D121b#1	35.49%	33.16%	0.93	27.00%	BRE Compliant	Negligible
D121b#2	19.29%	19.29%	1.00	15.43%	BRE Compliant	-
D121b#	27.61%	27.25%	0.99	22.09%	BRE Compliant	-
D112c#1	23.34%	23.17%	0.99	18.68%	BRE Compliant	Negligible
D112c#2	35.87%	33.29%	0.93	27.00%	BRE Compliant	-
D112c#3	36.21%	33.37%	0.92	27.00%	BRE Compliant	-
D112c#	38.84%	35.46%	0.91	27.00%	BRE Compliant	-
D114a	36.96%	34.03%	0.92	27.00%	BRE Compliant	Negligible
D115a	28.07%	25.36%	0.90	22.46%	BRE Compliant	Negligible
D115a#1	26.79%	24.43%	0.91	21.43%	BRE Compliant	Negligible
D115a#2	31.48%	29.25%	0.93	25.18%	BRE Compliant	-
D115a#	31.44%	29.27%	0.93	25.15%	BRE Compliant	-
D115b#1	31.46%	29.26%	0.93	25.17%	BRE Compliant	Negligible
D115b#2	34.40%	32.63%	0.95	27.00%	BRE Compliant	-
D115b#	34.78%	32.84%	0.94	27.00%	BRE Compliant	-
D115c	34.59%	32.74%	0.95	27.00%	BRE Compliant	Negligible

\* 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.

\*\* For the interpretation of level of effects please refer to "3.2 Definition of Effects" on page 14.

# If it can be determined or reasonably assumed that multiple windows serve the same room, each individual window is labelled with a hash-tag and a serial number (e.g. Xa#1, Xa#2). Each window is assessed, and a weighted average is calculated to determine the level of effect on the room. Rooms are identified with a hash-tag at the end (e.g. Xa#). In such cases, the 'effect of proposed development' column will display a dash (-) for the individual windows, with the overall level of effect indicated in the row corresponding to the room.

### C.1.9 Duplex, Units 111-122

Table No. C.1.8 - VSC Results: Supplementary						
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**
D116a#1	35.17%	33.03%	0.94	27.00%	BRE Compliant	Negligible
D116a#2	29.42%	27.58%	0.94	23.54%	BRE Compliant	-
D116a#	30.38%	28.30%	0.93	24.30%	BRE Compliant	-
D116b#1	29.90%	27.94%	0.93	23.92%	BRE Compliant	Negligible
D116b#2	32.80%	31.44%	0.96	26.24%	BRE Compliant	-
D116b#	33.05%	31.50%	0.95	26.44%	BRE Compliant	-
D116c	32.92%	31.47%	0.96	26.34%	BRE Compliant	Negligible
D117a	33.37%	31.66%	0.95	26.70%	BRE Compliant	Negligible
D118a#1	25.55%	24.59%	0.96	20.44%	BRE Compliant	Negligible
D118a#2	29.23%	28.28%	0.97	23.38%	BRE Compliant	-
D118a#	28.69%	27.79%	0.97	22.95%	BRE Compliant	-
D118b#1	28.96%	28.04%	0.97	23.17%	BRE Compliant	Negligible
D118b#2	32.43%	31.53%	0.97	25.94%	BRE Compliant	-
D118b#	32.51%	31.47%	0.97	26.01%	BRE Compliant	-
D118c	32.47%	31.50%	0.97	25.98%	BRE Compliant	Negligible
D119a	32.64%	31.44%	0.96	26.11%	BRE Compliant	Negligible
D120a#1	24.94%	24.18%	0.97	19.95%	BRE Compliant	Negligible
D120a#2	28.21%	27.50%	0.97	22.57%	BRE Compliant	-
D120a#	28.63%	27.79%	0.97	22.90%	BRE Compliant	-
D120b	28.42%	27.65%	0.97	22.74%	BRE Compliant	Negligible
D120c#1	31.99%	31.42%	0.98	25.59%	BRE Compliant	Negligible
D120c#2	31.80%	31.14%	0.98	25.44%	BRE Compliant	-
D120c#	31.77%	31.00%	0.98	25.42%	BRE Compliant	-
D121c	31.79%	31.07%	0.98	25.43%	BRE Compliant	Negligible
D122a#1	26.08%	25.88%	0.99	20.86%	BRE Compliant	Negligible
D122a#2	26.90%	26.90%	1.00	21.52%	BRE Compliant	-
D122a#3	30.51%	30.15%	0.99	24.41%	BRE Compliant	-
D122a#	29.63%	29.37%	0.99	23.70%	BRE Compliant	-
D122b#1	28.98%	28.77%	0.99	23.18%	BRE Compliant	Negligible
D122b#2	30.23%	30.23%	1.00	24.18%	BRE Compliant	-
D122b#3	32.98%	32.62%	0.99	26.38%	BRE Compliant	-
D122b#	32.79%	32.37%	0.99	26.23%	BRE Compliant	-
D122c	31.99%	31.73%	0.99	25.59%	BRE Compliant	Negligible

\* 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.

\*\* For the interpretation of level of effects please refer to "3.2 Definition of Effects" on page 14.

# If it can be determined or reasonably assumed that multiple windows serve the same room, each individual window is labelled with a hash-tag and a serial number (e.g. Xa#1, Xa#2). Each window is assessed, and a weighted average is calculated to determine the level of effect on the room. Rooms are identified with a hash-tag at the end (e.g. Xa#). In such cases, the 'effect of proposed development' column will display a dash (-) for the individual windows, with the overall level of effect indicated in the row corresponding to the room.

## C.2 Effect on No Sky Line (NSL)- Supplementary

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

Table Example. C.2 - NSL Impact Assessment: Supplementary						
Room Number	Baseline NSL Value	Proposed NSL Value	Ratio of Proposed NSL to Baseline NSL	Recommended minimum NSL	Level of Compliance with BRE Guidelines	Effect of Proposed Development
A	B	C	D	E	F	G

### A: Room Number

The number in this column will identify the assessed room, which under-performs under the VSC criteria. The relevant façade of the assessed rooms are represented visually in the corresponding figure.

### B: Baseline NSL Value

The *Baseline NSL Value* represents the NSL value of the assessed room which is calculated in the existing baseline model state (as explained in the “Building the Model States” on page 17).

### C: Proposed NSL Value

The *Proposed NSL Value* represents the NSL value of the assessed room which is calculated in the proposed model state (as explained in the “Building the Model States” on page 17).

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

This column expressed the ratio of change between the baseline NSL value and the proposed NSL 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 NSL

The *BRE Target Value* for each room 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 room, if the NSL value **both** drops below the guideline value of 80% **and** the NSL value is less than 0.8 times the baseline value.

Therefore, to determine the *recommended minimum Value*, 80% of the *Baseline NSL value* has been calculated. If this value is above the 80% threshold, 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 NSL Value* with the *recommended minimum NSL* as per the BRE Guidelines. In essence, it shows whether or not the assessed room would experience a perceptible level of impact. If the room complies with the BRE Guidelines this cell will state “*BRE Compliant*”. If the room 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 room will experience, based on its compliance with the *BRE Target Value*. A full list of definitions and a numerical rationale for each can be found in the section “Definition of Effects” on page 14.

It should be noted that the figures displayed in the table of results have been rounded off. A manual calculation on these figures may yield a negligible difference and should not be considered an error.

## C.2.1 Granted Block B - No Sky Line (NSL)

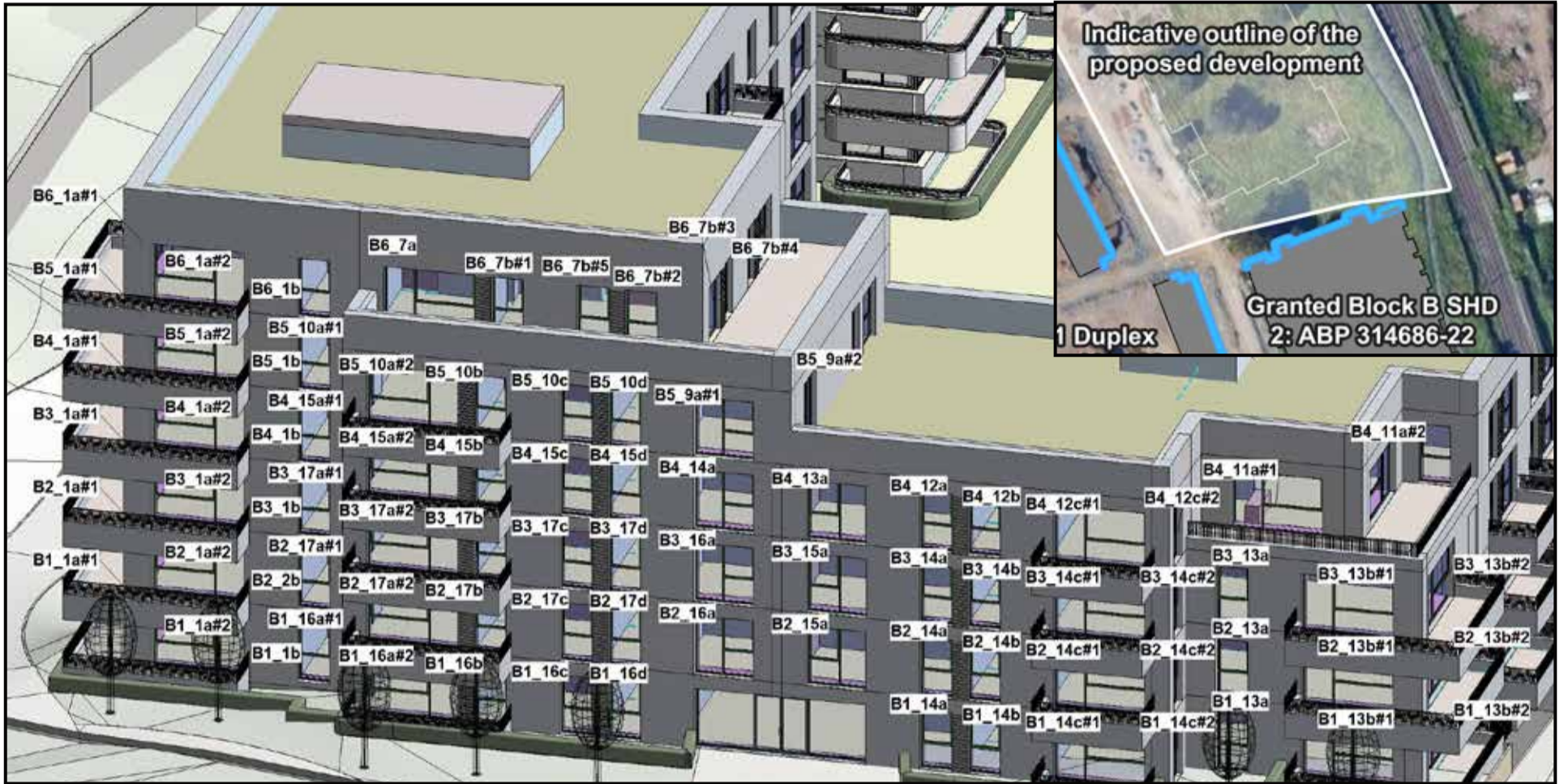


Figure C.5: Highlighted areas indicate the position of assessed windows (L), Aerial view of assessed location (R)

Table No. C.2.1 - NSL Impact Assessment: Supplementary

Room Number	Baseline NSL Value	Proposed NSL Value	Ratio of Proposed NSL to Baseline NSL	Recommended minimum NSL	Level of Compliance with BRE Guidelines**	Effect of Proposed Development
B1_a#	99.98%	99.98%	1.00	79.98%	BRE Compliant	Negligible
B1_16a	100.00%	78.31%	0.78	80.00%	98%	Minor Adverse
B1_14c#	100.00%	74.61%	0.75	80.00%	93%	Minor Adverse
B1_13b#	98.31%	98.29%	1.00	78.65%	BRE Compliant	Negligible
B1_1b	93.79%	90.56%	0.97	75.03%	BRE Compliant	Negligible
B1_16b	96.67%	70.41%	0.73	77.34%	91%	Minor Adverse
B1_16c	96.14%	50.72%	0.53	76.91%	66%	Moderate Adverse
B1_16d	95.79%	62.15%	0.65	76.63%	81%	Minor Adverse
B1_14a	96.45%	56.26%	0.58	77.16%	73%	Moderate Adverse
B1_14b	90.27%	61.11%	0.68	72.22%	85%	Minor Adverse
B1_13a	93.86%	61.06%	0.65	75.09%	81%	Minor Adverse
B2_1a#	99.99%	99.98%	1.00	79.99%	BRE Compliant	Negligible
B2_17a#2	100.00%	78.31%	0.78	80.00%	98%	Minor Adverse
B2_14c#	100.00%	66.53%	0.67	80.00%	83%	Minor Adverse
B2_13b#	99.89%	99.87%	1.00	79.91%	BRE Compliant	Negligible
B1_2b	93.97%	91.69%	0.98	75.18%	BRE Compliant	Negligible

\* The BRE Guidelines state that in order for a proposed development to have a noticeable effect on the daylight received by an existing room, the value needs to both drop below the guideline value of 80% and be less than 0.8 times the baseline value.

\*\* For the interpretation of level of effects please refer to "3.2 Definition of Effects" on page 14.

# The calculations have been made for the rooms, as individual windows are not considered in the NSL study

## C.2.2 Granted Block B- No Sky Line (NSL)

Table No. C.2.2 - NSL Impact Assessment: Supplementary						
Room Number	Baseline NSL Value	Proposed NSL Value	Ratio of Proposed NSL to Baseline NSL	Recommended minimum NSL	Level of Compliance with BRE Guidelines**	Effect of Proposed Development
B2_17b	96.67%	72.14%	0.75	77.34%	93%	Minor Adverse
B2_17c	96.14%	60.00%	0.62	76.91%	78%	Moderate Adverse
B2_17d	95.79%	68.04%	0.71	76.63%	89%	Minor Adverse
B2_14a	96.47%	75.70%	0.78	77.18%	98%	Minor Adverse
B2_14b	90.27%	77.18%	0.85	72.22%	BRE Compliant	Negligible
B2_13a	96.60%	76.53%	0.79	77.28%	>99%	Negligible
B2_16a	99.47%	81.63%	0.82	79.58%	BRE Compliant	Negligible
B2_15a	99.09%	84.04%	0.85	79.27%	BRE Compliant	Negligible
B3_1b	93.97%	93.09%	0.99	75.18%	BRE Compliant	Negligible
B3_17b	96.67%	76.45%	0.79	77.34%	99%	Minor Adverse
B3_17c	96.16%	71.77%	0.75	76.93%	93%	Minor Adverse
B3_17d	95.78%	78.23%	0.82	76.62%	BRE Compliant	Negligible
B3_14a	96.46%	90.45%	0.94	77.17%	BRE Compliant	Negligible
B3_14b	90.39%	83.36%	0.92	72.31%	BRE Compliant	Negligible
B3_13a	96.72%	94.26%	0.97	77.38%	BRE Compliant	Negligible
B3_16a	99.46%	96.52%	0.97	79.57%	BRE Compliant	Negligible
B3_15a	99.09%	97.75%	0.99	79.27%	BRE Compliant	Negligible
B3_1a#	99.99%	99.99%	1.00	79.99%	BRE Compliant	Negligible
B3_13b#	100.00%	100.00%	1.00	80.00%	BRE Compliant	Negligible
B3_14c#	100.00%	69.33%	0.69	80.00%	87%	Minor Adverse
B3_17a#	100.00%	78.45%	0.78	80.00%	98%	Minor Adverse
B4_1a#	99.99%	99.99%	1.00	79.99%	BRE Compliant	Negligible
B4_15a#	100.00%	81.15%	0.81	80.00%	BRE Compliant	Negligible
B4_12c#	100.00%	100.00%	1.00	80.00%	BRE Compliant	Negligible
B4_1b	93.79%	93.79%	1.00	75.03%	BRE Compliant	Negligible
B4_15b	96.67%	86.26%	0.89	77.34%	BRE Compliant	Negligible
B4_15c	96.14%	84.59%	0.88	76.91%	BRE Compliant	Negligible
B4_15d	95.79%	89.02%	0.93	76.63%	BRE Compliant	Negligible
B4_12a	96.45%	94.78%	0.98	77.16%	BRE Compliant	Negligible
B4_12b	90.28%	90.28%	1.00	72.22%	BRE Compliant	Negligible
B4_14a	99.46%	98.25%	0.99	79.57%	BRE Compliant	Negligible
B4_13a	99.14%	98.87%	1.00	79.31%	BRE Compliant	Negligible
B4_11a#	99.42%	99.41%	1.00	79.54%	BRE Compliant	Negligible
B5_1a#	99.99%	99.99%	1.00	79.99%	BRE Compliant	Negligible
B5_10a#	99.99%	92.33%	0.92	79.99%	BRE Compliant	Negligible
B5_1b	94.72%	94.72%	1.00	75.78%	BRE Compliant	Negligible
B5_10b	96.86%	96.86%	1.00	77.49%	BRE Compliant	Negligible
B5_10c	96.14%	96.14%	1.00	76.91%	BRE Compliant	Negligible
B5_10d	95.79%	95.79%	1.00	76.63%	BRE Compliant	Negligible
B5_9a#	97.14%	97.14%	1.00	77.71%	BRE Compliant	Negligible
B6_7b#	99.97%	99.97%	1.00	79.98%	BRE Compliant	Negligible
B6_1a#	99.99%	99.99%	1.00	79.99%	BRE Compliant	Negligible
B6_7a	100.00%	100.00%	1.00	80.00%	BRE Compliant	Negligible
B6_1b	93.99%	93.99%	1.00	75.19%	BRE Compliant	Negligible

\* The BRE Guidelines state that in order for a proposed development to have a noticeable effect on the daylight received by an existing room, the value needs to both drop below the guideline value of 80% and be less than 0.8 times the baseline value.

\*\* For the interpretation of level of effects please refer to "3.2 Definition of Effects" on page 14.

# The calculations have been made for the rooms, as individual windows are not considered in the NSL study.

### C.2.3 Duplex, Units 44-55- No Sky Line (NSL)

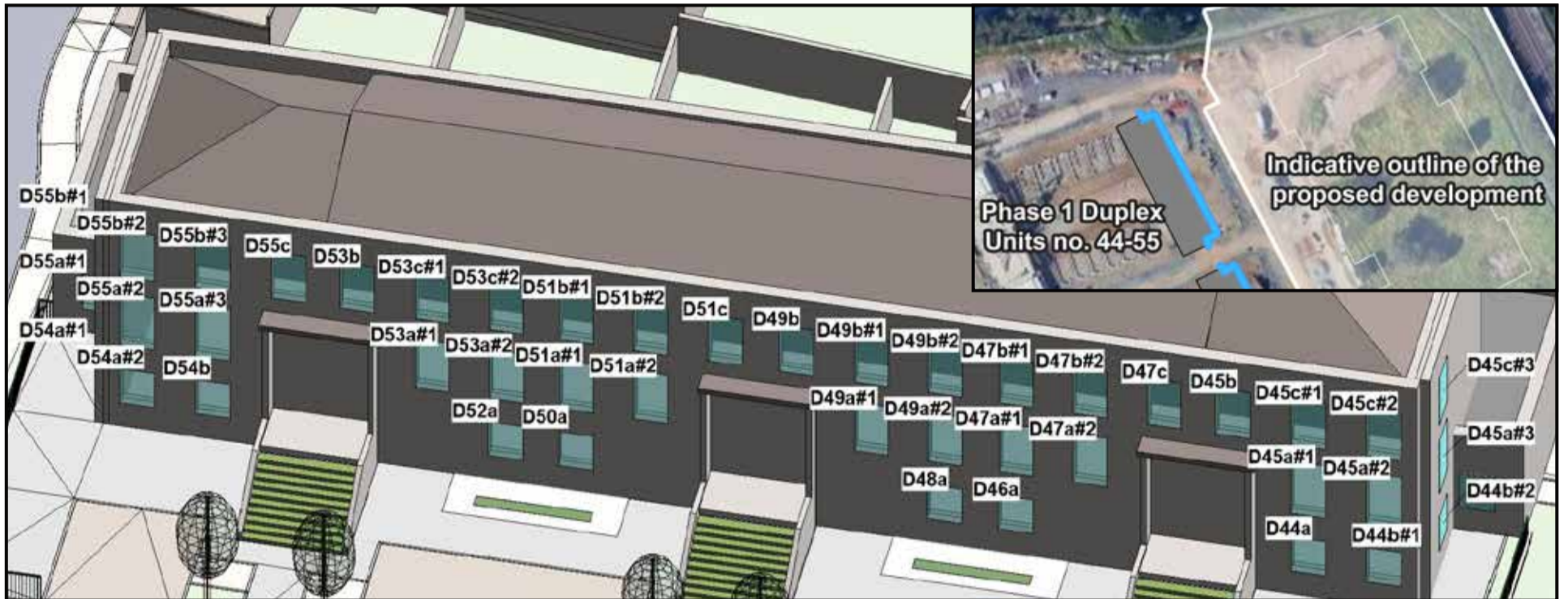


Figure C.6: Highlighted areas indicate the position of assessed windows (L), Aerial view of assessed location (R)

Table No. C.2.3 - NSL Impact Assessment: Supplementary

Room Number	Baseline NSL Value	Proposed NSL Value	Ratio of Proposed NSL to Baseline NSL	Recommended minimum NSL	Level of Compliance with BRE Guidelines**	Effect of Proposed Development
D44b#	99.33%	99.33%	1.00	79.47%	BRE Compliant	Negligible
D44a	97.71%	97.71%	1.00	78.17%	BRE Compliant	Negligible
D46a	97.55%	97.55%	1.00	78.04%	BRE Compliant	Negligible
D48a	97.59%	97.59%	1.00	78.07%	BRE Compliant	Negligible
D50a	97.55%	97.55%	1.00	78.04%	BRE Compliant	Negligible
D52a	97.63%	97.63%	1.00	78.10%	BRE Compliant	Negligible
D54b	97.57%	97.57%	1.00	78.05%	BRE Compliant	Negligible
D54a#	99.71%	99.71%	1.00	79.77%	BRE Compliant	Negligible
D45a#	98.60%	98.60%	1.00	78.88%	BRE Compliant	Negligible
D47a#	97.10%	97.10%	1.00	77.68%	BRE Compliant	Negligible
D49a#	96.88%	96.88%	1.00	77.51%	BRE Compliant	Negligible
D51a#	97.04%	97.04%	1.00	77.63%	BRE Compliant	Negligible
D53a#	96.90%	96.90%	1.00	77.52%	BRE Compliant	Negligible
D55a#	98.59%	98.59%	1.00	78.87%	BRE Compliant	Negligible
D45c#	98.25%	98.25%	1.00	78.60%	BRE Compliant	Negligible
D45b	99.15%	99.15%	1.00	79.32%	BRE Compliant	Negligible
D47c	99.04%	99.04%	1.00	79.23%	BRE Compliant	Negligible
D47b#	97.89%	97.89%	1.00	78.31%	BRE Compliant	Negligible
D49b#	98.01%	98.01%	1.00	78.41%	BRE Compliant	Negligible
D49b	98.99%	98.99%	1.00	79.19%	BRE Compliant	Negligible
D51c	99.01%	99.01%	1.00	79.21%	BRE Compliant	Negligible
D51b#	97.87%	97.87%	1.00	78.29%	BRE Compliant	Negligible
D53c#	98.02%	98.02%	1.00	78.41%	BRE Compliant	Negligible
D53b	98.99%	98.99%	1.00	79.19%	BRE Compliant	Negligible
D55c	99.05%	99.05%	1.00	79.24%	BRE Compliant	Negligible
D55b#	98.23%	98.23%	1.00	78.59%	BRE Compliant	Negligible

\* The BRE Guidelines state that in order for a proposed development to have a noticeable effect on the daylight received by an existing room, the value needs to both drop below the guideline value of 80% and be less than 0.8 times the baseline value.

\*\* For the interpretation of level of effects please refer to "3.2 Definition of Effects" on page 14.

# The calculations have been made for the rooms, as individual windows are not considered in the NSL study.

### C.2.4 Duplex, Units 78-89- No Sky Line (NSL)

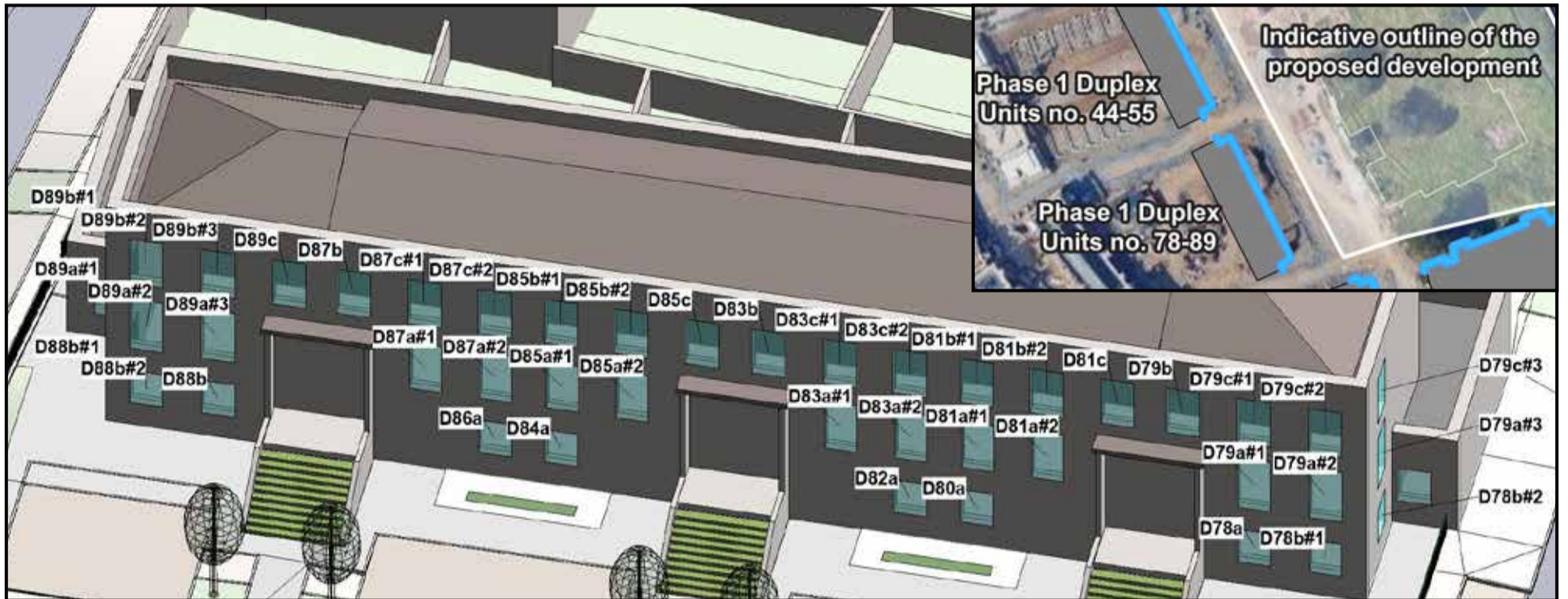


Figure C.7: Highlighted areas indicate the position of assessed windows (L), Aerial view of assessed location (R)

Table No. C.2.4 - NSL Impact Assessment: Supplementary

Room Number	Baseline NSL Value	Proposed NSL Value	Ratio of Proposed NSL to Baseline NSL	Recommended minimum NSL	Level of Compliance with BRE Guidelines**	Effect of Proposed Development
D78b#	99.72%	99.72%	1.00	79.78%	BRE Compliant	Negligible
D78a	97.71%	97.58%	1.00	78.17%	BRE Compliant	Negligible
D80a	97.58%	89.99%	0.92	78.06%	BRE Compliant	Negligible
D82a	97.59%	92.03%	0.94	78.07%	BRE Compliant	Negligible
D84a	97.55%	87.43%	0.90	78.04%	BRE Compliant	Negligible
D86a	97.59%	86.18%	0.88	78.07%	BRE Compliant	Negligible
D88b	97.57%	96.32%	0.99	78.05%	BRE Compliant	Negligible
D88b#	99.64%	98.81%	0.99	79.71%	BRE Compliant	Negligible
D79a#	99.86%	99.86%	1.00	79.89%	BRE Compliant	Negligible
D81a#	97.11%	97.11%	1.00	77.69%	BRE Compliant	Negligible
D83a#	96.90%	96.90%	1.00	77.52%	BRE Compliant	Negligible
D85a#	97.12%	97.12%	1.00	77.70%	BRE Compliant	Negligible
D87a#	96.89%	96.89%	1.00	77.51%	BRE Compliant	Negligible
D89a#	99.90%	99.90%	1.00	79.92%	BRE Compliant	Negligible
D79c#	99.87%	99.87%	1.00	79.90%	BRE Compliant	Negligible
D79b	98.79%	98.79%	1.00	79.03%	BRE Compliant	Negligible
D81c	99.16%	99.16%	1.00	79.33%	BRE Compliant	Negligible
D81b#	98.27%	98.27%	1.00	78.62%	BRE Compliant	Negligible
D83c#	98.25%	98.25%	1.00	78.60%	BRE Compliant	Negligible
D83b	99.12%	99.12%	1.00	79.30%	BRE Compliant	Negligible
D85c	99.14%	99.14%	1.00	79.31%	BRE Compliant	Negligible
D85b#	98.29%	98.29%	1.00	78.63%	BRE Compliant	Negligible
D87c#	98.27%	98.27%	1.00	78.61%	BRE Compliant	Negligible
D87b	99.11%	99.11%	1.00	79.29%	BRE Compliant	Negligible
D89c	99.06%	99.06%	1.00	79.25%	BRE Compliant	Negligible
D89b#	99.87%	99.87%	1.00	79.90%	BRE Compliant	Negligible

\* The BRE Guidelines state that in order for a proposed development to have a noticeable effect on the daylight received by an existing room, the value needs to both drop below the guideline value of 80% and be less than 0.8 times the baseline value.

\*\* For the interpretation of level of effects please refer to "3.2 Definition of Effects" on page 14.

# The calculations have been made for the rooms, as individual windows are not considered in the NSL study.

### C.2.5 Duplex, Units 111-122- No Sky Line (NSL)

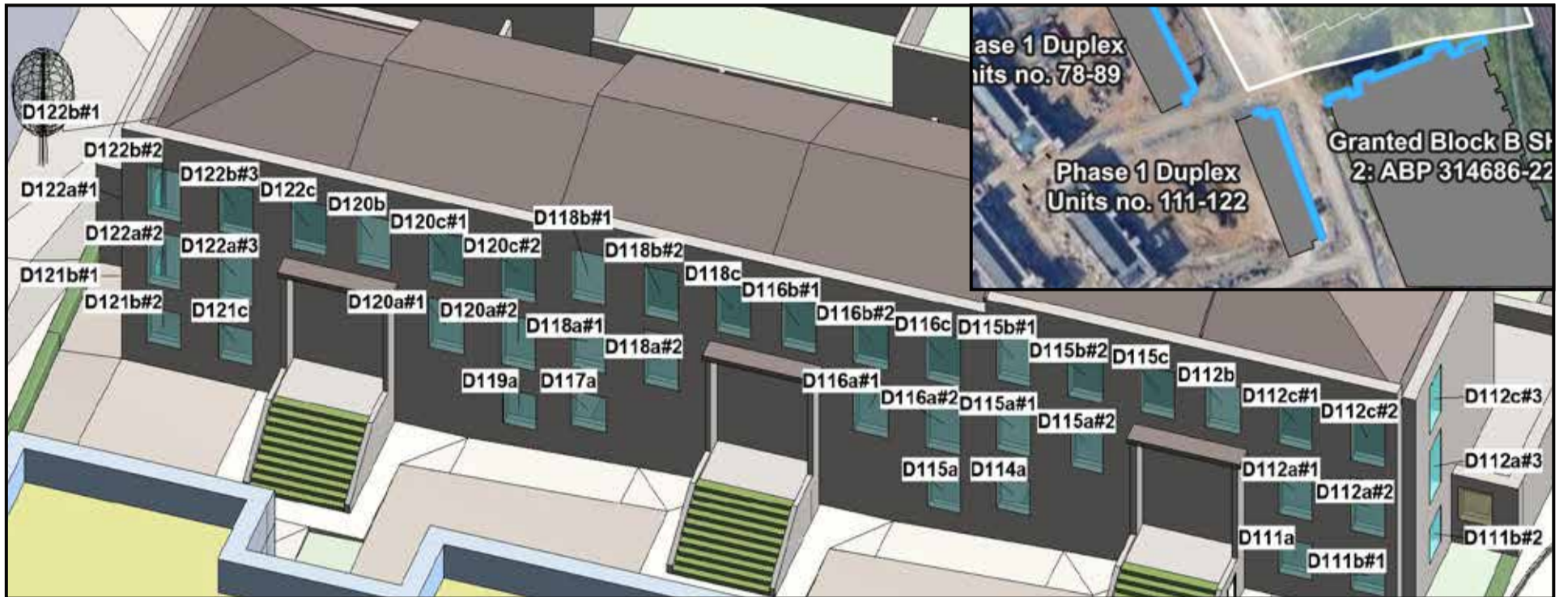


Figure C.8: Highlighted areas indicate the position of assessed windows (L), Aerial view of assessed location (R)

Table No. C.2.5 - NSL Impact Assessment: Supplementary

Room Number	Baseline NSL Value	Proposed NSL Value	Ratio of Proposed NSL to Baseline NSL	Recommended minimum NSL	Level of Compliance with BRE Guidelines**	Effect of Proposed Development
D111b#	94.83%	94.82%	1.00	75.87%	BRE Compliant	Negligible
D111a	77.81%	77.80%	1.00	62.25%	BRE Compliant	Negligible
D114a	70.19%	70.19%	1.00	56.15%	BRE Compliant	Negligible
D112a#	99.87%	99.87%	1.00	79.90%	BRE Compliant	Negligible
D115a#	96.36%	94.12%	0.98	77.09%	BRE Compliant	Negligible
D112c#	99.80%	99.80%	1.00	79.84%	BRE Compliant	Negligible
D112b	76.65%	76.65%	1.00	61.32%	BRE Compliant	Negligible
D115c	82.62%	82.62%	1.00	66.10%	BRE Compliant	Negligible
D115b#	98.31%	98.31%	1.00	78.65%	BRE Compliant	Negligible
D115a	70.18%	70.17%	1.00	56.14%	BRE Compliant	Negligible
D117a	89.11%	89.11%	1.00	71.28%	BRE Compliant	Negligible
D116a#	97.30%	94.25%	0.97	77.84%	BRE Compliant	Negligible
D118a#	97.48%	97.48%	1.00	77.98%	BRE Compliant	Negligible
D116b#	98.25%	98.25%	1.00	78.60%	BRE Compliant	Negligible
D118b#	98.37%	98.37%	1.00	78.69%	BRE Compliant	Negligible
D116c	83.81%	83.81%	1.00	67.05%	BRE Compliant	Negligible
D118c	80.06%	80.06%	1.00	64.05%	BRE Compliant	Negligible
D119a	71.24%	71.07%	1.00	56.99%	BRE Compliant	Negligible
D121c	61.41%	61.41%	1.00	49.13%	BRE Compliant	Negligible
D121b#	95.59%	95.59%	1.00	76.47%	BRE Compliant	Negligible
D120a#	97.48%	97.47%	1.00	77.98%	BRE Compliant	Negligible
D122a#	97.51%	97.50%	1.00	78.01%	BRE Compliant	Negligible
D120c#	98.23%	98.23%	1.00	78.58%	BRE Compliant	Negligible
D120b	99.24%	99.24%	1.00	79.39%	BRE Compliant	Negligible
D122c	97.82%	97.82%	1.00	78.26%	BRE Compliant	Negligible
D122b#	99.43%	99.43%	1.00	79.55%	BRE Compliant	Negligible

\* The BRE Guidelines state that in order for a proposed development to have a noticeable effect on the daylight received by an existing room, the value needs to both drop below the guideline value of 80% and be less than 0.8 times the baseline value.

\*\* For the interpretation of level of effects please refer to "3.2 Definition of Effects" on page 14.

