## Annexure 3 – SEPP 65 and ADG Assessment

# Part 1 – SEPP 65 Design Quality Principles

## 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.

**Comment: Complies -** The proposal seeks to develop a high-density residential development on R4 High Density Residential zoned land. The proposal has had regard to its differing context adjacent to E4 Environmental Living and E2 Environmental Conservation land by providing for a high-quality landscaping setting that will contribute to the surrounding natural setting.

## 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.

**Comment: Complies -** The proposed design provides a scale, bulk and height appropriate to the future desired character of the street by providing an appropriate height transition, utilisation of additional building separation to the south (min. 10m) and setting of the driveway location. The bulk and scale expressed as FSR is well below that envisaged under the local planning provisions and this has given the proposed design opportunities to provide for higher levels of articulation of building elements within the anticipated building platform.

#### **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.

**Comment: Complies -** The density is consistent with the local planning provisions (an FSR of less than 1.8:1). The proposed density of apartments per floor (Average of 5 per floor) provides for greater solar access, outlook, natural ventilation and internal amenity for each unit. The development site is well serviced by public transport infrastructure, community facilities in Mindarie Park and the environment in the nearby Stringybark Creek.

# 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.

**Comment: Complies -** The proposed development is accompanied by a Basix Certificate which indicates that the proposed development meets the principle of sustainability.

#### 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 useability, privacy and opportunities for social interaction, equitable access, respect for neighbours' amenity and provides for practical establishment and long term management.

**Comment: Complies –** The proposal provides a high quality landscape outcome with significant deep soil zones particularly to the more sensitive boundary interfaces to the west and the south. The proposal enables the retention of six (6) existing trees and provides for a replacement tree planting ration of 2:1 compromised of native trees with a mature height of up to 15m, and large pot sizes at initial planting. The landscaping softens the built-form from the streetscape, is practical in its maintenance capability and provides for privacy to the southern adjoining properties.

#### 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.

**Comment**: **Complies –** The proposal provides good internal and external amenity for residents including compliant room dimensions, storage, visual privacy, natural ventilation and solar access.

#### 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.

**Comment:** Complies – The proposal was not referred to North Shore Area Command (NSW Police) for comment. Notwithstanding, the proposal provides for secure access points, a clear activation of the public/private domain interface and the standard conditions of consent provided by the Police are recommended to be incorporated to maximise Crime Prevention Through Environmental Design.

# 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 and providing opportunities for social interaction among residents.

**Comment:** Complies – The proposal provides for 50% of units as affordable housing which provides for a range of household budgets and social interaction. The apartment mix is considered to be reasonable with 7 x 1 bedroom, 19 x 2 bedroom and 4 x 3 bedroom units. The total number of apartments would be **30** apartments. The proposal provides a good mix of apartment sizes in accordance with the Principle.

#### **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 a well designed apartment development responds to the existing or future local context, particularly desirable elements and repetitions of the streetscape.

**Comment: Complies –** The proposed building aesthetic is sound and the design in good proportion In particular the good articulation elements have been kept including the podium masonry base, and the southern facing articulation that reduced building separation and imposed on the southern adjoining property has been pulled back. The amendments will also reduce maintenance for future owners by rationalising some of the design elements.

# Part 2 – ADG Assessment

ADG Ref Item description	Proposal	Compliance
PART 3 Siting the development		
<i>Objective 3A-1</i> Site analysis illustrates that design decisions have been based on opportunities and constraints of the site conditions and their relationship to the surrounding context	The proposal has provided a Site Analysis and demonstrates design decisions have been made in relation to the site-specific context.	Yes
<b>Design guidance</b> Each element in the Site Analysis Checklist should be addressed (see Appendix 1)		
3B Orientation		
Objective 3B-1		
Building types and layouts respond to the streetscape and site while optimising solar access within the development	Provided.	Yes
<b>Design guidance</b> Buildings along the street frontage define the street, by facing it and incorporating direct access from the street (see figure 3B.1)	Incorporated via access ramp and stair from Pinaroo Place with entry canopy, and secondary access from Mindarie Street.	
Where the street frontage is to the east or west, rear buildings should be orientated to the north	The proposal is a singular building.	
Where the street frontage is to the north or south, overshadowing to the south should be minimised and buildings behind the street frontage should be orientated to the east and west (see figure 3B.2)	The overshadowing has been minimised in accordance with the ADG.	
Objective 3B-2		
Overshadowing of neighbouring properties is minimised during mid winter	Overshadowing minimise during mid-winter through increased building separation.	Yes
<b>Design guidance</b> Living areas, private open space and communal open space should receive solar access in accordance with sections 3D Communal and public open space and 4A Solar and daylight access	70% units and 50% of communal open space receive solar access in accordance with ADG.	
Solar access to living rooms, balconies and private open spaces of neighbours should be considered	Immediately southern adjoining impacts addressed in the report.	
Where an adjoining property does not currently receive the required hours of solar access, the proposed building ensures solar access to neighbouring properties is not reduced by more than 20%	The dwelling currently receives the required hours of solar access.	
If the proposal will significantly reduce the solar access of neighbours, building separation should be increased beyond	The proposal has increased building separation to the south beyond Section 3F – Visual Privacy.	

ADG Ref Item description	Proposal	Compliance
minimums contained in section 3F Visual privacy		
Overshadowing should be minimised to the south or down hill by increased upper level setbacks	As per above.	
It is optimal to orientate buildings 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	Orientation reasonable in context of site.	
A minimum of 4 hours of solar access should be retained to solar collectors on neighbouring buildings	No solar collectors on neighbouring buildings. No. 8 Pinaroo Place would be overshadowed outside the specified mid-winter period.	
3C Public domain interface		
<i>Objective 3C-1</i> Transition between private and public domain is achieved without compromising safety and security	Provided.	Yes
<b>Design guidance</b> Terraces, balconies and courtyard apartments should have direct street entry, where appropriate	Provided to Mindarie Street.	
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 (see figure 3C.1)	The proposal provides for a high-level of visual privacy for all ground-level courtyards.	
Upper level balconies and windows should overlook the public domain	Provided.	
Front fences and walls along street frontages should use visually permeable materials and treatments. The height of solid fences or walls should be limited to 1m	The front fence varies in height due to topography but is sufficiently permeable and landscaped.	
Length of solid walls should be limited along street frontages '	Appropriately limited and broken up by openings for stairs and landscaping.	
Opportunities should be provided for casual interaction between residents and the public domain. Design solutions may include seating	The proposal provides for a high-quality and generous lobby area which may encourage interactions.	

