

Chapter 4 – Design of residential apartment development

Chapter 4 of this policy aims to improve the quality of residential apartment development and provides an assessment framework ('the Apartment Design Guide') to facilitate the assessment of 'good design'.

This chapter applies to the proposed development as it is defined as a residential flat building, is a new building that is at least 3 stories and contains at least 4 dwellings.

Section 147(1)(a) requires that the consent authority considers the design principles for residential apartment developments set out in Schedule 9 of the policy. An assessment against the design principles has been undertaken in **Table 1** below.

Table 1. Assessment against design quality principles

Quality Design Principles	
Principle	Assessment
Principle 1: Context and neighbourhood character	<p>Principle 1 identifies that good design responds and contributes to its context, with context being established by the key natural and built features of an area. Responding to context involves identifying the desirable element of an area's existing or future character.</p> <p>The site is located on the corner of Stockton and Tomaree Street, with Stockton Street being one of the main commercial streets in the Nelson Bay town centre. The site is zoned E1 local centre and is surrounded by a mixture of development typologies with a small scale residential flat building existing to the sites south and north, commercial premises to the east and multi-dwelling housing to the west. The wider locality reflects this mixed development typology in all directions.</p> <p>The proposed development is in a shop top housing form, providing commercial premises on the ground floor orientated towards Stockton Street and Tomaree Street. This design reinforces the existing character and function of Stockton Street which as noted above, is one of the main commercial streets in the Nelson Bay town centre.</p> <p>In terms of the scale, the proposed developments scale is of a larger scale than existing developments within the sites immediate surrounds. This is considered to be symptomatic of the area undergoing change.</p> <p>The site was subject to an amendment to the LEP, which increased the allowable maximum height of buildings on the subject site and surrounding sites. The heights were increased in accordance with the Nelson Bay Town Centre</p>

Quality Design Principles	
	<p>Strategy which highlighted the importance of the future built form being consistent with the topography Nelson Bay's natural amphitheatre. The density and height positioning for future development throughout the Nelson Bay centre were adopted to promote and reinforce the natural topography and ensure that important views and vistas were retained.</p> <p>The proposal is compliant with the height and FSR controls. However, given the height limit is relatively new, the proposed development will inevitably be of a greater scale than those existing within the sites vicinity.</p> <p>Council's Housing Supply Plan identifies that the Nelson Bay Town Centre as a focus area for new mid-rise and high-rise development, including the provision of 960 new homes. The proposal provides an additional 48 units within a high-rise format and is therefore consistent with Council's Housing Supply Plan.</p> <p>Considering the areas changing context, it is considered that the proposal is consistent with this principle.</p>
Principle 2: Built form and scale	<p>Principle 2 identifies that good design achieves a scale, bulk and height appropriate to the existing or desired future character of the street and surrounding buildings.</p> <p>As briefly mentioned above, the proposed development is generally consistent with the existing built form of the area but more aligned with the desired built form and scale. The proposal has been designed with a presentation to both street frontages that will complement the public domain and contribute to the character of the streetscape.</p>
Principle 3: Density	<p>Principle 3 stipulates that good design achieves a high level of amenity for residents and each apartment, resulting in a density appropriate to the site and its context.</p> <p>The proposal is compliant with the FSR control within the PSLEP.</p> <p>The development also includes sufficient separation distances between apartments, a compliant landscaping design and suitable communal open space areas.</p>
Principle 4: Sustainability	<p>Principle 4 identifies that good design combines positive environmental, social and economic outcomes. Further, that good sustainable design includes the use of natural cross ventilation and sunlight for the amenity and liveability of residents.</p> <p>A valid BASIX certificate has been submitted with the development. Each unit achieves sufficient solar access and ventilation to reduce powered heating and cooling demand.</p>

