

15th March 2023

HOUSING SEPP DESIGN VERIFICATION STATEMENT

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

Proposed Seniors Living Development at Cumberland Country Golf Club, Greystanes, NSW 2154.

This Housing SEPP Design Verification Statement has been prepared on behalf of Pariter (Applicant) in support of a State Significant Development Application for a proposed Seniors Living Development to NSW Departments of Planning.

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 Seniors Housing (under Schedule 8) and Design Principles for Residential Apartment Development (under Schedule 9), the latter being the Principles contained in the recently repealed SEPP 65.

We confirm that Steve Zappia of Marchese Partners Architects directed the design of the Modification Application architectural drawings and that the related documentation achieves the principles set out in *Housing SEPP and the Environmental Planning and Assessment Regulation 2021* and has been designed with regard to the *Apartment Design Guide*.

Mr. Steve Zappia is registered as an architect in NSW (reg. No. 6535) in accordance with the Architects Act 1921.



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DESIGN PRINCIPLES FOR SENIORS HOUSING

PRINCIPLE 1 – NEIGHBOURHOOD AMENITY AND STREETScape

Seniors housing should be designed to recognise the operational, functional and economic requirements of residential care facilities, which typically require a different building shape from other residential accommodation; to recognise the desirable elements of the location's current character, or for precincts undergoing a transition—the future character of the location so new buildings contribute to the quality and identity of the area; to complement heritage conservation areas and heritage items in the area; to maintain reasonable neighbourhood amenity and appropriate residential character by providing building setbacks to reduce bulk and overshadowing, using building form and siting that relates to the site's land form, adopting building heights at the street frontage that are compatible in scale with adjacent buildings, and considering, where buildings are located on the boundary, the impact of the boundary walls on neighbours; to set back the front building on the site generally in line with the existing building line; to include plants reasonably similar to other plants in the street; to retain, wherever reasonable, significant trees, and to prevent the construction of a building in a riparian zone.

The proposed development at 248 Old Prospect Road, Greystanes, encompasses the Cumberland Country Golf Club Masterplan, which demonstrates a comprehensive understanding of the functional and economic needs of residential care facilities. The design of Independent Living Units (ILUs) and residential care facilities has been meticulously crafted to cater to the evolving requirements of future residents.

The architectural character of the buildings is designed to complement and integrate seamlessly with the prevalent brick structures in the residential development. Materials such as brick, timber, and dark-coloured metals, including concrete, aluminium, and concrete-look cladding, have been thoughtfully chosen to harmonize with the existing surroundings. A mix of light and dark brick, along with different coloured palettes, reflects the diverse architectural styles found in Greystanes, embracing both contemporary and mid-century modern designs.

Designed to work in harmony of the land's existing topography, the development minimizes earthworks and strategically positions building setbacks significantly away from the road and surrounding low and medium-density development, minimizing impact on neighbouring properties. The deliberate placement of buildings a considerable distance from the site's boundaries is further enhanced by dense landscaping.

The design of the buildings responds to the existing natural topography, leveraging natural level changes to create an under-croft parking area against the golf course mounds. Buildings are well-integrated into the topography, allowing for views towards the Golf Course while maintaining an activated streetscape to the internal road.

The proposed development harmoniously merges with the landscape, connecting the internal landscape with the golf course physically and visually. Existing trees on the boundary assist in blending the development into its natural surrounds. Apartments are oriented towards the Golf Course to benefit from panoramic views while ensuring required solar access.

The design responds to immediate surroundings, with the built form stepping down in scale towards the boundaries, especially towards neighbouring properties in Kootingal St. towards the Old Prospect Road boundary, the Care Hub building is designed at a lower scale with a more residential façade treatment, contributing positively to the existing and future neighbourhood character.

PRINCIPLE 2 – VISUAL AND ACOUSTIC PRIVACY

Seniors housing should be designed to consider the visual and acoustic privacy of adjacent neighbours and all residents of the seniors housing by using appropriate site planning, including considering the location and design of windows and balconies, the use of screening devices and landscaping, and ensuring acceptable noise levels in bedrooms of new dwellings by locating them away from driveways, parking areas and paths.

The proposal prioritizes visual and acoustic privacy for the surrounding development. The design of windows, balconies, and landscaping has been carefully crafted to ensure both visual and acoustic privacy. Considering the significant existing vegetation along the site's frontages to Old Prospect Road and Kootingal Street, the site has been appropriately set back from existing residential development and vegetation, allowing for the preservation of mature existing trees on-site. This approach minimizes the impact on neighbouring properties while preserving an unchanged streetscape to Old Prospect Road. The development further maintains and resurfaces the existing golf club parking area and the mature trees along the boundary to dwellings on Kootingal St, thus preserving the existing context for neighbours and screening the new development.

The design of the buildings is responsive to the undulating existing topography of the site, utilizing the change in levels to accommodate the under-croft parking area and Lower Ground Level Garden apartments of the ILUs. This design maintains views from units on the Ground Level across the Golf Course. The Lower Ground Level is thoughtfully designed to present a residential streetscape to the internal road, with garden units accessible directly from the footpath and visitor parking on the street, fostering a sense of security and familiarity for residents.

PRINCIPLE 3 – SOLAR ACCESS AND DESIGN FOR CLIMATE

The design of seniors housing should— for development involving the erection of a new building— provide residents of the building with adequate daylight in a way that does not adversely impact the amount of daylight in neighbouring buildings, and involve site planning, dwelling design and landscaping that reduces energy use and makes the best practicable use of natural ventilation, solar heating and lighting by locating the windows of living and dining areas in a northerly direction.

The proposal has been thoughtfully designed to capture solar access and privacy for future residents and neighbouring properties, while maximizing views toward the golf course. Site planning, landscaping, and dwelling design have been employed to reduce energy consumption and leverage natural ventilation and solar access. Spacing between buildings ensures high amenity and access to proposed landscaped gardens, pathways, and outdoor activity areas.

Adherence to the Housing SEPP requirements for solar access and cross-ventilation to the apartments has been achieved, promoting a high level of comfort, and reducing the need for air conditioning. More than 2 hours of solar access between 9 am and 3 pm is provided to 70% of the apartments. Natural cross-ventilation is integrated into 61% of the apartments, exceeding the stipulated 60%. This approach ensures ample natural light, unique views, and excellent amenity for the residents.

The orientation of the dwellings has been optimized to maximize solar amenity and incorporate passive design principles. All units will enjoy access to substantial common open spaces, surrounded by landscaping, offering maximum solar exposure. Partly recessed and screened balconies provide shading in summer while allowing lower winter sun to enter internal areas for passive solar heating. The development will achieve and demonstrate BASIX compliance, with solar panels occupying much of the roof to generate electricity. Additionally, the development is equipped with electrical distribution boards dedicated to Electric Vehicle (EV) charging, ensuring future provision for 100% of car spaces.

PRINCIPLE 4 – STORMWATER

The design of seniors housing should aim to control and minimise the disturbance and impacts of stormwater runoff on adjoining properties and receiving waters by, for example, finishing driveway surfaces with semi-pervious material, minimising the width of paths and minimising paved areas, and include, where practical, on-site stormwater detention or re-use for second quality water uses.

The proposed development prioritizes minimizing the disturbance and impacts of stormwater runoff on adjoining properties, as outlined in the Civil and Stormwater Plans found in Appendix I. Additionally, the Design Report in Appendix C highlights the incorporation of permeable paving to reduce stormwater runoff and enable natural irrigation of vegetation.

