

Consideration of Draft changes to SEPP 65: Design Quality of Residential Flat Development (Amendment 3)

- The proposed application has reviewed the performance outcomes proposed in the Draft changes to SEPP 65 October 2014.
- The Draft changes require adoption of the Apartment Design Guide as a complementary document to SEPP 65 and propose the inclusion of Clause 6A within the SEPP indicating that 'Development Control Plans cannot be inconsistent with the Apartment Design Guide'.
- The complementary Apartment Design Guide is proposed to comprise 5 parts: Parts 1 (Identifying Context) and 2 (Developing Controls) act as a formative guide for Local Councils. Parts 3 (Siting the Development) and 4 (Designing the Building) pertain to performance outcomes and Part 5 (Design Review Panels) facilitates the mode of assessment.
- The application has been assessed under the prevailing statutory planning controls at the date of submission and with the primary controls required by SEPP Seniors Living and the current SEPP 65 enabling the highest standard of planning outcomes which respond to the proposed guiding principles of the Draft changes to SEPP 65 being; 1/Context and Neighbourhood Character, 2/Built Form and Scale, 3/Density, 4/Sustainability, 5/Landscape, 6/Amenity, 7/Safety, 8/Housing Diversity and Social Interaction, 9/Architectural Expression.
- The guiding principles are supported through the performance outcomes under Parts 3 and 4 of the Apartment Design Guide and their application to the proposed project at 27A Stewart Street are indicated below.

Performance Outcomes of the Apartment Design Guide

Reference Criteria	Acceptable Solutions	Application to DA 2014/956 Seniors Living Project : 27A Stewart Street Wollongong
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	1. Each element in the Site Analysis Checklist is addressed	All components of site analysis as per checklist have been addressed. Complies
3B-1 Building types and layouts respond to the streetscape and site while optimising solar access within the development	1. Buildings along the street frontage define the street, by facing it and incorporating direct access from the street. 2. Where the street frontage is to the east or west, rear buildings are orientated to the north 3. Where the street frontage is to the north or south, overshadowing to the south is minimised and buildings behind the street frontage are orientated to the east and west.	The proposed building footprint is orientated around the perimeter of the site which has allowed for the placement of a well lit central courtyard between the Howard Court and Howard Court 2 buildings. Complies
3B-2 Overshadowing of neighbouring properties is minimised during mid winter	1. Living areas, private open space and communal areas receive solar access in accordance with sections 3D Communal and public open space and, 4L Solar and daylight access 2. Solar access to living rooms, balconies and private open spaces of neighbours is protected 3. Where an adjoining property does not currently receive 3 hours of solar access, the proposed building ensures solar access to neighbouring properties is not reduced by more than 20% 4. If the proposal will reduce the solar access of neighbours, building separation is increased beyond minimums contained in section 3F Visual privacy 5. Overshadowing is minimised to the south or downhill by increased upper level setbacks 6. Buildings are orientated at 90 degrees to the boundary with neighbouring properties to minimise overshadowing and privacy impacts, particularly where minimum setbacks are used and where buildings are higher than the adjoining development 7. A minimum of 4 hours of solar access is retained to solar	Allocation of the central communal open space courtyard provides for increased building separation in acknowledgement of the orientation of the existing Howard Court development towards the west. In addition, submitted shadow diagrams & overshadowing exercises submitted with the DA resulted in all units to the adjacent Howards court building to the west retain min 3 hrs sunlight. The units that exceeded 3 hrs were also retained. Complies

3C-1 Transition between private and public domain is achieved without compromising safety and security	collectors on neighbouring buildings 1. Terraces, balconies and courtyard apartments have direct street entry, where appropriate 2. Changes in level between private terraces, front gardens and dwelling entries above the street level provide surveillance and improve visual privacy for ground level dwellings. 3. Upper level balconies and windows overlook the public domain 4. Front fences and walls along street frontages use visually permeable materials and treatments. The height of solid fences or walls is limited to 1m 5. Length of solid walls is limited along street frontages 6. Opportunities for casual interaction between residents and the public domain is provided for, design solutions may include seating at building entries, near letter boxes and in private courtyards adjacent to streets 7. In developments with multiple buildings and/or entries, pedestrian entries and spaces associated with individual buildings/entries are differentiated to improve legibility for residents, using a number of the following design solutions: • architectural detailing • changes in materials • plant species • colours 8. Opportunities for people to be concealed are minimised	The orientation of all dwellings towards the street, the park or the communal open space area will maximise opportunities for surveillance of the public domain and entranceways. Secure pedestrian access is provided through the main foyer leading from Stewart Street or from the southern lifts accessed via the car parking area. Access to all areas will be secured. Complies
3C-2 Amenity of the public domain is retained and enhanced	1. Planting softens the edges of any raised terraces to the street, for example above sub-basement car parking 2. Mail boxes are located in lobbies, perpendicular to the street alignment or integrated into front fences where individual street entries are provided 3. The visual prominence of underground car park vents is minimised and located at a low level where possible 4. Substations, pump rooms, garbage storage areas and other service requirements are located in basement car parks or out of view 5. Ramping for accessibility is minimised by building entry location and setting ground floor levels in relation to footpath levels 6. Durable, graffiti resistant and easily cleanable materials are used 7. Where development adjoins public parks, open space or bushland, the design positively addresses this interface and uses a number of the following design solutions: • street access, pedestrian paths and building entries which are clearly defined • paths, low fences and planting that clearly delineate between communal/private open space and the adjoining public open	Clear pedestrian paths link Stewart Street & Pioneer park to the public courtyard area The absence of a basement provides the opportunity of deep soil planting in the public domain area allowing the use of mature species for the definition of the garden areas. This along with the addition of raised planter boxes & grassed areas enhance the public space & provide sufficient recreational area. Complies

