State Environmental Planning Policy Housing 2021
Chapter 4 - Design of Residential Apartment Development

Design of Residential Apartment Development	Discussion	Compliance Yes or No
142 Aims of the chapter (1) The aim of this chapter is to improve the design of residential apartment development in New South Wales for the following purposes— (a) to ensure residential apartment development contributes to the sustainable development of New South Wales by— (i) providing socially and environmentally sustainable housing, and (ii) being a long-term asset to the neighbourhood, and (iii) achieving the urban planning policies for local and regional areas. (b) to achieve better built form and aesthetics of buildings, streetscapes and public spaces, (c) to maximise the amenity, safety and security of the residents of residential apartment development and the community, (d) to better satisfy the increasing demand for residential apartment development, considering— (i) the changing social and demographic profile of the community, and (ii) the needs of a wide range of people, including persons with disability, children and seniors, (e) to contribute to the provision of a variety of dwelling types to meet population growth,	This is noted. It is considered that the development is consistent with the aims of the chapter especially given that the development is contributing to a revitalisation of the eastern side of the Merrylands Town Centre close to the railway station. In addition, the amending DA will provide for affordable housing and a variety of dwelling mix that will provide housing for a diverse range of community members.	Yes

(f) to support housing affordability, (g) to minimise the consumption of energy from non-renewable resources, to conserve the environment and to reduce greenhouse gas emissions, (h) to facilitate the timely and efficient assessment of development applications to which this chapter applies.		
144 Application of chapter (1) In this policy, development to which this chapter applies is referred to as ***residential apartment development***. (2) This chapter applies to the following— (a) development for the purposes of residential flat buildings, (b) development for the purposes of shop top housing, (c) mixed use development with a residential accommodation component that does not include boarding houses or co-living housing, unless a local environmental plan provides that mixed use development including boarding houses or co-living housing is residential apartment development for this chapter. (3) This chapter applies to development only if— (a) the development consists of— (i) the erection of a new building, or (ii) the substantial redevelopment or substantial refurbishment of an existing building, or (iii) the conversion of an existing building, and	This policy applies to the subject application as it contains a residential flat building	Yes

(b) the building is at least 3 storeys, not including underground car parking storeys, and (c) the building contains at least 4 dwellings. (4) If particular development comprises development for the purposes specified in subsection (2) and development for other purposes, this chapter applies only to the part of the development for the purposes specified in subsection (2). (5) This chapter does not apply to development that involves only a class 1a or 1b building within the meaning of the *Building Code of Australia*. (6) To avoid doubt, development to which Chapter 2, Part 2, Division 1, 5 or 6 applies may also be residential apartment development under this chapter. *(7) In this section—**underground car parking storey** means a storey used for car parking that is—* *(a) below ground level (existing), or* *(b) less than 1.2m above ground level (existing).*		
145 Referral to design review panel for development applications (1) This section applies to a development application for residential apartment development, other than State significant development. (2) Before determining the development application, the consent authority must refer the application to the design review panel for the local government area in which the development will be carried out for	The application was referred to the Design Excellence Panel. Refer to Attachment 12 for comments.	Yes

advice on the quality of the design of the development. (3) This section does not apply if— (a) a design review panel has not been constituted for the local government area in which the development will be carried out, or (b) a competitive design process has been held. *(4) In this section - **competitive design process** means a design competition held in accordance with the Design Competition Guidelines published by the Department in September 2023.*		
146 Referral to design review panel for modification applications (1) This section applies to a modification application for residential apartment development, other than State significant development. (2) If the statement by the qualified designer required to accompany the modification application under the *Environmental Planning and Assessment Regulation 2021*, section 102(1) does not verify that the qualified designer designed, or directed the design of, the original development, the consent authority must refer the modification application to the relevant design review panel for advice before determining the modification application. (3) The consent authority may also refer a modification application for residential apartment development to the relevant design review panel for advice before determining the modification application. (4) The design review panel must advise whether the modification—	The application is not a modification application, it is an amending Development Application.	N/A

