

Design Statement

57-61 Archer Street & 34 Albert Avenue, Chatswood NSW

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Prepared by: XC

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Design Verification Statement

04 Dec. 2024

To whom it may concern,

Architectural Design Verification Statement
Archer & Albert St, Chatswood

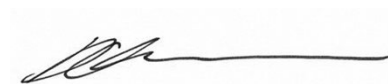
I can confirm that I designed, or directed the design of the development at 57 Archer Street, Chatswood.

I believe the proposal addresses:

- the **design principles for residential apartment development**
- each of the **objectives in Parts 3 and 4** of the *Apartment Design Guide* (ADG)

I am a registered architect in New South Wales and am enrolled in the Division of Chartered Architects in the register of Architects pursuant to the Architect Act 1921.
My registration number is 7445.

Please don't hesitate to contact us for further information.



Domenico Alvaro
Registered NSW Architect #7445
Director, Global Design Leader
Woods Bagot

SEPP (Housing) 2021 Design Principles & Apartment Design Guide Assessment



01.0 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.

Archer and Albert takes its name from its location within the Chatswood CBD at the busy junction of Archer Street and Albert Avenue. This was once Sydney Bluegum High Forest and the home of the Cammeraygal people of the Darug, likely supporting a rivulet running into Scotts Creek and onwards to Sugarloaf Bay north of Middle Cove.

As part of Willoughby Council's 2036 vision for the Chatswood CBD, the site is now well-situated within a dynamic and growing urban precinct. A 600m walk from Chatswood Railway Station, Archer and Albert is found within the newly extended mixed-use precinct which flanks the commercial core. On the opposite side of Bertram Street fronting the site to the east is the more leafy and suburban South Chatswood Heritage Conservation Area. An existing heritage listed home on the north-eastern corner of the site remains as a further link to the area's suburban history during the late 19th and 20th Centuries.

At this nexus between high-rise commercial/retail and one/two storey residential the site represents an opportunity to transition from low to high-density.

The proposal is for a single, mixed-use tower of thirty-two storeys, including three levels of commercial space situated on ground level up to level 2. The remaining levels above are residential, featuring high-quality apartments arranged to capture expansive views generally towards the east, extending from the south-east around to the north-west.

We envisage Archer & Albert to be leafy and green, with the eastern portion of the site dedicated to a pocket park and supporting a feature Sydney Blue gum tree. This park also establishes a curtilage for the heritage item, re-defining its historic extents. The landscaped nature of the locale is extended over to the northern side of Albert Avenue where a significant angophora provides an extensive canopy and the site opens up, reminiscent of the landscaped plaza on the southwestern corner of the Archer and Albert intersection.

The heritage house itself will be restored back to its former footprint, with unsympathetic additions removed and contemporary lightweight

canopies wrapping its western and southern sides, providing useable outdoor dining space as it is transformed into a café. The building's name will also be returned to its origins becoming: Laurels 34.

At ground level, the proposal becomes highly permeable, with pedestrians able to pass unrestricted around and through the site on all four sides. With the ground floor set above flood planning levels the surrounding podium is stitched into the surrounding urban fabric via shallow ramps and steps that double as seats nestled amongst generous landscaping complementing the existing significant street trees.

One continuous retail space is planned to wrap the tower core, activating the 3 street frontages via expansive glazed connections to the interior. This retail space is able to be subdivided into multiple tenancies, providing flexibility so the ground plane will remain vibrant over time.

Servicing is provided from a shared laneway set along the southern boundary which provides both a through site link and a means of handling waste and goods for the site without interrupting valuable street frontage.

Just off Archer Street, and in keeping with the site's current address, the residential lobby is situated in the south-west corner of the site. Access is via a part open and part undercover courtyard - a cool and calm intermediary space away from the busy street and securable at night via a metalwork gate.

The tower is intended as a singular form, with a strong identity and high-quality materials. Above a base of face brick, horizontal precast bands wrap the building from the first floor up to the roof. At low levels, the precast bands encompass generous landscaped balconies, dancing back and forth, pushing and pulling around the building faces in response to the urban context. Above level 6, the bands resolve into a recurring pattern until varying once more at the tower top, where high-end penthouses and a landscaped rooftop enjoy an uninterrupted outlook in the sun.

In combination with glazed fluted terracotta panels and simple glazing details the façade is designed to be both elegant and distinctively residential. With the top of the bands set at either 1200mm above finished floor level (AFFL) lower in the building or 650mm AFFL higher in the building, views to the surrounds remain available whilst residential privacy is maintained. Its confident, sharp lines softened by extensive landscaping mean Archer and Albert will lend a sophisticated character to its context both now and into the future.



02.0 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.

With elegant proportions and a dynamic façade, the built form of Archer and Albert is designed to suit both the existing and future character of its surrounds, in response to the scale of its neighbours.

The site has two height limits – 90m over the western portion and 23m over the east – established to increase the amount of housing clustered around the CBD with its employment, transportation and recreational opportunities whilst limiting overshadowing on the adjacent heritage conservation area. In combination with a 3m setback along the northern boundary setting a 23m street wall, the planning controls envisage a podium of 5-6 storeys.

Archer and Albert sits within a mixed-use zone which is only the width of the site, with the commercial core to the north and west and the heritage conservation zoned for residential use to the east. The proposed tower is therefore designed to transition between a scale of 150m+ towers and 1-2 storey homes via its broader stepping horizontal planes at low level which transform to become a slender tower form above. This transition allows the tower to look at home immediately adjacent the single storey heritage item on site whilst appearing to have a 23m high podium on the NW corner of the site facing towards the CBD.

Consolidating the built form into a single well-articulated tower also frees up the SE corner of the site for use as a park facing towards the residential area to the east and avoids introduction of an awkward, narrow and/or overly tall podium. Low-level commercial space opening out to the park but well-set back from the street creates a gentler interface between the multiple typologies converging around the site and creates better opportunities for views and vistas at low level from the streets and at high level from within the proposed apartments themselves.

With the affordable housing SEPP allowing a 30% increase in the height limit for the site (36m), the design is efficient enough to not need to take up this full height, with a 30% GFA increase possible in only 6 storeys (19.2m). This limited additional height provides further verticality to the tower and, in conjunction with a relatively narrow footprint, limits the impact of overshadowing on neighbouring properties. It also means the design continues to provide an appropriate transition to the future taller CBD context.

As a result, the proposal's built form appropriately contributes to the aspirations for Chatswood as a high-quality suburban CBD at the heart of the North Shore.

03.0 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.

Liveability is the concept which underpins the design of Archer and Albert – this concept originates from extensive experience with and a deep understanding of high-density inner-city living. Creating functional, well-detailed and aesthetic residences in close proximity to the attractions of urban centres provides improved opportunities for work, play and mobility, leading to more sustainable cities.

The proposal is for well-planned apartments that feature great views, large sunny outdoor spaces with integrated landscaping, copious storage, home media spaces within a complex featuring numerous supporting facilities. With its location near Chatswood's offices, shops and restaurants, high-quality transportation hub and indoor and outdoor entertainment facilities Archer and Albert's design supports high-density living.

The addition of affordable housing on the three lowest residential floors of the building provides opportunities for keyworkers to enjoy the benefits of the proposal's location and amenity.

Mobility for residents is straightforward with Chatswood Railway Station and the existing and proposed Metro line within a short 8-minute walk. The nearest bus stop is within 300m and extensive bus services pass through Chatswood travelling to the Sydney CBD, Northern Beaches, wider North Shore and immediate surrounds. The site can provide for sufficient residents parking, providing flexibility for weekend journeys, with both Archer Street and Albert Avenue sufficiently well-connected streets to make taxi trips and rideshare efficient ways to move around.

Given these characteristics, the proposal's density can be seen as a satisfactory addition able to be accommodated by its location.





04.0 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.

Sustainable development is vital for us to maintain an environment which can support our way of life – ideally, we go further and design regeneratively so that past environmental impacts can be mitigated. Given its situational constraints, the design of Archer and Albert nonetheless seeks to maximise its positive impact and achieve as sustainable an outcome as possible.

As a logical extension of the key design concept of liveability, the proposal uses the idea of social sustainability to drive environmental outcomes. If the large quantity of resources required for a building of this nature are to be justified then the project must be invested with sufficient quality to enable its continued use for years to come. It should become a well-loved home to a large number of people, easy to operate and maintain and remaining desirable for future generations to occupy or retain as part of their urban fabric.

That's why Archer and Albert includes:

- A mix of uses – from retail to commercial and from residence to recreational space – to support life, work and play.
- Robust, but well-detailed and attractive external materials that will continue to look good over time, with low levels of maintenance.
- Virtually no transfer structure, to minimise unnecessary material use and expense.
- Maximising and integrating landscaping, to maintain cooler urban spaces, improve groundwater quality and promote wellbeing.
- Carefully selected plant species, to minimise water use (xeriscaping).
- Water collection, to support landscape irrigation.
- A roof designed to be a mini power source, its solar panels providing green energy in common areas and acting as an area for clean water collection.

- Integrated passive solar design, with apartments oriented to bring winter sun in whilst overhangs provide summer shade.
- Framed views, with smaller areas of glazing to limit heat gain or loss.
- High levels of thermal insulation, with windows detailed for airtightness.
- A high proportion of cross-ventilated apartments.
- Energy efficient fittings and fixtures.
- Water efficient fittings and fixtures.
- Bicycle parking.
- Communal recycling and green waste facilities.
- Efficient building plant services.
- Locally sourced materials and design for disassembly, wherever possible.
- Opportunities for nature based solutions for managing runoff and pollutants (WSUD).

As required by Willoughby's DCP the project will target a minimum of 4-star Greenstar rating. Woods Bagot will continue to explore options for achieving a higher score in conjunction with our work on the five practice wide sustainability commitments copied below:

- All projects reporting mandatory sustainability performance by 2023.
- Post-occupancy evaluations for 25% of built projects by 2025, 100% by 2030.
- All projects designed to be zero carbon for Scopes 1 and 2 emissions by 2030.
- Adopt sustainable material strategies for every project by 2025 to reduce embodied carbon and eliminate hazardous materials.
- Climate risk assessments for all projects by 2023.



05.0 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 usability, privacy and opportunities for social interaction, equitable access, respect for neighbours' amenity, provides for practical establishment and long term management.

Landscaping is a fundamental component of Archer and Albert. The building is inspired by the Eucalyptus Saligna or Sydney Blue Gum that once characterised the area, with its distinctive stocking bark, a smooth, silvery green trunk and vibrant green leaves reflected in the textured face brick at the building base, the honed/painted precast upstands and green glazed terracotta façade. Ideologically, the proposal is conceived of as a tree, with the active spaces on the ground plane connected back to their surrounds like the roots in the forest floor, the podium rising up like the understorey, the tower resolving into a trunk and the upper floors reaching out into the sun like the canopy.

Plants are part of the design language for the project and we have worked closely with Landscape Architects Arcadia to truly integrate landscape and architecture within the project. There are a number of key landscaped elements that contribute to a positive outcome for the locale, the site and the building:

- Maintaining the existing urban canopy

Overall, the proposed landscape design is inspired by the extensive planting throughout the heritage conservation area and in the nearby streets. Wherever possible, existing trees are maintained and new planting is designed to relate to these assets. Smaller trees within the site are proposed to be removed.
- Creating a new pocket park

The area to the east of the site is set aside for a new private but publicly accessible park (*Brigstock Park*), with a feature Sydney Blue Gum tree and adjacent publicly accessible toilets associated with the extended undercover outdoor terrace wrapping *Laurels 34*.

- Replanting a heritage garden

The heritage house frontage itself will be bounded by a traditional picket style fence and a new heritage style garden created within, complimenting the re-established building footprint and its period appropriate detailing.
- A landscaped plaza

Between the heritage house and new tower a publicly accessible plaza connects the street with the pocket park via a west-facing outdoor terrace extending the new café's seating area. This space features several small trees, external seats and steps which can also be used for seating to create a dynamic urban space.
- Archer Street

A wide strip of deep soil running along the Archer Street frontage provides an opportunity to further green this area in addition to the narrow nature strip, creating a broad buffer zone between the ground level retail space and the busy road.
- Albert Avenue

The existing broader nature strip here is maintained and extended, and the street trees protected. A narrow band of shallow soil allows the brick base of the podium to be softened.

The existing street tree on the corner of Archer Street and Albert Avenue is proposed for removal to improve pedestrian circulation in this area, with a new tree provided as a replacement.

The existing tree to the north-west of the existing heritage house is proposed for removal to support installation of the substation, unless the substation can be installed without impacting the tree.

06.0 Principle 6: Amenity

Good design positively influences internal and external amenity for residents and neighbours. Achieving good amenity contributes to positive living environments and resident well-being. Good amenity combines appropriate room dimensions and shapes, access to sunlight, natural ventilation, outlook, visual and acoustic privacy, storage, indoor and outdoor space, efficient layouts and service areas, and ease of access for all age groups and degrees of mobility.

The proposal aims to be a good neighbour and, simultaneously, to provide its residents with high levels of amenity.

