

28/05/2024

Adam Marshall
Head of Development
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Dear Adam

**Re: 376-390 Pacific Highway, 1 Balfour Street and Balfour Lane, Lindfield – S4.56(3)
Submission**

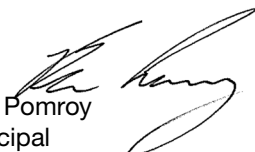
I, Ben Pomroy confirm that pursuant to Clause 29 (1 & 2) of the Environmental Planning and Assessment Regulation 2021 (EPA Reg), I am a qualified designer, which means a person registered as an architect in accordance with the Architects Act 2003, as defined by Clause 3 of the EPA Reg.

I did not direct the design of the development for which the original development consent was granted. Council should have on file the original consent 'Statement of Design', which was completed and signed by Neil Christiansen of Christiansen Obrien Architects, dated July 2019.

I directed the design of the modification of the development application stated above and I provide the accompanying explanation to verify that the proposed development achieves the design quality principles set out in Chapter 4 of the State Environmental Planning Policy (Housing) 2021 – Design of residential apartment development.

I also provide the accompanying summary to verify, in terms of the Apartment Design Guide, how the proposed development achieves the objectives of Part 3 & 4 of that guide. I verify that the modification that is sought does not diminish or detract from the design quality of the development as originally approved, nor does it compromise the design intent of the original development.

Yours sincerely,


Ben Pomroy
Principal

Nominated Architect (NSW): Ben Pomroy
Registration Number: 7918

Encl. Sepp65 Design Statement
ADG Objectives Review

CC.

SEPP 65 Design Quality Principles Statement

Balfour Place

376-390 Pacific Highway, 1 Balfour Street and Balfour Lane, Lindfield

Project no. / **220023** Status / **TP** Rev / **D** Date / **11/04/2024**

Principle 1: Context & 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.

Comment:

Part of the broader context of the site, is that it is subject to an existing DA approval (Ref: DA0197/18) granted by the Land and Environment Court for Lot consolidation, demolition of existing supermarket, partial demolition of heritage item, relocation of Balfour Lane and construction of a 6-storey mixed use building comprising shop top housing including apartments, Coles supermarket, liquor store, retail and residential carpark and associated works - part heritage item. This consent applies to the site located at 376-390 Pacific Highway, 1 Balfour Street and Balfour Lane, Lindfield and Balfour Lane.

The subject site is bounded by Pacific Highway to the north, Balfour Street to the south-east and the relocated Balfour Lane to the south-west. The site shares common boundaries with an existing substation building to the north-west. The heritage building sits at the northern corner of the site.

The proposed development responds to the existing context and the objectives of the zone, incorporating a mix of business and residential uses. The new building will contribute to the identity of the area with incorporation of ground level supermarket, corner café and street front activation along with articulated built form. Each street frontage provides activation at street level through either retail uses or residential lobbies.

The proposed development responds to the existing context and recognises that the locality is undergoing a transition towards higher densities and heights, as enabled by the planning controls which have been developed to encourage development and promote a liveable city.

The new building will contribute to the identity of the area with incorporation of ground level retail and street front activation and articulated built form, whilst at the same time will not dominate or be overbearing upon its adjoining neighbours, or the streetscape through complementary materiality and form to contribute to a cohesive neighbourhood around school and heritage building.

Principle 2: Built Form & 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.

Comment:

The built form of the proposed development aligns to the approved DA which transitions from low scale developments to the west to the high density to the north.

The design achieves the objectives of the relevant built form controls with a two-building form consistent with the approved DA envelope and is an elegant response to the height and FSR controls as well as building setback.

The northern building orientation maximises views and solar access without being dominant to the street scape. The southern building and podium responds to the lower scale residential to the south.

The building facades have been articulated and setback to provide an appropriate level of visual bulk when viewed from surrounding areas and will achieve the desired future character of the area.

A minor height non-compliance exists along the leading edge of the southern building due to the grade of natural ground level, and the non-compliance is consistent with the approved DA 4.6 variance of 2.66m height breach. In addition, this will not add to the scale of the development as it will not be visible from adjoining properties or the public domain

The building facades have been articulated and setback to provide an appropriate level of visual bulk when viewed from surrounding areas and will achieve the desired future character of the area.

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.

Comment:

The proposed development density is appropriate for the site and existing urban context.

The proposal meets the approved DA FSR of 1.81:1 which is below the site's allowable total FSR of 2.5:1.

The development comprises retail spaces and residential apartments. The retail spaces are located on the ground level of Pacific Highway and the apartments are elevated above the ground plane to minimise acoustic and privacy issues caused by nearby roads and are located around a central courtyard space.

The residential floor space is accommodated within two separate buildings, totally 59 apartments. The building footprints are consistent with the approved DA envelope and afford ample and diverse communal open space on podium and roof to support a population of this size.

Details of the area breakdowns are available in the architectural package.

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.

