SEPP 65 Apartment Design Guide – Verification Statement

Compass Station Development

43 Station Street, Wickham, NSW

Newcastle
115 King Street
Newcastle, NSW
2300 Australia

T 02 4929 1843

Central Coast
1/28 Adelaide Street
East Gosford, NSW
2250 Australia

T 02 4321 0503

www.ckds.com.au
admin@ckds.com.au

Sydney
Central Coast
Newcastle

1.1. Apartment Design Guide Verification Statement

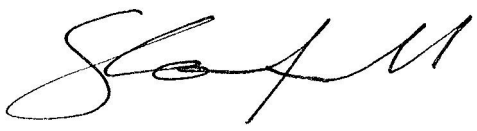
The assessment of the proposal is made in accordance with respect to the Design Quality principles as set out in the Apartment Design Guide and aims to achieve the following:

- Good design is a creative process which, when applied to towns and cities, results in the development of great urban places: buildings, streets, squares and parks.
- Good design is inextricably linked to its site and locality, responding to the landscape, existing built form, culture and attitudes. It provides sustainable living environments, both in private and public areas.
- Good Design serves the public interest and includes appropriate innovation to respond to technical, social, aesthetic, economic and environmental challenges.
- The design quality principles do not generate design solutions, but provide a guide to achieving good design and the means of evaluating the merit of proposed solutions.

CKDS Architecture have prepared and reviewed the architectural drawings and are satisfied that the design meets the intent of the design quality principles set out in the Apartment Design Guide.

CKDS Architecture has extensive experience in the design of residential housing developments in various forms ranging from individual residential houses to high-density apartment development.

I, Stuart Campbell, of CKDS, verify that I contributed to the design of this residential apartment development, and that the design quality principles set out in the Apartment Design Guide are achieved for the proposed development at 43 Station Street, Wickham.



Stuart Campbell

ARBN 7545

1.2. State Environmental Planning Policies

i. Design Quality Principles

	Objective	Comment
1. Context and neighbourhood character.	*"Good design responds and contributes to its context. Context is the key natural and built features of an area, their relationship and the character they create when combined. It also includes social, economic, health and environmental conditions.* *Responding to context involves identifying the desirable elements of an area's existing or future character. Well designed buildings respond to and enhance the qualities and identity of the area including the adjacent sites, streetscape and neighbourhood.* *Consideration of local context is important for all sites, including sites in established areas, those undergoing change or identified for change."*	The proposal is situated on a Southern oriented lot which faces directly onto the Newcastle Transport Interchange on Station Street, Wickham. The project sits within the Rail Edge Precinct of Newcastle City Council's (NCC) Wickham Master Plan. Station Street is currently comprised of taxi ranks, short stay parking and drop off zones for the Newcastle Interchange, along its southern edge which abuts the rail line. Directly west of the proposal site is a converted warehouse, with smaller 1-2 storey dwellings to the east and north. At the eastern end of Station Street, at the junction of Railway Street, is a footbridge to Hunter street and the heritage identified land of the Lass O'Gowrie pub. The relatively under developed area has been identified as a "precinct which provides an interface to the emerging commercial core of the Newcastle City Centre (in Newcastle West) through provision of mixed-use development". As a result of, this Station St has been identified as being able to accommodate a 24m (8 Storeys) building height. The proposed development addresses the building height and acknowledges the ethos of the Wickham master plan through the establishment of a future street wall height, appropriate façade articulation, and achieves an urban density that will be reflected in future development.
2. Built form & Scale	*"Good design achieves a scale, bulk and height appropriate to the existing or desired future character of the street and surrounding buildings.* *Good design also achieves an appropriate built form for a site and the building's purpose in terms of building alignments, proportions, building type, articulation and the manipulation of building elements.* *Appropriate built form defines the public domain, contributes to the character of streetscapes and parks, including their views and vistas, and provides internal amenity and outlook."*	The proposal provides a ground level commercial tenancy opening on to Station Street, which is at grade (approx. RL +1.6m). This is 1m lower than the RL +2.6m flood planning level. This decision was made after Urban Design Consultative Group (UDCG) panel advice suggested the development explore this to provide a more usable commercial tenancy. Robust internal material selections and GPO's will be above the flood planning level to justify the 'at grade' commercial space. Pedestrian access to all levels of the residential development is via a foyer located centrally along Station Street. Minimum floor levels are 3.1m Floor to floors which will accommodate required ceiling heights comfortably. The ground floor has a generous floor to floor height of 4.1m to create a generous interface along Station. Car parking to the rear of the site will be landscaped with permeable paving to serve as a visual outlook from the residential units above. Along Station Street, the front setback steps from 0m at street corner blocks to 2m at interstitial lots. The proposal acts as a transition between these two differing controls to act as a coherent and logical way to achieve the intent of the DCP setbacks. The street wall height has been determined by adding together the 3.1m floor to floor storey heights with the additional 4.1m commercial floor to floor height. This equation of necessary storey heights brought the proposal street wall height to a more realistic 14.3m rather than the 12m outlined in the DCP. This new street wall height acts as a precedent for future development

