DESIGN QUALITY

STATE ENVIRONMENTAL PLANNING POLICY NO.65 - DESIGN QUALITY OF RESIDENTIAL FLAT BUILDINGS

STANDARD / CONTROL	COMMENT
Principle 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 proposed development is located in an area adjacent the university. The Newcastle Urban Strategy provides that this area has the opportunity to provide housing and services associated with the University and nearby hospitals. The site is in a sense separated from the immediate residential context with large frontage to University Drive. The proposed
Principle 2: Built Form and 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 bulk and scale proposed for the development is suitable without compromising adjacent development.
Principle 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.	Due to the topographical constraints on the site the nominated density of the site is not able to be achieved. It is that consolidating development to the eastern portion of the site will provide the best built form outcome. Although additional density was considered it thought that this could lead to development that had a height that was out of character with the generally lower rise area.
Principle 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 site planning enhances the opportunities for sustainable development through the placement of building footprints that work with the topography, living spaces that respond to the orientation to maximise solar access and daylight and thin built forms that encourage natural ventilation. A positive social environment is created through the careful placement of linked common spaces that encourage gathering and social interaction. Strong visual surveillance is provided to all pedestrian spaces to enhance passive security. A substantial area of the site is provided as managed bushland that maintains the character of the site.

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Principle 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, coordinating water and soil management, solar access, micro-climate, tree canopy, habitat values, and preserving green networks. Good landscape design optimises usability, privacy and opportunities for social interaction, equitable access, respect for neighbours' amenity, provides for practical establishment and long term management.	The development on the site has a strong connection with the existing topography and the natural constraints. Although large areas of the existing landscape will be modified, the proposed landscape finds a fine balance between the existing natural character of the bushland and the more urban streetscape demanded by the intensity of the development. Substantial native planting provides for a landscape character similar to that of the University campus with high level tree canopy linked by managed understory planting.
Principle 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.	High levels of amenity are provided in the internal and external spaces throughout the proposal. The dwellings have generous internal spaces with good access to sunlight and daylight. Storage is provided both within the dwellings but also located within basement parking. Although there is not requirement by Council - provision is made for adaptable dwellings to accommodate persons with a disability.
Principle 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 development will generate the opportunity for good passive surveillance and active uses adjacent to and within the public domain without compromising the privacy of residents. Streets are provided with vehicle access to enable constant passive surveillance, while the pedestrian-only connections afford good lines of sight across the public open spaces. The spaces are defined with low planting and maintaining multiple means of exist from the spaces as not to create dead-ends. Lighting will be incorporated to comply with the required safety category. The proposal has been designed to accommodate the principles of Crime Prevention Through Environmental Design (CPTED).
Principle 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, providing opportunities for social interaction amongst residents.	Two different forms of housing are provided to meet the demands of different needs of people who would like to live close to the university - apartment and townhouse typologies This provides opportunities for different 'family' units to co-habit whether it be singles, couples, flat mates or young families with children. Throughout the masterplan are a series of different types of communal spaces - passive, active and gathering spaces ranging from sitting spaces within along the main pedestrian link that traverses the site, to communal spaces for BBQ and the 'green' space adjacent the entry to the site.

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Principle 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 well designed apartment development responds to the existing or future local context, particularly desirable elements and repetitions of the streetscape.	The aesthetics of the proposed development carries strong thematic influences from parts of the University campus across the road - the use of face brick providing timeless durable finish. The colour palette of materials provides a strong link to the bushland and the colours of the earth being a mix of browns, tans and mid reds. The apartment buildings that have a frontage to University drive have a more robust almost institutional aesthetic with visually thick walls that create shadow and texture. The town house buildings to the rear have a finer grain and play with the site topography with alternative skillion roofs and projecting balcony elements.