The development prioritises landscaped and deep soil areas, incorporating 10,130m² which equates to 26.8% of the development. The inclusion of permeable pavers in the car parking spaces contributes to a sustainable water cycle. Evergreen trees serve as biofilters, while deciduous trees act as solar filters, aligning with the landscape architect's design.

A comprehensive strategy is in place to direct rainwater to existing ponds, facilitating reuse in golf course and landscape irrigation. This multifaceted approach ensures both the reduction of stormwater impacts and the promotion of sustainable water management within the development.

PRINCIPLE 5 – CRIME PREVENTION

Seniors housing should be designed in accordance with environmental design principles relating to crime prevention, and provide personal property security for residents and visitors, and encourage crime prevention by site planning that allows observation of the approaches to a dwelling entry from inside each dwelling and general observation of public areas, driveways and streets from a dwelling that adjoins the area, driveway or street; providing shared entries, if required, that serve a small number of dwellings and that are able to be locked; and providing dwellings designed to allow residents to see who approaches their dwellings without the need to open the front door.

The proposed development prioritizes safety through the incorporation of CPTED. All dwelling entrances will be equipped with appropriate locking systems, and passive surveillance from balconies and windows is strategically integrated. The CPTED assessment confirms that the site is designed to provide a secure space for future residents and staff.

Within the development, the Independent Living Units (ILUs) ensure personal property security for residents and visitors. The layout of the development enables clear visibility of dwelling entries from the public domain while the ILUs feature clear sight lines toward the semi-public environment, allowing for passive observation and surveillance of the golf course, common areas, and entry lobbies.

Specific parking areas for visitors, separated from resident parking, contribute to maintaining security and convenience. Well-lit car park areas, with security controls in stairs and lift areas, further ensure a secure environment.

The new Cumberland Golf Club House acts as a passive security element due to its active uses and operating hours, providing a safe and secure entry for residents and visitors. Common open space design facilitates surveillance by on-site staff, ensuring seniors can use and enjoy the spaces without fear. Residential apartment buildings offer controlled access through electronic security devices at vehicle entry points and residential entry foyers, along with monitored pedestrian entry gates.

For children's facilities, natural play areas are centrally located and designed for easy monitoring, contributing to an overall emphasis on safety throughout the development.

PRINCIPLE 6 – ACCESSIBILITY

Seniors housing should have obvious and safe pedestrian links from the site that provide access to transport services or local facilities, and provide safe environments for pedestrians and motorists with convenient access and parking for residents and visitors.

The proposed development prioritizes accessibility, ensuring safe and convenient paths of travel for residents. Accessible pedestrian paths leading to the Independent Living Units (ILUs) are integrated, and the vehicular access point is clearly identifiable through site-wide signage. Landscaping and footpaths delineate entry lobbies to the ILUs.

Pedestrian links connect key areas such as the Clubhouse, ILUs, Residential Care facility, and outdoor amenity areas, fostering an overall safe environment. The development emphasizes pedestrian movement throughout the site, proposing slow movement vehicles areas in the centre of the development and narrow roads with passing bays that encourage slow driving.

The ILUs feature private and secure residential entry foyers in each of the six buildings. Lift access is provided to all apartment levels and the under-croft parking, creating a seamless connection between every floor and lower ground car parking areas. Lower Ground Level lobbies serve as clearly articulated entries to residential buildings, offering a welcoming and secure environment for residents and their guests. Each ILU lobby provides access to three to eight apartments per level, ensuring intimacy and privacy for residents. Additionally, most apartments on the lower ground floor have direct, independent entrances.

The design incorporates accessible parking spaces for residents, Club members and Care Hub visitors. Further to this, all ILUs have been designed to comply with accessibility within the units, complying with internal clearances.

PRINCIPLE 7 – WASTE MANAGEMENT

Seniors housing should include waste facilities that maximise recycling by the provision of appropriate facilities.

The design has been carefully considered to ensure waste treatment, disposal, recovery, and re-use. Dual chutes have been incorporated into every building, ensuring general waste and comingling recycling is allocated. Food waste bins have also been incorporated to give options for composting and units have the size and capacity to provide space for recycling bins, either in the kitchen or laundry areas. The development will be provided with waste signage that promotes resource recovery, waste minimisation, safety, and amenity.

DESIGN PRINCIPLES FOR RESIDENTIAL APARTMENT DEVELOPMENT

PRINCIPLE 1 – CONTEXT AND NEIGHBOURHOOD CHARACTER

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

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.”

Site definition & Context

The site for the Cumberland Country Golf Club Masterplan is situated on the northern side of the existing Cumberland Country Golf Club Course, 248 Old Prospect Road, Greystanes, at the location of the existing clubhouse, car park, practice range and 1st fairway. The site subject of the application covers an area of 37,375.60 m².

The site forms part of the Cumberland Country Golf Course and comprises 8 lots:

- Lot 13 DP17546
- Lot 14 DP17546
- Lot 15 DP17546
- Lot 16 DP17546
- Lot 17 DP17546
- Lot 18 DP17546
- Lot 46 DP242898
- Lot 2 DP545201

The surrounding area to the north, west and east is zoned R2 Low Density Residential and features mostly 1 & 2 storey detached dwellings. The development area has an extensive southern boundary to the golf course, providing golf course views. The site is currently accessed from Old Prospect Road. The design proposes to move the entry point to the proposed new Golf Club and Retirement Village from the existing access point slightly to the west, away from the corner of Paroo Street and the existing bus stop. Two other combined vehicular and pedestrian access points have been proposed from Kunyal Pl and Old Prospect Road, connecting with an internal road.

The design of the buildings has responded to the existing natural topography and the neighbouring context. The built form takes advantage of the existing natural level changes, creating an under-croft parking area against the golf course mounds. The buildings sit well in the topography, allowing for views toward the Golf Course, but maintaining an activated streetscape to the internal road.

The proposed development will sit within the landscape and be surrounded by it, as “Buildings in the rough”, connecting the internal landscape with the golf course both physically and visually. The existing trees on the boundary will assist in blending the development into its natural surrounds, rather than it dominate the surroundings or the skyline. The apartments in the buildings are orientated towards the Golf Course, to benefit from the panoramic views, while also achieving the required solar access.

The design responds coherently to the immediate surroundings, the built form steps down in scale towards the boundaries, integrating with the surrounding built form, especially towards the neighbouring properties in Kootingal St. Generally, the development has been located as far away from the adjoining properties as possible and makes good use of the site levels to provide a good fit into the context to minimise any impacts to the neighbours. Towards the Old Prospect Road boundary, the Care Hub building has been designed at lower scale and with more residential façade treatment.

The design will sit well with in its context and contribute positively to the existing and future neighbourhood character.

PRINCIPLE 2 – BUILT FORM AND SCALE

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

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

Uses & General Built Form

The proposal is for a Seniors Living Development that includes 6 ILU Buildings, a Care Hub Building, and new building for the existing Cumberland Country Golf Club, car parking, and open landscape areas. The intention of the proposal is to integrate all these different uses into an Age in Place Village with continuum of care. All these elements are distributed across the site, orientated along the existing contours, and connected by an internal road.

The design of the buildings responds to the undulating existing topography of the site, using the change in levels to accommodate the under-croft parking area and Lower Ground Level Garden apartments of the ILUs, while maintaining the views from units on Ground Level across the Golf Course. The Lower Ground Level has been designed to present a residential streetscape to the internal road, with garden units accessible directly from the footpath and visitor parking on street, generating a sense of security and familiarity to residents.