	Objective	Comment
		neighbours to the west. The edge of the balcony line to the fourth, fifth, sixth and seventh floors are setback 2m with a clear change in materiality to clearly articulate the street wall. The front setback extends into the ADG 6m setback above 4 storeys along Station Street. However, due to the unique location of being situated directly north of the railway line, the impact of extending into this zone is negligible. This is due to any overshadowing only affecting the road and a small part of the western end of the platform, for a short period during the day in Winter. Refer to DA-301. Garage: The entry to the garage is integrated into the development and does not dominate the streetscape. The entry to the carpark is setback 2m from the front setback. Side setbacks: In accordance with the Newcastle DCP regarding B4 Mixed Use Zones, side boundaries may be built to the boundary where: - the wall height and length match an existing wall on the adjoining site; and - the proposed wall and the wall on the adjoining property do not contain any openings; and - the wall will not impede the flow of stormwater or overland flowpaths.
3. Density	*"Good design achieves a high level of amenity for residents and each apartment, resulting in a density appropriate to the site and its context.* *Appropriate densities are consistent with the area's existing or projected population. Appropriate densities can be sustained by existing or proposed infrastructure, public transport, access to jobs, community facilities and the environment."*	The proposed development density is in accordance with local development guidelines and desired future character of the area. The development has accommodated the proposed number of apartments without compromising the amenity of the development or its surroundings, whilst addressing the requirement for flooding. The proposed development achieves an FSR (2.8:1) that is lower than the allowed FSR (3:1).
4. Sustainability	*"Good design combines positive environmental, social and economic outcomes.* *Good sustainable design includes use of natural cross ventilation and sunlight for the amenity and liveability of residents and passive thermal design for ventilation, heating and cooling reducing reliance on technology and operation costs. Other elements include recycling and reuse of materials and waste, use of sustainable materials and deep soil zones for groundwater recharge and vegetation."*	The proposed design solution is consistent with the principles of the Apartment Design Guide particularly through the orientation and design of the units (solar access and ventilation). Consideration is given to materials to reduce heating and cooling costs.
5. Landscape	*"Good design recognises that together landscape and buildings operate as an integrated and sustainable system, resulting in attractive developments with good amenity. A positive image and contextual fit of well designed developments is achieved by contributing to the landscape character of the streetscape and neighbourhood.* *Good landscape design enhances the development's environmental performance by retaining positive natural features which contribute to the local context, co-ordinating water and soil management, solar access, micro-climate, tree canopy, habitat values and preserving green networks.* *Good landscape design optimises useability, privacy and opportunities for social interaction, equitable access, respect for neighbours' amenity and provides for practical establishment and long term management."*	The proposed design utilizes the given footprint of the site in an efficient and effective manner to accommodate required built features and integrated landscape features. While the proposed density of the area inhibits the extent of large landscaping areas the proposal maintains a high level of integrated landscaping through: - The presence of landscaped parking bays - Minimal maintenance planting by using robust landscape elements for rooftop planting A landscape architect has been engaged for the project.

