

## Apartment Design Guide Assessment Table

Objective	Comment	Achieved
<p><u>3A-1 Site Analysis</u></p> <p>Site analysis illustrates that design decisions have been based on opportunities and constraints of the site conditions and their relationship to the surrounding context</p>	<p>The proposed excessive bulk and scale of the built forms show a lack of consideration of the future context, streetscape and desired future character of this locality.</p> <p>The site is located on the edge of the Leppington Major Centre adjoining the Leppington Priority Precinct and adjoining residential area to the south with a lower height control. The proposal should provide a transition to a lower built form in terms of bulk and scale. The applicant should demonstrate an understanding of this and provide a study of the potential future envelopes around the subject site including the lots across Ingleburn Road to the south. The study should also provide sections across Ingleburn Road, demonstrating the proposed built forms and potential building envelopes to the southern side of Ingleburn Road as well as the adjoining 20m Residential Collector Road.</p>	No
<p><u>3B-1 Orientation</u></p> <p>Building types and layouts respond to the streetscape and site whilst optimising solar access within the development</p>	<p>As per the objectives, “ <i>Building types and layouts should respond to the streetscape and site while optimising solar access within the development</i> ”, the proposal fails to meet this objective as it has a significant self-overshadowing issue. The orientation of the proposed buildings fails to activate the street frontage of Road No.1. The orientation is not responding to the desired active frontages envisaged in the DCP.</p> <p>The ground floor residential lobbies of the proposed buildings do not address proposed Road No. 2 and proposed road No.3. In addition, the western building ( building B ) residential lobbies are all orientated to the communal open space area.</p>	No
<p><u>3B-2 Orientation</u></p> <p>Overshadowing of neighbouring properties is minimised during mid-winter</p>	<p>The proposed building layout does not take advantage of the sites northern orientation, with the communal open space area located between two buildings.</p>	No

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	The streets and the adjacent lots are overshadowed by the proposed development based on the shadow diagrams provided, which do not meet the objective of "overshadowing of neighbouring properties is minimised during mid-winter."	
<b>3D-1 Communal and Public Open Space</b>  <b>Design Criteria</b>  Communal open space has a minimum area equal to 25% of the site area  Developments achieve a minimum of 50% direct sunlight to the principal usable part of the communal open space for a minimum of 2 hours between 9am and 3pm on 21 June (mid-winter)	Site Area – 5149m <sup>2</sup> Minimum requirement – 1287.25m <sup>2</sup>  Proposed area – Ground – 467.29m <sup>2</sup> Rooftop courtyard ( Level 4 ) – 155.76m <sup>2</sup> Total – 623.05m <sup>2</sup> / 12.1%  The principal usable part of the communal open space is not identified upon the development plans. However, based on the shadow diagrams submitted with the application significant self-overshadowing of the communal open space area occurs and the application fails to demonstrate that this requirement is met.  It is considered that the narrow open space area between the proposed buildings will not provide an adequate area for landscaping and congregating. In addition, no direct equitable access is provided to the communal open space area from building A.	No           No
<b>3E-1 Deep Soil Zones</b>  <b>Design Criteria</b>  Deep soil zones are to meet the following minimum requirements:  <u>Site area &lt;650m<sup>2</sup></u>  7% of site area  <u>Site area 650m<sup>2</sup>-1,500m<sup>2</sup></u>	Site Area – 5149m <sup>2</sup> Minimum requirement – 360.43m <sup>2</sup> Minimum dimensions – 6m  Proposed area – 507.35m <sup>2</sup> / 9.8% Minimum dimensions – 6m  Deep soil zone areas are located around the perimeter of the buildings, however only the southern frontage adjacent to proposed Road No. 2 satisfies the minimum 6m dimension. In addition, the northern end of the communal open space area provides a width of 7 metres, enabling this area to be calculated	           Yes

