COMPLIANCE TABLE ADG
DEVELOPMENT APPLICATION NO. 294.1.1/2023

Nos. 15 – 17 Lupin Ave and 82 Belmore St, FAIRFIELD EAST

Demolition of existing structures, Tree removal and the Construction of a 6-storey Residential Flat Building containing thirty – nine (39) dwellings over a basement car park containing 28 car spaces and associated landscaping and civil works

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1. SEPP (Housing) 2021: Chapter 4 Design of Residential Apartment Development

Chapter 4 of SEPP (Housing) 2021 contains the transferred provisions of SEPP 65 and is applicable to the proposed residential flat building. An assessment against the criteria of the ADG is provided in the tables below.

Table 1. Apartment Design Guide, July 2015

Objective	Design Criteria	Proposal	Compliance
Part 3 Siting the Development			
3A-1 Site Analysis	Site analysis illustrates that design decisions have been based on opportunities and constraints of the site conditions and their relationship to the surrounding context <u>Design guidance</u> Each element in the Site Analysis Checklist should be addressed (see Appendix 1)	Site analysis plan has been submitted and is acceptable.	Yes
3B-1 Orientation	Building types and layouts respond to the streetscape and site while optimising solar access within the development <u>Design guidance</u> Buildings along the street frontage define the street, by facing it and incorporating direct access from the street (see figure 3B.1)	Further consideration to the pedestrian entrance to Belmore Street is required.	No
	Where the street frontage is to the east or west, rear buildings should be orientated to the north	Not relevant.	Not applicable
	Where the street frontage is to	Achieved.	Yes

	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)		
3B-2 Orientation	Overshadowing of neighbouring properties is minimised during mid-winter <u>Design guidance</u> 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 3D requires 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) 4AA requires Living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 2 hours direct sunlight between 9 am and 3 pm at mid winter in the Sydney Metropolitan Area and in the Newcastle and Wollongong local government areas	Surrounding properties are detached dwelling houses with private open space (POS) in rear yards, and as such there are no existing neighbouring COS that would be impacted by the proposal. On balance the solar access to neighbouring POS is considered acceptable in this circumstance given that allowed building height and setbacks under the relevant planning legislation. Accordingly, the development as designed does not unreasonably impact neighbouring residents in terms of solar access.	Yes
	Solar access to living rooms, balconies and private open spaces of neighbours should be considered	Has been considered appropriately.	Yes
	Where an adjoining property does not currently receive the required hours of solar access, the proposed building ensures solar access to neighbouring properties	Has been considered appropriately.	Yes

	is not reduced by more than 20%		
	If the proposal will significantly reduce the solar access of neighbours, building separation should be increased beyond minimums contained in section 3F Visual privacy	The proposed building provides separation greater than what is required in certain locations.	Yes
	Overshadowing should be minimised to the south or down hill by increased upper level setbacks	Acceptable orientation proposed relative to boundary.	Yes
	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	Neighbouring dwellings so not have solar panels.	Yes
	A minimum of 4 hours of solar access should be retained to solar collectors on neighbouring buildings		
3C-1 Public Domain Interface	Transition between private and public domain is achieved without compromising safety and security		
	<u>Design guidance</u> Terraces, balconies and courtyard apartments should have direct street entry, where appropriate	It is considered the terrace for G.03 is located to close to the setback to Belmore Street.	No
	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)	It is considered that G.03, should be further considered to provide further privacy	No
	Upper level balconies and windows should overlook the public domain	Achieved.	Yes

	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 Length of solid walls should be limited along street frontages	The proposed front fence appears to be acceptable.	Yes
	Opportunities should be provided for casual interaction between residents and the public domain. Design solutions may include seating at building entries, near letter boxes and in private courtyards adjacent to streets	Building entrance for pestrains along Belmore Street should be further considered.	No
	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: • architectural detailing • changes in materials • plant species • colours	Achieved.	Yes
	Opportunities for people to be concealed should be minimised		Yes
3C-2 Public Domain Interface	Amenity of the public domain is retained and enhanced <u>Design guidance</u> Planting softens the edges of any raised terraces to the street, for example above sub-basement car parking	Further large canopy trees should be provided along the street setback. The terrace along Belmore Street should be further setback to increase landscaping.	Yes
	Mail boxes should be located in lobbies, perpendicular to the street alignment or integrated into front fences where individual street entries are provided	Mailbox are located in lobbies and perpendicular to the street frontage.	Yes

	The visual prominence of underground car park vents should be minimised and located at a low level where possible	Car parking vents are not visible according to the plans and will be located on the roof.	Yes
	Substations, pump rooms, garbage storage areas and other service requirements should be located in basement car parks or out of view	Limited details of Services have been provided on the plans including gas, water and substation.	No
	Ramping for accessibility should be minimised by building entry location and setting ground floor levels in relation to footpath levels	Achieved.	Yes
	Durable, graffiti resistant and easily cleanable materials should be used	Capable of being achieved.	Yes
	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 space • minimal use of blank walls, fences and ground level parking	The development does not directly adjoin parks or open space	Yes
	On sloping sites protrusion of car parking above ground level should be minimised by using split levels to step underground car parking	The site is not considered to be a sloping site.	Yes
3D-1 Communal and Public Open Space	<u>Design criteria</u> 1. Communal open space has a minimum area equal to 25% of the site (see figure 3D.3)	359m² on ground level and 322m² on rooftop level (total is 681m²). 48% is provided.	Yes

