

SEPP 65

A complete SEPP 65 assessment has been undertaken and is within the following table. The development generally complies with the intent and controls of SEPP 65, however seeks variations to the following elements of the ADG:

Part 3 – siting the development

- Deep Soil Zones

Objective 3E-1

Deep soil zones provide areas on the site that allow for and support healthy plant and tree growth. They improve residential amenity and promote management of water and air quality

Design Criteria 1

Design criteria		
1. Deep soil zones are to meet the following minimum requirements:		
Site area	Minimum dimensions	Deep soil zone (% of site area)
less than 650m ²	-	7%
650m ² - 1,500m ²	3m	
greater than 1,500m ²	6m	
greater than 1,500m ² with significant existing tree cover	6m	

Assessment

The proposal identifies 465m² (11.4%) of the site as being deep soil zones which are located around the perimeter of the site, including to all street frontages. These areas are proposed to provide substantial opportunity for the establishment of subtropical trees and planting in accordance with the ADG. Whilst the total area provided exceeds the ADG requirement of 7%, it is noted the deep soil zones identified do not meet the minimum dimensions requirement of 6m, with a minimum dimension of 3m proposed.

In response to the proposal's non-compliance with deep soil zones noted in the NRPP Briefing Meeting minutes, the applicant provided amended Landscape Concept Plans and a Landscape Architect Statement. The applicant noted that, despite the reduced minimum dimension, the *deep soil zone dimensions are appropriate to support the viability of the proposed tree and palm plantings*. In addition, it has been argued that *the proposal provides for substantial provision of alternative forms of landscaping such as soft landscaping, deep podium planters, podium planters and balcony planters*.

Further, podium planting areas will incorporate irrigation and drainage connected to the developments stormwater network thus reducing site stormwater runoff and...enhances amenity [to] the communal areas.

The variation to the minimum dimensions required for deep soil zones is considered acceptable for the following reasons:

- The total area of deep soil zones proposed exceeds the minimum requirements by 4.4%;
- The site is still able to accommodate large tree species along the street frontages;
- The site provides acceptable stormwater management;
- The development includes alternative forms of planting including soft landscaping, deep podium planters, podium planters and balcony planters;
- The objective of the design criteria is achieved;
- The deep soil zones have been distributed around the perimeter.

- Visual Privacy

Objective 3F-1

Adequate building separation distances are shared equitably between neighbouring sites, to achieve reasonable levels of external and internal visual privacy.

Design Criteria 1

Design criteria		
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:	
Building height	Habitable rooms and balconies	Non-habitable rooms
up to 12m (4 storeys)	6m	3m
up to 25m (5-8 storeys)	9m	4.5m
over 25m (9+ storeys)	12m	6m

Assessment

The proposed development adjoins a developed site along part of the northern boundary only. The development to the north of the subject site is the Santai Resort which comprises a three storey built form.

The proposal seeks a variation to the minimum 6m setback required between habitable rooms and balconies for buildings that are 4 storeys in height. The proposal seeks to provide a 5m setback between the northernmost edge of the proposed wrap-around balconies and the southern wall of the Santai Resort.

The 1m variation sought equates to a 16.66% variation however, it is considered the variation is acceptable as the portion of the southern wall of the Resort that the setback is measured from is a blank wall, with no windows, doors or balconies to habitable rooms provided. In respect of visual and acoustic privacy between balconies and habitable spaces, the proposed variation does not result in any impact on the Santai Resort, nor will it impact on the privacy of occupants of the proposed development on the subject site. The proposed 5m setback is considered to satisfactorily achieve the objective of the design criteria as visual privacy to the internal and external components of the proposed development and the existing Santai Resort to the north will not be adversely impacted.

Part 4 – Designing the building

- 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 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.

Assessment

The proposed development includes a total of 48 units (including the nominated dual key unit – Apartment 00.07 located on the ground floor).

The submitted Statement of Environmental Effects advised that the proposed development sought a variation to the 70% requirement however, provided no further information as to the size of the variation. Council therefore required further information to adequately assess the extent of the proposed variation and requested additional shadow diagrams be submitted in 3D format with a primary focus on the southern and south-western elevations.

The applicant provided the additional shadow diagrams as part of their response to RFI package. Refer to Attachment 4.

A review of the originally submitted shadow diagrams and the 3D shadow diagrams identified a total of 30 apartments or 61.7% as achieving the minimum of three hours direct sunlight, resulting in a variation to the prescribed requirement of 4 apartments or 8.3%.

The variation to the prescribed requirement is generally considered to result from the design response to maximise development yield and the portion of the building that faces due south (site orientation).

Whilst it is acknowledged that the development seeks a variation to this control, it is considered that the variation is relatively minor in nature, affects a minimal number of apartments and that the development is consistent with the requirements as set out by MP06_0258 and the relevant development standards of the TLEP 2014 as well as the future desired character of the Casuarina Town Centre.

- Natural Ventilation

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.

Assessment

The submitted ventilation diagram and Statement of Environmental Effects both stated compliance with the 60% requirement (29 apartments) however, a review of these documents by Council found that additional information was required to justify the apartments that had been depicted as achieving compliance.

Council requested the submitted ventilation diagram be updated to show ventilation paths on the apartments deemed as being compliant. An amended ventilation diagram was provided to Council as part of the applicant's response to RFI package and showed the ventilation paths as requested.

On 15 February 2022, the NRPP Briefing Meeting occurred and it is acknowledged that non-compliance with natural ventilation was noted in the Briefing Meeting minutes. Thus further information to justify compliance was again requested of the applicant by Council. This second request for additional information pertained specifically to two apartments in the north western corner of the building on and one of the south-western units, on all levels.

The applicant submitted an amended ventilation diagram (which has been provided as part of the plan set accompanying this Report) providing additional ventilation paths and explanations justifying the compliance.

Upon review of the second amended plan, Council accepted that the unit in the north-western most corner of the building, and the south-western unit, at each level, do achieve natural cross ventilation however, the north-western units numbered 01.13, 02.13 and 03.13 are not considered to achieve natural cross ventilation in accordance with the ADG.

This results in a total of 28 apartments or 57.4% of units achieving natural cross ventilation, resulting in a variation of 2.6% to the prescribed requirement. Whilst apartments 01.13, 02.13 and 03.13 are not considered to achieve natural cross ventilation, it is conceded that they are all dual-aspect apartments with ample operable glazing that allows for breezes from different directions to enter the apartments. The remainder of the non-complying units are single aspect.

- Apartment size and layout

Objective 4D-2

Environmental performance of the apartment is maximised.

Design Criteria 2

In open plan layouts (where the living, dining and kitchen are combined) the maximum habitable room depth is 8m from a window.

Assessment

The submitted Statement of Environmental Effects noted that the maximum habitable room depth for open plan layouts is 8m however, Council's review of the submitted architectural plans identified that apartments 00.01, 01.01, 02.01 and 03.01 exceeded the 8m requirements by approximately 500mm. The depth is measured from the window adjoining the living room to the rear wall of the kitchen.

Despite a 500mm or 6.25% variation being sought, it is considered the environmental performance of the identified apartments is not compromised as a window is proposed in the eastern wall of the kitchen in each of the identified units, toward the rear of the open plan layout. This allows additional natural ventilation and daylight access to enter the deepest portion of the room, reducing the requirement of occupants to turn on lights, fans or air conditioners. The environmental performance of the apartments is considered to be maximised despite the variation.

