DKO

28 Lockwood Avenue
Belrose

DEVELOPMENT APPLICATION
SEPP 65 REPORT

DKO ARCHITECTURE

PLATINUM PROPERTY GROUP

6.12.2019

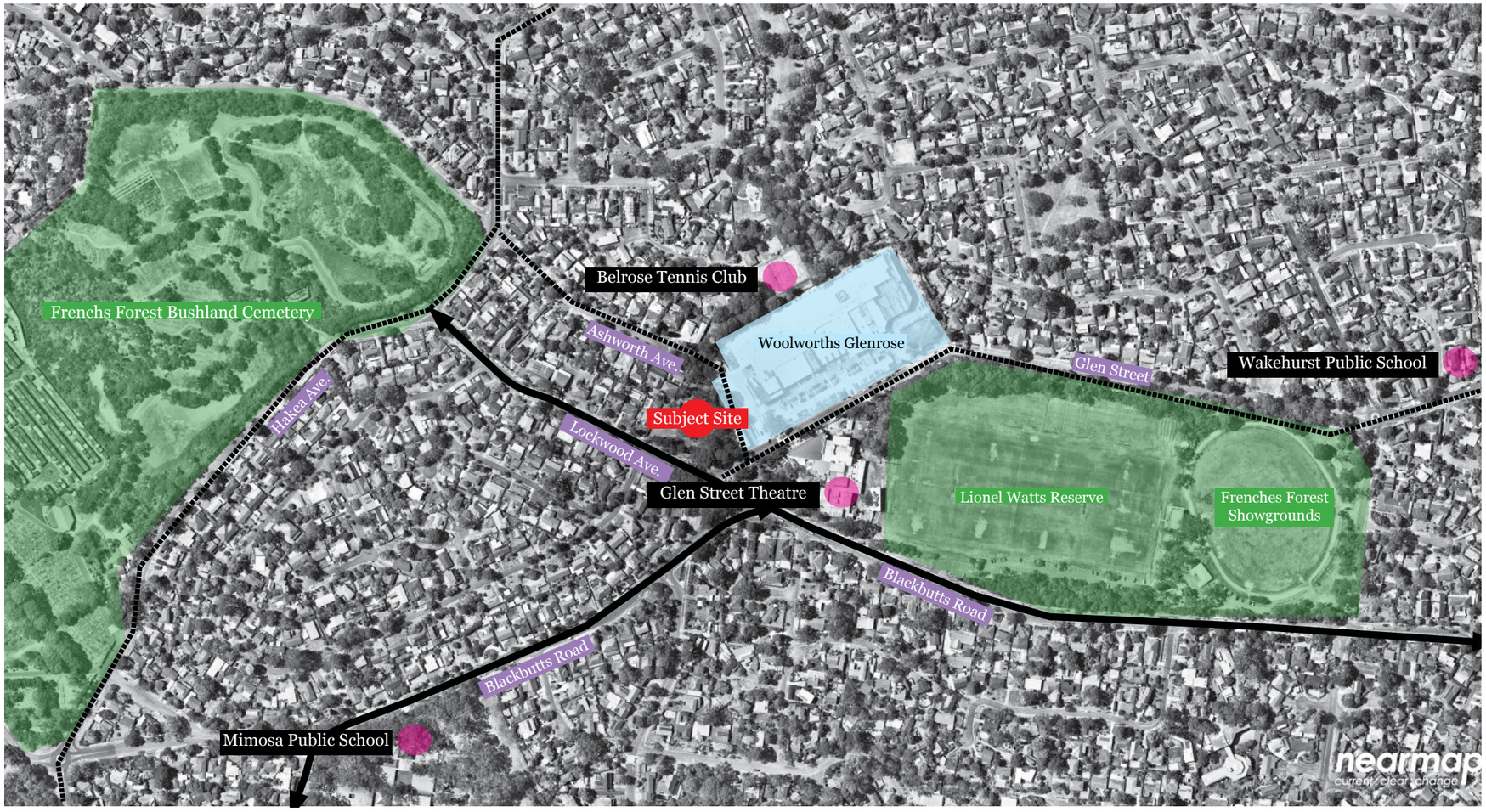
The development responds to its location and future urban context. The role of DKO's architecture is to mediate between the existing condition and the future urban context.

