Design principles – Schedule 9 of the Housing SEPP and Apartment Design Guide – Part 3 and Part 4

This assessment addresses the Design Principles in Schedule 9 of the Housing SEPP and the relevant provisions of the Apartment Design Guide.

Design Principles – Schedule 9 of the Housing SEPP
Context and Neighbourhood While the application is inconsistent with the relevant provisions relating to access, deep soil and internal amenity. Overall, it is considered that the application demonstrates that the proposed built form and massing achieve an acceptable response to the existing and desired future character of the CBD core of Bankstown City Centre. The proposal has regard for the potential future development of the northern adjoining site (62 The Mall) and includes a Massing Feasibility study which demonstrates two development options for future development in line with the current planning framework. Future planned development at the eastern adjoining site of Bankstown Central has also been considered in that the tower forms are of a similar scale to that anticipated for the site. Furthermore, the amended application has further refined the interface treatment with 3-7 Fetherstone Street to ensure that the potential visual and acoustic privacy impacts to the neighbouring residential apartments can be appropriately managed and minimised. The establishment of the thru-site links facilities ground floor permeability and legibility. As noted by the DRP, the central thru-site link not only provides access between the site and the surrounding public domain but establishes outlook to the sky and is well connected to the upper-level podium commercial and retail spaces.
Built form and scale The built form provides for a 5-storey podium with three tower forms above, the scale of which is generally reflective of the current planning controls applying to the site. The DRP has acknowledged that there is a clarity to the overall massing, composition and architectural expression, with three main elements, including a ground base, multi-level retail and commercial spaces and the varied residential towers above. In terms of the towers, the form and expression of the residential towers fronting the Appian Way (Building B and Building C) is intentionally understated in comparison to the active podium. The residential tower forms (Building B and Building C) as viewed from the Appian Way will contribute to the activation of this thoroughfare as the “Activity spine” of the CBD as identified in the Bankstown Complete Streets Transport and Place Plan. The hotel building (Building A) is lower in height which facilitates a transition in scale within the site and further marking the southwestern corner as a key pedestrian entry to the site and future identified pedestrian crossing to the future metro station. Sufficient separation between the tower forms is also achieved noting that the proposal achieves the relevant building separation requirements in the ADG. Notwithstanding the above, the application in its current form does not provide adequate building modulation to achieve sufficient solar access and natural ventilation in accordance with the ADG.
Density The proposal provides increased mixed-use development and housing choice within the Bankstown Accelerated TOD Precinct and will contribute to increased housing density in a prominent location, with the future Bankstown Metro Sation and bus services directly opposite the development. The development will also support the CBD core of the Bankstown City Centre, further strengthening the role of Bankstown as a strategic centre.
Sustainability The development has been amended to incorporate additional, communal spaces and facilities including the co-location of meeting, co-working and dining rooms, as well as a swimming pool and further outdoor space on Level 5. Furthermore, it is considered that the proposal achieves a high level of sustainability as demonstrated in the submitted ESD Report and updated Architectural Design Report.
Landscape The application has been amended to increase landscaping, primarily comprising on structure plantings to supplement the dep soil areas at ground level. The landscape plans also demonstrate that a maximum soil depth of 1 metre is provided for all landscaping located above the ground floor. It is considered that additional landscaping is required, in the form of deep soil zones, noting that the application in its current form provides deep soil areas that are equal to 1.6% of the site area which is inconsistent with the ADG.
Amenity The application in its current form does not demonstrate that adequate solar access and natural ventilation is provided. The proposal does not satisfy the solar access and natural ventilation provisions of the ADG.
Safety While a diverse range of communal internal and external spaces are provided, the connection between these spaces has been raised by the DRP and Council’s Urban Design Team, including concern regarding access within the car parking areas. For example, the DRP have noted that the upper level internal and external spaces are separated by physical elements and/or voids. Further the location and configuration of the landscaping along the interfaces with 3-7 Fethestone Street does not facilitate an appropriate level of passive surveillance. Design amendments have been incorporated into the updated architectural plans in response to these matters and include the consolidation of the communal open space on Level 5 into a single

contiguous area to improve, provision of direct pedestrian connection from Lobby C1 to the internal residential communal area and provision of access to the podium area via the gym on Level 1 and Level 2. The updated plans also demonstrate that minor adjustments to the pedestrian travel routes within the car parking areas, including within the child care car park.

Housing diversity and social interaction

As identified by the DRP, the proposal provides for an active ground plane and podium levels with a range of retail and commercial offerings. The application also provides flexibility in the use of the podium with the potential for the podium car parking to be converted to other residential or non-residential uses. The residential communal areas and facilities have been expanded in the amended application which provides for greater diversity of activity and social interaction.

Aesthetics
In terms of external façade design, the proposal incorporates a diverse range of finishes, materials and colours, informed by Connecting with Country input and includes brickwork which extends from the podium to the towers, framing the pedestrian entries into the site, lighter and more subdued material palette of the towers which deliberately contrast with the more textured podium levels below, as well as a combination of glass and solid balustrades across the residential towers. The DRP has also acknowledged that the hotel building (Building A) has a dramatic presence which creates a highly visible landmark and that the podium addresses the street frontages, including the site corners, clearly and boldly. The DRP has acknowledged that the visual qualities of the buildings, including the articulation of the residential towers (Building B and Building C), have been well-considered.

Apartment Design Guide		
Part 3		
Control	**Provision**	**Compliance**
3A - Site Analysis		
Objective 3A - 1 *Site analysis illustrates that design decisions have been based on opportunities and constraints of the site conditions and their relationship to the surrounding context*		
Design Guidance	Each element in the Site Analysis Checklist should be addressed (see Appendix 1).	An extensive site analysis has been undertaken and is set out in the Architectural Design Report prepared by PTW Architects.
3B - Orientation		
Objective 3B - 1 *Building types and layouts respond to the streetscape and site while optimising solar access within the development.*		
Design Guidance	Buildings along the street frontage define the street, by facing it and incorporating direct access from the street (see figure 3B.1).	Achieved. Each building addresses the respective street frontage.
	Where the street frontage is to the east or west, rear buildings should be orientated to the north.	Achieved. The site has 3 street frontages, including east, south and west and the "rear" building (Building B) is orientated towards north.
	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).	Achieved. It is considered that the overshadowing impacts are acceptable given the CBD context.
Objective 3B - 2 *Overshadowing of neighbouring properties is minimised during midwinter*		
Design Guidance	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.	The application does not demonstrate that internal living areas and private open space areas achieve solar access as per Objective 3F-1.
	Solar access to living rooms, balconies and private open spaces of neighbours should be considered.	