	2. 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)	Achieved to the principal usable part which is positioned on the eastern side of the building and on the rooftop.	Yes
	<u>Design guidance</u> Communal open space should be consolidated into a well designed, easily identified and usable area	Considered appropriately located	Yes
	Communal open space should have a minimum dimension of 3m, and larger developments should consider greater dimensions	Achieved.	Yes
	Communal open space should be co-located with deep soil areas	Achieved.	Yes
	Direct, equitable access should be provided to communal open space areas from common circulation areas, entries and lobbies	Achieved.	Yes
	Where communal open space cannot be provided at ground level, it should be provided on a podium or roof	COS is able to be provided at ground level.	Yes
	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: • provide communal spaces elsewhere such as a landscaped roof top terrace or a common room • provide larger balconies or increased private open space for apartments • demonstrate good proximity to public open space and facilities and/or provide contributions to public open space	The development is capable of meeting all the requirements.	Yes
3D-2	Communal open space is	The rooftop communal	No

Communal and Public Open Space	designed to allow for a range of activities, respond to site conditions and be attractive and inviting <u>Design guidance</u> 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	open space is considered to be exposed. Further shade structures should be incorporated into the design to provide further amenity for the residents.	
3D-3 Communal and Public Open Space	Communal open space is designed to maximise safety <u>Design guidance</u> 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: • bay windows • corner windows • balconies Communal open space should be well lit Where communal open space/facilities are provided for	 Further consideration of privacy between ground floor nits and COS. Capable of being achieved. Capable of being achieved.	 No Yes Yes

	children and young people they are safe and contained		
3D-4 Communal and Public Open Space	Public open space, where provided, is responsive to the existing pattern and uses of the neighbourhood <u>Design guidance</u> 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	Public space is not required to be provided by this development.	Not applicable
3E-1 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 <u>Design criteria</u> 1. Deep soil zones are to meet the following minimum requirements:	372m² of deep soil is provided which is 26% of the site. Some components of deep soil are less than the	Yes

	<table><tr><th>Site area</th><th>Minimum dimensions</th><th>Deep soil zone (% of site area)</th></tr><tr><td>less than 650m²</td><td>-</td><td rowspan="4">7%</td></tr><tr><td>650m² - 1,500m²</td><td>3m</td></tr><tr><td>greater than 1,500m²</td><td>6m</td></tr><tr><td>greater than 1,500m² with significant existing tree cover</td><td>6m</td></tr></table>	3m to be included. Appears to be appropriate.	
	<u>Design guidance</u> 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	Not relevant to this site or proposal as the site is capable of meeting the requirement.	Yes
	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: • 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: • 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	Not relevant to this site or proposal since the proposal meets the requirement for deep soil zones.	Not applicable

<table>
<tr><td></td><td>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</td><td></td><td></td></tr>
<tr><td>3F-1 Visual Privacy</td><td>Adequate building separation distances are shared equitably between neighbouring sites, to achieve reasonable levels of external and internal visual privacy

<u>Design criteria</u>
1. Separation between windows and balconies is provided to ensure visual privacy is achieved. Minimum required separation distances from buildings to the side and rear boundaries are as follows:
<table><tr><th>Building height</th><th>Habitable rooms and balconies</th><th>Non-habitable rooms</th></tr><tr><td>up to 12m (4 storeys)</td><td>6m</td><td>3m</td></tr><tr><td>up to 25m (5-8 storeys)</td><td>9m</td><td>4.5m</td></tr><tr><td>over 25m (9+ storeys)</td><td>12m</td><td>6m</td></tr></table>
Note:
Separation distances between buildings on the same site should combine required building separations depending on the type of room (see figure 3F.2)

Gallery access circulation should be treated as habitable space when measuring privacy separation distances between neighbouring properties

<u>Design guidance</u>
Generally one step in the built form as the height increases due to building separations is desirable. Additional steps should be careful not to cause a 'ziggurat' appearance</td><td>The development provides is considered to comply with the separation distances except for the upper levels to the southern boundary and the COS on the rooftop.

Not applicable

Noted

The built form incorporates one step.</td><td>No

Not applicable

Noted

Yes</td></tr>
</table>

	For residential buildings next to commercial buildings, separation distances should be measured as follows: • for retail, office spaces and commercial balconies use the habitable room distances • for service and plant areas use the non-habitable room distances	No commercial are present.	Not applicable
	New development should be located and oriented to maximise visual privacy between buildings on site and for neighbouring buildings. Design solutions include: • site layout and building orientation to minimise privacy impacts (see also section 3B Orientation) • on sloping sites, apartments on different levels have appropriate visual separation distances (see figure 3F.4)	Privacy for units within the same building that are facing one another has not been adequately addressed.	No
	Apartment buildings should have an increased separation distance of 3m (in addition to the requirements set out in design criteria 1) when adjacent to a different zone that permits lower density residential development to provide for a transition in scale and increased landscaping (figure 3F.5)	The site does not adjoin any sites that have a lesser zone.	Not Applicable Noted
	Direct lines of sight should be avoided for windows and balconies across corners	Further privacy measures are required	No
	No separation is required between blank walls	Noted	Noted
3F-2 Visual Privacy	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	Further privacy measures are required within the development	No

	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: • 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 Balconies and private terraces should be located in front of living rooms to increase internal privacy Windows should be offset from the windows of adjacent buildings Recessed balconies and/or vertical fins should be used between adjacent balconies		