Our design concept provides a framework which responds intelligently and sensitively to its location and relative context. As Belrose 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 suburb of the Warringah Council, an area that will undergo a significant transformation in terms of urban density. The precinct encompasses both existing and planned public transport connections that will help provide a diverse and sustainable community.

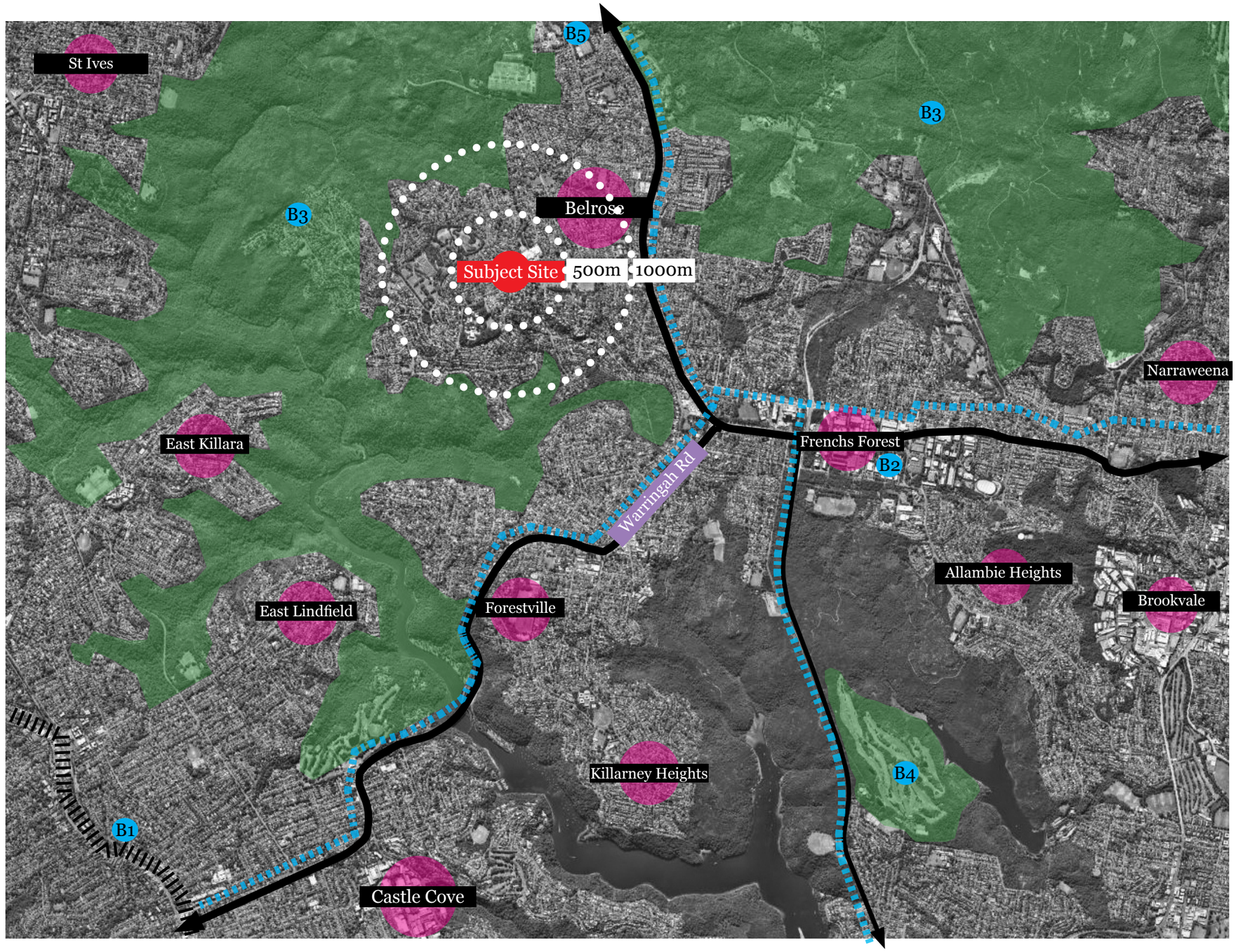
This urban design report has been prepared in support of the submitted planning proposal. It is intended to supplement the SEPP65 Report and assist council in determining the submitted development application.