(a) diminishes or detracts from the design quality of the original development, or (b) compromises the design intent of the original development. (5) Subsection (2) does not apply if— (a) a design review panel has not been constituted for the local government area in which the development will be carried out, or (b) a competitive design process has been held.		
147 Determination of development applications and modification applications for residential apartment development (1) Development consent must not be granted to residential apartment development, and a development consent for residential apartment development must not be modified, unless the consent authority has considered the following— (a) the quality of the design of the development, evaluated in accordance with the design principles for residential apartment development set out in Schedule 9, (b) the Apartment Design Guide, (c) any advice received from a design review panel within 14 days after the consent authority referred the development application or modification application to the panel. (2) The 14-day period referred to in subsection (1)(c) does not increase or otherwise affect the period in which a development application or modification application must be determined by the consent authority.	An assessment of Schedule 9 and the ADG is contained below this table. The DEP comments are contained in Attachment 12.	Yes

(3) To avoid doubt, subsection (1)(b) does not require a consent authority to require compliance with design criteria specified in the Apartment Design Guide. (4) Subsection (1)(c) does not apply to State significant development.		
148 Non-discretionary development standards for residential apartment development—the Act, s 4.15 (1) The object of this section is to identify development standards for particular matters relating to residential apartment development that, if complied with, prevent the consent authority from requiring more onerous standards for the matters. **Note—** See the Act, section 4.15(3), which does not prevent development consent being granted if a non-discretionary development standard is not complied with. (2) The following are non-discretionary development standards—		
(a) the car parking for the building must be equal to, or greater than, the recommended minimum amount of car parking specified in Part 3J of the Apartment Design Guide,	The car parking is consistent with Chapter 2, Division 1 and Chapter 3, Division 4 of the Housing SEPP 2021.	Yes
(b) the internal area for each apartment must be equal to, or greater than, the recommended minimum internal area for the apartment type specified in Part 4D of the Apartment Design Guide,	The apartments meet the internal areas for their type as specified in Part 4D of the ADG.	Yes
(c) the ceiling heights for the building must be equal to, or greater than, the recommended minimum ceiling heights specified in Part 4C of the Apartment Design Guide.	The proposal provides floor to floor height of 3.1metres, therefore the development will achieve ceiling heights of 2.7metres as per Part 4C of the ADG.	Yes

149 Apartment Design Guide prevails over development control plans (1) A requirement, standard or control for residential apartment development that is specified in a development control plan and relates to the following matters has no effect if the Apartment Design Guide also specifies a requirement, standard or control in relation to the same matter— a) visual privacy, b) solar and daylight access, c) common circulation and spaces, d) apartment size and layout, e) ceiling heights, f) private open space and balconies, g) natural ventilation, h) storage. (2) This section applies regardless of when the development control plan was made.	Noted. An ADG assessment is contained further below.	Noted.
Schedule 9 **Design Principles for residential apartment development.**		
1 Context and neighbourhood character (1) Good design responds and contributes to its context, which is the key natural and built features of an area, their relationship and the character they create when combined and also includes social, economic, health and environmental conditions. (2) Responding to context involves identifying the desirable elements of an area's existing or future character. (3) Well designed buildings respond to and enhance the qualities and identity of the area including the adjacent sites, streetscape and neighbourhood.	The site forms part of a larger redevelopment. As part of the redevelopment, a significant urban renewal project is underway to activate the eastern part of the Merrylands Town Centre close to the railway station and a bus interchange. In addition, the site is located close to Merrylands Mall. As part of the redevelopment, public parkland will be provided, this was determined under a separate development application. The development is consistent with the applicable planning controls that allows for the form of development to	Yes

(4) Consideration of local context is important for all sites, including sites in the following areas— (a) established areas, (b) areas undergoing change, (c) areas identified for change.	occur. While certain variations are identified with the planning controls, overall, the form and pattern of urban development shown is broadly consistent with desired outcomes for the locality.	
2 Built form and scale (1) Good design achieves a scale, bulk and height appropriate to the existing or desired future character of the street and surrounding buildings. (2) Good design also achieves an appropriate built form for a site and the building's purpose in terms of the following— a) building alignments and proportions, b) building type, c) building articulation, d) the manipulation of building elements. (3) Appropriate built form— a) defines the public domain, and b) contributes to the character of streetscapes and parks, including their views and vistas, and c) provides internal amenity and outlook.	The form of the development, including built form massing, setbacks, materials are consistent with the planning controls for the locality. In particular, the development is oriented towards a future park area. Building entrances face west and towards the future park area. As approved under DA2022/0776, the vehicle entrance to the development is towards the south west portion of Building D which is not directly visible from the important public domain areas.	Yes
3 Density 1) Good design achieves a high level of amenity for residents and each apartment, resulting in a density appropriate to the site and its context. 2) Appropriate densities are consistent with the area's existing or projected population. 3) Appropriate densities are sustained by the following—	The floor space ratio, density (For 449 apartments) and setbacks are generally acceptable for the location. The development achieves a compliant floor space ratio for the site. The site is within an appropriate location being in close proximity to Stockland Mall Merrylands which has an array of discount department stores, supermarkets and upwards of 200 specialty shops as well as a major railway station which is	Yes