Comment:

The design makes efficient use of natural resources, energy and water throughout its full cycle, including construction.

Energy efficient building response is developed through passive design and sun control elements. The building design is characterised by tailored shading devices and quality outdoor spaces to encourage natural light and airflow, natural light, air flow, seeking to provide high personal comfort and low energy consumption.

The living areas of the apartments have been orientated to maximise sunlight, daylight and natural ventilation. Overall, the project has 74.6% (44) Residential apartments with 2 hours' solar access between 9.00am and 3.00 pm, 62.7% (38) Residential apartments are naturally ventilated, by either corner or high level window air flow. All the units have been designed to maximise natural cross ventilation, through the provision of dual aspect units and kitchens within 8 metres of windows. The development will not be reliant upon automatic climate control to provide appropriate amenity for residents.

The carbon footprint is further reduced by high efficiency air conditioning; energy efficient appliances; fittings and services such as water reduction showerheads; dual flush toilets; gas cook tops; microwave

ovens; and energy efficient hot water systems. A water retention system has been incorporated in the development.

Waste minimisation and recycling strategies have been incorporated into the development.

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, co-ordinating water and soil management, solar access, micro-climate, tree canopy, habitat values and preserving green networks.

Good landscape design optimises useability, privacy and opportunities for social interaction, equitable access, respect for neighbours' amenity and provides for practical establishment and long-term management.

Comment:

The current development upon the site does not provide any areas of high-quality landscaping.

The proposed development provides formal landscaped areas, aligns with the approved DA being at the new publicly accessible forecourt along Pacific Highway and publicly accessible Balfour Lane. Several communal spaces for residents are included to provide a variety of communal landscape areas.

The communal open space in the centre of the site, aligns with the approved Concept DA being an elevated landscape garden for the residents. An additional roof top garden and amenity space has been provided with landscaped areas for resident use and outlook. Being at the upper level means it has high levels of access to sunlight during the midwinter months.

The landscape to the south-west next to Balfour Lane provides deep soil to promote healthy growth of existing large tress.

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 wellbeing.

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.

Comment:

The architectural design provides enhanced amenity through the physical, spatial and environmental qualities of the development. The development comprises 59 residential apartments with a mix of 24 x 1 beds (40.8%), 14 x 2 beds (23.8%), 18 x 3 beds (30.2%), 3 x 4 bed (5.2%) and includes 59 Liveable Housing Guidelines Platinum Universal Design Level (LHA) Silver level (100%), 10 LHA Platinum Level (16.9%), 42 Visitable apartments (71.2%).

A total of 323 car spaces are provided through out 3 levels of lower-levels secure parking comprising 85 residential apartments' car spaces, 225 retail car space and 12 visitor car spaces including parking for the retail accessible parking and 1 car share space located on the residential carpark. Additional residential storage is provided in the residential car park.

The apartments have been designed to achieve solar access, natural ventilation, visual and acoustic privacy, storage, indoor and outdoor open space, diverse layouts, service areas, outlook and ease of access and mobility for all ages.

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.

Comment:

The design of the development optimises safety and security, both internal to the development and to the public domain. Safety and security have also been considered in accordance with CPTED principles of surveillance, access, territorial reinforcement and space management.

The pedestrian entry point is highly visible from both the internal area of the development and the public domain which will allow safe access and egress from and to the building. The development has been designed to avoid hidden corners or concealment points.

Controlled vehicular access to the building is provided by secure car park access from Balfour Street and back of Balfour Lane, with direct access from the car park to the lift lobbies for residents, the audio intercom system at the main entry lobby, car park entry to communicate with residents and key card access for residents.

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 and providing opportunities for social interaction among residents.

Comment:

All residential units and basement parking areas are accessible by lift and close regard has been made in the design to ensure that an appropriate number of units could be adopted to suit the needs of people with disabilities or the elderly. A total of 59 LHA Silver level apartments (100%), 10 LHA Platinum Level apartments (16.9%), 42 Viable apartments (71.2%) with a mix of 1, 2, 3, 4 bed units to cater for a variety of household types.

A variety of communal spaces are provided including internal and external spaces at ground level, Level 2 podium and on the common roof top areas. This allows for resident's ease of access and mobility for all ages to be use at differing times of the day, and for both active and passive recreation.

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 a well-designed apartment development responds to the existing or future local context, particularly desirable elements and repetitions of the streetscape.

Comment:

An appropriate composition of building elements, material textures and colours have been utilised to reflect the positive elements of the neighbouring development and existing neighbourhood.

The development has been designed to promote visual interests and avoid blank unarticulated walls. The front façade is composed in bay elements with strong verticality and material change to provide a visual segmentation of the building.

The brick elements of the residential buildings reference the character of the neighbourhood. Warmer stone cladding is proposed for the podium elements to link into the natural materiality of the Lindfield area.

The northern podium façade is proposed to be composed of small scale through coloured pre-cast concrete panels that achieves articulation along the northern boundary whilst addressing buildability constraints regarding restricted access against the neighbouring substation limiting additional articulation and ongoing maintenance.