# The calculations have been made for the rooms, as individual windows are not considered in the NSL study.

## D.0 Scheme Performance

### D.1 Proposed Apartment Block A Floor Plans Block A1

#### D.1.1 Proposed Apartment Block A, Floor Plans - Block A1

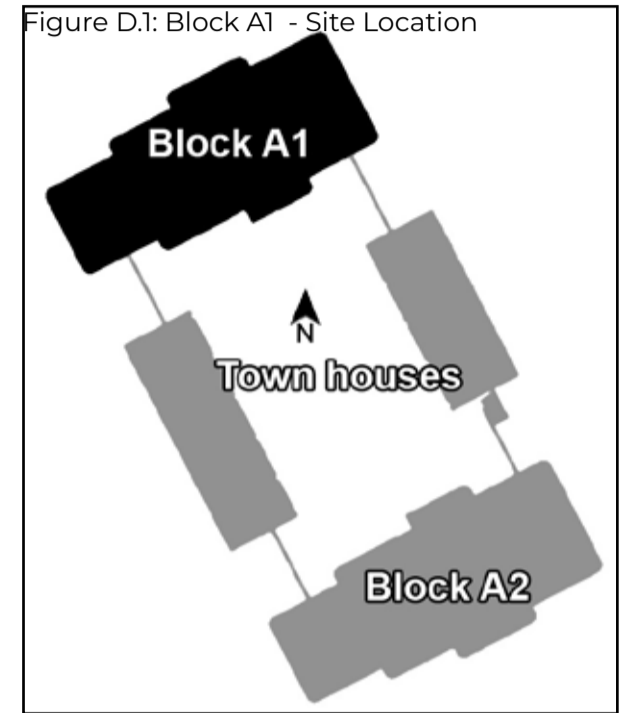


Figure D.2: Block A1 - Level 00

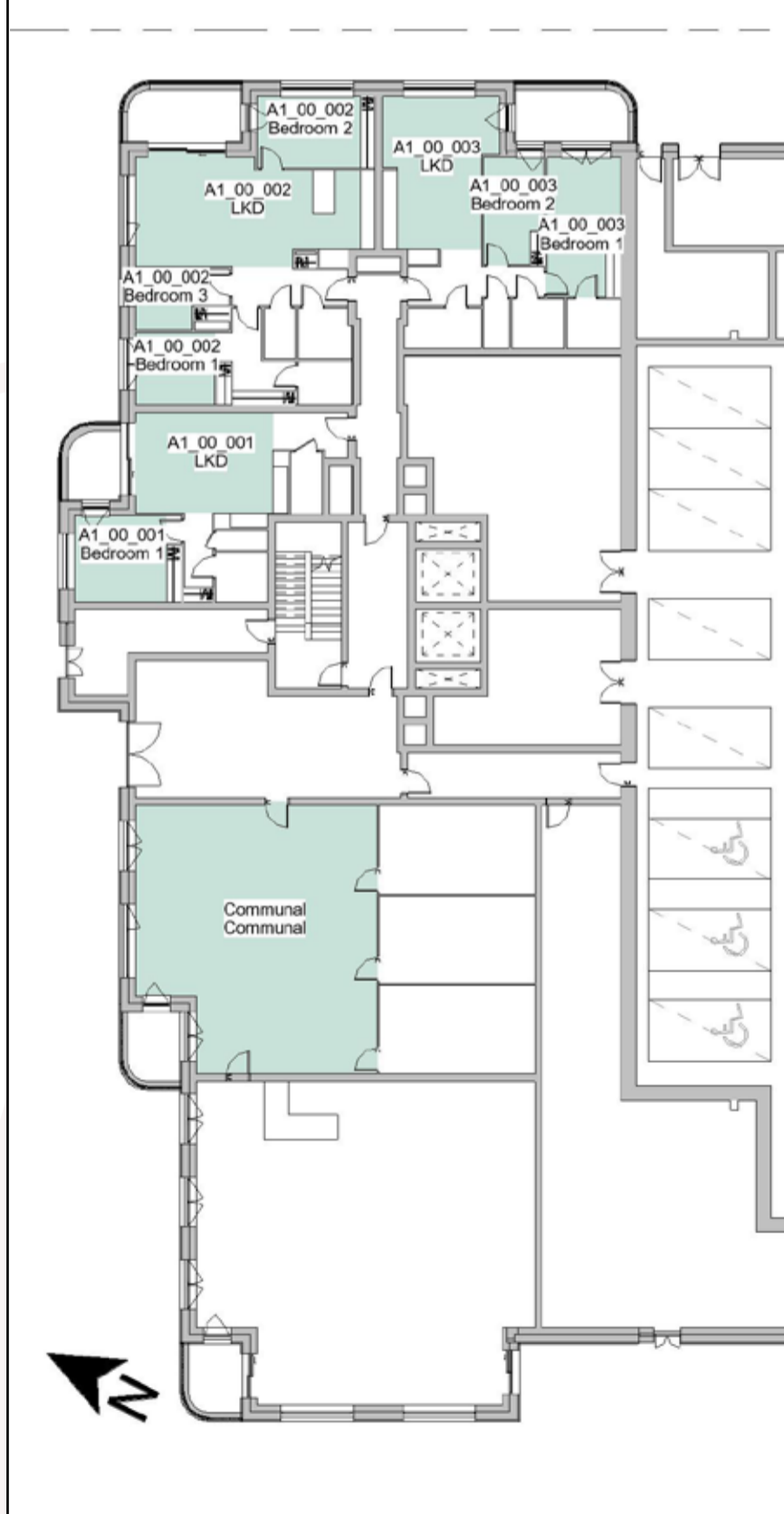
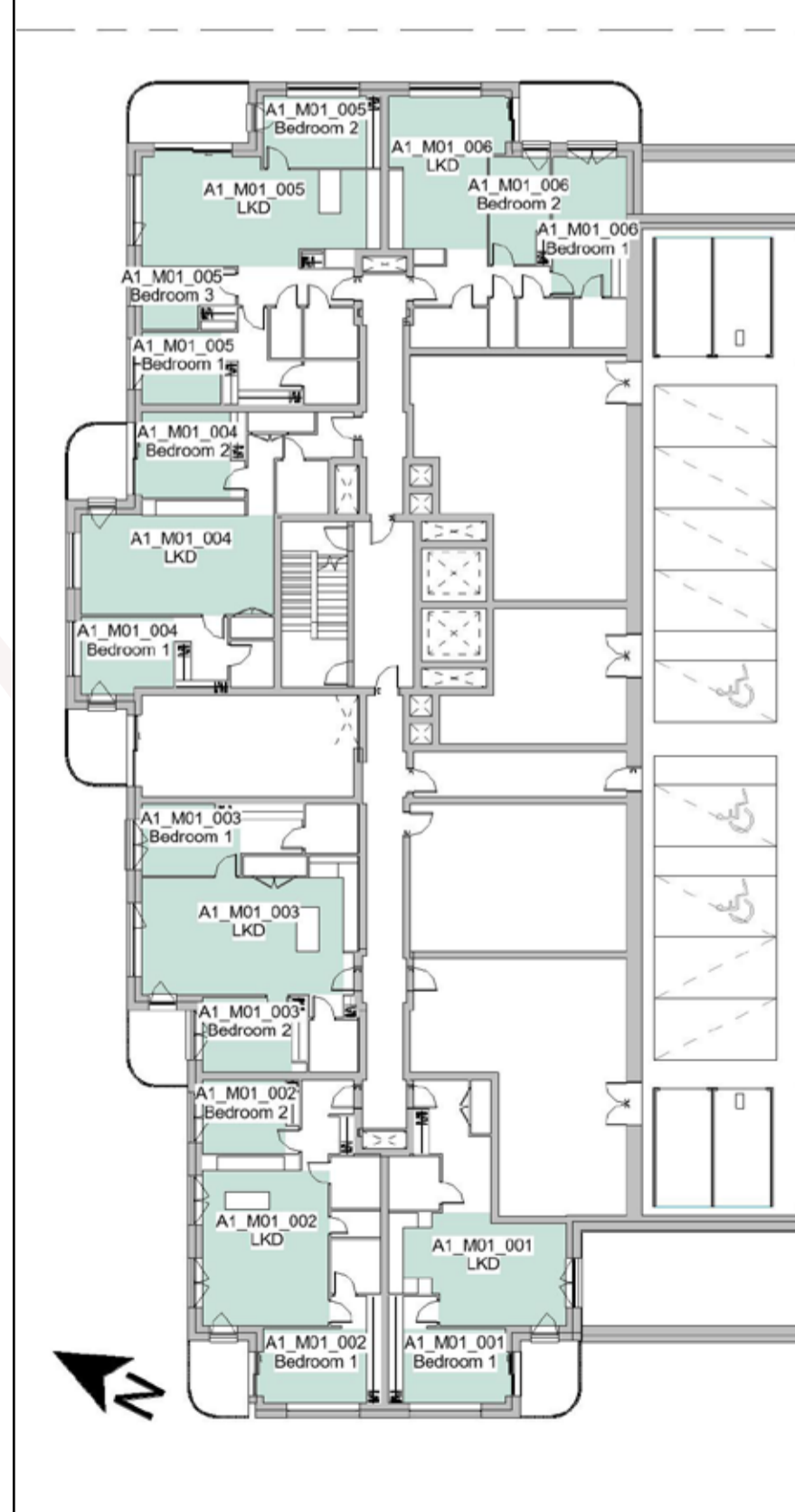


Figure D.3: Block A1 - Level 01 Mezzanine



## D.1.2 Proposed Apartment Block A, Floor Plans - Block A1

Figure D.4: Block A1 - Level 01

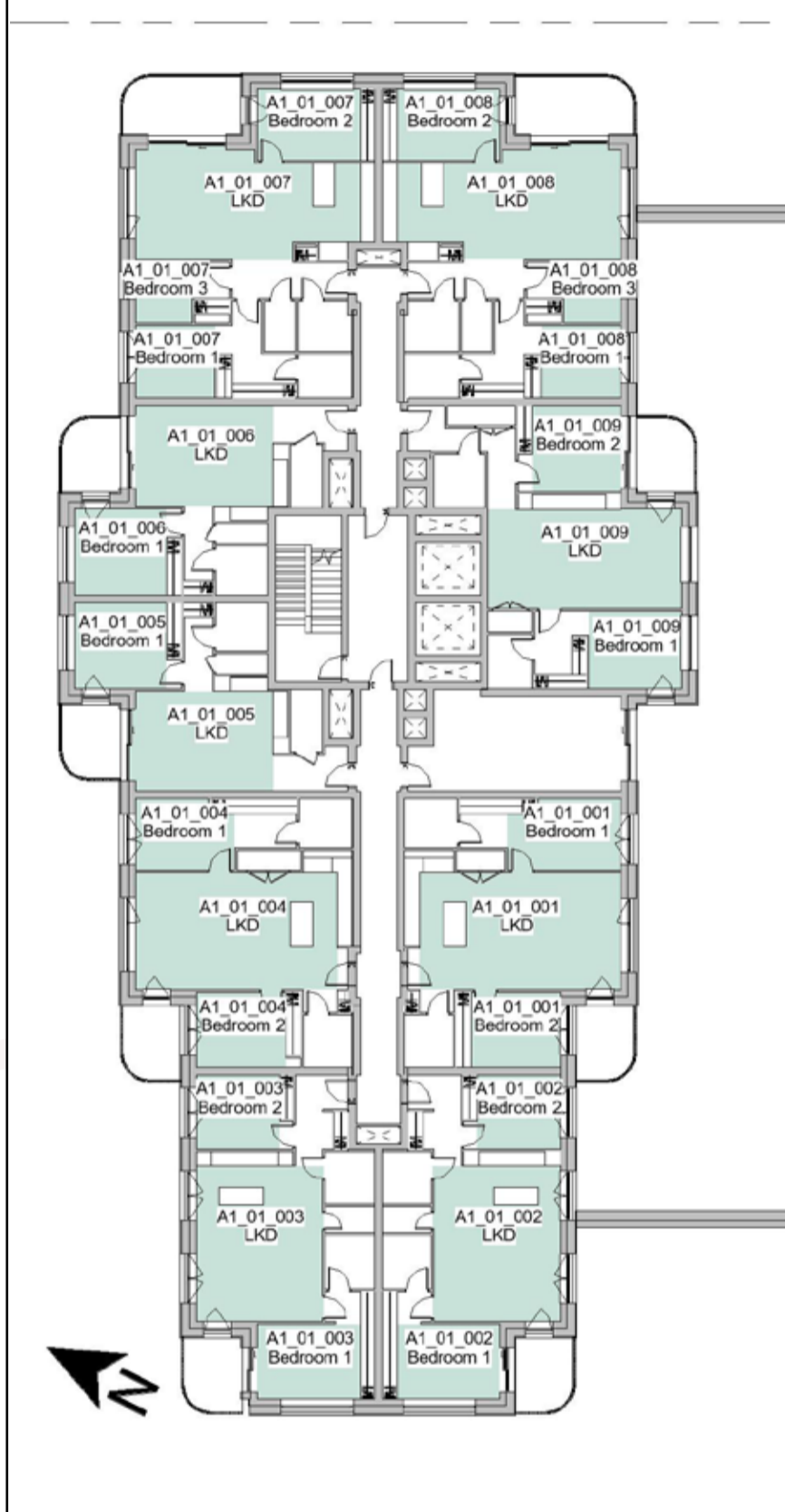
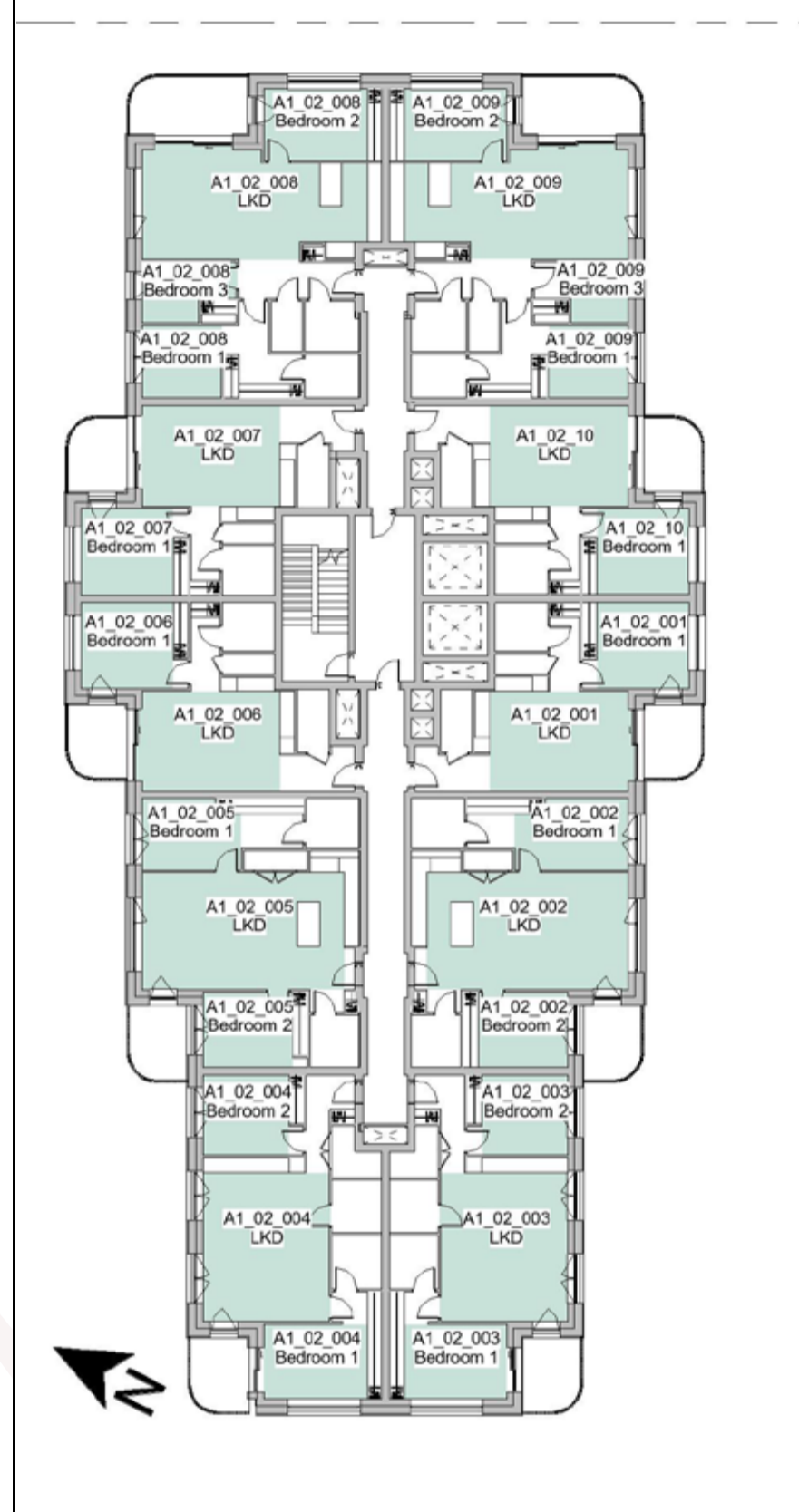


Figure D.5: Block A1 - Level 02



### D.1.3 Proposed Apartment Block A, Floor Plans - Block A1

Figure D.6: Block A1 - Level 03

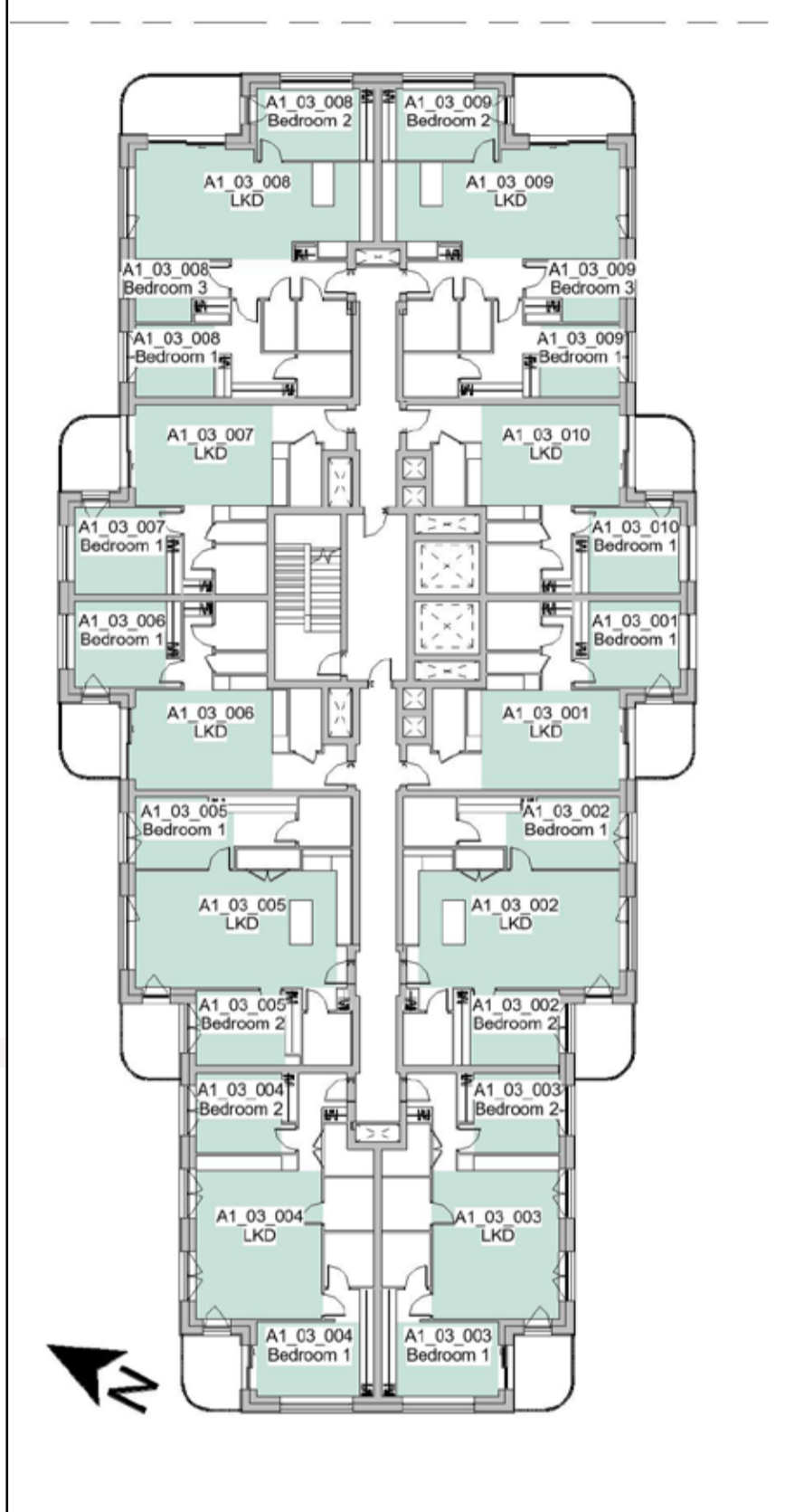
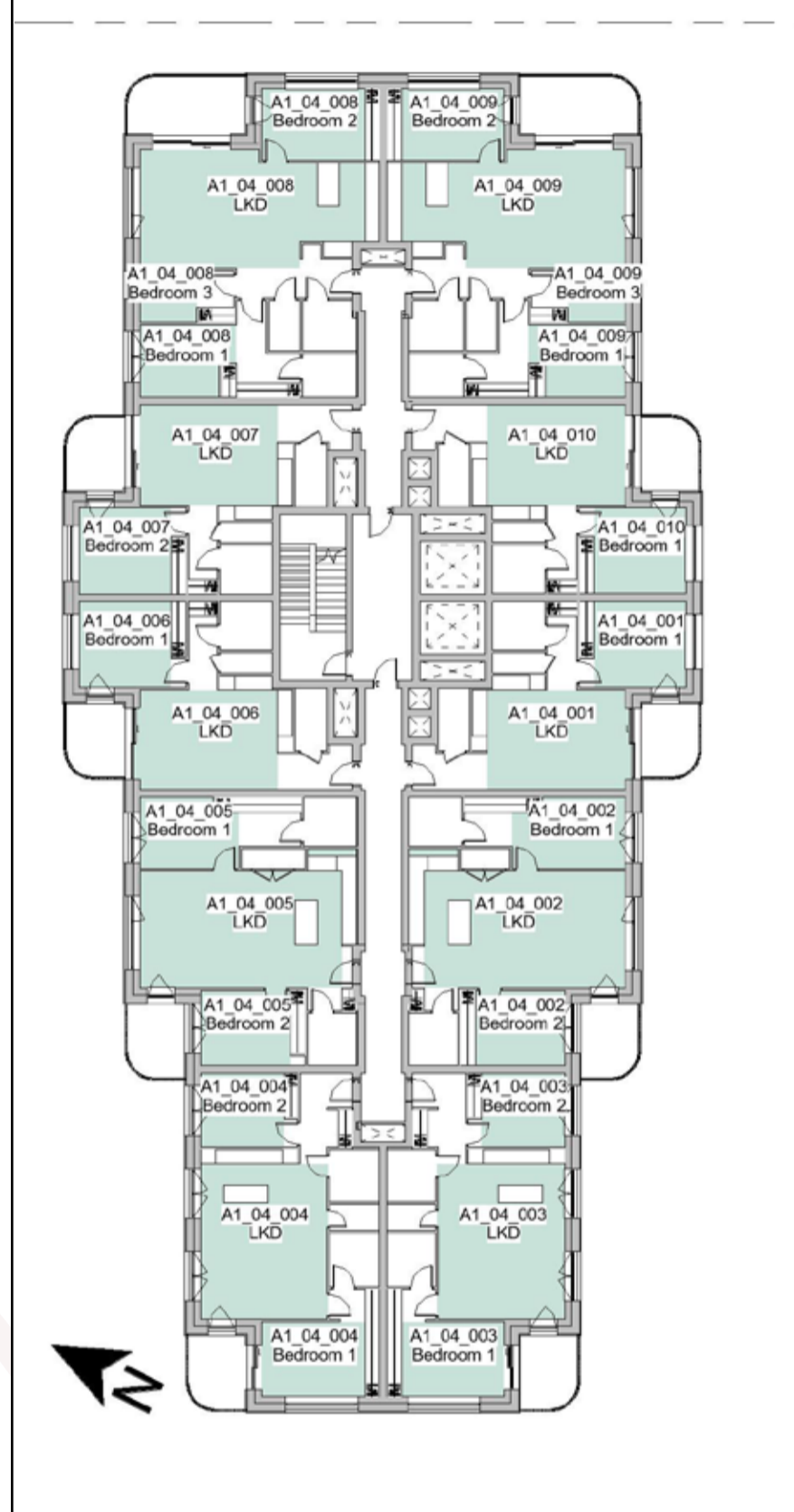


Figure D.7: Block A1 - Level 04



### D.1.4 Proposed Apartment Block A, Floor Plans - Block A1

Figure D.8: Block A1 - Level 05

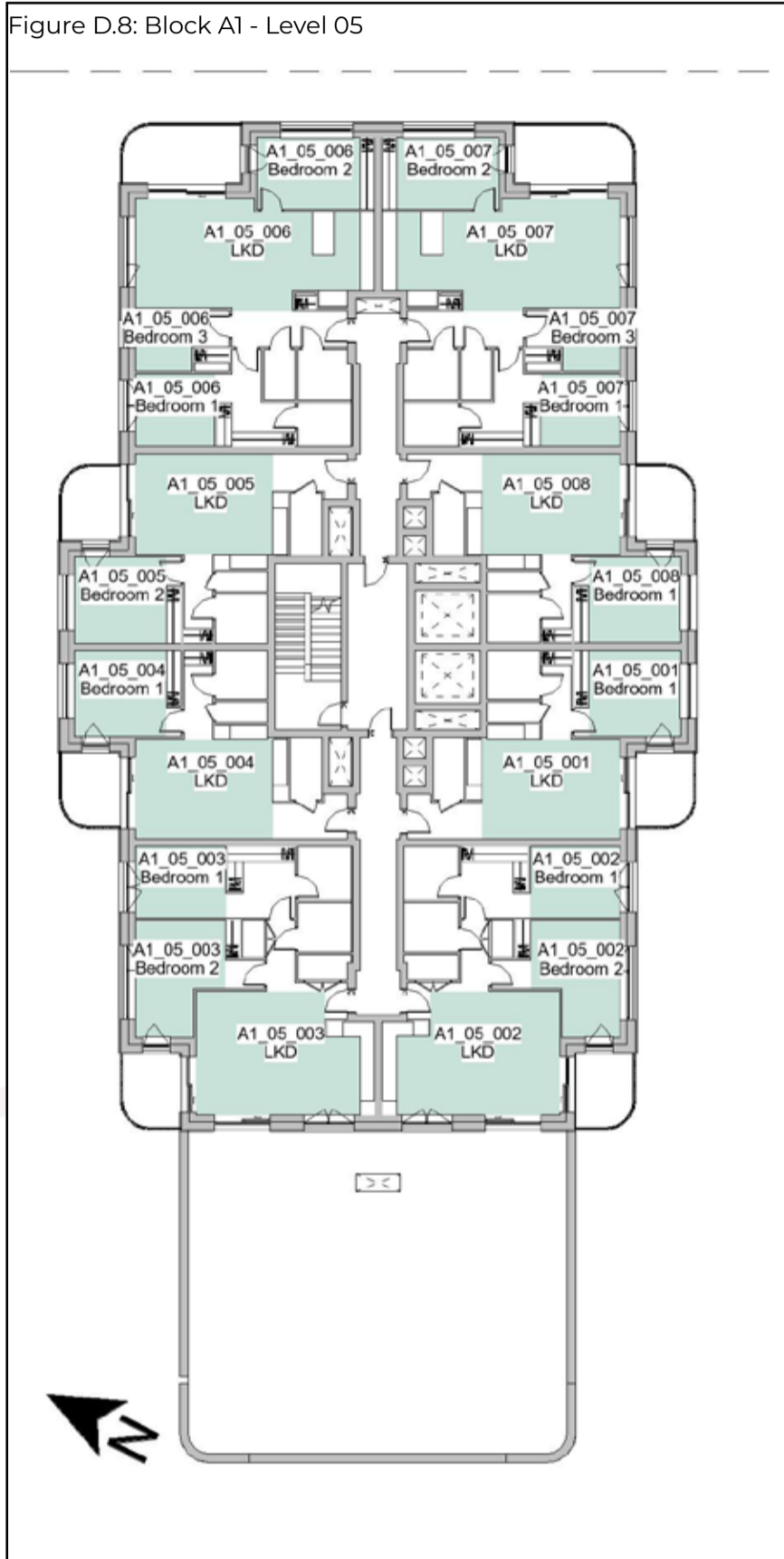
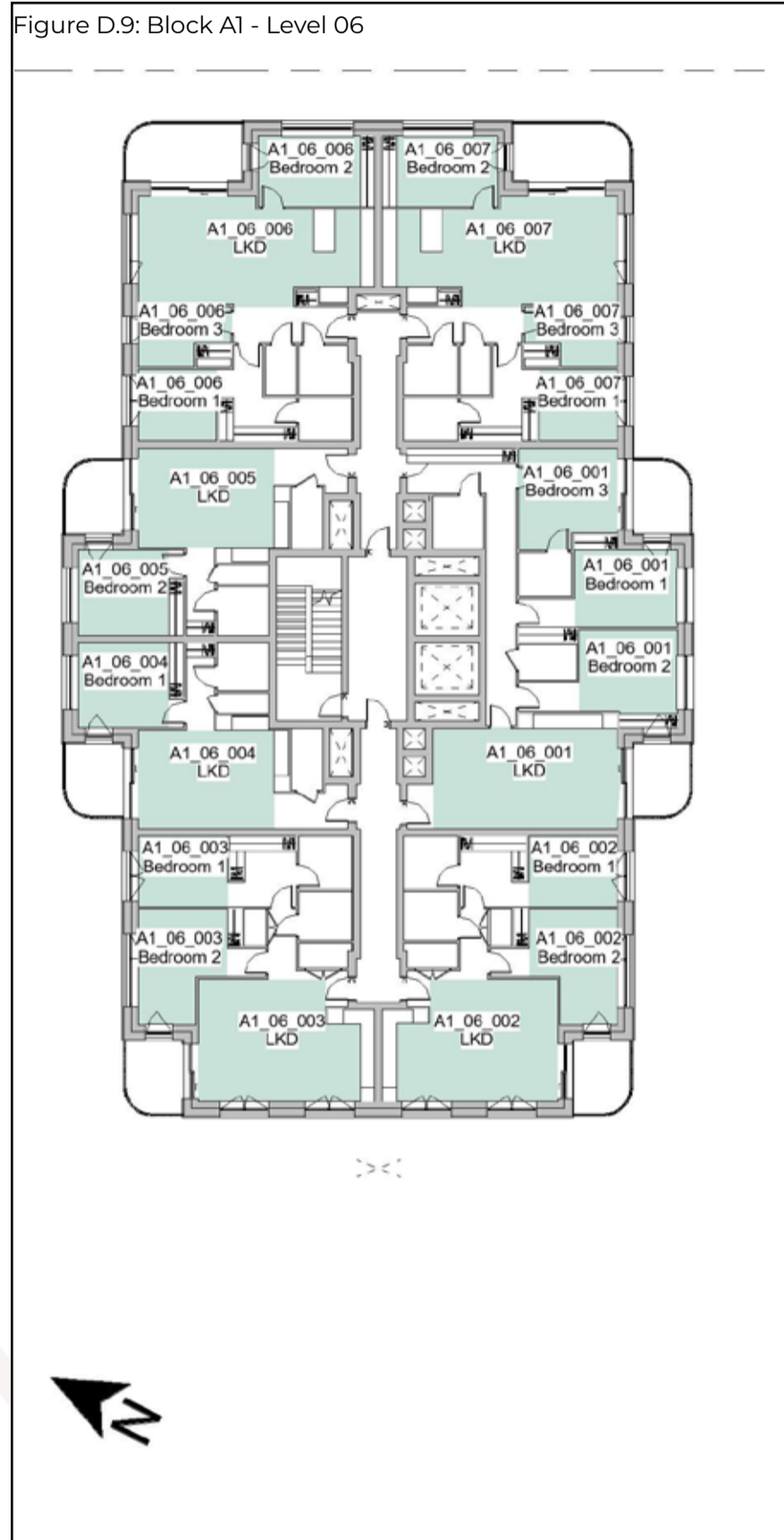


Figure D.9: Block A1 - Level 06



### D.1.5 Proposed Apartment Block A, Floor Plans - Block A1

Figure D.10: Block A1 - Level 07

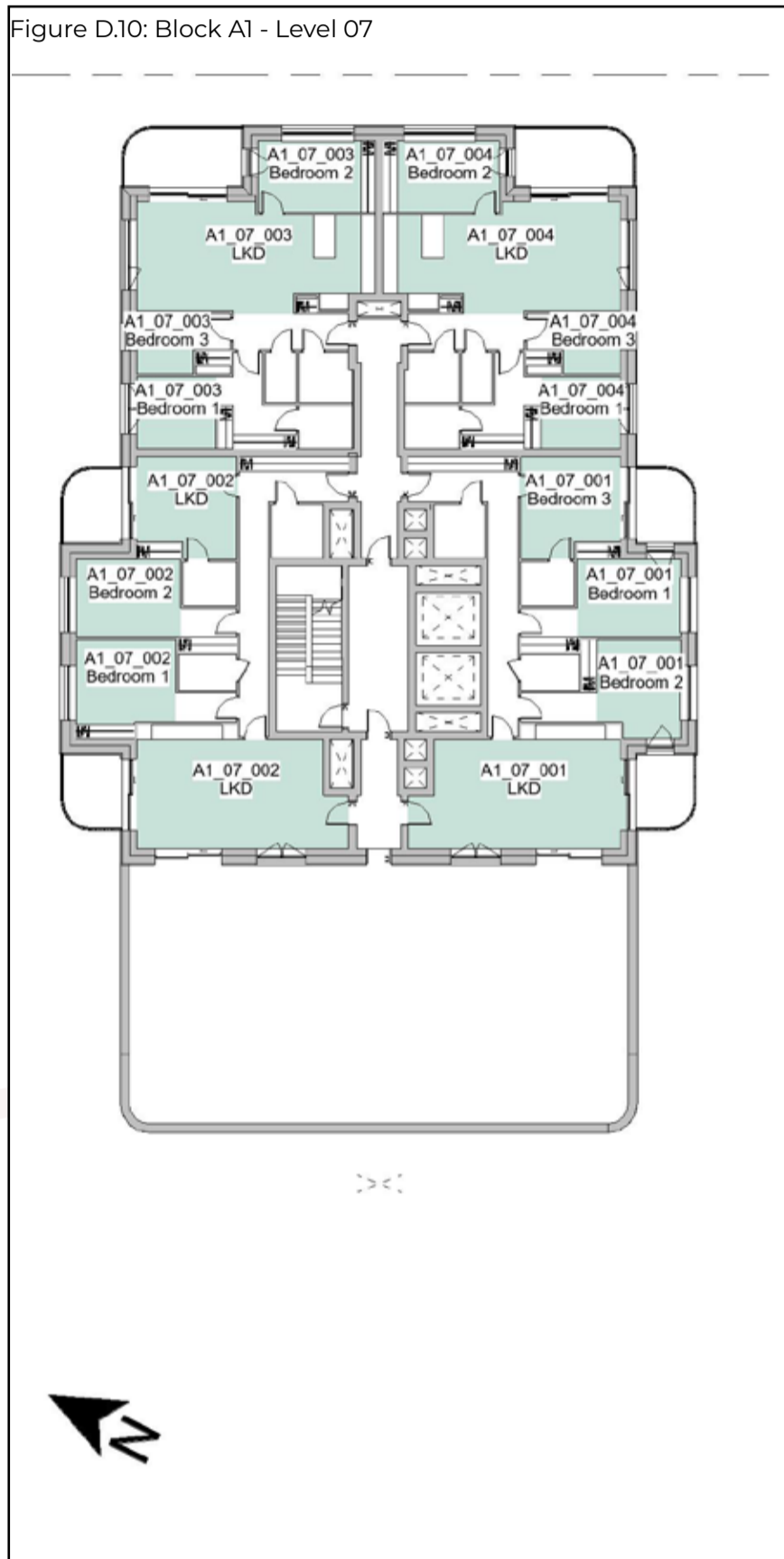
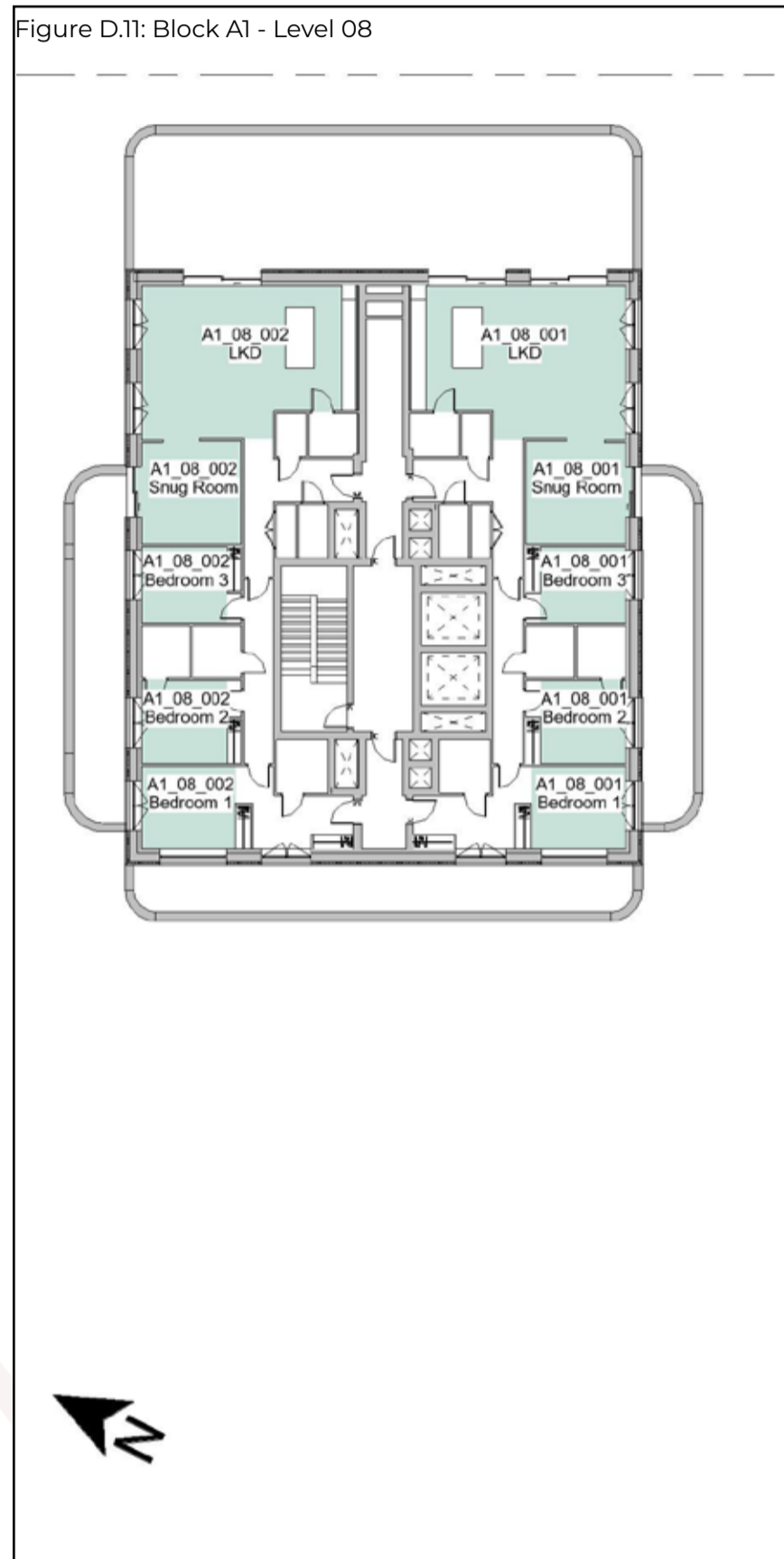


