

Attachment 7 – Apartment Design Guidance Compliance Table

Apartment Design Compliance Table				
	Objective	Design Criteria	Proposed	Council Comments
Apartment Building Types	Objective 1A	Courtyard apartments provide a centralised open space area, generally range between three and six storeys in height and are suitable in both urban and suburban settings. Their configuration depends on the context and site orientation. Courtyard apartments are a highly adaptable building type and are best used when: • located on corner sites or sites with two or more public frontages • located on sloping sites • a landscaped street character is desired (by orienting the courtyard to the street) • an urban character to the street is desired (by creating a street wall edge and orienting the courtyard to the rear) • there is a predominant aspect or outlook.	The development contains 64 residential apartments split between three buildings with communal open surrounding the buildings. The maximum height of the building is four storeys. Predominant aspect or outlook is to the wetlands to the south and street to the north.	The proposal is located within precinct E2 of the Shell Cove master planned development. The development will be a transition between low/medium density dwellings within Precinct E and the higher density development of Precinct D, Shell Cove Town Centre. The apartments have been orientated to maximise the predominant aspect of the Wetlands to the south and solar access to the north. The site provides street activation from all sides with garden apartments on three sides of the development including resident pedestrian access to the street and palisade fencing which allows some passive surveillance and landscaping for privacy and security. Vehicle access is from Cormorant Way to the north of the development.

				The site is considered suitable for these types of apartment.
Local Character and Context	Objective 1B	Good design responds and contributes to its context. Context is everything that has a bearing on an area and comprises its key natural and built features. Context also includes social, economic and environmental factors.		The development is guided by the Concept Approval in terms of form, use, height and number of storeys. The design is in keeping with this Approval. Further the proposal has responded well to the advice offered by the Shellharbour Design Review Advisory Panel. Overall the proposal responds well to the coastal context of the site and surrounding future development.
	Objective 1C Precincts and Individual Site	Precincts are characterised by large land parcels or a group of larger sites undergoing extensive change. These sites often need to be restructured to support a change of land use mix, building height and density. Precinct plans typically incorporate new streets and infrastructure, through-site links and public open spaces that relate in scale, location and character to the local context.	Precinct E has been further divided into medium density (E2) and low density residential (E1) for the purposes of developing Design Guidelines.	The development forms part of Precinct E2 which is subject of a land subdivision Development Application approved in March 2018 (DA0118/2017). The proposal complies with the Design Guidelines created for this precinct as required by the Concept Approval.

	Objective 2A Primary Controls	Primary development controls are the key planning tool used to manage the scale of development so that it relates to the context and desired future character of an area and manages impacts on surrounding development.	Concept Approval provides primary development controls for this site. Use – Apartments Height – Maximum 16 metres Number of Storeys – 4. Yield for Precinct - Maximum 300.	The proposal complies with the primary development controls as provided by the Concept Approval.
	Objective 2B Building Envelopes	A building envelope is a three-dimensional volume that defines the outermost part of a site that the building can occupy. Building envelopes set the appropriate scale of future development in terms of bulk and height relative to the streetscape, public and private open spaces, and block and lot sizes in a particular location.		The primary controls pertaining to this development are enshrined in the Concept Approval.
	Objective 2C Building Height	Height controls should be informed by decisions about daylight and solar access, roof design and use, wind protection, residential amenity and in response to landform and heritage.	Height control determined by Concept Approval – maximum height of 16 metres for this site.	Development will not exceed the height limit set by the Concept Approval.
	Objective 2D Floor Space Ratio	Floor space ratio (FSR) is the relationship of the total gross floor area (GFA) of a building relative to the total site area it is built on.	The Concept Approval does not include controls for FSR as height, number of storeys and yield is provided in its place.	Not applicable to land included in the Concept Approval.
	Objective 2E Building Depth	Use a range of appropriate maximum apartment depths of 12-18m from glass line to glass line when precinct planning and testing development controls. This will ensure that apartments receive adequate daylight and natural ventilation and optimise natural cross ventilation.		The apartments depths do not exceed the maximum 12 metres. The daylight and natural ventilation for each apartment is considered acceptable and natural cross ventilation is compliant with ADG requirements.