	Objective	Comment
6. Amenity	*"Good design positively influences internal and external amenity for residents and neighbours. Achieving good amenity contributes to positive living environments and resident well being.* *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."*	- Each unit has been provided with a private outdoor space in the form of a north facing balcony that has a functional area and configuration conducive to recreational use. - 100% of apartments achieve more than 2 hours access to natural sunlight. - Privacy has been addressed to all opposing windows and is integrated as part of the development with its surrounding context. - The depth of the dwellings have been restricted to maintain reasonable access to natural daylight and ventilation to all rooms therein. - Units have been oriented to limit living areas facing southern rail way lines, thus reducing acoustic issues.
7. Safety	*"Good design optimises safety and security within the development and the public domain. It provides for quality public and private spaces that are clearly defined and fit for the intended purpose. Opportunities to maximise passive surveillance of public and communal areas promote safety.* *A positive relationship between public and private spaces is achieved through clearly defined secure access points and well lit and visible areas that are easily maintained and appropriate to the location and purpose."*	- The proposed layout of dwellings and vehicular parking has ensured that the majority of areas have clear lines of sight and access points. - Public and private domains are clearly distinguished and their relationship has been integrated through the use of openings and screening to ensure overlooking of public spaces without compromising the privacy of the apartments. - The entrance to the carpark has been setback 2m from the boundary and the proposed building line in order to increase visibility for traversing vehicles and passing pedestrians.
8. Housing Diversity and Social Interaction	*"Good design achieves a mix of apartment sizes, providing housing choice for different demographics, living needs and household budgets.* *Well designed apartment developments respond to social context by providing housing and facilities to suit the existing and future social mix.* *Good design involves practical and flexible features, including different types of communal spaces for a broad range of people and providing opportunities for social interaction among residents."*	- This proposal provides 16 units of approx. 56.25% 1 Bed, 43.75% 2 Bed apartments. - The development contributes positively through outdoor communal areas with visually pleasing landscaping elements that create an inviting communal space to promote social interaction amongst residents.
9. Aesthetics	*"Good design achieves a built form that has good proportions and a balanced composition of elements, reflecting the internal layout and structure. Good design uses a variety of materials, colours and textures.* *The visual appearance of a well designed apartment development responds to the existing or future local context, particularly desirable elements and repetitions of the streetscape."*	- The design has been detailed to reflect contemporary design initiatives through the use of variation in form and material. - The proposed development has been suitably treated to include material finishes, which have a high aesthetic content and as outlined in the DCP. - This approach ensures that the existing aesthetics of the area are retained as well as the intended future vision for the precinct. This includes addressing the small-scale form break up and materiality. - The material palette of robust precast panels with varied fillet joints combined with metal cladding elements reference the former light industrial character of the area.

ii. Part 1 – Identifying the context

Refer architectural drawings and analysis.

iii. Part 2 – Developing the controls

	Aim	Proposal	Compliance
2C. Building Height	To ensure future development responds to the desired scale and character of the street and local area.	The multi-storey development contains six levels of residential apartments above a commercial/common multipurpose space along Station Street. The development generally complies with the 24m HOB required by the LEP, with the exception of lift overruns and covered common rooftop. Exceeding the height limit is a result of addressing raised levels for flooding requirements and maintaining appropriate clearance. The minimal exceedance has no detrimental effects to neighbouring development due to the rail line being directly south of the proposal. Minimnal overshadowing of the Newcastle Interchange is expected. Refer to architectural drawing DA-401.	Yes, on merit
	Adequate daylight and solar access is facilitated to apartments, common open space, adjoining properties and the public domain.	The proposed design has considered adequate solar access to both proposed apartments and neighbouring dwellings. The proposed development does not adversely impact the amenities of neighbouring properties. In doing so it achieves a high percentage of direct natural lighting to living areas without overshadowing neighbouring private spaces.	Yes
	Building height controls promote articulated roof design and roof top communal open spaces, where appropriate	The Height of Building control set by the DCP is 24m which appropriately allows for articulation of building form. The proposed design has a roof articulation that is in keeping with contemporary multi-residential and commercial practice. This is important in addressing the existing, and future, identity of the area.	Yes
	Consideration: *Ensure the maximum building height controls respond to the desired number of storeys, the minimum floor to floor heights required for future building uses and include generous ground floor heights* *Where a floor space ratio control is defined, test height controls against the FSR to ensure a good fit*		
2D. Floor Space Ratio	To ensure that development aligns with the optimum capacity of the site and the desired density of the local area	The permissible FSR is 3:1 with an additional 0.6:1 with the affordable rental housing bonus, therefore providing a 3.6:1 FSR. The proposal achieves an overall FSR of 2.8:1, which is below the permissible FSR for the site. The GFA fits comfortably within the building envelope, providing generous communal circulation and landscaped spaces.	Yes
	Provide opportunities for building articulation and creativity within a building envelope by carefully setting the allowable floor space		

