



SEPP 65 DESIGN STATEMENT

FEBRUARY 23, 2021 8:50 AM

RENELGAH REDEVELOPMENT PROJECT



GO
CIVIL

PREPARED FOR

Ranelagh Apartment Owners Corporation



PREPARED BY

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22 Feb 2021

**PROJECT 20190074 = RANELAGH APARTMENTS UPGRADE WORKS
SEPP65 DESIGN STATEMENT**

On behalf of Scott Carver Pty Ltd, I Edward Salib confirm that I have directed the design team for the project known as:

Name: Ranalegh Apartments redevelopment

Located at: 3-17 Darling Point Rd, Darling Point, NSW, 2027

The team is familiar with, and has worked to achieve the quality principles set out in Part 2 of State Environmental Planning Policy No 65- Design for Quality of Residential Flat Development.

Regards,



Edward Salib
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01

INTRODUCTION

INTRODUCTION

CONNECTION TO HISTORY / CONTEXT



CONNECTION TO EXISTING



Ranelagh Apartments is an unique, 30 storey, luxury apartment complex set in 1.5 acres of beautifully maintained gardens at the southern end of Darling Point. Ranelagh offers residents an enviable lifestyle with spectacular views from every apartment, encompassing panoramic views of Sydney Harbour, the Opera House, the Harbour Bridge, the Heads and the entire Eastern Suburbs district.

The original Ranelagh building was built by Andrew Lenehan in the early 1850s at the southern end of Darling Point Road. The original house was built of stone and comprised three stories, the upper two featuring broad cast iron balconies on three sides. In order to break up the square uniform appearance that these balconies created, a false porch was built into the front facade of the main entrance. Andrew Lenehan remained at Ranelagh, which he named after a Dublin suburb, until 1864 when the house was occupied by company director and Parliamentarian, John Frazer. During the early 1880s Ranelagh was occupied by another successful businessman, the financier and company director, James Ewan.

Politics and politicians played an important part in the life of Ranelagh. In 1885 Ranelagh became the home of Julian Emanuel Salomons, one of Sydney's most distinguished barristers. The departure of Salomons from the house in the late 1880s brought to a close Ranelagh's golden age. By the turn of the century it had been converted into a boarding house under the ownership of a Mrs Barnett.

Ranelagh remained a guest house until at least the end of the 1950s but its age and the every-increasing need for land for home unit development meant that it had finally run out of time and was demolished to make way for the tower.

In 1967 a block of apartments designed by Mr Peter Rommel and was completed in 1969. It set a benchmark for apartment buildings in Australia and was the highest at the time. It was unique in its construction and appearance, and is reminiscent of the style of Australia's most famous architect, Harry Seidler.

The last 50 years however have rendered the building facade tired, and in need of renewal. The existing building is in a state of disrepair. The initial intention of the owner's corporation was to complete remedial works only to the facade, however following a thorough investigation it revealed this wouldn't suffice. Following this investigation, they concluded a more comprehensive vision was required. The proposed development outlines this vision including a new building façade, amenity upgrade and additional penthouse floor. The proposal aims to bring together the cultural history and significance of the site with a nod to the existing building aesthetic.

The following report outlines how the proposed development achieves this specifically in response to the 9 guiding principals of the SEPP 65.

02

SEPP 65

DESIGN

QUALITY

PRINCIPLES

PRINCIPLE 1

Context & Neighbourhood Character

SEPP Principle

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.

Architectural Response

Ranelagh is located at 3-17 Darling Point Road Darling Point NSW 2027; sitting on 1.5 hectares with three existing structures.

- Ranelagh tower comprising of 30 stories of 127 strata subdivided residential apartments, with a single basement level, housing storage and plant areas.
- A 3-storey car park structure, with roof top parking deck.
- Trossachs Cottage – Private residence that sits on its own strata title.

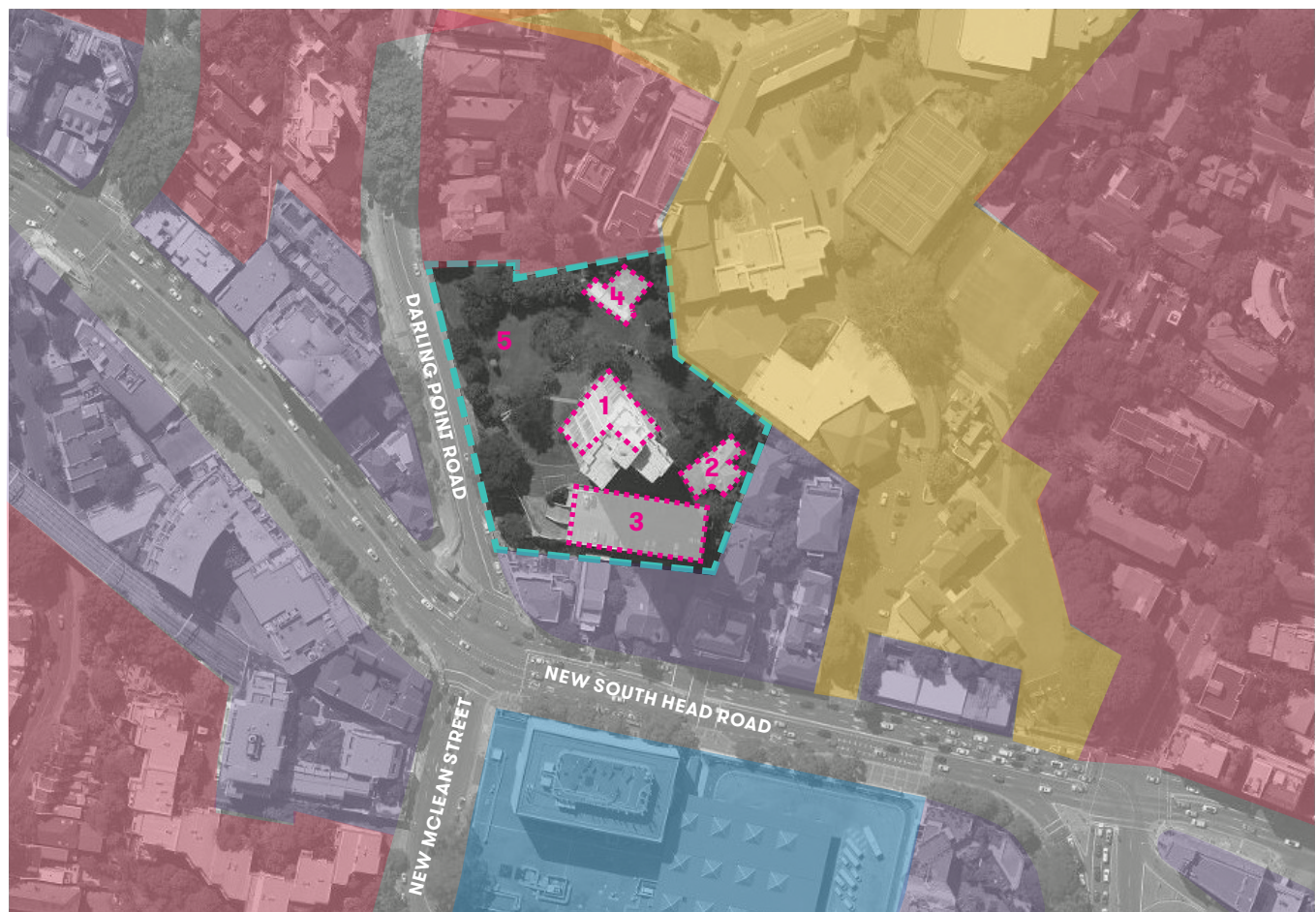
Surrounding the building is lush green gardens including an outdoor pool, and services and driveways associated with the carpark and entry. Materiality existing on the site is predominantly rendered concrete and exposed brick construction to the residential tower and carpark structure, with sandstone and shingle cladding to the cottage. The site has varying topography with a significant level change at the street boundary where a sandstone retaining wall fronts the street. A key asset to the site is the unobstructed views across all angles of Sydney Harbour that the apartments take advantage of.

The site is surrounded by predominately residential apartment buildings, and single dwelling cottage style homes to the East and West and further North. Directly North East of the site is the Ascham School and directly to the South are mixed used developments fronting New South Head Road.

There are also several heritage buildings within the locality, including The Glenrock and Dower house, at Ascham school, St Marks church rectory at 53 Darling point Rd, Former post office and interiors on the corner of New South Head Rd, a post modern building and interiors at 136 New South Head Rd and a concrete balustrade at the corner new South Head Rd and Darling point Rd.

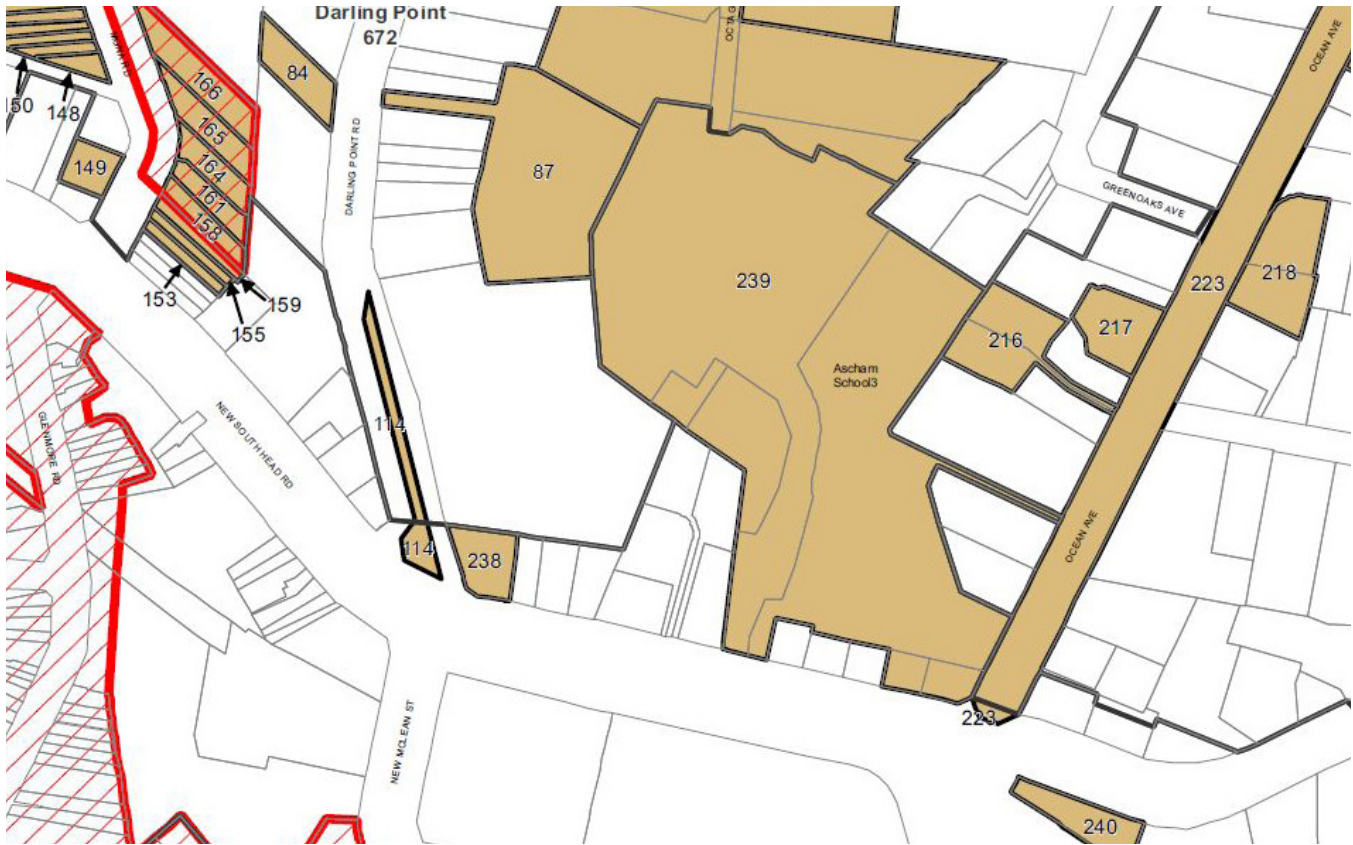
All with varying distinguishing styles and materiality what ties these items together is the use of masonry construction with warm tones and finishes.

Another distinguishing factor that the tower plays into the context is that due to its existing height it is visible from several vistas as you approach the site. This was also considered in the design response and studied to understand how the tower is viewed.



