marchesepartners

13 May 2022

SEPP 65 DESIGN VERIFICATION STATEMENT
Prepared to Accompany a Development Application to Newcastle City Council

Proposed Residential Development at 11 – 17 Mosbri Crescent, The Hill, NSW 2300.

This SEPP 65 Design Verification Statement has been prepared on behalf of Crescent Newcastle Pty Ltd in support of a Development Application for a proposed Residential Flat Building and Townhouse development to Newcastle City Council.

This report is intended to be read in conjunction with the Architectural plans prepared by Marchese Partners Architects and the associated Consultant Reports and drawings.

We confirm that Steve Zappia of Marchese Partners Architects directed the design of the Development Application architectural drawings and that the related documentation achieves the principles set out in *State Environmental Planning Policy 65-Design Quality of Residential Flat Developments* and has been designed with regard to the *Apartment Design Guide.*

Mr Steve Zappia is registered as an architect in NSW (reg. No. 6535) in accordance with the Architects Act 1921.

DEVELOPMENT APPLICATION ALTERATIONS

A development application has been submitted previously for this site. The development application is being altered to suit the revised stormwater easement design, whilst maintaining the overall design intent and development characteristics of the original proposal.

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DESIGN QUALITY PRINCIPLES

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 condition.
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 site is located at 11 – 17 Mosbri Cres, The Hill, the City of Newcastle and is legally described as Lot 1 in DP204077. 'The Hill' is a suburb located in Newcastle City and the site is conveniently located very close by to Newcastle CBD and Darby Street. The property is within close proximity to a range of entertainment choices and open space. The overall site subject of the DA has a total area of approximately 12,235m^2 with dual street frontage on Kitchener Parade and Mosbri Crescent. Vehicular/ pedestrian access point to the development is from Mosbri Crescent and a pedestrian path, providing connection from Mosbri Crescent to Kitchener Parade is also provided.

Existing developments on site currently consist of the NBN television studio with staff car parking. All existing site buildings will be demolished as part of the proposed development. The Site slopes westerly towards Mosbri Cres. The existing relative levels vary between RL 29.75 AHD and RL 40.00 AHD. The project site is generally bounded by land uses as follows;

- North: Steet frontage to Kitchener Parade and Newcastle East Public School across from Kitchener Parade
- East: Arcadia Park - a large parkland with mature trees
- South West: Combination of single and double story residential dwellings on below mentioned properties;
    - 17 Hillview Crescent
    - 13 Hillview Crescent
    - 11 Hillview Crescent
    - 9 Hillview Crescent
    - 19 Mosbri Crescent
- West: Street frontage to Mosbri Crescent and Mosbri Crescent Reserve.

The proposed Residential Flat buildings and Townhouse dwellings have been sited and planned in order to maximise the number of dwellings with a Northern, Western and Eastern orientation (maximising views and Northern sunlight). The proposal consists of 3 interconnected Residential Flat buildings A, B and C, connected by way of a carpark and 11 two story townhouse dwellings atop a carpark. It is envisaged that the proposed new contemporary town houses enhance the street appeal of Mosbri Cres.

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 proposal includes residential accommodation for 172 dwellings and there is a generous variety of 1, 1+, 2, 2+ and 3 bed types. There is a total of 161 dwellings in Buildings A, B and C. Buildings A, B and C are located to the Northeast of the site and are interconnected on levels Ground and L1 by way of a carpark. The towers are stand alone, allowing for view corridors and articulation across the site. To provide a greater break-down of the bulk and scale of the buildings the towers of building A, B and C vary in number of stories;

- Building A including a nine (9) storey east wing and six (6) storey west wing;
- Building B comprising seven (7) storeys and a roof top communal open space, with (9) town house style dwellings facing the internal courtyard;
- Building C comprising five (5) levels

The proposal also includes eleven (11) two storey townhouse style dwellings fronting Mosbri Crescent, these are located above a car park servicing these town houses.

The building incorporates corner apartments, maximising the number of naturally cross ventilated apartments within the development, this also reduces corridor lengths and allows for natural light in corridors where appropriate.

The built form and scale adopted for this project delivers a superior design outcome;

- Delivering appropriate building forms that respond to the site's context that will define 11- 17 Mosbri Cres, The Hill as one of the communities of an iconic sites.
- Providing a superior design option, built form and amenity (internal and surrounding) outcome over and above what the planning controls dictate for the site.
- Maximising opportunities for a ground level communal open space for residents including ample space for landscaping & social interaction throughout the proposal. Including but not limited to a pool with sundecks, courtyards, outdoor gyms, bowls, large turfed areas, intermittent external seating zones with views to arcadia park.
- Maximising unique views for the majority of the apartments, including views to the North East, Arcadia Park, Mosbri Crescent Reserve and into the development itself.
- Maximising private open spaces by way of large balconies and courtyards.
- Creating residential community breakout spaces in addition to Ground floor level including, internal/external residential foyers, external breakout courtyards on level two between buildings A and B and B and C.
- Community Pavilion within the landscaped gardens to encourage social interaction and provide a sheltered, peaceful area for residents and their guests to enjoy the community. Roof top pool located on level 7 of Building B.
- Understandingly incorporating the provision of car parking and services required.

