# SEPP No.65: DESIGN VERIFICATION STATEMENT

# 484-488 BRINGELLY ROAD, AUSTRAL RESIDENTIAL FLAT BUILDINGS

**PREPARED BY:**

DREAMSCAPES ARCHITECTS

## Verification of Qualifications

Lawrence Zheng is registered as an Architect in New South Wales and enrolled in the Division of Chartered Architects in the register of Architects pursuant to the Architect Act 1921.

His Architect Registration Number is 10061(NSW).

Statement of Design - SEPP No. 65

Lawrence Zheng has been responsible for the project, and has worked with related professionals and experts in respect of the matter. The proposal of residential flat building development at 484-488 Bringelly Road, Austral, responds to the best practice of design principles that set out in SEPP No. 65 –Design Quality of Residential Flat Building with exception of some minor non-compliances which have no impact on the objectives.

Yours faithfully,

Lawrence Zheng
Architect
Registration Number 10061

# CONTENTS

# Section A

## Introduction

This statement is for a development application submitted for a residential-flat-buildings development which contains two hundred and fifty-three (253) units at 484-488 Bringelly Road, Austral.

This design statement is prepared by the Dreamscapes Architects which has been assigned as the project architect for the subject development.

This statement aims to demonstrate that the subject development proposal can achieve the requirements of 9 Design Principles that outlined in SEPP 65-Design Quality of Residential Flat Development (Amendment No.3). The statement will individually assess the design performance and compliance of these nine principles in the following section.

*Good design responds and contributes to its context. Context is the key natural and built features of an area, their relationship and the character they create when combined. It also includes social, economic, health and environmental conditions.

Responding to context involves identifying the desirable elements of an area's existing or future character. Well-designed buildings respond to and enhance the qualities and identity of the area including the adjacent sites, streetscape and neighborhood. Consideration of local context is important for all sites, including sites in established areas, those undergoing change or identified for change.

* Good design achieves a scale, bulk and height appropriate to the existing or desired future character of the street and surrounding buildings.

Good design also achieves an appropriate built form for a site and the building's purpose in terms of building alignments, proportions, building type, articulation and the manipulation of building elements. Appropriate built form defines the public domain, contributes to the character of streetscapes and parks, including their views and vistas, and provides internal amenity and outlook.

*Good design achieves a high level of amenity for residents and each apartment, resulting in a density appropriate to the site and its context.

Appropriate densities are consistent with the area's existing or projected population. Appropriate densities can be sustained by existing or proposed infrastructure, public transport, access to jobs, community facilities and the environment.

*Good design combines positive environmental, social and economic outcomes. Good sustainable design includes use of natural cross ventilation and sunlight for the amenity and livability of residents and passive thermal design for ventilation, heating and cooling reducing reliance on technology and operation costs. Other elements include recycling and reuse of materials and waste, use of sustainable materials, and deep soil zones for groundwater recharge and vegetation.

* Good design recognizes that together landscape and buildings operate as an integrated and sustainable system, resulting in attractive developments with good amenity. A positive image and contextual fit of well-designed developments is achieved by contributing to the landscape character of the streetscape and neighborhood.

Good landscape design enhances the development's environmental performance by retaining positive natural features which contribute to the local context, coordinating water and soil management, solar access, micro-climate, tree canopy, habitat values, and preserving green networks. Good landscape design optimizes usability, privacy and opportunities for social interaction, equitable access, respect for neighbors' amenity, provides for practical establishment and long-term management.

*Good design positively influences internal and external amenity for residents and neighbors. Achieving good amenity contributes to positive living environments and resident wellbeing.

Good amenity combines appropriate room dimensions and shapes, access to sunlight, natural ventilation, outlook, visual and acoustic privacy, storage, indoor and outdoor space, efficient layouts and service areas, and ease of access for all age groups and degrees of mobility.

* Good design optimizes safety and security, within the development and the public domain. It provides for quality public and private spaces that are clearly defined and fit for the intended purpose. Opportunities to maximize passive surveillance of public and communal areas promote safety.

A positive relationship between public and private spaces is achieved through clearly defined secure access points and well-lit and visible areas that are easily maintained and appropriate to the location and purpose.

*Good design achieves a mix of apartment sizes, providing housing choice for different demographics, living needs and household budgets.

Well-designed apartment developments respond to social context by providing housing and facilities to suit the existing and future social mix. Good design involves practical and flexible features, including different types of communal spaces for a broad range of people, providing opportunities for social interaction amongst residents.

* Good design achieves a built form that has good proportions and a balanced composition of elements, reflecting the internal layout and structure. Good design uses a variety of materials, colours and textures.

The visual appearance of well-designed apartment development responds to the existing or future local context, particularly desirable elements and repetitions of the streetscape.

# Section B

## Principle 1:

**Context and Neighbourhood Character**

Good design responds and contributes to its context. Context is the key natural and built features of an area, their relationship and the character they create when combined. It also includes social, economic, health and environmental conditions.

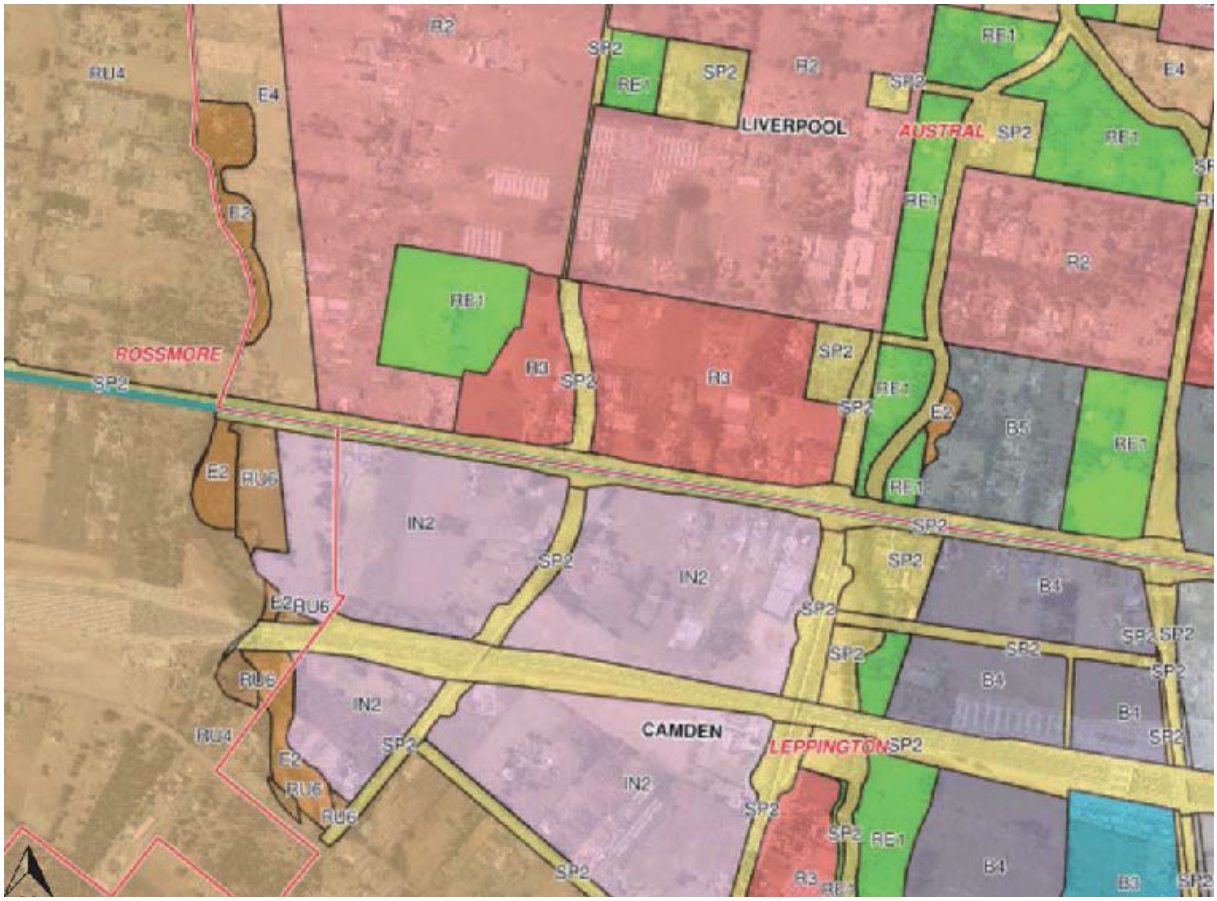
Responding to context involves identifying the desirable elements of an area's existing or future character. Well-designed buildings respond to and enhance the qualities and identity of the area including the adjacent sites, streetscape and neighbourhood. Consideration of local context is important for all sites,

***Proximity to the Transport & Services**

The site is located around 1300 meters (15 mins walking distance) from Leppington train station. And the bus service on the Bringelly road Acan be accessed from site. Therefore, the site is benefited by multiple existing and future public transportation. The Leppington town centre is around 1 km away from the site, with approximately 13,000 employment opportunity, retail, commercial and public services.

The adjoining lands includes medium to low density residential area(R2/ R3), light industrial land (IN2), reserved infrastructure road area(SP2) and public recreational open space(RE1). The lots on the north, east and west of the site are also zoned as R3 medium density residential, and the land zoning to the south is SP2 and IN 2 for infrastructure, and light industrial.

There are around 40,000 square meters public open space five block away from the subject site. There also several existing and proposed primary & secondary educational facilities within the area. Unity Grammar College is about 500 meters from the site to the north.




*Zoning Map of Site Surrounding*

The current main access of the site is from the Bringelly Road. As the Bringelly Road is under the upgrade construction, this future access has been denied. The future site access is proposed on the north of the site through the proposed development on 230-260 Fifth Avenue. There are 3 proposed local road for this development, there are one of 16 meters local road, one of 8 meters half road and one of 13.1 meters service road.

These roads width and location follow the indicative layout plan in Growth center DCP. These 3 proposed roads divide the site into 2 future lots, which are zoned as medium density residential land.

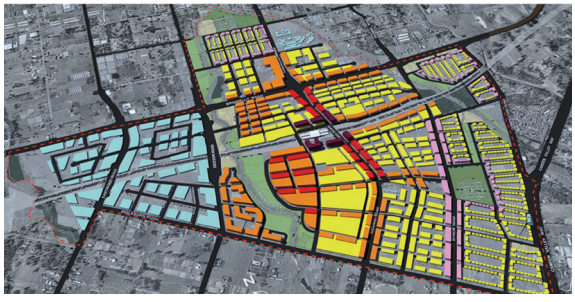
As stated above, although the subject site is currently occupied by rural production and surrounded by medium to large size rural allotments, the future planning of the area has provided sufficient traffic solution with both public transport and local road connection. the existing and planned educational, recreational facilities can also support the increased population of the area. The subject site has proximity to the sustained growth of service and transport infrastructure and educational facilities, which provide the possibility for higher density urban environment and demands for quality housing.

***Surrounding Built Form**

The surrounding building context are colonial style to post war style farmhouse. Most of these houses have wide frontage towards to the road, long entry veranda, single story and hip roof. Other structures in the area include vegetable greenhouse, barns and animal sheds.

The majority of these buildings/ structures are built by brick or weatherboard, plastic frame or steel frame.

*Existing Surrounding Buildings (Sourced from Google Map)*



*Proposed Leppington Town Centre Masterplan (Sourced from CMplus)*

The future built form in the precinct is planned to be 3 to 4 storey multi-dwelling housing or residential flat buildings. There are several development proposals in the precinct with 3-4 storey residential flat buildings and underground parking.

Furthermore, the transparent or light-weight architectural features such as louvers, pergolas and balustrades have been utilized in those developments to minimize the bulky looking visual obstruction.

***Topography**

The Bringelly Road is generally slope from west to east. And the site itself is fall towards to north east corner with about 4 meters level change. The highest point is at the south-west corner around RL 80.0 meters, and the lowest point is on the north-east corner around RL 76.0 meters.

The proposal tried to follow the sloping site to minimize the shadow casting to other site, and visual impact to the public roads. The top levels have further setback to reduce the breached height to LEP controls.

The overall stormwater design also utilizes the sloping site to guide the water to the north-east corner of the site where the regional drainage channel located.

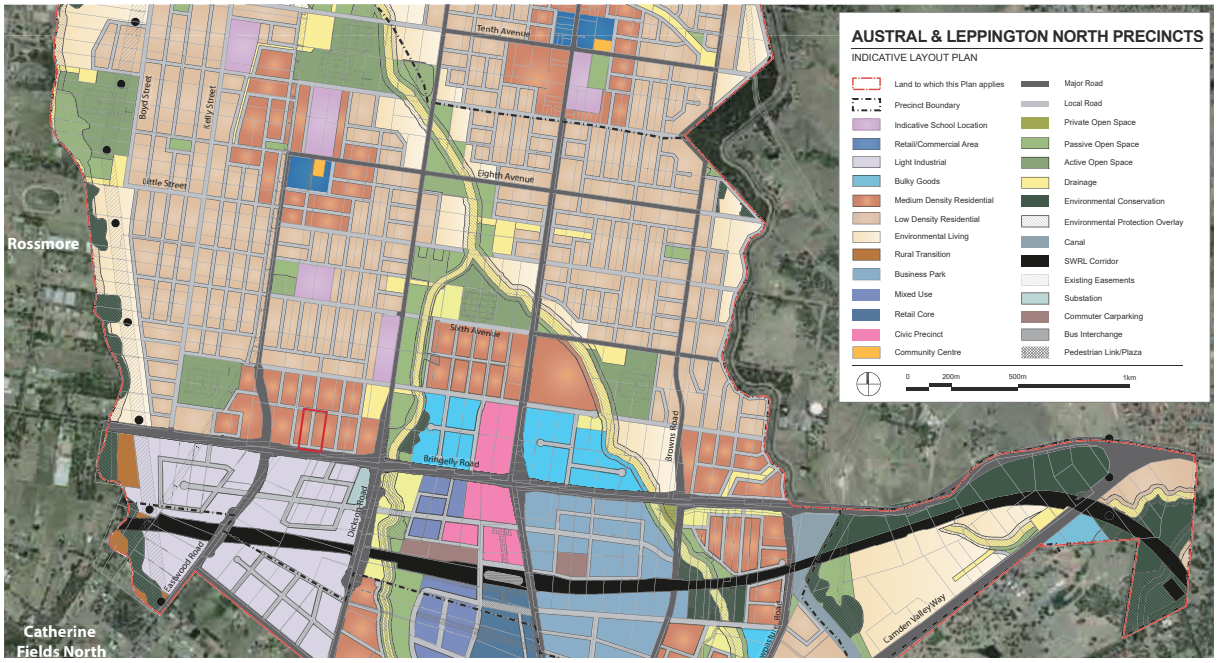
***Planning Context**

The subject site is zoned R3 Medium density residential which is currently in accordance with the State Environmental Planning Policy (Sydney Regional Growth Centres) 2006. Under the SEPP 2006, with consent, residential flat building is permissible on the subject site.

The land on the east, west and north of the site has the same zoning as the subject site, while on the south of the site is SP2 infrastructure zoning.

The height limit of the site is 12 meters, which allows about 4 storeys across the site, and a minimum density of 25 dwelling per hectare.

The overall planning context consistent with a low to medium density housing area with public recreational and infrastructure to support it. This allows the subject site to be developed with 4 storey residential flat buildings.