	Aim	Proposal	Compliance
2E. Building Depth	Ensure that the bulk of development relates to the scale of the desired future context	The proposed development relates to the scale of the desired future context by reflecting the urban grain likely to be seen by future development with carful articulation to provide clear streetwall heights and setbacks for any potential development along Station Street.	Yes
	Ensure building depths support apartment layouts that meet the objectives design criteria and design guidance within the apartment design guide.	The building depth has been considered to allow access from foyer corridors with natural ventilation. Deep reveals in the façade are necessary to provide a high level of cross ventilation to each apartment and direct views away from neighbouring properties.	Yes
2F. Building Separation	Ensure that the new development is scaled to support the desired future character with appropriate massing and spaces between buildings.	The scale and bulk of the proposed development responds to the desired future character of the area. The neighbouring lots to the north are adequately separated by the outlined ADG requirements. The southern Rail Corridor will not be affected. Whilst the Zero Setbacks to side boundaries are designed to be built up against fro future development. As a result of the negligible affect the proposal will have on neighbouring lots, the future character of Station street will be maintained and enhanced.	Yes on merit
	Assist in providing residential amenity including visual and acoustic privacy, natural ventilation, sunlight and daylight access and outlook	The proposed approach utilises an articulated roof form and deep reveals in the facade to direct views and increase solar access and natural ventilation on the site. This has little to no impact on neighbouring amenity given the articulated form and massing of the development.	Yes
	Provide suitable areas for communal open spaces, deep soil zones and landscaping	The Rail Edge Precinct which encompasses Station Street as part of the DCP and LEP aims to create a more dense mixed-use character. Such an approach minimises the potential for large areas of communal open spaces and deep soil planting zones. The development does however provide a landscaped rooftop, strong good solar access, cross ventilation and a visually pleasing outlook from units and commercial space.	Yes
	Considerations: *Test building separation controls for sunlight and daylight access to building and open spaces* *Minimum separation distances for buildings are:* *Up to four storeys (approx. 12m)* • *12m between habitable rooms/balconies* • *9m between habitable and non-habitable* • *6m between non-habitable rooms* *Refer guide for more stories.* *At the boundary between a change in zone from apartment buildings to a lower density area, increase the building setback from the boundary by 3m.*		
2G. Street Setbacks	Establish the desired spatial proportions of the street and define the street edge.	The building is built to a 0m front setback from the western boundary to the centre of the site. The	Yes

	Aim	Proposal	Compliance
	Provide space that can contribute to the landscape character of the street where desired	development then transitions to the 2m front setback to its eastern boundary in line with DCP controls. This provides a transition between two setback controls and sets a precedent for future development to meet. Furthermore, the building's 0m front setback along Station Street steps back to the entrance of the carpark. This has been set back 2m to increase visibility to traversing traffic. This approach aligns with the Wickham Master Plan – Rail edge and future vision for Station Street. The proposal maintains sight lines over public space and reinforces a safe and social public domain. Units are afforded visual privacy from the street with a clearly defined entrance between the break of two volumes in the massing of the development. Private open spaces are oriented to face North rather than the street to ensure privacy.	
	Create a clear threshold by providing a transition between public and private space.		
	Assist in achieving visual privacy to apartments from the street.		
	Create good quality entries to lobbies, foyers or individual dwellings		
	Promote passive surveillance and outlook to the street		
2H. Side & Rear Setbacks	Provide access to light, air and outlook for neighbouring properties and future buildings	The building is generally designed within permissible setbacks as set by the DCP. Where this is not achieved, visual and acoustic privacy was maintained through the use of screening and visual separation. The design addresses the bulk and scale of this approach to reinforce a rhythm and pattern that is at a human scale with the development and the objectives outlined by the Wickham master plan. The proposed development is built along the boundary on both sides which further allows neighbouring high density residential developments to be built adjacent to the proposed development and create a clear street frontage along Station Street. Further to this, the building provides a transition between proposed street backs to. Enabling future development to easily adopt the principles desired with in the Rail Edge Precinct.	Yes on merit
	Provide adequate privacy between neighbouring apartments		
	Retain or create a rhythm or pattern of spaces between buildings that define and add character to the streetscape		
	Achieve setbacks that maximise deep soil areas, retain existing landscaping and support mature vegetation consolidation across sites		
	Manage a transition between sites or areas with different development controls such as height and land use		

iv. Part 3 – Siting the development

	Objectives	Proposal	Compliance
3A. Site Analysis	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	Refer architectural drawings for illustration of information outlined in Appendix A of the *Residential Flat Buildings*, site analysis checklist.	Yes
3B. Orientation	3B-1. Building types and layouts respond to the streetscape and site while optimizing solar access within the development	The proposed building layout is a design response to create a visually harmonious streetscape with good outlook and amenity to units.	Yes

