

22nd April 2025**DESIGN VERIFICATION STATEMENT**

Prepared to Accompany a State Significant Development Application to the NSW Department of Planning.

Proposed Flat Residential Building at Burgoyne Street, Gordon, NSW 2072.

This Housing SEPP Design Verification Statement has been prepared on behalf of DPG Project 54 PTY LTD (Applicant) in support of a State Significant Development Application (SSD 82395459) for a Residential Flat Building.

This report is intended to be read in conjunction with the Architectural plans prepared by Marchese Partners Architects and the associated Consultant Reports and drawings. This document addresses the Housing SEPP Design Principles for a Residential Apartment Development (under chapter 4) and a Transport Oriented Development (under chapter 5).

Pursuant to Part 3, section 29(1) and (2) of the Environmental Planning and Assessment Regulation 2021, I hereby declare that Mr Steve Zappia is a qualified designer, which means a person registered as an architect in accordance with the Architects Act 2003 as defined by Schedule 7 of the Environmental Planning and Assessment Regulation 2021. Mr Steve Zappia is registered as an architect in NSW (reg. No. 6535) in accordance with the Architects Act 2003 (NSW).

We confirm that Steve Zappia of Marchese Partners Architects directed the design of the enclosed state significant development application and that the enclosed documentation achieves the Design quality principles as set out in Schedule 9 of State Environmental Planning Policy (Housing) 2021 and has been designed with reference to the Apartment Design Guide.

**Steve Zappia**

Marchese Partners International

Principal

Reg. NSW 6535

COMPLIANCE WITH SEPP HOUSING 2021**Marchese Partners International Pty Ltd**

Level 1, 53 Walker St
North Sydney NSW 2060
Australia

ABN 20 098 552 151

+ 61 2 9922 4375

info@marchesepartners.com

www.marchesepartners.com

Sydney | Brisbane | Melbourne | Adelaide | New Zealand | Kuala Lumpur | London | Madrid

NSW Nominated Architects

Steve Zappia B.Arch (Hons.) (6535)

Geoff Shaw B.Arch (Hons.) (9148)

CHAPTER 4 – DESIGN OF RESIDENTIAL APARTMENT DEVELOPMENT

Applicable

CHAPTER 5 – TRANSPORT ORIENTED DEVELOPMENT

Applicable

155. Maximum building height and maximum floor space ratio

(2) The maximum building height for a residential flat building in a Transport Oriented Development Area is 22m.

Due to the significant cross fall on the site, the proposal breaches the height limit of 22m at some locations, this breach will be substantiated by a clause 4.6 variation request.

(4) The maximum floor space ratio for a residential flat building or a building containing shop top housing in a relevant residential zone or relevant employment zone in a Transport Oriented Development Area is 2.5:1.

Achieved. The proposed development has an FSR of 2.49:1.

156. Affordable housing

(2) Development consent must not be granted unless the consent authority is satisfied that—

(a) at least 2% of the gross floor area of the building will be used for affordable housing, and

(b) the affordable housing will be managed by a registered community housing provider in perpetuity.

Achieved. The proposed development includes at least 2% of the gross floor area for affordable housing.

157 Affordable housing parking spaces

(2) Development to which section 156 applies must provide the following number of parking spaces for each affordable housing dwelling required under that section—

(a) for each dwelling containing 1 bedroom—0.4 parking space,

(b) for each dwelling containing 2 bedrooms—0.5 parking space,

(c) for each dwelling containing 3 or more bedrooms—1 parking space.

Achieved. The proposed development includes parking provisions as required.

159 Minimum lot width

Development consent must not be granted to development for the purposes of residential flat buildings or shop top housing on a lot in a Transport Oriented Development Area, unless the lot is at least 21m wide at the front building line.

Achieved. The site exceeds the minimum lot width required above.

161 Consideration of Apartment Design Guide

Development consent must not be granted for development for the purposes of residential flat buildings or shop top housing on land in a Transport Oriented Development Area unless the consent authority has considered the Apartment Design Guide.

The Apartment Design Guide has been considered in the design of the proposed development, as demonstrated later in this document.

SCHEDULE 9 – DESIGN PRINCIPLES FOR RESIDENTIAL APARTMENT DEVELOPMENT

PRINCIPLE 1 – CONTEXT AND NEIGHBOURHOOD CHARACTER

1. *Good design responds and contributes to its context, which is the key natural and built features of an area, their relationship and the character they create when combined, and also includes social, economic, health and environmental conditions.*
2. *Responding to context involves identifying the desirable elements of an area's existing or future character.*
3. *Well-designed buildings respond to and enhance the qualities and identity of the area including the adjacent sites, streetscape and neighbourhood.*
4. *Consideration of local context is important for all sites, including sites in the following areas:*
 - a. *established areas,*
 - b. *areas undergoing change,*
 - c. *areas identified for change.*

Site definition & Context

The site is located at the address 3A, 3B, 5A & 7 Burgoyne Street, 4 Burgoyne Lane and 1 & 3 Pearson Avenue, Gordon 2072 NSW.

The site comprises the following 7 neighbouring lots:

- 2/DP344901 (3A Burgoyne Street)
- 3/DP344901 (3B Burgoyne Street)
- 1/DP528615 (5A Burgoyne Street)
- 1/DP81938 (7 Burgoyne Street)
- 11/DP865615 (3 Pearson Avenue)
- 12/DP865615 (1 Pearson Avenue)
- 2/DP528615 (4 Burgoyne Lane)

The site covers an area of 7,093m² and has frontage to three streets: Burgoyne Street, Pearson Avenue, and Burgoyne Lane. It shares a boundary with a heritage-listed detached house at 9 Burgoyne Street.

The site is located within a Transport-Oriented Development (TOD) Area and is classified as a TOD site, it is situated within 400m of Gordon Train Station, approximately 14km northwest of Sydney's CBD. This proximity provides excellent access to public transportation, enhancing connectivity to the city and other destinations.

The surrounding area is primarily residential, characterized by a mix of established homes and green spaces, creating a quiet and community-oriented environment. The site is also close to local amenities, parks, and recreational facilities, adding to its appeal as a family-friendly location.

The area is currently zoned R2 – Low-Density Residential, with a general height limit of 9.5m. However, the TOD designation introduces provisions for increased density and height, allowing

building heights of up to 22 meters. This change supports a shift towards a denser urban model, enabling more families and individuals to benefit from the site's well-connected location as part of the broader TOD strategy for areas near train stations.

In addition to the TOD designation, recent changes have been announced by the State Government to facilitate the development of more Low and Mid Rise Housing. These changes will impact residential areas within 800m of Gordon Station. In R1 and R2 zoned land residential flat buildings will be permitted with to 0.8:1 FSR and 9.5m height. In R3 and R4 zoned land, residential flat buildings will be permitted within 400m from the station up to 2.2:1 FSR and 22m height and for R3 and R4 zoned land 400m-800m residential flat buildings will be permitted with 1.5:1 FSR and 17.5m height. These significant changes to permissibility and associated built form will result in a changing character in the area surrounding the Site with a shift to more medium density built form that takes advantage of the Site's proximity to excellent public transport, services and facilities.

Topography

The site topography slopes across the property, with an elevation difference of approximately 13.6m, ranging from the highest point at RL 122.2 on the southern boundary along Burgoyne Lane to the lowest point at RL 108.8 on Burgoyne Street.

Vegetation & Ecology

The site is situated within the boundaries of Burgoyne Street and Pearson Avenue, featuring vegetation comprised of a mix of native and non-native species, including large canopy trees. At the intersection of these two streets lies an ecological area identified in the Green Web map included in the Ku-ring-gai Development Control Plan (DCP). This ecological zone forms part of the public interface and extends into the site at this corner.

Current State of the Site

The site contains seven independent dwellings, a pair of which are semi-detached homes, with the remainder detached homes, all of them of 2 storeys or 2 storeys plus attic. Each dwelling has an independent vehicle access from one of the three street frontages. The properties also include several swimming pools, tennis courts and large trees.

Response to the Context and Neighbourhood Character

We have considered the points above, as well as the site's opportunities and constraints, in designing the buildings. The design responds positively to the context, addressing the existing and future neighbourhood character, the bulk and scale of neighbouring developments, adjoining uses, the environmental context, site orientation, topography, and key vistas.