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<p>Minimum dimensions of 3m and 7% of site area</p> <p><b><u>Site area &gt;1,500m<sup>2</sup></u></b></p> <p><b>Minimum dimensions of 6m and 7% of site area</b></p> <p><b><u>Site area &gt;1,500m<sup>2</sup> with significant existing tree cover</u></b></p> <p>Minimum dimensions of 6m and 7% of site area</p>	<p>as a deep soil zone.</p> <p>Northern perimeter depth – 5m – 5.025m Southern perimeter depth – 6m Eastern perimeter depth – 4.5m Western perimeter depth – 4.755m – 4.83m</p>	
<p><b>3F-1 Visual Privacy</b></p> <p><b>Design Criteria</b></p> <p>Separation distance between windows and balconies is provided to ensure visual privacy is achieved. Minimum requires separation distance from buildings to the side and rear boundaries are as follows:</p> <p><b><u>Building up to 12m (4 storeys)</u></b></p> <p><b>6m between habitable rooms and balconies, 3m between non-habitable rooms</b></p> <p><b><u>Building up to 25m (5-8 storeys)</u></b></p> <p><b>9m between habitable rooms and balconies, 4.5m between non-habitable rooms</b></p> <p><b><u>Building over 25m (9+ storeys)</u></b></p> <p>12m between habitable rooms and balconies, 6m between non-habitable rooms</p>	<p>Building Separation between building A and B</p> <p>Ground – 12.110m between habitable rooms, however 10.6 is proposed from stairwells. 1<sup>st</sup> Floor – 12.110m between habitable rooms / balconies at the closest point, however 10.6m is proposed from stairwells. 2<sup>nd</sup> Floor – 12.110m between habitable rooms / balconies at the closets point, however 10.6m is proposed from stairwells. 3<sup>rd</sup> Floor – 12.110m between habitable rooms / balconies at the closest point, however 10.6m is proposed from stairwells. 4<sup>th</sup> Floor – 12.110mm between habitable rooms / balconies at the closest point. In addition, 12.110m is proposed from the communal open space area located upon Building B. 5<sup>th</sup> Floor – 12.110m between habitable rooms / balconies at the closest point. 10.6m are proposed from stairwells. 6<sup>th</sup> Floor – 12.110m between habitable rooms / balconies at the closest point. 10.6m are proposed from stairwells.</p> <p>Proposed building separation is generally satisfactory on the lower levels ( Ground to 3<sup>rd</sup> floor ). However, the minimum separation distance at the upper levels ( 4<sup>th</sup> floor to 6<sup>th</sup> floor ) fails to meet the minimum separation distance of 18 metres, with the northern and southern ends of the development proposing 12.110m separation distances.</p>	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>No</p> <p>No</p> <p>No</p>

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<p>Separation distances between buildings on the same site should combine required building separations depending on the type of room</p> <p>Gallery access circulation should be treated as habitable space when measuring privacy separation distance between neighbouring properties</p>	<p>A minimum separation distance of 18m shall also apply from the 4<sup>th</sup> floor communal open space area. Insufficient building separation distance will create significant visual privacy issue to future residents as well as decreased solar access to lower levels.</p> <p>Building Separation between building B and the adjoining western property</p> <p>Ground – 6.015m  1<sup>st</sup> Floor – 6.015m  2<sup>nd</sup> Floor – 6.015m  3<sup>rd</sup> Floor – 6.015m  4<sup>th</sup> Floor – 7.2m from the edge of balconies. 6.015m from the edge of planter boxes.  5<sup>th</sup> Floor – 9.015m  6<sup>th</sup> Floor – 9.015m</p> <p>The proposed building separation to the western adjoining property is generally compliant, with the exception of balconies / planter boxes upon the 4<sup>th</sup> floor, which are 6.015m from the boundary. Balconies are proposed for the full length of the western façade and do not satisfy the minimum separation distance of 9m and are considered unsatisfactory in this instance.</p>	<p>Yes  Yes  Yes  Yes  No  Yes  Yes</p>
<p><u>3F-2 Visual Privacy</u></p> <p>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</p>	<p>Visual privacy is compromised between balconies upon building A at the northern and southern ends of the building upon level 4, where balconies of adjoining units are separated by approximately 4.4 metres without adequate screening to retain privacy for individual units.</p>	<p>No</p>
<p><u>3G-1 Pedestrian Access and Entries</u></p> <p>Building entries and pedestrian access connects to and</p>	<p>The residential lift lobbies of the western building ( building B )</p>	<p>No</p>