- 1. RANELAGH TOWER 2. THE TROSSACS COTTAGE 3. RESIDENT CAR PARK 4. OUTDOOR SWIMMING POOL**
5. LANDSCAPED GARDENS
- MIXED USE RESIDENTIAL SCHOOL RETAIL / COMMERCIAL**





HERITAGE MAP - LEP



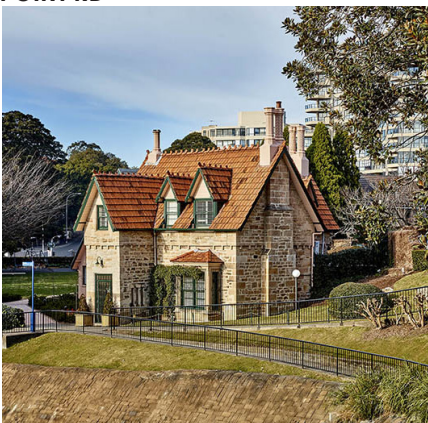
114. CONCRETE BALUSTRADE, CORNER NEW SOUTH HEAD RD AND DARLING POINT RD



238. BUILDING AND INTERIORS, 136 NEW SOUTH HEAD RD



91. ST MARKS CHURCH RECTORY, 53 DARLING POINT RD



239 . THE DOWER HOUSE, ASCHAM SCHOOL



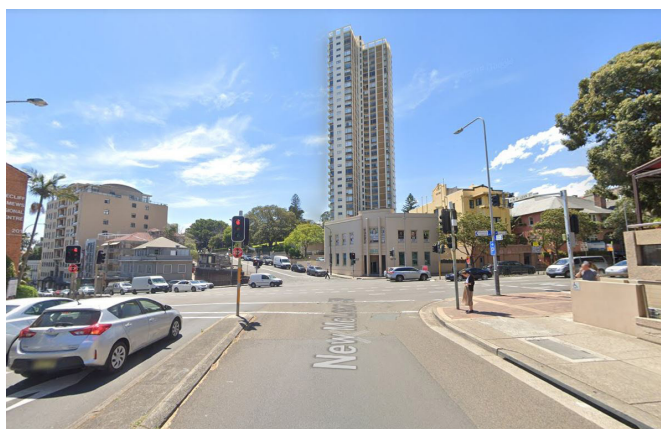
239 . THE GLENROCK, ASCHAM SCHOOL



240. FORMER POST OFFICE AND INTERIORS, CORNER OF NEW SOUTH HEAD RD



VIEW STUDY OF RANELAGH TOWER IN ITS CONTEXT



1. NEW MCLEAN ST - LOOKING NORTH



2. DARLING POINT RD - LOOKING NORTH



3. DARLING POINT RD - LOOKING SOUTH



4. NEW SOUTH HEAD RD - TOWARDS CITY

PRINCIPLE 2

Built Form & Scale

SEPP Principle

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.

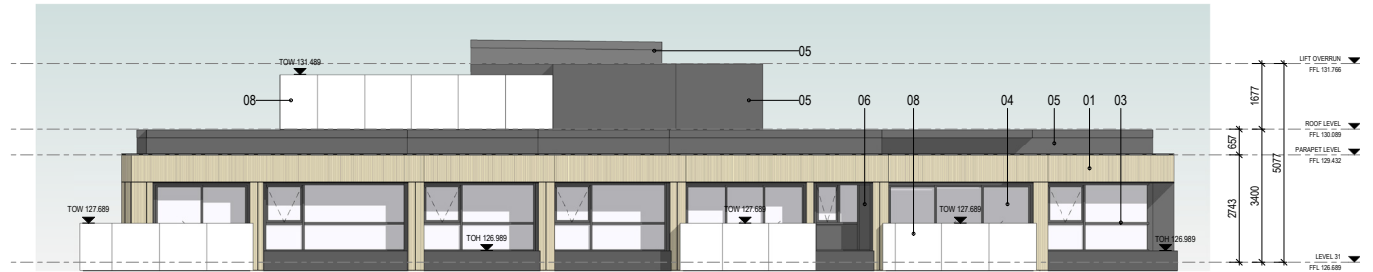
Architectural Response

The proposal does not alter the primary existing form and scale of buildings on the site.

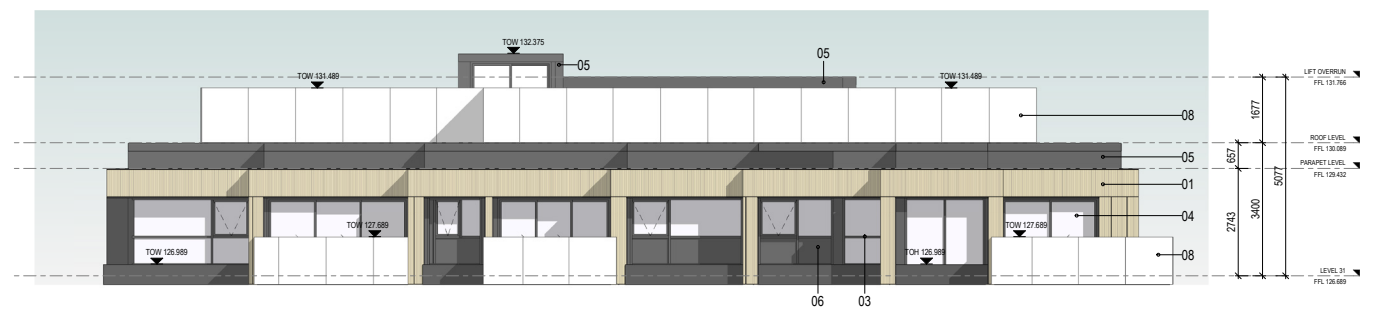
Additional form is added to level 31 with the inclusion of a penthouse level. This additional form sits marginally outside the existing building envelope and has negligible impact on surrounding developments and context.

Shadow studies are included in the proposal to demonstrate the minor increase in shadow depth to the tower form. The adjacent diagram demonstrated the additional height proposed to accommodate the additional level while looking to provide good internal amenity to the unit.

The additional form is setback off the existing parapet as reasonably possible to ensure that view of the existing structure and form remains the same.



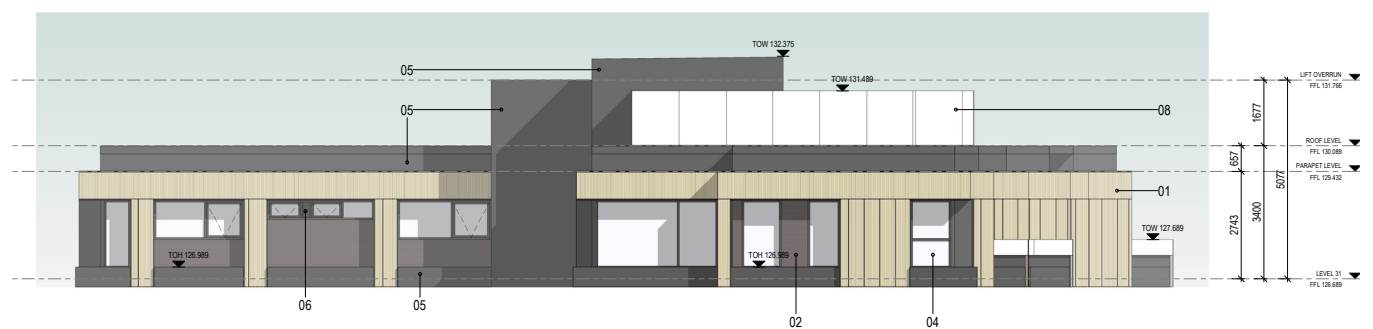
PENTHOUSE LEVEL - NORTH WEST ELEVATION



PENTHOUSE LEVEL - NORTH EAST ELEVATION



PENTHOUSE LEVEL - SOUTH WEST ELEVATION



PENTHOUSE LEVEL - SOUTH EAST ELEVATION

PRINCIPLE 3

Density

SEPP Principle

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.

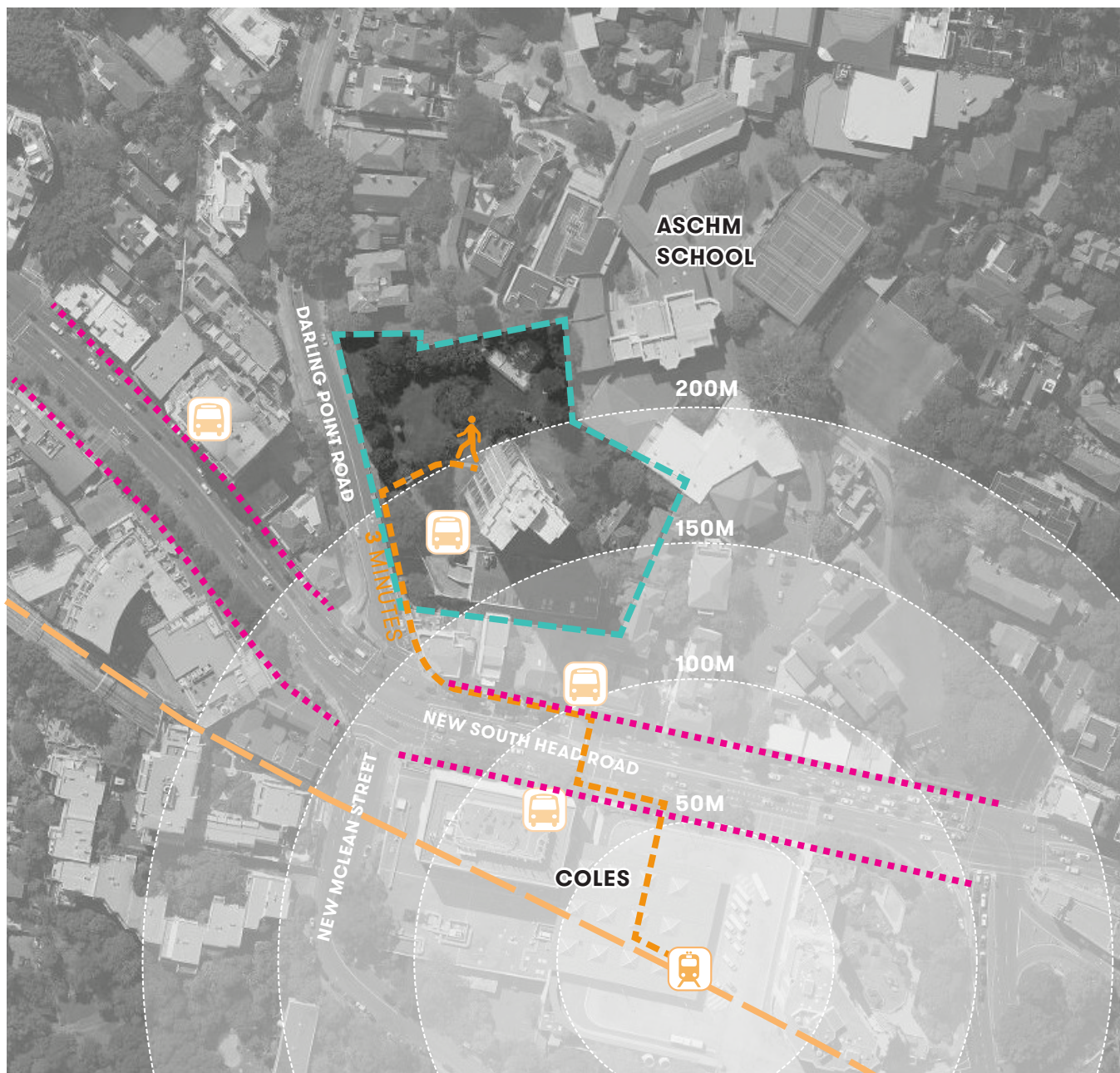
Architectural Response

The proposal increases the existing density of the site marginally through the proposed penthouse level. Considering the local context and uses surrounding the site, including being in close proximity to shops / transport / schools, the additional dwelling is consistent with land uses and existing conditions.

The site itself includes various areas of amenity including an indoor pool / gym and sauna, and an outdoor pool and landscaped gardens.

The proposed penthouse level considers internal amenity in its design, through the use of large living spaces and access to a private roof top terrace.

Improvement to the existing amenity is also proposed in order to improve accessibility and the arrival experience of residence. This includes a new awning over the drop off area providing additional weather protection but also improving the awning height.



TRANSPORT AND LOCOAL AMENITY

— PEDESTRIAN ROUTE



EDGECLIFF TRAIN STATION

— RETAIL SHOPFRONTS

— TRAIN LINE



BUS STOPS

PRINCIPLE 4

Sustainability

SEPP Principle

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.