APARTMENT DESIGN GUIDE - DESIGN CRITERIA

CL.	STANDARD / CONTROL	COMPLY	COMMENT
2F	**Building Separation** Building height: Up to 4 storeys high (app 12m) — Separation distance: Between habitable rooms/ balconies: 12m; Between habitable and non-habitable rooms: 9m; Between non-habitable rooms: 6m	Y	Building separation is noted on the plans.
3D	**Communal and public open space** 1. Communal open space has a minimum area equal to 25% of the site. 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).	Y	79% achievement for 2hrs. Refer to development schedule for full breakdown.
3E	**Deep soil zones** 1. Deep soil zones are to meet the following minimum requirements: Less than 650m² — Minimum dimensions: - — Deep soil zone (% of site area): 7% 650m² - 1,500m² — Minimum dimensions: 3m Greater than 1,500m² — Minimum dimensions: 6m Greater than 1,500m² with significant existing tree cover — Minimum dimensions: 6m	Y	14,609m² - 45%.
3F	**Visual privacy** 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: Up to 12m (4 storeys) — Habitable rooms and balconies: 6m; Non-habitable rooms: 3m	Y	Refer to building separation above.

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4A	**Solar and daylight access** 1. Living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 2 hours direct sunlight between 9 am and 3pm at mid winter in the Sydney Metropolitan Area and in the Newcastle and Wollongong local government areas.	Y	71% dwellings receive 2hrs solar access.
	3. A maximum of 15% of apartments in a building receive no direct sunlight between 9 am and 3 pm at mid winter.	Y	22% dwellings receive no solar access. This non compliance should be read in respect to the prevalence of south-western facing units in Building G which are targeted towards single occupants. Otherwise the remainder of buildings achieve an excellent proportion of daylight access.
4B	**Natural ventilation** 1. At least 60% of apartments are naturally cross ventilated in the first nine storeys of the building. Apartments at ten storeys or greater are deemed to be cross ventilate	Y	75% dwellings are cross ventilated.
	2. Overall depth of a cross-over or cross-through apartment does not exceed 18m, measured glass line to glass line.	Y	The maximum building depth is 10.75m.
4C	**Ceiling heights** 1. Measured from finished floor level to finished ceiling level, minimum ceiling heights are: Habitable rooms: 2.7m Non-habitable: 2.4m For 2 storey apartments: 2.7m for main living area floor; 2.4m for second floor, where its area does not exceed 50% of the apartment area.	Y	A floor to floor level of 3m is provided which will allow for a 2.7m ceiling space in all habitable rooms
4D	**Apartment size and layout** 1. Apartments are required to have the following minimum internal areas: Studio: 35m² 1 bedroom: 50m² 2 bedroom: 70m² 3 bedroom: 90m² The minimum internal areas include only one bathroom. Additional bathrooms increase the minimum internal area by 5m² each. 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.	Y	The proposed development exceeds the minimum dwelling sizes indicated in the table. Individual dwelling areas are provided in the development schedule at the rear of this report. Every habitable room has a window that exceeds 10% of the floor area.
4D	**Environmental performance** 1. Habitable room depths are limited to a maximum of 2.5 x the ceiling height.	Y	The maximum habitable room depth is 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.	N	The maximum depth of any living room is 9.8m. This occurs in a small number of dwellings. The kitchen is located at the rear and is large in size for a 1 bed dwelling.

CL.	STANDARD / CONTROL	COMPLY	COMMENT
4E	**Private open space and balconies** 1. All apartments are required to have primary balconies as follows: Dwelling type / Minimum area / Minimum depth Studio apartments — 4m² — - 1 bedroom apartments — 8m² — 2m 2 bedroom apartments — 10m² — 2m 3+ bedroom apartments — 12m² — 2.4m The minimum balcony depth to be counted as contributing to the balcony area is 1m. 2. For apartments at ground level or on a podium or similar structure, a private open space is provided instead of a balcony. It must have a minimum area of 15m² and a minimum depth of 3m.	Y	Balcony areas meet this requirement - please refer to Development Schedule for compliance.
4F	**Common circulation and spaces** 1. The maximum number of apartments off a circulation core on a single level is eight.	Y	The maximum number of dwellings off one core is 8 in Building J and Building G.
4G	**Storage** 1. In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided: Dwelling type / Storage size volume Studio apartments — 4m³ 1 bedroom apartments — 6m³ 2 bedroom apartments — 8m³ 3+ bedroom apartments — 10m³ At least 50% of the required storage is to be located within the apartment.	Y	Storage is provided both internally and within the basement - refer to Development Schedule for compliance.