		Coordinate building height and building depth: • buildings that have smaller depths over a greater height deliver better residential amenity than those with greater depth and a lower height • greater building depths may be possible where higher ceiling heights are provided, for example adaptive reuse of an existing building.		
	Objective 2F Building Separation	Building separation is the distance measured between building envelopes or buildings. Separation between buildings contributes to the urban form of an area and the amenity within apartments and open space areas. Minimum separation distances for buildings are: Up to four storeys (approximately 12m): • 12m between habitable rooms/balconies • 9m between habitable and non-habitable rooms • 6m between non-habitable rooms • Five to eight storeys (approximately 25m): • 18m between habitable rooms/balconies • 12m between habitable and non-habitable rooms	Building A is 4 storeys high. Building B is 3 storeys high Building C is 3 storeys high. Minimum distance between buildings within the development will be 12.3 metres.	The proposed building separation complies with the ADGs. The building separation within the site is considered to provide acceptable privacy between the apartments. This has achieved suitable solar access to the COS sited between the buildings and allowed views from the street through the development to the wetlands to the south.

		• 9m between non-habitable rooms		
	Objective 2G-Setbacks	Determine street setback controls relative to the desired streetscape and building forms, for example: • define a future streetscape with the front building line • match existing development • step back from special buildings • retain significant trees • in centres the street setback may need to be consistent to reinforce the street edge • consider articulation zones accommodating balconies, landscaping etc. within the street setback • use a setback range where the desired character is for variation within overall consistency, or where subdivision is at an angle to the street • manage corner sites and secondary road frontages Align street setbacks with building use. For example in mixed use buildings a zero street setback is appropriate Consider nominating a maximum percentage of development that may be built to the front build-to line, where one is set, to ensure modulated frontages along the length of buildings Identify the quality, type and use of open spaces and landscaped areas	Setbacks proposed: The development has a general setback of 3 metres around the entire site. There are examples where this setback is reduced such as the waste collection loading dock which is setback 2 metres from the site boundary and areas to the south of the development where the Private Open Space (POS) encroaches by approximately 0.5metres due to the design of the building.	The proposed setback for the development is considered acceptable and suitably reflects the existing setbacks set by the dwellings already constructed along Cormorant Way. The reduced setbacks as detailed are considered minor and are for limited sections of the buildings. The design of the development includes articulation which reduces the bulk of the buildings and creates areas for planting at ground level and visual interest and privacy on the upper levels. It is considered that the setbacks are suitable for the emerging street pattern within Precinct E.

		facing the street so setbacks can accommodate landscaping and private open space In conjunction with height controls, consider secondary upper level setbacks to: • reinforce the desired scale of buildings at the street frontage • minimise overshadowing of the street and other buildings To improve passive surveillance, promote setbacks which ensure a person on a balcony or at a window can easily see the street Consider increased setbacks where street or footpath widening is desired		
Part 3 Siting the Development		Control	Justification provided by applicant	Council Comments
Site Analysis	Objective 3A-1	Site analysis illustrates that design decisions have been based on opportunities and constraints of the site conditions and their relationship to the surrounding context	Site analysis establishes the characteristic of surrounding streets, orientations, solar access and noise, open space and public amenities including transport. The proposal responds to these opportunities and constraints to achieve a suitable and integrated development	Design decisions detailed in the supporting documentation are considered to be suitably reflective of the site conditions. The development is considered to be a suitable design which reacts to the benefits and restrictions of the site. Suitably complies.
Orientation	Objective 3B-1	Building types and layouts respond to the streetscape and site while	Buildings have been divided into 3 smaller towers, with good visual links through from the street to wetlands. The buildings are smaller	The design utilises three separate buildings which reduces the bulk and scale of

		optimising solar access within the development	to fit the residences opposite with Building C and B presenting 3 storeys and Building A on the corner of Lapwing and Aquatic Drive and with good proximity to the Marina boat harbour allowing for 4 storeys. The buildings are orientated to be parallel to the boundary and roads and to capture the water views to the south. The staggering of the facade at the short ends allows for solar access, building articulation and separation. The main lobby access is from Cormorant Way and Lapwing Avenue.	the development when viewed in the context of the medium density dwellings within the surrounding area. The setbacks are considered to reflect the existing setbacks along the street and the separation between the buildings allows for views and public access from Cormorant Way through to the Wetlands to the south. The separation of the buildings within the development will also allow sunlight to permeate through the site to the COS and the wetlands to the south.
	Objective 3B-2	Overshadowing of neighbouring properties is minimised during mid winter	Living areas and private open space are orientated towards maximising solar access and meet the ADG requirements for solar access. The proposal considers the neighbouring properties within the area of transition. The minimum distance between buildings external to the development will be 7.6 metres.	Shadow diagrams have been included as Attachment 11. This development is one of the last within Precinct E2 and therefore the impact on neighbouring dwellings can be assessed accurately. The development shares one boundary with an existing dwelling on the south western side (21 Cormorant Way). This existing dwelling will be a minimum of 7.6 metres (measuring from side

