



## ADVERTISED COPY

### Design Memo

Project:	7-9 Allen Street & Warrigal Road	DM No:	06
Project No:	21048	Revision No:	00
Subject:	Daylight RFI Response	Pages:	04 + Attmts
Date:	11 <sup>th</sup> November 2021		

To	Cc	Company	Attention	Email
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sinclair Brook	Robert Cricco	robert.cricco@sinclairbrook.com.au
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sinclair Brook	Matt Burns	Matt.burns@sinclairbrook.com.au
<input checked="" type="checkbox"/>	<input type="checkbox"/>	EBG developments	Kai Gu	kgu@ebgdevelopments.com.au
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Via Architects	Lin Zhu	LZhu@studiovia.com.au
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Via Architects	Kenji Jin	KJin@studiovia.com.au
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Ratio	William Bromhead	williamb@ratio.com.au
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Ratio	Jack Lyons	jackl@ratio.com.au
Fr	Cc	Company	Attention	Email
<input type="checkbox"/>	<input checked="" type="checkbox"/>	IGS	Chris Orr	Chris.orr@igs.com.au
<input checked="" type="checkbox"/>	<input type="checkbox"/>	IGS	Li Huan	Li.huan@igs.com.au

### Introduction

The intent of this memo is to provide feedback on the daylight commentary raised in the ‘Further Information Request’ from the City of Monash dated 25<sup>th</sup> October 2021. The council’s comment within Further Information Request states the following:

*“Some of the bedrooms will receive poor daylight access such as Apartments 215, 216, 217, 219, 220, 221, 222, 305, 316, 317, 319, 320, 323, 405, 415, and 418.”*

IGS was engaged to undertake a daylight simulation on the retirement living development at 1-9 Allen St & 777-781 Warrigal Rd, Oakleigh to identify the BESS Indoor Environment Quality (IEQ) Daylight Access to retirement apartments and communal facilities daylight availability compliances. A Sustainable Management Plan (SMP) along with supporting daylight report was issued as part of the town planning submission.

A daylight modelling was undertaken for both retirement apartments and communal facilities at the current preliminary design stage. BESS IEQ category requires more than 80% of the total number of bedrooms achieve a daylight factor greater than 0.5% to 90% of the floor area for retirement apartments and minimum 30% of the floor area achieves at least 2% daylight factor for non-residential component.

The daylight modelling results indicate more than 80% of the bedrooms of the development achieve a daylight factor of at least 0.5% to 90% of the floor area and more than 30% of the non-residential component achieves minimum 2% daylight factor. Overall, the modelling result indicates both residential dwellings and non-residential tenancies meet the BESS IEQ Daylight requirement.

With respect to the apartments queried by the council within Further Information Request document, the design team have populated the results below to demonstrate the level of daylight compliance. Please refer to the table below.

## RFI Residential Apartments Bedroom Daylight Result – Summary Table

Block	Zone	Floor area (m2)	Floor Area above Daylight Factor of 0.5 (m2)	Floor Area above Daylight Factor of 0.5 (%)
L00	215-Bed1	11.9	11.9	100%
L00	215-Bed2	10.7	10.7	100%
L00	215-Bed3	12.4	11.4	92%
L00	216-Bed1	17.4	17.0	98%
L00	216-Bed2	10.7	10.7	100%
L00	216-Bed3	12.5	12.5	100%
L00	217-Bed1	11.0	11.0	100%
L00	217-Bed2	14.7	14.7	100%
L00	217-Bed3	11.4	11.4	100%
L00	219-Bed1	10.4	10.4	100%
L00	219-Bed2	10.5	7.5	71%
L00	219-Bed3	11.5	11.2	97%
L00	220-Bed1	10.0	10.0	100%
L00	220-Bed2	13.9	13.9	100%
L00	221-Bed1	11.8	11.8	100%
L00	221-Bed2	13.3	13.3	100%
L00	222-Bed1	9.9	9.9	100%
L00	222-Bed2	14.0	14.0	100%
L01	305-Bed1	13.9	13.9	100%
L01	316-Bed1	13.6	13.6	100%
L01	316-Bed2	10.9	10.9	100%
L01	316-Bed3	12.8	12.8	100%
L01	317-Bed1	10.9	10.9	100%
L01	317-Bed2	14.9	14.9	100%
L01	317-Bed3	11.1	11.1	100%
L01	318-Bed3	13.1	13.1	100%
L01	319-Bed1	11.5	11.5	100%
L01	319-Bed2	18.6	18.6	100%
L01	319-Bed3	9.9	9.9	100%
L01	320-Bed1	11.8	11.8	100%
L01	320-Bed2	11.3	11.3	100%
L01	320-Bed3	14.0	14.0	100%
L01	323-Bed1	11.1	11.1	100%
L01	323-Bed2	13.9	13.9	100%
L02	405-Bed1	13.6	13.6	100%
L02	415-Bed1	11.6	11.6	100%
L02	415-Bed2	13.6	13.6	100%
L02	418-Bed1	10.9	10.9	100%
L02	418-Bed2	12.8	12.8	100%



### Ground Level Daylight Result - Contour Plot

Below is the daylight contour plot extracted from Design Builder daylight modelling result showing daylight availability across Ground Level residential apartments and communal spaces of the building.

