APPENDICES

I DESIGN INTEGRITY PANEL RESPONSES

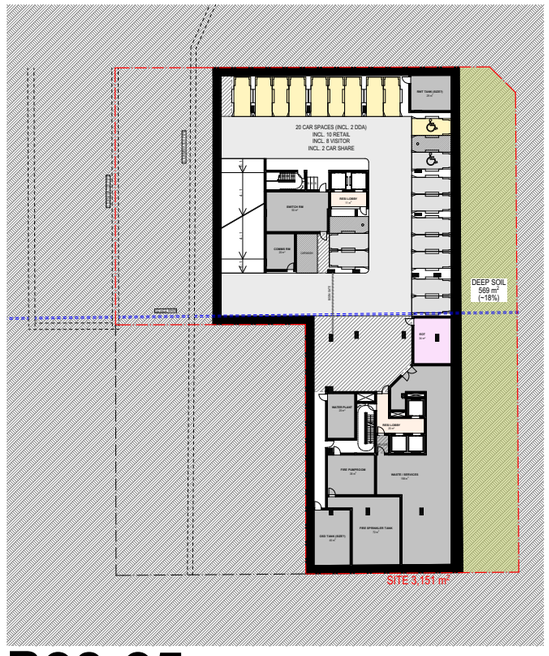
i design integrity panel responses

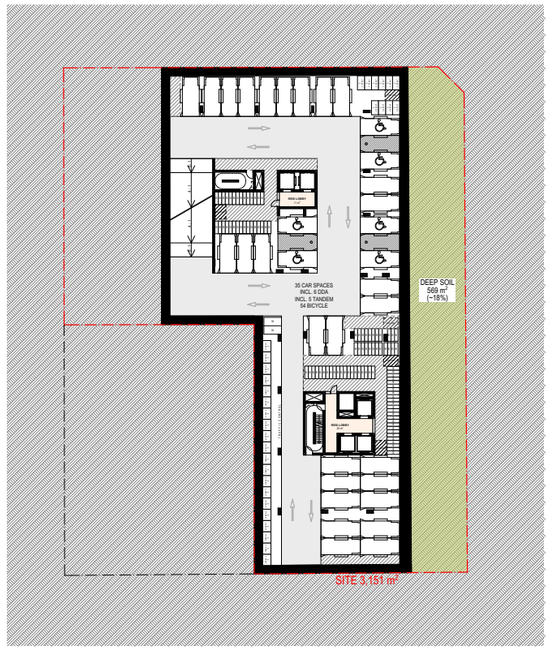
DESIGN INTEGRITY PANEL

COMPETITION SCHEME

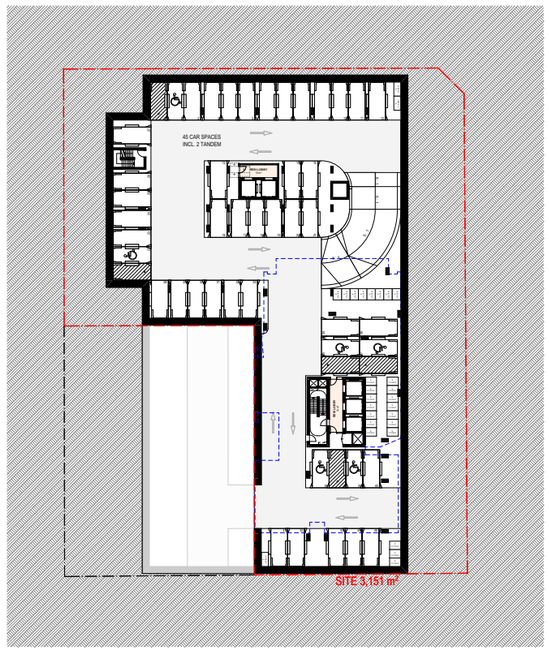
DESIGN REFINEMENT

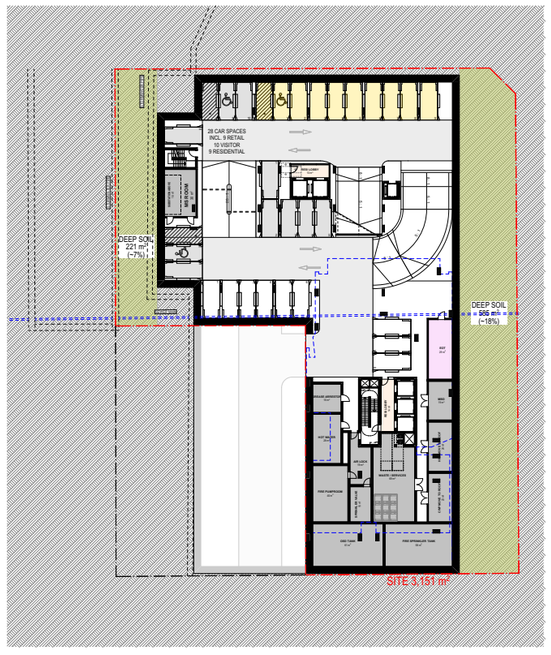
B01





B02-05





Jury

Comment 01

Further development of loading, basement and carparking design, and the treatment of underground sewer and stormwater infrastructure is required, ensuring alignment with technical objectives and constructability.

Improved Circulation: Basement layout reconfigured to enhance vehicle movement, efficiency, and access.

Loading Dock Relocation: Ground floor loading dock repositioned, prompting ramp relocation to Basement 1 for smoother entry and exit.