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."

The Sites Floor to Space Ratio (FSR) permitted is 1:1.5 while the proposed FSR is 1:1.49, the proposed design provides a superior outcome in terms of the density provisions. The total number of dwellings proposed 172, this includes 11 Town house units fronting Mosbri Crescent and 161 residential units in Buildings A, B and C (including 9 double story town house units in Building B), and 35 surplus carparks. The proposed allows for residents to reside in the suburb of The Hill & supports the future growth of the area.

The proposal also provides sufficient carparking spaces on the ground level to further service the development community. A total of 242 car spaces are provided of which 35 are Visitor and 207 are residential to cater to the development's needs.

The development will enjoy access to The Hills well established and regarded services, including transport, education, and proximity to key employment nodes.

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."

This proposed development is ideally located close to services, schools, recreation facilities and transport links which facilitates a very efficient use of resources for the servicing of live, learn, work and play lifestyles of the future residents.

A comprehensive analysis of the building has also been undertaken as part of the BASIX Assessment. We note the following inclusions as part of this proposal and include:

- The SEPP 65 requirement for solar access and cross ventilation to the apartments has been achieved, for buildings A, B and C, providing a level of comfort that will not strictly require air conditioning to maintain thermal comfort. More than 2 hours of solar access between the hours of 9am and 3pm has been provided to 72.0% of the apartments (minimum 70%). Natural cross ventilation has been provided to 63.9% of the apartments (minimum 60%). The apartments will have substantial natural light, unique view opportunities and excellent amenity,
- Energy efficient appliances and fixtures as part of the internal fit out to minimise water consumption of resources,
- Typical floor plates have been designed to minimize structural transfers and false ceilings, which substantially reduces building materials and wastages required to construct the building.

PRINCIPLE 5 – LANDSCAPE

"Good design recognises that together landscape and buildings operate as an integrated and sustainable system, resulting in greater aesthetic quality and amenity for both occupants and the adjoining public domain. Landscape design builds on the existing site's natural and cultural features in responsible and creative ways. It enhances the development's natural environmental performance by co-ordinating water and soil management, solar access, micro-climate, tree canopy and habitat values. It contributes to the positive image and contextual fit of development through respect for streetscape and neighbourhood character, or desired future character. Landscape design should optimise useability, privacy and social opportunity, equitable access and respect for neighbours' amenity, and provide for practical establishment and long term management."

The Landscape is designed by Arcadia Landscape Architects, the architect and Landscape Architect have worked collaboratively throughout the design process. The design provides an integrated holistic approach that integrates the architecture and landscaping elements. The proposed design provides for high quality ground communal landscaped areas for use by the residents. The site has a pedestrian link running North to South connecting Kitchener Parade and Mosbri Crescent. A portion of the site has incorporated this link and creates a permeable edge and blends the building envelope, pedestrian link and landscaping seamlessly.
The developments internal precinct is created through pockets of green planting, integrated seating and breakout feature areas that work together to produce a green space of high amenity. The design also allows for an activated connection between with a variety of external social spaces including pool facilities, outdoor barbeque facilities, external gyms, bowling, larges turfed areas and other breakout zones.

In addition, the rooftop pool area on Building B provides residents with a desirable external space including, rooftop lap pool, exercise equipment, lounge areas and communal seating areas/ garden organized to maximize the Northern sunlight views to Arcadia Park and development and provide spacious areas for the use of all residents. The proposed design provides a superior outcome in terms of both the common open space (25.2% of site area proposed) and deep soil (14.7% of site area proposed) than what was envisaged in the development controls for the site. The landscaping experience for the development relies on a carefully selected combination

of high quality soft and hardscape elements. Special consideration has been given to provide various layers of finer grain materials that complement the sites unique setting, context and adjacent public park.

PRINCIPLE 6 – AMENITY

"Good design provides amenity through the physical, spatial and environmental quality of a development. Optimising amenity requires appropriate room dimensions and shapes, access to sunlight, natural ventilation, visual and acoustic privacy, storage, indoor and outdoor space, efficient layouts and service areas, outlook and ease of access for all age groups and degrees of mobility."

The proposed development delivers a mix of residential apartments. All achieve a very high level of internal amenity by maximising the number of dwellings with a Northern orientation, and prioritising access to daylight by avoiding excessive depth of living areas, as well as maximising the number of corner apartments to achieve cross ventilation enhances natural ventilation in the apartments.

The residential apartment buildings are provided with private, secure residential entry foyers that are located in each building, A, B and C respectively. An accessible path of travel is provided from the street footpath along Mosbri Crescent to main entrance of each apartment building. Furthermore, there are interconnecting, accessible pathways between Buildings A, B and C. For the Mosbri Crescent townhouses, while stair access is provided from Mosbri Crescent, there will be an optional purchase upgrade for a lift that facilitates access between the carparking area on Lower Ground Floor and individual townhouses.