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



The subject site is located approximately:

. Glenrose Village Shopping Centre- 50m
. Glenrose Tennis Court- 100m
. Austlink Business Park 4km
. Northern Beaches Hospital - 2.5km
. Sydney Harbour National Park - 11.2km
. Westfield Warringah Mall - 6.1km
. Sydney CBD - 20km
. North Sydney - 9.8km



B1 Lindfield Station
B2 Northern Beaches Hospital Precinct
B3 Garigan National park
B4 Wakehurst Golf Club
B5 Austlink Business Park
Bus Network
Train Line

New Belrose Library/Glen Street Cultural Hub

Glenrose Village/ shopping centre

Glen Street Theatre

Belrose Tennis Club

Glen Street Caltex

Park on Corner of Glen St & Blackbutts Rd

Apartment Design Guide (ADG)

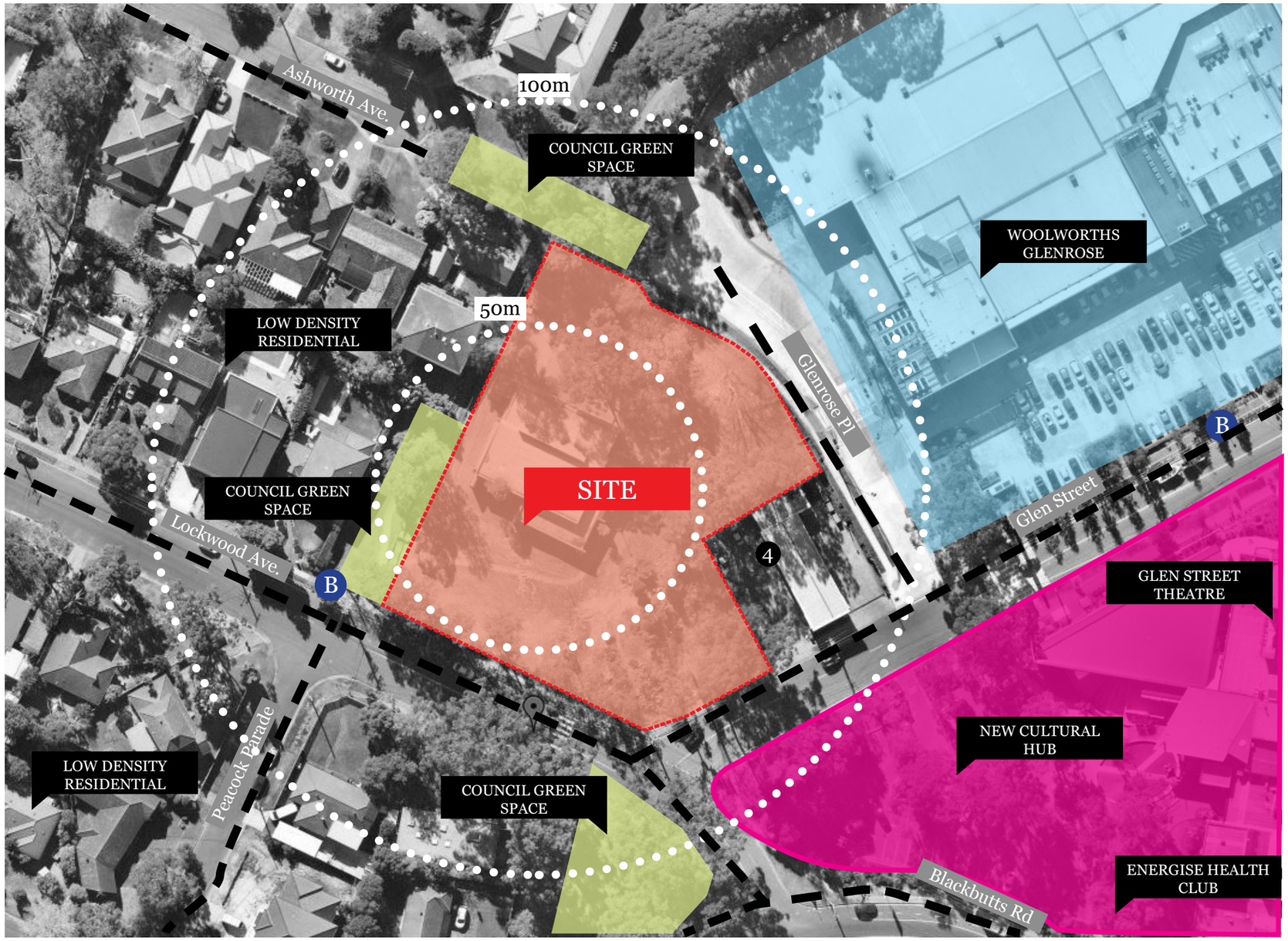
Good design responds and contributes to its context. Context is the key natural and built features of an area, their relationship and the character they create when combined. It also includes social, economic, health and environmental conditions. Responding to context involves identifying the desirable 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 neighbourhood. Consideration of local context is important for all sites, including sites in established areas, those undergoing change or identified for change.