				wall to side wall) and 6 metres from the shared side boundary. The PPOS for this existing dwelling is to the south, fronting the wetlands. The submitted solar diagrams included in attachment 11 show that the PPOS for No. 21 Cormorant Way will only be in shadow from the proposed development from 9am till approximately 12pm mid winter and not be overshadowed from the proposed development from 12pm till 3pm.
Public Domain Interface	Objective 3C-1	Transition between private and public domain is achieved without compromising safety and security	The proposal has ground floor dwelling facing the street with direct access through a front gate. All courtyards have planting and fencing for privacy. The upper level balconies overlook the public domain. A 1.8m fence for security with gate access is provided to all communal spaces between buildings. All lobbies have direct street access and visual connection for residents and visitors to engage with the surrounding neighbourhood.	The interface between the public areas surrounding the development and the private areas within the development is considered suitable. The use of combined masonry walls and metal palisade fencing above provides security and some passive surveillance. This style of fencing has been used throughout the Shell Cove Urban Release Area and is considered successful.

				The opportunities for people to be concealed are minimised.	The interface between the Communal Open Space Areas and the private open spaces belonging to ground floor apartments have been kept to a minimum and have suitable fencing with planting. This is considered a suitable design feature that addresses both safety and security.
	Objective 3C-2	Amenity of the public domain is retained and enhanced		There are planter boxes that are placed along all street frontages which soften the façade and a range of hard and soft landscape to all boundaries and to the communal courtyard and pool. Mail box located adjacent to the building entry on Cormorant Way and Lapwing Avenue. Car park exhaust vented through the roof in this development Pump rooms, garbage rooms integrated in basement car park design with tug to move waste as required to waste collection and bulky store room to allow forward in/forward out waste collection as per Council's requirements. All lobbies off street have equitable access.	Interface between wetlands and development. Need more info. Public pedestrian access provided from Cormorant Way through to the wetlands. This area will be suitably lit and benefit from passive surveillance from apartments on the south western edge of Building C.
Communal and Public Open Space	Objective 3D-1	An adequate area of communal open space is provided to enhance	1. Communal open space has a minimum area equal to 25% of the site	Communal open space is 23.7% with direct access for residents to the adjacent wetland public open space. The communal open space is located adjacent and between the buildings to meet solar access requirements.	The variation to the percentage of site area provided as part of the development has been discussed in detail in the Assessment Report and the

		residential amenity and to provide opportunities for landscaping	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)	The communal open space includes deep soil areas and can be directly accessed from all the towers.	variation is considered acceptable. Solar access plans provided by applicant show that at least 50% of the Communal Open Space will receive a minimum of 2 hours of direct sunlight between 9am and 3pm mid winter. Solar access plans have been included as Attachment 11 . Deep soil areas comply with dimensions and percentage of site area.
	Objective 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 provided allows for access to a resident pool as well as hardstand and soft landscape areas. All primary communal spaces act as a visual link to the wetlands with provision for a public through site link at the western boundary.	The amenity within the communal open space areas will provide a swimming pool, seating areas, lawn areas. There is also significant planting. This is considered to be attractive and inviting for the residents.
	Objective 3D-3	Communal Open space is designed to maximise safety.		Safety is maximised with the communal open space located with end apartments overlooking the space for high level visual surveillance combined with passive surveillance provided by pedestrian visual link to the wetlands.	The communal open space is accessed by swipe key only and fenced on all sides.
	Objective 3D-4	Public open space, where provided, is		Not applicable	No public open space is provided as part of this development. The design is

		responsive to the existing pattern and uses of the neighbourhood			considered to enhance and support the public open space which is provided within the wider Precinct E area. The area accessible by the public to the south west of the development is not to be dedicated to Council as public open space and the lot will include a right of way easement on title to allow the public to use this pathway as a route to and from the wetlands.
Deep Soil Zones	Objective 3E-1 - Deep soil zones provide areas on the site that allow for and support healthy plant and tree growth. They improve residential amenity and promote management of water and air quality	Deep soil zones are to meet the following minimum requirements: Site Area: Greater than 1500sqm Minimum dimensions: 6m Percentage of site area: 7%		Deep soil zones comply with ADG requirements and adjoin all boundaries.	Suitably complies.