Quality Design Principles	
	<p>Solar panels are proposed on the roof of the development which contributes to the sustainability of the development.</p> <p>One electric vehicle charging space is provided in the car park, with all car parks to be designed to include the provision of electrical circuitry with the capacity to provide charging facilities for an electric vehicle.</p> <p>Deep soil landscaping meeting the minimum percentage requirement of the ADG is also proposed.</p>
Principle 5: Landscape	<p>Principle 5 specifies that good design recognises that together landscape and buildings operate as an integrated and sustainable system, resulting in attractive developments with good amenity.</p> <p>The proposal incorporates landscaped areas comprising a mixture of native and non-native species.</p>
Principle 6: Amenity	<p>Principle 6 provides that good design positively influences internal and external amenity for residents and neighbours. Good amenity combines appropriate room dimensions and shapes, access to sunlight, natural ventilation, outlook, visual and acoustic privacy, storage, indoor and outdoor space, efficient layouts and service areas, and ease of access for all age groups and degrees of mobility.</p> <p>All apartments are provided with:</p> <ul style="list-style-type: none"> • Appropriate room dimensions and shapes, • Natural ventilation, • Visual privacy, • Appropriate storage, • Usable indoor and outdoor space, • Efficient layouts and service areas, • Ease of access for all age groups and degrees of mobility. <p>In addition to the above, the proposal is located within the Nelson Bay town centre and therefore provides future residents easy access to public amenities including parks and beaches as well as essential services and shops.</p>
Principle 7: Safety	<p>Principle 7 identifies that good design optimises safety and security within the development and public domain.</p> <p>The proposal has been designed to optimise safety for future residents and the community. Pedestrian access to the RFB has been minimised to one access point to the lobby. Stair and lift access is also provided from each level of the car parking for residents.</p>

Quality Design Principles	
Principle 8: Housing diversity and social interaction	<p>Balconies are orientated towards the Stockton and Tomaree Street frontages providing good passive surveillance.</p> <p>Principle 8 specifies that good design achieves a mix of apartment sizes, providing housing choices for different demographics, living needs and household budgets.</p> <p>The proposed development includes an appropriate apartment mix that will be suitable to cater for a cross-section of future residents.</p> <p>Two communal spaces are proposed offering different experiences for uses. The proposed layout of both communal areas provides the opportunity for social interaction.</p>
Principle 9: Aesthetics	<p>Principle 9 provides that good design achieves a built form that has good proportions and a balanced composition of elements, reflecting the internal layout and structure. Good design also uses a variety of materials, colours and textures.</p> <p>The proposal has been designed with a variety of materials, colours and textures.</p>

Section 147(1)(b) requires the consent authority to consider the Apartment Design Guide (ADG). An assessment of the application against the ADG has been undertaken in **Table 2** below.

Table 2. Apartment Design Guide Assessment

Apartment Design Guide Assessment Criteria		
Control / Requirement	Proposed	Compliance / Comment
<p>3A-1 – Site analysis</p> <p>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>	Site analysis plan submitted.	Yes – provided.
<p>3B-1 Orientation</p> <p>Building types and layouts respond to the streetscape and site while</p>	The building is appropriately located on the site and is considered to suitably respond to the desired future character of the area. The development is orientated as much as possible to	Yes – complies.

Apartment Design Guide

optimising solar access within the development.

the north-east and north-west, maximising the number of apartments with good solar access to living spaces and terraces.

3B-2 Orientation

Overshadowing of neighbouring properties is minimised during mid-winter.

The applicant provided solar diagrams for the proposed shadowing impacts during mid-winter. Living areas, private open space and communal open space received appropriate solar access. This is discussed further below.

Yes – complies.

All adjoining properties continue to receive the required hours of solar access.

It does not appear to reduce solar access by more than 20% which is consistent with ADG requirements.

3C-1 Public Domain Interface

Transition between private and public domain is achieved without compromising safety and security.

The proposed development achieves an appropriate transition between the public and private domain through the built form, use of landscaping and identifiable access points.

Yes – complies.

Each unit fronting Stockton and Tomaree Street has a balcony overlooking the street providing passive surveillance.

3C-2 Public Domain Interface

Amenity of the public domain is retained and enhanced.

The site is currently vacant, being used informally as a car park. The development will enhance the public domain interface by providing additional commercial premises along Stockton Street reinforcing its commercial nature whilst also providing residential apartments in a well located position.

Yes – complies.

Apartment Design Guide

3D-1 Communal and Public Open Space

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

Numerical design criteria:

- Communal open space has a minimum area equal to 25% of the site area.
- 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 9am and 3pm on 21 June (midwinter).

Two formal areas of communal space are proposed. One is located on the ground floor fronting Stockton Street and is approximately 64.5m². This area is mostly internal but provides an outdoor terrace. The second space is an outdoor area located on level one and is approximately 422.9m². The area contains a swimming pool, outdoor seating, landscaped areas, an internal common kitchen and accessible bathroom. Outdoor seating and areas to gather are also provided within the covered lobby area adjacent to the two commercial premises fronting Tomaree Street and within the north and western side setback areas where a footpath throughout the landscaped area is provided for residents.