	space • minimal use of blank walls, fences and ground level parking 8. On sloping sites protrusion of car parking above ground level is minimised, using split levels to step underground car parking	
3D-1 Communal open space is consolidated, well configured and designed	1. Communal open space has a minimum area equal to 25% of the site. 2. Communal open space is consolidated into a recognisable and usable area 3. Communal open space is co-located with deep soil areas 4. Solar access is provided to 50% of the principal useable portion of the communal open space for a minimum of 2 hours between 9am and 3pm in midwinter 5. Direct, equitable access is provided to communal open space areas from common circulation areas, entries and lobbies 6. Where communal open space cannot be provided at ground level, it is located on a podium or roof	A total communal open space area of 1002m² is provided (880m² on the ground floor and 122m² on level 5). 23% of total site The communal open space area is northern facing, with the majority of this area receiving 3 hours of sun on June 21 as demonstrated in the shadow analysis plan submitted. Complies
3D-2 Communal open space can be used for a range of activities	1. Facilities are provided for a range of age groups where size permits, incorporating some of the following elements: • seating for individuals or groups • barbeque areas • play equipment or play areas • swimming pools, gyms, tennis courts or common rooms 2. Location of facilities responds to microclimate and site conditions with access to sun in winter, shade in summer and shelter from strong winds and down drafts 3. Impacts of services are minimised, including location of ventilation duct outlets from basement car parks, electrical substation and detention tanks	The central courtyard provides activity for residents through the connection of different communal & recreational facilities in the development with connections to the park and Stewart Street. Complies
3D-3 Safety of communal open space is maximised	1. Communal open space and public domain is readily visible from habitable rooms and private open space areas while maintaining visual privacy, design solutions may include: • bay windows • corner windows • balconies 2. Communal open space is well lit 3. Where communal open space/facilities are provided for children and young people they are safe, well lit and contained	The orientation of some dwelling balconies towards the communal open space area will maximise opportunities for surveillance & safety. Complies
3D-4 Public open space, where provided, responds to the existing pattern and uses of the neighbourhood	1. Space is well connected with public streets along at least one edge 2. Space is connected with nearby parks and other landscape elements or linked through view lines, pedestrian desire paths, termination points and the wider street grid 3. Solar access is provided year round and space is protected from strong winds 4. A range of uses are provided for people of all ages 5. A positive street address and active street frontages are provided adjacent to public open space 6. Boundaries are clearly defined between public open space	The communal open space has been threaded throughout the ground level to enhance the entries, continuity and circulation. Its central location means the solar access is sufficient & it's protected from strong winds. As a result the proposed building is orientated around the perimeter addressing the existing streetscape & amenity. Complies

	and private areas	
3E-1 Deep soil zones are suitable for healthy plant and tree growth, improve residential amenity and promote management of water and air quality	1. Deep soil zones meet the requirements as shown in Table 1 2. Deep soil zones are located to retain existing significant trees and allow for the development of healthy root systems, providing anchorage and stability for mature trees. Design solutions may include: • basement and sub basement car park design that does not fully cover the site • use of front and side setbacks • adequate clearance around trees to ensure long term health • co-location with other deep soil areas on adjacent sites	SEPP65 table 1 specifies min 15% deep soil for sites over 1500sqm. 826m2 of deep soil landscaping is provided on the site, which equates to 19% of the site. Complies
3E-2 Deep soil zones allow for limited servicing and access	1. Pedestrian pathways and paving which is specifically designed for tree root growth occupies a maximum of 10% of the deep soil zone. 2. Services are limited to a maximum 300mm diameter consolidated services trench	The proposal defined in the landscape architects drawings is complying or capable of compliance. Complies
3F-1 Visual separation distances are shared equitably between neighbouring sites, providing reasonable levels of external and internal visual privacy	1. New development is located and oriented to maximise visual privacy between on site and neighbouring buildings. Design solutions include: • side and rear setbacks • site layout and building orientation minimise privacy impacts • on sloping sites, apartments on different levels have appropriate visual separation distances. 2. Unimpeded space is provided in front of windows and balconies to ensure visual privacy is achieved. 3. Privacy separation distances between residential and commercial buildings meet the above required separation distances as follows: • retail, office spaces and commercial balconies -habitable room distances • service and plant areas - non-habitable room distances 4. Apartment buildings should have an increased separation distance of 3m when adjacent to a zone permitting lower density residential development. 5. Direct lines of sight are avoided for windows and balconies across corners 6. For small infill sites where it is demonstrated that privacy separation distances cannot be achieved, minimum separation distances for rooms such as secondary bedrooms and studies are: • 4.5m for up to 12m (4 storeys) • 7m for up to 25m (5-8 storeys) • 9m for over 25m (9 storeys+) The above dimensions should be used as a guide when sizing light wells	The majority of balconies within the proposed building development are orientated towards the road frontages or park and for those limited number of balconies which face east a significant separation distance is provided as per SEPP65 requirements. Complies
3F-2 Site and building design elements increase privacy without compromising access to light and air,	1. Communal open space, common areas and access paths are separated from windows to apartments, particularly habitable room windows.	All residential apartments will be sited at Level 2 and above, providing acoustic and spatial separation from public communal open spaces, car parking

balance outlook and views from habitable rooms and private open space	Design solutions may include: • setbacks • windows offset from the windows of adjacent buildings • recessed balconies and/or vertical fins between adjacent balconies • solid or partially solid balustrades to balconies at lower levels • fencing and/or trees and vegetation to separate spaces • screening devices • raising apartments/private open space above the public domain or communal open space • planter boxes incorporated into walls and balustrades to increase visual separation • pergolas or shading devices to limit overlooking of lower apartments or private open space • on constrained sites where it can be demonstrated that building layout opportunities are limited, fixed louvres or screen panels to windows and/or balconies 2. Balconies and private terraces are located in front of living rooms to increase internal privacy	areas and access driveways. Complies
3G-1 Building entries and pedestrian access connects to and addresses the public domain	1. Multiple entries (including communal building entries and individual ground floor entries) are provided to activate the street edge 2. Entry locations relate to the street and subdivision pattern and the existing pedestrian network 3. Building entries are clearly identifiable. Communal entries are clearly distinguishable from private entries 4. Where street frontage is limited and multiple buildings are located on the site, a primary street address is provided with clear sight lines and pathways to secondary building entries	Pedestrian access is available directly from Stewart St via stairs or a disabled ramp connecting the proposed public courtyard and internal program. There is additional connection & access to the public courtyard space via Pioneer park to the south. Complies
3G-2 Access, entries and pathways are equitable and easy to identify	1. Building access areas including lift lobbies, stairwells and hallways are clearly visible from the public domain and communal spaces 2. The design of ground floors and underground car parks minimise level changes along pathways and entries 3. Steps and ramps are integrated into the overall building and landscape design 4. For large developments 'way finding' maps are provided to assist visitors and residents 5. For large developments electronic access and audio/video intercom is provided to manage access	The pedestrian entrance to the residential units is available from Stewart Street, whilst access to the cafe is available from Stewart St and Kembla St. All entrances are clearly defined. The development incorporates 2 lift cores each servicing 3-10 apartments per floor. Lift access is provided from all units to the lobby and car parking area. A disabled access ramp from the lobby then leads to the Stewart Street footpath. Complies
3G-3 Pedestrian links through developments provide access to streets and connect destinations	1. Pedestrian links through sites facilitate direct connections to main streets, centres and public transport 2. Pedestrian links are direct, have clear sight lines, are overlooked by habitable rooms or private open spaces of dwellings, are well lit and contain active uses, where appropriate	Pedestrian links through the proposed site connect Kembla Street, Stewart Street & Pioneer park in relation to the central public courtyard area. Complies