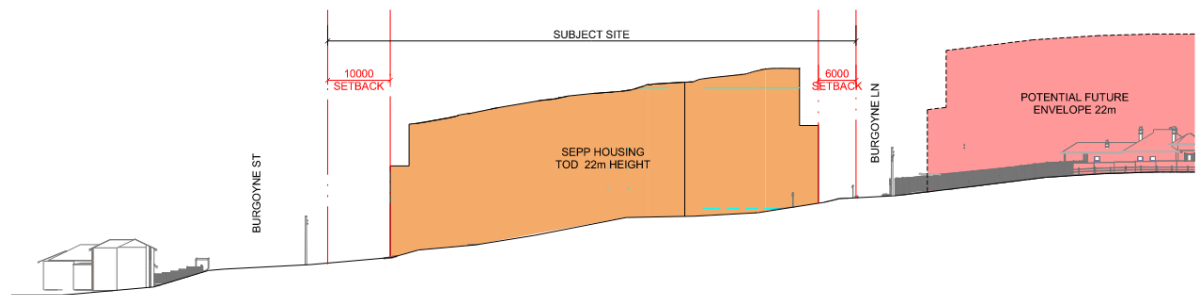


Fig 1. Maximum allowable envelope

PRINCIPLE 2 – BUILT FORM AND SCALE

1. *Good design achieves a scale, bulk and height appropriate to the existing or desired future character of the street and surrounding buildings.*
2. *Good design also achieves an appropriate built form for a site and the building's purpose in terms of the following:*
 - a) *building alignments and proportions,*
 - b) *building type,*
 - c) *building articulation,*
 - d) *the manipulation of building elements.*
3. *Appropriate built form*
 - a) *defines the public domain, and*
 - b) *contributes to the character of streetscapes and parks, including their views and vistas, and*
 - c) *provides internal amenity and outlook.*

Uses & General Built Form

The proposal is for a residential development comprising two buildings, with heights of 7-8 storeys, connected by an extended basement parking area and central communal spaces. The design aims to create a living experience that fosters a sense of community within the shared spaces while maintaining privacy within the apartments.

The massing of the buildings is informed by a careful analysis of the site's opportunities and constraints, alongside compliance with relevant planning codes. Key considerations include the steeply sloped topography, required setbacks, the bulk and rhythm of existing dwellings along Burgoyne Street, and views to and from the neighbouring heritage site.

The two longitudinal buildings align with the primary direction of Pearson Avenue, presenting their narrowest façades to Burgoyne Street. This approach reduces the perceived scale of the development near the heritage site. The proportions on this elevation are designed to respond to the character of the existing residential dwellings along the street. The prominent vegetation along this frontage, particularly at the intersection with Burgoyne Street, is preserved and enhanced. The existing greenery remains a dominant visual element, further mitigating the perceived bulk of the buildings.

To ensure harmonious integration with the surrounding context, the design incorporates a stepped massing along Pearson Avenue. The buildings follow the natural slope of the terrain, descending in height on both the western and eastern sides to align with the existing topography. These level transitions also provide opportunities for architectural articulation. In accordance with the Ku-ring-gai DCP and ADG guidelines, the buildings incorporate setbacks from the streets and between the two structures, with additional setbacks introduced from the fifth level. These setbacks contribute to the articulation of the built form and help to refine its overall shape.

Horizontally, the buildings are structured into distinct elements: base, body, recessed level, and head. Each of these components feature varied materiality and architectural expression, breaking up the overall bulk and enhancing visual interest.

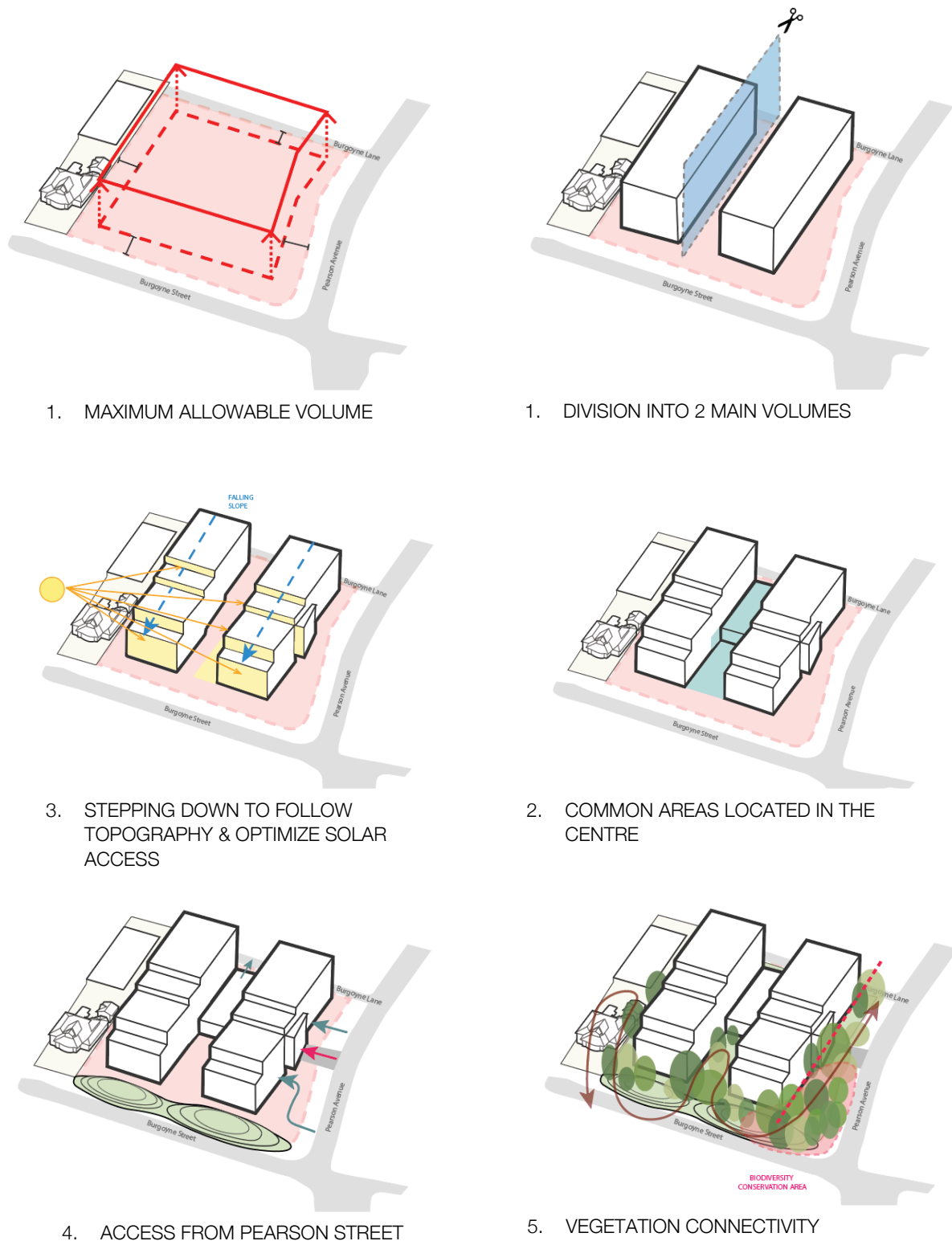
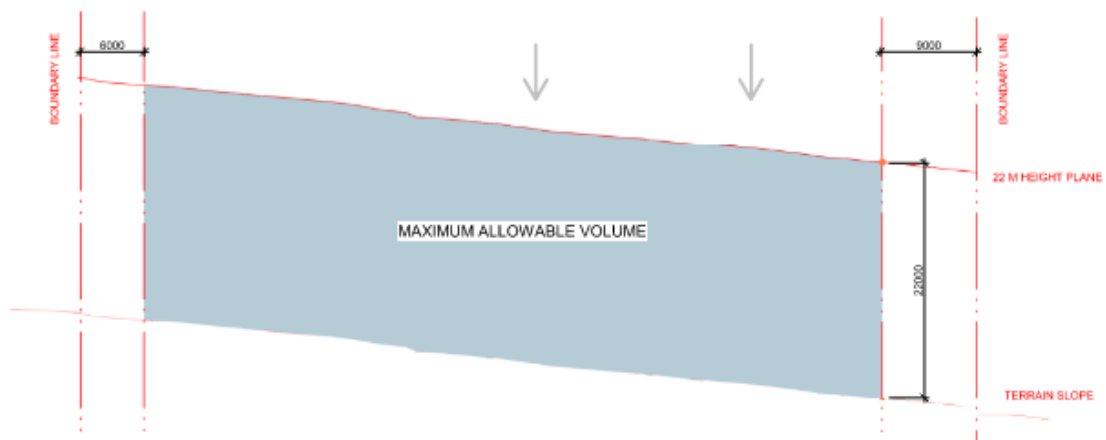
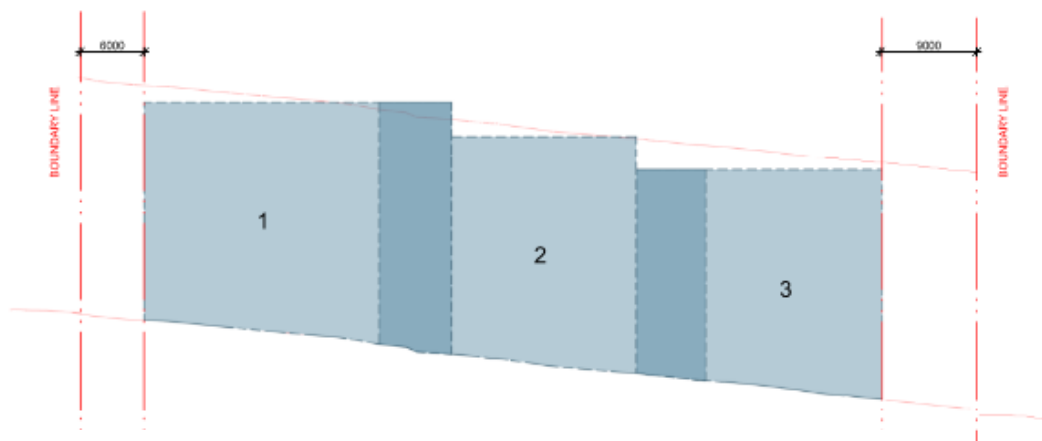