Summary

Whilst the development does not achieve compliance with the abovementioned design controls of the ADG, the variations proposed are generally minor, affect a limited number of units and are not considered to warrant refusal of the application.

PART 3 – SITING THE DEVELOPMENT

Development objectives	Assessment/Comment
<p>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</p> <p>Design guidance Each element in the Site Analysis Checklist should be addressed (see Appendix 1)</p>	<p>A site analysis has been submitted with the subject application demonstrating design decisions as having been based on opportunities and constraints.</p>
<p>Objective 3B-1 Building types and layouts respond to the streetscape and site while optimising solar access within the development</p> <p>Design guidance Buildings along the street frontage define the street, by facing it and incorporating direct access from the street (see figure 3B.1)</p> <p>Where the street frontage is to the east or west, rear buildings should be orientated to the north</p> <p>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)</p>	<p>Complies.</p> <p>The site has three street frontages to the east, west and south. As such, direct access from the street for all residents is available via Casuarina Way and Blackwattle Circuit whilst residents of ground floor apartments have access via their relevant street frontage. All apartments within the proposed building face one of the three street frontages depending on their orientation.</p> <p>Overshadowing to the south will primarily fall across Grand Parade and will not significantly impede upon future developments on the adjacent allotments to the south.</p>

Objective 3B-2

Overshadowing of neighbouring properties is minimised during mid winter

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

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%

If the proposal will significantly reduce the solar access of neighbours, building separation should be increased beyond minimums contained in section 3F Visual privacy

Overshadowing should be minimised to the south or down hill by increased upper level setbacks

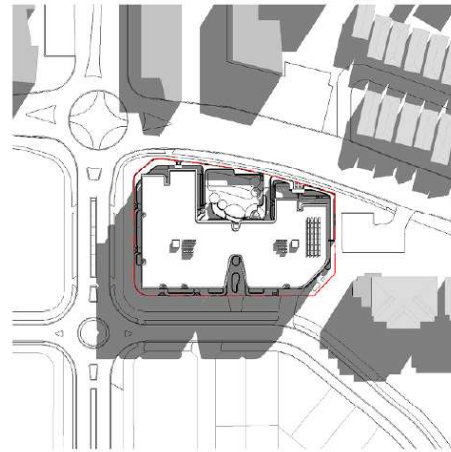
It is optimal to orientate buildings at 90 degrees to the boundary with neighbouring properties to minimise overshadowing and privacy impacts, particularly where minimum setbacks are used and where buildings are higher than the adjoining development

A minimum of 4 hours of solar access should be retained to solar collectors on neighbouring buildings

Complies.

The site contains street frontages to the east, west and south and shares a boundary to the north with a car park and with the Oaks Santai Resort.

Shadows cast by the proposal will generally fall over Casuarina Way, Grand Parade and Blackwattle Circuit and will not result in additional shadowing to the resort to the north. These shadows will fall marginally onto allotments on the eastern side of Blackwattle Circuit however, the extent of these shadows is minimal and will not adversely impact the private open space of any future developments on the affected sites as the shadows will be cast over the frontage of those sites only.



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<p>Objective 3C-1 Transition between private and public domain is achieved without compromising safety and security</p>	<p>Complies.</p>
<p>Design guidance</p>	<p>The development fronts three separate street frontages and access to the private open space of the ground floor apartments of the building is provided via the relevant frontages. Primary access for all residents to the building will be via Casuarina Way and Blackwattle Circuit.</p>
<p>Terraces, balconies and courtyard apartments should have direct street entry, where appropriate</p>	<p>Upper level apartment's areas of private open space (balconies) all face outwards providing sightlines from the spaces over the public domain below and the communal open space located along the western portion of the ground floor.</p>
<p>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)</p>	<p>Low 600mm planter boxes are proposed between boundary fencing and the public domain to provide a soft and visually appealing delineation between public and private. 1m aluminium battens are provided on top of the inner planter wall to provide additional privacy to the residents of the ground floor apartments.</p>
<p>Upper level balconies and windows should overlook the public domain</p>	<p>Seating is provided adjoining planter boxes within the principle entry point of the building fronting Blackwattle Circuit allowing for opportunities for casual interaction between residents and the public domain.</p>
<p>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</p>	<p>It is considered that the development meets the design guidance for transition between private and public spaces.</p>
<p>Length of solid walls should be limited along street frontages</p>	
<p>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</p>	
<p>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:</p> <ul style="list-style-type: none"> • architectural detailing • changes in materials • plant species • colours 	
<p>Opportunities for people to be concealed should be minimised</p>	

<p>Objective 3C-2</p> <p>Amenity of the public domain is retained and enhanced</p> <p>Design guidance</p> <p>Planting softens the edges of any raised terraces to the street, for example above sub-basement car parking</p> <p>Mail boxes should be located in lobbies, perpendicular to the street alignment or integrated into front fences where individual street entries are provided</p> <p>The visual prominence of underground car park vents should be minimised and located at a low level where possible</p> <p>Substations, pump rooms, garbage storage areas and other service requirements should be located in basement car parks or out of view</p> <p>Ramping for accessibility should be minimised by building entry location and setting ground floor levels in relation to footpath levels</p> <p>Durable, graffiti resistant and easily cleanable materials should be used</p> <p>Where development adjoins public parks, open space or bushland, the design positively addresses this interface and uses a number of the following design solutions:</p> <ul style="list-style-type: none"> • 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 <p>On sloping sites protrusion of car parking above ground level should be minimised by using split levels to step underground car parking</p>	<p>Complies.</p> <p>The proposed development includes courtyards and landscaping to all three street frontages.</p> <p>Letterboxes have been nominated within the building entrance/lobby area adjoining Blackwattle Circuit</p> <p>All waste, plant and pump rooms and facilities are proposed either within the basement level or at the north eastern end of the ground floor level, away from apartment/building entry points. The vents from the parking are not considered visually obtrusive.</p>
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<p>Objective 3D-1</p> <p>An adequate area of communal open space is provided to enhance residential amenity and to provide opportunities for landscaping</p>	<p>Complies.</p> <p>25% of the subject site equates to 1,020.75m² of communal open space required.</p>
<p>Design criteria</p> <ol style="list-style-type: none"> Communal open space has a minimum area equal to 25% of the site (see figure 3D.3) 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) 	<p>The proposal seeks to provide 1056m² or 25.9% of the site as communal open space and is proposed at ground floor level, running from the eastern portion of the site through to the western boundary. The minimum dimension for the proposed communal open space is 10m which far exceeds the minimum 3m requirement.</p>
<p>Design guidance</p> <p>Communal open space should be consolidated into a well designed, easily identified and usable area</p> <p>Communal open space should have a minimum dimension of 3m, and larger developments should consider greater dimensions</p> <p>Communal open space should be co-located with deep soil areas</p> <p>Direct, equitable access should be provided to communal open space areas from common circulation areas, entries and lobbies</p> <p>Where communal open space cannot be provided at ground level, it should be provided on a podium or roof</p> <p>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:</p> <ul style="list-style-type: none"> 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 	<p>As the principle portion of the communal open space is proposed on the western side of the site and the upper levels of the building have been designed to look out over this space, majority of the proposed communal open space will achieve the required 2 hours direct sunlight.</p> <p>Deep soil areas are proposed around the periphery of the principle area of communal open space.</p> <p>The communal open space area is accessible from street level and via the two internal lift cores ensuring equitable access is provided.</p>