3H-1 Vehicle access points are designed and located to achieve safety and high quality streetscapes	1. Car park access is integrated with the building's overall facade, design solutions may include: • the materials and colour palette minimise visibility from the street • security doors or gates at entries that minimise voids in the facade • where doors are not provided, the visible interior reflects the facade design and the building services, pipes and ducts are concealed 2. Car park entries are located behind the building line 3. Vehicle entries are located at the lowest point of the site minimising ramp lengths, excavation and impacts on the building form and layout 4. Car park entry and access is located on secondary streets or lanes where available 5. Vehicle standing areas that increase driveway width and encroach into setbacks are avoided 6. Access point locations avoid headlight glare to habitable rooms 7. Adequate separation distances are provided between vehicular entries and street intersections 8. The width of vehicle access points is limited to the minimum 9. Visual impact of long driveways is minimised through changing alignments and screen planting 10. The requirement for large vehicles to enter or turn around within the site is avoided 11. Garbage collection, loading and servicing areas are screened	Vehicle access will be via an ingress/egress from Kembla Street, with a further egress sited to the south of the site also leading to Kembla Street. Two levels of car parking (ground Level and Level 1) will be provided. The vehicular access arrangements have been designed to accommodate the simultaneous swept turning path requirements of a B85 and a B99 design vehicle as specified in AS2890.1, allowing them to enter and exit the site and the internal ramp in a forward direction at all times and independently. Complies
3H-2 Conflicts between pedestrians and vehicles are avoided	1. The width and number of vehicle access points are as narrow and as few as possible 2. Clear sight lines are provided at pedestrian and vehicle crossings 3. Traffic calming devices such as changes in paving material or textures are used where appropriate 4. Pedestrian and vehicle access is separated and distinguishable. Design solutions may include: • changes in surface materials • level changes • the use of landscaping for separation	Separation of pedestrian and vehicular entrance points are provided with the proposed building providing safe access Complies
3J-1 Car parking is provided based on proximity to public transport in metropolitan Sydney and centres in regional areas	1. Number of car parking spaces meet the requirements as shown in Table 2 where applicable 2. Number of visitor spaces are limited, particularly in basements, to 1 space per every 10 apartments 3. Where a car share scheme operates locally, provide car share parking spaces within the car park or on street. Car share spaces may be provided in lieu of the required number of car	Proposed building has 76 residential spaces and 5 retail spaces. All residential parking is adaptable. In total, the proposed development contains 75 apartments and 81 parking spaces and therefore referral to the RMS is not required. Complies
3J-2 Parking and facilities are provided for other	1. Conveniently located and sufficient numbers of parking spaces	Not Applicable. Seniors housing

modes of transport	are provided for motorbikes and scooters 2. Secure undercover bicycle parking is provided that is easily accessible from both the public domain and common areas 3. Conveniently located charging stations are provided for electric vehicles, where desirable	
3J-3 Car park design and access is safe and secure	1. Car park contains supporting facilities including garbage, plant and switch rooms, storage areas and car wash bays, which can be accessed without crossing car parking spaces 2. Direct, clearly visible and well lit access is provided into common circulation areas 3. A clearly defined and visible lobby or waiting area is provided to lifts and stairs 4. For larger car parks, safe pedestrian access is clearly defined and circulation areas have good lighting, colour, line marking and/or bollards	The geometric design layout of the proposed car parking facilities have been designed to comply with the relevant requirements specified in the Standards Australia publication in respect of parking bay dimensions, ramp gradients and aisle widths. Complies
3J-4 Visual and environmental impacts of on-grade car parking are minimised	1. On-grade car parking is avoided 2. Where on-grade car parking is unavoidable, the following design solutions are used: • parking is located on the side or rear of the lot away from the primary street frontage • cars are screened from view of streets, buildings, communal and private open space areas • safe and direct access to building entry points is provided • parking is incorporated into the landscape design of the site, by extending planting and materials into the car park space • stormwater run-off is managed appropriately from car parking surfaces • bio-swailes, rain gardens or on site detention tanks are provided, where appropriate • light coloured paving materials or permeable paving systems are used and shade trees are planted between every 4-5 parking spaces to reduce increased surface temperatures from large areas of paving	Car parking is provided on ground & level 1 to minimise the level of excavation & maximise the deep soil area for the site The car park has been successfully screened with permanent public artworks along Kembla St to add aesthetic appeal & public interest. Vehicle access will be via an ingress/egress from Kembla Street, with a further egress sited to the south of the site also leading to Kembla Street. Complies
3J-5 Visual and environmental impacts of underground car parking are minimised	1. Excavation is minimised through efficient car park layouts and ramp design 2. Car parking layout is well organised, using a logical, efficient structural grid and double loaded aisles 3. Protrusion of car parks does not exceed 1m above ground level, design solutions may include stepping car park levels or using split levels on sloping sites 4. Natural ventilation is provided to basement and sub basement car parking areas 5. Ventilation grills or screening devices for car parking openings are integrated into the facade and landscape design	Not Applicable.
3J-6 Visual and environmental impacts of above ground enclosed car parking are minimised	1. Exposed parking is not located along primary street frontages 2. Screening, landscaping and other design elements including public art are used to integrate the above ground car parking	The car park has been successfully screened with permanent public artworks along Kembla St to add aesthetic appeal & public interest. Parking on level 1 is

