MAKO ARCHITECTURE

Design Statement

Prepared to accompany the
Development Application submitted to
Campbelltown City Council for:

Lot 194, Road No 2, Rosemeadow

On behalf of NSW Land and Housing Corporation

ISSUE 02
14 April 2021

Contents

Design Verification Statement

With respect to the architectural documentation lodged in conjunction with this Development Application, I make the following statements:

- I am an Architect registered in NSW (Reg No. 9520) and as such, a qualified designer under clause 50 (1A)
- MAKO Architecture have been responsible for the design of the project since its inception and have worked with related professionals and experts in working towards this design outcome.
- The project has been designed to provide a development that is respectful of local planning and design controls and responds to the nine design quality principles of SEPP No. 65.
- MAKO Architecture verify as required by Clause 50 (1AB) of the Environmental Planning and Assessment Regulation 2000, that the design quality principles set out in Schedule 1 of State Environmental Planning Policy No. 65 – Design Quality of Residential Apartment Development and the objectives in Part 3 and Part 4 of the Apartment Design Guide have been achieved for the proposed development as detailed on the following pages.

Simon Mather

Director

MAKO Architecture

SEPP 65 DESIGN QUALITY CRITERIA

Principle / Criteria	Response
Principle 1: Context and Neighbourhood Character Good design responds and contributes to its context. Context is the key natural and built features of an area, their relationship and the character they create when combined. It also includes social, economic, health and environmental conditions. Responding to context involves identifying the desirable elements of an area's existing or future character. Well designed buildings respond to and enhance the qualities and identity of the area including the adjacent sites, streetscape and neighbourhood. Consideration of local context is important for all sites, including sites in established areas, those undergoing change or identified for change.	The proposal is for a new seniors social housing development under SEPP (Housing for Seniors and People with a Disability) 2004 as a part of Stage 3 of the Communities Plus Rosemeadow Renewal project masterplan. The site has been selected for seniors housing due to its close proximity to Rosemeadow Marketplace Shopping Mall and the services it provides. The area is undergoing significant change. The proposal will deliver good quality social housing for seniors, providing broad social, economic, health and environmental benefits to the community. The proposal responds to the topography by having two rows of buildings organised to run north-south following the site contours. A landscaped central courtyard manages the change in levels between the buildings. Small footprint buildings allow for a slight step with the cross fall. Car parking is located in a single split-level basement to avoid large areas of surface parking. The proposal will respond to and enhances the qualities and identity of the area through its relationship to adjacent sites, streetscape and neighbourhood through its built form strategy and landscape design (see below).
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.	The proposal is designed to be a 'good neighbour' and achieve a positive contextual 'fit' with the future masterplanned context. The site has its frontage to Road No 2 to the west. To the east, a drainage easement provides a wide buffer to Copperfield Drive. To the north, subdivisions are proposed for future detached dwellings. To the south, a site is intended for future townhouses. The proposal will be constructed prior to adjacent lots and will be a 'known quantity' to future neighbours. Buildings A, B and C directly address the Road No 2 street frontage and will activate the streetscape. The length of building along Road No 2 is broken to reduce its scale with a gap located on axis with a perpendicular street permitting a view into the landscape courtyard. This gap also provides a collective entry for Buildings D, E and F which are to the rear of the site. The uppermost storey of building A and B are partially setback to reduce scale and create a varied skyline. Buildings C and F are two storeys to provide an appropriate height adjacent to future two storey detached dwellings to the north. Building D is two storeys and Building A has a large setback to provide an appropriate height and separation adjacent to future two storey medium density townhouses to the south. Buildings D, E and F benefit from a very large setback to Copperfield Drive across the drainage easement reducing their apparent scale from the public domain, and are stepped in plan to further break down massing. All buildings are highly articulated with building entries, balconies, awnings and angled parapet lines. Deep soil landscaped setbacks to all boundaries allowing for canopy tree planting which will soften the appearance of the buildings, provide a pleasant green presentation to the public domain and a positive outlook for residents and neighbours. The proposal has been purposefully composed of multiple smaller buildings served by separate lift and stair cores. This reduces the apparent bulk of the buildings and creates a more domestic quality and scale. Dwellings primarily face forwards and back, providing a positive outlook to the street and courtyard and delivering excellent internal amenity.