3G-1 Pedestrian Access and Entries	Building entries and pedestrian access connects to and addresses the public domain <u>Design guidance</u> Multiple entries (including communal building entries and individual ground floor entries) should be provided to activate the street edge	Connection points from ground floor units are provided	Yes
	Entry locations relate to the street and subdivision pattern and the existing pedestrian network Building entries should be clearly identifiable and communal entries should be clearly distinguishable from private entries 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	Further consideration of the pedestrian access from Belmore Street should be undertaken	No
3G-2 Pedestrian Access and Entries	Access, entries and pathways are accessible and easy to identify <u>Design guidance</u> Building access areas including lift lobbies, stairwells and hallways should be clearly visible from the public domain and communal spaces	Further consideration of the entrance for the pedestrian access to Belmore Street needs to be considered.	No
	The design of ground floors and underground car parks minimise level changes along pathways and entries	Ramping is minimised.	Yes
	Steps and ramps should be integrated into the overall building and landscape design	Achieved.	Yes
	For large developments ‘way finding’ maps should be provided to assist visitors and residents (see figure 4T.3)	Capable of being achieved.	Yes

	For large developments electronic access and audio/video intercom should be provided to manage access	Capable of being achieved.	Yes
3G-3 Pedestrian Access and Entries	Large sites provide pedestrian links for access to streets and connection to destinations <u>Design guidance</u> 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	Achieved	Yes
3H-1 Vehicle Access	Vehicle access points are designed and located to achieve safety, minimise conflicts between pedestrians and vehicles and create high quality streetscapes <u>Design guidance</u> Car park access should be integrated with the building's overall facade. Design solutions may include: • 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 Vehicle entries should be located at the lowest point of the site minimising ramp lengths,	Car park access is not integrated with the building's overall façade as it is located outside of the building envelope. This also reduces landscaping along the southern boundary. Achieved. Acceptable in terms of site levels and length.	No Yes Yes

	excavation and impacts on the building form and layout		
	Car park entry and access should be located on secondary streets or lanes where available	Located off a private road Lupin Avenue.	Yes
	Vehicle standing areas that increase driveway width and encroach into setbacks should be avoided	No standing areas are proposed.	Yes
	Access point locations should avoid headlight glare to habitable rooms	Considered acceptable	Yes
	Adequate separation distances should be provided between vehicle entries and street intersections	Achieved.	Yes
	The width and number of vehicle access points should be limited to the minimum	1 access point provided into the basement.	Yes
	Visual impact of long driveways should be minimised through changing alignments and screen planting	Achieved.	Yes
	The need for large vehicles to enter or turn around within the site should be avoided	Achieved.	Yes
	Garbage collection, loading and servicing areas are screened	Waste collection areas are located within the building.	Yes
	Clear sight lines should be provided at pedestrian and vehicle crossings	Council's Traffic Engineer has not raised concern with the sight lines.	Yes
	Traffic calming devices such as changes in paving material or textures should be used where appropriate	Not required.	Yes
	Pedestrian and vehicle access should be separated and	Separate pedestrian access has been	Yes

	distinguishable. Design solutions may include: • changes in surface materials • level changes • the use of landscaping for separation	provided.	
3J-1 Bicycle and Car Parking	1. For development in the following 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 application has been made the provisions of SEPP (Housing) 2021 division 1 In – fill affordable housing. The non-discretionary development standards of the SEPP override the ADGs.	Yes
	The car parking needs for a development must be provided off street	All parking is within the basement.	Yes
	<u>Design guidance</u> Where a car share scheme operates locally, provide car share parking spaces within the development. Car share spaces, when provided, should be on site	No car share spaces are proposed.	Not applicable
	Where less car parking is provided in a development, council should not provide on street resident parking permits	Parking complies; and Council does not issue parking permits.	Yes
3J-2 Bicycle and Car Parking	Parking and facilities are provided for other modes of Transport <u>Design guidance</u> Conveniently located and sufficient numbers of parking spaces should be provided for motorbikes and scooters Secure undercover bicycle	No motorbike or bicycle parking is proposed.	Not Applicable

	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	 No electrical charging points are provided	 No
3J-3 Bicycle and Car Parking	Car park design and access is safe and secure <u>Design guidance</u> 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	The proposal is capable of achieving these requirements.	Yes

3J-4 Bicycle and Car Parking	Visual and environmental impacts of underground car parking are minimised <u>Design guidance</u> Excavation should be minimised through efficient car park layouts and ramp design	Achieved.	Yes
	Car parking layout should be well organised, using a logical, efficient structural grid and double loaded aisles	Achieved, although aisles are not double loaded.	Yes
	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	The basement does not protrude above the ground level according to the architectural plans.	Yes
	Natural ventilation should be provided to basement and sub basement car parking areas	Capable of being achieved and must comply with the BCA.	Yes
	Ventilation grills or screening devices for car parking openings should be integrated into the facade and landscape design	Achieved.	Yes
3J-5 Bicycle and Car Parking	Visual and environmental impacts of on-grade car parking are minimised <u>Design guidance</u> 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 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	No on-grade car parking is proposed for the residential flat building.	Yes

	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		
3J-6 Bicycle and Car Parking	Visual and environmental impacts of above ground enclosed car parking are minimised <u>Design guidance</u> 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	No aboveground enclosed parking is proposed for the residential flat building and all parking is within the basement.	Not applicable
Part 4 Designing the Building			
Amenity			
4A-1 Solar and	To optimise the number of apartments receiving sunlight to		