	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%.	Achieved. Due to the orientation of the site there are no adjoining sites that will be impacted in terms of compliance with the solar access provisions.
	If the proposal will significantly reduce the solar access of neighbours, building separation should be increased beyond minimums contained in section 3F Visual privacy.	Not required.
	Overshadowing should be minimised to the south or downhill by increased upper level setbacks.	See 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.	It is considered that the orientation of the buildings ensures that an acceptable level of overshadowing is achieved, particularly within the CBD context.
3C – Public Domain Interface		
Objective 3C – 1 *Transition between private and public domain is achieved without compromising safety and security*		
	Terraces, balconies and courtyard apartments should have direct street entry, where appropriate.	Not applicable. Residential apartments are provided in tower forms above the podium.
	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).	N/A
	Upper level balconies and windows should overlook the public domain.	Achieved.
	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.	N/A
	Length of solid walls should be limited along street frontages.	The podium addresses the public clearly and boldly, especially at the sites corners. A diverse range of materials and finishes are incorporated to provide architectural interest.
Design Guidance	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 street.	Achieved. Residents are provided with direct access to the lower podium levels which contain a range of non-residential uses, providing opportunity for interaction with other residents and site users.
	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	As noted by the DRP, the residential lobbies visually align with the podium entries. There is a deliberate change in materiality between the podium level, residential entries and tower forms. As noted by the DRP, "*the ground floor permeability, visibility and access are much improved, along with the potential clarity and legibility of the public domain and retail and hospitality spaces across the ground floor. The spatiality of the central connecting spine of Compass Way is also dramatically improved, as well as its relationship to the sky, and to the upper-level podium spaces.*"
	Opportunities for people to be concealed should be minimised.	Amended plans demonstrates access between the residential lobbies and communal areas has improved.

Objective 3C – 2 *Amenity of public domain is retained and enhanced*		
Design Guidance	Planting softens the edges of any raised terraces to the street, for example above sub-basement car parking.	It is considered that deep soil plantings, could be expanded with further canopy tree plantings to improve the public domain interface.
	Mail boxes should be located in lobbies, perpendicular to the street alignment or integrated into front fences where individual street entries are provided.	Achieved.
	The visual prominence of underground car park vents should be minimised and located at a low level where possible.	Achieved.
	Substations, pump rooms, garbage storage areas and other service requirements should be located in basement car parks or out of view.	Achieved.
	Ramping for accessibility should be minimised by building entry locations and setting ground floor levels in relation to footpath levels.	Achieved.
	Durable, graffiti resistant and easily cleanable materials should be used.	Noted, and able to comply.
	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 plating that clearly delineate between communal/private open space and the adjoining public open space. - Minimal use of blank walls, fences and ground level parking.	Achieved. The development adjoins Phil Engisch Reserve to the north. The ground floor setbacks of Building C to the northern boundary shared with Phil Engisch Reserve have been increased to achieve a consistent 4 metre setback and improve functionality of the interface area.
	On sloping sites protrusion of car parking above ground level should be minimised by using split levels to step underground car parking.	Car parking is located in the basement levels.

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.*		
Design Criteria	Communal open space has a minimum area equal to 25% of the site (See figure 3D.3)	Achieved. 2076.4m^2 (or 25.4% of the site) Located on Level 2, 5 and rooftop level of Building B and Building C.
Design Guidance	Communal open space should be consolidated into a well-designed, easily identified and usable area.	Achieved. Amended plans demonstrate the consolidation of internal and external communal areas on Level 5. Additional communal areas are provided on Level 2 and the rooftop levels of Building B and Building C.
	Communal open space should have a minimum dimension of 3m, and larger developments should consider greater dimensions.	Achieved.
	Communal open space should be co-located with deep soil areas.	Deep soil areas are provided at ground level only. On-structure planting is provided throughout the site with a minimum soil depth of 1 metre for all on structure planters.
	Direct, equitable access should be provided to communal open space areas from common circulation areas, entries and lobbies	Achieved for residents access the Level 5 communal internal and external areas.

	Where communal open space cannot be provided at ground level, it should be provided on a podium or roof.	Achieved.
	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 minimum communal open space area is achieved.
Objective 3D – 2 *Communal open space is designed to allow for a range of activities, respond to site conditions and be attractive and inviting*		
Design Guidance	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	Achieved. A range of activities and uses are facilitated on Level 5 and 2.
	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.	Achieved. Shading devices and canopy trees are provided.
	Visual impacts of services should be minimised, including location of ventilation duct outlets from basement car parks, electrical substations and detention tanks.	Achieved.
Objective 3D – 3 *Communal open space is designed to maximise safety*		
Design Guidance	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	Achieved. Amended plans were provided to relocate the residential apartments adjoining the communal open space areas. A consolidated communal open space area and facilities are provided a s contiguous area on Level 5.
	Communal open space should be well lit.	Achieved.
	Where communal open space/facilities are provided for children and young people they are safe and contained.	Achieved. All communal open space areas are contained within the site.
Objective 3D – 4 *Public open space, where provided, is responsive to the existing pattern and uses of the neighbourhood*		
Design Guidance	The public open space should be well connected with public streets along at least one edge	The development does not include public open space. The ground floor setback to Phil Engisch Reserve has been increased to provide a consistent 4 metre setback.
3E – Deep Soil Zones		
Objective 3E – 1 *Deep soil zones provide areas on the site that allow for and support healthy plant tree growth. They improve residential amenity and promote management of water and air quality*		

<table>
<tr><td>Design Criteria</td><td>Deep soil zones are to meet the following minimum requirements.