The final design concept has evolved from the idea of generating large setbacks to the street proposed by the State Design Review Panel. Therefore, the buildings have been located adjacent to the development line of the Golf course, allowing for mature existing trees to be maintained on site, minimizing the impact on neighbouring properties, while also preserving an unchanged streetscape to Old Prospect Road. The development maintains and resurfaces the existing golf club parking area and the mature trees along the boundary to dwellings on Kootingal St, also preserving the existing context for the neighbours and screening the new development.

The height of the buildings, ranging from 3 to 7 storeys, has been designed to rise in height towards the centre of the development, reducing impact to the views from the street, both from Kootingal St and Brighton St. The buildings have been reduced in footprint following feedback from the State Design Review Panel, increasing the landscape area around them and improving amenity to the residents and visitors, enhancing the idea of "buildings in the rough". The space in between the buildings is designed to connect the development either physically, visually or ecologically with the Golf Course.

The Care Hub building, responding to interface with the street, is reduced in height to 3 storeys, transitioning between the surrounding context and the new development.

The treatment of the facade, divided into three horizontal stratum distinguishes it as a podium (lower ground level), the main body of the building (from the ground floor up) and a recessed penthouse level, reducing the visual impact of the topmost level. The brick podium and recessed penthouse level will also contribute to breaking down the perceived bulk and scale of the development and assisting it to fit in well into its context.

Outcome

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

- Providing a superior design option and amenity (both internal and surrounding) over and above what the planning controls require for the site.
- Delivering appropriate building forms that respond to the site's context and with the appropriate scale to enable the development to provide a substantial number of services and facilities to cater for the seniors' residents, i.e., gym, hydrotherapy pool, cinema, consulting rooms, lounge area, salon, multipurpose room, library/coworking area. The location of the Care Hub on site allows residents to age in place and enjoy these services over time.
- Allowing for spaces for the community to interact within the development and access some of the abovementioned services, accessible through a community access plaza and ancillary commercial spaces.
- Creating opportunities for interaction between various types of users, fostering a sense of place and community, and establishing a lively and vibrant hub for the new neighbourhood.
- Maximizing ground-level open space for both residents and the wider public, providing ample room for landscaping and social interaction throughout the proposal. This includes green areas, child play spaces, informal seating options, and walking paths through the existing landscape.
- Offering access to the Golf Club, the residents can enjoy café seating areas, outdoor and indoor dining and lounge and gaming area, all with access to Golf Course views and Pro-Shop.
- Maximizing unique views for most of the apartments, capitalizing on the topography, which offers vistas of the golf course, the surrounding area, and the development itself.
- Designing spaces suitable for various age groups, including a children's playground linked to the café in the Golf Club.
- Thoughtfully incorporating car parking and necessary services.

PRINCIPLE 3 – DENSITY

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

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

Site Controls

As there are no specific Floor Space Ratio (FSR) controls for this site, the Housing SEPP and the Apartment Design Guide have been the tools used to determine the permissible constructed volume and final density. As previously mentioned, the development encompasses a residential component, new Golf Club and Care Hub building and facilities.

Density by use

The residential portion of the proposal includes a total of 234 seniors living dwellings, offering a varied unit mix of 1-bedroom, 2-bedroom + nook, 2-bedroom + study, 3-bedroom, and penthouse apartments which results in an FSR for this use of 0.71:1 which is relatively consistent with the FSR of the surrounding context. Given the scale of the overall golf course site area, and the specific development area, it can be said the proposed development sits comfortably within its neighbouring context in terms of density.

The design and configuration of the buildings on the site also provides an appropriate response to the site and ensures the proposed dwellings will have adequate light ventilation, privacy and amenity.

Parking Provisions

Parking provisions have been developed with input from JMT Consulting (see the detailed report for more information) and Purple Apple Access. Sufficient parking spaces have been allocated for both Residential and Care purposes, further parking has been provided on street for visitors. The existing parking area for the Golf Club has been maintained and expanded, ensuring the new Golf Club building has enough parking for future members.

PRINCIPLE 4 – SUSTAINABILITY

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

A seniors housing development that has immediate proximity to transport, on-site facilities for residents and provides for local employment opportunities, is an efficient use of resources by minimising the reliance on the local infrastructure and individual motor vehicle use. In addition to this, we note the following inclusions as part of the proposal will also contribute to minimising resources and energy.

ADG Compliance

The ADG requirement for solar access and cross-ventilation to the apartments has been achieved. This ensures a high level of comfort, reducing the strict necessity for air conditioning to maintain thermal comfort. Over 2 hours of solar access between 9 am and 3 pm has been provided to 70% of the apartments. Natural cross-ventilation has been integrated into 62% of the apartments (exceeding the minimum of 60%). The apartments will receive ample natural light, offer unique views, and provide excellent amenity. The orientation of the dwellings has been optimized to maximize solar amenity and incorporate passive design principles.

Materiality & Construction Waste

Typical floor plates have been designed to minimize structural transfers and false ceilings, which substantially reduces building materials and wastage required to construct the building.

Design

All units will have access to a substantial common open space, with considerable amenity, situated around the development, and will receive maximum solar exposure. Partly recessed and screened balconies will provide shading in summer months but will allow lower winter sun to enter internal areas for passive solar heating into all north facing apartments. BASIX compliance will be achieved and demonstrated. Solar panels will occupy much of the roof to generate electricity for the development. The development will be provided with electrical distribution boards dedicated to EV charging, ensuring future provision for 100% of car spaces to be charged.

Deep soil zones

Landscaped and deep soil areas dominate the development, providing 10,130 m² (26.8% of the development). Permeable pavers installed in the car parking spaces facilitate a sustainable water cycle. Evergreen trees serve as biofilters, while deciduous trees act as solar filters, following the landscape architect's design.

PRINCIPLE 5 – LANDSCAPE

“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 co-ordinating water and soil management, solar access, micro-climate, 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 useability, privacy and social opportunity, equitable access and respect for neighbours' amenity, and provide for practical establishment and long-term management.”

The design of the external environment is intended to create a sustainable, memorable and enjoyable landscape for future residents and users of the Golf Club. The design focuses on the retention of most of the existing established trees across the site and adds additional canopy through the installation of an extensive list of new endemic and native trees across the site, achieving a total of 39% of tree canopy coverage.

Plaza and entry

The primary vehicular and pedestrian entry to the site will be from Old Prospect Road. The pedestrian environments will be shaded, comfortable, accessible and activated by breakout and activity from the ancillary uses of the proposed Care Building. These areas will include a range of shade, shelter and amenity to encourage users to rest and enjoy this new environment. The pavement and design patterns of the ground plain and the built items in the landscape are inspired by the Gadigal carving patterns that are represented in the region as a design driver, which pays respect to Country and its people in a contemporary design manner.

Village heart and club

The primary and most vibrant centre of activity for the proposed community will be focused on the proposed new golf club building. Located centrally in the overall development, the club and associated outdoor environments provide for a range of flexible and functional open spaces for the community. Linked with the plaza and entry from Old Prospect Road, the west of the club will provide an outdoor and accessible children's play space for the benefit of users. This breakout space includes shade, shelter, accessible play and multi-functional open space opportunities connected to the proposed internal functions of the club house building.

Residential precincts

Residential precincts and surrounds to the residential buildings are interconnected through a consistent environmental design outcome which celebrates Country. To assist in wayfinding through the village for all users, distinctive and clearly recognisable vegetation will be provided to the entry to each residential building for identification. This intuitive wayfinding strategy will assist in pedestrian movement through the site and provide educational opportunities for residents through the village to understand more about

Country.