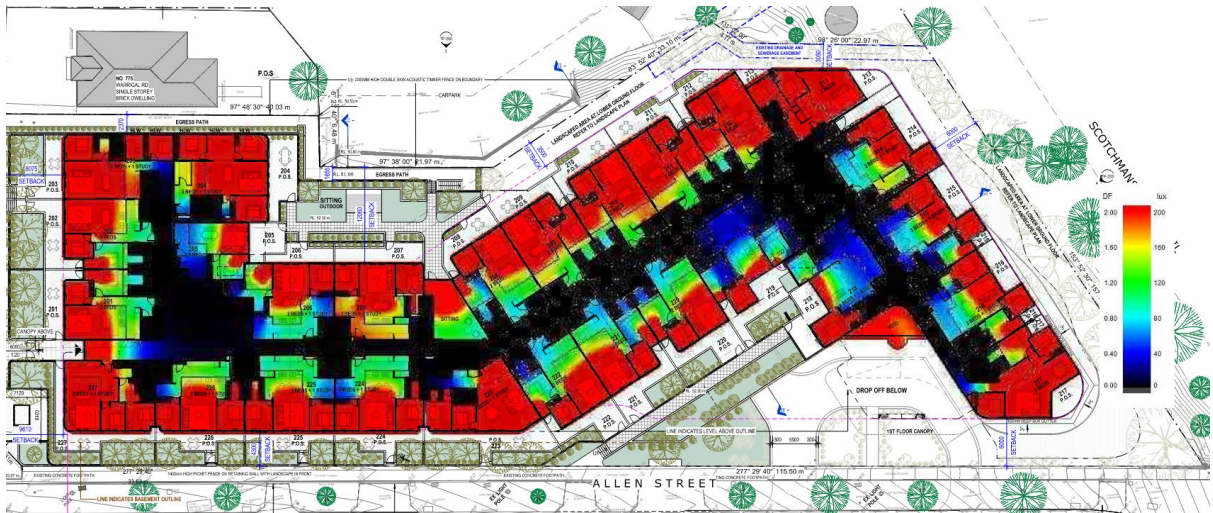


Figure 4 – Ground Level Daylight Contour Plot

### Level 01 Daylight Result - Contour Plot

Below is the daylight contour plot extracted from Design Builder daylight modelling result showing daylight availability across Level 01 residential apartments and communal spaces of the building.

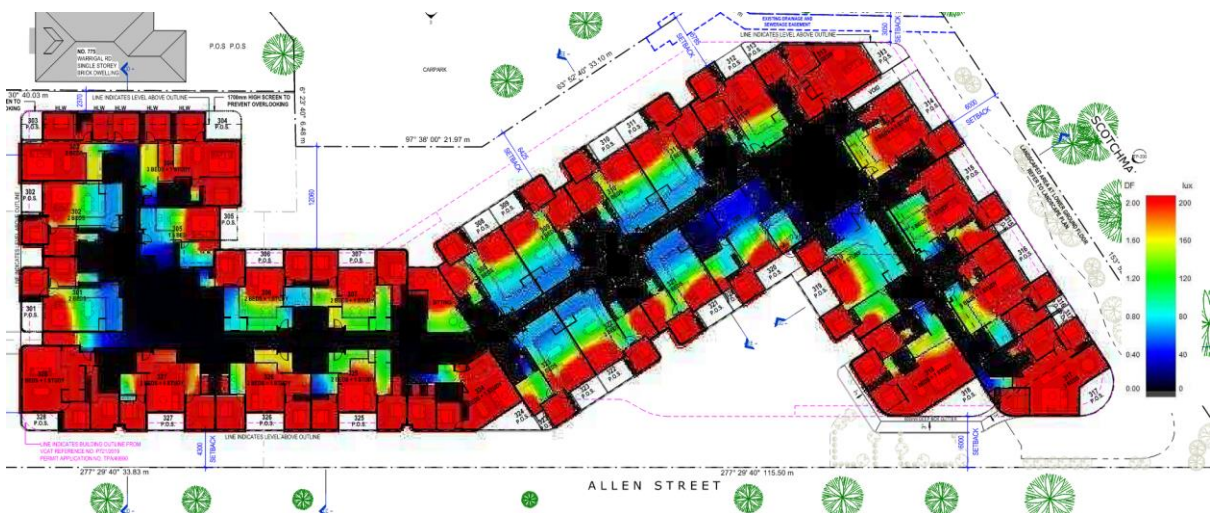


Figure 5 – Level 01 Daylight Contour Plot



## Level 02 Daylight Result - Contour Plot

Below is the daylight contour plot extracted from Design Builder daylight modelling result showing daylight availability across Level 02 residential apartments and communal spaces of the building.