	with the facade. Design solutions may include: • car parking that is concealed behind the facade, with windows integrated into the overall facade design (approach should be limited to developments where a larger floor plate podium is suitable at lower levels) • car parking that is 'wrapped' with other uses, such as retail, commercial or two storey SOHO units along street frontage. 3. Positive street address and active frontages are provided at ground level	screened via landscaped planter boxes & greenery. Complies
4A-1 A range of apartment types and sizes is provided to cater for different household types now and into the future	1. The apartment mix is appropriate, taking into consideration: • the distance to public transport, employment and education centres • the current market demands and projected future demographic trends • the demand for social and affordable housing • different cultural and socioeconomic groups 2. A variety of apartment types is provided 3. Flexible apartment configurations, such as dual key apartments, are provided to support diverse household types and stages of life including single person households, families, multi-generational families and group households	With consideration that building use will be seniors housing, the current mix accommodates units that are required to be adaptable with sufficient space. As a result, the current apartment mix provides for: 77% 2BED units 23% 3BED units Complies
4A-2 The apartment mix is distributed to suitable locations within the building	1. Different apartment types are located to achieve successful facade composition and to optimise solar access. 2. Larger apartment types are located on the ground or roof level where there is potential for more open space and on corners where more building frontage is available	All proposed residential levels provide a mix of 2BED & 3BED adaptable units. Complies
4B-1 Street frontage activity is maximised where ground floor apartments are located	1. Direct street access is provided to ground floor apartments 2. Activity is achieved through front gardens, terraces and the facade of the building. Design solutions may include: • both street and foyer entrances to ground floor apartments • private open space is next to the street • doors and windows face the street 3. Retail or home office spaces are located along street frontages	Not Applicable. (No ground floor units)
4B-2 Design of ground floor apartments delivers amenity and safety for residents	1. Privacy and safety is provided without obstructing casual surveillance. Design solutions may include: • elevation of private gardens and terraces above the street level by a maximum of 1m • landscaping and private courtyards • window sill heights that minimise sight lines into apartments • integrating balustrades, safety bars or screens with the exterior design 2. Solar access is maximised through: • high ceilings and tall windows • trees and shrubs that allow solar access in winter and shade in summer	Not Applicable. (No ground floor units)
4C-1 Building facades provide visual interest along	1. Design solutions for front building facades may include:	The building facade to Kembla Street has been

the street while respecting the character of the local area	• a composition of varied building elements • a defined base, middle and top of buildings • revealing and concealing certain elements • changes in texture, material, detail and colour to modify the prominence of elements 2. Building services are integrated within the overall facade 3. Building facades have appropriate scale, rhythm and proportion to the streetscape and human scale. Design solutions may include: • well composed horizontal and vertical elements variation in floor heights to enhance the human scale • elements that are proportional and arranged in patterns • public artwork or treatments to exterior blank walls • grouping of floors or elements such as balconies and windows on taller buildings 4. Building facades relate to key datum lines of adjacent buildings through upper level setbacks, parapets, cornices, awnings or colonnade heights 5. Shadow is created on the facade throughout the day with building articulation, balconies and deeper window reveals	successfully screened with permanent public artworks to add aesthetic appeal & public interest. Complies
4C-2 Building functions are expressed by the facade	1. Building entries are clearly defined 2. Important corners are given visual prominence through a change in articulation, materials or colour, roof expression or increased height 3. The apartment layout is expressed through facade features such as party walls and floor slabs	Entries into the building are clearly defined along both Kembla & Stewart street with a strong articulation of materials change and building form. Materials vary from glazing, hit & miss brickwork, large format brick roman proportion, brickwork textured bond rectangular patterns & permanent public artworks. Complies
4D-1 Roof treatments are integrated into the building design and positively respond to the street	1. Roof design relates to the street. Design solutions may include: • special roof features and strong corners • use of skillion or very low pitch hipped roofs • breaking down the massing of the roof by using smaller elements to avoid bulk • using materials or a pitched form complimentary to adjacent buildings 2. Roof treatments are integrated with the building design. Design solutions may include: • roof design is proportionate to the overall building size, scale and form • roof materials compliment the building • service elements are integrated	Proposed roof design addresses the existing streetscape. Complies
4D-2 Opportunities to use roof space for residential accommodation and open space are maximised	1. Habitable roof space is provided with good levels of amenity. Design solutions may include: • penthouse apartments • dormer or clerestory windows • openable skylights 2. Open space is provided on roof tops subject to	Upper level roof space has been designed to accommodate both private & communal open space. Skylights to individual units have also been provided to allow for additional solar access. Complies

	acceptable visual privacy, comfort levels, safety and security impacts	
4D-3 Roof design incorporates sustainability features	1. Roof design maximises solar access to apartments during winter and shade during summer. Design solutions may include: • the roof lifts to the north • eaves and overhangs shade walls and windows from summer sun 2. Skylights and ventilation systems are integrated into the roof design 3. Rainwater tanks are located on roofs where possible	Proposed roof design provides maximum solar access to units whilst also providing shading to some private balconies during summer. Complies
4E-1 Landscape design is viable and sustainable	1. Landscape design is environmentally efficient and may include: • bio-filtration gardens • appropriately planted shading trees • areas for residents to plant vegetables and herbs • composting • green roofs or walls 2. Ongoing maintenance plans are prepared 3. Microclimate is enhanced by: • appropriately scaled trees located on the eastern and western elevations for shade • a balance of evergreen and deciduous trees to provide shading in summer and solar access in winter • shade structures such as pergolas for balconies and courtyards 4. Tree and shrubs selection considers size at maturity and the potential for roots to overlap	The absence of a basement provides the opportunity of deep soil planting in the public domain area allowing the use of mature species for the definition of the garden areas. In addition, several articulated vertical planter boxes provides a rhythm than interconnects all the communal areas in the building while providing a treated and green face to the adjoining residential building, whilst also connecting upper level green communal roof areas. All first floor parking is screened via raised planter boxes that provide a softened landscaped edge. Complies
4E-2 Landscape design contributes to the streetscape and amenity	1. Landscape design responds to the existing site condition and includes retaining: • changes of levels • views • significant landscape features including trees and rock outcrops 2. Significant landscape features are protected by: • tree protection zones • appropriate signage and fencing during construction 3. Plants selected are endemic to the region and reflect the local ecology	The proposed design retains existing trees located along Kembla & Stewart street that provide shade & a softened landscaped edge. Complies
4F-1 To contribute to the quality and amenity of communal and public open spaces	1. Building design incorporates opportunities for planting on structures. Design solutions may include: • green walls with specialised lighting for indoor walls • wall design to incorporate planting • green roofs, particularly where roofs are visible from the public domain • planter boxes	Proposed articulated vertical planter boxes provides a rhythm than interconnects all the communal areas in the building while providing a treated and green face to the adjoining residential building. Complies
4F-2 Plant growth is maximised with appropriate selection and maintenance	1. Plants are suited to site conditions, considerations include: • drought and wind tolerance • seasonal changes in solar access	All plants are have been selected by appropriateness as per submitted Landscape architects plan. Complies