The building is arranged to capture the best views over the heritage conservation area and onwards to the coast, north towards Kuringai, as well as Chatswood CBD and Sydney CBD views, where available. Rather than large expanses of glazing, the proposal seeks to frame these views within smaller windows with thinner frames, protecting glass from overheating via horizontal bands which project above. Operable shading is avoided to limit maintenance.

The orientation of the site allows for residential balconies to be located as a direct extension of living rooms rather than being off to the side. Balconies are generous, with tiles set flush to the floor level within to provide seamless indoor/outdoor living. These balconies are protected from wind via solid precast concrete horizontal bands, with glazed balustrades above to maintain outlook, detailed to avoid climbability. Outdoor spaces are intended to support integrated planters which act as biological rather than built privacy screens and further mitigate the impact of winds on the building.

The combination of sliding doors to balconies and operable windows on the opposite corners of living spaces provide cross-ventilation through the majority of apartments on a typical floor. Elsewhere, shallow floor plates ensure apartments are easily able to be naturally ventilated.

Although Archer Street and Albert Avenue are busy and experience some traffic noise as a result, low level apartments are afforded visual and acoustic privacy via extended balconies at lower levels. Setbacks, high performance façade systems with suitable acoustic glazing and landscape devices contribute to further internal noise mitigation.

Internally, apartment layouts are efficient to maximise a sense of internal spaciousness with consideration of how best to provide views, sunlight, natural ventilation, visual and acoustic privacy, wind protection, large areas of storage and ease of access for all age groups prioritised throughout. 50% of the total new apartments are adaptable dwelling units, including 20% Silver Level Liveable housing units.

In particular, apartment planning is focussed around providing large continuous volumes of joinery to accommodate storage needs. All apartments have substantially more than the ADG minimum required

storage volumes and 50% or more of the required storage is located within the apartments. All apartments have additional storage located in private cages on Basement carpark levels. These are sized to store bicycles and are accessible only to residents on private parking levels, or otherwise secured from access by non-residents.

The publicly accessible park at ground level provides residential common open space shared with the local community. Residents only common open space is located on the landscaped rooftop which includes a recreational/lap pool, lounging area, family/couples cabanas and an outdoor kitchen and dining area, with charcoal and grill BBQs and preparation area.

A small sky-garden communal area on level 3 provides a small gathering space specifically for residents of the affordable housing.

On the topmost floor of the commercial levels at level 2, a commercially operated club-style facility will be made available for the public to join, with residents automatically granted membership. This commercial facility will provide a wellness centre, including hot and cold plunge, sauna and steam facilities and a range of other therapeutic services. It will also operate a functions space catering for events, meetings, film screenings and birthday parties.

The mixed-use composition of the proposed design allows residents to benefit from supporting amenity which also serves the locale. In addition to the conversion of the heritage house into a café, the goal is to lease some or all of the retail/commercial space to a high end gym operator to provide aerobic and resistance facilities as well as classes – residents will be granted membership opportunities.

With facilities designed around providing opportunities for neighbours to come together Archer and Albert hopes to become an important part of the Chatswood community upon opening and into the future.



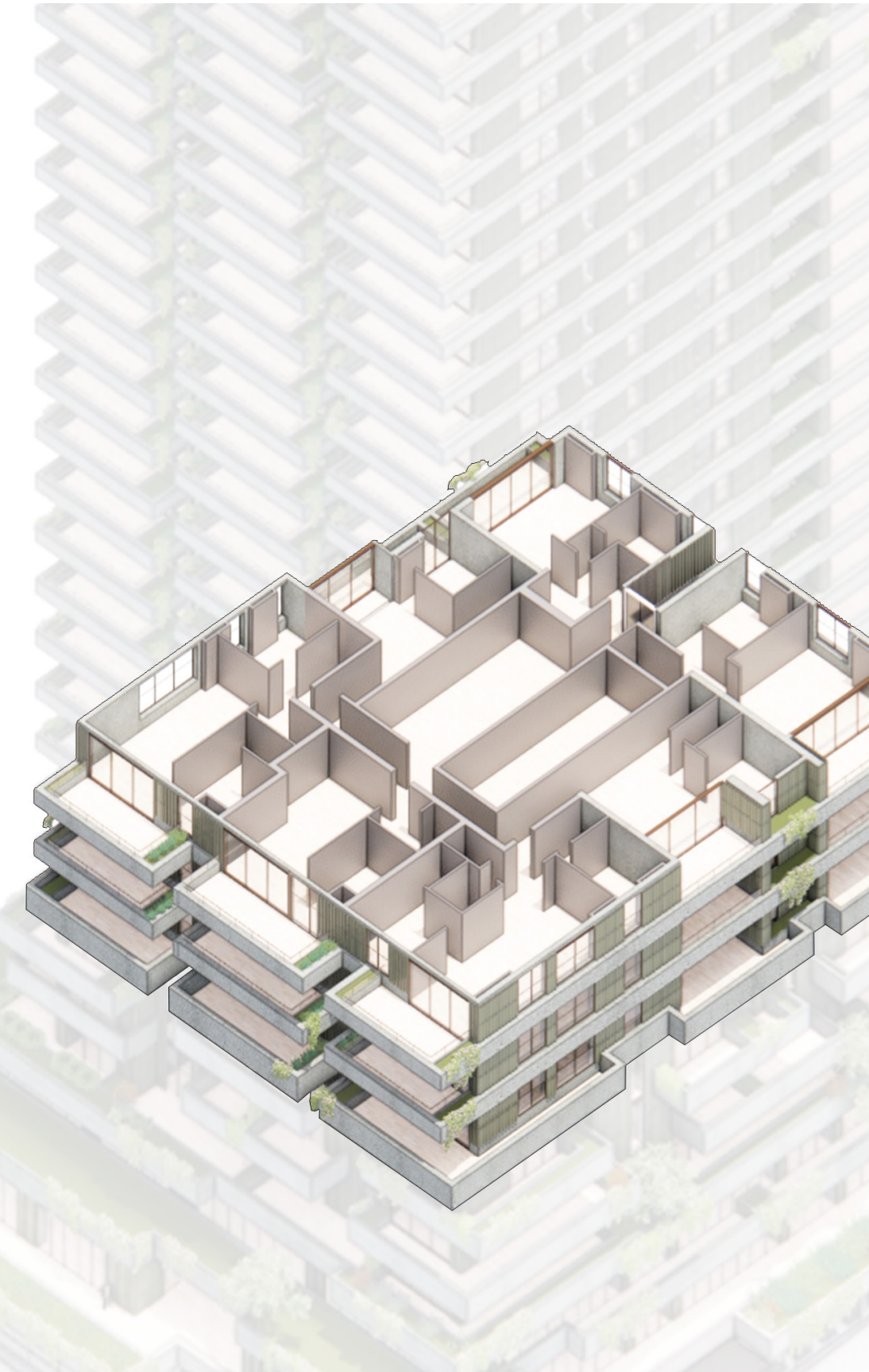


07.0 Principle 7: Safety

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 are maintained by the proposed design, which incorporates a number of initiatives to maintain welfare both within public and private spaces.

- Archer and Albert is designed using the four CPTED principles of natural surveillance, access control, territorial reinforcement and space management.
- The design of the public domain emphasises public pedestrian flow through and around the site to promote natural surveillance.
- Ground floor retail spaces are designed to be as continuous as possible around the three street frontages to promote a sense of security and to provide passive surveillance whilst active.
- Material changes define the boundaries of the site, with their quality emphasising they are owned and managed.
- Spaces are open, well-lit both with natural daylight and artificial lighting during the night.
- An easily identified and accessible residential entry point is provided directly off Archer Street for residents and the public.
- A large street number is located adjacent to this entry point, with high-quality permanent signage identifying the building's identity.
- The façade and landscape design minimises obstructions or areas where concealment is likely to occur and/or ensuring there are 2 means of moving out of any space safely.
- The hit and miss brickwork surrounding the residential entry courtyard and the corner window to the SE corner of the ground floor retail maximises passive surveillance of the laneway.
- The comfort and safety of pedestrians and cyclists is prioritised, with vehicular movements confined to small areas of the site, with good lines of sight and away from the primary desire lines. In the case of the laneway, this area is designed and designated as a shared zone to further slow vehicle movements.
- Basement access will be via security control cards and movements monitored on site from the 24-hour concierge within the residential lobby.



08.0 Principle 8: Housing Diversity & Social Interaction

Good design achieves a mix of apartment sizes, providing housing choice for different demographics, living needs and household budgets. Well-designed apartment developments respond to social context by providing housing and facilities to suit the existing and future social mix. Good design involves practical and flexible features, including different types of communal spaces for a broad range of people, providing opportunities for social interaction amongst residents.

With its mix of housing types, from smaller urbane affordable housing to 1-, 2-, 3- and 4- bedroom apartments and a small number of generous penthouse style homes, the proposal caters for a variety of needs. In its privileged position on the edge of rapidly growing CBD of Chatswood and with a range of mixed-use facilities on site, we anticipate Archer and Albert will be highly desirable.

Apartment types all meet or exceed ADG guidelines for overall sizes, as well as minimum living, bedroom and balcony areas/dimensions. There are 150 apartments proposed, comprising:

- 4% Studios
- 39% 1-bedrooms
- 29% 2-bedrooms
- 22% 3-bedrooms
- 6% 4-bedrooms

The number of adaptable and liveable apartments meet Local Government requirements and the proposal features:

- 75 Adaptable apartments (50%)
- 35 Liveable apartments (20%)

A level 1 pool as part of the members wellness and function facility, communal outdoor space, lobby wintergardens and ground level communal open spaces provide for a variety of enhanced experiences catering for a broad range of residents. Food & beverage offerings in the proposed local café provide further opportunities for social interaction and commercial opportunities in a rapidly evolving precinct.

09.0 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.

Archer and Albert aspires to be a significant contributor to the quality of Chatswood's skyline. Its efficient design, incorporating sufficient structure without excess and balancing repetition with variation, allows the development to afford high-quality materials – face brick, terracotta, honed and painted precast concrete, glass – and landscaping as part of its visual character.

In conjunction with these materials, the form and dimensions of the facade has been carefully curated from the ground to level 31. At low levels, horizontal banding is higher and more continuous, maintaining a higher degree of privacy whilst still allowing overlooking and proportional to the taller floor-floor dimensions and larger areas of glazing of these commercial floor plates. The first residential levels maintain the language of higher horizontal bands, but broken into individual balconies that move back and forth as they rise up the facades. Above the 6th floor, approximately at the 23m height limit, the horizontal bands become lower to better capture the view, as privacy to the street becomes less significant at this height, and to appear lighter as the building rises. The bands also repeat until the top of the tower is reached, supporting a faster and more modular construction methodology to lower cost whilst maintaining quality. At the top of the building the precast bands become more dynamic again, lending additional flair to the building's profile.

In contrast to the projecting horizontal, flatter, more textured and lighter coloured appearance of the precast concrete, terracotta cladding is recessed, vertically profiled, glossy and dark. The vertical limits for the tile module means the façade is effectively divided into 3 equal bands and so, within the terracotta zone, double hung windows are used to maintain the continuity of these established horizontal lines.

The building's orthogonal and geometric aesthetic is counterbalanced through extensive use of landscaping, similar to but at a larger scale than Woods Bagot's award-winning Short Lane project.

Textured brick at the building's base provides the necessary robustness for the public realm, whilst maintaining the high-quality of the tower finishes.

In combination, the design of Archer and Albert's consistently detailed but still diverse forms seeks to establish a desirable character for the locale as it develops into a residential focussed high density mixed-use precinct.



01.0 Apartment Design Guide Assessment

TABLE 1. SUMMARY OF THE KEY APARTMENT DESIGN GUIDE PROVISIONS WHICH APPLY TO THE SITE		
CONTROL	3A-1 SITE ANALYSIS	STATUS
Objective	Site analysis illustrates that design decisions have been based on opportunities and constraints of the site conditions and their relationship to the surrounding context.	✓
Design Guidance	Each element in the Site Analysis Checklist should be addressed.	Refer to the Site Analysis Checklist below and the Design Report which contains the Provided information.