*Austral & Leppington North Precincts DCP Control Map*

## Principle 2:

**Built Form and Scale**

Good design achieves a scale, bulk and height appropriate to the existing or desired future character of the street and surrounding buildings.

Good design also achieves an appropriate built form for a site and the building's purpose in terms of building alignments, proportions, building type, articulation and the manipulation of building elements. Appropriate built form defines the public domain, contributes to the character of streetscapes and parks, including their views and vistas, and provides internal amenity and outlook.

***Built Form**

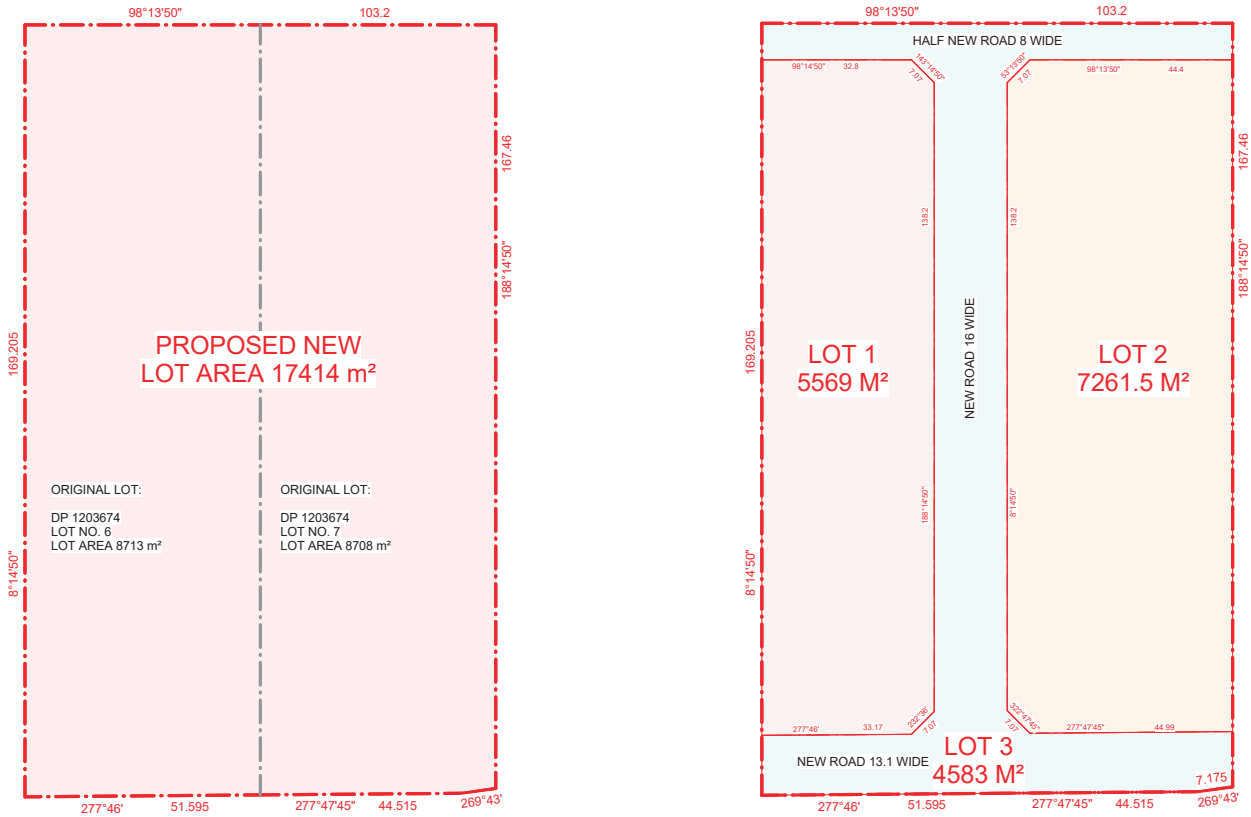
As part of a greenfield development, the proposed residential flat buildings are aiming to present a contemporary style, articulated and sustainable design.

There are 2 individual lots divided by proposed local road, each with around 5569-7261 square meters area. the proposal has 4 separated 4 storey buildings located on these 2 lots. Each of these buildings are around 16-25 metres in depth and 60-62 meters in length.

The size of this building allows all the units to have sufficient natural light and cross ventilation. All these perimeter blocks are surrounded by landscaped open spaces and communal gardens.

The design has in cooperated with the sun-shading devices and protruded balconies to articulate the façade, especially on the street frontage and rear sides of the façade, where to reduce its apparent bulk whilst providing high levels of amenity to all of the residential units and expressing an articulated architectural form to the future communities.

Furthermore, the proposal follows DCP building envelop control which includes the 6 meters setback from the street and side boundary, 4.5 meters setback for articulation elements or balconies. Thus, this proposal should have satisfied building separation to potential future adjacent residential flat building and reserved public recreational land.




*Subdivision Plan*

The maximum building height is 12 meters. This development proposes a 12 meters height building with skylight structure and 1.0-meter lift overrun on roof top which is not visible from street level. The overall building high should comply with the LEP control, while there are several minor encroachments with parapet wall and lift overruns. This non-compliance is due to the raised ground floor level which is intend to minimize the earth excavation, and it should have no negative environmental effect or negative impact on adjoining property's amenity.

Thus, the design evaluates the design quality and streetscape quality by utilizing variety of materials, providing diverse building types with different facades, providing visual and acoustic privacy.

*Bird-eye view*

*** Scale**

As noted above, the future surrounding built form is comprised of a mix of low to medium rise residential buildings. The existing surrounding buildings are one to two storeys in height and most are detached houses.

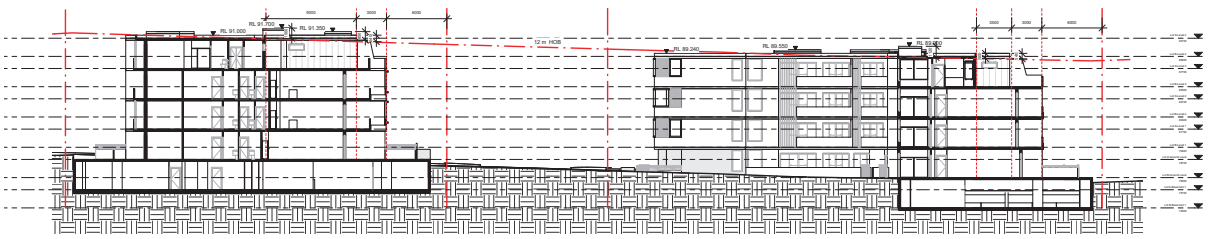
The height of building plan in Growth Centre SEPP 2006 and the indicative layout plan from Growth Centre DCP shows consistent 12m (4 Storeys) height limit to southern side. The proposed development is aligned within the height limitation has been set in local control plans.

The encroachment of height limit bevause the site is slopping from west to east. The current scheme has stepped building to fit the natural ground line change, however, the parapet and lift overrun of the building still breaches the 12 meters height limit.

The building has complied with the height limit on the street frontages (to the internal local roads/ half roads), so it has no impact on visual bulkiness. As shown on shadow diagrams, this non-compliance in height has very limited impact on solar access of the neighbouring sites.

As stated before, the street front facades of building have been divided into smaller part and collage them to minimize the impact of its scale and bulk. The exterior expression line and timber like panel has similar form and scale as the future development dwellings next to the property which helps to preserve the continuity of the streetscape. The windows opening on the wall also has been emphasized by metal frame to reduce the bulkiness of the street faced facades.

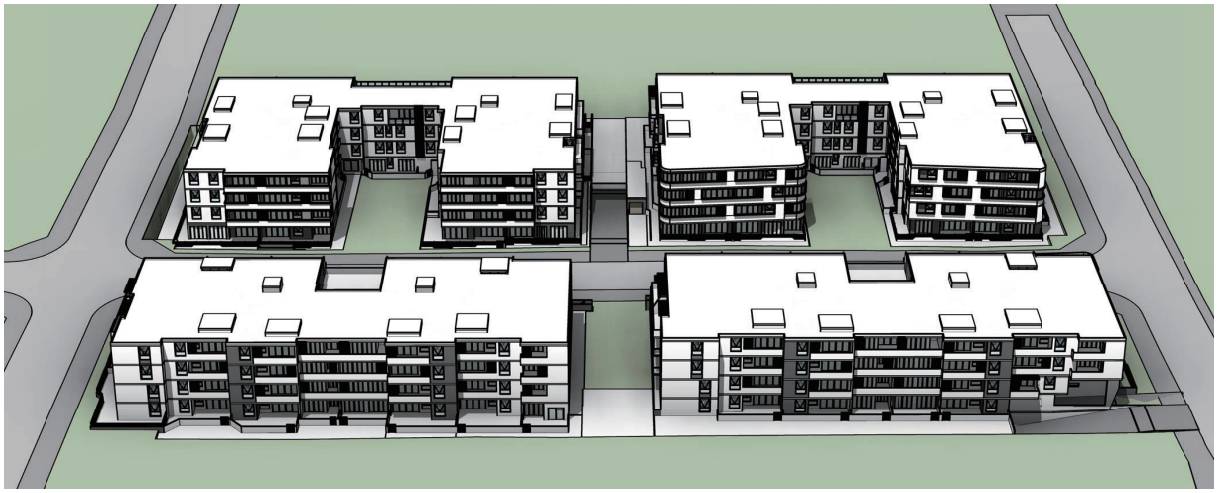
This scheme also proposed a different material for upper floor & lower floor facades to increase material articulation. It also visually reduced the building height and mass to avoid being unduly bulky to the street and adjoining developments.



CROSS SECTION 1

*The cross section of Lot 1*

*The Street Facade Facing Bringelly Road*



*Aerial View From South*

## Principle 3:

**Density**

Good design achieves a high level of amenity for residents and each apartment, resulting in a density appropriate to the site and its context.

Appropriate densities are consistent with the area's existing or projected population. Appropriate densities can be sustained by existing or proposed infrastructure, public transport, access to jobs, community facilities and the environment.

***Planning Control**

The subject site has total 17414 square meters (by survey) site area. It totals provides 253 units of residential dwelling. This can well satisfy the density control which is minimum 25 units per hectare.

It is considered as an appropriate density which reflects the objective for medium density residential area. Firstly, the residential flat building complies with the permissible development for R3 medium density residential zoning. Furthers, the proposal complies with the building envelope to minimize the environmental impact to the potential future surrounding neighbours. Thirdly, it delivers the form and density that is desired for the area which located with proximity to future public transportation and major retail and community centres.

The new development's environmental impacts and amenity influence on adjoining sites have been minimised with strict compliance to the DCP setback requirement, and the design excellence is demonstrated in the built form and its architectural resolution in response to the current site conditions.

The relatively higher density also results no influence on the living condition for the future residents. The design utilizing passive solar control, high quality visual & acoustic protection solutions and sizeable common open space to ensure the amenity for the future residents.

## Principle 4:

**Sustainability**

Good design combines positive environmental, social and economic outcomes. Good sustainable design includes use of natural cross ventilation and sunlight for the amenity and liveability of residents and passive thermal design for ventilation, heating and cooling reducing reliance on technology and operation costs. Other elements include recycling and reuse of materials and waste, use of sustainable materials, and deep soil zones for groundwater recharge and vegetation.

***Thermal Comfort & Energy Efficiency**

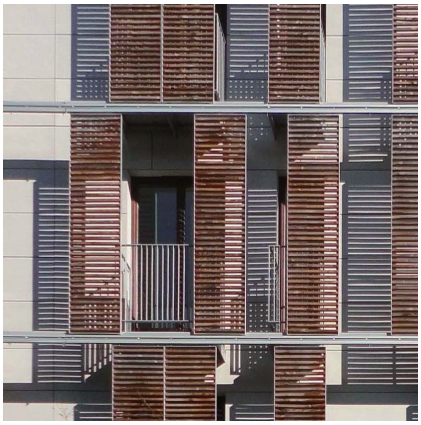
Climatic responsive design has been applied to this proposal. Most of the units have been oriented north, east or west to gain direct solar access. As stated above, the building depth and separation are all comply with relevant controls that allow the sufficient sunlight exposure to the most of the units. There are 182 out of 253 units (71.9 %) can satisfy the 2 hours direct sunlight exposure requirement, which complies with the 70 % requirement. Furthermore, the passive thermal gain can be controlled by the adjustable louvers, pergolas. It significantly reduces the needs of heating, cooling and artificial lighting. An accompanying BASIX report outlines the specification of the sustainability methods that applied in this development.

There are 152 out of 253 units (60.0 %) have cross ventilation with operable opening on both side. It not only satisfies the need of fresh air but also increases the thermal comfort performance and energy consumption performance. All the habitable rooms have its own opening in forms of windows or sliding doors to ensure the natural lighting and air ventilation requirements, while all the toilets and kitchens have either natural ventilation or mechanical ventilation.

*Concept Image of Proposed*
*Aluminium Pergola*

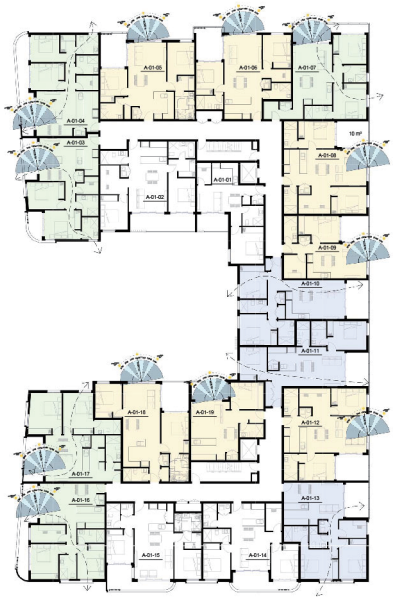
*Concept Image of Proposed*
*Clerestory Window*

