

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 minor variations to the following elements of the ADG:

Part 3 – siting the development

- Deep Soil Zones

Objective 3E-1.1

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	

- 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

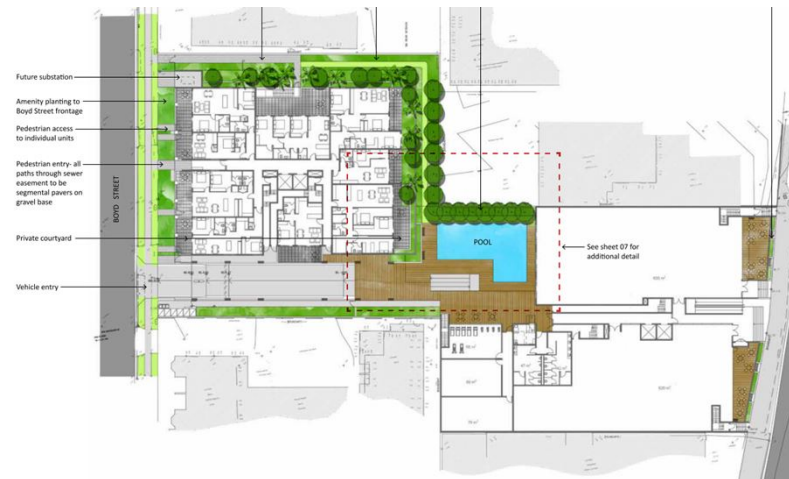
Assessment

The area nominated to the east of block B includes an area of approximately 6.8m x 24m (3.5% of the site area) and is compliant with the DSZ requirements for large tree planting

The area nominated to the north of block B provides approximately 2.8m in depth for the length the site (this area is not compliant with depth/soil volume requirements for large tree planting).

Based on the above areas, the site provides an area of approximately 6.5% for DSZ.

Accordingly, the proposed development seeks a 0.5% variation to the required DSZ of 7% of site.



The variation to the required deep soil zone is considered acceptable for the following reasons:

- The variation is minor (0.5%)
- The site is still able to accommodate large tree species along the eastern boundary of Block B. This area is approximately 163sqm
- The site provides acceptable stormwater management
- The development includes alternative forms of planting, such as on the structure.

Part 4 – designing the building

- Solar and daylight access

Objective 4A-1.2

To optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space

Design Criteria

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 122 units (including the nominated studio – dual key with unit 06 – Boyd Street, Ground level).

The submitted site solar access plans advise that a total of 52 units receive less than 3 hours sunlight during the nominated hours in mid-winter (including 15 of which receive no natural light). Accordingly, the proposed development provides only 57% of apartments benefitting from sunlight access.

Notwithstanding the above, of the 23 of the non-compliant units are still receiving at least 2 hours of direct sunlight during the nominated hours (resulting in approximately 71% of the site complying with at least 2 hours direct sunlight during 9am and 3pm in mid-winter).

The variation to the prescribed requirement (13% variation) is considered a response to maximising development yield and the wrapped internal layout/design of the units. Whilst it is acknowledged that the development seeks a variation to this control it should be acknowledged that the development is consistent with the zoning and future desired character of the Tweed Heads area.

- Apartment size and layout

Objective 4D-1.2

The layout of rooms within an apartment is functional, well organised and provides a high standard of amenity

Design Criteria

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

Assessment

In accordance with the standard instrument, the definition of a habitable room is the same as under the BCA. The BCA advises the following:

a Habitable Room is:

"a room used for normal domestic activities and

Includes *a bedroom, living room, lounge room, music room, television room, kitchen, dining room, sewing room, study, playroom, family room, home theatre, and sunroom, but*

Excludes *a bathroom, laundry, water closet, pantry, walk-in wardrobe, corridor, hallway, lobby, photographic darkroom, clothes drying room, and other spaces of a specialised nature occupied neither frequently nor for extended periods."*

The following units are located centrally and do not comply provide window to an external wall:

Boyd Street Building - Block1:

Ground Level

Studio – bedroom (no door – open plan)

U2 – room nominated as M (multipurpose) – no door

U7 – Bedroom 1 (has a high level window which opens into the buildings entry way.

Study (no door)

Level 1

U1 – study (no door)

U3 – study (no door)

Levels 2 and 3

U1– study (no door)

U3 – study (no door)

Level 4

U1 – study (no door)

U7 – study (no door)

Levels 5 and 6

U1 – study (no door)

U7 – study (no door)

Level 7

U1 – study (no door)

U7 – study (no door)

All studies listed above are generally befitting by larger entrances and as detailed have no doors. When calculating the average distances from windows to the non-compliant rooms is approximately 6m, considering this and the small scale size of the rooms and larger opening without the option to close off the rooms. The variation is considered minor and supported with this regard.

Objective 4D-3.1

Apartment layouts are designed to accommodate a variety of household activities and needs

Design Criteria

Master bedrooms have a minimum area of 10m² and other bedrooms 9m² (excluding wardrobe space)

Assessment:

A minor variation with this regard is proposed.

The studio unit located at ground level of Block B has a bedroom 3.0m x 2.7m = 8.1sqm, which is below the required area 10sqm. Given the studio unit is nominated for dual/adaptable uses and comprises of an open living area and bedroom area the variation is considered acceptable with this regard.

- Private open space and balconies

Objective 4E-1.2

Apartments provide appropriately sized private open space and balconies to enhance residential amenity

Design Criteria

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.

Assessment:

A slight variation to this control is sought.

1. The studio unit located at the ground level of proposed block B (adjoining Boyd Street), the courtyard area is approximately 12sqm.
2. Units 1, 2, 6-8 and the studio apartment have a depth of 2.6m. Accordingly, seek a variation of 0.4m

The variations with this regard are considered minor and acceptable. The variations are no considered to reduce significantly reduce the useability of private open space areas.

Summary

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

Further to the above the development is consistent with the future desired character of the Tweed Heads area.