<p>Objective 3D-2 Communal open space is designed to allow for a range of activities, respond to site conditions and be attractive and inviting</p> <p>Design guidance</p> <p>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:</p> <ul style="list-style-type: none"> • seating for individuals or groups • barbecue areas • play equipment or play areas • swimming pools, gyms, tennis courts or common rooms <p>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</p> <p>Visual impacts of services should be minimised, including location of ventilation duct outlets from basement car parks, electrical substations and detention tanks</p>	<p>Complies</p> <p>The proposed developments communal open space is considered to be designed to allow for a range of activities and respond to the sites conditions by providing the following:</p> <ul style="list-style-type: none"> • Swimming pool • Beach area • Landscaped areas • Outdoor kitchen and BBQ area • Outdoor beach bar • Seating in communal areas <p>The location of the facilities is centralised and is considered to soften the central portion of the site.</p>
<p>Objective 3D-3 Communal open space is designed to maximise safety</p> <p>Design guidance</p> <p>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:</p> <ul style="list-style-type: none"> • bay windows • corner windows • balconies <p>Communal open space should be well lit</p> <p>Where communal open space/facilities are provided for children and young people they are safe and contained</p>	<p>Complies.</p> <p>As discussed above the communal areas are located centrally within the site. The areas are offered passive surveillance from apartments located to the north, east and south, with upper level balconies overlooking the communal open space.</p> <p>Conditions will be applied to any development requiring adequate lighting of communal and access areas.</p>

<p>Objective 3D-4</p> <p>Public open space, where provided, is responsive to the existing pattern and uses of the neighbourhood</p>	<p>The provision of public open space does not form part of this proposal. A private through-site link has been provided for residents with an entry gate located along the western boundary of the site, providing access from Casuarina Way to Blackwattle Circuit.</p>
<p>Design guidance</p>	
<p>The public open space should be well connected with public streets along at least one edge</p>	
<p>The public open space should be connected with nearby parks and other landscape elements</p>	
<p>Public open space should be linked through view lines, pedestrian desire paths, termination points and the wider street grid</p>	
<p>Solar access should be provided year round along with protection from strong winds</p>	
<p>Opportunities for a range of recreational activities should be provided for people of all ages</p>	
<p>A positive address and active frontages should be provided adjacent to public open space</p>	
<p>Boundaries should be clearly defined between public open space and private areas</p>	

Objective 3E-1

Deep soil zones provide areas on the site that allow for and support healthy plant and tree growth. They improve residential amenity and promote management of water and air quality

Design criteria

1. Deep soil zones are to meet the following minimum requirements:

Site area	Minimum dimensions	Deep soil zone (% of site area)
less than 650m ²	-	7%
650m ² - 1,500m ²	3m	
greater than 1,500m ²	6m	
greater than 1,500m ² with significant existing tree cover	6m	

Design guidance

On some sites it may be possible to provide larger deep soil zones, depending on the site area and context:

- 10% of the site as deep soil on sites with an area of 650m² - 1,500m²
- 15% of the site as deep soil on sites greater than 1,500m²

Deep soil zones should be located to retain existing significant trees and to allow for the development of healthy root systems, providing anchorage and stability for mature trees. Design solutions may include:

- 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 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

The proposal seeks to provide 11.4% or 465.4m² of the site as deep soil zones which exceeds the minimum requirement by 4.4%. The areas of deep soil are proposed along the perimeter of the site.

However, the minimum dimension for the deep soil zones is proposed to be 3m, seeking a variation on the minimum 6m requirement.

The variation is considered acceptable in this instance given the exceedance in deep soil zones proposed across the site, additional forms of landscaping proposed, acceptable stormwater management, the ability for the deep soil zones to accommodate large tree species.

Refer to the assessment at the beginning of this document.



Objective 3F-1

Adequate building separation distances are shared equitably between neighbouring sites, to achieve reasonable levels of external and internal visual privacy

Design criteria

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:

Building height	Habitable rooms and balconies	Non-habitable rooms
up to 12m (4 storeys)	6m	3m
up to 25m (5-8 storeys)	9m	4.5m
over 25m (9+ storeys)	12m	6m

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

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

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

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)

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)

Direct lines of sight should be avoided for windows and balconies across corners

No separation is required between blank walls

The site is unique in that it has three street frontages with a neighbouring building adjoining the northern boundary of the site only. Adjacent sites to the east of Blackwattle Circuit and south of Grand Parade are approved under MP06_0258 for residential and mixed-use developments however, as the carriageways separate the subject site from these future developments, building separation will be ensured once those sites are developed.

In respect of the northern adjoining property, being the Oaks Santai Resort, only a small portion of the proposed development will adjoin the southern extent of the resort as majority of the site to the north consists of an at-grade car park that services the resort.

A minor variation is proposed at the north-eastern extent of the proposed building. A 5m setback is proposed, measuring from the northern extent of the wrap around balconies to the southern wall of the existing resort. It should be noted that the 3m separation to non-habitable rooms is achieved and that the western side of the southern extent of the resort are bathrooms. The portion of the southern extent of the resort that is within the 6m setback is an entirely blank wall with no windows.



It is considered that the minor variation is acceptable in this instance as the minimum separation to non-habitable rooms has been achieved and the minor variation to the separation between habitable rooms is offset by the fact the southern wall of the perceived habitable rooms of the resort do not contain any windows or balconies therefore mitigating visual privacy concerns.

<p>Objective 3F-2</p> <p>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</p>	
<p>Design guidance</p> <p>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:</p> <ul style="list-style-type: none"> • 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 	<p>Complies.</p> <p>Ground floor areas of private open space are separated from communal open space by fencing (which provides the delineation between communal and private open space) and landscaping (which provides additional privacy to areas of private open space).</p> <p>Areas of private open space for all apartments adjoin living rooms providing greater internal privacy.</p> <p>Where areas of private open space adjoin, blade walls, podium planting and screens have been proposed to ensure the occupants of one balcony cannot see onto the balcony of another apartment.</p>
<p>Bedrooms, living spaces and other habitable rooms should be separated from gallery access and other open circulation space by the apartment's service areas</p>	
<p>Balconies and private terraces should be located in front of living rooms to increase internal privacy</p>	
<p>Windows should be offset from the windows of adjacent buildings</p>	
<p>Recessed balconies and/or vertical fins should be used between adjacent balconies</p>	

<p>Objective 3G-1 Building entries and pedestrian access connects to and addresses the public domain</p> <p>Design guidance</p> <p>Multiple entries (including communal building entries and individual ground floor entries) should be provided to activate the street edge</p> <p>Entry locations relate to the street and subdivision pattern and the existing pedestrian network</p> <p>Building entries should be clearly identifiable and communal entries should be clearly distinguishable from private entries</p> <p>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</p>	<p>Complies.</p> <p>Pedestrian access to the building for all residents is achieved via the main access point along Blackwattle Circuit with a secondary pedestrian gate located along the western boundary providing direct access from Casuarina Way. Both entry points are clearly delineated.</p> <p>Private access points for pedestrians from the public domain to ground floor apartments are via individual locked gates and it is clearly delineated that these access points are for the occupants of those apartments only.</p>
<p>Objective 3G-2 Access, entries and pathways are accessible and easy to identify</p> <p>Design guidance</p> <p>Building access areas including lift lobbies, stairwells and hallways should be clearly visible from the public domain and communal spaces</p> <p>The design of ground floors and underground car parks minimise level changes along pathways and entries</p> <p>Steps and ramps should be integrated into the overall building and landscape design</p> <p>For large developments 'way finding' maps should be provided to assist visitors and residents (see figure 4T.3)</p> <p>For large developments electronic access and audio/video intercom should be provided to manage access</p>	<p>Complies.</p> <p>The ground floor is level with the entrance point from Blackwattle Circuit opening out into the broader portion of communal open space. Location of the lobbies providing access to ground floor apartments and the two lift cores are easily identifiable.</p> <p>The proposal has limited level changes to support BCA requirements for disability access.</p> <p>Way finding maps and electronic access can be conditioned.</p>
<p>Objective 3G-3 Large sites provide pedestrian links for access to streets and connection to destinations</p> <p>Design guidance</p> <p>Pedestrian links through sites facilitate direct connections to open space, main streets, centres and public transport</p> <p>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</p>	<p>A pedestrian link is proposed for residents of the building only. The site is not considered to be a large site as the proposal is for the construction of one residential flat building only. It is not considered the public would substantially gain from a public pedestrian through-link as existing footpaths along Blackwattle Circuit, Grand Parade and Casuarina Way can be utilised.</p>