The total amount of communal open space provided is 685.4m², accounting for 30.29% of the site area which is compliant with this control.

The principal useable open space has been assessed as being the communal area located on level one. At least 50% of the communal area receive direct sunlight for a minimum of 2 hours mid-winter.

Yes –
complies

3D-2 Communal and Public Open Space

Communal open space is designed to allow for a range of activities, respond to site conditions and be attractive and inviting

The communal open space provides a range of activities including outdoor seating, a work from home space and a swimming pool.

Yes –
complies.

Apartment Design Guide		
<p><i>3D-3 Communal and Public Open Space</i></p> <p>Communal open space is designed to maximise safety.</p>	<p>Passive surveillance is provided to the communal open space from units.</p>	<p>Yes – complies.</p>
<p><i>3D-4 Communal and Public Open Space</i></p> <p>Public open space, where provided, is responsive to the existing pattern and uses of the neighbourhood.</p>	<p>N/A – no public open space is provided.</p>	<p>N/A</p>
<p><i>3E-1 Deep Soil Zones</i></p> <p>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.</p> <p>Numerical design criteria:</p> <ul style="list-style-type: none"> • Site area between 650m² – 1,500m² – minimum 3m dimension and 7% of site area. <p>However, the design criteria may not be possible on some sites including:</p> <ul style="list-style-type: none"> • Central business district. • Constrained sites. • High density areas. • Commercial centres. • Where there is 100% site coverage or non-residential uses at ground floor. 	<p>Site area is 2,262.7m², deep soil area is 221.6m² = 9.79% = compliant with ADG requirements.</p>	<p>Yes – complies.</p>
<p><i>3F-1 Visual Privacy</i></p> <p>Adequate building separation distances are shared equitably between</p>	<p>The proposed development provides the following minimum setbacks to habitable rooms / balconies:</p>	<p>Yes – complies</p>

Apartment Design Guide

neighbouring sites, to achieve reasonable levels of external and internal visual privacy.

Numerical design criteria:

- Building height up to 12m (4 storeys):
- Habitable rooms and balconies - 6m.
- Non habitable rooms – 3m.
- Building height up to 25 metres (5-8 storeys):
- Habitable rooms and balconies - 9m.
- Non habitable rooms – 4.5m.
- Building height over 25m (9+ storeys):
- Habitable rooms and balconies - 12m.
- Non habitable rooms – 6m.
- No separation is required between blank walls.
- An additional 3 m separation is required when adjacent to a different zone which permits lower density residential development to provide a transition in scale and increased landscaping.

Northern setback

The basement level is setback a minimum of 2.1m from the northern boundary. No separation is required for blank walls and therefore the setback is consistent with the ADG.

A portion of the lower ground floor is exposed in the north east of the site. This area has a 3m setback and does not contain habitable rooms and is therefore consistent with the ADG.

The non-habitable portions of the ground floor are setback 3m. The setback from the ground floor unit's habitable room is 6m and is therefore compliant with the ADG.

The habitable rooms on floors 1 – 4 are setback 6m, which is compliant.

Habitable rooms on floors 5 – 7 are setback 9m as required by the ADG.

Western setback

The basement and lower ground levels are setback a minimum of 2.1m from the northern boundary. No separation is required for blank walls and therefore the setback is consistent with the ADG.

The ground floor does not have habitable rooms fronting the western boundary and is setback 6m and therefore compliant.

Levels 1 – 3 habitable rooms are setback 6m.

Levels 4 – 7 are setback 9m as required by the ADG.

Eastern and southern setback

The eastern and southern boundaries front Stockton Street and Tomaree Street, respectively.

Apartment Design Guide

3F-2 Visual Privacy

Site and building design elements increase privacy without compromising access to light and air and balance outlook and views from habitable rooms and private open space.

The setbacks to the nearest buildings, including both residential and commercial is a minimum of 20m and therefore exceeds the minimum design requirements.

The proposed development exceeds all minimum separation distance criteria between adjoining sites and therefore it is considered that adequate visual privacy is achieved. Notwithstanding, some units have been provided with vertical screening and solid balustrading to improve internal privacy. However, this will also contribute to further external privacy.