	• modified substrate depths for a diverse range of plants 2. A landscape maintenance plan is prepared 3. Irrigation and drainage systems respond to: • changing site conditions • soil profile and the planting regime • whether rainwater, stormwater or recycled grey water is used	
4F-3 Appropriate soil profiles are provided	1. Structures are reinforced for additional saturated soil weight 2. Soil volume is appropriate for plant growth, considerations include; • depths and widths are modified according to the planting mix and irrigation frequency • free draining and long soil life span • tree anchorage is encouraged 3. Minimum soil standards for plant sizes, are provided in accordance with Table 4	Appropriate soil provisions for use of planter boxes & mature species defined in the Landscaped architectural plans submitted are capable of compliance. Complies
4G-1 Universal design features are included in apartment design	1. Developments achieve a benchmark of 20% of total apartments incorporating the silver level universal design features in Table 5 <u>Table 5 Universal design solutions:</u> Safe and continuous levelled path to entrances Accessible entry door with a minimum 820mm clear opening width and a step-free threshold Level landing area of 1200mm x 1200mm at the entrance door Internal doors with a minimum 820mm clear opening width and a step-free transition between surfaces Internal corridors with a minimum of 1000mm clear width Step free shower recess Bathroom wall is reinforced for grab rails around the toilet, shower and basin A toilet is provided on the ground or entry level in multi-level apartments that provides: • minimum clear width of 900mm between walls • minimum clear circulation space forward of the toilet pan of 1200mm (excluding the door swing)	All units are classified as senior housing requiring all layouts to be adaptable & therefore comply with min 20% silver level design. Complies
4G-2 A variety of apartments with adaptable designs are provided	1. Adaptable housing is provided in accordance with the relevant council policy 2. Adaptable apartment design solutions may include: • convenient access to communal and public areas • high level of solar access • minimal structural change and residential amenity loss when adapted • larger car parking spaces for accessibility • parking is titled separately from apartments or there are shared car parking arrangements	All units & parking requirements are adaptable & therefore comply. Complies
4G-3 Apartment layouts are flexible and accommodate a range of lifestyle needs	1. Apartment design incorporates flexible design solutions which may include: • rooms with multiple functions • dual master bedroom apartments with separate bathrooms	All units & parking requirements are adaptable & therefore are flexible in unit arrangement. Complies

	• larger apartments with various living space options • dual key apartments which are separate but on the same title • open plan 'loft' style apartments with only a fixed kitchen, laundry and bathroom	
4H-1 New additions to existing buildings are contemporary and complementary	1. Design solutions may include: • new elements align with the existing building • additions complement the existing scale, proportion, pattern, form and rhythm • use of contemporary materials and finishes 2. There is clear separation of the old and new 3. Existing significant fabric is exposed with well designed insertions and signage 4. New additions allow for the interpretation and future evolution of the building	The eastern end of the existing building is to be retained and incorporated / intergraded into the proposed new design. Complies
4H-2 Adapted buildings provide residential amenity while not precluding future adaptive reuse	1. Considered features are incorporated into adapted buildings to make up for any physical limitations, to ensure residential amenity is achieved. Design solutions may include: • generously sized voids in deeper buildings • perimeter wall length is extended with facade indents • deeper apartments have greater ceiling heights • alternative apartment types when orientation is poor • additions expand the existing building envelope	Not Applicable.
4J-1 Mixed use developments are provided in appropriate locations and provide active street frontages that encourage pedestrian movement	1. Mixed use development is concentrated around public transport and centres 2. Mixed use developments positively contribute to the public domain, design solutions may include: • development addresses the street • active frontages are provided • diverse activities and uses • avoidance of blank walls at the ground level • live/work apartments are located on the ground floor, rather than commercial	A ground level cafe/restaurant with a gross floor area of approximately 160m2 will cater for residents of the facility, their visitors and the local community. Along with the installation permanent artworks along the streetscape, they will serve to provide sufficient street activation. Complies
4J-2 Residential floors are integrated within the development, safety and amenity is also maximised	1. Residential circulation areas are clearly defined. Design solutions may include: • residential entries are separated from commercial entries and directly accessible from the street • commercial service areas separated from residential components • residential car parking and communal facilities are separated or secured • security at entries and safe pedestrian routes are provided • avoiding concealment opportunities 2. Landscaped communal open space is provided at podium or roof levels	Not Applicable.
4K-1 Awnings are well located and complement and integrate with the building design	1. Awnings are located along streets with high pedestrian activity and active frontages 2. A number of the following design solutions are used: • continuous awnings are maintained and provided in areas with	Not Applicable.

	an existing pattern • height, depth, material and form complements the existing street character • protection from the sun and rain is provided • awnings are wrapped around the secondary frontages of corner sites • awnings are retractable in areas without an established pattern 3. Awnings are located over building entries for building address and public domain amenity 4. Awnings relate to residential windows, balconies, street tree planting, power poles and street infrastructure 5. Gutters and down pipes are integrated and concealed 6. Lighting under	
4K-2 Signage responds to the context and desired streetscape character	1. Signage is integrated into the building design and responds to the scale, proportion and detailing of the development 2. Legible and discrete way finding is provided for larger developments 3. Signage is limited to on and below awnings and a single facade sign on the primary street frontage	Signage is to be located with appropriateness to scale & proportion. Complies
4L-1 The number of apartments receiving sunlight to habitable rooms, primary windows and private open spaces is optimised	1. The design maximises north aspect 2. Single aspect, single storey apartments have a northerly or easterly aspect 3. The number of single aspect west and south facing apartments is minimised 4. Living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 3 hours direct sunlight between 9am and 3pm in mid winter 5. A maximum of 15% of apartments in a building have no direct sunlight between 9am and 3pm in mid winter 6. Living areas are located to the north and service areas to the south and west of apartments	73% of the dwellings achieve direct sunlight access between 9am & 3pm meeting the recommended 70%. Complies
4L-2 Reasonable levels of direct sunlight is provided to habitable rooms and balconies	1. Apartments that receive direct sunlight in accordance with the acceptable solution 4L-1.4 need to demonstrate that a person is able to sit in the sun in a habitable room or on a balcony of an apartment in mid winter between 9am and 3pm. 2. A number of the following design features are used: • dual aspect apartments • shallow apartment layouts • two storey and mezzanine level apartments • bay windows	Direct solar access complies with min 3 hrs as per solar access diagram submitted Complies
4L-3 Design incorporates shading and glare control, particularly for summer	1. A number of the following design features are used: • shading devices such as eaves awnings, balconies, pergolas, external louvres and planting • horizontal shading to north facing windows • vertical shading to east and particularly west facing windows • balconies or sun shading that extend far enough to shade summer sun, but allow winter sun to penetrate living areas	Balconies will be used to provide sufficient shading to residents in summer. Complies