The S4.55(3) modification includes an update to the colour of these precast panels as a darker tone relative to the adjacent wall and slab colour. This provides more depth and differentiation. The existing infrastructure building (substation) is obscuring this precast wall significantly which further reduces the “bulk” of wall visible.

The development will positively contribute to the desired future character of the area. The design responds well to the present and future character of the surrounding area using rich but simple material selections, proportions and simple building forms.

Apartment Design Guide Objectives – Part 3 & 4

Balfour Place

376-390 Pacific Highway, 1 Balfour Street and Balfour Lane, Lindfield

Project no. / **220023** Status / **TP** Rev / **D** Date / **11/04/2024**

Revision	Date	Notes – Revisions are noted in bold italics
-	7/10/2021	S4.56 Submission
A	3/3/2022	RFI submission
B	2/5/2023	S4.56(2) RFI submission
C	7/11/2023	S4.56(3) Submission
D	11/4/2024	S4.56(3) RFI submission

	Objective	Design Criteria	Objective Achieved	Comment
Part 3 Siting the Development				
Site Analysis	<i>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</i>		Yes	An extensive site analysis, site concept and masterplan has been completed based on a multi-layer urban design and contest study. Further details are available in the Architectural Design Report
Orientation	<i>Objective 3B-1 Building types and layouts respond to the streetscape and site while optimising solar access within the development</i>		Yes	The proposed buildings are aligned to the new street grid and create block-defining urban forms. The proposed buildings align with principals of the approved DA.
	<i>Objective 3B-2 Overshadowing of neighbouring properties is minimised during mid-winter</i>		Yes	The subject site is separated from neighbouring properties to the north, east and south with roads on these interfaces, the north-west by the school and substation building, providing appropriate separation to reduce overshadowing to the residential developments to the south.
Public Domain Interface	<i>Objective 3C-1 Transition between private and public domain is achieved without compromising safety and security</i>		Yes	Access from the public street to the building entries are straight, clear and legible, providing safe access to the proposed development.
	<i>Objective 3C-2 Amenity of the public domain is retained and enhanced</i>		Yes	The public domain of all adjacent streets is enhanced with active retail frontages that incorporate landscape planting. The building entries are legible and all services, loading and car parking, where possible, are located in secure zones behind screening.
	<i>Objective 3D-1 An adequate area of communal open space is provided to enhance residential amenity and</i>	<i>Communal open space has a minimum area equal to 25% of the site (see figure 3D.3)</i>	Yes	The communal open space of all stages exceeds the 25% minimum as identified in the landscape architect's drawings. The communal open space will include high quality

	Objective	Design Criteria			Objective Achieved	Comment
Communal and Public Open Space	<i>to provide opportunities for landscaping</i>	<i>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)</i>				landscaping and place making features such as plantings, bench seating and terraces promoting high amenity and useability of the space. The rooftop communal open space achieve a minimum of 2 hours direct sunlight between 9:00 am and 3:00pm
	<i>Objective 3D-2 Communal open space is designed to allow for a range of activities, respond to site conditions and be attractive and inviting</i>				Yes	Communal open spaces provide a selection of sub-spaces with varying uses, to allow for simultaneous use by multiple groups. The Architectural Design Report and landscape architect's drawings articulate the open space and landscaping strategy.
	<i>Objective 3D-3 Communal open space is designed to maximise safety</i>				Yes	Communal open spaces are clearly defined and legible with open areas. They are overlooked by upper level apartments and business and retail spaces promoting passive surveillance.
	<i>Objective 3D-4 Public open space, where provided, is responsive to the existing pattern and uses of the neighbourhood</i>				Yes	Publicly accessible open space is provided to the Pacific Highway to maintain existing character and publicly accessible plaza to activate the Pacific Highway and Balfour Street ground level retail spaces.
Deep Soil Zones	<i>Objective 3E-1 Deep soil zones provide areas on the site that allow for and support healthy plant and tree growth. They improve residential amenity and promote management of water and air quality</i>	<i>Deep soil zones are to meet the following minimum requirements:</i>			N/A	As per approved DA, deep planting zones are not incorporated into this development as it is a town centre mixed use development. Notwithstanding this, the setback for the root zone to the existing trees along Balfour Street acts as a deep soil zone for these trees as well as the additional proposed landscaping as part of the proposed development.
		Site Area	Min Dimensions	Deep Soil Zone (% of Site Area)		
		Less than 650m ²	-	7%		
		650m ² -1500m ²	3m			
		Greater than 1500m ²	6m			
Visual Privacy	<i>Objective 3F-1 Adequate building separation distances are shared equitably between neighbouring sites, to achieve reasonable levels of external and internal visual privacy</i> <i>Note: Separation distances between buildings on the same site should combine required building</i>	<i>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:</i>			Yes	Internal separation between the buildings aligns with the approved DA, with apartment layouts and configurations designed to enhance separation between habitable and non-habitable spaces as per the distances specified in the Guide. Windows and orientation of apartments along the shared north west, and Balfour Lane boundary have been carefully considered to create orientations away from the neighbours
		Building Height	Habitable rooms and balconies	Non-habitable rooms		