Architectural Response

Multi residential developments in high to medium density areas require intelligent design solutions to enable them to align with the guiding principles of the Apartment Design Guide.

While the development is existing, the proposed changes to the development adopt several environmental initiatives, and are designed to encourage sustainable practices.

Facade upgrade.

The new facade provides an optimal solution for residents and the building with considerations to longevity and improved performance. Recladding the building was measured against a base option of remedial works only. It was concluded that a facade upgrade was the best result for the building and site. The new facade option will provide improved thermal performance to units, measured against BASIX requirements. The dominant material for the cladding is proposed to be an extruded ceramic in vitrified porcelain. This was chosen based on low maintenance and long life cycle due to its hard wearing properties. The material also does not contain volatile organic compounds.

Additional penthouse Level

The penthouse is located and oriented to maximize liveability and opportunities for passive thermal design. With living areas facing North and to the dominant views of Sydney Harbour. Taking up a whole floor there is ample opportunity for cross ventilation and daylight amenity. The external envelope has been developed in line with BASIX compliance to minimize energy use and maximize efficient use of resources, appliances are to be provided and installed to ensure appropriateness and efficiency and specified fixtures are to comply with water-saving requirements. Low-energy use and a durability of design and construction give each project a sustainable basis. Construction will use a lightweight structural frame, with non-loadbearing internal walls providing opportunities for insulation. This also allows for a degree of adjustability during the life cycle of the building.

Accessibility upgrade

Improving accessibility to residents through enhanced accessibility between the main tower and carpark levels, improving the liveability of residents and catering to a wider demographic.

Porte Cochere

The new drop of entry looks to enhance the landscape through the additional of planers and improved landscaping to the existing roundabout.

SUCCESSFUL	✓
NON-SUCCESSFUL	X
PARTIAL SUCCESS	O



CRITERIA

OPTION 1A - BASE

OPTION 2 - FACADE UPGRADE

WARRANTY

INDICATIVE SERVICE LIFE

DESIGN LIFE

MAINTENANCE

MODERNISING

CONSTRUCTABILITY

DURABILITY

OPERATIONAL IMPACT

PROGRAM

5 YEARS

UNKNOWN

UNKNOWN

O

X

O

O

X

5 YEARS

10-15 YEARS**25 YEARS****50 YEARS**

✓

✓

✓

✓

O

3 YEARS**PREFERRED OPTION**

PRINCIPLE 5

Landscape

SEPP Principle

Good design recognises that together landscape and buildings operate as an integrated and sustainable system resulting in attractive developments with good amenity. A positive image and contextual fit of well designed developments is achieved by contributing to the landscape character of the streetscape and neighbourhood.

Good landscape design enhances the development's environmental performance by retaining positive natural features which contribute to the local context, coordinating water and soil management, solar access, microclimate, tree canopy, habituate values, and preserving green networks. Good landscape design optimizes usability, privacy and opportunities for social interaction, equitable access, respect for neighbours' amenity, provides for practical establishment and long-term management.

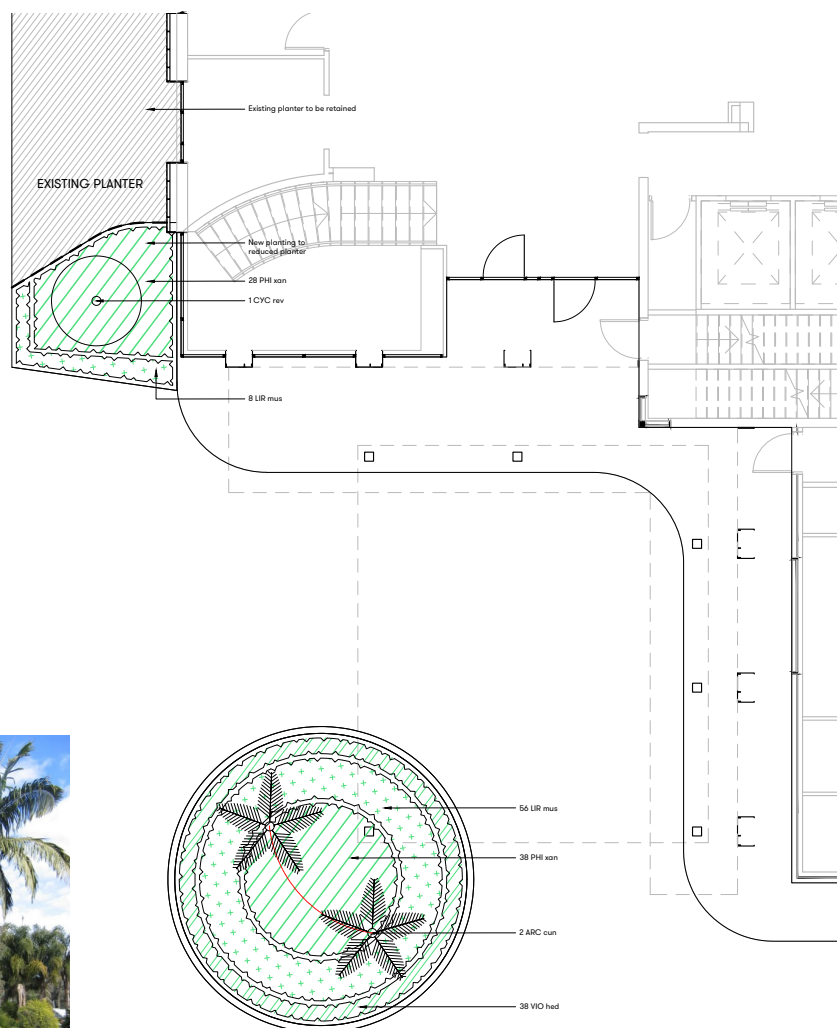
Architectural Response

The existing site includes large landscaped gardens that form part of the residential amenity. these gardens have a continuing maintenance regime and are a key feature of the site.

Additional landscaping is proposed around the entry porte cochere area. Species and type are selected to be complimentary to the existing.



EXISTING LANDSCAPING



PROPOSED LANDSCAPE TO PORTE CORCHERE AREA

PRINCIPLE 6

Amenity

SEPP Principle

Good design positively influences internal and external amenity for residents and neighbours. Achieving good amenity contributes to positive living environments and resident wellbeing.

Good amenity combines appropriate room dimensions and shapes, access to sunlight, natural ventilation, outlook, visual and acoustic privacy, storage, indoor and outdoor space, efficient layouts and service areas, and ease of access for all age groups and degrees of mobility.

Architectural Response

The site contains several existing shared amenity zones including an indoor pool / gym and spa, and an outdoor pool and landscaped gardens.

As part of the facade works it is intended to improve the existing amenity by improving the outlook and views where possible by removing the existing spandrel panel.

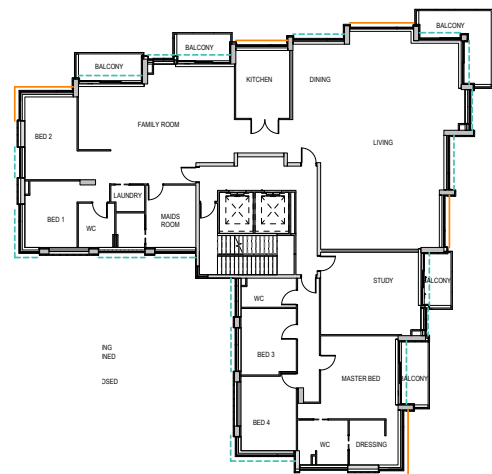
The proposed additional penthouse floor includes oversized living areas and bedrooms that are in keeping with a high end offering that capitalises on the breathtaking views of Sydney harbour. Occupying an entire floor the unit is able to maximise access to sunlight, daylight and natural ventilation. A rooftop terrace is proposed to provide ample outdoor space that again is able to capitalise of outlook and views.

Part of the proposal is to improve accessibility for residences with a new lift proposed that links all car park levels. A part of this works is an accessible ramp that provides a pathway to a traversable portion of the existing driveway that would lead you to the main entry. Signage and line marking will also form a part of these works and will be developed further in the design development phase of the project.

A new porte cochere is also proposed. An increase in height from the existing awning will allow for larger vehicles including a mini bus to be able to park at the building entry with the additional covered area providing enhanced weather protection and the opportunity for multiple vehicles to park at the same time.



INDICATIVE INTERNAL VIEW WITH SPANDREL PANEL REMOVED



PROPOSED WINDOWS TO REMOVE SPANDREL IN ORANGE



PROPOSED PORTE COCHURE UPGRADE



PROPOSED LIFT / AWNING AND ACCESS RAMP TO EXISTING CARPARK

PRINCIPLE 7

Safety

SEPP Principle

Good design optimizes 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.

Architectural Response

No change to existing security solution and surveillance.

PRINCIPLE 8

Housing Diversity & Social Interaction

SEPP Principle

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.

Architectural Response

Na - only 1 additional apartment proposed.

Generally the existing units offer a diverse range of 1 / 2 and 3 bedroom apartments.

PRINCIPLE 9

Aesthetics

SEPP Principle

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.

Architectural Response

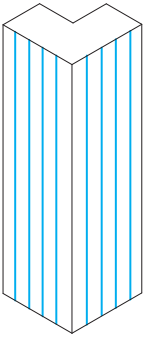
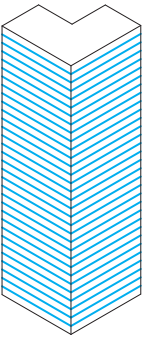
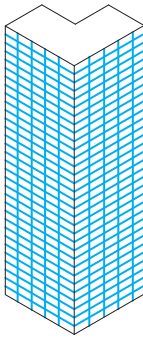

A concept was developed where the Ranelagh building can be divided into two distinct sides. The northern side, that celebrated the spectacular views to the harbour and the southern side that communicates more to the context.

Thus, there were three main concepts that were accentuated in the design:

- Views: increase and frame the northern views to the harbour
- Context: strengthen relationship with the context by increasing the solidity of the southern façade
- Heritage: pick up on materiality cues from the surrounding heritage buildings

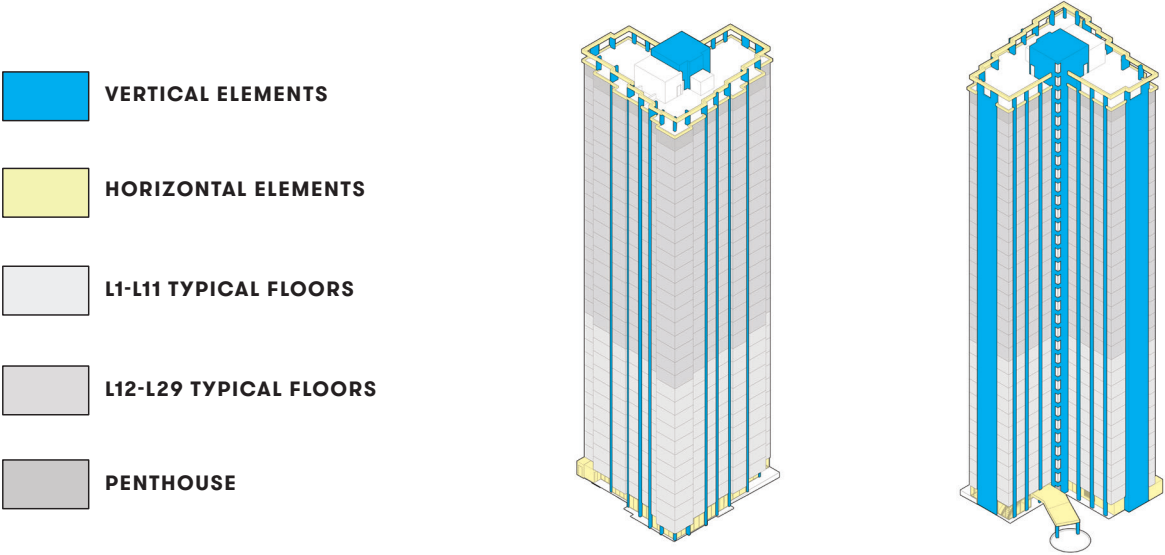


Once the direction of a new facade was confirmed several studies were undertaken with regards to facade expression. Option 1 was chosen as it best related to the context and the existing Ranelagh aesthetic.

SUCCESSFUL	✓				
NON-SUCCESSFUL	X				
PARTIAL SUCCESS	O				
CRITERIA		OPTION 1	OPTION 2	OPTION 3	OPTION 4
RELATIONSHIP TO EXISTING		✓	O	O	X
RELATIONSHIP TO CONTEXT		✓	✓	O	X
MODERNISING		O	O	O	✓
CONSTRUCTABILITY		✓	✓	✓	O
EXPRESSION OF INTERNALS		✓	✓	✓	X

PREFERRED OPTION

The concept and verticality was applied to the facade. Existing building elements were identified to translate this expression across the existing building.