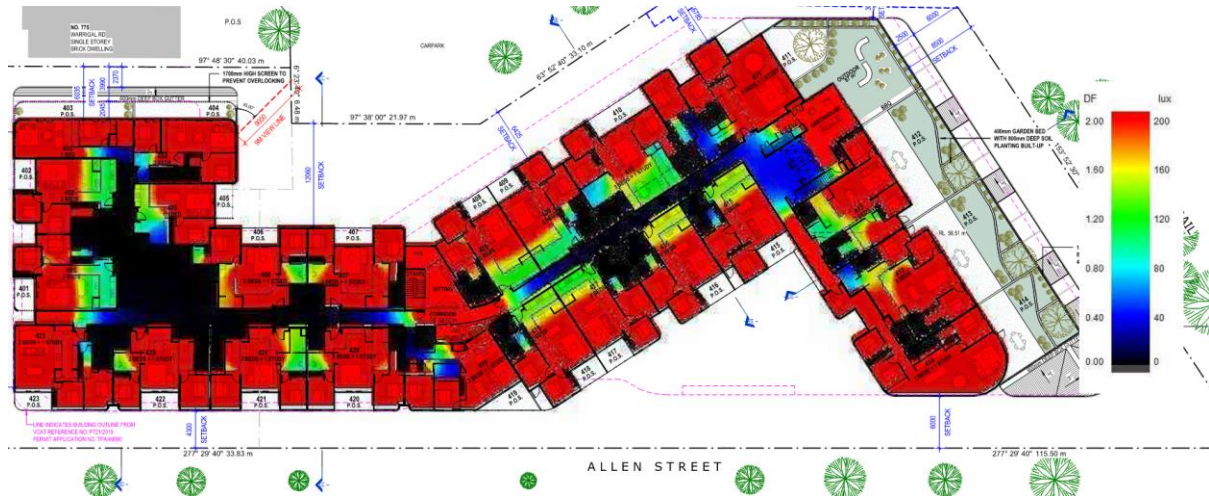


Figure 6 – Level 02 Daylight Contour Plot

## Overall Residential Apartments Bedroom Daylight Result – Summary Table

The below table summarises that minimum 80% of the bedrooms of the development achieve a daylight factor of at least 0.5% to 90% of the floor area.

The daylight report of the original SMP submission has been attached as an appendix to this design memo to support the below position. Further details on the modelling parameters and assumptions are made available in this report.

<b>Total Assessed Bedrooms</b>	<b>180</b>
<b>Total Compliant Bedrooms</b>	<b>178</b>
<b>Total Compliant (% Rooms)</b>	<b>99%</b>
<b>Total Compliant (% Areas)</b>	<b>100%</b>
<b>Minimum Compliance by Council (80% Bedrooms)</b>	<b>Yes</b>

## Conclusion

BESS compliance on IEQ bedrooms requires at least 80% of the residential bedrooms to achieve a daylight factor of at least 0.5% to 90% of the floor area within the room.

The daylight modelling result for the proposed retirement living development at Allen Street & Warrigal Road indicates more than 80% of the bedrooms achieve a daylight factor of at least 0.5% to 90% of the floor area within the room.

**END OF MEMO.**





**IGS** INTEGRATED  
GROUP  
SERVICES

Value | Innovation | Trust

**BESS IEQ DAYLIGHT  
ACCESS MODELLING REPORT**

1-9 Allen St & 777-781 Warrigal Road,  
Oakleigh

Date 10/09/2021

Project No. 21048



Level 4, 108 Elizabeth Street  
Melbourne VIC 3000  
Web: [www.igs.com.au](http://www.igs.com.au)

## Document Control

Version	Date	Author		Reviewer	
00	02/09/2021	Li Huan	LH	Chris Orr	CO
01	10/09/2021	Li Huan	LH	Chris Orr	CO

"© 2019 IGS Pty Ltd All Rights Reserved. Copyright in the whole and every part of this document belongs to IGS Pty Ltd and may not be used, sold, transferred, copied or reproduced in whole or in part in any manner or form or in or on any media to any person without the prior written consent of IGS Pty Ltd."



## TABLE OF CONTENTS

<b>1.</b>	<b>Executive Summary</b> .....	<b>4</b>
<b>2.</b>	<b>Introduction</b> .....	<b>5</b>
2.1	Key Assumptions .....	5
2.2	Sky Model .....	5
2.3	Building Shape.....	5
<b>3.</b>	<b>BESS Daylight Requirement</b> .....	<b>6</b>
3.1	Residential Daylight Requirement.....	6
3.2	Non-Residential Daylight Requirement.....	6
<b>4.</b>	<b>Daylight Result -Contour Map</b> .....	<b>7</b>
4.1	Lower Ground Level Daylight Result - Contour Plot .....	7
4.2	Ground Level Daylight Result - Contour Plot .....	7
4.3	Level 01 Daylight Result - Contour Plot .....	8
4.4	Level 02 Daylight Result - Contour Plot .....	8
4.5	Residential Apartments Bedroom Daylight Result – Summary Table .....	9
4.6	Residential Apartments Living Room Daylight Result – Summary Table.....	14
4.7	Communal Spaces Daylight Result – Summary Table .....	17
<b>5.</b>	<b>Conclusion</b> .....	<b>18</b>



---

## 1. Executive Summary

IGS was engaged to undertake a daylight simulation on the retirement apartment development 1-9 Allen St & 777-781 Warrigal Rd, Oakleigh to identify the BESS Indoor Environment Quality (IEQ) Daylight Access to retirement apartments and communal facilities daylight availability compliances.

The daylight availability simulation has been undertaken above the finished floor level under the Uniform Cloudy Sky. A Uniform Cloudy Sky represents a sky with a constant value of luminance. The values are derived from a statistical analysis of outdoor illuminance levels. They represent a horizontal illuminance level that exceeds 85% of the time between the hours of 9am and 5pm throughout the year. They also represent that the building has been designed to meet the modelled daylight levels for at least 85% of the daytime annually.

A daylight modelling was undertaken for both retirement apartments and communal facilities at the current preliminary design stage.

BESS IEQ category requires more than 80% of the total number of bedrooms achieve a daylight factor greater than 0.5% to 90% of the floor area for retirement apartments and minimum 30% of the floor area achieves at least 2% daylight factor for non-residential component.

The daylight modelling results indicate more than 80% of the bedrooms achieve a daylight factor of at least 0.5% to 90% of the floor area and more than 30% of the non-residential component achieves minimum 2% daylight factor.

Overall, the modelling result indicates both residential dwellings and non-residential tenancies meet the BESS IEQ Daylight requirement.