	Objective	Design Criteria			Objective Achieved	Comment
	<i>separations depending on the type of room</i>	<i>Up to 12m (4 storeys)</i>	<i>6m</i>	<i>3m</i>		where setback dimensions are aligned with non-habitable areas, and towards the boundary when larger, habitable to habitable distances are achieved.
		<i>Up to 25m (5-8 storeys)</i>	<i>9m</i>	<i>4.5m</i>		
		<i>Over 25m (9+ storeys)</i>	<i>12m</i>	<i>6m</i>		
	<i>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</i>				Yes	The comprehensive solar and view analysis has allowed for buildings to be sited, and heights modulated, to take advantage of keys views and solar access. Privacy between apartments has been considered in the building separation and internal space planning.
Pedestrian Access and Entries	<i>Objective 3G-1 Building entries and pedestrian access connects to and addresses the public domain</i>				Yes	All apartment lobbies address the publicly accessible open space and public domain within the development. Care has been taken to create legible and permeable access for pedestrians throughout the development
	<i>Objective 3G-2 Access, entries and pathways are accessible and easy to identify</i>				Yes	Residential entries are clearly visible from the street and provide direct access to the podium and to the roof top communal open space and to hallways. Way finding signage will be incorporated to augment building legibility for residents and their visitors.
	<i>Objective 3G-3 Large sites provide pedestrian links for access to streets and connection to destinations</i>				Yes	The fundamental design principle for the site has been to create an interconnected series of publicly accessible open spaces. Great care has been taken to ensure excellent pedestrian permeability and legibility throughout the site.
Vehicle Access	<i>Objective 3H-1 Vehicle access points are designed and located to achieve safety, minimise conflicts between pedestrians and vehicles and create high quality streetscapes</i>				Yes	As per approved DA, car park, loading and waste collection points are consolidated or co-located where possible to minimise interruption to street frontages. The vehicle access points are clear and legible.
Bicycle and Car Parking	<i>Objective 3J-1 Car parking is provided based on proximity to public transport in metropolitan Sydney and centres in regional areas</i>	<i>For development in the following locations:</i> <i>on sites that are within 800 metres of a railway station or light rail stop in the Sydney Metropolitan Area; or</i> <i>on land zoned, and sites within 400 metres of land zoned, B3 Commercial Core, B4 Mixed Use or equivalent in a nominated regional centre</i> <i>the minimum car parking requirement for residents and visitors is set out in the Guide</i>			Yes	Both retail and residential car parking provision will satisfy the minimum parking provision as specified in the Guide to Traffic Generating Developments. The number of retail cars proposed remain as per approved DA, the retail carpark provision will exceed the maximum parking rates as specified in the Ku-ring-gai DCP. Extra car provision will be included s as GFA.

	Objective	Design Criteria	Objective Achieved	Comment
		<i>to Traffic Generating Developments, or the car parking requirement prescribed by the relevant council, whichever is less The car parking needs for a development must be provided off street.</i>		
	Objective 3J-2 Parking and facilities are provided for other modes of transport		Yes	As per approved DA, secure bicycle parking is provided in retail carpark and residential carpark separately. The urban design encourages easy pedestrian movement throughout the site.
	Objective 3J-3 Car park design and access is safe and secure		Yes	As per approved DA, Residential and non-residential parking spaces are secure and separate.
	Objective 3J-4 Visual and environmental impacts of underground car parking are minimised		Yes	As per approved DA, the design of the carparks minimises excavation on the -sloping site. The car park layout is efficient with double-loaded aisles and split-level ramping
	Objective 3J-5 Visual and environmental impacts of on-grade car parking are minimised		N/A	
	Objective 3J-6 Visual and environmental impacts of above ground enclosed car parking are minimised		Yes	Carparking areas are sleeved to the sloping by mixed retail spaces. Residential carpark above ground will be screened by the residential apartments.
Solar and Daylight Access	Objective 4A-1 To optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space	<i>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</i>	Yes	At least 70% of apartments achieve two hours of solar access between 9am and 3pm in midwinter. Please refer to a breakdown of solar access per unit in the architectural package
		<i>In all other areas, living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 3 hours direct sunlight between 9 am and 3 pm at mid-winter</i>	N/A	
		<i>A maximum of 15% of apartments in a building receive no direct sunlight between 9 am and 3 pm at mid-winter</i>	Yes	As per approved DA, 10 apartments receive no direct sunlight to the living and POS.
	Objective 4A-2 Daylight access is maximised where sunlight is limited		N/A	The southern building has limited opportunities for solar access; therefore, the layouts are increased in size along with maximising dual orientation. Skylights have been proposed on the southern building to increase solar and daylight to the living areas of the upper most building.