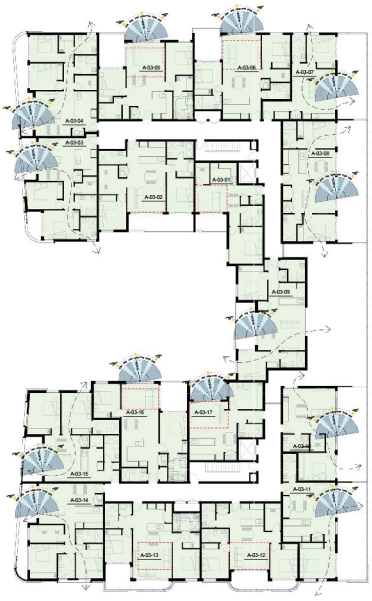
*Concept Image of Proposed*
*Skylight*

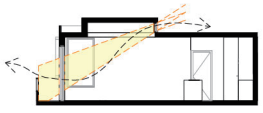


*Concept Image of Proposed*
*Privacy Screen*

| Unit NO. | Compliance | | |
|---|---|---|---|
| | Solar Access 0-2hrs from 9am - 3pm | Solar Access 2hrs from 9am - 3pm | Cross Ventilation |
| A-G-01 | No | No | No |
| A-G-02 | No | Yes | Yes |
| A-G-03 | No | Yes | Yes |
| A-G-04 | No | Yes | No |
| A-G-05 | No | Yes | No |
| A-G-06 | No | Yes | Yes |
| A-G-07 | No | Yes | No |
| A-G-08 | No | Yes | Yes |
| A-G-09 | Yes | No | Yes |
| A-G-10 | Yes | No | Yes |
| A-G-11 | No | Yes | Yes |
| A-G-12 | Yes | No | Yes |
| A-G-13 | No | No | No |
| A-G-14 | No | No | No |
| A-G-15 | No | Yes | Yes |
| A-G-16 | No | Yes | Yes |
| A-G-17 | No | Yes | No |
| A-01-01 | No | No | No |
| A-01-02 | No | No | No |
| A-01-03 | No | Yes | Yes |
| A-01-04 | No | Yes | Yes |
| A-01-05 | No | Yes | No |
| A-01-06 | No | Yes | No |
| A-01-07 | No | Yes | Yes |
| A-01-08 | No | Yes | No |
| A-01-09 | No | Yes | No |
| A-01-10 | Yes | No | Yes |
| A-01-11 | Yes | No | Yes |
| A-01-12 | No | Yes | No |
| A-01-13 | Yes | No | Yes |
| A-01-14 | No | No | No |
| A-01-15 | No | No | No |
| A-01-16 | No | Yes | Yes |
| A-01-17 | No | Yes | Yes |
| A-01-18 | No | Yes | No |
| A-01-19 | No | Yes | No |
| A-02-01 | No | No | No |
| A-02-02 | No | No | No |
| A-02-03 | No | Yes | Yes |
| A-02-04 | No | Yes | Yes |
| A-02-05 | No | Yes | No |
| A-02-06 | No | Yes | No |
| A-02-07 | No | Yes | Yes |
| A-02-08 | No | Yes | No |
| A-02-09 | No | Yes | No |
| A-02-10 | Yes | No | Yes |
| A-02-11 | Yes | No | Yes |
| A-02-12 | No | Yes | No |
| A-02-13 | Yes | No | Yes |
| A-02-14 | No | No | No |
| A-02-15 | No | No | No |
| A-02-16 | No | Yes | Yes |
| A-02-17 | No | Yes | Yes |
| A-02-18 | No | Yes | No |
| A-02-19 | No | Yes | No |
| A-03-01 | No | Yes | Yes |
| A-03-02 | No | Yes | Yes |
| A-03-03 | No | Yes | Yes |
| A-03-04 | No | Yes | Yes |
| A-03-05 | No | Yes | Yes |
| A-03-06 | No | Yes | Yes |
| A-03-07 | No | Yes | Yes |
| A-03-08 | No | Yes | Yes |
| A-03-09 | No | Yes | Yes |
| A-03-10 | No | Yes | Yes |
| A-03-11 | No | Yes | Yes |
| A-03-12 | No | Yes | Yes |
| A-03-13 | No | Yes | Yes |
| A-03-14 | No | Yes | Yes |
| A-03-15 | No | Yes | Yes |
| A-03-16 | No | Yes | Yes |
| A-03-17 | No | Yes | Yes |
| Sum | 9/72(12.5%) | 52/72(72.2%) | 43/72(59.7%) |
| Compliance | Yes | Yes | Yes |

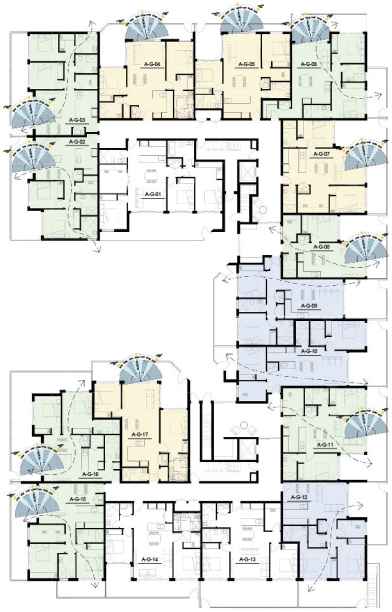






**SOLAR ACCESS & NATURAL CROSS VENTILATION DIAGRAM LEGEND**

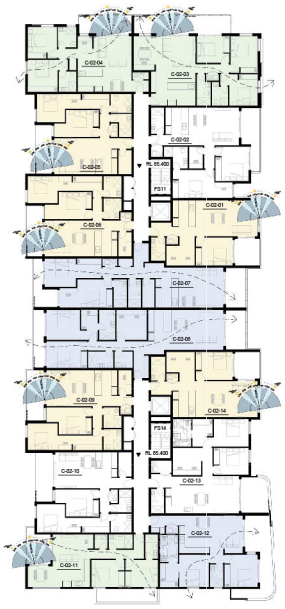
- UNIT WITH SOLAR ACCESS
- UNIT WITH NATURAL CROSS VENTILATION
- UNIT WITH SOLAR ACCESS & NATURAL CROSS VENTILATION
- UNIT WITH SKYLIGHT SOLAR ACCESS & NATURAL CROSS VENTILATION

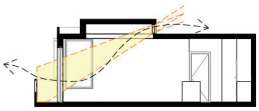


*Natural Cross Ventilation & Solar Access Compliance Diagrams*

*Natural Cross Ventilation & Solar Access Indicative Diagrams*

| Unit NO. | Compliance | | |
|---|---|---|---|
| | Solar Access 0-2hrs from 9am - 3pm | Solar Access 2hrs from 9am - 3pm | Cross Ventilation |
| C-G-01 | No | Yes | Yes |
| C-G-02 | No | Yes | No |
| C-G-03 | No | Yes | Yes |
| C-G-04 | No | Yes | Yes |
| C-G-05 | No | Yes | No |
| C-G-06 | No | Yes | No |
| C-G-07 | No | Yes | Yes |
| C-G-08 | Yes | No | Yes |
| C-G-09 | No | Yes | No |
| C-G-10 | No | No | Yes |
| C-G-11 | Yes | No | Yes |
| C-G-12 | No | Yes | No |
| C-G-13 | No | Yes | Yes |
| C-01-01 | No | Yes | No |
| C-01-02 | Yes | No | No |
| C-01-03 | No | Yes | Yes |
| C-01-04 | No | Yes | Yes |
| C-01-05 | No | Yes | No |
| C-01-06 | No | Yes | No |
| C-01-07 | Yes | No | Yes |
| C-01-08 | Yes | No | Yes |
| C-01-09 | No | Yes | No |
| C-01-10 | Yes | No | No |
| C-01-11 | No | No | Yes |
| C-01-12 | Yes | No | Yes |
| C-01-13 | Yes | No | No |
| C-01-14 | No | Yes | No |
| C-02-01 | No | Yes | No |
| C-02-02 | Yes | No | No |
| C-02-03 | No | Yes | Yes |
| C-02-04 | No | Yes | Yes |
| C-02-05 | No | Yes | No |
| C-02-06 | No | Yes | No |
| C-02-07 | Yes | No | Yes |
| C-02-08 | Yes | No | Yes |
| C-02-09 | No | Yes | No |
| C-02-10 | Yes | No | No |
| C-02-11 | No | Yes | Yes |
| C-02-12 | Yes | No | Yes |
| C-02-13 | Yes | No | No |
| C-02-14 | No | Yes | No |
| C-03-01 | No | Yes | Yes |
| C-03-02 | No | Yes | Yes |
| C-03-03 | No | Yes | Yes |
| C-03-04 | No | Yes | Yes |
| C-03-05 | No | Yes | Yes |
| C-03-06 | No | Yes | Yes |
| C-03-07 | No | Yes | Yes |
| C-03-08 | No | Yes | Yes |
| C-03-09 | No | Yes | Yes |
| C-03-10 | No | Yes | Yes |
| C-03-11 | No | Yes | Yes |
| C-03-12 | No | Yes | Yes |
| C-03-13 | No | Yes | Yes |
| Sum | 14/54(25.9%) | 38/54(70.4%) | 33/54(61.1%) |
| Compliance | Yes | Yes | Yes |





**SOLAR ACCESS & NATURAL CROSS VENTILATION DIAGRAM LEGEND**

- UNIT WITH SOLAR ACCESS
- UNIT WITH NATURAL CROSS VENTILATION
- UNIT WITH SOLAR ACCESS & NATURAL CROSS VENTILATION
- UNIT WITH SKYLIGHT SOLAR ACCESS & NATURAL CROSS VENTILATION

*Natural Cross Ventilation & Solar Access Compliance Diagrams*

*Natural Cross Ventilation & Solar Access Indicative Diagrams*

***Waste Management**

The demolition and construction waste will be managed and reused on site to maximize the recycle and minimize the potential pollution. Most of recyclable materials such as timber, plastic, glass, paper boxes, steel and aluminium will be encouraged to recycle on-site or by other specialized contractors. Those not recyclable materials such as masonry material, tiles or earth will be utilized for driveway base construction or as refill material for landscaping. The hazard material will be collected by qualified contractor.

Bin storage areas have been provided on the ground level for each lot with sufficient area for recycle bins and general wastes, separated bulky garbage rooms have been provided as well, loading bay has been designed next to the bin storage area for waste collection.

*Bike Rack for Accommodating*
*- The Sustainable Lifestyle*

***Sustainable Lifestyle**

This proposal provides bicycle racks and lockers which can store more than 92 bikes on site. These facilities will allow more sustainable traveling method to be used in future.

## Principle 5:

**Landscape**

Good design recognises that together landscape and buildings operate as an integrated and sustainable system, resulting in attractive developments with good amenity. A positive image and contextual fit of well-designed developments is achieved by contributing to the landscape character of the streetscape and neighbourhood.

Good landscape design enhances the development's environmental performance by retaining positive natural features which contribute to the local context, co-ordinating water and soil management, solar access, micro-climate, tree canopy, habitat values, and preserving green networks. Good landscape design optimises usability, privacy and opportunities for social interaction, equitable access, respect for neighbours' amenity, provides for practical establishment and long term management.

***Environmental Effect**

The development is proposed to be delivered with sufficient landscape area to improve the resident's amenity and environmental sustainability performance. The majority of the ground floor open spaces are designed to be landscaped area. each lot has its own central courtyard, with deep soil area, raised planters, lawn and designed paved area. the ground floor community open space is the main communal space for residents. Indigenous flora species are used to protect biological diversity. The building has been separated with the neighbours by screening vegetation, which will also protect the potential green corridors that go across the precinct.

The proposal has included raised planting beds with low-maintenance vegetation on ground floor private yards, which can reduce the privacy issue for ground floor residents. It also reduces the hard surface area in the building envelope to improve the passive stormwater retention performance. Low-water landscaping is also encouraged in this proposal to improve the water saving as well as the energy saving performance.

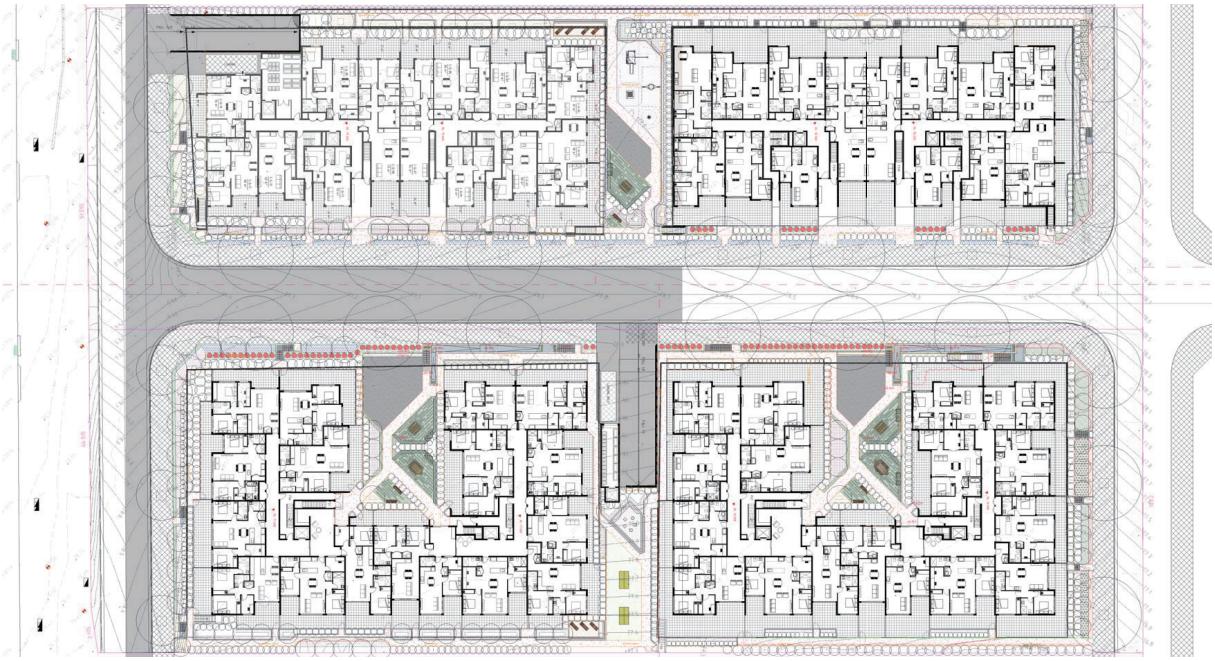
***Recreational Open Spaces**

Every individual unit has a private open space in the forms of balcony, terrace or court-yard. All private open spaces are equal or larger than the SEPP 65 requirement and DCP requirement. The ground floor units also have larger open space and deeper depth to enhance amenity and avoid privacy issues.

On the other hand, public recreational areas have been provided on ground floor central courtyard. Both two common open spaces are located on the central part of the site and between two buildings in each lot. The entries of these communal open spaces are from lobby or side gate. Furthermore, the public roof top terraces have been provided on each building.

These roof top garden enriched the option of the outdoor recreational activities. The residents can either enjoy the hairy ground floor open space and playground or utilize level 3 public terrace with hard paved area and public facilities.

These communal open spaces are surrounded by screening plants to avoid the overlooking issue. The plants also provide natural sun shading for the opening spaces. Series of facilities are provided in these communal spaces, which include seating, barbeque grill units and children playgrounds. The boundaries are treated with fencing and hedges to provide more inclusive and surveilled area.



*Indicative Landscape Plan*

## Principle 6:

**Amenity**

Good design positively influences internal and external amenity for residents and neighbours. Achieving good amenity contributes to positive living environments and resident wellbeing.

Good amenity combines appropriate room dimensions and shapes, access to sunlight, natural ventilation, outlook, visual and acoustic privacy, storage, indoor and outdoor space, efficient layouts and service areas, and ease of access for all age groups and degrees of mobility.

***Room Size & Layout**

The unit design is following the apartment design guide. All the habitable rooms have 2.7 meters ceiling height, while the bathrooms and kitchens will be constructed with bulkheads and leave a 2.4 meters ceiling height.

The 1 bedroom units will have 51-69 square meters internal floor area; the 2 bedroom units will have 75-112 square meters internal floor area; and 3 bedroom units will have 98-102 square meters internal floor area, which all 3 types of units satisfy with the design criteria (50m2;70+5m2; 90+5m2). Every apartment has been fitted with a storage in the form of study room, pantry or cupboard which is also complied with the control.

All the bedrooms have minimum 3 meters in both direction and 9 square meters floor area, while the master bedrooms have minimum 3 meters in both direction and more than 10 square meters floor area. Furthers, all the bedrooms have more than 1.5 meters robe, while master bedrooms have either 1.8 meters built-in robe or walk-in robe.