Yes – complies.

3G-1 Pedestrian Access and Entries

Building entries and pedestrian access connects to and addresses the public domain.

The proposed development includes an entry lobby off Tomaree Street which is accessed via a pedestrian path from the street frontage, therefore addressing the public domain.

Yes – complies.

3G-2 Pedestrian Access and Entries

Access, entries and pathways are accessible and easy to identify.

The entry lobby has been clearly defined, this has been achieved through the use of landscaping and differing coloured materials to celebrate the entrance point to the building.

Yes – complies.

3G-3 Pedestrian Access and Entries

Large sites provide pedestrian links for access to streets and connection to destinations.

Pedestrian access to the street is provided from the footpath to the entry lobby.

Yes – complies.

Apartment Design Guide

3H-1 Vehicle Access

Vehicle access points are designed and located to achieve safety, minimise conflicts between pedestrians and vehicles and create high quality streetscapes.

The proposed vehicle access point and pedestrian access via the entry footpath and lobby are separated appropriately.

Yes –
complies.

3J-1 Bicycle and Car Parking

Car parking is provided based on proximity to public transport in metropolitan Sydney and centres in regional areas.

The site is not within 400m of land zoned mixed use or commercial core nor is Nelson Bay a nominated regional centre and therefore Chapter B8 of the PSDCP applies to the proposal rather than the Guide to Traffic Generating Developments.

Yes –
complies

Numerical design criteria:

- on sites that are within 800m of a railway station or light rail stop in the Sydney Metropolitan Area; or
- on land zoned, and sites within 400m of land zoned, B3 Commercial Core, B4 Mixed Use or equivalent in a nominated regional centre

As per the Chapter B8 of the PSDCP, 77 car parking spaces are required. The proposed development provides 83 spaces which is compliant with the DCP. Further discussion in regard to car parking is provided against Chapter B8 of the PSDCP.

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 less.

The car parking need for a development must be provided off-street.

Apartment Design Guide

<p><i>3J-2 Bicycle and Car Parking</i></p> <p>Parking and facilities are provided for other modes of transport.</p>	<p>One bike rack is proposed. This is consistent with the PSDCP.</p>	<p>Yes – complies</p>
<p><i>3J-3 Bicycle and Car Parking</i></p> <p>Car park design and access is safe and secure</p>	<p>The access is proposed to have a security garage door providing safe and secure parking.</p>	<p>Yes – complies</p>
<p><i>3J-4 Bicycle and Car Parking</i></p> <p>Visual and environmental impacts of underground car parking are minimised.</p>	<p>The visual and environmental impacts of the proposed basement car park have been minimised.</p> <p>Ground level access to the carpark is screened by security roller doors, with landscaping adjacent the entry/exit.</p>	<p>Yes - complies</p>
<p><i>3J-5 Bicycle and Car Parking</i></p> <p>Visual and environmental impacts of on-grade car parking are minimised.</p>	<p>On-grade car parking is proposed but located at the rear of the building and not visible from the public domain.</p>	<p>Yes – complies</p>
<p><i>3J-6 Bicycle and Car Parking</i></p> <p>Visual and environmental impacts of above ground enclosed car parking area minimised.</p>	<p>As above.</p>	<p>Yes – complies</p>

Apartment Design Guide

4A-1 Solar and Daylight Access

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

Numerical design criteria:

- In all other areas (i.e. areas outside Sydney metropolitan area, Newcastle and Wollongong local government 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
- A maximum of 15% of apartments in a building receive no direct sunlight between 9 am and 3 pm at mid-winter.

33/48 apartments receive 3 hours of direct sunlight between 9am and 3pm mid-winter which equates to 68.75% of apartments and is therefore compliant with the ADG. No apartments receive no direct sunlight.

Yes –
complies

4A-2 Solar and Daylight Access

Daylight access is maximised where sunlight is limited.

Daylight has been maximised where required.

Yes –
complies.

4A-3 Solar and Daylight Access

Design incorporates shading and glare control, particularly for warmer months.

Adequate shading and glare control are incorporated throughout the development, with the vertical screening provided as necessary.

Yes –
complies.

4B-1 Natural Ventilation

All habitable rooms are naturally ventilated.

All habitable rooms can be naturally ventilated.

Yes –
complies.

Apartment Design Guide

4B-2 Natural Ventilation

The layout and design of single aspect apartments maximises natural ventilation.