	Objective	Design Criteria	Objective Achieved	Comment
				<p>Additionally, voids are proposed to assist in daylight and ventilation to the south facing rooms.</p> <p>PH07 has skylights added in our S4.55(3) submission. These are a purchaser change, not required for compliance.</p>
	<i>Objective 4A-3 Design incorporates shading and glare control, particularly for warmer months</i>		Yes	The articulated facades are designed for summer shading. The north-west and south-west facing facades fronting have deep-inset windows to minimise summer sun access and late afternoon sun access. Internal courtyard facing apartments also have pergola and articulated frames to balconies to provide privacy and shading.
Natural Ventilation	<i>Objective 4B-1 All habitable rooms are naturally ventilated</i>			Openable windows are proposed for all habitable rooms.
	<i>Objective 4B-2 The layout and design of single aspect apartments maximises natural ventilation</i>			Openable windows are proposed for all habitable rooms.
	<i>Objective 4B-3 The number of apartments with natural cross ventilation is maximised to create a comfortable indoor environment for residents</i>	<p><i>At least 60% of apartments are naturally cross ventilated in the first nine storeys of the building.</i></p> <p><i>Apartments at ten storeys or greater are deemed to be cross ventilated only if any enclosure of the balconies at these levels allows adequate natural ventilation and cannot be fully enclosed</i></p> <p><i>Overall depth of a cross-over or cross-through apartment does not exceed 18m, measured glass line to glass line</i></p>	Yes	<p>Single-aspect apartments, where they exist in the plan have been designed with open-plan layouts and wide frontages to maximise any available natural ventilation.</p> <p>Apartment depths are limited to less than 8m to habitable rooms for all single-aspect apartments</p> <p>At least 60% of the apartments within the development are naturally cross-ventilated.</p> <p>Several different arrangements are proposed to create a cross-ventilated dwelling.</p> <p>The primary typology is corner apartments, where ventilation is achieved on two facades, with 90 degree separation from each other.</p> <p>Roof top level apartments are naturally cross ventilated through the inclusion of ventilating skylights and clerestory windows. Clerestory windows are included as a way of enhancing the internal amenity of southern orientated apartments by using the clerestory windows to similarly gain deep solar access to the living spaces of apartments.</p> <p>Please refer to a breakdown of cross-ventilation per unit in the architectural package.</p> <p>PH07 has skylights added in our S4.55(3) submission. These are a purchaser change, not required for compliance.</p>
Ceiling Height	<i>Objective 4C-1 Ceiling height achieves sufficient natural ventilation and daylight access</i>	<i>Measured from finished floor level to finished ceiling level, minimum ceiling heights for apartment and mixed-use buildings are:</i>	Yes	The floor-to-floor heights of the building allow 2700 ceilings to all living areas and bedrooms and 2400 to other space in the apartment.

	Objective	Design Criteria		Objective Achieved	Comment
		Habitable Rooms	2.7m		Upper level apartments are provided with clerestory windows and skylights to further enhance the amount of daylighting to living areas.
		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		
		Attic Spaces	1.8m at edge of room with a 30-degree minimum ceiling slope		
		If located in mixed use areas	3.3m for ground and first floor to promote future flexibility of use		
	Objective 4C-2 Ceiling height increases the sense of space in apartments and provides for well-proportioned rooms			Yes	Bulkheads are to be minimised as much as possible with flat ceilings in living areas and bedrooms.
	Objective 4C-3 Ceiling heights contribute to the flexibility of building use over the life of the building			Yes	Ceiling heights to the retail spaces are maximised to minimum 3.3m allow for a variety of uses.
Apartment Size and Layout	Objective 4D-1 The layout of rooms within an apartment is functional, well organised and provides a high standard of amenity	Apartments are required to have the following minimum internal areas:		Yes	
		Apartment Types	Minimum Internal Area		
		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. A fourth bedroom and further additional bedrooms increase the minimum internal area by 12m² each			
		Every habitable room must have a window in an external wall with a total minimum glass area of not less than 10% of the floor area of the room. Daylight and air may not be borrowed from other rooms			

	Objective	Design Criteria			Objective Achieved	Comment		
	Objective 4D-2 Environmental performance of the apartment is maximised	Habitable room depths are limited to a maximum of 2.5 x the ceiling height			Yes			
		In open plan layouts (where the living, dining and kitchen are combined) the maximum habitable room depth is 8m from a window			Yes			
	Objective 4D-3 Apartment layouts are designed to accommodate a variety of household activities and needs	Master bedrooms have a minimum area of 10m2 and other bedrooms 9m2 (excluding wardrobe space)			Yes			
		Bedrooms have a minimum dimension of 3m (excluding wardrobe space)			Yes			
		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			Yes			
		The width of cross-over or cross-through apartments are at least 4m internally to avoid deep narrow apartment layouts			Yes			
	Private Open Space and Balconies	Objective 4E-1 Apartments provide appropriately sized private open space and balconies to enhance residential amenity	All apartments are required to have primary balconies as follows:				Yes	
			Dwelling type	Minimum Area	Minimum Depth			
Studio			4m³	-				
1 bedroom			8m³	2m				
2 bedrooms			10m³	2m				
3+ bedrooms			12m³	2.4m				
The minimum balcony depth to be counted as contributing to the balcony area is 1m								