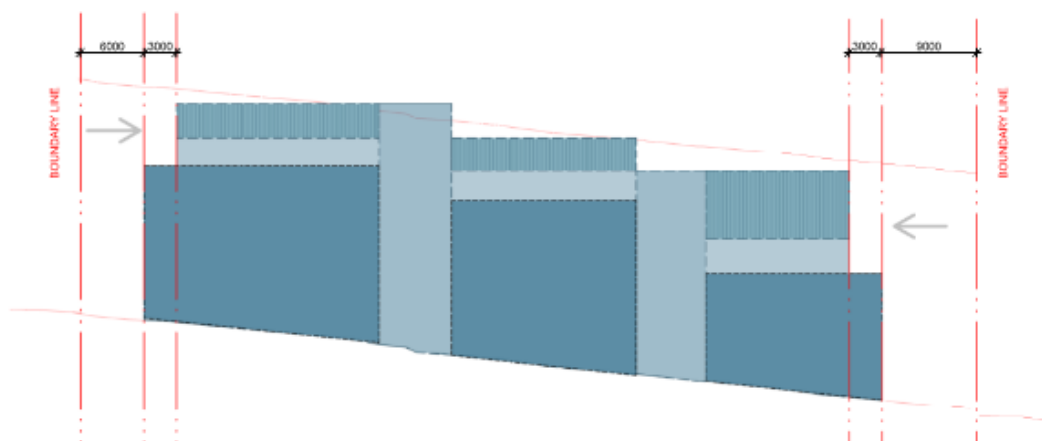
Fig 2. Design response – Massing diagrams



6. STEPPING DOWN AS A RESPONSE TO TOPOGRAPHY



2. BUILDING ARTICULATION & RECESSES



3. SETBACKS AND CHANGE IN BUILDING LANGUAGE ON THE UPPER LEVELS

Fig 3. Bulk mass and façade articulation diagram

The development comprises 106 residential apartments, offering a diverse mix of 1-bedroom, 2-bedroom, 3-bedroom, and 4-bedroom units, as well as penthouses. The layout prioritizes dual-aspect apartments, ensuring that no units are solely oriented to the south. This strategy optimizes natural light and ventilation, enhancing overall living quality.

Outcome

The built form and scale chosen for this project result in a well-designed outcome:

- **Exceeding planning requirements:** Providing a superior design and enhanced amenity, both internally and for the surrounding context, that surpasses the planning controls established for the site.
- **Responding to the evolving context:** Delivering building forms that align with the site's evolving context and are appropriately scaled to support the area's redevelopment under the SEPP Housing TOD framework. This ensures the provision of high-end, high-quality apartments in close proximity to the well-connected Gordon Station area.
- **Fostering community:** Creating opportunities for resident interaction, fostering a sense of place and community, and establishing a lively, vibrant hub within the neighbourhood.
- **Maximizing open space:** Enhancing ground-level open space for residents with ample landscaping and areas for social interaction. This includes green spaces and activity zones connected to shared facilities such as the wellness centre, clubhouse, and lounge/café. The landscape design ensures varying degrees of privacy in communal areas to accommodate different levels of intimacy for their intended uses.
- **Optimizing views:** Maximizing unique views for most apartments by leveraging the site's elevated position and vegetative surroundings. Special attention is given to vistas towards the northeast and northwest.
- **Incorporating practical parking solutions:** Offering thoughtfully designed parking facilities for both residents and visitors, including provisions for cars and bicycles. Additionally, a dedicated drop-off area leading to a reception with concierge services enhances the overall amenity, ensuring convenience for residents.

PRINCIPLE 3 – DENSITY

- (1) Good design achieves a high level of amenity for residents and each apartment, resulting in a density appropriate to the site and its context.*
- (2) Appropriate densities are consistent with the area's existing or projected population.*
- (3) Appropriate densities can be sustained by the following –*
 - a) existing or proposed infrastructure,*
 - b) public transport,*
 - c) access to jobs,*
 - d) community facilities.*
 - e) the environment.*

Site Controls

The original Site Floor Space Ratio (FSR) as per the LEP is overridden by the SEPP Housing control, given the site's designation as a Transport-Oriented Development (TOD), which permits a ratio of 2.5:1.

Density

The proposal includes a significant communal area on Ground and Lower Ground Levels and a total of 106 dwellings, spread across two buildings, offering a varied mix of 1-bedroom, 2-bedroom, 3-bedroom, and 4-bedroom apartments, along with penthouses on the upper two levels, which feature either 3 or 4 bedrooms. The proposed FSR is 2.49:1 which is inline with the FSR as designated under the TOD provisions to allow for strategic densification in the areas near the city's major transport infrastructure.

Transportation strategy

Sufficient car parking spaces have been allocated for both residents and visitors in accordance with the requirements outlined in the DCP. The transportation strategy also includes bicycle provisions for both residents and visitors.

The site's location is highly advantageous in terms of transportation, being less than 400m from Gordon Train Station, ensuring easy access to the broader city network.

Community facilities & environment

Common areas are strategically located at the centre of the development, easily accessible from both the vehicular access and pedestrian paths through the lobbies on Pearson Avenue. These spaces include a drop-off area, concierge, a café/lounge, and a wellness centre with a gym, indoor swimming pool, sauna, steam room, and massage rooms. Additionally, the Clubhouse, which features a cinema, golf simulator, bar, and meeting areas, will be available for use by residents and their guests.

The exterior central space features an expansive landscaped area, with gardens and distinct zones offering a variety of activities for the residents. These spaces, along with the surrounding vegetation (maintained and enhanced), provide a green frontage, especially along Burgoyne Street.

PRINCIPLE 4 – SUSTAINABILITY

- (1) Good design combines positive environmental, social and economic outcomes.*
- (2) Good sustainable design includes –*
 - a) 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.*
- (3) Good sustainable design also includes the following –*
 - a) recycling and reuse of materials and waste,*
 - b) use of sustainable materials*
 - c) deep soil zones for groundwater recharge and vegetation.*

Amenity – sunlight and ventilation

As part of the BASIX Assessment, a comprehensive analysis of the building has been conducted. We note the following inclusions within this proposal:

The ADG requirement for solar access and cross-ventilation in the apartments has been achieved. This ensures a high level of comfort, reducing the necessity for air conditioning to maintain thermal comfort. Over 2 hours of solar access between 9 am and 3 pm has been provided to 74.5% of the apartments (exceeding the minimum of 70%). Natural cross-ventilation has been integrated into 73.6% of the apartments (exceeding the minimum of 60%).

With most of the units being dual aspect, the apartments will receive ample natural light, offer unique views, and provide excellent amenity. The percentage of units that receive no direct solar access from 9 am to 3 pm is capped at 15%, and the development fully complies with this requirement, with only 10.4% of the total units falling within this category.

The orientation of the dwellings has been optimised to maximise solar amenity and incorporate passive design principles.

Materiality

The design concept prioritizes the use of locally sourced materials where possible, particularly brick and natural sandstone.

Deep soil zones

The intent of the proposal is to maintain the maximum area of deep soil possible. The proposal allows for 44.0% of the site area to be either retained or reinstated as deep soil zones per the Kuring-gai DCP's definition, and for 45.3% of the site area as deep soil zone according to the ADG's definition. These areas contribute to the pre-existing biodiversity area located on the northwest corner of the site and enhance connectivity to other bio-diversity areas and remnant tree canopy by instating significant planting along the eastern boundary of the site.