ADG Ref Item description	Proposal	Compliance
at building entries, near letter boxes and in private courtyards adjacent to streets		
In developments with multiple buildings and/or entries, pedestrian entries and spaces associated with individual buildings/entries should be differentiated to improve legibility for residents, using a number of the following design solutions:	N/A	
architectural detailing changes in materials plant species colours		
Opportunities for people to be concealed should be minimised	Satisfactory	
Objective 3C-2		Yes
Amenity of the public domain is retained and enhanced		
<b>Design guidance</b> Planting softens the edges of any raised terraces to the street, for example above sub- basement car parking	Provided.	
Mail boxes should be located in lobbies, perpendicular to the street alignment or integrated into front fences where individual street entries are provided	Mailbox location conditioned by police comments to be integrated into design.	
The visual prominence of underground car park vents should be minimised and located at a low level where possible	No vents.	
Substations, pump rooms, garbage storage areas and other service requirements should be located in basement car parks or out of view	All services screened from view. Further detail required of kiosk to ensure appropriately screened.	
Ramping for accessibility should be minimised by building entry location and setting ground floor levels in relation to footpath levels	The ground level is reasonably set and a single ramp is provided at 1:14 with no turning back on itself.	
Durable, graffiti resistant and easily cleanable materials should be used	Satisfactory.	
Where development adjoins public parks, open space or bushland, the design positively addresses this interface and uses a number of the following design solutions:	N/A	
<ul> <li>street access, pedestrian paths and building entries which are clearly defined</li> <li>paths, low fences and planting that clearly delineate between</li> </ul>		
	1	

ADG Ref Item description	Proposal	Compliance
<ul> <li>communal/private open space and the adjoining public open space</li> <li>minimal use of blank walls, fences and ground level parking</li> </ul>		
On sloping sites protrusion of car parking above ground level should be minimised by using split levels to step underground car parking	Complies.	
3D Communal and public open space		
Objective 3D-1		
An adequate area of communal open space is provided to enhance residential amenity and to provide opportunities for landscaping		Yes
Design criteria		
<ul> <li>Communal open space has a minimum area equal to 25% of the site (see figure 3D.3)</li> </ul>	441m <sup>2</sup> proposed being 25% of site.	
<ol> <li>Developments achieve a minimum of 50% direct sunlight to the principal usable part of the communal open space for a minimum of 2 hours between 9 am and 3 pm on 21 June (mid winter)</li> </ol>	50% for 5 hours achieved.	
Design guidance		
Communal open space should be consolidated into a well designed, easily identified and usable area	The proposal provides for a consolidated area on the rooftop and a passive communal open space at ground.	
Communal open space should have a minimum dimension of 3m, and larger developments should consider greater dimensions	The proposal provides for greater dimensions than the ADG minimum.	
Communal open space should be co-located with deep soil areas	Provided.	
Direct, equitable access should be provided to communal open space areas from common circulation areas, entries and lobbies	Provided.	
Where communal open space cannot be provided at ground level, it should be provided on a podium or roof	Both provided for.	
Where developments are unable to achieve the design criteria, such as on small lots, sites within business zones, or in a dense urban area, they should:	N/A	

ADG Ref Item description	Proposal	Compliance
<ul> <li>provide communal spaces elsewhere such as a landscaped roof top terrace or a common room</li> <li>provide larger balconies or increased private open space for apartments</li> <li>demonstrate good proximity to public open space and facilities and/or provide contributions to public open space</li> </ul>		
Objective 3D-2		
Communal open space is designed to allow for a range of activities, respond to site conditions and be attractive and inviting	The proposal provides high quality facilities, shade/window protection, and screening from services as outlined in the planning report.	Yes
<b>Design guidance</b> Facilities are provided within communal open spaces and common spaces for a range of age groups (see also 4F Common circulation and spaces), incorporating some of the following elements:		
seating for individuals or groups barbecue areas play equipment or play areas swimming pools, gyms, tennis courts or common rooms		
The 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		
Visual impacts of services should be minimised, including location of ventilation duct outlets from basement car parks, electrical substations and detention tanks		
Objective 3D-3		
Communal open space is designed to maximise safety	The proposed communal open space would be	Yes
<b>Design guidance</b> Communal open space and the public domain should be readily visible from habitable rooms and private open space areas while maintaining visual privacy. Design solutions may include:	secure for residents only and is designed to provide safe usable areas with suitable passive surveillance.	
bay windows corner windows balconies		
Communal open space should be well lit		
Where communal open space/facilities are provided for children and young people they are safe and contained		

ADG Ref Item description	Proposal	Compliance
3D Communal and public open space		
Objective 3D-4		
Public open space, where provided, is responsive to the existing pattern and uses of the neighbourhood	The proposal does not seek to provide for public open space.	N/A
<b>Design guidance</b> The public open space should be well connected with public streets along at least one edge		
The public open space should be connected with nearby parks and other landscape elements		
Public open space should be linked through view lines, pedestrian desire paths, termination points and the wider street grid		
Solar access should be provided year round along with protection from strong winds		
Opportunities for a range of recreational activities should be provided for people of all ages		
A positive address and active frontages should be provided adjacent to public open space		
Boundaries should be clearly defined between public open space and private areas		
3E Deep soil zones		
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.	The proposal provides for high quality deep soil zones adjacent to the western and southern boundaries, and within front setback zones.	Yes
<ul><li><b>Design criteria</b></li><li>1. Deep soil zones are to meet the following minimum requirements:</li></ul>	A total of 20.5% is provided.	Yes
Site area Minimum Deep soil zone dimensions (% of site area) less than - 7% 650m2 650m2 - 3m 1,500m2		
greater than 6m 1,500m2		
greater than 6m 1,500m2 with significant existing tree cover		
Design guidance	Meets with design guidance for sites greater than 1,500m <sup>2</sup> .	Yes

ADG Ref Item description	Proposal	Compliance
On some sites it may be possible to provide larger deep soil zones, depending on the site area and context:		
10% of the site as deep soil on sites with an area of 650m2 - 1,500m2 15% of the site as deep soil on sites greater than 1,500m2		
Deep soil zones should be located to retain existing significant trees and to allow for the development of healthy root systems, providing anchorage and stability for mature trees. Design solutions may include:	The basement design is reasonably restricted to the building footprint, allows for greater deep soil zones to the south and west and provides for adequate clearance around trees to be retained.	
basement and sub basement car park design that is consolidated beneath building footprints use of increased front and side setbacks adequate clearance around trees to ensure long term health co-location with other deep soil areas on adjacent sites to create larger contiguous areas of deep soil		
Achieving the design criteria may not be possible on some sites including where:	NA	
the location and building typology have limited or no space for deep soil at ground level (e.g. central business district, constrained sites, high density areas, or in centres) there is 100% site coverage or non-residential uses at ground floor level		
Where a proposal does not achieve deep soil requirements, acceptable stormwater management should be achieved and alternative forms of planting provided such as on structure		
3F Visual privacy		
<i>Objective 3F-1</i> Adequate building separation distances are shared equitably between neighbouring sites, to achieve reasonable levels of external and internal visual privacy	Provided	Yes

<b>Design criteria</b> 1. Separation b	n between windows a	nd balconies is	The proposal provides for compliant building	Yes
Minimum requ	nsure visual privac ired separation o side and rear boo	distances from	separation as detailed in <b>Table 1</b> below including additional separation to the southern adjoining site	
Building height	Habitable room and balconies	s Non- habitable rooms		
up to 12m	6m	3m		
(4 storeys)				
up to 25m	9m	4.5m		
(5-8 storeys)				
over 25m	12m	6m		
(9+ storeys)				
Decian quide	200			
increases due to	step in the built form building separations s should be careful ne	s is desirable.	The proposal generally provides for single step.	
	buildings next to aration distances lows:	commercial should be	N/A	
use the habitabl	spaces and commerce e room distances plant areas use the p			
to maximise vis	ent should be located sual privacy between neighbouring buildi e:	buildings on	Satisfactory – separation and design measures utilised.	
privacy impacts on sloping site	building orientation (see also section 3B s, apartments on di e visual separation d	Orientation) fferent levels		
separation dist requirements se adjacent to a density resident	dings should have a ance of 3m (in ad- et out in design crit different zone that p tial development to cale and increased	dition to the eria 1) when permits lower provide for a	The proposal was amended compared to the preceeding Concept DA to provide for this additional separation. See Table 1 below for more detail.	
Direct lines of si and balconies a	ght should be avoided cross corners	d for windows	Avoided in proposed design.	
No separation is	s required between bla	ank walls	Not proposed or relied upon.	

