



10 James Street, Carlingford

DESIGN REPORT

CAPIO PROPERTY

CONTENTS:

Introduction

Development Overview

Urban Context

Site Photos

- 2.0 Chapter 4 Design Statement Design Quality Principle
 - 2.1 Principle 01 - Context & Neighbourhood Character
 - 2.2 Principle 02 - Built Form and Scale
 - 2.3 Principle 03 - Density
 - 2.4 Principle 04 - Sustainability
 - 2.5 Principle 05 - Landscape
 - 2.6 Principle 06 - Amenity
 - 2.7 Principle 07 - Safety
 - 2.8 Principle 08 - Housing Diversity and Social Interaction
 - 2.9 Principle 09- Aesthetics

- 3.0 Chapter 4 Compliance Table

CAPIO Property Group

Nominated Architect:

Chenxiao Xu

Architect Registration No. NSW - 11314

INTRODUCTION

1.1 DEVELOPMENT OVERVIEW

The development responds to its location and future urban context. The role of architect is to mediate between the existing condition and the future urban context.

Our design concept provides a framework which responds intelligently and sensitively to its location and relative context. As Carlingford evolves further to meet changing conditions, it is vital that its architecture and built fabric changes in order to preserve and improve on its identity while responding to the needs of a new generation.

The subject site is within the growing City of Parramata, an area that will undergo a transformation in urban density. The precinct encompasses both existing and planned public transport connections that will help provide a diverse and sustainable community.

The report evaluates the site in relation to the proposed architecture, neighbourhood character, building mass and scale, pedestrian and vehicle connectivity, and amenity to the residents and public.

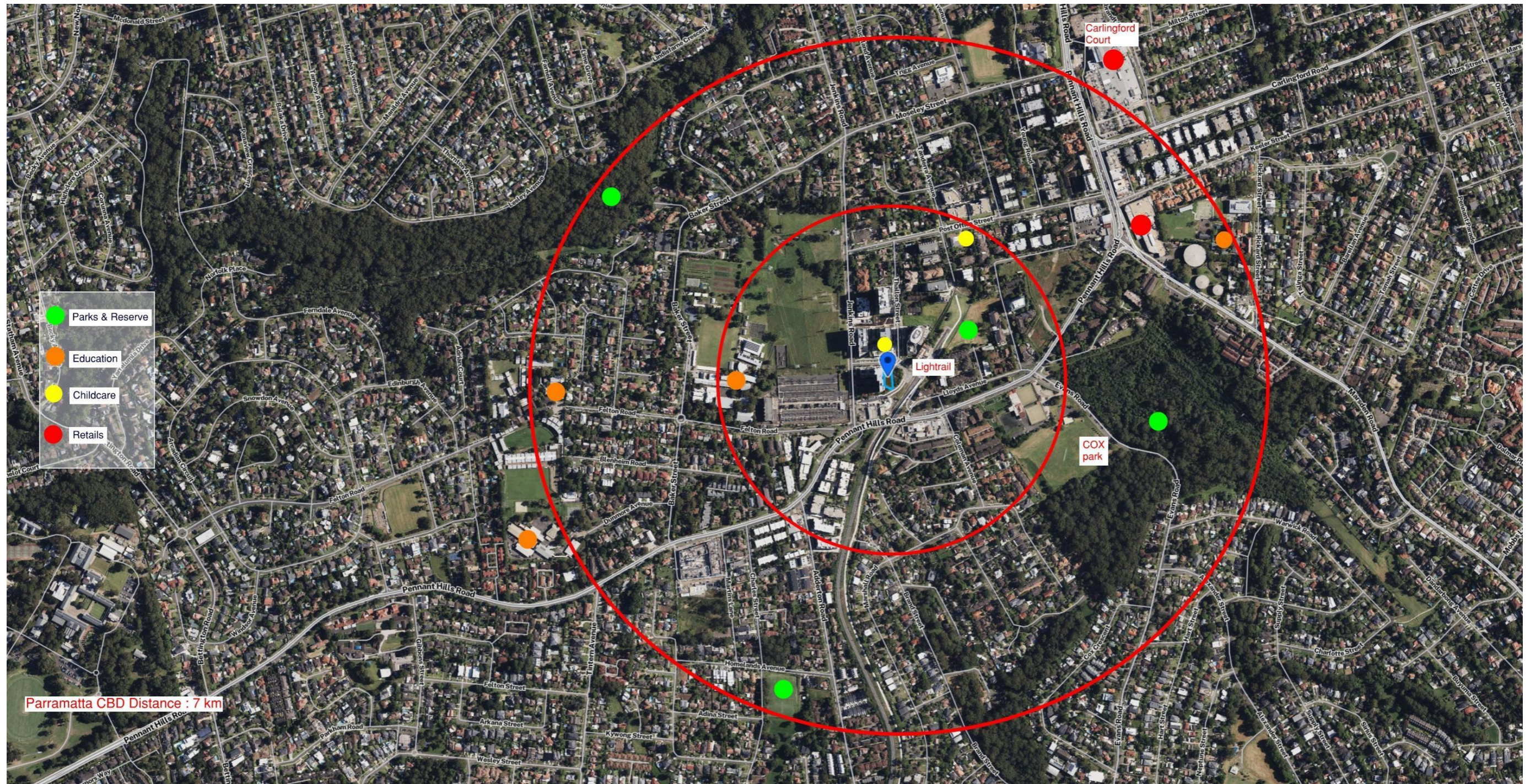


INTRODUCTION

1.2 URBAN CONTEXT

The subject site is located approximately:

- . Carlingford Court Shopping Centre (LMR Town Centre) – 1 km
- . Parramatta CBD - 7 km
- . Carlingford Light Rail – 130 m
- . North Rocks Shopping Centre - 2.5km