## 2. Introduction

### 2.1 Key Assumptions

The proposed external windows visible light transmissions (VLTs) are recommended to be:

- Residential Glazed Windows and Doors VLT  $\geq$  70%
- Communal Spaces and Caf  VLT  $\geq$  40%
- Skylight VLT  $\geq$  40%

### Finishes Reflectance Values

The following reflectance values are used for the building finishes daylight availability modelling.

- Floor covering reflectance = 0.45
- Walls and Internal Partitions reflectance= 0.9
- Ceiling reflectance = 0.9
- Surrounding Buildings reflectance =0.2

### 2.2 Sky Model

The Uniform Cloudy Sky of horizontal external illuminance of 10,000 Lux is used for daylight availability simulation. A Uniform Cloudy Sky represents a sky with a constant value of luminance. The values are derived from a statistical analysis of outdoor illuminance levels. They represent a horizontal illuminance level that exceeds 85% of the time between the hours of 9am and 5pm throughout the year. Thus, they also represent that the building has been designed to meet the modelled daylight levels for at least 85% of the daytime annually.

### 2.3 Building Shape

The building physical shape is modelled in accordance with the architectural drawings package Town Planning issue dated 10/09/2021.



Figure 1 – Building Model of the site



## 3. BESS Daylight Requirement

### 3.1 Residential Daylight Requirement

For residential dwellings, BESS Indoor Environment Quality (IEQ) 1.2 Daylight Access – Bedroom category requires the daylight modelling to be undertaken to demonstrate more than 80% of the total number of bedrooms achieve a daylight factor greater than 0.5% to 90% of the floor area in each room assuming a uniform design sky. Points are awarded as follows.

- 66% score for 80% of the total number of bedrooms achieves the daylight of at least 0.5% to 90% of the floor area; and
- 100% score for 100% of the total number of bedrooms achieves the daylight of at least 0.5% to 90% of the floor area.

### 3.2 Non-Residential Daylight Requirement

For Non-residential component, BESS Indoor Environment Quality (IEQ) 1.4 Daylight Access – Non-Residential requires the daylight modelling to be undertaken to demonstrate more than 30% of the nominated area achieves a daylight factor of at least 2% assuming a uniform design sky. Points are awarded as follows:

- 33% score for 30% of the nominated floor area achieves the daylight of at least 2%;
- 66% score for 60% of the nominated floor area achieves the daylight of at least 2%;
- 100% score for 90% of the nominated floor area achieves the daylight of at least 2%.



## 4. Daylight Result -Contour Map

### 4.1 Lower Ground Level Daylight Result - Contour Plot

Below is the daylight contour plot extracted from Design Builder daylight modelling result showing daylight availability across Lower Ground Level residential dwellings and communal spaces of the building.

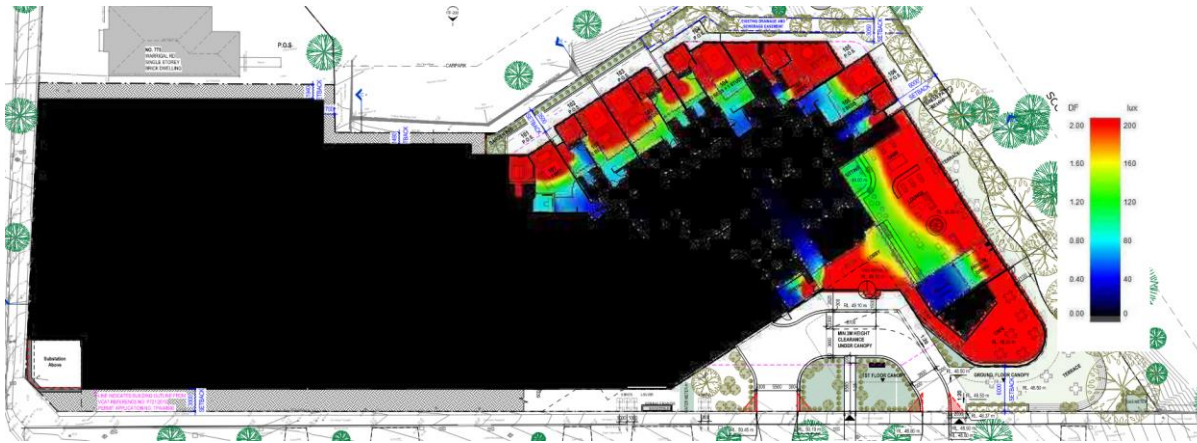


Figure 3 – Lower Ground Level Daylight Contour Plot

### 4.2 Ground Level Daylight Result - Contour Plot

Below is the daylight contour plot extracted from Design Builder daylight modelling result showing daylight availability across Ground Level residential dwellings and communal spaces of the building.