	Objective	Design Criteria	Objective Achieved	Comment
		<i>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.</i>	Yes	
	<i>Objective 4E-2 Primary private open space and balconies are appropriately located to enhance liveability for residents</i>		Yes	All primary balconies and terraces are located adjacent to a living space.
	<i>Objective 4E-3 Private open space and balcony design is integrated into and contributes to the overall architectural form and detail of the building</i>		Yes	The balconies form an integral part of the building design.
	<i>Objective 4E-4 Private open space and balcony design maximises safety</i>		Yes	All balconies can meet the minimum safety provisions
Common Circulation and Spaces	<i>Objective 4F-1 Common circulation spaces achieve good amenity and properly service the number of apartments</i>	<i>The maximum number of apartments off a circulation core on a single level is eight</i>	Yes	The maximum number of units off a single core on any level is nine. Where the number of units per core exceeds eight, natural light and ventilation to the lobby has been pursued. External stairs have also been provided, linking the residential levels to the communal open space, encouraging residents to use this as an alternative to the lifts.
		<i>For buildings of 10-storeys and over, the maximum number of apartments sharing a single lift is 40</i>		
	<i>Objective 4F-2 Common circulation spaces promote safety and provide for social interaction between residents</i>		Yes	<p>The ground floor lobbies have been designed to allow a direct, clear and legible access from the street.</p> <p>Common circulation spaces wherever possible have been designed as part of the external landscape spaces so that residents have the choice to access their apartments through the common garden areas, or through internal circulation corridors.</p> <p>Common corridor areas on each level of the building have been designed with a minimum of one daylighting and ventilation opening, with the majority having two points of natural light where the corridor length is extended.</p> <p>Daylighting opportunities are created through a variety of means with glazed doors, and windows to access points, and in the case of the lift facing Balfour street, the inclusion of a glazed elevator that will enable large amounts of natural light into the corridor space addressing the street, whilst creating an additional built form setback.</p> <p>Required fire isolated stair cases, have been designed as naturally ventilated, and daylit spaces. This means that these stairs form an additional vertical circulation node for residents creating further opportunity for social interaction and connection.</p>

	Objective	Design Criteria	Objective Achieved	Comment
Storage	<i>Objective 4G-1 Adequate, well designed storage is provided in each apartment</i>	<i>In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided:</i>	Yes	All apartment storage meets or exceeds the minimum standard. Most units have more than 50% of the storage internal to the unit. Each apartment also has been a basement storage cage. Please refer to a per-unit schedule of internal storage sizes in the architectural package.
		<i>Dwelling Type</i>		
		<i>Studio</i>		
		<i>1 bedroom</i>		
		<i>2 bedrooms</i>		
		<i>3+ bedrooms</i>		
		<i>At least 50% of the required storage is to be located within the apartment</i>		
	<i>Objective 4G-2 Additional storage is conveniently located, accessible and nominated for individual apartments</i>		Yes	Secure residential storage is clearly and accessibly located in the car park.
Acoustic Privacy	<i>Objective 4H-1 Noise transfer is minimised through the siting of buildings and building layout</i>		Yes	Care has been taken to avoid major acoustic clashes. Apartments facing Pacific Highway have been design with deeply-inset balconies and operable screening to mitigate road noise impacts, aligns with approved DA design. The loading docks are fully, enclosed within the building to minimise noise transfer. Separation is provided inherently to neighbouring buildings due to the setbacks provided by the existing streets and relocated lane. The substation building to the north-west is well below the residential level, and no apartment has a direct sightline to the substation below. This provides some natural acoustic screening. Windows facing the street have been set back from the street to minimise noise impacts from the main road.
	<i>Objective 4H-2 Noise impacts are mitigated within apartments through layout and acoustic treatments</i>		Yes	Care has been taken to co-locate similar room types where possible and to use buffers, such as wardrobes, between different spaces.
Noise and Pollution	<i>Objective 4J-1 In noisy or hostile environments the impacts of external noise and pollution are minimised through the careful siting and layout of buildings</i>		Yes	The buildings have been shaped to deflect noise form Pacific Highway by creating a sheltered courtyard space in the centre. The majority of the apartments are therefore orientated away from the acoustic impacts of the major road. Enclosed vertical common circulation nodes such as the main lift and stair access point are positioned on the most acoustically impacted corner to further shield the residential areas.