Site Analysis Checklist

Documentation	Required Information	Provided
Site Location	Broad map or aerial photo showing site location in relation to surrounding centres, shops, civic/community facilities and transport.	✓
Aerial Photograph	Colour aerial photographs of site in its context.	✓
Local Context Plan	Plan(s) of the existing features of the wider context including adjoining properties and the other side of the street, that show:	✓
	pattern of buildings, proposed building envelopes, setbacks and subdivision pattern	✓
	land use and building typologies of adjacent and opposite buildings in the street	✓
	movement and access for vehicles, servicing, pedestrians and cyclists	✓

	topography, landscape, open spaces and vegetation	✓
	significant views to and from the site	✓
	significant noise sources in the vicinity of the site, particularly vehicular traffic, train, aircraft and industrial noise	✓
Site Context and Survey Plan	Plan(s) of the existing site based on a survey drawing showing the features of the immediate site including:	✓
	boundaries, site dimensions, site area, north point	✓
	topography, showing relative levels and contours at 0.5 metre intervals for the site and across site boundaries where level changes exist, any unique natural features such as rock outcrops, watercourses, existing cut or fill, adjacent streets and sites	✓
	location and size of major trees on site and relative levels where relevant, on adjacent properties and street trees	✓
	location and use of existing buildings or built features on the site	✓
	location and important characteristics of adjacent public, communal and private open spaces	✓
	location and height of existing windows, balconies, walls and fences on adjacent properties facing the site, as well as parapet and ridge lines	✓

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	pedestrian and vehicular access points, driveways and features such as service poles, bus stops, fire hydrants etc.	✓
	location of utility services, including easements and drainage	✓
	location of any other relevant features	✓
Streetscape Elevations and Sections	Photographs or drawings of the site in relation to the streetscape and along both sides of any street that the development fronts, that show	✓
	overall height (storeys, metres) and important parapet/datum lines of adjacent buildings	✓
	patterns of building frontage, street setbacks and side setbacks	✓
	planned heights	✓
Analysis	Plan that synthesises and interprets the context, streetscape and site documentation into opportunities and constraints that generate design parameters, including the following information:	✓
	orientation and any overshadowing of the site and adjoining properties by neighbouring structures (excludes vegetation). The winter sun path should also be shown between 9 am and 3 pm on 21 June	✓
	identification of prevailing wind	✓
	the geotechnical characteristics of the site and suitability of the proposed development	✓
	the public domain interface and street setback	✓

	relationship to and interface with adjacent properties, including side and rear setbacks	✓
	ventilation for the subject site and immediate neighbours	✓
	proposed building footprint location	✓
	retained and proposed significant trees and deep soil zones	✓
	proposed communal open space	✓
	proposed car park footprint and depth	✓
	proposed building entries	✓
	supporting written material - this should include technical advice from specialists involved in the development process including landscape architects, arborists, geotechnical engineers and/or contamination specialists where applicable	✓

CONTROL	3B-1 ORIENTATION	STATUS
Objective	Building types and layouts respond to the streetscape and site while optimising solar access within the development.	✓
Design Guidance	Buildings along the street frontage define the street, by facing it and incorporating direct access from the street (see figure 3B.1)	✓
Design Guidance	Where the street frontage is to the east or west, rear buildings should be orientated to the north.	✓

03.0 Apartment Design Guide Assessment

Design Guidance	Where the street frontage is to the north or south, overshadowing to the south should be minimised and buildings behind the street frontage should be orientated to the east and west (see figure 3B.2).	✓
CONTROL	3B-2 ORIENTATION	STATUS
Objective	Overshadowing of neighbouring properties is minimised during mid-winter.	✓
Design Guidance	Living areas, private open space and communal open space should receive solar access in accordance with sections 3D Communal and public open space and 4A Solar and daylight access.	✓
Design Guidance	Solar access to living rooms, balconies and private open spaces of neighbours should be considered.	✓
Design Guidance	Where an adjoining property does not currently receive the required hours of solar access, the proposed building ensures solar access to neighbouring properties is not reduced by more than 20%.	N/A
Design Guidance	If the proposal will significantly reduce the solar access of neighbours, building separation should be increased beyond minimums contained in section 3F Visual privacy.	N/A
Design Guidance	Overshadowing should be minimised to the south or downhill by increased upper-level setbacks.	N/A
Design Guidance	It is optimal to orientate buildings at 90 degrees to the boundary with neighbouring properties to minimise overshadowing and privacy impacts, particularly where minimum setbacks are used and where buildings are higher than the adjoining development.	✓

Design Guidance	A minimum of 4 hours of solar access should be retained to solar collectors on neighbouring buildings.	N/A
CONTROL	3C-1 PUBLIC DOMAIN INTERFACE	STATUS
Objective	Transition between private and public domain is achieved without compromising safety and security.	✓
Design Guidance	Terraces, balconies and courtyard apartments should have direct street entry, where appropriate.	N/A – Ground level use is active retail/commercial
Design Guidance	Changes in level between private terraces, front gardens and dwelling entries above the street level provide surveillance and improve visual privacy for ground level dwellings (see figure 3C.1).	N/A – Ground level use is active retail/commercial
Design Guidance	Upper-level balconies and windows should overlook the public domain.	✓
Design Guidance	Front fences and walls along street frontages should use visually permeable materials and treatments. The height of solid fences or walls should be limited to 1m.	N/A – The ground plane is designed as an extension of the public realm
Design Guidance	Length of solid walls should be limited along street frontages.	N/A – The ground plane is designed as an extension of the public realm
Design Guidance	Opportunities should be provided for casual interaction between residents and the public domain. Design solutions may include seating at building entries, near letter boxes and in private courtyards adjacent to streets.	✓
Design Guidance	In developments with multiple buildings and/or entries, pedestrian entries and spaces associated with individual buildings/entries should be differentiated to improve legibility for residents, using a number of the following design solutions:	N/A – The proposal has a single residential entry

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	- architectural detailing - changes in materials - plant species - colours	
Design Guidance	Opportunities for people to be concealed should be minimised.	✓
CONTROL	3C-2 PUBLIC DOMAIN INTERFACE	STATUS
Objective	Amenity of the public domain is retained and enhanced.	✓
Design Guidance	Planting softens the edges of any raised terraces to the street, for example above sub-basement car parking.	✓
Design Guidance	Mailboxes should be located in lobbies, perpendicular to the street alignment or integrated into front fences where individual street entries are provided.	✓
Design Guidance	The visual prominence of underground car park vents should be minimised and located at a low level where possible.	✓
Design Guidance	Substations, pump rooms, garbage storage areas and other service requirements should be located in basement car parks or out of view.	Meets objective. Services are positioned discretely and intelligently integrated into the building's architecture. The majority of services interfacing with the public domain are located in the basement. Architectural louvres at high level above the ground floor commercial façade provide ventilation for basement services, where required. Waste collection is by commercial vehicle at ground

		level in an enclosed loading bay accessed via the laneway. A single landscaped 1.5kV substation kiosk is located adjacent to the Albert Avenue frontage. The aim is to landscape the immediate surrounds with dense hedging plants which are in keeping with the traditional character of the adjacent heritage item.
Design Guidance	Ramping for accessibility should be minimised by building entry location and setting ground floor levels in relation to footpath levels.	✓
Design Guidance	Durable, graffiti resistant and easily cleanable materials should be used.	✓
Design Guidance	Where development adjoins public parks, open space or bushland, the design positively addresses this interface and uses a number of the following design solutions: - street access, pedestrian paths and building entries which are clearly defined - paths, low fences and planting that clearly delineate between communal/private open space and the adjoining public open space - minimal use of blank walls, fences and ground level parking	✓
Design Guidance	On sloping sites protrusion of car parking above ground level should be minimised by using split levels to step underground car parking.	✓
CONTROL	3D-1 COMMUNAL AND PUBLIC OPEN SPACE	STATUS
Objective	An adequate area of communal open space is provided to enhance residential amenity and to provide opportunities for landscaping.	✓

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Design Criteria	1. Communal open space has a minimum area equal to 25% of the site (see figure 3D.3). 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).	Meets objective. Communal open space equivalent to 26% of the site area is provided.
Design Guidance	Communal open space should be consolidated into a well-designed, easily identified and usable area	Meets objective. Communal open space is provided in three locations around the building. This strategy caters for a wider range of resident's interests and allows for more varied passive and active recreational activities to occur simultaneously. Areas included: - Ground level pocket park and plaza - Level 1 exterior terrace spaces accessible only to residents and separate from the commercial space on this level. The resident's amenity space includes 1. A sizeable, landscaped terrace facing towards the northeast and looking into the tree canopy; 2. Indoor/outdoor space to provide for a mix of uses in varying seasons and weather; 3. Storage and a galley kitchen to cater for functions and events and 4. A DDA-compliant bathroom. - Level 3 communal space
Design Guidance	Communal open space should have a minimum dimension of 3m, and larger developments should consider greater dimensions	✓

Design Guidance	Communal open space should be co-located with deep soil areas	✓ (Park) Level 1 communal spaces include planting on elevated slabs and the eastern terrace overlooks the pocket park, which meets the objective.
Design Guidance	Direct, equitable access should be provided to communal open space areas from common circulation areas, entries and lobbies	✓ (Park) Level 1 communal spaces are accessible directly from residential lobbies.
Design Guidance	Where communal open space cannot be provided at ground level, it should be provided on a podium or roof	✓ (Podium)
Design Guidance	Where developments are unable to achieve the design criteria, such as on small lots, sites within business zones, or in a dense urban area, they should: - provide communal spaces elsewhere such as a landscaped rooftop terrace or a common room - provide larger balconies or increased private open space for apartments - demonstrate good proximity to public open space and facilities and/or provide contributions to public open space	✓ The design achieves the design criteria, and includes the following additional communal benefits: - Level 1 wellness space, bookable dining area and landscaped outdoor terrace area equipped with views, catering kitchen and DDA compliant amenities - Larger balconies for smaller apartments at low levels as well as generally throughout.
CONTROL	3D-2 COMMUNAL AND PUBLIC OPEN SPACE	STATUS

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Objective	Communal open space is designed to allow for a range of activities, respond to site conditions and be attractive and inviting	✓
Design Guidance	Facilities are provided within communal open spaces and common spaces for a range of age groups (see also 4F Common circulation and spaces), incorporating some of the following elements: • seating for individuals or groups • barbecue areas • play equipment or play areas • swimming pools, gyms, tennis courts or common rooms	✓
Design Guidance	The location of facilities responds to microclimate and site conditions with access to sun in winter, shade in summer and shelter from strong winds and down drafts	✓
Design Guidance	Visual impacts of services should be minimised, including location of ventilation duct outlets from basement car parks, electrical substations and detention tanks	✓

CONTROL	3D-3 COMMUNAL AND PUBLIC OPEN SPACE	STATUS
Objective	Communal open space is designed to maximise safety	✓
Design Guidance	Communal open space and the public domain should be readily visible from habitable rooms and private open space areas while maintaining visual privacy. Design solutions may include: • bay windows • corner windows • balconies	✓
Design Guidance	Communal open space should be well lit	✓

Design Guidance	Where communal open space/facilities are provided for children and young people they are safe and contained	✓
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CONTROL	3D-4 COMMUNAL AND PUBLIC OPEN SPACE	STATUS
Objective	Public open space, where provided, is responsive to the existing pattern and uses of the neighbourhood	✓
Design Guidance	The public open space should be well connected with public streets along at least one edge	✓
Design Guidance	The public open space should be connected with nearby parks and other landscape elements	✓
Design Guidance	Public open space should be linked through view lines, pedestrian desire paths, termination points and the wider street grid	✓
Design Guidance	Solar access should be provided year-round along with protection from strong winds	✓
Design Guidance	Opportunities for a range of recreational activities should be provided for people of all ages	✓
Design Guidance	A positive address and active frontages should be provided adjacent to public open space	✓
Design Guidance	Boundaries should be clearly defined between public open space and private areas	✓

CONTROL	3E-1 DEEP SOIL ZONES	STATUS
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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	✓													
Design Criteria	1. 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 650m²</td><td>-</td><td rowspan="3">7%</td></tr><tr><td>650m² - 1,500m²</td><td>3m</td></tr><tr><td>greater than 1,500m²</td><td>6m</td></tr><tr><td>greater than 1,500m² with significant existing tree cover</td><td>6m</td><td></td></tr></table>	Site area	Minimum dimensions	Deep soil zone (% of site area)	less than 650m ²	-	7%	650m ² - 1,500m ²	3m	greater than 1,500m ²	6m	greater than 1,500m ² with significant existing tree cover	6m		✓
Site area	Minimum dimensions	Deep soil zone (% of site area)													
less than 650m ²	-	7%													
650m ² - 1,500m ²	3m														
greater than 1,500m ²	6m														
greater than 1,500m ² with significant existing tree cover	6m														
Design Guidance	On some sites it may be possible to provide larger deep soil zones, depending on the site area and context: 10% of the site as deep soil on sites with an area of 650m² - 1,500m² 15% of the site as deep soil on sites greater than 1,500m²	Meets objective. As the site is in a high-density area this larger target is unlikely to be achievable for development within the locale. Nonetheless, the provision of the park means that a deep soil area equivalent to 8.2% of the site area is achieved, which substantially exceeds the minimum requirement. A further deep soil area of 99m² along the Archer Street frontage, to the west of the heritage house and near the southern edge of the site boundary is excluded from the calculation above as it is less than 6m													

		minimum width. If these areas were included, the total deep soil area would be equivalent to 11.9% of the site area which would satisfy the metric of the deep soil zone design guidance.
Design Guidance	Deep soil zones should be located to retain existing significant trees and to allow for the development of healthy root systems, providing anchorage and stability for mature trees. Design solutions may include: - basement and sub-basement car park design that is consolidated beneath building footprints - use of increased front and side setbacks - adequate clearance around trees to ensure long term health - co-location with other deep soil areas on adjacent sites to create larger contiguous areas of deep soil	✓
Design Guidance	Achieving the design criteria may not be possible on some sites including where: - the location and building typology have limited or no space for deep soil at ground level (e.g. central business district, constrained sites, high density areas, or in centres) - there is 100% site coverage or non-residential uses at ground floor level Where a proposal does not achieve deep soil requirements, acceptable stormwater management should be achieved and alternative forms of planting provided such as on structure	✓

CONTROL	3F-1 VISUAL PRIVACY	STATUS
Objective	Adequate building separation distances are shared equitably between neighbouring sites, to achieve reasonable levels of external and internal visual privacy	✓

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Design Criteria	1. Separation between windows and balconies is provided to ensure visual privacy is achieved. Minimum required separation distances from buildings to the side and rear boundaries are as follows: <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> Note: Separation distances between buildings on the same site should combine required building separations depending on the type of room (see figure 3F.2) Gallery access circulation should be treated as habitable space when measuring privacy separation distances between neighbouring properties	Building height	Habitable rooms and balconies	Non-habitable rooms	up to 12m (4 storeys)	6m	3m	up to 25m (5-8 storeys)	9m	4.5m	over 25m (9+ storeys)	12m	6m	✓
Building height	Habitable rooms and balconies	Non-habitable rooms												
up to 12m (4 storeys)	6m	3m												
up to 25m (5-8 storeys)	9m	4.5m												
over 25m (9+ storeys)	12m	6m												
Design Guidance	Generally one step in the built form as the height increases due to building separations is desirable. Additional steps should be careful not to cause a 'ziggurat' appearance	✓ The design achieves both the objective and the guidance, maintaining sufficient separation for visual privacy to the neighbouring site to the south whilst maximising outlook and solar access for both sites. The podium is designed to have a dynamic form that modulates as it rises into the vertical tower - like the way roots transform into the trunk of a tree. This allows the podium to relate appropriately to its current and future context on all four sides (particularly the single storey heritage house), rather than trying to adopt a single top of podium datum.												