Visual Privacy	Objective 3F-2 Adequate building separation distances are shared equitably between neighbouring sites, to achieve reasonable levels of external and internal visual privacy Note: Separation distances between buildings on the same site should combine required building separations depending on the type of room	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: Up to 12 m (4 Storeys). Habitable rooms and balconies: 9 metres Non-habitable rooms: 4.5 metres.	Separation distances between buildings is achieved, the design of balconies and POS areas help to mitigate any potential overlooking. Building C - west elevation shown below. 	Separation distances within the development comply with the control. The site is suitably separated from other sites on three sides to avoid any impact on visual privacy to existing dwellings and within the development. The south west boundary of the site adjoins an existing medium density residential dwelling No. 21 Cormorant Way. The inclusion of metal louvres along the south western edge of the balconies for apartments C205 and C104 on level 1 and 2 of Building C will reduce potential overlooking into the Principle Private Open Space (PPOS) for this neighbouring dwelling. The windows included on the side elevation facing No. 21 will be secondary windows serving bedrooms and a corridor window. The positioning of these windows will not allow views into the PPOS for No. 21 and will not allow views directly into
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				living or high use habitable rooms.
	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.	Complies – Façade elements, a mixture of solid, glazed and palisade screens and balustrades provide various levels of privacy depending on their relationship to the ground and adjacent streets or buildings. Windows are positioned to increase privacy without compromising light and air and balance outlook. Screens are provided to protect neighbours privacy where required.	The variety of design techniques described by the applicant has provided suitable privacy for residents internally and also from the public domain and neighbouring dwellings. The ground floor apartments will have suitable boundary treatment to provide privacy and also some passive surveillance to the public domain adjacent to the site.
Pedestrian Access and Entries	Objective 3G-1	Building entries and pedestrian access connects to and addresses the public domain.	The building entry and public access is directly from Cormorant Way and Lapwing Avenue public domain.	Each building has a separate pedestrian entrance. The ground floor apartments on the northern elevation also have individual pedestrian entrances to the street. All entrances are level and accessible for all.
	Objective 3G-2	Access, entries and pathways are accessible and easy to identify.	Each building access point is clearly visible from the public domain. Disability Access Report submitted with the application which reviews all access points, entries and pathways for the development.	Suitably complies.
Vehicle Access	Objective 3H-1	Vehicle access points are designed and located to achieve safety, minimise conflicts between	Vehicle entry point and the resident vehicle entry to basement which is located at Building B. This entry is provided with a 6m queuing zone from footpath to secure entry.	The residential vehicle access point for this development will be off Cormorant Way to the north

		pedestrians and vehicles and create high quality streetscape		Waste collection at Building A separates this vehicular activity from residential traffic and waste collection room is setback 6m to provide separation from neighbouring sites.	of the site. This access point will be for all resident and visitor vehicles. Service vehicles – waste etc will be to the waste collection loading bay to the west of the site within Building C. The vehicle access point will be completely separate from the pedestrian entrances and is serviced by an turntable within the enclosure. Suitably complies.
. Check access. Bicycle and car parking	Objective 3J-1	Car parking is provided based on proximity to public transport in metropolitan Sydney and centres in regional areas	For development in the following locations: • on sites that are within 800 metres of a railway station or light rail stop in the Sydney Metropolitan Area; or • on land zoned, and sites within 400 metres of land zoned, B3 Commercial Core, B4 Mixed Use or equivalent in a nominated regional	Off street parking is provided. All spaces are minimum 2400x5400mm.	The Council endorsed Design Guidelines required by the Concept Approval for Precinct E2 call up the Shellharbour Development Control Plan requirements for parking. This is addressed in detail in Attachment 10 . The car parking provided complies with the Council requirements.

			centre the minimum car parking requirement for residents and visitors is set out in the Guide to Traffic Generating Developments, or the car parking requirement prescribed by the relevant council, whichever is less The car parking needs for a development must be provided off street.		
	Objective 3J-2	Parking and facilities are provided for other modes of transport. Conveniently located and sufficient numbers of parking spaces should be provided for motorbikes and scooters Secure undercover bicycle parking should be provided that is easily accessible from both the public domain and common areas Conveniently located charging stations are provided for electric vehicles, where desirable		Onsite secure bicycle parking for 8 bikes is provided within Building B. This will be available for all residents to use.	Bicycle storage room located on ground floor of Building B. Applicant has confirmed all residents will have access to all buildings. Suitably complies.