SEPP 65 DESIGN QUALITY CRITERIA

Principle / Criteria	Response
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.	The proposal achieves excellent internal amenity for the residents of each apartment. Building depths are narrow, habitable rooms are not too deep, there is ample perimeter wall length for windows and apartments are primarily dual aspect. These features mean that excellent daylight and natural ventilation is provided to all apartments. Impacts to neighbours are minimised. The proposal will not detrimentally overlook or overshadow neighbouring development. The number and mix of dwellings proposed is consistent with the Communities Plus Rosemeadow Renewal project masterplan and will be adequately serviced by existing and proposed infrastructure. The site is in close proximity to bus services along Copperfield Drive and Rosemeadow Marketplace Shopping Mall and the services it provides.
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.	The proposal exhibits superior passive environmental design features. A high proportion of apartments are naturally cross ventilated. A high proportion of apartments receive adequate solar access in mid-winter. No apartments receive no sun. Passive thermal design is provided by face brick and concrete walls and structure which will keep the buildings cooler in summer and warmer in winter. Dual aspect apartments reduce the need for mechanical ventilation and shallow habitable room depths reduce the need for artificial lighting during the day. All living rooms and bedrooms will have ceiling fans for resident comfort. The materials selected have relatively low embodied energy. Lobbies are open in design for fresh air, but are covered to provide shelter from the elements. The basement car park is predominantly located below the building footprint allowing for plentiful areas of deep soil at the perimeter of the site and between the buildings. These deep soil areas allow for infiltration of rain to the water table and are able to support larger trees which will reduce the urban heat island effect.
Principle 5: Landscape Good design recognises that together landscape and buildings operate as an integrated and sustainable system, resulting in attractive developments with good amenity. A positive image and contextual fit of well designed developments is achieved by contributing to the landscape character of the streetscape and neighbourhood. Good landscape design enhances the development's environmental performance by retaining positive natural features which contribute to the local context, co-ordinating water and soil management, solar access, micro-climate, tree canopy, habitat values, and preserving green networks. Good landscape design optimises usability, privacy and opportunities for social interaction, equitable access, respect for neighbours' amenity, provides for practical establishment and long term management.	The proposal provides deep soil landscaped setbacks to all boundaries allowing for canopy tree planting which will soften the appearance of the buildings, provide a pleasant green presentation to the public domain and a positive outlook for neighbours. This will contribute to the positive identity and attractiveness of the area. Once the trees mature, they will match or exceed the height of the buildings and enhance their environmental performance by contributing to the shading of dwellings, cooling the air and improving outlook. The landscaped central courtyard provides a positive focus for the proposal with ample sun throughout the middle of the day. The southern end of the courtyard (above the basement car park) provides a hard paved space and barbecue area for gathering. The northern end of the courtyard maximises deep soil and tree planting. Private open spaces are buffered by planter beds to increase separation and privacy. All areas of the communal open space are accessible with well-integrated ramps coupled with stairs for direct lines of movement. All pathways are framed by planting and include seating to make movement enjoyable and encourage interaction. All buildings have direct access to the communal open spaces.