Daylight Access	habitable rooms, primary windows and private open space <u>Design criteria</u> 1. Living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 2 hours direct sunlight between 9 am and 3 pm at mid winter in the Sydney Metropolitan Area and in the Newcastle and Wollongong local government areas	30 out of 39 units achieve the minimum solar access equal to 76.9%	Yes
	2. In all other areas, living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 3 hours direct sunlight between 9 am and 3 pm at mid winter	Not relevant	Not applicable
	3. A maximum of 15% of apartments in a building receive no direct sunlight between 9 am and 3 pm at mid winter	There are 5 out of 39 units that would get no sunlight, equal to 12.8%.	Yes
	<u>Design guidance</u> The design maximises north aspect and the number of single aspect south facing apartments is minimised	Achieved.	Yes
	Single aspect, single storey apartments should have a northerly or easterly aspect	Achieved where appropriate.	Yes
	Living areas are best located to the north and service areas to the south and west of apartments	Achieved where appropriate.	Yes
	To optimise the direct sunlight to habitable rooms and balconies a number of the following design features are used: • dual aspect apartments • shallow apartment layouts • two storey and mezzanine level	Dual aspect and shallow apartments utilised.	Yes

	apartments • bay windows To maximise the benefit to residents of direct sunlight within living rooms and private open spaces, a minimum of 1m2 of direct sunlight, measured at 1m above floor level, is achieved for at least 15 minutes Achieving the design criteria may not be possible on some sites. This includes: • where greater residential amenity can be achieved along a busy road or rail line by orientating the living rooms away from the noise source • on south facing sloping sites • where significant views are oriented away from the desired aspect for direct sunlight Design drawings need to demonstrate how site constraints and orientation preclude meeting the design criteria and how the development meets the objective	Capable of complying. Greater amenity could have been achieved by orienting the living areas away from the noisy classified roads however the proposed design ensures that solar access is achieved to 75% of units. A total of 27 out of 85 units have been oriented to the south and away from the noise source. Whilst these units will generally receive none or less than 2 hours solar access in mid-winter, these units will be better positioned away from the noise source. The objective is met.	Yes Yes Yes
4A-2 Solar and Daylight Access	Daylight access is maximised where sunlight is limited <u>Design guidance</u> Courtyards, skylights and high level windows (with sills of 1,500mm or greater) are used only as a secondary light source in habitable rooms	Secondary light sources have not been provided.	Yes

	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	Achieved.	Yes
	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	This is capable of being achieved.	Yes
4A-3 Solar and Daylight Access	Design incorporates shading and glare control, particularly for warmer months <u>Design guidance</u> 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	Amended design adequately incorporates shading features such as screens where necessary.	Yes

	minimises external glare off windows, with consideration given to reduced tint glass or glass with a reflectance level below 20% (reflective films are avoided)		
4B-1 Natural Ventilation	All habitable rooms are naturally ventilated <u>Design guidance</u> The building's orientation maximises capture and use of prevailing breezes for natural ventilation in habitable rooms Depths of habitable rooms support natural ventilation The area of unobstructed window openings should be equal to at least 5% of the floor area served Light wells are not the primary air source for habitable rooms Doors and openable windows maximise natural ventilation opportunities by using 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 windows and externally opening doors	The development achieves the requirements.	Yes
4B-2 Natural Ventilation	The layout and design of single aspect apartments maximises natural ventilation <u>Design guidance</u> Apartment depths are limited to maximise ventilation and airflow (see also figure 4D.3) Natural ventilation to single	The development achieves the requirements.	Yes

	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		
4B-3 Natural Ventilation	The number of apartments with natural cross ventilation is maximised to create a comfortable indoor environment for residents <u>Design criteria</u> 1. At least 60% of apartments are naturally cross ventilated in the first nine storeys of the building.	24 out of 39 units are naturally cross-ventilated equal to 61.5%	Yes
	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	Not relevant as proposal is up to 6 storeys.	Not applicable
	2. Overall depth of a cross-over or cross-through apartment does not exceed 18m, measured glass line to glass line	Achieved	Yes
	<u>Design guidance</u> The building should include dual aspect apartments, cross through apartments and corner apartments and limit apartment depths	Achieved.	Yes
	In cross-through apartments	Capable of being	Yes

<table>
<tr><td></td><td>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</td><td>achieved.

Achieved.

Achieved.</td><td>

Yes

Yes</td></tr>
<tr><td>4C-1 Ceiling Heights</td><td>Ceiling height achieves sufficient natural ventilation and daylight access

<u>Design criteria</u>
1. Measured from finished floor level to finished ceiling level, minimum ceiling heights are:
<table>
<tr><th colspan="2">Minimum ceiling height
for apartment and mixed use buildings</th></tr>
<tr><td>Habitable rooms</td><td>2.7m</td></tr>
<tr><td>Non-habitable</td><td>2.4m</td></tr>
<tr><td>For 2 storey apartments</td><td>2.7m for main living area floor
2.4m for second floor, where its area does not exceed 50% of the apartment area</td></tr>
<tr><td>Attic spaces</td><td>1.8m at edge of room with a 30 degree minimum ceiling slope</td></tr>
<tr><td>If located in mixed used areas</td><td>3.3m for ground and first floor to promote future flexibility of use</td></tr>
</table>
These minimums do not preclude higher ceilings if desired

<u>Design guidance</u>
Ceiling height can accommodate use of ceiling fans for cooling and heat distribution</td><td>2.7m minimum.