<table><tr><th>Site Area</th><th>Min. Dimensions</th><th>Deep Soil Zone (% of site area)</th></tr><tr><td>< 650m²</td><td>-</td><td></td></tr><tr><td>650-1500m²</td><td>3m</td><td></td></tr><tr><td>>1500m²</td><td>6m</td><td>7%</td></tr><tr><td>>1500m² with significant 6m existing tree cover</td><td>6m</td><td></td></tr></table></td><td>Inconsistent.

1.6% (139.44m²) of site area

While requiring strict adherence with the 7% deep soil design criteria may be unreasonable given the site context, it is considered that there is scope to increase the deep soil above the proposed 1.6% to improve satisfaction of Objective 3E-1</td></tr>
<tr><td rowspan="3">Design Guidance</td><td>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</td><td>See below.</td></tr>
<tr><td>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</td><td>See below.</td></tr>
<tr><td>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 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>Noted. However, it is considered that additional ground level deep soil plantings could be achieved with enlarged or additional deep soil plantings/nodes along edges of the site, particularly along The Appian Way and/or Fetherstone Street frontage to maximise plantings, specifically canopy trees.</td></tr>
<tr><td colspan="3">3F – Visual Privacy</td></tr>
<tr><td colspan="3">Objective 3F – 1
Adequate building separation distances are shared equitably between neighbouring sites, to achieve reasonable levels of external and internal visual privacy</td></tr>
<tr><td>Design Criteria</td><td>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*</th></tr><tr><td>Up to 12 (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.</td><td>The proposal is consistent with the building setback and separation requirements in the design criteria with the exception of the:

- Northern setbacks of Building A to 3-1 Fetherstone Street (ranging between 8 and 16.2 metres);
- Northern setbacks of Building C to 62 The Mall/ Phil Engisch Reserve.

While strict adherence is not achieved the proposal in its current form is acceptable for the reasons discussed below.

3-7 Fetherstone Street

A range of function spaces and hotel guest facilities are proposed at the site’s interface with 3-7 Fetherstone Street, including a library lounge, medium function room and gymnasium and external terrace at Level 4, and the hotel ball room at Level 5.This matter was raised with the applicant, and in response, amended plans have been</td></tr>
</table>

provided demonstrating that adequate visual privacy is achieved, as follows:

— Incorporation of a 3-metre-wide planter box at the northern edge of the building at Level 4, including landscaping with a range of tree plantings; and

— Installation of opaque colour-backed glass along the northern elevation of the Hotel Building

While the external terrace area surrounding the hotel building on Level 4 is set back from the edge of the building by the proposed planter box, the Noise Impact Assessment also requires the following additional measures to achieve compliance with the relevant noise criteria and further minimise noise impacts on the residential apartment at 3-7 Fetherstone Street:

- Restriction of the maximum number of people to be within the level 4 external terrace to a maximum of 35 people at any one time;
- Restriction of access and use of the Level 4 external terrace between 10pm and 7am; and
- External glazing to all hotel function spaces to be fixed and/or closed while occupied and in us.

Based on the measures identified above, it is considered that the potential visual and acoustic privacy impacts on the adjoining residential apartment at 3-7 Fetherstone Street will be appropriately managed.

62 The Mall/Phil Engisch Reserve

The proposed setback distances of the upper residential levels of Building C to the eastern extent of the northern boundary, shared with 62 The Mall/Phil Engisch Reserve, range between 3.1 and 5.4 metres.

Achieving strict adherence of the design criteria by increasing the northern tower setbacks of Building C would have no material benefit for the redevelopment of the eastern portion of 62 The Mall, occupied by Phil Engisch Resevre. If the equivalent ADG compliant setbacks were applied within the adjoining site, a tower form could not be realised noting the configuration and width of the eastern portion of the lot (i.e., 18 metres, approximately).

The northern boundary is shared with Phil Engisch Reserve which is existing open space, and it is considered that the development achieves the design guidance under Objective 3F-1.

It is also noted that the development provides a compliant setback to the western boundary shared with the former library building occupying the western portion of the lot, also located at 62 The Mall, which could potentially accommodate a tower form as per the ADG provisions.

		Having regard to the above the development is consistent with Objective 3F-1.
Design Guidance	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.	The DRP has acknowledged that *"the articulation of the residential towers, on both the north and south elevations, have been well considered, introducing an intelligent, stepping of balconies, to clearly identify these significant street corners."*
	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	Noted.
	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)	The development is consistent with Objective 3F-1.
	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)	N/A
	Direct lines of sight should be avoided for windows and balconies across corners	Noted.
	No separation is required between blank walls	Noted.
Objective 3F – 2 *Site and building design elements increase privacy without compromising access to light and air and balance outlook and views from habitable rooms and private open space*		
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	Achieved. Amended plans are provided demonstrating that residential apartments are no longer adjacent to communal areas.
	Bedrooms, living spaces and other habitable rooms should be separated from gallery access and other open circulation space by the apartment's service areas	Achieved.
	Balconies and private terraces should be located in front of living rooms to increase internal privacy	Achieved.
	Windows should be offset from the windows of adjacent buildings	The proposed tower of Building A does not contain hotel room balconies adjacent to the apartments at 3-7 Fetherstone Street.
	Recessed balconies and/or vertical fins should be used between adjacent balconies.	N/A