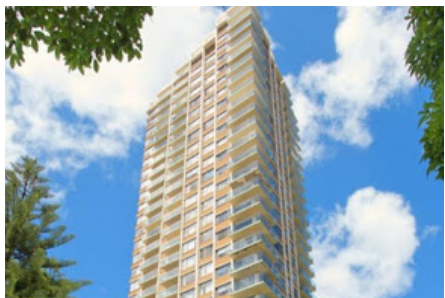


The proposed materials to the facade followed on from the previous concepts with an identified palette that responded to the context and existing features of the site. These were:



**MASONRY, SOLIDITY
AND HEAVINESS**

TEXTURED



EXISTING FORM

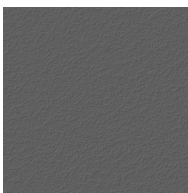
NATURAL FEATURES

Materials following these concepts were then selected based on these concepts and applied to desired form and expression of the proposed facade. The changing materials highlighted the vertical expression of the building with the more dominant material of the frontek cladding and allowed recessed materials to be simpler in aesthetic and selection.



1
4
5
3
6
2

1



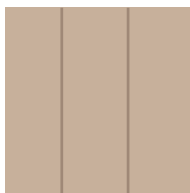
**RENDERED PAINT
FINISH**

2



**EXPRESSED RECESS
ALUMINIUM FINISH**

3



**FRONTEK CLADDING
(SANDSTONE LOOK)**

4



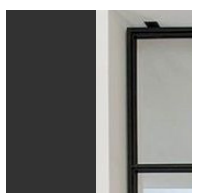
GREY TINTED GLASS

5



COLOR BACK GLASS

6



DARK METAL FRAMES

03

SEPP 65

ADG RESPONSE TABLE

PART 3: SITING THE DEVELOPMENT			
3A Site Analysis			
3A-1	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.		
		Comments	Consistency
Design Guidance:			
	Each element in the Site Analysis Checklist should be addressed.	A site analysis has been submitted with the development application, demonstrating that the built form outcome responds to the site constraints and adjoining developments.	YES
3B Orientation			
3B-1	Objective: Building types and layouts respond to the streetscape and site while optimising solar access within the development.		
		Comments	Consistency
Design Guidance:			
	Buildings along the street frontage define the street, by facing it and incorporating direct access from the street.	N/A - existing condition	N/A
	Where the street frontage is to the east or west, rear buildings should be orientated to the north.	N/A - existing condition	N/A
	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.	N/A - existing condition	N/A
3B-2	Objective: Overshadowing of neighbouring properties is minimised during mid winter.		
		Comments	Consistency
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.	The proposal maintains appropriate levels of solar access during mid-winter given the site orientation. See Part 4A Solar and Daylight Access.	YES
	Solar access to living rooms, balconies and private open spaces of neighbours should be considered.	N/A - existing condition	N/A
	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	N/A
	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	N/A

	Overshadowing should be minimised to the south or downhill by increased upper level setbacks.	Overshadowing minimised, through the setback of penthouse glazing and walls from behind the existing level 31 hob and roof parapet line.	YES
	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.	N/A	N/A
	A minimum of 4 hours of solar access should be retained to solar collectors on neighbouring buildings.	No solar collectors visible on neighbouring buildings.	N/A

3C Public Domain Interface

3C-1 **Objective:** Transition between private and public domain is achieved without compromising safety and security.

		Comments	Consistency
Design Guidance:			
	Terraces, balconies and courtyard apartments should have direct street entry, where appropriate.	N/A - existing condition, additional apartment proposed in tower.	N/A
	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.	N/A	N/A
	Upper level balconies and windows should overlook the public domain.	All existing balconies are retained. The introduction of new glazing is setback, aligning to existing glazing positions. These existing balconies and new glazing line overlooks the public domain. New penthouse balconies in most cases have been positioned to align with balcony placement at lower levels. These balconies face the street and overlook the public domain.	YES
	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	N/A
	Length of solid walls should be limited along street frontages.	N/A	N/A
	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.	N/A	N/A
	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: <ul style="list-style-type: none"> architectural detailing; changes in materials; plant species; colours. 	N/A	N/A

	Opportunities for people to be concealed should be minimised.	The penthouse proposes balconies & windows that overlook the surrounding site, building entry and street, providing passive surveillance. The position and type of window glazing to the penthouse will allow for the appropriate concealment of residents.	YES
3C-2	Objective: Amenity of the public domain is retained and enhanced.		
		Comments	Consistency
Design Guidance:			
	Planting softens the edges of any raised terraces to the street, for example above sub-basement car parking.	N/A	N/A
	Mail boxes should be located in lobbies, perpendicular to the street alignment or integrated into front fences where individual street entries are provided.	N/A	N/A
	The visual prominence of underground car park vents should be minimised and located at a low level where possible.	N/A	N/A
	Substations, pump rooms, garbage storage areas and other service requirements should be located in basement car parks or out of view.	N/A	N/A
	Ramping for accessibility should be minimised by building entry location and setting ground floor levels in relation to footpath levels.	Accessible ramps and lift core to carpark is introduced as minimalistic as possible as existing carpark is void of any accessibility routes.	YES
	Durable, graffiti resistant and easily cleanable materials should be used.	Appropriate materials have been submitted with the development application and are considered satisfactory.	YES
	Where development adjoins public parks, open space or bushland, the design positively addresses this interface and uses a number of the following design solutions: <ul style="list-style-type: none"> 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. 	The existing building sits on a site that is predominately private open space for residents. All existing on-site pathways are retained, clearly defined and unobstructed. Please refer to landscape design (LD-DA100) near new porte-cochere and building entry for new planting scheme.	YES
	On sloping sites protrusion of car parking above ground level should be minimised by using split levels to step underground car parking.	On-site parking is retained. A proposed modest lift core and ramping for accessibility purposes is introduced. These items sit with the current context in a unobstructive manner and offer minimal projections on site.	YES

3D Communal and Public Open Space			
3D-1	Objective: An adequate area of communal open space is provided to enhance residential amenity and to provide opportunities for landscaping.		
		Comments	Consistency
Design Criteria:			
	1. Communal open space has a minimum area equal to 25% of the site.	N/A	N/A
	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).	N/A	N/A
Design Guidance:			
	Communal open space should be consolidated into a well-designed, easily identified and usable area.	N/A	N/A
	Communal open space should have a minimum dimension of 3m, and larger developments should consider greater dimensions.	N/A	N/A
	Communal open space should be co-located with deep soil areas.	N/A	N/A
	Direct, equitable access should be provided to communal open space areas from common circulation areas, entries and lobbies.	N/A	N/A
	Where communal open space cannot be provided at ground level, it should be provided on a podium or roof.	N/A	N/A
	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: <ul style="list-style-type: none"> provide communal spaces elsewhere such as a landscaped roof top 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. 	N/A	N/A

3D-2	Objective: Communal open space is designed to allow for a range of activities, respond to site conditions and be attractive and inviting.		
		Comments	Consistency
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: <ul style="list-style-type: none"> seating for individuals or groups; barbecue areas; play equipment or play areas; swimming pools, gyms, tennis courts or common rooms. 	N/A	N/A
	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.	N/A	N/A
	Visual impacts of services should be minimised, including location of ventilation duct outlets from basement car parks, electrical substations and detention tanks.	On-site parking is retained. A proposed modest lift core and ramping for accessibility purposes is introduced. These items sit with the current context in a unobstructive manner and offer minimal projections on site.	YES
3D-3	Objective: Communal open space is designed to maximise safety.		
		Comments	Consistency
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: <ul style="list-style-type: none"> bay windows; corner windows; balconies. 	All windows on all levels overlook the public domain. Large residential balconies at each apartment will ensure good visual connection to the public domain.	YES
	Communal open space should be well lit.	Future lighting at the porte cochere and building entry will ensure the communal open space is well lit.	YES
	Where communal open space/facilities are provided for children and young people they are safe and contained.	There are no dedicated areas for children.	N/A
3D-4	Objective: Public open space, where provided, is responsive to the existing pattern and uses of the neighbourhood.		
		Comments	Consistency
Design Guidance:			
	The public open space should be well connected with public streets along at least one edge.	N/A	N/A
	The public open space should be connected with nearby parks and other landscape elements.	N/A	N/A

	Public open space should be linked through view lines, pedestrian desire paths, termination points and the wider street grid.	N/A	N/A
	Solar access should be provided year round along with protection from strong winds.	N/A	N/A
	Opportunities for a range of recreational activities should be provided for people of all ages.	N/A	N/A
	A positive address and active frontages should be provided adjacent to public open space.	N/A	N/A
	Boundaries should be clearly defined between public open space and private areas.	N/A	N/A

3E Deep Soil Zones

3E-1 **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.

	Comments	Consistency
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Design Criteria:

	1. <u>Deep soil zones are to meet the following minimum requirement</u>	N/A	N/A
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Design Guidance:

	On some sites it may be possible to provide larger deep soil zones, depending on the site area and context: <ul style="list-style-type: none"> 10% of the site as deep soil on sites with an area of 650m² - 1,500m²; 15% of the site as deep soil on site greater than 1,500m². 	N/A	N/A
	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: <ul style="list-style-type: none"> 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. 	N/A	N/A

	<p>Achieving the design criteria may not be possible on some sites including where:</p> <ul style="list-style-type: none"> 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. <p>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.</p>	N/A	N/A
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3F Visual Privacy

3F-1	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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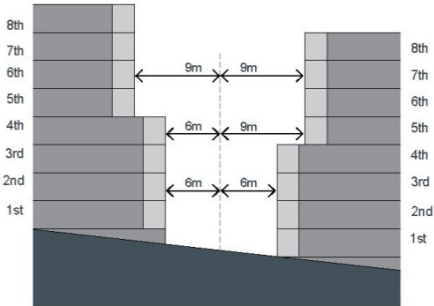
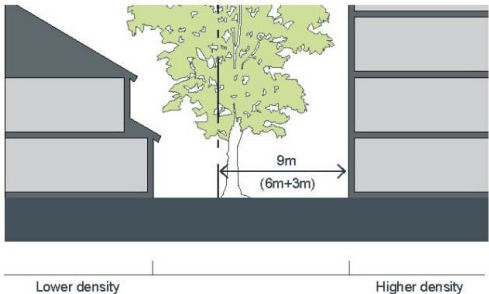
	Comments	Consistency
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Design Criteria:

1.	<p><u>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:</u></p> <table><tr><th>Building height</th><th>Habitable rooms & balcony</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> <p>Note: Separation distances between buildings on the same site should combine required building separations depending on the type of room.</p> <p>Gallery access circulation should be treated as habitable space when measuring privacy separation distances between neighbouring properties.</p>	Building height	Habitable rooms & balcony	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	N/A
Building height	Habitable rooms & balcony	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.	N/A	N/A
	<p>For residential buildings next to commercial buildings, separation distances should be measured as follows:</p> <ul style="list-style-type: none"> for retail, office spaces and commercial balconies use the habitable room distances; <p>for service and plant areas use the non-habitable room distances.</p>	N/A	N/A

	<p>New development should be located and oriented to maximise visual privacy between buildings on site and for neighbouring buildings. Design solutions include:</p> <ul style="list-style-type: none"> • 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. 	N/A	N/A
	<p>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.</p>  <p>Lower density Higher density</p>	N/A	N/A
	<p>Direct lines of sight should be avoided for windows and balconies across corners.</p>	N/A	N/A
	<p>No separation is required between blank walls.</p>	N/A	N/A

3F-2	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.		
		Comments	Consistency
Design Guidance:			
	<p>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:</p> <ul style="list-style-type: none"> • 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; <p>on constrained sites where it can be demonstrated that building layout opportunities are limited, fixed louvres or screen panels to windows and/or balconies.</p>	The penthouse design sits within the existing orientation of the building and well above the communal space below.	YES
	Bedrooms, living spaces and other habitable rooms should be separated from gallery access and other open circulation space by the apartment's service areas.	The penthouse habitable and living areas are separated by circulation space.	YES
	Balconies and private terraces should be located in front of living rooms to increase internal privacy.	Balconies on the penthouse level are situated in front of habitable and living spaces and therefore comply.	YES
	Windows should be offset from the windows of adjacent buildings.	<p>Windows on the penthouse level have been appropriately situated to ensure appropriate privacy, whilst also maintaining amenity and views.</p> <p>Additionally, the new window glazing is aligned to existing window positions. Therefore all previous offsets are retained.</p>	YES
	Recessed balconies and/or vertical fins should be used between adjacent balconies.	Visual privacy is provided between apartment balconies on the penthouse level. This is achieved by appropriately designed balcony party walls, which are directed towards the iconic views of Sydney.	YES