Complies. Single aspect apartments have been minimised.

Yes – complies.

4B-3 Natural Ventilation

The number of apartments with natural cross ventilation is maximised to create a comfortable indoor environment for residents.

A total of 38 of the 48 apartments are naturally cross ventilated. This exceeds the 60% requirement.

Yes – complies

Numerical design criteria:

- At least 60% of apartments are naturally cross ventilated in the first nine storeys of the building.
- Overall depth of a cross-over or cross-through apartment does not exceed 18m, measured glass line to glass line.

4C-1 Ceiling Heights

Ceiling height achieves sufficient natural ventilation and daylight access.

Habitable rooms on each floor have a ceiling height of 2.7m.

Yes - complies.

Numerical design criteria: Measured from finished floor level to finished ceiling level, minimum ceiling heights are:

- Habitable rooms – 2.7m.
- Non-habitable rooms – 2.4m,
- Two storey apartments – 2.7m for main living area floor and 2.4 m for second floor where it does not exceed 50% of the apartment area.

Apartment Design Guide

- Attic spaces – 1.8m at the edge of the room with a 30 degree minimum ceiling slope.
- If located in mixed use areas – 3.3m for ground floor and first floor to promote future flexibility of use.

4C-2 Ceiling Heights

Ceiling height increases the sense of space in apartments and provides for well-proportioned rooms.

Ceiling heights of 2.7m meet the minimum requirement and effectively create a sense of space in apartments.

Yes - complies.

4C-3 Ceiling Heights

Ceiling heights contribute to the flexibility of building use over the life of the building.

Ground Level ceiling heights of 3.5m are proposed for the commercial space to promote future flexibility of use.

Yes – complies.

Lower level apartments have not been provided with larger floor to ceiling heights. However, this is considered acceptable in this instance.

4D-1 Apartment Size and Layout

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

The following minimum internal areas have been proposed:

Yes – complies.

- One bedroom – 69.5m²
- Two bedroom – 89.9m²
- Three bedroom – 123.7m²
- Four bedroom – 143m²

Numerical design criteria: Apartments are required to have the following minimum internal areas:

All of the proposed apartments comply with the minimum areas required by the design criteria. All habitable rooms will have a window in an external wall.

- Studio – 35 m²
- One bedroom – 50 m²
- Two bedroom – 70m²
- Three bedroom – 90m²

Apartment Design Guide

- An additional 5m² is required for apartments with more than one bathroom.
- An additional 12m² is required for a fourth, and further additional bedrooms.
- 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.

4D-2 Apartment Size and Layout

Environmental performance of the apartment is maximised.

Numerical design criteria:

- Habitable room depths are limited to a maximum of 2.5 x the ceiling height.
- In open plan layout (where the living, dining and kitchen are combined) the maximum habitable room depth is 8m from a window.

4D-3 Apartment Size and Layout

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

Numerical design criteria:

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

Each habitable room includes the appropriate depth dimensions. Adequate lighting is afforded to each habitable room.

Yes – complies.

Proposed master bedrooms have a minimum area of 10m² and all other bedrooms have been provided with a minimum area of 9m².

Yes – complies.

All bedrooms have a minimum dimension of 3m (excluding wardrobe space).

All living rooms have a minimum width of 4 metres.

It is noted that a study with inbuilt storage is provided to a number of apartments. If these were to be

Apartment Design Guide

- Bedrooms have a minimum dimension of 3m (excluding wardrobe space).
- Living rooms or combined living/dining rooms have a minimum width of:
 - One bedroom apartments - 3.6m.
 - Two or three bedroom apartments – 4m.
- The width of cross-over or cross-through apartments are at least 4m internally to avoid deep narrow apartment layouts.

assessed as bedrooms they would not meet the required dimensions. As such, a condition has been recommended noting that studies are not to be converted to bedrooms without the prior consent from Council noting that this would also have implications for amenity and for the provision of car parking and storage.

4E-1 Private Open Space and Balconies

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

Numerical design criteria – all apartments are required to have primary balconies as follows:

- Studio apartments – 4m².
- One bedroom apartments – 8m² with a depth of 2m.
- Two bedroom apartments – 10m² with a depth of 2m.
- Three + bedroom apartments – 12m² with a depth of 2.4m.
- 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

The following minimum balcony areas have been proposed:

- One bedroom – 8.7m²
- Two bedroom – 13m²
- Three bedroom – 13.9m²
- Four bedroom – 27.9m²
- Ground floor and podium units – 18.9m²

Yes – complies.