Buildings A, B and C include five lift and stair cores to service the apartments, accessed either at ground level by external residential foyer/landscaped area, or via the carparking areas on level Ground and One. The provision of five generous cores to the residential apartment buildings reduces common corridor lengths and the notion of anonymity therefore encouraging engagement with smaller groups of neighbours for the overall quality of the community.

Large areas of glazing are provided to living spaces providing generous natural light and visual access to expansive views. The high level of internal amenity of each apartment is supplemented with good-sized balconies and achieves requirements above outlined in the ADG. All apartments have a balcony or courtyard as their private open space. The depth and width of the space allows for flexible outdoor living arrangements and as the apartments open directly onto these amenities good ventilation is provided.

The design allows for apartments to accommodate all age groups and degrees of mobility, all apartments in buildings A, B and C meet Silver Level, Liveable Housing Designs requirements. Of those 161, a mix of different bedroom numbers are provided. Refer to Disability Access Report prepared by Lindsay Perry Access for further details.

Development will achieve SEPP 65 cross flow ventilation and solar access requirements. Storage provided for the apartments is provided internally and within the carparking levels. Secure parking is provided in the carpark with direct lift to all residential apartments.

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."

Safety and security will be provided for both the residents and any persons visiting the site through the following design measures:

- The residential apartment building will be a secure environment. Access will be by electronic security devices at both the vehicle entry point to the secure carpark on ground floor and level one, at the ground floor residential entry foyers and at the pedestrian entry gate from Mosbri Crescent.
- The common areas are to be well lit, with clearly defined paths. All residential entries will be lit with ceiling mounted down lights and monitored with security cameras. There is a clear definition between public and private spaces.
- All carpark areas are located in carpark levels and are to be well lit and the stairs and lift areas will have security control.
- Windows and balconies will provide good natural surveillance to the surrounding streets, adjacent park and residential landscape breakout zones.

Refer to Crime prevention through environmental design (CPTED) report prepared by KDC planners for further details

PRINCIPLE 8 – HOUSING DIVERSITY AND SOCIAL INTERACTIONS

"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."

The site is located close to excellent facilities, services, recreational areas and schools. Apartments mix has generally prioritised well designed and efficient 2, 2+ and 3 bedroom typologies, recognising the likely buyer demographic for this development. Larger apartments have been provided to offer variety and to provide a mix of housing options in close proximity to the well-established and serviced suburb of The Hill. All the apartments in Buildings A, B and C achieve Silver Liveable Units recognising the need for access opportunities for all age groups and degrees of mobility and incorporates a group home. The scale of the proposed building, the building façade materials and architectural detail of the elevations combine to make a positive contribution to the urban environment and general streetscape now, and for the future of the area.

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 proposed development has been carefully considered with respect to the adjacent sites heritage item and Public Park (Arcadia Park and Mosbri Crescent Reserve). The design of the building is respectful and at the same time proposes a high standard of quality detailing, articulation and form. The design incorporates a number of design characteristics, which contribute to the overall aesthetics of the proposal. These include,

- The use of a limited pallet of materials and colours will provide a simple and timeless character to the buildings. The overall design is conservative and contemporary in nature and will fit well within its surroundings.
- The gentle dialogue among the sleek design and finishes of the buildings A, B and C podium levels three towers are complimented by elements of landscape pockets and will enhance the aesthetic qualities of each other.
- A careful composition of building elements, colours and materials contribute to the urban character of the precinct and enhance the area of the Hill and streetscape of both Kitchener Parade and Mosbri Crescent.
- The specific site reactive locations of united buildings, A, B and C and the Mosbri Cres Townhouses allow for view corridors and articulation across the site. Further there are common materials used across the site to enhance the designs features.

Apartment Design Guide (ADG) Assessment Table.

An Assessment of the proposal's compliance with the ADG is provided in the table below.

Design Objective	Assessment	Whether Achieved
Part 3 Siting the Development **3A 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	The proposal is the result of a lengthy planning and design process that has sought to address the constraints and opportunities that exist on the site. Particular care has been taken to address relevant items outlined in the specific Newcastle Development Control Plan for *11 Mosbri Crescent, The Hill*. A site analysis (Drawing DA1.04) form a key part of assessing and illustrating the opportunities and constraints that exist. This analysis identified, amongst other things: • Local character and context • Topography and slope • Views and vistas • Site context and amenity • Surrounding Building forms and materials • Height precinct of site, refer to roof plan for details (Drawing DA2.11)	Achieved
3B Orientation		
Objective 3B-1 Building types and layouts respond to the streetscape and site while optimising solar access within the development	The development has two street frontages, Kitchener Parade and Mosbri Crescent. The buildings orientations have been sited to work with site conditions including, but not limited to, typography, views and vistas, differing height precincts of site. North aspect and solar access have been maximised to all dwellings with a total of 75.2% of residential flat buildings dwellings receiving 2 hours of solar access in mid-winter, refer to solar analysis drawings for details.	Achieved
Objective 3B-2 Overshadowing of neighbouring properties is minimised during mid-winter	Appropriate setbacks have been provided to minimise overshadowing to neighbouring properties.	Achieved
3C – Public Domain Interface		
Objective 3C-1 Transition between private and public domain is achieved without compromising safety and security	• The built form has been orientated to minimise possible conflict between residents. • Buildings A, B, C and town houses have been oriented to the internal communal open space and landscaped area. • An accessible pedestrian pathway is differentiated from the vehicular access, improving legibility for residents. • Direct vehicular street entry will occur from a driveway off Mosbri Crescent, this is the only vehicular entry point in the proposal.	Achieved
Objective 3C-2 Amenity of the public domain is retained and enhanced	• The site responds positively to the surrounding sites with a clear delineation between public and private land with minimal use of blank walls and fences to adjoining sites and the two street frontages.	Achieved