3G – Pedestrian Access and Entries		
Objective 3G – 1 *Building entries and pedestrian access connects to and address the public domain*		
Design Guidance	Multiple entries (including communal building entries and individual ground floor entries) are provided to activate the street edge	Achieved. Residential lobbies on upper podium level.
	Entry locations relate to the street and subdivision pattern and the existing pedestrian network	N/A
	Building entries are clearly identifiable. Communal entries are clearly distinguishable from private entries	Achieved.
	Where street frontage is limited and multiple buildings are located on the site, a primary street address is provided with clear sight lines and pathways to secondary building entries	Achieved. The podium provides for a positive and active street address to all site frontages.
Objective 3G – 2 *Access, entries and pathways are equitable and easy to identify*		
Design Guidance	Building access areas including lift lobbies, stairwells and hallways are clearly visible from the public domain and communal spaces	Achieved.
	The design of ground floors and underground car parks minimise level changes along pathways and entries	Achieved.
	Steps and ramps are integrated into the overall building and landscape design	Achieved.
	For large developments 'way finding' maps should be provided to assist visitors and residents (see figure 4T.3)	Noted.
	For large developments electronic access and audio/video intercom should be provided to manage access	Noted.
Objective 3G – 3 *Pedestrian links through developments provide access to streets and connect destinations*		
Design Guidance	Pedestrian links through sites facilitate direct connections to open space, main streets, centres and public transport	Achieved. Three (3) separate pedestrian entries including a southern entry via North Terrace, a western entry via The Appian Way and a northern entry via 62 The Mall. A primary north-south thru-site link, "Compass Way" which provides access between the site and the future metro station to the south and Phil Engisch Reserve and Paul Keating Park to the North. East-west connections via Compass Way which provide access to Fetherstone Street to the west and The Appian Way to the east.
	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.

3H - Vehicle Access

Objective 3H - 1
Vehicle access points are designed and located to achieve safety, minimise conflicts between pedestrians and vehicles and create high quality streetscapes

	Car park access is integrated with the building's overall facade, design solutions may include: - the materials and colour palette minimise visibility from the street - security doors or gates at entries that minimise voids in the facade - where doors are not provided, the visible interior reflects the facade design and the building services, pipes and ducts are concealed	Assessment of the application by Council's Traffic Engineer has identified a range of traffic safety and compliance issues with the proposed site access arrangements via Fetherstone Street as well as the taxi and coach access via North Terrace. Specifically: • the location, configuration and co-location of the retail and loading dock driveways whereby the loading (truck) access is situated between the retail entry and exit driveway compromises safety for all road users and is therefore considered unacceptable. • Compliance with the relevant Australian Standards in terms of the required driveway widths and swept path analysis has not been achieved. • The location of the proposed taxi and coach drop-off and pick-up zone conflicts with on-street traffic, the existing taxi stand located on the northern side of North terrace and the bus zone on the southern side of North terrace, respectively, which will give rise to unreasonable traffic safety and efficiency impacts.
Design Guidance	Car park entries are located behind the building line	Achieved.
	Vehicle entries are located at the lowest point of the site minimising ramp lengths, excavations and impacts on the building form and layout	Achieved.
	Car park entry and access is located on secondary streets or lanes where available	Achieved.
	Vehicle standing areas that increase driveway width and encroach into setbacks should be avoided	See comment above regarding assessment by Council's Traffic Engineer.
	Access point locations avoid headlight glare to habitable rooms	Achieved.
	Adequate separation distances are provided between vehicular entries and street intersections	See comment above regarding assessment by Council's Traffic Engineer.
	The width and number of vehicle access points is limited to the minimum Visual impact of long driveways is minimised through changing alignments and screen planting	See comment above regarding assessment by Council's Traffic Engineer.
	The requirement for large vehicles to enter or turnaround within the site is avoided	Service vehicles and all site servicing is to occur within the site.
	Garbage collection, loading and servicing areas are screened	Achieved. These areas are provided within the basement.
	Clear sight lines should be provided at pedestrian and vehicle crossings	See comment above regarding assessment by Council's Traffic Engineer.

	Traffic calming devices such as changes in paving material or textures should be used where appropriate	See comment above regarding assessment by Council's Traffic Engineer.
	Pedestrian and vehicle access should be separated and distinguishable. Design solutions may include: - changes in surface materials - level changes - the use of landscaping for separation	See comment above regarding assessment by Council's Traffic Engineer.
3J – Bicycle and Car Parking		
Objective 3J – 1 *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 locations:
	
	- on sites that are within 800 metres of a railway station or light rail stop in the Sydney Metropolitan Area;
	- 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.
		The Guide to Traffic Generating Developments requires a total of:
		• 219 spaces for the non-residential uses
		• 239 car spaces for the residential component
		
		The CBDCP requires a total of:
		• 7 accessible car spaces for the non-residential component
		• 34 accessible car spaces for the residential component
		• 42 bicycle spaces for the non-residential component
		• 34 bicycle spaces for the residential component
		
		A total of 494 car parking spaces are proposed within the basement levels, distributed as follows:
		
		• **Residential:** 239 (including 34 accessible spaces)
		• **Non-residential** (254 car spaces)
		  ○ **Retail and gym:** 124 (including 3 accessible spaces)
		  ○ **Hotel:** 78 (including 2 accessible spaces)
		  ○ **Medical suites:** 28 (including 1 accessible space)
		  ○ **Child care centre:** 25 (including 1 accessible space)
		
		The Traffic Impact Assessment prepped by PTC identifies that a total of 27 motorcycle spaces is provided. This is contrary to the architectural plans which demonstrate a total of 7 spaces are provided on Basement Level 1.

Design Guidance	Where car share scheme operates locally, provide car share parking spaces within the development. Car share spaces, when provided, should be on site.	N/A
	Where less car parking is provided in a development, council should not provide on street resident parking permits.	N/A
Objective 3J – 2 *Parking and facilities are provided for other modes of transport*		
Design Guidance	Conveniently located and sufficient numbers of parking spaces should be provided for motorbikes and scooters.	See comment above regarding motorcycle spaces.