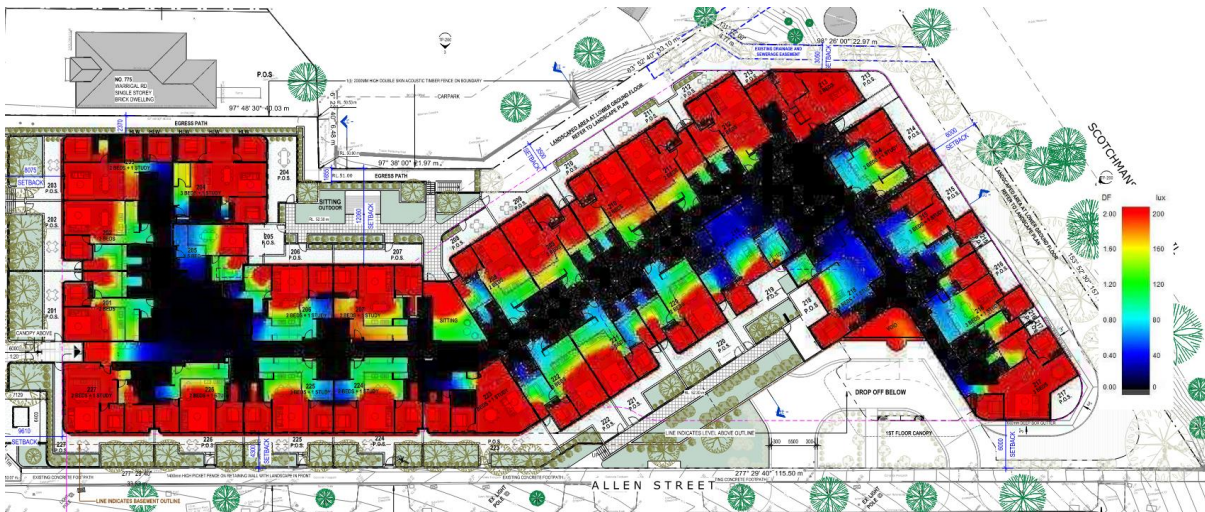


Figure 4 – Ground Level Daylight Contour Plot



### 4.3 Level 01 Daylight Result - Contour Plot

Below is the daylight contour plot extracted from Design Builder daylight modelling result showing daylight availability across Level 01 residential dwellings and communal spaces of the building.

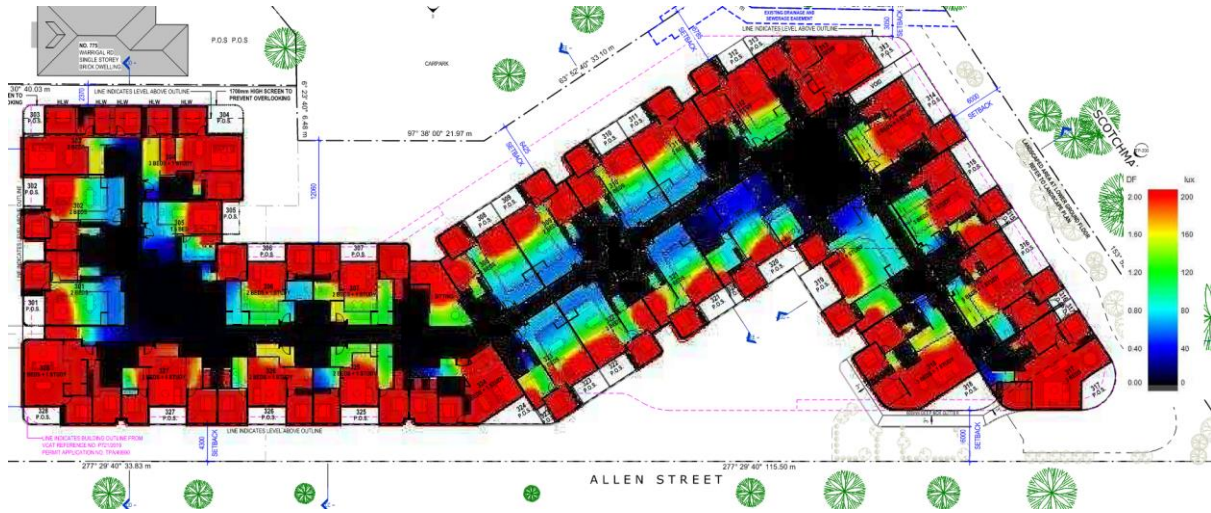


Figure 5 – Level 01 Daylight Contour Plot

### 4.4 Level 02 Daylight Result - Contour Plot

Below is the daylight contour plot extracted from Design Builder daylight modelling result showing daylight availability across Level 02 residential dwellings and communal spaces of the building.