Old Prospect Rd frontage

The street frontage and presentation to the residential and road corridor will be enhanced to include extensive new tree, shrub and groundcover planting in addition to the retention of the existing trees. This generously sized landscape area will provide a range of passive functions for the benefit of residents, Country and the environment. This area will be revegetated with endemic Cumberland Plain Woodland species with additional bush tucker planting of the region, to create a nature bushtucker trail through the canopy of the existing trees.

Overall, the village will provide a sustainable, grounded and resilient residential environment for the future generations of users, their families and Country.

PRINCIPLE 6 – AMENITY

“Good design provides amenity through the physical, spatial and environmental quality of a development. Optimising amenity requires appropriate room dimensions and shapes, access to sunlight, natural ventilation, visual and acoustic privacy, storage, indoor and outdoor space, efficient layouts and service areas, outlook and ease of access for all age groups and degrees of mobility.”

The general design of the project has considered the use of space by different groups of people, ranging from Club Members, ILU and Residential Care residents and the broader community, as well as catering to varying degrees of mobility and promoting alternatives to car usage. The development features high-quality outdoor areas that incorporate vegetation and provide ample seating opportunities with recreational views.

All the ILU apartments are designed to achieve a high level of internal amenity. This is achieved by maximizing the number of dwellings with views to the Golf course and by providing the required solar access and cross ventilation to apartments. The proposed apartments will all have excellent amenity with 2 hours of solar access in mid-winter provided to 70% of the apartments between the hours of 9.00am and 3.00pm.

The ILUs are equipped with private, secure residential entry foyers in each of the six buildings. Lift access will be provided to all apartment levels and the under-croft parking, linking every floor with lower ground car parking areas. The lobbies at Lower Ground Level will present as clearly articulated entries to the residential buildings, providing a welcoming and secure environment for residents and their guests. Each independent living unit lobby provides access to three to eight apartments per level which provides intimacy and privacy for the residents. Additionally, most of the apartments on the lower ground floor have direct, independent entrances.

Large areas of glass are provided to living spaces, providing generous natural light and views. All apartments have balconies as their private open space. The depth and width of balconies will allow for various seating arrangements. The living rooms of the apartments open directly onto these balconies providing natural ventilation and outdoor living opportunities.

The communal areas have been carefully designed to provide large accessible outdoor spaces that can be enjoyed throughout the year by the residents and their visiting family and friends. In addition to that, a selection of on-site facilities and services have been incorporated into the new Cumberland Golf Club and Care Hub to accommodate the needs of residents, family and friends. This will ensure that the residents will remain connected to their greater community.

A large, surrounding communal landscape space with various amenities will be provided for the enjoyment of residents. The setting of this development within a beautiful golf course environment provides enviable amenity for the residents, club members and visitors to the site with fantastic views to the renewed landscape of the golf course. The entire development has been designed with accessible paths between the buildings, connecting the entire site, ensuring that all services are accessible to users. Sufficient accessible toilets and accessible adult change facilities have been provided for services in the Golf Club and Care Hub.

PRINCIPLE 7 – SAFETY

“Good design optimises safety and security, within the development and the public domain. It provides for quality public and private spaces that are clearly defined and fit for the intended purpose. Opportunities to maximise passive surveillance of public and communal areas promote safety. A positive relationship between public and private spaces is achieved through clearly defined secure access points and well-lit and visible areas that are easily maintained and appropriate to the location and purpose.”

General measures:

- Through site planning and internal layout planning, the design allows for significant observation and surveillance of the golf course and the common areas and entry lobbies of the development.
- Ensuring accessibility features throughout the development, including ramps, handrails, tactile indicators, and Braille signage, to accommodate residents and visitors with disabilities.
- Ensuring safe pedestrian access by incorporating well-marked crosswalks, pedestrian-friendly pathways, and adequate lighting in outdoor areas.
- Designation of specific parking areas for visitors, separated from resident parking, to maintain security and convenience.
- All car park areas on the car park levels will be well-lit, and the stairs and lift areas will have security controls.
- The new Cumberland Golf Club House will provide a level of passive security for the site due to its active uses and operating hours. The building includes the drop-off area and the reception area, which provides a safe and secure entry to the site for the residents and their visitors.
- The Care Hub building also includes a drop-off area and ambulance parking bay.
- The common open space design allows for surveillance and supervision by the staff on site which will enable Seniors to use, enjoy, socialise and move around the spaces without fear of falling, tripping and becoming disorientated. The provision of some staff on site, will provide the residents and their families a great deal of comfort knowing that in the event of an incident a Care Professional is on hand.

Residential areas:

- The residential apartment buildings will offer a secure environment. Access will be controlled by electronic security devices at both the vehicle entry points to the secure car park on the Lower Ground Floor and at the residential entry foyers, and pedestrian entry gates.
- 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 natural surveillance of the internal pathways and to the golf course.
- 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.

Childrens facilities:

- Natural play areas are centrally located and have been designed for easy monitoring.
- Pavements in play areas will avoid steps for safety of children when playing.

PRINCIPLE 8 – HOUSING DIVERSITY AND SOCIAL INTERACTIONS

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

Housing diversity:

The project prioritizes housing diversity by offering a varied unit mix. The development comprises 234 Seniors Independent Living Units, thoughtfully distributed across 1-bedroom, 2-bedroom, and 3-bedroom units. This diverse range of apartment sizes caters to residents with varying housing requirements. The development is located in the existing Cumberland Country Golf Club. The Seniors Housing Design Guide 2023 policy recognises the benefits of co-locating Seniors Living developments with registered clubs as the co-location benefits both uses.

The development also caters for seniors requiring more assisted care, with 38 Residential Care rooms located in 3 houses, each of these with separate nurse care and facilities.

Extensive research has been conducted to align housing options with the existing and future social fabric of the area. Retirement Villages provide a diversity of suitable housing for the ageing population that is not served by traditional housing types or apartment buildings. This approach ensures that the development resonates with the needs and preferences of the local community and frees up existing local housing stock for younger / family generations to utilise. The wide range of services and activities in the area provides opportunities for a broad spectrum of residents and inclusive communities.

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 a village heart, plazas, pocket parks, dog off-leash areas, and nature playgrounds. These spaces are strategically designed to facilitate social engagement among residents of all ages. Features like seating areas, BBQ facilities, and community gardens contribute to a welcoming environment.

The club will provide significant facilities on site which will appeal to its existing and future members and the residents of the Senior’s Living development. The use of these facilities will provide extensive opportunities for social interaction within this development. This interaction of the wider community with the seniors living residents will assist to minimise social isolation of our senior community.

PRINCIPLE 9 – AESTHETICS

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

The proposed development achieves design excellence through the careful modulation of building forms, the use of a restrained palette of materials that blends with the natural context and the character of the local context and through the deliberate architectural articulation of elements.

The design and detailing of the buildings are simple and clean to create a modern and timeless aesthetic. The design in plan introduces soft angles to the balconies to guide views towards the Golf Course, introducing dynamism into the façades.

The buildings incorporate contrast as a way of providing articulation to the simple facades. Off white balcony edges, combined with light colour brick blade walls, generate the main composition of the façade, rounded up by a simple concrete frame. These elements stand out over a darker brick base and the darker colour of the cladding to the penthouse levels, generating a recessed lower ground and top level, lowering the perceived height of the buildings and helping them blend into the tree line when viewed from a distance. Colours have been thoughtfully chosen to add depth, break up lengths, and achieve volumetric and aesthetic objectives.

The ILU buildings incorporate different shades of brick and tonalities for each building, introducing legibility and distinctiveness to seniors’ homes.

The new Cumberland Golf Club has been conceived as the iconic centrepiece of the development and sits at the centre of the aesthetic composition. Its design is a beautiful and dramatic form, opening towards the views and light, and becomes the reference point for golfers when viewed from the golf course.