	Secure undercover bicycle parking should be provided that is easily accessible from both the public domain and common areas.	Achieved.
	Conveniently located charging stations are provided for electric vehicles, where desirable.	A statement has been provided by the Applicant demonstrating that EV charging stations may be accommodated.
Objective 3J - 3 *Car park design and access is safe and secure*		
Design Guidance	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	See comment below.
	Direct, clearly visible and well lit access should be provided into common circulation areas	Achieved.
	A clearly defined and visible lobby or waiting area should be provided to lifts and stairs	Achieved.
	For larger car parks, safe pedestrian access should be clearly defined and circulation areas have good lighting, colour, line marking and/or bollards	The amened application refers to additional treatment of the car park including differentiation of car spaces by surface, colour and lighting. However, a delineated pedestrian paths are not provided, including within the area comprising the child care centres car spaces.
Objective 3J - 4 *Visual and environmental impacts of underground car parking are minimised*		
Design Guidance	Excavation should be minimised through efficient car park layouts and ramp design	Achieved.
	Car parking layout should be well organised, using a logical, efficient structural grid and double loaded aisles	Assessment of the original application by Council's Development Engineer identified a range issues regarding on-site manoeuvring including driveway ramp widths, intersection and car park design and associated compliance with the relevant Australian Standards (AS2890.1).
	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	Achieved.
	Natural ventilation should be provided to basement and sub-basement car parking areas	Achieved.
	Ventilation grills or screening devices for car parking openings should be integrated into the facade and landscape design	Achieved.
Objective 3J - 5 *Visual and environmental impacts of on-grade car parking are minimised*		
Design Guidance	On-grade car parking should be avoided	Achieved. On-grade car parking is not proposed.
	Where on-grade car parking is unavoidable, the following design solutions are used: - parking is located on the side or rear of the lot away from the primary street frontage - cars are screened from view of streets, buildings, communal and private open space areas - safe and direct access to building entry points is provided - parking is incorporated into the landscape design of the site, by extending planting and materials into the car park space	N/A

	- 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	
Objective 3J - 6 *Visual and environmental impacts of above ground enclosed car parking are minimised*		
Design Guidance	Exposed parking should not be located along primary street frontages	The application identifies that the proposed podium level car parking is proposed to be screened with brick face patterning, integrated with indigenous art work and digital screens.
	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)	Noted
	Positive street address and active frontages should be provided at ground level	Achieved.

Part 4		
Control	**Provision**	**Compliance**
4A – Solar and Daylight Access		
Objective 4A – 1 *To optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space*		
Design Criteria	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 9am and 3 pm at mid-winter in the Sydney Metropolitan Area and in the Newcastle and Wollongong local government areas.	Refer to the discussion under the Housing SEPP regarding solar access at Section 4.1(d) of the Report. The architectural plans do not demonstrate that the living rooms and private open spaces of at least 70% of the proposed apartments receive a minimum of 2 hours of sunlight between 9am and 3pm in accordance with Design Criteria 1 in Objective 4A-1. For example: • The solar access diagrams for Level 6 to 23 included in the architectural plans (Drawing Q110060) indicate that all east facing 1, 2 and 3-bedroom apartments in Building B and Building C receive more than 2 hours of direct sunlight. This is contrary to the sun-eye view diagrams which demonstrate that these apartments receive direct sunlight between 9am and 10am only (Drawing Q110030-31).The diagrams do not demonstrate that solar access is provided to the living rooms of these apartments after 10am. • Solar access to the private open space areas of apartments is not identified on the solar access diagrams (Drawing Q110060) or the ADG Compliance Assessment in Section 10 of the updated Architectural Design Report.
	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.	N/A
	3. A maximum of 15% of apartments in a building receive no direct sunlight between 9am and 3 pm at mid winter.	Inadequate information is provided to properly assess and determine the level of adherence with this design criteria (see comments above).
Design Guidance	The design maximises north aspect and the number of single aspect south facing apartments is minimise	See above.
	Single aspect, single storey apartments should have a northerly or easterly aspect	See above.
	Living areas are best located to the north and service areas to the south and west of apartment	Achieved.
	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	See above.

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	- two storey and mezzanine level 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	Inadequate information is provided to properly assess and determine the extent of solar access obtained by the residential apartments.
	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	See above.
Objective 4A - 2 *Daylight access is maximised where sunlight is limited*		
	Courtyards, skylights and high level windows (with sills of 1,500mm or greater) are used only as a secondary light source in habitable rooms	See above.
Design Guidance	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	N/A
	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	N/A
Objective 4A - 3 *Design incorporates shading and glare control, particularly for warmer months*		
Design Guidance	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)	The Applicant has identified that performance glass will be employed to mitigate external glare. For the eastern and western facades, shading will be achieved via extended slab edges and recessed balconies. The northern facades incorporate recessed balconies to provide protection from northern sunlight.
4B - Natural Ventilation		
Objective 4B - 1 *All habitable rooms are naturally ventilated*		

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Design Guidance	The building's orientation maximises capture and use of prevailing breezes for natural ventilation in habitable rooms	Inadequate information is provided to demonstrate that the residential apartments are naturally ventilated.
	Depths of habitable rooms support natural ventilation	Achieved.
	The area of unobstructed window openings should be equal to at least 5% of the floor area served	Inadequate information is provided to demonstrate adherence.
	Light wells are not the primary air source for habitable rooms	N/A
	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	Inadequate information is provided to demonstrate adherence.
Objective 4B - 2 *The layout and design of single aspect apartments maximises natural ventilation*		
Design Guidance	Apartment depths are limited to maximise ventilation and airflow (see also figure 4D.3)	Achieved.
	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	Inadequate information is provided to demonstrate adherence. Elevations and sections are not provided for all inlet/outlet windows.
Objective 4B - 3 *The number of apartments with natural cross ventilation is maximised to create a comfortable indoor environment for residents*		
Design Criteria	1. 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 2. Overall depth of a cross-over or cross-through apartment does not exceed 18m, measured glass line to glass line	Not achieved. The architectural plans identify that 18 apartments in Building B and 15 apartments in Building C across levels 6 to 8 are cross ventilated. However it is considered that these apartments are not cross ventilated as they include outlet windows which are significantly smaller area than the respective inlet openings.
Design Guidance	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)	See above.
	Apartments are designed to minimise the number of corners, doors and rooms that might obstruct airflow	Achieved.
	Apartment depths, combined with appropriate ceiling heights, maximise cross ventilation and airflow	Noted.