Capable of being achieved</td><td>Yes

Yes</td></tr>
<tr><td>4C-2 Ceiling Heights</td><td>Ceiling height increases the sense of space in apartments and provides for well proportioned rooms

<u>Design guidance</u></td><td>Capable of being achieved.</td><td>Yes</td></tr>
</table>

<table>
<tr><td></td><td>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
• 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</td><td></td><td></td></tr>
<tr><td>4C-3 Ceiling Heights</td><td>Ceiling heights contribute to the flexibility of building use over the life of the building

<u>Design guidance</u>
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)</td><td>Site is not in a neighbourhood centre and does not require flexibility for conversion to non-residential uses.</td><td>Not applicable</td></tr>
<tr><td>4D-1 Apartment Size and Layout</td><td>The layout of rooms within an apartment is functional, well organised and provides a high standard of amenity

<u>Design criteria</u>

1. Apartments are required to have the following minimum internal areas:
<table><tr><th>Apartment type</th><th>Minimum internal area</th></tr><tr><td>Studio</td><td>35m²</td></tr><tr><td>1 bedroom</td><td>50m²</td></tr><tr><td>2 bedroom</td><td>70m²</td></tr><tr><td>3 bedroom</td><td>90m²</td></tr></table>
The minimum internal areas</td><td>All units meet the minimum internal areas.

Units with a second</td><td>Yes

Yes</td></tr>
</table>

	include only one bathroom. Additional bathrooms increase the minimum internal area by 5m2 each	bathroom are provided with an additional $5m^2$ of area.	
	A fourth bedroom and further additional bedrooms increase the minimum internal area by 12m2 each	No 4 bedroom units.	Not applicable
	2. 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	Capable of being achieved	Yes
	<u>Design guidance</u> Kitchens should not be located as part of the main circulation space in larger apartments (such as hallway or entry space)	Achieved.	Yes
	A window should be visible from any point in a habitable room	Achieved.	Yes
	Where minimum areas or room dimensions are not met apartments need to demonstrate that they are well designed and demonstrate the usability and functionality of the space with realistically scaled furniture layouts and circulation areas. These circumstances would be assessed on their merits	Minimum areas and room dimensions are met.	Yes
4D-2 Apartment Size and Layout	Environmental performance of the apartment is maximised <u>Design criteria</u> 1. Habitable room depths are limited to a maximum of 2.5 x the ceiling height	Achieved.	Yes
	2. In open plan layouts (where the living, dining and kitchen are combined) the maximum habitable room depth is 8m from a window	Achieved.	Yes

	Design guidance Greater than minimum ceiling heights can allow for proportional increases in room depth up to the permitted maximum depths	Not proposed.	Not applicable
	All living areas and bedrooms should be located on the external face of the building	Achieved.	Yes
4D-3 Apartment Size and Layout	Apartment layouts are designed to accommodate a variety of household activities and needs Design criteria 1. Master bedrooms have a minimum area of 10m2 and other bedrooms 9m2 (excluding wardrobe space)	Achieved.	Yes
	2. Bedrooms have a minimum dimension of 3m (excluding wardrobe space)	Achieved.	Yes
	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.	Yes
	4. The width of cross-over or cross-through apartments are at least 4m internally to avoid deep narrow apartment layouts	Achieved.	Yes
	Design guidance Access to bedrooms, bathrooms and laundries is separated from living areas minimising direct openings between living and service areas	Achieved.	Yes
	All bedrooms allow a minimum length of 1.5m for robes	Capable of being achieved.	Yes
	The main bedroom of an apartment or a studio apartment should be provided with a	Capable of being achieved.	Yes

<table>
<tr>
<td></td>
<td>wardrobe of a minimum 1.8m long, 0.6m deep and 2.1m high

Apartment layouts allow flexibility over time, design solutions may include:
• dimensions that facilitate a variety of furniture arrangements and removal
• spaces for a range of activities and privacy levels between different spaces within the apartment
• dual master apartments
• 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
• 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</td>
<td>Appropriate floor layouts proposed.</td>
<td>Yes</td>
</tr>
<tr>
<td>4E-1 Private Open Space and Balconies</td>
<td>Apartments provide appropriately sized private open space and balconies to enhance residential amenity

<u>Design criteria</u>
1. All apartments are required to have primary balconies as follows:
<table>
<tr><th>Dwelling type</th><th>Minimum area</th><th>Minimum depth</th></tr>
<tr><td>Studio apartments</td><td>4m²</td><td>-</td></tr>
<tr><td>1 bedroom apartments</td><td>8m²</td><td>2m</td></tr>
<tr><td>2 bedroom apartments</td><td>10m²</td><td>2m</td></tr>
<tr><td>3+ bedroom apartments</td><td>12m²</td><td>2.4m</td></tr>
</table>

The minimum balcony depth to be counted as contributing to the balcony area is 1m</td>
<td>The proposal provides All apartments comply with the minimum balcony sizes and depths.</td>
<td>Yes</td>
</tr>
</table>

	2. 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 <u>Design guidance</u> Increased communal open space should be provided where the number or size of balconies are reduced Storage areas on balconies is additional to the minimum balcony size 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	Not Achieved. More than the minimum required COS is provided. Achieved. Not relevant.	No Yes Yes Yes
4E-2 Private Open Space and Balconies	Primary private open space and balconies are appropriately located to enhance liveability for residents <u>Design guidance</u> Primary open space and balconies should be located adjacent to the living room, dining room or kitchen to extend the living space	Capable of being achieved.	Yes