The Care Hub building has been designed to respond to the street interface as well as the new development, combining the materials used for the ILUs with more residential forms, using the pitched roofs as reference to the neighbouring buildings and giving the aspect of lower scale to passers-by.

Particular attention has been given to the ground floor design. The shared areas and interior streets will feature high-quality pavements, furniture, and finishes. The Darug interpretive paving patterns design pays respect to Country and its people in a contemporary design manner. The constructed elements and vegetation will mutually enhance their aesthetic qualities.

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		
<p><i>Objective 3A-1</i></p> <p>Site analysis illustrates that design decisions have been based on opportunities and constraints of the site conditions and their relationship to the surrounding context.</p>	<p>The proposal is the result of a lengthy consultation, planning and design process that has sought to address the constraints and opportunities that exist on the site.</p> <p>This analysis identified, amongst other things:</p> <ul style="list-style-type: none"> • Current and future local character, site context and amenity. • Topography, vegetation and waterways. • Significant views to and from the site. • Surrounding built form and materials. • Public domain interfaces • LEP controls, including zoning and height limitations. • DCP and relevant SEPP controls. 	Achieved
3B Orientation		
<p><i>Objective 3B-1</i></p> <p>Building types and layouts respond to the streetscape and site while optimising solar access within the development.</p>	<p>The development site has two street frontages: a primary frontage along Old Prospect Road, which provides two points of access for vehicles, and although the site does not adjoin the road reserve along Brighton Street, this secondary frontage allows the longest view corridor into the golf course, as the significant trees along Old Prospect Road and the ridge line / dam walls running parallel to this site boundary block the views into the site from this frontage.</p> <p>The buildings have been set back significantly from the primary frontage of Old Prospect Road and placed along the ridge line to allow for the significant trees on the boundary to provide visual screening for the</p>	Achieved

Part 3 Siting the Development		
	<p>ILU buildings while the Clubhouse is placed in the most prominent position in the gap between the trees.</p> <p>The desire to maximize direct solar access and the views over the golf course to the south have been balanced, with 70 of the ILUs receiving a minimum of 2 hours of solar access during mid-winter.</p>	
<p><i>Objective 3B-2</i></p> <p>Overshadowing of neighbouring properties is minimised during mid-winter.</p>	<p>As the proposed development has been setback significantly back from the site boundaries, with its highest buildings pushed to the centre of the site, the shadows cast on neighbouring residential properties has been minimised with only Building F casting a shadow onto 25, 27 & 29 Kootingal Street from 2pm in mid-winter.</p> <p>There is no overshadowing between the hours of 9am to 3pm in mid-winter for the remaining neighbouring properties and therefore the proposal does not reduce solar access to neighbouring residential uses.</p>	Achieved
3C – Public Domain Interface		
<p><i>Objective 3C-1</i></p> <p>Transition between private and public domain is achieved without compromising safety and security.</p>	<p>The built form has been oriented to minimize potential conflicts among residents.</p> <p>The units on the Lower Ground Level and Ground Level feature landscaped planters as well as fencing around their private open space, 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.</p> <p>Clear, identifiable entries have been established for each residential building. The Clubhouse and Care Hub also have well-defined access points.</p>	Achieved
<p><i>Objective 3C-2</i></p>		

Part 3 Siting the Development		
<p>Amenity of the public domain is retained and enhanced.</p>	<p>The public domain along Old Prospect Road and relationship of the club to the street has been enhanced with the creation of a publicly accessible plaza situated in front of the Golf Clubhouse and the Care Hub allowing for pedestrian access directly off Old Prospect Road to the club and Care Hub facilities.</p> <p>A child's play area has also been incorporated in the village heart, situated in front of the Care Hub building between Building C, the Clubhouse. The play space will be serviced by the Café proposed on the ground floor of the club and allow for a true multi-generational space where public, golf club members, ILU residents, Care Hub residents and visitor can mix freely.</p> <p>Extensive landscaping is proposed as part of the scheme to revegetate the site.</p> <p>The existing club car park will be refurbished with the screening benefits of the retained significant trees enhanced with the substantial supplementary planting proposed.</p> <p>The proposal minimizes access ramps by locating the building entrances and setting ground floor levels in relation to footpath levels to enable levels transitions to be achieved by maximum 1:20 gradients.</p>	<p>Achieved</p>
3D Communal and Public Open Space		
<p><i>Objective 3D-1</i></p> <p>An adequate area of communal open space is provided to enhance residential amenity and to provide opportunities for landscaping.</p>	<p>Significant Communal and Publicly accessible Open Space has been provided within the development allowing residents access to a variety of external activities and experiences.</p> <p>The proposed landscape design provides accessible pedestrian pathways through the remnant Cumberland Plain Woodland on Old Prospect Road as well as the additional pocket created at the Kunyal Place entry area. Both of these areas with existing large trees are to be supplemented with additional planting.</p> <p>A publicly accessible plaza and children's</p>	<p>Achieved</p>

Part 3 Siting the Development		
	play area are also proposed for the development.	
<i>Design Criteria</i> Communal open space has a minimum area equal to 25% of the site.	The proposed development is compliant, with approximately 9,507m ² or 25.2% of the site area set aside for communal open space. In addition to this, approximately 1630m ² of publicly accessible open space has been provided.	
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 development exceeds the minimum compliance of 50% direct sunlight to the principal usable part of the communal open space for at least 2 hours on June 21.	
<i>Objective 3D-2</i> 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. All these spaces are internal to the site between the buildings. They ensure all residents have an equal opportunity to use the varying spaces. The following elements will be provided: <ul style="list-style-type: none"> • Seating areas • BBQ areas • Dining areas • Sundecks 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.	Achieved
<i>Objective 3D-3</i> Communal open space is designed to maximise safety.	All buildings address the communal open space ensuring passive surveillance occurs across this space, maximising safety.	Achieved
3E Deep Soil Zones		
<i>Objective</i> Deep soil zones provide areas on the site	Deep soil areas have been maintained	

Part 3 Siting the Development

that allow for and support healthy plant and tree growth. They improve residential amenity and promote management of water and air quality.

within the remanent Cumberland Plain Bushland areas and along the boundary to the neighbouring sites to the east. Both areas are large and support the growth of significant existing trees in excess of 20m in height. In addition to this deep soil is provided with the children’s play area and between the clubhouse & Building D, Building D & Building E, Building E & Building F and between Building F and the boundary

Achieved

Design Criteria

Deep soil zones are to meet the following minimum requirements:

Site Area	Minimum Dimensions	Deep Soil Zone (% of site area)
Less than 650m ²	-	7%
650m ² – 1,500m ²	3m	
Greater than 1,500m ²	6m	
> 1,500m ² with significant existing tree cover	6m	

Approximately 10,534m² of deep soil or 28% of the development area is proposed within the development. This is well in excess of the minimum 15% required.

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

Part 3 Siting the Development

Building F:



A minimum 12m building separation is provided between all buildings and appropriate visual screening included where required to maintain visual privacy between habitable spaces.

Objective 3F-2

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 the individual requirements of their specific location within the development, including height modulation and topography, while allowing for building articulation throughout the development.

Facade elements have been designed to ensure privacy through the use of solar screens, planters, and balustrades.

Particular attention has been paid to the relationships between units facing the development's internal road and those located at street level.

The canopy trees along Old Prospect Road, along with additional planting will serve as a green buffer to the existing built fabric of the neighbourhood.

Solar access and cross ventilation have been achieved and are in compliance with ADG guidelines.