Response

The proposal complies with Local Centre under the Warringah LEP 2011 and will complement the desired future character of the area.

The proposed buildings are highly articulated and have been visually broken down into volumes. The massing will sensitively respond to existing conditions and is aligned with Council's future plans for the area.

The proposed development complies with ADG setback requirements to most of its boundaries. The proposal incorporates attractive landscape areas that surround the built form on ground level. Generous private open spaces are provided to ground floor units, with communal open spaces at basement and lower ground level of the building allowing for an activated and dynamic street character. The proposed development is compatible with the built form context of the site.



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

Response

The bulk and height of the design proposal has been carefully considered to respond to Belrose transition into a higher density area. As opposed to having linear buildings, the proposed scheme breaks up the massing on site through incorporating multiple breaks in the building for articulation.

These buildings are designed as distinctive families of building elements that respond sensitively to the architectural character and expression of the existing and proposed surrounding buildings within its vicinity. The visual bulk of the buildings are softened further as a result of material selection, massing techniques and landscaping that is located at the base of each building.

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 delivers a total of 51 dwellings. These apartments range in sizes to promote a diverse mix of unit types that respond to the controls of Northern Beaches Council.

As part of a developing neighbourhood, the site context is characterised by existing and proposed residential flat buildings of approximately 3 storeys from street view.

The proposal takes in consideration factors of overshadowing, amenity and privacy impacts between existing and future buildings, open space patterns, existing vegetation, demand for new public domain elements, variety of lot sizes and shapes and changing streetscape and scale.

The residential density of the proposal is sustainable, suitable, and supports this developing nature. The proposal fits in the context and possesses the ability to be supported by existing and future infrastructure.

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 63% of units designed to be cross ventilated. In addition to this, 73% 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.

Smart Building Systems

Integrated building systems such as heating, cooling and hot water will be designed to respond to the environmental conditions of the site. The consolidation of these building-wide systems will minimise environmental impact, installation costs, and significantly reduce ongoing running costs for residents.

Rainwater Collection

Water retention tanks and Rainwater tanks are provided to retain and reuse the rainwater collected on site for irrigation of the communal gardens and other water uses in the building. A BASIX certificate has been submitted as part of this application and demonstrates that the development meets the government's criteria for energy efficiency.

BASIX Targets

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

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

Landscaping of public spaces wrap around the building on street level across Glenrose Pl and Lockwood Ave. It provides a visual buffer that enhances the streetscape character and establishes a clearly identifiable, engaging and welcoming entry for both residents and the public into the central courtyard area.

The courtyard area is utilised for a generous communal open space with a variety of uses that caters for a diverse range of residents and activity levels.

Additional podium landscaping of communal open spaces for the private use of residents is provided across Levels 1 and 2.

Ground Floor Landscape Plan prepared by *Paul Scrivener Landscape*

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, indoor and outdoor spaces, visual and acoustic privacy, efficient layouts, outlook and storage areas. Parking for residential, recycling and waste storage areas are provided across the basement levels.