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 nomination all site 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>The building is oriented toward both Wharf and Boyd (West-East) Streets with balconies of apartments providing passive surveillance of both streets. Pedestrian and vehicle entrance is clearly defined with direct access from Boyd Street and clearly identified pedestrian access from Wharf Street.</p> <p>The street frontage of the building is oriented to the west for the mixed use building and East for the residential building. The apartments where adjoining the road reserve are orientated this way with some units being oriented to the north and south side boundaries.</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

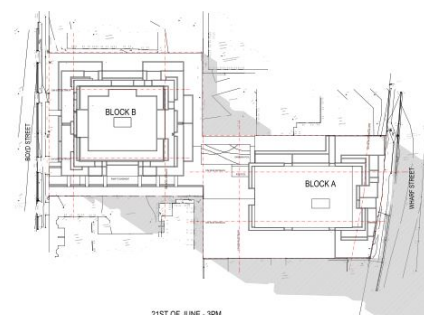
A minimum of 4 hours of solar access should be retained to solar collectors on neighbouring buildings

Wharf Street:

Medical Centre (north)
multi-storey commercial building (south)



The subject application includes partial overshadowing of the subject site adjoining to the north. This is expected between the hours of 2 and 3pm. The area is currently comprised of a sealed carpark (see image below).



To the south of the subject site is an existing commercial building. Accordingly, the site is not comprised of any internal living or associated POS. The proposed development is not considered to have any negative impacts on the running of the commercial business.


Boyd Street:

Detached dwelling (north)
dental surgery which contains two residential units at the rear of the property (south)

The subject site to the north will not receive any overshadowing.

The site to the south will receive some overshadowing, however given the setbacks and stepped upper levels the overshadowing is considered minimal.

The adjoining site does not have any formal POS areas. The living areas, will receive solar access in accordance with sections 3D Communal and public

	<p>open space (minimum 3 hours, to 70%) and the subject site with 4A Solar and daylight access of the ADG.</p>  <p>The subject application is compliant with the overshadowing requirements of the ADG.</p>
<p>Objective 3C-1 Transition between private and public domain is achieved without compromising safety and security</p> <p>Design guidance</p> <p>Terraces, balconies and courtyard apartments should have direct street entry, where appropriate</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>Upper level balconies and windows should overlook 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>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>Complies – The development is comprised of two separate buildings, each with their own street frontages. Each building presents to the street and offers a level of interaction and passive surveillance.</p> <p>Boyd Street frontage: The development provides direction access to ground floor units via a courtyard which adjoins the Boyd Street Road Reserve.</p> <p>The courtyard areas are fenced using open fencing and soft landscaping.</p> <p>All upper floor units have balconies which overlook the street where possible.</p> <p>The wharf Street frontage is comprised of commercial land uses at ground floor level. The area offers glass balustrades and landscape bays.</p> <p>Accordingly, the proposed development is considered to achieve a balanced transition between private and public spaces.</p> <p>It is considered that the development meets the design guidance for transition between private and public spaces.</p>

<p>Objective 3C-2</p>	<p>Complies.</p>
<p>Amenity of the public domain is retained and enhanced</p>	
<p>Design guidance</p>	<p>The proposed development includes courtyards to the Boyd Street (Residential) frontage and landscape bays to the Wharf street (Commercial) frontage.</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>Letterboxes have been nominated within the building entrance/lobby area adjoining Boyd Street.</p>
<p>The visual prominence of underground car park vents should be minimised and located at a low level where possible</p>	<p>The Wharf Street Building is considered capable of accommodating mail boxes for the upper floor residential units within the lobby.</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>All waste, pump stations and facilities are proposed within the basement levels. The vents from the parking are not considered visually obtrusive.</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>	

Objective 3D-1

An adequate area of communal open space is provided to enhance residential amenity and to provide opportunities for landscaping

Design criteria

1. Communal open space has a minimum area equal to 25% of the site (see figure 3D.3)
2. Developments achieve a minimum of 50% direct sunlight to the principal usable part of the communal open space for a minimum of 2 hours between 9 am and 3 pm on 21 June (mid winter)

Design guidance

Communal open space should be consolidated into a well designed, easily identified and usable area

Communal open space should have a minimum dimension of 3m, and larger developments should consider greater dimensions

Communal open space should be co-located with deep soil areas

Direct, equitable access should be provided to communal open space areas from common circulation areas, entries and lobbies

Where communal open space cannot be provided at ground level, it should be provided on a podium or roof

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 communal open space area at ground level of building B complies with the minimum 3m dimensions. This DSZ area adjoins the communal pool and ancillary use areas.

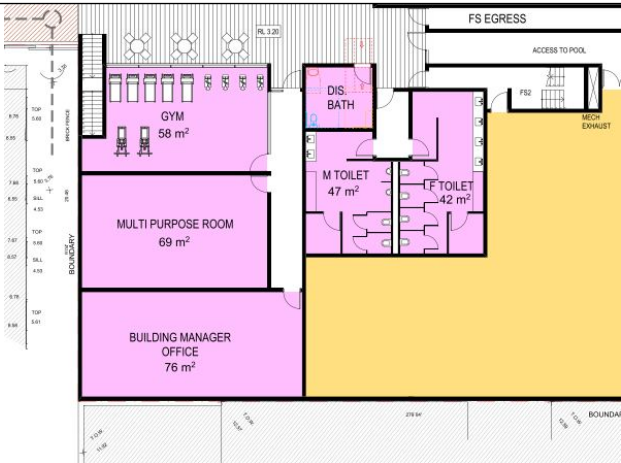
In addition to the ground level the development includes a podium level communal space area.

The podium level when combined with the ground level areas equates to a total of 30% communal open space. The area along the southern elevation and includes planter box landscaping and seats in an area extended from the BBQ section, measuring approximately 21m x 6.6m in depth (5m – less the planter boxes).

Even though this area is located on the southern elevation and adjoins terraces of A101 and A104, it is considered that this space could still be useable.