	Objective	Design Criteria	Objective Achieved	Comment
	<i>Objective 4J-2 Appropriate noise shielding or attenuation techniques for the building design, construction and choice of materials are used to mitigate noise transmission</i>		N/A	A detailed acoustic report has been prepared in DA to identify units that require additional acoustic treatment. No changes proposed to the technical requirement as outlined in the DA. These apartments on the Pacific highway orientation have been designed with a deep, and oversized wintergarden area that creates an acoustic buffer for the residents within. The additional GFA for this space has been included with the floor space calculations for the development.
Apartment Mix	<i>Objective 4K-1 A range of apartment types and sizes is provided to cater for different household types now and into the future</i>		Yes	The building provides a mix of 1, 2, 3 and 4 bedroom apartments to meet market needs.
	<i>Objective 4K-2 - The apartment mix is distributed to suitable locations within the building</i>		Yes	Apartment types are mixed throughout the buildings.
Ground Floor Apartments	<i>Objective 4L-1 Street frontage activity is maximised where ground floor apartments are located</i>		N/A	
	<i>Objective 4L-2 Design of ground floor apartments delivers amenity and safety for residents</i>		N/A	

	Objective	Design Criteria	Objective Achieved	Comment
Facades	<i>Objective 4M-1 Building facades provide visual interest along the street while respecting the character of the local area</i>		Yes	<p>Care has been taken to ensure proportionally-balanced-buildings which fit within the surrounding future context. Retail and building entries dominate the lower façade levels. Residential entries have been emphasised as vertical façade elements.</p> <p>Façade treatments between retail entry points are generally horizontal elements to reduce perceived height and scale.</p> <p>Special consideration has been given to the existing adjacent heritage building. The building has been set back from the heritage building at upper levels to provide suitable separation. Parapet and awning heights established by the existing heritage building have been emulated in the lower facades of the new development to respect key façade aspects and the scale of the existing heritage building design.</p> <p>We have introduced a new precast wall colour in our S4.55(3) submission. This colour is a darker tone relative to the adjacent wall and slab colour. This provides more depth and differentiation.</p> <p>Further, we note that the existing neighbouring infrastructure building is obscuring this precast wall significantly. This results in a different visual impact as it reduces the “bulk” of wall visible. We have indicated the existing building on the updated elevation.</p>
	<i>Objective 4M-2 Building functions are expressed by the facade</i>		Yes	<p>Each of the facades pursues a different agenda of expressing solid/void, pattern and materiality. The macro-forms of each building are reflected in the materiality and colours; lighter colours for the dominant forms and darker colours for more recessive elements. Retail uses are articulated in the podium with larger scale shop front glazing to Pacific Highway and finer grain detailing to Balfour Street.</p>
Roof Design	<i>Objective 4N-1 Roof treatments are integrated into the building design and positively respond to the street</i>		Yes	<p>The consistent parapet line simplifies the form and conceals roof top mechanical plant.</p>
	<i>Objective 4N-2 Opportunities to use roof space for residential accommodation and open space are maximised</i>		Yes	<p>The podium roof top has been dedicated to a large communal space with multiple spaces and aspects.</p>
	<i>Objective 4N-3 Roof design incorporates sustainability features</i>		Yes	<p>Roof areas will be intensively thermally insulated to maximise passive thermal comfort in the upper-most apartments. The following sustainability measures are included on the revised roof top design</p>

	Objective	Design Criteria	Objective Achieved	Comment
				<ul style="list-style-type: none"> - Increased size of soft landscaped area to the lower and upper roof areas, with the resultant increase in green canopy - Provision of additional Photo-voltaic panels on the roof of the Northern building to provide sustainable power for the common facilities in the development - Several roof top apartments have included clerestory and skylight windows to the living spaces which provide an additional source of ventilation and lighting to these dwellings, reducing the requirement for mechanical or electrical services.
Landscape Design	<i>Objective 4O-1 Landscape design is viable and sustainable</i>		Yes	The landscape design has a focus on amenity with the inclusion of key place making elements such as seating and terraces. Simple design elements, high quality materiality of hardscaping along with an appropriate mix of native and introduced plant species will be a long lasting, easy to maintain landscape which can be adapted to suit a variety of uses over time.
	<i>Objective 4O-2 Landscape design contributes to the streetscape and amenity</i>		Yes	The landscape design maximises the amenity of the communal open space by balancing planted areas with areas for residents to relax or interact. The streetscape landscape design provides layered plantings to allow an appropriate transition between public and private spaces
Planting on Structures	<i>Objective 4P-1 Appropriate soil profiles are provided</i>		Yes	The landscape has been designed with tree planting on-structure and large trees in deep soil zones alongside lower planting zones and shrubs in appropriately sized bases.
	<i>Objective 4P-2 Plant growth is optimised with appropriate selection and maintenance</i>		Yes	The landscape has been designed with a diverse range of species appropriate to the various areas and planting opportunities.
	<i>Objective 4P-3 Planting on structures contributes to the quality and amenity of communal and public open spaces</i>		Yes	Landscape design includes a variety of plantings to soften the communal open space areas.
Universal Design	<i>Objective 4Q-1 Universal design features are included in apartment design to promote flexible housing for all community members</i>		Yes	100% of apartments are capable of achieving the Liveable Housing Guidelines silver level. Please refer to a per-unit schedule of LHDG compliance in the architectural package
	<i>Objective 4Q-2 A variety of apartments with adaptable designs are provided</i>		N/A	Ku-ring-gai Council DCP (2017) does not list a requirement for adaptable apartments. The proposed development includes 10 apartments (16.9%) designed to the Liveable Housing Guidelines Platinum Universal Design Level.