Figure D.11: Block A1 - Level 08



## D.2 Proposed Apartment Block A Floor Plans -Block A2

### D.2.1 Proposed Apartment Block A, Floor Plans - Block A2

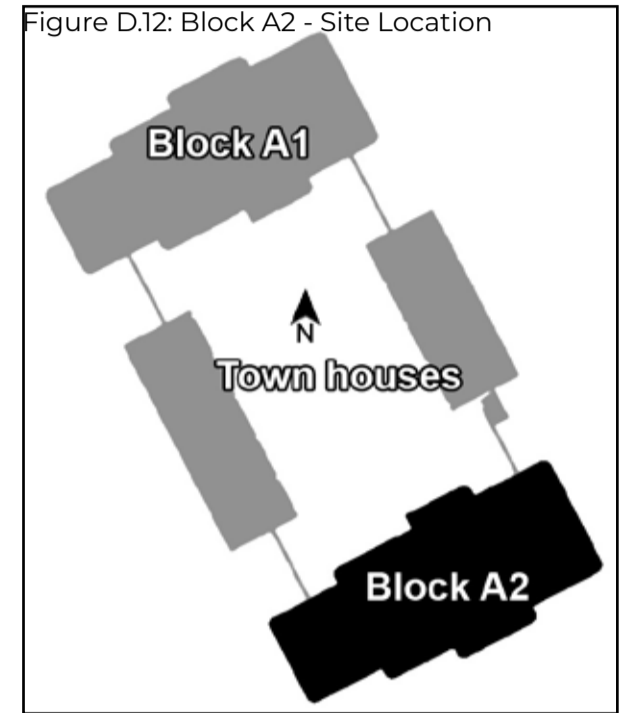


Figure D.13: Block A2 - Level 00

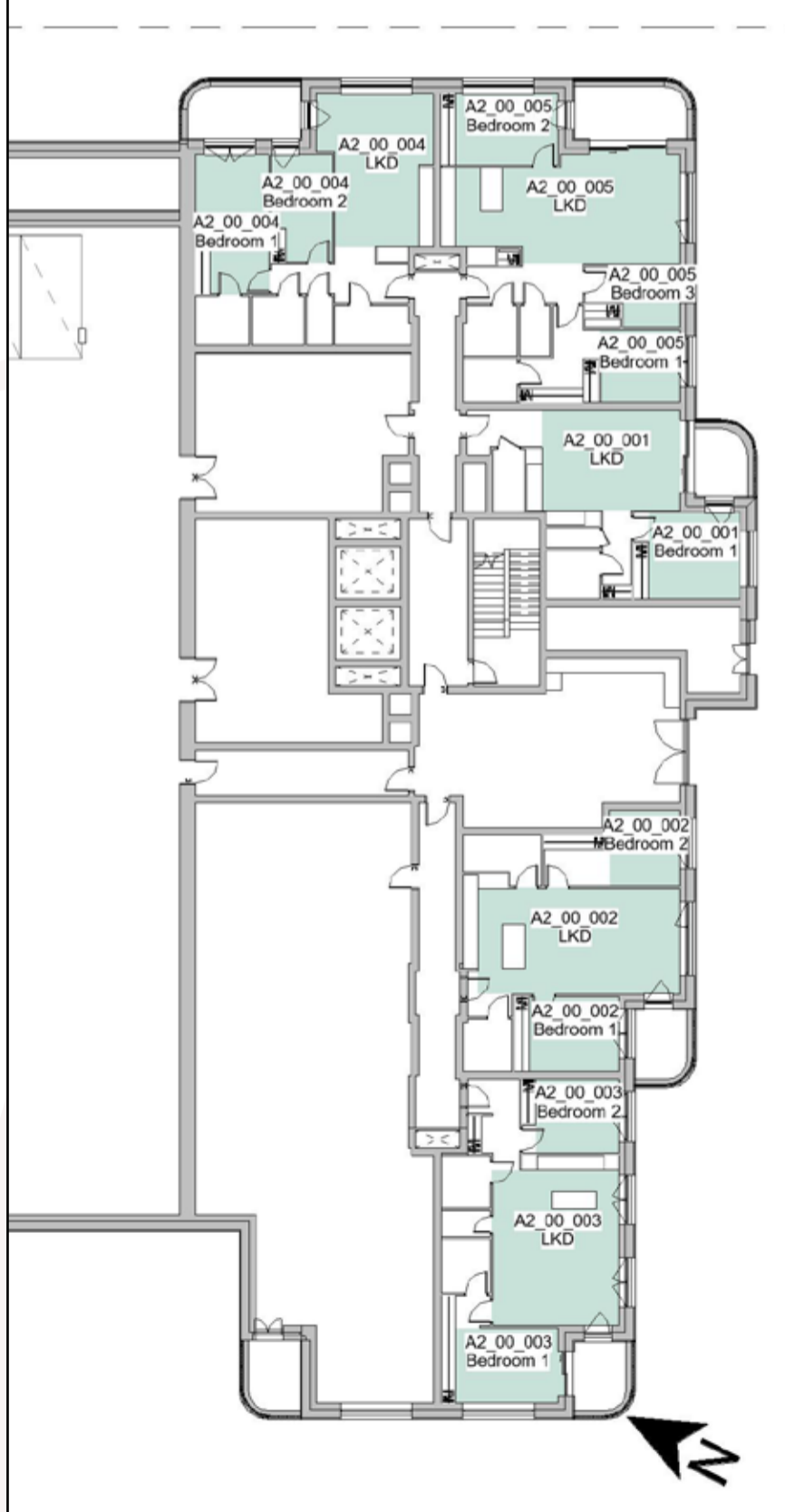
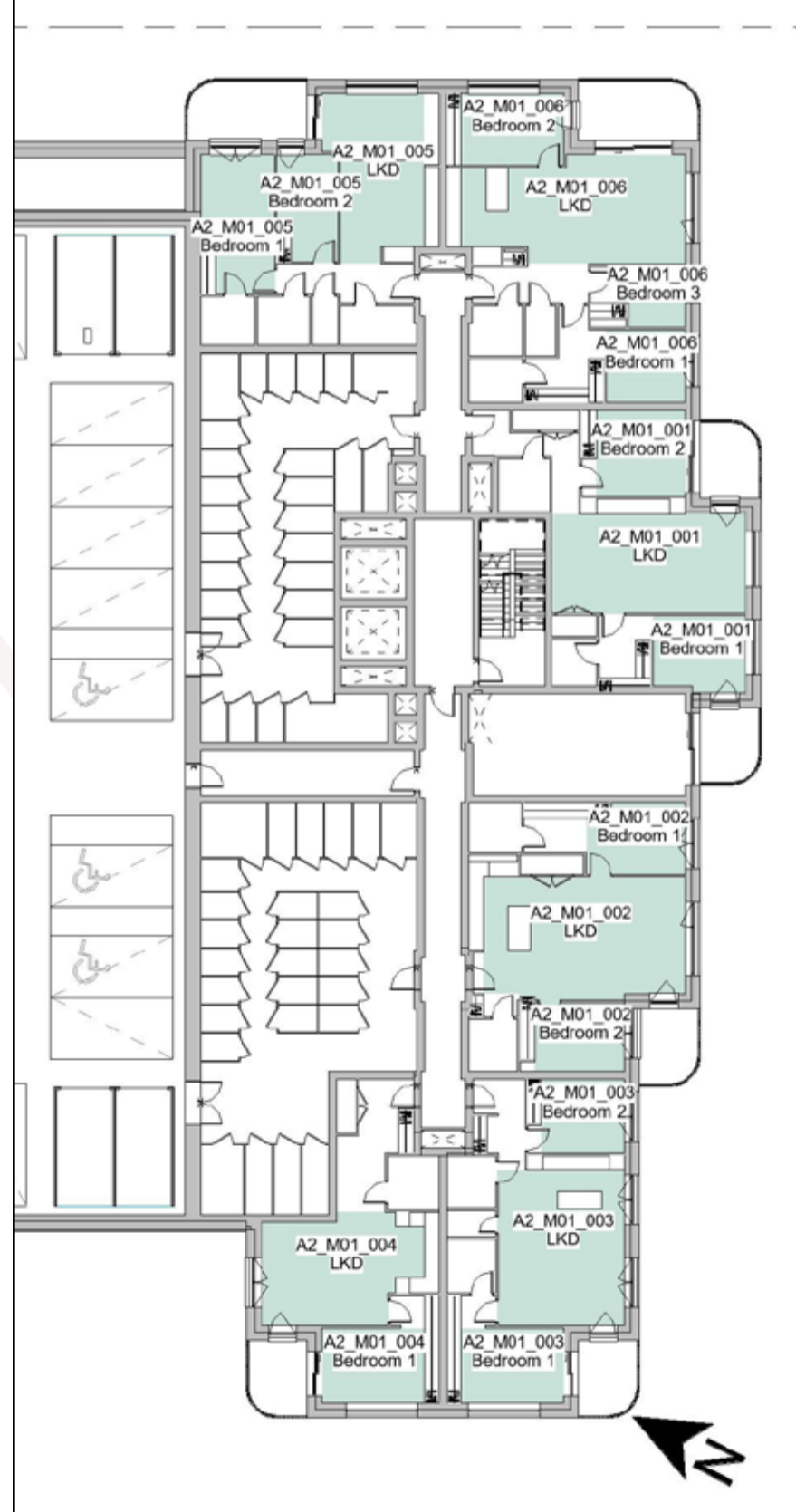


Figure D.14: Block A2 - Level 01 Mezzanine



## D.2.2 Proposed Apartment Block A, Floor Plans - Block A2

Figure D.15: Block A2 - Level 01

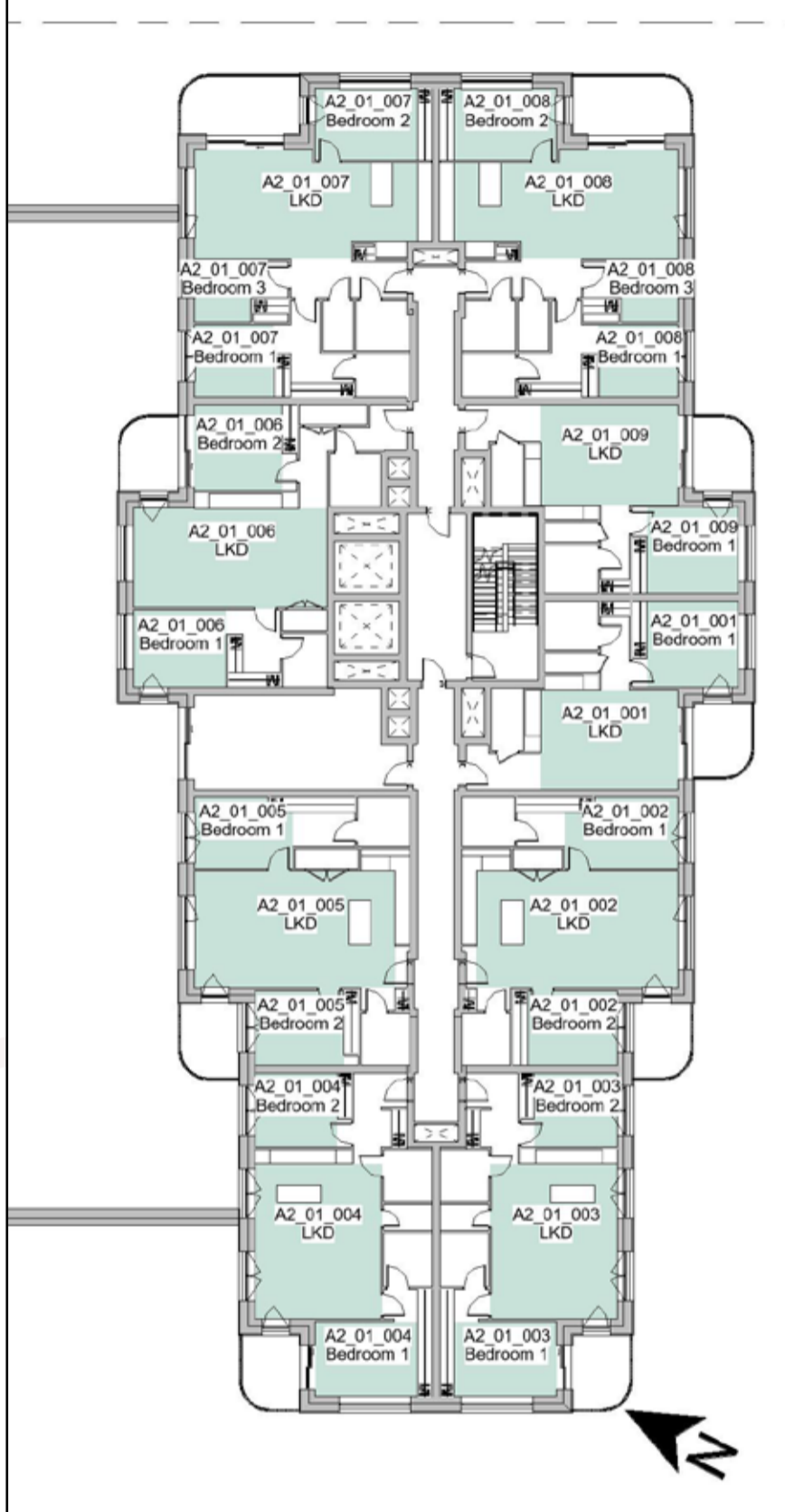
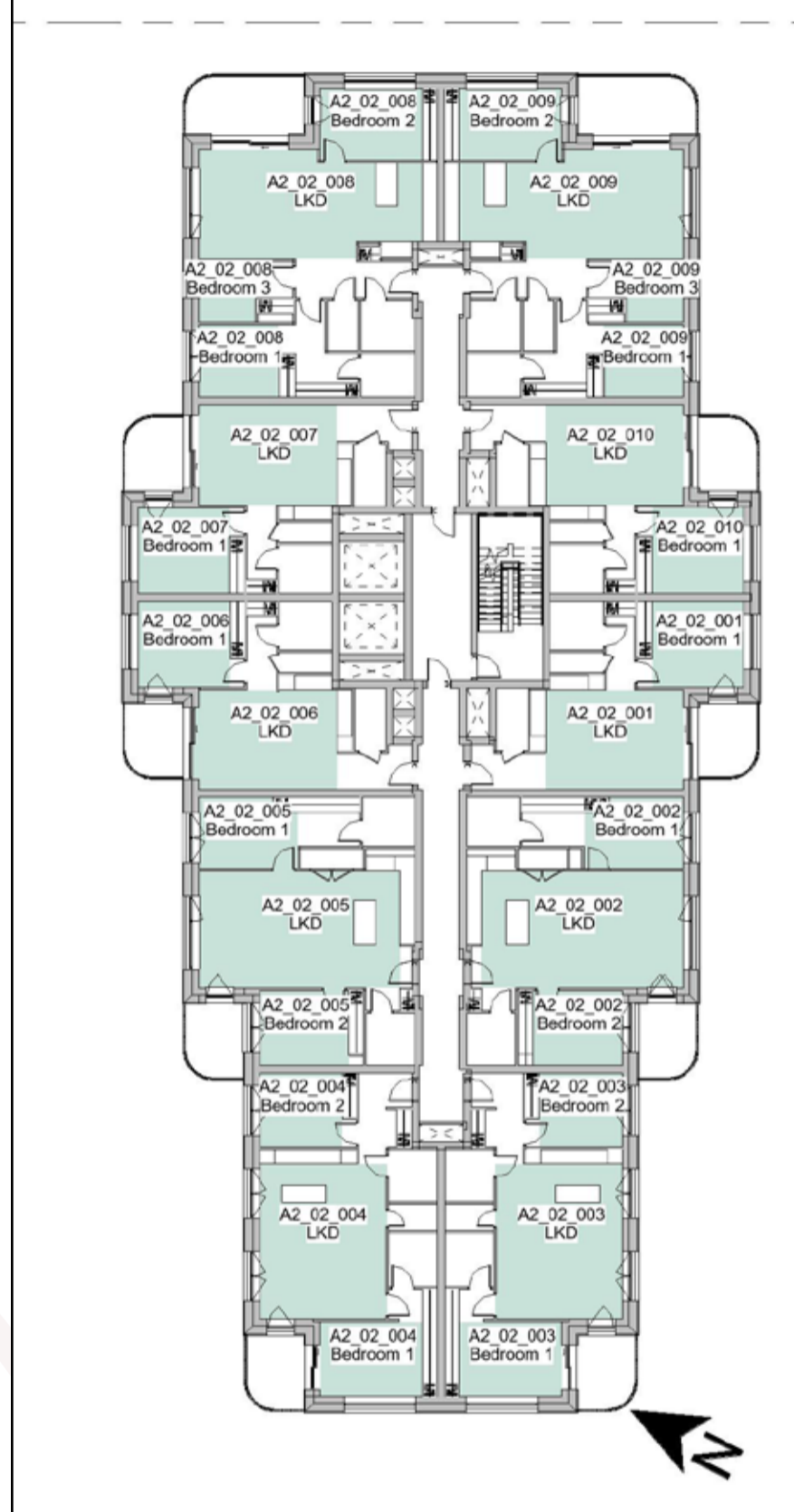


Figure D.16: Block A2 - Level 02



### D.2.3 Proposed Apartment Block A, Floor Plans - Block A2

Figure D.17: Block A2 - Level 03

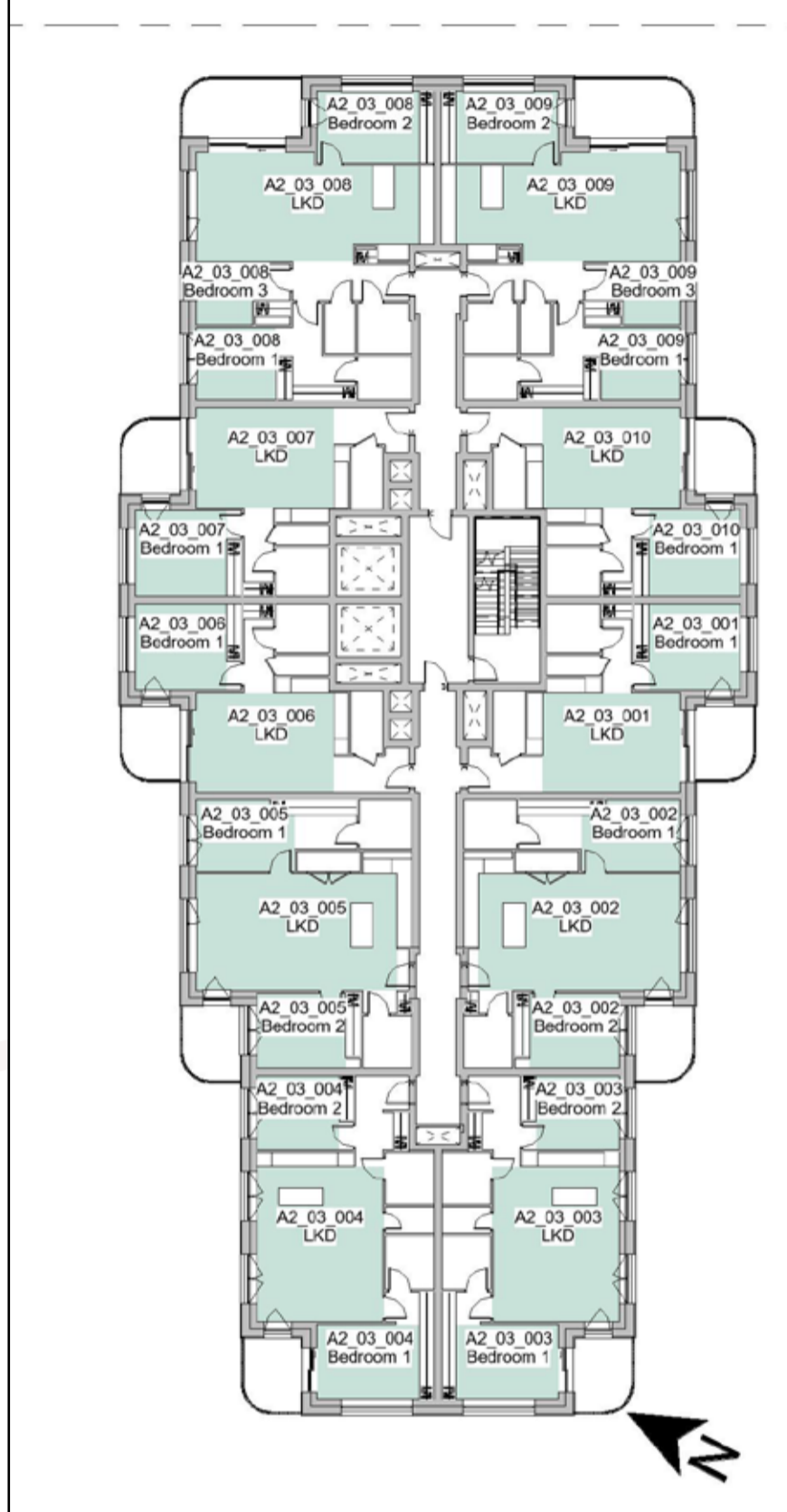
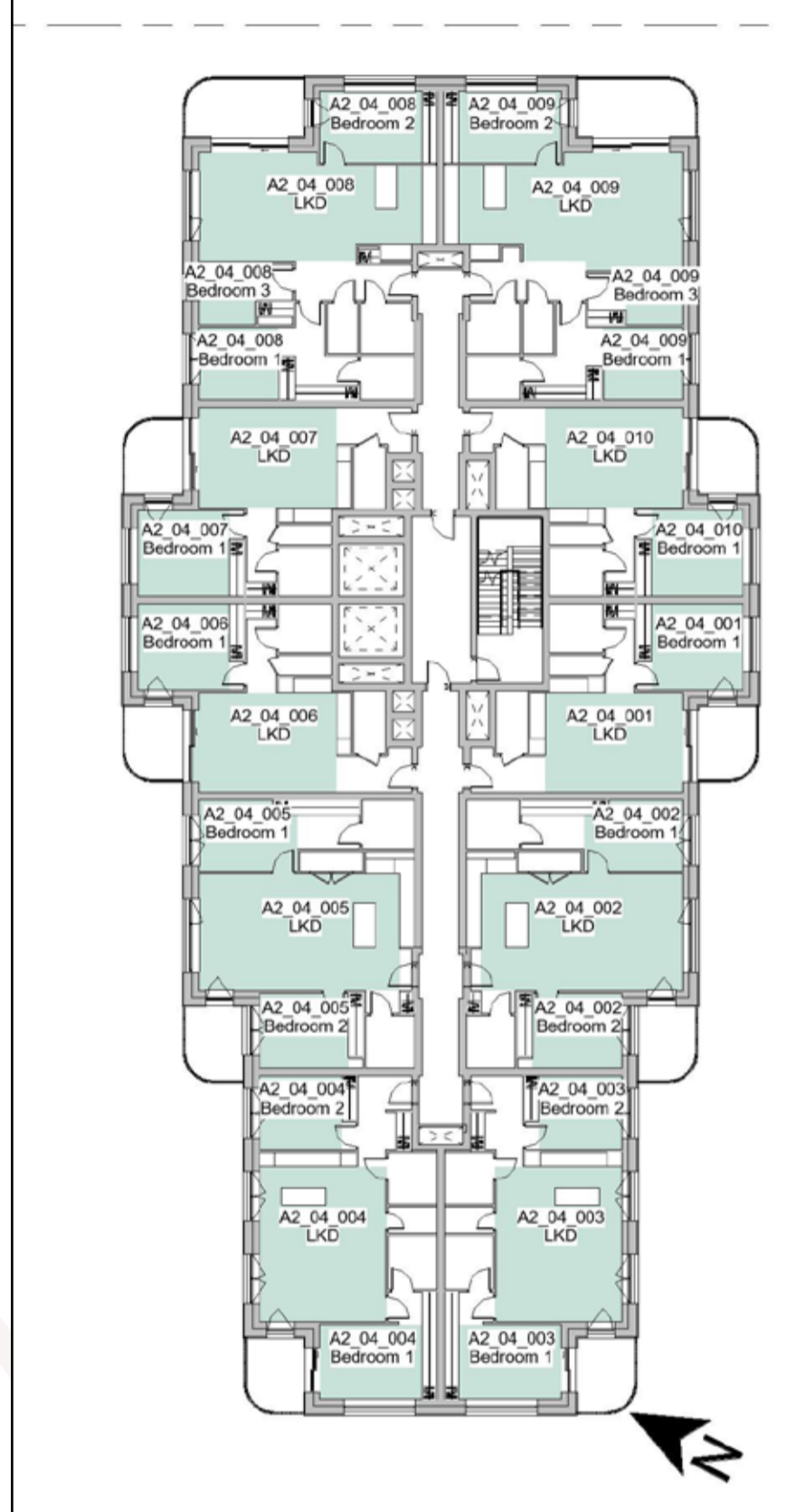


Figure D.18: Block A2 - Level 04



## D.2.4 Proposed Apartment Block A, Floor Plans - Block A2

Figure D.19: Block A2 - Level 05

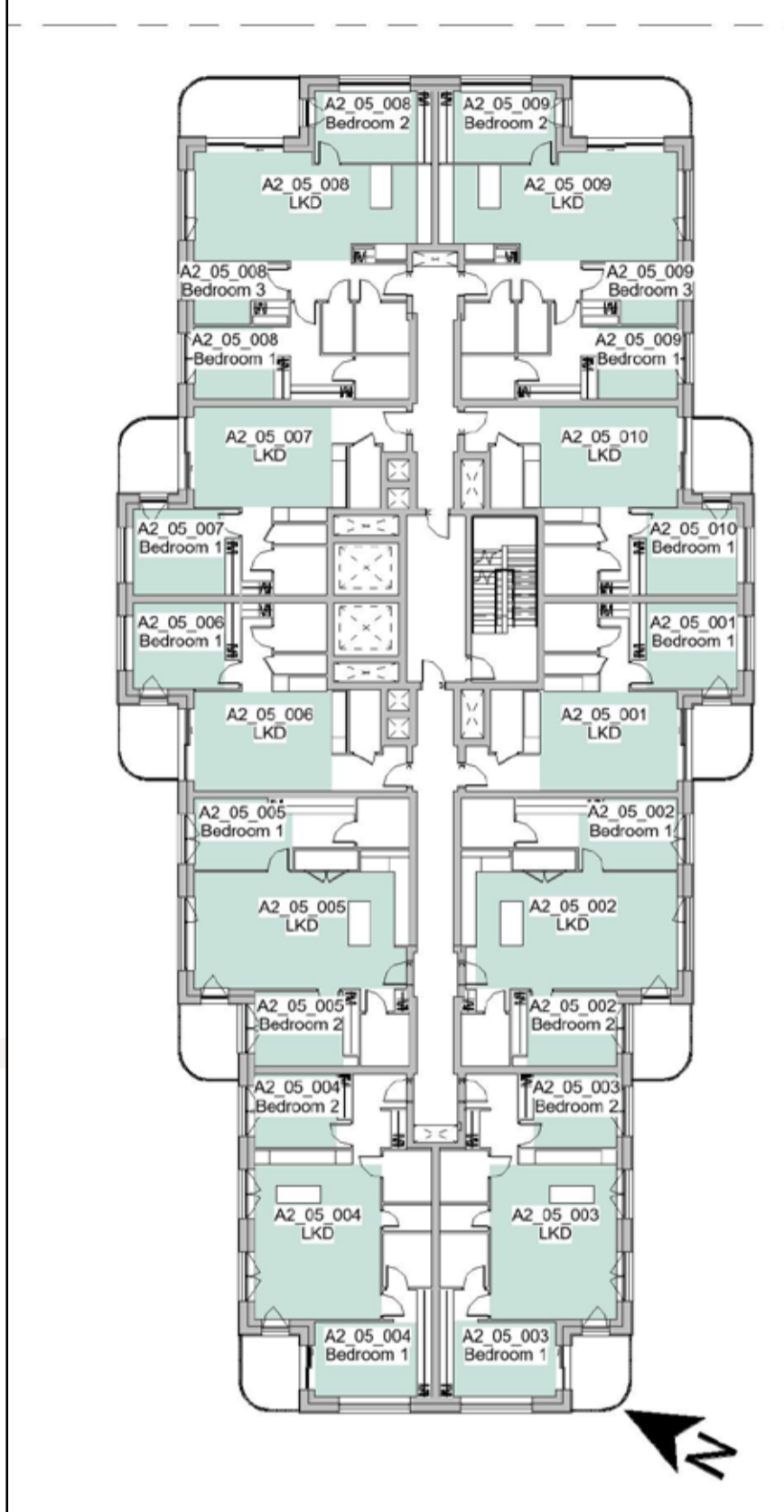
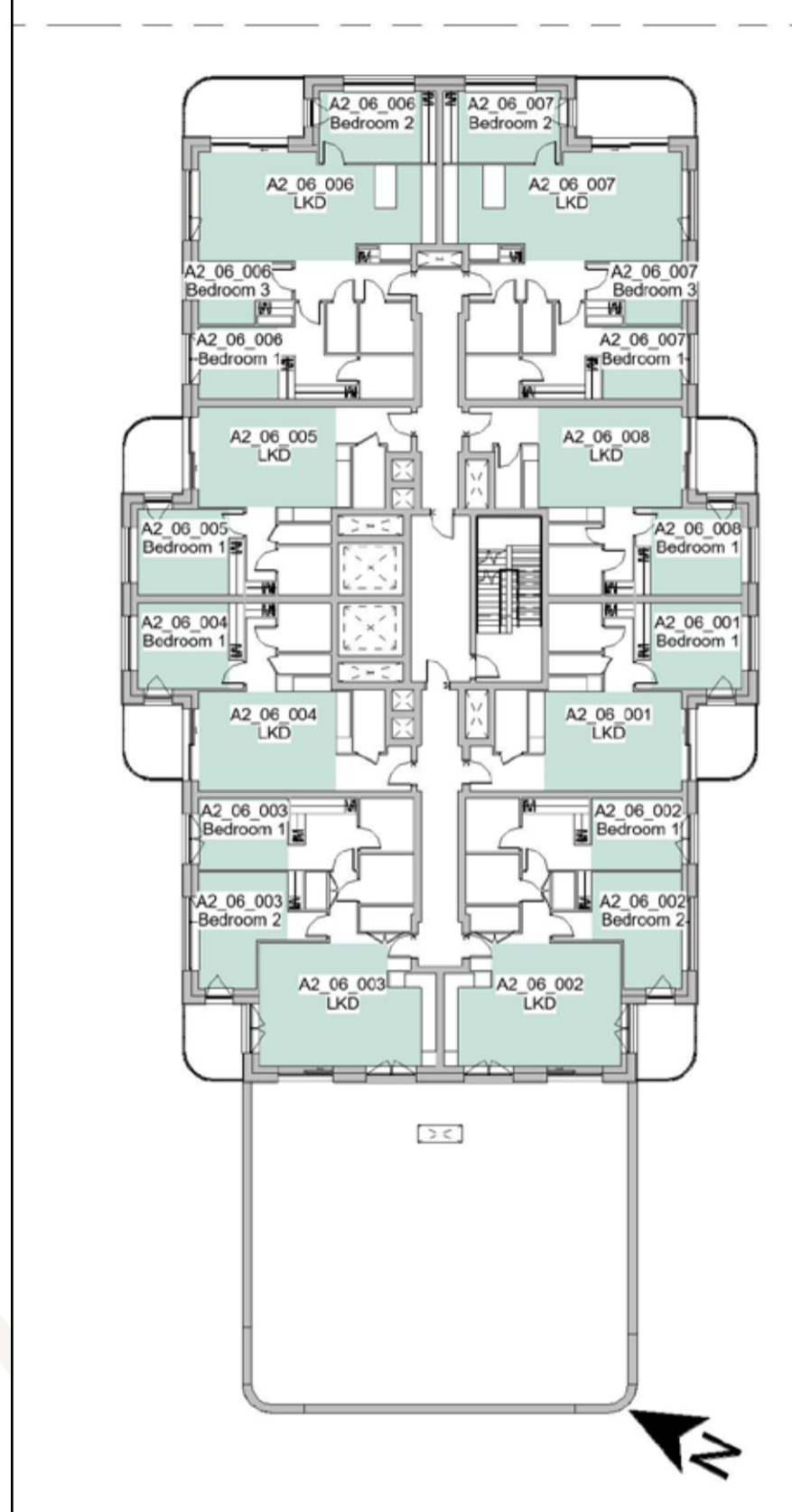