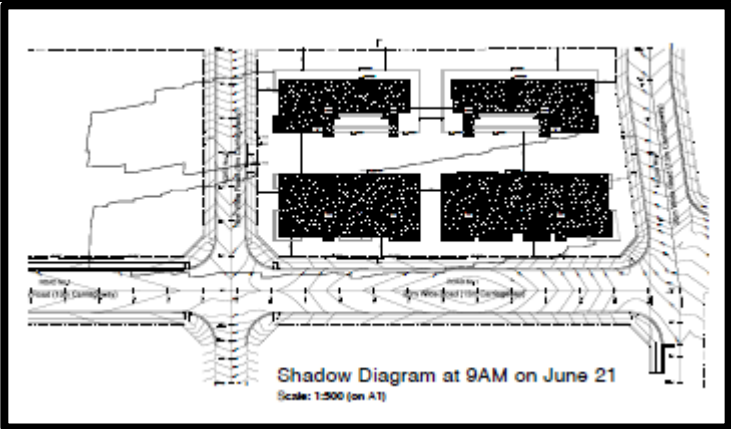
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<p>addresses the public domain</p> <p><u>3G-2 Pedestrian Access and Entries</u></p> <p>Access, entries and pathways are accessible and easy to identify</p>	<p>face the raised up communal open space area rather than facing the street directly. This is not acceptable as it reduces entry legibility, street activation and address. The proposed buildings, shall be accessible directly from the streets ( i.e. proposed Road No. 2 and proposed Road No. 3 ). The proposed entries from the internal courtyard are not acceptable.</p>	
<p><u>3H-1 Vehicle Access</u></p> <p>Vehicle access points are designed and located to achieve safety, minimise conflicts between pedestrians and vehicles and create high quality streetscapes</p>	<p>The vehicular entry/driveway from Road No. 2 is exposed and is located between two buildings. The exposed basement ramp is considered to compromise the visual quality of the public domain and the ramp should be encapsulated into a built form. In addition, the proposed basement access width does not accommodate a 9.98m heavy rigid vehicle to allow for Council waste servicing of the site.</p>	No
<p><b>3J-1 Bicycle and Car Parking</b></p> <p><b>Design Criteria</b></p> <p>For development in the following locations:</p> <ul style="list-style-type: none"> <li>on sites that are within 800m of a railway station or light rail stop in the Sydney Metropolitan Area; or</li> <li>on land zoned, and sites within 400m of land zoned, B3 Commercial Core, B4 Mixed Use or equivalent in a nominated regional centre</li> </ul> <p>the minimum car parking requirement for residents and visitors is set out in the Guide to Traffic Generating Developments, or the car parking requirement prescribed by the relevant council, whichever less</p>	<p>The proposed development does not meet either of these locational criteria</p>	N/A

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The car parking need for a development must be provided off-street		
<p><b>4A-1 Solar and Daylight Access</b></p> <p><b>Design Criteria</b></p> <p>Living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 2 hours direct sunlight between 9am and 3pm at mid-winter in the Sydney Metropolitan Area and in the Newcastle and Wollongong local government areas</p> <p>A maximum of 15% of apartments in a building receive no direct sunlight between 9am and 3pm at mid-winter</p>	<p>Self-overshadowing is significant from the western building ( building B ) to the eastern building ( building A ), including over the common open space area located between the buildings. The proposed lower levels, including the ground floor subterranean units of Building A along the 20m residential collector road are likely to be overshadowed by the building to the west ( Building B ). In addition, the reduced floor to floor height (2.9m) on each level coupled with significant self-overshadowing will sacrifice solar access to the proposed units.</p> <p>Insufficient details have been submitted with the application i.e. Sun-eye diagrams to demonstrate that the development meets the minimum requirements as claimed within the Statement of Environmental Effects. In addition, the proposed development has not considered the impact of overshadowing from the adjoining north eastern development proposed upon Lot 3 subject to DA/1472/2016. Shadow diagrams submitted with DA/1472/2016 reveal that the development proposed upon Lot 3 will overshadow the development proposed on Lot 2 – DA/1471/2016 from 9am to approximately 11am. The shadows are likely to impact lower levels facing the north west, which does not appear to have been considered with the application.</p> <p>No single aspect units are proposed upon the eastern side of building B. However, insufficient shadow diagram information has been provided to confirm whether any lower level single aspect units located on the western side of building A are constantly overshadowed.</p>	<p>No. Insufficient information to confirm compliance.</p> <p>No. Insufficient information to confirm compliance.</p>

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	 <p>Shadow Diagram at 9AM on June 21 Scale: 1:500 (on A1)</p>	
<p><b>4B-3 Natural Ventilation</b></p> <p><b>Design Criteria</b></p> <p>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 naturally ventilated only if any enclosure of the balconies at these levels allows adequate natural ventilation can cannot be fully enclosed</p> <p>Overall depth of a cross-over or cross-through apartment does not exceed 18m, measured glass line to glass line</p>	<p>Image 1 – Shadow diagram at 9am submitted with DA/1472/2016. Note that no building form has been indicated upon Lot 2 to the south west.</p> <p>110 / 156 Units ( 70.5% ) are naturally cross ventilated.</p> <p>Max depth 14m.</p>	<p>Yes</p> <p>Yes</p>
<p><b>4C-1 Ceiling Heights</b></p> <p><b>Design Criteria</b></p> <p>Measured from finished floor level to finished ceiling level, minimum ceiling heights are:</p>	<p>2.7m habitable rooms ceiling height.</p> <p>As per figure 4C.5, which demonstrates that a 3.1m floor to floor height is required, the proposed development specifies a floor to</p>	<p>Yes</p>