A minimum depth of 3m is provided. The units are therefore compliant in this regard.

Apartment Design Guide

4E-2 Private Open Space and Balconies

Primary private open space and balconies are appropriately located to enhance liveability for residents.

All primary balconies are located adjacent to open plan living/dining spaces.

Yes – complies.

4E-3 Private Open Space and Balconies

Private open space and balcony design is integrated into and contributes to the overall architectural form and detail of the building.

The balconies have been designed to be incorporated into the overall design of the building.

Yes – complies.

4E-4 Private Open Space and Balconies

Private open space and balcony design maximises safety.

The proposed balcony design achieves an adequate level of safety.

Yes – complies.

4F-1 Common Circulation and Spaces

Common circulation spaces achieve good amenity and properly service the number of apartments.

Numerical design criteria:

- For buildings less than ten storeys in height the maximum number of apartments off a circulation core on a single level is eight.

The maximum number of apartments off a circulation core on a single level is five.

Yes – complies.

Two separate circulation cores are proposed incorporating one lift in each. One core will service 30 apartments whilst the other will service 20 apartments.

4F-2 Common Circulation and Spaces

Common circulation spaces promote safety and provide for social interaction between residents.

Common circulation areas are of a size that will provide for social intersection and promote safety.

Yes – complies

Apartment Design Guide

4G-1 Common Circulation and Spaces

Adequate, well designed storage is provided in each apartment.

Numerical design criteria –in addition to storage in kitchens, bathrooms and bedrooms the following storage is provided:

- Studio apartments – 4m².
- One bedroom apartments – 6m².
- Two bedroom apartments – 8m².
- Three + bedroom apartments – 10m².
- At least 50% of the required storage is to be located within the apartment.

All apartments proposed have storage areas that exceed this control. All storage areas provide at least 50% of the required storage within the apartment as required. Storage is also provided within storage spaces in the car park.

Yes – complies.

4G-2 Common Circulation and Spaces

Additional storage is conveniently located, accessible and nominated for individual apartments.

Additional storage is located within the car park and will be nominated for individual apartments and easily accessible.

Yes – complies.

4H-1 Acoustic Privacy

Noise transfer is minimised through the siting of buildings and building layout.

Noise transfer will be minimised through apartment design and separation together with the location of service areas in the proposed basements.

Yes – complies.

A Noise Impact Assessment (NIA) was prepared for the proposal by Engineering Science which concluded that with the incorporation of appropriate noise mitigation measures, such as the

Apartment Design Guide

	use of acoustic attenuators and roof extraction systems for the mechanical plant and carpark exhaust, the development is expected to comply with all relevant noise emission criteria.	
<p><i>4H-2 Acoustic Privacy</i></p> <p>Noise impacts are mitigated within apartments through layouts and acoustic treatments.</p>	The proposed layouts will adequately mitigate any potential noise impacts within apartments.	Yes – complies
<p><i>4J-1 Noise and Pollution</i></p> <p>In noisy or hostile environments the impacts of external noise and pollution are minimised through the careful siting and layout of buildings.</p>	The proposed development is not located in a noisy or pollutant environment, such as near a major road, rail line or beneath a flight path.	N/A.
<p><i>4J-2 Noise and Pollution</i></p> <p>Appropriate noise shielding or attenuation techniques for the building design, construction and choice of materials are used to mitigate noise transmission.</p>	The proposed development is not located in a noisy or hostile environment, such as near a major road, rail line or beneath a flight path.	N/A
<p><i>4K-1 Apartment Mix</i></p> <p>A range of apartment types and sizes is provided to cater for different household types now and into the future.</p>	<p>The development provides the following apartment mix:</p> <ul style="list-style-type: none"> • 4 x 1 bedroom apartments; • 36 x 2 bedroom apartments; • 5 x 3 bedroom apartments; and • 3 x 4 bedroom apartments. <p>This apartment mix is considered suitable.</p>	Yes – complies.