Figure D.20: Block A2 - Level 06



## D.2.5 Proposed Apartment Block A, Floor Plans - Block A2

Figure D.21: Block A2 - Level 07

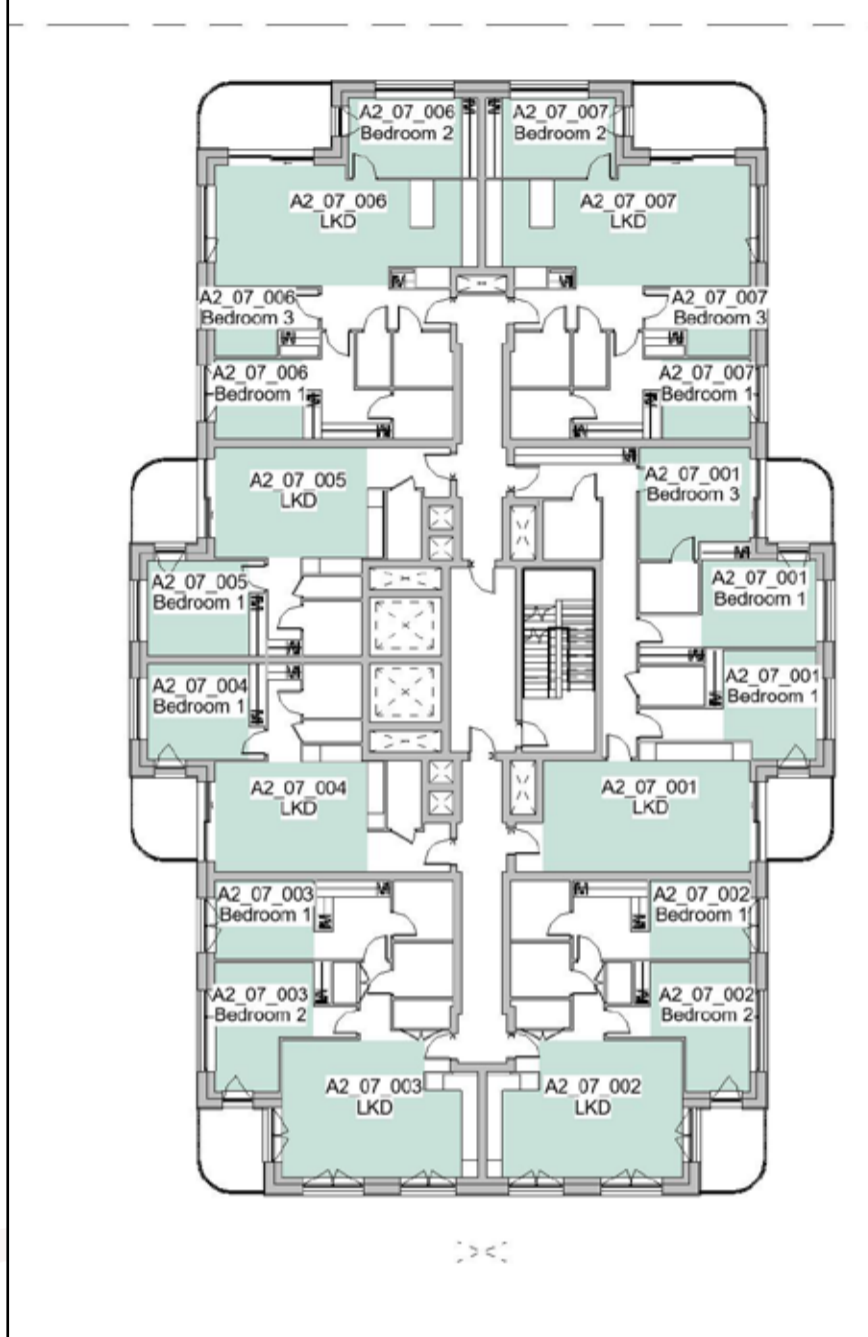


Figure D.22: Block A2 - Level 08

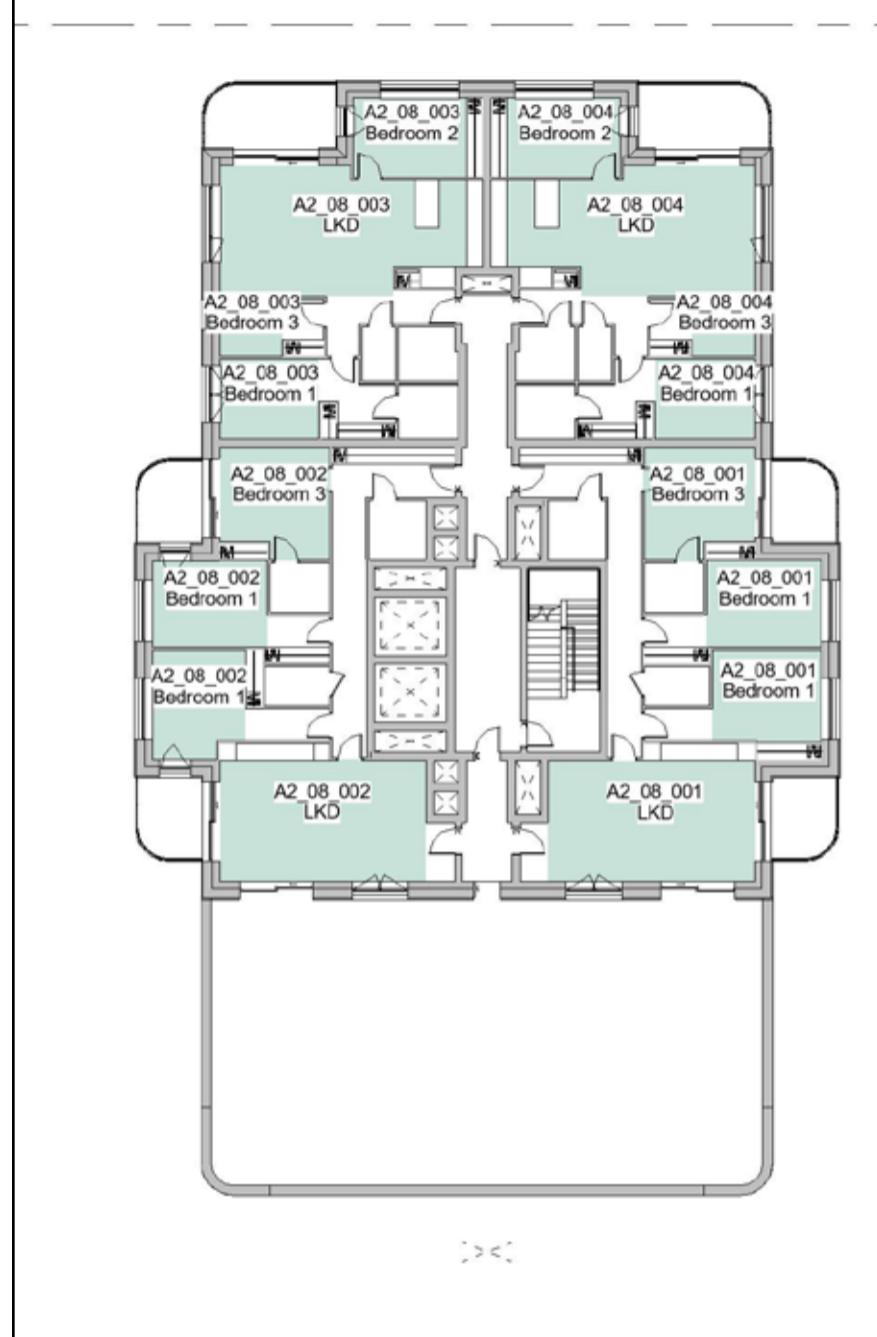
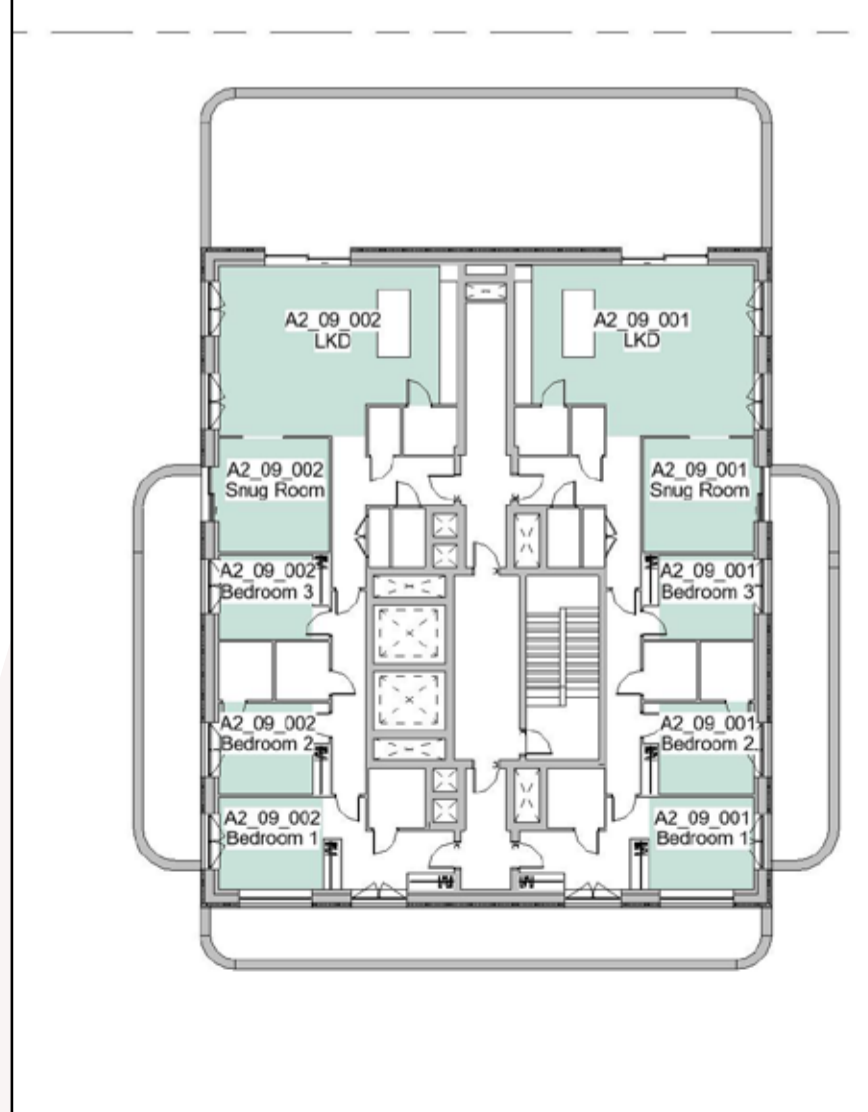
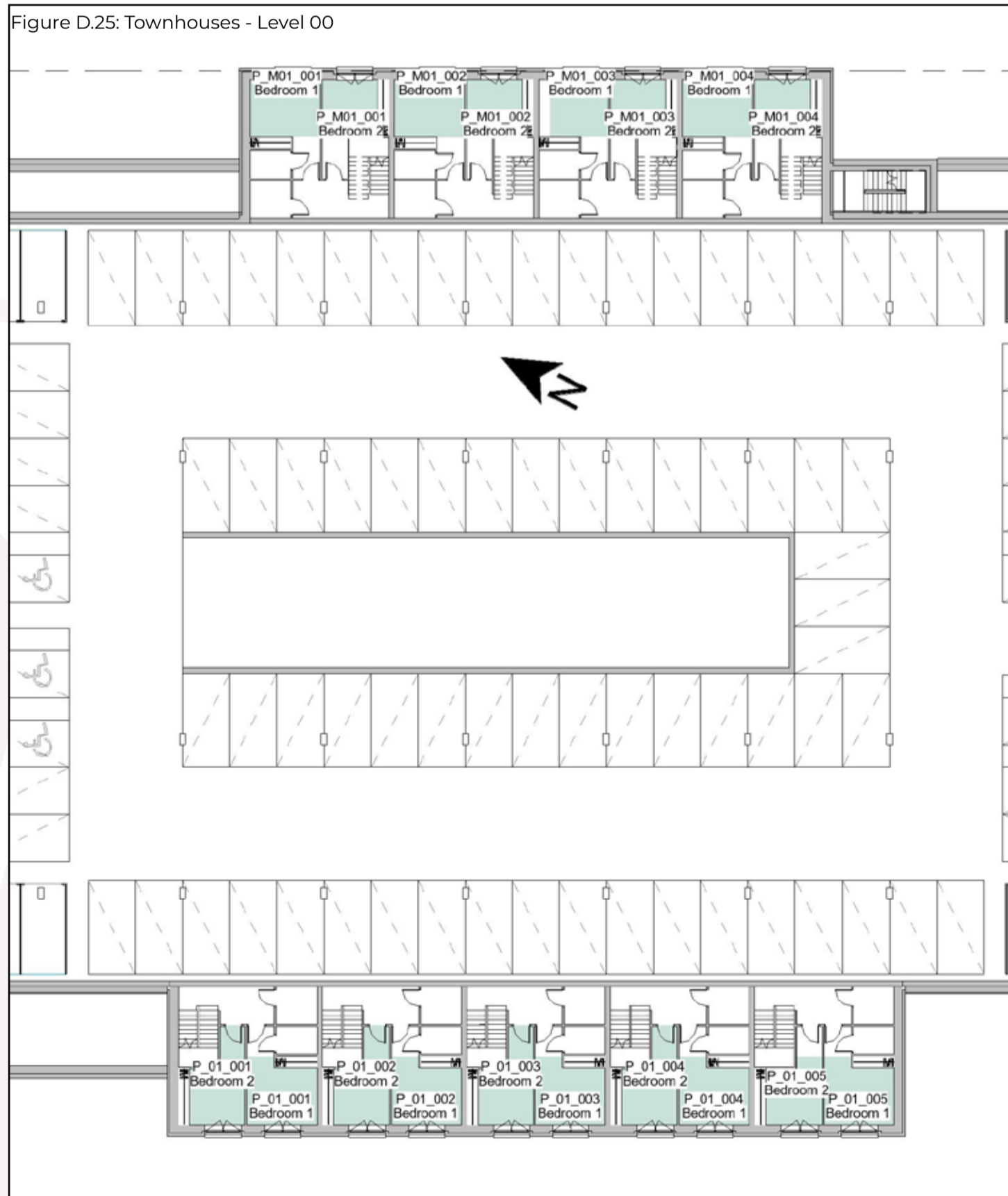
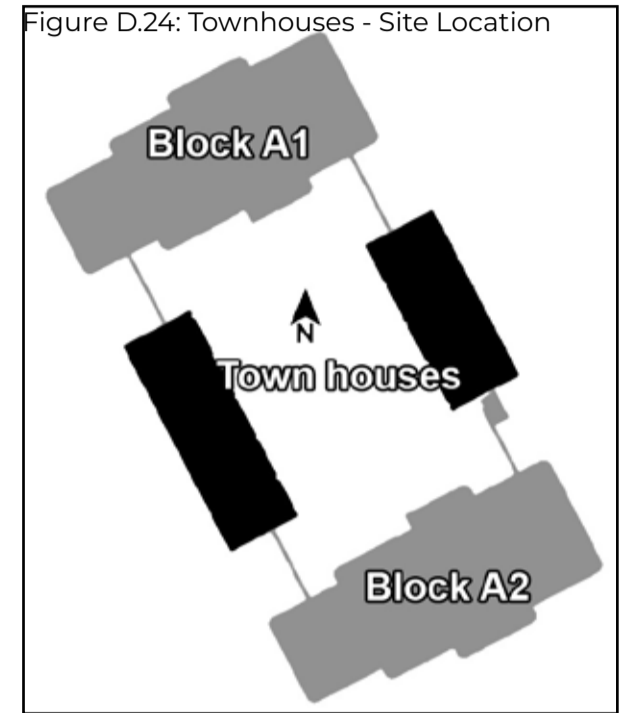


Figure D.23: Block A2 - Level 09

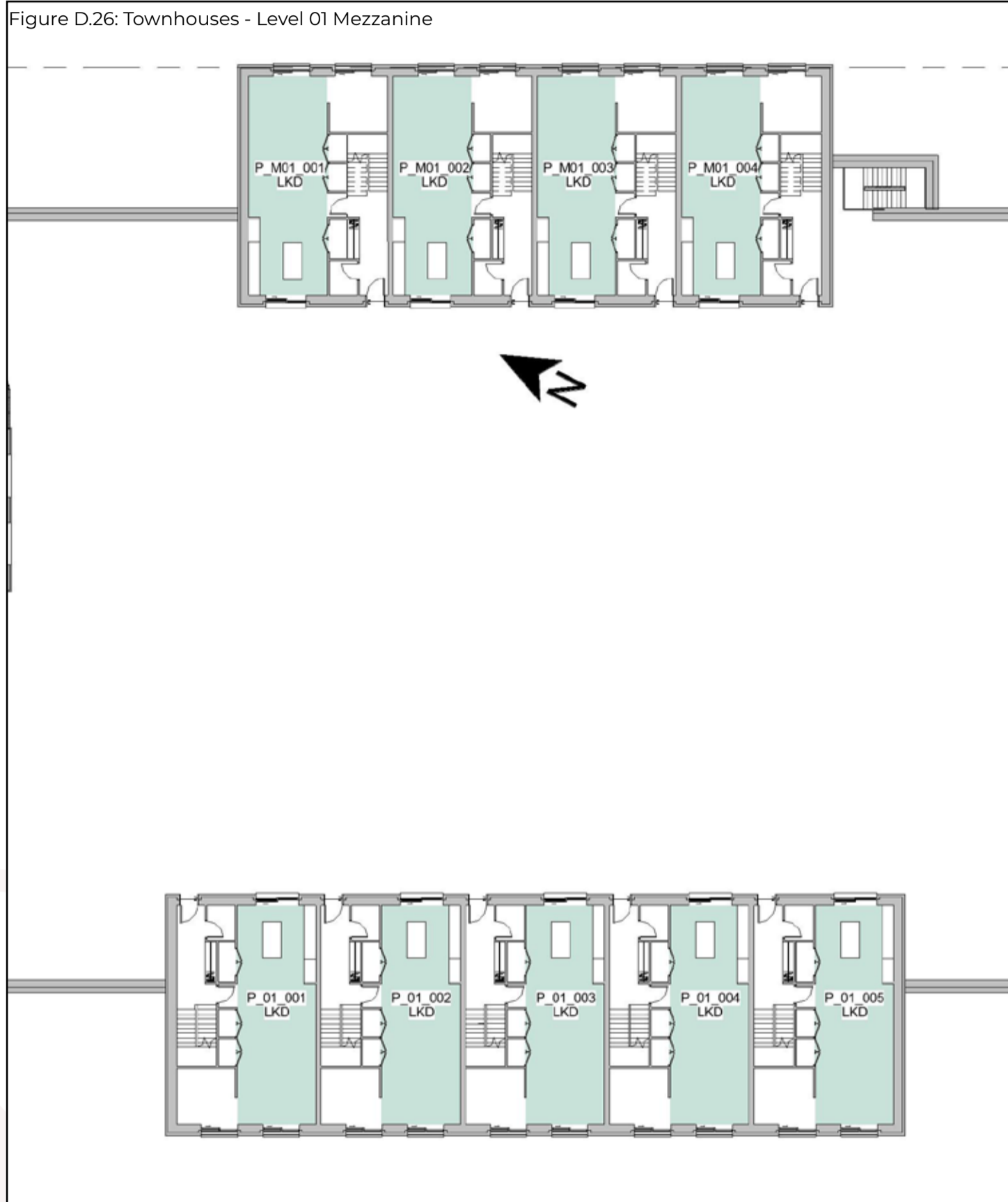


### D.3 Proposed Apartment Block A Floor Plans - Townhouses

#### D.3.1 Proposed Apartment Block A Floor Plans - Townhouses

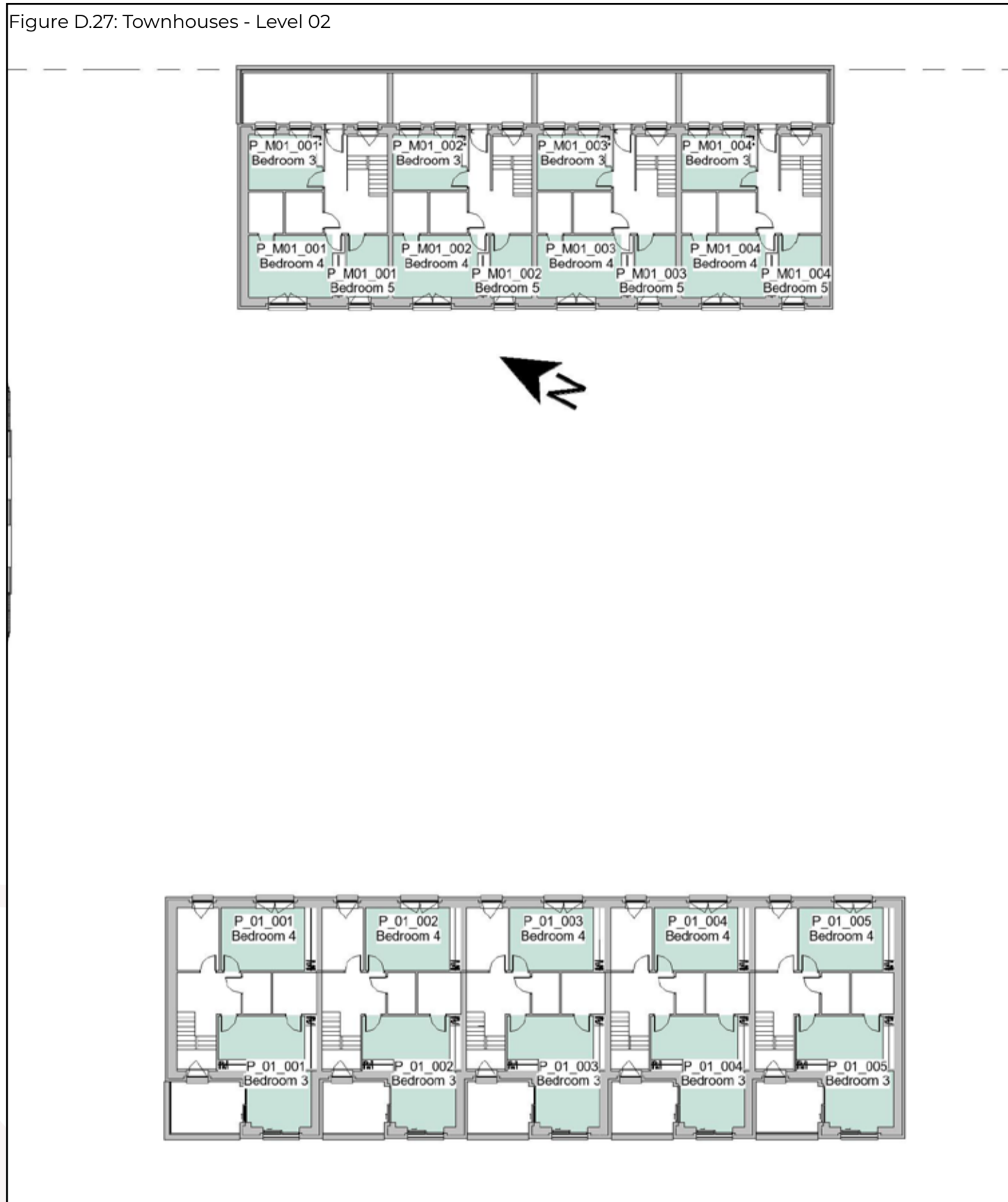


### D.3.2 Proposed Apartment Block A Floor Plans - Townhouses



### D.3.3 Proposed Apartment Block A Floor Plans - Townhouses

Figure D.27: Townhouses - Level 02



## D.4 Spatial Daylight Autonomy (SDA) in Proposed Units

Below is an example of the table used to describe the spatial daylight autonomy results in proposed units.

Table Example. D.4 - Scheme Performance SDA					
Unit Number	Room Description	Target Lux*	% of area above target Lux* (recommendation >50%)		Compliance with BR 209 Criteria
			Without Trees	With Trees	
A	B	C	D	E	F

### 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 in the unit has been assessed, e.g. bedroom, LKD, etc.

### C: Target Lux

Under BR 209 the appropriate target lux levels to be achieved across 50% of the working plane of a room differ depending on the room type. Kitchens have a target lux of 200, living rooms have a target lux of 150 and bedrooms have a target lux of 100. In a room providing more than one function, such as an LKD, the higher target value should be taken i.e. 200 Lux.

### D: % of area above target Lux (Without Trees)

BR 209 recommends target lux levels to be achieved across at least 50% of the working 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 working plane of the assessed room that is capable of receiving more than the appropriate target lux for at least half the daylight hours with trees excluded from the analytical model. The figures shown in this column should be considered part of a supplementary study that helps identify if trees are having an effect on daylight within the proposed units.

### E: % of area above target Lux (With Trees)

BR 209 recommends target lux levels to be achieved across at least 50% of the working 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 working plane of the assessed room that is capable of receiving more than the appropriate target lux for at least half the daylight hours with the foliage of deciduous trees varied to account for summer and winter conditions, i.e. full leaf and bare branch.

### F: Compliance with BR 209 Criteria

This column states if the assessed room achieves the recommended level of daylight as per BR 209 with consideration to the various tree states.

If the target lux level is achieved across more than 50% of the working plane, for half the daylight hours, both with and without trees, this column will state: *'Compliant'*.

If the target lux level is not achieved across more than 50% of the working plane, for half the daylight hours, both with and without trees, this column will state: *'Non-compliant'*.

If the target lux level is achieved across more than 50% of the working plane, for half the daylight hours, without trees but is not achieved with trees, this column will state: *'Trees affecting compliance'*.

Compliance rates will be stated for SDA, both with and without trees.

It should be noted that the figures displayed in the table of results have been rounded off. A manual calculation of these figures may yield a negligible difference and should not be considered an error.

#### D.4.1 SDA Results: Block A1 -Level 00 and 01 Mezzanine

Table No. D.4.1 - SDA Results:					
Unit Number	Room Description	Target Lux*	% of area above target Lux* (recommendation >50%)		Compliance with BR 209 Criteria*
			Without Trees***	With Trees**	
Communal	Communal	150	66%	24%	Trees affecting compliance
A1_00_001	Bedroom 1	100	100%	99%	Compliant
A1_00_001	LKD	200	50%	10%	Trees affecting compliance
A1_00_002	Bedroom 1	100	100%	100%	Compliant
A1_00_002	Bedroom 2	100	100%	100%	Compliant
A1_00_002	Bedroom 3	100	100%	100%	Compliant
A1_00_002	LKD	200	70%	45%	Trees affecting compliance
A1_00_003	Bedroom 1	100	100%	65%	Compliant
A1_00_003	Bedroom 2	100	71%	32%	Trees affecting compliance
A1_00_003	LKD	200	92%	58%	Compliant
A1_M01_001	Bedroom 1	100	100%	100%	Compliant
A1_M01_001	LKD	200	50%	50%	Compliant
A1_M01_002	Bedroom 1	100	100%	100%	Compliant
A1_M01_002	Bedroom 2	100	100%	100%	Compliant
A1_M01_002	LKD	200	100%	66%	Compliant
A1_M01_003	Bedroom 1	100	100%	100%	Compliant
A1_M01_003	Bedroom 2	100	100%	70%	Compliant
A1_M01_003	LKD	200	57%	40%	Trees affecting compliance
A1_M01_004	Bedroom 1	100	100%	100%	Compliant
A1_M01_004	Bedroom 2	100	100%	100%	Compliant
A1_M01_004	LKD	200	51%	33%	Trees affecting compliance
A1_M01_005	Bedroom 1	100	100%	100%	Compliant
A1_M01_005	Bedroom 2	100	100%	100%	Compliant
A1_M01_005	Bedroom 3	100	100%	100%	Compliant
A1_M01_005	LKD	200	74%	58%	Compliant
A1_M01_006	Bedroom 1	100	100%	97%	Compliant
A1_M01_006	Bedroom 2	100	94%	60%	Compliant
A1_M01_006	LKD	200	97%	85%	Compliant

\* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 24.

\*\* Under the BR 209 study the SDA has been calculated with indicative trees represented accounting for annual foliage.

\*\*\* The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 28.

For floor plans of the assessed units please refer to section D.1 on page 86.

## D.4.2 SDA Results: Block A1 -Level 01

Table No. D.4.2 - SDA Results:

Unit Number	Room Description	Target Lux*	% of area above target Lux* (recommendation >50%)		Compliance with BR 209 Criteria*
			Without Trees***	With Trees**	
A1_01_001	Bedroom 1	100	100%	100%	Compliant
A1_01_001	Bedroom 2	100	93%	93%	Compliant
A1_01_001	LKD	200	53%	53%	Compliant
A1_01_002	Bedroom 1	100	100%	100%	Compliant
A1_01_002	Bedroom 2	100	100%	100%	Compliant
A1_01_002	LKD	200	100%	100%	Compliant
A1_01_003	Bedroom 1	100	100%	100%	Compliant
A1_01_003	Bedroom 2	100	100%	100%	Compliant
A1_01_003	LKD	200	100%	96%	Compliant
A1_01_004	Bedroom 1	100	100%	100%	Compliant
A1_01_004	Bedroom 2	100	100%	100%	Compliant
A1_01_004	LKD	200	60%	47%	Trees affecting compliance
A1_01_005	Bedroom 1	100	100%	100%	Compliant
A1_01_005	LKD	200	59%	42%	Trees affecting compliance
A1_01_006	Bedroom 1	100	100%	100%	Compliant
A1_01_006	LKD	200	55%	40%	Trees affecting compliance
A1_01_007	Bedroom 1	100	100%	100%	Compliant
A1_01_007	Bedroom 2	100	100%	100%	Compliant
A1_01_007	Bedroom 3	100	100%	100%	Compliant
A1_01_007	LKD	200	73%	67%	Compliant
A1_01_008	Bedroom 1	100	100%	100%	Compliant
A1_01_008	Bedroom 2	100	100%	100%	Compliant
A1_01_008	Bedroom 3	100	100%	100%	Compliant
A1_01_008	LKD	200	73%	71%	Compliant
A1_01_009	Bedroom 1	100	100%	100%	Compliant
A1_01_009	Bedroom 2	100	100%	100%	Compliant
A1_01_009	LKD	200	50%	50%	Compliant

\* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 24.

\*\* Under the BR 209 study the SDA has been calculated with indicative trees represented accounting for annual foliage.

\*\*\* The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 28.

For floor plans of the assessed units please refer to section D.1 on page 86.

### D.4.3 SDA Results: Block A1 -Level 02

Table No. D.4.3 - SDA Results:					
Unit Number	Room Description	Target Lux*	% of area above target Lux* (recommendation >50%)		Compliance with BR 209 Criteria*
			Without Trees***	With Trees**	
A1_02_001	Bedroom 1	100	100%	100%	Compliant
A1_02_001	LKD	200	63%	63%	Compliant
A1_02_002	Bedroom 1	100	100%	100%	Compliant
A1_02_002	Bedroom 2	100	100%	100%	Compliant
A1_02_002	LKD	200	65%	65%	Compliant
A1_02_003	Bedroom 1	100	100%	100%	Compliant
A1_02_003	Bedroom 2	100	100%	100%	Compliant
A1_02_003	LKD	200	100%	100%	Compliant
A1_02_004	Bedroom 1	100	100%	100%	Compliant
A1_02_004	Bedroom 2	100	100%	100%	Compliant
A1_02_004	LKD	200	100%	100%	Compliant
A1_02_005	Bedroom 1	100	100%	100%	Compliant
A1_02_005	Bedroom 2	100	100%	100%	Compliant
A1_02_005	LKD	200	60%	52%	Compliant
A1_02_006	Bedroom 1	100	100%	100%	Compliant
A1_02_006	LKD	200	62%	50%	Compliant
A1_02_007	Bedroom 1	100	100%	100%	Compliant
A1_02_007	LKD	200	55%	46%	Trees affecting compliance
A1_02_008	Bedroom 1	100	100%	100%	Compliant
A1_02_008	Bedroom 2	100	100%	100%	Compliant
A1_02_008	Bedroom 3	100	100%	100%	Compliant
A1_02_008	LKD	200	73%	70%	Compliant
A1_02_009	Bedroom 1	100	100%	100%	Compliant
A1_02_009	Bedroom 2	100	100%	100%	Compliant
A1_02_009	Bedroom 3	100	100%	100%	Compliant
A1_02_009	LKD	200	76%	75%	Compliant
A1_02_10	Bedroom 1	100	100%	100%	Compliant
A1_02_10	LKD	200	55%	54%	Compliant

\* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 24.

\*\* Under the BR 209 study the SDA has been calculated with indicative trees represented accounting for annual foliage.

\*\*\* The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 28.

For floor plans of the assessed units please refer to section D.1 on page 86.

#### D.4.4 SDA Results: Block A1 -Level 03

Table No. D.4.4 - SDA Results:					
Unit Number	Room Description	Target Lux*	% of area above target Lux* (recommendation >50%)		Compliance with BR 209 Criteria*
			Without Trees***	With Trees**	
A1_03_001	Bedroom 1	100	100%	100%	Compliant
A1_03_001	LKD	200	69%	69%	Compliant
A1_03_002	Bedroom 1	100	100%	100%	Compliant
A1_03_002	Bedroom 2	100	100%	100%	Compliant
A1_03_002	LKD	200	68%	67%	Compliant
A1_03_003	Bedroom 1	100	100%	100%	Compliant
A1_03_003	Bedroom 2	100	100%	100%	Compliant
A1_03_003	LKD	200	100%	100%	Compliant
A1_03_004	Bedroom 1	100	100%	100%	Compliant
A1_03_004	Bedroom 2	100	100%	100%	Compliant
A1_03_004	LKD	200	100%	100%	Compliant
A1_03_005	Bedroom 1	100	100%	100%	Compliant
A1_03_005	Bedroom 2	100	100%	100%	Compliant
A1_03_005	LKD	200	62%	55%	Compliant
A1_03_006	Bedroom 1	100	100%	100%	Compliant
A1_03_006	LKD	200	64%	53%	Compliant
A1_03_007	Bedroom 1	100	100%	100%	Compliant
A1_03_007	LKD	200	56%	50%	Compliant
A1_03_008	Bedroom 1	100	100%	100%	Compliant
A1_03_008	Bedroom 2	100	100%	100%	Compliant
A1_03_008	Bedroom 3	100	100%	100%	Compliant
A1_03_008	LKD	200	73%	71%	Compliant
A1_03_009	Bedroom 1	100	100%	100%	Compliant
A1_03_009	Bedroom 2	100	100%	100%	Compliant
A1_03_009	Bedroom 3	100	100%	100%	Compliant
A1_03_009	LKD	200	78%	78%	Compliant
A1_03_010	Bedroom 1	100	100%	100%	Compliant
A1_03_010	LKD	200	64%	64%	Compliant

\* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 24.

\*\* Under the BR 209 study the SDA has been calculated with indicative trees represented accounting for annual foliage.

\*\*\* The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 28.

For floor plans of the assessed units please refer to section D.1 on page 86.

#### D.4.5 SDA Results: Block A1 -Level 04

Table No. D.4.5 - SDA Results:					
Unit Number	Room Description	Target Lux*	% of area above target Lux* (recommendation >50%)		Compliance with BR 209 Criteria*
			Without Trees***	With Trees**	
A1_04_001	Bedroom 1	100	100%	100%	Compliant
A1_04_001	LKD	200	77%	76%	Compliant
A1_04_002	Bedroom 1	100	100%	100%	Compliant
A1_04_002	Bedroom 2	100	100%	100%	Compliant
A1_04_002	LKD	200	70%	69%	Compliant
A1_04_003	Bedroom 1	100	100%	100%	Compliant
A1_04_003	Bedroom 2	100	100%	100%	Compliant
A1_04_003	LKD	200	100%	100%	Compliant
A1_04_004	Bedroom 1	100	100%	100%	Compliant
A1_04_004	Bedroom 2	100	100%	100%	Compliant
A1_04_004	LKD	200	100%	100%	Compliant
A1_04_005	Bedroom 1	100	100%	100%	Compliant
A1_04_005	Bedroom 2	100	100%	100%	Compliant
A1_04_005	LKD	200	63%	59%	Compliant
A1_04_006	Bedroom 1	100	100%	100%	Compliant
A1_04_006	LKD	200	65%	59%	Compliant
A1_04_007	Bedroom 2	100	100%	100%	Compliant
A1_04_007	LKD	200	57%	53%	Compliant
A1_04_008	Bedroom 1	100	100%	100%	Compliant
A1_04_008	Bedroom 2	100	100%	100%	Compliant
A1_04_008	Bedroom 3	100	100%	100%	Compliant
A1_04_008	LKD	200	75%	74%	Compliant
A1_04_009	Bedroom 1	100	100%	100%	Compliant
A1_04_009	Bedroom 2	100	100%	100%	Compliant
A1_04_009	Bedroom 3	100	100%	100%	Compliant
A1_04_009	LKD	200	81%	80%	Compliant
A1_04_010	Bedroom 1	100	100%	100%	Compliant
A1_04_010	LKD	200	67%	66%	Compliant

\* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 24.

\*\* Under the BR 209 study the SDA has been calculated with indicative trees represented accounting for annual foliage.

\*\*\* The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 28.

For floor plans of the assessed units please refer to section D.1 on page 86.

#### D.4.6 SDA Results: Block A1 -Level 05

Table No. D.4.6 - SDA Results:

Unit Number	Room Description	Target Lux*	% of area above target Lux* (recommendation >50%)		Compliance with BR 209 Criteria*
			Without Trees***	With Trees**	
A1_05_001	Bedroom 1	100	100%	100%	Compliant
A1_05_001	LKD	200	87%	87%	Compliant
A1_05_002	Bedroom 1	100	100%	100%	Compliant
A1_05_002	Bedroom 2	100	98%	98%	Compliant
A1_05_002	LKD	200	100%	100%	Compliant
A1_05_003	Bedroom 1	100	100%	100%	Compliant
A1_05_003	Bedroom 2	100	100%	100%	Compliant
A1_05_003	LKD	200	100%	100%	Compliant
A1_05_004	Bedroom 1	100	100%	100%	Compliant
A1_05_004	LKD	200	67%	61%	Compliant
A1_05_005	Bedroom 2	100	100%	100%	Compliant
A1_05_005	LKD	200	59%	55%	Compliant
A1_05_006	Bedroom 1	100	100%	100%	Compliant
A1_05_006	Bedroom 2	100	100%	100%	Compliant
A1_05_006	Bedroom 3	100	100%	100%	Compliant
A1_05_006	LKD	200	75%	74%	Compliant
A1_05_007	Bedroom 1	100	100%	100%	Compliant
A1_05_007	Bedroom 2	100	100%	100%	Compliant
A1_05_007	Bedroom 3	100	100%	100%	Compliant
A1_05_007	LKD	200	81%	81%	Compliant
A1_05_008	Bedroom 1	100	100%	100%	Compliant
A1_05_008	LKD	200	74%	72%	Compliant

\* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 24.

\*\* Under the BR 209 study the SDA has been calculated with indicative trees represented accounting for annual foliage.

\*\*\* The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 28.

For floor plans of the assessed units please refer to section D.1 on page 86.

### D.4.7 SDA Results: Block A1 -Level 06

Table No. D.4.7 - SDA Results:

Unit Number	Room Description	Target Lux*	% of area above target Lux* (recommendation >50%)		Compliance with BR 209 Criteria*
			Without Trees***	With Trees**	
A1_06_001	Bedroom 1	100	100%	100%	Compliant
A1_06_001	Bedroom 2	100	100%	100%	Compliant
A1_06_001	Bedroom 3	100	100%	100%	Compliant
A1_06_001	LKD	200	71%	71%	Compliant
A1_06_002	Bedroom 1	100	100%	100%	Compliant
A1_06_002	Bedroom 2	100	98%	98%	Compliant
A1_06_002	LKD	200	100%	100%	Compliant
A1_06_003	Bedroom 1	100	100%	100%	Compliant
A1_06_003	Bedroom 2	100	96%	96%	Compliant
A1_06_003	LKD	200	100%	100%	Compliant
A1_06_004	Bedroom 1	100	100%	100%	Compliant
A1_06_004	LKD	200	69%	64%	Compliant
A1_06_005	Bedroom 2	100	100%	100%	Compliant
A1_06_005	LKD	200	58%	57%	Compliant
A1_06_006	Bedroom 1	100	100%	100%	Compliant
A1_06_006	Bedroom 2	100	100%	100%	Compliant
A1_06_006	Bedroom 3	100	100%	100%	Compliant
A1_06_006	LKD	200	76%	74%	Compliant
A1_06_007	Bedroom 1	100	100%	100%	Compliant
A1_06_007	Bedroom 2	100	100%	100%	Compliant
A1_06_007	Bedroom 3	100	100%	100%	Compliant
A1_06_007	LKD	200	82%	82%	Compliant

\* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 24.

\*\* Under the BR 209 study the SDA has been calculated with indicative trees represented accounting for annual foliage.

\*\*\* The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 28.

For floor plans of the assessed units please refer to section D.1 on page 86.

#### D.4.8 SDA Results: Block A1 -Level 07

Table No. D.4.8 - SDA Results:

Unit Number	Room Description	Target Lux*	% of area above target Lux* (recommendation >50%)		Compliance with BR 209 Criteria*
			Without Trees***	With Trees**	
A1_07_001	Bedroom 1	100	100%	100%	Compliant
A1_07_001	Bedroom 2	100	100%	100%	Compliant
A1_07_001	Bedroom 3	100	100%	100%	Compliant
A1_07_001	LKD	200	100%	100%	Compliant
A1_07_002	Bedroom 1	100	100%	100%	Compliant
A1_07_002	Bedroom 2	100	100%	100%	Compliant
A1_07_002	LKD	200	100%	100%	Compliant
A1_07_002	LKD	200	100%	100%	Compliant
A1_07_003	Bedroom 1	100	100%	100%	Compliant
A1_07_003	Bedroom 2	100	100%	100%	Compliant
A1_07_003	Bedroom 3	100	100%	100%	Compliant
A1_07_003	LKD	200	78%	77%	Compliant
A1_07_004	Bedroom 1	100	100%	100%	Compliant
A1_07_004	Bedroom 2	100	100%	100%	Compliant
A1_07_004	Bedroom 3	100	100%	100%	Compliant
A1_07_004	LKD	200	88%	87%	Compliant
A1_08_001	Bedroom 1	100	100%	100%	Compliant
A1_08_001	Bedroom 2	100	100%	100%	Compliant
A1_08_001	Bedroom 3	100	100%	100%	Compliant
A1_08_001	LKD	200	100%	100%	Compliant
A1_08_001	Snug Room	150	100%	100%	Compliant
A1_08_002	Bedroom 1	100	100%	100%	Compliant
A1_08_002	Bedroom 2	100	100%	100%	Compliant
A1_08_002	Bedroom 3	100	100%	100%	Compliant
A1_08_002	LKD	200	100%	100%	Compliant
A1_08_002	Snug Room	150	100%	100%	Compliant

\* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 24.

\*\* Under the BR 209 study the SDA has been calculated with indicative trees represented accounting for annual foliage.

\*\*\* The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 28.

For floor plans of the assessed units please refer to section D.1 on page 86.

#### D.4.9 SDA Results: Block A2 -Level 00 and 01 Mezzanine

Table No. D.4.9 - SDA Results:					
Unit Number	Room Description	Target Lux*	% of area above target Lux* (recommendation >50%)		Compliance with BR 209 Criteria*
			Without Trees***	With Trees**	
A2_00_001	Bedroom 1	100	100%	100%	Compliant
A2_00_001	LKD	200	25%	6%	Non-compliant
A2_00_002	Bedroom 1	100	64%	35%	Trees affecting compliance
A2_00_002	Bedroom 2	100	100%	100%	Compliant
A2_00_002	LKD	200	38%	28%	Non-compliant
A2_00_003	Bedroom 1	100	100%	100%	Compliant
A2_00_003	Bedroom 2	100	100%	100%	Compliant
A2_00_003	LKD	200	92%	74%	Compliant
A2_00_004	Bedroom 1	100	100%	62%	Compliant
A2_00_004	Bedroom 2	100	57%	19%	Trees affecting compliance
A2_00_004	LKD	200	90%	63%	Compliant
A2_00_005	Bedroom 1	100	100%	97%	Compliant
A2_00_005	Bedroom 2	100	100%	100%	Compliant
A2_00_005	Bedroom 3	100	100%	83%	Compliant
A2_00_005	LKD	200	68%	57%	Compliant
A2_M01_001	Bedroom 1	100	100%	100%	Compliant
A2_M01_001	Bedroom 2	100	100%	100%	Compliant
A2_M01_001	LKD	200	39%	34%	Non-compliant
A2_M01_002	Bedroom 1	100	100%	100%	Compliant
A2_M01_002	Bedroom 2	100	87%	66%	Compliant
A2_M01_002	LKD	200	43%	36%	Non-compliant
A2_M01_003	Bedroom 1	100	100%	100%	Compliant
A2_M01_003	Bedroom 2	100	100%	100%	Compliant
A2_M01_003	LKD	200	99%	92%	Compliant
A2_M01_004	Bedroom 1	100	100%	100%	Compliant
A2_M01_004	LKD	200	41%	32%	Non-compliant
A2_M01_005	Bedroom 1	100	100%	93%	Compliant
A2_M01_005	Bedroom 2	100	78%	50%	Compliant
A2_M01_005	LKD	200	95%	83%	Compliant
A2_M01_006	Bedroom 1	100	100%	100%	Compliant
A2_M01_006	Bedroom 2	100	100%	100%	Compliant
A2_M01_006	Bedroom 3	100	100%	100%	Compliant
A2_M01_006	LKD	200	71%	67%	Compliant

\* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 24.

\*\* Under the BR 209 study the SDA has been calculated with indicative trees represented accounting for annual foliage.

\*\*\* The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 28.

For floor plans of the assessed units please refer to section D.1 on page 86.

#### D.4.10 SDA Results: Block A2 -Level 01

Table No. D.4.10 - SDA Results:

Unit Number	Room Description	Target Lux*	% of area above target Lux* (recommendation >50%)		Compliance with BR 209 Criteria*
			Without Trees***	With Trees**	
A2_01_001	Bedroom 1	100	100%	100%	Compliant
A2_01_001	LKD	200	30%	29%	Non-compliant
A2_01_002	Bedroom 1	100	99%	99%	Compliant
A2_01_002	Bedroom 2	100	91%	88%	Compliant
A2_01_002	LKD	200	50%	46%	Trees affecting compliance
A2_01_003	Bedroom 1	100	100%	100%	Compliant
A2_01_003	Bedroom 2	100	100%	100%	Compliant
A2_01_003	LKD	200	100%	99%	Compliant
A2_01_004	Bedroom 1	100	100%	100%	Compliant
A2_01_004	Bedroom 2	100	100%	100%	Compliant
A2_01_004	LKD	200	89%	79%	Compliant
A2_01_005	Bedroom 1	100	100%	100%	Compliant
A2_01_005	Bedroom 2	100	66%	60%	Compliant
A2_01_005	LKD	200	40%	40%	Non-compliant
A2_01_006	Bedroom 1	100	100%	100%	Compliant
A2_01_006	Bedroom 2	100	100%	100%	Compliant
A2_01_006	LKD	200	39%	38%	Non-compliant
A2_01_007	Bedroom 1	100	100%	100%	Compliant
A2_01_007	Bedroom 2	100	100%	100%	Compliant
A2_01_007	Bedroom 3	100	100%	100%	Compliant
A2_01_007	LKD	200	65%	64%	Compliant
A2_01_008	Bedroom 1	100	100%	100%	Compliant
A2_01_008	Bedroom 2	100	100%	100%	Compliant
A2_01_008	Bedroom 3	100	100%	100%	Compliant
A2_01_008	LKD	200	71%	70%	Compliant
A2_01_009	Bedroom 1	100	100%	100%	Compliant
A2_01_009	LKD	200	33%	32%	Non-compliant

\* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 24.

\*\* Under the BR 209 study the SDA has been calculated with indicative trees represented accounting for annual foliage.

\*\*\* The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 28.

For floor plans of the assessed units please refer to section D.1 on page 86.