SEPP 65 DESIGN QUALITY CRITERIA

Principle / Criteria	Response
Principle 6: Amenity Good design positively influences internal and external amenity for residents and neighbours. Achieving good amenity contributes to positive living environments and resident well being. Good amenity combines appropriate room dimensions and shapes, access to sunlight, natural ventilation, outlook, visual and acoustic privacy, storage, indoor and outdoor space, efficient layouts and service areas, and ease of access for all age groups and degrees of mobility.	The proposal achieves excellent internal and external amenity for residents and neighbours to promote positive living environments and resident well being. All living room and bedroom dimensions meet or exceed minimum sizes. 35 of 45 (78%) of apartments have living rooms and private open spaces that will receive a minimum of two hours direct sunlight at mid-winter. No apartments receive no direct sunlight between 9am and 3pm at mid-winter. Extensive solar access testing has been undertaken to ensure that every future townhouse to the south will have adequate direct sun at mid winter. Narrow building depths and multiple cores with dual aspect apartments ensure excellent natural ventilation is achieved. 43 of 45 (96%) of apartments are naturally cross ventilated. Dwellings primarily face forwards and back, providing a positive outlook to the street and over the courtyard. A minimum building separation between buildings on site of 12m is met and exceeded to maintain visual and acoustic privacy between apartments and prevent overlooking of neighbours. Party walls are generally shared by rooms with like use, and rooms with like use are generally stacked in a typical plan. All dwellings have adequate storage with apartments and basements to meet LAHC Dwelling Requirements supplemented by individual storage areas in the basement. Dwellings at ground level have large private open space courtyards. Upper units each have two balconies areas, a large balcony directly accessible from the living room and a secondary, smaller balcony area for services. Minimum apartment sizes are met with high internal efficiency achieved with generally small corridors. Bathroom and kitchen designs are standardised to provide the most desired layout to all apartments. All doorways, corridors, bathrooms, laundries, kitchens and bedrooms provide accessible circulation areas as required by SEPP (Housing for Seniors and People with a Disability) 2004.
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.	The proposal has been designed to optimise safety within the development and from the private domain. The site is attractively fenced and landscaped to the street and boundaries to provide a clear distinction between public and private land. Portals clearly demarcate the entries at the street edge, with straight paths to the building, and gates to provide security to the buildings and the central courtyard. All entries have awnings and will be well-lit. Dwellings face forwards and back, providing passive surveillance to the street and central courtyard making these spaces safe to be in.

SEPP 65 DESIGN QUALITY CRITERIA

Principle / Criteria	Response
Principle 8: Housing Diversity and Social Interaction Good design achieves a mix of apartment sizes, providing housing choice for different demographics, living needs and household budgets. Well designed apartment developments respond to social context by providing housing and facilities to suit the existing and future social mix. Good design involves practical and flexible features, including different types of communal spaces for a broad range of people, providing opportunities for social interaction amongst residents.	The proposal is comprised of self-contained two bedroom seniors social housing apartments in response to the desired portfolio of the NSW Land and Housing Corporation. The proposal provides a variety of communal spaces to promote social interaction amongst residents. The southern end of the courtyard (above the basement car park) provides a hard paved space and barbecue area for gathering. This space is relatively flexible and can be put to different uses as desired by the tenants. The northern end of the courtyard is softer with deep soil and tree planting. All pathways include seating to encourage interaction. Seats at the entries will allow interaction with passers by and informal conversation at the letterbox. Generous lobbies and open stairways serving groups of only 4 to 11 dwellings per core will foster opportunities for incidental encounters between neighbours.
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 proposal is designed to present attractively to the public domain, being appropriately scaled and modulated in height in response to the future streetscape and adjacent sites. The proposal is highly articulated with a variety of building elements composed in pleasing proportions. Attention to building entries, balconies, awnings, angled parapet lines and brick details provide visual interest, particularly at the street frontage and at the skyline. The proposal reflects its internal layout and structure by clearly revealing its composition as multiple buildings which reduces the apparent bulk of the buildings and creates a more domestic scale and quality. The primary facade material is light textured face brick which provides excellent durability and reduces maintenance. Subtle brick details, such as those between windows, demonstrate craftsmanship. Aluminium window and door suites in contrasting colour break up the mass with 'punched' openings in the masonry walls. Features such as entry slots, balcony balustrades and projecting roofs with an alternating material provide important visual counterpoints and relief to the body of the building through the casting of shadow. All elements integrate to the overall building and are not 'stuck on'. All colours are recessive and will recede into the landscaped setting provided. No render is proposed for the project. The buildings should appear to be 'familiar' and 'friendly' in their streetscape and context and will sit comfortably alongside their anticipated neighbours. The buildings are appropriately 'human-scaled' and residential in character. The proposal will be a positive contribution to its neighbourhood.