Design Objective	Assessment	Whether Achieved
	• Extensive landscaping is proposed as part of the scheme to revegetate the site. • The car parks will remain largely unseen from all perspectives due to site typography and location.	
3D Communal and Public Open Space		

Objective 3D-1
An adequate area of communal open space is provided to enhance residential amenity and to provide opportunities for landscaping
	The development complies with the design criteria as follows:
	• The design provides an accessible pedestrian connection surrounded by landscaped gardens and communal spaces linking the units and townhouse to different communal zones.
	• Communal spaces include;
	  ○ Large area in the centre of the development on ground level including bowls, swimming pools, outdoor gyms and other communal spaces.
	  ○ 2 seating areas for passive communal areas with views to Arcadia park and onto the development.
	  ○ Roof top pool and sundeck on Building B as well as an outdoor gym
	• The development benefits from the significant amenity provided by its natural setting being adjacent to Arcadia Park with many walking trails close by.
		Achieved

Design Criteria Communal open space has a minimum area equal to 25% of the site	Compliant. 25.2%	
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 development is more than compliant with 50% direct sunlight to the principle usable part of the communal open space for at least 2 hours on June 21.	
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 is a multi-level, layered experience providing for a range of spaces and activities. The spaces include: • Ground Floor facilities • Level 2 break out zones between Buildings A, B and C • Roof top pool area on Building B All three of these spaces are internal to the site between the buildings. They ensure all residents have an equal opportunity to use the varying spaces. The following elements will be provided: • Seating areas • BBQ areas • Pool Areas • Gym Areas • Bowls Court • Sundecks The communal areas and the garden have been carefully designed to provide large outdoor spaces that can be enjoyed throughout the year by the residents and their visiting family and friends.	Achieved
Objective 3D-3	All buildings will address the communal open space	Achieved

<table>
<tr><th>Design Objective</th><th>Assessment</th><th>Whether Achieved</th></tr>
<tr><td>Communal open space is designed to maximise safety</td><td>ensuring natural surveillance occurs across this space, maximising safety.
The communal open space is internal to the built form and shielded from any possible public conflicts.</td><td></td></tr>
<tr><td colspan="3">3E Deep Soil Zones</td></tr>
<tr><td>Objective
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.</td><td>See below.</td><td>Achieved</td></tr>
<tr><td>Design Criteria
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>7%</td></tr>
<tr><td>650m^2 – 1,500m^2</td><td>3m</td><td></td></tr>
<tr><td>Greater than 1,500m^2</td><td>6m</td><td></td></tr>
<tr><td>> 1,500m^2 with significant existing tree cover</td><td>6m</td><td></td></tr>
</table></td><td>The development is more than compliant with the deep soil zone, criterion with 15.1% of the site being deep soil.</td><td></td></tr>
<tr><td colspan="3">3F Visual Privacy</td></tr>
<tr><td>Objective 3F-1
Adequate building separation distances are shared equitably between neighbouring sites, to achieve reasonable levels of external and internal visual privacy.</td><td>The proposal is compliant with the design criteria as outlined below.</td><td>Achieved.</td></tr>
<tr><td>Design Criteria
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>Building Height</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>
<tr><td>Over 25m (9+ storeys)</td><td>12m</td><td>6m</td></tr>
</table></td><td>• Rear setbacks from Eastern boundary (Arcadia Park) to Buildings A, B and C balcony line is 9m.
• Street setback from Northern Boundary (Kitchener parade) to Building A balcony line is 6m.
• Southern setback to Building C is an average of 9.8m (12.5 at maximum and 7.5 at minimum).
• Internal separation between buildings. (there are no windows with direct views to either Habitable or non-Habitable rooms windows, appropriate feature screening has been allowed for)
o Building A – B: 11.4 metres to 9 metres
o Building B – C: 5.5 metres to 9.2 metres
o Building B- townhouses: 12.5 at minimum
• Mosbri Crescent Town houses are innkeeping with other residential properties.</td><td></td></tr>
<tr><td>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</td><td>• Buildings A, B and C bulk and scale have been designed to suit individual requirements including, height restrictions, typography and also allow for building articulation across the development.</td><td>Achieved</td></tr>
</table>