INTRODUCTION

1.3 SURROUNDING CONTEXT



Bowling Club



Pennant Hills Road



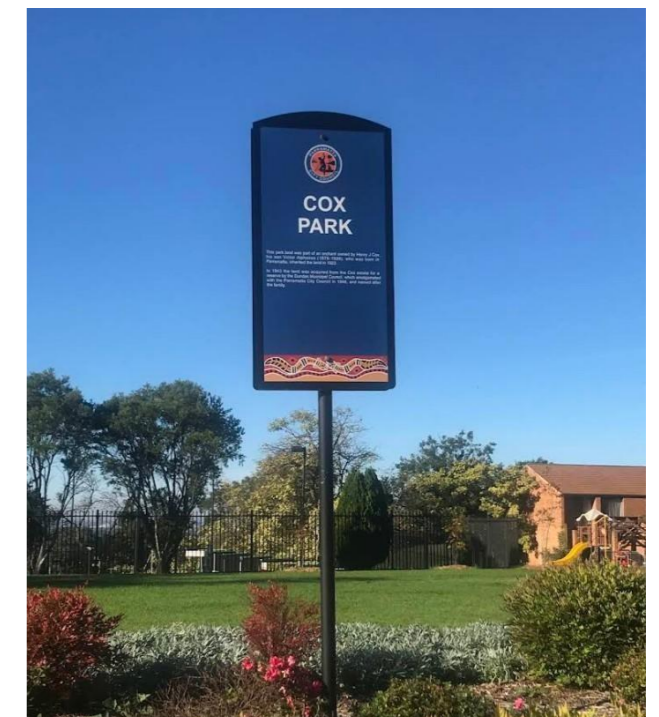
James Ruse Agricultural High School



Carlingford Court



Carlingford Light rail



Cox Park

2.1 - PRINCIPLE 01

CONTEXT & NEIGHBOURHOOD CHARACTER

Apartment Design Guide (ADG)

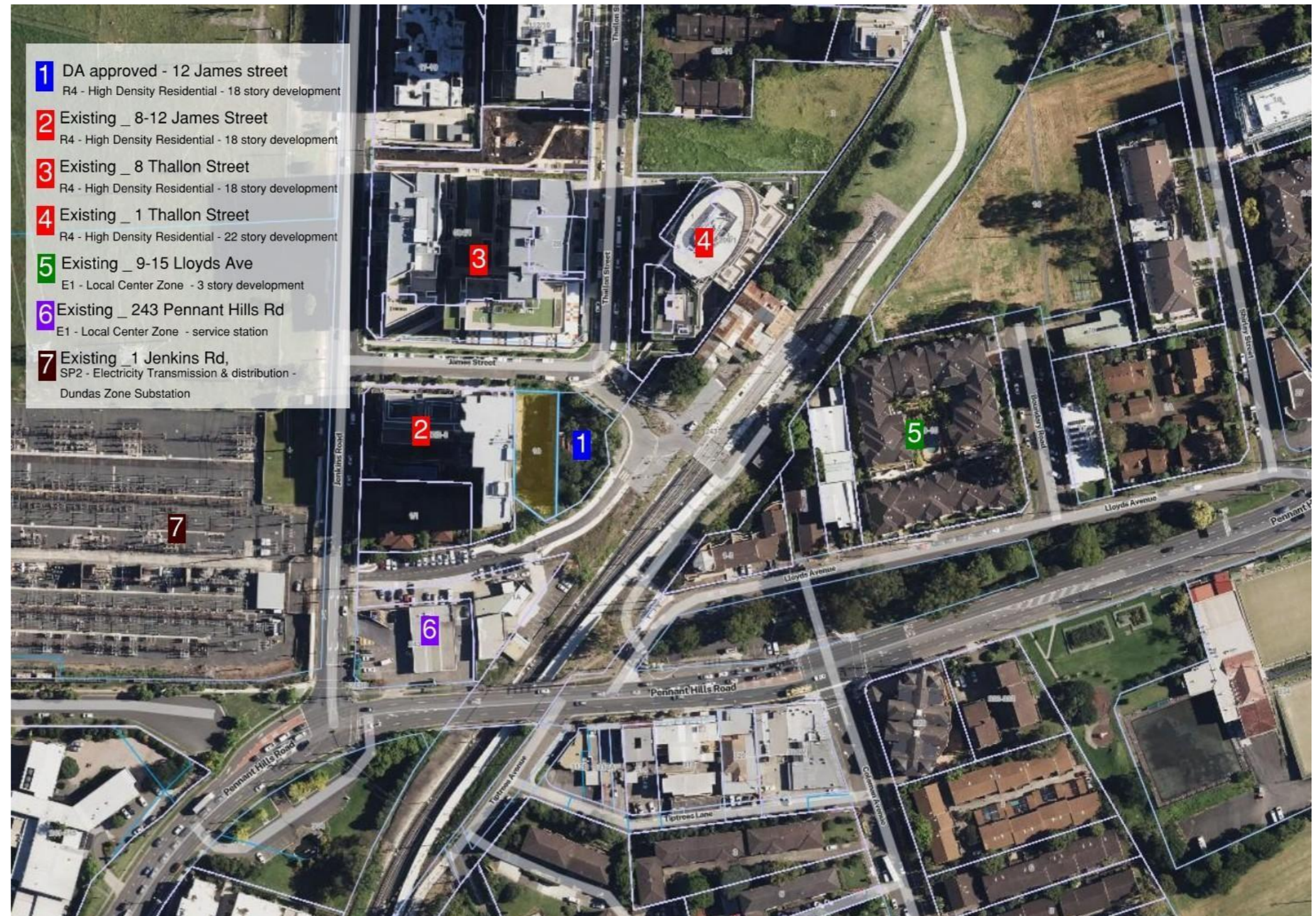
Good design responds and contributes to its context. Context is the key natural and built features of an area, their relationship and the character they create when combined. It also includes social, economic, health and environmental conditions. Responding to context involves identifying the desirable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

Response

The immediate site context includes a variety of residential building types, constructed at different times and each with their own character. The site is within an R4 High Density Residential Zone, surrounded by high density residential development. The south of the site is zoned as E1 with local centre zone. To the east of the site is light rail station and Cox park.

The proposal has been developed to respond appropriately to these varying types and scales, with a highly articulated building form which is a direct result of the immediate context. The massing will sensitively respond to the existing conditions and is aligned with Council's future plans for the area.

The proposed development is compatible with the built form context of the site, and will contribute to the character of the area immensely.



2.2 - PRINCIPLE 01

BUILT FORM AND SCALE

Apartment Design Guide (ADG)

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 including their views and vistas, and provides internal amenity and outlook.

Response

The proposed built form and scale is a considered contextual response that addresses the existing streetscape, orientation, views, planning and density requirements.

The resultant building form maximises street frontage with the intent to orient each apartment's outlook towards desirable street views.

The proposed built form is read as a collection of buildings, with purposeful details expressing individuality. The James Street façade presented with curved solid balustrade on above levels and louvred features in lower levels.



2.3 - PRINCIPLE 01

DENSITY

Apartment Design Guide (ADG)

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.

Response

The proposal consists of 27 two-bedroom, 8 three-bedroom, 10 four-bedroom Apartments. The proposal also includes shared basement parking five level full basement level. Each apartment has been carefully planned to ensure high levels of amenity, and is appropriate for the existing and/ or future demographic of the area. The proposal takes into consideration factors of overshadowing, amenity and privacy impacts between existing and future buildings and changing streetscape and scale. The residential density of the proposal is sustainable, suitable, and supports this developing nature. The proposal fits in with the context and possesses the ability to be supported by existing and future infrastructure.