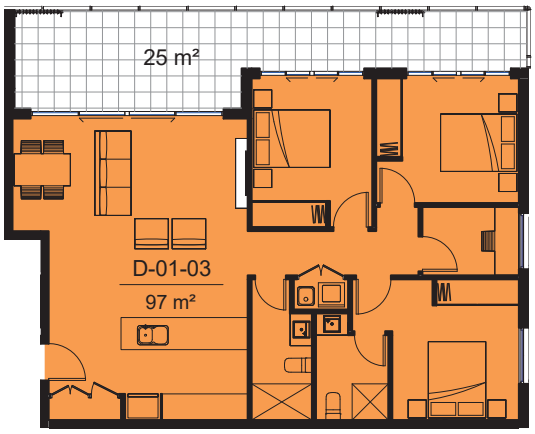
All the 2 & 3 bedroom units have minimum 4.0 meters width for living area. All the private recreational open spaces are connected with the main living area to maximize the usage of both. All habitable areas are relatively shallow from glass to rear wall to decrease the need of artificial lighting. Most of balconies are separated to protect privacy. Moreover, some of master room can also access to the main private open space or a separated balcony.

***Thermal Comfort, Air & Natural Lighting**

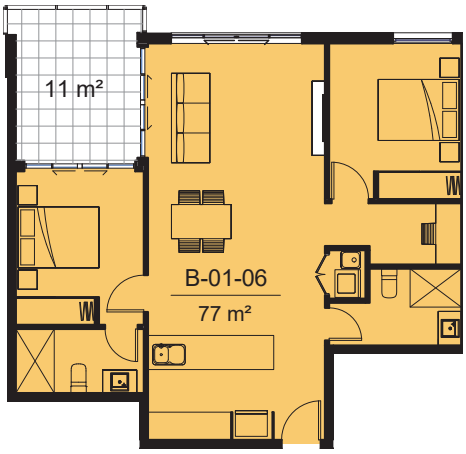
As stated above, 71.6% of units can receive two or more hours of sunlight between 9am to 3pm in the midwinter. North facing living rooms are maximised, and are relatively shallow from glass to rear wall. Most of north facing units and some of east and west facing units have controllable aluminium louvers or fixed timber-like louvers to improve the thermal comfort. All the balconies are covered by roof pergolas to reduce thermal gain from summer direct sunlight.

Over 60% of units have cross ventilation to maximize the energy efficiency and thermal comfort, mechanical ventilation system has been employed in bathrooms and kitchens to ensure the air quality. Furthers, all the external windows are openable for ventilation purpose.

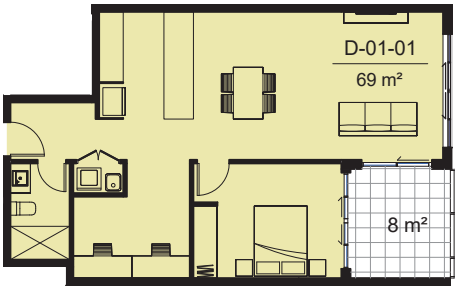
The design of the window size and shape balanced the needs of natural lighting and thermal comfort. All the living areas are connected to the private open space with a glazing sliding door which are about 6-8 sqm. And all the bedrooms have 3-5 sqm opening.




*Typical Unit Layout 1*




*Typical Unit Layout 2*




*Typical Unit Layout 3*

***Acoustic Performance**

The major noise impact is expected to come from the Bringelly road traffic. This transport corridor is about 26.1 meters (6 meters from Bringelly road to proposed road, 13.1 meters proposed service road, 6 meters setback from building to the road) from the proposed building. All the buildings are setback 6 meters from other local roads to minimize the noise from traffic.

***Privacy**

The proposal is strictly complied with all setback control of the DCP which benefits the privacy performance. The building separation also complies with the apartment design guide. Furthers, thick vegetation around the ground floor units will screen the view from adjacent site and public access area. Thus, no significant privacy issue is expected on both eastern and western side and street fronts. The ground floor windows that face to the public open space have been screened by the planting as well. The 1800mm sill height windows are used to minimize the potential overlooking issue.

***Storage Area**

The storage volume for each unit has either be allocated in basement cages or as a multi-function-room/ storage within the apartment units. Thus, 1 bedroom unit will have equal to or over $6m^3$ space of storage, 2 bedrooms unit will have equal to or over $8m^3$ and 3 bedrooms unit will have equal to or over $10m^3$ space of storage.

## Principle 7:

**Safety**

Good design optimises safety and security, within the development and the public domain. It provides for quality public and private spaces that are clearly defined and fit for the intended purpose. Opportunities to maximise passive surveillance of public and communal areas promote safety.

A positive relationship between public and private spaces is achieved through clearly defined secure access points and well-lit and visible areas that are easily maintained and appropriate to the location and purpose.

***Crime Prevention Outcome**

There is no apparent issue of safety and security in or around the subject site. The pedestrian has access to get in to the building direct from street. And vehicle will access the building from local road.

Swipe card control access is provided for both main entrance, garden entrance, lift and car parking gate. For the visitors, video intercom system is adopted for main entrance and car parking area.

The streets, courtyard and balcony are benefited from visual surveillance from the living area and private open space. The residential accesses from proposed local roads are highly visible from the street and units to allow passive surveillance. The residential mail boxes are located in the entry lobby.

The vehicle accesses are located on middle of block for each lot. It improves the passive surveillance from the ground floor units and private yards.

Street lighting and landscape lighting improve the security for the residents and public domain. The CCTV monitoring system also will be also adopted to these areas.

## Principle 8:

**Housing Diversity and Social Interaction**

Good design achieves a mix of apartment sizes, providing housing choice for different demographics, living needs and household budgets.

Well-designed apartment developments respond to social context by providing housing and facilities to suit the existing and future social mix. Good design involves practical and flexible features, including different types of communal spaces for a broad range of people, providing opportunities for social interaction amongst residents.

***Housing Diversity**

3 types of unit have been provided in the project with certain variation in terms of layout and size. There are 10 of three bedroom units (4%), 196 of two bedroom units (77.5%) and 47 of one bedroom units (18.6%).

Sufficient car spaces have been provided as well as certain amount of bike lockers and racks to encourage the sustainable life style.

As the site has proximity to the future Leppington station and commercial shopping centre, the majority of the units are designed to be 2 bedroom units, which should attract small household types such as couple without child or with one child. All 3 bedroom units have a larger private outdoor space either on the terrace or ground floor private yard. It should encourage the medium size family to move into this higher density residential area with its high amenity and proximity to the future educational facilities. Most of 2 and 3 bedroom units are designed with a study room which can be adaptably used as a home office/ storage, which can also potentially increase the housing diversity.

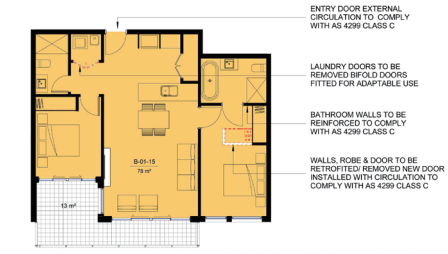
## *Social Interaction

The proposed development provides for new residential supply within a priority growth centre, which is currently undergoing significant development. The area has been earmarked for an increase in density, which is encouraged by controls applicable to the site, and the future desired character for the precinct.

There are 25 adaptable units has been designed to provide housing for disabilities. These 25 adaptable units have been located in all 4 blocks.

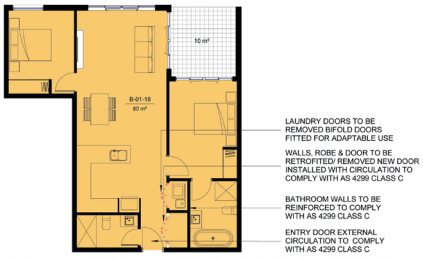
There are 1 & 2 bedrooms choice for the adaptable units. These adaptable units are not only design for the disable people, it also encourages elderly residents to live in, which improves the local social interaction in terms of mixture of different aging group.

Moreover, all the communal space is designed in accordance to the 1428.1 for ease access. It should allow different aging group and disabilities to live in the community.



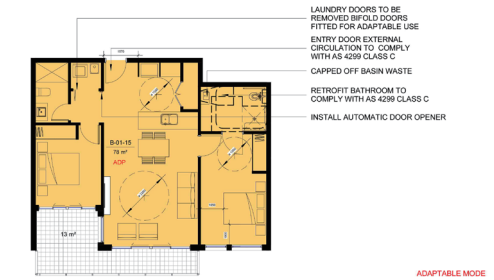

1 LOT B - LEVEL 1 - ADAPTABLE UNIT TYPE 4
1 : 100

**2 ADAPTABLE UNITS IN LOT B: B-G-14 / B-01-15**
**2 ADAPTABLE UNITS IN LOT A: A-G-14 / A-01-15**

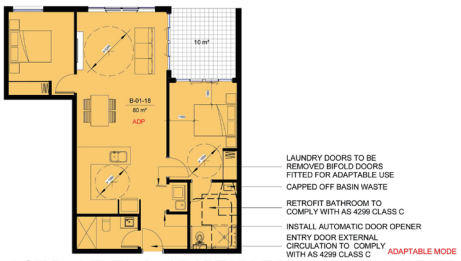



3 LOT B - LEVEL 1 - ADAPTABLE UNIT TYPE 5
1 : 100

**2 ADAPTABLE UNITS IN LOT B: B-G-17 / B-01-18**
**2 ADAPTABLE UNITS IN LOT A: A-G-17 / A-01-18**

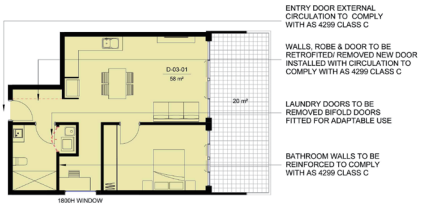



2 LOT B - LEVEL 1 - ADAPTABLE UNIT TYPE 4 VARIED
1 : 100




4 LOT B - LEVEL 1 - ADAPTABLE UNIT TYPE 5 VARIED
1 : 100

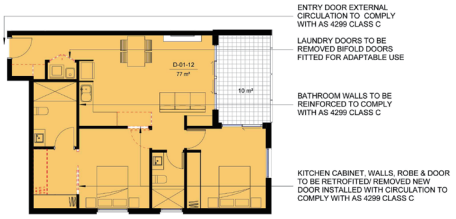
*Adaptable Unit Variation Plans*
*Refer to Architectural Plan Set*




5 LOT D-LEVEL 3 - ADAPTABLE UNIT TYPE 6

1 : 100

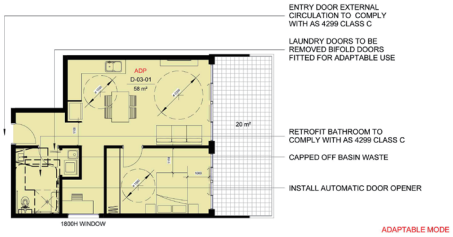
**2 ADAPTABLE UNIT: D-03-01 / D-03-13**
**2 ADAPTABLE UNIT: C-03-01 / C-03-13**




1 LOT D - LEVEL 1 - ADAPTABLE UNIT TYPE 1

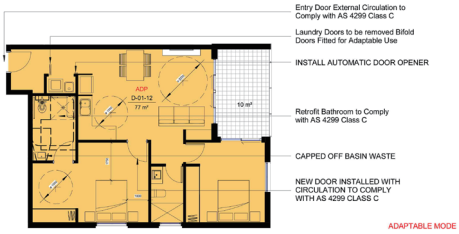
1 : 100

**2 ADAPTABLE UNITS IN LOT D: D-G-12 / D-01-12**
**2 ADAPTABLE UNITS IN LOT C: C-G-11 / C-01-12**



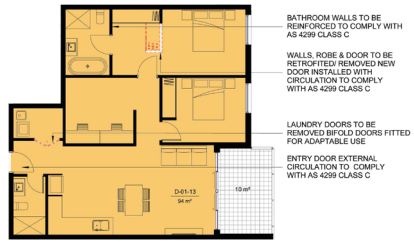

6 LOT D-LEVEL 3 - ADAPTABLE UNIT TYPE 6 VARIED

1 : 100




2 LOT D - LEVEL 1 - ADAPTABLE UNIT TYPE 1 VARIED

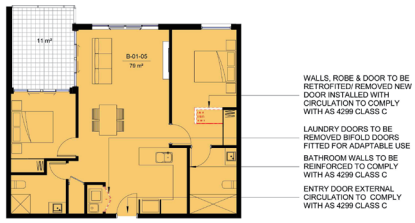
1 : 100




3 LOT D - LEVEL 1 - ADAPTABLE UNIT TYPE 2

1 : 100

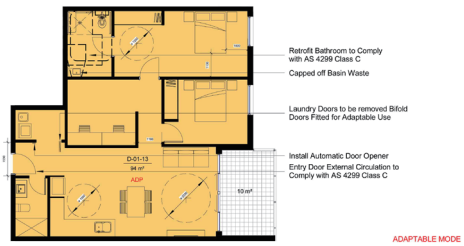
**2 ADAPTABLE UNITS: D-01-13/ D-02-13**
**1 ADAPTABLE UNITS: C-01-13**




5 LOT B - LEVEL 1 - ADAPTABLE UNIT TYPE 3

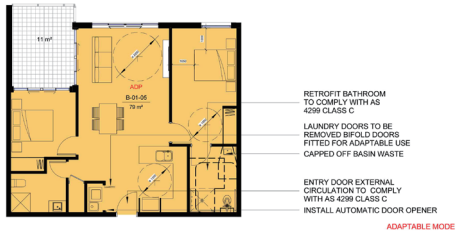
1 : 100

**3 ADAPTABLE UNITS: B-G-04 / B-01-05 / B-02-05**
**3 ADAPTABLE UNITS: A-G-04 / A-01-05 / A-02-05**




4 LOT D - LEVEL 1 - ADAPTABLE UNIT TYPE 2 VARIED

1 : 100




6 LOT B - LEVEL 1 - ADAPTABLE UNIT TYPE 3 VARIED

1 : 100

*Adaptable Unit Variation Plans*
*Refer to Architectural Plan Set*

## Principle 9:

**Aesthetics**

Good design achieves a built form that has good proportions and a balanced composition of elements, reflecting the internal layout and structure. Good design uses a variety of materials, colours and textures.

The visual appearance of well-designed apartment development responds to the existing or future local context, particularly desirable elements and repetitions of the streetscape.

***Streetscape & Townscape**

As stated above, the proposal tries to express a modern architectural style which in consistency with those future development in the Austral & Leppington precinct, while keep similar form and scale to other proposed contemporary buildings within the precinct.

Moreover, the facade design has been articulated to improve the visual attraction and avoid to present a bulky form facing to the street. The balconies are projected to increase the layers on street-fronting façades. The window openings on the wall have been emphasized by powder-coated feature frame to divide the facade. The transparent material has been used for balustrades or pergolas to avoid over bulky looking. Vegetation has been used to create a soften separation between the buildings.

The buildings have further setback on its forth level to allow solar access and avoid bulky looking. This setback also presents the buildings as attached dwellings or townhouses, especially with its extrusion on every 4-6 meters.