Design Objective	Assessment	Whether Achieved
	• The façade elements have been design to allow for privacy by way of solar screens and balustrades. • Any development in this Site would be screened by the existing trees and typography from Arcadia park Eastern view point. • Solar and cross ventilation are achieved and compliant as per ADG guidelines.	
3G Pedestrian access and entries		
Objective 3G-1 Building entries and pedestrian access connects to and addresses the public domain	• All buildings address the communal open space and internal pedestrian links within the centre of the site, providing pedestrian access from this point. There is an accessible path of travel from Mosbri Crescent to each foyer on Buildings A, B and C through the communal open space.	Achieved
Objective 3G-2 Access, entries and pathways are accessible and easy to identify	• Points of access and pathways are provided from the front of every building with pathways and entries easily obvious from the communal open space. • The development has been designed to create a very clear sense of entry into the site and into each building. • The pedestrian point from Mosbri Crescent creates an impressive arrival point that defines a very familiar sense of gathering for residents and visitors. From there the communal open space allows for large pathways and way finding to buildings A, B and C foyer areas. • Paths are clear and easily managed, with clear delineation between communal and private areas.	Achieved
Objective 3G-3 Large sites provide pedestrian links for access to streets and connection to destinations	• From the principal pedestrian entrance on Mosbri Crescent an accessible path of travel is provided through the development to Buildings A, B and C foyers.	Achieved
3H Vehicle Access		
Objective 3H-1 Vehicle access points are designed and located to achieve safety, minimise conflicts between pedestrians and vehicles and create high quality streetscapes	• A single point of vehicular entry and exit has been proposed onto Mosbri Crescent. This ensures that minimal conflicts between pedestrians and vehicles will occur.	Achieved
3J 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	• Car parking has been provided in a manner that is compliant with the ADG and the Newcastle DCP. • It is considered that the parking provision is suitable given the sites proximity to public transport options. • The proposal meets the requirement of the SEPP in terms of public transport accessibility	Achieved
Objective 3J-2 Parking and facilities are provided for other modes of transport	• The development incorporates bicycle parking within the carpark to assist residents and visitors.	Achieved
Objective 3J-3	• The car park design and access has been assessed by a traffic consultant, Refer to traffic report for	Achieved

Design Objective	Assessment	Whether Achieved
Car park design and access is safe and secure	details.	
Objective 3J-4 Visual and environmental impacts of underground car parking are minimised	• Majority of all carparking spaces (Lower ground, Ground and Level 1) are below ground, this is due to the sloping typography of the site. The entry points to the carparks are off Mosbri Crescent and have minimal visual lines to the greater site and streetscapes.	Achieved
Objective 3J-5 Visual and environmental impacts of on-grade car parking are minimised	• No on-grade car parking is proposed.	Achieved
Objective 3J-6 Visual and environmental impacts of above ground enclosed car parking are minimised	• As mentioned, the Ground and Level 1 carparking areas are predominantly bunkered into the topography due to the sloping nature of the site.	Achieved

Part 4 Designing the Buildings		
4A Solar and Daylight access		
Objective 4A-1 To optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space	• The proposal is compliant with the design criteria as outlined below.	Achieved
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.	• Compliant. • 72.0% of units receive a minimum of 2 hours of direct sunlight.	
A maximum of 15% of apartments in a building receive no direct sunlight between 9 am and 3 pm at mid-winter.	• Compliant. • 14.9 % of apartments receive no direct sunlight between 9 am and 3 pm.	
Objective 4A-2 Daylight access is maximised where sunlight is limited	• Solar access is not limited to the site and all apartments will be provided with a compliant level of solar access.	Achieved
Objective 4A-3 Design incorporates shading and glare control, particularly for warmer months	• Recessed balconies will provide shading in summer months but allow lower winter sun to enter internal areas for passive solar heating into all north facing apartments • Increased depths of the balconies will provide shading to the eastern and western elevations. In addition to this, sliding solar screens to the west and north facing facades will help improve the amenity in the warmer months. • Projected slabs will also be incorporated into the western facades to further shade bedroom areas in the warmer months. • The use of different sun shading devices and appropriate glare control to the various facades creates a dramatic and varied character. • BASIX compliance is achieved and demonstrated.	Achieved
4B Natural Ventilation		
Objective 4B-1 All habitable rooms are naturally ventilated	• All habitable rooms are naturally ventilated.	Achieved
Objective 4B-2 The layout and design of single aspect apartments maximises natural ventilation	• The maximum depth for single aspect apartment layout (living, dining, kitchen) will be no more than 8m as per ADG criteria to maximise ventilation airflow.	Achieved
Objective 4B-3 The number of apartments with natural cross ventilation is maximised to create a comfortable indoor environment for residents	• The proposal is compliant with the design criteria as outlined below with 60.2% of apartments being cross-ventilated.	Achieved
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	• The apartments achieve cross-ventilation criteria with 63.9% being compliant.	Achieved