APARTMENT DESIGN GUIDE
PART 3 OBJECTIVES

Principle / Criteria	Response
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	A site analysis is provided which addresses each element of the site analysis checklist.
Objective 3B-1 Building types and layouts respond to the streetscape and site while optimising solar access within the development	Buildings are located along the street frontage to define the street by facing it and provide direct access. Built form is setback and stepped down at the southern edge to minimise overshadowing to the townhouse site to the south.
Objective 3B-2 Overshadowing of neighbouring properties is minimised during mid winter	Extensive solar access testing has been undertaken to ensure that every future townhouse to the south can achieve adequate direct sunlight to living areas and private open spaces between 9am and 3pm at mid winter. Built form is setback and stepped down at the southern edge to minimise overshadowing to the townhouse site to the south.
Objective 3C-1 Transition between private and public domain is achieved without compromising safety and security	Single secure entries are more desirable for seniors social housing, however all ground floor apartments are provided with individual gates to private open spaces to allow for scooter access. Visually permeable fencing and buffer landscape planting provide visual privacy for ground floor dwellings. Upper level balconies overlook the public domain. No long walls are provided along the street frontage. Opportunities for casual interaction between residents and the public domain are provided by seating at entry portals and near the letterboxes. Multiple building entries are clearly signalled by entry portals. Opportunities for people to be concealed are minimised with straight paths leading to building entries and no blind corners.
Objective 3C-2 Amenity of the public domain is retained and enhanced	The street edge is softened by extensive planting within the generous deep soil setback. Mailboxes are consolidated at the large central entry portal as a single point for delivery at the main address to the site. The visual prominence of the driveway is minimised by locating it at the lowest point of the site and lining it with planting. The substation is located on a small irregular piece of remainder land, accessed from the Copperfield Drive frontage. Services are located within enclosed cupboards and well integrated as a part of the main entry portal. Ground floor levels and building entries are set equal to or slightly above the footpath level for positive entries. There is no ramping to the public domain. All materials are durable and cleanable. The interface with the drainage easement is positively addressed by a retaining wall and level change. The protrusion of basement car parking above ground level is minimised by using a split level design.
Objective 3D-1 An adequate area of communal open space is provided to enhance residential amenity and to provide opportunities for landscaping	The proposed communal open space exceeds 25% of the site area. The principal usable part of the communal open space is consolidated into the central landscaped courtyard which faces due north and achieves a minimum of two hours direct sunlight between 9am and 3pm at midwinter to at least 50% of its area. All communal open space has a minimum dimension of 3m. Communal open space is co-located with deep soil areas. Direct equitable access is provided to communal open space from the lobbies of all buildings.

APARTMENT DESIGN GUIDE
PART 3 OBJECTIVES

Principle / Criteria	Response
Objective 3D-2 Communal open space is designed to allow for a range of activities, respond to site conditions and be attractive and inviting	Communal open space incorporates facilities suitable for seniors housing including seating for individuals and groups and a covered barbecue area. The facilities are located in the central landscaped courtyard which has ample access to sun in winter, shade provided by trees and barbecue area available in the summer and is protected from strong winds by surrounding buildings. The visual impacts of services are minimised by locating them within landscaping or on rooftops.
Objective 3D-3 Communal open space is designed to maximise safety	The communal open space and public domain is readily visible from habitable rooms and private open space areas while maintaining visual privacy. The communal open space will be well it for safety.
Objective 3D-4 Public open space, where provided, is responsive to the existing pattern and uses of the neighbourhood	No public open space is provided on site.
Objective 3E-1 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 zones with a minimum dimension of 6m exceed 7% of the site area. As the site is being significantly re-levelled prior to development, no existing trees will remain on site to retain.
Objective 3F-1 Adequate building separation distances are shared equitably between neighbouring sites, to achieve reasonable levels of external and internal visual privacy	Proposed buildings are a maximum of three storeys. A minimum building separation of 3m is provided between non-habitable room windows and side boundaries. A minimum building separation of 6m is provided between habitable room windows and balconies and side boundaries. A minimum building separation of 12m is provided between habitable room windows and balconies of buildings on the same site. All buildings are located and oriented to maximise visual privacy between buildings on the same site and neighbouring sites.
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	Communal open space, common areas and access paths are separated from private open spaces and windows to apartments by setbacks with planter beds, visually permeable fencing and solid balcony balustrades in front of living rooms.
Objective 3G-1 Building entries and pedestrian access connects to and addresses the public domain	Multiple communal entries are distributed along the available street frontage to activate the street edge. Portal structures provide clearly identifiable communal entries. A large central portal provides a primary street address to rear buildings with clear sight lines to the courtyard and direct pathways to secondary building entries.
Objective 3G-2 Access, entries and pathways are accessible and easy to identify	Lobbies with lifts and stairways are clearly visible from the public domain and communal open spaces. Ground floor levels step with the topography to minimise as far as possible the required level changes along pathways and entries. Steps and ramps are integrated into the overall landscape design.
Objective 3G-3 Large sites provide pedestrian links for access to streets and connection to destinations	A pedestrian link from the site across the drainage easement to Copperfield Drive facilitates a direct connection to the Rosemeadow Marketplace Shopping Mall and bus stops.