Design Guidance	For residential buildings next to commercial buildings, separation distances should be measured as follows: - for retail, office spaces and commercial balconies use the habitable room distances - for service and plant areas use the non-habitable room distances	N/A – The proposal is not adjacent to a commercial building
Design Guidance	New development should be located and oriented to maximise visual privacy between buildings on site and for neighbouring buildings. Design solutions include: - site layout and building orientation to minimise privacy impacts (see also section 3B Orientation) - on sloping sites, apartments on different levels have appropriate visual separation distances (see figure 3F.4)	✓
Design Guidance	Apartment buildings should have an increased separation distance of 3m (in addition to the requirements set out in design criteria 1) when adjacent to a different zone that permits lower density residential development to provide for a transition in scale and increased landscaping (figure 3F.5)	N/A – The proposal is not adjacent to a different zone
Design Guidance	Direct lines of sight should be avoided for windows and balconies across corners	✓
Design Guidance	No separation is required between blank walls	N/A – The proposal is a free-standing structure with no blank walls

CONTROL	3F-2 VISUAL PRIVACY	STATUS
Objective	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	✓

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Design Guidance	Communal open space, common areas and access paths should be separated from private open space and windows to apartments, particularly habitable room windows. Design solutions may include: • setbacks • solid or partially solid balustrades to balconies at lower levels • fencing and/or trees and vegetation to separate spaces • screening devices • bay windows or pop out windows to provide privacy in one direction and outlook in another • raising apartments/private open space above the public domain or communal open space • planter boxes incorporated into walls and balustrades to increase visual separation • pergolas or shading devices to limit overlooking of lower apartments or private open space • on constrained sites where it can be demonstrated that building layout opportunities are limited, fixed louvres or screen panels to windows and/or balconies	✓
Design Guidance	Bedrooms, living spaces and other habitable rooms should be separated from gallery access and other open circulation space by the apartment's service areas	N/A – There are no gallery access or other open circulation spaces proposed
Design Guidance	Balconies and private terraces should be located in front of living rooms to increase internal privacy	✓
Design Guidance	Windows should be offset from the windows of adjacent buildings	N/A – There are no adjacent buildings currently around the site
Design Guidance	Recessed balconies and/or vertical fins should be used between adjacent balconies	✓

		Visual privacy between apartment balconies is achieved via fixed screens which will also support climbing plants
CONTROL	3G-1 PEDESTRIAN ACCESS AND ENTRIES	STATUS
Objective	Building entries and pedestrian access connects to and addresses the public domain	✓
Design Guidance	Multiple entries (including communal building entries and individual ground floor entries) should be provided to activate the street edge	✓
Design Guidance	Building entries should be clearly identifiable and communal entries should be clearly distinguishable from private entries	✓
Design Guidance	Where street frontage is limited and multiple buildings are located on the site, a primary street address should be provided with clear sight lines and pathways to secondary building entries	N/A – The proposal is for a single building with extensive activated frontage. The building is clearly distinct from the existing heritage building.
CONTROL	3G-2 PEDESTRIAN ACCESS AND ENTRIES	STATUS
Objective	Access, entries and pathways are accessible and easy to identify	✓
Design Guidance	Building access areas including lift lobbies, stairwells and hallways should be clearly visible from the public domain and communal spaces	✓
Design Guidance	The design of ground floors and underground car parks minimise level changes along pathways and entries	✓
Design Guidance	Steps and ramps should be integrated into the overall building and landscape design	✓

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Design Guidance	For large developments 'way finding' maps should be provided to assist visitors and residents (see figure 4T.3)	N/A – The proposal is for a single building with clear wayfinding cues
Design Guidance	For large developments electronic access and audio/video intercom should be provided to manage access	✓
CONTROL	3G-3 PEDESTRIAN ACCESS AND ENTRIES	STATUS
Objective	Large sites provide pedestrian links for access to streets and connection to destinations	✓
Design Guidance	Pedestrian links through sites facilitate direct connections to open space, main streets, centres and public transport	✓
Design Guidance	Pedestrian links should be direct, have clear sight lines, be overlooked by habitable rooms or private open spaces of dwellings, be well lit and contain active uses, where appropriate	✓ The laneway running along the southern boundary of the site is primarily intended to cater for waste collection and loading for both commercial and residential uses. This laneway does also provide an accessible path of travel linking Archer Street to Bertram Street. Finished with high-quality materials, well-lit and maintaining clear sight lines via upstands limited to a maximum of 1.2m high this link is both safe and attractive, even if it is likely to be used only occasionally.
CONTROL	3H-1 VEHICLE ACCESS	STATUS

Objective	Vehicle access points are designed and located to achieve safety, minimise conflicts between pedestrians and vehicles and create high quality streetscapes	✓
Design Guidance	Car park access should be integrated with the building's overall facade. Design solutions may include: - the materials and colour palette to minimise visibility from the street - security doors or gates at entries that minimise voids in the facade - where doors are not provided, the visible interior reflects the facade design and the building services, pipes and ducts are concealed	Meets objective. Vehicles access the site from 2 points: - Archer Street: Service Vehicles - Bertram Street: Cars The laneway running along the southern boundary of the site allows for MRVs to access the loading bay for waste collection and loading for both commercial and residential uses. Access is from Archer Street, which is the primary north-south traffic route within the Chatswood CBD. This approach avoids heavier vehicles using the smaller and more residential Bertram Street. Car park access is provided from Bertram Street to avoid traffic conflicts with service vehicles using the laneway. This access point is therefore external to the building but is designed to be integrated into its landscaped setting as part of the proposed pocket park. A flood barrier at the beginning of the ramp allows the ramp to immediately grade downwards to minimise the size of its opening. With a maximum height of 1.2m a low upstand frames the ramp with a geometrically interesting form finished in high quality materials and extensively landscaped.

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Design Guidance	Car park entries should be located behind the building line	Meets objective – refer above.
Design Guidance	Vehicle entries should be located at the lowest point of the site minimising ramp lengths, excavation and impacts on the building form and layout	Meets objective. The carpark ramp is positioned appropriately given the constraints and opportunities of the site and the nature of the surrounding road network. The lowest point of the site is along Albert Avenue, corresponding to an existing driveway leading to an underground carpark below the townhouses currently occupying the western portion of the site. A vehicle entry at this point is undesirable due to: • This location being most prone to flooding • A driveway here would bisect the site, quarantining the heritage house from the active frontages opposite and limiting any outdoor seating. The proposed vehicle entry location is less impacted by flood and allows for active ground floor uses to be consolidated on the site, creating a more dynamic urban precinct.
Design Guidance	Car park entry and access should be located on secondary streets or lanes where available	✓
Design Guidance	Vehicle standing areas that increase driveway width and encroach into setbacks should be avoided	✓

Design Guidance	Access point locations should avoid headlight glare to habitable rooms	✓
Design Guidance	Adequate separation distances should be provided between vehicle entries and street intersections	✓
Design Guidance	The width and number of vehicle access points should be limited to the minimum	✓
Design Guidance	Visual impact of long driveways should be minimised through changing alignments and screen planting	✓
Design Guidance	The need for large vehicles to enter or turn around within the site should be avoided	✓
Design Guidance	Garbage collection, loading and servicing areas are screened	✓
Design Guidance	Clear sight lines should be provided at pedestrian and vehicle crossings	✓
Design Guidance	Traffic calming devices such as changes in paving material or textures should be used where appropriate	✓
Design Guidance	Pedestrian and vehicle access should be separated and distinguishable. Design solutions may include: • changes in surface materials • level changes • the use of landscaping for separation	✓

CONTROL	3J-1 BICYCLE AND CAR PARKING	STATUS
Objective	Car parking is provided based on proximity to public transport in metropolitan Sydney and centres in regional areas	✓

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Design Criteria	1. For development in the following locations: - on sites that are within 800 metres of a railway station or light rail stop in the Sydney Metropolitan Area; or - on land zoned, and sites within 400 metres of land zoned, B3 Commercial Core, B4 Mixed-Use or equivalent in a nominated regional centre the minimum car parking requirement for residents and visitors is set out in the Guide to Traffic Generating Developments, or the car parking requirement prescribed by the relevant council, whichever is less The car parking needs for a development must be provided off street	✓ The parking requirements for the proposal are established by the relevant SEPP.
Design Guidance	Where a car share scheme operates locally, provide car share parking spaces within the development. Car share spaces, when provided, should be on site	✓ Space is available within the basement of the proposal for a car share space to be provided by a suitable operator, if desired.
Design Guidance	Where less car parking is provided in a development, council should not provide on street resident parking permits	✓

CONTROL	3J-2 BICYCLE AND CAR PARKING	STATUS
Objective	Parking and facilities are provided for other modes of transport	✓
Design Guidance	Conveniently located and sufficient numbers of parking spaces should be provided for motorbikes and scooters	✓
Design Guidance	Secure undercover bicycle parking should be provided that is easily accessible from both the public domain and common areas	✓
Design Guidance	Conveniently located charging stations are provided for electric vehicles, where desirable	✓

CONTROL	3J-3 BICYCLE AND CAR PARKING	STATUS
Objective	Car park design and access is safe and secure	✓
Design Guidance	Supporting facilities within car parks, including garbage, plant and switch rooms, storage areas and car wash bays can be accessed without crossing car parking spaces	✓
Design Guidance	Direct, clearly visible and well-lit access should be provided into common circulation areas	✓
Design Guidance	A clearly defined and visible lobby or waiting area should be provided to lifts and stairs	✓
Design Guidance	For larger car parks, safe pedestrian access should be clearly defined and circulation areas have good lighting, colour, line marking and/or bollards	✓

CONTROL	3J-4 BICYCLE AND CAR PARKING	STATUS
Objective	Visual and environmental impacts of underground car parking are minimised	✓
Design Guidance	Excavation should be minimised through efficient car park layouts and ramp design	✓
Design Guidance	Car parking layout should be well organised, using a logical, efficient structural grid and double loaded aisles	✓
Design Guidance	Protrusion of car parks should not exceed 1m above ground level. Design solutions may include stepping car park levels or using split levels on sloping sites	✓

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Design Guidance	Natural ventilation should be provided to basement and sub-basement car parking areas	✓
Design Guidance	Ventilation grills or screening devices for car parking openings should be integrated into the facade and landscape design	✓
CONTROL	3J-5 BICYCLE AND CAR PARKING	STATUS
Objective	Visual and environmental impacts of on-grade car parking are minimised	✓
Design Guidance	On-grade car parking should be avoided	✓
Design Guidance	Where on-grade car parking is unavoidable, the following design solutions are used: • parking is located on the side or rear of the lot away from the primary street frontage • cars are screened from view of streets, buildings, communal and private open space areas • safe and direct access to building entry points is provided • parking is incorporated into the landscape design of the site, by extending planting and materials into the car park space • stormwater run-off is managed appropriately from car parking surfaces • bio-swoles, rain gardens or on-site detention tanks are provided, where appropriate • light coloured paving materials or permeable paving systems are used and shade trees are planted between every 4-5 parking spaces to reduce increased surface temperatures from large areas of paving	N/A – The proposal does not include on-grade parking
CONTROL	3J-6 BICYCLE AND CAR PARKING	STATUS

Objective	Visual and environmental impacts of above ground enclosed car parking are minimised	✓
Design Guidance	Exposed parking should not be located along primary street frontages	N/A – The proposal does not include exposed parking
Design Guidance	Screening, landscaping and other design elements including public art should be used to integrate the above ground car parking with the facade. Design solutions may include: • car parking that is concealed behind the facade, with windows integrated into the overall facade design (approach should be limited to developments where a larger floor plate podium is suitable at lower levels) • car parking that is 'wrapped' with other uses, such as retail, commercial or two storey Small Office/Home Office (SOHO) units along the street frontage (see figure 3J.9)	N/A – The proposal does not include above ground parking
Design Guidance	Positive street address and active frontages should be provided at ground level	✓
CONTROL	4A-1 SOLAR AND DAYLIGHT ACCESS	STATUS
Objective	To optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space	✓
Design Criteria	1. Living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 2 hours direct sunlight between 9 am and 3 pm at mid-winter in the Sydney Metropolitan Area and in the Newcastle and Wollongong local government areas	✓ Refer ADG Detail Schedule – A total of 112 apartments receive 2 or more hours of direct sunlight between 9 am and 3