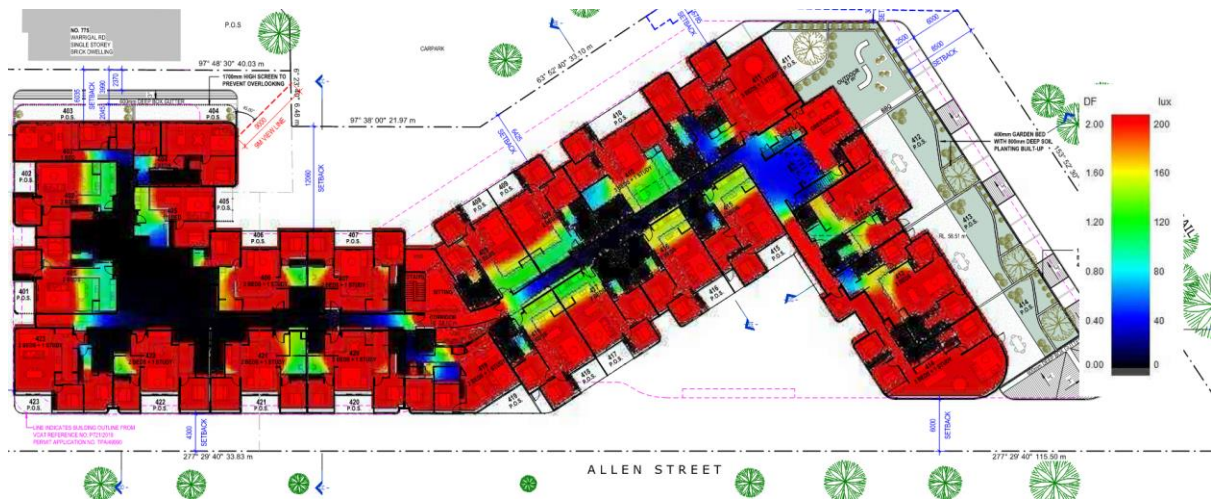


Figure 6 – Level 02 Daylight Contour Plot



#### 4.5 Residential Apartments Bedroom Daylight Result – Summary Table

Block	Zone	Floor area (m <sup>2</sup> )	Floor Area above Daylight Factor of 0.5 (m <sup>2</sup> )	Floor Area above Daylight Factor of 0.5 (%)
LG	101-Bed1	13.3	13.3	100%
LG	102-Bed1	10.6	10.6	100%
LG	102-Bed2	12.5	12.5	100%
LG	103-Bed1	10.2	10.2	100%
LG	103-Bed2	12.9	12.9	100%
LG	104-Bed1	11.6	11.6	100%
LG	104-Bed2	13.0	13.0	100%
LG	105-Bed1	11.8	11.8	100%
LG	105-Bed2	17.4	17.4	100%
LG	106-Bed1	10.1	10.1	100%
LG	106-Bed2	12.6	9.0	72%
L00	201-Bed1	10.4	10.4	100%
L00	201-Bed2	14.1	14.1	100%
L00	202-Bed1	11.9	11.9	100%
L00	202-Bed2	13.9	13.9	100%
L00	203-Bed1	13.1	13.1	100%
L00	203-Bed2	10.1	10.1	100%
L00	204-Bed1	12.9	12.9	100%
L00	204-Bed2	14.1	14.1	100%
L00	204-Bed3	11.6	11.6	100%
L00	205-Bed1	10.7	10.7	100%
L00	206-Bed1	11.3	11.3	100%
L00	206-Bed2	11.6	11.6	100%
L00	207-Bed1	11.7	11.7	100%
L00	207-Bed2	13.9	13.9	100%
L00	208-Bed1	10.5	10.5	100%
L00	208-Bed2	12.7	12.5	98%
L00	209-Bed1	10.6	10.6	100%
L00	209-Bed2	13.6	13.6	100%
L00	210-Bed1	10.7	10.7	100%
L00	210-Bed2	13.8	13.8	100%
L00	211-Bed1	10.1	10.1	100%
L00	211-Bed2	14.1	14.1	100%
L00	212-Bed1	10.5	10.5	100%
L00	212-Bed2	14.1	14.1	100%
L00	213-Bed1	12.8	12.8	100%
L00	213-Bed2	12.0	12.0	100%
L00	214-Bed1	10.8	10.8	100%
L00	214-Bed2	12.2	12.2	100%
L00	215-Bed1	11.9	11.9	100%



L00	215-Bed2	10.7	10.7	100%
L00	215-Bed3	12.4	11.4	92%
L00	216-Bed1	17.4	17.0	98%
L00	216-Bed2	10.7	10.7	100%
L00	216-Bed3	12.5	12.5	100%
L00	217-Bed1	11.0	11.0	100%
L00	217-Bed2	14.7	14.7	100%
L00	217-Bed3	11.4	11.4	100%
L00	218-Bed1	10.0	10.0	100%
L00	218-Bed2	13.4	13.4	100%
L00	219-Bed1	10.4	10.4	100%
L00	219-Bed2	10.5	7.5	71%
L00	219-Bed3	11.5	11.2	97%
L00	220-Bed1	10.0	10.0	100%
L00	220-Bed2	13.9	13.9	100%
L00	221-Bed1	11.8	11.8	100%
L00	221-Bed2	13.3	13.3	100%
L00	222-Bed1	9.9	9.9	100%
L00	222-Bed2	14.0	14.0	100%
L00	223-Bed1	13.0	13.0	100%
L00	223-Bed2	11.1	11.1	100%
L00	224-Bed1	11.9	11.9	100%
L00	224-Bed2	14.6	14.6	100%
L00	225-Bed1	14.7	14.7	100%
L00	225-Bed2	12.5	12.5	100%
L00	226-Bed1	15.3	15.3	100%
L00	226-Bed2	12.1	12.1	100%
L00	227-Bed1	12.3	12.3	100%
L00	227-Bed2	13.5	13.5	100%
L01	301-Bed1	11.1	11.1	100%
L01	301-Bed2	12.0	12.0	100%
L01	302-Bed1	11.4	11.4	100%
L01	302-Bed2	12.0	12.0	100%
L01	303-Bed1	12.8	12.8	100%
L01	303-Bed2	10.4	10.4	100%
L01	304-Bed1	10.4	10.4	100%
L01	304-Bed2	11.6	11.6	100%
L01	304-Bed3	15.1	15.1	100%
L01	305-Bed1	13.9	13.9	100%
L01	306-Bed1	16.0	16.0	100%
L01	306-Bed2	12.6	12.6	100%
L01	307-Bed1	12.9	12.9	100%
L01	307-Bed2	16.3	16.3	100%
L01	308-Bed1	11.8	11.8	100%