APARTMENT DESIGN GUIDE
PART 3 OBJECTIVES

Principle / Criteria	Response
Objective 3H-1 Vehicle access points are designed and located to achieve safety, minimise conflicts between pedestrians and vehicles and create high quality streetscapes	The car park access has been integrated with the proposed landscape to minimise its visibility. The car park entry is behind the building line, beneath landscaping and includes a security door to minimise the appearance of a void. The single driveway is located at the lowest point along the street frontage to minimise ramp length, excavation and impacts on the building form and layout. The driveway location avoids headlight glare into habitable rooms. Access for large vehicles to enter or turn around within the site is avoided. Garbage areas are screened. Clear site lines are provided at the driveway crossing. Primary pedestrian access and vehicular access are separated.
Objective 3J-1 Car parking is provided based on proximity to public transport in metropolitan Sydney and centres in regional areas	Car parking is provided to meet the brief of one space per dwelling as required by NSW Land and Housing Corporation for seniors social housing. Car parking is provided off street within a basement car park.
Objective 3J-2 Parking and facilities are provided for other modes of transport	Provision of motorcycle, scooter and bicycle parking is not desirable for seniors social housing.
Objective 3J-3 Car park design and access is safe and secure	Supporting facilities with in the basement car park such as storage can be accessed without crossing car parking spaces associated with another tenancy. All lifts have direct, clearly visible and well lit access with safe areas in front of them.
Objective 3J-4 Visual and environmental impacts of underground car parking are minimised	Excavation for the car park is minimised through efficient car park layouts and ramp design. The car-parking layout is well organised, using a logical and efficient structural grid related to the building over and primarily double loaded aisles. Protrusion of the car park above ground is minimised through the use of split levels on the sloping site.
Objective 3J-5 Visual and environmental impacts of on-grade car parking are minimised	No on-grade car parking is proposed
Objective 3J-6 Visual and environmental impacts of above ground enclosed car parking are minimised	No above ground enclosed car parking is proposed

APARTMENT DESIGN GUIDE
PART 4 OBJECTIVES

Principle / Criteria	Response
Objective 4A-1 To optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space	35 of 45 (78%) of apartments have living rooms and private open spaces that will receive a minimum of two hours direct sunlight at mid-winter. No apartments receive no direct sunlight between 9am and 3pm at mid-winter. The proposal responds to the topography by having two rows of buildings organised to run north-south following the site contours. The design maximises the east and west aspects for solar access. There are no single aspect south facing apartments. Single aspect, single storey apartments have an eastern aspect. Direct sunlight to habitable rooms and balconies is optimised through dual aspect apartments with shallow layouts.
Objective 4A-2 Daylight access is maximised where sunlight is limited	Sunlight is not limited. No courtyards, skylights and high level windows are used as primary light sources in habitable rooms.
Objective 4A-3 Design Incorporates shading and glare control, particularly for warmer months	Balconies and roof elements provide sun shading to living room and bedroom doors. Individual external shading is provided to bedroom windows.
Objective 4B-1 All habitable rooms are naturally ventilated	The building orientation, thin building section and dual aspect apartments will maximise natural ventilation in habitable rooms. Shallow habitable room depths support natural ventilation. The area of unobstructed window openings is equal to at least 5% of the floor area served. No light wells are used for an air source.
Objective 4B-2 The layout and design of single aspect apartments maximises natural ventilation	Apartment depths are limited to maximise ventilation and airflow. Natural ventilation to single aspect apartments is achieved by having very shallow depths.
Objective 4B-3 The number of apartments with natural cross ventilation is maximised to create a comfortable indoor environment for residents	43 of 45 (96%) of apartments are naturally cross ventilated. The overall depth of cross-through apartments does not exceed 18m measured glass line to glass line. The proposal maximises dual aspect apartments and limits apartment depth. The size of external window and door openings in cross-through apartments are approximately equal on both sides of the apartment. Apartments are designed to minimise the number of corners, doors and rooms that obstruct airflow.
Objective 4C-1 Ceiling height achieves sufficient natural ventilation and daylight access	Proposed ceiling heights are 2.7m in habitable rooms and 2.4m in non-habitable rooms, with an overall floor-to-floor height of 3.1m. All living rooms and bedrooms will have ceiling fans for cooling and heat distribution.
Objective 4C-2 Ceiling height increases the sense of space in apartments and provides for well proportioned rooms	Ceiling heights are maximised in habitable rooms with bulkheads located and integrated over joinery and non-habitable rooms. Service rooms are generally stacked from floor to floor.
Objective 4C-3 Ceiling heights contribute to the flexibility of building use over the life of the building	The proposal is not located in a centre and apartments will not be converted to non-residential uses.