<p>Objective 3H-1 Vehicle access points are designed and located to achieve safety, minimise conflicts between pedestrians and vehicles and create high quality streetscapes</p> <p>Design guidance</p> <p>Car park access should be integrated with the building's overall facade. Design solutions may include:</p> <ul style="list-style-type: none"> • 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 <p>Car park entries should be located behind the building line</p> <p>Vehicle entries should be located at the lowest point of the site minimising ramp lengths, excavation and impacts on the building form and layout</p> <p>Car park entry and access should be located on secondary streets or lanes where available</p> <p>Vehicle standing areas that increase driveway width and encroach into setbacks should be avoided</p> <p>Access point locations should avoid headlight glare to habitable rooms</p> <p>Adequate separation distances should be provided between vehicle entries and street intersections</p> <p>The width and number of vehicle access points should be limited to the minimum</p> <p>Visual impact of long driveways should be minimised through changing alignments and screen planting</p> <p>The need for large vehicles to enter or turn around within the site should be avoided</p> <p>Garbage collection, loading and servicing areas are screened</p> <p>Clear sight lines should be provided at pedestrian and vehicle crossings</p> <p>Traffic calming devices such as changes in paving material or textures should be used where appropriate</p> <p>Pedestrian and vehicle access should be separated and distinguishable. Design solutions may include:</p> <ul style="list-style-type: none"> • changes in surface materials • level changes • the use of landscaping for separation 	<p>Complies.</p> <p>The proposed development includes basement parking with a single vehicle access point.</p> <p>Vehicle access to the site is proposed off Blackwattle Circuit which is considered the sites 'secondary frontage.' The vehicle access is separated from the pedestrian access points to the site.</p> <p>A security door is proposed at basement level, behind the visitor parking spaces. The entry to the car park is located behind the building line fronting Blackwattle Circuit</p> <p>All engineering issues have been satisfied in terms of sight distances and access separation.</p>
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<p>Objective 3J-1 Car parking is provided based on proximity to public transport in metropolitan Sydney and centres in regional areas</p> <p>Design criteria</p> <p>1. For development in the following locations:</p> <ul style="list-style-type: none"> 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 <p>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</p> <p>The car parking needs for a development must be provided off street</p> <p>Design guidance</p> <p>Where a car share scheme operates locally, provide car share parking spaces within the development. Car share spaces, when provided, should be on site</p> <p>Where less car parking is provided in a development, council should not provide on street resident parking permits</p>	<p>Complies.</p> <p>The proposed development provides car parking and bike parking in accordance with Section A2 Site Access and Parking Code of the Tweed Development Control Plan 2008.</p> <p>The site is located within walking distance of two bus stops along Casuarina Way (approximately 200m to the south of the site).</p> <p>The site is within 800m of the following services: Public transport Shopping centre Recreation Food and dining Public Parks (including beach).</p> <p>Accordingly, the development meets all parking and access arrangements.</p> <p>The development includes the following:</p> <p>96 vehicle spaces - residential 12 vehicle spaces - commercial</p> <p>48 bike spaces - residential 6 bikes spaces - commercial</p>
<p>Objective 3J-2 Parking and facilities are provided for other modes of transport</p> <p>Design guidance</p> <p>Conveniently located and sufficient numbers of parking spaces should be provided for motorbikes and scooters</p> <p>Secure undercover bicycle parking should be provided that is easily accessible from both the public domain and common areas</p> <p>Conveniently located charging stations are provided for electric vehicles, where desirable</p>	<p>As discussed above, the proposed development provides car parking and bike parking in accordance with Section A2 Site Access and Parking Code of the Tweed Development Control Plan 2008.</p> <p>The parking for both vehicles and bikes is located in secured basement parking with additional bicycle parking spaces at ground floor level within the vintage bikes shack and visitor bicycle parking provided off Blackwattle Circuit.</p>

<p>Objective 3J-3 Car park design and access is safe and secure</p> <p>Design guidance</p> <p>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</p> <p>Direct, clearly visible and well lit access should be provided into common circulation areas</p> <p>A clearly defined and visible lobby or waiting area should be provided to lifts and stairs</p> <p>For larger car parks, safe pedestrian access should be clearly defined and circulation areas have good lighting, colour, line marking and/or bollards</p>	<p>Complies.</p> <p>The proposed development includes, plant, fan rooms and storage within Basement Level 1.</p> <p>The basement is accessible by a security system (gated) and access is located via the northern end of the site. Conditions will apply for light and safety.</p> <p>The provision of bin store and pump rooms are at located at ground floor level, adjoining the vehicle access point to allow for ease of transfer of bins to the kerb for kerbside collection, and return. The fire pump room is also located at ground floor level for ease of access by the RFS in the event of a fire.</p>
<p>Objective 3J-4 Visual and environmental impacts of underground car parking are minimised</p> <p>Design guidance</p> <p>Excavation should be minimised through efficient car park layouts and ramp design</p> <p>Car parking layout should be well organised, using a logical, efficient structural grid and double loaded aisles</p> <p>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</p> <p>Natural ventilation should be provided to basement and sub basement car parking areas</p> <p>Ventilation grills or screening devices for car parking openings should be integrated into the facade and landscape design</p>	<p>The development requires excavation for the basement parking however, no dewatering is anticipated and it is not considered likely that the proposed excavation will encounter groundwater.</p> <p>The layout is considered with double loaded aisles.</p> <p>There will be no protrusion of vehicles.</p> <p>Natural ventilation is provided to the basement.</p> <p>Accordingly, the propose development is considered to minimise visual and environmental impacts.</p>

<p>Objective 3J-5 Visual and environmental impacts of on-grade car parking are minimised</p> <p>Design guidance</p> <p>On-grade car parking should be avoided</p> <p>Where on-grade car parking is unavoidable, the following design solutions are used:</p> <ul style="list-style-type: none"> • parking is located on the side or rear of the lot away from the primary street frontage • cars are screened from view of streets, buildings, communal and private open space areas • safe and direct access to building entry points is provided • parking is incorporated into the landscape design of the site, by extending planting and materials into the car park space • stormwater run-off is managed appropriately from car parking surfaces • bio-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 	<p>Not applicable – there is no on grade parking proposed.</p>
<p>Objective 3J-6 Visual and environmental impacts of above ground enclosed car parking are minimised</p> <p>Design guidance</p> <p>Exposed parking should not be located along primary street frontages</p> <p>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:</p> <ul style="list-style-type: none"> • 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) <p>Positive street address and active frontages should be provided at ground level</p>	<p>Not applicable – there is no above ground parking proposed.</p>