### D.4.11 SDA Results: Block A2 -Level 02

Table No. D.4.11 - SDA Results:					
Unit Number	Room Description	Target Lux*	% of area above target Lux* (recommendation >50%)		Compliance with BR 209 Criteria*
			Without Trees***	With Trees**	
A2_02_001	Bedroom 1	100	100%	100%	Compliant
A2_02_001	LKD	200	33%	32%	Non-compliant
A2_02_002	Bedroom 1	100	100%	100%	Compliant
A2_02_002	Bedroom 2	100	99%	99%	Compliant
A2_02_002	LKD	200	52%	50%	Compliant
A2_02_003	Bedroom 1	100	100%	100%	Compliant
A2_02_003	Bedroom 2	100	100%	100%	Compliant
A2_02_003	LKD	200	100%	100%	Compliant
A2_02_004	Bedroom 1	100	100%	100%	Compliant
A2_02_004	Bedroom 2	100	100%	100%	Compliant
A2_02_004	LKD	200	99%	98%	Compliant
A2_02_005	Bedroom 1	100	100%	100%	Compliant
A2_02_005	Bedroom 2	100	99%	99%	Compliant
A2_02_005	LKD	200	50%	47%	Trees affecting compliance
A2_02_006	Bedroom 1	100	100%	100%	Compliant
A2_02_006	LKD	200	43%	43%	Non-compliant
A2_02_007	Bedroom 1	100	100%	100%	Compliant
A2_02_007	LKD	200	40%	40%	Non-compliant
A2_02_008	Bedroom 1	100	100%	100%	Compliant
A2_02_008	Bedroom 2	100	100%	100%	Compliant
A2_02_008	Bedroom 3	100	100%	100%	Compliant
A2_02_008	LKD	200	69%	68%	Compliant
A2_02_009	Bedroom 1	100	100%	100%	Compliant
A2_02_009	Bedroom 2	100	100%	100%	Compliant
A2_02_009	Bedroom 3	100	100%	100%	Compliant
A2_02_009	LKD	200	73%	72%	Compliant
A2_02_010	Bedroom 1	100	100%	100%	Compliant
A2_02_010	LKD	200	35%	33%	Non-compliant

\* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 24.

\*\* Under the BR 209 study the SDA has been calculated with indicative trees represented accounting for annual foliage.

\*\*\* The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 28.

For floor plans of the assessed units please refer to section D.1 on page 86.

#### D.4.12 SDA Results: Block A2 -Level 03

Table No. D.4.12 - SDA Results:

Unit Number	Room Description	Target Lux*	% of area above target Lux* (recommendation >50%)		Compliance with BR 209 Criteria*
			Without Trees***	With Trees**	
A2_03_001	Bedroom 1	100	100%	100%	Compliant
A2_03_001	LKD	200	41%	40%	Non-compliant
A2_03_002	Bedroom 1	100	100%	100%	Compliant
A2_03_002	Bedroom 2	100	100%	100%	Compliant
A2_03_002	LKD	200	54%	54%	Compliant
A2_03_003	Bedroom 1	100	100%	100%	Compliant
A2_03_003	Bedroom 2	100	100%	100%	Compliant
A2_03_003	LKD	200	100%	100%	Compliant
A2_03_004	Bedroom 1	100	100%	100%	Compliant
A2_03_004	Bedroom 2	100	100%	100%	Compliant
A2_03_004	LKD	200	100%	100%	Compliant
A2_03_005	Bedroom 1	100	100%	100%	Compliant
A2_03_005	Bedroom 2	100	100%	100%	Compliant
A2_03_005	LKD	200	54%	54%	Compliant
A2_03_006	Bedroom 1	100	100%	100%	Compliant
A2_03_006	LKD	200	50%	50%	Compliant
A2_03_007	Bedroom 1	100	100%	100%	Compliant
A2_03_007	LKD	200	46%	45%	Non-compliant
A2_03_008	Bedroom 1	100	100%	100%	Compliant
A2_03_008	Bedroom 2	100	100%	100%	Compliant
A2_03_008	Bedroom 3	100	100%	100%	Compliant
A2_03_008	LKD	200	71%	70%	Compliant
A2_03_009	Bedroom 1	100	100%	100%	Compliant
A2_03_009	Bedroom 2	100	100%	100%	Compliant
A2_03_009	Bedroom 3	100	100%	100%	Compliant
A2_03_009	LKD	200	74%	74%	Compliant
A2_03_010	Bedroom 1	100	100%	100%	Compliant
A2_03_010	LKD	200	36%	36%	Non-compliant

\* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 24.

\*\* Under the BR 209 study the SDA has been calculated with indicative trees represented accounting for annual foliage.

\*\*\* The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 28.

For floor plans of the assessed units please refer to section D.1 on page 86.

### D.4.13 SDA Results: Block A2 -Level 04

Table No. D.4.13 - SDA Results:					
Unit Number	Room Description	Target Lux*	% of area above target Lux* (recommendation >50%)		Compliance with BR 209 Criteria*
			Without Trees***	With Trees**	
A2_04_001	Bedroom 1	100	100%	100%	Compliant
A2_04_001	LKD	200	47%	46%	Non-compliant
A2_04_002	Bedroom 1	100	100%	100%	Compliant
A2_04_002	Bedroom 2	100	100%	100%	Compliant
A2_04_002	LKD	200	59%	58%	Compliant
A2_04_003	Bedroom 1	100	100%	100%	Compliant
A2_04_003	Bedroom 2	100	100%	100%	Compliant
A2_04_003	LKD	200	100%	100%	Compliant
A2_04_004	Bedroom 1	100	100%	100%	Compliant
A2_04_004	Bedroom 2	100	100%	100%	Compliant
A2_04_004	LKD	200	100%	100%	Compliant
A2_04_005	Bedroom 1	100	100%	100%	Compliant
A2_04_005	Bedroom 2	100	100%	100%	Compliant
A2_04_005	LKD	200	57%	56%	Compliant
A2_04_006	Bedroom 1	100	100%	100%	Compliant
A2_04_006	LKD	200	55%	54%	Compliant
A2_04_007	Bedroom 1	100	100%	100%	Compliant
A2_04_007	LKD	200	50%	50%	Compliant
A2_04_008	Bedroom 1	100	100%	100%	Compliant
A2_04_008	Bedroom 2	100	100%	100%	Compliant
A2_04_008	Bedroom 3	100	100%	100%	Compliant
A2_04_008	LKD	200	72%	71%	Compliant
A2_04_009	Bedroom 1	100	100%	100%	Compliant
A2_04_009	Bedroom 2	100	100%	100%	Compliant
A2_04_009	Bedroom 3	100	100%	100%	Compliant
A2_04_009	LKD	200	75%	75%	Compliant
A2_04_010	Bedroom 1	100	100%	100%	Compliant
A2_04_010	LKD	200	40%	39%	Non-compliant

\* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 24.

\*\* Under the BR 209 study the SDA has been calculated with indicative trees represented accounting for annual foliage.

\*\*\* The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 28.

For floor plans of the assessed units please refer to section D.1 on page 86.

#### D.4.14 SDA Results: Block A2 -Level 05

Table No. D.4.14 - SDA Results:					
Unit Number	Room Description	Target Lux*	% of area above target Lux* (recommendation >50%)		Compliance with BR 209 Criteria*
			Without Trees***	With Trees**	
A2_05_001	Bedroom 1	100	100%	100%	Compliant
A2_05_001	LKD	200	56%	55%	Compliant
A2_05_002	Bedroom 1	100	100%	100%	Compliant
A2_05_002	Bedroom 2	100	100%	100%	Compliant
A2_05_002	LKD	200	63%	63%	Compliant
A2_05_003	Bedroom 1	100	100%	100%	Compliant
A2_05_003	Bedroom 2	100	100%	100%	Compliant
A2_05_003	LKD	200	100%	100%	Compliant
A2_05_004	Bedroom 1	100	100%	100%	Compliant
A2_05_004	Bedroom 2	100	100%	100%	Compliant
A2_05_004	LKD	200	100%	100%	Compliant
A2_05_005	Bedroom 1	100	100%	100%	Compliant
A2_05_005	Bedroom 2	100	100%	100%	Compliant
A2_05_005	LKD	200	58%	58%	Compliant
A2_05_006	Bedroom 1	100	100%	100%	Compliant
A2_05_006	LKD	200	59%	57%	Compliant
A2_05_007	Bedroom 1	100	100%	100%	Compliant
A2_05_007	LKD	200	52%	52%	Compliant
A2_05_008	Bedroom 1	100	100%	100%	Compliant
A2_05_008	Bedroom 2	100	100%	100%	Compliant
A2_05_008	Bedroom 3	100	100%	100%	Compliant
A2_05_008	LKD	200	73%	72%	Compliant
A2_05_009	Bedroom 1	100	100%	100%	Compliant
A2_05_009	Bedroom 2	100	100%	100%	Compliant
A2_05_009	Bedroom 3	100	100%	100%	Compliant
A2_05_009	LKD	200	76%	76%	Compliant
A2_05_010	Bedroom 1	100	100%	100%	Compliant
A2_05_010	LKD	200	45%	45%	Non-compliant

\* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 24.

\*\* Under the BR 209 study the SDA has been calculated with indicative trees represented accounting for annual foliage.

\*\*\* The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 28.

For floor plans of the assessed units please refer to section D.1 on page 86.

#### D.4.15 SDA Results: Block A2 -Level 06

Table No. D.4.15 - SDA Results:

Unit Number	Room Description	Target Lux*	% of area above target Lux* (recommendation >50%)		Compliance with BR 209 Criteria*
			Without Trees***	With Trees**	
A2_06_001	Bedroom 1	100	100%	100%	Compliant
A2_06_001	LKD	200	65%	65%	Compliant
A2_06_002	Bedroom 1	100	100%	100%	Compliant
A2_06_002	Bedroom 2	100	100%	100%	Compliant
A2_06_002	LKD	200	100%	100%	Compliant
A2_06_003	Bedroom 1	100	100%	100%	Compliant
A2_06_003	Bedroom 2	100	100%	100%	Compliant
A2_06_003	LKD	200	100%	100%	Compliant
A2_06_004	Bedroom 1	100	100%	100%	Compliant
A2_06_004	LKD	200	62%	62%	Compliant
A2_06_005	Bedroom 1	100	100%	100%	Compliant
A2_06_005	LKD	200	55%	54%	Compliant
A2_06_006	Bedroom 1	100	100%	100%	Compliant
A2_06_006	Bedroom 2	100	100%	100%	Compliant
A2_06_006	Bedroom 3	100	100%	100%	Compliant
A2_06_006	LKD	200	74%	73%	Compliant
A2_06_007	Bedroom 1	100	100%	100%	Compliant
A2_06_007	Bedroom 2	100	100%	100%	Compliant
A2_06_007	Bedroom 3	100	100%	100%	Compliant
A2_06_007	LKD	200	77%	77%	Compliant
A2_06_008	Bedroom 1	100	100%	100%	Compliant
A2_06_008	LKD	200	51%	51%	Compliant

\* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 24.

\*\* Under the BR 209 study the SDA has been calculated with indicative trees represented accounting for annual foliage.

\*\*\* The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 28.

For floor plans of the assessed units please refer to section D.1 on page 86.

### D.4.16 SDA Results: Block A2 -Level 07 and 08

Table No. D.4.16 - SDA Results:					
Unit Number	Room Description	Target Lux*	% of area above target Lux* (recommendation >50%)		Compliance with BR 209 Criteria*
			Without Trees***	With Trees**	
A2_07_001	Bedroom 1	100	79%	79%	Compliant
A2_07_001	Bedroom 1	100	100%	100%	Compliant
A2_07_001	Bedroom 3	100	100%	100%	Compliant
A2_07_001	LKD	200	63%	62%	Compliant
A2_07_002	Bedroom 1	100	100%	100%	Compliant
A2_07_002	Bedroom 2	100	100%	100%	Compliant
A2_07_002	LKD	200	100%	100%	Compliant
A2_07_003	Bedroom 1	100	100%	100%	Compliant
A2_07_003	Bedroom 2	100	100%	100%	Compliant
A2_07_003	LKD	200	100%	100%	Compliant
A2_07_004	Bedroom 1	100	100%	100%	Compliant
A2_07_004	LKD	200	65%	65%	Compliant
A2_07_005	Bedroom 1	100	100%	100%	Compliant
A2_07_005	LKD	200	58%	56%	Compliant
A2_07_006	Bedroom 1	100	100%	100%	Compliant
A2_07_006	Bedroom 2	100	100%	100%	Compliant
A2_07_006	Bedroom 3	100	100%	100%	Compliant
A2_07_006	LKD	200	75%	74%	Compliant
A2_07_007	Bedroom 1	100	100%	100%	Compliant
A2_07_007	Bedroom 2	100	100%	100%	Compliant
A2_07_007	Bedroom 3	100	100%	100%	Compliant
A2_07_007	LKD	200	80%	80%	Compliant
A2_08_001	Bedroom 1	100	80%	80%	Compliant
A2_08_001	Bedroom 1	100	100%	100%	Compliant
A2_08_001	Bedroom 3	100	100%	100%	Compliant
A2_08_001	LKD	200	100%	100%	Compliant
A2_08_002	Bedroom 1	100	100%	100%	Compliant
A2_08_002	Bedroom 1	100	100%	100%	Compliant
A2_08_002	Bedroom 3	100	100%	100%	Compliant
A2_08_002	LKD	200	100%	100%	Compliant
A2_08_003	Bedroom 1	100	100%	100%	Compliant
A2_08_003	Bedroom 2	100	100%	100%	Compliant
A2_08_003	Bedroom 3	100	100%	100%	Compliant
A2_08_003	LKD	200	79%	79%	Compliant
A2_08_004	Bedroom 1	100	100%	100%	Compliant
A2_08_004	Bedroom 2	100	100%	100%	Compliant
A2_08_004	Bedroom 3	100	100%	100%	Compliant
A2_08_004	LKD	200	88%	87%	Compliant

\* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 24.

\*\* Under the BR 209 study the SDA has been calculated with indicative trees represented accounting for annual foliage.

\*\*\* The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 28.

For floor plans of the assessed units please refer to section D.1 on page 86.

#### D.4.17 SDA Results: Block A2 -Level 09

Table No. D.4.17 - SDA Results:

Unit Number	Room Description	Target Lux*	% of area above target Lux* (recommendation >50%)		Compliance with BR 209 Criteria*
			Without Trees***	With Trees**	
A2_09_001	Bedroom 1	100	100%	100%	Compliant
A2_09_001	Bedroom 2	100	100%	100%	Compliant
A2_09_001	Bedroom 3	100	100%	100%	Compliant
A2_09_001	LKD	200	100%	100%	Compliant
A2_09_001	Snug Room	150	100%	100%	Compliant
A2_09_002	Bedroom 1	100	100%	100%	Compliant
A2_09_002	Bedroom 2	100	100%	100%	Compliant
A2_09_002	Bedroom 3	100	100%	100%	Compliant
A2_09_002	LKD	200	100%	100%	Compliant
A2_09_002	Snug Room	150	100%	100%	Compliant

\* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 24.

\*\* Under the BR 209 study the SDA has been calculated with indicative trees represented accounting for annual foliage.

\*\*\* The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 28.

For floor plans of the assessed units please refer to section D.1 on page 86.

#### D.4.18 SDA Results: Townhouses (West)

Table No. D.4.18 - SDA Results:

Unit Number	Room Description	Target Lux*	% of area above target Lux* (recommendation >50%)		Compliance with BR 209 Criteria*
			Without Trees***	With Trees**	
P_01_001	Bedroom 1	100	100%	100%	Compliant
P_01_001	Bedroom 2	100	100%	100%	Compliant
P_01_001	Bedroom 3	100	100%	100%	Compliant
P_01_001	Bedroom 4	100	100%	100%	Compliant
P_01_001	LKD	200	100%	100%	Compliant
P_01_002	Bedroom 1	100	100%	100%	Compliant
P_01_002	Bedroom 2	100	100%	100%	Compliant
P_01_002	Bedroom 3	100	100%	100%	Compliant
P_01_002	Bedroom 4	100	100%	100%	Compliant
P_01_002	LKD	200	100%	100%	Compliant
P_01_003	Bedroom 1	100	100%	100%	Compliant
P_01_003	Bedroom 2	100	100%	100%	Compliant
P_01_003	Bedroom 3	100	100%	100%	Compliant
P_01_003	Bedroom 4	100	100%	100%	Compliant
P_01_003	LKD	200	100%	100%	Compliant
P_01_004	Bedroom 1	100	100%	100%	Compliant
P_01_004	Bedroom 2	100	100%	100%	Compliant
P_01_004	Bedroom 3	100	100%	100%	Compliant
P_01_004	Bedroom 4	100	100%	100%	Compliant
P_01_004	LKD	200	100%	100%	Compliant
P_01_005	Bedroom 1	100	100%	100%	Compliant
P_01_005	Bedroom 2	100	100%	100%	Compliant
P_01_005	Bedroom 3	100	100%	100%	Compliant
P_01_005	Bedroom 4	100	100%	100%	Compliant
P_01_005	LKD	200	100%	99%	Compliant

\* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 24.

\*\* Under the BR 209 study the SDA has been calculated with indicative trees represented accounting for annual foliage.

\*\*\* The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 28.

For floor plans of the assessed units please refer to section D.1 on page 86.

#### D.4.19 SDA Results: Townhouses (East)

Table No. D.4.19 - SDA Results:

Unit Number	Room Description	Target Lux*	% of area above target Lux* (recommendation >50%)		Compliance with BR 209 Criteria*
			Without Trees***	With Trees**	
P_M01_001	Bedroom 1	100	100%	100%	Compliant
P_M01_001	Bedroom 2	100	100%	68%	Compliant
P_M01_001	Bedroom 3	100	100%	100%	Compliant
P_M01_001	Bedroom 4	100	100%	100%	Compliant
P_M01_001	Bedroom 5	100	100%	100%	Compliant
P_M01_001	LKD	200	100%	100%	Compliant
P_M01_002	Bedroom 1	100	100%	99%	Compliant
P_M01_002	Bedroom 2	100	100%	99%	Compliant
P_M01_002	Bedroom 3	100	100%	100%	Compliant
P_M01_002	Bedroom 4	100	100%	100%	Compliant
P_M01_002	Bedroom 5	100	100%	100%	Compliant
P_M01_002	LKD	200	100%	100%	Compliant
P_M01_003	Bedroom 1	100	100%	100%	Compliant
P_M01_003	Bedroom 2	100	100%	84%	Compliant
P_M01_003	Bedroom 3	100	100%	100%	Compliant
P_M01_003	Bedroom 4	100	100%	100%	Compliant
P_M01_003	Bedroom 5	100	100%	100%	Compliant
P_M01_003	LKD	200	100%	100%	Compliant
P_M01_004	Bedroom 1	100	100%	97%	Compliant
P_M01_004	Bedroom 2	100	100%	73%	Compliant
P_M01_004	Bedroom 3	100	100%	100%	Compliant
P_M01_004	Bedroom 4	100	100%	100%	Compliant
P_M01_004	Bedroom 5	100	100%	100%	Compliant
P_M01_004	LKD	200	100%	100%	Compliant

\* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 24.

\*\* Under the BR 209 study the SDA has been calculated with indicative trees represented accounting for annual foliage.

\*\*\* The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 28.

For floor plans of the assessed units please refer to section D.1 on page 86.

## D.5 Sunlight Exposure (SE) in Proposed Units

Below is an example of the table used to describe the SE performance of proposed habitable rooms.

Table Example. D.5 - Scheme Performance Sunlight Exposure							
Unit Number	Room Description	Deciduous Trees as Opaque Objects			Without Deciduous Trees		
		SE Hours on March 21st	Level of SE on March 21st	Unit compliance based on highest performing room	SE Hours on March 21st	Level of SE on March 21st	Unit compliance based on highest performing room
A	B	C	D	E	F	G	H

### 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: SE Hours on March 21st (Deciduous Trees as Opaque Objects)

This column will state the number of hours the assessed room can expect to receive on March 21st with the assessment carried out with deciduous trees as opaque objects.

### D: Level of SE on March 21st (Deciduous Trees as Opaque Objects)

BR 209 recommends a minimum sunlight exposure of 1.5 hours for a proposed unit with preference given to main living rooms. BR 209 categorise sunlight exposure as minimum, medium and high, this column will categorise the level of sunlight exposure with deciduous trees as opaque objects based on the following:

- Less than 1.5 hours: *Below minimum*,
- Between 1.5 hours and 3 hours: *Minimum*
- Between 3 hours and 4 hours: *Medium*
- More than 4 hours: *High*

### E: Unit compliance based on highest performing room (Deciduous Trees as Opaque Objects)

A proposed unit is considered to be compliant provided any habitable room within the unit is capable of receiving at least 1.5 hours of sunlight on the assessment date. This column will identify the highest performing room within a unit and state compliance for the associated unit based on that room with the assessment carried out with deciduous trees as opaque objects.

Typically unit compliance will be stated for the best performing room per unit only, with lesser performing rooms indicated with a dash (-).

### F: SE Hours on March 21st (Without Deciduous Trees)

This column will state the number of hours the assessed room can expect to receive on March 21st with the assessment carried out without deciduous trees.

### G: Level of SE on March 21st (Without Deciduous Trees)

BR 209 recommends a minimum sunlight exposure of 1.5 hours for a proposed unit with preference given to main living rooms. BR 209 categorise sunlight exposure as minimum, medium and high, this column will categorise the level of sunlight exposure without deciduous trees using the same criteria as the study with deciduous trees as opaque objects.

### H: Unit compliance based on highest performing room (Without Deciduous Trees)

A proposed unit is considered to be compliant provided any habitable room within the unit is capable of receiving at least 1.5 hours of sunlight on March 21st. This column will identify the highest performing room within a unit and state compliance for the associated unit based on that room with the assessment carried out without deciduous trees. Typically only one room per unit will be populated in this column, with lesser performing rooms indicated with a dash (-).

It should be noted that the figures displayed in the table of results have been rounded off. A manual calculation of these figures may yield a negligible difference and should not be considered an error.

## D.6 Sun On Ground (SOG) in Proposed Outdoor Amenity Areas

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

Table Example. D.6 - Scheme Performance SOG					
Assigned Area Number	Assessed Area	Area Capable of Receiving 2 Hours of Sunlight on March 21st	Recommended Minimum	Level of Compliance with BRE Guidelines	Meets BR 209 Criteria
A	B	C	D	E	F

### A: Assigned Area Number

This column indicates the number that 3DDB have assigned to the assessed areas, which is included for the sole purpose of aiding in the identification of the corresponding space shown in the corresponding figure.

### B: Assessed Area

This column identifies the assessed garden/amenity area.

### C: 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.

### D: 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%.

### E: 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.

### F: Meets BR 209 Criteria

This column states if the assessed area achieves the recommended level of sunlight on March 21st as per BR 209.

It should be noted that the figures displayed in the table of results have been rounded off. A manual calculation of these figures may yield a negligible difference and should not be considered an error.

## D.6.1 SE Results: Block A1 -Level 00 and 01 Mezzanine

Table No. D.6.1 - Sunlight Exposure Results:

Unit Number	Room Description	Deciduous Trees as Opaque Objects*			Without Deciduous Trees*		
		SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**
Communal	Communal	1.30	Below Minimum	Non-Compliant	1.30	Below Minimum	Non-Compliant
A1_00_001	Bedroom 1	0.00	Below Minimum	Non-Compliant	0.00	Below Minimum	Non-Compliant
A1_00_001	LKD	0.00	Below Minimum	Non-Compliant	0.00	Below Minimum	Non-Compliant
A1_00_002	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
A1_00_002	Bedroom 2	2.50	Minimum	Compliant	2.50	Minimum	Compliant
A1_00_002	Bedroom 3	0.00	Below Minimum	-	0.00	Below Minimum	-
A1_00_002	LKD	0.00	Below Minimum	-	0.00	Below Minimum	-
A1_00_003	Bedroom 1	1.90	Minimum	-	2.20	Minimum	-
A1_00_003	Bedroom 2	0.40	Below Minimum	-	0.70	Below Minimum	-
A1_00_003	LKD	2.50	Minimum	Compliant	2.50	Minimum	Compliant
A1_M01_001	Bedroom 1	4.30	High	-	5.60	High	-
A1_M01_001	LKD	5.20	High	Compliant	5.70	High	Compliant
A1_M01_002	Bedroom 1	4.20	High	Compliant	5.60	High	Compliant
A1_M01_002	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
A1_M01_002	LKD	0.80	Below Minimum	-	1.50	Minimum	-
A1_M01_003	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
A1_M01_003	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
A1_M01_003	LKD	1.20	Below Minimum	Non-Compliant	1.20	Below Minimum	Non-Compliant
A1_M01_004	Bedroom 1	1.20	Below Minimum	Non-Compliant	1.20	Below Minimum	Non-Compliant
A1_M01_004	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
A1_M01_004	LKD	0.00	Below Minimum	-	0.00	Below Minimum	-
A1_M01_005	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
A1_M01_005	Bedroom 2	2.50	Minimum	Compliant	2.50	Minimum	Compliant
A1_M01_005	Bedroom 3	0.00	Below Minimum	-	0.00	Below Minimum	-
A1_M01_005	LKD	0.00	Below Minimum	-	0.00	Below Minimum	-
A1_M01_006	Bedroom 1	2.20	Minimum	-	2.20	Minimum	-
A1_M01_006	Bedroom 2	0.80	Below Minimum	-	0.80	Below Minimum	-
A1_M01_006	LKD	2.50	Minimum	Compliant	2.50	Minimum	Compliant

\* Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.  
 \*\* The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 31.  
 \*\*\* For the interpretation of levels of Sunlight Exposure please refer to "3.3 Definition of Levels of Sunlight Exposure" on page 15.  
 For floor plans of the assessed units please refer to section D.1 on page 86.

## D.6.2 SE Results: Block A1 -Level 01

Table No. D.6.2 - Sunlight Exposure Results:

Unit Number	Room Description	Deciduous Trees as Opaque Objects*			Without Deciduous Trees*		
		SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**
A1_01_001	Bedroom 1	7.30	High	-	7.30	High	-
A1_01_001	Bedroom 2	0.60	Below Minimum	-	0.60	Below Minimum	-
A1_01_001	LKD	8.40	High	Compliant	8.40	High	Compliant
A1_01_002	Bedroom 1	5.20	High	-	5.80	High	-
A1_01_002	Bedroom 2	7.30	High	-	7.30	High	-
A1_01_002	LKD	8.60	High	Compliant	8.70	High	Compliant
A1_01_003	Bedroom 1	5.60	High	Compliant	5.60	High	Compliant
A1_01_003	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
A1_01_003	LKD	1.30	Below Minimum	-	1.30	Below Minimum	-
A1_01_004	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
A1_01_004	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
A1_01_004	LKD	1.20	Below Minimum	Non-Compliant	1.20	Below Minimum	Non-Compliant
A1_01_005	Bedroom 1	1.20	Below Minimum	Non-Compliant	1.20	Below Minimum	Non-Compliant
A1_01_005	LKD	0.10	Below Minimum	-	0.10	Below Minimum	-
A1_01_006	Bedroom 1	0.00	Below Minimum	Non-Compliant	0.00	Below Minimum	Non-Compliant
A1_01_006	LKD	0.00	Below Minimum	Non-Compliant	0.00	Below Minimum	Non-Compliant
A1_01_007	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
A1_01_007	Bedroom 2	2.50	Minimum	Compliant	2.50	Minimum	Compliant
A1_01_007	Bedroom 3	0.00	Below Minimum	-	0.00	Below Minimum	-
A1_01_007	LKD	0.00	Below Minimum	-	0.00	Below Minimum	-
A1_01_008	Bedroom 1	5.80	High	-	5.80	High	-
A1_01_008	Bedroom 2	2.50	Minimum	-	2.50	Minimum	-
A1_01_008	Bedroom 3	6.60	High	-	6.60	High	-
A1_01_008	LKD	7.40	High	Compliant	7.40	High	Compliant
A1_01_009	Bedroom 1	7.60	High	Compliant	7.60	High	Compliant
A1_01_009	Bedroom 2	1.80	Minimum	-	1.80	Minimum	-
A1_01_009	LKD	6.60	High	-	6.60	High	-

\* Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.

\*\* The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 31.

\*\*\* For the interpretation of levels of Sunlight Exposure please refer to "3.3 Definition of Levels of Sunlight Exposure" on page 15.

For floor plans of the assessed units please refer to section D.1 on page 86.

### D.6.3 SE Results: Block A1 -Level 02

Table No. D.6.3 - Sunlight Exposure Results:							
Unit Number	Room Description	Deciduous Trees as Opaque Objects*			Without Deciduous Trees*		
		SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**
A1_02_001	Bedroom 1	8.20	High	Compliant	8.20	High	Compliant
A1_02_001	LKD	2.60	Minimum	-	2.60	Minimum	-
A1_02_002	Bedroom 1	7.30	High	-	7.30	High	-
A1_02_002	Bedroom 2	0.60	Below Minimum	-	0.60	Below Minimum	-
A1_02_002	LKD	8.40	High	Compliant	8.40	High	Compliant
A1_02_003	Bedroom 1	5.80	High	-	5.80	High	-
A1_02_003	Bedroom 2	7.30	High	-	7.30	High	-
A1_02_003	LKD	8.70	High	Compliant	8.70	High	Compliant
A1_02_004	Bedroom 1	5.60	High	Compliant	5.60	High	Compliant
A1_02_004	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
A1_02_004	LKD	1.30	Below Minimum	-	1.30	Below Minimum	-
A1_02_005	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
A1_02_005	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
A1_02_005	LKD	1.20	Below Minimum	Non-Compliant	1.20	Below Minimum	Non-Compliant
A1_02_006	Bedroom 1	1.20	Below Minimum	Non-Compliant	1.20	Below Minimum	Non-Compliant
A1_02_006	LKD	0.10	Below Minimum	-	0.10	Below Minimum	-
A1_02_007	Bedroom 1	0.00	Below Minimum	Non-Compliant	0.00	Below Minimum	Non-Compliant
A1_02_007	LKD	0.00	Below Minimum	Non-Compliant	0.00	Below Minimum	Non-Compliant
A1_02_008	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
A1_02_008	Bedroom 2	2.50	Minimum	Compliant	2.50	Minimum	Compliant
A1_02_008	Bedroom 3	0.00	Below Minimum	-	0.00	Below Minimum	-
A1_02_008	LKD	0.00	Below Minimum	-	0.00	Below Minimum	-
A1_02_009	Bedroom 1	5.80	High	-	5.80	High	-
A1_02_009	Bedroom 2	2.50	Minimum	-	2.50	Minimum	-
A1_02_009	Bedroom 3	6.60	High	-	6.60	High	-
A1_02_009	LKD	7.40	High	Compliant	7.40	High	Compliant
A1_02_10	Bedroom 1	7.40	High	Compliant	7.40	High	Compliant
A1_02_10	LKD	2.10	Minimum	-	2.10	Minimum	-

\* Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.  
 \*\* The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 31.  
 \*\*\* For the interpretation of levels of Sunlight Exposure please refer to "3.3 Definition of Levels of Sunlight Exposure" on page 15.  
 For floor plans of the assessed units please refer to section D.1 on page 86.

#### D.6.4 SE Results: Block A1 -Level 03

Table No. D.6.4 - Sunlight Exposure Results:							
Unit Number	Room Description	Deciduous Trees as Opaque Objects*			Without Deciduous Trees*		
		SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**
A1_03_001	Bedroom 1	8.20	High	Compliant	8.20	High	Compliant
A1_03_001	LKD	2.60	Minimum	-	2.60	Minimum	-
A1_03_002	Bedroom 1	7.30	High	-	7.30	High	-
A1_03_002	Bedroom 2	0.60	Below Minimum	-	0.60	Below Minimum	-
A1_03_002	LKD	8.40	High	Compliant	8.40	High	Compliant
A1_03_003	Bedroom 1	5.80	High	-	5.80	High	-
A1_03_003	Bedroom 2	7.30	High	-	7.30	High	-
A1_03_003	LKD	8.70	High	Compliant	8.70	High	Compliant
A1_03_004	Bedroom 1	5.60	High	Compliant	5.60	High	Compliant
A1_03_004	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
A1_03_004	LKD	1.30	Below Minimum	-	1.30	Below Minimum	-
A1_03_005	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
A1_03_005	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
A1_03_005	LKD	1.20	Below Minimum	Non-Compliant	1.20	Below Minimum	Non-Compliant
A1_03_006	Bedroom 1	1.20	Below Minimum	Non-Compliant	1.20	Below Minimum	Non-Compliant
A1_03_006	LKD	0.10	Below Minimum	-	0.10	Below Minimum	-
A1_03_007	Bedroom 1	0.00	Below Minimum	Non-Compliant	0.00	Below Minimum	Non-Compliant
A1_03_007	LKD	0.00	Below Minimum	Non-Compliant	0.00	Below Minimum	Non-Compliant
A1_03_008	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
A1_03_008	Bedroom 2	2.50	Minimum	Compliant	2.50	Minimum	Compliant
A1_03_008	Bedroom 3	0.00	Below Minimum	-	0.00	Below Minimum	-
A1_03_008	LKD	0.00	Below Minimum	-	0.00	Below Minimum	-
A1_03_009	Bedroom 1	5.80	High	-	5.80	High	-
A1_03_009	Bedroom 2	2.50	Minimum	-	2.50	Minimum	-
A1_03_009	Bedroom 3	6.60	High	-	6.60	High	-
A1_03_009	LKD	7.40	High	Compliant	7.40	High	Compliant
A1_03_010	Bedroom 1	7.40	High	Compliant	7.40	High	Compliant
A1_03_010	LKD	2.10	Minimum	-	2.10	Minimum	-

\* Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.  
 \*\* The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 31.  
 \*\*\* For the interpretation of levels of Sunlight Exposure please refer to "3.3 Definition of Levels of Sunlight Exposure" on page 15.  
 For floor plans of the assessed units please refer to section D.1 on page 86.

### D.6.5 SE Results: Block A1 -Level 04

Table No. D.6.5 - Sunlight Exposure Results:							
Unit Number	Room Description	Deciduous Trees as Opaque Objects*			Without Deciduous Trees*		
		SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**
A1_04_001	Bedroom 1	2.70	Minimum	Compliant	2.70	Minimum	Compliant
A1_04_001	LKD	1.50	Minimum	-	2.70	Minimum	Compliant
A1_04_002	Bedroom 1	7.30	High	-	7.30	High	-
A1_04_002	Bedroom 2	0.60	Below Minimum	-	0.60	Below Minimum	-
A1_04_002	LKD	8.50	High	Compliant	8.50	High	Compliant
A1_04_003	Bedroom 1	5.70	High	-	5.70	High	-
A1_04_003	Bedroom 2	7.30	High	-	7.30	High	-
A1_04_003	LKD	8.60	High	Compliant	8.60	High	Compliant
A1_04_004	Bedroom 1	5.60	High	Compliant	5.60	High	Compliant
A1_04_004	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
A1_04_004	LKD	1.30	Below Minimum	-	1.30	Below Minimum	-
A1_04_005	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
A1_04_005	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
A1_04_005	LKD	0.20	Below Minimum	Non-Compliant	5.40	High	Compliant
A1_04_006	Bedroom 1	1.40	Below Minimum	Non-Compliant	3.20	Medium	Compliant
A1_04_006	LKD	0.00	Below Minimum	-	0.00	Below Minimum	-
A1_04_007	Bedroom 2	2.50	Minimum	Compliant	2.50	Minimum	Compliant
A1_04_007	LKD	0.00	Below Minimum	-	0.00	Below Minimum	-
A1_04_008	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
A1_04_008	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
A1_04_008	Bedroom 3	0.00	Below Minimum	-	0.00	Below Minimum	-
A1_04_008	LKD	0.40	Below Minimum	Non-Compliant	0.70	Below Minimum	Non-Compliant
A1_04_009	Bedroom 1	1.50	Minimum	-	1.50	Minimum	-
A1_04_009	Bedroom 2	4.00	High	Compliant	4.80	High	Compliant
A1_04_009	Bedroom 3	0.10	Below Minimum	-	1.50	Minimum	-
A1_04_009	LKD	0.80	Below Minimum	-	1.20	Below Minimum	-
A1_04_010	Bedroom 1	1.60	Minimum	Compliant	2.70	Minimum	Compliant
A1_04_010	LKD	0.00	Below Minimum	-	0.80	Below Minimum	-

\* Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.  
 \*\* The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 31.  
 \*\*\* For the interpretation of levels of Sunlight Exposure please refer to "3.3 Definition of Levels of Sunlight Exposure" on page 15.  
 For floor plans of the assessed units please refer to section D.1 on page 86.

## D.6.6 SE Results: Block A1 -Level 05

Table No. D.6.6 - Sunlight Exposure Results:

Unit Number	Room Description	Deciduous Trees as Opaque Objects*			Without Deciduous Trees*		
		SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**
A1_05_001	Bedroom 1	6.50	High	-	7.10	High	-
A1_05_001	LKD	7.70	High	Compliant	7.70	High	Compliant
A1_05_002	Bedroom 1	3.70	Medium	-	3.70	Medium	-
A1_05_002	Bedroom 2	0.00	Below Minimum	-	5.40	High	Compliant
A1_05_002	LKD	4.10	High	Compliant	5.00	High	-
A1_05_003	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
A1_05_003	Bedroom 2	2.10	Minimum	-	2.20	Minimum	-
A1_05_003	LKD	4.60	High	Compliant	4.60	High	Compliant
A1_05_004	Bedroom 1	2.10	Minimum	Compliant	2.10	Minimum	Compliant
A1_05_004	LKD	0.00	Below Minimum	-	0.00	Below Minimum	-
A1_05_005	Bedroom 2	1.40	Below Minimum	Non-Compliant	1.40	Below Minimum	Non-Compliant
A1_05_005	LKD	0.00	Below Minimum	-	0.00	Below Minimum	-
A1_05_006	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
A1_05_006	Bedroom 2	0.70	Below Minimum	-	0.70	Below Minimum	-
A1_05_006	Bedroom 3	0.10	Below Minimum	-	0.10	Below Minimum	-
A1_05_006	LKD	1.60	Minimum	Compliant	1.60	Minimum	Compliant
A1_05_007	Bedroom 1	1.80	Minimum	-	2.10	Minimum	-
A1_05_007	Bedroom 2	3.20	Medium	Compliant	3.20	Medium	Compliant
A1_05_007	Bedroom 3	2.60	Minimum	-	2.60	Minimum	-
A1_05_007	LKD	1.80	Minimum	-	1.80	Minimum	-
A1_05_008	Bedroom 1	7.30	High	Compliant	7.30	High	Compliant
A1_05_008	LKD	1.70	Minimum	-	1.70	Minimum	-

\* Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.  
 \*\* The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 31.  
 \*\*\* For the interpretation of levels of Sunlight Exposure please refer to "3.3 Definition of Levels of Sunlight Exposure" on page 15.  
 For floor plans of the assessed units please refer to section D.1 on page 86.