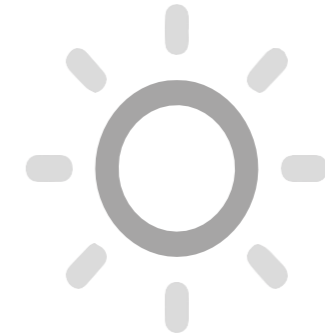
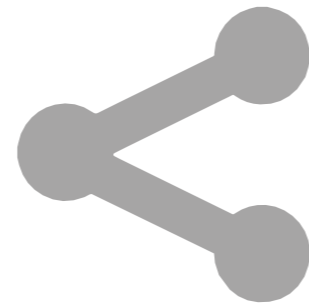


2.4 - PRINCIPLE 01

SUSTAINABILITY

Apartment Design Guide 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.



Response

The proposed development will reduce the necessity for mechanical heating and cooling with 80% of units designed to be cross ventilated. In addition to this, 71.1% of the units will receive 2 hours solar access during winter.

Low-energy Lighting

Low-energy lighting will be used throughout the building. Energy Efficient water heaters will also be integrated into the development. Additionally, the proposal will use water saving fixtures and fittings as well as energy efficient lighting, air-conditioning, lifts, and appliances to minimise water and energy loads.

Natural Ventilation

80% of units feature cross-through layouts that are also dual aspect and located to the corner of the building, and are therefore naturally cross ventilated. Sufficient volumes of fresh air through the apartments will create a comfortable indoor environment that reduces the need and dependency on mechanical ventilation and air-conditioning, responding to the local climate.

BASIX Targets

Through the strategies outlined above, the proposal will achieve at least the minimum NSW Benchmark Consumption for energy and water.

Passive Solar Design

Apartments subjected to excessive solar gain and heat loss will be recessed behind balconies to minimise summer solar heat gain and shield apartments from harsh summer sun. Winter daylight will penetrate deep into the interior of by ways of balconies.

2.5 - PRINCIPLE 01

LANDSCAPE

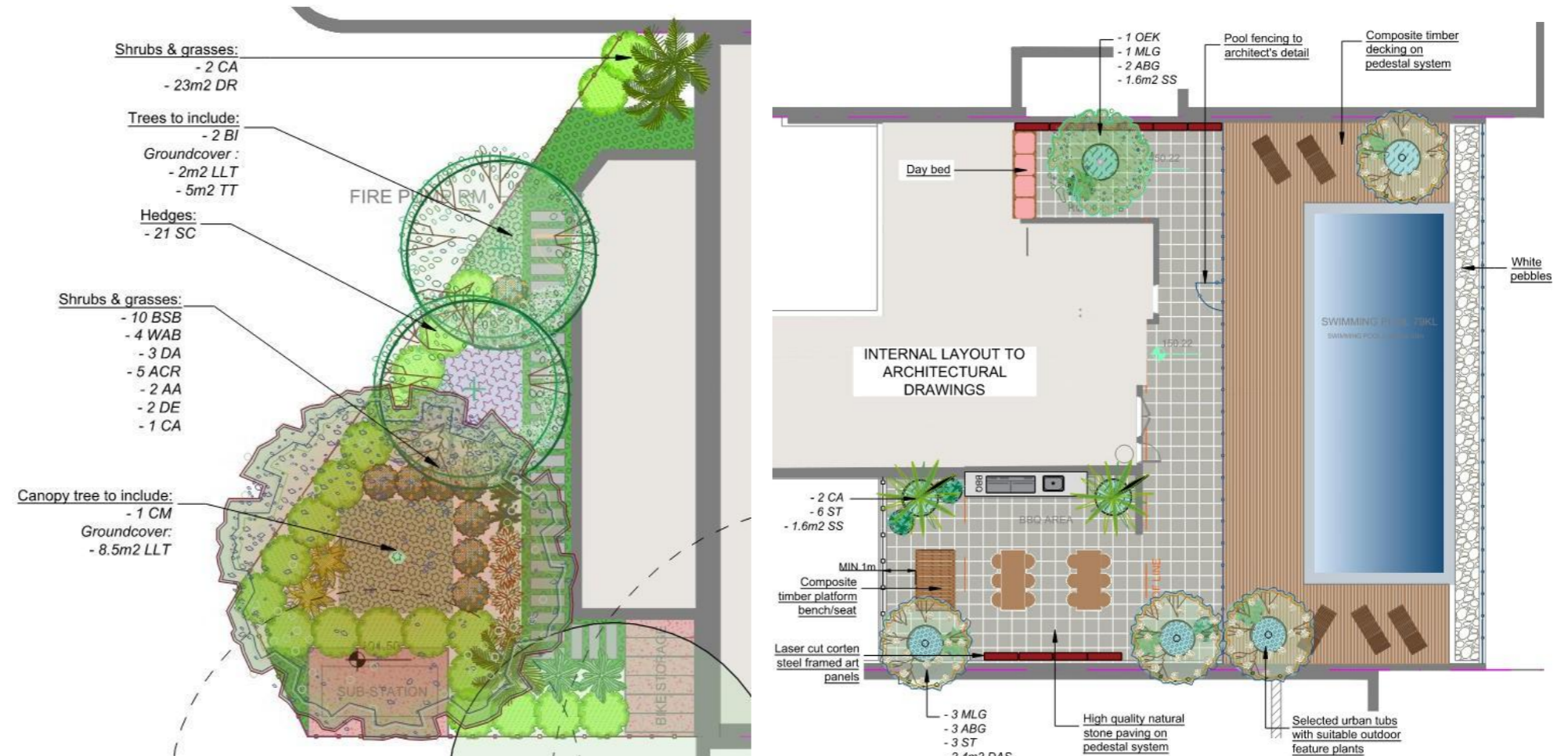
Apartment Design Guide (ADG)

Good design recognises that together landscape and buildings operate as an integrated and sustainable system, resulting in greater aesthetic quality and amenity for both occupants and the adjoining public domain. Landscape design builds on the existing site's natural and cultural features in responsible and creative ways. It enhances the development's natural environmental performance by coordinating water and soil management, solar access, microclimate, tree canopy and habitat values. It contributes to the positive image and contextual fit of development through respect for streetscape and neighbourhood character, or desired future character. Landscape design should optimise usability, privacy and social opportunity, equitable access and respect for neighbours' amenity, and provide for practical establishment and long term management.

Response

Landscaped area provided at the rear of the site will provide aesthetic aspect and softening the building envelope from street view.

The communal open space on roof level with infinity view pool encourages personal and group activity, with outdoor spaces tailored to exercise and coming together as a community.