a) existing or proposed infrastructure, b) public transport, c) access to jobs, d) community facilities, e) the environment.	supported with a bus interchange. The location of such a development is appropriate for the form of development proposed.	
4 Sustainability (1) Good design combines positive environmental, social and economic outcomes. (2) Good sustainable design includes— (a) use of natural cross ventilation and sunlight for the amenity and liveability of residents, and (b) passive thermal design for ventilation, heating and cooling, which reduces reliance on technology and operation costs. (3) Good sustainable design also includes the following— a) recycling and reuse of materials and waste, b) use of sustainable materials, c) deep soil zones for groundwater recharge and vegetation.	The proposal provides: Buildings to have a North orientation to achieve solar access for 70% of apartments which receive a minimum of 2 hours of solar access during mid-winter to the living rooms and private open space between 8am-4pm. 8% of apartments have zero solar access. 64% of apartments receive natural cross ventilation in the first 9 storeys of the buildings. The residential lift lobbies are naturally lit and ventilated. The communal open spaces on the rooftops have a northerly aspect and receive solar access throughout the day. Rainwater tank provided for communal landscape irrigation. Energy and water efficient fixtures and appliances are proposed.	Yes
5 Landscape (1) Good design recognises that landscape and buildings operate together as an integrated and sustainable system, resulting in development with good amenity. (2) A positive image and contextual fit of well designed development is achieved by contributing to the landscape character of the streetscape and neighbourhood.	The subject amending DA does not alter the landscaping approved under DA2022/0776. The site will form part of a broader redevelopment of an area within the eastern side of the Merrylands Town Centre south of Neil Street.	Yes

(3) Good landscape design enhances the development's environmental performance by retaining positive natural features that contribute to the following— (a) the local context, (b) co-ordinating water and soil management, (c) solar access, (d) micro-climate, (e) tree canopy, (f) habitat values, (g) preserving green networks. (4) Good landscape design optimises the following— (a) usability, (b) privacy and opportunities for social interaction, (c) equitable access, (d) respect for neighbours' amenity. (5) Good landscape design provides for practical establishment and long term management.	As part of the redevelopment, local parklands will be established for the longer term.	
6 Amenity (1) Good design positively influences internal and external amenity for residents and neighbours. (2) Good amenity contributes to positive living environments and resident well-being. (3) Good amenity combines the following— a) appropriate room dimensions and shapes, b) access to sunlight, c) natural ventilation, d) outlook, e) visual and acoustic privacy, f) storage, g) indoor and outdoor space,	The apartment layouts, room sizes, balconies and means of internal access are consistent with the provisions contained within the Apartment Design Guide. Given the location and how the site functions, the development is being oriented towards the future public parkland to be established for the long term. The development is providing 90 adaptable dwellings which is 20% of the total number of dwellings within the development.	Yes

h) efficient layouts and service areas, **i)** ease of access for all age groups and degrees of mobility.		
7 Safety (1) Good design optimises safety and security within the development and the public domain. (2) Good design provides for quality public and private spaces that are clearly defined and fit for the intended purpose. (3) Opportunities to maximise passive surveillance of public and communal areas promote safety. (4) 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.	Building entrances are highlighted through form and materials. Lift lobbies are clearly visible from the public domain. All the residential entry lobbies are clearly visible and directly accessible from new Park. The gated COS on the ground floor of Site 1 provides direct entry to the Building B &C. It is design to be overlooked and provide security, particularly at night. North-West apartment balconies overlook the new, future park and therefore provide passive surveillance of the public domain.	Yes
8 Housing diversity and social interaction (1) Good design achieves a mix of apartment sizes, providing housing choice for different demographics, living needs and household budgets. (2) Well designed residential apartment development responds to social context by providing housing and facilities to suit the existing and future social mix. (3) Good design involves practical and flexible features, including— a) different types of communal spaces for a broad range of people, and b) opportunities for social interaction among residents.	The development is providing for: • 23 x Studios • 153 x 1 bedroom • 243 x 2 bedrooms • 30 x 3 bedrooms. The development is split into 3 separate buildings with each building having a different and distinct design and will provide for market housing, build-to-rent and affordable housing. There are 90 adaptable apartments being provided for within the development.	Yes
9 Aesthetics (1) Good design achieves a built form that has good proportions and a	The development is split into 3 separate buildings with each building having a different and	Yes