	Objectives	Proposal	Compliance
	3B-2. Overshadowing of neighbouring properties is minimized during mid winter	The proposed approach takes advantage of the lack of southern neighbours helping to site the building where the only impact would be to the street and minimally to the rail corridor. Refer to architectural drawings DA-401. This helps to better direct views and increase solar access and natural ventilation on the site. The articulation of the roof, and proposed eave line, has little to no impact on neighbouring dwellings during mid-winter.	
3C. Public Domain Interface	3C-1. Transition between private and public domain is achieved without compromising safety and security 3C-2. Amenity of the public domain is retained and enhanced	A separate private foyer entrance is provided between fire stair and commercial space. This is clearly defined as it lands between a break in two volumes which help to articulate the facade and safely denote the private entry.	Yes
3D. Communal and Public open space	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* *2. Developments achieve a minimum 50% direct sunlight to the principle usuable part of the communal open space for a minimum of 2 hours between 9am and 3pm on 21 June (mid winter)* *Design guidance:* *Communal open space should be have a minimum dimension of 3m, and larger developments should consider greater dimensions* • *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 and facilities and/or provide contributions to public open space*	Public open space has been provided in the form of common rooftop garden and facilities. This has been designed to enhance the residential amenity and promote a safe and communal open space. The landscaped rooftop encourages social interaction.	Yes
	3D-2. 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 has been scaled appropriately to the proposed development site. The development contributes positively through communal landscaping to the common rooftop of the development. These accommodate seating and landscaping elements to create an inviting public space that promotes social interaction within the building.	Yes
	3D-3. Communal open space is designed to maximise safety	The design of the communal outdoor space provides a safe environment through apartment layouts that promote sight lines and visibility of the public domain.	Yes

	Objectives	Proposal	Compliance
	3D-4. Public open space, where provided, is responsive to the existing pattern and uses of the neighbourhood	The proposed design abutting the street is consistent with the future character of the area, as outlined by the Wickham master plan. This is further reinforced through commercial/common multipurpose space at the ground level to contribute to a developing active street frontage.	Yes
3E. Deep Soil Zones	Deep soil zones provide areas on the site that allow for and support healthy plant and tree growth. They improve residential amenity and promote management of water and air quality. ***Design Criteria:*** *1. Deep soil zones are to meet the following minimum requirements:* *Site area – min. dimensions – DSZ %* *Less than 650m^2 – NA – 7%* *650m^2 – 1500m^2 – 3m – 7%* *>1500m^2 – 6m – 7%* *Design Guidance:* *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 storm water management should be achieved and alternative forms of planting provided such as on structure*	Deep soil zones are proposed within the northern boundary with permeable paving, in order to improve residential amenity and promote management of water and air quality. Refer to landscape architects plans.	Yes
3F. Visual Privacy	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* *Up to 12m (4 stories) – 6m – 3m* *Up to 25m (5-8 stories) – 9m – 4.5m* *Over 25m (9+ stories) – 12m – 6m* *Note: separation distances between buildings on the same site should combine required building separations depending on the type of room* *Gallery access and circulation should be treated as habitable space when measuring privacy separation distances between neighbouring properties*	Visual privacy has been integrated into the design by a number of semi-transparent and solid elements. These include visual separation, landscape screening, solid balustrades and responsible apartment planning.	Yes on merit

	Objectives	Proposal	Compliance
	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	The development has been designed with good sightlines offering the occupants and the public a high level of surveillance, whilst considering access control, territorial reinforcement and space management.	Yes
3G. Pedestrian access and entries	3G-1. Building entries and pedestrian access connects to and addresses the public domain	The main entry point to the apartment building is accessible at ground level from the centre of the site between two volumes which help to clearly identify the entry.	Yes
	3G-2. Access, entries and pathways are accessible and easy to identify	The main entry into the development is off Station Street through the centre of the site. It has generous proportions and is easily identified. The entrance to the carpark in set off Station Street and is also clearly identifiable along the streetscape.	Yes
	3G-3. Large sites provide pedestrian links for access to streets and connection to destinations	N/A	Yes
3H. Vehicle Access	3H-1. Vehicle access points are designed and located to achieve safety, minimize conflicts between pedestrians and vehicles and create high quality streetscapes	The carpark entry is accessed from Station Street. A setback to the line of the driveway crossover allows vehicles to safely enter and exit from the site.	Yes
3J. Bicycle and car parking	3J-1. Car parking is provided based on proximity to public transport in metropolitan Sydney and centres in regional areas ***Design criteria*** *1. For development in the following locations:* • *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.*	Parking facilities have been provided at ground level and numbers have been calculated to accommodate the number of affordable rental housing apartments in the building. The visual impact of the parking has additionally been minimized through the use of setbacks and appropriate screening and landscaping.	Yes
	3J-2. Parking and facilities are provided for other modes of transport	The location of development is significant in relation to regular bus services into Newcastle CBD.	Yes
	3J-3. Car park design and access is safe and secure	Secure entry points have been provided, and clear open view of the parking area has been designed to minimize shaded and unseen areas.	
	3J-4. Visual and environmental impacts of underground car parking are minimised	Adequate off-street parking has been provided for each apartment in basement carpark.	