### D.6.7 SE Results: Block A1 -Level 06

Table No. D.6.7 - Sunlight Exposure Results:							
Unit Number	Room Description	Deciduous Trees as Opaque Objects*			Without Deciduous Trees*		
		SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**
A1_06_001	Bedroom 1	5.90	High	-	5.90	High	-
A1_06_001	Bedroom 2	1.50	Minimum	-	1.50	Minimum	-
A1_06_001	Bedroom 3	7.30	High	Compliant	7.30	High	Compliant
A1_06_001	LKD	1.70	Minimum	-	1.70	Minimum	-
A1_06_002	Bedroom 1	1.50	Minimum	-	1.50	Minimum	-
A1_06_002	Bedroom 2	8.20	High	Compliant	8.20	High	Compliant
A1_06_002	LKD	5.80	High	-	5.80	High	-
A1_06_003	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
A1_06_003	Bedroom 2	1.60	Minimum	-	1.60	Minimum	-
A1_06_003	LKD	5.60	High	Compliant	5.60	High	Compliant
A1_06_004	Bedroom 1	5.30	High	Compliant	5.30	High	Compliant
A1_06_004	LKD	0.10	Below Minimum	-	0.10	Below Minimum	-
A1_06_005	Bedroom 2	2.10	Minimum	Compliant	2.10	Minimum	Compliant
A1_06_005	LKD	0.00	Below Minimum	-	0.00	Below Minimum	-
A1_06_006	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
A1_06_006	Bedroom 2	2.10	Minimum	Compliant	2.10	Minimum	Compliant
A1_06_006	Bedroom 3	0.00	Below Minimum	-	0.00	Below Minimum	-
A1_06_006	LKD	2.10	Minimum	Compliant	2.10	Minimum	Compliant
A1_06_007	Bedroom 1	7.30	High	Compliant	7.30	High	Compliant
A1_06_007	Bedroom 2	5.10	High	-	5.10	High	-
A1_06_007	Bedroom 3	4.40	High	-	4.40	High	-
A1_06_007	LKD	5.80	High	-	5.80	High	-

\* Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.  
 \*\* The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 31.  
 \*\*\* For the interpretation of levels of Sunlight Exposure please refer to "3.3 Definition of Levels of Sunlight Exposure" on page 15.  
 For floor plans of the assessed units please refer to section D.1 on page 86.

## D.6.8 SE Results: Block A1 -Level 07

Table No. D.6.8 - Sunlight Exposure Results:

Unit Number	Room Description	Deciduous Trees as Opaque Objects*			Without Deciduous Trees*		
		SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**
A1_07_001	Bedroom 1	2.50	Minimum	-	2.50	Minimum	-
A1_07_001	Bedroom 2	8.10	High	-	8.10	High	-
A1_07_001	Bedroom 3	0.90	Below Minimum	-	0.90	Below Minimum	-
A1_07_001	LKD	9.40	High	Compliant	9.40	High	Compliant
A1_07_002	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
A1_07_002	Bedroom 2	0.10	Below Minimum	-	0.10	Below Minimum	-
A1_07_002	LKD	1.20	Below Minimum	Non-Compliant	2.60	Minimum	Compliant
A1_07_002	LKD	0.00	Below Minimum	-	0.00	Below Minimum	-
A1_07_003	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
A1_07_003	Bedroom 2	1.60	Minimum	Compliant	1.60	Minimum	-
A1_07_003	Bedroom 3	0.00	Below Minimum	-	0.00	Below Minimum	-
A1_07_003	LKD	1.40	Below Minimum	-	2.10	Minimum	Compliant
A1_07_004	Bedroom 1	5.10	High	-	5.10	High	-
A1_07_004	Bedroom 2	1.30	Below Minimum	-	1.30	Below Minimum	-
A1_07_004	Bedroom 3	7.40	High	Compliant	7.40	High	Compliant
A1_07_004	LKD	3.00	Medium	-	3.00	Medium	-
A1_08_001	Bedroom 1	2.80	Minimum	-	2.80	Minimum	-
A1_08_001	Bedroom 2	3.70	Medium	-	3.70	Medium	-
A1_08_001	Bedroom 3	1.50	Minimum	-	1.50	Minimum	-
A1_08_001	LKD	7.40	High	-	7.40	High	-
A1_08_001	Snug Room	7.70	High	Compliant	7.70	High	Compliant
A1_08_002	Bedroom 1	0.80	Below Minimum	Non-Compliant	1.50	Minimum	Compliant
A1_08_002	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
A1_08_002	Bedroom 3	0.00	Below Minimum	-	0.00	Below Minimum	-
A1_08_002	LKD	0.00	Below Minimum	-	0.00	Below Minimum	-
A1_08_002	Snug Room	0.10	Below Minimum	-	0.10	Below Minimum	-

\* Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.  
 \*\* The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 31.  
 \*\*\* For the interpretation of levels of Sunlight Exposure please refer to "3.3 Definition of Levels of Sunlight Exposure" on page 15.  
 For floor plans of the assessed units please refer to section D.1 on page 86.

### D.6.9 SE Results: Block A2 -Level 00 and 01 Mezzanine

Table No. D.6.9 - Sunlight Exposure Results:							
Unit Number	Room Description	Deciduous Trees as Opaque Objects*			Without Deciduous Trees*		
		SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**
A2_00_001	Bedroom 1	3.20	Medium	Compliant	3.40	Medium	Compliant
A2_00_001	LKD	0.10	Below Minimum	-	1.50	Minimum	-
A2_00_002	Bedroom 1	0.60	Below Minimum	-	0.60	Below Minimum	-
A2_00_002	Bedroom 2	1.50	Minimum	-	2.70	Minimum	-
A2_00_002	LKD	1.60	Minimum	Compliant	4.30	High	Compliant
A2_00_003	Bedroom 1	0.00	Below Minimum	-	5.40	High	Compliant
A2_00_003	Bedroom 2	3.70	Medium	-	3.70	Medium	-
A2_00_003	LKD	3.80	Medium	Compliant	5.00	High	-
A2_00_004	Bedroom 1	0.30	Below Minimum	-	0.30	Below Minimum	-
A2_00_004	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
A2_00_004	LKD	0.60	Below Minimum	Non-Compliant	0.60	Below Minimum	Non-Compliant
A2_00_005	Bedroom 1	0.20	Below Minimum	-	0.70	Below Minimum	-
A2_00_005	Bedroom 2	2.50	Minimum	Compliant	2.50	Minimum	-
A2_00_005	Bedroom 3	0.80	Below Minimum	-	1.80	Minimum	-
A2_00_005	LKD	1.30	Below Minimum	-	4.20	High	Compliant
A2_M01_001	Bedroom 1	4.20	High	Compliant	4.20	High	Compliant
A2_M01_001	Bedroom 2	0.40	Below Minimum	-	1.50	Minimum	-
A2_M01_001	LKD	3.40	Medium	-	3.40	Medium	-
A2_M01_002	Bedroom 1	3.50	Medium	-	3.50	Medium	-
A2_M01_002	Bedroom 2	0.70	Below Minimum	-	0.70	Below Minimum	-
A2_M01_002	LKD	4.60	High	Compliant	4.90	High	Compliant
A2_M01_003	Bedroom 1	0.00	Below Minimum	-	5.60	High	-
A2_M01_003	Bedroom 2	4.40	High	-	4.40	High	-
A2_M01_003	LKD	4.80	High	Compliant	6.30	High	Compliant
A2_M01_004	Bedroom 1	4.30	High	Compliant	5.60	High	Compliant
A2_M01_004	LKD	0.50	Below Minimum	-	1.50	Minimum	-
A2_M01_005	Bedroom 1	0.30	Below Minimum	-	0.30	Below Minimum	-
A2_M01_005	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
A2_M01_005	LKD	2.50	Minimum	Compliant	2.50	Minimum	Compliant
A2_M01_006	Bedroom 1	1.50	Minimum	-	2.60	Minimum	-
A2_M01_006	Bedroom 2	2.50	Minimum	-	2.50	Minimum	-
A2_M01_006	Bedroom 3	3.50	Medium	-	3.70	Medium	-
A2_M01_006	LKD	4.60	High	Compliant	4.60	High	Compliant

\* Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.  
 \*\* The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 31.  
 \*\*\* For the interpretation of levels of Sunlight Exposure please refer to "3.3 Definition of Levels of Sunlight Exposure" on page 15.  
 For floor plans of the assessed units please refer to section D.1 on page 86.

### D.6.10 SE Results: Block A2 -Level 01

Table No. D.6.10 - Sunlight Exposure Results:							
Unit Number	Room Description	Deciduous Trees as Opaque Objects*			Without Deciduous Trees*		
		SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**
A2_01_001	Bedroom 1	4.00	High	Compliant	4.00	High	Compliant
A2_01_001	LKD	2.00	Minimum	-	2.00	Minimum	-
A2_01_002	Bedroom 1	3.50	Medium	-	3.50	Medium	-
A2_01_002	Bedroom 2	0.60	Below Minimum	-	0.60	Below Minimum	-
A2_01_002	LKD	4.70	High	Compliant	4.70	High	Compliant
A2_01_003	Bedroom 1	5.60	High	Compliant	5.60	High	-
A2_01_003	Bedroom 2	4.40	High	-	4.40	High	-
A2_01_003	LKD	5.00	High	-	6.40	High	Compliant
A2_01_004	Bedroom 1	5.00	High	Compliant	5.60	High	Compliant
A2_01_004	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
A2_01_004	LKD	1.30	Below Minimum	-	1.30	Below Minimum	-
A2_01_005	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
A2_01_005	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
A2_01_005	LKD	1.20	Below Minimum	Non-Compliant	1.20	Below Minimum	Non-Compliant
A2_01_006	Bedroom 1	1.20	Below Minimum	Non-Compliant	1.20	Below Minimum	Non-Compliant
A2_01_006	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
A2_01_006	LKD	0.00	Below Minimum	-	0.00	Below Minimum	-
A2_01_007	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
A2_01_007	Bedroom 2	2.50	Minimum	Compliant	2.50	Minimum	Compliant
A2_01_007	Bedroom 3	0.00	Below Minimum	-	0.00	Below Minimum	-
A2_01_007	LKD	0.00	Below Minimum	-	0.00	Below Minimum	-
A2_01_008	Bedroom 1	2.90	Minimum	-	2.90	Minimum	-
A2_01_008	Bedroom 2	2.50	Minimum	-	2.50	Minimum	-
A2_01_008	Bedroom 3	3.70	Medium	-	3.70	Medium	-
A2_01_008	LKD	4.60	High	Compliant	4.60	High	Compliant
A2_01_009	Bedroom 1	3.60	Medium	Compliant	3.60	Medium	Compliant
A2_01_009	LKD	1.50	Minimum	-	1.50	Minimum	-

\* Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.  
 \*\* The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 31.  
 \*\*\* For the interpretation of levels of Sunlight Exposure please refer to "3.3 Definition of Levels of Sunlight Exposure" on page 15.  
 For floor plans of the assessed units please refer to section D.1 on page 86.

## D.6.11 SE Results: Block A2 -Level 02

Table No. D.6.11 - Sunlight Exposure Results:							
Unit Number	Room Description	Deciduous Trees as Opaque Objects*			Without Deciduous Trees*		
		SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**
A2_02_001	Bedroom 1	4.80	High	Compliant	4.80	High	Compliant
A2_02_001	LKD	2.00	Minimum	-	2.00	Minimum	-
A2_02_002	Bedroom 1	4.20	High	-	4.20	High	-
A2_02_002	Bedroom 2	0.60	Below Minimum	-	0.60	Below Minimum	-
A2_02_002	LKD	4.90	High	Compliant	4.90	High	Compliant
A2_02_003	Bedroom 1	5.60	High	-	5.60	High	-
A2_02_003	Bedroom 2	4.60	High	-	4.60	High	-
A2_02_003	LKD	6.50	High	Compliant	6.50	High	Compliant
A2_02_004	Bedroom 1	5.60	High	Compliant	5.60	High	Compliant
A2_02_004	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
A2_02_004	LKD	1.30	Below Minimum	-	1.30	Below Minimum	-
A2_02_005	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
A2_02_005	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
A2_02_005	LKD	1.20	Below Minimum	Non-Compliant	1.20	Below Minimum	Non-Compliant
A2_02_006	Bedroom 1	1.20	Below Minimum	Non-Compliant	1.20	Below Minimum	Non-Compliant
A2_02_006	LKD	0.10	Below Minimum	-	0.10	Below Minimum	-
A2_02_007	Bedroom 1	0.00	Below Minimum	Non-Compliant	0.00	Below Minimum	Non-Compliant
A2_02_007	LKD	0.00	Below Minimum	Non-Compliant	0.00	Below Minimum	Non-Compliant
A2_02_008	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
A2_02_008	Bedroom 2	2.50	Minimum	Compliant	2.50	Minimum	Compliant
A2_02_008	Bedroom 3	0.00	Below Minimum	-	0.00	Below Minimum	-
A2_02_008	LKD	0.00	Below Minimum	-	0.00	Below Minimum	-
A2_02_009	Bedroom 1	2.80	Minimum	-	2.80	Minimum	-
A2_02_009	Bedroom 2	2.50	Minimum	-	2.50	Minimum	-
A2_02_009	Bedroom 3	3.80	Medium	-	3.80	Medium	-
A2_02_009	LKD	5.20	High	Compliant	5.20	High	Compliant
A2_02_010	Bedroom 1	4.40	High	Compliant	4.40	High	Compliant
A2_02_010	LKD	1.50	Minimum	-	1.50	Minimum	-

\* Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.  
 \*\* The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 31.  
 \*\*\* For the interpretation of levels of Sunlight Exposure please refer to "3.3 Definition of Levels of Sunlight Exposure" on page 15.  
 For floor plans of the assessed units please refer to section D.1 on page 86.

### D.6.12 SE Results: Block A2 -Level 03

Table No. D.6.12 - Sunlight Exposure Results:							
Unit Number	Room Description	Deciduous Trees as Opaque Objects*			Without Deciduous Trees*		
		SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**
A2_03_001	Bedroom 1	4.50	High	-	7.10	High	-
A2_03_001	LKD	7.70	High	Compliant	7.70	High	Compliant
A2_03_002	Bedroom 1	4.80	High	-	5.80	High	-
A2_03_002	Bedroom 2	1.20	Below Minimum	-	2.00	Minimum	-
A2_03_002	LKD	7.30	High	Compliant	8.40	High	Compliant
A2_03_003	Bedroom 1	4.20	High	-	6.20	High	-
A2_03_003	Bedroom 2	1.90	Minimum	-	2.00	Minimum	-
A2_03_003	LKD	8.70	High	Compliant	8.70	High	Compliant
A2_03_004	Bedroom 1	4.70	High	Compliant	4.70	High	Compliant
A2_03_004	Bedroom 2	0.10	Below Minimum	-	0.10	Below Minimum	-
A2_03_004	LKD	3.00	Medium	-	3.00	Medium	-
A2_03_005	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
A2_03_005	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
A2_03_005	LKD	1.30	Below Minimum	Non-Compliant	1.30	Below Minimum	Non-Compliant
A2_03_006	Bedroom 1	1.30	Below Minimum	Non-Compliant	1.30	Below Minimum	Non-Compliant
A2_03_006	LKD	0.00	Below Minimum	-	0.00	Below Minimum	-
A2_03_007	Bedroom 1	1.20	Below Minimum	Non-Compliant	1.20	Below Minimum	Non-Compliant
A2_03_007	LKD	0.00	Below Minimum	-	0.00	Below Minimum	-
A2_03_008	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
A2_03_008	Bedroom 2	2.20	Minimum	Compliant	2.20	Minimum	Compliant
A2_03_008	Bedroom 3	0.00	Below Minimum	-	0.10	Below Minimum	-
A2_03_008	LKD	2.10	Minimum	-	2.20	Minimum	Compliant
A2_03_009	Bedroom 1	1.00	Below Minimum	-	1.00	Below Minimum	-
A2_03_009	Bedroom 2	4.50	High	Compliant	4.60	High	-
A2_03_009	Bedroom 3	0.40	Below Minimum	-	2.20	Minimum	-
A2_03_009	LKD	4.40	High	-	6.30	High	Compliant
A2_03_010	Bedroom 1	2.10	Minimum	-	2.10	Minimum	-
A2_03_010	LKD	7.70	High	Compliant	7.70	High	Compliant

\* Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.  
 \*\* The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 31.  
 \*\*\* For the interpretation of levels of Sunlight Exposure please refer to "3.3 Definition of Levels of Sunlight Exposure" on page 15.  
 For floor plans of the assessed units please refer to section D.1 on page 86.

### D.6.13 SE Results: Block A2 -Level 04

Table No. D.6.13 - Sunlight Exposure Results:							
Unit Number	Room Description	Deciduous Trees as Opaque Objects*			Without Deciduous Trees*		
		SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**
A2_04_001	Bedroom 1	3.90	Medium	-	4.10	High	-
A2_04_001	LKD	7.70	High	Compliant	7.70	High	Compliant
A2_04_002	Bedroom 1	0.40	Below Minimum	-	1.50	Minimum	-
A2_04_002	Bedroom 2	2.10	Minimum	-	2.10	Minimum	-
A2_04_002	LKD	4.40	High	Compliant	4.40	High	Compliant
A2_04_003	Bedroom 1	7.90	High	-	9.40	High	Compliant
A2_04_003	Bedroom 2	7.20	High	-	7.30	High	-
A2_04_003	LKD	8.90	High	Compliant	9.40	High	Compliant
A2_04_004	Bedroom 1	4.70	High	Compliant	4.70	High	-
A2_04_004	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
A2_04_004	LKD	4.20	High	-	5.30	High	Compliant
A2_04_005	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
A2_04_005	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
A2_04_005	LKD	5.30	High	Compliant	5.30	High	Compliant
A2_04_006	Bedroom 1	4.70	High	Compliant	4.70	High	Compliant
A2_04_006	LKD	0.00	Below Minimum	-	0.00	Below Minimum	-
A2_04_007	Bedroom 1	0.70	Below Minimum	Non-Compliant	0.70	Below Minimum	Non-Compliant
A2_04_007	LKD	0.00	Below Minimum	-	0.00	Below Minimum	-
A2_04_008	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
A2_04_008	Bedroom 2	1.40	Below Minimum	Non-Compliant	1.40	Below Minimum	Non-Compliant
A2_04_008	Bedroom 3	0.00	Below Minimum	-	0.00	Below Minimum	-
A2_04_008	LKD	1.40	Below Minimum	Non-Compliant	1.40	Below Minimum	Non-Compliant
A2_04_009	Bedroom 1	6.60	High	Compliant	6.60	High	Compliant
A2_04_009	Bedroom 2	6.00	High	-	6.00	High	-
A2_04_009	Bedroom 3	6.60	High	Compliant	6.60	High	Compliant
A2_04_009	LKD	6.60	High	Compliant	6.60	High	Compliant
A2_04_010	Bedroom 1	5.60	High	-	5.60	High	-
A2_04_010	LKD	6.60	High	Compliant	6.60	High	Compliant

\* Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.  
 \*\* The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 31.  
 \*\*\* For the interpretation of levels of Sunlight Exposure please refer to "3.3 Definition of Levels of Sunlight Exposure" on page 15.  
 For floor plans of the assessed units please refer to section D.1 on page 86.

### D.6.14 SE Results: Block A2 -Level 05

Table No. D.6.14 - Sunlight Exposure Results:							
Unit Number	Room Description	Deciduous Trees as Opaque Objects*			Without Deciduous Trees*		
		SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**
A2_05_001	Bedroom 1	5.60	High	Compliant	5.60	High	Compliant
A2_05_001	LKD	0.00	Below Minimum	-	0.00	Below Minimum	-
A2_05_002	Bedroom 1	5.50	High	Compliant	5.50	High	Compliant
A2_05_002	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
A2_05_002	LKD	0.00	Below Minimum	-	0.00	Below Minimum	-
A2_05_003	Bedroom 1	4.40	High	-	4.40	High	-
A2_05_003	Bedroom 2	7.70	High	Compliant	7.70	High	Compliant
A2_05_003	LKD	5.10	High	-	5.10	High	-
A2_05_004	Bedroom 1	5.30	High	Compliant	5.30	High	Compliant
A2_05_004	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
A2_05_004	LKD	1.50	Minimum	-	1.50	Minimum	-
A2_05_005	Bedroom 1	0.10	Below Minimum	-	0.10	Below Minimum	-
A2_05_005	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
A2_05_005	LKD	3.10	Medium	Compliant	3.10	Medium	Compliant
A2_05_006	Bedroom 1	5.30	High	Compliant	5.30	High	Compliant
A2_05_006	LKD	0.00	Below Minimum	-	0.00	Below Minimum	-
A2_05_007	Bedroom 1	2.50	Minimum	Compliant	2.50	Minimum	Compliant
A2_05_007	LKD	0.00	Below Minimum	-	0.00	Below Minimum	-
A2_05_008	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
A2_05_008	Bedroom 2	0.80	Below Minimum	Non-Compliant	0.80	Below Minimum	Non-Compliant
A2_05_008	Bedroom 3	0.00	Below Minimum	-	0.00	Below Minimum	-
A2_05_008	LKD	0.00	Below Minimum	-	0.00	Below Minimum	-
A2_05_009	Bedroom 1	7.40	High	Compliant	7.40	High	Compliant
A2_05_009	Bedroom 2	2.60	Minimum	-	2.60	Minimum	-
A2_05_009	Bedroom 3	7.40	High	Compliant	7.40	High	Compliant
A2_05_009	LKD	0.90	Below Minimum	-	0.90	Below Minimum	-
A2_05_010	Bedroom 1	7.30	High	Compliant	7.30	High	Compliant
A2_05_010	LKD	1.70	Minimum	-	1.70	Minimum	-

\* Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.  
 \*\* The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 31.  
 \*\*\* For the interpretation of levels of Sunlight Exposure please refer to "3.3 Definition of Levels of Sunlight Exposure" on page 15.  
 For floor plans of the assessed units please refer to section D.1 on page 86.

### D.6.15 SE Results: Block A2 -Level 06

Table No. D.6.15 - Sunlight Exposure Results:							
Unit Number	Room Description	Deciduous Trees as Opaque Objects*			Without Deciduous Trees*		
		SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**
A2_06_001	Bedroom 1	8.40	High	Compliant	8.40	High	Compliant
A2_06_001	LKD	1.50	Minimum	-	1.50	Minimum	-
A2_06_002	Bedroom 1	2.10	Minimum	-	2.10	Minimum	-
A2_06_002	Bedroom 2	8.20	High	Compliant	8.20	High	Compliant
A2_06_002	LKD	7.10	High	-	7.10	High	-
A2_06_003	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
A2_06_003	Bedroom 2	1.60	Minimum	-	1.60	Minimum	-
A2_06_003	LKD	5.30	High	Compliant	5.30	High	Compliant
A2_06_004	Bedroom 1	1.50	Minimum	Compliant	1.50	Minimum	Compliant
A2_06_004	LKD	0.00	Below Minimum	-	0.00	Below Minimum	-
A2_06_005	Bedroom 1	1.50	Minimum	Compliant	1.50	Minimum	Compliant
A2_06_005	LKD	0.00	Below Minimum	-	0.00	Below Minimum	-
A2_06_006	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
A2_06_006	Bedroom 2	2.20	Minimum	Compliant	2.20	Minimum	Compliant
A2_06_006	Bedroom 3	0.00	Below Minimum	-	0.00	Below Minimum	-
A2_06_006	LKD	0.00	Below Minimum	-	0.00	Below Minimum	-
A2_06_007	Bedroom 1	4.60	High	-	4.60	High	-
A2_06_007	Bedroom 2	7.30	High	Compliant	7.30	High	Compliant
A2_06_007	Bedroom 3	7.00	High	-	7.00	High	-
A2_06_007	LKD	3.50	Medium	-	3.50	Medium	-
A2_06_008	Bedroom 1	2.50	Minimum	Compliant	2.50	Minimum	Compliant
A2_06_008	LKD	2.00	Minimum	-	2.00	Minimum	-

\* Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.  
 \*\* The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 31.  
 \*\*\* For the interpretation of levels of Sunlight Exposure please refer to "3.3 Definition of Levels of Sunlight Exposure" on page 15.  
 For floor plans of the assessed units please refer to section D.1 on page 86.

### D.6.16 SE Results: Block A2 -Level 07 and 08

Table No. D.6.16 - Sunlight Exposure Results:

Unit Number	Room Description	Deciduous Trees as Opaque Objects*			Without Deciduous Trees*		
		SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**
A2_07_001	Bedroom 1	7.20	High	-	7.20	High	-
A2_07_001	Bedroom 1	7.30	High	Compliant	7.30	High	Compliant
A2_07_001	Bedroom 3	1.70	Minimum	-	1.70	Minimum	-
A2_07_001	LKD	0.90	Below Minimum	-	0.90	Below Minimum	-
A2_07_002	Bedroom 1	0.90	Below Minimum	-	0.90	Below Minimum	-
A2_07_002	Bedroom 2	9.40	High	Compliant	9.40	High	Compliant
A2_07_002	LKD	6.00	High	-	6.00	High	-
A2_07_003	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
A2_07_003	Bedroom 2	1.90	Minimum	-	1.90	Minimum	-
A2_07_003	LKD	3.50	Medium	Compliant	3.50	Medium	Compliant
A2_07_004	Bedroom 1	5.60	High	Compliant	5.60	High	Compliant
A2_07_004	LKD	0.00	Below Minimum	-	0.00	Below Minimum	-
A2_07_005	Bedroom 1	2.50	Minimum	Compliant	2.50	Minimum	Compliant
A2_07_005	LKD	0.00	Below Minimum	-	0.00	Below Minimum	-
A2_07_006	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
A2_07_006	Bedroom 2	1.70	Minimum	Compliant	1.70	Minimum	Compliant
A2_07_006	Bedroom 3	0.10	Below Minimum	-	0.10	Below Minimum	-
A2_07_006	LKD	1.10	Below Minimum	-	1.10	Below Minimum	-
A2_07_007	Bedroom 1	1.70	Minimum	-	1.70	Minimum	-
A2_07_007	Bedroom 2	3.10	Medium	-	3.10	Medium	-
A2_07_007	Bedroom 3	7.30	High	-	7.30	High	-
A2_07_007	LKD	7.40	High	Compliant	7.40	High	Compliant
A2_08_001	Bedroom 1	7.70	High	-	7.70	High	-
A2_08_001	Bedroom 1	1.50	Minimum	-	1.50	Minimum	-
A2_08_001	Bedroom 3	6.60	High	-	6.60	High	-
A2_08_001	LKD	9.40	High	Compliant	9.40	High	Compliant
A2_08_002	Bedroom 1	1.20	Below Minimum	-	1.20	Below Minimum	-
A2_08_002	Bedroom 1	1.50	Minimum	-	1.50	Minimum	-
A2_08_002	Bedroom 3	0.00	Below Minimum	-	0.00	Below Minimum	-
A2_08_002	LKD	4.50	High	Compliant	4.50	High	Compliant
A2_08_003	Bedroom 1	0.10	Below Minimum	-	0.10	Below Minimum	-
A2_08_003	Bedroom 2	1.40	Below Minimum	-	1.40	Below Minimum	-
A2_08_003	Bedroom 3	0.00	Below Minimum	-	0.00	Below Minimum	-
A2_08_003	LKD	2.00	Minimum	Compliant	2.00	Minimum	Compliant
A2_08_004	Bedroom 1	7.70	High	Compliant	7.70	High	Compliant
A2_08_004	Bedroom 2	3.10	Medium	-	3.10	Medium	-
A2_08_004	Bedroom 3	7.70	High	Compliant	7.70	High	Compliant
A2_08_004	LKD	7.40	High	-	7.40	High	-

\* Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.  
 \*\* The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 31.  
 \*\*\* For the interpretation of levels of Sunlight Exposure please refer to “3.3 Definition of Levels of Sunlight Exposure” on page 15.  
 For floor plans of the assessed units please refer to section D.1 on page 86.

### D.6.17 SE Results: Block A2 -Level 09

Table No. D.6.17 - Sunlight Exposure Results:							
Unit Number	Room Description	Deciduous Trees as Opaque Objects*			Without Deciduous Trees*		
		SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**
A2_09_001	Bedroom 1	3.70	Medium	-	3.70	Medium	-
A2_09_001	Bedroom 2	1.10	Below Minimum	-	1.10	Below Minimum	-
A2_09_001	Bedroom 3	1.70	Minimum	-	1.70	Minimum	-
A2_09_001	LKD	7.70	High	Compliant	7.70	High	Compliant
A2_09_001	Snug Room	7.30	High	-	7.30	High	-
A2_09_002	Bedroom 1	5.30	High	Compliant	5.30	High	Compliant
A2_09_002	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
A2_09_002	Bedroom 3	0.10	Below Minimum	-	0.10	Below Minimum	-
A2_09_002	LKD	2.50	Minimum	-	2.50	Minimum	-
A2_09_002	Snug Room	0.00	Below Minimum	-	0.00	Below Minimum	-

\* Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.  
 \*\* The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 31.  
 \*\*\* For the interpretation of levels of Sunlight Exposure please refer to "3.3 Definition of Levels of Sunlight Exposure" on page 15.  
 For floor plans of the assessed units please refer to section D.1 on page 86.

### D.6.18 SE Results: Townhouses (West)

Table No. D.6.18 - Sunlight Exposure Results:

Unit Number	Room Description	Deciduous Trees as Opaque Objects*			Without Deciduous Trees*		
		SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**
P_01_001	Bedroom 1	5.30	High	-	5.30	High	-
P_01_001	Bedroom 2	5.30	High	-	5.30	High	-
P_01_001	Bedroom 3	5.30	High	-	5.30	High	-
P_01_001	Bedroom 4	0.50	Below Minimum	-	0.50	Below Minimum	-
P_01_001	LKD	5.60	High	Compliant	5.60	High	Compliant
P_01_002	Bedroom 1	5.30	High	Compliant	5.30	High	Compliant
P_01_002	Bedroom 2	5.30	High	Compliant	5.30	High	Compliant
P_01_002	Bedroom 3	5.30	High	Compliant	5.30	High	Compliant
P_01_002	Bedroom 4	0.00	Below Minimum	-	0.00	Below Minimum	-
P_01_002	LKD	5.30	High	Compliant	5.30	High	Compliant
P_01_003	Bedroom 1	4.30	High	-	5.30	High	Compliant
P_01_003	Bedroom 2	5.30	High	Compliant	5.30	High	Compliant
P_01_003	Bedroom 3	5.30	High	Compliant	5.30	High	Compliant
P_01_003	Bedroom 4	0.00	Below Minimum	-	0.00	Below Minimum	-
P_01_003	LKD	5.30	High	Compliant	5.30	High	Compliant
P_01_004	Bedroom 1	4.20	High	-	5.30	High	Compliant
P_01_004	Bedroom 2	4.20	High	-	5.30	High	Compliant
P_01_004	Bedroom 3	5.30	High	Compliant	5.30	High	Compliant
P_01_004	Bedroom 4	0.00	Below Minimum	-	0.00	Below Minimum	-
P_01_004	LKD	5.20	High	-	5.30	High	Compliant
P_01_005	Bedroom 1	4.60	High	-	5.30	High	Compliant
P_01_005	Bedroom 2	4.20	High	-	5.30	High	Compliant
P_01_005	Bedroom 3	5.30	High	Compliant	5.30	High	Compliant
P_01_005	Bedroom 4	0.00	Below Minimum	-	0.00	Below Minimum	-
P_01_005	LKD	5.20	High	-	5.30	High	Compliant

\* Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.  
 \*\* The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 31.  
 \*\*\* For the interpretation of levels of Sunlight Exposure please refer to "3.3 Definition of Levels of Sunlight Exposure" on page 15.  
 For floor plans of the assessed units please refer to section D.1 on page 86.

### D.6.19 SE Results: Townhouses (East)

Table No. D.6.19 - Sunlight Exposure Results:

Unit Number	Room Description	Deciduous Trees as Opaque Objects*			Without Deciduous Trees*		
		SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**
P_M01_001	Bedroom 1	1.20	Below Minimum	-	1.20	Below Minimum	-
P_M01_001	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
P_M01_001	Bedroom 3	1.40	Below Minimum	-	1.40	Below Minimum	-
P_M01_001	Bedroom 4	5.30	High	-	5.30	High	-
P_M01_001	Bedroom 5	4.70	High	-	4.70	High	-
P_M01_001	LKD	7.50	High	Compliant	7.50	High	Compliant
P_M01_002	Bedroom 1	2.10	Minimum	-	2.10	Minimum	-
P_M01_002	Bedroom 2	2.10	Minimum	-	2.10	Minimum	-
P_M01_002	Bedroom 3	1.40	Below Minimum	-	1.40	Below Minimum	-
P_M01_002	Bedroom 4	5.30	High	-	5.30	High	-
P_M01_002	Bedroom 5	4.70	High	-	4.70	High	-
P_M01_002	LKD	7.50	High	Compliant	7.50	High	Compliant
P_M01_003	Bedroom 1	2.10	Minimum	-	2.10	Minimum	-
P_M01_003	Bedroom 2	2.00	Minimum	-	2.00	Minimum	-
P_M01_003	Bedroom 3	1.40	Below Minimum	-	1.40	Below Minimum	-
P_M01_003	Bedroom 4	4.60	High	-	4.60	High	-
P_M01_003	Bedroom 5	4.00	High	-	4.00	High	-
P_M01_003	LKD	6.30	High	Compliant	6.30	High	Compliant
P_M01_004	Bedroom 1	0.70	Below Minimum	-	0.70	Below Minimum	-
P_M01_004	Bedroom 2	0.90	Below Minimum	-	0.90	Below Minimum	-
P_M01_004	Bedroom 3	1.40	Below Minimum	-	1.40	Below Minimum	-
P_M01_004	Bedroom 4	3.70	Medium	-	3.70	Medium	-
P_M01_004	Bedroom 5	3.50	Medium	-	3.50	Medium	-
P_M01_004	LKD	5.80	High	Compliant	5.80	High	Compliant

\* Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.  
 \*\* The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 31.  
 \*\*\* For the interpretation of levels of Sunlight Exposure please refer to "3.3 Definition of Levels of Sunlight Exposure" on page 15.  
 For floor plans of the assessed units please refer to section D.1 on page 86.

### D.6.20 Sun On Ground in Proposed Outdoor Amenity Areas

Table No. D.6.20 - SOG in Proposed Outdoor Amenity Areas Results:

Assigned Area Number	Assessed Area	Area Capable of Receiving 2 Hours of Sunlight on March 21st	Recommended minimum	Level of Compliance with BRE Guidelines*	Meets BR 209 Criteria*
1	Public Open Space 1	95.22%	50.00%	BRE Compliant	Yes
2	Public Open Space 2	99.38%	50.00%	BRE Compliant	Yes
3	Communal Open Space	87.45%	50.00%	BRE Compliant	Yes

\* 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.

\*\* Average values have been calculated by considering all the relevant areas as a singular area and calculating what portion of the spaces as a whole can receive at least two hours of sunlight on March 21st.

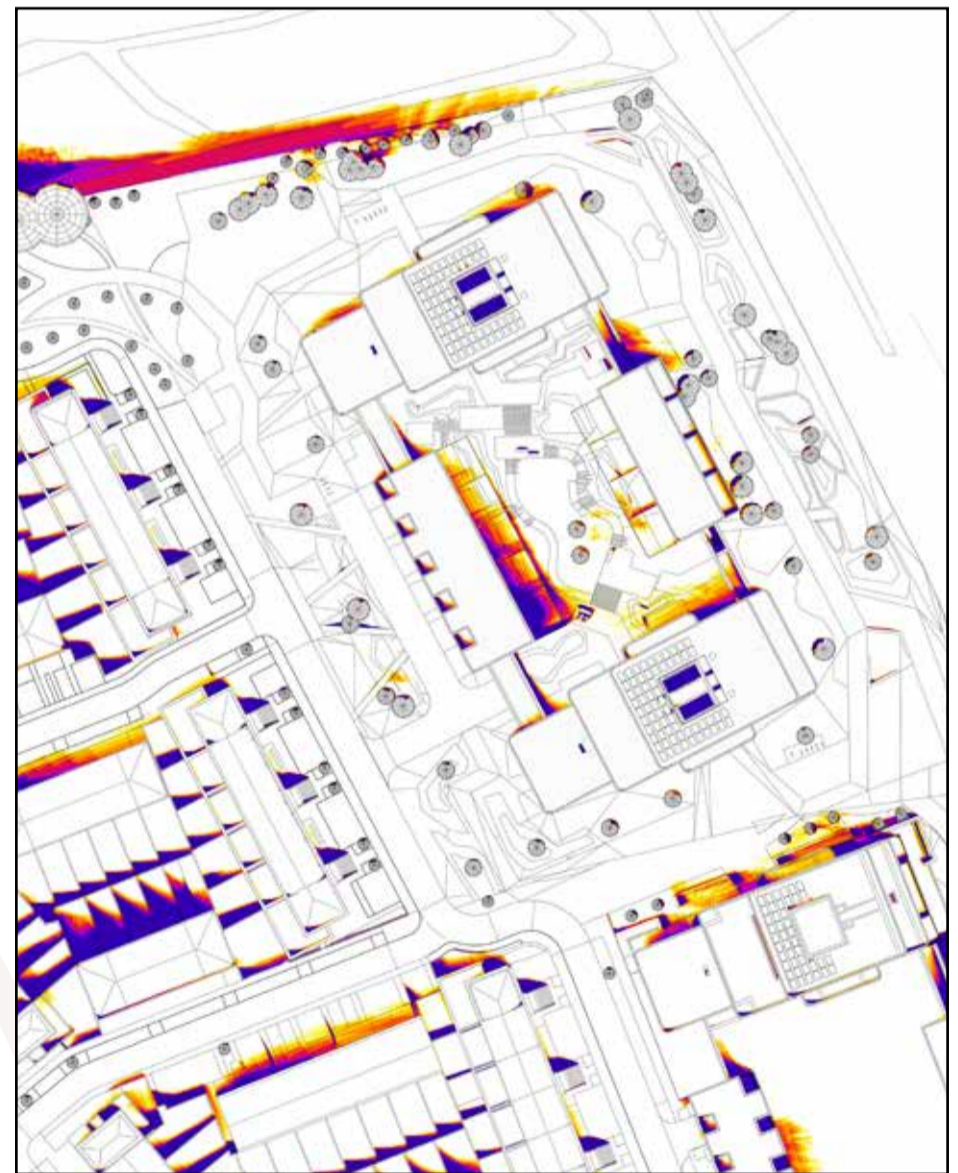


Figure D.28: Indication of the amenity areas that have been analysed (L), Area capable of receiving 2 hours of sunlight on March 21st shown in white (R)

## E.0 Supplementary Study Results

### E.1 SDA study, under the I.S. EN 17037 criteria

Below is an example of the table used to describe the supplementary study results for proposed units in the assessment of SDA under the I.S. EN 17037 criteria.

Table Example. E.1 - Supplementary SDA Results (I.S. EN 17037 criteria)						
Unit Number	Room Description	No Trees		With Trees		Compliance with I.S. EN 17037 Criteria
		Area above 300 Lux	Area above 100 Lux	Area above 300 Lux	Area above 100 Lux	
A	B	C	D	E	F	G

#### 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 in the unit has been assessed, e.g. bedroom, LKD, etc.

#### C: % of area above 300 Lux (No Trees)

I.S. EN 17037 recommends at least 50% of the working plane receives above 300 lux for at least half the daylight hours. This column states percentage of the working plane of the assessed room that is capable of receiving more than 300 lux for at least half the daylight hours when the assessment is carried out without trees in the analytical model.

#### D: % of area above 100 Lux (No Trees)

I.S. EN 17037 recommends at least 95% of the working plane receives above 100 lux for at least half the daylight hours. This column states percentage of the working plane of the assessed room that is capable of receiving more than 100 lux for at least half the daylight hours when the assessment is carried out without trees in the analytical model.

#### E: % of area above 300 Lux (Winter Trees)

I.S. EN 17037 recommends at least 50% of the working plane receives above 300 lux for at least half the daylight hours. This column states percentage of the working plane of the assessed room that is capable of receiving more than 300 lux for at least half the daylight hours with the foliage of deciduous trees varied to account for summer and winter conditions, i.e. full leaf and bare branch.