<table>
<tr><th colspan="3">Part 4 Designing the Buildings</th></tr>
<tr><td>natural ventilation and cannot be fully enclosed.</td><td></td><td></td></tr>
<tr><td>Overall depth of a cross-over or cross-through apartment does not exceed 18m, measured glass line to glass line.</td><td>• Complies.
• The apartments incorporate a 16.95m average cross over ranging from a minimum of 16.3m min to a maximum of 17.6m.</td><td></td></tr>
<tr><th colspan="2">4C Ceiling Height</th><th></th></tr>
<tr><td>Objective
Ceiling height achieves sufficient natural ventilation and daylight access</td><td>• The proposal is compliant with the design criteria as outlined below.</td><td>Achieved</td></tr>
<tr><td>Design Criteria
Measured from finished floor level to finished ceiling level, minimum ceiling heights are:
<table>
<tr><th colspan="2">Minimum ceiling height</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 use areas</td><td>3.3m for ground and first floor to promote future flexibility of use</td></tr>
</table>
These minimums do not preclude higher ceilings if desired.</td><td>• All the apartments have been provided with the compliant finished floor level to minimum ceiling heights as a minimum according to the design criteria.</td><td></td></tr>
<tr><th colspan="2">4D Apartment Size and Layout</th><th></th></tr>
<tr><td>Objective 4D-1
The layout of rooms within an apartment is functional, well organised and provides a high standard of amenity.</td><td>• The proposal is compliant with the design criteria as outlined below.</td><td>Achieved</td></tr>
<tr><td>Design Criteria
Apartments are required to have the following minimum internal areas:
<table>
<tr><th>Apartment Type</th><th>Minimum internal area</th></tr>
<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 5m^2 each.
A fourth bedroom and further additional bedrooms increase the minimum internal area by 12m^2 each.</td><td>• The units are all 1, 2 or 3 bedroom apartments that exceed the minimum internal area criteria required by Objective 4D-1.</td><td></td></tr>
<tr><td>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.</td><td>• Compliant: Every habitable room has a window in an external wall.</td><td></td></tr>
</table>

<table>
<tr><td colspan="3">Part 4 Designing the Buildings</td></tr>
<tr><td>Objective 4D-2
Environmental performance of the apartment is maximised</td><td>• The proposal is compliant with the design criteria as outlined below.</td><td>Achieved</td></tr>
<tr><td>Design Criteria
Habitable room depths are limited to a maximum of 2.5 x the ceiling height.</td><td>• Compliant</td><td></td></tr>
<tr><td>In open plan layouts (where the living, dining and kitchen are combined) the maximum habitable room depth is 8m from a window.</td><td>• Compliant</td><td></td></tr>
<tr><td>Objective 4D-3
Apartment layouts are designed to accommodate a variety of household activities and needs</td><td>• The proposal is compliant with the design criteria as outlined below.</td><td>Achieved</td></tr>
<tr><td>Design Criteria
Master bedrooms have a minimum area of 10m^2 and other bedrooms 9m^2 (excluding wardrobe space).</td><td>• Compliant.
• All master bedrooms have a minimum area of 10sqm with all other bedrooms having a minimum area of 9sqm.</td><td></td></tr>
<tr><td>Bedrooms have a minimum dimension of 3m (excluding wardrobe space).</td><td>• Compliant.</td><td></td></tr>
<tr><td>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</td><td>• Compliant.</td><td></td></tr>
<tr><td>The width of cross-over or cross-through apartments are at least 4m internally to avoid deep narrow apartment layouts.</td><td>• Compliant, cross through apartment width exceed this design criteria.</td><td></td></tr>
<tr><td colspan="3">4E Private Open Space and Balconies</td></tr>
<tr><td>Objectives 4E-1
Apartments provide appropriately sized private open space and balconies to enhance residential amenity</td><td>• The proposal is compliant with the design criteria as outlined below.</td><td>Achieved</td></tr>
<tr><td>Design Criteria
All apartments are required to have primary balconies as follows:
<table><tr><th>Dwelling Type</th><th>Minimum Area</th><th>Minimum internal area</th></tr><tr><td>Studio apartment</td><td>4m^2</td><td>-</td></tr><tr><td>1 bedroom apartment</td><td>8m^2</td><td>2m</td></tr><tr><td>2 bedroom apartment</td><td>10m^2</td><td>2m</td></tr><tr><td>3+ bedroom apartment</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>• Compliant.
• All the apartments are provided with a minimum primary balcony area of and minimum depth over 1m.
• Any balcony areas where minimum depth is below 1m have not been included in calculations</td><td></td></tr>
<tr><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 15m^2 and a minimum depth of 3m.</td><td>• Compliant.
• All the ground floor apartments are provided with a secure courtyard with area that exceeds 15m^2.</td><td></td></tr>
<tr><td>Objective 4E-2
Primary private open space and balconies are appropriately located to enhance liveability for residents</td><td>• Private open space is located adjacent to the living room in all instances to ensure enhanced liveability for all the residents.
• In some cases the bedrooms also have access to the balconies.</td><td>Achieved</td></tr>
</table>