In addition to the ground level and podium communal areas, the development includes a 58sqm gym and a 69sqm multipurpose room.



	
<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 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>The proposed developments communal open space is considered to be designed to allow arrange of activities and respond to the sites conditions by providing the following:</p> <ul style="list-style-type: none"> • Swimming pool • Kids swimming pool • Landscaped areas • Multipurpose room • Gym • BBQ area • Seating in communal areas <p>The location of the facilities is centralised and is considered to soften the site between the two multi-storey buildings.</p>
<p>Objective 3D-3 Communal open space is designed to maximise safety</p> <p>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:</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>As discussed above the communal areas are located centrally within the site. The areas are offered passive surveillance from both residential blocks from windows of internal living areas or balconies.</p> <p>Conditions will be applied to any development requiring adequate lighting of communal and access areas.</p>

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 public open space should be connected with nearby parks and other landscape elements

Public open space should be linked through view lines, pedestrian desire paths, termination points and the wider street grid

Solar access should be provided year round along with protection from strong winds

Opportunities for a range of recreational activities should be provided for people of all ages

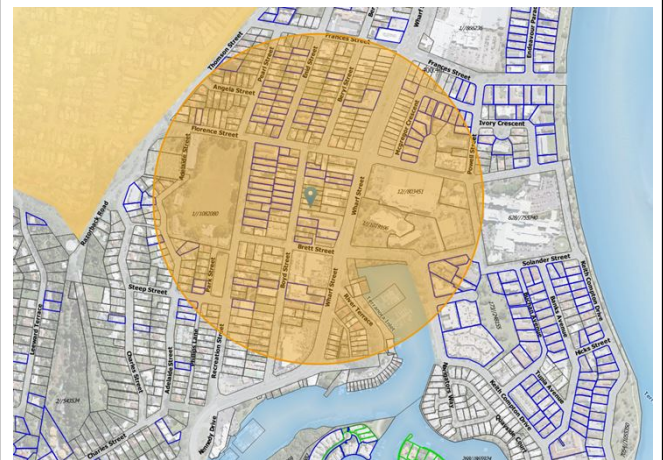
A positive address and active frontages should be provided adjacent to public open space

Boundaries should be clearly defined between public open space and private areas

The development offers a direct link to public space via Boyd and Wharf Streets. The development includes active frontages to Wharf street through the proposed commercial core and Boyd Street through courtyard areas and internal access to the building for upper floor residential.

Below is a 400m PedShed (5 minute walk), which highlights that the site is within a walking distances of park, community facilities, recreation areas, medical services and retail/food premises.

The active frontages of the development are considered to contribute and be responsive the existing neighbourhood.



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

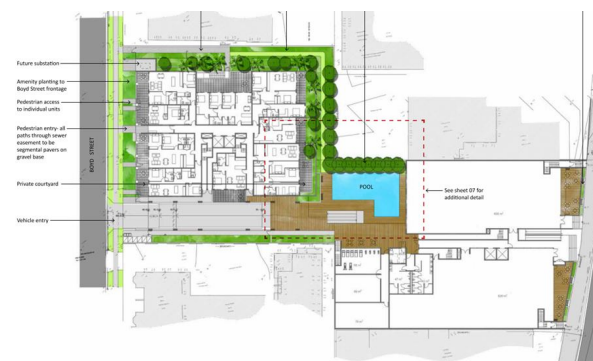
Where a proposal does not achieve deep soil requirements, acceptable stormwater management should be achieved and alternative forms of planting provided such as on structure

The area nominated to the east of block B includes an area of approximately 6.8m x 24m (3.5% of the site area)

The area nominated to the north of block B provides approximately 2.8m in depth for the length of block B.

The site provides approximately 6.5% of DSZ.

Accordingly, the proposed development seeks a 0.5% variation to the required DSZ of 7% of site.



Further to above it should also be noted that the area nominated as DSZ along the sites northern boundary does not comply with the dimensions to accommodate a large tree planting as required elsewhere within the ADG for DSZ.

Notwithstanding the above, it is considered that the variation is minor, the development is located within are area seeking higher density development and acceptable stormwater management has been provided. Accordingly, the proposed variation is still considered to meet the required design criteria.

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 proposed development includes setbacks as follows:

Boyd Street – Block B

- Northern boundary (side boundary)
G – 3 = 6m setback
4 – 7 = 9m setback
8 – 12m setback

The adjoining site to the north is comprised of an existing single storey brick building. The building is setback approximately 1.2m from the boundary. Accordingly, the building separation at the closest point will be 7.2m

- Eastern boundary (rear boundary)
G – 6.5m (4.5m courtyard)
1 – 3 = 6m setback
4 – 7 = 9m setback
8 – 12m setback

The adjoining site to the east is comprised of a part two storey and part one storey medical centre. The building is setback approximately 17m from the boundary.

Accordingly, the building separation at the closest point will be 21.5m

- Southern boundary (side boundary)
G – 9.5m (2.8m access ramp)
1 – 3 = 6m setback
4 – 7 = 9m setback
8 – 12m setback

The adjoining site to the south is comprised of an existing a mixed use, part residential and part commercial. The building is setback approximately 1.2m from the boundary.