APARTMENT DESIGN GUIDE
PART 4 OBJECTIVES

Principle / Criteria	Response
Objective 4D-1 The layout of rooms within an apartment is functional, well organised and provides a high standard of amenity	All apartments are two bedrooms with one bathroom. All apartments are 74m2-81m2 and exceed the minimum apartment size of 70m2. Every habitable rooms has a window in an external wall with a minimum glass area of 10% of the floor area of the room. No daylight or air is borrowed from other rooms. All kitchens are 'L'-shaped wall kitchens and are integrated into an open plan living and dining area. A window is visible from every point of every habitable room.
Objective 4D-2 Environmental performance of the apartment is maximised	All open plan layouts are less than 8m in depth from a window. All living areas and bedrooms are located on the external face of the building. Where possible bathrooms with laundries have an external openable window. Main living spaces are oriented towards the primary outlook.
Objective 4D-3 Apartment layouts are designed to accomodate a variety of household activities and needs	All master bedrooms have a minimum area of 10m2, a minimum robe length of 1.8m, and provide accessible circulation areas as required by SEPP (Housing for Seniors and People with a Disability) 2004. All other bedrooms have a minimum area of 9m2 and a minimum robe length of 1.5m. All combined living/dining rooms have a minimum width of 4m. Access to all bedrooms, bathrooms and laundries is separated from living areas by a corridor. Apartment layouts allow for flexibility with rectangular room proportions and efficient planning of circulation to maximise usable floor space in rooms.
Objective 4E-1 Apartments provide appropriately sized private open space and balconies to enhance residential amenity	All apartments at ground level have a private open space with a minimum area of 15m2 and a minimum depth of 3m. All upper level apartments have a balcony with a minimum area of 10m2 and a minimum depth of 2m.
Objective 4E-2 Primary open space and balconies are appropriately located to enhance liveability for residents	Primary open space and balconies are located adjoining the living room to extend the living space. Private open space and balconies face north, east and west. Primary open space and balconies are oriented with the longer side facing outwards to optimise daylight access into adjacent rooms.
Objective 4E-3 Private open space and balcony design is integrated into and contributes to the overall architectural form and detail of the building	Balcony balustrades are partially solid to permit views but maintain visual privacy and allow for a range of uses on the balcony. No glass balustrades are proposed. Projecting balconies are integrated in to the building design.
Objective 4E-4 Private open space and balcony design maximises safety	Private open spaces are level with internal floor levels for accessibility. Detailing of balustrades avoids opportunities for climbing and falls.
Objective 4F-1 Common circulation spaces achieve good amenity and properly service the number of apartments	The maximum number of apartments off a circulation core on a single level is four. Corridor widths are generous to allow comfortable movement and access in entry lobbies, outside lifts and at apartment entry doors. All common circulation spaces are open and provided with daylight and natural ventilation. No corridors are greater than 12m from the lift core. Multiple lift and stair maximise opportunities for dual aspect apartments. No primary living room or bedroom windows open onto common circulation spaces.