Apartment Design Guide

<p><i>4K-2 Apartment Mix</i></p> <p>The apartment mix is distributed to suitable locations within the building.</p>	<p>The apartments are appropriately distributed throughout the building.</p>	<p>Yes – complies.</p>
<p><i>4L-1 Ground Floor Apartments</i></p> <p>Street frontage is maximised where ground floor apartments are located.</p>	<p>N/A</p>	<p>N/A.</p>
<p><i>4L-2 Ground Floor Apartments</i></p> <p>Design of ground floor apartments delivers amenity and safety for residents.</p>	<p>N/A</p>	<p>N/A</p>
<p><i>4M-1 Facades</i></p> <p>Building facades provide visual interest along the street while respecting the character of the local area.</p>	<p>The development has been designed to be consistent with the desired character of the area and incorporate visual interest through the use of differing materials and finishes as well as through the articulation of the built form.</p>	<p>Yes – complies.</p>
<p><i>4M-2 Facades</i></p> <p>Building functions are expressed by the façade.</p>	<p>Each of the building functions are expressed by the façade.</p>	<p>Yes – complies.</p>
<p><i>4N-1 Roof Design</i></p> <p>Roof treatments are integrated into the building designed and positive respond to the streets.</p>	<p>The roof design has been inspired by the sites position within proximity to Kurrara Hill. Roof treatments are integrated into the building design.</p>	<p>Yes – complies.</p>

Apartment Design Guide

<p><i>4N-2 Roof Design</i></p> <p>Opportunities to use roof space for residential accommodation and open space are maximised.</p>	<p>A roof space has not been proposed.</p>	<p>No – non-compliant.</p>
<p><i>4N-3 Roof Design</i></p> <p><i>Roof design incorporates sustainability features.</i></p>	<p>The roof has been designed to cater for PV solar panels.</p>	<p>Yes – complies.</p>
<p><i>4O-1 Landscape Design</i></p> <p>Landscape design is viable and sustainable.</p>	<p>A landscaping design has been provided for the proposed development, prepared by Meraki Green Landscape Architecture. The species selection and landscape design includes native vegetation and appropriate soils to ensure that landscaping is viable and sustainable.</p>	<p>Yes – complies.</p>
<p><i>4O-2 Landscape Design</i></p> <p>Landscape design contributes to the streetscape and amenity.</p>	<p>The landscaping proposed contributes to the streetscape and amenity.</p>	<p>Yes – complies.</p>
<p><i>4P-1 Planting on Structures</i></p> <p>Appropriate soil profiles are provided.</p>	<p>The proposed landscaping plan indicates appropriate soil profiles are provided.</p>	<p>Yes – complies.</p>
<p><i>4P-2 Planting on Structures</i></p> <p>Plant growth is optimized with appropriate selection and maintenance.</p>	<p>Native plant species have been prioritised in the landscape plan thereby minimising maintenance.</p>	<p>Yes – complies.</p>

Apartment Design Guide

<p><i>4P-3 Planting on Structures</i></p> <p>Planting on structures contributes to the quality and amenity of communal and public open spaces.</p>	<p>Building design incorporates opportunities for planting on structures with landscaping provided on the structure in the communal open space area, fourth floor and seventh floor.</p>	<p>Yes - complies.</p>
<p><i>4Q-1 Universal Design</i></p> <p>Universal design features are included in apartment design to promote flexible housing for all community members.</p> <p>Numerical design criteria:</p> <ul style="list-style-type: none"> • A benchmark of 20% of the total apartments incorporate the Liveable Housing Guidelines silver level universal design features. 	<p>The design verification statement confirms that universal design features have been included in the design.</p> <p>A condition has been recommended that prior to the issue of a construction certificate, details demonstrating that 20% of the apartments proposed (10) incorporate the Liveable Housing Guidelines silver level universal design features.</p>	<p>Yes – complies.</p>
<p><i>4Q-2 Universal Design</i></p> <p>A variety of apartments with adaptable designs are provided.</p>	<p>The design verification statement confirms that universal design features have been included in the design.</p>	<p>Yes – complies.</p>
<p><i>4Q-3 Universal Design</i></p> <p>Apartment layouts are flexible and accommodate a range of lifestyle needs.</p>	<p>The apartment layouts are flexible and accommodate a range of lifestyle needs.</p>	<p>Yes – complies.</p>
<p><i>4R-1 Adaptive Reuse</i></p> <p>New additions to existing buildings are contemporary and complementary and enhance an area's identity and sense of place.</p>	<p>The proposed development does not involve any additions to existing buildings.</p>	<p>N/A.</p>

Apartment Design Guide

4R-2 Adaptive Reuse

Adapted buildings provide residential amenity while not precluding future adaptive reuse.