Achieved

3G Pedestrian access and entries

Objective 3G-1

Building entries and pedestrian access connects to and addresses the public domain.

All buildings are designed to respond to their various street and internal contexts by providing convenient access points for all residents. Lobbies will be directly accessible from the internal street. The communal

Achieved

Part 3 Siting the Development		
	areas proposed in front of the lobbies allow for a transitional semi-public area which addresses the public domain while providing a convenient and pleasant space for interaction between residents.	
<p><i>Objective 3G-2</i></p> <p>Access, entries and pathways are accessible and easy to identify.</p>	<p>Access points within the overall development are readily visible and accessible from the internal roadway.</p> <p>The pedestrian link from east to west, originating at the secondary entry on Old Prospect Road and flowing all the way through to the eastern entry off Kunyal Plance, establishes a clear, easily pathway through the development, creating a familiar experience for both residents and visitors.</p> <p>The development has been carefully designed to provide a distinct sense of entry for each building. All lobbies share a similar design however distinctive elements have been added to each building, both within the material choices and the detail of the screening provided.</p>	Achieved
<p><i>Objective 3G-3</i></p> <p>Large sites provide pedestrian links for access to streets and connection to destinations.</p>	<p>The proposal offers excellent permeability and pedestrian connections through the site, extending from the existing public footpaths to the publicly accessible plaza and children's play area.</p> <p>The development of the east-west through link along the roadway creates a connection into the surrounding neighbourhood and provides a clear pathway to navigate the site providing ease of access to the Clubhouse and Care Hub and the ILUs</p>	Achieved
3H Vehicle Access		
<p><i>Objective 3H-1</i></p> <p>Vehicle access points are designed and located to achieve safety, minimise conflicts between pedestrians and vehicles and create high quality streetscapes.</p>	<p>There are three vehicle access points proposed for the development.</p> <p>The primary vehicular access point is central to the site, (moved slightly west of the existing club car park entry) and will serve as the main entry to the clubhouse, the club</p>	Achieved

Part 3 Siting the Development		
	<p>parking, the care hub and provide access for service vehicles to both loading docks, restricting large vehicles to the centre of the site, away from the residential precincts.</p> <p>The two secondary access points, the western most entry off Old Prospect Road will provide access to the western residential precinct and the eastern access point off Kunyal Place will provide access to the eastern residential precinct. These secondary points will be controlled to limit access outside of hours to ensure security to the residential precincts.</p> <p>Vehicular access points to the parking areas both on grade and in the under crofts all have good sight line to their crossings and shallow grades to minimize potential impediment to visibility.</p>	
3J Bicycle and Car Parking		
<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 to the residential precincts in accordance with the seniors housing SEPP, adequate provision for the golfclub and care hub facilities have also been provided.	Achieved
<i>Objective 3J-2</i>		
Parking and facilities are provided for other modes of transport.	As the development caters for golfers, seniors, and people in residential care it is anticipated that most users will use either their own cars or the bus, with bus stop situated on Old Prospect Road immediately outside the development. <p>Additionally bicycle parking will be provided within the Care Hub for staff and visitor / non-residential use.</p>	Achieved
<i>Objective 3J-3</i>		
Car park design and access is safe and secure.	The car park design and access has been assessed by a traffic consultant and is considered safe. The under-croft parking for the ILUs will be secured withy access control and the club parking will be well lit with CCTV / security cameras as required.	Achieved
<i>Objective 3J-4</i>		

Part 3 Siting the Development		
Visual and environmental impacts of underground car parking are minimised.	No underground carparking is proposed.	Achieved
<i>Objective 3J-5</i> Visual and environmental impacts of on-grade car parking are minimised.	The retention of the existing on grade club parking and existing large trees supplemented with additional planting, minimizes the potential environmental impact of a new on grade parking that would be required.	Achieved
<i>Objective 3J-6</i> Visual and environmental impacts of above ground enclosed car parking are minimised.	The under-croft parking areas are set into the existing folds / mounds of the golf course and are sleaved with garden units facing the internal street screening them from view and minimizing their visual impact.	Achieved

Part 4 Designing the Buildings

4A Solar and Daylight access

<p><i>Objective 4A-1</i></p> <p>To optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space</p>	<p>The proposal is compliant with the design criteria as outlined below.</p>	<p>Achieved</p>
<p><i>Design Criteria</i></p> <p>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.</p>	<p>Compliant.</p> <p>70% of units receive a minimum of 2 hours of direct sunlight.</p>	
<p>A maximum of 15% of apartments in a building receive no direct sunlight between 9 am and 3 pm at mid-winter.</p>	<p>On Merit.</p> <p>17.95% of the apartments receive no direct sunlight between 9 am and 3 pm, however these apartments have been orientated to maximise the views to the golf course from their living rooms and have been designed with either a shallow plan to allow light to penetrate the apartment or are corner apartments. All have good amenity.</p>	
<p><i>Objective 4A-2</i></p> <p>Daylight access is maximised where sunlight is limited</p>	<p>Solar access to the site is not limited and all apartments will be provided with a compliant level of solar access.</p>	<p>Achieved</p>
<p><i>Objective 4A-3</i></p> <p>Design incorporates shading and glare control, particularly for warmer months</p>	<p>Recessed balconies will provide shading in summer months but allow lower winter sun to enter internal areas for passive solar heating in north facing apartments.</p> <p>The use of different sun shading devices and appropriate glare control to the various facades creates a dramatic and varied character.</p> <ul style="list-style-type: none"> - Perforated screens to the west and east facing facades will help 	<p>Achieved</p>

Part 4 Designing the Buildings

	<p>improve the amenity in the warmer months.</p> <ul style="list-style-type: none"> - On the north facing facades, privacy screens will modulate the solar heat gain during summer. <p>BASIX compliance will be achieved and demonstrated.</p>		
4B Natural Ventilation			
<p><i>Objective 4B-1</i></p> <p>All habitable rooms are naturally ventilated</p>	All habitable rooms are naturally ventilated.	Achieved	
<p><i>Objective 4B-2</i></p> <p>The layout and design of single aspect apartments maximises natural ventilation</p>	The maximum depth for single aspect apartment layout (living, dining, kitchen) will be no more than 8m as per ADG criteria to maximise ventilation airflow.	Achieved	
<p><i>Objective 4B-3</i></p> <p>The number of apartments with natural cross ventilation is maximised to create a comfortable indoor environment for residents</p>	The proposal is compliant with the design criteria as outlined below.	Achieved	
<p><i>Design Criteria</i></p> <p>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.</p>	The apartments achieve cross-ventilation criteria with 61% being cross-ventilated.	Achieved	
<p>Overall depth of a cross-over or cross-through apartment does not exceed 18m, measured glass line to glass line.</p>	Complies. No cross over or through units are proposed.		
4C Ceiling Height			
<p><i>Objective</i></p> <p>Ceiling height achieves sufficient natural ventilation and daylight access</p>	The proposal is compliant with the design criteria as outlined below.	Achieved	
<p><i>Design Criteria</i></p> <p>Measured from finished floor level to finished ceiling level, minimum ceiling heights are:</p> <table border="1" data-bbox="193 1982 715 2042"> <tr> <td>Minimum ceiling height</td> </tr> </table>	Minimum ceiling height	All the apartments have been provided with the compliant finished floor level to minimum ceiling heights as a minimum	
Minimum ceiling height			

Part 4 Designing the Buildings

Habitable rooms	2.7m	according to the design criteria.	
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		

These minimums do not preclude higher ceilings if desired.