APARTMENT DESIGN GUIDE
PART 4 OBJECTIVES

Principle / Criteria	Response
Objective 4F-2 Common circulation spaces promote safety and provide for social interaction between residents	Direct and legible access is provided between vertical circulation points and apartment entries with short corridor lengths and clear sight lines. Tight corners and spaces are avoided. Circulation spaces will be well lit at night.
Objective 4G-1 Adequate, well designed storage is provided in each apartment	All dwellings have adequate storage with apartments and basements to meet LAHC Dwelling Requirements supplemented by individual storage areas in the basement. Storage is adjacent to the kitchen and is accessible from the living area.
Objective 4G-2 Additional storage is conveniently located, accessible and nominated for individual apartments	Storage located in the basement is clearly allocated to specific apartments, is caged, and is generally associated with car spaces. Basement storage areas provide space for larger items.
Objective 4H-1 Noise transfer is minimised through the siting of buildings and building layout	Adequate building separation is provided within the development and from future neighbouring buildings. Party walls are generally shared by rooms with like use, and rooms with like use are generally stacked in a typical plan. Entry corridors and bathrooms generally buffer noise from common circulation spaces. The number of party walls are relatively limited. Noise sources are located away from bedrooms.
Objective 4H-2 Noise impacts are mitigated within apartments through layout and acoustic treatments	Internal apartment layouts separate noisy spaces from quiet spaces by grouping bedrooms together and providing a short corridor.
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 environment is not considered noisy or hostile.
Objective 4J-2 Appropriate noise shielding or attenuation techniques for the building design, construction and choice of materials are used to mitigate noise transmission	The proposal does not require specialised noise mitigation.
Objective 4K-1 A range of apartment types and sizes is provided to cater for different household types now and into the future	The proposal is comprised of self-contained two bedroom seniors social housing apartments in response to the desired portfolio of the NSW Land and Housing Corporation.
Objective 4K-2 The apartment mix is distributed to suitable locations within the building	Different apartment types are located to achieve a successful facade composition and to optimise solar access.
Objective 4L-1 Street frontage activity is maximised where ground floor apartments are located	Single secure entries are more desirable for seniors social housing, however all ground floor apartments are provided with individual gates to private open spaces to allow for scooter access. Private open space is located within the front setback and doors and windows face the street.
Objective 4L-2 Design of ground floor apartments delivers amenity and safety for residents	Privacy and safety are provided to ground floor apartments with landscaping and private courtyards.

APARTMENT DESIGN GUIDE
PART 4 OBJECTIVES

Principle / Criteria	Response
Objective 4M-1 Building facades provide visual interest along the street while respecting the character the local area	The front building facade is composed from a variety of building elements, with a defined base of fencing and landscaping, a defined top of angled parapet lines and changes in texture, material and detail to modify the prominence of elements. Building facades are well resolved with an appropriate scale and proportion to the streetscape and human scale. Building facades relate to key heights of future adjacent buildings. Shadow is created on the facade throughout the day with building articulation and balconies.
Objective 4M-2 Building functions are expressed by the facade	Building entries are clearly defined. Apartment layouts are expressed externally through balconies, a variety of window openings and party walls.
Objective 4N-1 Roof treatments are integrated into the building design and positively respond to the street	Roof design relates to the street with a variety of heights breaking down the massing and providing visual interest. Angled parapet lines create a skyline. Roof treatments are integrated with the building with roof design proportionate to the overall building size and purposefully emphasising the composition of multiple smaller buildings.
Objective 4N-2 Opportunities to use roof space for residential accomodation and open space are maximised	Clerestory windows provide direct sunlight and natural cross ventilation to top floor apartments. Limited rooftop private open space is provided to atypical top floor apartments without any undesirable associated impacts.
Objective 4N-3 Roof design incorporates sustainability features	The roof design maximises solar access and natural cross ventilation through the use of clerestory windows to top floor apartments. Balconies and awnings protect windows from summer sun.
Objective 4O-1 Landscape design is viable and sustainable	Landscape design is environmentally sustainable with diverse and appropriate planting, appropriately located shading trees and a community garden. Ongoing maintenance will be managed by NSW Land and Housing Corporation. The microclimate will be enhanced by appropriately scaled trees near the eastern and western elevations, a balance of evergreen and deciduous trees, and provision of shade structures.
Objective 4O-2 Landscape design contributes to the streetscape and amenity	The landscape design to responds to the changes of level. As the site is being significantly re-levelled prior to development, no existing trees will remain on site to retain.
Objective 4P-1 Appropriate soil profiles are provided	Structures are designed for additional saturated soil weight. Soil volume to planter boxes is appropriate for proposed plant growth. Soil is provided in accordance with minimum soil depths.
Objective 4P-2 Plant growth is optimised with appropriate selection and maintenance	Plants have been selected by the landscape architect to be suitable to site conditions. Ongoing maintenance will be managed by NSW Land and Housing Corporation.
Objective 4P-3 Planting on structures contributes to the quality and amenity of communal and public open spaces	Building design incorporates opportunities for planting over the basement can park structure in planter boxes.