Part 4		
4C – Ceiling Heights		
Objective 4C-1 *Ceiling height achieves sufficient natural ventilation and daylight access*		
Design Criteria	1. Measured from finished floor level to finished ceiling level, minimum ceiling heights are: **Minimum ceiling height (for apartment and mixed use buildings)** *Habitable rooms* — *2.7m* *Non-habitable* — *2.4m* *For 2 storey apartments* — *2.7m for main living area floor*; *2.4m for second floor, where its area does not exceed 50% of the apartment area* *Attic spaces* — *1.8m at edge of room with a 30 people degree minimum ceiling slope* These minimums do not preclude higher ceilings if desired	Achieved.
Design Guidance	Ceiling height can accommodate use of ceiling fans for cooling and heat distribution	Noted.
Objective 4C-2 *Ceiling height increases the sense of space in apartments and provides for well-proportioned rooms*		
Design Guidance	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	Services are stacked and located in bulkheads.
Objective 4C-3 *Ceiling heights contribute to the flexibility of building use over the life of the building*		
Design Guidance	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)	Achieved.
4D – Apartment size and layout		
Objective 4D-1 *The layout of rooms within an apartment is functional, well organised and provides a high standard of amenity*		
Design Criteria	1. Apartments are required to have the following minimum internal areas: **Apartment Type** — **Minimum Internal Area** *Studio* — *35m²* *1 bedroom* — *50m²* *2 bedroom* — *70m²*	Amended architectural plans have been provided demonstrating consistency with the design criteria regarding the internal areas of the apartments.

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	3 bedroom *90m²* 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.	
	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.	Achieved.
Design Guidance	Kitchens should not be located as part of the main circulation space in larger apartments (such as hallway or entry space)	Achieved.
	A window should be visible from any point in a habitable room	Achieved.
	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	N/A
Objective 4D-2 *Environmental performance of the apartment is maximised*		
Design Criteria	1. Habitable room depths are limited to a maximum of 2.5 x the ceiling height 2. In open plan layouts (where the living, dining and kitchen are combined) the maximum habitable room depth is 8m from a window	Amended plans have been provided demonstrating adherence with the design criteria for apartment and room depths.
	Greater than minimum ceiling heights can allow for proportional increases in room depth up to the permitted maximum depths	N/A
Design Guidance	All living areas and bedrooms should be located on the external face of the building	Achieved. Some bedrooms are located on internal walls.
	Where possible: - Bathrooms and laundries should have an external openable window - Main living spaces should be oriented toward the primary outlook and aspect and away from noise sources	Bathrooms do not include window openings
Objective 4D-3 *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)	Amended plans have been provided demonstrating adherence with the design criteria for room sizes.
	2. Bedrooms have a minimum dimension of 3m (excluding wardrobe space)	As above.
	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	As above.
	4. The width of cross-over or cross-through apartments are at least 4m internally to avoid deep narrow apartment layouts	As above.
Design Guidance	Access to bedrooms, bathrooms and laundries is separated from living areas minimising direct openings between living and service areas	Achieved

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	All bedrooms allow a minimum length of 1.5m for robes	Achieved.
	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	Achieved.
4E – Private Open Space and Balconies		
Objective 4E-1 *Apartments provide appropriately sized private open space and balconies to enhance residential amenity*		
Design Criteria	All statements are required to have primary balconies as follows: Dwelling Type / Minimum Area / Minimum Depth *Studio* / *4m²* / - *1 bedroom* / *8m²* / *2m* *2 bedroom* / *10m²* / *2m* *3 bedroom* / *12m²* / *2.4* The minimum balcony depth to be counted as contributing to the balcony area is 1m	Amended plans have been provided demonstrating adherence with the design criteria for balcony sizes.
	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.	N/A
Design Guidance	Increased communal open space should be provided where the number or size of balconies are reduced	N/A
	Storage areas on balconies is additional to the minimum balcony size	N/A
	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.	Noted.
Objective 4E-2 *Primary private open space and balconies are appropriately located to enhance liveability for residents*		
Design Guidance	Primary open space and balconies should be located adjacent to the living room, dining room or kitchen to extend the living space	Achieved.
	Private open spaces and balconies predominantly face north, east or west	Achieved.
	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	Achieved.

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Objective 4E-3 *Private open space and balcony design is integrated into and contributes to the overall architectural form and detail of the building*		
Design Guidance	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	Achieved. A combination of both solid-backed and glass balustrades are proposed.
	Full width full height glass balustrades alone are generally not desirable	Not proposed.
	Projecting balconies should be integrated into the building design and the design of soffits considered	The Applicant has identified that the incorporation of curved balconies contributes to the façade design and integrate with the building form.
	Operable screens, shutters, hoods and pergolas are used to control sunlight and wind	Noted.
	Balustrades are set back from the building or balcony edge where overlooking or safety is an issue	Achieved.
	Downpipes and balcony drainage are integrated with the overall facade and building design	Achieved.
	Air-conditioning units should be located on roofs, in basements, or fully integrated into the building design	Condenser units are not proposed balconies.
Objective 4E-4 *Private open space and balcony design maximises safety*		
Design Guidance	Changes in ground levels or landscaping are minimised	Achieved.
	Design and detailing of balconies avoids opportunities for climbing and falls	The Applicant has identified that the design of the balconies will be in accordance with the relevant BCA provisions and Australian Standards.
4F - Common Circulation and Spaces		
Objective 4F-1 *Common circulation spaces achieve good amenity and properly service the number of apartments*		
Design Criteria	1. The maximum number of apartments off a circulation core on a single level is eight	Inconsistent. There are 9 apartments on each level of Building B and Building C. The Applicant has identified that 3 high speed lifts will be provided indicating a maximum wait time of 60 seconds. Refer to the Vertical Transport Assessment Prepared by WSP dated 23 May 2024. It is considered that the proposed exceedance of the design criteria is unacceptable noting that the development is inconsistent with