Optimised Car Parking: Clearer structural grid and simplified circulation improved legibility and reduced travel distances.

Reduced Tandem Spaces: Rationalised parking layout decreased tandem bays, improved safety and user convenience.

Setback Coordination: Minor encroachments within western setback allowed for diversion and upgrading of underground services.

i design integrity panel responses

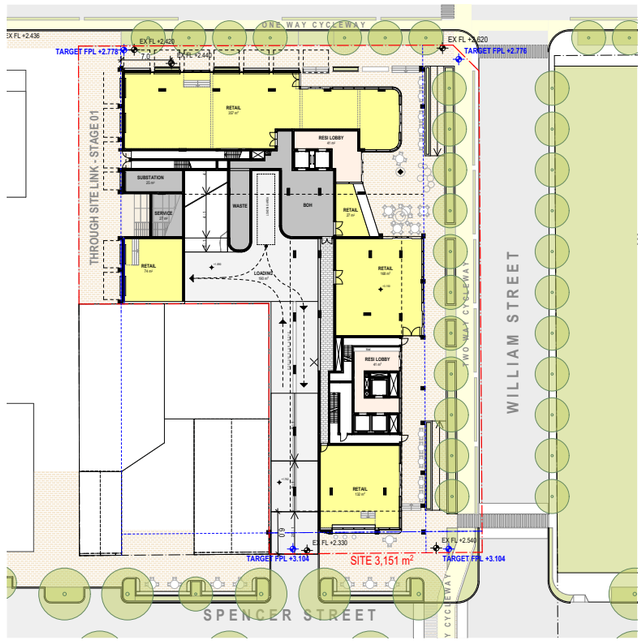
DESIGN INTEGRITY PANEL

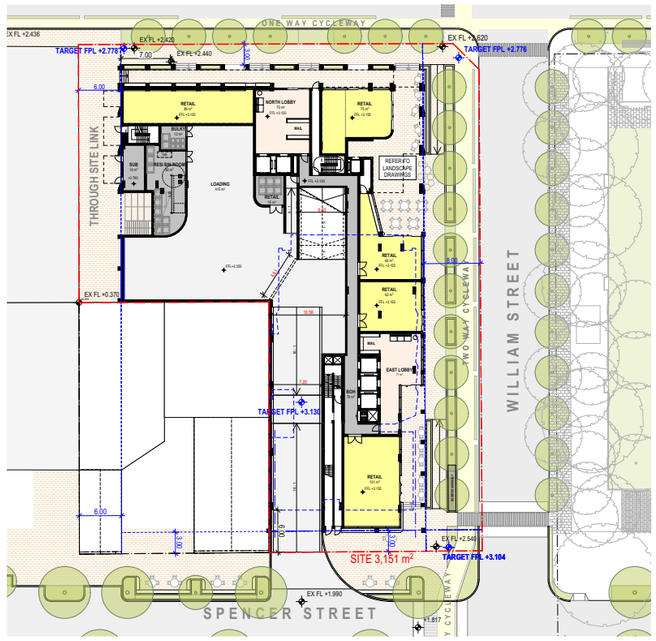
COMPETITION SCHEME

DESIGN REFINEMENT

PUBLIC DOMAIN AND GROUND FLOOR

L00





Jury

Comment 01

The dynamic and flexible nature of the retail offering was considered a positive, however, the Jury would expect further refinement and integration with the public domain once the retail strategy has been developed.