#### F: % of area above 100 Lux (Winter Trees)

I.S. EN 17037 recommends at least 95% of the working plane receives above 100 lux for at least half the daylight hours. This column states percentage of the working plane of the assessed room that is capable of receiving more than 100 lux for at least half the daylight hours with the foliage of deciduous trees varied to account for summer and winter conditions.

#### G: Compliance with I.S. EN 17037 Criteria

This column states if the assessed room achieves the recommended level of daylight as per I.S. EN 17037 with consideration to the various tree states.

If the recommended lux levels are achieved on the working plane, for half the daylight hours, both with and without trees, this column will state: *'Compliant'*.

If the recommended lux levels are not achieved on the working plane, for half the daylight hours, both with and without trees, this column will state: *'Non-compliant'*.

If the recommended lux levels are achieved on the working plane, for half the daylight hours, without trees but are not achieved with trees, this column will state: *'Trees affecting compliance'*.

Compliance rates will be stated for SDA compliance with trees in all of the above states.

It should be noted that the figures displayed in the table of results have been rounded off. A manual calculation of these figures may yield a negligible difference and should not be considered an error.

## E.1.1 Supplementary SDA Results (I.S. EN 17037 criteria): Block A1 -Level 00 and 01 Mezzanine

Table No. E.1.1 - Supplementary SDA Results (I.S. EN 17037 criteria):						
Unit Number	Room Description	No Trees		With Trees		Compliance with I.S. EN 17037 Criteria*
		Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	
Communal	Communal	23%	100%	12%	37%	Non-compliant
A1_00_001	A1_00_001	100%	100%	39%	100%	Trees affecting compliance
A1_00_001	A1_00_001	27%	100%	3%	48%	Non-compliant
A1_00_002	A1_00_002	100%	100%	45%	100%	Trees affecting compliance
A1_00_002	A1_00_002	100%	100%	98%	100%	Compliant
A1_00_002	A1_00_002	100%	100%	50%	100%	Compliant
A1_00_002	A1_00_002	60%	100%	31%	69%	Trees affecting compliance
A1_00_003	A1_00_003	27%	100%	6%	66%	Non-compliant
A1_00_003	A1_00_003	0%	77%	0%	34%	Non-compliant
A1_00_003	A1_00_003	61%	100%	43%	95%	Trees affecting compliance
A1_M01_001	A1_M01_001	100%	100%	100%	100%	Compliant
A1_M01_001	A1_M01_001	42%	88%	37%	86%	Non-compliant
A1_M01_002	A1_M01_002	100%	100%	100%	100%	Compliant
A1_M01_002	A1_M01_002	100%	100%	48%	100%	Trees affecting compliance
A1_M01_002	A1_M01_002	91%	100%	42%	100%	Trees affecting compliance
A1_M01_003	A1_M01_003	85%	100%	63%	100%	Compliant
A1_M01_003	A1_M01_003	14%	100%	0%	71%	Non-compliant
A1_M01_003	A1_M01_003	39%	98%	28%	64%	Non-compliant
A1_M01_004	A1_M01_004	100%	100%	79%	100%	Compliant
A1_M01_004	A1_M01_004	97%	100%	43%	100%	Trees affecting compliance
A1_M01_004	A1_M01_004	35%	100%	24%	55%	Non-compliant
A1_M01_005	A1_M01_005	100%	100%	95%	100%	Compliant
A1_M01_005	A1_M01_005	100%	100%	100%	100%	Compliant
A1_M01_005	A1_M01_005	100%	100%	75%	100%	Compliant
A1_M01_005	A1_M01_005	63%	100%	50%	81%	Trees affecting compliance
A1_M01_006	A1_M01_006	35%	100%	22%	98%	Non-compliant
A1_M01_006	A1_M01_006	0%	98%	0%	72%	Non-compliant
A1_M01_006	A1_M01_006	78%	100%	63%	100%	Compliant

\* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 24. For floor plans of the assessed units please refer to section D.1 on page 86.

## E.1.2 Supplementary SDA Results (I.S. EN 17037 criteria): Block A1 -Level 01

Table No. E.1.2 - Supplementary SDA Results (I.S. EN 17037 criteria):						
Unit Number	Room Description	No Trees		With Trees		Compliance with I.S. EN 17037 Criteria*
		Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	
A1_01_001	A1_01_001	72%	100%	72%	100%	Compliant
A1_01_001	A1_01_001	14%	98%	11%	98%	Non-compliant
A1_01_001	A1_01_001	41%	84%	40%	84%	Non-compliant
A1_01_002	A1_01_002	100%	100%	100%	100%	Compliant
A1_01_002	A1_01_002	93%	100%	91%	100%	Compliant
A1_01_002	A1_01_002	96%	100%	95%	100%	Compliant
A1_01_003	A1_01_003	100%	100%	100%	100%	Compliant
A1_01_003	A1_01_003	100%	100%	79%	100%	Compliant
A1_01_003	A1_01_003	95%	100%	62%	100%	Compliant
A1_01_004	A1_01_004	91%	100%	72%	100%	Compliant
A1_01_004	A1_01_004	16%	100%	0%	100%	Non-compliant
A1_01_004	A1_01_004	42%	100%	33%	75%	Non-compliant
A1_01_005	A1_01_005	100%	100%	97%	100%	Compliant
A1_01_005	A1_01_005	36%	100%	23%	100%	Non-compliant
A1_01_006	A1_01_006	100%	100%	96%	100%	Compliant
A1_01_006	A1_01_006	32%	100%	23%	97%	Non-compliant
A1_01_007	A1_01_007	100%	100%	100%	100%	Compliant
A1_01_007	A1_01_007	100%	100%	100%	100%	Compliant
A1_01_007	A1_01_007	100%	100%	100%	100%	Compliant
A1_01_007	A1_01_007	64%	100%	58%	92%	Trees affecting compliance
A1_01_008	A1_01_008	100%	100%	100%	100%	Compliant
A1_01_008	A1_01_008	100%	100%	100%	100%	Compliant
A1_01_008	A1_01_008	100%	100%	100%	100%	Compliant
A1_01_008	A1_01_008	64%	98%	61%	94%	Trees affecting compliance
A1_01_009	A1_01_009	100%	100%	100%	100%	Compliant
A1_01_009	A1_01_009	61%	100%	61%	100%	Compliant
A1_01_009	A1_01_009	35%	90%	35%	89%	Non-compliant

\* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 24. For floor plans of the assessed units please refer to section D.1 on page 86.

### E.1.3 Supplementary SDA Results (I.S. EN 17037 criteria): Block A1 -Level 02

Table No. E.1.3 - Supplementary SDA Results (I.S. EN 17037 criteria):

Unit Number	Room Description	No Trees		With Trees		Compliance with I.S. EN 17037 Criteria*
		Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	
A1_02_001	A1_02_001	100%	100%	100%	100%	Compliant
A1_02_001	A1_02_001	43%	100%	43%	100%	Non-compliant
A1_02_002	A1_02_002	81%	100%	81%	100%	Compliant
A1_02_002	A1_02_002	32%	100%	32%	100%	Non-compliant
A1_02_002	A1_02_002	50%	97%	50%	97%	Compliant
A1_02_003	A1_02_003	100%	100%	100%	100%	Compliant
A1_02_003	A1_02_003	100%	100%	100%	100%	Compliant
A1_02_003	A1_02_003	100%	100%	100%	100%	Compliant
A1_02_004	A1_02_004	100%	100%	100%	100%	Compliant
A1_02_004	A1_02_004	100%	100%	83%	100%	Compliant
A1_02_004	A1_02_004	100%	100%	81%	100%	Compliant
A1_02_005	A1_02_005	91%	100%	78%	100%	Compliant
A1_02_005	A1_02_005	16%	100%	2%	100%	Non-compliant
A1_02_005	A1_02_005	42%	100%	37%	84%	Non-compliant
A1_02_006	A1_02_006	100%	100%	100%	100%	Compliant
A1_02_006	A1_02_006	36%	100%	29%	100%	Non-compliant
A1_02_007	A1_02_007	100%	100%	100%	100%	Compliant
A1_02_007	A1_02_007	33%	100%	27%	100%	Non-compliant
A1_02_008	A1_02_008	100%	100%	100%	100%	Compliant
A1_02_008	A1_02_008	100%	100%	100%	100%	Compliant
A1_02_008	A1_02_008	80%	100%	73%	100%	Compliant
A1_02_008	A1_02_008	64%	100%	60%	100%	Compliant
A1_02_009	A1_02_009	100%	100%	100%	100%	Compliant
A1_02_009	A1_02_009	100%	100%	100%	100%	Compliant
A1_02_009	A1_02_009	100%	100%	100%	100%	Compliant
A1_02_009	A1_02_009	68%	100%	67%	99%	Compliant
A1_02_10	A1_02_10	100%	100%	100%	100%	Compliant
A1_02_10	A1_02_10	36%	100%	35%	100%	Non-compliant

\* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 24. For floor plans of the assessed units please refer to section D.1 on page 86.

### E.1.4 Supplementary SDA Results (I.S. EN 17037 criteria): Block A1 -Level 03

Table No. E.1.4 - Supplementary SDA Results (I.S. EN 17037 criteria):

Unit Number	Room Description	No Trees		With Trees		Compliance with I.S. EN 17037 Criteria*
		Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	
A1_03_001	A1_03_001	100%	100%	100%	100%	Compliant
A1_03_001	A1_03_001	50%	100%	50%	100%	Compliant
A1_03_002	A1_03_002	86%	100%	86%	100%	Compliant
A1_03_002	A1_03_002	46%	100%	46%	100%	Non-compliant
A1_03_002	A1_03_002	54%	100%	54%	100%	Compliant
A1_03_003	A1_03_003	100%	100%	100%	100%	Compliant
A1_03_003	A1_03_003	100%	100%	100%	100%	Compliant
A1_03_003	A1_03_003	100%	100%	100%	100%	Compliant
A1_03_004	A1_03_004	100%	100%	100%	100%	Compliant
A1_03_004	A1_03_004	100%	100%	94%	100%	Compliant
A1_03_004	A1_03_004	100%	100%	91%	100%	Compliant
A1_03_005	A1_03_005	91%	100%	85%	100%	Compliant
A1_03_005	A1_03_005	17%	100%	8%	100%	Non-compliant
A1_03_005	A1_03_005	44%	100%	38%	93%	Non-compliant
A1_03_006	A1_03_006	100%	100%	100%	100%	Compliant
A1_03_006	A1_03_006	38%	100%	32%	100%	Non-compliant
A1_03_007	A1_03_007	100%	100%	100%	100%	Compliant
A1_03_007	A1_03_007	34%	100%	30%	100%	Non-compliant
A1_03_008	A1_03_008	100%	100%	100%	100%	Compliant
A1_03_008	A1_03_008	100%	100%	100%	100%	Compliant
A1_03_008	A1_03_008	100%	100%	100%	100%	Compliant
A1_03_008	A1_03_008	64%	100%	61%	100%	Compliant
A1_03_009	A1_03_009	100%	100%	100%	100%	Compliant
A1_03_009	A1_03_009	100%	100%	100%	100%	Compliant
A1_03_009	A1_03_009	100%	100%	100%	100%	Compliant
A1_03_009	A1_03_009	71%	100%	71%	100%	Compliant
A1_03_010	A1_03_010	100%	100%	100%	100%	Compliant
A1_03_010	A1_03_010	43%	100%	41%	100%	Non-compliant

\* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 24. For floor plans of the assessed units please refer to section D.1 on page 86.

### E.1.5 Supplementary SDA Results (I.S. EN 17037 criteria): Block A1 -Level 04

Table No. E.1.5 - Supplementary SDA Results (I.S. EN 17037 criteria):

Unit Number	Room Description	No Trees		With Trees		Compliance with I.S. EN 17037 Criteria*
		Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	
A1_04_001	A1_04_001	100%	100%	100%	100%	Compliant
A1_04_001	A1_04_001	53%	100%	53%	100%	Compliant
A1_04_002	A1_04_002	88%	100%	88%	100%	Compliant
A1_04_002	A1_04_002	56%	100%	56%	100%	Compliant
A1_04_002	A1_04_002	57%	100%	57%	100%	Compliant
A1_04_003	A1_04_003	100%	100%	100%	100%	Compliant
A1_04_003	A1_04_003	100%	100%	100%	100%	Compliant
A1_04_003	A1_04_003	100%	100%	100%	100%	Compliant
A1_04_004	A1_04_004	100%	100%	100%	100%	Compliant
A1_04_004	A1_04_004	100%	100%	100%	100%	Compliant
A1_04_004	A1_04_004	99%	100%	93%	100%	Compliant
A1_04_005	A1_04_005	93%	100%	85%	100%	Compliant
A1_04_005	A1_04_005	19%	100%	16%	100%	Non-compliant
A1_04_005	A1_04_005	45%	100%	42%	98%	Non-compliant
A1_04_006	A1_04_006	100%	100%	100%	100%	Compliant
A1_04_006	A1_04_006	39%	100%	34%	100%	Non-compliant
A1_04_007	A1_04_007	100%	100%	100%	100%	Compliant
A1_04_007	A1_04_007	36%	100%	31%	100%	Non-compliant
A1_04_008	A1_04_008	96%	100%	94%	100%	Compliant
A1_04_008	A1_04_008	100%	100%	100%	100%	Compliant
A1_04_008	A1_04_008	100%	100%	100%	100%	Compliant
A1_04_008	A1_04_008	65%	100%	63%	100%	Compliant
A1_04_009	A1_04_009	100%	100%	100%	100%	Compliant
A1_04_009	A1_04_009	100%	100%	100%	100%	Compliant
A1_04_009	A1_04_009	100%	100%	100%	100%	Compliant
A1_04_009	A1_04_009	73%	100%	73%	100%	Compliant
A1_04_010	A1_04_010	100%	100%	100%	100%	Compliant
A1_04_010	A1_04_010	48%	100%	48%	100%	Non-compliant

\* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 24. For floor plans of the assessed units please refer to section D.1 on page 86.

### E.1.6 Supplementary SDA Results (I.S. EN 17037 criteria): Block A1 -Level 05

Table No. E.1.6 - Supplementary SDA Results (I.S. EN 17037 criteria):

Unit Number	Room Description	No Trees		With Trees		Compliance with I.S. EN 17037 Criteria*
		Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	
A1_05_001	A1_05_001	100%	100%	100%	100%	Compliant
A1_05_001	A1_05_001	59%	100%	59%	100%	Compliant
A1_05_002	A1_05_002	100%	100%	100%	100%	Compliant
A1_05_002	A1_05_002	91%	91%	91%	91%	Non-compliant
A1_05_002	A1_05_002	100%	100%	100%	100%	Compliant
A1_05_003	A1_05_003	100%	100%	100%	100%	Compliant
A1_05_003	A1_05_003	100%	100%	100%	100%	Compliant
A1_05_003	A1_05_003	100%	100%	100%	100%	Compliant
A1_05_004	A1_05_004	100%	100%	100%	100%	Compliant
A1_05_004	A1_05_004	40%	100%	36%	100%	Non-compliant
A1_05_005	A1_05_005	100%	100%	100%	100%	Compliant
A1_05_005	A1_05_005	35%	100%	33%	100%	Non-compliant
A1_05_006	A1_05_006	100%	100%	100%	100%	Compliant
A1_05_006	A1_05_006	100%	100%	100%	100%	Compliant
A1_05_006	A1_05_006	100%	100%	100%	100%	Compliant
A1_05_006	A1_05_006	64%	100%	64%	100%	Compliant
A1_05_007	A1_05_007	100%	100%	100%	100%	Compliant
A1_05_007	A1_05_007	100%	100%	100%	100%	Compliant
A1_05_007	A1_05_007	100%	100%	100%	100%	Compliant
A1_05_007	A1_05_007	72%	100%	72%	100%	Compliant
A1_05_008	A1_05_008	100%	100%	100%	100%	Compliant
A1_05_008	A1_05_008	53%	100%	51%	100%	Compliant

\* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 24. For floor plans of the assessed units please refer to section D.1 on page 86.

### E.1.7 Supplementary SDA Results (I.S. EN 17037 criteria): Block A1 -Level 06

Table No. E.1.7 - Supplementary SDA Results (I.S. EN 17037 criteria):

Unit Number	Room Description	No Trees		With Trees		Compliance with I.S. EN 17037 Criteria*
		Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	
A1_06_001	A1_06_001	100%	100%	100%	100%	Compliant
A1_06_001	A1_06_001	100%	100%	100%	100%	Compliant
A1_06_001	A1_06_001	100%	100%	100%	100%	Compliant
A1_06_001	A1_06_001	51%	100%	50%	100%	Compliant
A1_06_002	A1_06_002	100%	100%	100%	100%	Compliant
A1_06_002	A1_06_002	91%	91%	91%	91%	Non-compliant
A1_06_002	A1_06_002	100%	100%	100%	100%	Compliant
A1_06_003	A1_06_003	100%	100%	100%	100%	Compliant
A1_06_003	A1_06_003	91%	91%	91%	91%	Non-compliant
A1_06_003	A1_06_003	100%	100%	100%	100%	Compliant
A1_06_004	A1_06_004	100%	100%	100%	100%	Compliant
A1_06_004	A1_06_004	42%	100%	38%	100%	Non-compliant
A1_06_005	A1_06_005	100%	100%	100%	100%	Compliant
A1_06_005	A1_06_005	36%	100%	35%	100%	Non-compliant
A1_06_006	A1_06_006	100%	100%	100%	100%	Compliant
A1_06_006	A1_06_006	100%	100%	100%	100%	Compliant
A1_06_006	A1_06_006	80%	100%	80%	100%	Compliant
A1_06_006	A1_06_006	64%	100%	64%	100%	Compliant
A1_06_007	A1_06_007	100%	100%	100%	100%	Compliant
A1_06_007	A1_06_007	100%	100%	100%	100%	Compliant
A1_06_007	A1_06_007	93%	100%	93%	100%	Compliant
A1_06_007	A1_06_007	75%	100%	75%	100%	Compliant

\* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 24. For floor plans of the assessed units please refer to section D.1 on page 86.

### E.1.8 Supplementary SDA Results (I.S. EN 17037 criteria): Block A1 -Level 07

Table No. E.1.8 - Supplementary SDA Results (I.S. EN 17037 criteria):						
Unit Number	Room Description	No Trees		With Trees		Compliance with I.S. EN 17037 Criteria*
		Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	
A1_07_001	A1_07_001	100%	100%	100%	100%	Compliant
A1_07_001	A1_07_001	100%	100%	100%	100%	Compliant
A1_07_001	A1_07_001	100%	100%	100%	100%	Compliant
A1_07_001	A1_07_001	100%	100%	100%	100%	Compliant
A1_07_002	A1_07_002	100%	100%	100%	100%	Compliant
A1_07_002	A1_07_002	100%	100%	100%	100%	Compliant
A1_07_002	A1_07_002	100%	100%	99%	100%	Compliant
A1_07_002	A1_07_002	98%	100%	97%	100%	Compliant
A1_07_003	A1_07_003	100%	100%	100%	100%	Compliant
A1_07_003	A1_07_003	100%	100%	100%	100%	Compliant
A1_07_003	A1_07_003	100%	100%	100%	100%	Compliant
A1_07_003	A1_07_003	65%	100%	64%	100%	Compliant
A1_07_004	A1_07_004	100%	100%	100%	100%	Compliant
A1_07_004	A1_07_004	100%	100%	100%	100%	Compliant
A1_07_004	A1_07_004	100%	100%	100%	100%	Compliant
A1_07_004	A1_07_004	76%	100%	75%	100%	Compliant
A1_08_001	A1_08_001	100%	100%	100%	100%	Compliant
A1_08_001	A1_08_001	100%	100%	100%	100%	Compliant
A1_08_001	A1_08_001	100%	100%	100%	100%	Compliant
A1_08_001	A1_08_001	100%	100%	100%	100%	Compliant
A1_08_001	A1_08_001	100%	100%	100%	100%	Compliant
A1_08_002	A1_08_002	100%	100%	100%	100%	Compliant
A1_08_002	A1_08_002	100%	100%	100%	100%	Compliant
A1_08_002	A1_08_002	100%	100%	100%	100%	Compliant
A1_08_002	A1_08_002	81%	100%	80%	100%	Compliant
A1_08_002	A1_08_002	100%	100%	100%	100%	Compliant

\* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 24. For floor plans of the assessed units please refer to section D.1 on page 86.

### E.1.9 Supplementary SDA Results (I.S. EN 17037 criteria): Block A2 -Level 00 and 01 Mezzanine

Table No. E.1.9 - Supplementary SDA Results (I.S. EN 17037 criteria):

Unit Number	Room Description	No Trees		With Trees		Compliance with I.S. EN 17037 Criteria*
		Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	
A2_00_001	A2_00_001	82%	100%	46%	100%	Trees affecting compliance
A2_00_001	A2_00_001	12%	66%	0%	36%	Non-compliant
A2_00_002	A2_00_002	0%	68%	0%	33%	Non-compliant
A2_00_002	A2_00_002	48%	100%	33%	100%	Non-compliant
A2_00_002	A2_00_002	27%	64%	18%	52%	Non-compliant
A2_00_003	A2_00_003	100%	100%	100%	100%	Compliant
A2_00_003	A2_00_003	54%	100%	39%	100%	Trees affecting compliance
A2_00_003	A2_00_003	63%	100%	44%	100%	Trees affecting compliance
A2_00_004	A2_00_004	24%	100%	5%	61%	Non-compliant
A2_00_004	A2_00_004	0%	68%	0%	23%	Non-compliant
A2_00_004	A2_00_004	63%	100%	50%	100%	Compliant
A2_00_005	A2_00_005	69%	100%	14%	100%	Trees affecting compliance
A2_00_005	A2_00_005	100%	100%	100%	100%	Compliant
A2_00_005	A2_00_005	70%	100%	0%	95%	Trees affecting compliance
A2_00_005	A2_00_005	57%	90%	48%	79%	Non-compliant
A2_M01_001	A2_M01_001	97%	100%	84%	100%	Compliant
A2_M01_001	A2_M01_001	40%	100%	24%	100%	Non-compliant
A2_M01_001	A2_M01_001	26%	67%	21%	57%	Non-compliant
A2_M01_002	A2_M01_002	43%	100%	39%	100%	Non-compliant
A2_M01_002	A2_M01_002	6%	87%	0%	67%	Non-compliant
A2_M01_002	A2_M01_002	29%	71%	24%	62%	Non-compliant
A2_M01_003	A2_M01_003	100%	100%	100%	100%	Compliant
A2_M01_003	A2_M01_003	68%	100%	55%	100%	Compliant
A2_M01_003	A2_M01_003	79%	100%	63%	100%	Compliant
A2_M01_004	A2_M01_004	100%	100%	100%	100%	Compliant
A2_M01_004	A2_M01_004	29%	79%	20%	59%	Non-compliant
A2_M01_005	A2_M01_005	32%	100%	23%	93%	Non-compliant
A2_M01_005	A2_M01_005	0%	81%	0%	60%	Non-compliant
A2_M01_005	A2_M01_005	69%	100%	60%	100%	Compliant
A2_M01_006	A2_M01_006	81%	100%	50%	100%	Compliant
A2_M01_006	A2_M01_006	100%	100%	100%	100%	Compliant
A2_M01_006	A2_M01_006	75%	100%	50%	100%	Compliant
A2_M01_006	A2_M01_006	61%	95%	56%	86%	Trees affecting compliance

\* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 24. For floor plans of the assessed units please refer to section D.1 on page 86.

### E.1.10 Supplementary SDA Results (I.S. EN 17037 criteria): Block A2 -Level 01

Table No. E.1.10 - Supplementary SDA Results (I.S. EN 17037 criteria):						
Unit Number	Room Description	No Trees		With Trees		Compliance with I.S. EN 17037 Criteria*
		Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	
A2_01_001	A2_01_001	89%	100%	86%	100%	Compliant
A2_01_001	A2_01_001	15%	73%	14%	69%	Non-compliant
A2_01_002	A2_01_002	44%	100%	44%	100%	Non-compliant
A2_01_002	A2_01_002	6%	95%	3%	89%	Non-compliant
A2_01_002	A2_01_002	35%	75%	32%	71%	Non-compliant
A2_01_003	A2_01_003	100%	100%	100%	100%	Compliant
A2_01_003	A2_01_003	80%	100%	75%	100%	Compliant
A2_01_003	A2_01_003	88%	100%	78%	100%	Compliant
A2_01_004	A2_01_004	100%	100%	100%	100%	Compliant
A2_01_004	A2_01_004	63%	100%	63%	100%	Compliant
A2_01_004	A2_01_004	58%	100%	52%	100%	Compliant
A2_01_005	A2_01_005	63%	100%	59%	100%	Compliant
A2_01_005	A2_01_005	0%	68%	0%	62%	Non-compliant
A2_01_005	A2_01_005	28%	65%	28%	63%	Non-compliant
A2_01_006	A2_01_006	100%	100%	100%	100%	Compliant
A2_01_006	A2_01_006	36%	100%	35%	100%	Non-compliant
A2_01_006	A2_01_006	28%	68%	27%	66%	Non-compliant
A2_01_007	A2_01_007	86%	100%	86%	100%	Compliant
A2_01_007	A2_01_007	100%	100%	100%	100%	Compliant
A2_01_007	A2_01_007	80%	100%	80%	100%	Compliant
A2_01_007	A2_01_007	57%	88%	55%	86%	Non-compliant
A2_01_008	A2_01_008	88%	100%	79%	100%	Compliant
A2_01_008	A2_01_008	100%	100%	100%	100%	Compliant
A2_01_008	A2_01_008	90%	100%	80%	100%	Compliant
A2_01_008	A2_01_008	63%	96%	61%	94%	Trees affecting compliance
A2_01_009	A2_01_009	92%	100%	83%	100%	Compliant
A2_01_009	A2_01_009	17%	78%	14%	70%	Non-compliant

\* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 24. For floor plans of the assessed units please refer to section D.1 on page 86.

### E.1.11 Supplementary SDA Results (I.S. EN 17037 criteria): Block A2 -Level 02

Table No. E.1.11 - Supplementary SDA Results (I.S. EN 17037 criteria):						
Unit Number	Room Description	No Trees		With Trees		Compliance with I.S. EN 17037 Criteria*
		Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	
A2_02_001	A2_02_001	94%	100%	92%	100%	Compliant
A2_02_001	A2_02_001	19%	79%	17%	77%	Non-compliant
A2_02_002	A2_02_002	63%	100%	61%	100%	Compliant
A2_02_002	A2_02_002	16%	100%	13%	100%	Non-compliant
A2_02_002	A2_02_002	38%	82%	37%	81%	Non-compliant
A2_02_003	A2_02_003	100%	100%	100%	100%	Compliant
A2_02_003	A2_02_003	91%	100%	91%	100%	Compliant
A2_02_003	A2_02_003	92%	100%	90%	100%	Compliant
A2_02_004	A2_02_004	100%	100%	100%	100%	Compliant
A2_02_004	A2_02_004	86%	100%	80%	100%	Compliant
A2_02_004	A2_02_004	72%	100%	68%	100%	Compliant
A2_02_005	A2_02_005	76%	100%	76%	100%	Compliant
A2_02_005	A2_02_005	0%	100%	0%	100%	Non-compliant
A2_02_005	A2_02_005	34%	76%	34%	75%	Non-compliant
A2_02_006	A2_02_006	100%	100%	100%	100%	Compliant
A2_02_006	A2_02_006	24%	99%	24%	98%	Non-compliant
A2_02_007	A2_02_007	100%	100%	100%	100%	Compliant
A2_02_007	A2_02_007	23%	95%	23%	94%	Non-compliant
A2_02_008	A2_02_008	100%	100%	100%	100%	Compliant
A2_02_008	A2_02_008	100%	100%	100%	100%	Compliant
A2_02_008	A2_02_008	100%	100%	100%	100%	Compliant
A2_02_008	A2_02_008	59%	92%	59%	90%	Non-compliant
A2_02_009	A2_02_009	90%	100%	88%	100%	Compliant
A2_02_009	A2_02_009	100%	100%	100%	100%	Compliant
A2_02_009	A2_02_009	90%	100%	90%	100%	Compliant
A2_02_009	A2_02_009	64%	98%	63%	97%	Compliant
A2_02_010	A2_02_010	93%	100%	90%	100%	Compliant
A2_02_010	A2_02_010	18%	84%	17%	81%	Non-compliant

\* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 24. For floor plans of the assessed units please refer to section D.1 on page 86.

### E.1.12 Supplementary SDA Results (I.S. EN 17037 criteria): Block A2 -Level 03

Table No. E.1.12 - Supplementary SDA Results (I.S. EN 17037 criteria):

Unit Number	Room Description	No Trees		With Trees		Compliance with I.S. EN 17037 Criteria*
		Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	
A2_03_001	A2_03_001	99%	100%	99%	100%	Compliant
A2_03_001	A2_03_001	25%	96%	24%	92%	Non-compliant
A2_03_002	A2_03_002	70%	100%	69%	100%	Compliant
A2_03_002	A2_03_002	21%	100%	21%	100%	Non-compliant
A2_03_002	A2_03_002	41%	87%	40%	86%	Non-compliant
A2_03_003	A2_03_003	100%	100%	100%	100%	Compliant
A2_03_003	A2_03_003	98%	100%	98%	100%	Compliant
A2_03_003	A2_03_003	98%	100%	97%	100%	Compliant
A2_03_004	A2_03_004	100%	100%	100%	100%	Compliant
A2_03_004	A2_03_004	96%	100%	96%	100%	Compliant
A2_03_004	A2_03_004	88%	100%	84%	100%	Compliant
A2_03_005	A2_03_005	80%	100%	80%	100%	Compliant
A2_03_005	A2_03_005	11%	100%	6%	100%	Non-compliant
A2_03_005	A2_03_005	39%	87%	38%	85%	Non-compliant
A2_03_006	A2_03_006	100%	100%	100%	100%	Compliant
A2_03_006	A2_03_006	30%	100%	29%	100%	Non-compliant
A2_03_007	A2_03_007	100%	100%	100%	100%	Compliant
A2_03_007	A2_03_007	28%	99%	27%	99%	Non-compliant
A2_03_008	A2_03_008	100%	100%	100%	100%	Compliant
A2_03_008	A2_03_008	100%	100%	100%	100%	Compliant
A2_03_008	A2_03_008	100%	100%	100%	100%	Compliant
A2_03_008	A2_03_008	62%	98%	61%	96%	Compliant
A2_03_009	A2_03_009	95%	100%	95%	100%	Compliant
A2_03_009	A2_03_009	100%	100%	100%	100%	Compliant
A2_03_009	A2_03_009	100%	100%	100%	100%	Compliant
A2_03_009	A2_03_009	65%	99%	65%	99%	Compliant
A2_03_010	A2_03_010	97%	100%	97%	100%	Compliant
A2_03_010	A2_03_010	21%	88%	21%	86%	Non-compliant

\* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 24. For floor plans of the assessed units please refer to section D.1 on page 86.

### E.1.13 Supplementary SDA Results (I.S. EN 17037 criteria): Block A2 -Level 04

Table No. E.1.13 - Supplementary SDA Results (I.S. EN 17037 criteria):						
Unit Number	Room Description	No Trees		With Trees		Compliance with I.S. EN 17037 Criteria*
		Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	
A2_04_001	A2_04_001	100%	100%	100%	100%	Compliant
A2_04_001	A2_04_001	30%	100%	29%	99%	Non-compliant
A2_04_002	A2_04_002	80%	100%	76%	100%	Compliant
A2_04_002	A2_04_002	33%	100%	33%	100%	Non-compliant
A2_04_002	A2_04_002	46%	94%	45%	93%	Non-compliant
A2_04_003	A2_04_003	100%	100%	100%	100%	Compliant
A2_04_003	A2_04_003	100%	100%	100%	100%	Compliant
A2_04_003	A2_04_003	100%	100%	100%	100%	Compliant
A2_04_004	A2_04_004	100%	100%	100%	100%	Compliant
A2_04_004	A2_04_004	100%	100%	100%	100%	Compliant
A2_04_004	A2_04_004	94%	100%	92%	100%	Compliant
A2_04_005	A2_04_005	85%	100%	85%	100%	Compliant
A2_04_005	A2_04_005	14%	100%	13%	100%	Non-compliant
A2_04_005	A2_04_005	41%	98%	40%	96%	Non-compliant
A2_04_006	A2_04_006	100%	100%	100%	100%	Compliant
A2_04_006	A2_04_006	33%	100%	32%	100%	Non-compliant
A2_04_007	A2_04_007	100%	100%	100%	100%	Compliant
A2_04_007	A2_04_007	29%	100%	29%	100%	Non-compliant
A2_04_008	A2_04_008	100%	100%	100%	100%	Compliant
A2_04_008	A2_04_008	100%	100%	100%	100%	Compliant
A2_04_008	A2_04_008	100%	100%	100%	100%	Compliant
A2_04_008	A2_04_008	63%	100%	62%	100%	Compliant
A2_04_009	A2_04_009	95%	100%	95%	100%	Compliant
A2_04_009	A2_04_009	100%	100%	100%	100%	Compliant
A2_04_009	A2_04_009	100%	100%	100%	100%	Compliant
A2_04_009	A2_04_009	68%	99%	68%	99%	Compliant
A2_04_010	A2_04_010	100%	100%	100%	100%	Compliant
A2_04_010	A2_04_010	22%	94%	22%	93%	Non-compliant

\* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 24. For floor plans of the assessed units please refer to section D.1 on page 86.

### E.1.14 Supplementary SDA Results (I.S. EN 17037 criteria): Block A2 -Level 05

Table No. E.1.14 - Supplementary SDA Results (I.S. EN 17037 criteria):						
Unit Number	Room Description	No Trees		With Trees		Compliance with I.S. EN 17037 Criteria*
		Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	
A2_05_001	A2_05_001	100%	100%	100%	100%	Compliant
A2_05_001	A2_05_001	37%	100%	36%	100%	Non-compliant
A2_05_002	A2_05_002	87%	100%	87%	100%	Compliant
A2_05_002	A2_05_002	44%	100%	44%	100%	Non-compliant
A2_05_002	A2_05_002	50%	100%	50%	99%	Compliant
A2_05_003	A2_05_003	100%	100%	100%	100%	Compliant
A2_05_003	A2_05_003	100%	100%	100%	100%	Compliant
A2_05_003	A2_05_003	100%	100%	100%	100%	Compliant
A2_05_004	A2_05_004	100%	100%	100%	100%	Compliant
A2_05_004	A2_05_004	100%	100%	100%	100%	Compliant
A2_05_004	A2_05_004	97%	100%	96%	100%	Compliant
A2_05_005	A2_05_005	87%	100%	85%	100%	Compliant
A2_05_005	A2_05_005	17%	100%	16%	100%	Non-compliant
A2_05_005	A2_05_005	43%	98%	42%	97%	Non-compliant
A2_05_006	A2_05_006	100%	100%	100%	100%	Compliant
A2_05_006	A2_05_006	35%	100%	34%	100%	Non-compliant
A2_05_007	A2_05_007	100%	100%	100%	100%	Compliant
A2_05_007	A2_05_007	31%	100%	30%	100%	Non-compliant
A2_05_008	A2_05_008	100%	100%	100%	100%	Compliant
A2_05_008	A2_05_008	100%	100%	100%	100%	Compliant
A2_05_008	A2_05_008	100%	100%	100%	100%	Compliant
A2_05_008	A2_05_008	64%	100%	64%	100%	Compliant
A2_05_009	A2_05_009	100%	100%	100%	100%	Compliant
A2_05_009	A2_05_009	100%	100%	100%	100%	Compliant
A2_05_009	A2_05_009	100%	100%	100%	100%	Compliant
A2_05_009	A2_05_009	69%	100%	67%	100%	Compliant
A2_05_010	A2_05_010	100%	100%	100%	100%	Compliant
A2_05_010	A2_05_010	28%	99%	28%	99%	Non-compliant

\* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 24. For floor plans of the assessed units please refer to section D.1 on page 86.

### E.1.15 Supplementary SDA Results (I.S. EN 17037 criteria): Block A2 -Level 06

Table No. E.1.15 - Supplementary SDA Results (I.S. EN 17037 criteria):

Unit Number	Room Description	No Trees		With Trees		Compliance with I.S. EN 17037 Criteria*
		Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	
A2_06_001	A2_06_001	100%	100%	100%	100%	Compliant
A2_06_001	A2_06_001	46%	100%	44%	100%	Non-compliant
A2_06_002	A2_06_002	100%	100%	100%	100%	Compliant
A2_06_002	A2_06_002	100%	100%	100%	100%	Compliant
A2_06_002	A2_06_002	100%	100%	100%	100%	Compliant
A2_06_003	A2_06_003	100%	100%	100%	100%	Compliant
A2_06_003	A2_06_003	100%	100%	100%	100%	Compliant
A2_06_003	A2_06_003	100%	100%	100%	100%	Compliant
A2_06_004	A2_06_004	100%	100%	100%	100%	Compliant
A2_06_004	A2_06_004	38%	100%	38%	100%	Non-compliant
A2_06_005	A2_06_005	100%	100%	100%	100%	Compliant
A2_06_005	A2_06_005	34%	100%	33%	100%	Non-compliant
A2_06_006	A2_06_006	100%	100%	100%	100%	Compliant
A2_06_006	A2_06_006	100%	100%	100%	100%	Compliant
A2_06_006	A2_06_006	100%	100%	100%	100%	Compliant
A2_06_006	A2_06_006	64%	100%	64%	100%	Compliant
A2_06_007	A2_06_007	100%	100%	100%	100%	Compliant
A2_06_007	A2_06_007	100%	100%	100%	100%	Compliant
A2_06_007	A2_06_007	100%	100%	100%	100%	Compliant
A2_06_007	A2_06_007	70%	100%	70%	100%	Compliant
A2_06_008	A2_06_008	100%	100%	100%	100%	Compliant
A2_06_008	A2_06_008	31%	99%	31%	99%	Non-compliant

\* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 24. For floor plans of the assessed units please refer to section D.1 on page 86.