The significant areas of connected deep soil and the inclusion of swales around the site perimeter enhance the site ability to soak up rain fall and reduce run-off from the site.

Sustainability & Transportation

This proposed development enjoys an ideal location, close to the train station. It is well-connected to public transport, including a network of buses, and is just 200 meters from the Pacific Highway. The location also benefits from proximity to educational, medical, and recreational facilities.

PRINCIPLE 5 – LANDSCAPE

- (1) Good design recognises that landscape and buildings operate together as an integrated and sustainable system, resulting in attractive developments with good amenity.*
- (2) A positive image and contextual fit of well designed development is achieved by contributing to the landscape character of the streetscape and neighbourhood.*
- (3) Good landscape design enhances the development's environmental performance by retaining positive natural features which contribute to the following –*
 - a. the local context,*
 - b. co-ordinating water and soil management,*
 - c. solar access,*
 - d. micro-climate,*
 - e. tree canopy,*
 - f. habitat values*
 - g. preserving green networks.*
- (4) Good landscape design optimises the following –*
 - a. useability,*
 - b. privacy and opportunities for social interaction,*
 - c. equitable access,*
 - d. respect for neighbours' amenity.*
- (5) Good landscape design provides for practical establishment and long term management.*

Landscape Design

The landscape design has been developed by Mike Cass Creative, with architects and landscape architects collaborating closely throughout the design process. This design takes a holistic approach, creating a contrast between the formal language of the architecture and the very organic and natural landscape elements. It includes high-quality communal landscaped areas on the lower ground and level 1 for resident use.

The treatment of the lower ground and landscape accounts for various uses along the site, including different solutions for along the two main street frontages and the private open spaces for residents.

The main open space for communal use is the central area, in direct relationship with the wellness centre, café/lounge and clubhouse. The landscape design here provides a series of natural elements as seating / play places to conform a dynamic environment. The incorporation of large canopy trees also provides for ample shade, while still getting direct sunlight into this space.

The treatment of the boundaries responds to the varying site contexts. Along Burgoyne Street and Pearson Avenue, the existing lush vegetation and the green strip between the building and the pathway—both within and beyond the site—have been carefully studied to enhance the presence of native species and strengthen the ecological footprint. The natural topography along these frontages forms a gentle, organic border that defines access to the site. The vegetation is

particularly dense at the corner of Burgoyne Street and Pearson Avenue, where a biodiversity cluster is preserved and further enhanced.

The main pedestrian and vehicular accesses are located along Pearson Avenue, integrated into pathways that weave through the landscaped setbacks.

The challenging topography along Burgoyne Lane and the neighboring site has been addressed through a system of large retaining stones, allowing the terrain to be stepped while maintaining deep soil continuity. The design of private open spaces at ground level has been seamlessly integrated with these retaining walls, and screened from future developments to the south with large trees, creating a cohesive architectural language. These private open spaces also contribute to deep soil calculations, featuring permeable paving where possible.

The proposed design delivers a superior outcome, excelling in both common open space and the overall landscaping experience. It incorporates a carefully curated blend of high-quality soft and hardscape elements, featuring a richly layered design that accommodates diverse activities and fosters social interaction among neighbours. The design also offers varying degrees of intimacy and visual privacy throughout the development, creating an exciting and highly enjoyable environment.

PRINCIPLE 6 – AMENITY

- (1) Good design positively influences internal and external amenity for residents and neighbours.*
- (2) Good amenity contributes to positive living environments and resident well being.*
- (3) Good amenity combines the following –*
 - a) appropriate room dimensions and shapes,*
 - b) access to sunlight,*
 - c) natural ventilation,*
 - d) outlook,*
 - e) visual and acoustic privacy,*
 - f) storage,*
 - g) indoor and outdoor space,*
 - h) efficient layouts and service areas*
 - i) ease of access for all age groups and degrees of mobility.*

Accessibility

The two pedestrian accesses from Pearson Street both have accessible pathways to the building lobbies of Building A, one entering at the Lower Ground level and the other at the First Level. The residential apartment buildings are equipped with private, secure residential entry foyers. Residents or visitors accessing Building B utilise the same pathways to gain access through covered walkways that connect the Building B lobbies to those of Building A.

Vehicle access is provided to a central drop off area which allows for direct entry into the arrival space and concierge connected to the communal areas and facilities. An accessible path of travel is provided to all the lift cores from this point.

The main communal areas have been strategically placed in direct contact with the southern lifts and the southern access from Pearson Street, being at the core of the development and therefore allowing visibility of the activity and appealing to the neighbours on their arrival.

Amenity in the Apartments

All the residential apartments are designed to achieve a high level of internal amenity. This is achieved by several strategies, including making the best use of the orientation and proportioning large areas for every unit. The percentage of dual aspect and cross-through apartments is very high, being 73.6% of the total of the units. There are no units with single aspect to the south. This prioritises access to daylight and enhances natural ventilation within the apartments.

Generous openings provide a great quantity of natural light and expansive views to living spaces. The high level of internal amenity in each apartment exceeds the requirements outlined in the ADG. The generous areas of the apartments allow for different living arrangements in terms of use of the space and furniture arrangements. All apartments feature a balcony or courtyard as their private open space, with dimensions that allow for flexible outdoor living arrangements. As the apartments

open directly onto these amenities, good ventilation is provided. The development meets and exceeds ADG cross-ventilation and solar access requirements, as discussed above. Storage for the apartments is provided both internally and within the residential parking on the basement levels. Most of the apartments exceed the ADG storage requirements within the units, the additional spaces provided in the basement supplement this. Bike storage lockers are also located in the basements for every unit. Secure parking is available in the carpark, with direct lift access to all residential apartments and communal spaces.

The design allows for apartments to accommodate different types of users and families. All the apartments comply with the Livable Housing Australia Silver Living standard, with at least 15% of them also compliant with the Platinum Living standard as required by the Ku-ring-gai DCP controls. The parking spaces allocated to the Platinum level units will also comply to the Platinum Level criteria.

PRINCIPLE 7 – SAFETY

- (1) Good design optimises safety and security within the development and the public domain.*
- (2) Good design provides for quality public and private spaces that are clearly defined and fit for the intended purpose.*
- (3) Opportunities to maximise passive surveillance of public and communal areas promote safety.*
- (4) 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.*

Safety Measures

Safety and security will be provided to residents, and visitors through the following design measures (subject to design refinement at CC):

General measures:

- Ensuring accessibility features throughout the development, including ramps, handrails, and Braille signage, to accommodate residents and visitors with disabilities.
- Ensuring safe pedestrian access by incorporating pedestrian-friendly pathways, and adequate lighting in outdoor areas.
- Installation of closed-circuit television (CCTV) surveillance cameras at key locations to monitor and record activities.
- Designation of specific parking areas for visitors, largely separated from resident parking, to maintain security and convenience.
- Provide secure and well-lit bicycle storage areas to deter theft and promote bicycle use.
- All car park areas on the car park levels will be well-lit, and the stairs and lift areas will have security controls.

Residential areas:

- The residential apartment buildings will offer a secure environment, with access controlled by electronic security devices at the vehicle entry point to the secure car park on the Ground Floor and at the Lower Ground and Level One pedestrian entry gates. Additionally, a dedicated concierge will be available to assist residents, enhancing both security and convenience within the development.
- The common areas will be well-lit, with clearly defined paths. All residential entries will be illuminated with ceiling-mounted downlights and monitored by security cameras.
- Windows and balconies will provide good passive surveillance of the surrounding streets and residential landscape zones.
- Emergency contact information will be displayed prominently throughout the development, including building lobbies and common areas.
- Emergency lighting will be installed in common areas and stairwells to provide illumination during power outages.

PRINCIPLE 8 – HOUSING DIVERSITY AND SOCIAL INTERACTIONS

- (1) Good design achieves a mix of apartment sizes, providing housing choice for different demographics, living needs and household budgets.*
- (2) Well-designed apartment developments respond to social context by providing housing and facilities to suit the existing and future social mix.*
- (3) Good design involves practical and flexible features, including –*
 - a) different types of communal spaces for a broad range of people, and*
 - b) opportunities for social interaction among residents.*

Housing diversity:

The project prioritises housing diversity by offering a varied Apartment Mix. It comprises 106 apartments, thoughtfully distributed across 1-bedroom, 2-bedroom, 3-bedroom, 4-bedroom units, and penthouses. This diverse range of apartment sizes caters to residents with varying housing requirements.

Extensive research has been conducted to align housing options with the existing and future social fabric of the area. This approach ensures that the development resonates with the needs and preferences of the local community. The proposed common areas provide enjoyment opportunities for a broad spectrum of residents.