*Material Indicative Perspective*


**ZC**
ZINC CLADDING PANEL

**GB**
GLASS BALUSTRADE

**CF**
COLORBOND FENCE

**RDG**
RENDER - DARK GREY



**RPW**
RENDER - PEARL WHITE

**TLP**
TIMBER LOUVRE PANEL

**GFB**
DARK GREY FACE BRICK

**AP**
ALUMINIUM PERGOLA

| | |
|---|---|
| **ZC** | ZINC CLADDING PANEL |
| **GB** | GLASS BALUSTRADE |
| **CF** | COLORBOND FENCE |
| **RDG** | RENDER -DARK GREY |
| **RPW** | RENDER - PEARL WHITE |
| **TLP** | TIMBER LOUVRE PANEL |
| **GFB** | DARK GREY FACE BRICK |
| **AP** | ALUMINIUM PERGOLA |

*Material Indicative Sample*

***Materiality**

The use of materials on architectural features such as blade walls, framed exterior window, warm colour louvers and glass/metal balustrade provide a rich character that articulate the facade, with a high degree of refinement and longevity. The design whilst contemporary in nature fits in with the developments in the area through its relevant and moderated material palette.

Bright, low-reflective and warm colours have been chosen for the majority of the facades to increase the visual tension. The darker colour has been used for top & ground level of the building to visually 'setback' those levels. Brighter colour that used on middle levels with architectural geometry elements to minimize the bulky feeling of the building. The warm colour material such as timber-looking fence or louver panels can balance the large amount of cold colour rendering and refine the private open spaces.

Furthermore, the contrast between the fine grain texture such as grooved cladding/ bricks and large area painted surface enriches the facades.

The materials and finishes used throughout are robust and designed to withstand the elements whilst maintaining the character of the local area which exists within the locality. The intent of the design works on both a macro and micro level, the planning of the site and the detailing of the finishes will ensure and provide a high quality example for future development in this area.

***Overall Design Principle**

The building is designed to be symmetrical on both layout and façade. The majority of the façade features follow this pattern while some of the architectural elements such as windows and privacy panels have asymmetrical design. This design is the outcome of considering the size of the parcel, the ratio of the width and depth of the land and the appropriate unit layout. And it should also reflect the future characters of this medium density housing community within the Austral and Leppington Precinct.

# Section C

## Conclusion:

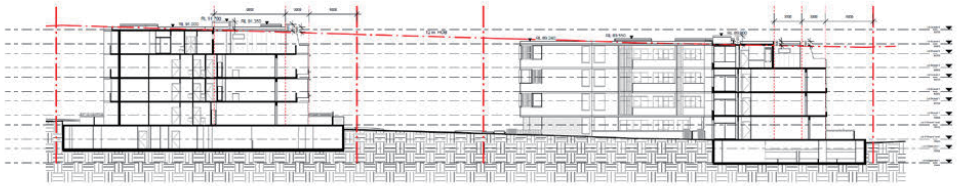
This statement discussed the architectural design performance for the development on 484 & 488 Bringelly Road, Austral in accordance with 9 principles that stated in the SEPP65 Design Quality of Residential Flat Building. The proposal endeavour to comply with all criteria that set out in the Apartment Design Guide, while it tries to deliver a quality and responsive design for this growing future residential precinct.

It is our opinion that this proposal complies and achieves all the controls and objectives in the Sepp 65 with exception of some minor non-compliances which have no impact on the objectives.

*Render Image*

# Appendix A

## Compliance Table

| Relevant Section | Performance Criteria | Proposed Development | Compliance |
|---|---|---|---|
| **Part 2 – Developing the Controls** | | | |
| 2c Building Height | Develop site-specific building envelopes and heights within a development control plan for large or complex sites such as those on steep slopes and those with changing topography. These specific heights need to be achievable within the building height set in the LEP | The project proposed 12.0 meters building height (habitable area from ground floor slab to roof top slab) which complies with the Growth Centre SEPP 2006 height limit 12m<br>Minor encroachment due to the slopping site. | No, refer to variation statement |
| | Ensure that building height controls respond to the desired number of storeys, the minimum floor to floor heights required for future building uses and include generous ground floor heights | The floor to floor height of building is 3 meters, with 2.7 meters ceiling height in habitable area (200mm slab, 20mm floor finish, 65mm ceiling space and 15mm ceiling finish) | Yes |
| Variation statement:<br><br>The proposed buildings have maximum 640mm encroachment to the height limit with its parapet walls and 1120mm encroachment with lift overruns.<br>The encroachment of height limit is due to following reason:<br>1. The site is sloping from south-west towards to the north-east. The current scheme has stepped building to fit the natural ground line change, however, the part of the building's parapet and lift overruns are still breaching the 12 meters height limit.<br>2. To ensure the performance of storm water drainage design and future public domain interface design. The ground slab level of all four blocks is set within 300mm difference with the proposed road levels.<br>This non-compliance is considered to have no impact to the surrounding future built environment because:<br>1. The building habitable area complies with the height of building control (12m), with 4 levels of 3 meters slab to slab distance. The non-compliance does not increase any gross floor area and density.<br>2. The design tried to incorporate with the slopping site by setback the top levels further on the breaching side of the buildings by 3-9 meters.<br>3. The building has complied with the height limit on the street frontages (to the internal local roads/ half roads), so it has no impact on visual bulkiness.<br>4. As shown on shadow diagrams, this non-compliance in height has very limited impact on solar access of the neighboring sites.<br>  <br>1 CROSS SECTION 1<br>1 : 200 | | | |
| 2d Floor Space Ratio | Floor space ratio (FSR) is the relationship of the total gross floor area (GFA) of a building relative to the total site area it is built on. It indicates the intended density. FSR is a widely used method for estimating the development potential of a site. | There are no FSR control in the precinct, development follows setback, site coverage and height limit controls. | n/a |

| | | | |
|---|---|---|---|
| | The GFA should fit comfortably within the building envelope as the envelope needs to also account for building elements and service areas that are not included in the GFA definition and to allow for building articulation | The building is complied with the given setback and building height (from Ground floor slab to roof slab 12 meters ) | Yes |
| 2e Building Depth | Use a range of appropriate maximum apartment depths of 12-18m from glass line to glass line when precinct planning and testing development controls. This will ensure that apartments receive adequate daylight and natural ventilation and optimise natural cross ventilation | The proposed building depth varies from 14.6 meters to 18 meters, while the apartments' depth varies from 4 meters to 8.74 meters from glass to wall with open plan kitchen layout. | Yes |
| | Coordinate building height and building depth:<br>*buildings that have smaller depths over a greater height deliver better residential amenity than those with greater depth and a lower height<br>*greater building depths may be possible where higher ceiling heights are provided, for example adaptive reuse of an existing building | The maximum wall to glazing depth for open plan uses should be 8.1 meters with 2.7m ceiling height. The biggest proposed depth is 8.3 meters wall to glazing depth. | No, refer to variation statement |
| Variation statement:<br>The 8.3 meters unit depth is considered to have no impact to the amenity because:<br>1. The natural lighting is sufficient in those rooms with full width (4m-5m) and 2.4 meters height glazing door.<br>2. All 2 units that have more than 8.1 meters unit depth are facing either north or north-east, which have direct sun light in more than 3 hours and better daylight. | | | |

| Relevant Section | Performance Criteria | Proposed Development | Compliance |
|---|---|---|---|
| 2f Building Separation | Minimum separation distances for buildings are:<br><br>Up to four storeys (approximately 12m):<br><br>12m between habitable rooms/balconies<br>9m between habitable and non-habitable rooms<br>6m between non-habitable rooms<br><br>Five to eight storeys (approximately 25m):<br><br>18m between habitable rooms/balconies<br>12m between habitable and non-habitable rooms<br>9m between non-habitable rooms<br><br>Nine storeys and above (over 25m):<br><br>24m between habitable rooms/balconies<br>18m between habitable and non-habitable rooms<br>12m between non-habitable rooms | All the building has 4 storeys. The distance between habitable rooms/balconies are 12.6m to 13.6m. | Yes |
| | No building separation is necessary where building types incorporate blank party walls. Typically this occurs along a main street or at podium levels within centres | n/a | n/a |

| Relevant Section | Performance Criteria | Proposed Development | Compliance |
|---|---|---|---|
| 2g Street Setbacks | Align street setbacks with building use. For example in mixed use buildings a zero street setback is appropriate | 6 meters for building footprint and 4.5 meters for articulation zone, which comply with the DCP control | Yes |
| | In conjunction with height controls, consider secondary upper level setbacks to:<br>• reinforce the desired scale of buildings at the street frontage<br>• minimise overshadowing of the street and other buildings | n/a | n/a |
| 2h Side and Rear Setbacks | Consider zero side setbacks where the desired character is for a continuous street wall, such as in dense urban areas, main streets or for podiums within centres<br>. | n/a | n/a |
| | On sloping sites, consider increasing side and rear setbacks where new development is uphill to minimise overshadowing and assist with visual privacy | The site is slope to west. The land on the west and south are zoned as non-residential area, so this clause is not considered. | n/a |

| Part 3- Siting the Development | | | |
|---|---|---|---|
| Relevant Section | Performance Criteria | Proposed Development | Compliance |
| 3a-1 Site Analysis Checklist | Site Location | A site location map has been provided. | Yes |
| | Local Context Map | A site location map has been provided. | Yes |
| | Site Context and Survey Plan | Site plan with adjacent building footprints has been provided | Yes |
| | Streetscape Elevations & Sections | Separated elevation and perspectives have been provided | Yes |
| | Analysis | Site Analysis with local climatic condition has been provided | Yes |
| 3b-1 Orientation | Where an adjoining property does not currently receive the required hours of solar access, the proposed building ensures solar access to neighbouring properties is not reduced by more than 20% | The subject development has no significant impact to the adjoining neighbors. A shadow diagram has been submitted with the DA. | Yes |
| | A minimum of 4 hours of solar access should be retained to solar collectors on neighbouring buildings | The subject development has no significant impact to the adjoining neighbors. A shadow diagram has been submitted with the DA. | Yes |
| 3d-1 Communal & Public Open Space | Communal open space has a minimum area equal to 25% of the site | Total 2881 (22.5%) square meters communal open space is proposed which is complied with the DCP 15% control. | No, refer to variation statement |
| | Developments achieve a minimum of 50% direct sunlight to the principal usable part of the communal open space for a minimum of 2 hours between 9 am and 3 pm on 21 June (mid winter) | At least 70% of communal open space can receive more than 2 hours sunlight between 9am and 3pm at mid-winter. | Yes |

Variation statement:

The site is considered to have sufficient communal open space for future residents because:

1. The current communal open space area is more than 15 % which is complied with the DCP control
2. All the units have large private open space, the average of all units are 17 sqm/ units, which is much larger than the DCP/SEPP65 requirements.
3. The site is close to the planned RE1 area and public reserve with more than 3 hectares open space

| Relevant Section | Performance Criteria | Proposed Development | Compliance |
|---|---|---|---|
| 3e Deep Soil Zones | Minimum requirement of deep soil zone:<br><br>Deep Soil Zone: 7%<br><br>Size:<br>Less than 650sqm:-<br>650-1500sqm: 3m<br>>1500sqm: 6m | The site provides total 1396 square meters deep soil area which equals to 10.9% of site area. | Yes |
| | On some sites it may be possible to provide larger deep soil zones, depending on the site area and context:<br><br>*10% of the site as deep soil on sites with an area of 650m2 - 1,500m2<br>*15% of the site as deep soil on sites greater than 1,500m2 | n/a | n/a |
| 3f-1 Visual Privacy | Separation between windows and balconies is provided to ensure visual privacy is achieved. Minimum required separation distances from buildings to the side and rear boundaries are as follows: (Habitable & Balcony; Non-habitable)<br><br>Up to 12 m: 6m; 3m<br>Up to 25m: 9m; 4.5m<br>Over 25m: 12m; 6m<br>Separation distances between buildings on the same site should combine required building separations depending on the type of room<br><br>Gallery access circulation should be treated as habitable space when measuring privacy separation distances between neighbouring properties | All the building has 4 storey. The distance between habitable rooms/balconies are 12.6m to 13.6m.<br><br>The building setback from all boundaries are 6 meters which complies with DCP. | Yes. |

| Relevant Section | Performance Criteria | Proposed Development | Compliance |
|---|---|---|---|
| 3j-1 Bicycle and Car Parking | For development in the following locations:<br><br>*on sites that are within 800 metres of a railway station or light rail stop in the Sydney Metropolitan Area; or<br>*on land zoned, and sites within 400 metres of land zoned, B3 Commercial Core, B4 Mixed Use or equivalent in a nominated regional centre<br><br>the minimum car parking requirement for residents and visitors is set out in the Guide to Traffic Generating Developments, or the car parking requirement prescribed by the relevant council, whichever is less<br><br>The car parking needs for a development must be provided of street | 313 On site off-street parking have been provided with 28 of them are adaptable car spaces.<br><br>92 Bicycle park space has been provided. | Yes |

| Relevant Section | Performance Criteria | Proposed Development | Compliance |
|---|---|---|---|
| Part 4- Designing the Building | | | |
| 4a-1 Solar and Daylight Access | Living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 2 hours direct sunlight between 9 am and 3 pm at mid-winter in the Sydney Metropolitan Area and in the Newcastle and Wollongong local government areas | 182 out of 253 units has a minimum of 2 hours direct sunlight between 9 am and 3 pm at mid-winter(71.9%) | Yes |
| | In all other areas, living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 3 hours direct sunlight between 9 am and 3 pm at mid-winter | n/a | n/a |
| | A maximum of 15% of apartments in a building receive no direct sunlight between 9 am and 3 pm at mid-winter | There are 24 units receive no direct sunlight between 9 am and 3 pm at mid-winter which is about 9.5%. | Yes |
| 4a-2 Solar and Daylight Access | Courtyards, skylights and high level windows (with sills of 1,500mm or greater) are used only as a secondary light source in habitable rooms | The skylights and high windows are not designed to be primary natural lighting source. | Yes |
| | Where courtyards are used :<br><br>†use is restricted to kitchens, bathrooms and service areas<br>†building services are concealed with appropriate detailing and materials to visible walls<br>†courtyards are fully open to the sky<br>†access is provided to the light well from a communal area for cleaning and maintenance<br>†acoustic privacy, fire safety and minimum privacy separation distances (see section 3F Visual privacy) are achieved | The courtyard is used only for private or public open space. | Yes |
| | Opportunities for reflected light into apartments are optimised through:<br><br>†reflective exterior surfaces on buildings opposite south facing windows<br>†positioning windows to face other buildings or surfaces (on neighbouring sites or within the site) that will reflect light<br>†integrating light shelves into the design<br>†light coloured internal finishes | The proposed building has sufficient daylight or sun light access. | Yes |

| Relevant Section | Performance Criteria | Proposed Development | Compliance |
|---|---|---|---|
| 4a-3 Shading | A number of the following design features are used:<br>*balconies or sun shading that extend far enough to shade summer sun, but allow winter sun to penetrate living areas<br>*shading devices such as eaves, awnings, balconies, pergolas, external louvres and planting<br>*horizontal shading to north facing windows<br>*vertical shading to east and particularly west facing windows<br>*operable shading to allow adjustment and choice<br>*high performance glass that minimises external glare off windows, with consideration given to reduced tint glass or glass with a reflectance level below 20% (reflective films are avoided) | North facing balcony has been designed in terms of the depth that allows only winter sunlight access to the living area.<br><br>Louvers and pergolas have been used. | Yes |
| 4b-3 Natural Ventilation | At least 60% of apartments are naturally cross ventilated in the first nine storeys of the building. Apartments at ten storeys or greater are deemed to be cross ventilated only if any enclosure of the balconies at these levels allows adequate natural ventilation and cannot be fully enclosed | 152 units are naturally cross ventilated which is about 60% of all units. | Yes |
| | Overall depth of a cross-over or cross-through apartment does not exceed 18m, measured glass line to glass line | The maximum glass line to glass line is less than 18m | Yes |