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		pm in mid-winter, which achieves 75% of the 150 apartments in total.
	2. 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	N/A – The proposal is located in the Sydney Metropolitan Area
	3. A maximum of 15% of apartments in a building receive no direct sunlight between 9 am and 3 pm at mid-winter	✓
Design Guidance	The design maximises north aspect and the number of single aspect south facing apartments is minimised	✓
Design Guidance	Single aspect, single storey apartments should have a northerly or easterly aspect	Meets objectives. A total of 11 apartments out of the 150 proposed are single aspect, single storey apartments with a southerly aspect. These apartments are proposed to provide a small number of more inexpensive residential opportunities, with 8 being affordable apartments.
Design Guidance	Living areas are best located to the north and service areas to the south and west of apartments	✓
Design Guidance	To optimise the direct sunlight to habitable rooms and balconies a number of the following design features are used: - dual aspect apartments - shallow apartment layouts - two storey and mezzanine level apartments - bay windows	✓

Design Guidance	To maximise the benefit to residents of direct sunlight within living rooms and private open spaces, a minimum of 1m² of direct sunlight, measured at 1m above floor level, is achieved for at least 15 minutes	✓
Design Guidance	Achieving the design criteria may not be possible on some sites. This includes: - where greater residential amenity can be achieved along a busy road or rail line by orientating the living rooms away from the noise source - on south facing sloping sites - where significant views are oriented away from the desired aspect for direct sunlight Design drawings need to demonstrate how site constraints and orientation preclude meeting the design criteria and how the development meets the objective	N/A – The design achieves the criteria

CONTROL	4A-2 SOLAR AND DAYLIGHT ACCESS	STATUS
Objective	Daylight access is maximised where sunlight is limited	✓
Design Guidance	Courtyards, skylights and high-level windows (with sills of 1,500mm or greater) are used only as a secondary light source in habitable rooms	✓
Design Guidance	Where courtyards are used: - use is restricted to kitchens, bathrooms and service areas - building services are concealed with appropriate detailing and materials to visible walls - courtyards are fully open to the sky - access is provided to the light well from a communal area for cleaning and maintenance - acoustic privacy, fire safety and minimum privacy separation distances (see section 3F Visual privacy) are achieved	N/A – The proposal does not include courtyards

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Design Guidance	Opportunities for reflected light into apartments are optimised through: - reflective exterior surfaces on buildings opposite south facing windows - positioning windows to face other buildings or surfaces (on neighbouring sites or within the site) that will reflect light - integrating light shelves into the design - light-coloured internal finishes	✓
CONTROL	4A-3 SOLAR AND DAYLIGHT ACCESS	STATUS
Objective	Design incorporates shading and glare control, particularly for warmer months	✓
Design Guidance	A number of the following design features are used: - balconies or sun shading that extend far enough to shade summer sun, but allow winter sun to penetrate living areas - shading devices such as eaves, awnings, balconies, pergolas, external louvres and planting - horizontal shading to north facing windows - vertical shading to east and particularly west facing windows - operable shading to allow adjustment and choice - high performance glass that minimises external glare off windows, with consideration given to reduced tint glass or glass with a reflectance level below 20% (reflective films are avoided)	✓
CONTROL	4B-1 NATURAL VENTILATION	STATUS
Objective	All habitable rooms are naturally ventilated	✓
Design Guidance	The building's orientation maximises capture and use of prevailing breezes for natural ventilation in habitable rooms	✓

Design Guidance	Depths of habitable rooms support natural ventilation	✓
Design Guidance	The area of unobstructed window openings should be equal to at least 5% of the floor area served	✓
Design Guidance	Light wells are not the primary air source for habitable rooms	✓
Design Guidance	Doors and openable windows maximise natural ventilation opportunities by using the following design solutions: - adjustable windows with large effective openable areas - a variety of window types that provide safety and flexibility such as awnings and louvres - windows which the occupants can reconfigure to funnel breezes into the apartment such as vertical louvres, casement windows and externally opening doors	
CONTROL	4B-2 NATURAL VENTILATION	STATUS
Objective	The layout and design of single aspect apartments maximises natural ventilation	✓
Design Guidance	Apartment depths are limited to maximise ventilation and airflow (see also figure 4D.3)	✓
Design Guidance	Natural ventilation to single aspect apartments is achieved with the following design solutions: - primary windows are augmented with plenums and light wells (generally not suitable for cross ventilation) - stack effect ventilation / solar chimneys or similar to naturally ventilate internal building areas or rooms such as bathrooms and laundries	Meets objectives. The proposal minimises the number of single aspect apartments. Where these apartments are proposed, the building form is designed to encourage natural ventilation.

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	courtyards or building indentations have a width to depth ratio of 2:1 or 3:1 to ensure effective air circulation and avoid trapped smells	
CONTROL	4B-3 NATURAL VENTILATION	STATUS
Objective	The number of apartments with natural cross ventilation is maximised to create a comfortable indoor environment for residents	✓
Design Criteria	1. At least 60% of apartments are naturally cross ventilated in the first nine storeys of the building. Apartments at ten storeys or greater are deemed to be cross ventilated only if any enclosure of the balconies at these levels allows adequate natural ventilation and cannot be fully enclosed	✓ Refer ADG Detail Schedule – A total of 111 apartments are naturally cross ventilated, accounting for 74% of the overall units.
Design Criteria	2. Overall depth of a cross-over or cross-through apartment does not exceed 18m, measured glass line to glass line	N/A – The proposal does not include cross-over or cross-through apartments
Design Guidance	The building should include dual aspect apartments, cross through apartments and corner apartments and limit apartment depths	✓
Design Guidance	In cross-through apartments external window and door opening sizes/areas on one side of an apartment (inlet side) are approximately equal to the external window and door opening sizes/areas on the other side of the apartment (outlet side) (see figure 4B.4)	N/A – The proposal does not include cross-over or cross-through apartments
Design Guidance	Apartments are designed to minimise the number of corners, doors and rooms that might obstruct airflow	✓
Design Guidance	Apartment depths, combined with appropriate ceiling heights, maximise cross ventilation and airflow	✓

CONTROL	4C-1 CEILING HEIGHTS	STATUS												
Objective	Ceiling height achieves sufficient natural ventilation and daylight access	✓												
Design Criteria	1. Measured from finished floor level to finished ceiling level, minimum ceiling heights are: <table><tr><th colspan="2">Minimum ceiling height for apartment and mixed-use buildings</th></tr><tr><td>Habitable rooms</td><td>2.7m</td></tr><tr><td>Non-habitable</td><td>2.4m</td></tr><tr><td>For 2 storey apartments</td><td>2.7m for main living area floor 2.4m for second floor, where its area does not exceed 50% of the apartment area</td></tr><tr><td>Attic spaces</td><td>1.8m at edge of room with a 30-degree minimum ceiling slope</td></tr><tr><td>If located in mixed-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	Minimum ceiling height for apartment and mixed-use buildings		Habitable rooms	2.7m	Non-habitable	2.4m	For 2 storey apartments	2.7m for main living area floor 2.4m for second floor, where its area does not exceed 50% of the apartment area	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	✓
Minimum ceiling height for apartment and mixed-use buildings														
Habitable rooms	2.7m													
Non-habitable	2.4m													
For 2 storey apartments	2.7m for main living area floor 2.4m for second floor, where its area does not exceed 50% of the apartment area													
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													
Design Guidance	Ceiling height can accommodate use of ceiling fans for cooling and heat distribution	✓												

CONTROL	4C-2 NATURAL VENTILATION	STATUS
Objective	Ceiling height increases the sense of space in apartments and provides for well-proportioned rooms	✓

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Design Guidance	A number of the following design solutions can be used: - the hierarchy of rooms in an apartment is defined using changes in ceiling heights and alternatives such as raked or curved ceilings, or double height spaces - well-proportioned rooms are provided, for example, smaller rooms feel larger and more spacious with higher ceilings - ceiling heights are maximised in habitable rooms by ensuring that bulkheads do not intrude. The stacking of service rooms from floor to floor and coordination of bulkhead location above non-habitable areas, such as robes or storage, can assist	✓
CONTROL	4C-3 NATURAL VENTILATION	STATUS
Objective	Ceiling heights contribute to the flexibility of building use over the life of the building	✓
Design Guidance	Ceiling heights of lower-level apartments in centres should be greater than the minimum required by the design criteria allowing flexibility and conversion to non-residential uses (see figure 4C.1)	N/A – The proposal already includes non-residential uses throughout its first 3 levels.
CONTROL	4D-1 APARTMENT SIZE AND LAYOUT	STATUS
Objective	The layout of rooms within an apartment is functional, well organised and provides a high standard of amenity	✓

Design Criteria	1. 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>35m²</td></tr><tr><td>1 bedroom</td><td>50m²</td></tr><tr><td>2 bedroom</td><td>70m²</td></tr><tr><td>3 bedroom</td><td>90m²</td></tr></table> The minimum internal areas include only one bathroom. Additional bathrooms increase the minimum internal area by 5m² each A fourth bedroom and further additional bedrooms increase the minimum internal area by 12m² each	Apartment type	Minimum internal area	Studio	35m ²	1 bedroom	50m ²	2 bedroom	70m ²	3 bedroom	90m ²	✓ Each apartment adheres to or surpasses the ADG standards for both total area and minimum room dimensions. Studio apartments range from 42 to 45m², one-bedroom apartments from 50 to 70m², two-bedroom apartments from 70 to 88m², and three-bedroom apartments, including the two penthouses, range from 123 to 233m². The four-bedroom apartments offer a generous 195m².
	Apartment type	Minimum internal area										
Studio	35m ²											
1 bedroom	50m ²											
2 bedroom	70m ²											
3 bedroom	90m ²											
	2. Every habitable room must have a window in an external wall with a total minimum glass area of not less than 10% of the floor area of the room. Daylight and air may not be borrowed from other rooms	✓										
Design Guidance	Kitchens should not be located as part of the main circulation space in larger apartments (such as hallway or entry space)	✓										
Design Guidance	A window should be visible from any point in a habitable room	✓										
Design Guidance	Where minimum areas or room dimensions are not met apartments need to demonstrate that they are well designed and demonstrate the usability and functionality of the space with realistically scaled furniture layouts and circulation areas. These circumstances would be assessed on their merits	✓										
CONTROL	4D-2 APARTMENT SIZE AND LAYOUT	STATUS										
Objective	Environmental performance of the apartment is maximised	✓										

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Design Criteria	1. Habitable room depths are limited to a maximum of 2.5 x the ceiling height	✓
	2. In open plan layouts (where the living, dining and kitchen are combined) the maximum habitable room depth is 8m from a window	✓
Design Guidance	Greater than minimum ceiling heights can allow for proportional increases in room depth up to the permitted maximum depths	✓
Design Guidance	All living areas and bedrooms should be located on the external face of the building	✓
CONTROL	4D-3 APARTMENT SIZE AND LAYOUT	STATUS
Objective	Apartment layouts are designed to accommodate a variety of household activities and needs	✓
Design Criteria	1. Master bedrooms have a minimum area of 10m² and other bedrooms 9m² (excluding wardrobe space)	✓
	2. Bedrooms have a minimum dimension of 3m (excluding wardrobe space)	✓
	3. 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	✓
	4. The width of cross-over or cross-through apartments are at least 4m internally to avoid deep narrow apartment layouts	N/A – The proposal does not include cross-over or cross-through apartments
Design Guidance	Access to bedrooms, bathrooms and laundries is separated from living areas minimising direct openings between living and service areas	✓ The proposal includes efficient planning to maximise the liveability of the spaces and

		bathrooms and laundries are separated from livings spaces. Some apartment layouts have direct openings to bedrooms from living spaces to provide better internal layouts with increased flexibility for varied living arrangements – bedrooms can act as extensions of the living room, or become workspaces for those seeking this flexibility, whilst solid doors allow for them to be acoustically separated to remain as bedrooms.
Design Guidance	All bedrooms allow a minimum length of 1.5m for robes	✓
Design Guidance	The main bedroom of an apartment or a studio apartment should be provided with a wardrobe of a minimum 1.8m long, 0.6m deep and 2.1m high	✓
Design Guidance	Apartment layouts allow flexibility over time, design solutions may include: - dimensions that facilitate a variety of furniture arrangements and removal - spaces for a range of activities and privacy levels between different spaces within the apartment - dual master apartments - dual key apartments Note: dual key apartments which are separate but on the same title are regarded as two sole occupancy units for the purposes of the Building Code of Australia and for calculating the mix of apartments - room sizes and proportions or open plans (rectangular spaces (2:3) are more easily furnished than square spaces (1:1)) - efficient planning of circulation by stairs, corridors and through rooms to maximise the amount of usable floor space in rooms	✓