Fostering Social Interactions

The project places a strong emphasis on creating spaces that promote social interactions among residents. These communal areas encourage community engagement and contribute to a vibrant neighbourhood. The development incorporates a variety of communal spaces such as courtyards, gardens, community rooms, coworking spaces, cinema, golf simulator, games room and gym. These spaces are strategically designed to facilitate social engagement among residents of all ages.

PRINCIPLE 9 – AESTHETICS

- (1) Good design achieves a built form that has good proportions and a balanced composition of elements, reflecting the internal layout and structure.*
- (2) Good design uses a variety of materials, colours and textures.*
- (3) The visual appearance of a well-designed apartment development responds to the existing or future local context, particularly desirable elements and repetitions of the streetscape.*

The proposed development has been meticulously considered in relation to the adjacent sites and the present and future streetscape. The building design is both respectful of its context and strives for a high standard of quality detailing, articulation, and form. The design incorporates several key characteristics that contribute to the overall aesthetics of the proposal, including:

- The design features a clear structural elevation that steps with the site's topography, responding to both its natural and urban context. The façade is composed of a solid lower body with a lighter upper portion, introducing changes in material and architectural language. The first level, in contact with the ground, is expressed in sandstone, followed by a brick body, a recessed / shadow line level in dark cladding, and a top section articulated with battened detailing.
- The material and colour palette responds to the environment and specific requirements of the Ku-ring-gai area, drawing inspiration from neighbouring developments. The lower floors adopt a more traditional aesthetic, while the upper levels present a contemporary, yet integrated, and coherent form.
- Particular attention has been given to both the façade and lower ground floor design. Landscape pockets and interior pathways will feature high-quality pavements, furniture, and finishes. The built elements and vegetation will work together to enhance their aesthetic qualities.
- Attention to detail is evident in the treatment of every material, as demonstrated by the intricate brick detailing (such as sweeps, hit-and-miss patterns, and curved finishes), which maximizes their potential.
- Colours have been carefully chosen to add depth, break up long expanses, and achieve both volumetric and aesthetic objectives, while integrating with the environment.
- The treatment of the various elevations aligns with the existing entourage, responding to the scale of the boundaries and adjacent properties.

These design characteristics collectively contribute to the project's aesthetics, ensuring it harmoniously integrates into the surrounding environment while delivering a visually appealing built form.

APARTMENT DESIGN GUIDE (ADG) ASSESSMENT TABLE

An Assessment of the proposal's compliance with the ADG is provided in the table below.

Design Objective	Assessment	Whether Achieved
Part 3 Siting the Development		
3A Site Analysis		
Objective 3A-1 Site analysis illustrates that design decisions have been based on opportunities and constraints of the site conditions and their relationship to the surrounding context	The proposal is the result of a lengthy planning and design process that has sought to address the constraints and opportunities that exist on the site (refer to drawings DA0.10 SITE ANALYSIS – DA1.00 SITE RESPONSE). This analysis identified, amongst other things: • Current and future local character, site context and amenity • Topography and slopes • Views and vistas • Vegetation and ecological constraints & opportunities • Surrounding building forms and materials • Public domain interfaces • LEP controls • DCP controls, which define the main street external and internal structure • TOD controls, which override some of the above	Achieved.
3B Orientation		
Objective 3B-1 Building types and layouts respond to the streetscape and site while optimising solar access within the development	The development has three existing street frontages: Burgoyne Street, Pearson Avenue and Burgoyne Lane. The orientation of the buildings has been carefully planned to align with site conditions, including but not limited to topography, views, visual and formal relationship with the adjacent site, perception from the street. The north aspect and solar access have been optimized for all dwellings, with 74.5% of the apartments receiving a minimum of 2 hours of solar access during mid-winter. Refer to Solar Analysis Drawings provided.	Achieved.

Part 3 Siting the Development		
Objective 3B-2 Overshadowing of neighbouring properties is minimised during mid-winter	The proposed development does not reduce solar access to neighbouring residential uses, exclusively casting shadows in the early morning of the childcare and the rear portions of the extensive gardens of the houses across Burgoyne Lane. Setbacks have been included in compliance with the Ku-ring-gai Development Control Plan (DCP) Special attention has been given to minimize overshadowing within the development, given that it comprises several buildings.	Achieved.
3C – Public Domain Interface		
Objective 3C-1 Transition between private and public domain is achieved without compromising safety and security	The built form has been oriented to minimise potential conflicts among residents. The units in direct relationship with the communal open spaces feature green pockets in front of them, as well as screens, to provide visual privacy from the streets and internal communal areas. Planters incorporate changes in level to facilitate vegetation growth, creating an additional layer that addresses privacy concerns and enhances the aesthetics from both the street and the terraces. Landscape geometry and windows orientation has been carefully projected to preserve privacy. Clear, identifiable entries have been established for each building.	Achieved.
Objective 3C-2 Amenity of the public domain is retained and enhanced	Extensive landscaping is proposed as part of the scheme to revegetate the site. The car park will remain largely unseen from all perspectives due to site topography and location. Vents and car park exhaust will be integrated into the buildings and/or landscape to minimise impact. The proposal minimises access ramps by locating the building entrances and setting ground floor levels in relation to footpath	Achieved.

Part 3 Siting the Development		
	levels. The transitions in level are done with ramps of a maximum slope of 1:20.	
3D Communal and Public Open Space		
<i>Objective 3D-1</i> An adequate area of communal open space is provided to enhance residential amenity and to provide opportunities for landscaping	The development complies with the design criteria as follows: • The design provides an accessible pedestrian connection surrounded by landscaped gardens and communal spaces linking the units to different communal zones. • Communal spaces include. • Large area in the centre of the development on lower ground level including various sitting and play opportunities. • Enclosed communal space featuring a clubhouse, wellness centre and a café/lounge, in direct communication with the building accesses and vehicle drop off. • The development benefits from the significant amenity provided by its relationship to the natural character of the biodiversity areas on the frontage of the site.	Achieved.
<i>Design Criteria</i> Communal open space has a minimum area equal to 25% of the site	The development is compliant, with 27% of the site area assigned to communal open space. The proposal ensures the residents access and enjoy the landscaped areas and amenities.	
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 9am and 3pm on 21 June (mid-winter)	The development compliant with more than 50% direct sunlight to the principal usable part of the communal open space for 4 hours on June 21.	
Objective 3D-2 Communal open space is designed to allow for a range of activities, respond to site conditions and be attractive and inviting	The communal open space is a multi-level, layered experience providing for a range of spaces and activities. The open common space is in contact with the internal common areas, complementing its uses	Achieved.

Part 3 Siting the Development								
	and providing a visual and activity direct connection. The main common space is central to the site between the buildings. This ensures all residents have an equal opportunity to use the various spaces. The following elements will be provided: • Seating areas • Dining areas • Nature play areas • Gardens The residential communal areas and the garden have been carefully designed to provide large outdoor spaces that can be enjoyed throughout the year by the residents and their visiting family and friends.							
Objective 3D-3 Communal open space is designed to maximise safety	Both buildings will address the communal open space ensuring passive surveillance occurs across this space, maximising safety, at the same time than preserving privacy to the units. The common open space is internal to the built form and shielded from any possible public conflicts.	Achieved.						
3E Deep Soil Zones								
<i>Objective</i> Deep soil zones provide areas on the site that allow for and support healthy plant and tree growth. They improve residential amenity and promote management of water and air quality.	Deep soil areas have been allowed for around all perimeters of the site as well as between the two buildings creating significant areas of landscaping and facilitating the growth of large canopy trees around the entire perimeter of the site.	Achieved.						
<i>Design Criteria</i> Deep soil zones are to meet the following minimum requirements: <table><tr><td>Site Area</td><td>Minimum Dimensions</td><td>Deep Soil Zone (% of site area)</td></tr><tr><td>Less than 650m²</td><td>-</td><td>7%</td></tr></table>	Site Area	Minimum Dimensions	Deep Soil Zone (% of site area)	Less than 650m ²	-	7%	The Design Guidance stipulate a minimum of 15% of the site area to be designated for deep soil in developments exceeding 1,500m² with a minimum dimension of 6 meters. The proposal provides 45.3%, which significantly exceeds this design criteria.	
Site Area	Minimum Dimensions	Deep Soil Zone (% of site area)						
Less than 650m ²	-	7%						

Part 3 Siting the Development

650m ² – 1,500m ²	3m	
Greater than 1,500m ²	6m	
> 1,500m ² with significant existing tree cover	6m	

Design Guidance

On some sites it may be possible to provide larger deep soil zones, depending on the site area and context:

- 10% of the site as deep soil on sites with an area of 650m² - 1,500m²
- 15% of the site as deep soil on sites greater than 1,500m²

Achieving the design criteria may not be possible on some sites including where:

- the location and building typology have limited or no space for deep soil at ground level (e.g., central business district, constrained sites, high density areas, or in centres)

- there is 100% site coverage or non-residential uses at ground floor level

Where a proposal does not achieve deep soil requirements, acceptable stormwater management should be achieved, and alternative forms of planting provided such as on structure.