	Private open spaces and balconies predominantly face north, east or west 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		
4E-3 Private Open Space and Balconies	Private open space and balcony design is integrated into and contributes to the overall architectural form and detail of the Building <u>Design guidance</u> 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	Design of balcony balustrades is appropriate, varied and aesthetic.	Yes
	Full width full height glass balustrades alone are generally not desirable	All balconies are integrated into the design of the building.	Yes
	Projecting balconies should be integrated into the building design and the design of soffits considered	Achieved.	Yes
	Operable screens, shutters, hoods and pergolas are used to control sunlight and wind	Achieved.	Yes
	Balustrades are set back from the building or balcony edge where overlooking or safety is an issue	Can be conditioned	Yes
	Downpipes and balcony drainage are integrated with the overall facade and building design	Capable of being achieved.	Yes
	Air-conditioning units should be	Air-conditioning units	No

	located on roofs, in basements, or fully integrated into the building design	have not been depicted on the plans and therefore this issue remains.	Yes
	Where clothes drying, storage or air conditioning units are located on balconies, they should be screened and integrated in the building design	Capable of being achieved.	
	Ceilings of apartments below terraces should be insulated to avoid heat loss	No terraces proposed on top of apartments.	Yes
	Water and gas outlets should be provided for primary balconies and private open space	Capable of being achieved.	Yes
4E-4 Private Open Space and Balconies	Private open space and balcony design maximises safety <u>Design guidance</u> Changes in ground levels or landscaping are minimised	Achieved.	Yes
	Design and detailing of balconies avoids opportunities for climbing and falls	Achieved.	Yes
4F-1 Common Circulation and Spaces	Common circulation spaces achieve good amenity and properly service the number of apartments <u>Design criteria</u> 1. The maximum number of apartments off a circulation core on a single level is eight	Maximum of 7 units off a single core. Notwithstanding there is only 1 lift proposed and maintenance/breakdown needs to be further considered.	No
	2. For buildings of 10 storeys and over, the maximum number of apartments sharing a single lift is 40 <u>Design guidance</u> Greater than minimum	Maximum 6 storeys proposed. Achieved.	Not applicable Yes

	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	Achieved.	Yes
	Windows should be provided in common circulation spaces and should be adjacent to the stair or lift core or at the ends of corridors	Achieved.	Yes
	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	24m long corridors proposed but are articulated appropriately.	Yes
	Design common circulation spaces to maximise opportunities for dual aspect apartments, including multiple core apartment buildings and cross over apartments	Dual aspect apartments have been provided.	Yes
	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: • sunlight and natural cross ventilation in apartments • access to ample daylight and natural ventilation in common circulation spaces • common areas for seating and gathering • generous corridors with greater	The development achieves the design criteria therefore these guidelines are not relevant.	Yes

	than minimum ceiling heights • other innovative design solutions that provide high levels of amenity		
	Where design criteria 1 is not achieved, no more than 12 apartments should be provided off a circulation core on a single level	Design criteria 1 is achieved and therefore this guideline is not relevant.	Yes
	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	Achieved.	Yes
4F-2 Common Circulation and Spaces	Common circulation spaces promote safety and provide for social interaction between residents <u>Design guidance</u> 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	Achieved.	Yes
	Tight corners and spaces are avoided	Achieved.	Yes
	Circulation spaces should be well lit at night	Capable of being achieved.	Yes
	Legible signage should be provided for apartment numbers, common areas and general wayfinding	Capable of being achieved.	Yes
	Incidental spaces, for example space for seating in a corridor, at a stair landing, or near a window are provided	No space for seating is provided in corridors.	No
	In larger developments, community rooms for activities	85 units proposed within the RFB and 53	No

<table>
<tr><td></td><td>such as owners corporation meetings or resident use should be provided and are ideally co-located with communal open space

Where external galleries are provided, they are more open than closed above the balustrade along their length</td><td>in the multi dwelling housing development. This is a large development yet no community room for activities has been provided.

Annotations on plans indicate that any external galleries will have a balustrade with a maximum height of 1.4m.</td><td>

Yes</td></tr>
<tr><td>4G-1 Storage</td><td>Adequate, well designed storage is provided in each apartment

<u>Design criteria</u>
1. In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided:
<table><tr><th>Dwelling type</th><th>Storage size volume</th></tr><tr><td>Studio apartments</td><td>4m³</td></tr><tr><td>1 bedroom apartments</td><td>6m³</td></tr><tr><td>2 bedroom apartments</td><td>8m³</td></tr><tr><td>3+ bedroom apartments</td><td>10m³</td></tr></table>
At least 50% of the required storage is to be located within the apartment

<u>Design guidance</u>
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</td><td>

Achieved.

Achieved.

Achieved.

Storage on balconies is in addition to the minimum area of balconies.