| Relevant Section | Performance Criteria | Proposed Development | Compliance |
|---|---|---|---|
| 4c-1 Ceiling Height | Minimum Ceiling Height;<br>Habitable Room: 2.7m<br>Non-Habitable Room: 2.4m<br>For 2 Storey :2.7m for main living area floor<br>2.4m for second floor, wher does not exceed 50% of total floor area<br>Attic Space: 1.8m at edge o room with a 30 degree minimum ceiling slope<br>Mixed Use area: 3.3m for Ground floor and first floor t promote future flexibility of use | 2.7m Ceiling height for habitable room in the units;<br>2.4 m ceiling height for kitchens and bathroom in the units | Yes.<br>Yes. |
| 4d-1 Apartment Size | Apartment are required to have the following minimum internal areas:<br>Studio: 35 m2<br>1 Bedroom: 50m2<br>2 Bedroom: 70 m2<br>3 Bedroom: 90m2<br><br>The minimum internal areas include only one bathroom. Additional bathrooms increase the minimum internal area by 5m2 each<br>A fourth bedroom and furthe additional bedrooms increase the minimum internal area by 12m2 each | The 1-bedroom apartments have minimum 51 square meters internal floor area while 2-bedroom apartment has 75 square meters internal floor area and 3-bedroom apartments have minimum 98 square meters internal floor area. | Yes |
| | Every habitable room must have a window in an external wall with a total minimum glass area of not less than 10% of the floor area of the room. Daylight and air may not be borrowed from other rooms<br>. | The minimal window to room size ratio is 14.9%. | Yes |

| Relevant Section | Performance Criteria | Proposed Development | Compliance |
|---|---|---|---|
| 4d-2 Apartment size and Layout | Habitable room depths are limited to a maximum of 2.5 x the ceiling height | n/a | n/a |
| | In open plan layouts (where the living, dining and kitchen are combined) the maximum habitable room depth is 8.1m from a window | The maximum room depth is 8.3 meters | No, refer to variation statement |
| Variation statement:<br>The 8.3 meters unit depth is considered to have no impact to the amenity because:<br>1. The natural lighting is sufficient in those rooms with full width (4m-5m) and 2.4 meters height glazing door.<br>2. All these units that have more than 8.1 meters unit depth are orienting either north or north-east, which have direct sun light in more than 3 hours and better daylight. | | | |
| 4d-3 Apartment size and Layout | Master bedrooms have a minimum area of 10m2 and other bedrooms 9m2 (excluding wardrobe space) | The minimal bedroom size is 9 m2 while the minimal master room size is 11 m2 | Yes |
| | Bedrooms have a minimum dimension of 3m (excluding wardrobe space) | The minimum bedroom dimension is 3.0 m | Yes |
| | Living rooms or combined living/dining rooms have a minimum width of:<br>*3.6m for studio and 1 bedroom apartments<br>*4m for 2 and 3 bedroom apartments | The minimum living room width for the 1-bedroom units is 3.7 m while the living rooms in 2-bedroom & 3-bedroom units are 4.0m. | Yes |
| | The width of cross-over or cross-through apartments are at least 4m internally to avoid deep narrow apartment layouts | The minimum width for cross-over unit is 4.0m. | Yes |
| 4e-1 Private Open Space and Balconies | All apartments are required to have primary balconies as follows:<br>Studio: 4m2 –<br>1 Bedroom: 8m2 2m<br>2 Bedroom: 10m2 2m<br>3 Bedroom: 12m2 2.4m | All the 1-bedroom units have more than 8 m2 and 2m depth balconies, while the 2-bedroom unit have at least 10m2 with 2.0meters depth balcony. | Yes |
| | For apartments at ground level or on a podium or similar structure, a private open space is provided instead of a balcony. It must have a minimum area of 15m2 and a minimum depth of 3m | The ground floor units' courtyards are 16-68m2 | Yes |

| Relevant Section | Performance Criteria | Proposed Development | Compliance |
|---|---|---|---|
| 4f-1 Common Circulation and Spaces | The maximum number of apartments off a circulation core on a single level is 8 | The maximum units to share one circulation core in the in one floor are 4.5. All units can access at least 2 cores, one of them is mechanical vertical circulation and the other one is a stair. | Yes |
| | For buildings of 10 storeys and over, the maximum number of apartments sharing a single lift is 40 | n/a | n/a |
| 4g-1 Storage | In addition to storage in kitchens, bathroom and bedrooms, the following storage is provided<br>Studio: 4m3<br>1 bedroom unit: 6m3<br>2 bedroom unit: 8m3<br>3 bedroom unit: 10m3 | The project provided sufficient storage for the residents, refer to the Appendix B for further detail. | Yes |

# Appendix B

## Units Numeric Table - Block A

| SEPP 65 Numeric Compliance Table | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Project Adress:* | *Block A - 484-488 Bringelly Road, Austral* | | | | | | | | | | | | |
| *Unit Number:* | *72 of 253* | | | | | | *Architect:* | DREAMSCAPES ARCHITECTS | | | | | |
| Unit NO. | Compliance | | | | | | | Storage Area | | | | Unit NO. | |
| | Solar Access 0-2hrs from 9am - 3pm | Solar Access 2hrs from 9am - 3pm | Cross Ventilation | Habitable Room Depth(m) | Unit Size($m^2$) | Balcony Size($m^2$) | | Interior Storage($m^2$) | Basement Storage($m^2$) | Total($m^3$) | Requried($m^3$) | | |
| A-G-01 | No | No | No | 7.8 | 102 | 31 | | 10 | 0 | 26 | 10 | A-G-01 | |
| A-G-02 | No | Yes | Yes | 6.8 | 75 | 28 | | 4 | 2 | 14.6 | 8 | A-G-02 | |
| A-G-03 | No | Yes | Yes | 6.8 | 79 | 24 | | 4 | 2 | 14.6 | 8 | A-G-03 | |
| A-G-04 | No | Yes | No | 5.9 | 79 | 25 | | 1 | 3 | 8.9 | 8 | A-G-04 | |
| A-G-05 | No | Yes | No | 6.6 | 77 | 18 | | 3 | 2 | 12 | 8 | A-G-05 | |
| A-G-06 | No | Yes | Yes | 6.7 | 77 | 32 | | 2 | 2 | 9.4 | 8 | A-G-06 | |
| A-G-07 | No | Yes | No | 6.4 | 81 | 32 | | 7 | 0 | 18.2 | 8 | A-G-07 | |
| A-G-08 | No | Yes | Yes | 4.8 | 53 | 23 | | 6 | 0 | 15.6 | 6 | A-G-08 | |
| A-G-09 | Yes | No | Yes | 6.4 | 76 | 39 | | 2 | 2 | 9.4 | 8 | A-G-09 | |
| A-G-10 | Yes | No | Yes | 7.5 | 81 | 30 | | 7 | 0 | 18.2 | 8 | A-G-10 | |
| A-G-11 | No | Yes | Yes | 6.4 | 83 | 30 | | 7 | 0 | 18.2 | 8 | A-G-11 | |
| A-G-12 | Yes | No | Yes | 7.1 | 80 | 44 | | 6 | 0 | 15.6 | 8 | A-G-12 | |
| A-G-13 | No | No | No | 8.3 | 79 | 31 | | 5 | 0 | 13 | 8 | A-G-13 | |
| A-G-14 | No | No | No | 7 | 78 | 24 | | 2 | 3 | 11.5 | 8 | A-G-14 | |
| A-G-15 | No | Yes | Yes | 7.1 | 80 | 33 | | 7 | 0 | 18.2 | 8 | A-G-15 | |
| A-G-16 | No | Yes | Yes | 6.6 | 77 | 47 | | 2 | 3 | 11.5 | 8 | A-G-16 | |
| A-G-17 | No | Yes | No | 6.5 | 81 | 29 | | 1 | 3 | 8.9 | 8 | A-G-17 | |
| A-01-01 | No | No | No | 5.5 | 54 | 6 | | 4 | 2 | 14.6 | 6 | A-01-01 | |
| A-01-02 | No | No | No | 7.8 | 85 | 13 | | 7 | 0 | 18.2 | 8 | A-01-02 | |
| A-01-03 | No | Yes | Yes | 6.5 | 75 | 11 | | 4 | 2 | 14.6 | 8 | A-01-03 | |
| A-01-04 | No | Yes | Yes | 6.8 | 79 | 15 | | 4 | 2 | 14.6 | 8 | A-01-04 | |
| A-01-05 | No | Yes | No | 5.9 | 79 | 11 | | 1 | 3 | 8.9 | 8 | A-01-05 | |
| A-01-06 | No | Yes | No | 6.6 | 77 | 11 | | 3 | 2 | 12 | 8 | A-01-06 | |
| A-01-07 | No | Yes | Yes | 6.7 | 77 | 12 | | 2 | 3 | 11.5 | 8 | A-01-07 | |
| A-01-08 | No | Yes | No | 6.4 | 81 | 10 | | 7 | 0 | 18.2 | 8 | A-01-08 | |
| A-01-09 | No | Yes | No | 3.8 | 53 | 9 | | 6 | 0 | 15.6 | 6 | A-01-09 | |
| A-01-10 | Yes | No | Yes | 6.4 | 76 | 10 | | 2 | 3 | 11.5 | 8 | A-01-10 | |
| A-01-11 | Yes | No | Yes | 7.1 | 75 | 9 | | 2 | 3 | 11.5 | 8 | A-01-11 | |
| A-01-12 | No | Yes | No | 6.1 | 81 | 10 | | 7 | 0 | 18.2 | 8 | A-01-12 | |
| A-01-13 | Yes | No | Yes | 6.5 | 78 | 10 | | 6 | 0 | 15.6 | 8 | A-01-13 | |
| A-01-14 | No | No | No | 7.3 | 75 | 10 | | 5 | 0 | 13 | 8 | A-01-14 | |
| A-01-15 | No | No | No | 7 | 78 | 11 | | 2 | 2 | 9.4 | 8 | A-01-15 | |
| A-01-16 | No | Yes | Yes | 7.1 | 80 | 14 | | 7 | 0 | 18.2 | 8 | A-01-16 | |
| A-01-17 | No | Yes | Yes | 6.5 | 80 | 10 | | 2 | 2 | 9.4 | 8 | A-01-17 | |
| A-01-18 | No | Yes | No | 6.5 | 80 | 10 | | 1 | 3 | 8.9 | 8 | A-01-18 | |
| A-01-19 | No | Yes | No | 6.5 | 53 | 8 | | 1 | 3 | 8.9 | 6 | A-01-19 | |
| A-02-01 | No | No | No | 5.5 | 54 | 6 | | 4 | 2 | 14.6 | 6 | A-02-01 | |
| A-02-02 | No | No | No | 7.8 | 85 | 13 | | 7 | 0 | 18.2 | 8 | A-02-02 | |
| A-02-03 | No | Yes | Yes | 6.5 | 75 | 11 | | 4 | 2 | 14.6 | 8 | A-02-03 | |
| A-02-04 | No | Yes | Yes | 6.8 | 79 | 15 | | 4 | 2 | 14.6 | 8 | A-02-04 | |
| A-02-05 | No | Yes | No | 5.9 | 79 | 11 | | 1 | 3 | 8.9 | 8 | A-02-05 | |
| A-02-06 | No | Yes | No | 6.6 | 77 | 11 | | 3 | 2 | 12 | 8 | A-02-06 | |
| A-02-07 | No | Yes | Yes | 6.7 | 77 | 12 | | 2 | 3 | 11.5 | 8 | A-02-07 | |
| A-02-08 | No | Yes | No | 6.4 | 81 | 10 | | 7 | 0 | 18.2 | 8 | A-02-08 | |
| A-02-09 | No | Yes | No | 3.8 | 53 | 9 | | 6 | 0 | 15.6 | 8 | A-02-09 | |
| A-02-10 | Yes | No | Yes | 6.4 | 76 | 10 | | 2 | 2 | 9.4 | 8 | A-02-10 | |
| A-02-11 | Yes | No | Yes | 7.1 | 75 | 9 | | 2 | 2 | 9.4 | 8 | A-02-11 | |
| A-02-12 | No | Yes | No | 6.1 | 81 | 10 | | 7 | 0 | 18.2 | 8 | A-02-12 | |
| A-02-13 | Yes | No | Yes | 6.5 | 78 | 10 | | 6 | 0 | 15.6 | 8 | A-02-13 | |
| A-02-14 | No | No | No | 7.3 | 75 | 10 | | 5 | 0 | 13 | 8 | A-02-14 | |
| A-02-15 | No | No | No | 7 | 78 | 11 | | 2 | 3 | 11.5 | 8 | A-02-15 | |
| A-02-16 | No | Yes | Yes | 7.1 | 80 | 14 | | 7 | 0 | 18.2 | 8 | A-02-16 | |
| A-02-17 | No | Yes | Yes | 6.5 | 80 | 10 | | 2 | 3 | 11.5 | 8 | A-02-17 | |
| A-02-18 | No | Yes | No | 6.5 | 80 | 10 | | 1 | 3 | 8.9 | 8 | A-02-18 | |
| A-02-19 | No | Yes | No | 6.5 | 53 | 8 | | 1 | 3 | 8.9 | 6 | A-02-19 | |
| A-03-01 | No | Yes | Yes | 5.5 | 54 | 6 | | 4 | 0 | 10.4 | 6 | A-03-01 | |
| A-03-02 | No | Yes | Yes | 7.8 | 85 | 14 | | 7 | 0 | 18.2 | 8 | A-03-02 | |
| A-03-03 | No | Yes | Yes | 6.5 | 75 | 11 | | 4 | 2 | 14.6 | 8 | A-03-03 | |
| A-03-04 | No | Yes | Yes | 7 | 79 | 15 | | 4 | 0 | 10.4 | 8 | A-03-04 | |
| A-03-05 | No | Yes | Yes | 6.9 | 79 | 10 | | 1 | 3 | 8.9 | 8 | A-03-05 | |
| A-03-06 | No | Yes | Yes | 6.6 | 77 | 10 | | 3 | 2 | 12 | 8 | A-03-06 | |
| A-03-07 | No | Yes | Yes | 4.8 | 51 | 31 | | 1 | 3 | 8.9 | 6 | A-03-07 | |
| A-03-08 | No | Yes | Yes | 5.8 | 77 | 44 | | 1 | 3 | 8.9 | 8 | A-03-08 | |
| A-03-09 | No | Yes | Yes | 5.2 | 77 | 11 | | 1 | 3 | 8.9 | 8 | A-03-09 | |
| A-03-10 | No | Yes | Yes | 5.8 | 53 | 34 | | 3 | 0 | 7.8 | 6 | A-03-10 | |
| A-03-11 | No | Yes | Yes | 5.8 | 59 | 35 | | 1 | 3 | 8.9 | 6 | A-03-11 | |
| A-03-12 | No | Yes | Yes | 7.3 | 75 | 10 | | 5 | 0 | 13 | 8 | A-03-12 | |
| A-03-13 | No | Yes | Yes | 7 | 78 | 11 | | 2 | 3 | 11.5 | 8 | A-03-13 | |
| A-03-14 | No | Yes | Yes | 7.1 | 80 | 14 | | 7 | 0 | 18.2 | 8 | A-03-14 | |
| A-03-15 | No | Yes | Yes | 6.5 | 80 | 10 | | 2 | 3 | 11.5 | 8 | A-03-15 | |
| A-03-16 | No | Yes | Yes | 6.5 | 80 | 10 | | 1 | 3 | 8.9 | 8 | A-03-16 | |
| A-03-17 | No | Yes | Yes | 6.5 | 53 | 8 | | 1 | 3 | 8.9 | 6 | A-03-17 | |
| Sum | 9/72(12.5%) | 52/72(72.2%) | 43/72(59.7%) | 8.30 MAX | 5382 | 1204 | | 270 | 113 | 939.3 | | Sum | |
| Compliance | Yes | Yes | Yes | No | Yes | Yes | | Yes | Yes | Yes | | Compliance | |

Note: This table is prepared by TSA Dreamscape for the DA submission for 105 Cudgegong Road, Rouse Hill, 201 units residential flat building development, should read accompany with SEPP 65 report and architectural drawings.