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<p><u>Habitable rooms</u></p> <p>2.7m</p> <p><u>Non-habitable rooms</u></p> <p>2.4m</p> <p><u>2 storey apartments</u></p> <p>2.7m for main living area floor</p> <p>2.4m for second floor, where its area does not exceed 50% of the apartment area</p> <p><u>Attic spaces</u></p> <p>1.8m at the edge of room with a 30 degree minimum ceiling slope</p> <p><u>If located in mixed use areas</u></p> <p>3.3m for ground and first floor to promote future flexibility of use</p>	<p>floor height of 2.9m per each floor.</p>	
<p><b>4D-1 Apartment Size and Layout</b></p> <p><b>Design Criteria</b></p> <p>Apartments are required to have the following minimum internal areas:</p> <p><u>Studio</u></p> <p>35m<sup>2</sup></p>	<p>All of the proposed apartments comply with the minimum areas required by the design criteria.</p>	<p>Yes</p>



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<p><u>1 bedroom</u></p> <p>50m<sup>2</sup></p> <p><u>2 bedroom</u></p> <p>70m<sup>2</sup></p> <p><u>3 bedroom</u></p> <p>90m<sup>2</sup></p> <p>The minimum internal areas include only one bathroom. Additional bathrooms increase the minimum internal area by 5m<sup>2</sup> each.</p> <p>A fourth bedroom and further additional bedrooms increase the minimum internal area by 12m<sup>2</sup> each</p> <p>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</p>		
<p><b>4D-2 Apartment Size and Layout</b></p> <p><b>Design Criteria</b></p> <p>Habitable room depths are limited to a maximum of 2.5 x the ceiling height</p> <p>In open plan layout (where the living, dining and kitchen are combined) the maximum habitable room depth is 8m from a window</p>	<p>The proposed habitable room ceiling heights are 2.7m. 2.5m x 2.7m = 6.75m maximum permitted habitable room depth.</p> <p>Proposed habitable rooms (excluding open plan combined living, dining and kitchens) have maximum depths less than 6.75m.</p> <p>Proposed open plan combined living, dining and kitchens have maximum depths up to 8.4m from a window to the following units; A-002, A-011, A-102, A-111, A-202, A-211, A-302, A-311, A-402, A-411, A-502, A-511, A-602, A-611, B-002, B-011, B-102, B-111, B-202, B-211, B-302 and B-311.</p>	<p>Yes</p> <p>Yes</p> <p>No</p>

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<p><b>4D-3 Apartment Size and Layout</b></p> <p><b>Design Criteria</b></p> <p>Master bedrooms have a minimum area of 10m<sup>2</sup> and other bedrooms 9m<sup>2</sup> (excluding wardrobe space)</p> <p>Bedrooms have a minimum dimension of 3m (excluding wardrobe space)</p> <p>Living rooms or combined living/dining rooms have a minimum width of:</p> <p><u>1 bedroom apartments</u></p> <p>3.6m</p> <p><u>2 or 3 bedroom apartments</u></p> <p>4m</p> <p>The width of cross-over or cross-through apartments are at least 4m internally to avoid deep narrow apartment layouts</p>	<p>All bedrooms achieve a minimum area of 9m<sup>2</sup> ( excluding wardrobe space ).</p>	<p>Yes</p>
	<p>A-007, A-107, A-207, A-307, A-407, A-507, A-607 and B-007, B-107, B-207, B-307 – Achieve a width of 3.55m.</p> <p>All other living rooms of 1 bedroom apartments achieve the minimum width of 3.6m.</p>	<p>No</p>
	<p>All living rooms of 2 and 3 bedroom apartments achieve the minimum width of 4m.</p>	<p>Yes</p>
	<p>All cross through apartments achieve the minimum width of 4m.</p>	<p>Yes</p>