L01	308-Bed2	10.9	10.9	100%
L01	309-Bed1	11.3	11.3	100%
L01	309-Bed2	11.7	11.7	100%
L01	310-Bed1	11.5	11.5	100%
L01	310-Bed2	12.0	12.0	100%
L01	311-Bed1	11.6	11.6	100%
L01	311-Bed2	11.9	11.9	100%
L01	312-Bed1	10.6	10.6	100%
L01	312-Bed2	11.9	11.9	100%
L01	313-Bed1	12.5	12.5	100%
L01	313-Bed2	11.9	11.9	100%
L01	314-Bed1	11.4	11.4	100%
L01	314-Bed2	12.1	12.1	100%
L01	315-Bed1	12.0	12.0	100%
L01	315-Bed2	10.7	10.7	100%
L01	315-Bed3	12.7	12.7	100%
L01	316-Bed1	13.6	13.6	100%
L01	316-Bed2	10.9	10.9	100%
L01	316-Bed3	12.8	12.8	100%
L01	317-Bed1	10.9	10.9	100%
L01	317-Bed2	14.9	14.9	100%
L01	317-Bed3	11.1	11.1	100%
L01	318-Bed1	10.6	10.6	100%
L01	318-Bed2	12.0	12.0	100%
L01	318-Bed3	13.1	13.1	100%
L01	319-Bed1	11.5	11.5	100%
L01	319-Bed2	18.6	18.6	100%
L01	319-Bed3	9.9	9.9	100%
L01	320-Bed1	11.8	11.8	100%
L01	320-Bed2	11.3	11.3	100%
L01	320-Bed3	14.0	14.0	100%
L01	321-Bed1	13.4	13.4	100%
L01	321-Bed2	12.2	12.2	100%
L01	322-Bed1	12.1	12.1	100%
L01	322-Bed2	13.4	13.4	100%
L01	323-Bed1	11.1	11.1	100%
L01	323-Bed2	13.9	13.9	100%
L01	324-Bed1	11.1	11.1	100%
L01	324-Bed2	13.1	13.1	100%
L01	325-Bed1	14.9	14.9	100%
L01	325-Bed2	13.1	13.1	100%
L01	326-Bed1	12.4	12.4	100%
L01	326-Bed2	15.7	15.7	100%
L01	327-Bed1	15.7	15.7	100%



L01	327-Bed2	12.5	12.5	100%
L01	328-Bed1	11.3	11.3	100%
L01	328-Bed2	13.3	13.3	100%
L02	401-Bed1	11.5	11.5	100%
L02	401-Bed2	13.5	13.5	100%
L02	402-Bed1	10.8	10.8	100%
L02	402-Bed2	13.4	13.4	100%
L02	403-Bed1	11.8	11.8	100%
L02	404-Bed1	15.4	15.4	100%
L02	404-Bed2	12.7	12.7	100%
L02	405-Bed1	13.6	13.6	100%
L02	406-Bed1	15.8	15.8	100%
L02	406-Bed2	12.7	12.7	100%
L02	407-Bed1	16.2	16.2	100%
L02	407-Bed2	12.3	12.3	100%
L02	408-Bed1	11.4	11.4	100%
L02	408-Bed2	11.4	11.4	100%
L02	409-Bed1	11.1	11.1	100%
L02	409-Bed2	13.9	13.9	100%
L02	410-Bed1	10.9	10.9	100%
L02	410-Bed2	11.5	11.5	100%
L02	410-Bed3	15.2	15.2	100%
L02	411-Bed1	16.6	16.6	100%
L02	411-Bed2	11.3	11.3	100%
L02	411-Bed3	20.2	20.2	100%
L02	412-Bed1	10.5	10.5	100%
L02	412-Bed2	11.3	11.3	100%
L02	412-Bed3	15.7	15.7	100%
L02	413-Bed1	10.7	10.7	100%
L02	413-Bed2	11.7	11.7	100%
L02	413-Bed3	12.0	12.0	100%
L02	414-Bed1	14.6	14.6	100%
L02	414-Bed2	10.1	10.1	100%
L02	414-Bed3	10.3	10.3	100%
L02	415-Bed1	11.6	11.6	100%
L02	415-Bed2	13.6	13.6	100%
L02	416-Bed1	11.2	11.2	100%
L02	416-Bed2	13.7	13.7	100%
L02	417-Bed1	11.4	11.4	100%
L02	417-Bed2	13.4	13.4	100%
L02	418-Bed1	10.9	10.9	100%
L02	418-Bed2	12.8	12.8	100%
L02	419-Bed1	11.2	11.2	100%
L02	419-Bed2	12.6	12.6	100%





<b>L02</b>	420-Bed1	14.8	14.8	100%
<b>L02</b>	420-Bed2	11.7	11.7	100%
<b>L02</b>	421-Bed1	11.9	11.9	100%
<b>L02</b>	421-Bed2	15.1	15.1	100%
<b>L02</b>	422-Bed1	15.2	15.2	100%
<b>L02</b>	422-Bed2	11.5	11.5	100%
<b>L02</b>	423-Bed1	10.9	10.9	100%
<b>L02</b>	423-Bed2	13.9	13.9	100%

<b>Total Assessed Bedrooms</b>	<b>180</b>
<b>Total Compliant Bedrooms</b>	<b>178</b>
<b>Total Compliant (% Rooms)</b>	<b>99%</b>
<b>Total Compliant (% Areas)</b>	<b>100%</b>