ADG Ref Item description	Proposal	Compliance
Objective 3F-2		X
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	Appropriately considered in design.	Yes
Design guidance		
Communal open space, common areas and access paths should be separated from private open space and windows to apartments, particularly habitable room windows. Design solutions may include:	Communal open space is separated from windows and POS through courtyard fencing to ground floor units in the southern and western setback zones.	
setbacks solid or partially solid balustrades to balconies at lower levels fencing and/or trees and vegetation to separate spaces screening devices bay windows or pop out windows to provide privacy in one direction and outlook in another 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		
Bedrooms, living spaces and other habitable rooms should be separated from gallery access and other open circulation space by the apartment's service areas	Apartments service areas maximise available separation.	
Balconies and private terraces should be located in front of living rooms to increase internal privacy	Balconies and terraces located adjacent to living rooms.	
Windows should be offset from the windows of adjacent buildings	The proposal provides suitable privacy screening where facing adjoining windows.	
Recessed balconies and/or vertical fins should be used between adjacent balconies	Utilised where necessary.	
3G Pedestrian access and entries		
Objective 3G-1		Vaa
Building entries and pedestrian access connects to and addresses the public domain	Accessible connectivity provided addressing public domain.	Yes
Design guidance		
Multiple entries (including communal building entries and individual ground floor entries) should be provided to activate the street edge	The proposal provides both a grand stair entrance as well as an accessible ramp, improving street activation in accordance with the ADG.	

ADG Ref Item description	Proposal	Compliance
Entry locations relate to the street and subdivision pattern and the existing pedestrian network	Satisfactory	
Building entries should be clearly identifiable and communal entries should be clearly distinguishable from private entries	Satisfactory.	
Where street frontage is limited and multiple buildings are located on the site, a primary street address should be provided with clear sight lines and pathways to secondary building entries	Not applicable.	
Objective 3G-2		
Access, entries and pathways are accessible and easy to identify	Provided.	Yes
Design guidance		
Building access areas including lift lobbies, stairwells and hallways should be clearly visible from the public domain and communal spaces	Clearly visible (and led-to) by Pinaroo Place pedestrian access, and within the basement parking areas.	
The design of ground floors and underground car parks minimise level changes along pathways and entries	Provided.	
Steps and ramps should be integrated into the overall building and landscape design.	The steps and ramps are highly integrated into landscape design with a singular ramp and stair (with no bends or returns) maximise potential for landscaping.	
For large developments 'way finding' maps should be provided to assist visitors and residents (see figure 4T.3)	Not required.	
For large developments electronic access and audio/video intercom should be provided to manage access	Would be required.	
Objective 3G-3		
Large sites provide pedestrian links for access to streets and connection to destinations	A pedestrian link is not needed in this instance as the site is not a large site connecting destinations.	Yes
<b>Design guidance</b> Pedestrian links through sites facilitate direct connections to open space, main streets, centres and public transport		
Pedestrian links should be direct, have clear sight lines, be overlooked by habitable rooms or private open spaces of dwellings, be well lit and contain active uses, where appropriate		
3H Vehicle access		
<i>Objective 3H-1</i> Vehicle access points are designed and located to achieve safety, minimise conflicts	Complies	Yes

ADG Ref Item description	Proposal	Compliance
between pedestrians and vehicles and create high quality streetscapes		
Design guidance		
Car park access should be integrated with the building's overall facade. Design solutions may include:	The vehicular entrance is integrated into the podium masonry façade of the building.	
the materials and colour palette to 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		
Car park entries should be located behind the building line	Provided	
Vehicle entries should be located at the lowest point of the site minimising ramp lengths, excavation and impacts on the building form and layout	The proposal achieves this.	
Car park entry and access should be located on secondary streets or lanes where available	Provided.	
Vehicle standing areas that increase driveway width and encroach into setbacks should be avoided	Driveway width is satisfactory in width (2-way).	
Access point locations should avoid headlight glare to habitable rooms	Adequate.	
Adequate separation distances should be provided between vehicle entries and street intersections	Assesses by Council's Traffic Section as being adequate.	
The width and number of vehicle access points should be limited to the minimum	Limited to one (1).	
Visual impact of long driveways should be minimised through changing alignments and screen planting	Screen planting provided to Pinaroo Place	
The need for large vehicles to enter or turn around within the site should be avoided	Occurs within basement and is anticipated to be limited to an SRV.	
Garbage collection, loading and servicing areas are screened	Screened by being within the basement area.	
Clear sight lines should be provided at pedestrian and vehicle crossings	Clear sight lines provided given co-location with fire exit.	
Traffic calming devices such as changes in paving material or textures should be used where appropriate	Not required.	

ADG Ref Item description	Proposal	Compliance
Pedestrian and vehicle access should be separated and distinguishable. Design solutions may include:	Provided for through landscape buffers for separation.	
changes in surface materials level changes		
the use of landscaping for separation		
3J Bicycle and car parking		
Objective 3J-1	SEPP (ARH) 2009 rates apply.	N/A
Car parking is provided based on proximity to public transport in metropolitan Sydney and centres in regional areas		
Design criteria		
For development in the following 1. locations:		
on sites that are within 800 metres of a railway station or light rail stop in the Sydney Metropolitan Area; or		
on land zoned, and sites within 400 metres of land zoned, B3 Commercial Core, B4 Mixed Use or equivalent in a nominated regional centre		
the minimum car parking requirement for residents and visitors is set out in the Guide to Traffic Generating Developments, or the car parking requirement prescribed by the relevant council, whichever is less		
The car parking needs for a development must be provided off street		
<b>Design guidance</b> Where a car share scheme operates locally, provide car share parking spaces within the development. Car share spaces, when provided, should be on site		
Where less car parking is provided in a development, council should not provide on street resident parking permits		
Objective 3J-2		
Parking and facilities are provided for other modes of transport	Suitable additional other modes of transport are provided in accordance with Council's DCP.	Yes
Design guidance		

ADG Ref Item description	Proposal	Compliance
Conveniently located and sufficient numbers of parking spaces should be provided for motorbikes and scooters		
Secure undercover bicycle parking should be provided that is easily accessible from both the public domain and common areas		
Conveniently located charging stations are provided for electric vehicles, where desirable		
Objective 3J-3		X
Car park design and access is safe and secure	Car park design has been reviewed and is consistent with Objective 3J-3 to provide for safe and secure access.	Yes
<b>Design guidance</b> Supporting facilities within car parks, including garbage, plant and switch rooms, storage areas and car wash bays can be accessed without crossing car parking spaces		
Direct, clearly visible and well lit access should be provided into common circulation areas		
A clearly defined and visible lobby or waiting area should be provided to lifts and stairs		
For larger car parks, safe pedestrian access should be clearly defined and circulation areas have good lighting, colour, line marking and/or bollards		
Objective 3J-4		
Visual and environmental impacts of underground car parking are minimised		Yes
<b>Design guidance</b> Excavation should be minimised through efficient car park layouts and ramp design	The basement layout is efficient with ramping minimised.	
Car parking layout should be well organised, using a logical, efficient structural grid and double loaded aisles	The parking layout is well-designed and double loaded aisles where possible.	
Protrusion of car parks should not exceed 1m above ground level. Design solutions may include stepping car park levels or using split levels on sloping sites	Complies, no protrusion proposed.	
Natural ventilation should be provided to basement and sub basement car parking areas	Ventilation would be detailed at Construction Certificate stage.	
Ventilation grills or screening devices for car parking openings should be integrated into the facade and landscape design		
Objective 3J-5	Not applicable	N/A