1 Bedroom
2 Bedroom
3 Bedroom

Compliance
Non-Compliance

# Appendix B

## Units Numeric Table - Block B

| SEPP 65 Numeric Compliance Table | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Project Adress:* | *Block B - 484-488 Bringelly Road, Austral* | | | | | | | | | | | | |
| *Unit Number:* | *72 of 253* | | | | | | *Architect:* | DREAMSCAPES ARCHITECTS | | | | | |
| Unit NO. | Compliance | | | | | | | Storage Area | | | | Unit NO. | |
| | Solar Access 0-2hrs from 9am - 3pm | Solar Access 2hrs from 9am - 3pm | Cross Ventilation | Habitable Room Depth(m) | Unit Size($m^2$) | Balcony Size($m^2$) | | Interior Storage($m^2$) | Basement Storage($m^2$) | Total($m^3$) | Requried($m^3$) | | |
| B-G-01 | No | No | No | 7.8 | 102 | 31 | | 10 | 0 | 26 | 10 | B-G-01 | |
| B-G-02 | No | Yes | Yes | 6.7 | 75 | 41 | | 4 | 3 | 16.7 | 8 | B-G-02 | |
| B-G-03 | No | Yes | Yes | 6.7 | 78 | 57 | | 4 | 3 | 16.7 | 8 | B-G-03 | |
| B-G-04 | No | Yes | No | 5.9 | 79 | 36 | | 1 | 5 | 13.1 | 8 | B-G-04 | |
| B-G-05 | No | Yes | No | 6.6 | 77 | 29 | | 3 | 3 | 14.1 | 8 | B-G-05 | |
| B-G-06 | No | Yes | Yes | 6.7 | 77 | 60 | | 2 | 3 | 11.5 | 8 | B-G-06 | |
| B-G-07 | No | Yes | No | 6.4 | 83 | 31 | | 7 | 0 | 18.2 | 8 | B-G-07 | |
| B-G-08 | No | Yes | Yes | 4.8 | 53 | 33 | | 6 | 2 | 19.8 | 6 | B-G-08 | |
| B-G-09 | Yes | No | Yes | 6.8 | 77 | 24 | | 2 | 3 | 11.5 | 8 | B-G-09 | |
| B-G-10 | Yes | No | Yes | 7.5 | 81 | 28 | | 7 | 0 | 18.2 | 8 | B-G-10 | |
| B-G-11 | No | Yes | Yes | 6.4 | 86 | 35 | | 7 | 0 | 18.2 | 8 | B-G-11 | |
| B-G-12 | Yes | No | Yes | 7.1 | 84 | 72 | | 6 | 2 | 19.8 | 8 | B-G-12 | |
| B-G-13 | No | No | No | 8.3 | 79 | 25 | | 5 | 2 | 17.2 | 8 | B-G-13 | |
| B-G-14 | No | No | No | 7 | 78 | 14 | | 2 | 3 | 11.5 | 8 | B-G-14 | |
| B-G-15 | No | Yes | Yes | 7.4 | 82 | 32 | | 7 | 0 | 18.2 | 8 | B-G-15 | |
| B-G-16 | No | Yes | Yes | 7.4 | 84 | 63 | | 2 | 3 | 11.5 | 8 | B-G-16 | |
| B-G-17 | No | Yes | No | 6.5 | 82 | 29 | | 1 | 5 | 13.1 | 8 | B-G-17 | |
| B-01-01 | No | No | No | 5.5 | 55 | 6 | | 4 | 2 | 14.6 | 6 | B-01-01 | |
| B-01-02 | No | No | No | 7.9 | 85 | 14 | | 7 | 0 | 18.2 | 8 | B-01-02 | |
| B-01-03 | No | Yes | Yes | 6.7 | 75 | 20 | | 4 | 3 | 16.7 | 8 | B-01-03 | |
| B-01-04 | No | Yes | Yes | 6.5 | 77 | 10 | | 4 | 3 | 16.7 | 8 | B-01-04 | |
| B-01-05 | No | Yes | No | 5.9 | 79 | 11 | | 1 | 5 | 13.1 | 8 | B-01-05 | |
| B-01-06 | No | Yes | No | 6.6 | 77 | 11 | | 3 | 3 | 14.1 | 8 | B-01-06 | |
| B-01-07 | No | Yes | Yes | 6.7 | 77 | 12 | | 2 | 3 | 11.5 | 8 | B-01-07 | |
| B-01-08 | No | Yes | No | 6.4 | 83 | 9 | | 7 | 0 | 18.2 | 8 | B-01-08 | |
| B-01-09 | No | Yes | No | 3.8 | 53 | 9 | | 6 | 2 | 19.8 | 6 | B-01-09 | |
| B-01-10 | Yes | No | Yes | 6.4 | 76 | 10 | | 2 | 3 | 11.5 | 8 | B-01-10 | |
| B-01-11 | Yes | No | Yes | 7.1 | 75 | 9 | | 2 | 3 | 11.5 | 8 | B-01-11 | |
| B-01-12 | No | Yes | No | 6.4 | 84 | 10 | | 7 | 0 | 18.2 | 8 | B-01-12 | |
| B-01-13 | Yes | No | Yes | 6.9 | 83 | 10 | | 6 | 2 | 19.8 | 8 | B-01-13 | |
| B-01-14 | No | No | No | 7.3 | 75 | 16 | | 5 | 2 | 17.2 | 8 | B-01-14 | |
| B-01-15 | No | No | No | 7 | 78 | 13 | | 2 | 3 | 11.5 | 8 | B-01-15 | |
| B-01-16 | No | Yes | Yes | 7.1 | 80 | 9 | | 7 | 0 | 18.2 | 8 | B-01-16 | |
| B-01-17 | No | Yes | Yes | 7.1 | 82 | 16 | | 2 | 4 | 13.6 | 8 | B-01-17 | |
| B-01-18 | No | Yes | No | 6.5 | 80 | 10 | | 1 | 5 | 13.1 | 8 | B-01-18 | |
| B-01-19 | No | Yes | No | 6.4 | 54 | 9 | | 1 | 5 | 13.1 | 6 | B-01-19 | |
| B-02-01 | No | No | No | 5.5 | 55 | 6 | | 4 | 3 | 16.7 | 6 | B-02-01 | |
| B-02-02 | No | No | No | 7.9 | 85 | 14 | | 7 | 0 | 18.2 | 8 | B-02-02 | |
| B-02-03 | No | Yes | Yes | 6.7 | 75 | 20 | | 4 | 3 | 16.7 | 8 | B-02-03 | |
| B-02-04 | No | Yes | Yes | 6.5 | 77 | 10 | | 4 | 3 | 16.7 | 8 | B-02-04 | |
| B-02-05 | No | Yes | No | 5.9 | 79 | 11 | | 1 | 5 | 13.1 | 8 | B-02-05 | |
| B-02-06 | No | Yes | No | 6.6 | 77 | 11 | | 3 | 3 | 14.1 | 8 | B-02-06 | |
| B-02-07 | No | Yes | Yes | 6.7 | 77 | 12 | | 2 | 4 | 13.6 | 8 | B-02-07 | |
| B-02-08 | No | Yes | No | 6.4 | 83 | 9 | | 7 | 0 | 18.2 | 8 | B-02-08 | |
| B-02-09 | No | Yes | No | 3.8 | 53 | 9 | | 6 | 2 | 19.8 | 6 | B-02-09 | |
| B-02-10 | Yes | No | Yes | 6.4 | 76 | 10 | | 2 | 4 | 13.6 | 8 | B-02-10 | |
| B-02-11 | Yes | No | Yes | 7.1 | 75 | 9 | | 2 | 5 | 15.7 | 8 | B-02-11 | |
| B-02-12 | No | Yes | No | 6.4 | 84 | 10 | | 7 | 0 | 18.2 | 8 | B-02-12 | |
| B-02-13 | Yes | No | Yes | 6.9 | 83 | 10 | | 6 | 2 | 19.8 | 8 | B-02-13 | |
| B-02-14 | No | No | No | 7.3 | 75 | 16 | | 5 | 2 | 17.2 | 8 | B-02-14 | |
| B-02-15 | No | No | No | 7 | 78 | 13 | | 2 | 5 | 15.7 | 8 | B-02-15 | |
| B-02-16 | No | Yes | Yes | 7.1 | 80 | 9 | | 7 | 0 | 18.2 | 8 | B-02-16 | |
| B-02-17 | No | Yes | Yes | 7.1 | 82 | 16 | | 2 | 5 | 15.7 | 8 | B-02-17 | |
| B-02-18 | No | Yes | No | 6.5 | 80 | 10 | | 1 | 5 | 13.1 | 8 | B-02-18 | |
| B-02-19 | No | Yes | No | 6.4 | 54 | 9 | | 1 | 5 | 13.1 | 6 | B-02-19 | |
| B-03-01 | No | Yes | Yes | 5.8 | 55 | 6 | | 4 | 3 | 16.7 | 6 | B-03-01 | |
| B-03-02 | No | Yes | Yes | 7.8 | 85 | 14 | | 7 | 0 | 18.2 | 8 | B-03-02 | |
| B-03-03 | No | Yes | Yes | 6.7 | 75 | 20 | | 4 | 3 | 16.7 | 8 | B-03-03 | |
| B-03-04 | No | Yes | Yes | 6.5 | 77 | 10 | | 4 | 3 | 16.7 | 8 | B-03-04 | |
| B-03-05 | No | Yes | Yes | 5.9 | 79 | 10 | | 1 | 5 | 13.1 | 8 | B-03-05 | |
| B-03-06 | No | Yes | Yes | 6.6 | 77 | 10 | | 3 | 3 | 14.1 | 8 | B-03-06 | |
| B-03-07 | No | Yes | Yes | 4.8 | 51 | 31 | | 2 | 5 | 15.7 | 6 | B-03-07 | |
| B-03-08 | No | Yes | Yes | 5.8 | 77 | 44 | | 1 | 5 | 13.1 | 8 | B-03-08 | |
| B-03-09 | No | Yes | Yes | 5.2 | 82 | 12 | | 1 | 5 | 13.1 | 8 | B-03-09 | |
| B-03-10 | No | Yes | Yes | 5.8 | 54 | 34 | | 3 | 3 | 14.1 | 6 | B-03-10 | |
| B-03-11 | No | Yes | Yes | 5.8 | 59 | 35 | | 1 | 5 | 13.1 | 6 | B-03-11 | |
| B-03-12 | No | Yes | Yes | 7.3 | 75 | 15 | | 5 | 2 | 17.2 | 8 | B-03-12 | |
| B-03-13 | No | Yes | Yes | 7 | 78 | 12 | | 2 | 5 | 15.7 | 8 | B-03-13 | |
| B-03-14 | No | Yes | Yes | 7.1 | 80 | 9 | | 7 | 0 | 18.2 | 8 | B-03-14 | |
| B-03-15 | No | Yes | Yes | 7.1 | 82 | 16 | | 2 | 5 | 15.7 | 8 | B-03-15 | |
| B-03-16 | No | Yes | Yes | 6.5 | 80 | 10 | | 1 | 5 | 13.1 | 8 | B-03-16 | |
| B-03-17 | No | Yes | Yes | 6.5 | 53 | 8 | | 1 | 5 | 13.1 | 6 | B-03-17 | |
| Sum | 9/72(12.5%) | 52/72(72.2%) | 43/72(59.7%) | 8.30 MAX | 5432 | 1364 | | 271 | 203 | 1130.9 | | Sum | |
| Compliance | Yes | Yes | Yes | No | Yes | Yes | | Yes | Yes | Yes | | Compliance | |

Note: This table is prepared by TSA Dreamscape for the DA submission for 105 Cudgegong Road, Rouse Hill, 201 units residential flat building development, should read accompany with SEPP 65 report and architectural drawings.