3F Visual Privacy

Objective 3F-1

Adequate building separation distances are shared equitably between neighbouring sites, to achieve reasonable levels of external and internal visual privacy.

The proposal is compliant with the design criteria as outlined below.

Achieved.

Design Criteria

- Setback to Burgoyne Street: 10 m + 2m articulation area

Part 3 Siting the Development				
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:			- Setback to Pearson Avenue: (6m+4m) - The setback ranges from 16.6 to 6m. across the length of the building - Setback to Burgoyne Lane: 6m, with greater setbacks for the upper levels - Setback to adjacent site (9 Burgoyne Avenue, classified as heritage): 9m, with greater setbacks for the upper levels - Internal separation between buildings: at least 12m in lower floors, 15 in upper floors. - There are no windows providing direct views into either habitable or non-habitable rooms, as appropriate screening features have been allowed for.	
Building Height	Habitable rooms and balconies	Non-habitable rooms		
Up to 12m (4 storeys)	6m	3m		
Up to 25m (5-8 storeys)	9m	4.5m		
Over 25m (9+ storeys)	12m	6m		
<i>Objective 3F-2</i> Site and building design elements increase privacy without compromising access to light and air and balance outlook and views from habitable rooms and private open space			The bulk and scale of the buildings have been designed to accommodate individual requirements, including height restrictions and topography, while allowing for building articulation throughout the development. Facade elements have been designed to ensure privacy using solar screens, planters, and balustrades. Particular attention has been paid to the relationships between units facing the development's interior and those located at street level. The façade facing the adjacent heritage site (9 Burgoyne Street) has been carefully designed to ensure privacy, allowing for various systems to intercept the views to and from this property. Direct views of the neighbouring swimming pool and tennis court are mitigated through the use of privacy screens and strategically placed planters, ensuring that residents cannot directly overlook these areas. Solar access and cross ventilation have been achieved in excess of the ADG guidelines.	Achieved.
3G Pedestrian access and entries				

Part 3 Siting the Development		
Objective 3G-1 Building entries and pedestrian access connects to and addresses the public domain	Both buildings are designed to respond to various street and internal contexts, offering convenient access points for all residents. The development is accessible from Pearson Avenue for both pedestrians and vehicles, with two pedestrian pathways providing access to Building A. The pathway connecting Building A to Building B is direct and covered. The vehicular access includes a drop-off area that links to the lobbies of both buildings.	Achieved.
Objective 3G-2 Access, entries and pathways are accessible and easy to identify	Access points on Pearson Avenue are clearly identifiable through the articulation of the façade, entrance awnings, and integrated design features. Additional signage and lighting will be provided in later stages to ensure clear visibility and ease of navigation.	Achieved.
Objective 3G-3 Large sites provide pedestrian links for access to streets and connection to destinations	The proposal includes a main access from Pearson Avenue, with secondary access points from Burgoyne Lane and Burgoyne Street. Given the existing topography and slope of the site, as well as the lack of a pedestrian pathway along the project's boundary on Burgoyne Street, the secondary access in this area serves as a continuation of a pre-existing access point, retained for the convenience of residents in the lower ground area. The connection to Burgoyne Lane also serves as an egress route.	Achieved.
3H Vehicle Access		
Objective 3H-1 Vehicle access points are designed and located to achieve safety, minimise conflicts between pedestrians and vehicles and create high quality streetscapes	Vehicular access to the basement is seamlessly integrated into the overall design of the façade. It also provides sufficient visibility and space in front to ensure vehicles do not obstruct pedestrian pathways.	Achieved.
3J Bicycle and Car Parking		

Part 3 Siting the Development		
<i>Objective 3J-1</i> Car Parking is provided based on proximity to public transport in metropolitan Sydney and centres in regional areas	Car parking has been provided in accordance with the Ku-ring-gai DCP and is consistent with the Housing SEPP (Chapter 5-Transport Oriented Development). The parking provision is considered appropriate, given the site's proximity to public transport options.	Achieved.
Objective 3J-2 Parking and facilities are provided for other modes of transport	The development includes bicycle parking within the basement to accommodate both residents and visitors. It provides more than one lockable bicycle space per unit, along with additional visitor bicycle racks, exceeding the requirements set out in Ku-ring-gai DCP.	Achieved.
Objective 3J-3 Car park design and access is safe and secure	The car park design and access has been assessed by a traffic consultant Refer to traffic report for details.	Achieved.
Objective 3J-4 Visual and environmental impacts of underground car parking are minimised	All car parking spaces are located below ground, within the excavated sections of the Ground Floor, Lower Ground Level, and Basements 1 and 2. The entry point to the car parks is off Pearson Avenue, and its visual impact on the façade and neighboring units has been significantly minimized through landscaping and façade articulation treatment. Visual connection from the reception lobby to the vehicle drop-off area have been allowed for, and natural light is provided to this parking level to enhance amenity and ensure safety.	Achieved.
Objective 3J-5 Visual and environmental impacts of on-grade car parking are minimised	No on-grade car parking is proposed.	Achieved.
Objective 3J-6 Visual and environmental impacts of above ground enclosed car parking are minimised.	No above ground enclosed parking. Visual connection from the reception lobby to the vehicle drop-off area has been incorporated and natural light is provided to this parking level to enhance amenity.	Achieved.

Part 4 Designing the Buildings		
4A Solar and Daylight access 73		
<i>Objective 4A-1</i> To optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space.	The proposal is compliant with the design criteria as outlined below.	Achieved.
<i>Design Criteria</i> 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.	Compliant. 74.5% of units receive a minimum of 2 hours of direct sunlight.	
A maximum of 15% of apartments in a building receive no direct sunlight between 9 am and 3 pm at mid-winter.	Compliant. Only 10.4% of the apartments receive no direct sunlight between 9 am and 3 pm.	
<i>Objective 4A-2</i> Daylight access is maximised where sunlight is limited	Solar access to the site is not limited and the development will be provided with a compliant level of solar access.	Achieved.
<i>Objective 4A-3</i> Design incorporates shading and glare control, particularly for warmer months	Recessed balconies will provide shading during the summer months while allowing the lower winter sun to penetrate into the internal areas of north-facing apartments for passive solar heating. Apartments on the top levels, as well as those with a setback from the façade, will feature awnings and pergolas to mitigate the impact of direct sunlight while still allowing access to sunlight. The use of different sun shading devices and appropriate glare control to the various facades creates a dramatic and varied character. • Perforated & movable screens to the west and east facing	Achieved.

Part 4 Designing the Buildings

	facades will enhance amenity during the warmer months. • Privacy screens with battens on balconies in the internal courtyard and facing the heritage site will help prevent overheating in these units. • Hit and miss feature walls will also contribute to this. • On the north facing facades, privacy screens will modulate the solar entrance during summer. • BASIX compliance is achieved and demonstrated.	
4B Natural Ventilation		
Objective 4B-1 All habitable rooms are naturally ventilated	All habitable rooms are naturally ventilated.	Achieved.
Objective 4B-2 The layout and design of single aspect apartments maximises natural ventilation	Some units have layouts where the rear portion of the kitchen, which typically contains full height joinery, is further than 8m from a window. These layouts have window openings that are full width and full height with the width greater than the minimum 4m.	Achieved.
<i>Objective 4B-3</i> The number of apartments with natural cross ventilation is maximised to create a comfortable indoor environment for residents	The proposal is compliant with the design criteria as outlined below with 73.6% of apartments being cross-ventilated.	Achieved.
<i>Design Criteria</i> 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.	The apartments achieve cross-ventilation criteria with 73.6% being cross-ventilated.	Achieved.
Overall depth of a cross-over or cross-through apartment does not exceed 18m, measured glass line to glass line.	Typical cross-through apartments depth is 17.1m	