2.6 - PRINCIPLE 06

AMENITY - SOLAR ACCESS

Apartment Design Guide (ADG)

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

Response

Due consideration has been given to solar access, cross ventilation, visual and acoustic privacy, efficient layouts, outlook and storage areas. Parking for residential and visitors, recycling and waste storage areas are provided across the ground floor level.

The proposed development is aligned to provide maximum amenity to a majority of the dwellings, with most units demonstrating northern aspect. The proportion of all units that achieve minimum 2 hours of sunlight into living room windows between 9am and 3pm during mid winter complies with the constraints outlined in the ADG. In terms of natural cross ventilation, the development reaches a compliance at 80%. Balconies are designed to provide usable outdoor space whilst maintaining privacy between units, as well as ensuring good solar penetration and ventilation to each unit.

The design proposal complies with SEPP 65 criteria and thus provides a high level of amenity to all apartments.



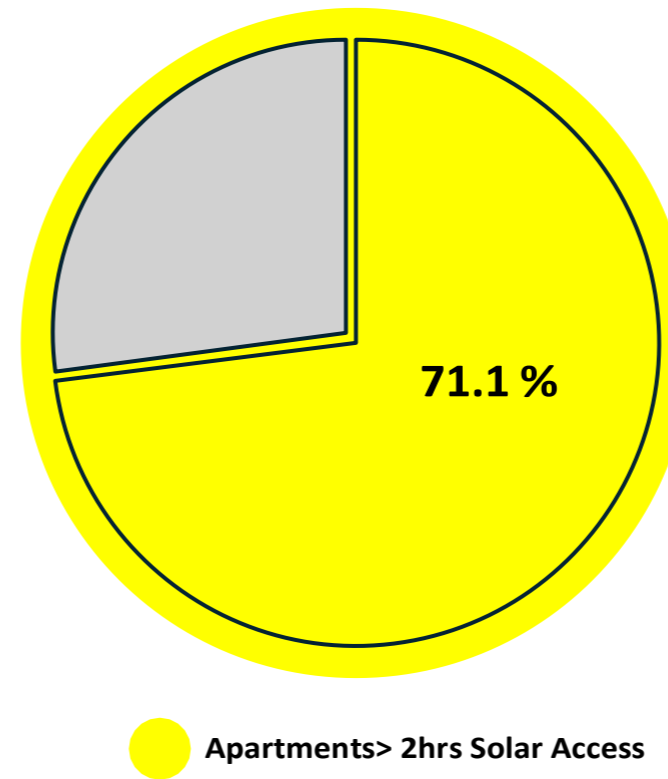
2.6 - PRINCIPLE 06

AMENITY - SOLAR ACCESS

Solar Access:

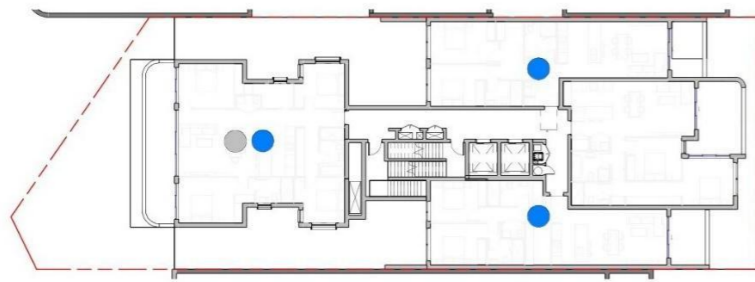
The proposed development is designed to provide the maximum amenity to all of the dwellings, with consideration to the significant slope of the site. The design maximises the amount of natural daylight received by each unit. The proportion of all units that achieve a minimum 2 hours of sunlight between 9am - 3pm mid winter is 71.1%