Part 4		
		the relevant design criteria and objectives regarding solar access and natural ventilation.
	2. For buildings of 10 storeys and over, the maximum number of apartments sharing a single lift is 40	Inconsistent.
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	Not achieved.
	Daylight and natural ventilation should be provided to all common circulation spaces that are above ground	Not achieved.
	Windows should be provided in common circulation spaces and should be adjacent to the stair or lift core or at the ends of corridors	Not achieved.
	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	Not achieved.
	Design common circulation spaces to maximise opportunities for dual aspect apartments, including multiple core apartment buildings and cross over apartments	Not achieved. Refer to comments regarding natural ventilation.
	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 than minimum ceiling heights - other innovative design solutions that provide high levels of amenity	Noted.
	Where design criteria 1 is not achieved, no more than 12 apartments should be provided off a circulation core on a single level	Noted.
	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.
Objective 4F-2 *Common circulation spaces promote safety and provide for social interaction between residents*		
	Tight corners and spaces are avoided	Achieved.
	Circulation spaces should be well lit at night	Able to comply.
	Legible signage should be provided for apartment numbers, common areas and general wayfinding	Able to comply.
	Incidental spaces, for example space for seating in a corridor, at a stair landing, or near a window are provided	Not achieved within residential tower levels.

Part 4		
4G - Storage		
Objective 4G-1 *Adequate, well designed storage is provided in each apartment*		
Design Criteria	In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided: **Dwelling type** / **Storage size** *Studio apartments* / *4m³* *1 bedroom apartments* / *6m³* *2 bedroom apartments* / *8m³* *3 bedroom apartments* / *10m³* At least 50% of the required storage is to be located within the apartment	Amended plans were provided by the Applicant demonstrating compliance with the design criteria.
Design Guidance	Storage is accessible from either circulation or living areas	Achieved.
	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	Achieved.
	Left over space such as under stairs is used for storage	N/A
4H - Acoustic Privacy		
Objective 4H-1 *Noise transfer is minimised through the siting of buildings and building layout*		
Design Guidance	Adequate building separation is provided within the development and from neighbouring buildings / adjacent uses (also see section 2F Building separation and section 3F Visual Privacy)	Achieved.
	Window and door openings are generally orientated away from noise sources	Achieved.
	Noisy areas within buildings including building entries and corridors are located next to or above each other and quieter areas next to or above quieter areas	Achieved. It is considered that additional insulation and other treatment is required for the apartments adjacent the car parking areas within the podium.
	Storage, circulation areas and non-habitable rooms are located to buffer noise from external sources	Achieved.
	The number of party walls (walls shared with other apartments) are limited and are appropriately insulated	Noted.
	Noise sources such as garage doors, driveways, service areas, plant rooms, building services, mechanical equipment, active communal open spaces and circulation areas are located at least 3m away from bedrooms	Achieved.

Part 4		
Objective 4H-2 *Noise impacts are mitigated through internal apartment layout and acoustic treatments*		
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	Achieved.
	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	Noted.
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*		
Design Guidance	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	Achieved.
	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: - solar and daylight access - private open space and balconies - natural cross ventilation	Noted.
Objective 4J-2 *Appropriate noise shielding or attenuation techniques for the building design, construction and choice of 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	Insufficient detail is provided regarding the construction phase of the development.

Part 4		
4K - Apartment Mix		
Objective 4K-1 *A range of apartment types and sizes is provided to cater for different household types now and into the future*		
Design Guidance	A variety of apartment types is provided	Achieved.
	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	Achieved.
	Flexible apartment configurations, such as dual key apartments, are provided to support diverse household types and stages of life including single person households, families, multi-generational families and group households	Achieved.
4M - Facades		
Objective 4M-1 *Building facades provide visual interest along the street respecting the character of the local area*		
Design Guidance	Design solutions for front building facades may include: - A composition of varied building elements - A defined base, middle and top of the buildings - Revealing and concealing certain elements - Changes in texture, material, detail and colour to modify the prominence of elements	Achieved.
	Building services should be integrated within the overall façade	Achieved.
	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	Achieved.
	Building facades relate to key datum lines of adjacent buildings through upper level setbacks, parapets, cornices, awnings or colonnade heights	Achieved.
Objective 4M-2 *Building functions are expressed by the facade*		
Design Guidance	Building entries should be clearly defined	Achieved.
	Important corners are given visual prominence through a change in articulation, materials or colour, roof expression or changes in height	Achieved.

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	The apartment layout should be expressed externally through façade features as party walls and floor slabs	Achieved.
4N - Roof Design		
Objective 4N-1 *Roof treatments are integrated into the building design and positively respond to the street*		
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	Insufficient detail is provided regarding the roof elements/structures.
	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 complement the building - Service elements are integrated	As above.
Objective 4N-2 *Opportunities to use roof space for residential accommodation and open space are maximised*		
Design Guidance	Habitable roof space should be provided with good levels of amenity. Design solutions may include: - Penthouse apartments - Dormer or clerestory windows - Openable skylights	Achieved.
	Open space is provided on rooftops subject to acceptable visual and acoustic privacy, comfort levels, safety and security considerations.	Achieved.
Objective 4N-3 *Roof design incorporates sustainability features*		
Design Guidance	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	Achieved.
	Skylights and ventilation systems should be integrated into the roof design	Not provided.
4O - Landscape Design		
Objective 4O-1 *Landscape design is viable and sustainable*		
Design Guidance	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	Refer to comments regarding deep soil. It is considered that addition deep soil plantings are required at the ground plane.

Part 4		
	- Composting - Green roofs or walls	
	Ongoing maintenance plans should be prepared	Noted.
	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	Noted.
	Tree and shrub selection considers size at maturity and the potential for roots to complete (see table 4)	Council's Landscape Architect has assessed the application, and no objections are raised regarding plant selection.
Objective 4O-2 *Landscape design contributes to the streetscape and amenity*		
Design Guidance	Landscape design responds to the existing site conditions including: - Changes of levels - Views - Significant landscape features including trees and rock outcrops	As above.
	Significant landscape features should be protected by: - Tree protection zones (see figure 40.5) - Appropriate signage and fencing during construction	Noted.
	Plants selected should be endemic to the region and reflect the local ecology	Achieved.
4P - Planting on Structures		
Objective 4P-1 *Appropriate soil profiles are provided*		
Design Guidance	Structures are reinforced for additional saturated soil weight	Council's Landscape Architect has assessed the application, and no objections are raised regarding on structure planting.
	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	Council's Landscape Architect has assessed the application, and no objections are raised regarding soil depths.
Objective 4P-2 *Plant growth is optimised with appropriate selection and maintenance*		
Design Guidance	Plants are suited to site conditions, considerations include: - Drought and wind tolerance - Seasonal changes in solar access - Modified substrate depths for diverse range of plants	Council's Landscape Architect has assessed the application, and no objections are raised regarding plant selection.