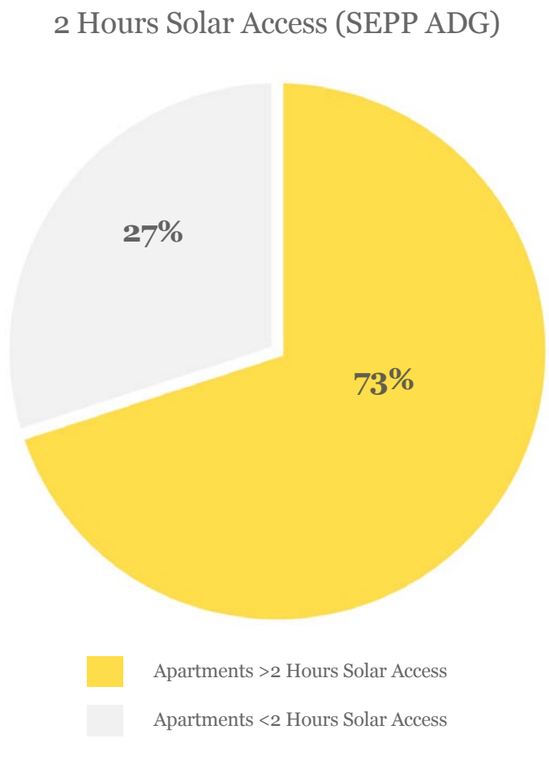
Generally the proposed development is aligned to provide maximum amenity to a majority of the dwellings, with most units demonstrating northern or eastern aspect. The proportion of all units that achieve minimum 2 hours of sunlight into living room windows between 9am and 3pm during mid winter complies with constraints outlined in the ADG. In terms of natural cross ventilation, the development reaches a compliance at 63%. Balconies are designed to provide usable outdoor space while maintaining privacy between units as sufficient private open spaces ensure 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.

Solar Access

The proposed development is designed to provide the maximum amenity to a majority of the dwellings, with most units possessing northern-eastern aspects.

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 into living room windows between 9 am and 3 pm during mid winter is 73%



Lower Ground Floor

Solar Access: 14/19
No Solar Access: 1/19

Ground Floor

Solar Access: 11/16
No Solar Access: 1/16

Level 1

Solar Access: 7/11
No Solar Access: 4/11

Level 2

Solar Access: 5/5
No Solar Access: 0/5

SOLAR ACCESS CALCULATIONS

Units with 2+ Hrs Solar Access:	37/51	73%
Units with no Solar Access:	6/51	12%

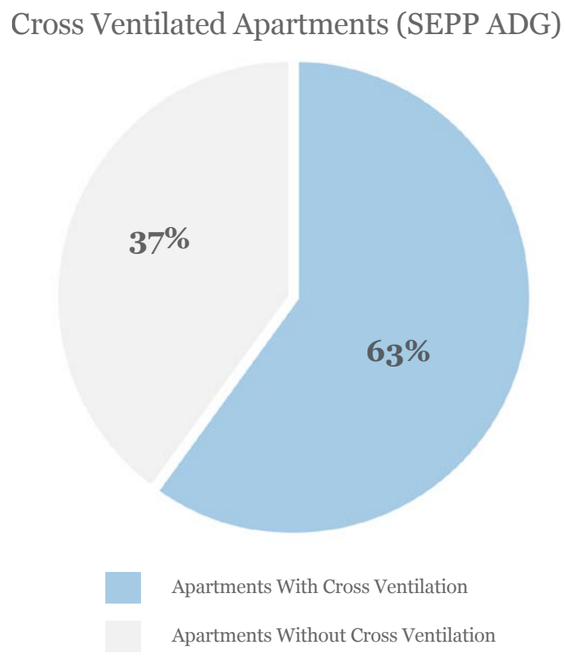
Apartment Design Guide (ADG)
Natural ventilation is the movement of sufficient volumes of fresh air through an apartment to create a comfortable indoor environment. Sustainable design practice incorporates natural ventilation by responding to the local climate and reduces the need for mechanical ventilation 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 generally of open plan units with relatively shallow apartment depths which facilitates good ventilation to all habitable rooms. A high number of cross through and corner apartments within the development also allow the proposed design 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 (51 units) require cross-ventilation.

The building's orientation take full advantage of prevailing breezes to maximize the movement of fresh air to create a comfortable indoor environment. Large openable windows and doors are to be effectively incorporated to reduce the need for mechanical ventilation and air conditioning.



Lower Ground Floor 10/19

Ground Floor 9/16

Level 1 8/11

Level 2 5/5

CROSS VENTILATION CALCULATIONS

Cross Ventilated Units 32/51 63%

Ground Floor Cross Ventilation Study

Response

A minimum 6m³ of storage is required for 1 Bedroom Units. 8m³ for 2 Bedroom Units and 10m³ for 3 Bedroom Units.

A 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.

1 BEDROOM UNIT
TOTAL 3M² STORAGE IN APARTMENT

2 BEDROOM UNIT
TOTAL 7M² STORAGE IN APARTMENT

BASEMENT 3 PLAN

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 design proposal provides clear and well defined lobby entries to each building and main entries off Lockwood Avenue and Glenrose Place. These lobby entries will have clear and unobstructed views from the street and will be secure, lockable and well-lit for the safety of the residents.