L00 - LANDSCAPE DESIGN

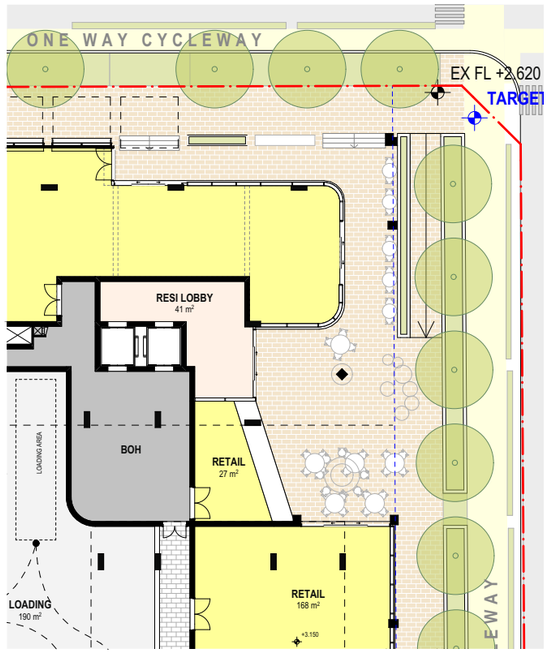
1. TERRACE STEPS ON QUEEN ST FRONTAGE
2. EXTENSIVE TREE CANOPY WITH RAIN GARDEN OPPORTUNITIES
3. IN-GROUND BUFFER PLANTING AND LARGE TREE CANOPY IN DEEP SOIL
4. PRPOSED TWO-WAY CYCLE WAY
5. GROUND FLOOR ACTIVATION AND OUTDOOR DINING ON BOTH SIDES OF THE STREET
6. RAISED PLANTERS WITH NATIVE FEATURE PLANTING
7. RAMP ACCESS TO ACTIVATED RETAIL FRONTAGE