ADG Ref Item description	Proposal	Compliance
Visual and environmental impacts of on-grade car parking are minimised <b>Design guidance</b> On-grade car parking should be avoided Where on-grade car parking is unavoidable, the following design solutions are used: parking is located on the side or rear of the lot		Compliance
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-swales, 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		
<i>Objective 3J-6</i> Visual and environmental impacts of above ground enclosed car parking are minimised	Not applicable.	N/A
<i>Design guidance</i> Exposed parking should not be located along primary street frontages		
Screening, landscaping and other design elements including public art should be used to integrate the above ground car parking 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 Small Office/Home Office (SOHO) units along the street frontage (see figure 3J.9)		
Positive street address and active frontages should be provided at ground level		

ADG Ref Item description		Proposal	Compliance
PART 4 Designing the building			
4A Solar and daylight access			
<i>Objective 4A-1</i> To optimise the number of sunlight to habitable rooms, private open space		The proposal provides for the following:	Yes
Design criteria			
Living rooms and p 1. least 70% of apa receive a minimu sunlight between 9 winter in the Sydne	rivate open spaces of at artments in a building m of 2 hours direct am and 3 pm at mid y Metropolitan Area and and Wollongong local	70%	
2 open spaces of at l in a building receive	iving rooms and private east 70% of apartments e a minimum of 3 hours veen 9 am and 3 pm at	N/A	
	% of apartments in a direct sunlight between nid winter	10%	
Design guidance			
The design maximises north of single aspect south facing a		No single-aspect south facing apartments proposed.	
Single aspect, single storey ap northerly or easterly aspect	partments should have a	In line with ADG design criteria.	
Living areas are best located areas to the south and west o		In this instance the reasons to locate lift core to north outweigh this guidance.	
To optimise the direct sunlight balconies a number of the fo are used:			
. dual aspect apartmen . shallow apartment lay . two storey and mezza . bay windows	outs		
To maximise the benefit to res within living rooms and pr minimum of 1m2 of direct su above floor level, is achieved	ivate open spaces, a nlight, measured at 1m	Provided where solar access is achieved.	
Achieving the design criteria some sites. This includes:	may not be possible on	Design criteria achieved.	
achieved along a busy road of the living rooms away from the on south facing slopin	e noise source g sites ws are oriented away		

ADG Ref Item description	Proposal	Compliance
Design drawings need to demonstrate how site constraints and orientation preclude meeting the design criteria and how the development meets the objective	Provided.	
Objective 4A-2		
Daylight access is maximised where sunlight is limited	Not proposed to be used as primary light source.	Yes
<b>Design guidance</b> Courtyards, skylights and high level windows (with sills of 1,500mm or greater) are used only as a secondary light source in habitable rooms		
Where courtyards are used :		
use is restricted to kitchens, bathrooms and service		
areas building services are concealed with appropriate detailing and materials to visible walls courtyards are fully open to the sky access is provided to the light well from a communal area for cleaning and maintenance acoustic privacy, fire safety and minimum privacy separation distances (see section 3F Visual privacy) are achieved		
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	Scale of development doesn't warrant the guidance solutions for reflected light.	
Objective 4A-3	Provided.	Yes
Design incorporates shading and glare control, particularly for warmer months		
<i>Design guidance</i> A number of the following design features are used:		
balconies or sun shading that extend far enough to shade summer sun, but allow winter sun to penetrate living areas 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 operable shading to allow adjustment and choice 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)		

ADG Ref Item description	Proposal	Compliance
4B Natural ventilation		
Objective 4B-1		
All habitable rooms are naturally ventilated	Provided.	Yes
<b>Design guidance</b> The building's orientation maximises capture and use of prevailing breezes for natural ventilation in habitable rooms	Provided.	
Depths of habitable rooms support natural ventilation	Compliant.	
The area of unobstructed window openings should be equal to at least 5% of the floor area served	Provided.	
Light wells are not the primary air source for habitable rooms	Not relied upon.	
Doors and openable windows maximise natural ventilation opportunities by using the following design solutions:	Large openable areas provided to apartments on all elevations to maximise natural ventilation.	
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 windows and externally opening doors		
Objective 4B-2		
The layout and design of single aspect apartments maximises natural ventilation	Depth minimised in accordance with ratio for single aspect apartments.	Yes
<b>Design guidance</b> Apartment depths are limited to maximise ventilation and airflow (see also figure 4D.3)		
Natural ventilation to single aspect apartments is achieved with the following design solutions:		
primary windows are augmented with plenums and light wells (generally not suitable for cross ventilation) stack effect ventilation / solar chimneys or similar to naturally ventilate internal building areas or rooms such as bathrooms and laundries courtyards or building indentations have a width to depth ratio of 2:1 or 3:1 to ensure effective air circulation and avoid trapped smells		
Objective 4B-3		Yes

ADG Ref Item description	Proposal	Compliance
The number of apartments with natural cross ventilation is maximised to create a comfortable indoor environment for residents	66%	Yes
Design criteria		
<ol> <li>At least 60% of apartments are naturally cross ventilated in the first nine storeys of the building. Apartments at ten storeys or greater are deemed to be cross ventilated only if any enclosure of the balconies at these levels allows adequate natural ventilation and cannot be fully enclosed</li> </ol>		
<ol> <li>Overall depth of a cross-over or cross- through apartment does not exceed 18m, measured glass line to glass line</li> </ol>		
<b>Design guidance</b> The building should include dual aspect apartments, cross through apartments and corner apartments and limit apartment depths		
In cross-through 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) (see figure 4B.4)		
Apartments are designed to minimise the number of corners, doors and rooms that might obstruct airflow		
Apartment depths, combined with appropriate ceiling heights, maximise cross ventilation and airflow		
Objective 4C-1		
Ceiling height achieves sufficient natural ventilation and daylight access		
Design criteriaMeasured from finished floor level to1.finished ceiling level, minimum ceilingheights are:		
Minimum ceiling height 2.7m (residential) 3.3m commercial	Minimum 2.7m for habitable	Yes
Objective 4C-2 Ceiling height increases the sense of space in apartments and provides for well-proportioned rooms		
<b>Design guidance</b> A number of the following design solutions can be 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		

ADG Ref Item description	Proposal	Compliance
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.		
<i>Objective 4C-3</i> Ceiling heights contribute to the flexibility of building use over the life of the building	Provided.	Yes
<b>Design guidance</b> Ceiling heights of lower level apartments in centres should be greater than the minimum required by the design criteria allowing flexibility and conversion to non-residential uses (see figure 4C.1)		
4D Apartment size and layout		
<i>Objective 4D-1</i> The layout of rooms within an apartment is functional, well organised and provides a high standard of amenity	See below.	Yes
Design criteriaApartments are required to have the1.following minimum internal areas:		
Apartment typeMinimum area 35m2Studio35m21 bedroom50m22 bedroom70m23 bedroom90m2	The proposed apartment sizes are consistent with the minimum apartment sizes.	Yes
The minimum internal areas include only one bathroom. Additional bathrooms increase the minimum internal area by 5m2 each A fourth bedroom and further additional bedrooms increase the minimum internal area by 12m2 each.	Additional 5m <sup>2</sup> provided for.	Yes
Every habitable room must have a window in an external wall with a total minimum glass area of not less than 10% of the floor area of the room. Daylight and air may not be borrowed from other rooms	Provided.	Yes
<b>Design guidance</b> Kitchens should not be located as part of the main circulation space in larger apartments (such as hallway or entry space)	Provided.	Yes
A window should be visible from any point in a habitable room		