	Objective 3J-3	Car park design and access is safe and secure		Secured entry is provided to the basement carpark	The design of the basement car park areas is considered suitable with access points that are accessible, safe and secure. Finishes, internal signage and materials are not specified and will be subject to condition. This is a satisfactory outcome.
	Objective 3J-4	Visual and environmental impacts of underground car parking are minimised.		The basement carpark does not visually impact the surrounding environment	Suitably complies
Solar and Daylight Access.	Objective 4A-1	To optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space	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	The proposal achieves 64% solar compliance for 3 hours between 9am and 3pm at midwinter. 70% of apartments receive solar compliance with extended 8.30am to 3.30pm hours.	The percentage of apartments that receive a minimum of 3 hours of solar access between 9am and 3pm mid winter is below the required 70%. Broken down this means 41 apartments receive a minimum of 3 hours solar access, where as the control requires 45 apartments. This variation is addressed in detail within the Assessment Report. The variation is considered acceptable by virtue of the additional design features of the building and the desire to maximise the wetland views from the apartments.

			3. A maximum of 15% of apartments in a building receive no direct sunlight between 9 am and 3 pm at mid winter	28% of apartments do not receive sunlight between 9am and 3pm. The building entrances are sited on the northern side of the development maximising the apartments on the southern side which have views over the wetlands.	The percentage of apartments that receive no direct sun between 9am and 3pm mid winter is 28%, this is higher than the 15% maximum. The development shares a boundary with the wetlands to the south restricting the side available for vehicle and pedestrian access and so reducing the area available for apartments on the northern side of the site. This variation is considered acceptable by virtue of the site constrictions, requirements of the Concept Approval and desire to maximise views of the wetlands to the south. Further discussion of variation included in Assessment Report.
	Objective 4A-2	Daylight access is maximised where sunlight is limited.			The design of the development is considered to have suitably taken advantage of the location of the site, in terms of views. The floor to ceiling glazing for windows and balcony doors are considered to maximise daylight, with

					skylights in top floor apartments across each building. Suitably complies.
	Objective 4A-3	Design incorporates shading and glare control, particularly for warmer months		The vertical screens in front of façade windows are carefully place to enhance privacy and shade to bedroom and without compromising views	Suitable design features have been included within the development to provide shading and glare control. The Communal Open Space suitably includes shaded areas. Suitably complies.
Natural Ventilation	Objective 4B-1	All habitable rooms are naturally ventilated.		All habitable rooms are naturally ventilated.	Suitably complies.
	Objective 4B-2	The layout and design of single aspect apartments maximises natural ventilation		All single aspect apartments are laid out to ensure natural ventilation is maximised, with habitable spaces ranged around balconies at the facades.	All single aspect apartments are to include open plan living areas and include balconies that cover the width of the apartments. This, in addition to coastal breezes, is considered to be sufficient to maximise natural ventilation for single aspect apartments.
	Objective 4B-3	The number of apartments with natural cross ventilation is maximised to create a	1. At least 60% of apartments are naturally cross ventilated in the first nine storeys of the building.	The proposal complies with 65% of apartments naturally cross ventilated when including the use of skylights.	The percentage of apartments that are naturally cross ventilated exceeds the control of 60%. Suitably complies.

		comfortable indoor environment for residents	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	No apartments exceed 18m.	Suitably complies
Ceiling Heights	Objective 4C-1	Ceiling height achieved sufficient natural ventilation and daylight access	Measured from finished floor level to finished ceiling level, minimum ceiling heights are: Habitable rooms – 2.7m Non-habitable 2.4m	Measured from finished floor level to finished ceiling level, the proposed floor to ceiling heights are no less than: • Habitable rooms: 2.7m • Non-habitable rooms: 2.4m The area is zoned residential and hence there is no requirement for level 1 to be provided with floor to ceiling heights of 3.3m.	Ceiling heights are a minimum of 2.7 metres for habitable rooms and 2.4 for non habitable rooms. The development is not in a centre, land is zoned residential and the Concept Approval requires this site to be residential, and therefore the requirement for higher ceiling heights than the minimum on level 1 to provide for future non

					residential uses is not relevant.
	Objective 4C-2	Ceiling height increases the sense of space in apartments and provides for well-proportioned rooms		All residential apartments have a minimum ceiling height of 2.7m in habitable rooms and apartment layouts are designed to provide well-proportioned rooms	Suitably complies
	Objective 4C-3	Ceiling heights contribute to the flexibility of building use over the life of the building			The development is not in a centre, land is zoned residential and the Concept Approval requires this site to be residential, and therefore the requirement for higher ceiling heights than the minimum on level 1 to provide for future non residential uses is not relevant.