balanced composition of elements, reflecting the internal layout and structure. (2) Good design uses a variety of materials, colours and textures. (3) The visual appearance of well designed residential apartment development responds to the existing or future local context, particularly desirable elements and repetitions of the streetscape.	distinct design. This includes different use of materials and colours which proves each building a unique and distinct bult form	

Apartment Design Guide
Compliance Table

No.	Required/Permitted	Comment	Comply
Part 3 – Siting the Development			
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.*	Satisfactory.	Yes
3B	**Orientation**		
3B-1	*Building types and layouts respond to the streetscape and site while optimising solar access within the development.*	Satisfactory.	Yes
3B-2	*Overshadowing of neighbouring properties is minimised during mid-winter.*	The separation distance between the site and the development along Railway Terrace to the east is 45 metres. The separation. The separation distance includes a railway corridor and a road. Shadow diagrams have been submitted which identifies that the development will have an impact upon developments facing Railway Terrace after 12 pm. The impacts are within acceptable limits and consistent with the built form and permitted massing allowed by the local and state planning controls.	Yes
3C	**Public Domain Interface**		
3C-1	*Transition between private and public domain is achieved without compromising safety and security.*	Satisfactory.	Yes
3C-2	*Amenity of the public domain is retained and enhanced.*	Satisfactory.	Yes
3D	**Communal and Public Open Space**		

3D-1	*An adequate are of communal open space is provided to enhance residential amenity and to provide opportunities for landscaping.*		Satisfactory.	Yes
	Design Criteria	Communal open space has a minimum area equal to 25% of the site.	Based on a site area of 6,1557 square metres the proposal requires 1,538.925 square metres of communal open space. Proposed: 1,753.73 square metres or 28.5% over four roof top spaces.	
		Developments achieve a minimum of 50% direct sunlight to the principal usable part of the communal open space for a minimum of 2 hours between 9am and 3pm on 21 June.	The proposed development will achieve compliance to at least 50% of the principal usable part of the communal open space from 10am – 2pm on 21 June.	
3D-2	*Communal open space is designed to allow for a range of activities, respond to site conditions and be attractive and inviting.*		Satisfactory.	Yes
3D-3	*Communal open space is designed to maximise safety.*		Satisfactory.	Yes
3D-4	*Public open space, where provided, is responsive to the existing pattern and uses of the neighbourhood.*		Satisfactory.	N/A. However, a public park is being delivered under a separate DA.
3E	**Deep Soil Zones**			

<table>
<tr>
<td>3E-1</td>
<td>Design Criteria</td>
<td>Deep soil zones are to meet the following minimum requirements:
<table>
<tr><th>Site area</th><th>Minimum dimensions</th><th>Deep soil zone (% of site area)</th></tr>
<tr><td>less than 650m^2</td><td>-</td><td rowspan="4">7%</td></tr>
<tr><td>650m^2 - 1,500m^2</td><td>3m</td></tr>
<tr><td>greater than 1,500m^2</td><td>6m</td></tr>
<tr><td>greater than 1,500m^2 with significant existing tree cover</td><td>6m</td></tr>
</table>
Requires 430.9 square metres.</td>
<td>The total area is approximately 260 square metres or 4.2% for Site 2.

The variation is 170 square metres or 39.4%.

The deep soil area was considered and found acceptable under DA2022/0766, no changes are sought as part of this application.</td>
<td>N/A for this application.</td>
</tr>
<tr>
<td>3F</td>
<td colspan="3">Visual Privacy</td>
</tr>
<tr>
<td>3F-1</td>
<td colspan="2">Adequate building separation distances are shared equitably between neighbouring sites, to achieve reasonable levels of external and internal visual privacy</td>
<td>Noted. Refer to below.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Design Criteria</td>
<td>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:
<table>
<tr><th></th><th>Habitable rooms and balconies</th><th>Non-habitable rooms</th></tr>
<tr><td>up to 12m (4 storeys)</td><td>6m</td><td>3m</td></tr>
<tr><td>up to 25m (5-8 storeys)</td><td>9m</td><td>4.5m</td></tr>
</table></td>
<td>The western elevation between Building B towards A is considered. There are main rooms and private areas situated on the ground level facing west but these would not raise privacy issues. There are balconies and main rooms facing west on Levels 1, 2 and 3 across numerous apartments. Building C is compliant. Building B A separation distance between balconies and living</td>
<td>No. Acceptable on merit, refer to amin body of report for a detailed assessment.</td>
</tr>
</table>