Part 4 Designing the Buildings

	One unit (A-GF.01) exceeds the 18m distance from glass line to glass line by 0.7m.												
4C Ceiling Height													
Objective Ceiling height achieves sufficient natural ventilation and daylight access	The proposal is compliant with the design criteria as outlined below.	Achieved.											
Design Criteria Measured from finished floor level to finished ceiling level, minimum ceiling heights are: <table><tr><td colspan="2">Minimum ceiling height</td></tr><tr><td>Habitable rooms</td><td>2.7m</td></tr><tr><td>Non-habitable</td><td>2.4m</td></tr><tr><td>For 2 storey apartments</td><td>2.7m for main living area floor 2.4m for second floor, where its area does not exceed 50% of the apartment area</td></tr><tr><td>Attic spaces</td><td>1.8m at edge of room with a 30 degree minimum ceiling slope</td></tr><tr><td>If located in mixed use areas</td><td>3.3m for ground and first floor to promote future flexibility of use</td></tr></table> These minimums do not preclude higher ceilings if desired.	Minimum ceiling height		Habitable rooms	2.7m	Non-habitable	2.4m	For 2 storey apartments	2.7m for main living area floor 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 30 degree minimum ceiling slope	If located in mixed use areas	3.3m for ground and first floor to promote future flexibility of use	All the apartments have been provided with the compliant finished floor level to ceiling heights as a minimum according to the design criteria.
Minimum ceiling height													
Habitable rooms	2.7m												
Non-habitable	2.4m												
For 2 storey apartments	2.7m for main living area floor 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 30 degree minimum ceiling slope												
If located in mixed use areas	3.3m for ground and first floor to promote future flexibility of use												
4D Apartment Size and Layout													
Objective 4D-1 The layout of rooms within an apartment is functional, well organised and provides a high standard of amenity.	The proposal is compliant with the design criteria as outlined below.	Achieved.											
Design Criteria Apartments are required to have the following minimum internal areas: <table><tr><td>Apartment Type</td><td>Minimum internal area</td></tr></table>	Apartment Type		Minimum internal area	The units are all 1, 2 3- or 4-bedroom apartments that exceed the minimum internal area criteria required by Objective 4D-1.									
Apartment Type	Minimum internal area												

Part 4 Designing the Buildings

Studio	35m ²		
1 bedroom	50m ²		
2 bedroom	70m ²		
3 bedroom	90m ²		
The minimum internal areas include only one bathroom. Additional bathrooms increase the minimum internal area by 5m ² each. A fourth bedroom and further additional bedrooms increase the minimum internal area by 12m ² each.			
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.		Compliant. Every habitable room has at least one window within an external wall, always complying with the minimum glass surface.	
<i>Objective 4D-2</i> Environmental performance of the apartment is maximised		The proposal is compliant with the design criteria as outlined below.	Achieved.
<i>Design Criteria</i> Habitable room depths are limited to a maximum of 2.5 x the ceiling height. In open plan layouts (where the living, dining and kitchen are combined) the maximum habitable room depth is 8m from a window.		Compliant Some units have layouts where the rear portion of the kitchen, which typically contains full height joinery, is further than 8m from a window. These layouts have window openings that are full width and full height with the width greater than the minimum 4m.	
<i>Objective 4D-3</i> Apartment layouts are designed to accommodate a variety of household activities and needs		The proposal is compliant with the design criteria as outlined below.	Achieved.
<i>Design Criteria</i> Master bedrooms have a minimum area of 10m ² and other bedrooms 9m ² (excluding wardrobe space).		Compliant. All master bedrooms have a minimum area of 10sqm with all other bedrooms having a minimum area of 9sqm.	
Bedrooms have a minimum dimension of 3m (excluding wardrobe space).		Compliant.	

Part 4 Designing the Buildings

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	Compliant.																
The width of cross-over or cross-through apartments are at least 4m internally to avoid deep narrow apartment layouts.	Compliant, cross through apartment width exceed this design criteria.																
4E Private Open Space and Balconies																	
<i>Objectives 4E-1</i> Apartments provide appropriately sized private open space and balconies to enhance residential amenity	The proposal is compliant with the design criteria as outlined below.	Achieved.															
<i>Design Criteria</i> All apartments are required to have primary balconies as follows: <table border="1"> <thead> <tr> <th>Dwelling Type</th><th>Minimum Area</th><th>Minimum internal area</th></tr> </thead> <tbody> <tr> <td>Studio apartment</td><td>4m²</td><td>-</td></tr> <tr> <td>1 bedroom apartment</td><td>8m²</td><td>2m</td></tr> <tr> <td>2 bedroom apartment</td><td>10m²</td><td>2m</td></tr> <tr> <td>3+ bedroom apartment</td><td>12m²</td><td>2.4m</td></tr> </tbody> </table> The minimum balcony depth to be counted as contributing to the balcony area is 1m.	Dwelling Type	Minimum Area	Minimum internal area	Studio apartment	4m ²	-	1 bedroom apartment	8m ²	2m	2 bedroom apartment	10m ²	2m	3+ bedroom apartment	12m ²	2.4m	Compliant. All the apartments are provided with a minimum primary balcony area as required. Any balcony areas where minimum depth is below 1m have not been included in calculations.	
Dwelling Type	Minimum Area	Minimum internal area															
Studio apartment	4m ²	-															
1 bedroom apartment	8m ²	2m															
2 bedroom apartment	10m ²	2m															
3+ bedroom apartment	12m ²	2.4m															
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 15m ² and a minimum depth of 3m.	Compliant. All the ground floor apartments are provided with a secure courtyard with area that exceeds 15m².																
Objective 4E-2 Primary private open space and balconies are appropriately located to enhance liveability for residents	Private open space is located adjacent to the living room in all instances to ensure enhanced liveability for all the residents. In some instances, the bedrooms also have access to the balconies, terraces, and courtyards.	Achieved.															

Part 4 Designing the Buildings

Objective 4E-3 Private open space and balcony design is integrated into and contributes to the overall architectural form and detail of the building	Balconies are sculpted to define the geometry of the façades, with treatments tailored to respond to their orientation. Additionally, perforated metal solar screens, battens, planting opportunities, and hit-and-miss brick feature walls are incorporated into the development. These elements create dynamic visual relationships between different spaces, provide sun control, and contribute to a cohesive façade design. Private open spaces on the lower ground and ground floors harmonize with the landscape's formal solutions, maintaining a cohesive design language with the rest of the ground-level landscaped areas. These spaces are designed to ensure privacy for residents while enhancing the overall design.	Achieved.
Objective 4E-4 Private open space and balcony design maximises safety	The changes of level in ground levels or landscaping pavements will be minimised on the accessible pathways for improved liveability of the units. Safety will be ensured within the balconies with appropriate materiality and parapet heights preventing falls or climbing. Balconies will provide passive surveillance of the site's surroundings.	Achieved
4F Common Circulation and Spaces		
<i>Objective 4F-1</i> Common circulation spaces achieve good amenity and properly service the number of apartments.	Common circulation spaces are wider than minimum requirements for corridor widths and ceiling heights. They allow comfortable movement and access particularly	Achieved.

Part 4 Designing the Buildings

	in entry lobbies, outside lifts and at apartment entry doors.											
<i>Design Criteria</i> The maximum number of apartments off a circulation core on a single level is eight.	Compliant. The maximum number of apartments per level accessed from the same circulation core is five.											
<i>Objective 4F-2</i> Common circulation spaces promote safety and provide for social interaction between residents.	The communal open space, building entryways, and building circulation have been designed to encourage social interaction among residents, facilitating the use, enjoyment, and socialisation within these spaces while ensuring safe movement without concerns of falling or tripping. The common areas have been strategically located in relation to the building entries and cores to promote social interaction and enhance the activity and use of these spaces by residents. Sunlight and natural ventilation have been incorporated into common corridors, enhancing the overall amenity of these circulation areas.	Achieved.										
4G Storage												
<i>Objective 4G-1</i> Adequate, well designed storage is provided in each apartment.	Compliant. Refer to storage diagrams for details.	Achieved.										
<i>Design Criteria</i> In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided: <table><tr><td>Dwelling Type</td><td>Minimum Area</td></tr><tr><td>Studio apartment</td><td>4m²</td></tr><tr><td>1 bedroom apartment</td><td>6m²</td></tr><tr><td>2 bedroom apartment</td><td>8m²</td></tr><tr><td>3+ bedroom apartment</td><td>10m²</td></tr></table>	Dwelling Type	Minimum Area	Studio apartment	4m ²	1 bedroom apartment	6m ²	2 bedroom apartment	8m ²	3+ bedroom apartment	10m ²	All apartments meet the required storage area standards. At least 50% of the storage space for apartments is situated within the apartment itself. Additional storage is available on each carparking level.	
Dwelling Type	Minimum Area											
Studio apartment	4m ²											
1 bedroom apartment	6m ²											
2 bedroom apartment	8m ²											
3+ bedroom apartment	10m ²											

Part 4 Designing the Buildings

At least 50% of the required storage is to be located within the apartment.		
Objective 4G-2 Additional storage is conveniently located, accessible and nominated for individual apartments	Storage is available in Basement 1 and Basement 2 car parks and will be allocated to individual apartments accordingly. All storage areas are in cages / private garages so that storage remains secure.	Achieved.
4H Acoustic Privacy		
Objective 4H-1 Noise transfer is minimised through the siting of buildings and building layout	Common areas are grouped together and separated from the residential areas to avoid noise transfer between them.	Achieved.
Objective 4H-2 Noise impacts are mitigated within apartments through layout and acoustic treatments	Internal apartment layout separates noisy spaces from quiet spaces having rooms with similar noise requirements grouped together and doors separating different use zones.	Achieved.
4J Noise and Pollution		
Objective 4J-1 In noisy or hostile environments, the impacts of external noise and pollution are minimised through the careful siting and layout of buildings	The development is situated in a quiet residential neighbourhood and so external noise factors are not a concern.	Achieved.
Objective 4J-2 Appropriate noise shielding or attenuation techniques for the building design, construction, and choice of materials are used to mitigate noise transmission	Acoustic insulation and performance glazing as required by the Acoustic report will be provided.	Achieved.
4K Apartment Mix		
Objective 4K-1 A range of apartment types and sizes is provided to cater for different household types now and into the future	The apartments have been designed to respond to the current and future socioeconomic context of the area, considering factors as education, employment, public transport, and market demands. The development includes 1 Bed (10.4%), 2 Bed (19.8%)	Achieved.