None of the units contain staircases.</td><td>

Yes

Yes

Yes

Yes

Not applicable</td></tr>
<tr><td>4G-2</td><td>Additional storage is conveniently</td><td>Storage is provided in</td><td>Yes</td></tr>
</table>

Storage	located, accessible and nominated for individual apartments	apartments and/or basement.	
	<u>Design guidance</u> Storage not located in apartments is secure and clearly allocated to specific apartments	Achieved	Yes
	Storage is provided for larger and less frequently accessed items	Achieved.	Yes
	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	Provided in cages.	Yes
	If communal storage rooms are provided they should be accessible from common circulation areas of the building	Within walking distance of the lifts.	Yes
	Storage not located in an apartment is integrated into the overall building design and is not visible from the public domain	Achieved.	Yes
4H-1 Acoustic Privacy	Noise transfer is minimised through the siting of buildings and building layout		
	<u>Design guidance</u> 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)	Adequate building separation is not provided.	No
	Window and door openings are generally orientated away from noise sources	Achieved.	Yes
	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	Generally achieved.	No

	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	 Achieved Achieved. Achieved.	 Yes Yes Yes
4H-2 Acoustic Privacy	Noise impacts are mitigated within apartments through layout and acoustic treatments <u>Design guidance</u> 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 with streetscape or other amenity requirements	 Generally achieved. Capable of being achieved.	 Yes Yes
4J-1	In noisy or hostile environments	The site is not	Not

Noise Pollution	the impacts of external noise and pollution are minimised through the careful siting and layout of buildings <u>Design guidance</u> 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, nonhabitable 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 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	considered to be a hostile environment.	Applicable

	achieve the design criteria, alternatives may be considered in the following areas: • solar and daylight access • private open space and balconies • natural cross ventilation		
4J-2 Noise Pollution	Appropriate noise shielding or attenuation techniques for the building design, construction and choice of materials are used to mitigate noise transmission <u>Design guidance</u> 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	The Acoustic Report submitted with the application addresses the impact of noise to and from the development and concludes that subject to compliance with the recommendations of the report, acoustic criteria for indoor spaces will be met. This has been assessed by council's Public Health & Environment Section who raised no issues with the proposal.	Yes
4K-1 Apartment Mix	A range of apartment types and sizes is provided to cater for different household types now and into the future <u>Design guidance</u> 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	A variety of apartment types and sizes are provided.	Yes

	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		
4K-2 Apartment Mix	The apartment mix is distributed to suitable locations within the building <u>Design guidance</u> 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	Achieved. Achieved.	Yes Yes
4L-1 Ground Floor Apartments	Street frontage activity is maximised where ground floor apartments are located <u>Design guidance</u> 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	Direct entry has been provided. Achieved. Retail is not permitted in the residential zones.	Yes Yes

	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	Capable of being achieved.	Not applicable
4L-2 Ground Floor Apartments	Design of ground floor apartments delivers amenity and safety for residents <u>Design guidance</u> 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	It is considered that G.03 is too exposed on the corner and the terrace should be further setback into the development.	Yes
4M-1 Facades	Building facades provide visual interest along the street while respecting the character of the local area <u>Design guidance</u> Design solutions for front building facades may include: • a composition of varied building elements • a defined base, middle and top of buildings • revealing and concealing certain elements • changes in texture, material,	The proposed building façade is considered to be appropriate.	Yes

	detail and colour to modify the prominence of elements Building services should be integrated within the overall façade Building facades should be well resolved with an appropriate scale 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 Building facades relate to key datum lines of adjacent buildings through upper level setbacks, parapets, cornices, awnings or colonnade heights Shadow is created on the facade throughout the day with building articulation, balconies and deeper window reveals		
4M-2 Facades	Building functions are expressed by the facade <u>Design guidance</u> 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	 The building entry for pedestrians along Belmore Street needs further consideration. Achieved. Achieved.	 Yes Yes Yes

	expressed externally through facade features such as party walls and floor slabs		
4N-1 Roof Design	Roof treatments are integrated into the building design and positively respond to the street <u>Design guidance</u> 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	Roof Plan is appropriate however it does not incorporate any services on the submitted plans.	No
4N-2 Roof Design	Opportunities to use roof space for residential accommodation and open space are maximised <u>Design guidance</u> 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	COS is provided on the rooftop. The COS is considered to be exposed and further shading structures are considered appropriate.	No
4N-3	Roof design incorporates	The roof design is	Yes

Roof Design	sustainability features <u>Design guidance</u> 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	acceptable however there are minimal sustainability features.	
4O-1 Landscape Design	Landscape design is viable and sustainable <u>Design guidance</u> Landscape design should be environmentally sustainable and can enhance environmental performance by incorporating: • 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	The proposed deep soil zone is 26% of the site and can accommodate appropriate landscaping. Notwithstanding this, the terrace for G.03 prevents substantial landscaping along Belmore Street and should be further setback and large canopy trees provided.	No

	(see Table 4) Table 4 Recommended tree planting in deep soil zones Site area / Recommended tree planting Up to 850m² / 1 medium tree per 50m² of deep soil zone Between 850 - 1,500m² / 1 large tree or 2 medium trees per 90m² of deep soil zone Greater than 1,500m² / 1 large tree or 2 medium trees per 80m² of deep soil zone		
4O-2 Landscape Design	Landscape design contributes to the streetscape and amenity <u>Design guidance</u> Landscape design responds to the existing site conditions including: • changes of levels • views • significant landscape features including trees and rock outcrops Significant landscape features should be protected by: • tree protection zones (see figure 4O.5) • appropriate signage and fencing during construction Plants selected should be endemic to the region and reflect the local ecology	Landscape design is not considered to be appropriate as it does not maximise landscaping along the Belmore frontage. In addition, the landscape plan does not consider the stormwater drained infrastructure within the southern setback.	No
4P-1 Planting on Structures	Appropriate soil profiles are provided <u>Design guidance</u> Structures are reinforced for additional saturated soil weight 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	These matters have been reviewed by Council's Tree Preservation Officer and no issues have been raised regarding planting on structures.	Yes