PART 4 – DESIGNING THE BUILDING

Development objectives	Assessment/Comment
<p>Objective 4A-1 To optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space</p> <p>Design criteria</p> <ol style="list-style-type: none"> 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 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 3. A maximum of 15% of apartments in a building receive no direct sunlight between 9 am and 3 pm at mid winter 	<ol style="list-style-type: none"> 1. Not applicable the subject site is not located within this area. 2. The proposed development includes a total of 48 units (including the nominated 1 bedroom – dual key unit – Apartment 00.07). 29 or 61.7% of units achieve a minimum of 3 hours direct sunlight during mid-winter. A variation of 4 units or 8.3% is sought. Refer to the assessment at the beginning of this document. 3. The proposed development includes a total of 4 units which have no direct sunlight between the nominated areas. The proposed development has a total of 8.5% and complies with the 15% requirement.
<p>Objective 4A-2 Daylight access is maximised where sunlight is limited</p> <p>Design guidance</p> <p>Courtyards, skylights and high level windows (with sills of 1,500mm or greater) are used only as a secondary light source in habitable rooms</p> <p>Where courtyards are used :</p> <ul style="list-style-type: none"> • 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 <p>Opportunities for reflected light into apartments are optimised through:</p> <ul style="list-style-type: none"> • 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 	<p>Sunlight to the south-facing apartments is limited due to their orientation and as each of these units are single-aspect only. Ample glazing has been provided along the southern walls of these units to provide as much natural light into the apartments as possible and adjoin bedrooms and living areas.</p> <p>It is considered daylight access is maximised as far as can be reasonably be expected for the south-facing apartments.</p>

Development objectives	Assessment/Comment
<p>Objective 4A-3 Design incorporates shading and glare control, particularly for warmer months</p> <p>Design guidance</p> <p>A number of the following design features are used:</p> <ul style="list-style-type: none"> • 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) 	<p>The proposal seeks to provide deep-set balconies for western and south-western facing apartments to provide shading and glare control.</p> <p>Additional shading was requested by Council's SPUD Unit and was mentioned in the NRPP Briefing Meeting minutes however, these have not been provided with the architect noting that the incorporation of additional screening would <i>counter the activated and articulated building presentation to the street</i>.</p> <p>A condition of consent has been recommended to include the incorporation of additional operable, extendable shading devices for western and south-western facing apartments.</p>
<p>Objective 4B-1 All habitable rooms are naturally ventilated</p>	<p>Complies.</p>
<p>Objective 4B-2 The layout and design of single aspect apartments maximises natural ventilation</p>	<p>The development includes a number of single aspect apartments. Each of these units (approximately 25 units or 53%) includes acceptable cross ventilation or, where this is not possible, has ample access for living areas to be naturally ventilated.</p>
<p>Objective 4B-3 The number of apartments with natural cross ventilation is maximised to create a comfortable indoor environment for residents</p> <p>Design criteria</p> <ol style="list-style-type: none"> 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 	<ol style="list-style-type: none"> 1. The proposed development includes approximately 28 units or 57.4% as being naturally cross ventilated. <p>A minor variation of 2.6% or 1 unit is sought. Refer to the assessment at the beginning of this document.</p> <ol style="list-style-type: none"> 2. Complies – based on the submitted natural ventilation plan no areas exceed a depth of 18m, measured glass to line for the cross ventilation.

Development objectives	Assessment/Comment												
<p>Objective 4C-1 Ceiling height achieves sufficient natural ventilation and daylight access</p> <p>Design criteria</p> <p>1. Measured from finished floor level to finished ceiling level, minimum ceiling heights are:</p> <table border="1"> <thead> <tr> <th colspan="2">Minimum ceiling height for apartment and mixed use buildings</th></tr> </thead> <tbody> <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> </tbody> </table> <p>These minimums do not preclude higher ceilings if desired</p>	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 degree minimum ceiling slope	If located in mixed used areas	3.3m for ground and first floor to promote future flexibility of use	<p>Complies.</p> <p>The proposed development seeks to provide 2.7m or greater floor to ceiling heights for habitable rooms and 2.4m or greater for non-habitable rooms.</p>
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 degree minimum ceiling slope												
If located in mixed used areas	3.3m for ground and first floor to promote future flexibility of use												
<p>Objective 4C-2 Ceiling height increases the sense of space in apartments and provides for well proportioned rooms</p>	<p>Generally complies – the proposed development exceeds the recommended ceiling heights. Accordingly, the proposed development offers an increased sense of space.</p>												
<p>Objective 4C-3 Ceiling heights contribute to the flexibility of building use over the life of the building</p>	<p>Complies.</p> <p>Whilst the proposal is for residential development only, in alignment with MP06_0258-Mod 10, ground floor ceiling heights of 3.2m have been provided to allow for flexibility.</p>												

Development objectives	Assessment/Comment										
<p>Objective 4D-1 The layout of rooms within an apartment is functional, well organised and provides a high standard of amenity</p> <p>Design criteria</p> <p>1. Apartments are required to have the following minimum internal areas:</p> <table border="1" data-bbox="332 510 826 720"> <thead> <tr> <th>Apartment type</th><th>Minimum internal area</th></tr> </thead> <tbody> <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> </tbody> </table> <p>The minimum internal areas include only one bathroom. Additional bathrooms increase the minimum internal area by 5m² each</p> <p>A fourth bedroom and further additional bedrooms increase the minimum internal area by 12m² each</p> <p>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</p>	Apartment type	Minimum internal area	Studio	35m ²	1 bedroom	50m ²	2 bedroom	70m ²	3 bedroom	90m ²	<p>1. The proposed development complies with the required room sizes.</p> <p>2. The proposed development provides windows in external walls to all habitable rooms that measure a minimum of 10% of the floor area of the room.</p>
Apartment type	Minimum internal area										
Studio	35m ²										
1 bedroom	50m ²										
2 bedroom	70m ²										
3 bedroom	90m ²										
<p>Objective 4D-2 Environmental performance of the apartment is maximised</p> <p>Design criteria</p> <p>1. Habitable room depths are limited to a maximum of 2.5 x the ceiling height</p> <p>2. In open plan layouts (where the living, dining and kitchen are combined) the maximum habitable room depth is 8m from a window</p>	<p>1. The development includes ceiling heights of 3.2m for habitable rooms. Based on the allowance $2.5 \times 3.2 = 8\text{m}$ Maximum depth.</p> <p>2. The development seeks a 6.25% variation for apartments 00.01, 01.01, 02.01 and 03.01 which seek to provide a maximum room depth of 8.5m measured from living room window to the rear wall of the kitchen.</p> <p>Refer to the assessment provided at the beginning of this document.</p>										