v. Part 4 – Designing the Building

	Objectives	Proposal	Compliance
4A. Solar and daylight access	4A-1. To optimize the number of apartments receiving sunlight to habitable rooms, primary windows and private open space ***Design Criteria:*** *1. Living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 2 hours direct sunlight between 9am and 3pm 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 9am and 3pm at mid winter* *3. A maximum of 15% of apartments in a building receive no direct sunlight between 9am and 3pm at mid winter*	Living rooms / Balcony spaces to 100% of the apartments will achieve a minimum of 2hrs sunlight during mid winter.	Yes
	4A-2. Daylight access is maximized where sunlight is limited *Design Guidance:* *Courtyards, skylights and high-level windows (with sills of 1,500mm or greater) are used only as secondary light source in habitable rooms.*		
	4A-3. Design incorporates shading and glare control, particularly for warmer months		
4B. Natural Ventilation	4B-1. All habitable rooms are naturally ventilated	All habitable rooms have access to an appropriately sized opening	Yes
	4b-2. The layout and design of single aspect apartments maximizes natural ventilation	The single aspect apartments have an opening frontage maximized to encourage as much natural ventilation as possible	
	4B-3. The number of apartments with natural cross ventilation is maximized to create a comfortable indoor environment for residents ***Design criteria:*** *1. At least 60% of apartments are natural 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*	A minimum of 65% of apartments have achieved cross ventilation totaling 14 out of 16 apartments.	

	Objectives	Proposal	Compliance
4C. Ceiling Heights	4C-1. Ceiling height achieves sufficient natural ventilation and daylight access ***Design criteria:*** *1. Measured from finished floor level to finished ceiling level, minimum ceiling heights are:* *Habitable rooms – 2.7* *Non-habitable – 2.4* *2 Storey apartments – 2.7 (main living) & 2.4 (second floor, where the floor area does not exceed 50% of the apartment area)* *Attic spaces – 1.8m at edge of room with a 30 degree minimum ceiling slope* *Mixed use areas – 3.3m for ground and first floor to promote future flexibility of use*	2.7m minimum floor to ceilings for habitable rooms and 2.4m minimum for non-habitable rooms has been achieved while the floor plate depths allow for maximum penetration of natural light into the space.	Yes
	4C-2. Ceiling height increases the sense of space in apartments and provides for well proportioned rooms		
	4C-3. Ceiling heights contribute to the flexibility of building use over the life of the building *Design Guidance:* *Ceiling heights of lower level apartments in centres should be greater than the minimum required by the design criteria allowing flexibility and conversion to non-residential uses*		
4D. Apartment size and Layout	4D-1 The layout of rooms within an apartment is functional, well organized and provides a high standard of amenity. ***Design Criteria*** *1. Apartments are required to have the following minimum internal areas:* *Studio – 35m^2* *1 Bedroom – 50m^2* *2 Bedroom – 70m^2* *3 Bedroom – 90m^2* *The minimum internal areas include only one bathroom. Additional bathrooms increase the minimum internal area by 5m^2* *A fourth bedroom and further additional bedrooms increase the minimum internal area by 12m^2* *Design Guidance* *Where minimum areas or room dimensions are not met apartments need to demonstrate that they are well designed and demonstrate the usability and functionality of the space with realistically scaled furniture layouts and circulation areas. These circumstances would be assessed on their merits*	The typical apartment layouts have been designed based on build-ability, serviceability and a good level of environmental performance. Each apartment layout provides a high level of residential amenity and accommodates / exceeds the minimum standards of rooms sizes for habitable rooms. All kitchens are no more than 8m from a window. The width of each apartment type is greater than 4m.	Yes