ADG Ref	Item description	Proposal	Compliance
met apar well desi functiona furniture	inimum areas or room dimensions are not tments need to demonstrate that they are gned and demonstrate the usability and lity of the space with realistically scaled layouts and circulation areas. These inces would be assessed on their merits		
Objective		Provided.	Yes
Environm maximise	ental performance of the apartment is d		163
	<i>riteria</i> ble room depths are limited to a maximum of ne ceiling height		
kitcher	n plan layouts (where the living, dining and are combined) the maximum habitable lepth is 8m from a window		
proportio	<b>uidance</b> han minimum ceiling heights can allow for nal increases in room depth up to the maximum depths		
-	areas and bedrooms should be located on nal face of the building		
Objective	4D-3		
	t layouts are designed to accommodate a household activities and needs		Yes ·
Design d	riteria		
1.	Master bedrooms have a minimum area of 10m2 and other bedrooms 9m2 (excluding wardrobe space)	Provided.	
2	Bedrooms have a minimum dimension of 3m (excluding wardrobe space)	Minimum dimension achieved and shown on plans.	
3	Living rooms or combined living/dining rooms have a minimum width of: . 3.6m for studio and 1 bedroom apartments . 4m for 2 and 3 bedroom apartments	Achieved and detailed on plans.	
4	The width of cross-over or cross-through apartments are at least 4m internally to avoid deep narrow apartment layouts	Minimum width achieved.	
separated	<i>uidance</i> o bedrooms, bathrooms and laundries is from living areas minimising direct between living and service areas		
All bedro robes	oms allow a minimum length of 1.5m for		
l			

ADG Ref Item description	Proposal	Compliance
The main bedroom of an apartment or a studio apartment should be provided with a wardrobe of a minimum 1.8m long, 0.6m deep and 2.1m high	Provided.	
Apartment layouts allow flexibility over time, design solutions may include:	Usable floor area generally maximised and suitable flexibility in space, though not a focus of the layouts provided.	
dimensions that facilitate a variety of furniture arrangements and removal		
<ul> <li>spaces for a range of activities and privacy levels between different spaces within the apartment dual master apartments</li> <li>dual key apartments Note: dual key apartments which are separate but on the same title are regarded as two sole occupancy units for the purposes of the Building Code of Australia and for calculating the mix of apartments</li> <li>room sizes and proportions or open plans</li> </ul>		
(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		
4E Private open space and balconies		
Objective 4E-1		
Apartments provide appropriately sized private open space and balconies to enhance residential amenity		
<ul><li>All apartments are required to have primary</li><li>balconies as follows:</li></ul>		
Dwelling type Minimum area Minimum depth Studio apartments 4m2	Balconies are generously sized.	Yes
1 bedroom apartments 8m2 2.0m		
2 bedroom apartments 10m2 2.0m		
3 bedroom apartments 12m2 2.4m		
The minimum balcony depth to be counted as contributing to the balcony area is 1m		
For apartments at ground level or on a podium or similar structure, a private open space is provided instead of a balcony. It must have a minimum area of 15m2 and a minimum depth of 3m	Provided.	Yes
Design guidance		
Increased communal open space should be provided where the number or size of balconies are reduced	Not applicable.	Yes
Storage areas on balconies is additional to the minimum balcony size	None proposed.	
	N/A	

ADG Ref Item description	Proposal	Compliance
Balcony use may be limited in some proposals by: consistently high wind speeds at 10 storeys and above close proximity to road, rail or other noise sources exposure to significant levels of aircraft noise heritage and adaptive reuse of existing buildings		
In these situations, juliet balconies, operable walls, enclosed wintergardens or bay windows may be appropriate, and other amenity benefits for occupants should also be provided in the apartments or in the development or both. Natural ventilation also needs to be demonstrated		
Objective 4E-2		X
Primary private open space and balconies are appropriately located to enhance liveability for residents		Yes
<b>Design guidance</b> Primary open space and balconies should be located adjacent to the living room, dining room or kitchen to extend the living space	Provided.	
Private open spaces and balconies predominantly face north, east or west	Face north, east or west predominantly.	
Primary open space and balconies should be orientated with the longer side facing outwards or be open to the sky to optimise daylight access into adjacent rooms	Provided.	
Objective 4E-3		
Private open space and balcony design is integrated into and contributes to the overall architectural form and detail of the building		Yes
<b>Design guidance</b> Solid, partially solid or transparent fences and balustrades are selected to respond to the location. They are designed to allow views and passive surveillance of the street while maintaining visual privacy and allowing for a range of uses on the balcony. Solid and partially solid balustrades are preferred	Combination of solid and glazed balustrading proposed included straight and curved building forms.	
Full width full height glass balustrades alone are generally not desirable	A range of treatments proposed (As above).	
Projecting balconies should be integrated into the building design and the design of soffits considered	Not unduly projected balconies.	
Operable screens, shutters, hoods and pergolas are used to control sunlight and wind	Provided.	
Balustrades are set back from the building or balcony edge where overlooking or safety is an issue	Suitable landscape buffer (rooftop) or screening provided.	
Downpipes and balcony drainage are integrated with the overall facade and building design		

ADG Ref Item description	Proposal	Compliance
Air-conditioning units should be located on roofs, in	Provided on the roof.	
basements, or fully integrated into the building design		
Where clothes drying, storage or air conditioning units are located on balconies, they should be screened and integrated in the building design	Generally screening provided to lower levels.	
Ceilings of apartments below terraces should be insulated to avoid heat loss	Designed in accordance with BASIX.	
Water and gas outlets should be provided for primary balconies and private open space	Guidance only.	
Objective 4E-4		Not Applicable
Private open space and balcony design maximises safety		
Design guidance		
Changes in ground levels or landscaping are minimised		
Design and		
4F Common circulation and spaces		
Objective 4F-1		Yes
Common circulation spaces achieve good amenity and properly service the number of apartments		
Design criteria		
<ul> <li>The maximum number of apartments off</li> <li>a circulation core on a single level is eight</li> </ul>	Maximum of 7 (average of 5)	
For buildings of 10 storeys and over, the 1. maximum number of apartments sharing a single lift is 40	N/A	
Design guidance		
Greater than minimum requirements for corridor widths and/ or ceiling heights allow comfortable movement and access particularly in entry lobbies, outside lifts and at apartment entry doors		
Daylight and natural ventilation should be provided to all common circulation spaces that are above ground		
Windows should be provided in common circulation spaces and should be adjacent to the stair or lift core or at the ends of corridors	A high quality northern opening is provided to the corridor.	
Longer corridors greater than 12m in length from the lift core should be articulated. Design solutions may include:		
. a series of foyer areas with windows and spaces for seating . wider areas at apartment entry doors and varied ceiling heights		