i design integrity panel responses

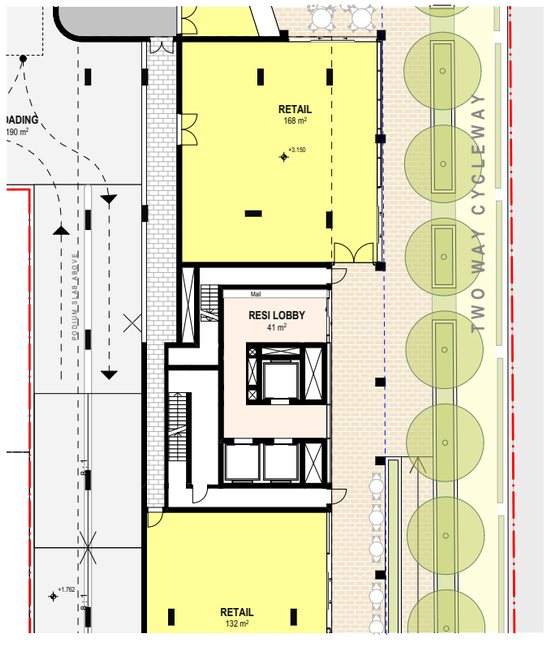
DESIGN INTEGRITY PANEL

COMPETITION SCHEME

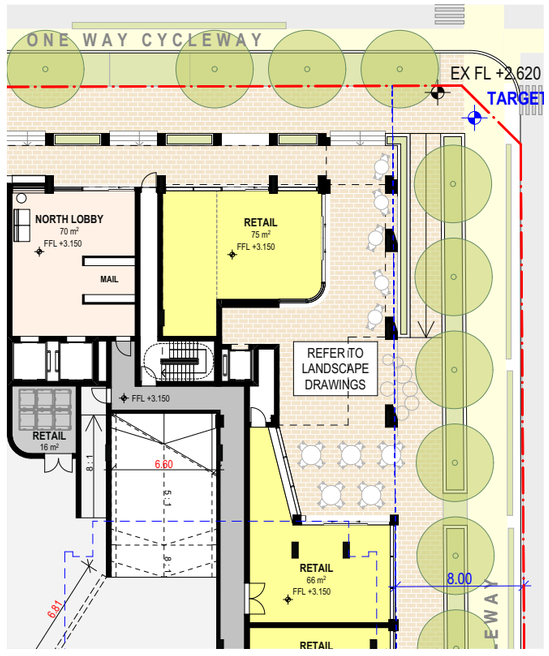
Queens Road Lobby

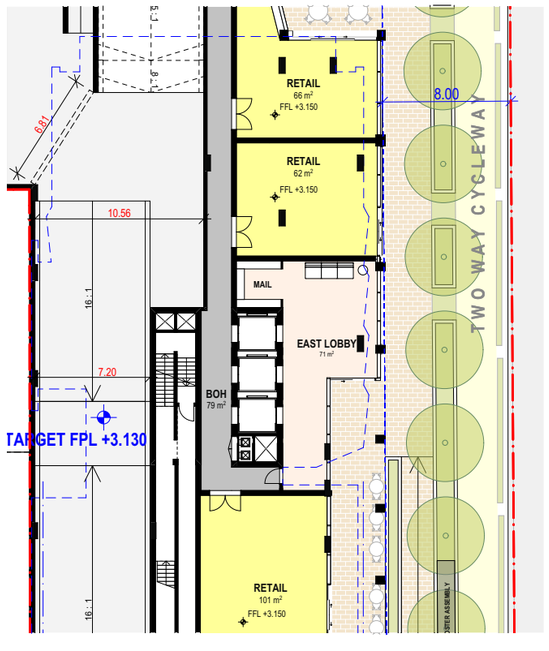


William St Lobby



DESIGN REFINEMENT





PUBLIC DOMAIN AND GROUND FLOOR

Jury

Comment 02

The lobby is lacking size and character given the scale of the tower and as such, it is recommended to consider the lobby with greater spatial generosity and architectural presence.

i design integrity panel responses

DESIGN INTEGRITY PANEL

COMPETITION SCHEME

View West

DESIGN REFINEMENT

View South

PODIUM

Jury

Comment 01 + 02

The northern elevation above the 2 storey street wall to Queens Road should be reconsidered to provide a more consistent podium materiality that would strengthen its relationship with the rest of the podium and street whilst creating opportunities for sun shading and articulation.

The eastern elevation of the northern building should also be reconsidered to provide a more consistent materiality with the rest of the podium.

Refined Northern Podium: Enhanced material language and corner geometry for a stronger urban response and façade cohesion.

Stepped Corner Form: Re-sculpted podium corner improved geometric transition and unified the two building wings.

Material Palette: Two-level brick podium grounded the form, complemented by lighter upper elements to express verticality and reduce bulk.

Detailing Strategy: Varied brick coursing, reveals, and balcony treatments added depth and differentiation while maintaining material consistency.

i design integrity panel responses

DESIGN INTEGRITY PANEL

COMPETITION SCHEME

North elevation

East elevation

DESIGN REFINEMENT

PODIUM

Jury

Comment 01 + 02

The northern elevation above the 2 storey street wall to Queens Road should be reconsidered to provide a more consistent podium materiality that would strengthen its relationship with the rest of the podium and street whilst creating opportunities for sun shading and articulation.

The eastern elevation of the northern building should also be reconsidered to provide a more consistent materiality with the rest of the podium.

i design integrity panel responses

DESIGN INTEGRITY PANEL

COMPETITION SCHEME

PODIUM FACADE SPLAY

DESIGN REFINEMENT

PODIUM FACADE SPLAY

PODIUM

Jury

Comment 03

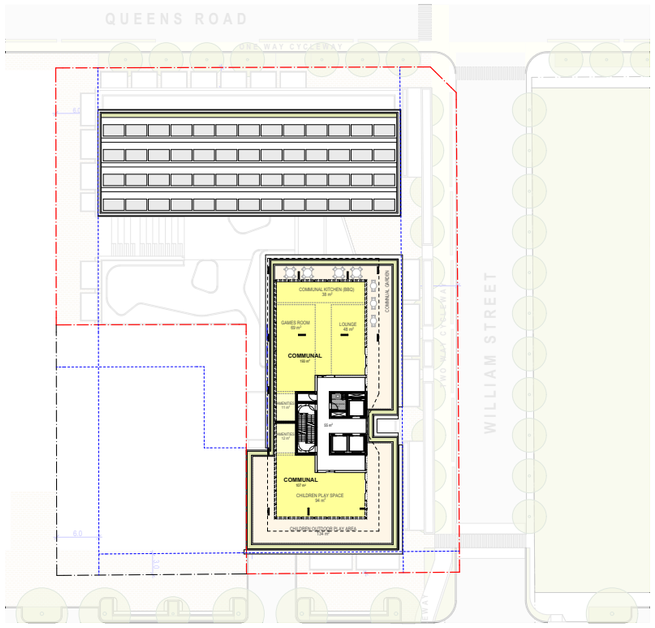
Greater solidity in the podium should be explored to improve privacy for residents.