4D Apartment Size and Layout

<p><i>Objective 4D-1</i></p> <p>The layout of rooms within an apartment is functional, well organised and provides a high standard of amenity.</p>	<p>The proposal is compliant with the design criteria as outlined below.</p>	Achieved									
<p><i>Design Criteria</i></p> <p>Apartments are required to have the following minimum internal areas:</p> <table border="1"> <thead> <tr> <th>Apartment Type</th> <th>Minimum internal area</th> </tr> </thead> <tbody> <tr> <td>Studio</td> <td>35m²</td> </tr> <tr> <td>1 bedroom</td> <td>50m²</td> </tr> <tr> <td>2 bedroom</td> <td>70m²</td> </tr> <tr> <td>3 bedroom</td> <td>90m²</td> </tr> </tbody> </table> <p>The minimum internal areas include only one bathroom. Additional bathrooms increase the minimum internal area by 5m² each.</p> <p>A fourth bedroom and further additional bedrooms increase the minimum internal area by 12m² each.</p>	Apartment Type		Minimum internal area	Studio	35m ²	1 bedroom	50m ²	2 bedroom	70m ²	3 bedroom	90m ²
Apartment Type	Minimum internal area										
Studio	35m ²										
1 bedroom	50m ²										
2 bedroom	70m ²										
3 bedroom	90m ²										

Part 4 Designing the Buildings

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.	Compliant	
In open plan layouts (where the living, dining and kitchen are combined) the maximum habitable room depth is 8m from a window.	On merit Unit layouts are slightly over the 8m maximum depth to ensure adequate circulation, suitable for seniors living, within the unit and to allow for the kitchen island to be shifted if required to accommodate 1550mm clear as required by the Housing SEPP.	
<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.	
Living rooms or combined living/dining rooms have a minimum width of: <ul style="list-style-type: none"> • 3.6m for studio and 1 bedroom apartments • 4m for 2 and 3 bedroom apartments 	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>		

Part 4 Designing the Buildings

Apartments provide appropriately sized private open space and balconies to enhance residential amenity

Design Criteria

All apartments are required to have primary balconies as follows:

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

The minimum balcony depth to be counted as contributing to the balcony area is 1m.

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

Compliant.

All the apartments are provided with a minimum primary balcony area of and minimum depth over 1m.

Any balcony areas where minimum depth is below 1m have not been included in calculations.

Achieved

For apartments at ground level or on a podium or similar structure, a private open space is provided instead of a balcony. It must have a minimum area of 15m² and a minimum depth of 3m.

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 and courtyards.

Achieved

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 designed as part of the façade, introducing angles capturing the best views of the golf course and generating dynamism across the buildings.

Additionally, perforated metal solar screens are incorporated onto the facades, enhancing privacy, and contributing to the overall design.

Private open spaces on the ground

Achieved

Part 4 Designing the Buildings

	<p>floor harmonize with and adapt to the landscape's design, maintaining a cohesive design language with the rest of the landscaped areas at ground level. They are also provided with pergolas for shading in the warm months.</p>	
<p><i>Objective 4E-4</i> Private open space and balcony design maximises safety</p>	<p>The changes of level in ground levels or landscaping pavements have been designed with accessible pathways of 1:20 or less grade change, for improved liveability of the units.</p> <p>There is no level difference between the interior finished floor level of the units and the private open space.</p> <p>Safety will be ensured within the balconies with appropriate materiality and parapet heights preventing falls or climbing.</p> <p>Balconies will provide passive surveillance of the site's surroundings.</p>	<p>Achieved</p>
<p>4F Common Circulation and Spaces</p>		
<p><i>Objective 4F-1</i> Common circulation spaces achieve good amenity and properly service the number of apartments</p>	<p>Common circulation spaces on the residential blocks count with greater than minimum requirements for corridor widths and ceiling heights allow comfortable movement and access particularly in entry lobbies, outside lifts and at apartment entry doors.</p>	<p>Achieved.</p>
<p><i>Design Criteria</i> The maximum number of apartments off a circulation core on a single level is eight.</p> <p><i>Design Guidance</i> Achieving the design criteria for the number of apartments off a circulation core may not be possible. Where a development is unable to</p>	<p>Compliant, maximum number of units per level ranges from 3 to 8.</p>	

Part 4 Designing the Buildings

achieve the design criteria, a high level of amenity for common lobbies, corridors and apartments should be demonstrated, including:

- sunlight and natural cross ventilation in apartments
- access to ample daylight and natural ventilation in common circulation spaces
- common areas for seating and gathering
- generous corridors with greater than minimum ceiling heights
- other innovative design solutions that provide high levels of amenity

Objective 4F-2

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 socialization within these spaces while ensuring safe movement without concerns of falling or tripping.

Sunlight and natural ventilation have been incorporated into common corridors, enhancing the overall amenity of these circulation areas.

Achieved

4G Storage

Objective 4G-1

Adequate, well-designed storage is provided in each apartment

Compliant, refer to storage diagrams for details.

Achieved

Design Criteria

In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided:

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 complementary storage is available on each carparking level or in designated storage areas.

Part 4 Designing the Buildings

<p>At least 50% of the required storage is to be located within the apartment.</p>		
<p><i>Objective 4G-2</i> Additional storage is conveniently located, accessible and nominated for individual apartments</p>	<p>Storage is available in car parking areas or in a specifically allocated room. All storage areas are in cages so that storage remains secure.</p>	<p>Achieved</p>
<h3>4H Acoustic Privacy</h3>		
<p><i>Objective 4H-1</i> Noise transfer is minimised through the siting of buildings and building layout</p>	<p>An acoustic study and report have been conducted to ensure compliance with noise impact regulations. Possible sources of noise transfer identified include the first-floor dining and lounge to the south of the development and second floor function rooms to the south of the development. The study recommends limiting the operating time for these premises. At this stage, no significant problems have been identified. Further studies will be required as the project becomes more defined. For additional details, please refer to the report.</p>	<p>Achieved</p>
<p><i>Objective 4H-2</i> Noise impacts are mitigated within apartments through layout and acoustic treatments</p>	<p>Internal apartment layout separates noisy spaces from quiet spaces having rooms with similar noise requirements grouped together and doors separating different use zones.</p>	<p>Achieved</p>
<h3>4J Noise and Pollution</h3>		
<p><i>Objective 4J-1</i> In noisy or hostile environments, the impacts of external noise and pollution are minimised through the careful siting and layout of buildings</p>	<p>An acoustic study and report have been conducted to ensure compliance with noise regulations. The report evaluates traffic noise. Please refer to the report for more</p>	<p>Achieved</p>

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	<p>details.</p> <p>Design measures include large setback from the residential buildings to the boundary and maintaining the mature existing trees, thus reducing the impact of traffic noise at Old Prospect Rd.</p>	
<p><i>Objective 4J-2</i></p> <p>Appropriate noise shielding or attenuation techniques for the building design, construction, and choice of materials are used to mitigate noise transmission</p>	<p>Minimum noise transmission is ensured. Please refer to Acoustic report</p>	<p>Achieved</p>
<h3>4K Apartment Mix</h3>		
<p><i>Objective 4K-1</i></p> <p>A range of apartment types and sizes is provided to cater for different household types now and into the future</p>	<p>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.</p> <p>The development includes 1B (5%), 2B (23%), 2b+S (32%), 3B (35%) and 3B Penthouses (5%) apartments, which is an adequate typology variety for the area.</p>	<p>Achieved</p>
<p><i>Objective 4K-2</i></p> <p>The apartment mix is distributed to suitable locations within the building</p>	<p>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 views to the golf course and solar access.</p>	<p>Achieved</p>
<h3>4L Ground floor apartments</h3>		
<p><i>Objective 4L-1</i></p> <p>Street frontage activity is maximised where ground floor apartments are located</p>	<p>Direct street access is provided to lower ground units. Additionally, most apartments located on the internal communal areas have a</p>	<p>Achieved</p>