However it should be noted that the building is on average setback approximately 7m

Accordingly, the building separation at the closest point will be 7.2m

- Western boundary (front boundary)
G – 3m
1 – 3 = 4m setback
4 – 8 = 8m setback

Wharf Street – Block A

Ground level = commercial

- Northern boundary (side boundary)
G – adjoining

	<p>2 – 3 = 9m setback (units located behind the street commercial) Adjoining above street commercial 4 – 7 = 9m setback</p> <p><i>The adjoining site to the north is comprised of an existing part single storey and part two storey brick building (medical clinic). The building adjoins the boundary.</i></p> <p><i>Accordingly, for the commercial component of the subject application there is no separation. For the component of upper floor residential, located behind the commercial area, the separation will be approximately 6m</i></p> <ul style="list-style-type: none"> • Eastern boundary (front boundary) G – 3 = adjoining (planter box landscaping) 1 = 3m setback 4 = generally 6m (slight variation for planter/terrace of approx. 2m in the s/e corner) 5 – 6 = generally 6m (slight variation for planter/terrace of approx. 800mm in the s/e corner) 7 = 6m setback (slight variation for planter/terrace of approx. 2m in the s/e corner) • Southern boundary (side boundary) G = adjoining 1 = adjoining 2 – 3 = adjoining above commercial 9m for units behind commercial area 4 – 7 = 9m <p><i>The adjoining site to the south is comprised of an existing three storey commercial building. The building adjoins the boundary.</i></p> <p><i>Accordingly, for the commercial component of the subject application there is no separation.</i></p> <p><i>For the component of upper floor residential, located behind the commercial area, the separation will be approximately 9m</i></p> <ul style="list-style-type: none"> • Western boundary (rear boundary) G – adjoining 1 – podium adjoins boundary 2 - 7 = 15m setback <p><i>The adjoining site to the west is comprised of a two storey brick building (where the sites adjoin, the site is comprised of a mixed use). The building is setback approximately 3.5m.</i></p> <p><i>Accordingly, for the commercial component of the subject application the separation is 3.5m.</i></p> <p><i>For the component of upper floor residential, located</i></p>
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	<p><i>behind the commercial area, the separation will be approximately 18.5m</i></p> <p>Considering the setbacks of the proposed development it is considered that the development provides adequate setbacks and provides reasonable levels of external and internal visual privacy.</p>
<p>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</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>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>Generally complies - the proposed development has separated courtyard areas from the nominated communal open space by including appropriate screening and planter boxes.</p> <p>It should be noted that on the ground level of block B, units 2, 7 and 8 include egress points adjoining habitable rooms. These areas have incorporated high level windows to achieve maximum privacy, whilst aiming to offer liveability.</p> <p>As discussed elsewhere within this report the balconies and POS areas are located in front of living rooms, increasing internal privacy and these areas are separated from adjoining POS areas by solid walls.</p> <p>Accordingly, the proposed development is considered to offer a level of privacy without comprising light and ventilation to habitable rooms.</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>The building access to both buildings, from their respective frontages is clearly identifiable.</p> <p>Block B – Boyd Street offers direct access to those ground floor units via a courtyard fronting Boyd Street. In addition to this the building also includes two clearly identifiable entrances and vehicle access.</p> <p>Block A – Wharf Street includes direct access to each retail tenancy and a central entrance, including disability access to the retail premises and residential components.</p> <p>The building includes a secured section to the lift and residential uses.</p> <p>Access to amenities for the commercial tenancies is in this area – security????</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>The access to each building includes clearly identifiable access arrangements. These areas are accessible and visible from the public domain and from the internal communal areas.</p> <p>The development has limited level changes and has been supported in terms of BCA requirements for disability access.</p> <p>The access located at wharf street includes a ramp. The ramp has been integrated into the building.</p> <p>The communal OS area has a level change from the facilities in Block A (Gym, media, BBQ etc) to the pool area. The change is 3.20RL to 4.20RL. A ramp area has been provided and is centrally located.</p> <p>The development is considered to offer access, entries and pathways which are easily identified and accessible.</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>The proposed development includes pedestrian linkages for residents and their guests to enable through traffic and access to all communal areas, the commercial/retail component of the site and both public road reserves.</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>The proposed development includes basement parking.</p>
<p>Design guidance</p>	<p>The access to the site is proposed off the Boyd Street road reserve, which is considered the sites 'secondary frontage' and adjoining the residential component of the site.</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>The vehicle access is separated from the pedestrian access points to the site. The access area does include a waste storage bay – this area will be screened from the road reserve.</p>
<p>Car park entries should be located behind the building line</p>	<p>All engineering issues have been satisfied in terms of sight distances, access separation and surface materials has been satisfied.</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>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>The proposed development provides carparking and bike parking in accordance with Section A2 Site Access and Parking Code of the Tweed Development Control Plan 2008.</p> <p>The site adjoins a public bus stop and multiple bus routes.</p> <p>The site is within 800m of all services: Public transport Library Shopping centre Council building Recreation Food and dining Public Parks.</p> <p>Accordingly, the development meets all parking and access arrangements.</p> <p>The development includes the following:</p> <p>140 vehicle spaces - residential 54 vehicle spaces - commercial</p> <p>243 bike spaces - residential 16 bikes spaces - commercial</p> <p>6 motorbike spaces - residential 4 motorbike 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 carparking 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.</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>As discussed elsewhere within this report the proposed development includes, plant, pump room, storage, waste collection and bulky waste within Basement Level 1.</p> <p>The basement is accessible on by security system (gated) and access is located centrally under each building. Conditions will apply for light and safety.</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. A dewatering application has been sought and issued.</p> <p>The layout is considered structured and access to services is centralised under each building (single basement, two levels)</p> <p>There will be no protrusion of vehicles.</p> <p>Natural ventilation is provided to the basement and subbasement areas</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