		over 25m (9+ storeys) | 12m | 6m Separation distances between buildings on the same site should combine required building separations depending on the type of room (see Figure 3F.2) Gallery access circulation should be treated as habitable space when measuring privacy separation distances between neighbouring properties	areas of 12 metres metres is provided. Between Buildings B and C Ground - No issues raised. Level 1 to 3 - 12 metres between habitable and non habitable rooms. Levels 4 to 7 - 12 metres between habitable rooms and bedrooms. Levels 8 to 11 - 18 metres between habitable and non habitable rooms. Between Buildings C and D Ground - No issues raised. Level 1 to 3 - 12 metres between habitable and non habitable rooms and balconies. Levels 4 to 7 - 12 metres between habitable rooms, bedrooms and balconies. Levels 8 to 11 - 18 metres between habitable and non habitable rooms and balconies. For Building D There are habitable floor areas, balconies and bedrooms facing one another across a distance of 12 metres on Level 8 to 11.	
3G	**Pedestrian Access and Entries**			
3G-1	*Building entries and pedestrian access connects to and addresses the public domain*		The location of the building entrances are satisfactory.	Yes
3G-2	*Access, entries and pathways are accessible and easy to identify*		This is achieved.	Yes
3G-3	*Large sites provide pedestrian links for access to streets and connection to destinations*		A pathway is provided between Buildings A and B which includes a security gate. The link does not pass to Neil Street due to the presence of an	Yes

			embankment and a fence.	
3H	**Vehicle Access**			
3H-1	*Vehicle access points are designed and located to achieve safety, minimise conflicts between pedestrians and vehicles and create high quality streetscapes*		The vehicle access area was considered and found acceptable under DA2022/0766, no changes are sought as part of this application.	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*		Car parking is addressed under Attachment 8 of this report and is found to be satisfactory.	Yes
	Design Criteria	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 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	Car parking is addressed under Attachment 8 of this report and is found to be satisfactory.	Yes
		The car parking needs for a development must be provided off street	This is achieved.	
3J-2	*Parking and facilities are provided for other modes of transport*		Bicycle storage is provided in basement 1 and designated motorcycle parking spaces are also provided in the basement levels to	Yes

			supplement the car parking.	
3J-3	*Car park design and access is safe and secure*		Satisfactory. A security grill is shown on the plans on the ground floor basement access level.	Yes
3J-4	*Visual and environmental impacts of underground car parking are minimised*		Satisfactory.	Yes
3J-5	*Visual and environmental impacts of on-grade car parking are minimised*		N/A	N/A
3J-6	*Visual and environmental impacts of above ground enclosed car parking are minimised*		N/A	N/A
Part 4 – Designing the Building				
4A-1	***Design Criteria***	Living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 2 hours direct sunlight between 9 am and 3 pm at mid winter in the Sydney Metropolitan Area and in the Newcastle and Wollongong local government areas	A total of 314 of 449 apartments or 70% will receive adequate sunlight penetration at the winter solstice.	Yes
		A maximum of 15% of apartments in a building receive no direct sunlight between 9 am and 3 pm at mid winter	At least 36 apartments or 8% will receive no sunlight at the winter solstice	Yes
4A-2	*Daylight access is maximised where sunlight is limited*		Satisfactory.	Yes
4A-3	*Design incorporates shading and glare control, particularly for warmer months*		Satisfactory.	Yes
4B	**Natural Ventilation**			
4B-1	*All habitable rooms are naturally ventilated*		Satisfactory.	Yes
4B-2	*The layout and design of single aspect apartments maximises natural ventilation*		Satisfactory.	Yes
4B-3	*The number of apartments with natural cross ventilation is maximised to create a comfortable indoor environment for residents*			
	Design Criteria	At least 60% of apartments are naturally cross ventilated in the first nine storeys of the building. Apartments at ten storeys or greater are deemed to be cross ventilated only if any enclosure of the balconies at these levels allows adequate natural ventilation and cannot be fully enclosed	149 apartments are naturally crossed ventilated or 63.67%. i.e 149 of the 234 units below 10 storeys are cross ventilated.	Yes