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	<p>direct access from those areas.</p> <p>Activity is achieved through front gardens, terraces, and the facade of the building, as well as interaction with the club and residential care services.</p> <p>Private open space is next to the street. Doors and windows face the street.</p> <p>Landscape activated spaces and activities activate the street and the open spaces.</p>	
<p><i>Objective 4L-2</i></p> <p>Design of ground floor apartments delivers amenity and safety for residents</p>	<p>Privacy is ensured through adequate integrated fencing and landscape but also opportunities for the residents to engage with neighbours.</p> <p>Greater amenity provided to the units at ground floor through the landscaped private open space.</p> <p>Shading is provided for the private open spaces through pergolas.</p>	<p>Achieved</p>
<p>4M Facades</p>		
<p><i>Objective 4M-1</i></p> <p>Building facades provide visual interest along the street while respecting the character of the local area</p>	<p>The buildings form and materiality of the development responds to the context.</p> <p>The design and detailing of the buildings are simple and clean to create a modern and timeless aesthetic.</p> <p>The design in plan introduces soft angles in balconies to guide views towards the Golf Course, introducing dynamism into the façades.</p> <p>The buildings incorporate contrast as a way of providing articulation to the simple facades.</p> <p>The building also incorporates a recessed top level, lowering the perceived height of the buildings</p>	<p>Achieved</p>

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	<p>and helping them blend into the tree line when viewed from a distance.</p> <p>Colours have been thoughtfully chosen to add depth, break up lengths, and achieve volumetric and aesthetic objectives.</p>	
<p><i>Objective 4M-2</i></p> <p>Building functions are expressed by the facade</p>	<p>Building entries are clearly defined.</p> <p>The apartment layout has been expressed externally, through the change in depth of planes for the balconies and the shown structure.</p> <p>The residential care building is designed with a more residential look.</p>	Achieved
4N Roof design		
<p><i>Objective 4N-1</i></p> <p>Roof treatments are integrated into the building design and positively respond to the street</p>	<p>For all buildings, the roofs are flat with plant screening located to the middle of building to minimise sight lines from ground levels.</p> <p>Top levels have a setback that allows privacy and minimises visual impact.</p>	Achieved
<p><i>Objective 4N-2</i></p> <p>Opportunities to use roof space for residential accommodation and open space are maximised</p>	<p>Large terraces have been provided on setback levels, with the remainder of the roof given over to photovoltaic solar panels.</p>	Achieved
<p><i>Objective 4N-3</i></p> <p>Roof design incorporates sustainability features</p>	<p>Roofs incorporate sky lights to allow for passive ventilation and solar access into the units. The roof also includes photovoltaic panels.</p>	Achieved
4O Landscape design		
<p><i>Objective 4O-1</i></p> <p>Landscape design is viable and sustainable</p>	<p>The design of the external environments intends to create a sustainable, memorable and enjoyable landscape for future</p>	Achieved

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	residents and users of the Golf Club. Please refer to Landscape Design by Taylor Brammer Landscape Architects.	
<p><i>Objective 4O-2</i></p> <p>Landscape design contributes to the streetscape and amenity</p>	<p>The landscape design is a critical component of the proposal and has been thoughtfully prepared.</p> <p>Landscape Architects and Architects have worked collaboratively to achieve site specific landscape scheme.</p> <p>The design responds to the existing site conditions including changes of levels, views, significant landscape features.</p> <p>Residential precincts and surrounds to the residential buildings are interconnected through a consistent environmental design outcome which celebrates Country.</p>	Achieved
4P Planting on structures		
<p><i>Objective 4P-1</i></p> <p>Appropriate soil profiles are provided</p>	Suitable soil profiles will be provided.	Achieved
<p><i>Objective 4P-2</i></p> <p>Plant growth is optimised with appropriate selection and maintenance</p>	Endemic species have been selected. Refer to landscape report for further details	Achieved
<p><i>Objective 4P-3</i></p> <p>Planting on structures contributes to the quality and amenity of communal and public open spaces</p>	The internal areas will offer a diversity of spaces to the surrounding areas and will offer high quality and amenity.	Achieved
4Q Universal Design		
<p><i>Objective 4Q-1</i></p> <p>Universal design features are included in apartment design to promote flexible housing for all community members</p>	All the apartments achieve the standards for Housing SEPP Seniors Living and Liveable Housing Guideline's silver level	Achieved

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	universal design features.	
<p><i>Objective 4Q-2</i></p> <p>A variety of apartments with adaptable designs are provided</p>	Refer to Access report prepared by Purple Access Consultants.	Achieved
<p><i>Objective 4Q-3</i></p> <p>Apartment layouts are flexible and accommodate a range of lifestyle needs</p>	The apartments have been designed to allow for a flexible room layout, often accommodating media desks or spaces that can be switched between study to living space to allow for visitors to stay with the residents and friends to visit.	Achieved
4U Energy Efficiency		
<p><i>Objective 4U-1</i></p> <p>Development incorporates passive environmental design</p>	<p>The development is compliant with the ADG figures for solar access and cross-ventilation, meaning that the internal spaces will not be solely reliant on-air conditioning to maintain thermal comfort.</p> <p>PV panels have been incorporated into the design.</p> <p>Shading is reliant on existing trees.</p> <p>A strategy has been put in place for rainwater to be directed to the existing ponds and be reused in golf course and landscape irrigation</p>	Achieved
<p><i>Objective 4U-2</i></p> <p>Development incorporates passive solar design to optimise heat storage in winter and reduce heat transfer in summer</p>	At least 2 hours of solar access in the middle of winter is provided to 70% 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.	Achieved
<p><i>Objective 4U-3</i></p> <p>Adequate natural ventilation minimises the need for mechanical ventilation</p>	Natural cross ventilation is provided to 62% of the units, in excess of the minimum rule of thumb of 60%.	Achieved

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4V Waste Management and conservation

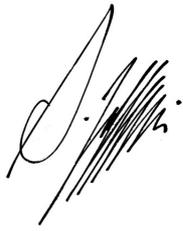
<i>Objective 4V-1</i> Potable water use is minimised	Water re-use is proposed, refer to Civil drawings for details.	Achieved
<i>Objective 4V-2</i> Urban stormwater is treated on site before being discharged to receiving waters	Complies. Refer to Civil drawings for details.	Achieved
<i>Objective 4V-3</i> Flood management systems are integrated into site design	Complies. Refer to Civil drawings for details.	Achieved

4W Waste management

<i>Objective 4W-1</i> Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity of residents	Waste storage is located on the carpark areas and collected from the two temporary holding points, to prevent any impact on the amenity of the residents.	Achieved
<i>Objective 4W-2</i> Domestic waste is minimised by providing safe and convenient source separation and recycling	General waste and recycling bins are located separately within designated waste rooms for every building.	Achieved

4X Building Maintenance

<i>Objective 4X-1</i> Building design detail provides protection from weathering	Design solutions will be provided. Appropriate materials are provided requiring low maintenance.	Achieved
<i>Objective 4X-2</i> Systems and access enable ease of maintenance	The design enables easy cleaning from the inside of the buildings. Easy to maintain solutions will be provided.	Achieved
<i>Objective 4X-3</i> Material selection reduces ongoing maintenance costs	Durable and low maintenance materials that weather well will be prescribed.	Achieved



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