	• operable shading to allow adjustment and choice, where possible and appropriate • high performance glass that minimises external glare off windows, with consideration given to reduced tint glass or glass with a reflectance level below 20% • Reflective films are avoided	
4L-4 Opportunities for improved daylight are provided where sunlight is limited	1. Light wells, skylights and high level windows (with sills of 1500mm or greater) are used only as a secondary light source in habitable rooms 2. Where light wells are unavoidable: • use is restricted to kitchens, bathrooms and service areas • building services are concealed with appropriate detailing and materials to visible walls • lightwells are fully open to the sky • access is provided to the lightwell from a communal area for cleaning and maintenance • acoustic privacy, fire safety and minimum privacy separation distances (see section 3F Visual Privacy) are achieved 3. Opportunities for reflected light into apartments are optimised through: • reflective exterior surfaces on buildings opposite south facing windows • positioning windows to face other buildings or surfaces (on neighbouring sites or within the site) that will reflect light • integrating light shelves into the design • light coloured internal finishes	8 Skylight s have been installed in living areas to provide additional solar access. Complies
4M-1 Common circulation spaces achieve good amenity and provide for a variety of apartment types	1. The maximum number of apartments off a circulation core on a single level is eight 2. The number of vertical circulation points and number of entries are maximised 3. Corridor widths and/or ceiling heights are greater than minimum requirements, allowing comfortable movement and accessibility particularly in entry lobbies, outside lifts and at apartment entry doors 4. Daylight and natural ventilation is provided to all common circulation and spaces, where possible 5. Windows to corridors are provided where possible, commonly adjacent to the stair or lift core or at the ends of corridors 6. Longer corridors are articulated. Design solutions may include: • a series of foyer areas with space for seating • wider areas at apartments entry doors and varied ceiling heights 7. Design of common circulation and spaces maximises opportunities for dual aspect apartments, including multiple core apartment buildings and gallery access cross over apartments	The development incorporates 2 lift cores each servicing 3-10 apartments per floor. Lift access is provided from all units to the lobby and car parking area. Where front-on approaches to internal corridor doorways are provided then the doorway circulation is at least 1600mm as per accessibility report. Complies
4M-2 Common circulation spaces provide for	1. Direct and legible access is provided between vertical	Vertical cores are located centrally to surrounding

interaction between residents	circulation points and apartment entries by minimising corridor or gallery length to give short, straight clear sight lines 2. Tight corners and spaces are avoided 3. Legible signage is provided for apartment numbers, common areas and general wayfinding 4. Incidental spaces, for example space for seating in a corridor, at a stair landing, or near a window are provided, where appropriate 5. In larger developments, community rooms for activities such as owners corporation meetings or resident use are provided and ideally co-located with communal open space 6. Where external galleries are provided, they are more open than closed along the length above the handrail	units. Complies
4N-1 Spatial arrangement and layout of apartments is functional, well organised and provides a high standard of amenity	1. Apartment sizes are in accordance with Table 6 <u>Table 6 Minimum apartment sizes</u> Apartment type Minimum size Studio 35m² 1 bedroom 50m² 2 bedroom 70m² 3 bedroom 95m² 2. A window should be visible from any point in a habitable room 3. Kitchens are not located as part of the main circulation space in larger apartments (such as hallway or entry space)	Apartment sizes meet min size requirements as per SEPP 65 compliance table. Complies
4N-2 Environmental performance of the apartment is maximised	1. Habitable room depth complies with the ceiling height to room depth ratio as per Figure 4N.3 2. For open plan layouts, combining the living room, dining room and kitchen, the back of the kitchen is a maximum of 8 metres from a window 3. Main living spaces are oriented toward the primary outlook and aspect and away from noise sources 4. Main living spaces are located adjacent to main private open spaces to provide direct connections and increase usability 5. All living areas and bedrooms are located on the external face of the building 6. All kitchens in corner apartments have an external openable window/door 7. For non-corner apartments the number of kitchens with an external openable window/door is maximised. 8. The number of bathrooms and laundries with windows is maximised	Proposed 2.7m min ceiling heights to all habitable rooms comply with SEPP65 compliance table. All main living areas are orientated towards a primary outlook and are located adjacent to private open spaces. 20 (ie. 26%) of the residential apartments contain a kitchen with direct access to natural ventilation. The backs of kitchens generally meet the 8m recommendation. Complies
4N-3 Apartment layout can accommodate a variety of household activities and occupant needs	1. The number of bathrooms and size of living areas, kitchens and laundries increase proportionately with the number of bedrooms 2. Master bedrooms have a minimum area of 10m² and other bedrooms 9m² (excluding wardrobe space) 3. Bedrooms have a minimum dimension of 3m (excluding wardrobe space) 4. All bedrooms allow a minimum length of 1.5m for robes 5. Living rooms or combined living/dining rooms have a minimum	All units are adaptable & therefore comply with SEPP65 compliance table. Complies

	width of: • 3.6m for studio and 1 bedroom apartments • 4m for 2 and 3 bedroom apartments 6. Access to bedrooms, bathrooms and laundries is separated from living areas minimising direct openings between living and service areas 7. Apartment layouts are resilient over time and have dimensions that facilitate a variety of furniture arrangements and removal, design solutions may include: • spaces for a range of activities and privacy levels between different spaces within the apartment • dual master or dual key apartments to provide tenancy flexibility • flexible room sizes and proportions or open plans (rectangular spaces (2:3) are more easily furnished than square spaces (1:1)) • efficient planning of circulation by stairs, corridors and through rooms to maximise the amount of usable floor space in rooms	
4N-4 Safety of children and young people within apartments is maximised	1. Windows have safety screens, window locks or other safety devices in place to prevent falls. Safety screens support natural ventilation 2. Room layouts minimise the need to locate furniture immediately adjacent to windows or balustrades	All windows are proposed with safety screens. Complies
4O-1 Ceiling height achieves sufficient natural ventilation and daylight access	<u>D</u>1. Measured from finished floor level to finished ceiling level, minimum ceiling heights are: Habitable rooms 2.7m Non-habitable 2.4m These minimums do not preclude higher ceilings if desired 2. Ceiling height can accommodate use of ceiling fans for cooling and heat distribution	Proposed 2.7m min ceiling heights to all habitable rooms comply with SEPP65 compliance table. Complies
4O-2 Ceiling height increases the sense of space in apartments and provides for well proportioned rooms	1. A number of the following design solutions are used: • the hierarchy of rooms in an apartment is defined using changes in ceiling heights and alternatives such as raked or curved ceilings; - or double height spaces • well proportioned rooms are provided, for example, smaller rooms feel larger and more spacious with higher ceilings • Ceiling heights are maximised in habitable rooms by ensuring that bulkheads do not intrude. The stacking of service rooms from floor to floor and coordination of bulkhead location above non-habitable areas, such as robes or storage, can assist	Not Applicable.
4O-3 Ceiling heights contribute to the flexibility of building use over the life of the building	1. Ceiling heights of lower level apartments in centres are greater than the minimum required in the table above (4O-1.1) allowing flexibility and conversion to non-residential uses	Not Applicable.
4P-1 Primary private open space and balconies are	1. Primary open space and balconies are located adjacent to the main living areas, such as the living room, dining room or	All main living areas are orientated towards a primary outlook and are located adjacent to private open