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CONTROL	4E-1 PRIVATE OPEN SPACE AND BALCONIES			STATUS															
Objective	Apartments provide appropriately sized private open space and balconies to enhance residential amenity			✓															
Design Criteria	1. All apartments are required to have primary balconies as follows:			✓ All balconies comply with or exceed the ADG guidelines for both overall size and minimum width. Sizes range from 4-11m ² for studios, 8-25m ² for one-bedroom apartments, 15-19m ² for two-bedroom apartments, and 16-22m ² for three-bedroom apartments. The two three-bedroom penthouses feature exceptionally large terraces, each spanning 61m ²															
	<table><tr><th>Dwelling type</th><th>Minimum area</th><th>Minimum depth</th></tr><tr><td>Studio apartments</td><td>4m²</td><td>-</td></tr><tr><td>1 bedroom apartments</td><td>8m²</td><td>2m</td></tr><tr><td>2 bedroom apartments</td><td>10m²</td><td>2m</td></tr><tr><td>3 bedroom apartments</td><td>12m²</td><td>2.4m</td></tr></table>				Dwelling type	Minimum area	Minimum depth	Studio apartments	4m ²	-	1 bedroom apartments	8m ²	2m	2 bedroom apartments	10m ²	2m	3 bedroom apartments	12m ²	2.4m
	Dwelling type	Minimum area	Minimum depth																
	Studio apartments	4m ²	-																
	1 bedroom apartments	8m ²	2m																
	2 bedroom apartments	10m ²	2m																
	3 bedroom apartments	12m ²	2.4m																
The minimum balcony depth to be counted as contributing to the balcony area is 1m																			
Design Criteria	2. For apartments at ground level or on a podium or similar structure, a private open space is provided instead of a balcony. It must have a minimum area of 15m ² and a minimum depth of 3m			✓ The proposal does not include ground level apartments but lower-level residences are provided with larger balconies.															
Design Guidance	Increased communal open space should be provided where the number or size of balconies are reduced			✓															
Design Guidance	Storage areas on balconies is additional to the minimum balcony size			✓															

Design Guidance	Balcony use may be limited in some proposals by: - consistently high wind speeds at 10 storeys and above - close proximity to road, rail or other noise sources - exposure to significant levels of aircraft noise - heritage and adaptive reuse of existing buildings In these situations, Juliet balconies, operable walls, enclosed wintergardens or bay windows may be appropriate, and other amenity benefits for occupants should also be provided in the apartments or in the development or both. Natural ventilation also needs to be demonstrated	✓
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CONTROL	4E-2 PRIVATE OPEN SPACE AND BALCONIES	STATUS
Objective	Primary private open space and balconies are appropriately located to enhance liveability for residents	✓
Design Guidance	Primary open space and balconies should be located adjacent to the living room, dining room or kitchen to extend the living space	✓
Design Guidance	Private open spaces and balconies predominantly face north, east or west	✓
Design Guidance	Primary open space and balconies should be orientated with the longer side facing outwards or be open to the sky to optimise daylight access into adjacent rooms	✓

CONTROL	4E-3 PRIVATE OPEN SPACE AND BALCONIES	STATUS
Objective	Solid, partially solid or transparent fences and balustrades are selected to respond to the location. They are designed to allow views and passive surveillance of the street while maintaining visual privacy and allowing for a range of uses on the balcony. Solid and partially solid balustrades are preferred	✓

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Design Guidance	Full width full height glass balustrades alone are generally not desirable	✓
Design Guidance	Projecting balconies should be integrated into the building design and the design of soffits considered	✓
Design Guidance	Operable screens, shutters, hoods and pergolas are used to control sunlight and wind	✓
Design Guidance	Balustrades are set back from the building or balcony edge where overlooking or safety is an issue	✓
Design Guidance	Downpipes and balcony drainage are integrated with the overall facade and building design	✓
Design Guidance	Air-conditioning units should be located on roofs, in basements, or fully integrated into the building design	✓
Design Guidance	Where clothes drying, storage or air conditioning units are located on balconies, they should be screened and integrated in the building design	✓
Design Guidance	Ceilings of apartments below terraces should be insulated to avoid heat loss	✓
Design Guidance	Water and gas outlets should be provided for primary balconies and private open space	✓
CONTROL	4E-4 PRIVATE OPEN SPACE AND BALCONIES	STATUS
Objective	Private open space and balcony design maximises safety	✓
Design Guidance	Changes in ground levels or landscaping are minimised	✓

Design Guidance	Design and detailing of balconies avoids opportunities for climbing and falls	✓
CONTROL	4F-1 COMMON CIRCULATION AND SPACES	STATUS
Objective	Common circulation spaces achieve good amenity and properly service the number of apartments	✓
Design Criteria	1. The maximum number of apartments off a circulation core on a single level is eight	Meets objectives. All floors of the proposal have less than 8 apartments off a circulation core, except for the affordable apartment levels which have a maximum of 9 per floor. These floors are provided with a larger opening to the façade providing increased outlook and natural light from the lift lobby and corridor. Combined with an external social space on the lowest level the proposed common circulation achieves good amenity and properly services the small additional number of apartments (1).
	2. For buildings of 10 storeys and over, the maximum number of apartments sharing a single lift is 40	✓
Design Guidance	Greater than minimum requirements for corridor widths and/ or ceiling heights allow comfortable movement and access particularly in entry lobbies, outside lifts and at apartment entry doors	✓
Design Guidance	Daylight and natural ventilation should be provided to all common circulation spaces that are above ground	Meets objectives.

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		All floors of the proposal have daylight and natural ventilation opportunities provided to common circulation spaces, other than the sub-penthouse and penthouse levels (29-31). These two floors have only a small number (3) of larger apartments with additional features and higher specification internal finishes extending into the lobby and are therefore considered to achieve good amenity of a suitable quality for these residences.
Design Guidance	Windows should be provided in common circulation spaces and should be adjacent to the stair or lift core or at the ends of corridors	✓
Design Guidance	Longer corridors greater than 12m in length from the lift core should be articulated. Design solutions may include: - a series of foyer areas with windows and spaces for seating - wider areas at apartment entry doors and varied ceiling heights	N/A – The proposal does not have longer corridors
Design Guidance	Design common circulation spaces to maximise opportunities for dual aspect apartments, including multiple core apartment buildings and cross over apartments	N/A – The proposal has a small building footprint and these solutions aren't required
Design Guidance	Achieving the design criteria for the number of apartments off a circulation core may not be possible. Where a development is unable to achieve the design criteria, a high level of amenity for common lobbies, corridors and apartments should be demonstrated, including: - sunlight and natural cross ventilation in apartments - access to ample daylight and natural ventilation in common circulation spaces - common areas for seating and gathering - generous corridors with greater than minimum ceiling heights	N/A – The proposal achieves the design criteria

	other innovative design solutions that provide high levels of amenity	
Design Guidance	Where design criteria 1 is not achieved, no more than 12 apartments should be provided off a circulation core on a single level	✓
Design Guidance	Primary living room or bedroom windows should not open directly onto common circulation spaces, whether open or enclosed. Visual and acoustic privacy from common circulation spaces to any other rooms should be carefully controlled	✓

CONTROL	4 F-2 COMMON CIRCULATION AND SPACES	STATUS
Objective	Common circulation spaces promote safety and provide for social interaction between residents	✓
Design Guidance	Direct and legible access should be provided between vertical circulation points and apartment entries by minimising corridor or gallery length to give short, straight, clear sight lines	✓
Design Guidance	Tight corners and spaces are avoided	✓
Design Guidance	Circulation spaces should be well lit at night	✓
Design Guidance	Legible signage should be provided for apartment numbers, common areas and general wayfinding	✓
Design Guidance	Incidental spaces, for example space for seating in a corridor, at a stair landing, or near a window are provided	✓
Design Guidance	In larger developments, community rooms for activities such as owner's corporation meetings or resident use should be provided and are ideally co-located with communal open space	✓

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Design Guidance	Where external galleries are provided, they are more open than closed above the balustrade along their length	✓										
CONTROL	4G-1 STORAGE	STATUS										
Objective	Adequate, well-designed storage is provided in each apartment	✓										
Design Criteria	1. In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided: <table><tr><th>Dwelling type</th><th>Minimum area</th></tr><tr><td>Studio apartments</td><td>4m³</td></tr><tr><td>1 bedroom apartments</td><td>6m³</td></tr><tr><td>2 bedroom apartments</td><td>8m³</td></tr><tr><td>3 bedroom apartments</td><td>10m³</td></tr></table> At least 50% of the required storage is to be located within the apartment	Dwelling type	Minimum area	Studio apartments	4m³	1 bedroom apartments	6m³	2 bedroom apartments	8m³	3 bedroom apartments	10m³	✓ Refer ADG Detail Schedule – All apartments are equipped with ample storage, with at least 50% of the storage volume located within each unit, and the remainder situated in Basements 2 to 5.
Dwelling type	Minimum area											
Studio apartments	4m³											
1 bedroom apartments	6m³											
2 bedroom apartments	8m³											
3 bedroom apartments	10m³											
Design Guidance	Storage is accessible from either circulation or living areas	✓										
Design Guidance	Storage provided on balconies (in addition to the minimum balcony size) is integrated into the balcony design, weatherproof and screened from view from the street	✓										
Design Guidance	Left over space such as under stairs is used for storage	N/A – The proposal has no apartments with stairs										

CONTROL	4G-2 STORAGE	STATUS
Objective	Additional storage is conveniently located, accessible and nominated for individual apartments	✓
Design Guidance	Storage not located in apartments is secure and clearly allocated to specific apartments	✓
Design Guidance	Storage is provided for larger and less frequently accessed items	✓
Design Guidance	Storage space in internal or basement car parks is provided at the rear or side of car spaces or in cages so that allocated car parking remains accessible	✓
Design Guidance	If communal storage rooms are provided they should be accessible from common circulation areas of the building	✓
Design Guidance	Storage not located in an apartment is integrated into the overall building design and is not visible from the public domain	✓
CONTROL	4H-1 ACOUSTIC PRIVACY	STATUS
Objective	Noise transfer is minimised through the siting of buildings and building layout	✓
Design Guidance	Adequate building separation is provided within the development and from neighbouring buildings/adjacent uses (see also section 2F Building separation and section 3F Visual privacy)	✓
Design Guidance	Window and door openings are generally orientated away from noise sources	✓

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Design Guidance	Noisy areas within buildings including building entries and corridors should be located next to or above each other and quieter areas next to or above quieter areas	✓
Design Guidance	Storage, circulation areas and non-habitable rooms should be located to buffer noise from external sources	✓
Design Guidance	The number of party walls (walls shared with other apartments) are limited and are appropriately insulated	✓
Design Guidance	Noise sources such as garage doors, driveways, service areas, plant rooms, building services, mechanical equipment, active communal open spaces and circulation areas should be located at least 3m away from bedrooms	✓

CONTROL	4H-2 ACOUSTIC PRIVACY	STATUS
Objective	Noise impacts are mitigated within apartments through layout and acoustic treatments	✓
Design Guidance	Internal apartment layout separates noisy spaces from quiet spaces, using a number of the following design solutions: - rooms with similar noise requirements are grouped together - doors separate different use zones - wardrobes in bedrooms are co-located to act as sound buffers	✓
Design Guidance	Where physical separation cannot be achieved noise conflicts are resolved using the following design solutions: - double or acoustic glazing - acoustic seals - use of materials with low noise penetration properties - continuous walls to ground level courtyards where they do not conflict with streetscape or other amenity requirements	✓

CONTROL	4J-1 NOISE AND POLLUTION	STATUS
Objective	In noisy or hostile environments the impacts of external noise and pollution are minimised through the careful siting and layout of buildings	✓
Design Guidance	To minimise impacts the following design solutions may be used: - physical separation between buildings and the noise or pollution source - residential uses are located perpendicular to the noise source and where possible buffered by other uses - non-residential buildings are sited to be parallel with the noise source to provide a continuous building that shields residential uses and communal open spaces - non-residential uses are located at lower levels vertically separating the residential component from the noise or pollution source. Setbacks to the underside of residential floor levels should increase relative to traffic volumes and other noise sources - buildings should respond to both solar access and noise. Where solar access is away from the noise source, non-habitable rooms can provide a buffer - where solar access is in the same direction as the noise source, dual aspect apartments with shallow building depths are preferable (see figure 4J.4) - landscape design reduces the perception of noise and acts as a filter for air pollution generated by traffic and industry	✓
Design Guidance	Achieving the design criteria in this Apartment Design Guide may not be possible in some situations due to noise and pollution. Where developments are unable to achieve the design criteria, alternatives may be considered in the following areas: - solar and daylight access - private open space and balconies - natural cross ventilation	✓

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CONTROL	4J-2 NOISE AND POLLUTION	STATUS
Objective	Appropriate noise shielding or attenuation techniques for the building design, construction and choice of materials are used to mitigate noise transmission	✓
Design Guidance	Design solutions to mitigate noise include: - limiting the number and size of openings facing noise sources - providing seals to prevent noise transfer through gaps - using double or acoustic glazing, acoustic louvres or enclosed balconies (wintergardens) - using materials with mass and/or sound insulation or absorption properties e.g. solid balcony balustrades, external screens and soffits	✓