	Objective	Design Criteria	Objective Achieved	Comment
				LHA Platinum has spatial requirements similar to the requirements for an adaptable apartment under AS4299-1995.
	<i>Objective 4Q-3 Apartment layouts are flexible and accommodate a range of lifestyle needs</i>		Yes	The design offers a diverse range of apartment types
Adaptive Reuse	<i>Objective 4R-1 New additions to existing buildings are contemporary and complementary and enhance an area's identity and sense of place</i>		N/A	
	<i>Objective 4R-2 Adapted buildings provide residential amenity while not precluding future adaptive reuse</i>		N/A	
Mixed Use	<i>Objective 4S-1 Mixed use developments are provided in appropriate locations and provide active street frontages that encourage pedestrian movement</i>		Yes	As per approved DA, active frontages are maximised throughout the entire mixed-use precinct. Great care has been taken to ensure that retail uses activate the ground plane with permeable pedestrian networks throughout the whole site.
	<i>Objective 4S-2 Residential levels of the building are integrated within the development, and safety and amenity are maximised for residents</i>		Yes	Each commercial space has a separate entrance. Residential entries are integrated within the podium design and fit within the retail ground floor uses. Clear lines of site are provided from the public domain, with planter boxes and landscaped elements providing demarcation lines between residential and retail uses. Residential apartments above take on a more domestic character in their architecture.
Awnings and Signage	<i>Objective 4T-1 Awnings are well located and complement and integrate with the building design</i>		Yes	As per approved DA, awnings are provided to all retail frontages. These are carefully integrated into the building design in gently curved podiums
	<i>Objective 4T-2 Signage responds to the context and desired streetscape character</i>		Yes	As per approved DA, building identification signage will be located the building entry, adjacent to the proposed letterboxes. Any retail or commercial signage will be integrated into the shopfront design.
Energy Efficiency	<i>Objective 4U-1 Development incorporates passive environmental design</i>		Yes	Passive environmental design features are provided including large tree planting and water elements in the landscape for reduction of temperature The Architectural expression of the buildings includes deep shading balcony and masonry facades to protect northern and western aspects of the building. The use of masonry cladding to the building will assist in their thermal performance. Significant quantities of green planting areas on the building will reduce the amount of stormwater runoff from the development, and aid in reducing the urban heat island effect on the developments upper floors.
	<i>Objective 4U-2 Development incorporates passive solar design to optimise heat storage in winter and reduce heat transfer in summer</i>		Yes	The general orientation of buildings in a north-south axis assists with solar access and shading for the majority of apartments. The articulated building façade and deep

	Objective	Design Criteria	Objective Achieved	Comment
				balconies to each apartment that provide for shading in summer and solar access in winter. Deep window reveals have been provided to south-west facades to mitigate the effects of hot afternoon sun in summer.
	<i>Objective 4U-3 Adequate natural ventilation minimises the need for mechanical ventilation</i>		Yes	Refer to BASIX assessment
Water Management and Conservation	<i>Objective 4V-1 Potable water use is minimised</i>		Yes	Refer to BASIX assessment
	<i>Objective 4V-2 Urban stormwater is treated on site before being discharged to receiving waters</i>			Refer to civil engineer's details
	<i>Objective 4V-3 Flood management systems are integrated into site design</i>		N/A	
Waste Management	<i>Objective 4W-1 Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity of residents</i>		Yes	Waste management is handled entirely within the building envelope to minimise impact on the streetscape
	<i>Objective 4W-2 Domestic waste is minimised by providing safe and convenient source separation and recycling</i>		Yes	Separate recycling facilities and rooms for each apartment are provided. Refer to Waste Management Report
Building Maintenance	<i>Objective 4X-1 Building design detail provides protection from weathering</i>		Yes	Robust finishes have been selected for maintenance and high-durability
	<i>Objective 4X-2 Systems and access enable ease of maintenance</i>		Yes	Stair access is provided to all rooftop plant and equipment. Other services areas are located within the podium or basements of each building.
	<i>Objective 4X-3 Material selection reduces ongoing maintenance costs</i>		Yes	Where possible, high- durability, pre-finished, untreated or natural-finish materials are proposed for building facades. Brick cladding is proposed to the majority of the residential facades, with powdercoated metalwork, and integral pigmented concrete expressed elements. Through-coloured pre-cast panels are proposed for the northern façade to reduce maintenance requirements where access is restricted alongside the existing neighbouring substation building.