3G Pedestrian Access and Entries			
3G-1	Objective: Building entries and pedestrian access connects to and addresses the public domain.		
		Comments	Consistency
Design Guidance:			
	Multiple entries (including communal building entries and individual ground floor entries) should be provided to activate the street edge.	N/A	N/A
	Entry locations relate to the street and subdivision pattern and the existing pedestrian network.	N/A	N/A
	Building entries should be clearly identifiable and communal entries should be clearly distinguishable from private entries.	N/A	N/A
	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	N/A
3G-2	Objective: Access, entries and pathways are accessible and easy to identify.		
		Comments	Consistency
Design Guidance:			
	Building access areas including lift lobbies, stairwells and hallways should be clearly visible from the public domain and communal spaces.	New building & carpark access are clearly visible from the public domain. Signage will also be incorporated and aid in wayfinding.	YES
	The design of ground floors and underground car parks minimise level changes along pathways and entries.	N/A	N/A
	Steps and ramps should be integrated into the overall building and landscape design.	Steps and ramps are appropriately integrated within the site.	YES
	For large developments 'way finding' maps should be provided to assist visitors and residents.	Way finding maps and signage will be provided within the development.	YES
	For large developments electronic access and audio/video intercom should be provided to manage access.	Secure (keyed) access and intercom points are provided at residential and vehicular entrances.	YES

3G-3	Objective: Large sites provide pedestrian links for access to streets and connection to destinations.		
		Comments	Consistency
Design Guidance:			
	Pedestrian links through sites facilitate direct connections to open space, main streets, centres and public transport.	N/A	N/A
	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.	N/A	N/A
3H Vehicle Access			
3H-1	Objective: Vehicle access points are designed and located to achieve safety, minimise conflicts between pedestrians and vehicles and create high quality streetscapes.		
		Comments	Consistency
Design Guidance:			
	Car park access should be integrated with the building's overall facade. Design solutions may include: <ul style="list-style-type: none"> 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. 	N/A	N/A
	Car park entries should be located behind the building line.	N/A	N/A
	Vehicle entries should be located at the lowest point of the site minimising ramp lengths, excavation and impacts on the building form and layout.	N/A	N/A
	Car park entry and access should be located on secondary streets or lanes where available.	N/A	N/A
	Vehicle standing areas that increase driveway width and encroach into setbacks should be avoided.	N/A	N/A
	Access point locations should avoid headlight glare to habitable rooms.	N/A	N/A
	Adequate separation distances should be provided between vehicle entries and street intersections.	N/A	N/A
	The width and number of vehicle access points should be limited to the minimum.	N/A	N/A
	Visual impact of long driveways should be minimised through changing alignments and screen planting.	N/A	N/A
	The need for large vehicles to enter or turn around within the site should be avoided.	N/A	N/A

	Garbage collection, loading and servicing areas are screened.	N/A	N/A
	Clear sight lines should be provided at pedestrian and vehicle crossings.	Clear sight lines provided at pedestrian and vehicle crossings at car park entry as well as within the basement.	YES
	Traffic calming devices such as changes in paving material or textures should be used where appropriate.	Traffic calming measures at the vehicle entry off Gould Lane will be integrated into design where appropriate.	YES
	Pedestrian and vehicle access should be separated and distinguishable. Design solutions may include: <ul style="list-style-type: none"> changes in surface materials; level changes; the use of landscaping for separation. 	Car park entry is provided on the right hand side of residential entry way, clear of hi pedestrian traffic and with clear sight lines for front entering and existing cars. Pedestrian entry provided with separate entry door, right hand side circulation path. Changes in surface materials used where required to further distinguish entry separation.	YES

3J Bicycle and Car Parking

3J-1 **Objective:** Car parking is provided based on proximity to public transport in metropolitan Sydney and centres in regional areas.

		Comments	Consistency
Design Criteria:			
	1. <u>For development in the following locations:</u> <ul style="list-style-type: none"> <u>on sites that are within 800 metres of a railway station or light rail stop in the Sydney Metropolitan Area; or</u> <u>on land zoned, and sites within 400 metres of land zoned, B3 Commercial Core, B4 Mixed Use or equivalent in a nominated regional centre.</u> <p><u>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.</u></p> <p><u>The car parking needs for a development must be provided off street.</u></p>	Car parking requirements are maximums and therefore no additional parking is required for the additional penthouse apartment.	YES
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.	N/A	N/A
	Where less car parking is provided in a development, council should not provide on street resident parking permits.	N/A	N/A
3J-2	Objective: Parking and facilities are provided for other modes of transport.		
		Comments	Consistency
Design Guidance:			
	Conveniently located and sufficient numbers of parking spaces should be provided for motorbikes and scooters.	N/A - existing condition	N/A

	Secure undercover bicycle parking should be provided that is easily accessible from both the public domain and common areas.	N/A - existing condition	N/A
	Conveniently located charging stations are provided for electric vehicles, where desirable.	N/A - existing condition. No electric vehicle provision provided in existing building.	N/A
3J-3	Objective: Car park design and access is safe and secure.		
		Comments	Consistency
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.	N/A - existing condition	YES
	Direct, clearly visible and well lit access should be provided into common circulation areas.	Accessible pathway proposed as part of works from main entry to car park.	YES
	A clearly defined and visible lobby or waiting area should be provided to lifts and stairs.	Additional lift access with sufficient lobby now provided to each parking level.	YES
	For larger car parks, safe pedestrian access should be clearly defined and circulation areas have good lighting, colour, line marking and/or bollards.	Lighting, signage, line markings and bollards will be included in the car park design.	YES
3J-4	Objective: Visual and environmental impacts of underground car parking are minimised.		
		Comments	Consistency
Design Guidance:			
	Excavation should be minimised through efficient car park layouts and ramp design.	N/A - existing condition	N/A
	Car parking layout should be well organised, using a logical, efficient structural grid and double loaded aisles.	N/A - existing condition	N/A
	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.	N/A - existing condition	N/A
	Natural ventilation should be provided to basement and sub-basement car parking areas.	N/A - existing condition	N/A
	Ventilation grills or screening devices for car parking openings should be integrated into the facade and landscape design.	N/A - existing condition	N/A
3J-5	Objective: Visual and environmental impacts of on-grade car parking are minimised.		
		Comments	Consistency
Design Guidance:			
	On-grade car parking should be avoided.	N/A - existing condition	N/A

	<p>Where on-grade car parking is unavoidable, the following design solutions are used:</p> <ul style="list-style-type: none"> • 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-swales, 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 - existing condition	N/A
3J-6	Objective: Visual and environmental impacts of above ground enclosed car parking are minimised.		
		Comments	Consistency
Design Guidance:			
	Exposed parking should not be located along primary street frontages.	N/A - existing condition	N/A
	<p>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:</p> <ul style="list-style-type: none"> • 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. 	N/A - existing condition	N/A
	Positive street address and active frontages should be provided at ground level.	N/A - existing condition	N/A

PART 4: DESIGNING THE BUILDING (AMENITY)			
4A Solar and Daylight Access			
4A-1	Objective: To optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space.		
		Comments	Consistency
Design Criteria:			
	1. <u>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.</u>	Proposed additional dwelling receives sufficient sunlight. Generally while an existing condition 100% of existing apartments receive required sunlight access.	YES
	2. <u>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.</u>	N/A	N/A
	3. <u>A maximum of 15% of apartments in a building receive no direct sunlight between 9 am and 3 pm at mid-winter.</u>	Refer to item 1. above.	YES
Design Guidance:			
	The design maximises north aspect and the number of single aspect south facing apartments is minimised.	Proposed penthouse apartment is oriented to the North and primary views.	YES
	Single aspect, single storey apartments should have a northerly or easterly aspect.	Complies	YES
	Living areas are best located to the north and service areas to the south and west of apartments.	Complies	YES
	To optimise the direct sunlight to habitable rooms and balconies a number of the following design features are used: <ul style="list-style-type: none"> • dual aspect apartments; • shallow apartment layouts; • two storey and mezzanine level apartments; • bay windows. 	Proposed penthouse apartment is a full floor apartment giving opportunity to outlook and daylight to all aspects.	YES
	To maximise the benefit to residents of direct sunlight within living rooms and private open spaces, a minimum of 1m ² of direct sunlight, measured at 1m above floor level, is achieved for at least 15 minutes.	Complies	YES

	<p>Achieving the design criteria may not be possible on some sites. This includes:</p> <ul style="list-style-type: none"> • 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. <p>Design drawings need to demonstrate how site constraints and orientation preclude meeting the design criteria and how the development meets the objective.</p>	N/A	N/A
4A-2	Objective: Daylight access is maximised where sunlight is limited.		
		Comments	Consistency
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.	N/A	N/A
	<p>Where courtyards are used:</p> <ul style="list-style-type: none"> • 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. 	Complies	YES
	<p>Opportunities for reflected light into apartments are optimised through:</p> <ul style="list-style-type: none"> • 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. 	Opportunities for reflected light are maximised by providing light coloured internal finishes.	YES

4A-3	Objective: Design incorporates shading and glare control, particularly for warmer months.		
		Comments	Consistency
Design Guidance:			
	<p>A number of the following design features are used:</p> <ul style="list-style-type: none"> • 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). 	Shading is provided through the use of overhangs provided by the existing parapet structure, and additionally increased depth of balcony that provides additional eave over windows to internals.	YES
4B Natural Ventilation			
4B-1	Objective: All habitable rooms are naturally ventilated.		
		Comments	Consistency
Design Guidance:			
	The building's orientation maximises capture and use of prevailing breezes for natural ventilation in habitable rooms.	All habitable rooms are provided with openable windows and designed to support natural ventilation.	YES
	Depths of habitable rooms support natural ventilation.	Habitable room depths have been designed to support natural ventilation whilst providing appropriate space internal amenity.	YES
	The area of unobstructed window openings should be equal to at least 5% of the floor area served.	Habitable rooms incorporate a combination of floor to ceiling sliding doors and/or openable windows to maximise natural ventilation. The area of unobstructed window openings is 5% min. of the floor area served.	YES
	Light wells are not the primary air source for habitable rooms.	As above	YES
	<p>Doors and openable windows maximise natural ventilation opportunities by using the following design solutions:</p> <ul style="list-style-type: none"> • adjustable windows with large effective openable areas; • a variety of window types that provide safety and flexibility such as awnings and louvres; <p>windows which the occupants can reconfigure to funnel breezes into the apartment such as vertical louvres, casement windows and externally opening doors.</p>	As above	YES
4B-2	Objective: The layout and design of single aspect apartments maximises natural ventilation.		
		Comments	Consistency
Design Guidance:			
	Apartment depths are limited to maximise ventilation and airflow.	Apartment depths are limited where appropriate to maximise ventilation and airflow.	YES

	<p>Natural ventilation to single aspect apartments is achieved with the following design solutions:</p> <ul style="list-style-type: none"> 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; 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. 	N/A	N/A
4B-3	Objective: The number of apartments with natural cross ventilation is maximised to create a comfortable indoor environment for residents.		
		Comments	Consistency
Design Criteria:			
	<p>1. <u>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.</u></p>	Proposed additional penthouse apartment is naturally ventilated. Generally the development achieves 3/5 apartments per floor that achieve cross ventilation.	YES
	<p>2. <u>Overall depth of a cross-over or cross-through apartment does not exceed 18m, measured glass line to glass line.</u></p>	N/A	N/A
Design Guidance:			
	The building should include dual aspect apartments, cross through apartments and corner apartments and limit apartment depths.	Proposed penthouse apartment is both dual aspect and a corner apartment	YES
	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).	complies	YES
	Apartments are designed to minimise the number of corners, doors and rooms that might obstruct airflow Apartment depths, combined with appropriate ceiling heights, maximise cross ventilation and airflow.	Apartments minimise internal steps in rooms, and integrate appropriate ceiling heights with floor to ceiling doors / windows to maximise ventilation and airflow.	YES