ADG Ref Item description	Proposal	Compliance
Design common circulation spaces to maximise opportunities for dual aspect apartments, including multiple core apartment buildings and cross over apartments		
Achieving the design criteria for the number of apartments off a circulation core may not be possible. Where a development is unable to achieve the design criteria, a high level of amenity for common lobbies, corridors and apartments should be demonstrated, including:		
<ul> <li>sunlight and natural cross ventilation in apartments</li> <li>access to ample daylight and natural ventilation in common circulation spaces</li> <li>common areas for seating and gathering</li> <li>generous corridors with greater than minimum ceiling heights</li> <li>other innovative design solutions that provide high levels of amenity</li> </ul>		
Where design criteria 1 is not achieved, no more than 12 apartments should be provided off a circulation core on a single level		
Primary living room or bedroom windows should not open directly onto common circulation spaces, whether open or enclosed. Visual and acoustic privacy from common circulation spaces to any other rooms should be carefully controlled		
Objective 4F-2	Lobby gross have maximum of and linear	Voc
Common circulation spaces promote safety and provide for social interaction between residents	Lobby areas have maximum of one linear length with no tight corners and are well- designed.	Yes
<b>Design guidance</b> Direct and legible access should be provided between vertical circulation points and apartment entries by minimising corridor or gallery length to give short, straight, clear sight lines		
Tight corners and spaces are avoided		
Circulation spaces should be well lit at night		
Legible signage should be provided for apartment numbers, common areas and general wayfinding		
Incidental spaces, for example space for seating in a corridor, at a stair landing, or near a window are provided		
In larger developments, community rooms for activities such as owners corporation meetings or resident use should be provided and are ideally co-located with communal open space		

ADG Ref Item description	Proposal	Compliance
Where external galleries are provided, they are more open than closed above the balustrade along their length		
Objective 4G-1		
Adequate, well designed storage is provided in each apartment	Storage complies.	Yes
Design criteria		
<ol> <li>In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided:</li> </ol>		
Dwelling type Storage size volume		
Studio apartments 4m2	Storage complies with significant ground level storage area provided.	Yes
1 bedroom apartments 6m2	level stolage alea provided.	
2 bedroom apartments 8m2		
3 bedroom apartments 10m2		
At least 50% of the required storage is to be located within the apartment.		
<b>Design guidance</b> Storage is accessible from either circulation or living areas 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 Left over space such as under stairs is used for storage	Satisfactory	Yes
Objective 4G-2	Satisfactory	Yes
Additional storage is conveniently located, accessible and nominated for individual apartments		
Design guidance		
Storage not located in apartments is secure and clearly allocated to specific apartments		
Storage is provided for larger and less frequently accessed items		
Storage space in internal or basement car parks is provided at the rear or side of car spaces or in cages so that allocated car parking remains accessible		
If communal storage rooms are provided they should be accessible from common circulation areas of the building		
Storage not located in an apartment is integrated into the overall building design and is not visible from the public domain		
4H Acoustic privacy		
Objective 4H-1		
Noise transfer is minimised through the siting of buildings and building layout	Acoustic privacy addressed in submitted acoustic report and draft conditions of consent.	Yes
Design guidance		

ADG Ref Item description	Proposal	Compliance
Adequate building separation is provided within the development and from neighbouring buildings/adjacent uses (see also section 2F Building separation and section 3F Visual privacy)		
Window and door openings are generally orientated away from noise sources		
Noisy areas within buildings including building entries and corridors should be located next to or above each other and quieter areas next to or above quieter areas		
Storage, circulation areas and non-habitable rooms should be located to buffer noise from external sources		
The number of party walls (walls shared with other apartments) are limited and are appropriately insulated		
Noise sources such as garage doors, driveways, service areas, plant rooms, building services, mechanical equipment, active communal open spaces and circulation areas should be located at least 3m away from bedrooms		
Objective 4H-2		
Noise impacts are mitigated within apartments through layout and acoustic treatments	Acoustic privacy addressed in submitted acoustic report and draft conditions of consent.	Yes
Design guidance		
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		
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		
4J Noise and pollution		
Objective 4J-1		
In noisy or hostile environments the impacts of external noise and pollution are minimised through the careful siting and layout of buildings	Acoustic privacy addressed in submitted acoustic report and draft conditions of consent.	Yes
Design guidance		

ADG Ref Item description	Proposal	Compliance
To minimise impacts the following design solutions		
may be used:		
physical separation between buildings and the noise		
or pollution source		
residential uses are located perpendicular to the noise		
source and where possible buffered by other uses		
non-residential buildings are sited to be parallel with the noise source to provide a continuous building that		
shields residential uses and communal open spaces		
non-residential uses are located at lower levels		
vertically separating the residential component from		
the noise or pollution source. Setbacks to the underside of residential floor levels should increase		
relative to traffic volumes and other noise sources		
buildings should respond to both solar access and		
noise. Where solar access is away from the noise		
source, non-habitable rooms can provide a buffer where solar access is in the same direction as the		
noise source, dual aspect apartments with shallow		
building depths are preferable (see figure 4J.4)		
landscape design reduces the perception of noise and		
acts as a filter for air pollution generated by traffic and industry		
industry		
Achieving the design criteria in this Apartment Design		
Guide may not be possible in some situations due to		
noise and pollution. Where developments are unable		
to achieve the design criteria, alternatives may be considered in the following areas:		
, and the second s		
solar and daylight access		
private open space and balconies natural cross ventilation		
Objective 4J-2		Mar
Appropriate noise shielding or attenuation techniques	Acoustic privacy addressed in submitted acoustic report and draft conditions of	Yes
for the building design, construction and choice of	consent.	
materials are used to mitigate noise transmission		
Design guidance		
Design solutions to mitigate noise include:		
limiting the number and size of openings facing noise		
sources		
providing seals to prevent noise transfer through gaps		
using double or acoustic glazing, acoustic louvres or enclosed balconies (wintergardens)		
using materials with mass and/or sound insulation or		
absorption properties e.g. solid balcony balustrades,		
external screens and soffits		
4K Apartment mix		
Objective 4K-1		
A range of apartment types and sizes is provided to	The proposed apartment mix is	Yes
cater for different household types now and into the	appropriate being a suitable range of 1	
future	bedroom (7 units), 2 bedroom (19 units) and 3 bedroom (4 units) apartments.	
Design guidance		
······································	1	

ADG Ref Item description	Proposal	Compliance
A variety of apartment types is provided		
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		
Flexible apartment configurations are provided to support diverse household types and stages of life including single person households, families, multi- generational families and group households		
Objective 4K-2		
The apartment mix is distributed to suitable locations within the building	Provided.	Yes
Design guidance		
Different apartment types are located to achieve successful facade composition and to optimise solar access (see figure 4K.3)		
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		
4L Ground floor apartments		
Objective 4L-1		
Street frontage activity is maximised where ground floor apartments are located	Provided.	Yes
Design guidance		
Direct street access should be provided to ground floor apartments		
Activity is achieved through front gardens, terraces and the facade of the building. Design solutions may include:		
both street, foyer and other common internal circulation entrances to ground floor apartments private open space is next to the street doors and windows face the street		
Retail or home office spaces should be located along street frontages		
Ground floor apartment layouts support small office home office (SOHO) use to provide future opportunities for conversion into commercial or retail areas. In these cases provide higher floor to ceiling heights and ground floor amenities for easy conversion		