CONTROL	4K-1 APARTMENT MIX	STATUS
Objective	A range of apartment types and sizes is provided to cater for different household types now and into the future	✓
Design Guidance	A variety of apartment types is provided	✓
Design Guidance	The apartment mix is appropriate, taking into consideration: - the distance to public transport, employment and education centres - the current market demands and projected future demographic trends - the demand for social and affordable housing - different cultural and socioeconomic groups	✓
Design Guidance	Flexible apartment configurations are provided to support diverse household types and stages of life including single person households, families, multi-generational families and group households	✓

CONTROL	4K-2 APARTMENT MIX	STATUS
Objective	The apartment mix is distributed to suitable locations within the building	✓
Design Guidance	Different apartment types are located to achieve successful facade composition and to optimise solar access (see figure 4K.3)	✓
Design Guidance	Larger apartment types are located on the ground or roof level where there is potential for more open space and on corners where more building frontage is available	✓

CONTROL	4L-1 GROUND FLOOR APARTMENTS	STATUS
Objective	Street frontage activity is maximised where ground floor apartments are located	✓
Design Guidance	Direct street access should be provided to ground floor apartments	N/A – The proposal does not include ground floor apartments
Design Guidance	Activity is achieved through front gardens, terraces and the facade of the building. Design solutions may include: - both street, foyer and other common internal circulation entrances to ground floor apartments - private open space is next to the street - doors and windows face the street	✓
Design Guidance	Retail or home office spaces should be located along street frontages	✓
Design Guidance	Ground floor apartment layouts support small office home office (SOHO) use to provide future opportunities for conversion into commercial or retail areas. In these	N/A – The proposal does not include ground floor apartments

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	cases provide higher floor to ceiling heights and ground floor amenities for easy conversion	
CONTROL	4L-2 GROUND FLOOR APARTMENTS	STATUS
Objective	Design of ground floor apartments delivers amenity and safety for residents	✓
Design Guidance	Privacy and safety should be provided without obstructing casual surveillance. Design solutions may include: - elevation of private gardens and terraces above the street level by 1-1.5m (see figure 4L.4) - landscaping and private courtyards - windowsill heights that minimise sight lines into apartments - integrating balustrades, safety bars or screens with the exterior design	✓
Design Guidance	Solar access should be maximised through: - high ceilings and tall windows - trees and shrubs that allow solar access in winter and shade in summer	✓
CONTROL	4M-1 FACADES	STATUS
Objective	Building facades provide visual interest along the street while respecting the character of the local area	✓
Design Guidance	Design solutions for front building facades may include: - a composition of varied building elements - a defined base, middle and top of buildings - revealing and concealing certain elements	✓

	changes in texture, material, detail and colour to modify the prominence of elements	
Design Guidance	Building services should be integrated within the overall facade	✓
Design Guidance	Building facades should be well resolved with an appropriate scale and proportion to the streetscape and human scale. Design solutions may include: - well composed horizontal and vertical elements - variation in floor heights to enhance the human scale - elements that are proportional and arranged in patterns - public artwork or treatments to exterior blank walls - grouping of floors or elements such as balconies and windows on taller buildings	✓
Design Guidance	Building facades relate to key datum lines of adjacent buildings through upper-level setbacks, parapets, cornices, awnings or colonnade heights	✓
Design Guidance	Shadow is created on the facade throughout the day with building articulation, balconies and deeper window reveals	✓
CONTROL	4M-2 FACADES	STATUS
Objective	Building functions are expressed by the facade	✓
Design Guidance	Building entries should be clearly defined	✓
Design Guidance	Important corners are given visual prominence through a change in articulation, materials or colour, roof expression or changes in height	✓
Design Guidance	The apartment layout should be expressed externally through facade features such as party walls and floor slabs	✓

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CONTROL	4N-1 ROOF DESIGN	STATUS
Objective	Roof treatments are integrated into the building design and positively respond to the street	✓
Design Guidance	Roof design relates to the street. Design solutions may include: - special roof features and strong corners - use of skillion or very low pitch hipped roofs - breaking down the massing of the roof by using smaller elements to avoid bulk - using materials or a pitched form complementary to adjacent buildings	✓
Design Guidance	Roof treatments should be integrated with the building design. Design solutions may include: - roof design proportionate to the overall building size, scale and form - roof materials compliment the building - service elements are integrated	

CONTROL	4N-2 ROOF DESIGN	STATUS
Objective	Opportunities to use roof space for residential accommodation and open space are maximised	✓
Design Guidance	Habitable roof space should be provided with good levels of amenity. Design solutions may include: - penthouse apartments - dormer or clerestory windows - openable skylights	✓
Design Guidance	Open space is provided on roof tops subject to acceptable visual and acoustic privacy, comfort levels, safety and security considerations	✓

CONTROL	4N-3 ROOF DESIGN	STATUS
Objective	Roof design incorporates sustainability features	✓
Design Guidance	Roof design maximises solar access to apartments during winter and provides shade during summer. Design solutions may include: - the roof lifts to the north - eaves and overhangs shade walls and windows from summer sun	✓
Design Guidance	Skylights and ventilation systems should be integrated into the roof design	✓

CONTROL	4O-1 LANDSCAPE DESIGN	STATUS
Objective	Landscape design is viable and sustainable	✓
Design Guidance	Landscape design should be environmentally sustainable and can enhance environmental performance by incorporating: - diverse and appropriate planting - bio-filtration gardens - appropriately planted shading trees - areas for residents to plant vegetables and herbs - composting - green roofs or walls	✓
Design Guidance	Ongoing maintenance plans should be prepared	✓
Design Guidance	Microclimate is enhanced by: appropriately scaled trees near the eastern and western elevations for shade	✓

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	- a balance of evergreen and deciduous trees to provide shading in summer and sunlight access in winter - shade structures such as pergolas for balconies and courtyards	
Design Guidance	Tree and shrub selection considers size at maturity and the potential for roots to compete	✓
CONTROL	4O-2 LANDSCAPE DESIGN	STATUS
Objective	Landscape design contributes to the streetscape and amenity	✓
Design Guidance	Landscape design responds to the existing site conditions including: - changes of levels - views - significant landscape features including trees and rock outcrops	✓
Design Guidance	Significant landscape features should be protected by: - tree protection zones - appropriate signage and fencing during construction	✓
Design Guidance	Plants selected should be endemic to the region and reflect the local ecology	✓
CONTROL	4P-1 PLANTING ON STRUCTURES	STATUS
Objective	Appropriate soil profiles are provided	✓
Design Guidance	Structures are reinforced for additional saturated soil weight	✓
Design Guidance	Soil volume is appropriate for plant growth, considerations include:	✓

	- modifying depths and widths according to the planting mix and irrigation frequency - free draining and long soil life span - tree anchorage	
Design Guidance	Minimum soil standards for plant sizes should be provided in accordance with Table 5	✓
CONTROL	4P-2 PLANTING ON STRUCTURES	STATUS
Objective	Plant growth is optimised with appropriate selection and maintenance	✓
Design Guidance	Plants are suited to site conditions, considerations include: - drought and wind tolerance - seasonal changes in solar access - modified substrate depths for a diverse range of plants - plant longevity	✓
Design Guidance	A landscape maintenance plan is prepared	✓
Design Guidance	Irrigation and drainage systems respond to: - changing site conditions - soil profile and the planting regime - whether rainwater, stormwater or recycled grey water is used	✓

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CONTROL	4P-3 PLANTING ON STRUCTURES	STATUS
Objective	Planting on structures contributes to the quality and amenity of communal and public open spaces	✓
Design Guidance	Building design incorporates opportunities for planting on structures. Design solutions may include: - green walls with specialised lighting for indoor green walls - wall design that incorporates planting - green roofs, particularly where roofs are visible from the public domain - planter boxes Note: structures designed to accommodate green walls should be integrated into the building facade and consider the ability of the facade to change over time	✓

CONTROL	4Q-1 UNIVERSAL DESIGN	STATUS
Objective	Universal design features are included in apartment design to promote flexible housing for all community members	✓
Design Guidance	Developments achieve a benchmark of 20% of the total apartments incorporating the Liveable Housing Guideline's silver level universal design features	✓

CONTROL	4Q-2 UNIVERSAL DESIGN	STATUS
Objective	A variety of apartments with adaptable designs are provided	✓
Design Guidance	Adaptable housing should be provided in accordance with the relevant council policy	✓

Design Guidance	Design solutions for adaptable apartments include: - convenient access to communal and public areas - high level of solar access - minimal structural change and residential amenity loss when adapted - larger car parking spaces for accessibility - parking titled separately from apartments or shared car parking arrangements	✓
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CONTROL	4Q-3 UNIVERSAL DESIGN	STATUS
Objective	Apartment layouts are flexible and accommodate a range of lifestyle needs	✓
Design Guidance	Apartment design incorporates flexible design solutions which may include: - rooms with multiple functions - dual master bedroom apartments with separate bathrooms - larger apartments with various living space options - open plan 'loft' style apartments with only a fixed kitchen, laundry and bathroom	✓

CONTROL	4R-1 ADAPTIVE REUSE	STATUS
Objective	New additions to existing buildings are contemporary and complementary and enhance an area's identity and sense of place	✓
Design Guidance	Design solutions may include: - new elements to align with the existing building - additions that complement the existing character, siting, scale, proportion, pattern, form and detailing - use of contemporary and complementary materials, finishes, textures and colours	✓ The proposal includes the restoration and refurbishment of an existing heritage home for use as a café (ie. a non-residential use). The responses in this section are therefore

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		related to this heritage house component of the project only.
Design Guidance	Additions to heritage items should be clearly identifiable from the original building	✓
Design Guidance	New additions allow for the interpretation and future evolution of the building	✓

CONTROL	4R-2 ADAPTIVE REUSE	STATUS
Objective	Adapted buildings provide residential amenity while not precluding future adaptive reuse	✓
Design Guidance	Design features should be incorporated sensitively into adapted buildings to make up for any physical limitations, to ensure residential amenity is achieved. Design solutions may include: - generously sized voids in deeper buildings - alternative apartment types when orientation is poor - using additions to expand the existing building envelope	✓
Design Guidance	Some proposals that adapt existing buildings may not be able to achieve all of the design criteria in this Apartment Design Guide. Where developments are unable to achieve the design criteria, alternatives could be considered in the following areas: - where there are existing higher ceilings, depths of habitable rooms could increase subject to demonstrating access to natural ventilation, cross ventilation (when applicable) and solar and daylight access (see also sections 4A Solar and daylight access and 4B Natural ventilation) - alternatives to providing deep soil where less than the minimum requirement is currently available on the site - building and visual separation – subject to demonstrating alternative design approaches to achieving privacy - common circulation	N/A – The proposal is to convert existing heritage home for non-residential use

	- car parking - alternative approaches to private open space and balconies	
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CONTROL	4S-1 MIXED-USE	STATUS
Objective	Mixed-use developments are provided in appropriate locations and provide active street frontages that encourage pedestrian movement	✓
Design Guidance	Mixed-use development should be concentrated around public transport and centres	✓
Design Guidance	Mixed-use developments positively contribute to the public domain. Design solutions may include: - development addresses the street - active frontages are provided - diverse activities and uses - avoiding blank walls at the ground level - live/work apartments on the ground floor level, rather than commercial	✓

CONTROL	4S-2 MIXED-USE	STATUS
Objective	Residential levels of the building are integrated within the development, and safety and amenity is maximised for residents	✓
Design Guidance	Residential circulation areas should be clearly defined. Design solutions may include: - residential entries are separated from commercial entries and directly accessible from the street - commercial service areas are separated from residential components - residential car parking and communal facilities are separated or secured - security at entries and safe pedestrian routes are provided	✓

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	concealment opportunities are avoided	
Design Guidance	Landscaped communal open space should be provided at podium or roof levels	✓
CONTROL	4T-1 AWNINGS AND SIGNAGE	STATUS
Objective	Awnings are well located and complement and integrate with the building design	✓
Design Guidance	Awnings should be located along streets with high pedestrian activity and active frontages	✓
Design Guidance	A number of the following design solutions are used: - continuous awnings are maintained and provided in areas with an existing pattern - height, depth, material and form complements the existing street character - protection from the sun and rain is provided - awnings are wrapped around the secondary frontages of corner sites - awnings are retractable in areas without an established pattern	✓
Design Guidance	Awnings should be located over building entries for building address and public domain amenity	✓
Design Guidance	Awnings relate to residential windows, balconies, street tree planting, power poles and street infrastructure	✓
Design Guidance	Gutters and down pipes should be integrated and concealed	✓
Design Guidance	Lighting under awnings should be provided for pedestrian safety	✓

CONTROL	4T-2 AWNINGS AND SIGNAGE	STATUS
Objective	Signage responds to the context and desired streetscape character	✓
Design Guidance	Signage should be integrated into the building design and respond to the scale, proportion and detailing of the development	✓
Design Guidance	Legible and discrete way finding should be provided for larger developments	✓
Design Guidance	Signage is limited to being on and below awnings and a single facade sign on the primary street frontage	✓