2 Hours Solar Access



2.6 - PRINCIPLE 06

AMENITY - SOLAR ACCESS



1 L3 FLOOR PLAN SOLAR
1 : 250



2 L4 FLOOR PLAN SOLAR
1 : 250



3 L5 FLOOR PLAN SOLAR
1 : 250



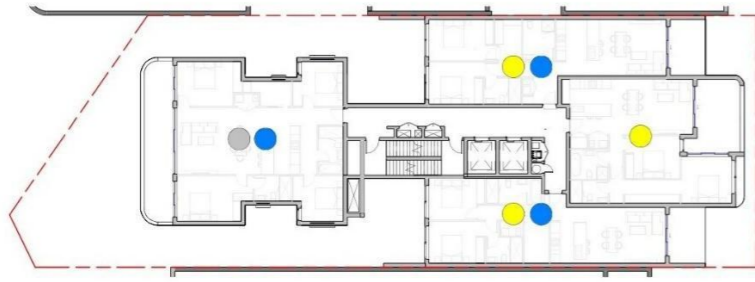
4 L6 FLOOR PLAN SOLAR
1 : 250



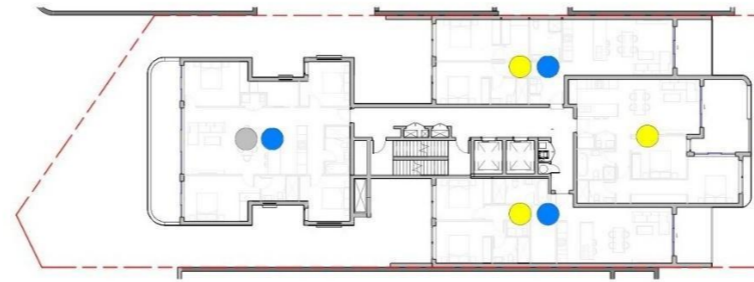
5 L7 FLOOR PLAN SOLAR
1 : 250



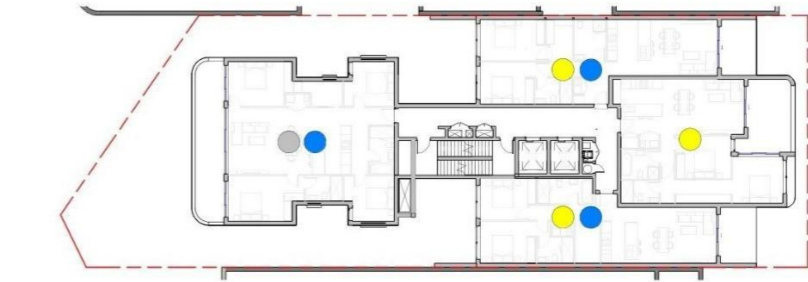
6 L8 FLOOR PLAN SOLAR
1 : 250



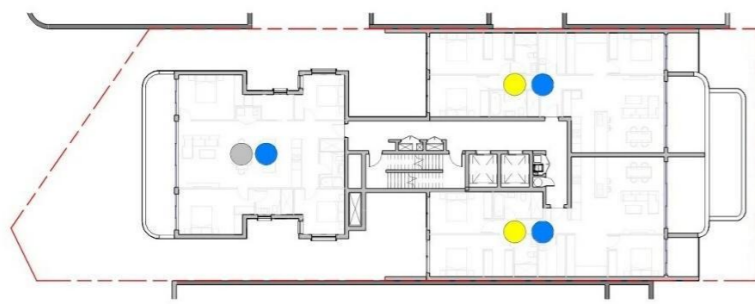
7 L9 FLOOR PLAN SOLAR
1 : 250



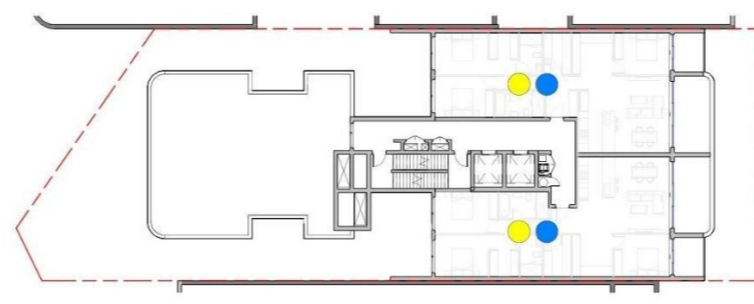
8 L10 FLOOR PLAN SOLAR
1 : 250



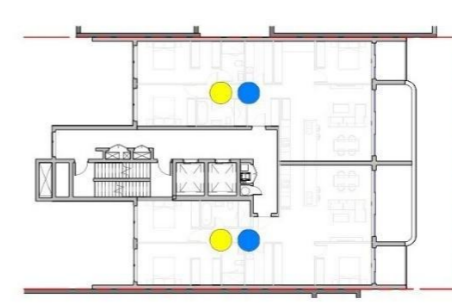
9 L11 FLOOR PLAN SOLAR
1 : 250



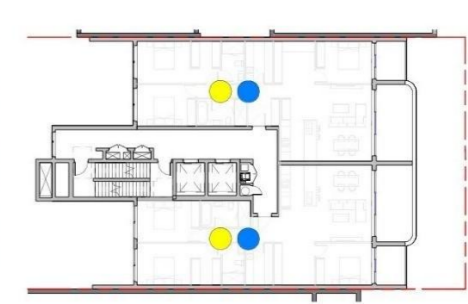
10 L12 FLOOR PLAN SOLAR
1 : 250



11 L13 FLOOR PLAN SOLAR
1 : 250



12 L14 FLOOR PLAN SOLAR
1 : 250



13 L15 FLOOR PLAN SOLAR
1 : 250



2.6 - PRINCIPLE 06

AMENITY – VENTILATION

Apartment Design Guide (ADG)

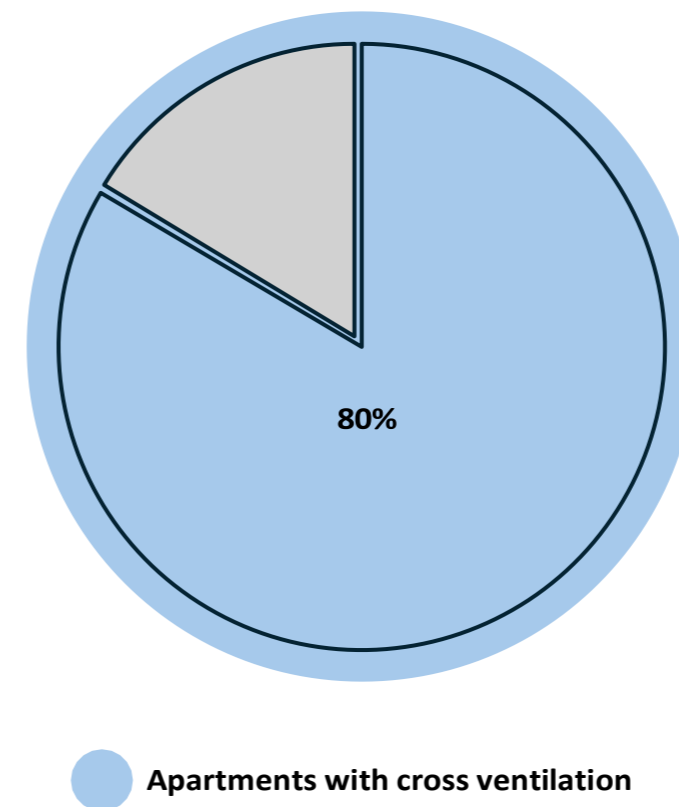
Natural ventilation is the movement of sufficient volumes of fresh air through an apartment to create a comfortable indoor environment. Sustainable design practice incorporates natural ventilation by responding to the local climate and reduces the need for mechanical ventilation and air conditioning. To achieve adequate natural ventilation, apartment design must address the orientation of the building, the configuration of apartments and the external building envelope.

Response

The development consists of cross-over dual aspect apartments with open plan layouts, which allows the proposed building to achieve a high percentage of well-ventilated units.

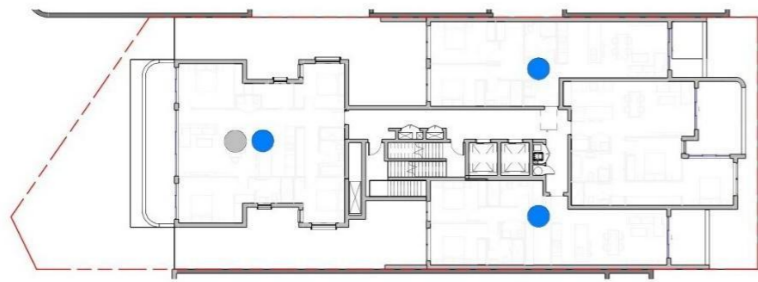
Outlined by the State Environmental Planning Policy No.65 - Apartment Design Guide, a minimum of 60% of total apartments within the first 9 storeys require cross-ventilation. The proportion of dwellings which achieve cross-ventilation is 80%