<table>
<tr><td></td><td></td><td>Overall depth of a cross-over or cross-through apartment does not exceed 18m, measured glass line to glass line</td><td>There are no apartments that exceed a length of 18 metres.</td><td>Yes</td></tr>
<tr><td>4C</td><td colspan="4">Ceiling heights</td></tr>
<tr><td>4C-1</td><td colspan="2"></td><td colspan="2">Ceiling height achieves sufficient natural ventilation and daylight access</td></tr>
<tr><td></td><td>Design Criteria</td><td>Measured from finished floor level to finished ceiling level, minimum ceiling heights are:

<table><tr><th colspan="2">Minimum ceiling height for apartment and mixed use buildings</th></tr><tr><td>Habitable rooms</td><td>2.7m</td></tr><tr><td>Non-habitable</td><td>2.4m</td></tr><tr><td>For 2 storey apartments</td><td>2.7m for main living area floor 2.4m for second floor, where its area does not exceed 50% of the apartment area</td></tr><tr><td>Attic spaces</td><td>1.8m at edge of room with a 30 degree minimum ceiling slope</td></tr><tr><td>If located in mixed used areas</td><td>3.3m for ground and first floor to promote future flexibility of use</td></tr></table></td><td>2.7m floor to ceiling is provided to all residential floors, the proposal provides for 3.1m floor to floor heights.

The proposed development complies with the ADG provisions.</td><td>Yes</td></tr>
<tr><td>4C-2</td><td colspan="2">Ceiling height increases the sense of space in apartments and provides for well proportioned rooms</td><td>Satisfactory.</td><td>Yes</td></tr>
<tr><td>4C-3</td><td colspan="2">Ceiling heights contribute to the flexibility of building use over the life of the building</td><td>Noted. Satisfactory, given the proposal is for a residential flat building.</td><td>Noted.</td></tr>
<tr><td>4D</td><td colspan="4">Apartment size and layout</td></tr>
<tr><td>4D-1</td><td colspan="4">The layout of rooms within an apartment is functional, well organised and provides a high standard of amenity</td></tr>
<tr><td></td><td>Design Criteria</td><td>Apartments are required to have the following minimum internal areas:

<table><tr><th>Apartment size</th><th>Minimum Internal Area</th></tr></table></td><td>All apartments achieve or exceed the minimum apartment size.</td><td>Yes</td></tr>
</table>

		<table><tr><td>Studio</td><td>35m^2</td></tr><tr><td>1 bedroom</td><td>50m^2</td></tr><tr><td>2 bedroom</td><td>70m^2</td></tr><tr><td>3 bedroom</td><td>90m^2</td></tr></table> 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 12m2 each		
		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	Satisfactory.	Yes
4D-2	*Environmental performance of the apartment is maximised*			
	Design Criteria	Habitable room depths are limited to a maximum of 2.5 x the ceiling height	Room depths are satisfactory.	Yes
		In open plan layouts (where the living, dining and kitchen are combined) the maximum habitable room depth is 8m from a window	This achieved.	Yes
4D-3	*Apartment layouts are designed to accommodate a variety of household activities and needs*			
	Design Criteria	Master bedrooms have a minimum area of 10m2 and other bedrooms 9m2 (excluding wardrobe space)	All bedrooms comply.	Yes
		Bedrooms have a minimum dimension of 3m (excluding wardrobe space)	All bedrooms comply.	Yes
		Living rooms or combined living/dining rooms have a minimum width of:	Livings rooms comply with minimum dimensions.	Yes