i design integrity panel responses

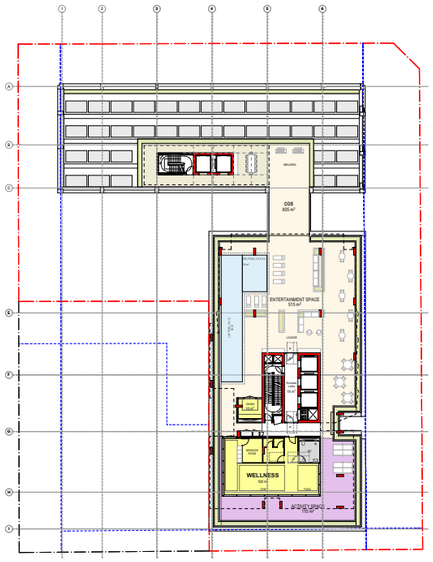
DESIGN INTEGRITY PANEL

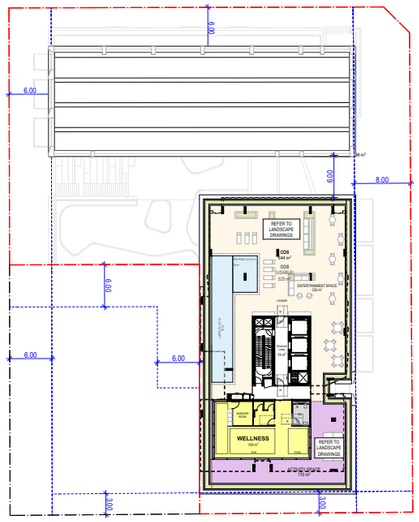
COMPETITION SCHEME

L05



DESIGN REFINEMENT





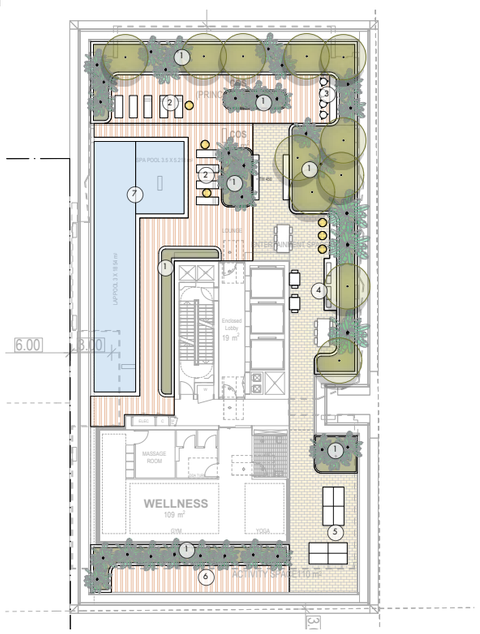
PODIUM

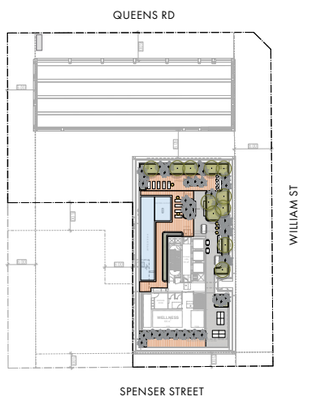
Jury

Comment 04

The design should investigate the potential for communal open space on the rooftop of the northern podium.