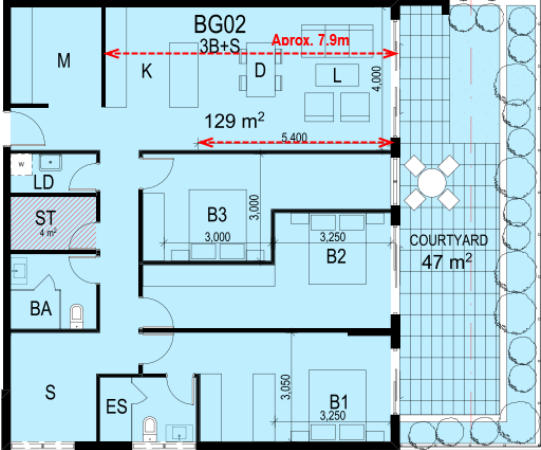
Development objectives

Assessment/Comment

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><i>Design criteria</i></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 122 units (including the nominated studio – dual key with unit 06 – Boyd Street, Ground level). The submitted site solar access plans advise that a total of 52 units receive less than 3 hours sunlight during the nominated hours in mid-winter. Accordingly, the proposed development provides only 57% of apartments benefitting from sunlight access. 3. The proposed development includes a total of 12 units which have no direct sunlight between the nominated areas. The proposed development has a total of 9.8%. Accordingly, complies with the 15% requirement.
<p>Objective 4B-1 All habitable rooms are naturally ventilated</p>	<p>The proposed development generally complies with this requirement. It is noted that some bedrooms are adjoined to windows/door openings via long halls. Notwithstanding this the width of the halls has been increased to generally 1.5m and includes storage to allow better ventilation to these areas.</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 50%) 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><i>Design criteria</i></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 90% of all units being naturally cross ventilated. 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><i>Design criteria</i></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 the proposed development exceeds the 2.7m minimum requirement with units generally providing 2.9m ceiling heights, with the ground floor providing approximately 3.3m ceiling heights.</p>
Minimum ceiling height for apartment and mixed use buildings													
Habitable rooms	2.7m												
Non-habitable	2.4m												
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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>The proposed development has nominated the use of ground floor only for commercial/retail uses. The first floor is purely for residential occupation and it is not considered the area could be adapted. The provision of 3.3m ceiling heights at ground level is considered to allow a range of appropriate commercial/retail uses.</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"> <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>3. The proposed development complies with the required room sizes.</p> <p>4. In accordance with the standard instrument, the definition of a habitable room is the same as under the BCA. The BCA advises the following:</p> <p><i>a Habitable Room is:</i> <i>"a room used for normal domestic activities and Includes a bedroom, living room, lounge room, music room, television room, kitchen, dining room, sewing room, study, playroom, family room, home theatre, and sunroom, but</i> <i>Excludes a bathroom, laundry, water closet, pantry, walk-in wardrobe, corridor, hallway, lobby, photographic darkroom, clothes drying room, and other spaces of a specialised nature occupied neither frequently nor for extended periods."</i></p> <p>The following units do not comply:</p> <p>Block1: G U2 – room nominated as M (multipurpose) – no door U7 – Bedroom 1 and study</p> <p>L1 U1 – study – no door U3 – study – no door</p> <p>L2 and L3 U1– study – no door U3 – study – no door</p> <p>L4 U1 – study – no door U7 – study – no door</p> <p>L5 and L6 U1 – study – no door U7 – study – no door</p> <p>L7 U1 – study – no door U7 – study – no door</p> <p>All studies noted without doors are located off hallways and are generally towards the centre of the building. Basically the furthest point from the external walls, ventilation and natural light.</p> <p>Further to the above the proposed 'studio' located at the ground level of block 1 includes a bedroom without a door. Essentially the room cannot be closed off from the remainder of the living area, resulting in the area being classed as a single room for the purposes of this control.</p>
Apartment type	Minimum internal area										
Studio	35m ²										
1 bedroom	50m ²										
2 bedroom	70m ²										
3 bedroom	90m ²										

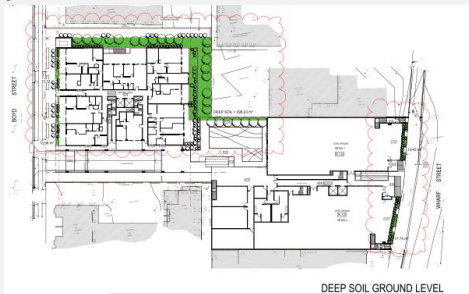
Development objectives	Assessment/Comment
<p>Objective 4D-2 Environmental performance of the apartment is maximised</p> <p>Design criteria</p> <ol style="list-style-type: none"> Habitable room depths are limited to a maximum of 2.5 x the ceiling height In open plan layouts (where the living, dining and kitchen are combined) the maximum habitable room depth is 8m from a window 	<p>The area complies.</p> <p>Should the bedroom be closed off there is no natural light or ventilation afforded to the bedroom.</p> <ol style="list-style-type: none"> The development includes ceiling heights of 2.9m. Based on the allowance $2.5 \times 2.9 = 7.25\text{m}$ Maximum depth. The development complies with the maximum 8m depth for open plan layouts. 
<p>Objective 4D-3 Apartment layouts are designed to accommodate a variety of household activities and needs</p> <p>Design criteria</p> <ol style="list-style-type: none"> Master bedrooms have a minimum area of 10m² and other bedrooms 9m² (excluding wardrobe space) Bedrooms have a minimum dimension of 3m (excluding wardrobe space) Living rooms or combined living/dining rooms have a minimum width of: <ul style="list-style-type: none"> 3.6m for studio and 1 bedroom apartments 4m for 2 and 3 bedroom apartments The width of cross-over or cross-through apartments are at least 4m internally to avoid deep narrow apartment layouts 	<ol style="list-style-type: none"> The proposed development generally complies with the exception of: The studio unit located at ground level of Block B has a bedroom $3.0\text{m} \times 2.7\text{m} = 8.1\text{m}$, which is below the required area. Complies, with the exception of the studio unit Complies Complies