4C Ceiling Heights															
4C-1	Objective: Ceiling height achieves sufficient natural ventilation and daylight access.														
		Comments	Consistency												
Design Criteria:															
	<div>1. <u>Measured from finished floor level to finished ceiling level, minimum ceiling heights are:</u></div> <div><table><tr><th colspan="2">Minimum ceiling height for apartment and mixed use buildings. Habitable rooms and balconies. Non-habitable rooms</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 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 mix used areas</td><td>3.3m for ground and first floor to promote future flexibility of use</td></tr></table></div> <div>These minimums do not preclude higher ceilings if desired.</div>	Minimum ceiling height for apartment and mixed use buildings. Habitable rooms and balconies. Non-habitable rooms		Habitable rooms	2.7m	Non-habitable	2.4m	For 2 storey apartments	2.7m for main living 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 mix used areas	3.3m for ground and first floor to promote future flexibility of use	Proposed penthouse level complies. Proposed 2.9m ceiling height with lower ceilings over bathroom and storage areas.	YES
Minimum ceiling height for apartment and mixed use buildings. Habitable rooms and balconies. Non-habitable rooms															
Habitable rooms	2.7m														
Non-habitable	2.4m														
For 2 storey apartments	2.7m for main living 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 mix used 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.	Based on comments above, ceiling heights can accomodate use of ceiling fans in all living rooms and bedrooms.	YES												
4C-2	Objective: Ceiling height increases the sense of space in apartments and provides for well-proportioned rooms.														
		Comments	Consistency												
Design Guidance:															
	<div>A number of the following design solutions can be used:</div> <div><ul style="list-style-type: none">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.</div>	Well proportioned rooms are provided along with hierachy of rooms being defined through ceiling height changes. Bulkheads are kept clear of living areas where possible and are located above cupboards, corridors, non-habitable rooms and in bedrooms when required.	YES												

4C-3	Objective: Ceiling heights contribute to the flexibility of building use over the life of the building.		
		Comments	Consistency
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.	N/A	N/A

4D Apartment Size and Layout																			
4D-1	Objective: The layout of rooms within an apartment is functional, well organised and provides a high standard of amenity.																		
		Comments	Consistency																
Design Criteria:																			
	<p>1. <u>Apartments are required to have the following minimum internal areas:</u></p> <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> <p><u>The minimum internal areas include only one bathroom. Additional bathrooms increase the minimum internal area by 5m² each.</u> <u>A fourth bedroom and further additional bedrooms increase the minimum internal area by 12m² each.</u></p>	Apartment type	Minimum internal area	Studio	35m ²	1 bedroom	50m ²	2 bedroom	70m ²	3 bedroom	90m ²	<p>Proposed apartment exceeds minimum standards.</p> <table><tr><th>Apartment type</th><th>ADG Minimum internal area</th><th>Achieved</th></tr><tr><td>3 bedroom</td><td>90m²</td><td>291m²</td></tr></table> <p>Note: 4 and 5 Bed apartment areas not included in table.</p>	Apartment type	ADG Minimum internal area	Achieved	3 bedroom	90m ²	291m ²	YES
Apartment type	Minimum internal area																		
Studio	35m ²																		
1 bedroom	50m ²																		
2 bedroom	70m ²																		
3 bedroom	90m ²																		
Apartment type	ADG Minimum internal area	Achieved																	
3 bedroom	90m ²	291m ²																	
	<p>2. <u>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.</u></p>	<p>Every habitable room incorporates full height doors/ windows 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 are accessed through the window and are not borrowed from adjoining rooms.</p>	YES																

Design Guidance:			
	Kitchens should not be located as part of the main circulation space in larger apartments (such as hallway or entry space).	Kitchen does not form part of the primary circulation space (hallways or entry spaces).	YES
	A window should be visible from any point in a habitable room.	All habitable rooms have visible windows from any position within the room.	YES
	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.	N/A	N/A

4D-2	Objective: Environmental performance of the apartment is maximised.		
		Comments	Consistency
Design Criteria:			
	1. <u>Habitable rooms depths are limited to a maximum of 2.5 x the ceiling height</u>	All habitable rooms (not open plan) are consistent with this ratio.	YES
	2. <u>In open plan layouts (where the living, dining and kitchen are combined) the maximum habitable room depth is 8m from a window.</u>	Complies - Max depth from window >8m	YES
Design Guidance:			
	Greater than minimum ceiling heights can allow for proportional increases in room depth up to the permitted maximum depths.	Proposed additional ceiling height for added amenity.	YES
	All living areas and bedrooms should be located on the external face of the building.	All bedrooms and living rooms are located on an external face of the building, with balconies included in available areas along the facade and off living areas and bedrooms. Additional outdoor terrace provided on roof.	YES
	Where possible: <ul style="list-style-type: none"> bathrooms and laundries should have an external openable window; main living spaces should be oriented toward the primary outlook and aspect and away from noise sources. 	Where bathrooms and laundries do not have access to an external window ventilation ducting is used to improve air quality. All apartments have been designed to orientate main living spaces towards primary visual outlook and aspect maximizing visual amenity.	YES
4D-3	Objective: Apartment layouts are designed to accommodate a variety of household activities and needs.		
		Comments	Consistency
Design Criteria:			
	1. <u>Master bedrooms have a minimum area of 10m² and other bedrooms 9m² (excluding wardrobe space).</u>	All bedrooms meet or exceed the minimum area requirements.	YES
	2. <u>Bedrooms have a minimum dimension of 3m (excluding wardrobe space).</u>	All bedrooms meet or exceed the minimum 3m dimension in both directions.	YES
	3. <u>Living rooms or combined living/dining rooms have a minimum width of:</u> <ul style="list-style-type: none"> <u>3.6m for studio and 1 bedroom apartments;</u> <u>4m for 2 and 3 bedroom apartments.</u> 	Proposed penthouse apartment exceeds the minimum living room widths.	YES
	4. <u>The width of cross-over or cross-through apartments are at least 4m internally to avoid deep narrow apartment layouts.</u>	N/A	N/A
Design Guidance:			
	Access to bedrooms, bathrooms and laundries is separated from living areas minimising direct openings between living and service areas.	The individual apartments layouts aim to minimise doors to bedrooms, bathrooms, and laundries off the primary living space.	YES
	All bedrooms allow a minimum length of 1.5m for robes.	All wardrobes are a minimum length of 1.5m	YES

	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.	Complies. Large walk in robe provided.	YES
	<p>Apartment layouts allow flexibility over time, design solutions may include:</p> <ul style="list-style-type: none"> 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; <p>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.</p> <ul style="list-style-type: none"> 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. 	<p>Apartment area and dimensions exceed the minimum requirements. This allows for future flexibility in internal furniture layouts.</p> <p>Apartment is rationally planned to maximise usable space and storage in apartments.</p>	YES

4E Private Open Space and Balconies

4E-1 **Objective:** Apartments provide appropriately sized private open space and balconies to enhance residential amenity.

		Comments	Consistency														
Design Criteria:																	
<div>1. <u>All apartments are required to have primary balconies as follows:</u></div> <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> <div><u>The minimum balcony depth to be counted as contributing to the balcony area is 1m.</u></div>	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	<div>Large roof top terrace provided complying with minimum areas and dimensions.</div>	<div>YES</div>
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															
<div>2. <u>For apartments at ground level or on a podium or similar structure, a private open space is provided instead of a balcony. It must have a minimum area of 15m² and a minimum depth of 3m.</u></div>	<div>N/A</div>	<div>N/A</div>															

Design Guidance:			
	Increased communal open space should be provided where the number or size of balconies is reduced.	N/A	N/A
	Storage areas on balconies are additional to the minimum balcony size.	N/A	N/A
	<p>Balcony use may be limited in some proposals by:</p> <ul style="list-style-type: none"> 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. <p>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.</p>	Sufficient balustrade heights are proposed to roof top terrace to ensure sufficient wind protection.	YES
4E-2	Objective: Primary private open space and balconies are appropriately located to enhance liveability for residents.		
		Comments	Consistency
Design Guidance:			
	Primary open space and balconies should be located adjacent to the living room, dining room or kitchen to extend the living space.	A balcony is provided off the main living space, however will not act as the primary outdoor space due to constraints with the existing building. This area is better used as internal with the larger courtyard provided on the roof.	ADEQUATE
	Private open spaces and balconies predominantly face north, east or west.	Balconies are predominantly facing North, east or west.	YES
	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.	Complies. longer side open to the sky.	YES
4E-3	Objective: Private open space and balcony design is integrated into and contributes to the overall architectural form and detail of the building.		
		Comments	Consistency
Design Guidance:			
	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.	Glass balconies proposed, to maximise outlook and view opportunity. No overlooking issues.	YES
	Full width full height glass balustrades alone are generally not desirable.	See point above - generally complies with objective, and in keeping with existing aesthetic.	ADEQUATE
	Projecting balconies should be integrated into the building design and the design of soffits considered.	Projecting balconies consistent with existing.	YES

	Operable screens, shutters, hoods and pergolas are used to control sunlight and wind.	Generally balconies are covered.	YES
	Balustrades are set back from the building or balcony edge where overlooking or safety is an issue.	Balustrades to roof top set back from edge.	YES
	Downpipes and balcony drainage are integrated with the overall facade and building design.	Downpipes to new built form to tie in with existing.	YES
	Air-conditioning units should be located on roofs, in basements, or fully integrated into the building design.	A/C integrated on rooftop terrace at rear.	YES
	Where clothes drying, storage or air conditioning units are located on balconies, they should be screened and integrated in the building design.	N/A - internal drying to be provided.	N/A
	Ceilings of apartments below terraces should be insulated to avoid heat loss.	Provided in line with BASIX requirements.	YES
	Water and gas outlets should be provided for primary balconies and private open space.	These services are provided for roof top terrace.	YES
4E-4	Objective: Private open space and balcony design maximises safety.		
		Comments	Consistency
Design Guidance:			
	Changes in ground levels or landscaping are minimised.	N/A	N/A
	Design and detailing of balconies avoids opportunities for climbing and falls.	Balustrade height and design is sufficient and does not provide opportunity for climbing. All balconies are provided with balustrades to BCA compliance.	YES
4F Common Circulation and Spaces			
4F-1	Objective: Common circulation spaces achieve good amenity and properly service the number of apartments.		
		Comments	Consistency
Design Criteria:			
	1. <u>The maximum number of apartments off a circulation core on a single level is eight.</u>	Complies - single apartment proposed for the entire floor.	YES
	2. <u>For buildings of 10 storeys and over, the maximum number of apartments sharing a single lift is 40.</u>	N/A - existing condition, additional apartment considered negligible to impact current lifting capacity.	N/A
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.	N/A - existing condition	N/A

	Daylight and natural ventilation should be provided to all common circulation spaces that are above ground.	N/A - existing condition	N/A
	Windows should be provided in common circulation spaces and should be adjacent to the stair or lift core or at the ends of corridors.	N/A - existing condition	N/A
	Longer corridors greater than 12m in length from the lift core should be articulated. Design solutions may include: <ul style="list-style-type: none"> a series of foyer areas with windows and spaces for seating; wider areas at apartment entry doors and varied ceiling heights. 	N/A - existing condition	N/A
	Design common circulation spaces to maximise opportunities for dual aspect apartments, including multiple core apartment buildings and cross over apartments.	N/A - existing condition	N/A
	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: <ul style="list-style-type: none"> 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; other innovative design solutions that provide high levels of amenity.	N/A - existing condition	N/A
	Where design criteria 1 is not achieved, no more than 12 apartments should be provided off a circulation core on a single level.	N/A	N/A
	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.	Complies	YES
4F-2	Objective: Common circulation spaces promote safety and provide for social interaction between residents.		
		Comments	Consistency
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.	Complies	YES
	Tight corners and spaces are avoided.	Complies	YES

	Circulation spaces should be well lit at night.	Sufficient lighting to be provided in proposed corridor	YES
	Legible signage should be provided for apartment numbers, common areas and general way finding.	Sufficient signage to be provided	YES
	Incidental spaces, for example space for seating in a corridor, at a stair landing, or near a window are provided.	N/A – Single apartment to floor	YES
	In larger developments, community rooms for activities such as owners' corporation meetings or resident use should be provided and are ideally co-located with communal open space.	N/A	N/A
	Where external galleries are provided, they are more open than closed above the balustrade along their length.	N/A, no external galleries provided.	N/A

4G Storage

4G-1 **Objective:** Adequate, well designed storage is provided in each apartment.