Apartment Size and Layout	Objective 4D-1	The layout of rooms within an apartment is functional, well organised and provides a high standard of amenity.	Apartments are required to have the following minimum internal areas: 1 bedroom – 50m³ 2 bedroom – 70m³ 3 bedroom – 90m³ The minimum internal areas include only one bathroom. Additional bathrooms increase the minimum internal area by 5m² each. A fourth bedroom and further additional bedrooms increase the minimum internal area by 12m²each.	Apartment areas are in excess of the minimum ADG standards.	Suitably complies
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			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	All habitable rooms have a window to an external wall with a total minimum glass area greater than 10% of the floor area of the room. No daylight or air is borrowed from other rooms.	Suitably complies
	Objective 4D-2	Environmental performance of the apartment is maximised.	1. Habitable room depths (other than rooms in open plan layouts) are limited to a maximum of 2.5 x the ceiling height	All apartments achieve this requirement	Suitably complies
			2. In open plan layouts (where the living, dining and kitchen are combined) the maximum habitable room depth is 8m from a window	All apartments achieve this requirement.	suitably complies
	Objective 4D-3	Apartment layouts are designed to	1. Master bedrooms have a minimum area of	All master bedrooms have a minimum area of more than 10m ² , with generous robe	Each apartment suitably complies

		accommodate a variety of household activities and needs	10m ² and other bedrooms 9m ² (excluding wardrobe space)	allowances, with other bedrooms typically 9m ² or more.	
			2. Bedrooms have a minimum dimension of 3m (excluding wardrobe space)	Bedrooms have a minimum dimension of 3m	Each apartment suitably complies
			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	All 1 bedroom apartments have living room widths of 4m. The living rooms to 2 and 3 bedroom apartments have living room widths of 4.3 – 4.8 metres.	Each apartment suitably complies
			4. The width of cross-over or cross-through apartments are at least 4m internally to avoid deep narrow apartment layouts	All cross through apartments are typically at least 4m wide.	All cross through apartments have a minimum width of 4 metres.

Private Open Space and Balconies	Objective 4E-1	Apartments provide appropriately sized private open space and balconies to enhance residential amenity	All apartments are required to have a primary balconies as follows: 1 bedroom – 8m ³ , minimum depth 2m. 2 bedroom - 10m ³ , minimum depth 2m. 3+ bedroom – 12m ³ , minimum depth 2.4m. The minimum balcony depth to be counted as contributing to the balcony area is 1m	All balconies and open spaces satisfy or improve upon the minimum required areas.	Each apartment will have an area of balcony that achieves the minimum dimension at the minimum depth – suitably complies.
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			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.		Suitably complies for apartments on ground level.
	Objective 4E-2	Primary private open space and balconies are appropriately located to enhance liveability for residents			All balconies and Private Open Space areas are directly accessed from the open plan living areas for each apartment. The design of the development and placement of the balconies/private open space maximises the views from the site and over the Communal Open Space. The design is considered to enhance liveability for future residents.

	Objective 4E-3	Private open space and balcony design is integrated into and contributes to the overall architectural form and detail of the building	The balcony design is integral to the building articulation. With suitable palisade balustrading for privacy while retaining views to the adjacent open space and surrounding locality	The integrated balconies and boundary treatment included for the ground floor private open space areas are considered to contribute to the architectural form and detail of both buildings.
	Objective 4E-4	Private open space and balcony design maximises safety.	All balconies have safe barriers in accordance with the requirements of the BCA.	Suitably complies

Common Circulation and Spaces	Objective 4F-1	Common circulation spaces achieve good amenity and properly service the number of apartments	1. The maximum number of apartments off a circulation core on a single level is eight	Single lift provided per core servicing no greater than 7 apartments per floor	Suitably complies
	Objective 4F-2	Common circulation spaces promote safety and provide for social interaction between residents		Resident floor lobbies all have secured access from basement levels and the entry level. Floor to ceiling glazing provides a high level of transparency enhancing security and social interaction Core location at the centre allows two corridors per building traveling east or west, allowing through site secure travel to communal areas.	Suitably complies
Storage	Objective 4G-1	Adequate, well designed storage is provided in each apartment.	In addition to storage in kitchens, bathrooms and bedrooms the following storage is provided: 1 bedroom – 6m ³ 2 bedroom – 8m ³ 3+ bedroom – 10m ³ At least 50% of the required storage is to be located within the apartment.		Storage plans have been submitted (attachment 12) highlighting the internal storage provided for each apartment. This shows compliance with a minimum of 50% of the storage requirement for each apartments. The remaining 50% required has been provided in the basement floors in secure cages.