1 Bedroom
2 Bedroom
3 Bedroom

Compliance
Non-Compliance

# Appendix B

## Units Numeric Table - Block C

| SEPP 65 Numeric Compliance Table | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Project Adress:* | *Block C - 484-488 Bringelly Road, Austral* | | | | | | | | | | | |
| *Unit Number:* | *54 of 253* | | | | | | *Architect:* | DREAMSCAPES ARCHITECTS | | | | |
| Unit NO. | Compliance | | | | | | | Storage Area | | | | Unit NO. |
| | Solar Access 0-2hrs from 9am - 3pm | Solar Access 2hrs from 9am - 3pm | Cross Ventilation | Habitable Room Depth(m) | Unit Size($m^2$) | Balcony Size($m^2$) | | Interior Storage($m^2$) | Basement Storage($m^2$) | Total($m^3$) | Requried($m^3$) | |
| C-G-01 | No | Yes | Yes | 3.7 | 53 | 21 | | 1 | 3 | 8.9 | 6 | C-G-01 |
| C-G-02 | No | Yes | No | 8.1 | 63 | 23 | | 6 | 0 | 15.6 | 6 | C-G-02 |
| C-G-03 | No | Yes | Yes | 7.7 | 98 | 55 | | 2 | 3 | 11.5 | 10 | C-G-03 |
| C-G-04 | No | Yes | Yes | 6.2 | 81 | 16 | | 4 | 0 | 10.4 | 8 | C-G-04 |
| C-G-05 | No | Yes | No | 7.2 | 83 | 28 | | 4 | 0 | 10.4 | 8 | C-G-05 |
| C-G-06 | No | Yes | No | 8.1 | 86 | 21 | | 4 | 2 | 14.6 | 8 | C-G-06 |
| C-G-07 | No | Yes | Yes | 7.4 | 112 | 31 | | 9 | 0 | 23.4 | 8 | C-G-07 |
| C-G-08 | Yes | No | Yes | 8.1 | 112 | 43 | | 12 | 0 | 31.2 | 8 | C-G-08 |
| C-G-09 | No | Yes | No | 8.1 | 86 | 21 | | 4 | 2 | 14.6 | 8 | C-G-09 |
| C-G-10 | No | No | Yes | 7.1 | 75 | 31 | | 6 | 0 | 15.6 | 8 | C-G-10 |
| C-G-11 | Yes | No | Yes | 7 | 79 | 19 | | 2 | 2 | 9.4 | 8 | C-G-11 |
| C-G-12 | No | Yes | No | 7.7 | 65 | 27 | | 7 | 0 | 18.2 | 6 | C-G-12 |
| C-G-13 | No | Yes | Yes | 6.5 | 53 | 21 | | 1 | 3 | 8.9 | 6 | C-G-13 |
| C-01-01 | No | Yes | No | 7.1 | 69 | 8 | | 9 | 0 | 23.4 | 6 | C-01-01 |
| C-01-02 | Yes | No | No | 8.1 | 88 | 11 | | 4 | 2 | 14.6 | 8 | C-01-02 |
| C-01-03 | No | Yes | Yes | 7.7 | 98 | 21 | | 3 | 2 | 12 | 10 | C-01-03 |
| C-01-04 | No | Yes | Yes | 6.2 | 81 | 12 | | 4 | 2 | 14.6 | 8 | C-01-04 |
| C-01-05 | No | Yes | No | 7 | 82 | 10 | | 4 | 2 | 14.6 | 8 | C-01-05 |
| C-01-06 | No | Yes | No | 8.1 | 86 | 10 | | 4 | 2 | 14.6 | 8 | C-01-06 |
| C-01-07 | Yes | No | Yes | 7.3 | 99 | 25 | | 8 | 0 | 20.8 | 8 | C-01-07 |
| C-01-08 | Yes | No | Yes | 8.1 | 112 | 17 | | 12 | 0 | 31.2 | 8 | C-01-08 |
| C-01-09 | No | Yes | No | 7.9 | 85 | 11 | | 4 | 2 | 14.6 | 8 | C-01-09 |
| C-01-10 | Yes | No | No | 7.2 | 56 | 10 | | 4 | 2 | 14.6 | 6 | C-01-10 |
| C-01-11 | No | No | Yes | 7.9 | 75 | 12 | | 2 | 2 | 9.4 | 8 | C-01-11 |
| C-01-12 | Yes | No | Yes | 7 | 79 | 22 | | 2 | 2 | 9.4 | 8 | C-01-12 |
| C-01-13 | Yes | No | No | 8.1 | 96 | 12 | | 10 | 0 | 26 | 8 | C-01-13 |
| C-01-14 | No | Yes | No | 6.6 | 69 | 8 | | 10 | 0 | 26 | 6 | C-01-14 |
| C-02-01 | No | Yes | No | 7.1 | 69 | 8 | | 9 | 0 | 23.4 | 6 | C-02-01 |
| C-02-02 | Yes | No | No | 8.1 | 88 | 11 | | 4 | 2 | 14.6 | 10 | C-02-02 |
| C-02-03 | No | Yes | Yes | 7.7 | 98 | 21 | | 3 | 2 | 12 | 8 | C-02-03 |
| C-02-04 | No | Yes | Yes | 6.2 | 81 | 12 | | 4 | 2 | 14.6 | 8 | C-02-04 |
| C-02-05 | No | Yes | No | 7 | 82 | 10 | | 4 | 2 | 14.6 | 8 | C-02-05 |
| C-02-06 | No | Yes | No | 8.1 | 86 | 10 | | 4 | 2 | 14.6 | 8 | C-02-06 |
| C-02-07 | Yes | No | Yes | 7.3 | 99 | 18 | | 8 | 0 | 20.8 | 8 | C-02-07 |
| C-02-08 | Yes | No | Yes | 8.1 | 112 | 17 | | 12 | 0 | 31.2 | 8 | C-02-08 |
| C-02-09 | No | Yes | No | 7.9 | 85 | 11 | | 4 | 2 | 14.6 | 8 | C-02-09 |
| C-02-10 | Yes | No | No | 7.2 | 81 | 10 | | 4 | 2 | 14.6 | 8 | C-02-10 |
| C-02-11 | No | Yes | Yes | 4.2 | 74 | 10 | | 1 | 3 | 8.9 | 8 | C-02-11 |
| C-02-12 | Yes | No | Yes | 7 | 79 | 22 | | 2 | 2 | 9.4 | 8 | C-02-12 |
| C-02-13 | Yes | No | No | 8.1 | 96 | 12 | | 10 | 0 | 26 | 8 | C-02-13 |
| C-02-14 | No | Yes | No | 6.6 | 69 | 8 | | 10 | 0 | 26 | 6 | C-02-14 |
| C-03-01 | No | Yes | Yes | 6.6 | 59 | 20 | | 5 | 0 | 13 | 6 | C-03-01 |
| C-03-02 | No | Yes | Yes | 7.4 | 79 | 14 | | 3 | 2 | 12 | 8 | C-03-02 |
| C-03-03 | No | Yes | Yes | 7.7 | 76 | 33 | | 1 | 3 | 8.9 | 8 | C-03-03 |
| C-03-04 | No | Yes | Yes | 6.2 | 81 | 11 | | 4 | 2 | 14.6 | 8 | C-03-04 |
| C-03-05 | No | Yes | Yes | 7.1 | 82 | 9 | | 4 | 2 | 14.6 | 8 | C-03-05 |
| C-03-06 | No | Yes | Yes | 8.1 | 86 | 10 | | 4 | 2 | 14.6 | 8 | C-03-06 |
| C-03-07 | No | Yes | Yes | 5 | 114 | 22 | | 4 | 2 | 14.6 | 10 | C-03-07 |
| C-03-08 | No | Yes | Yes | 7.9 | 85 | 11 | | 4 | 2 | 14.6 | 8 | C-03-08 |
| C-03-09 | No | Yes | Yes | 6.9 | 81 | 10 | | 4 | 1 | 12.5 | 8 | C-03-09 |
| C-03-10 | No | Yes | Yes | 4.2 | 74 | 10 | | 1 | 3 | 8.9 | 8 | C-03-10 |
| C-03-11 | No | Yes | Yes | 5.8 | 61 | 41 | | 8 | 0 | 20.8 | 6 | C-03-11 |
| C-03-12 | No | Yes | Yes | 7.4 | 82 | 26 | | 4 | 1 | 12.5 | 8 | C-03-12 |
| C-03-13 | No | Yes | Yes | 6.6 | 59 | 20 | | 5 | 0 | 13 | 6 | C-03-13 |
| Sum | 14/54(25.9%) | 38/54(70.4%) | 33/54(61.1%) | 8.10 MAX | 4439 | 963 | | 272 | 72 | 858.4 | | Sum |
| Compliance | Yes | Yes | Yes | Yes | Yes | Yes | | Yes | Yes | Yes | | Compliance |

Note: This table is prepared by TSA Dreamscape for the DA submission for 105 Cudgegong Road, Rouse Hill, 201 units residential flat building development, should read accompany with SEPP 65 report and architectural drawings.

1 Bedroom
2 Bedroom
3 Bedroom

Compliance
Non-Compliance

# Appendix B

## Units Numeric Table - Block D

| SEPP 65 Numeric Compliance Table | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Project Adress:* | *Block D - 484-488 Bringelly Road, Austral* | | | | | | | | | | | |
| *Unit Number:* | *55 of 253* | | | | | | *Architect:* | DREAMSCAPES ARCHITECTS | | | | |
| Unit NO. | Compliance | | | | | | | Storage Area | | | | Unit NO. |
| | Solar Access 0-2hrs from 9am - 3pm | Solar Access 2hrs from 9am - 3pm | Cross Ventilation | Habitable Room Depth(m) | Unit Size($m^2$) | Balcony Size($m^2$) | | Interior Storage($m^2$) | Basement Storage($m^2$) | Total($m^3$) | Requried($m^3$) | |
| D-G-01 | No | Yes | Yes | 3.7 | 53 | 25 | | 1 | 2 | 6.8 | 6 | D-G-01 |
| D-G-02 | No | Yes | No | 8.1 | 63 | 28 | | 6 | 0 | 15.6 | 6 | D-G-02 |
| D-G-03 | No | Yes | Yes | 7.7 | 98 | 68 | | 2 | 3 | 11.5 | 10 | D-G-03 |
| D-G-04 | No | Yes | Yes | 6.2 | 75 | 68 | | 3 | 2 | 12 | 8 | D-G-04 |
| D-G-05 | No | Yes | No | 7.2 | 83 | 30 | | 4 | 0 | 10.4 | 8 | D-G-05 |
| D-G-06 | No | Yes | No | 8.1 | 86 | 35 | | 4 | 0 | 10.4 | 8 | D-G-06 |
| D-G-07 | Yes | No | Yes | 8.1 | 95 | 55 | | 1 | 5 | 13.1 | 8 | D-G-07 |
| D-G-08 | Yes | No | Yes | 8.1 | 112 | 50 | | 12 | 0 | 31.2 | 8 | D-G-08 |
| D-G-09 | No | Yes | No | 8.1 | 86 | 37 | | 4 | 0 | 10.4 | 8 | D-G-09 |
| D-G-10 | Yes | No | No | 7.2 | 83 | 43 | | 4 | 0 | 10.4 | 8 | D-G-10 |
| D-G-11 | No | Yes | Yes | 5.9 | 82 | 21 | | 1 | 4 | 11 | 8 | D-G-11 |
| D-G-12 | Yes | No | Yes | 7 | 80 | 30 | | 2 | 2 | 9.4 | 8 | D-G-12 |
| D-G-13 | No | Yes | No | 7.7 | 65 | 31 | | 7 | 0 | 18.2 | 6 | D-G-13 |
| D-G-14 | No | Yes | Yes | 3.7 | 83 | 24 | | 1 | 2 | 6.8 | 6 | D-G-14 |
| D-01-01 | No | Yes | No | 7.1 | 69 | 8 | | 9 | 0 | 23.4 | 6 | D-01-01 |
| D-01-02 | Yes | No | No | 8.1 | 79 | 12 | | 1 | 3 | 8.9 | 8 | D-01-02 |
| D-01-03 | No | Yes | Yes | 7.5 | 97 | 25 | | 5 | 0 | 13 | 10 | D-01-03 |
| D-01-04 | No | Yes | Yes | 5.7 | 76 | 12 | | 3 | 2 | 12 | 8 | D-01-04 |
| D-01-05 | No | Yes | No | 7 | 82 | 10 | | 4 | 0 | 10.4 | 8 | D-01-05 |
| D-01-06 | No | Yes | No | 8.1 | 86 | 10 | | 4 | 0 | 10.4 | 8 | D-01-06 |
| D-01-07 | Yes | No | Yes | 7.3 | 98 | 19 | | 8 | 0 | 20.8 | 8 | D-01-07 |
| D-01-08 | Yes | No | Yes | 8.1 | 110 | 17 | | 12 | 0 | 31.2 | 8 | D-01-08 |
| D-01-09 | No | Yes | No | 7.9 | 85 | 11 | | 4 | 0 | 10.4 | 8 | D-01-09 |
| D-01-10 | Yes | No | No | 6.9 | 81 | 10 | | 4 | 0 | 10.4 | 6 | D-01-10 |
| D-01-11 | No | Yes | Yes | 4 | 75 | 10 | | 1 | 3 | 8.9 | 8 | D-01-11 |
| D-01-12 | Yes | No | Yes | 6.2 | 77 | 10 | | 2 | 2 | 9.4 | 8 | D-01-12 |
| D-01-13 | Yes | No | No | 7.7 | 94 | 10 | | 10 | 0 | 26 | 8 | D-01-13 |
| D-01-14 | No | Yes | No | 7.1 | 69 | 8 | | 10 | 0 | 26 | 6 | D-01-14 |
| D-02-01 | No | Yes | No | 7.1 | 69 | 8 | | 9 | 0 | 23.4 | 6 | D-02-01 |
| D-02-02 | Yes | No | No | 8.1 | 79 | 12 | | 1 | 3 | 8.9 | 8 | D-02-02 |
| D-02-03 | No | Yes | Yes | 7.5 | 97 | 25 | | 5 | 0 | 13 | 10 | D-02-03 |
| D-02-04 | No | Yes | Yes | 5.7 | 76 | 12 | | 3 | 2 | 12 | 8 | D-02-04 |
| D-02-05 | No | Yes | No | 7 | 82 | 10 | | 4 | 0 | 10.4 | 8 | D-02-05 |
| D-02-06 | No | Yes | No | 8.1 | 86 | 10 | | 4 | 0 | 10.4 | 8 | D-02-06 |
| D-02-07 | Yes | No | Yes | 7.3 | 98 | 19 | | 8 | 0 | 20.8 | 8 | D-02-07 |
| D-02-08 | Yes | No | Yes | 8.1 | 110 | 17 | | 12 | 0 | 31.2 | 8 | D-02-08 |
| D-02-09 | No | Yes | No | 7.9 | 85 | 11 | | 4 | 0 | 10.4 | 8 | D-02-09 |
| D-02-10 | Yes | No | No | 6.9 | 81 | 10 | | 4 | 0 | 10.4 | 8 | D-02-10 |
| D-02-11 | No | Yes | Yes | 4 | 75 | 10 | | 1 | 3 | 8.9 | 8 | D-02-11 |
| D-02-12 | Yes | No | Yes | 6.2 | 77 | 10 | | 2 | 2 | 9.4 | 8 | D-02-12 |
| D-02-13 | Yes | No | No | 7.7 | 94 | 10 | | 10 | 0 | 26 | 8 | D-02-13 |
| D-02-14 | No | Yes | No | 7.1 | 69 | 8 | | 10 | 0 | 26 | 6 | D-02-14 |
| D-03-01 | No | Yes | Yes | 6.6 | 58 | 20 | | 5 | 0 | 13 | 6 | D-03-01 |
| D-03-02 | No | Yes | Yes | 6.6 | 75 | 12 | | 3 | 2 | 12 | 8 | D-03-02 |
| D-03-03 | No | Yes | Yes | 7.5 | 76 | 31 | | 4 | 0 | 10.4 | 8 | D-03-03 |
| D-03-04 | No | Yes | Yes | 5.7 | 76 | 12 | | 3 | 2 | 12 | 8 | D-03-04 |
| D-03-05 | No | Yes | Yes | 7 | 82 | 10 | | 4 | 0 | 10.4 | 8 | D-03-05 |
| D-03-06 | No | Yes | Yes | 8.1 | 86 | 10 | | 4 | 0 | 10.4 | 8 | D-03-06 |
| D-03-07 | No | Yes | Yes | 5 | 114 | 22 | | 4 | 0 | 10.4 | 10 | D-03-07 |
| D-03-08 | No | Yes | Yes | 7.9 | 85 | 11 | | 4 | 0 | 10.4 | 8 | D-03-08 |
| D-03-09 | No | Yes | Yes | 6.9 | 81 | 10 | | 4 | 0 | 10.4 | 8 | D-03-09 |
| D-03-10 | No | Yes | Yes | 4 | 75 | 10 | | 1 | 3 | 8.9 | 8 | D-03-10 |
| D-03-11 | No | Yes | Yes | 5.8 | 62 | 26 | | 8 | 0 | 20.8 | 6 | D-03-11 |
| D-03-12 | No | Yes | Yes | 7.4 | 82 | 22 | | 4 | 0 | 10.4 | 8 | D-03-12 |
| D-03-13 | No | Yes | Yes | 6.6 | 59 | 20 | | 5 | 0 | 13 | 6 | D-03-13 |
| Sum | 16/55(29.1%) | 39/55(70.9%) | 33/55(60%) | 8.10 MAX | 4511 | 1105 | | 259 | 47 | 772.1 | | Sum |
| Compliance | Yes | Yes | Yes | Yes | Yes | Yes | | Yes | Yes | Yes | | Compliance |

Note: This table is prepared by TSA Dreamscape for the DA submission for 105 Cudgegong Road, Rouse Hill, 201 units residential flat building development, should read accompany with SEPP 65 report and architectural drawings.

1 Bedroom
2 Bedroom
3 Bedroom

Compliance
Non-Compliance