A variety of landscaped areas are provided to increase the passive surveillance and safety to the development. Integrated activities in the landscape and large lobbies provide a vibrant area for fostering safety and interaction.

Furthermore, all external spaces will have multiple clear sight lines without obstacles, low shrub planting will reduce the number of places to hide and all paths will be well-lit at night time and designed to meet relevant Australian Lighting Standards.

All areas including entries and communal open spaces are highly visible providing great passive surveillance. Corner balconies and windows provide a wider degree of casual surveillance along the street and open spaces across the site.

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, not only to its residents, but to the local community.

On ground level, safe and activated areas for visitors and residents to meet and interact will be provided. Below, basement levels will have a residential garage that also serves as a space for residential and bicycle storage.

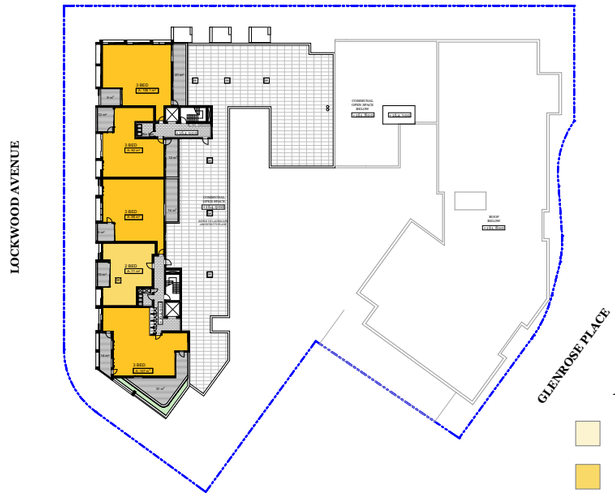
The communal gardens on the podium level are a common asset shared amongst the development's community. These shared facilities and spaces will foster social interactions between residents and promote a real sense of community.

The proposal includes a variety of different housing typologies that will be offered in different sizes and layouts. The mix in housing typologies will cater for a range of households and help diversify the residents of the development.

Lower Ground Floor

Ground Floor

Level 1



Level 2

Apartment Mix Summary

1 Bed	3/51 (6%)
2 Bed	27/51 (53%)
3 Bed	18/51 (35%)
3 Bed-T	3/51 (6%)

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 a collection of buildings surrounding a central landscaped plaza-like area on lower entry levels with a diverse retail offering. The proposal establishes a clearly identifiable, engaging and welcoming main entrance for residents and visitors located on Glenrose Place and a secondary entrance located on Lockwood Ave.

Materials, Colours and Textures

The colour choices utilise a natural brick podium holding a lighter material palette on the upper levels, giving a sense of depth to the facade presentation. The façade is composed primarily of brick, which varies in tone throughout the buildings. This reinforces the articulation of the façade achieved through varied setbacks and step downs in building mass. The brick element contributes to the texture and materiality of the façade and responds to the general character of the surrounding buildings.


Aged Face Brick


Light Face Brick


White Face Brick


Grey Painted Pre-Cast

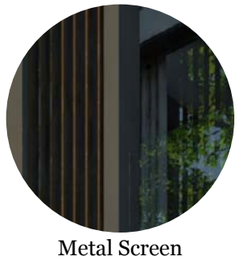

Metal Screen

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.	Site area: 5,322 m² Required Communal open space: 1330.5 m² (25%) Proposed Communal open space: 1,870 m² (35%) Communal open space is provided at both the Basement 2 courtyard, as well as podium Levels 1 and 2. A high level of solar access is achieved to all communal open spaces, therefore providing a high level of amenity. 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).	The built form located in front of the communal open space is of low scale in nature, the majority of the communal space located on the podium levels receives the required solar access between 9am and 3pm on June 21st Compliance achieved
3E Deep Soil Zones	Minimum of 7% of a site should be a deep soil zone with the following minimum dimensions: - greater than 1,500m² – 6m	Site area: 5,322 m² Required Deep soil: 372.5 m² (7 %) Proposed deep soil zone: 423 m² (8%) Compliance achieved
3F Visual Privacy Building separation	Up to four storeys/12 meters • 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	The buildings demonstrate a separation of 6 metres to the boundary between habitable rooms/balconies. Compliance achieved
3J Bicycle and Car Parking	The maximum car parking rates are as follows: Residential 0.5 Spaces per 1 Bed 0.5 Spaces per 2Bed 1.2 Spaces per 3 Bed Retail: 1 per 50m2 Commercial: 1 per 125m2 Childcare: 1 space per 100m2 Visitors: 11 + 1 per 15 units over 70 units.	Car parking rates comply with the requirements of the WDCP 2011 Car Parking Requirements for residential car parking. Retail/Gym car parking numbers comply with the minimum rates of the RMS Guide to Traffic Generating Developments. Refer to Drawing DA001 Development Summary for the breakdown of car parking spaces. Compliance achieved
4A	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	Minimum number of apartments with 2hrs solar access required: 36/51 units (70%) Proposed: 37/51 (73%)