Cross Ventilated Apartments



2.6 - PRINCIPLE 06

AMENITY – VENTILATION



1 L3 FLOOR PLAN SOLAR
1 : 250



2 L4 FLOOR PLAN SOLAR
1 : 250



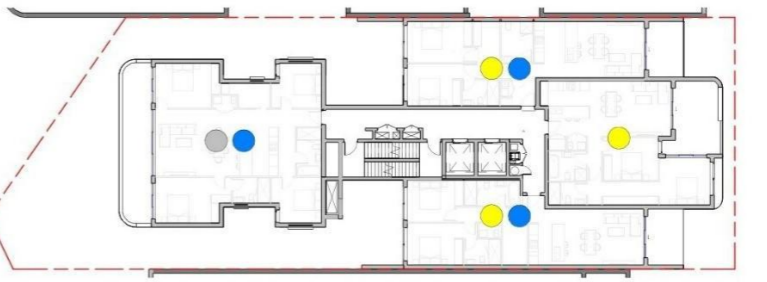
3 L5 FLOOR PLAN SOLAR
1 : 250



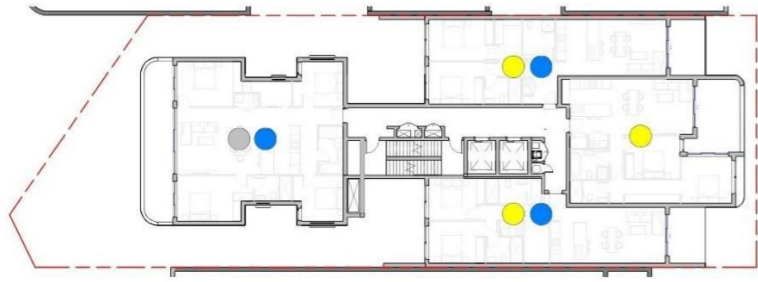
4 L6 FLOOR PLAN SOLAR
1 : 250



5 L7 FLOOR PLAN SOLAR
1 : 250



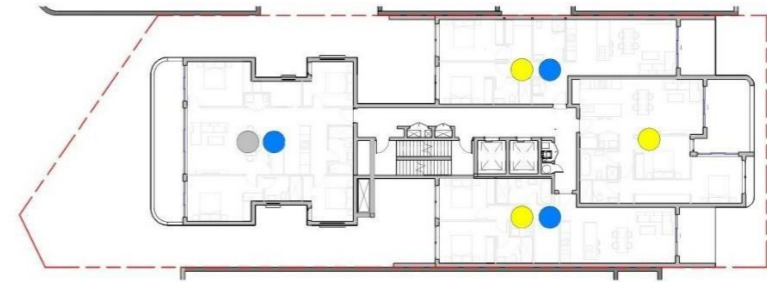
6 L8 FLOOR PLAN SOLAR
1 : 250



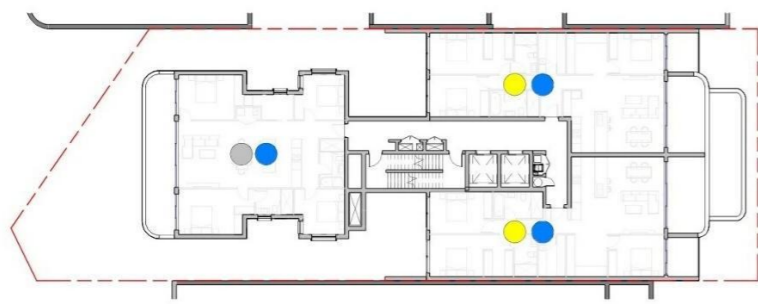
7 L9 FLOOR PLAN SOLAR
1 : 250



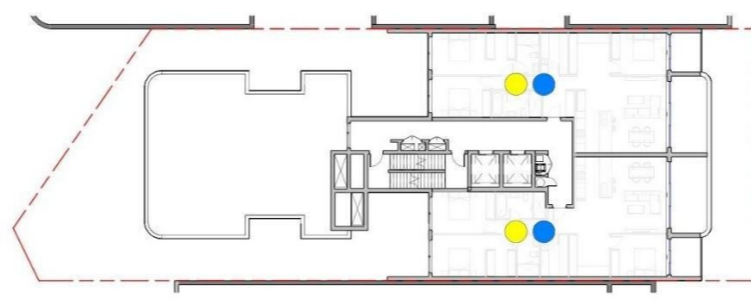
8 L10 FLOOR PLAN SOLAR
1 : 250



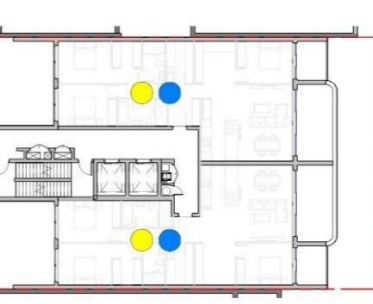
9 L11 FLOOR PLAN SOLAR
1 : 250



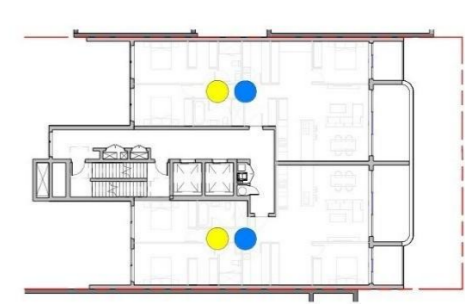
10 L12 FLOOR PLAN SOLAR
1 : 250



11 L13 FLOOR PLAN SOLAR
1 : 250



12 L14 FLOOR PLAN SOLAR
1 : 250



13 L15 FLOOR PLAN SOLAR
1 : 250

SOLAR ANALYSIS ●	NO SOLAR COMPLIANCE ●	CROSS VENTILATION ANALYSIS ●
2hrs Solar Compliance	10units /45 units = 22 %	36/45 units /45 units = 80 %
32 units /45 units = 71.1 %	ADG requirements = 15%	ADG requirements = 60%
ADG requirements = 70%		