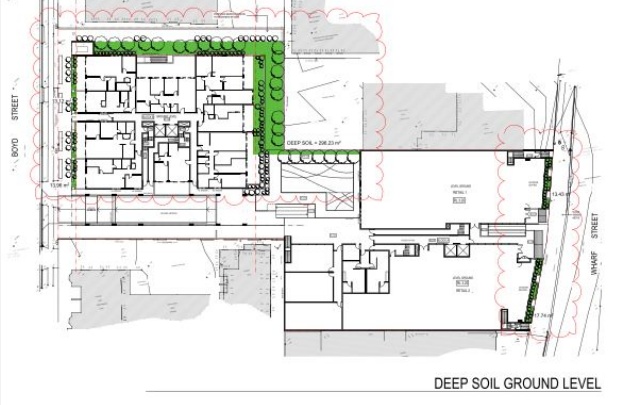

Development objectives	Assessment/Comment															
<p>Objective 4E-1 Apartments provide appropriately sized private open space and balconies to enhance residential amenity</p> <p>Design criteria</p> <p>1. All apartments are required to have primary balconies as follows:</p> <table><tr><th>Dwelling type</th><th>Minimum area</th><th>Minimum depth</th></tr><tr><td>Studio apartments</td><td>4m²</td><td>-</td></tr><tr><td>1 bedroom apartments</td><td>8m²</td><td>2m</td></tr><tr><td>2 bedroom apartments</td><td>10m²</td><td>2m</td></tr><tr><td>3+ bedroom apartments</td><td>12m²</td><td>2.4m</td></tr></table> <p>The minimum balcony depth to be counted as contributing to the balcony area is 1m</p> <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>	Dwelling type	Minimum area	Minimum depth	Studio apartments	4m ²	-	1 bedroom apartments	8m ²	2m	2 bedroom apartments	10m ²	2m	3+ bedroom apartments	12m ²	2.4m	<p>1. Complies</p> <p>2. All units except for the studio unit (Block B, Ground Floor) comply with the minimum area requirement of 15sqm. The studio is only adjoined by a private open space area of approximately 12sqm.</p> <p>Further to the above Units 1, 2, 6, studio, 7 and 8 do not comply with the required 3m depth, but propose approximately 2.6m.</p>
Dwelling type	Minimum area	Minimum depth														
Studio apartments	4m ²	-														
1 bedroom apartments	8m ²	2m														
2 bedroom apartments	10m ²	2m														
3+ bedroom apartments	12m ²	2.4m														
<p>Objective 4E-2 Primary private open space and balconies are appropriately located to enhance liveability for residents</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>Objective 4E-3 Private open space and balcony design is integrated into and contributes to the overall architectural form and detail of the building</p>	The proposed POS areas are considered to contribute to the overall architectural form of the building (see elevation plans for more detail). The proposed development includes a combination of solid and glass balustrade the locations and orientation are considered to offer passive surveillance.															
<p>Objective 4E-4 Private open space and balcony design maximises safety</p>	It is considered that the distance between floors and adjacent balcony will discourage climbing and reduce the number of falls.															
<p>Objective 4F-1 Common circulation spaces achieve good amenity and properly service the number of apartments</p> <p>Design criteria</p> <p>1. The maximum number of apartments off a circulation core on a single level is eight</p> <p>2. For buildings of 10 storeys and over, the maximum number of apartments sharing a single lift is 40</p>	<p>1. The proposed development includes a maximum of 10 units which are accessed from the central circulation core. Notwithstanding this the development provides 2 units for each block and the configuration of the units implies that from the core access area each direction will service a maximum 5 units.</p> <p>2. N/A the proposed development does not exceed 10 storeys.</p>															
<p>Objective 4F-2 Common circulation spaces promote safety and provide for social interaction between residents</p>																

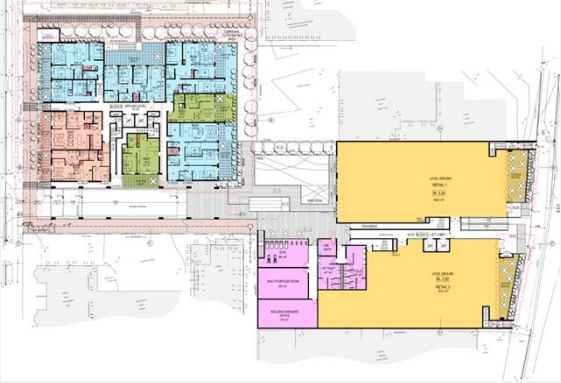


Development objectives	Assessment/Comment										
<p>Objective 4G-1 Adequate, well designed storage is provided in each apartment</p> <p>Design criteria</p> <p>1. In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided:</p> <table border="1"> <thead> <tr> <th>Dwelling 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 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 – the site is setback from the side boundaries as a response to easements and access. All openings from internal and associated external living areas are generally face towards the street elevations as opposed to adjoining sites. The construction has to comply with all BCA separation requirements. The parking, commercial loading bay, plant room, pump room and bulky waste areas are located within the basement.</p>										
<p>Objective 4H-2 Noise impacts are mitigated within apartments through layout and acoustic treatments</p>	<p>Complies – 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. The service areas are located within the basement Commercial uses are at ground level and present to the street frontage and not internally. Units external living areas face the street frontages Appropriate units layouts and services provide increase separation within the building internally. Block B includes residential uses at ground level however is separated from proposed Block A, which includes commercial/retail tenancies. The main communal podium and gym facilities are located adjoining the commercial component of the site.</p>										