	Objective 4G-2	Additional storage is conveniently located, accessible and nominated for individual apartments	Required additional storage provided in basement	Storage areas in basement provided	
Acoustic Privacy	Objective 4H-1	Adequate building separation is provided within the development and from neighbouring buildings/adjacent uses.	Minimum noise transfer has been considered, building orientated to have private and living areas away from adjacent dwellings. Section 5.3 of the Noise Impact Assessment submitted with the DA states that external walls will be constructed from concrete and masonry and will be acceptable from a noise mitigation perspective without any further treatment. The building will be constructed in accordance with the requirements of the National Construction Code.	Apartments A003, A005, A105, A102, A202, A205, A305 have bedroom walls which partially adjoin balconies for neighbouring apartments. The proposed construction materials are considered acceptable to provide adequate noise mitigation.	

		Window and door openings are generally orientated away from noise sources.	Windows for apartments A01.15, A02.15, A03.14 and A04.14, B03.06 and B02.06 face onto the vehicle access.	Windows and doors are generally sited away from noise sources such as vehicle driveway and plant rooms. The windows that have been noted as facing onto vehicle access are small, secondary windows and are to be suitably treated as per requirements of acoustic report to minimise noise nuisance to the apartments affected.
		Noisy areas within buildings including building entries and corridors should be located next to or above each other and quieter areas next to or above quieter areas.	Corridors and entries are located above each other throughout the development.	Suitably compliant
		Storage, circulation areas and non-habitable rooms should be located to buffer noise from external sources.	Throughout all apartments storage, circulation areas and non habitable rooms (bathrooms) are located adjacent to the corridors for the buildings, habitable rooms are on the outside of the building to increase benefits of outlook, light and solar access.	Suitably complies

		The number of party walls (walls shared with other apartments) are limited and are appropriately insulated.	Maximum number of neighbouring apartments each unit will share party walls with is two.	Suitably compliant.
		Noise sources such as garage doors, driveways, service areas, plant rooms, building services, mechanical equipment, active communal open spaces and circulation areas should be located at least 3m away from bedrooms.	Proposed swimming pool within communal open space is located a minimum of 3.3 metres from nearest bedroom. Waste collection/loading dock adjoins bedroom of apartment C005. Apartments set away from main vehicle access ramp and roller door.	Suitably compliant.
	Objective 4H-2	Noise impacts are mitigated within apartments through layout and acoustic treatments	Bedrooms where possible are located away from living space, and stacking of unit types maintain similar room type stacking to minimise noise impacts.	Apartments A003, A005, A105, A102, A202, A205, A305 have bedroom walls which partially adjoin balconies for neighbouring apartments. The proposed construction materials are considered acceptable to provide adequate noise mitigation.

Noise and Pollution	Objective 4J-1	In noisy or hostile environments the impacts of external noise and pollution are minimised through the careful siting and layout of buildings	The development is residential only and within a residential precinct with public domain areas located a suitable distance from the apartments.	The development site is not considered to be a noisy or hostile environment.
Apartment Mix	Objective 4K-1	A range of apartment types and sizes is provided to cater for different household types now and into the future	One bedroom apartments – 6 Two bedroom apartments – 33 Three bedroom apartments - 25	Suitable mix proposed.
	Objective 4K-2	The apartment mix is distributed to suitable locations within the building	The apartments are distributed through each building proposed and on each level.	Suitably complies.
Ground Floor Apartments	Objective 4L-1	Street frontage activity is maximised where ground floor apartments are located.	Seven (7) of the ground floor apartments will have independent direct street access as well as access through the building.	Suitably complies

	Objective 4L-2	Design of ground floor apartments delivers amenity and safety for residents	Secured entry to ground floor apartments is from internal secure corridors. Courtyards have 1.8m fencing with lockable gates for resident amenity and security.	Suitably complies
Facades	Objective 4M-1	Building facades provide visual interest along the street while respecting the character of the local area.	Building facades are articulated as a base, middle and top. The ground floor contains active uses including the building entry, resident cafe and the communal courtyard for visual interest, planting to soften the edge. The top level of Building A is a recessive darker metal finish to reduce visual impact.	Suitably complies as required by Concept Approval.
	Objective 4M-2	Building functions are expressed by the façade.	Articulation of balconies clearly articulate the domestic residential uses of the building and individual apartments	Suitably complies.
Roof Design	Objective 4N-1	Roof treatments are integrated into the building design and positively respond to the street.	The roof articulation provides an overhanging ribbon feature eave to cap the building. This thin edge adds visual interest and a quality material finish.	Suitably complies