APARTMENT DESIGN GUIDE
PART 4 OBJECTIVES

Principle / Criteria	Response
Objective 4Q-1 Universal design features are included in apartment design to promote flexible housing for alll community members	The apartments are designed to achieve the accessibility requirements of SEPP (Housing for Seniors and People with a Disability) 2004.
Objective 4Q-2 A variety of apartments with adaptable designs are provided	The apartments are designed to achieve the accessibility requirements of SEPP (Housing for Seniors and People with a Disability) 2004. All apartments have convenient access to communal open spaces. A high proportion of apartments receive adequate solar access in mid-winter. 20% of car spaces are provided as accessible.
Objective 4Q-3 Apartment layouts are flexible and accomodate a range of lifestyle needs	Apartment layouts allow for flexibility with rectangular room proportions and efficient planning of circulation to maximise usable floor space in rooms.
Objective 4R-1 New additions to existing buildings are contemporary and complimentary and enhance an area's identity and sense of place	The proposal is not an adaptive reuse project.
Objective 4R-2 Adapted buildings provide residential amenity while not precluding future adaptive reuse	The proposal is not an adaptive reuse project.
Objective 4S-1 Mixed use developments are provided in appropriate locations and provide active street frontages that encourage pedestrian movement	The proposal is not a mixed use development.
Objective 4S-2 Residential levels of the building are integrated within the development and safety and amenity is maximised for residents	The proposal is not a mixed use development.
Objective 4T-1 Awnings are well located and complement and integrate with the building design	Awnings are provided to all building entries with lighting for safety.
Objective 4T-2 Signage responds to the context and desired streetscape character	Legible but discrete signage and way finding will be integrated into entry portals.
Objective 4U-1 Development incorporates passive environmental design	The proposal provides ample natural light to habitable rooms. Individual screened areas are provided on secondary balconies for clothes drying.
Objective 4U-2 Development incorporates passive solar design to optimise heat storage in winter and reuse heat transfer in summer	Thermal mass in concrete floors and face brick walls is maximised. Open plan living and dining areas will be tiled. Roofs, walls and floors will be insulated.
Objective 4U-3 Adequate natural ventilation minimises the need for mechanical ventilation	Natural cross ventilation for apartments is optimised. Natural ventilation is provided to all habitable rooms, many non-habitable rooms and all common areas and circulation spaces.

APARTMENT DESIGN GUIDE
PART 4 OBJECTIVES

Principle / Criteria	**Response**
Objective 4V-1 Potable water use is minimised	Water efficient fittings and appliances are incorporated. Apartments are individually metered. Drought tolerant, low water use plants have been selected for landscaped areas.
Objective 4V-2 Urban stormwater is treated on site before being discharged to receiving waters	The stormwater system has been designed by a suitably qualified engineer.
Objective 4V-3 Flood management systems are integrated into site design	The detention system has been designed by a suitably qualified engineer.
Objective 4W-1 Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity of residents	Adequately sized open air storage areas for rubbish bins are conveniently located within the front setback. Rubbish bin areas are adequately screened by fencing and landscaping. Circulation design allows bins to be easily manoeuvred by residents and collection personnel.
Objective 4W-2 Domestic waste is minimised by providing safe and convenient source separation and recycling	All dwellings will have a waste and recycling cupboard located beneath the kitchen sink. Communal waste and recycling areas are located associated with entry portals to be convenient for all residents as they leave the site or check the mailbox.
Objective 4X-1 Building design detail provides protection from weathering	Hoods over windows and doors protect openings. Horizontal edges will be detailed with drip lines to avoid staining of surfaces. Material selection is robust and durable and appropriate for the location.
Objective 4X-2 Systems and access enable ease of maintenance	Most windows will be safely cleanable from inside the building. Material selection means that external scaffolding should not be required for maintenance access. Ongoing maintenance will be managed by NSW Land and Housing Corporation.
Objective 4X-3 Material selection reduces ongoing maintenance costs	Face brickwork weathers well and improves with time. Material selection is easily cleanable, robust and durable.