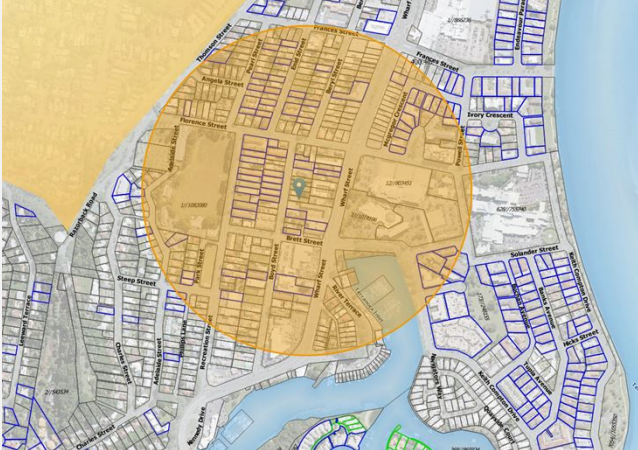
Development objectives	Assessment/Comment																																																																																																																																							
<p>Objective 4J-2</p> <p>Appropriate noise shielding or attenuation techniques for the building design, construction and choice of materials are used to mitigate noise transmission</p>	<p>As discussed above the openings from living and POS areas presents to the street as opposed to adjoining onsite and neighbouring properties. In relation to POS areas the development includes solid balcony balustrades and screening as required.</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>Under the amend plans the proposed development provides the following unit mix:</p> <table><tr><th colspan="5">Schedule of Units: Wharf Street</th></tr><tr><th></th><th>1B</th><th>2B</th><th>3B</th><th>4B</th></tr><tr><td>Ground</td><td></td><td colspan="3">commercial</td></tr><tr><td>Level 1</td><td></td><td>9</td><td></td><td></td></tr><tr><td>Level 2</td><td></td><td>9</td><td></td><td></td></tr><tr><td>Level 3</td><td></td><td>9</td><td></td><td></td></tr><tr><td>Level 4</td><td></td><td>6</td><td></td><td></td></tr><tr><td>Level 5</td><td></td><td>6</td><td></td><td></td></tr><tr><td>Level 6</td><td></td><td>6</td><td></td><td></td></tr><tr><td>Level 7</td><td></td><td></td><td>1</td><td>1</td></tr><tr><td>Level 8</td><td></td><td></td><td></td><td></td></tr><tr><td>Total</td><td>0</td><td>45</td><td>1</td><td>1</td></tr><tr><td>total</td><td colspan="4">47</td></tr></table> <table><tr><th colspan="4">Schedule of Units: Boyd Street</th></tr><tr><th></th><th>1B</th><th>2B</th><th>3B</th></tr><tr><td>Ground</td><td>3</td><td>3</td><td>3</td></tr><tr><td>Level 1</td><td>2</td><td>5</td><td>3</td></tr><tr><td>Level 2</td><td>2</td><td>5</td><td>3</td></tr><tr><td>Level 3</td><td>2</td><td>5</td><td>3</td></tr><tr><td>Level 4</td><td>1</td><td>7</td><td>0</td></tr><tr><td>Level 5</td><td>1</td><td>7</td><td>0</td></tr><tr><td>Level 6</td><td>1</td><td>7</td><td>0</td></tr><tr><td>Level 7</td><td>1</td><td>7</td><td>0</td></tr><tr><td>Level 8</td><td>0</td><td>4</td><td>0</td></tr><tr><td>Total</td><td>13</td><td>50</td><td>12</td></tr><tr><td>total</td><td colspan="3">75</td></tr></table> <table><tr><th colspan="3">Unit breakdown</th></tr><tr><td colspan="2">Total units in development</td><td>122</td></tr><tr><td>Unit type</td><td>Number</td><td>%</td></tr><tr><td>1B</td><td>13</td><td>10.6%</td></tr><tr><td>2B</td><td>95</td><td>78%</td></tr><tr><td>3B and 4B</td><td>14</td><td>11.4%</td></tr></table> <p>The development also includes 12% of units being adaptable and a range of dual key apartments to allow use as 2 or 3 bedrooms as required by the market.</p> <p>The site is within walking distance to a range of services and facilities and has a public transport service including bus stops immediately adjoining the Wharf Street frontage.</p> 	Schedule of Units: Wharf Street						1B	2B	3B	4B	Ground		commercial			Level 1		9			Level 2		9			Level 3		9			Level 4		6			Level 5		6			Level 6		6			Level 7			1	1	Level 8					Total	0	45	1	1	total	47				Schedule of Units: Boyd Street					1B	2B	3B	Ground	3	3	3	Level 1	2	5	3	Level 2	2	5	3	Level 3	2	5	3	Level 4	1	7	0	Level 5	1	7	0	Level 6	1	7	0	Level 7	1	7	0	Level 8	0	4	0	Total	13	50	12	total	75			Unit breakdown			Total units in development		122	Unit type	Number	%	1B	13	10.6%	2B	95	78%	3B and 4B	14	11.4%
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Development objectives	Assessment/Comment
<p>Objective 4K-2 The apartment mix is distributed to suitable locations within the building</p>	<p>Generally complies – whilst it is acknowledged that the development offers some diversity in the number of units proposed the above tables indicate that the building adjoining Wharf Street is comprised solely of 2b units from levels 1-6 and level 7 is comprised of 1 x 3B and 1 x 2B.</p> <p>Block B which faces Boyd Street is considered to make more of an effort to distribute the mix of apartments with the ground level- L3 offering a range of 1, 2 and 3 bedrooms consistent with Figure 4K.3. While Levels 4-7 include 7 x 2 bedrooms and 1 x 1 bedroom and Level 8 is comprised of 4x 2 beds (with possibility of being adapted to 3 beds).</p> <p>Larger unit types are located on roof levels.</p>
<p>Objective 4L-1 Street frontage activity is maximised where ground floor apartments are located</p>	<p>The development offers direct street frontage for the residential units adjoining Boyd Street and Commercial uses fronting Wharf Street.</p> <p>The amended plans for the Commercial component of the development (Wharf Street) include landscaping by the way of planter boxes and glass balustrades. The plans appear to include a potential dining/refreshment room within one of the tenancies (no uses are proposed/approved under this application). This is considered to engage the street.</p> <div data-bbox="938 1178 1422 1393" data-label="Image"> </div> <div data-bbox="948 1422 1410 1624" data-label="Image"> </div> <p>The Boyd Street residential uses each have direct access to the road reserve, adjoining POS areas and offer suitable areas for landscaping and open fences.</p> <p>Both building include direct access and internal circulation entrances.</p>
<p>Objective 4L-2 Design of ground floor apartments delivers amenity and safety for residents</p>	<p>Complies – the internal layout and positioning of ground floor uses and adjoining external living and POS areas are considered to offer amenity and safety for residents and offer passive surveillance of the adjoining areas.</p>