<table>
<tr><td colspan="3">Part 4 Designing the Buildings</td></tr>
<tr><td>Objective 4E-3
Private open space and balcony design is integrated into and contributes to the overall architectural form and detail of the building</td><td>• The facades comprise of strong horizontals created by the slab the metal balustrades of the balconies add to this sleek design.
• Further feature perforated metal solar screens are incorporated onto certain facades that not only improve liability but also add to builds overall deign and break up bulk and scale.</td><td>Achieved</td></tr>
<tr><td>Objective 4E-4
Private open space and balcony design maximises safety</td><td>• The changes in ground levels or landscaping will be minimised on the accessible pathways for improved liveability of the units.
• Safety will be ensured within the balconies with appropriate materiality and parapet heights preventing falls or climbing.
• Balconies will provide passive surveillance of the site’s surrounds</td><td>Achieved</td></tr>
<tr><td colspan="3">4F Common Circulation and Spaces</td></tr>
<tr><td>Objective 4F-1
Common circulation spaces achieve good amenity and properly service the number of apartments</td><td>• Building forms are broken down into 3 towers and 11 town houses, as such, internal circulation areas are reduced.</td><td>Achieved</td></tr>
<tr><td>Design Criteria
The maximum number of apartments off a circulation core on a single level is eight.</td><td>• Compliant.</td><td></td></tr>
<tr><td>Objective 4F-2
Common circulation spaces promote safety and provide for social interaction between residents</td><td>• The communal open space, building entry ways and building circulation have been designed to promote social interaction between residents, which enable residents to use, enjoy, socialize and move around the spaces without fear of falling, tripping, etc.
• Sunlight and natural ventilation to common corridors are provided improving to most foyer corridors which adds to the amenity of the circulation areas.</td><td>Achieved</td></tr>
<tr><td colspan="3">4G Storage</td></tr>
<tr><td>Objective 4G-1
Adequate, well designed storage is provided in each apartment</td><td>• Compliant, refer to storage diagrams for details.</td><td>Achieved</td></tr>
<tr><td>Design Criteria
In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided:
<table><tr><td>Dwelling Type</td><td>Minimum Area</td></tr><tr><td>Studio apartment</td><td>4m^2</td></tr><tr><td>1 bedroom apartment</td><td>6m^2</td></tr><tr><td>2 bedroom apartment</td><td>8m^2</td></tr><tr><td>3+ bedroom apartment</td><td>10m^2</td></tr></table>At least 50% of the required storage is to be located within the apartment.</td><td>• All apartments comply in terms of storage areas.
• At most, 50% of the storage certain apartments is currently not located within the apartment but adequate storage is provided in each carparking level / storage area.</td><td></td></tr>
<tr><td>Objective 4G-2
Additional storage is conveniently located, accessible and</td><td>• Storage is provided at the on ground and Level 1 carpark.</td><td>Achieved</td></tr>
</table>

Part 4 Designing the Buildings		
nominated for individual apartments	• All storage areas are in cages so that storage remains secure.	
4H Acoustic Privacy		
Objective 4H-1 Noise transfer is minimised through the siting of buildings and building layout	• Noise sources within the development are mindfully located (i.e. pools and gyms) in order to prevent any noise transfer to the living areas.	Achieved
Objective 4H-2 Noise impacts are mitigated within apartments through layout and acoustic treatments	• Internal apartment layout separates noisy spaces from quiet spaces having rooms with similar noise requirements grouped together and doors separating different use zones.	Achieved
4J Noise and Pollution		
4K 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	• The apartments have been designed to respond to the wide variety of life styles of residents living locally in Newcastle with a variety of sizes across the whole development with 1, 1+, 2, 2+ and 3 bedroom apartments to allow for a flexible room layout that can be switched between study to living space to allow for visitors and friends to come and visit the residents encouraging social interaction with the rest of the families. • The development provides the residents with the ability to live their lives as they wish, dine in their home, or join friends and family in the pool barbeque area.	Achieved
Objective 4K-2 The apartment mix is distributed to suitable locations within the building	• The apartment types and mixes are varied across the development.	Achieved
4l Ground floor apartments		
Objective 4L-1 Street frontage activity is maximised where ground floor apartments are located	• Mosbri Crescent town houses front Mosbri Crescent and create a modern streetscape. • Building A fronts Kitchener parade, large windows to the apartments allow for passive surveillance, white the balustrades and solar screens allow privacy.	
Objective 4L-2 Design of ground floor apartments delivers amenity and safety for residents	• Privacy is ensured through adequate integrated fencing and landscape but also opportunities for the residents to engage with neighbours and have a casual conversation. • Greater amenity provided to the units at ground floor through the landscaped private open space.	Achieved
4M Facades		
Objective 4M-1 Building facades provide visual interest along the street while respecting the character of the local area	• The buildings form and materiality of the development embraces the recognisable elements utilised in the Newcastle Council catchment and particularly in The Hills surroundings. • Substantial landscaping concept, a variety of	Achieved