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<p><b>4E-1 Private Open Space and Balconies</b></p> <p><b>Design Criteria</b></p> <p>All apartments are required to have primary balconies as follows:</p> <p><u>Studio apartments</u></p> <p>4m<sup>2</sup></p> <p><u>1 bedroom apartments</u></p> <p>8m<sup>2</sup> with a minimum depth of 2m</p> <p><u>2 bedroom apartments</u></p> <p>10m<sup>2</sup> with a minimum depth of 2m</p> <p><u>3+ bedroom apartments</u></p> <p>12m<sup>2</sup> with a minimum depth of 2.4m</p> <p>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<sup>2</sup> and a minimum depth of 3m</p>	<p>All ground floor apartments and proposed balconies comply with the minimum area and dimension design criteria.</p>	<p>Yes</p>
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<p><b>4F-1 Common Circulation and Spaces</b></p> <p><b>Design Criteria</b></p> <p>The maximum number of apartments off a circulation core on a single level is eight</p> <p>For buildings of 10 storeys and over, the maximum number of apartments sharing a single lift is 40</p>	<p>No more than 4 apartments on one level will have access off a circulation core.</p>	<p>Yes</p>
<p><b>4G-1 Common Circulation and Spaces</b></p> <p><b>Design Criteria</b></p> <p>In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided:</p> <p><u>Studio apartments</u></p> <p>4m<sup>3</sup></p> <p><u>1 bedroom apartments</u></p> <p>6m<sup>3</sup></p> <p><u>2 bedroom apartments</u></p> <p>8m<sup>3</sup></p> <p><u>3+ bedroom apartments</u></p> <p>10m<sup>3</sup></p> <p>At least 50% of the required storage is to be located within the apartment</p>	<p>The proposed unit types have identified storage rooms and volumes; however, the unit layouts of the floor plans contain no dimensions of the proposed storage rooms. In addition, it is noted within the SOEE that not all units are provided with the minimum requirement of providing at least 50% of the required storage within the apartment. No adequate justification has been provided to support this. External storage areas appear to exist within the basement, but are also not dimensioned or specified on the plans clearly of their purpose.</p>	<p>No</p>

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<p><u>4L-1 Ground Floor Apartments</u></p> <p>Street frontage is maximized where ground floor apartments are located</p>	<p>None of the ground floor apartments have direct street access contrary to the requirements of the ADG.</p>	<p>No</p>
<p><u>4M-1 Facades</u></p> <p>Building facades provide visual interest along the street while respecting the character of the local area</p>	<p>The proposed building length over 70m is not acceptable. All continuous buildings of more than 30m to 40m are considered to be excessive and need to be broken up. This will also facilitate in improving the proposed blanket roofs for these long buildings.</p> <p>The proposed buildings lack articulation on all of the facades. In addition, the proposed development does not adopt quality materials to vary the finishes to create architectural interest, which is heavily reliant on the use of painted render. The development fails to provide a secondary setback into the design to provide breaks between the street wall height and the upper levels. Vertical elements and proper insets are also required to create breaks on the proposed facades every 20m to create visual interest to the facades of the development.</p>	<p>No</p>
<p><u>4N-1 Roof Design</u></p> <p>Roof treatments are integrated into the building designed and positive respond to the streets</p>	<p>The development applies minimal variation to the height and form of the roof to break up the building massing. All of the proposed built forms have a flat roof.</p>	<p>No</p>
<p><u>4W-1 Waste Management</u></p> <p>Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity of residents.</p>	<p>Waste and recycling storage areas are proposed within two designated areas upon basement level 1. The submitted traffic and parking assessment report advises that collection will be undertaken by Council's 6.4m small rigid truck or by a private contractor within the Waste Management Plan. In respect to the size of the vehicle, Council's waste vehicles are 9.98m heavy rigid vehicles.</p>	<p>No</p>

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	<p>The development as proposed has not been designed to accommodate this larger vehicle ( HRV ) to provide a waste service for this development. In this regard, amended design details to accommodate a HRV such as; ramp width, access driveway width, ramp grades, maximum grade change, loading bay area, manoeuvring area, vertical height clearance and swept paths were requested, however these details have not been provided.</p> <p>In addition, other waste management details were requested including; finished floor level of the waste storage areas and adjoining loading bay, waste and recycling bins and sizes of bins to be accurately reflected upon the architectural plans. Consideration of whether waste chutes would be provided within the development was also requested, however no further details in respect to waste management was submitted with the application.</p>	
<p><u>4X-3 Building Maintenance</u></p> <p>Material selection reduces ongoing maintenance costs</p>	<p>The proposed development does not adopt quality materials to vary the finishes to create architectural interest and reduce ongoing maintenance costs, which is heavily reliant on the use of painted render.</p>	No