<table>
<tr><td></td><td></td><td>3.6m for studio and 1 bedroom apartments
4m for 2 and 3 bedroom apartments</td><td></td><td></td></tr>
<tr><td></td><td></td><td>The width of cross-over or cross-through apartments are at least 4m internally to avoid deep narrow apartment layouts</td><td>Satisfactory.</td><td>Yes</td></tr>
<tr><td>4E</td><td colspan="4">Private open space and balconies</td></tr>
<tr><td>4E-1</td><td colspan="4">Apartments provide appropriately sized private open space and balconies to enhance residential amenity</td></tr>
<tr><td></td><td>Design Criteria</td><td>All apartments are required to have primary balconies as follows:<table><tr><th>Dwelling Type</th><th>Minimum Area</th><th>Minimum Depth</th></tr><tr><td>Studio</td><td>4m^2</td><td>-</td></tr><tr><td>1 bedroom</td><td>8m^2</td><td>2m</td></tr><tr><td>2 bedroom</td><td>10m^2</td><td>2m</td></tr><tr><td>3+ bedroom</td><td>12m^2</td><td>2.4m</td></tr></table>The minimum balcony depth to be counted as contributing to the balcony area is 1m</td><td>All balconies comply with the exception of apartments 210, 211, 310, 311, 410, 411, 510, 511, 925, 926,1025,1026,1125, 1126,1225, 1226, 1325, 1326, 1425, 1426, 1525 and 1526 in Building C (4.9% variation, 22/449 apartments).</td><td>No. Acceptable on merit refer to main body of report for detailed discussion.</td></tr>
<tr><td></td><td></td><td>For apartments at ground level or on a podium or similar structure, a private open space is provided instead of a balcony. It must have a minimum area of 15m2 and a minimum depth of 3m</td><td>The subject application does not alter the ground floor apartments previously approved under DA2022/0776.</td><td>N/A</td></tr>
<tr><td>4F</td><td colspan="4">Common circulation spaces achieve good amenity and properly service the number of apartments</td></tr>
<tr><td>4F-1</td><td>Design Criteria</td><td>The maximum number of apartments off a circulation core on a single level is eight</td><td>The proposal provides for 8 or less apartments off a circulation core on a single level, with the exception of Building D (BTR) which has 9. However, this is less than the design guidance which allows a maximum of 12 apartments off a</td><td>Yes</td></tr>
</table>

<table>
<tr><td></td><td></td><td></td><td>circulation core on a single level.</td><td></td></tr>
<tr><td></td><td></td><td>For buildings of 10 storeys and over, the maximum number of apartments sharing a single lift is 40</td><td><u>Building B</u>: 174 apartments with three lifts, average of 58 units per lift.

<u>Building C</u>
73 apartments with two lifts, average of 36.5 units per lift.

<u>Building D</u>
194 apartments with five lifts, average of 38.8 units per lift.</td><td>No. Acceptable on merit refer to main body of report for detailed discussion.

Yes

Yes</td></tr>
<tr><td>4F-2</td><td colspan="2">Common circulation spaces promote safety and provide for social interaction between residents</td><td>Satisfactory.</td><td>Yes</td></tr>
<tr><td>4G</td><td colspan="4">Storage</td></tr>
<tr><td>4G-1</td><td colspan="4">Adequate, well designed storage is provided in each apartment</td></tr>
<tr><td></td><td>Design Criteria</td><td>In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided:<table><tr><th>Dwelling type</th><th>Storage size volume</th></tr><tr><td>Studio apartments</td><td>4m^3</td></tr><tr><td>1 bedroom apartments</td><td>6m^3</td></tr><tr><td>2 bedroom apartments</td><td>8m^3</td></tr><tr><td>3+ bedroom apartments</td><td>10m^3</td></tr></table>At least 50% of the required storage is to be located within the apartment</td><td>Storage is provided the apartments and storage spaces in the basement levels.</td><td>Yes</td></tr>
<tr><td>4G-2</td><td colspan="2">Additional storage is conveniently located, accessible and nominated for individual apartments</td><td>Satisfactory.</td><td>Yes</td></tr>
<tr><td>4H</td><td colspan="4">Acoustic privacy</td></tr>
<tr><td>4H-1</td><td colspan="2">Noise transfer is minimised through the siting of buildings and building layout</td><td>Satisfactory where possible.</td><td>Yes</td></tr>
</table>