Development objectives	Assessment/Comment															
<p>Objective 4D-3</p> <p>Apartment layouts are designed to accommodate a variety of household activities and needs</p>	Complies.															
<p>Design criteria</p>																
<p>1. Master bedrooms have a minimum area of 10m² and other bedrooms 9m² (excluding wardrobe space)</p>																
<p>2. Bedrooms have a minimum dimension of 3m (excluding wardrobe space)</p>																
<p>3. Living rooms or combined living/dining rooms have a minimum width of:</p> <ul style="list-style-type: none">• 3.6m for studio and 1 bedroom apartments• 4m for 2 and 3 bedroom apartments																
<p>4. The width of cross-over or cross-through apartments are at least 4m internally to avoid deep narrow apartment layouts</p>																
<p>Objective 4E-1</p> <p>Apartments provide appropriately sized private open space and balconies to enhance residential amenity</p>	<p>1. Complies</p> <p>2. All units comply with the minimum area requirement of 15sqm.</p>															
<p>Design criteria</p>																
<p>1. All apartments are required to have primary balconies as follows:</p> <table><thead><tr><th>Dwelling type</th><th>Minimum area</th><th>Minimum depth</th></tr></thead><tbody><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></tbody></table> <p>The minimum balcony depth to be counted as contributing to the balcony area is 1m</p>		Dwelling type	Minimum area	Minimum depth	Studio apartments	4m²	-	1 bedroom apartments	8m²	2m	2 bedroom apartments	10m²	2m	3+ bedroom apartments	12m²	2.4m
Dwelling type		Minimum area	Minimum depth													
Studio apartments	4m²	-														
1 bedroom apartments	8m²	2m														
2 bedroom apartments	10m²	2m														
3+ bedroom apartments	12m²	2.4m														
<p>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</p>																
<p>Objective 4E-2</p> <p>Primary private open space and balconies are appropriately located to enhance liveability for residents</p>	<p>The location of all private open space areas are located off internal living areas and are positioned to achieve the best solar access where possible.</p>															
<p>Objective 4E-3</p> <p>Private open space and balcony design is integrated into and contributes to the overall architectural form and detail of the building</p>	<p>The proposed POS and balcony design contribute to the overall architectural form of the building and aid in providing greater articulation (see elevation plans for more detail). The proposed development includes a combination of timer look louvres, aluminium balustrades and battens and podium planting. The</p>															

Development objectives	Assessment/Comment
	locations and orientation are considered to offer passive surveillance.
Objective 4E-4 Private open space and balcony design maximises safety	It is considered that the distance between floors and adjacent balcony will discourage climbing and reduce the number of falls. In additional, all balustrades are non-climbable.
Objective 4F-1 Common circulation spaces achieve good amenity and properly service the number of apartments	1. The proposed development includes a maximum of 7 units off the southern circulation core at Levels 1-3. The northern circulation core for Levels 1-3 support 6 units whilst at ground floor level, the southern core services 5 units and the northern core services 3. 2. N/A the proposed development does not exceed 10 storeys.
Design criteria	
1. The maximum number of apartments off a circulation core on a single level is eight 2. For buildings of 10 storeys and over, the maximum number of apartments sharing a single lift is 40	
Objective 4F-2 Common circulation spaces promote safety and provide for social interaction between residents	Generally complies. Direct legible access between circulation points and apartment entries is achieved however, on the upper levels corridor lengths are longer in some instances than is ideal. However, along these elongated corridor lengths are a number of apartment entries which allow for social interaction between residents and there are minimal to no opportunities for concealment ensuring safety for residents accessing their apartments or the lift cores.
Design guidance	
Direct and legible access should be provided between vertical circulation points and apartment entries by minimising corridor or gallery length to give short, straight, clear sight lines	
Tight corners and spaces are avoided	
Circulation spaces should be well lit at night	
Legible signage should be provided for apartment numbers, common areas and general wayfinding	
Incidental spaces, for example space for seating in a corridor, at a stair landing, or near a window are provided	
In larger developments, community rooms for activities such as owners corporation meetings or resident use should be provided and are ideally co-located with communal open space	
Where external galleries are provided, they are more open than closed above the balustrade along their length	



Development objectives	Assessment/Comment										
<p>Objective 4G-1 Adequate, well designed storage is provided in each apartment</p> <p>Design criteria</p> <p>1. In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided:</p> <table border="1" data-bbox="355 514 834 730"> <thead> <tr> <th>Dwelling type</th><th>Storage size volume</th></tr> </thead> <tbody> <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> </tbody> </table> <p>At least 50% of the required storage is to be located within the apartment</p>	Dwelling type	Storage size volume	Studio apartments	4m ³	1 bedroom apartments	6m ³	2 bedroom apartments	8m ³	3+ bedroom apartments	10m ³	<p>Complies.</p> <p>The proposed development includes internal storage within each unit, generally equating to 50% of the total required area. The remainder of the required storage volume is catered for within the basement parking area.</p>
Dwelling type	Storage size volume										
Studio apartments	4m ³										
1 bedroom apartments	6m ³										
2 bedroom apartments	8m ³										
3+ bedroom apartments	10m ³										
<p>Objective 4G-2 Additional storage is conveniently located, accessible and nominated for individual apartments</p>	<p>As discussed above additional storage is located within the basement levels.</p>										
<p>Objective 4H-1 Noise transfer is minimised through the siting of buildings and building layout</p>	<p>Generally complies.</p> <p>The site has three street frontages and the building has been setback from these frontages generally in compliance with relevant controls. All openings from internal and associated external living areas have been designed to face the street, including apartments at the northern end of the site thereby minimising noise transfer between units and between the proposed development and the adjoining resort to the north. The separation of the site from other adjacent sites is achieved via the carriageways.</p> <p>Where apartments adjoin vertical circulations cores, non-habitable rooms have been located adjoining these areas to ensure any mechanical noise does not disrupt the use of habitable rooms.</p> <p>The parking, storage and plant rooms have been proposed in the basement level whilst pump rooms are proposed in the north eastern corner of the building at ground floor level and are located way from any openings to ground floor apartments.</p>										
<p>Objective 4H-2 Noise impacts are mitigated within apartments through layout and acoustic treatments</p>	<p>Complies.</p> <p>As discussed above the design and layout of the site mitigates any potential noise impacts.</p>										
<p>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</p>	<p>As discussed previously the layout of the proposed development is considered to minimise potential noise impacts.</p> <p>Service areas are either located within the basement or at ground floor level away from any apartment openings.</p>										