	Table 5 Minimum soil standards for plant types and sizes  Plant type / Definition / Soil volume / Soil depth / Soil area Large trees / 12-18m high, up to 16m crown spread at maturity / 150m³ / 1,200mm / 10m x 10m or equivalent Medium trees / 8-12m high, up to 8m crown spread at maturity / 35m³ / 1,000mm / 6m x 6m or equivalent Small trees / 6-8m high, up to 4m crown spread at maturity / 9m³ / 800mm / 3.5m x 3.5m or equivalent Shrubs / / / 500-600mm / Ground cover / / / 300-450mm / Turf / / / 200mm /		
4P-2 Planting on Structures	Plant growth is optimised with appropriate selection and maintenance <u>Design guidance</u> Plants are suited to site conditions, considerations include: • 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		
4P-3 Planting on Structures	Planting on structures contributes to the quality and amenity of communal and public open spaces <u>Design guidance</u> 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 • 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-1 Universal Design	Universal design features are included in apartment design to promote flexible housing for all community members <u>Design guidance</u> Developments achieve a benchmark of 20% of the total apartments incorporating the Livable Housing Guideline's silver level universal design features	Can be achieved.	Yes
4Q-2 Universal Design	A variety of apartments with adaptable designs are provided <u>Design guidance</u> 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	Can be achieved.	Yes
4Q-3 Universal Design	Apartment layouts are flexible and accommodate a range of lifestyle needs <u>Design guidance</u> 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	Proposed apartment layouts are considered to be flexible.	Yes

	and bathroom		
4R-1 Adaptive Reuse	New additions to existing buildings are contemporary and complementary and enhance an area's identity and sense of place <u>Design guidance</u> 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	The application is for a new development and does not involve extensions/additions.	Not applicable
4R-2 Adaptive Reuse	Adapted buildings provide residential amenity while not precluding future adaptive reuse <u>Design guidance</u> 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	The proposal does not involve adaptive reuse of a building.	Not applicable

	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-1 Mixed use	Mixed use developments are provided in appropriate locations and provide active street frontages that encourage pedestrian movement <u>Design guidance</u> 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	Only residential accommodation is proposed.	Not applicable
4S-2 Mixed use	Residential levels of the building are integrated within the development, and safety and	Only residential accommodation is proposed.	Not applicable

	amenity is maximised for residents <u>Design guidance</u> 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-1 Awnings and Signage	Awnings are well located and complement and integrate with the building design <u>Design guidance</u> 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 Awnings should be located over	Site is not in a neighbourhood centre and does not have a high pedestrian activity or active frontage.	Not applicable

	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		
4T-2 Awnings and Signage	Signage responds to the context and desired streetscape character <u>Design guidance</u> 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	No signage is proposed for this site.	Not applicable
4U-1 Energy Efficiency	Development incorporates passive environmental design <u>Design guidance</u> 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	 Not all habitable room receive adequate natural light as identified earlier in this table. Capable of being achieved.	 No Yes
4U-2 Energy Efficiency	Development incorporates passive solar design to optimise heat storage in winter and reduce heat transfer in summer	The development must comply with the BASIX certificate which contains numerous requirements relating	No

	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 Provision of consolidated heating and cooling infrastructure should be located in a centralised location (e.g. the basement)	to energy efficiency. However it is noted that the BASIX Certificate for this development is outdated and an amended certificate has not been submitted to reflect the revised proposal and to verify that original recommendations are still relevant.	
4U-3 Energy Efficiency	Adequate natural ventilation minimises the need for mechanical ventilation Design guidance 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	Achieved.	Yes
4V-1 Water Management and Conservation	Potable water use is minimised Design guidance Water efficient fittings, appliances and wastewater reuse should be incorporated Apartments should be individually metered Rainwater should be collected, stored and reused on site	The BASIX Certificate for this development is outdated and an amended certificate has not been submitted to reflect the revised proposal.	No

	Drought tolerant, low water use plants should be used within landscaped areas		
4V-2 Water Management and Conservation	Urban stormwater is treated on site before being discharged to receiving waters <u>Design guidance</u> 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	Council's Development Engineers have assessed this aspect of the proposal and raise no issues.	Yes
4V-3 Water Management and Conservation	Flood management systems are integrated into site design <u>Design guidance</u> Detention tanks should be 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	The site is not flood affected.	Not applicable
4W-1 Waste Management	Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity of residents <u>Design guidance</u> Adequately sized storage areas for rubbish bins should be located discreetly away from the front of the development or in the basement car park	Council's Waste Management Section have assessed the amended application and raise a number of issues with the	No

	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 (WMP) should be prepared	proposal. These issues with waste management are discussed in the Key Issues section of the report.	
4W-2 Waste Management	Domestic waste is minimised by providing safe and convenient source separation and recycling <u>Design guidance</u> 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	Council's Waste Management Section have assessed the amended application and raise a number of issues with the proposal. These issues with waste management are discussed in the Key Issues section of the report.	No
4X-1 Building Maintenance	Building design detail provides protection from weathering <u>Design guidance</u> 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	The development is capable of complying with these requirements.	Yes

	• methods to eliminate or reduce planter box leaching • appropriate design and material selection for hostile locations		
4X-2 Building Maintenance	Systems and access enable ease of maintenance <u>Design guidance</u> 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 façade 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	The development is capable of complying with these requirements.	Yes
4X-3 Building Maintenance	Material selection reduces ongoing maintenance costs <u>Design guidance</u> 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	The development is capable of complying with these requirements.	Yes

	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		