		Comments	Consistency									
Design Criteria:												
<div>1. <u>In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided:</u></div> <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> <div><u>At least 50% of the required storage is to be located within the apartment.</u></div>	Dwelling type	Minimum area	Studio apartments	4m ³	1 bedroom apartments	6m ³	2 bedroom apartments	8m ³	3+ bedroom apartments	10m ³	<div>Storage provisions exceeds standard for the proposed penthouse level. Additional storage provided in standalone storage room~12m³. Storage in laundry room ~4m³. Additional library storage ~6m³. TOTAL ~22m³</div> <div>There is also ample additional storage in each bedroom with wardrobe areas exceeding minimum requirements.</div>	YES
Dwelling type	Minimum area											
Studio apartments	4m ³											
1 bedroom apartments	6m ³											
2 bedroom apartments	8m ³											
3+ bedroom apartments	10m ³											
Design Guidance:												
	Storage is accessible from either circulation or living areas.	Storage is located from circulation and living areas.	YES									
	Storage provided on balconies (in addition to the minimum balcony size) is integrated into the balcony design, weather proof and screened from view from the street.	N/A, no storage is provided on balconies.	N/A									
	Left over space such as under stairs is used for storage.	Where appropriate, storage is located in all left over space.	YES									

4G-2	Objective: Additional storage is conveniently located, accessible and nominated for individual apartments.		
		Comments	Consistency
Design Guidance:			
	Storage not located in apartments is secure and clearly allocated to specific apartments.	Storage not located within apartments is located in basement, residents will have secure access to this space. Storage areas have individual storage cages that are clearly identified with signage.	YES
	Storage is provided for larger and less frequently accessed items.	All apartments are provided with a minimum of 8m ³ of secure dedicated storage within the basement carpark.	YES
	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.	N/A	N/A
	If communal storage rooms are provided they should be accessible from common circulation areas of the building.	N/A	N/A
	Storage not located in an apartment is integrated into the overall building design and is not visible from the public domain.	N/A	N/A
4H Acoustic Privacy			
4H-1	Objective: Noise transfer is minimised through the siting of buildings and building layout.		
		Comments	Consistency
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).	N/A	N/A
	Window and door openings are generally orientated away from noise sources.	Doors and windows are generally oriented away from noise sources, and to address views and daylight access.	YES
	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.	Noisy areas within the building are generally co-located and are positioned to have minimum impact on quieter areas.	YES
	Storage, circulation areas and non-habitable rooms should be located to buffer noise from external sources.	Storage, circulation and non-habitable areas have been planned to buffer noise transfer where possible.	YES
	The number of party walls (walls shared with other apartments) is limited and are appropriately insulated.	N/A	N/A
	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.	N/A	N/A

4H-2	Objective: Noise impacts are mitigated within apartments through layout and acoustic treatments.		
		Comments	Consistency
Design Guidance:			
	<p>Internal apartment layout separates noisy spaces from quiet spaces, using a number of the following design solutions:</p> <ul style="list-style-type: none"> rooms with similar noise requirements are grouped together; doors separate different use zones; wardrobes in bedrooms are co-located to act as sound buffers. 	The penthouse layout have been designed with consideration to this guidance and in conjunction with maximising the aspect of bedrooms and living spaces to provide access to iconic views, natural light and ventilation.	YES
	<p>Where physical separation cannot be achieved noise conflicts are resolved using the following design solutions:</p> <ul style="list-style-type: none"> 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. 	Building elements have been designed in accordance with this guidance. Acoustic treatment of walls, windows, doors, floors and ceilings to future acoustic consultants advice.	YES
4J Noise and Pollution			
4J-1	Objective: In noisy or hostile environments the impacts of external noise and pollution are minimised through the careful siting and layout of buildings.		
		Comments	Consistency
Design Guidance:			
	<p>To minimise impacts the following design solutions may be used:</p> <ul style="list-style-type: none"> 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. 	N/A	N/A

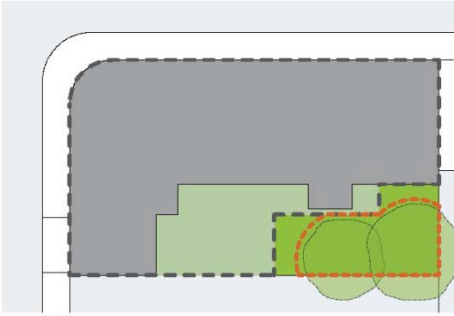
	Achieving the design criteria in this Apartment Design Guide may not be possible in some situations due to noise and pollution. Where developments are unable to achieve the design criteria, alternatives may be considered in the following areas: <ul style="list-style-type: none"> solar and daylight access; private open space and balconies; natural cross ventilation.	N/A	N/A
4J-2	Objective: Appropriate noise shielding or attenuation techniques for the building design, construction and choice of materials are used to mitigate noise transmission.		
		Comments	Consistency
Design Guidance:			
	Design solutions to mitigate noise include: <ul style="list-style-type: none"> 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. 	Methods of mitigating noise impacts include; <ul style="list-style-type: none"> Acoustic seals to doors and windows Double / laminated glazing to affected facades as required 	YES
PART 4: DESIGNING THE BUILDING (CONFIGURATION)			
4K Apartment Mix			
4K-1	Objective: A range of apartment types and sizes is provided to cater for different household types now and into the future.		
		Comments	Consistency
Design Guidance:			
	A variety of apartment types is provided.	N/A	N/A
	The apartment mix is appropriate, taking into consideration: <ul style="list-style-type: none"> 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. 	N/A	N/A
	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.	N/A	N/A

4K-2	Objective: The apartment mix is distributed to suitable locations within the building.		
		Comments	Consistency
Design Guidance:			
	Different apartment types are located to achieve successful facade composition and to optimise solar access.	Different apartment types have been distributed throughout the proposed building.	YES
	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.	Larger apartment types are located on corners to take advantage of views and larger balcony frontage.	YES
4L Ground Floor Apartments			
4L-1	Objective: Street frontage activity is maximised where ground floor apartments are located.		
		Comments	Consistency
Design Guidance:			
	Direct street access should be provided to ground floor apartments.	N/A	N/A
	Activity is achieved through front gardens, terraces and the facade of the building. Design solutions may include: <ul style="list-style-type: none"> 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. 	N/A	N/A
	Retail or home office spaces should be located along street frontages.	N/A	N/A
	Ground floor apartment layouts support small office home office (SOHO) use to provide future opportunities for conversion into commercial or retail areas. In these cases provide higher floor to ceiling heights and ground floor amenities for easy conversion.	N/A	N/A
4L-2	Objective: Design of ground floor apartments delivers amenity and safety for residents.		
		Comments	Consistency
Design Guidance:			
	Privacy and safety should be provided without obstructing casual surveillance. Design solutions may include: <ul style="list-style-type: none"> elevation of private gardens and terraces above the street level by 1-1.5m (see figure 4L.4); landscaping and private courtyards; window sill heights that minimise sight lines into apartments; integrating balustrades, safety bars or screens with the exterior design. 	N/A	N/A
	Solar access should be maximised through: <ul style="list-style-type: none"> high ceilings and tall windows; trees and shrubs that allow solar access in winter and shade in summer. 	N/A	N/A

4M Facades			
4M-1	Objective: Building facades provide visual interest along the street while respecting the character of the local area.		
		Comments	Consistency
Design Guidance:			
	Design solutions for front building facades may include: <ul style="list-style-type: none"> 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. 	Building facades have been designed with regard to the following: <ul style="list-style-type: none"> Building composition and elements are proportioned in keeping with the original facade. Changes in texture and material to define the base from the top, and to relate to the surrounding context. Facade angulation provides a composition of varied building elements, adding contrasting solid/void, light/shadow 	YES
	Building services should be integrated within the overall façade.	Building services are integrated into the design	YES
	Building facades should be well resolved with an appropriate scale and proportion to the streetscape and human scale. Design solutions may include: <ul style="list-style-type: none"> 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. 	The building facade provides a high level of visual interest and groups balcony elements in relation to apartment ownership.	YES
	Building facades relate to key datum lines of adjacent buildings through upper level setbacks, parapets, cornices, awnings or colonnade heights.	N/A, following existing building datum lines	N/A
	Shadow is created on the facade throughout the day with building articulation, balconies and deeper window reveals.	The existing building's balcony design creates articulation and shadows on the facade.	YES
4M-2	Objective: Building functions are expressed by the façade.		
		Comments	Consistency
Design Guidance:			
	Building entries should be clearly defined.	The articulation of the façade at ground level provides adequate legibility of building entries and highlighted by architectural features such as awnings	YES
	Important corners are given visual prominence through a change in articulation, materials or colour, roof expression or changes in height.	The buildings aesthetic and form takes into consideration this guidance.	YES
	The apartment layout should be expressed externally through facade features such as party walls and floor slabs.	The buildings aesthetic and form takes into consideration this guidance.	YES

4N Roof Design			
4N-1	Objective: Roof treatments are integrated into the building design and positively respond to the street.		
		Comments	Consistency
Design Guidance:			
	<p>Roof design relates to the street. Design solutions may include:</p> <ul style="list-style-type: none"> 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. 	The roof design is unobtrusive and compliments the overall building form.	YES
	<p>Roof treatments should be integrated with the building design. Design solutions may include:</p> <ul style="list-style-type: none"> roof design proportionate to the overall building size, scale and form; roof materials compliment the building; service elements are integrated. 	Further to above comments, services elements are housed at roof level and concealed through an appropriate facade design and materials are consistent with the entire building aesthetic.	YES
4N-2	Objective: Opportunities to use roof space for residential accommodation and open space are maximised.		
		Comments	Consistency
Design Guidance:			
	<p>Habitable roof space should be provided with good levels of amenity. Design solutions may include:</p> <ul style="list-style-type: none"> penthouse apartments; dormer or clerestory windows; openable skylights. 	The roof space has been altered to incorporate a penthouse with private courtyard space above.	YES
	<p>Open space is provided on roof tops subject to acceptable visual and acoustic privacy, comfort levels, safety and security considerations.</p>	Private courtyard space is provided for the penthouse on roof level. Two courtyards are integrated adhering privacy, security, visual, acoustic and safety considerations.	YES
4N-3	Objective: Roof design incorporates sustainability features.		
		Comments	Consistency
Design Guidance:			
	<p>Roof design maximises solar access to apartments during winter and provides shade during summer. Design solutions may include:</p> <ul style="list-style-type: none"> the roof lifts to the north; eaves and overhangs shade walls and windows from summer sun. 	The roof design ties into the overall building form, providing overhangs that shade the penthouse apartments during the summer sun.	YES
	<p>Skylights and ventilation systems should be integrated into the roof design.</p>	No skylights in design	N/A

4O Landscape Design											
4O-1	Objective: Landscape design is viable and sustainable.										
		Comments	Consistency								
Design Guidance:											
	<p>Landscape design should be environmentally sustainable and can enhance environmental performance by incorporating:</p> <ul style="list-style-type: none">diverse and appropriate planting;bio-filtration gardens;appropriately planted shading trees;areas for residents to plant vegetables and herbs;composting;green roofs or walls.	<p>The landscape design has been designed in accordance with this guidance. The planting palette has been carefully selected to suit to local context and continue to the biodiversity of the area.</p> <p>Refer to Landscape architects package.</p>	YES								
	Ongoing maintenance plans should be prepared.	Refer to Landscape package.	YES								
	<p>Microclimate is enhanced by:</p> <ul style="list-style-type: none">appropriately scaled trees near the eastern and western elevations for shade;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.	Refer to Landscape package.	YES								
	<p>Tree and shrub selection considers size at maturity and the potential for roots to compete.</p> <table><tr><th>Site Area</th><th>Recommended tree planting</th></tr><tr><td>Up to 850m²</td><td>1 medium tree per 50m² of deep soil zone</td></tr><tr><td>Between 850 - 1,500m²</td><td>1 large tree of 2 medium trees per 90m² of deep soil zone</td></tr><tr><td>Greater than 1,500m²</td><td>1 large tree of 2 medium trees per 80m² of deep soil zone</td></tr></table>	Site Area	Recommended tree planting	Up to 850m ²	1 medium tree per 50m ² of deep soil zone	Between 850 - 1,500m ²	1 large tree of 2 medium trees per 90m ² of deep soil zone	Greater than 1,500m ²	1 large tree of 2 medium trees per 80m ² of deep soil zone	Refer to Landscape package.	YES
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4O-2	Objective: Landscape design contributes to the streetscape and amenity.										
		Comments	Consistency								
Design Guidance:											
	<p>Landscape design responds to the existing site conditions including:</p> <ul style="list-style-type: none">changes of levels;views;significant landscape features including trees and rock outcrops.	<p>The proposed landscape design and choice of vegetation will have a positive impact upon the locality and responds to views from private open spaces.</p>	YES								

	<p>Significant landscape features should be protected by:</p> <ul style="list-style-type: none"> • tree protection zones; • appropriate signage and fencing during construction. 	N/A	N/A
	Plants selected should be endemic to the region and reflect the local ecology.	Plant selections are endemic to the region and reflect the local ecology where possible.	YES

4P Planting on Structures

4P-1 **Objective:** Appropriate soil profiles are provided.