4H-2	*Noise impacts are mitigated within apartments through layout and acoustic treatments*	Internal layout sensibly locates bedrooms away lounge and dining room areas.	Yes
4J	**Noise and pollution**		
4J-1	*In noisy or hostile environments the impacts of external noise and pollution are minimised through the careful siting and layout of buildings*	Satisfactory. An acoustic report has been provided and Council's Environmental Health officer raised no objections subject to conditions.	Yes
4J-2	*Appropriate noise shielding or attenuation techniques for the building design, construction and choice of materials are used to mitigate noise transmission*	An acoustic report has been provided that concludes construction for glazing, external walls and the roof/ceiling systems have been provided to achieve the internal noise criteria based on the impact of road traffic and railway noise. An assessment of railway vibration levels has been conducted accordance with the Department of Planning guidelines and EPA criteria.	Yes
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*	Satisfactory and achieved via a range of apartment types to meet a range of household types.	Yes
4K-2	*The apartment mix is distributed to suitable locations within the building*	Studio = 23 or 5% 1 bed = 153 or 34% 2 bed = 243 or 54% 3 bed = 30 or 7%	Yes
4L	**Ground Floor Apartments**		
4L-1	*Street frontage activity is maximised where ground floor apartments are located*	No changes sought to the ground floor apartments as part of this application.	N/A
4L-2	*Design of ground floor apartments delivers amenity and safety for residents*	As above.	N/A
4M	**Facades**		

4M-1	*Building facades provide visual interest along the street while respecting the character of the local area*	No changes sought to ground floor apartments.	Yes
4M-2	*Building functions are expressed by the facade*	Satisfactory.	Yes
4N	**Roof Design**		
4N-1	*Roof treatments are integrated into the building design and positively respond to the street*	The buildings have communal open space on the rooftops. These spaces are screened to mitigate high wind speeds and to provide a comfortable environment.	Yes
4N-2	*Opportunities to use roof space for residential accommodation and open space are maximised*	Refer to above.	Yes
4N-3	*Roof design incorporates sustainability features*	Roof spaces are capable of achieve sustainable features in the future.	N/A
4O	**Landscape Design**		
4O-1	*Landscape design is viable and sustainable*	Satisfactory.	Yes
4O-2	*Landscape design contributes to the streetscape and amenity*	Satisfactory.	Yes
4P	**Planting on Structures**		
4P-1	*Appropriate soil profiles are provided*	This is satisfactory.	Yes
4P-2	*Plant growth is optimised with appropriate selection and maintenance*	These are shown on the landscape plans.	Yes
4P-3	*Planting on structures contributes to the quality and amenity of communal and public open spaces*	Satisfactory.	Yes
4Q	**Universal Design**		
4Q-1	*Universal design features are included in apartment design to promote flexible housing for all community members*	Satisfactory.	Yes
4Q-2	*A variety of apartments with adaptable designs are provided*	90 apartments (20%) nominated as adaptable.	Yes
4Q-3	*Apartment layouts are flexible and accommodate a range of lifestyle needs*	Satisfactory.	Yes
4R	**Adaptive Reuse**		
4R-1	*New additions to existing buildings are contemporary and complementary and enhance an area's identity and sense of place*	N/A	N/A

4R-2	Adapted buildings provide residential amenity while not precluding future adaptive reuse	N/A	N/A
4S	**Mixed Use**		
4S-1	*Mixed use developments are provided in appropriate locations and provide active street frontages that encourage pedestrian movement*	N/A	N/A
4T	**Awnings and Signage**		
4T-1	*Awnings are well located and complement and integrate with the building design*	No change sought to awnings	N/A
4U	**Energy Efficiency**		
4U-1	*Development incorporates passive environmental design*	A BASIX Certificate is provided addressing sustainability matters. The Certificate suggests compliances with the water and energy needs.	Yes
4U-2	*Development incorporates passive solar design to optimise heat storage in winter and reduce heat transfer in summer*	Satisfactory.	Yes
4U-3	*Adequate natural ventilation minimises the need for mechanical ventilation*	Satisfactory.	Yes
4V	**Water Management and Conservation**		
4V-1	*Potable water use is minimised*	Satisfactory.	Yes
4V-2	*Urban stormwater is treated on site before being discharged to receiving waters*	Satisfactory.	Yes
4V-3	*Flood management systems are integrated into site design*	Separate engineering consideration.	Yes
4W	**Waste Management**		
4W-1	*Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity of residents*	Waste storage and collection is carried out on the ground floor within the subject site.	Yes
4W-2	*Domestic waste is minimised by providing safe and convenient source separation and recycling*	Satisfactory.	Yes
4X	**Building Maintenance**		
4X-1	*Building design detail provides protection from weathering*	Satisfactory.	Yes
4X-2	*Systems and access enable ease of maintenance*	Satisfactory.	Yes
4X-3	*Material selection reduces ongoing maintenance costs*	Satisfactory.	Yes