### E.1.16 Supplementary SDA Results (I.S. EN 17037 criteria): Block A2 -Level 07 and 08

Table No. E.1.16 - Supplementary SDA Results (I.S. EN 17037 criteria):

Unit Number	Room Description	No Trees		With Trees		Compliance with I.S. EN 17037 Criteria*
		Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	
A2_07_001	A2_07_001	75%	75%	75%	75%	Non-compliant
A2_07_001	A2_07_001	100%	100%	100%	100%	Compliant
A2_07_001	A2_07_001	96%	100%	95%	100%	Compliant
A2_07_001	A2_07_001	43%	100%	43%	100%	Non-compliant
A2_07_002	A2_07_002	100%	100%	100%	100%	Compliant
A2_07_002	A2_07_002	100%	100%	100%	100%	Compliant
A2_07_002	A2_07_002	100%	100%	100%	100%	Compliant
A2_07_003	A2_07_003	100%	100%	100%	100%	Compliant
A2_07_003	A2_07_003	100%	100%	100%	100%	Compliant
A2_07_003	A2_07_003	100%	100%	100%	100%	Compliant
A2_07_004	A2_07_004	100%	100%	100%	100%	Compliant
A2_07_004	A2_07_004	41%	100%	41%	100%	Non-compliant
A2_07_005	A2_07_005	100%	100%	100%	100%	Compliant
A2_07_005	A2_07_005	35%	100%	35%	100%	Non-compliant
A2_07_006	A2_07_006	100%	100%	100%	100%	Compliant
A2_07_006	A2_07_006	100%	100%	100%	100%	Compliant
A2_07_006	A2_07_006	100%	100%	100%	100%	Compliant
A2_07_006	A2_07_006	65%	100%	65%	100%	Compliant
A2_07_007	A2_07_007	100%	100%	100%	100%	Compliant
A2_07_007	A2_07_007	100%	100%	100%	100%	Compliant
A2_07_007	A2_07_007	100%	100%	100%	100%	Compliant
A2_07_007	A2_07_007	73%	100%	72%	100%	Compliant
A2_08_001	A2_08_001	75%	75%	75%	75%	Non-compliant
A2_08_001	A2_08_001	100%	100%	100%	100%	Compliant
A2_08_001	A2_08_001	100%	100%	100%	100%	Compliant
A2_08_001	A2_08_001	100%	100%	100%	100%	Compliant
A2_08_002	A2_08_002	100%	100%	100%	100%	Compliant
A2_08_002	A2_08_002	100%	100%	100%	100%	Compliant
A2_08_002	A2_08_002	97%	100%	97%	100%	Compliant
A2_08_002	A2_08_002	100%	100%	100%	100%	Compliant
A2_08_003	A2_08_003	100%	100%	100%	100%	Compliant
A2_08_003	A2_08_003	100%	100%	100%	100%	Compliant
A2_08_003	A2_08_003	100%	100%	100%	100%	Compliant
A2_08_003	A2_08_003	66%	100%	65%	100%	Compliant
A2_08_004	A2_08_004	100%	100%	100%	100%	Compliant
A2_08_004	A2_08_004	100%	100%	100%	100%	Compliant
A2_08_004	A2_08_004	100%	100%	100%	100%	Compliant
A2_08_004	A2_08_004	77%	100%	77%	100%	Compliant

\* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 24. For floor plans of the assessed units please refer to section D.1 on page 86.

### E.1.17 Supplementary SDA Results (I.S. EN 17037 criteria): Block A2 -Level 09

Table No. E.1.17 - Supplementary SDA Results (I.S. EN 17037 criteria):						
Unit Number	Room Description	No Trees		With Trees		Compliance with I.S. EN 17037 Criteria*
		Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	
A2_09_001	A2_09_001	100%	100%	100%	100%	Compliant
A2_09_001	A2_09_001	100%	100%	100%	100%	Compliant
A2_09_001	A2_09_001	100%	100%	100%	100%	Compliant
A2_09_001	A2_09_001	95%	100%	95%	100%	Compliant
A2_09_001	A2_09_001	100%	100%	100%	100%	Compliant
A2_09_002	A2_09_002	100%	100%	100%	100%	Compliant
A2_09_002	A2_09_002	100%	100%	100%	100%	Compliant
A2_09_002	A2_09_002	100%	100%	100%	100%	Compliant
A2_09_002	A2_09_002	80%	100%	80%	100%	Compliant
A2_09_002	A2_09_002	100%	100%	100%	100%	Compliant

\* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 24. For floor plans of the assessed units please refer to section D.1 on page 86.

### E.1.18 Supplementary SDA Results (I.S. EN 17037 criteria): Townhouses (West)

Table No. E.1.18 - Supplementary SDA Results (I.S. EN 17037 criteria):

Unit Number	Room Description	No Trees		With Trees		Compliance with I.S. EN 17037 Criteria*
		Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	
P_01_001	P_01_001	100%	100%	97%	100%	Compliant
P_01_001	P_01_001	92%	100%	90%	100%	Compliant
P_01_001	P_01_001	80%	100%	76%	100%	Compliant
P_01_001	P_01_001	79%	100%	78%	100%	Compliant
P_01_001	P_01_001	96%	100%	91%	100%	Compliant
P_01_002	P_01_002	100%	100%	94%	100%	Compliant
P_01_002	P_01_002	92%	100%	90%	100%	Compliant
P_01_002	P_01_002	80%	100%	73%	100%	Compliant
P_01_002	P_01_002	74%	100%	74%	100%	Compliant
P_01_002	P_01_002	91%	100%	82%	100%	Compliant
P_01_003	P_01_003	100%	100%	94%	100%	Compliant
P_01_003	P_01_003	92%	100%	88%	100%	Compliant
P_01_003	P_01_003	78%	100%	71%	100%	Compliant
P_01_003	P_01_003	70%	100%	70%	100%	Compliant
P_01_003	P_01_003	85%	100%	69%	100%	Compliant
P_01_004	P_01_004	100%	100%	94%	100%	Compliant
P_01_004	P_01_004	92%	100%	88%	100%	Compliant
P_01_004	P_01_004	77%	100%	70%	100%	Compliant
P_01_004	P_01_004	64%	100%	64%	100%	Compliant
P_01_004	P_01_004	77%	100%	62%	100%	Compliant
P_01_005	P_01_005	100%	100%	94%	100%	Compliant
P_01_005	P_01_005	100%	100%	95%	100%	Compliant
P_01_005	P_01_005	78%	100%	71%	100%	Compliant
P_01_005	P_01_005	59%	100%	58%	100%	Compliant
P_01_005	P_01_005	69%	100%	58%	100%	Compliant

\* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 24. For floor plans of the assessed units please refer to section D.1 on page 86.

### E.1.19 Supplementary SDA Results (I.S. EN 17037 criteria): Townhouses (East)

Table No. E.1.19 - Supplementary SDA Results (I.S. EN 17037 criteria):

Unit Number	Room Description	No Trees		With Trees		Compliance with I.S. EN 17037 Criteria*
		Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	
P_M01_001	P_M01_001	79%	100%	43%	100%	Trees affecting compliance
P_M01_001	P_M01_001	86%	100%	22%	84%	Trees affecting compliance
P_M01_001	P_M01_001	100%	100%	100%	100%	Compliant
P_M01_001	P_M01_001	96%	100%	96%	100%	Compliant
P_M01_001	P_M01_001	100%	100%	100%	100%	Compliant
P_M01_001	P_M01_001	89%	100%	67%	100%	Compliant
P_M01_002	P_M01_002	79%	100%	25%	99%	Trees affecting compliance
P_M01_002	P_M01_002	86%	100%	67%	100%	Compliant
P_M01_002	P_M01_002	100%	100%	100%	100%	Compliant
P_M01_002	P_M01_002	98%	100%	98%	100%	Compliant
P_M01_002	P_M01_002	100%	100%	100%	100%	Compliant
P_M01_002	P_M01_002	81%	100%	68%	100%	Compliant
P_M01_003	P_M01_003	85%	100%	62%	100%	Compliant
P_M01_003	P_M01_003	86%	100%	57%	94%	Trees affecting compliance
P_M01_003	P_M01_003	100%	100%	100%	100%	Compliant
P_M01_003	P_M01_003	97%	100%	96%	100%	Compliant
P_M01_003	P_M01_003	100%	100%	97%	100%	Compliant
P_M01_003	P_M01_003	81%	100%	65%	100%	Compliant
P_M01_004	P_M01_004	79%	100%	30%	99%	Trees affecting compliance
P_M01_004	P_M01_004	86%	100%	27%	86%	Trees affecting compliance
P_M01_004	P_M01_004	100%	100%	100%	100%	Compliant
P_M01_004	P_M01_004	89%	100%	89%	100%	Compliant
P_M01_004	P_M01_004	84%	100%	84%	100%	Compliant
P_M01_004	P_M01_004	76%	100%	61%	100%	Compliant

\* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 24. For floor plans of the assessed units please refer to section D.1 on page 86.

## E.2 Supplementary No Sky Line (NSL) assessment in proposed units.

Below is an example of the table used to describe the supplementary assessment results for 'No Sky Line' in proposed units.

Table Example. E.2 - Supplementary NSL Results:			
Unit Number	Room Description	No Sky Line (NSL)	
		% of room where the sky is visible from the working plane	Above 80%
<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>

### 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 in the unit has been assessed, e.g. bedroom, LKD, etc.

### C: % of room where the sky is visible from the working plane

This column states the percentage of the room from which there is a direct line of sight to the sky when assessed at the working plane height, which is 850mm above the finished floor level in residential rooms or 700mm above the finished floor level in offices or classrooms.

### D: Above 80%

Whilst the BRE Guidelines only provide recommendations for NSL in the context of an impact analysis, it states that "Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line."

If this column states: 'Yes', it signifies that the sky will be visible from more than 80% of the working plane.

If this column states: 'No', it signifies that the sky will be visible from less than 80% of the working plane and supplementary electric lighting may be required.

## E.2.1 Supplementary NSL Results: Block A1 -Level 00 and 01 Mezzanine

Table No. E.2.1 - Supplementary NSL Results:			
Unit Number	Room Description	No Sky Line (NSL)	
		% of room where the sky is visible from the working plane	Above 80%*
Communal	Communal	100%	Yes
A1_00_001	Bedroom 1	100%	Yes
A1_00_001	LKD	99%	Yes
A1_00_002	Bedroom 1	99%	Yes
A1_00_002	Bedroom 2	99%	Yes
A1_00_002	Bedroom 3	96%	Yes
A1_00_002	LKD	100%	Yes
A1_00_003	Bedroom 1	99%	Yes
A1_00_003	Bedroom 2	95%	Yes
A1_00_003	LKD	99%	Yes
A1_M01_001	Bedroom 1	99%	Yes
A1_M01_001	LKD	76%	No
A1_M01_002	Bedroom 1	100%	Yes
A1_M01_002	Bedroom 2	99%	Yes
A1_M01_002	LKD	100%	Yes
A1_M01_003	Bedroom 1	100%	Yes
A1_M01_003	Bedroom 2	98%	Yes
A1_M01_003	LKD	100%	Yes
A1_M01_004	Bedroom 1	100%	Yes
A1_M01_004	Bedroom 2	99%	Yes
A1_M01_004	LKD	99%	Yes
A1_M01_005	Bedroom 1	99%	Yes
A1_M01_005	Bedroom 2	99%	Yes
A1_M01_005	Bedroom 3	96%	Yes
A1_M01_005	LKD	100%	Yes
A1_M01_006	Bedroom 1	99%	Yes
A1_M01_006	Bedroom 2	95%	Yes
A1_M01_006	LKD	99%	Yes

\* Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that "Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line."  
For floor plans of the assessed units please refer to section D.1 on page 86.

## E.2.2 Supplementary NSL Results: Block A1 -Level 01

Table No. E.2.2 - Supplementary NSL Results:			
Unit Number	Room Description	No Sky Line (NSL)	
		% of room where the sky is visible from the working plane	Above 80%*
A1_01_001	Bedroom 1	92%	Yes
A1_01_001	Bedroom 2	82%	Yes
A1_01_001	LKD	65%	No
A1_01_002	Bedroom 1	100%	Yes
A1_01_002	Bedroom 2	99%	Yes
A1_01_002	LKD	100%	Yes
A1_01_003	Bedroom 1	100%	Yes
A1_01_003	Bedroom 2	99%	Yes
A1_01_003	LKD	100%	Yes
A1_01_004	Bedroom 1	100%	Yes
A1_01_004	Bedroom 2	98%	Yes
A1_01_004	LKD	100%	Yes
A1_01_005	Bedroom 1	100%	Yes
A1_01_005	LKD	99%	Yes
A1_01_006	Bedroom 1	100%	Yes
A1_01_006	LKD	99%	Yes
A1_01_007	Bedroom 1	99%	Yes
A1_01_007	Bedroom 2	99%	Yes
A1_01_007	Bedroom 3	96%	Yes
A1_01_007	LKD	100%	Yes
A1_01_008	Bedroom 1	99%	Yes
A1_01_008	Bedroom 2	99%	Yes
A1_01_008	Bedroom 3	96%	Yes
A1_01_008	LKD	89%	Yes
A1_01_009	Bedroom 1	100%	Yes
A1_01_009	Bedroom 2	97%	Yes
A1_01_009	LKD	66%	No

\* Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that "Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line."  
For floor plans of the assessed units please refer to section D.1 on page 86.

### E.2.3 Supplementary NSL Results: Block A1 -Level 02

Table No. E.2.3 - Supplementary NSL Results:			
Unit Number	Room Description	No Sky Line (NSL)	
		% of room where the sky is visible from the working plane	Above 80%*
A1_02_001	Bedroom 1	100%	Yes
A1_02_001	LKD	89%	Yes
A1_02_002	Bedroom 1	96%	Yes
A1_02_002	Bedroom 2	88%	Yes
A1_02_002	LKD	82%	Yes
A1_02_003	Bedroom 1	100%	Yes
A1_02_003	Bedroom 2	98%	Yes
A1_02_003	LKD	100%	Yes
A1_02_004	Bedroom 1	100%	Yes
A1_02_004	Bedroom 2	98%	Yes
A1_02_004	LKD	100%	Yes
A1_02_005	Bedroom 1	100%	Yes
A1_02_005	Bedroom 2	98%	Yes
A1_02_005	LKD	100%	Yes
A1_02_006	Bedroom 1	100%	Yes
A1_02_006	LKD	99%	Yes
A1_02_007	Bedroom 1	100%	Yes
A1_02_007	LKD	99%	Yes
A1_02_008	Bedroom 1	99%	Yes
A1_02_008	Bedroom 2	99%	Yes
A1_02_008	Bedroom 3	97%	Yes
A1_02_008	LKD	100%	Yes
A1_02_009	Bedroom 1	99%	Yes
A1_02_009	Bedroom 2	99%	Yes
A1_02_009	Bedroom 3	96%	Yes
A1_02_009	LKD	90%	Yes
A1_02_10	Bedroom 1	100%	Yes
A1_02_10	LKD	87%	Yes

\* Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that "Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line."  
For floor plans of the assessed units please refer to section D.1 on page 86.

## E.2.4 Supplementary NSL Results: Block A1 -Level 03

Table No. E.2.4 - Supplementary NSL Results:			
Unit Number	Room Description	No Sky Line (NSL)	
		% of room where the sky is visible from the working plane	Above 80%*
A1_03_001	Bedroom 1	100%	Yes
A1_03_001	LKD	92%	Yes
A1_03_002	Bedroom 1	98%	Yes
A1_03_002	Bedroom 2	93%	Yes
A1_03_002	LKD	89%	Yes
A1_03_003	Bedroom 1	100%	Yes
A1_03_003	Bedroom 2	99%	Yes
A1_03_003	LKD	100%	Yes
A1_03_004	Bedroom 1	100%	Yes
A1_03_004	Bedroom 2	98%	Yes
A1_03_004	LKD	100%	Yes
A1_03_005	Bedroom 1	100%	Yes
A1_03_005	Bedroom 2	98%	Yes
A1_03_005	LKD	100%	Yes
A1_03_006	Bedroom 1	100%	Yes
A1_03_006	LKD	99%	Yes
A1_03_007	Bedroom 1	100%	Yes
A1_03_007	LKD	99%	Yes
A1_03_008	Bedroom 1	99%	Yes
A1_03_008	Bedroom 2	99%	Yes
A1_03_008	Bedroom 3	96%	Yes
A1_03_008	LKD	100%	Yes
A1_03_009	Bedroom 1	99%	Yes
A1_03_009	Bedroom 2	99%	Yes
A1_03_009	Bedroom 3	96%	Yes
A1_03_009	LKD	91%	Yes
A1_03_010	Bedroom 1	100%	Yes
A1_03_010	LKD	90%	Yes

\* Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that "Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line."  
For floor plans of the assessed units please refer to section D.1 on page 86.

## E.2.5 Supplementary NSL Results: Block A1 -Level 04

Table No. E.2.5 - Supplementary NSL Results:			
Unit Number	Room Description	No Sky Line (NSL)	
		% of room where the sky is visible from the working plane	Above 80%*
A1_04_001	Bedroom 1	100%	Yes
A1_04_001	LKD	94%	Yes
A1_04_002	Bedroom 1	99%	Yes
A1_04_002	Bedroom 2	97%	Yes
A1_04_002	LKD	91%	Yes
A1_04_003	Bedroom 1	100%	Yes
A1_04_003	Bedroom 2	99%	Yes
A1_04_003	LKD	100%	Yes
A1_04_004	Bedroom 1	100%	Yes
A1_04_004	Bedroom 2	99%	Yes
A1_04_004	LKD	100%	Yes
A1_04_005	Bedroom 1	100%	Yes
A1_04_005	Bedroom 2	98%	Yes
A1_04_005	LKD	98%	Yes
A1_04_006	Bedroom 1	100%	Yes
A1_04_006	LKD	99%	Yes
A1_04_007	Bedroom 2	100%	Yes
A1_04_007	LKD	99%	Yes
A1_04_008	Bedroom 1	99%	Yes
A1_04_008	Bedroom 2	99%	Yes
A1_04_008	Bedroom 3	96%	Yes
A1_04_008	LKD	100%	Yes
A1_04_009	Bedroom 1	99%	Yes
A1_04_009	Bedroom 2	99%	Yes
A1_04_009	Bedroom 3	96%	Yes
A1_04_009	LKD	91%	Yes
A1_04_010	Bedroom 1	100%	Yes
A1_04_010	LKD	96%	Yes

\* Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that "Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line."  
For floor plans of the assessed units please refer to section D.1 on page 86.

## E.2.6 Supplementary NSL Results: Block A1 -Level 05

Table No. E.2.6 - Supplementary NSL Results:			
Unit Number	Room Description	No Sky Line (NSL)	
		% of room where the sky is visible from the working plane	Above 80%*
A1_05_001	Bedroom 1	100%	Yes
A1_05_001	LKD	97%	Yes
A1_05_002	Bedroom 1	99%	Yes
A1_05_002	Bedroom 2	99%	Yes
A1_05_002	LKD	100%	Yes
A1_05_003	Bedroom 1	99%	Yes
A1_05_003	Bedroom 2	100%	Yes
A1_05_003	LKD	100%	Yes
A1_05_004	Bedroom 1	100%	Yes
A1_05_004	LKD	99%	Yes
A1_05_005	Bedroom 2	100%	Yes
A1_05_005	LKD	99%	Yes
A1_05_006	Bedroom 1	99%	Yes
A1_05_006	Bedroom 2	99%	Yes
A1_05_006	Bedroom 3	96%	Yes
A1_05_006	LKD	100%	Yes
A1_05_007	Bedroom 1	99%	Yes
A1_05_007	Bedroom 2	99%	Yes
A1_05_007	Bedroom 3	96%	Yes
A1_05_007	LKD	92%	Yes
A1_05_008	Bedroom 1	100%	Yes
A1_05_008	LKD	98%	Yes

\* Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that "Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line."  
For floor plans of the assessed units please refer to section D.1 on page 86.

## E.2.7 Supplementary NSL Results: Block A1 -Level 06

Table No. E.2.7 - Supplementary NSL Results:			
Unit Number	Room Description	No Sky Line (NSL)	
		% of room where the sky is visible from the working plane	Above 80%*
A1_06_001	Bedroom 1	100%	Yes
A1_06_001	Bedroom 2	99%	Yes
A1_06_001	Bedroom 3	98%	Yes
A1_06_001	LKD	96%	Yes
A1_06_002	Bedroom 1	99%	Yes
A1_06_002	Bedroom 2	99%	Yes
A1_06_002	LKD	100%	Yes
A1_06_003	Bedroom 1	99%	Yes
A1_06_003	Bedroom 2	99%	Yes
A1_06_003	LKD	100%	Yes
A1_06_004	Bedroom 1	100%	Yes
A1_06_004	LKD	99%	Yes
A1_06_005	Bedroom 2	100%	Yes
A1_06_005	LKD	99%	Yes
A1_06_006	Bedroom 1	99%	Yes
A1_06_006	Bedroom 2	99%	Yes
A1_06_006	Bedroom 3	97%	Yes
A1_06_006	LKD	100%	Yes
A1_06_007	Bedroom 1	99%	Yes
A1_06_007	Bedroom 2	99%	Yes
A1_06_007	Bedroom 3	97%	Yes
A1_06_007	LKD	95%	Yes

\* Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that "Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line."  
For floor plans of the assessed units please refer to section D.1 on page 86.

## E.2.8 Supplementary NSL Results: Block A1 -Level 07

Table No. E.2.8 - Supplementary NSL Results:			
Unit Number	Room Description	No Sky Line (NSL)	
		% of room where the sky is visible from the working plane	Above 80%*
A1_07_001	Bedroom 1	100%	Yes
A1_07_001	Bedroom 2	100%	Yes
A1_07_001	Bedroom 3	98%	Yes
A1_07_001	LKD	100%	Yes
A1_07_002	Bedroom 1	99%	Yes
A1_07_002	Bedroom 2	99%	Yes
A1_07_002	LKD	100%	Yes
A1_07_002	LKD	98%	Yes
A1_07_003	Bedroom 1	99%	Yes
A1_07_003	Bedroom 2	99%	Yes
A1_07_003	Bedroom 3	96%	Yes
A1_07_003	LKD	100%	Yes
A1_07_004	Bedroom 1	99%	Yes
A1_07_004	Bedroom 2	99%	Yes
A1_07_004	Bedroom 3	96%	Yes
A1_07_004	LKD	100%	Yes
A1_08_001	Bedroom 1	100%	Yes
A1_08_001	Bedroom 2	99%	Yes
A1_08_001	Bedroom 3	99%	Yes
A1_08_001	LKD	100%	Yes
A1_08_001	Snug Room	98%	Yes
A1_08_002	Bedroom 1	100%	Yes
A1_08_002	Bedroom 2	99%	Yes
A1_08_002	Bedroom 3	99%	Yes
A1_08_002	LKD	100%	Yes
A1_08_002	Snug Room	98%	Yes

\* Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that "Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line."  
For floor plans of the assessed units please refer to section D.1 on page 86.

## E.2.9 Supplementary NSL Results: Block A2 -Level 00 and 01 Mezzanine

Table No. E.2.9 - Supplementary NSL Results:

Unit Number	Room Description	No Sky Line (NSL)	
		% of room where the sky is visible from the working plane	Above 80%*
A2_00_001	Bedroom 1	88%	Yes
A2_00_001	LKD	55%	No
A2_00_002	Bedroom 1	49%	No
A2_00_002	Bedroom 2	60%	No
A2_00_002	LKD	55%	No
A2_00_003	Bedroom 1	99%	Yes
A2_00_003	Bedroom 2	74%	No
A2_00_003	LKD	93%	Yes
A2_00_004	Bedroom 1	99%	Yes
A2_00_004	Bedroom 2	95%	Yes
A2_00_004	LKD	99%	Yes
A2_00_005	Bedroom 1	73%	No
A2_00_005	Bedroom 2	99%	Yes
A2_00_005	Bedroom 3	75%	No
A2_00_005	LKD	89%	Yes
A2_M01_001	Bedroom 1	84%	Yes
A2_M01_001	Bedroom 2	62%	No
A2_M01_001	LKD	57%	No
A2_M01_002	Bedroom 1	51%	No
A2_M01_002	Bedroom 2	45%	No
A2_M01_002	LKD	58%	No
A2_M01_003	Bedroom 1	99%	Yes
A2_M01_003	Bedroom 2	78%	No
A2_M01_003	LKD	93%	Yes
A2_M01_004	Bedroom 1	99%	Yes
A2_M01_004	LKD	77%	No
A2_M01_005	Bedroom 1	99%	Yes
A2_M01_005	Bedroom 2	95%	Yes
A2_M01_005	LKD	100%	Yes
A2_M01_006	Bedroom 1	74%	No
A2_M01_006	Bedroom 2	99%	Yes
A2_M01_006	Bedroom 3	77%	No
A2_M01_006	LKD	89%	Yes

\* Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that "Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line."

For floor plans of the assessed units please refer to section D.1 on page 86.

## E.2.10 Supplementary NSL Results: Block A2 -Level 01

Table No. E.2.10 - Supplementary NSL Results:			
Unit Number	Room Description	No Sky Line (NSL)	
		% of room where the sky is visible from the working plane	Above 80%*
A2_01_001	Bedroom 1	86%	Yes
A2_01_001	LKD	35%	No
A2_01_002	Bedroom 1	51%	No
A2_01_002	Bedroom 2	50%	No
A2_01_002	LKD	60%	No
A2_01_003	Bedroom 1	99%	Yes
A2_01_003	Bedroom 2	85%	Yes
A2_01_003	LKD	93%	Yes
A2_01_004	Bedroom 1	100%	Yes
A2_01_004	Bedroom 2	99%	Yes
A2_01_004	LKD	100%	Yes
A2_01_005	Bedroom 1	99%	Yes
A2_01_005	Bedroom 2	87%	Yes
A2_01_005	LKD	76%	No
A2_01_006	Bedroom 1	100%	Yes
A2_01_006	Bedroom 2	99%	Yes
A2_01_006	LKD	69%	No
A2_01_007	Bedroom 1	99%	Yes
A2_01_007	Bedroom 2	99%	Yes
A2_01_007	Bedroom 3	96%	Yes
A2_01_007	LKD	89%	Yes
A2_01_008	Bedroom 1	77%	No
A2_01_008	Bedroom 2	99%	Yes
A2_01_008	Bedroom 3	80%	Yes
A2_01_008	LKD	89%	Yes
A2_01_009	Bedroom 1	90%	Yes
A2_01_009	LKD	56%	No

\* Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that "Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line."

For floor plans of the assessed units please refer to section D.1 on page 86.

## E.2.11 Supplementary NSL Results: Block A2 -Level 02

Table No. E.2.11 - Supplementary NSL Results:			
Unit Number	Room Description	No Sky Line (NSL)	
		% of room where the sky is visible from the working plane	Above 80%*
A2_02_001	Bedroom 1	62%	No
A2_02_001	LKD	41%	No
A2_02_002	Bedroom 1	69%	No
A2_02_002	Bedroom 2	56%	No
A2_02_002	LKD	42%	No
A2_02_003	Bedroom 1	99%	Yes
A2_02_003	Bedroom 2	94%	Yes
A2_02_003	LKD	94%	Yes
A2_02_004	Bedroom 1	99%	Yes
A2_02_004	Bedroom 2	99%	Yes
A2_02_004	LKD	100%	Yes
A2_02_005	Bedroom 1	99%	Yes
A2_02_005	Bedroom 2	93%	Yes
A2_02_005	LKD	89%	Yes
A2_02_006	Bedroom 1	99%	Yes
A2_02_006	LKD	92%	Yes
A2_02_007	Bedroom 1	100%	Yes
A2_02_007	LKD	90%	Yes
A2_02_008	Bedroom 1	99%	Yes
A2_02_008	Bedroom 2	99%	Yes
A2_02_008	Bedroom 3	96%	Yes
A2_02_008	LKD	90%	Yes
A2_02_009	Bedroom 1	81%	Yes
A2_02_009	Bedroom 2	99%	Yes
A2_02_009	Bedroom 3	83%	Yes
A2_02_009	LKD	89%	Yes
A2_02_010	Bedroom 1	64%	No
A2_02_010	LKD	57%	No

\* Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that "Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line."  
For floor plans of the assessed units please refer to section D.1 on page 86.

## E.2.12 Supplementary NSL Results: Block A2 -Level 03

Table No. E.2.12 - Supplementary NSL Results:			
Unit Number	Room Description	No Sky Line (NSL)	
		% of room where the sky is visible from the working plane	Above 80%*
A2_03_001	Bedroom 1	93%	Yes
A2_03_001	LKD	52%	No
A2_03_002	Bedroom 1	79%	No
A2_03_002	Bedroom 2	74%	No
A2_03_002	LKD	62%	No
A2_03_003	Bedroom 1	99%	Yes
A2_03_003	Bedroom 2	97%	Yes
A2_03_003	LKD	99%	Yes
A2_03_004	Bedroom 1	100%	Yes
A2_03_004	Bedroom 2	99%	Yes
A2_03_004	LKD	100%	Yes
A2_03_005	Bedroom 1	100%	Yes
A2_03_005	Bedroom 2	97%	Yes
A2_03_005	LKD	93%	Yes
A2_03_006	Bedroom 1	100%	Yes
A2_03_006	LKD	94%	Yes
A2_03_007	Bedroom 1	100%	Yes
A2_03_007	LKD	97%	Yes
A2_03_008	Bedroom 1	99%	Yes
A2_03_008	Bedroom 2	99%	Yes
A2_03_008	Bedroom 3	96%	Yes
A2_03_008	LKD	91%	Yes
A2_03_009	Bedroom 1	85%	Yes
A2_03_009	Bedroom 2	99%	Yes
A2_03_009	Bedroom 3	88%	Yes
A2_03_009	LKD	89%	Yes
A2_03_010	Bedroom 1	93%	Yes
A2_03_010	LKD	58%	No

\* Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that "Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line."  
For floor plans of the assessed units please refer to section D.1 on page 86.

### E.2.13 Supplementary NSL Results: Block A2 -Level 04

Table No. E.2.13 - Supplementary NSL Results:			
Unit Number	Room Description	No Sky Line (NSL)	
		% of room where the sky is visible from the working plane	Above 80%*
A2_04_001	Bedroom 1	93%	Yes
A2_04_001	LKD	66%	No
A2_04_002	Bedroom 1	86%	Yes
A2_04_002	Bedroom 2	80%	Yes
A2_04_002	LKD	72%	No
A2_04_003	Bedroom 1	100%	Yes
A2_04_003	Bedroom 2	99%	Yes
A2_04_003	LKD	100%	Yes
A2_04_004	Bedroom 1	100%	Yes
A2_04_004	Bedroom 2	99%	Yes
A2_04_004	LKD	100%	Yes
A2_04_005	Bedroom 1	100%	Yes
A2_04_005	Bedroom 2	98%	Yes
A2_04_005	LKD	96%	Yes
A2_04_006	Bedroom 1	100%	Yes
A2_04_006	LKD	96%	Yes
A2_04_007	Bedroom 1	100%	Yes
A2_04_007	LKD	98%	Yes
A2_04_008	Bedroom 1	99%	Yes
A2_04_008	Bedroom 2	99%	Yes
A2_04_008	Bedroom 3	96%	Yes
A2_04_008	LKD	91%	Yes
A2_04_009	Bedroom 1	91%	Yes
A2_04_009	Bedroom 2	99%	Yes
A2_04_009	Bedroom 3	95%	Yes
A2_04_009	LKD	89%	Yes
A2_04_010	Bedroom 1	94%	Yes
A2_04_010	LKD	61%	No

\* Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that "Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line."  
For floor plans of the assessed units please refer to section D.1 on page 86.

### E.2.14 Supplementary NSL Results: Block A2 -Level 05

Table No. E.2.14 - Supplementary NSL Results:			
Unit Number	Room Description	No Sky Line (NSL)	
		% of room where the sky is visible from the working plane	Above 80%*
A2_05_001	Bedroom 1	95%	Yes
A2_05_001	LKD	74%	No
A2_05_002	Bedroom 1	97%	Yes
A2_05_002	Bedroom 2	88%	Yes
A2_05_002	LKD	83%	Yes
A2_05_003	Bedroom 1	100%	Yes
A2_05_003	Bedroom 2	99%	Yes
A2_05_003	LKD	100%	Yes
A2_05_004	Bedroom 1	100%	Yes
A2_05_004	Bedroom 2	99%	Yes
A2_05_004	LKD	100%	Yes
A2_05_005	Bedroom 1	100%	Yes
A2_05_005	Bedroom 2	98%	Yes
A2_05_005	LKD	98%	Yes
A2_05_006	Bedroom 1	100%	Yes
A2_05_006	LKD	99%	Yes
A2_05_007	Bedroom 1	100%	Yes
A2_05_007	LKD	99%	Yes
A2_05_008	Bedroom 1	99%	Yes
A2_05_008	Bedroom 2	99%	Yes
A2_05_008	Bedroom 3	96%	Yes
A2_05_008	LKD	95%	Yes
A2_05_009	Bedroom 1	95%	Yes
A2_05_009	Bedroom 2	99%	Yes
A2_05_009	Bedroom 3	96%	Yes
A2_05_009	LKD	89%	Yes
A2_05_010	Bedroom 1	100%	Yes
A2_05_010	LKD	68%	No

\* Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that "Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line."  
For floor plans of the assessed units please refer to section D.1 on page 86.

### E.2.15 Supplementary NSL Results: Block A2 -Level 06

Table No. E.2.15 - Supplementary NSL Results:			
Unit Number	Room Description	No Sky Line (NSL)	
		% of room where the sky is visible from the working plane	Above 80%*
A2_06_001	Bedroom 1	97%	Yes
A2_06_001	LKD	87%	Yes
A2_06_002	Bedroom 1	99%	Yes
A2_06_002	Bedroom 2	100%	Yes
A2_06_002	LKD	100%	Yes
A2_06_003	Bedroom 1	99%	Yes
A2_06_003	Bedroom 2	100%	Yes
A2_06_003	LKD	100%	Yes
A2_06_004	Bedroom 1	100%	Yes
A2_06_004	LKD	99%	Yes
A2_06_005	Bedroom 1	100%	Yes
A2_06_005	LKD	99%	Yes
A2_06_006	Bedroom 1	99%	Yes
A2_06_006	Bedroom 2	99%	Yes
A2_06_006	Bedroom 3	96%	Yes
A2_06_006	LKD	100%	Yes
A2_06_007	Bedroom 1	99%	Yes
A2_06_007	Bedroom 2	99%	Yes
A2_06_007	Bedroom 3	96%	Yes
A2_06_007	LKD	89%	Yes
A2_06_008	Bedroom 1	100%	Yes
A2_06_008	LKD	75%	No

\* Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that "Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line."  
For floor plans of the assessed units please refer to section D.1 on page 86.

## E.2.16 Supplementary NSL Results: Block A2 -Level 07 and 08

Table No. E.2.16 - Supplementary NSL Results:			
Unit Number	Room Description	No Sky Line (NSL)	
		% of room where the sky is visible from the working plane	Above 80%*
A2_07_001	Bedroom 1	99%	Yes
A2_07_001	Bedroom 1	100%	Yes
A2_07_001	Bedroom 3	97%	Yes
A2_07_001	LKD	88%	Yes
A2_07_002	Bedroom 1	99%	Yes
A2_07_002	Bedroom 2	100%	Yes
A2_07_002	LKD	100%	Yes
A2_07_003	Bedroom 1	99%	Yes
A2_07_003	Bedroom 2	100%	Yes
A2_07_003	LKD	100%	Yes
A2_07_004	Bedroom 1	100%	Yes
A2_07_004	LKD	99%	Yes
A2_07_005	Bedroom 1	100%	Yes
A2_07_005	LKD	99%	Yes
A2_07_006	Bedroom 1	99%	Yes
A2_07_006	Bedroom 2	99%	Yes
A2_07_006	Bedroom 3	96%	Yes
A2_07_006	LKD	100%	Yes
A2_07_007	Bedroom 1	99%	Yes
A2_07_007	Bedroom 2	99%	Yes
A2_07_007	Bedroom 3	96%	Yes
A2_07_007	LKD	93%	Yes
A2_08_001	Bedroom 1	99%	Yes
A2_08_001	Bedroom 1	100%	Yes
A2_08_001	Bedroom 3	98%	Yes
A2_08_001	LKD	100%	Yes
A2_08_002	Bedroom 1	100%	Yes
A2_08_002	Bedroom 1	100%	Yes
A2_08_002	Bedroom 3	98%	Yes
A2_08_002	LKD	100%	Yes
A2_08_003	Bedroom 1	99%	Yes
A2_08_003	Bedroom 2	99%	Yes
A2_08_003	Bedroom 3	96%	Yes
A2_08_003	LKD	100%	Yes
A2_08_004	Bedroom 1	99%	Yes
A2_08_004	Bedroom 2	99%	Yes
A2_08_004	Bedroom 3	96%	Yes
A2_08_004	LKD	99%	Yes

\* Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that "Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line."  
For floor plans of the assessed units please refer to section D.1 on page 86.

### E.2.17 Supplementary NSL Results: Block A2 -Level 09

Table No. E.2.17 - Supplementary NSL Results:			
Unit Number	Room Description	No Sky Line (NSL)	
		% of room where the sky is visible from the working plane	Above 80%*
A2_09_001	Bedroom 1	100%	Yes
A2_09_001	Bedroom 2	99%	Yes
A2_09_001	Bedroom 3	99%	Yes
A2_09_001	LKD	100%	Yes
A2_09_001	Snug Room	98%	Yes
A2_09_002	Bedroom 1	100%	Yes
A2_09_002	Bedroom 2	99%	Yes
A2_09_002	Bedroom 3	99%	Yes
A2_09_002	LKD	100%	Yes
A2_09_002	Snug Room	98%	Yes

\* Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that "Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line."  
For floor plans of the assessed units please refer to section D.1 on page 86.

### E.2.18 Supplementary NSL Results: Townhouses (West)

Table No. E.2.18 - Supplementary NSL Results:			
Unit Number	Room Description	No Sky Line (NSL)	
		% of room where the sky is visible from the working plane	Above 80%*
P_01_001	Bedroom 1	98%	Yes
P_01_001	Bedroom 2	99%	Yes
P_01_001	Bedroom 3	0%	No
P_01_001	Bedroom 4	95%	Yes
P_01_001	LKD	99%	Yes
P_01_002	Bedroom 1	98%	Yes
P_01_002	Bedroom 2	99%	Yes
P_01_002	Bedroom 3	89%	Yes
P_01_002	Bedroom 4	93%	Yes
P_01_002	LKD	99%	Yes
P_01_003	Bedroom 1	98%	Yes
P_01_003	Bedroom 2	99%	Yes
P_01_003	Bedroom 3	89%	Yes
P_01_003	Bedroom 4	89%	Yes
P_01_003	LKD	99%	Yes
P_01_004	Bedroom 1	98%	Yes
P_01_004	Bedroom 2	99%	Yes
P_01_004	Bedroom 3	89%	Yes
P_01_004	Bedroom 4	82%	Yes
P_01_004	LKD	99%	Yes
P_01_005	Bedroom 1	98%	Yes
P_01_005	Bedroom 2	99%	Yes
P_01_005	Bedroom 3	89%	Yes
P_01_005	Bedroom 4	91%	Yes
P_01_005	LKD	100%	Yes

\* Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that "Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line."  
For floor plans of the assessed units please refer to section D.1 on page 86.

### E.2.19 Supplementary NSL Results: Townhouses (East)

Table No. E.2.19 - Supplementary NSL Results:			
Unit Number	Room Description	No Sky Line (NSL)	
		% of room where the sky is visible from the working plane	Above 80%*
P_M01_001	Bedroom 1	97%	Yes
P_M01_001	Bedroom 2	99%	Yes
P_M01_001	Bedroom 3	98%	Yes
P_M01_001	Bedroom 4	93%	Yes
P_M01_001	Bedroom 5	97%	Yes
P_M01_001	LKD	99%	Yes
P_M01_002	Bedroom 1	97%	Yes
P_M01_002	Bedroom 2	99%	Yes
P_M01_002	Bedroom 3	98%	Yes
P_M01_002	Bedroom 4	95%	Yes
P_M01_002	Bedroom 5	97%	Yes
P_M01_002	LKD	99%	Yes
P_M01_003	Bedroom 1	99%	Yes
P_M01_003	Bedroom 2	96%	Yes
P_M01_003	Bedroom 3	98%	Yes
P_M01_003	Bedroom 4	96%	Yes
P_M01_003	Bedroom 5	97%	Yes
P_M01_003	LKD	99%	Yes
P_M01_004	Bedroom 1	73%	No
P_M01_004	Bedroom 2	62%	No
P_M01_004	Bedroom 3	98%	Yes
P_M01_004	Bedroom 4	95%	Yes
P_M01_004	Bedroom 5	97%	Yes
P_M01_004	LKD	99%	Yes

\* Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that "Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line."

For floor plans of the assessed units please refer to section D.1 on page 86.