Part 4 Designing the Buildings		
	complementing materials have been incorporated into the development including, brick podiums and warm grey colours, charcoal metal solar screens and dark framed glazing suites.	
Objective 4M-2 Building functions are expressed by the facade	• The buildings have been designed with different materiality responsive of the buildings size and scale. Complementing materials have been used so the development works with the site surrounds. • The palate of colours, materials and textures has been selected to highlight the local context, eg. Brick podium used to reflect other heritage listed items within site vicinity. • The private communal spaces have an easy to "read" series of hierarchies achieved through placement, screening and different form and permeability.	Achieved
4N Roof design		
Objective 4N-1 Roof treatments are integrated into the building design and positively respond to the street	• For Buildings A, B and C the roofs are flat with plant screening located to the middle of building to minimise sight lines from ground levels. • The Mosbri Crescent town houses incorporate a gentle skillion roof forms that add to the overall design of the development.	Achieved
Objective 4N-2 Opportunities to use roof space for residential accommodation and open space are maximised	• The development incorporates habitable roof space for the apartments by way of a roof top pool, sundeck and external gym.	Achieved
Objective 4N-3 Roof design incorporates sustainability features	• Roofs incorporate sky lights to allow for passive ventilation and solar access into the units.	Achieved
4O Landscape design		
Objective 4O-1 Landscape design is viable and sustainable	• The landscape design has been designed in accordance with the Newcastle DCP. Landscape Architecture prepared by Arcadia Landscape Architects, refer to drawings for details.	Achieved
Objective 4O-2 Landscape design contributes to the streetscape and amenity	• The landscape design is a critical component of the proposal and has been thoughtfully prepared. • Landscape Architects and Architects have worked collaboratively to achieve site specific landscape scheme.	Achieved
4P Planting on structures		
Objective 4P-1 Appropriate soil profiles are provided	• Above carpark planting areas are minimised, however suitable soil profiles will be provided.	Achieved
Objective 4P-2 Plant growth is optimised with appropriate selection and maintenance	• Endemic species have been selected.	Achieved

Part 4 Designing the Buildings		
Objective 4P-3 Planting on structures contributes to the quality and amenity of communal and public open spaces	• The internal areas will offer a diversity of spaces to the surrounding areas and will offer high quality and amenity.	Achieved
4Q Universal Design		
Objective 4Q-1 Universal design features are included in apartment design to promote flexible housing for all community members	• All the apartments in Building A, B and C achieve Liveable Housing Guideline's silver level universal design features.	Achieved
Objective 4Q-2 A variety of apartments with adaptable designs are provided	• Refer to Access report prepared by, Lindsay Perry Access.	
Objective 4Q-3 Apartment layouts are flexible and accommodate a range of lifestyle needs	• The apartments have been designed to allow for a flexible room layout that can be switched between study to living space to allow for visitors to stay with the residents and friends to visit.	Achieved
4U Energy Efficiency		
Objective 4U-1 Development incorporates passive environmental design	• The development is above the ADG compliance figures for solar access, 75.2% of the apartments receive more than 2h solar and cross ventilation (over 60.2% of the apartments) meaning that the internal spaces will not be solely reliant on-air conditioning to maintain thermal comfort.	Achieved
Objective 4U-2 Development incorporates passive solar design to optimise heat storage in winter and reduce heat transfer in summer	• 2 hours of solar access in the middle of winter is provided to 75.2% of the self-contained dwellings. All units will have access to a substantial common open space, with considerable amenity, situated in the centre of the development, to receive maximum solar exposure. Recessed balconies will provide shading in summer months but allow lower winter sun to enter internal areas for passive solar heating into all north facing apartments.	Achieved
Objective 4U-3 Adequate natural ventilation minimises the need for mechanical ventilation	• Natural cross ventilation is provided to 60.2% of the units, in excess of the minimum rule of thumb of 60%.	Achieved
4V Waste Management and conservation		
Objective 4V-1 Potable water use is minimised	• Water re-use is proposed, refer to Civil drawings prepared by Northrop engineers for details.	Achieved
Objective 4V-2 Urban stormwater is treated on site before being discharged to receiving waters	• Complies, refer to Civil drawings prepared by Northrop engineers for details.	Achieved
Objective 4V-3 Flood management systems are integrated into site design	• Complies, refer to Civil drawings prepared by Northrop engineers for details.	Achieved
4W Waste management		
Objective 4W-1 Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity of residents	• Waste storage is located below ground to prevent any impact on the amenity of the residents.	Achieved
Objective 4W-2	• General waste and recycling bins are located	Achieved

Part 4 Designing the Buildings		
Domestic waste is minimised by providing safe and convenient source separation and recycling	separately within designated waste rooms.	
4X Building Maintenance		
Objective 4X-1 Building design detail provides protection from weathering	• Design solutions will be provided: • Appropriate materials are provided requiring low maintenance • Deep balconies to avoid the external walls to be exposed to weathering.	Achieved
Objective 4X-2 Systems and access enable ease of maintenance	• The design enables easy cleaning from the inside of the buildings. • Easy to maintain solutions will be provided, with the proponent of the developer also being the long-term operator.	Achieved
Objective 4X-3 Material selection reduces ongoing maintenance costs	• Durable and low maintenance materials that weather well will be prescribed.	Achieved

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