appropriately located	kitchen to extend the living space 2. Private open spaces and balconies predominantly face north, east or west and solar access to living rooms is not impeded 3. Primary open space and balconies are orientated with the long side facing outwards to optimise daylight access into adjacent rooms	spaces. Complies
4P-2 Primary private open space and balconies are appropriately sized	1. Primary private open space at ground level or similar space on a structure has a minimum area of 16m² and a minimum dimension in one direction of 3m 2. Primary balconies are provided for all apartments with the following minimum area and depth according to apartment size: Dwelling type Minimum 1 bedroom apartments 8m² 2m 2 bedroom apartments 10m² 2m 3+ bedroom apartments 12m² 2.5m	12m² of private open space is provided for each unit in the form of a balcony. Complies
4P-3 Private open space and balcony design is integrated into the overall architectural form and detail of the building	1. Projecting balconies are integrated into the building design 2. Operable screens, shutters, hoods and pergolas are used to control sunlight and wind, where required 3. Solid, partially solid or transparent fences and balustrades are suitable for the location and are designed to allow views and passive surveillance of the street while maintaining visual privacy 4. Balustrades are set back from the building or balcony edge where overlooking or safety is an issue 5. Screening is provided for clothes drying, storage and air conditioning units 6. Downpipes, balcony drainage and air conditioning units are integrated with the overall facade and building design, with unsightly features hidden 7. Ceilings of apartments below terraces are insulated to avoid heat loss	All balconies are set behind the building line to give a distinct architectural character to the facade tying into the overall design aesthetics of Howard court. Complies
4P-4 Private open space and balcony design maximises safety	1. Changes in ground levels or landscaping are minimised 2. Design and detailing of balconies avoids opportunities for climbing and falls	All balustrades proposed comply with relevant Australian standards. Complies
4Q-1 All habitable rooms are naturally ventilated	1. Orientation of building maximises capture and use of prevailing breezes for natural ventilation 2. Rooms have appropriate depths (see Section 4N Apartment layout) 3. Unobstructed window openings are equal to at least 5% of the floor area served 4. Doors and operable windows maximise natural ventilation opportunities established by the apartment layout, using a number of the following design solutions: • adjustable windows with large effective openable areas • a variety of window types that provide safety and flexibility such as awnings and louvres • windows which the occupants can reconfigure to funnel breezes into the apartment such as vertical louvres, casement	All habitable rooms have an open able window as per compliance requirements. Complies

	windows and externally opening doors	
4Q-2 Natural ventilation for single aspect apartments is maximised	1. Apartment depths are limited to maximise ventilation and airflow. See figure 4Q.1 2. Light wells are not the primary air source for habitable rooms 3. A number of the following design solutions are used: • primary windows are augmented with plenums and lightwells (generally not suitable for cross ventilation) • solar chimneys, stack effect ventilation or similar to naturally ventilate internal building areas or rooms such as bathrooms and laundries • lightwells or building indentations with a width to depth ratio of 2:1 or 3:1 where possible to ensure effective air circulation and avoid trapped smells	All single aspect apartment layouts have max depth of 8.5m. Skylights have also been installed to add additional unit ventilation. Complies
4Q-3 The number of apartments with natural cross ventilation is maximised	1. At least 60% of apartments are naturally cross ventilated 2. For apartment buildings 9 storeys and over an appropriately qualified wind consultant has confirmed that 60% of the apartments achieve cross ventilation 3. Overall building depth does not exceed 12-18 metres 4. Cross ventilation is facilitated by limited apartment depths and use of dual aspect apartments, cross through apartments and corner apartments 5. In dual aspect apartments external window and door opening sizes/areas on one side of an apartment (inlet side) are approximately equal to the external window and door opening sizes/areas on the other side of the apartment (outlet side). 6. Interruptions to airflow are limited through the apartments by minimising the number of corners, doors and rooms that might obstruct airflow 7. Apartment depths, combined with ceiling heights, maximise ventilation and airflow.	60% of the dwellings achieve cross-ventilation-meeting the recommended 60%. Overall building depth has a minor variation of approx 19.0m; however the placement of balconies behind the main line of the building reduces the building depth for the majority of the length of the building. Complies with minor variation
4R-1 Adequate, well designed storage is provided in each apartment	1. In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided: Dwelling type Storage size studio apartments 6m³ 1 bedroom apartments 6m³ 2 bedroom apartments 8m³ 3+ bedroom apartments 10m³ with at least 50% located within the apartment 2. Storage is accessible from either circulation or living areas 3. Storage provided on balconies (in addition to the minimum balcony size) is integrated into the balcony design, weather proof and screened from view from the street 4. Left over space such as under stairs is used for storage	All units comply with min storage requirements as per SEPP65 compliance table with min 50% storage located inside the apartment. Complies
4R-2 Additional storage is conveniently located,	1. Storage not located in apartments is secure and clearly	Storage unable to be located in apartment will be