Table 1. Summary of compliance with the key Apartment Design Guide 'Design Criteria'		
Control	**ADG Design Criteria**	**Compliance**
Solar + Daylight Access	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.	Compliance achieved
	A maximum of 15% of apartments in a building receive no direct sunlight between 9 am and 3 pm at mid-winter.	No more than 8/51 apartments (15%) are to not receive any solar access. Proposed: 6/51 (12%) Compliance is 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.	Cross Ventilated Apartments: 32/51 apartments (63%) Compliance achieved
	Overall depth of a cross-over or cross-through apartment does not exceed 18m, measured glass line to glass line.	The overall depth of the proposed cross over or cross through apartments does not exceed 18m, maximum depth of a cross through apartment is 12 m Compliance achieved
4C Ceiling heights	Minimum ceiling heights are as follows: • 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 • attic spaces – 1.8m at edge of room with a minimum 30degree slope in mixed use areas – 3.3m for ground and first floor	Proposed 2.7m habitable– Compliance achieved Proposed 2.4 m non habitable – Compliance achieved
4D-1 Apartment Size + layout	Minimum Apartment sizes: • 70m² for two bedrooms; and • 90m² for three bedrooms. Add an 5m² for additional bathrooms Add an 12m² 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 borrow 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 form the window is 8m	Compliance achieved

Table 1. Summary of compliance with the key Apartment Design Guide 'Design Criteria'		
Control	**ADG Design Criteria**	**Compliance**
4D-3 Apartment Size + layout	Master bedrooms have a minimum area of 10m2 and other bedrooms 9m2 (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: • 3.6m for studio and 1 bedroom apartments • 4m for 2 and 3 bedroom apartments	Compliance achieved 3.6m and 4.0m are provided for 1 bed apartments 4.0m minimum provided for 2 & 3 bed apartments
	The width of cross-over or cross-through apartments are at least 4m internally to avoid deep narrow apartment layouts.	Compliance achieved Minimum width of cross over apartments are 4m
4E Private open space and balconies	Apartments are to have the following balcony dimensions: • 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 15m² of open space, with a minimum dimension in one direction of 3m.	Compliance achieved Ground level apartments and apartments located adjacent to the podium contain a minimum of 15m² of private open space with minimum dimension of 3m
4F Common circulation and spaces	The maximum number of apartments off a circulation core on a single level is eight.	Compliance achieved
	For buildings of 10 storeys and over, the maximum number of apartments sharing a single lift is 40.	Compliance Achieved
4G Storage	• 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.	Where storage is not wholly provided within the unit itself, the remainder is provided in the carpark via storage cages. In the instance where storage cages are required, 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

6th December 2019

Council of Submission:

Northern Beaches Council

PO Box 82 Manly,
NSW 1655

Re:

28 Lockwood Avenue, Belrose

SEPP 65 Design Statement

To Whom It May Concern,

Pursuant to Clause 50(1A) of the Environmental Planning and Assessment Regulation 2000, effective from July 26, 2003;

I hereby declare that I am a qualified designer, which means, a person registered as an architect in accordance with the Architects Act 1921, as defined by Clause 3 of the Environmental Planning and Assessment Regulation 2000.

I directed the design of the residential development stated above and I affirm that the design achieves the design quality principles as set out in Part 1 of the 'State Environmental Planning Policy No.65- Design Quality of Residential Apartment Development';

I have provided further detail on the design's compliance with all nine of the principles in the SEPP 65 Design Compliance Table accompanying this Development Application.

Yours Faithfully

Nicholas Byrne

Associate Director

Registration Number: 7806 (NSW)

DKO