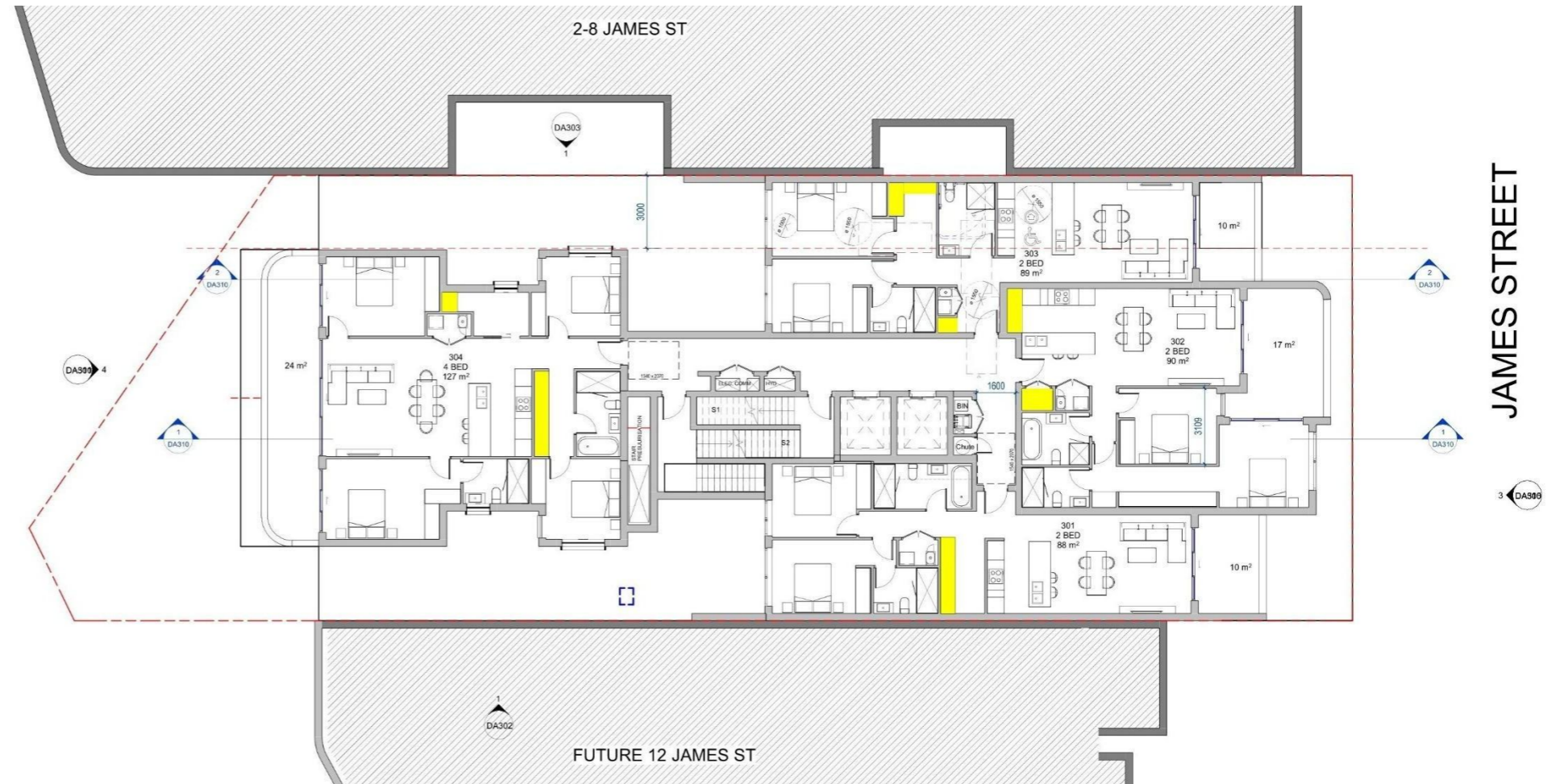
2.6 - PRINCIPLE 06

AMENITY – STORAGE

Response

A minimum 6m^3 of storage is required for 1 Bedroom Units. 8m^3 for 2 Bedroom Units and 10m^3 for 3 Bedroom Units.

minimum of 50% of the storage required is provided in each unit through storage cupboards with the remainder 50% provided in storage cages located within the basement, easily accessible from the lift cores.



2.7 - PRINCIPLE 07

SAFETY

Apartment Design Guide (ADG)

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.

Response

The proposal has considered safety from first principles to ensure public interfaces are legible and open, entries and windows are designed to assist with passive surveillance, and these design initiatives are supplemented by appropriate lighting and security systems.

Lobby entries to the buildings are accessed from both James Street. Lobby entries will have a security door at the entrance point, be well-lit at night to provide extra safety measures. Large windows and balconies further encourage views towards public spaces.

Furthermore, all external spaces will have multiple clear sight lines without obstacles, all paths will be well-lit at night time and designed to meet relevant Australian Lighting Standards.



2.8 - PRINCIPLE 08

HOUSING DIVERSITY & SOCIAL INTERACTION

Apartment Design Guide (ADG)

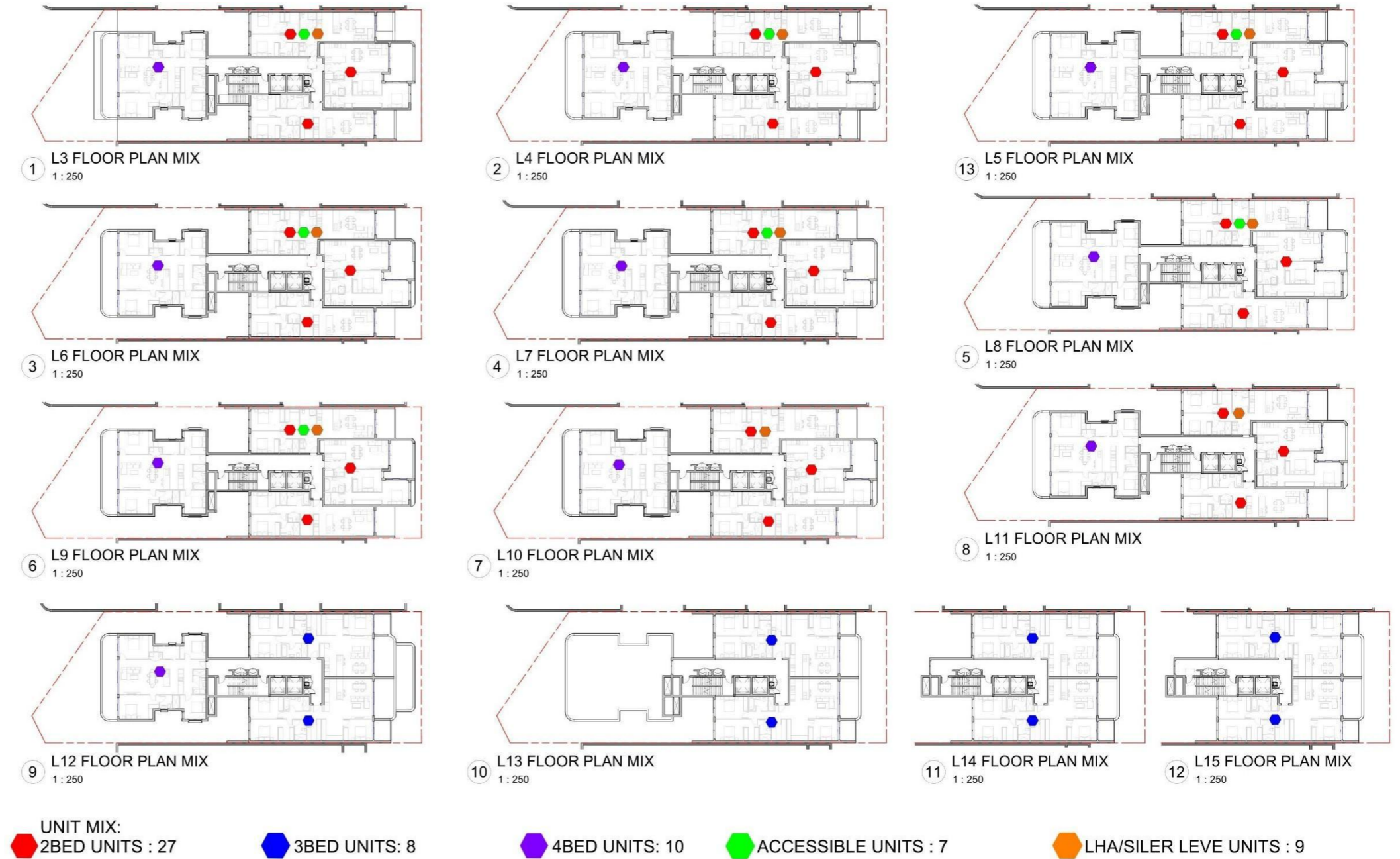
Good design responds to the social context and needs of the local community in terms of lifestyles, affordability, and access to social facilities. New developments should optimise the provision of housing to suit the social mix and needs in the neighbourhood or, in the case of precincts undergoing transition, provide for the desired future community.