ADG Ref Item description	Proposal	Compliance
Objective 4L-2		
Design of ground floor apartments delivers amenity and safety for residents	Privacy and safety provided to ground floor apartments.	Yes
<b>Design guidance</b> Privacy and safety should be provided without obstructing casual surveillance. Design solutions may include:		
elevation of private gardens and terraces above the street level by 1-1.5m (see figure 4L.4) landscaping and private courtyards window sill heights that minimise sight lines into apartments integrating balustrades, safety bars or screens with the exterior design		
Solar access should be maximised through:		
high ceilings and tall windows trees and shrubs that allow solar access in winter and shade in summer		
4M Facades		
Objective 4M-1		
Building facades provide visual interest along the street while respecting the character of the local area	The proposed façade provides a high level of visual interest.	Yes
<i>Design guidance</i> Design solutions for front building facades may include:	See materiality board submitted with the Development Application.	
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		
Building services should be integrated within the overall facade	Services are either within the basement mostly with a small section facing Mindarie Street.	
Building facades should be well resolved with an appropriate scale and proportion to the streetscape and human scale. Design solutions may include:	Proposal is highly resolved with proportional articulation, masonry base,	
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	variation in balustrading finishes, ground- level interaction and landscaping.	
Building facades relate to key datum lines of adjacent buildings through upper level setbacks, parapets, cornices, awnings or colonnade heights	Suitable analysis provided in the architectural plans of relationship in the streetscape.	

ADG Ref Item description	Proposal	Compliance
Shadow is created on the facade throughout the day with building articulation, balconies and deeper window reveals		
Objective 4M-2		
Building functions are expressed by the facade	Provided.	Yes
<b>Design guidance</b> Building optrice should be clearly defined		
Building entries should be clearly defined		
Important corners are given visual prominence through a change in articulation, materials or colour, roof expression or changes in height		
The apartment layout should be expressed externally through facade features such as party walls and floor slabs		
4N Roof design		
Objective 4N-1		N
Roof treatments are integrated into the building design and positively respond to the street	Roof service elements appropriately integrated.	Yes
Design guidance		
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 complementary to adjacent buildings		
Roof treatments should be integrated with the building design. Design solutions may include:		
roof design proportionate to the overall building size, scale and form roof materials compliment the building service elements are integrated		
Objective 4N-2		
Opportunities to use roof space for residential accommodation and open space are maximised	The proposal includes a highly functional rooftop communal open space.	Yes
<b>Design guidance</b> Habitable roof space should be provided with good levels of amenity. Design solutions may include:		
penthouse apartments dormer or clerestory windows openable skylights		
Open space is provided on roof tops subject to acceptable visual and acoustic privacy, comfort levels, safety and security considerations		
Objective 4N-3		

ADG Ref Item description	Proposal	Compliance
Roof design incorporates sustainability features	The roof provides for some greening of the	Yes
Design guidance	roof.	
Roof design maximises solar access to apartments during winter and provides shade during summer. Design solutions may include:		
the roof lifts to the north eaves and overhangs shade walls and windows from summer sun		
Skylights and ventilation systems should be integrated into the roof design		
40 Landscape design		
Objective 40-1		
Landscape design is viable and sustainable	The proposal landscaping has been provided in accordance with the local	Yes
<b>Design guidance</b> Landscape design should be environmentally sustainable and can enhance environmental performance by incorporating:	planning provisions including significant deep soil zones, canopy potential and a detailed consideration of ongoing maintenance.	
diverse and appropriate planting bio-filtration gardens appropriately planted shading trees areas for residents to plant vegetables and herbs composting green roofs or walls		
Ongoing maintenance plans should be prepared		
Microclimate is enhanced by:		
appropriately scaled trees near the eastern and western elevations for shade a balance of evergreen and deciduous trees to provide shading in summer and sunlight access in winter shade structures such as pergolas for balconies and courtyards		
Tree and shrub selection considers size at maturity and the potential for roots to compete (see Table 4)		
<i>Objective 40-2</i> Landscape design contributes to the streetscape and amenity	Council's Landscape Assessment Officer is of the view the streetscape planting is highly developed and would soften the	Yes
<b>Design guidance</b> Landscape design responds to the existing site conditions including:	visual impact of the building within the streetscape.	
changes of levels views significant landscape features including trees and rock outcrops		
Significant landscape features should be protected by:		
tree protection zones (see figure 40.5)		

ADG Ref Item description	Proposal	Compliance
appropriate signage and fencing during construction		
Plants selected should be endemic to the region and reflect the local ecology		
4P Planting on structures		
Objective 4P-1		
Appropriate soil profiles are provided	Further detail on soil profiles are required as a draft recommended condition of	Yes
<b>Design guidance</b> Structures are reinforced for additional saturated soil weight	consent.	
Soil volume is appropriate for plant growth, considerations include:		
modifying depths and widths according to the planting mix and irrigation frequency free draining and long soil life span tree anchorage		
Minimum soil standards for plant sizes should be provided in accordance with Table 5		
Objective 4P-2		
Plant growth is optimised with appropriate selection and maintenance	Council's Tree Preservation Officer and Landscape Officer have worked in conjunction with the applicant's landscape	Yes
<b>Design guidance</b> Plants are suited to site conditions, considerations include:	architect to provide tree planting that is appropriate to the site, including the requirement for high quality irrigation, and the preparation of a maintenance plan.	
drought and wind tolerance seasonal changes in solar access modified substrate depths for a diverse range of plants plant longevity		
A landscape maintenance plan is prepared		
Irrigation and drainage systems respond to:		
changing site conditions soil profile and the planting regime whether rainwater, stormwater or recycled grey water is used		
Objective 4P-3		
Planting on structures contributes to the quality and amenity of communal and public open spaces	Highly contributes.	Yes
<b>Design guidance</b> Building design incorporates opportunities for planting on structures. Design solutions may include:		
green walls with specialised lighting for indoor green walls wall design that incorporates planting green roofs, particularly where roofs are visible from the public domain		

ADG Ref Item description	Proposal	Compliance
planter boxes		
Note: structures designed to accommodate green walls should be integrated into the building facade and consider the ability of the facade to change over time		
4Q Universal design		
Objective 4Q-1	Dreneged to be previded in eccenteres	Vaa
Universal design features are included in apartment design to promote flexible housing for all community members	Proposed to be provided in accordance with this Clause.	Yes
<b>Design guidance</b> Developments achieve a benchmark of 20% of the total apartments incorporating the Livable Housing		
Objective 4Q-2		
A variety of apartments with adaptable designs are provided	As above.	Yes
<b>Design guidance</b> Adaptable housing should be provided in accordance with the relevant council policy		
Design solutions for adaptable apartments 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 titled separately from apartments or shared car parking arrangements		
Objective 4Q-3		
Apartment layouts are flexible and accommodate a range of lifestyle needs	The proposal provides for suitable flexibility in the larger apartments.	Yes
<b>Design guidance</b> Apartment design incorporates flexible design solutions which may include:		
rooms with multiple functions dual master bedroom apartments with separate bathrooms larger apartments with various living space options open plan 'loft' style apartments with only a fixed kitchen, laundry and bathroom		
4R Adaptive reuse		
Objective 4R-1		
New additions to existing buildings are contemporary and complementary and enhance an area's identity and sense of place	Not applicable.	Not applicable The proposed development is
Design guidance		for a new building.