Part 4 Designing the Buildings

	3 Bed (38.7%) 4 Bed (23.6%) and Penthouses Apartments (7.5%) which is an adequate typology variety for the area.	
Objective 4K-2 The apartment mix is distributed to suitable locations within the building	The apartment types and mixes are varied across the development. Rooftop areas accommodate larger units. Different apartment types are located to achieve successful facade composition and to optimise solar access.	Achieved.
4I Ground floor apartments		
Objective 4L-1 Street frontage activity is maximised where ground floor apartments are located	The apartments facing north, located within the internal communal areas, have direct access from these spaces. These apartments are served by both the communal realm and the internal corridor. Due to the character of the street, the area's status as a vegetative conservation zone, and the challenging topography, not all ground-floor apartments have direct access from the public realm. Privacy is prioritized over this redundant connection. Activity is encouraged through the relationship between the public realm and the communal open space.	Achieved.
Objective 4L-2 Design of ground floor apartments delivers amenity and safety for residents	Privacy is ensured through adequate integrated fencing and landscape as well as orienting the primary private open spaces away from communal areas.	Achieved.
4M Facades		
Objective 4M-1	The building form and materiality of the development responds to both the context and the requirements of	Achieved.

Part 4 Designing the Buildings

Building facades provide visual interest along the street while respecting the character of the local area	the Ku-ring-gai DCP. All materials and tones have been carefully selected to align with the heritage conservation area while maintaining a contemporary and elegant aesthetic. Design solutions include variations in the composition of the facades, with height fluctuation and recessed volumes to provide building articulation. A range of devices and treatments, such as perforated metal screens, battened privacy screening, and pergolas, contribute to the composition of the façade while achieving privacy and solar control. Changes in materiality and texture have been incorporated, with different materials used for the podium or base, main building mass, and penthouse levels, helping to define the volumes as distinct, articulated elements. The use of certain materials, such as brick, is explored through various features (hit-and-miss patterns, curved brickwork, and different bond and pattern techniques). The upper floors are treated with a more contemporary design language to visually separate the massing of this element.	
Objective 4M-2 Building functions are expressed by the facade	Building entries are clearly defined. The apartment layout is expressed externally, with larger openings to the living areas and increased privacy for the bedrooms.	Achieved.
4N Roof design		
Objective 4N-1	Roofs are flat and their expression, integrated in the composition of the	Achieved.

Part 4 Designing the Buildings

Roof treatments are integrated into the building design and positively respond to the street	last 1-2 level volumes, being finished with a coherent materiality and geometry.	
Objective 4N-2 Opportunities to use roof space for residential accommodation and open space are maximised	Large private open space located on rooftops as the buildings step back following the topography of the site. These private opening spaces are separated from the remaining roof area which incorporate low maintenance green roofs but landscape planters.	Achieved.
Objective 4N-3 Roof design incorporates sustainability features	A low-maintenance green roof is provided in areas not occupied by private open space, enhancing the thermal performance. The rooftop on the upper level will also feature a low-maintenance green roof and will include solar panels to a minimum of 20% of the roof area.	Achieved.
4O Landscape design		
Objective 4O-1 Landscape design is viable and sustainable	The landscape design, executed by Mike Cass Creative has been designed in accordance with the Ku-ring-gai DCP. Refer to Landscape Architecture drawings for details regarding sustainability and environmental performance.	Achieved.
Objective 4O-2 Landscape design contributes to the streetscape and amenity	The landscape design is a critical component of the proposal and has been thoughtfully prepared. Mike Cass Creative and Marchese Partners have worked collaboratively to achieve a site-specific landscape scheme. The design responds to the existing site conditions including changes of levels, views, significant landscape features and relationships with	Achieved.

Part 4 Designing the Buildings

	internal uses, providing high amenity for residents.	
4P Planting on structures		
Objective 4P-1 Appropriate soil profiles are provided	Suitable soil profiles will be provided. Refer to Landscape Architecture drawings for details.	Achieved.
Objective 4P-2 Plant growth is optimised with appropriate selection and maintenance	Endemic/native species have been selected. Refer to Landscape Architecture drawings for details.	Achieved.
Objective 4P-3 Planting on structures contributes to the quality and amenity of communal and public open spaces	The internal areas will offer a diversity of spaces and will offer high quality and amenity.	Achieved.
4Q Universal Design		
Objective 4Q-1 Universal design features are included in apartment design to promote flexible housing for all community members	The development incorporates 100% of apartments that achieve Livable Housing Australia guideline's Silver Level universal design features, with at least 15% reaching Platinum Level status.	Achieved.
Objective 4Q-2 A variety of apartments with adaptable designs are provided	All apartments in the development exceed the ADG minimum size standards and comply with the Silver Level of the Liveable Housing Australia guidelines, as per the Kuring-gai DCP. Please refer to the Access Report.	Achieved.
Objective 4Q-3 Apartment layouts are flexible and accommodate a range of lifestyle needs	The apartments have been designed with flexibility in mind, featuring large rectangular spaces in most living areas, among other design elements, to allow for adaptable room layouts.	Achieved.
4U Energy Efficiency		
Objective 4U-1 Development incorporates passive environmental design	The development is above the ADG compliance figures for solar access and cross-ventilation, meaning that	Achieved.

Part 4 Designing the Buildings

	the internal spaces will not be solely reliant on-air conditioning to maintain thermal comfort.	
Objective 4U-2 Development incorporates passive solar design to optimise heat storage in winter and reduce heat transfer in summer	At least 2 hours of solar access in the middle of winter is provided to 74.5% of the self-contained dwellings. All units will have access to a substantial common open space, with considerable amenity, which has been planned to receive maximum solar exposure during winter. Passive strategies have been incorporated in the design, such as movable shade devices on West and East facades.	Achieved.
Objective 4U-3 Adequate natural ventilation minimises the need for mechanical ventilation	Natural cross ventilation is provided to 73.6% of the units, in excess of the minimum requirement of 60%.	Achieved.
4V Waste Management and conservation		
Objective 4V-1 Potable water use is minimised	Water re-use is proposed. Refer to Civil drawings for details.	Achieved.
Objective 4V-2 Urban stormwater is treated on site before being discharged to receiving waters	Compliant. Refer to Civil drawings for details.	Achieved.
Objective 4V-3 Flood management systems are integrated into site design	Compliant. Refer to Civil drawings for details.	Achieved
4W Waste management		
Objective 4W-1 Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity of residents	Waste storage is located on the basement and collected from the loading bay, to prevent any impact on the amenity of the residents.	Achieved.
Objective 4W-2 Domestic waste is minimised by providing safe and convenient source separation and recycling	General waste and recycling chutes are located separately within designated waste rooms for every vertical communication core.	Achieved.
4X Building Maintenance		

Part 4 Designing the Buildings

Objective 4X-1 Building design detail provides protection from weathering	Appropriate low maintenance materials such as face brick and sandstone form the majority of the façade with the remaining surfaces either powder coated aluminium or paint, with the painted surfaces located in areas with convenient and safe access for maintenance.	Achieved.
Objective 4X-2 Systems and access enable ease of maintenance	The design enables easy cleaning of glazing from either balconies or from the inside of the buildings. Maintenance access has been provided to all roof top plant areas to allow easy and safe access to plant and green roofs.	Achieved.
Objective 4X-3 Material selection reduces ongoing maintenance costs	Durable and low maintenance materials, such as face brick, sandstone cladding and powder coated aluminium that weather well have been selected.	Achieved.

Steve Zappia

Marchese Partners International

Principal

Reg. NSW 6535