New developments should address housing affordability by optimising the provision of economic housing choices and providing a mix of housing types to cater for different budgets and housing needs

Response

The proposed development has been designed with a high level of social contribution in mind. On ground level, safe and activated areas for visitors and residents to meet and interact will be provided. Balconies overlook and enable interaction with users of the public domain, increased safety and activation. Below, basement car parking is provided to residents and visitors that also serves as a space for storage and bicycle parking.

The high levels of amenity to each generously proportioned dwelling will cater for a range of households and help diversify the residents of the development.



**2.9 - PRINCIPLE 08
AESTHETICS**

Apartment Design Guide (ADG)

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.

Response

The development proposes an improved sense of place through a variety of architectural expression, enduring materials and detailing quality. The proposal considers scale through setbacks, projection and a hierarchy of elements.

The building utilises dark-coloured brick at ground level to ground the building.

On the levels above, light-coloured Render, balconies with different setback and curved balustrade details are used to break-up the built form and articulate the façade through shadow play. The use of durable materials for the building's façade will ensure longevity and reduce maintenance costs.

EXTERIOR FINISH SCHEDULE



EF-1
MEDIUM NEUTRAL FINISH



EF-2
LIGHT NEUTRAL PAINT



EF-3
POWDERCOAT BLACK BALUSTRADE



EF-4
GLAZING



EF-5
BRICK



EF-6
POWDERCOAT YELLOW FINISH LOUVRE



EF-8
FROSTED GLAZING



Table 1. Summary of compliance with the key Apartment Design Guide 'Design Criteria'		
Control	ADG Design Criteria	Compliance
3D Communal Open space	Minimum of 25% of the site area should be devoted to communal open space.	Communal open space: 304 m ² (33%) Compliance achieved
	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).	Compliance achieved
3E Deep Soil Zones	Minimum of 7% of a site should be a deep soil zone	Site area: 916 m ² Required Deep soil: 64 m ² (7%) Proposed Deep soil: 74 m ² (8.2%) Compliance achieved
3F Visual Privacy Building separation	Up to four storeys/12 meters <ul style="list-style-type: none"> 6 meters to the boundary between habitable rooms/balconies 3 meters to the boundary between non-habitable rooms Five to eight storeys /up to 25 meters 9 meters to the boundary between habitable rooms/balconies 4.5 meters to the boundary between non-habitable rooms Nine storeys and above/ over 25 meters 12 meters between habitable rooms/balconies 6 meters between non-habitable rooms 	Refer to SEE report
4A..Solar+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. 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.	Minimum number of apartments with 2hrs solar access required: 32/45 units (70%) Proposed: 32/45(71.1%) Compliance achieved
4B 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.	Minimum number of cross-ventilated dwellings required: 36/45 (80%) Cross Ventilated Apartments: 36/45 apartments (80%) Compliance achieved
4C Ceiling heights	Minimum ceiling heights are as follows: <ul style="list-style-type: none"> 2.7m for habitable rooms 2.4m for non-habitable rooms double storey apartments – 2.7m for main living area, 2.4m for second floor where its area does not exceed 50% of the apartment area 	Proposed 2.7m habitable– Compliance achieved Proposed 2.4 m non habitable – Compliance achieved

Table 1. Summary of compliance with the key Apartment Design Guide ‘Design Criteria’

Control	ADG Design Criteria	Compliance
4D-1 Apartment Size + layout	Minimum Apartment sizes: <ul style="list-style-type: none"> 70m² for two bedrooms; and 90m² for three bedrooms. Add an 5m² for additional bathrooms Add an 12m ² for additional bedrooms	Compliance achieved
	Every habitable room must have a window in an external wall with a total minimum glass area of no less than 10% of the floor area of the room. Day light and air may not be borrowed from another room	Compliance achieved
4D-2 Apartment Size + layout	Habitable room depths are limited to a maximum of 2.5 x the ceiling height. Open plan layouts (where living, dining and Kitchen are combined habitable room depth from the window is 8m	Compliance achieved
4D-3 Apartment Size + layout	Master bedrooms have a minimum area of 10m ² and other bedrooms 9m ² (excluding wardrobe space).	Compliance achieved
	Bedrooms have a minimum dimension of 3m (excluding wardrobe space).	Compliance achieved
	Living rooms or combined living/dining rooms have a minimum width of: <ul style="list-style-type: none"> 3.6m for studio and 1 bedroom apartments 4m for 2 and 3 bedroom apartments 	Compliance achieved
	The width of cross-over or cross-through apartments are at least 4m internally to avoid deep narrow apartment layouts.	Compliance achieved
4E Private open space and balconies	Apartments are to have the following balcony dimensions: <ul style="list-style-type: none"> 1br – 8sqm with min.2m depth 2br – 10sqm with min. 2m depth 3br – 12sqm with min. 2.4m depth 	Compliance achieved
	Ground level apartments should contain a minimum of 15m ² of open space, with a minimum dimension in one direction of 3m.	Compliance achieved
4F Common circulation and spaces	The maximum number of apartments off a circulation core on a single level is eight.	Compliance achieved
4G Storage	<ul style="list-style-type: none"> Studio apartments require 4m² of storage area One bedroom dwellings require 6m³ of storage area Two bedroom dwellings require 8m³ of storage area. Three bedroom dwellings require 10m³ of storage area. 	at least 50% of the apartment’s storage is provided within the apartment itself. The total combined storage areas provided for each dwelling meets the minimum areas required. Compliance achieved.