CONTROL	4U-1 ENERGY EFFICIENCY	STATUS
Objective	Development incorporates passive environmental design	✓
Design Guidance	Adequate natural light is provided to habitable rooms	✓
Design Guidance	Well located, screened outdoor areas should be provided for clothes drying	Meets objectives The proposal provides low energy dryers within each apartment

CONTROL	4U-2 ENERGY EFFICIENCY	STATUS
Objective	Development incorporates passive solar design to optimise heat storage in winter and reduce heat transfer in summer	✓
Design Guidance	A number of the following design solutions are used: the use of smart glass or other technologies on north and west elevations	✓

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	- thermal mass in the floors and walls of north facing rooms is maximised - polished concrete floors, tiles or timber rather than carpet - insulated roofs, walls and floors and seals on window and door openings - overhangs and shading devices such as awnings, blinds and screens	
Design Guidance	Provision of consolidated heating and cooling infrastructure should be located in a centralised location (e.g. the basement)	✓

CONTROL	4U-3 ENERGY EFFICIENCY	STATUS
Objective	Adequate natural ventilation minimises the need for mechanical ventilation	✓
Design Guidance	A number of the following design solutions are used: - rooms with similar usage are grouped together - natural cross ventilation for apartments is optimised - natural ventilation is provided to all habitable rooms and as many non-habitable rooms, common areas and circulation spaces as possible	✓

CONTROL	4V-1 WATER MANAGEMENT AND CONSERVATION	STATUS
Objective	Potable water use is minimised	✓
Design Guidance	Water efficient fittings, appliances and wastewater reuse should be incorporated	✓
Design Guidance	Apartments should be individually metered	✓
Design Guidance	Rainwater should be collected, stored and reused on site	✓
Design Guidance	Drought tolerant, low water use plants should be used within landscaped areas	✓

CONTROL	4V-2 WATER MANAGEMENT AND CONSERVATION	STATUS
Objective	Urban stormwater is treated on site before being discharged to receiving waters	✓
Design Guidance	Water sensitive urban design systems are designed by a suitably qualified professional	✓
Design Guidance	A number of the following design solutions are used: - runoff is collected from roofs and balconies in water tanks and plumbed into toilets, laundry and irrigation - porous and open paving materials is maximised - on site stormwater and infiltration, including bio-retention systems such as rain gardens or street tree pits	✓

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CONTROL	4V-3 WATER MANAGEMENT AND CONSERVATION	STATUS
Objective	Flood management systems are integrated into site design	✓
Design Guidance	Detention tanks should be located under paved areas, driveways or in basement car parks	✓
Design Guidance	On large sites parks or open spaces are designed to provide temporary on-site detention basins	✓

CONTROL	4W-1 WASTE MANAGEMENT	STATUS
Objective	Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity of residents	✓

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Design Guidance	Adequately sized storage areas for rubbish bins should be located discreetly away from the front of the development or in the basement car park	✓
Design Guidance	Waste and recycling storage areas should be well ventilated	✓
Design Guidance	Circulation design allows bins to be easily manoeuvred between storage and collection points	✓
Design Guidance	Temporary storage should be provided for large bulk items such as mattresses	✓
Design Guidance	A waste management plan should be prepared	✓

CONTROL	4W-2 WASTE MANAGEMENT	STATUS
Objective	Domestic waste is minimised by providing safe and convenient source separation and recycling	✓
Design Guidance	All dwellings should have a waste and recycling cupboard or temporary storage area of sufficient size to hold two days' worth of waste and recycling	✓
Design Guidance	Communal waste and recycling rooms are in convenient and accessible locations related to each vertical core	✓
Design Guidance	For mixed-use developments, residential waste and recycling storage areas and access should be separate and secure from other uses	✓
Design Guidance	Alternative waste disposal methods such as composting should be provided	✓

CONTROL	4X-1 BUILDING MAINTENANCE	STATUS
Objective	Building design detail provides protection from weathering	✓
Design Guidance	A number of the following design solutions are used: • roof overhangs to protect walls • hoods over windows and doors to protect openings • detailing horizontal edges with drip lines to avoid staining of surfaces • methods to eliminate or reduce planter box leaching • appropriate design and material selection for hostile locations	✓

CONTROL	4X-2 BUILDING MAINTENANCE	STATUS
Objective	Systems and access enable ease of maintenance	✓
Design Guidance	Window design enables cleaning from the inside of the building	✓
Design Guidance	Building maintenance systems should be incorporated and integrated into the design of the building form, roof and facade	✓
Design Guidance	Design solutions do not require external scaffolding for maintenance access	✓
Design Guidance	Manually operated systems such as blinds, sunshades and curtains are used in preference to mechanical systems	✓
Design Guidance	Centralised maintenance, services and storage should be provided for communal open space areas within the building	✓

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CONTROL	4X-3 BUILDING MAINTENANCE	STATUS
Objective	Material selection reduces ongoing maintenance costs	✓
Design Guidance	A number of the following design solutions are used: - sensors to control artificial lighting in common circulation and spaces - natural materials that weather well and improve with time such as face brickwork - easily cleaned surfaces that are graffiti resistant - robust and durable materials and finishes are used in locations which receive heavy wear and tear, such as common circulation areas and lift interiors	✓

TABLE 2. SUMMARY OF THE WILLOUGHBY LEP 2012 (AMENDMENT NO 34) CONTROLS WHICH APPLY TO THE SITE		
ZONING / STANDARD	PROVISION	COMPLIANCE
2.1 Land use zone	The site is zoned MU1 Mixed-Use MU1 Mixed-Use (previously B4 Mixed-Use): <u>Permitted with consent</u> Amusement centres; Boarding houses; Building identification signs; Business identification signs; Car parks; Centre-based child care facilities; Commercial premises; Community facilities; Entertainment facilities; Function centres; Information and education facilities; Light industries; Local distribution premises; Medical centres; Oyster aquaculture; Passenger transport facilities; Places of public worship; Recreation areas; Recreation facilities (indoor); Registered clubs; Respite day care centres; Restricted premises; Seniors housing; Shop top housing; Tank-based aquaculture; Tourist and visitor accommodation; Vehicle repair stations; Any other development not specified in item 2 or 4 <u>Prohibited</u> Agriculture; Air transport facilities; Airstrips; Animal boarding or training establishments; Biosolids treatment facilities; Boat building and repair facilities; Boat launching ramps; Boat sheds; Camping grounds; Caravan parks; Cemeteries; Charter and tourism boating facilities; Correctional centres; Crematoria; Depots; Eco-tourist facilities; Electricity generating works; Environmental facilities; Exhibition homes; Exhibition villages; Extractive industries; Farm buildings; Forestry; Freight transport facilities; Heavy industrial storage establishments; Helipads; Highway service centres; Home occupations (sex services); Industrial retail outlets; Industrial training facilities; Industries; Marinas; Mooring pens; Mortuaries; Open cut mining; Port facilities; Recreation facilities (major); Research stations; Residential accommodation; Resource recovery facilities; Rural industries; Service stations; Sewage treatment plants; Sex services premises; Signage; Storage premises;	Complies.

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	Transport depots; Truck depots; Vehicle body repair workshops; Veterinary hospitals; Waste disposal facilities; Water recycling facilities; Water supply systems; Wharf or boating facilities; Wholesale supplies	
4.3 Height of Building	Maximum 23m (+30% = 29.9m) – 34 Albert Avenue Maximum 90m (+30% =117m) – 57-61 Archer Street	Complies.
4.4 Floor Space Ratio	The subject site is subject to a maximum 5:1 FSR standard (+30% = 6.5:1) (Refer to the calculations provided for the distribution of GFA)	Complies.
5.10 Heritage Conservation	The site at 34 Albert Avenue is identified as a heritage item, being <i>I52 – House (including original interiors)</i> .	Complies.
6.1 Acid Sulfate Soils	The site is identified as having Class 5 Acid Sulfate Soils.	Unlikely to require any action.
6.3 Urban heat	(2) In deciding whether to grant development consent to development for the purposes of commercial premises, industries or residential accommodation, the consent authority must consider whether— (a) the facade and roof of the proposed building and paved surfaces are designed to reduce adverse effects of solar heat on the surrounding land, including private open space and the public domain, and (b) the awnings and eaves of the building are designed to provide shelter from the sun and improve public comfort at street level, and (c) the heating, ventilation and air conditioning systems of the building are designed to minimise the release of heat in the direction of private open space and the public domain, and (d) the development maximises the use of green infrastructure that is strategically designed and managed to support a good quality of life in an urban environment, and	Complies. The proposal incorporates significant landscaping and overhangs to actively reduce urban heat island effect.

	(e) the development accommodates sufficient tree canopy, open space and deep soil zones to achieve urban cooling benefits, and (f) the building is designed to achieve high passive thermal performance.	
6.7 Active Street Frontage	Active street frontage is required for Archer Street, Albert Avenue and Bertram Street. Note: Council's mapping is currently being finalised to confirm the active street frontage requirement. All ground floor premises facing the street are used for commercial premises. An active street frontage is not required for part of a building that is used for the following— (a) entrances and lobbies, including as part of mixed-use development, (b) access for fire services, (c) vehicular access.	Complies. All entries lobbies and tenancies address the primary street frontages of Albert Avenue and Archer Street.
6.8 Affordable Housing	10% affordable housing contribution	Complies. We understand that the developer intends to make an equivalent contribution in keeping with the requirements of the relevant controls, noting that 15% affordable housing is provided in accordance with the Housing SEPP.
6.15 Sun access	(1) Development consent must not be granted to development on land in Zone E2 Commercial Centre or Zone MU1 Mixed-Use that results in additional overshadowing on land identified as "Area 1" on the Sun Access Protection Map at mid-winter between 12pm and 2pm.	Complies.

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	(2) Development consent must not be granted to development that results in additional overshadowing on land identified as "Area 2" on the Sun Access Protection Map at mid-winter between 11am and 2pm. (3) Development consent must not be granted to development that results in a dwelling on land identified as "Area 3" on the Sun Access Protection Map receiving less than 3 hours of direct sunlight between 9am and 3pm at mid-winter. (4) Development consent must not be granted to development that results in additional overshadowing on the tree canopy of the <i>Angophora costata</i> tree identified as Schedule 5, Part 1, item 1237 at mid-winter between 12pm and 2pm.	
6.16 Minimum lot sizes for commercial and mixed-use development in Chatswood CBD	Minimum lot size for mixed-use development in MU1 Mixed-Use zone: 1,200m²	Complies.
6.23 Design Excellence	(1) The objective of this clause is to deliver the highest standard of architectural, urban and landscape design. (2) This clause applies to development involving the erection of a new building or external alterations to an existing building on land identified as "Area 5" on the Special Provisions Area Map. (3) Development consent must not be granted to development to which this clause applies unless the consent authority considers that the development exhibits design excellence. (4) In considering whether the development exhibits design excellence, the consent authority must have regard to the following matters— (a) whether a high standard of architectural design, materials and detailing appropriate to the building type and location will be achieved, (b) whether the form, arrangement and external appearance of the development will improve the quality and amenity of the public domain,	N/A.

	(c) whether the development detrimentally impacts on view corridors. (5) The consent authority must also have regard to how the development addresses the following matters— (a) the suitability of the land for development, (b) existing and proposed uses and use mix, (c) heritage and streetscape constraints, (d) the relationship of the development with other existing or proposed development on the same site or on neighbouring sites in terms of separation, setbacks, amenity and urban form, (e) bulk, massing and modulation of buildings, (f) street frontage heights, (g) environmental impacts such as sustainable design, overshadowing, wind and reflectivity, (h) achieving the principles of ecologically sustainable development, (i) pedestrian, cycle, vehicular and service access, circulation and requirements, (j) the impact on, and proposed improvements to, the public domain, (k) the impact on special character areas, (l) achieving appropriate interfaces at ground level between the building and the public domain, (m) excellence and integration of landscape design. (6) Development consent must not be granted to development to which this clause applies unless— (a) for a building with a height of more than 12m and less than 35m above ground level (existing)— (i) a design excellence panel has reviewed the development, and	
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	(ii) the consent authority has taken into account the design excellence panel's review, or (b) for a building with a height of 35m or more above ground level (existing)—the design of the development is the winner of the architectural design competition held in relation to the development. (7) Subclause (6) does not apply to development involving external alterations to an existing building if the consent authority is satisfied that compliance with the subclause is unreasonable or unnecessary in the circumstances. (8) Subclause (6)(b) does not apply if— (a) the consent authority is satisfied that compliance with the paragraph is unreasonable or unnecessary in the circumstances, and (b) a design excellence panel reviews the development, and (c) the consent authority takes into account the findings of the design excellence panel. (9) In this clause— <i>architectural design competition</i> means a competitive process conducted in accordance with the Design Excellence Guidelines. <i>Design Excellence Guidelines</i> means the guidelines entitled <i>Guidelines for Design Excellence Review and Competitions</i>, published by the Council on 9 December 2019. <i>design excellence panel</i> means a panel, consisting of 2 or more persons, established by the consent authority for the purposes of this clause.	
6.25 Shop top housing in Zone MU1	Development consent for the purposes of shop top housing on land in Zone MU1 Mixed-Use must not be granted unless the consent authority is satisfied at least 17% of the gross floor area of the building will be used for non-residential purposes.	Complies.