Development objectives	Assessment/Comment
Objective 4M-1 Building facades provide visual interest along the street while respecting the character of the local area	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.
Objective 4M-2 Building functions are expressed by the facade	Complies – all building entries are clearly defined and the internal layouts are expressed internally through party walls and floor slabs.
Objective 4N-1 Roof treatments are integrated into the building design and positively respond to the street	The proposed development is considered to break down the mass of the roof by using smaller elements essentially avoiding bulk. The roof treatments and services are located centrally. Accordingly are not visible from external land areas.
Objective 4N-2 Opportunities to use roof space for residential accommodation and open space are maximised	The submitted SEPP 65 Assessment advises that the development general compliance is achieved. The submitted plans do not make reference to the use of the roof areas.
Objective 4N-3 Roof design incorporates sustainability features	The design of the roof allows for larger overhangs to provide shading to openings and allows useability of open spaces areas.
Objective 4O-1 Landscape design is viable and sustainable	<p>The subject application included the provision of a landscape concept plan and the below (as amended) DSZ plan.</p>  <p>The site is considered to offer minimal landscaping, however when considering the location, proximity to Public Open Space, the proposed landscaping located along both street frontage and planter boxes on multiple levels as detailed in the concept plan, it is considered that conditions with this regard may be applied to ensure that all landscaping proposed will be viable and sustainable.</p>
Objective 4O-2 Landscape design contributes to the streetscape and amenity	<p>The amended plans have included the following: Landscaping bays along the Wharf street reserve – Commercial area; and Landscaped courtyards with an open fence along the Boyd Street residential component.</p> <p>It is considered that appropriate conditions would ensure that the landscape design contributes to the street scape and amenity.</p>
Objective 4P-1 Appropriate soil profiles are provided	The proposed development includes a basement parking area. The plan below details the area of DSZ where there is no easement or basement underneath.

Development objectives	Assessment/Comment
	 <p>DEEP SOIL GROUND LEVEL</p> <p>The area nominated to the east of block B includes an area of approximately 6.8m x 24m (3.5% of the site area)</p> <p>The area nominated to the north of block B provides approximately 2.8m in depth.</p> <p>The site is comprised of approximately 6.5% DSZ (when including all nominated areas shown below, however as noted above the area to the north does not comply with dimensions for large tree plantings as discussed under the ADG) – the ADG requires 7% DSZ and a minimum dimension of 6m.</p>
<p>Objective 4P-2 Plant growth is optimised with appropriate selection and maintenance</p>	<p>As discussed previously any landscaping/planting is required to be suitable to the site. Appropriate conditions will be applied to any consent in relation to native requirements, size requirements (based on limited DSZ areas) and the provision of a maintenance plan.</p>
<p>Objective 4P-3 Planting on structures contributes to the quality and amenity of communal and public open spaces</p>	<p>The application provides the following (which are considered to be integrated into the building façade where applicable):</p>  <p>GROUND LEVEL</p> <p>Planter boxes located along the Wharf Street frontage (Commercial area)</p> <p>Planter boxes located in POS areas of the residential units of Block B facing into the communal ground areas (eastern elevation)</p> <p>Courtyard landscaping on the Boyd Street Frontage</p>

Development objectives	Assessment/Comment
	 <p>UPPER LEVELS Level 4, 7 and 8 include the provision of planter boxes for amenity</p>  <p>Podium communal area</p> 
<p>Objective 4Q-1 Universal design features are included in apartment design to promote flexible housing for all community members</p>	
<p>Objective 4Q-2 A variety of apartments with adaptable designs are provided</p>	<p>The proposed development includes adaptable uses comprised of the following:</p> <ul style="list-style-type: none"> • 12 units which are adaptable (10% units). The units are dual key and generally considered to be

Development objectives	Assessment/Comment
	<p>useable for home office or 2/3 bedroom residential.</p> <ul style="list-style-type: none"> The units all benefit from POS and access to communal open space onsite and public (with a range of services, libraries, recreation, shopping and hospitals all being within a 400m/5 minute walking distance) – see image below.  <p>The adaptable units comply with the requirements for solar access. All parking shall be titled appropriately.</p>
<p>Objective 4Q-3 Apartment layouts are flexible and accommodate a range of lifestyle needs</p>	<p>The proposed development includes open plan living which can accommodate different layout options and functions. All 2 bedrooms units are comprised of 2 bathrooms and external living areas.</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>The location of the proposed commercial component adjoins the Wharf Street Road Reserve. The area directly adjoins a public bus stop and services. The development has an active and engaging frontage, avoids blank walls and proposes a range of future uses and tenancy sizes)</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>The proposed development offering vehicle and pedestrian access from within the site basement. The basement area is</p>
<p>Objective 4T-1 Awnings are well located and complement and integrate with the building design</p>	<p>The proposed development includes continuous awnings along the Wharf street commercial component of the application. The development includes awnings for shade cover and protection as entrances to the buildings.</p>

Development objectives	Assessment/Comment
Objective 4T-2 Signage responds to the context and desired streetscape character	The subject application does not propose any signage. Notwithstanding this it is considered that any future signage will be able to respond to the context and desired streetscape character.
Objective 4U-1 Development incorporates passive environmental design	The proposed development is considered to incorporate passive environmental design. The development complies with requirements for natural lighting and offers a large communal area for clothes drying.
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	The submitted ventilation plan demonstrates natural cross ventilation, with the internal layouts of the proposed dwellings grouping 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	COUNCILS STORMWATER COMMENTS
Objective 4V-3 Flood management systems are integrated into site design	COUNCILS STORMWATER COMMENTS
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 capable of accommodating individual waste units. The development includes a waste room located on basement level 1 and the provision of a bulky waste storage area.
Objective 4W-2 Domestic waste is minimised by providing safe and convenient source separation and recycling	As discussed previously the proposed development includes areas within in each capable of accommodating individual waste units. The development includes a waste room located on basement level 1 and the provision of a bulky waste storage area.
Objective 4X-1 Building design detail provides protection from weathering	The proposed development offers a range of building materials, including brick, render, glass balustrade, screening etc. The proposed building design is considered to suitable for weathering.
Objective 4X-2 Systems and access enable ease of maintenance	The development is considered to include minimal windows which are inaccessible from the outside of the building. All windows are accessible internally. 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. The development includes a partial brick façade and circulation areas are assumed to be comprised of heavy duty materials.