ADG Ref Item description	Proposal	Compliance
Design solutions may include:		
new elements to align with the existing building additions that complement the existing character, siting, scale, proportion, pattern, form and detailing use of contemporary and complementary materials, finishes, textures and colours		
Additions to heritage items should be clearly identifiable from the original building		
New additions allow for the interpretation and future evolution of the building		
Objective 4R-2		
Adapted buildings provide residential amenity while not precluding future adaptive reuse	Not applicable.	Not applicable
<b>Design guidance</b> Design features should be incorporated sensitively 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 alternative apartment types when orientation is poor using additions to expand the existing building envelope		
Some proposals that adapt existing buildings may not be able to achieve all of the design criteria in this Apartment Design Guide. Where developments are unable to achieve the design criteria, alternatives could be considered in the following areas:		
where there are existing higher ceilings, depths of habitable rooms could increase subject to demonstrating access to natural ventilation, cross ventilation (when applicable) and solar and daylight access (see also sections 4A Solar and daylight access and 4B Natural ventilation) alternatives to providing deep soil where less than the minimum requirement is currently available on the site building and visual separation – subject to demonstrating alternative design approaches to achieving privacy common circulation car parking		
alternative approaches to private open space and balconies		
4S Mixed use		
Objective 4S-1		
Mixed use developments are provided in appropriate locations and provide active street frontages that encourage pedestrian movement	N/A	N/A
Design guidance		

ADG Ref Item description	Proposal	Compliance
Mixed use development should be concentrated around public transport and centres		
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		
avoiding blank walls at the ground level live/work apartments on the ground floor level, rather than commercial		
Mixed use development should maximise retail and commercial <i>Objective 4S-2</i>	N/A	N/A
Residential levels of the building are integrated within the development, and safety and amenity is maximised for residents		
<b>Design guidance</b> Residential circulation areas should be clearly defined. Design solutions may include:		
residential entries are separated from commercial entries and directly accessible from the street commercial service areas are separated from residential components residential car parking and communal facilities are separated or secured security at entries and safe pedestrian routes are provided concealment opportunities are avoided		
Landscaped communal open space should be provided at podium or roof levels		
4T Awnings and signage		
<i>Objective 4T-1</i> Awnings are well located and complement and integrate with the building design	Provided.	Yes
<b>Design guidance</b> Awnings should be located along streets with high pedestrian activity and active frontages		
A number of the following design solutions are used:		
continuous awnings are maintained and provided in areas with 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		

ADG Ref Item description	Proposal	Compliance
Awnings should be located over building entries for building address and public domain amenity		
Awnings relate to residential windows, balconies, street tree planting, power poles and street infrastructure		
Gutters and down pipes should be integrated and concealed		
Lighting under awnings should be provided for pedestrian safety		
Objective 4T-2		
Signage responds to the context and desired streetscape character	No signage proposed.	N/A
Design guidance		
Signage should be integrated into the building design and respond to the scale, proportion and detailing of the development		
Legible and discrete way finding should be provided for larger developments		
Signage is limited to being on and below awnings and a single facade sign on the primary street frontage		
4U Energy efficiency		
Objective 4U-1		Mar
Development incorporates passive environmental design	BASIX provided.	Yes
Design guidance		
Adequate natural light is provided to habitable rooms (see 4A Solar and daylight access)		
Well located, screened outdoor areas should be provided for clothes drying		
Objective 4U-2		
Development incorporates passive solar design to optimise heat storage in winter and reduce heat transfer in summer	BASIX provided.	Yes
Design guidance		
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 the floors and walls of north facing rooms is maximised polished concrete floors, tiles or timber rather than		
carpet insulated roofs, walls and floors and seals on window		
and door openings overhangs and shading devices such as awnings, blinds and screens		

ADG Ref Item description	Proposal	Compliance
Provision of consolidated heating and cooling infrastructure should be located in a centralised location (e.g. the basement)		
Objective 4U-3		Maa
Adequate natural ventilation minimises the need for mechanical ventilation	Natural ventilation provided in excess of ADG requirements (66%).	Yes
<i>Design guidance</i> 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		
4V Water management and conservation		
Objective 4V-1	PACIX provided	Vaa
Potable water use is minimised	BASIX provided.	Yes
<b>Design guidance</b> Water efficient fittings, appliances and wastewater reuse should be incorporated		
Apartments should be individually metered		
Rainwater should be collected, stored and reused on site		
Drought tolerant, low water use plants should be used within landscaped areas		
Objective 4V-2		
Urban stormwater is treated on site before being discharged to receiving waters	OSD is conditioned to be provided.	Yes
<b>Design guidance</b> Water sensitive urban design systems are designed by a suitably qualified professional		
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 on site stormwater and infiltration, including bio- retention systems such as rain gardens or street tree pits		
Objective 4V-3		
Flood management systems are integrated into site design	N/A	N/A
Design guidance		
Detention tanks should be located under paved areas, driveways or in basement car parks		

ADG Ref Item description	Proposal	Compliance
On large sites parks or open spaces are designed to provide temporary on site detention basins		
4W Waste management		
Objective 4W-1		
Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity of residents	Waste management includes a chute system and basement storage and collection, minimising impacts on the amenity of residents, streetscape and	Yes
<b>Design guidance</b> Adequately sized storage areas for rubbish bins should be located discreetly away from the front of the development or in the basement car park	building entry.	
Waste and recycling storage areas should be well ventilated		
Circulation design allows bins to be easily manoeuvred between storage and collection points		
Temporary storage should be provided for large bulk items such as mattresses		
A waste management plan should be prepared		
Objective 4W-2		
Domestic waste is minimised by providing safe and convenient source separation and recycling	Provided.	Yes
<b>Design guidance</b> All dwellings should have a waste and recycling cupboard or temporary storage area of sufficient size to hold two days worth of waste and recycling		
Communal waste and recycling rooms are in convenient and accessible locations related to each vertical core		
For mixed use developments, residential waste and recycling storage areas and access should be separate and secure from other uses		
Alternative waste disposal methods such as composting should be provided		
4X Building maintenance		
Objective 4X-1		
Building design detail provides protection from weathering	Provided.	Yes
Design guidance		
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		

ADG Ref Item description	Proposal	Compliance
appropriate design and material selection for hostile locations		
Objective 4X-2		
Systems and access enable ease of maintenance	Provided.	Yes
<i>Design guidance</i> Window design enables cleaning from the inside of the building		
Building maintenance systems should be incorporated and integrated into the design of the building form, roof and facade		
Design solutions do not require external 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 should be provided for communal open space areas within the building		
Objective 4X-3		
Material selection reduces ongoing maintenance costs	Provided.	Yes
<i>Design guidance</i> A number of the following design solutions are used:		
sensors to control artificial lighting in common circulation and spaces 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 areas and lift interiors		

Table 1 – Building Separation						
Elevation	Level	ADG	ADG (inc. +3m)	Proposed (Minimum)	Compliance	
South	Ground	N/A	9m	9.7m	Yes	
	1	N/A	9m	10m	Yes	
	2	N/A	9m	9.5m	Yes	
	3	N/A	9m	9.5m	Yes	
	4	N/A	12m	12.63m	Yes	
	5	N/A	12m	12.63m	Yes	
West	Ground	6m	N/A	7.83m	Yes	
	1	6m	N/A	6.08m	Yes	
	2	6m	N/A	6.08m	Yes	
	3	6m	N/A	6.08m	Yes	
	4	9m	N/A	9.5m	Yes	
	5	9m	N/A	9.5m	Yes	