	Objectives	Proposal	Compliance
	4D-2. Environmental performance of the apartment is maximized *Design criteria:* *1. Habitable room depths are limited to a maximum of 2.5 x ceiling height* *2. In open plan layouts (where the living, dining and kitchen are combined) the maximum habitable room depth is 8m from a window*		
	4D-3. Apartment layouts are designed to accommodate a variety of household activities and needs ***Design Criteria:*** *1. Master bedrooms have a minimum area of 10m^2 and other bedrooms 9m2 (excluding wardrobe space)* *2. Bedrooms have a minimum dimension of 3m (excluding wardrobe space)* *3. Living rooms or combined living/dining rooms have a minimum width of:* • *3.6m for studio and 1 bedroom apartments* • *4m for 2 and 3 bedroom apartments* *4. The width of cross-over or cross-through apartments are at least 4m internally to avoid deep narrow apartment layouts* *Design Guidance:* *All bedrooms allow a minimum length of 1.5m for robes*		
4E. Private open space and balconies	4E-1. Apartments provide appropriately sized private open space and balconies to enhance residential amenity ***Design criteria:*** *1. All apartments are required to have primary balconies as follows:* *Studio apartments – 4m^2* *1 bedroom apartments – 8m^2 (2m min.)* *2 bedroom apartments – 10m^2 (2m min.)* *3+ bedroom apartments – 12m^2 (2.4m min.)* *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 15m^2 and a minimum depth of 3m*	All apartments have a balcony with a minimum depth of 2m or greater for 2 bedroom apartments and 2.4m min for 3 bedroom apartments. The configuration of balconies and apartments will provide a good level or surveillance to public and private areas. Furthermore, the recess in building mass as a result of balconies has been integrated into the overall building design and street elevation composition	Yes
	4E-2. Primary private open space and balconies are appropriately located to enhance livability for residents		
	4E-3. Private open space and balcony design is integrated into and contributes to the overall architectural form and detail of the building		
	4E-4. Private open space and balcony design maximizes safety		

	Objectives	Proposal	Compliance
4F. Common circulation and spaces	Common circulation spaces achieve good amenity and properly service the number of apartments ***Design criteria:*** *1. The maximum number of apartments off a circulation core on a single level is eight* *2. For buildings of 10 storeys and over, the maximum number of apartments sharing a single lift is 40* *Design Guidance:* *Where design criteria 1 is not achieved, no more than 12 apartments should be provided off a circulation core on a single level*	Internal corridors have been designed to provide clear and well-defined circulation paths. The number of apartments off a single circulation core is a maximum of 3, which complies with the design guidance. The layout of these areas accommodates seating wherever possible and natural sunlight to create an inviting public space that promotes social interaction.	Yes
	4F-2. Common circulation spaces promote safety and provide for social interaction between residents		
4G. Storage	4G-1 Adequate, well designed storage is provided in each apartment ***Design criteria:*** *1. In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided:* *Studio apartments – 4m^3* *1 bedroom apartments – 6m^3* *2 bedroom apartments – 8m^3* *3 bedroom apartments – 10m^3* *At least 50% of the required storage is to be located within the apartment*	Every opportunity has been taken to provide additional storage to each apartment both internally in the apartment and in a designated storage areas at each level.	Yes
4H. Acoustic privacy	4H-1. Noise transfer is minimized through the siting of buildings and building layout	The apartments are designed to meet the acoustic requirements as outlined in the BCA through the use of acoustic insulation to provide a complimentary level of amenity.	Yes
	4H-2. Noise impacts are mitigated within apartments through layout and acoustic treatments		
4J. Noise and pollution	4J-1. In noisy or hostile environments the impacts of external noise and pollution are minimized through the careful siting and layout of buildings	The development appropriately minimizes noise and pollution through physical separation or public and private spaces, and insulated building materials.	Yes
	4J-2. Appropriate noise shielding or attenuation techniques for the building design, construction and choice of materials are used to mitigate noise transmission	This has been achieved through the limitation of building openings and appropriate installation of seals and glazing to Station St along the Railway edge.	
4K. Apartment Mix	4K-1. A range of apartment types and sizes is provided to cater for different household types now and into the future	The apartment mix will cater for different household requirements taking into consideration: • The distance to public transport, employment and education centres • The current market demands and projected future demographic trends • The demand for social and affordable housing • Different cultural and socio-economic groups A number of, two bedroom and one-bedroom apartments have been accommodated with variation in the design and floor plan to provide flexibility for specific audiences.	Yes
	4K-2. The apartment mix is distributed to suitable locations within the building		