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	- Plant longevity	
	A landscape maintenance plan is prepared	Provided.
	Irrigation and drainage systems respond to: - Changing site conditions - Soil profile and the planting regime - Whether rainwater, stormwater or recycled grey water is used	Noted.
Objective 4P-3 *Planting on structure contributes to the quality and amenity of communal and public open spaces*		
Design Guidance	Building design incorporates opportunities for planting on structures. Design solutions may include: - Green walls with specialised lighting for indoor green walls - All design that incorporates planting - Green roofs, particularly where roofs are visible form public domain - Planter boxes Note: structures designed to accommodate green walls should be integrated into the building façade and consider the ability of the façade to change over time	Achieved.
4Q - Universal Design		
Objective 4Q-1 *Universal design features are included in apartment design to promote flexible housing for all community members*		
Design Guidance	Developments achieve a benchmark of 20% of the total apartment incorporating the Liveable Housing Guideline's silver level universal design features	Achieved (i.e., 69 liveable apartments of 336 including a mix of 1 bedroom, 2 bedroom and 3 bedroom apartments).
Objective 4Q-2 *A variety of apartments with adaptable designs are provided*		
	Adaptable housing should be provided in accordance with the relevant council policy	Achieved (i.e., 36 adaptable apartments out 336)
Design Guidance	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	Noted.
Objective 4Q-3 *Apartment layouts are flexible and accommodate a range of lifestyle needs*		
Design Guidance	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	Achieved.

Part 4		
	- Open plan 'loft' style apartments with only a fixed kitchen, laundry and bathroom	
4S – Mixed Use		
Objective 4S-1 *Mixed use developments are provided in appropriate locations and provide active street frontages that encourage pedestrian movement*		
Design Guidance	Mixed use development should be concentrated around public transport and centres	Achieved.
	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	Achieved.
Objective 4S-2 *Residential levels of the building are integrated within the development, and safety and amenity is maximised for residents*		
Design Guidance	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 - Concealment opportunities are avoided	Achieved.
	Landscape communal open space should be provided at podium or roof levels	Achieved.
4T – Awnings and Signage		
Objective 4T-1 *Awnings are well located and complement and integrate with the building design*		
Design Guidance	Awnings should be located along streets with high pedestrian activity and active frontages	Achieved.
	A number of the following design solutions are used: - Continuous awnings are maintained and provided in areas with 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	Not achieved. The proposed awnings are not continuous along the street edges.
	Awnings should be located over building entries for building address and public domain amenity	Achieved.
	Awnings relate to residential windows, balconies, street tree planting, power poles and street infrastructure	Achieved.

Part 4		
	Gutters and down pipes should be integrated and concealed	Noted.
	Lighting under awnings should be provided for pedestrian safety	Noted.
4U - Energy Efficiency		
Objective 4U-1 *Development incorporates passive environmental design*		
Design Guidance	Adequate natural light is provided to habitable rooms (see 4A Solar and daylight access)	See above regarding solar access in Objective 4A-1.
	Well located, screened outdoor areas should be provided for clothes drying	Achieved.
Objective 4U-2 *Development incorporates passive solar design to optimise heat storage in winter and reduce heat transfer in summer*		
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 in maximised - Polished concrete floor, 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	Achieved.
	Provision of consolidated heating and cooling infrastructure should be located in a centralised location (e.g. the basement)	Achieved.
Objective 4U-3 *Adequate natural ventilation minimises the need for mechanical ventilation*		
Design Guidance	A number of the following design solution are used: - Rooms with similar usage are grouped together - Natural cross ventilation for apartments is optimised - Natural ventilation is provided to all inhabitable rooms and as many non-habitable rooms, common areas and circulation spaces as possible	See above regarding ventilation in Objective 4B-1.
4V - Water Management and Conservation		
Objective 4V-1 *Potable water use is minimised*		
Design Guidance	Water efficient fittings, appliances and wastewater reuse should be incorporated	Achieved.
	Apartments should be individually metered	Achieved.
	Rainwater should be collected, stored and reused on site	Achieved.

Part 4		
	Drought tolerant, low water use plants should be used within landscaped areas	Achieved.
Objective 4V-2 *Urban stormwater is treated on site before being discharged to receiving waters*		
Design Guidance	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 Asset Engineer and Development Engineer has assessed the application and issues regarding flooding and OSD are raised. Refer to discussion under clause 5.21 and clause 6.9 of the CBLEP at Section 4.1(g) of the Report.
Objective 4V-3 *Flood management systems are integrated into site design*		
Design Guidance	Detention tanks should be located under paved areas, driveways or in basement car parks	As above.
	On large sites parks or open spaces are designed to provide temporary on site detention basins	As above.
4W - Waste Management		
Objective 4W-1 *Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity of residents*		
Design Guidance	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 Resource recovery Officer assessed the application and has identified that insufficient information regard the proposed waste management measures is provided.
	Waste and recycling storage areas should be well ventilated	No objections raised by Council's Resource Recovery Officer regarding ventilation.
	Circulation design allows bins to be easily manoeuvred between storage and collection points	Insufficient information provided.
Objective 4W-2 *Domestic waste is minimised by providing safe and convenient source separation and recycling*		
Design Guidance	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	As above.
	Communal waste and recycling rooms are in convenient and accessible locations related to each vertical core	Achieved.
	For mixed use developments, residential waste and recycling storage areas and access should be separate and secure from other uses	Achieved.