	Objective 4N-2	Opportunities to use roof space for residential accommodation and open space are maximised		Not considered applicable to this development as opportunities for open space are achieved on ground level.
	Objective 4N-3	Roof design incorporates sustainability features	1200mm deep feature eaves provide shading to upper windows. Solar panels provided are located on the roof as part of the proposal's sustainability features.	Suitably complies. Sky lights also included for some top floor apartments to increase solar access.
Landscape Design	Objective 4O-1	Landscape design is viable and sustainable		The proposed landscape is to scale that provides adequate screening & softening of the proposed development. The proposed landscape marries with the adjacent wetland proposal with pedestrian linkage for resident use to the proposed shareway and open space. The landscape design is satisfactory.

	Objective 4O-2	Landscape design contributes to the streetscape and amenity	Street trees and landscaping for wetlands approved as part of subdivision of precinct under DA0118/2017.	Not included as part of this DA.
Planting on Structures	Objective 4P-1	Appropriate soil profiles are provided	<u>Topsoil (Type A)</u> Native low 'P' Mix 300mm depth organic topsoil o all mass planted areas. <u>Subsoil (Type B)</u> Sand soil blend 80-20. 20% soil 80% double washed river sand mix. Fill below top 300mm in all planted areas. <u>Planting Mulch</u> 'Forest Blend' (to 75mm depth) 75mm depth mulch to all planted areas	Suitably complies
	Objective 4P-2	Plant growth is optimised with appropriate selection and maintenance.	Landscape plans show variety of plant species suitable to coastal environment.	Suitably complies subject to condition.

Universal Design	Objective 4Q-1	Universal design features are included in apartment design to promote flexible housing for all community members.	14 apartments proposed incorporate the Liveable Housing Guideline's Silver Level universal design features.	Suitably complies
	Objective 4Q-2	A variety of apartments with adaptable designs are provided	7 apartments proposed with adaptable floor plan designs.	Suitably complies
	Objective 4Q-3	Apartments layouts are flexible and accommodate a range of lifestyle needs	All apartments have open plan living/dining and kitchens – rooms with multiple functions. All apartments exceed the overall size requirements.	Suitably complies
Energy Efficiency	Objective 4U-1	Development incorporates passive environmental design	Passive environmental design features are provided in the building including large trees adjacent to the building, landscaping and communal spaces between buildings.	Suitably complies

	Objective 4U-2	Development incorporates passive solar design to optimise heat storage in winter and reduce heat transfer in summer.	The articulated building façade on building and articulated balconies to each apartment provide shading in summer while opening up to allow solar access in winter. Deep window reveals and shading screens have been provided outside of balconies to mitigate effects of the summer sun.	Suitably complies
	Objective 4U-3	Adequate natural ventilation minimises the need for mechanical ventilation.	Apartments in the building have broad frontages to encourage natural ventilation in accordance with ADG requirements.	Suitably complies – cross ventilation requirements exceeded by the development.
Water management and Conservation	Objective 4V-1	Potable water use is minimised	Suitable plant species proposed with low water requirement. Four star rating for all taps, dishwashers and HW systems proposed.	Suitably complies
Waste Management	Objective 4W-1	Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity of residents	Waste management has on grade street access and is enclosed to minimise visual impact. Planting along its edge and adjacent trees reduces visual impact.	Suitably complies

	Objective 4W-2	Domestic waste is minimised by providing safe and convenient source separation and recycling	All apartments proposed suitable waste storage areas within kitchen. Organic waste storage provided.	Suitably complies
Building maintenance	Objective 4X-1	Building design detail provides protection from weathering	Deep balconies provide protection to the building façades, and robust finishes have been selected for high durability.	Suitably complies
	Objective 4X-2	Systems and access enable ease of maintenance.	All plants have hatch access at roof level or door access in basement level.	Suitably complies.
	Objective 4X-3	Materials selection reduces ongoing maintenance.	Resilient materials and high durability finishes have been selected to allow longevity of building integrity.	Suitably complies