The proposed development does not involve any additions to existing buildings.

N/A.

4S-1 Mixed Use

Mixed use developments are provided in appropriate locations and provide active street frontages that encourage pedestrian movement.

The site is located within the Nelson Bay town centre and is zoned E1 Local Centre and therefore the development as a mixed use development is considered appropriate in this location. The proposal includes ground floor commercial premises orientated toward both of the sites street frontages which provides activation and encourages pedestrian movement.

Yes –
complies

4S-2 Mixed Use

Residential levels of the building are integrated within the development, and safety and amenity is maximised for residents.

The residential and commercial circulation areas are separated from each other. Residential car parking and communal facilities are separated and secured.

Yes –
complies

4T-1 Awnings and Signage

Awnings are well located and complement and integrate with the building design.

Awnings are provided over entries and integrated into the building design.

Yes –
complies.

4T-2 Awnings and Signage

Signage responds to the context and desired streetscape character.

N/A no signage is proposed.

N/A.

Apartment Design Guide

<p><i>4U-1 Energy Efficiency</i></p> <p>Development incorporates passive environmental design.</p>	<p>A valid BASIX certificate has been submitted. Adequate natural light will be provided to habitable rooms.</p>	<p>Yes – complies.</p>
<p><i>4U-2 Energy Efficiency</i></p> <p>Development incorporates passive solar design to optimise heat storage in winter and reduce heat transfer in summer.</p>	<p>A valid BASIX certificate has been provided. The development is considered to incorporate sufficient passive solar design to optimise heat storage in winter and reduce heat transfer in summer.</p>	<p>Yes – complies.</p>
<p><i>4U-3 Energy Efficiency</i></p> <p>Adequate natural ventilation minimises the need for mechanical ventilation.</p>	<p>The proposed development is compliant with the ADG's design criteria for 4B-3 Natural Ventilation.</p>	<p>Yes – complies.</p>
<p><i>4V-1 Water Management and Conservation</i></p> <p>Potable water use is minimised.</p>	<p>A valid BASIX certificate has been provided. A condition of consent requiring compliance with the BASIX has been imposed.</p>	<p>Yes – complies</p>
<p><i>4V-2 Water Management and Conservation</i></p> <p>Urban stormwater is treated on site before being discharged to receiving waters.</p>	<p>The proposed development includes a stormwater treatment system to ensure that stormwater is appropriately treated prior to discharge.</p>	<p>Yes – complies.</p>
<p><i>4V-3 Water Management and Conservation</i></p> <p>Flood management systems are integrated into the site design.</p>	<p>The stormwater design has been appropriately integrated into the design.</p>	<p>Yes – complies.</p>

Apartment Design Guide

4W-1 Waste Management

Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity of residents.

A waste storage area has been provided within the basement level. The waste room is appropriately screened from the street.

Yes – complies.

4W-2 Waste Management

Domestic waste is minimised by providing safe and convenient source separation and recycling.

Waste storage areas are provided on the ground floor of the development with separate storage rooms provided for the residential units and the commercial premises. A Waste Management Plan (WMP) has been prepared for the proposal by WGA which considers operational waste. The residential component of the development is to be serviced by a bulk waste room, a residential bin room with chutes and another residential bin room to service the ground level apartment. The commercial component is to be serviced by a single waste room. the WMP identified that one collection per week will be required for both recycling and general waste. The WMP confirmed that the waste rooms provided on the ground floor are suitable to store the required waste bins. It is proposed that waste will be collected on-site within the car park. Swept paths have been provided which demonstrate that a waste vehicle can enter and exit the site in a forward direction. It is noted that waste collection will be required to be undertaken by a private waste contractor.

Yes – complies.

Apartment Design Guide

4X-1 Building Maintenance

Building design detail provides protection from weathering.

The proposal includes the use of pre-cast concrete panel, stone cladding and compressed fibre cement concrete to ensure longevity and minimise weathering.

Yes – complies.

4X-2 Building Maintenance

Systems and access enable ease of maintenance.

Accessible services areas have been proposed.

Yes – complies.

4X-3 Building Maintenance

Material selection reduces ongoing maintenance costs.

Robust materials that will weather well have been proposed.

Yes – complies