Development objectives	Assessment/Comment																																																													
	<p>The external living areas of all apartments have been designed to face one of the three street frontages. Apartments have been designed to ensure that similar uses are proposed on either side of shared walls.</p> <p>The pool and associated beach area proposed within the principle area of communal open space have been conditioned to be operable from 7am to 10pm only.</p>																																																													
<p>Objective 4J-2</p> <p>Appropriate noise shielding or attenuation techniques for the building design, construction and choice of materials are used to mitigate noise transmission</p>	<p>As discussed above the openings from living and private open space areas present to one of the three street frontages.</p> <p>The development proposes solid balcony balustrades, screening and podium planting as required to further reduce noise transmission.</p>																																																													
<p>Objective 4K-1</p> <p>A range of apartment types and sizes is provided to cater for different household types now and into the future</p>	<p>Complies.</p> <p>The proposed development provides the following unit mix (including the dual key unit which comprises 1 x 1 bedroom and 1 x 3 bedroom):</p> <table><tr><th colspan="5">Schedule of Units</th></tr><tr><th></th><th>1B</th><th>2B</th><th>3B</th><th>4B</th></tr><tr><td>Ground</td><td>1</td><td>4</td><td>3</td><td>1</td></tr><tr><td>Level 1</td><td></td><td>7</td><td>4</td><td>2</td></tr><tr><td>Level 2</td><td></td><td>7</td><td>4</td><td>2</td></tr><tr><td>Level 3</td><td></td><td>7</td><td>4</td><td>2</td></tr><tr><td>Total</td><td>1</td><td>25</td><td>15</td><td>7</td></tr><tr><td>Total</td><td colspan="4">48 (dual key inclusive)</td></tr></table> <table><tr><th colspan="3">Unit breakdown</th></tr><tr><td colspan="2">Total units in development</td><td>48 (dual key inclusive)</td></tr><tr><th>Unit type</th><th>Number</th><th>%</th></tr><tr><td>1B</td><td>1</td><td>2.08%</td></tr><tr><td>2B</td><td>25</td><td>52.08%</td></tr><tr><td>3B</td><td>15</td><td>31.25%</td></tr><tr><td>4B</td><td>7</td><td>14.58%</td></tr></table> <p>The development also includes 11 units or 22.91% being adaptable and a single dual key apartments to allow use as 1 x 1 bedroom and 1 x 3 bedroom or 1 x 4 bedroom as required by the market.</p> <p>As noted previously, the site is within walking distance to a range of service and facilities including public transport which two bus stops located approximately 200m south of the site along Casuarina Way.</p>	Schedule of Units						1B	2B	3B	4B	Ground	1	4	3	1	Level 1		7	4	2	Level 2		7	4	2	Level 3		7	4	2	Total	1	25	15	7	Total	48 (dual key inclusive)				Unit breakdown			Total units in development		48 (dual key inclusive)	Unit type	Number	%	1B	1	2.08%	2B	25	52.08%	3B	15	31.25%	4B	7	14.58%
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<p>Objective 4K-2</p> <p>The apartment mix is distributed to suitable locations within the building</p>	<p>Complies.</p> <p>The ground floor provides options for all apartment types whilst Levels 1-3 provide 2, 3 and 4 bedroom apartment type options spread amongst each other.</p>																																																													

Development objectives	Assessment/Comment
<p>Objective 4L-1 Street frontage activity is maximised where ground floor apartments are located</p>	<p>Complies.</p> <p>As has been discussed previously in this document, each ground floor apartment has direct access from either Grand Parade, Casuarina Way or Blackwattle Circuit, depending on which street the apartment has a frontage to.</p> <p>Planter boxes with ample landscaping are proposed between the street boundaries and the edge of ground floor apartment areas of private open space. The proposed areas of private open space are located between the apartments and the planter boxes provided along the sites boundaries. Pedestrian access points for ground floor apartments lead from the public domain to proposed areas of private open space.</p> <p>As discussed previously, ground floor apartments enjoy 3.2m ceiling heights which allow for any potential conversion of these apartments in the future.</p>
<p>Objective 4L-2 Design of ground floor apartments delivers amenity and safety for residents</p>	<p>Complies.</p> <p>The internal layout and positioning of ground floor uses and adjoining external living and areas of private open space are considered to offer amenity and safety for residents and offer passive surveillance of the adjoining areas. Direct access from the public domain to ground floor apartments via secure gates also provides additional opportunities for passive surveillance.</p>
<p>Objective 4M-1 Building facades provide visual interest along the street while respecting the character of the local area</p>	<p>Complies.</p> <p>The proposed development includes a range of varied building elements and materials, grouping of external living areas, changes in depth and overhangs all of which are considered to provide visual interest.</p> <p>The base, middle and top of the built form are clearly discernible and building services have generally been sited to be within the built form so as not to be visible from the public domain. Where this has been unachievable (bin room and pump rooms at ground floor), the rooms have been incorporated into the building's design so that their use is not immediately obvious but is merely an extension of the built form (see elevations).</p>
<p>Objective 4M-2 Building functions are expressed by the facade</p>	<p>Complies.</p> <p>All building entry points (main pedestrian access points and individual access points to ground floor apartments) are clearly defined.</p> <p>As the site has three street frontages, visual prominence to the corner of Casuarina Way and Grand Parade, and Grand Parade and Blackwattle Circuit are required. This has been achieved through</p>

Development objectives	Assessment/Comment
	<p>the differing use of materials, articulation, landscaping and podium planting and colours.</p> <p>The internal layouts are expressed externally through party walls, floor slabs and the location and materials used for areas of private open space (balustrades, screens, landscaping etc.).</p>
<p>Objective 4N-1 Roof treatments are integrated into the building design and positively respond to the street</p>	<p>Complies.</p> <p>The proposed roof form has been integrated into the design of the overall building by providing curved edges as well as corners which provide articulation and reduce overall massing. The proposed roof seeks to cover the building only which results in a large recess in the western elevation due to the location of the communal open space. This aids in minimising scale and provides visual interest.</p> <p>Service elements (lift overruns, A/C condensers, solar panels) have been incorporated into the roof and will not be visible from the public domain.</p>
<p>Objective 4N-2 Opportunities to use roof space for residential accommodation and open space are maximised</p>	<p>Roof space is not proposed to be utilised for residential accommodation or open space. It is considered these have been adequately provided for within the built form and use of the roof space for these purposes is therefore not required.</p>
<p>Objective 4N-3 Roof design incorporates sustainability features</p>	<p>Complies.</p> <p>The design of the roof allows for larger overhangs to provide shading to openings and allows useability of open spaces areas.</p> <p>Furthermore, as mentioned previously, solar panels are proposed at the northern end of the roof.</p>

Development objectives	Assessment/Comment
<p>Objective 4O-1 Landscape design is viable and sustainable</p> <p>Design guidance</p> <p>Landscape design should be environmentally sustainable and can enhance environmental performance by incorporating:</p> <ul style="list-style-type: none"> • diverse and appropriate planting • bio-filtration gardens • appropriately planted shading trees • areas for residents to plant vegetables and herbs • composting • green roofs or walls <p>Ongoing maintenance plans should be prepared</p> <p>Microclimate is enhanced by:</p> <ul style="list-style-type: none"> • 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 <p>Tree and shrub selection considers size at maturity and the potential for roots to compete (see Table 4)</p>	<p>The subject application included landscape plans (as amended) showing the provision of landscaping across all four storeys of the proposed development (refer to Landscape Concept Plans).</p> <p>Trees proposed along the sites perimeter and within the area of communal open space to ensure adequate shading is provided along public footpaths and to the communal open space area.</p> <p>Podium planting is proposed for Levels 1-3 to ensure vegetation is also provided to enhance the amenity of residents living within the upper level apartments.</p> <p>A Landscape Architect Statement has also been provided.</p> <p>Whilst the amount and location of the proposed landscaping is considered to be viable and sustainable, a condition of consent has been recommended requiring 80% of total plants to be native to the local area. This will further enhance the character of the streets that front the subject site, as well as the broader locality.</p>
<p>Objective 4O-2 Landscape design contributes to the streetscape and amenity</p> <p>Design guidance</p> <p>Landscape design responds to the existing site conditions including:</p> <ul style="list-style-type: none"> • changes of levels • views • significant landscape features including trees and rock outcrops <p>Significant landscape features should be protected by:</p> <ul style="list-style-type: none"> • tree protection zones (see figure 4O.5) • appropriate signage and fencing during construction <p>Plants selected should be endemic to the region and reflect the local ecology</p>	<p>Complies.</p> <p>As noted above, a condition has been recommended which would require 80% of total plants to be native to the local area. The condition will enhance the development's frontage to Blackwattle Circuit, Grand Parade and Casuarina Way and will enhance the character of naturally occurring flora in the area, as well as with the locality as all developments are subject to the requirement of the condition.</p> <p>The proposal seeks to locate perimeter landscaping within defined planter boxes which aid in delineating street vegetation (nature strips, street trees) from vegetation within the development boundaries.</p>
<p>Objective 4P-1 Appropriate soil profiles are provided</p>	<p>The proposal seeks to provide raised planters to provide additional landscaping to the upper levels of the building. Raised planters are provided adjoining balconies of all apartments on Levels 1 and 2 with the exception of apartments 01.09 and 02.09. At level 3, raised planters are provided adjoining the balconies of four apartments.</p>