		Comments	Consistency																																			
Design Guidance:																																						
	Structures are reinforced for additional saturated soil weight.	The structural design is appropriate for the landscape design.	YES																																			
	Soil volume is appropriate for plant growth, considerations include: <ul style="list-style-type: none">• modifying depths and widths according to the planting mix and irrigation frequency;• free draining and long soil life span;• tree anchorage.	Appropriate soil profiles are provided, in accordance with Landscape Architects specification.	YES																																			
	Minimum soil standards for plant sizes should be provided in accordance with Table 5. Table 5 Minimum soil standards for plant types and sizes	<table><tr><th>Plant type</th><th>Definition</th><th>Soil volume</th><th>Soil depth</th><th>Soil area</th></tr><tr><td>Large trees</td><td>12-18m high, up to 16m crown spread at maturity</td><td>150m³</td><td>1,200mm</td><td>10mx10x or equivalent</td></tr><tr><td>Medium trees</td><td>8-12m high, up to 8m crown spread at maturity</td><td>35m³</td><td>1,000mm</td><td>6mx6m or equivalent</td></tr><tr><td>Small trees</td><td>6-8m high, up to 4m crown spread at maturity</td><td>9m³</td><td>800mm</td><td>3.5mx3.5m or equivalent</td></tr><tr><td>Shrubs</td><td></td><td></td><td>500-600mm</td><td></td></tr><tr><td>Ground over</td><td></td><td></td><td>300-345mm</td><td></td></tr><tr><td>Turf</td><td></td><td></td><td>200mm</td><td></td></tr></table>	Plant type	Definition	Soil volume	Soil depth	Soil area	Large trees	12-18m high, up to 16m crown spread at maturity	150m ³	1,200mm	10mx10x or equivalent	Medium trees	8-12m high, up to 8m crown spread at maturity	35m ³	1,000mm	6mx6m or equivalent	Small trees	6-8m high, up to 4m crown spread at maturity	9m ³	800mm	3.5mx3.5m or equivalent	Shrubs			500-600mm		Ground over			300-345mm		Turf			200mm		N/A
Plant type	Definition	Soil volume	Soil depth	Soil area																																		
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Turf			200mm																																			
	Note: The above has been calculated assuming fortnightly irrigation. Any sub-surface drainage requirements are in addition to the above minimum soil depths.																																					

4P-2	Objective: Plant growth is optimised with appropriate selection and maintenance.		
		Comments	Consistency
Design Guidance:			
	Plants are suited to site conditions, considerations include: <ul style="list-style-type: none"> drought and wind tolerance; seasonal changes in solar access; modified substrate depths for a diverse range of plants; plant longevity. 	Plant selections have been specified by a qualified Landscape Architect, refer to Landscape plan - LD-DA100.	YES
	A landscape maintenance plan is prepared.	Refer to Landscape report, a landscape maintenance plan can be prepared as part of future stages of the project.	YES
	Irrigation and drainage systems respond to: <ul style="list-style-type: none"> changing site conditions; soil profile and the planting regime; whether rainwater, stormwater or recycled grey water is used. 	Refer to Landscape report, appropriate irrigation and drainage to planter beds will be incorporated into the design.	YES
4P-3	Objective: Planting on structures contributes to the quality and amenity of communal and public open spaces.		
		Comments	Consistency
Design Guidance:			
	Building design incorporates opportunities for planting on structures. Design solutions may include: <ul style="list-style-type: none"> 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.	N/A	N/A
4Q Universal Design			
4Q-1	Objective: Universal design features are included in apartment design to promote flexible housing for all community members.		
		Comments	Consistency
Design Guidance:			
	Developments achieve a benchmark of 20% of the total apartments incorporating the Liveable Housing Guideline's silver level universal design features.	N/A	N/A
4Q-2	Objective: A variety of apartments with adaptable designs are provided.		
		Comments	Consistency
Design Guidance:			
	Adaptable housing should be provided in accordance with the relevant council policy.	N/A	N/A

	<p>Design solutions for adaptable apartments include:</p> <ul style="list-style-type: none"> • 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. 	N/A	N/A
4Q-3	Objective: Apartment layouts are flexible and accommodate a range of lifestyle needs.		
		Comments	Consistency
Design Guidance:			
	<p>Apartment design incorporates flexible design solutions which may include:</p> <ul style="list-style-type: none"> • 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. 	The penthouse incorporates a master bedroom with ensuite.	YES
4R Adaptive Reuse			
4R-1	Objective: New additions to existing buildings are contemporary and complementary and enhance an area's identity and sense of place.		
		Comments	Consistency
Design Guidance:			
	<p>Design solutions may include:</p> <ul style="list-style-type: none"> • 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 proposed new glazing and cladding adheres to this criteria.	YES
	Additions to heritage items should be clearly identifiable from the original building.	N/A	N/A
	New additions allow for the interpretation and future evolution of the building.	Addition sits in with the existing building fabric and context.	YES

4R-2	Objective: Adapted buildings provide residential amenity while not precluding future adaptive reuse.		
		Comments	Consistency
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: <ul style="list-style-type: none"> generously sized voids in deeper buildings; alternative apartment types when orientation is poor; using additions to expand the existing building envelope. 	N/A	N/A
	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: <ul style="list-style-type: none"> 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; car parking; alternative approaches to private open space and balconies. 	N/A	N/A
4S Mixed Use			
4S-1	Objective: Mixed use developments are provided in appropriate locations and provide active street frontages that encourage pedestrian movement.		
		Comments	Consistency
Design Guidance:			
	Mixed use development should be concentrated around public transport and centres.	N/A	N/A
	Mixed use developments positively contribute to the public domain. Design solutions may include: <ul style="list-style-type: none"> 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. 	N/A	N/A

4S-2	Objective: Residential levels of the building are integrated within the development, and safety and amenity is maximised for residents.		
		Comments	Consistency
Design Guidance:			
	Residential circulation areas should be clearly defined. Design solutions may include: <ul style="list-style-type: none"> 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; concealment opportunities are avoided. 	Residential carparking is secured and safe pedestrian routes are provided.	YES
	Landscaped communal open space should be provided at podium or roof levels.	N/A	N/A
4T Awnings and Signage			
4T-1	Objective: Awnings are well located and complement and integrate with the building design.		
		Comments	Consistency
Design Guidance:			
	Awnings should be located along streets with high pedestrian activity and active frontages.	N/A	N/A
	A number of the following design solutions are used: <ul style="list-style-type: none"> 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. 	The awning provides adequate protection from sun and rain.	YES
	Awnings should be located over building entries for building address and public domain amenity.	A wrapped awning / port cochere is incorporated into the design at ground level and building entry.	YES
	Awnings relate to residential windows, balconies, street tree planting, power poles and street infrastructure.	N/A	N/A
	Gutters and down pipes should be integrated and concealed.	Gutters and downpipes are integrated into the roof and facade design.	YES
	Lighting under awnings should be provided for pedestrian safety.	Lighting is provided under all awnings.	YES

4T-2	Objective: Signage responds to the context and desired streetscape character.		
		Comments	Consistency
Design Guidance:			
	Signage should be integrated into the building design and respond to the scale, proportion and detailing of the development.	Signage locations are well integrated and in proportion to the building.	YES
	Legible and discrete way finding should be provided for larger developments.	Signage and wayfinding is clear and integrated into the building/site aesthetic.	YES
	Signage is limited to being on and below awnings and a single facade sign on the primary street frontage.	Signage is minimised to primary areas, and integrated into the building design and awning aesthetic.	YES
PART 4: DESIGNING THE BUILDING (PERFORMANCE)			
4U Energy Efficiency			
4U-1	Objective: Development incorporates passive environmental design.		
		Comments	Consistency
Design Guidance:			
	Adequate natural light is provided to habitable rooms (see 4A Solar and daylight access).	Floor to ceiling doors and windows are incorporated to allow for maximum natural light for habitable spaces.	YES
	Well located, screened outdoor areas should be provided for clothes drying.	No proposed outdoor clothes drying, space for dryer in apartment laundry.	ADEQUATE
4U-2	Objective: Development incorporates passive solar design to optimise heat storage in winter and reduce heat transfer in summer.		
		Comments	Consistency
Design Guidance:			
	A number of the following design solutions are used: <ul style="list-style-type: none"> the use of smart glass or other technologies on north and west elevations; 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. 	The design incorporates the following passive solar design strategies: <ul style="list-style-type: none"> High thermal mass to the North and in the floor help to ensure good passive solar design outcomes. Balcony depth generally acts as a good shading device ranging in depth from approx. 2 - 3 metres. Insulated roof and walls Seals on windows and doors Roof and balcony overhangs, blade walls and blinds 	YES
	Provision of consolidated heating and cooling infrastructure should be located in a centralised location (e.g. the basement).	All are consolidated into appropriate locations within the building and integrated into the design so that no services element is visible.	YES
4U-3	Objective: Adequate natural ventilation minimises the need for mechanical ventilation.		
		Comments	Consistency
Design Guidance:			

	<p>A number of the following design solutions are used:</p> <ul style="list-style-type: none"> 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. 	Most habitable rooms and living space in the penthouse are provided with operable windows for natural ventilation. Habitable rooms are grouped together with an open plan design.	YES
4V Water Management and Conservation			
4V-1	Objective: Potable water use is minimised.		
		Comments	Consistency
Design Guidance:			
	Water efficient fittings, appliances and wastewater reuse should be incorporated Apartments should be individually metered.	N/A	N/A
	Rainwater should be collected, stored and reused on site.	N/A	N/A
	Drought tolerant, low water use plants should be used within landscaped areas.	Planting selections are appropriate to the site and climatic condition; refer to landscape plan and planting schedule on LD-DA100.	YES
4V-2	Objective: Urban stormwater is treated on site before being discharged to receiving waters.		
		Comments	Consistency
Design Guidance:			
	Water sensitive urban design systems are designed by a suitably qualified professional.	N/A	N/A
	<p>A number of the following design solutions are used:</p> <ul style="list-style-type: none"> 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. 	N/A	N/A
4V-3	Objective: Flood management systems are integrated into site design.		
		Comments	Consistency
Design Guidance:			
	Detention tanks should be located under paved areas, driveways or in basement car parks.	N/A	N/A
	On large sites parks or open spaces are designed to provide temporary on site detention basins.	N/A	N/A

4W Waste Management			
4W-1	Objective: Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity of residents.		
		Comments	Consistency
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.	N/A	N/A
	Waste and recycling storage areas should be well ventilated.	N/A	N/A
	Circulation design allows bins to be easily manoeuvred between storage and collection points.	N/A	N/A
	Temporary storage should be provided for large bulk items such as mattresses.	N/A	N/A
	A waste management plan should be prepared.	N/A	N/A
4W-2	Objective: Domestic waste is minimised by providing safe and convenient source separation and recycling.		
		Comments	Consistency
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.	N/A	N/A
	Communal waste and recycling rooms are in convenient and accessible locations related to each vertical core.	N/A	N/A
	For mixed use developments, residential waste and recycling storage areas and access should be separate and secure from other uses.	N/A	N/A
	Alternative waste disposal methods such as composting should be provided.	N/A	N/A
4X Building Maintenance			
4X-1	Objective: Building design detail provides protection from weathering.		
		Comments	Consistency
Design Guidance:			
	A number of the following design solutions are used: <ul style="list-style-type: none"> • 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. 	N/A	N/A
4X-2	Objective: Systems and access enable ease of maintenance.		

		Comments	Consistency
Design Guidance:			
	Window design enables cleaning from the inside of the building.	The internal design does not enable the windows to be cleaned from the inside	N/A
	Building maintenance systems should be incorporated and integrated into the design of the building form, roof and façade.	Building maintenance will be included	YES
	Design solutions do not require external scaffolding for maintenance access.	N/A	N/A
	Manually operated systems such as blinds, sunshades and curtains are used in preference to mechanical systems.	Manually operated blind systems are used	YES
	Centralised maintenance, services and storage should be provided for communal open space areas within the building.	N/A	N/A
4X-3	Objective: Material selection reduces ongoing maintenance costs.		
		Comments	Consistency
Design Guidance:			
	<p>A number of the following design solutions are used:</p> <ul style="list-style-type: none"> 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. 	The proposal comprises substantial glazing with a mix of painted and clad surfaces. Materials selected are robust, durable and of high-quality. Surfaces such as painted masonry are easily cleaned.	YES

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