accessible and nominated for individual apartments	allocated 2. Storage is provided for larger and less frequently accessed items, where practical 3. Storage space in internal or basement car parks is provided at the rear or side of car spaces or in cages 4. Storage rooms are accessible from common circulation areas of the building 5. Storage not located in an apartment is integrated into the overall building design and not visible from the public domain	located securely in parking levels both in caged storage areas and overhead compartments. Complies
4S-1 Noise transfer is minimised through the siting of buildings and building layout	1. Adequate building separation is provided within the development and from neighbouring buildings/ adjacent uses 2. Window and door openings are generally orientated away from noise sources 3. Noisy areas within buildings including building entries and corridors are located next to or above each other and quieter areas next to or above quieter areas 4. Storage, circulation areas and non-habitable rooms are located to buffer noise from external sources 5. The number of party walls (walls shared with other apartments) are limited and are appropriately insulated 6. Noise sources such as garage doors, driveways, service areas, plant rooms, building services, mechanical equipment, active communal open spaces and circulation areas are located at least 3m away from bedrooms	Proposed unit layouts are orientated predominantly around the perimeter of the site to the streetscape or public courtyard which has allowed for minimisation of noise transmissions to adjacent dwellings. Complies
4S-2 Noise impacts are mitigated through internal apartment layout and acoustic treatments	1. Internal apartment layout separates noisy spaces from quiet spaces, using a number of the following design solutions: • rooms with similar noise requirements are grouped together • doors separate different use zones • wardrobes in bedrooms are co-located to act as sound buffers 2. Where physical separation cannot be achieved noise conflicts are resolved using the following design solutions: • double or acoustic glazing • acoustic seals • use of materials with low noise penetration properties • continuous walls to ground level courtyards where they do not conflict with streetscape or other amenity requirements	Private & public rooms within unit layouts are appropriately designed to predominantly confine unit noise to the living areas. Complies
4T-1 The siting and layout of buildings minimise the impacts of external noise and pollution	1. A number of the following design solutions are used: • residential uses are located perpendicular to the noise sources and where possible buffered by other uses • non-residential buildings are positioned parallel to the noise source to provide a continuous building shielding residential uses and communal open spaces • non-residential uses are located at lower levels vertically separating the residential component from the noise source • where solar access is in the opposite direction to the noise or pollution source, habitable rooms are located away from these	Proposed unit layouts are orientated perpendicular to the streetscape or public courtyard which has allowed for minimised external noise pollution. Complies

	and storage areas, circulation areas, non-habitable rooms and kitchens provide a buffer to the noise or pollution source • where solar access is in the same direction as the noise or pollution source, apartments are dual aspect with shallow building depths • landscape design reduces the perception of noise and acts as a filter for air pollution generated by traffic and industry	
4T-2 Noise transmission is mitigated by appropriate noise shielding or attenuation techniques for the building design, construction and choice of materials	1. A number of the following design solutions are used: • number and size of openings facing noise sources are limited • seals prevent noise transfer through gaps • double or acoustic glazing, acoustic louvres or enclosed balconies (wintergardens) • materials with mass and/or sound insulation or absorption properties e.g. balcony balustrades, external screens and soffits	All dwellings have balconies with a min depth of 3.3m allowing for a buffering of noise to the street or public courtyard. Complies
4U-1 Development incorporates passive environmental design	1. Adequate natural light is provided to habitable rooms 2. Well located, screened outdoor areas are provided for clothes drying	73% of the dwellings achieve direct sunlight access between 9am & 3pm meeting the recommended 70%. Complies
4U-2 Development incorporates passive solar design to optimise heat storage in winter and reduce heat transfer in summer	1. A number of the following design solutions are used: • the use of smart glass or other technologies on north and west elevations • thermal mass in floor and walls in the north facing rooms is maximised • polished concrete floors, tiles or timber rather than carpet • insulated roofs, walls and floors and seals on windows and door openings • overhangs and shading devices such as awnings, blinds and screens 2. Provision of consolidated heating and cooling infrastructure in a centralised location (e.g. the basement)	Not applicable.
4U-3 Adequate natural ventilation minimises the need for mechanical ventilation	1. A number of the following design solutions are used: • rooms with similar usage are grouped together • natural cross ventilation for apartments is optimised • natural ventilation is provided to all habitable rooms and as many non-habitable rooms, common areas and circulation spaces as possible	Private & public rooms within unit layouts are appropriately grouped for similar usage to optimise natural ventilation. Complies
4V-1 Potable water use is minimised	1. Water efficient fittings, appliances and wastewater reuse are incorporated 2. Apartments are individually metered 3. Rainwater is collected, stored and reused on site 4. Drought tolerant, low water use plants are used within landscaped areas	All water fixtures & water saving methods are in compliance with the BASIX report submitted. Complies
4V-2 Urban stormwater is treated on site before being discharged to receiving waters	1. Water sensitive urban design systems are designed by a suitably qualified professional 2. A number of the following design solutions are used: • runoff is collected from roofs and balconies in water tanks and plumbed into toilets, laundry and irrigation • porous and open paving materials is maximised	All water fixtures & water saving methods are in compliance with the BASIX report submitted. Complies

	on site stormwater and infiltration, including bio-retention systems such as rain gardens or street tree pits	
4V-3 Flood management systems are integrated into site design	- Detention tanks are located under paved areas, driveways or in basement car parks - On large sites parks or open spaces are designed to provide temporary on site detention basins	All flood management requirements are in compliance with flood and stormwater report submitted. 1:100yr flood level @ RL.5.86 for ground Complies
4W-1 Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity of residents	- Adequately sized storage areas for rubbish bins are located discreetly away from the front of the development or in the basement car park - Garbage storage areas are well ventilated - Circulation design allows bins to be easily manoeuvred between storage and collection points - Temporary storage is provided for large bulk items such as mattresses - A waste management plan is prepared	Waste management & waste storage areas have design in accordance to the waste management plan submitted. Complies
4W-2 Domestic waste is minimised by providing safe and convenient source separation and recycling	- All dwellings have a waste cupboard or temporary storage area of sufficient size to hold two days worth of garbage recycling - Communal garbage rooms are in convenient and accessible locations related to each vertical core - For mixed use developments, residential garbage storage areas and access are separate and secure from other uses - Alternative waste disposal methods such as composting are provided	Allocation, disposal & collection of waste are in compliance with the waste management plan submitted. Complies
4X-1 Building design detail provides protection from weathering	- A number of the following design solutions are used: - roof overhangs to protect walls - hoods over windows and doors to protect openings - detailing horizontal edges with drip lines to avoid staining of surfaces - methods to eliminate or reduce planter box leaching - appropriate design and material selection for hostile locations	External wall materials as per finishes schedule submitted provide good protection from weathering elements. Complies
4X-2 Systems and access enable ease of maintenance	- Window design enables cleaning from the inside of the building - Building maintenance systems are incorporated and integrated into the design of the building form, roof and facade - Design solutions do not require scaffolding for maintenance access - Manually operated systems such as blinds, sunshades and curtains are used in preference to mechanical systems - Centralised maintenance, services and storage are provided for communal open space areas within the building	Proposed architectural building form allows for simple maintenance procedures to be carried out through simple perpendicular lines & predominant rectangular geometry. Complies
4X-3 Material selection reduces ongoing maintenance costs	- A number of the following design solutions are used: - natural materials that weather well and improve with time such as face brickwork - easily cleaned surfaces that are graffiti resistant - robust and durable materials and finishes are used in locations which receive heavy wear and tear, such as common circulation	Proposed external building materials as per finishes schedule submitted provides durable & low maintenance benefits. Complies

	areas and lift interiors	
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