Development objectives	Assessment/Comment
	<p>Raised planters are also provided along the hallway to provide greater amenity within the corridor of Levels 1-3.</p> <p>The amended Landscape Concept Plans include cross sections of typical podium planting showing sufficient soil profiles can be supported.</p>  <p>Proposed Levels 1 and 2 raised planters</p>  <p>Proposed Level 3 raised planters.</p>
<p>Objective 4P-2 Plant growth is optimised with appropriate selection and maintenance</p>	<p>As discussed previously, a condition of consent has been recommended requiring 80% of total plants to be native to the local area. This will ensure the species of plants are in character with the locality and are tolerant to the weather conditions experienced by the Tweed.</p> <p>Smaller plants are proposed on upper level raised planters to mitigate negative effects on plants by wind.</p> <p>Council's Development Engineering Unit, Environmental Health Unit and Roads and Stormwater Unit raised no objections to the proposed planting on structures.</p>

Development objectives	Assessment/Comment
<p>Objective 4P-3 Planting on structures contributes to the quality and amenity of communal and public open spaces</p> <p>Design guidance</p> <p>Building design incorporates opportunities for planting on structures. Design solutions may include:</p> <ul style="list-style-type: none"> • 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 <p>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</p>	<p>A condition of consent has been included requiring a Landscape Management Plan be established and adhered to.</p> <p>Complies.</p> <p>As has been discussed previously, the proposal seeks to provide raised planters and planting on structures across Levels 1-3 which increases the amenity for residents of the upper levels of the development. Raised planters also provide greater visual interest to those observing the development from the public domain.</p> <p>Planting on structures, within raised planters, is also proposed at ground floor level, in areas where the basement is directly below. This includes at the entrance of the development off Blackwattle Circuit, within the centre of the ground floor, and within the principle area of communal open space. The addition of these planter boxes increase the quality of the communal open space as they provide alternatives for privacy and options for seating in the shade.</p>

Development objectives	Assessment/Comment
<p>Objective 4Q-2 A variety of apartments with adaptable designs are provided</p> <p>Design guidance</p> <p>Adaptable housing should be provided in accordance with the relevant council policy</p> <p>Design solutions for adaptable apartments include:</p> <ul style="list-style-type: none"> • 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 	<p>Council does not provide an adaptable housing requirement however, 11 units are adaptable and can be modified when required.</p>
<p>Objective 4Q-3 Apartment layouts are flexible and accommodate a range of lifestyle needs</p>	<p>Complies.</p> <p>The proposed development includes open plan living areas which can accommodate different layout options and functions.</p> <p>Master bedrooms are provided with ensuite that are separate to the main bathrooms provided within the unit. The only exception to this is the nominated 1 bedroom dual key apartment that contains a single bathroom.</p> <p>Furthermore, a range of 2, 3 and 4 bedroom apartments allow for flexibility in the use of bedrooms with capability to transform some into home office as required.</p>
<p>Objective 4R-1 New additions to existing buildings are contemporary and complementary and enhance an area's identity and sense of place</p>	<p>N/A – new development</p>
<p>Objective 4R-2 Adapted buildings provide residential amenity while not precluding future adaptive reuse</p>	<p>N/A – new development</p>
<p>Objective 4S-1 Mixed use developments are provided in appropriate locations and provide active street frontages that encourage pedestrian movement</p>	<p>N/A – the proposal is not mixed use.</p>
<p>Objective 4S-2 Residential levels of the building are integrated within the development, and safety and amenity is maximised for residents</p>	<p>N/A – the proposal is not mixed use.</p>
<p>Objective 4T-1 Awnings are well located and complement and integrate with the building design</p>	<p>N/A - no awnings or signage proposed.</p>

Development objectives	Assessment/Comment
Objective 4T-2 Signage responds to the context and desired streetscape character	N/A - no awnings or signage proposed.
Objective 4U-1 Development incorporates passive environmental design	The proposed development is considered to incorporate passive environmental design. The proposed variation to natural light is considered acceptable. A condition of consent is recommended to ensure communal clothes drying space is provided.
Objective 4U-2 Development incorporates passive solar design to optimise heat storage in winter and reduce heat transfer in summer	The development is considered to comply with passive solar design to optimise heat storage in winter and the reduction of heat transfer in summer. The development is consistent with all BASIX requirements.
Objective 4U-3 Adequate natural ventilation minimises the need for mechanical ventilation	Despite the variation sought to natural cross ventilation, it is considered sufficient operable glazing has been provided within the apartments (including those that do not achieve natural cross ventilation) to enable enough ventilation into the apartment, minimising the need to rely on mechanical ventilation. This is enhanced through the proposed grouping of rooms with similar uses e.g. Living and bedrooms.
Objective 4V-1 Potable water use is minimised	As discussed above the proposed development is required to comply with BASIX requirements. Accordingly, it is considered that the development will minimise potable water use.
Objective 4V-2 Urban stormwater is treated on site before being discharged to receiving waters	Council's Roads and Stormwater Unit have reviewed the application and, subject to the provision of a preliminary Erosion and Sediment Control Plan and increased GPT storage capabilities (which was provided by the applicant) raised no objections to the proposal.
Objective 4V-3 Flood management systems are integrated into site design	The subject site is not mapped as being flood prone. Council's Roads and Stormwater Unit have not raised any concerns in respect of flood management.
Objective 4W-1 Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity of residents	The proposed development includes areas within in each apartment capable of accommodating individual waste units.
Design guidance	A bin refuse has been proposed at the northern end of the ground floor to allow for ease of movement of bins from the refuse room, to the kerb for kerbside collection, and back again. The bin refuse is located behind a booster cupboard and so is not easily discernible from the public domain along Blackwattle Circuit.
Adequately sized storage areas for rubbish bins should be located discreetly away from the front of the development or in the basement car park	
Waste and recycling storage areas should be well ventilated	
Circulation design allows bins to be easily manoeuvred between storage and collection points	
Temporary storage should be provided for large bulk items such as mattresses	
A waste management plan should be prepared	Council's Resource Recovery Unit is satisfied with the Waste Management Plan (as amended).

Development objectives	Assessment/Comment
Objective 4W-2 Domestic waste is minimised by providing safe and convenient source separation and recycling	As noted above, the proposed development includes areas within each apartment capable of accommodating individual waste units. Separate domestic waste, green waste and recycling bins will be provided in the bin refuse room at ground floor level.
Objective 4X-1 Building design detail provides protection from weathering	The proposed development offers a range of building materials, including concrete/masonry, metal balustrades, aluminium partitions, timber look louvres, aluminium screening etc. The proposed building design is considered to suitable for weathering.
Objective 4X-2 Systems and access enable ease of maintenance	Minimal windows are inaccessible from the outside of the building however, all are accessible from within the apartments. The maintenance areas for the building are generally located within the centre of building.
Objective 4X-3 Material selection reduces ongoing maintenance costs	The proposed materials of the development are considered to reduce ongoing maintenance costs.