	Objectives	Proposal	Compliance
4L. Ground Floor Apartments	4L-1. Street frontage activity is maximized where ground floor apartments are located	Apartments located at level 01, have apertures looking out to Station Street. This promotes passive surveillance.	Yes
	4L-2. Design of ground floor apartments delivers amenity and safety for residents		
4M. Facades	4M-1. Building facades provide visual interest along the street while respecting the character of the local area	The façade has been designed with a mix of materials and elements to provide visual interest, whilst being visually suited within the context of the surrounding environment.	Yes
	4M-2. Building functions are expressed by the facade		
4N. Roof design	4N-1. Roof treatments are integrated into the building design and positively respond to the street	The roof profile presents an attractive articulation to the potentially bland side boundaries, enhancing the character of Station Street. The roof introduces a contemporary aesthetics in line with the desired future character of the area.	Yes
	4N-2. Opportunities to use roof space for residential accommodation and open space are maximised		
	4N-3. Roof design incorporates sustainability features	The articulation of the roof forms allows good access to and maintenance to PVC at roof level.	
4O. Landscape design	4O-1. Landscape design is viable and sustainable	Appropriate landscaping has been provided to communal outdoor spaces, designed to create a visually interesting, private and secure communal rooftop zone accessible to residents.	Yes
	4O-2. Landscape design contributes to the streetscape and amenity		
4P. Planting on structures	4P-1. Appropriate soil profiles are provided	The opportunities for deep landscaping zones are limited due to the constraints of the site, however deep-soil landscaping at ground car parking provides some opportunity. Further to this, communal vegetable gardens, with good solar access, at roof level provide good amenity to the public open space.	Yes
	4P-2. Plant growth is optimized with appropriate selection and maintenance		
	4P-3. Planting on structures contributes to the quality and amenity of communal and public open spaces		
4Q. Universal Design	4Q-1. Universal design features are included in apartment design to promote flexible housing for all community members	Adaptable apartments have been integrated into the development and are made viable through the flat floor plate design. The open plan of each apartment provides a greater degree of flexibility, in addition to the designated adaptable units.	Yes
	4Q-2. A variety of apartments with adaptable designs are provided		
	4Q-3. Apartment layouts are flexible and accommodate a range of lifestyle needs		
4R. Adaptive reuse	4R-1. New additions to existing buildings are contemporary and complementary and enhance an areas identity and sense of place	NA	NA
	4R-2. Adapted buildings provide residential amenity while not precluding future adaptive reuse	The proposal provides an open plan floor plate, and central corridor to accommodate potential future adaptive reuse.	Yes
4S. Mixed Use	4S-1. Mixed use developments are provided in appropriate locations and provide active street frontages that encourage pedestrian movement	The proposal provides a commercial tenancy on the ground floor, creating an active street frontage to Station Street.	Yes
	4S-2. Residential levels of the building are integrated within the development, and safety and amenity is maximized for residents	The upper floor apartments are integrated into the development and consider the safety and amenity of the public domain. The commercial tenancy/common multipurpose room ensures occupancy at street level and a good level of public surveillance.	

	Objectives	Proposal	Compliance
4T. Awnings and signage	4T-1 Awnings are well located and complement and integrate within the building design	The proposal provides an awning over the commercial street frontage which is well integrated into the building design through the use of complementary material selection and construction methods.	Yes
	4T-2 Signage responds to the context and desired streetscape character		
4U. Energy Efficiency	4U-1. Development incorporates passive environmental design	The design considers ESD design principles to reduce greenhouse gas emissions. The development is intentionally orientated to maximize northern solar access during winter. Balconies provide adequate shading during summer. Uniut layouts have been designed to maximise natural cross ventilation.	Yes
	4U-2. Development incorporates passive solar design to optimize heat storage in winter and reduce heat transfer in summer		
	4U-3. Adequate natural ventilation minimizes the need for mechanical ventilation		
4V. Water management and Conservation	4V-1. Potable water is minimised	Water efficient fittings will be used throughout the apartments and common spaces. Soft landscaping used wherever possible.	Yes
	4V-2. Urban stormwater is treated on site before being discharged to receiving waters	The proposed development incorporates an approach that is designed to meet the following general objectives: • Protect and minimise the impact of the development on the surrounding existing developments. • Reduce run-off and peak flows using the local detention measures and minimizing impervious areas, Refer to civil engineers drawings.	
	4V-3. Flood management systems are integrated into the design		
4W. Waste Management	4W-1. Waste storage facilities are designed to minimize impacts on the streetscape, building entry and amenity of residents	Waste management plan has been prepared to minimise waste and recycle existing materials.	Yes
	4W-2. Domestic waste is minimized by providing safe and convenient source separation and recycling		
4X. Building Maintenance	4X-1. Building design detail provides protection from weathering	Robust and durable materials have been selected to enhance the life of the buildings and the landscaping	Yes
	4X-2. Systems and access enable ease of maintenance		
	4X-3. Material selection reduces ongoing maintenance costs		