#### 4.6 Residential Apartments Living Room Daylight Result – Summary Table

Block	Zone	Floor area (m2)	Floor Area above Daylight Factor of 1.0 (m2)	Floor Area above Daylight Factor of 1.0 (%)
LG	101-Living	33.3	30.3	91%
LG	102-Living	33.0	33.0	100%
LG	103-Living	32.1	32.1	100%
LG	104-Living	31.5	31.0	98%
LG	105-Living	33.4	33.4	100%
LG	106-Living	35.8	32.2	90%
L00	201-Living	33.6	33.6	100%
L00	202-Living	34.2	34.2	100%
L00	203-Living	35.4	35.4	100%
L00	204-Living	33.4	33.4	100%
L00	205-Living	27.0	20.7	77%
L00	206-Living	32.7	32.4	99%
L00	207-Living	36.5	36.4	100%
L00	208-Living	32.7	32.7	100%
L00	209-Living	32.2	32.2	100%
L00	210-Living	33.2	33.2	100%
L00	211-Living	32.5	32.5	100%
L00	212-Living	32.1	32.1	100%
L00	213-Living	33.3	33.3	100%
L00	214-Living	31.3	25.2	80%
L00	215-Living	29.0	20.3	70%
L00	216-Living	31.3	25.7	82%
L00	217-Living	47.1	47.1	100%
L00	218-Living	36.1	13.5	37%
L00	219-Living	43.9	11.8	27%
L00	220-Living	31.9	31.9	100%
L00	221-Living	32.0	32.0	100%
L00	222-Living	32.5	32.5	100%
L00	223-Living	44.4	44.4	100%
L00	224-Living	37.1	36.2	98%
L00	225-Living	36.9	35.8	97%
L00	226-Living	35.0	34.9	100%
L00	227-Living	32.0	32.0	100%
L01	301-Living	34.5	25.4	74%
L01	302-Living	34.1	27.4	80%
L01	303-Living	37.7	37.7	100%
L01	304-Living	32.5	32.5	100%
L01	305-Living	27.7	23.3	84%
L01	306-Living	28.4	26.9	95%
L01	307-Living	24.8	24.8	100%



L01	308-Living	29.1	20.0	69%
L01	309-Living	28.9	19.0	66%
L01	310-Living	29.6	20.2	68%
L01	311-Living	29.7	21.9	74%
L01	312-Living	30.1	30.1	100%
L01	313-Living	35.9	35.9	100%
L01	314-Living	29.8	29.6	99%
L01	315-Living	28.3	28.3	100%
L01	316-Living	25.6	25.6	100%
L01	317-Living	58.5	58.5	100%
L01	318-Living	50.6	50.6	100%
L01	319-Living	40.0	32.8	82%
L01	320-Living	41.7	15.4	37%
L01	321-Living	29.5	18.3	62%
L01	322-Living	30.1	21.7	72%
L01	323-Living	30.4	19.2	63%
L01	324-Living	34.9	34.9	100%
L01	325-Living	27.2	27.2	100%
L01	326-Living	24.6	24.6	100%
L01	327-Living	25.0	25.0	100%
L01	328-Living	42.2	42.2	100%
L02	401-Living	34.4	33.1	96%
L02	402-Living	35.4	35.4	100%
L02	403-Living	31.9	31.9	100%
L02	404-Living	32.8	32.8	100%
L02	405-Living	28.3	28.3	100%
L02	406-Living	28.4	28.4	100%
L02	407-Living	24.9	24.9	100%
L02	408-Living	29.3	29.3	100%
L02	409-Living	30.3	30.3	100%
L02	410-Living	36.1	36.1	100%
L02	411-Living	61.4	61.4	100%
L02	412-Living	32.3	32.3	100%
L02	413-Living	42.6	42.6	100%
L02	414-Living	93.1	93.1	100%
L02	415-Living	32.2	32.2	100%
L02	416-Living	30.5	30.5	100%
L02	417-Living	30.7	30.7	100%
L02	418-Living	30.9	30.9	100%
L02	419-Living	35.3	35.3	100%
L02	420-Living	27.1	27.1	100%
L02	421-Living	25.1	25.1	100%
L02	422-Living	24.9	24.9	100%
L02	423-Living	40.4	40.4	100%



<b>Total Assessed Living Rooms</b>	<b>84</b>
<b>Total Compliant Living Rooms</b>	<b>66</b>
<b>Total Compliant (% Rooms)</b>	<b>79%</b>
<b>Total Compliant (% Areas)</b>	<b>93%</b>



#### 4.7 Communal Spaces Daylight Result – Summary Table

Block	Zone	Floor area (m2)	Floor Area above Daylight Factor of 2.0 (m2)	Floor Area above Daylight Factor of 2.0 (%)
Lower Ground	Pre-function	28.3	0.0	0%
Lower Ground	Cinema	101.0	0.0	0%
Lower Ground	Admin	10.7	0.0	0%
Lower Ground	Meeting	16.5	3.7	22%
Lower Ground	Gym	37.0	0.0	0%
Lower Ground	Lounge and Game	233.9	117.2	50%
Lower Ground	Café	95.2	95.2	100%
Lower Ground	Kitchen	30.2	0.0	0%
Lower Ground	Lobby	73.6	45.5	62%
Ground	Sitting	37.9	15.9	42%
Level 1	Sitting	32.1	18.2	57%
Level 2	Sitting	20.4	20.4	100%
Level 2	Greenhouse	47.2	47.2	100%

<b>Total Compliance Area (m2)</b>	<b>363</b>
<b>Total Assessed Area (m2)</b>	<b>764</b>
<b>Total Compliant (% Areas)</b>	<b>48%</b>



---

## 5. Conclusion

BESS compliance on IEQ bedrooms requires at least 80% of the residential bedrooms to achieve a daylight factor of at least 0.5% to 90% of the floor area within the room. The daylight modelling result indicates more than 80% of the bedrooms achieve a daylight factor of at least 0.5% to 90% of the floor area within the room and meets the minimum BESS daylight access requirement which requires 80% of residential bedrooms comply.

For non-residential component, BESS IEQ category requires minimum 30% floor area achieves at least 2% daylight factor for non-residential component and more than 30% of the non-residential component achieves minimum 2% daylight factor.

Overall, the development has met the BESS daylight requirements on both residential dwellings and non-residential component.