L05 - LANDSCAPE DESIGN





LEGEND

1. RAISED PLANTERS WITH SHRUBS AND NATIVE PLANTING
2. CABANA AND LOUNGE BEDS
3. BAR SETTING WITH STOOLS
4. BBQ AND OUTDOOR DINING AREA
5. TABLE TENNIS AREA
6. FLEXIBLE DECK / OUTDOOR YOGA
7. POOL AND SPA

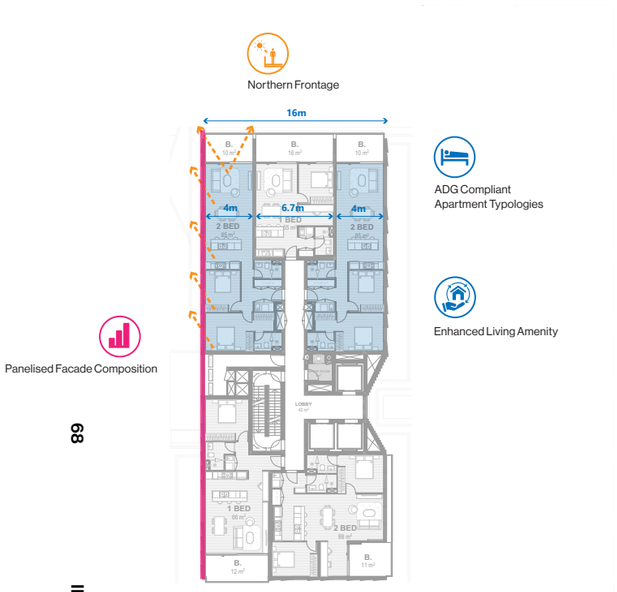
Land+ Form

i design integrity panel responses

DESIGN INTEGRITY PANEL

COMPETITION SCHEME

Tower



DESIGN REFINEMENT

FACADE

Jury

Comment 01

The western façade requires further development.

i design integrity panel responses

DESIGN INTEGRITY PANEL

COMPETITION SCHEME

View West

DESIGN REFINEMENT

FACADE

Jury

Comment 02

There are concerns with the effectiveness of the shallow angled façade, and its expression could be amplified to also provide a more functional purpose to create openings with a northerly aspect that provide views whilst achieving thermal comfort through balancing solar access and sun shading.

Enhanced Façade Modulation: Deeper projections and clearer vertical rhythm improved architectural expression and identity.

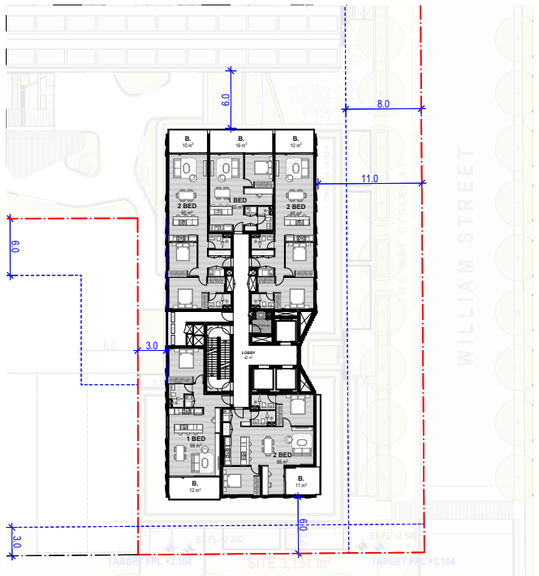
Optimised Solar Performance: Increased façade depth and refined window placement balanced solar access and shading for better thermal comfort.

Improved Outlook & Amenity: Reoriented openings and balconies captured northern views toward the park and Parramatta River.

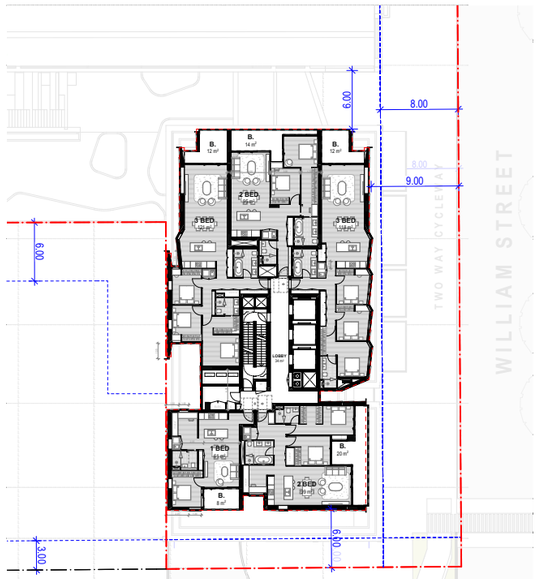
Refined Apartment Planning: Enhanced corner layouts and more dual-aspect dwellings improved livability, daylight, and overall market appeal.

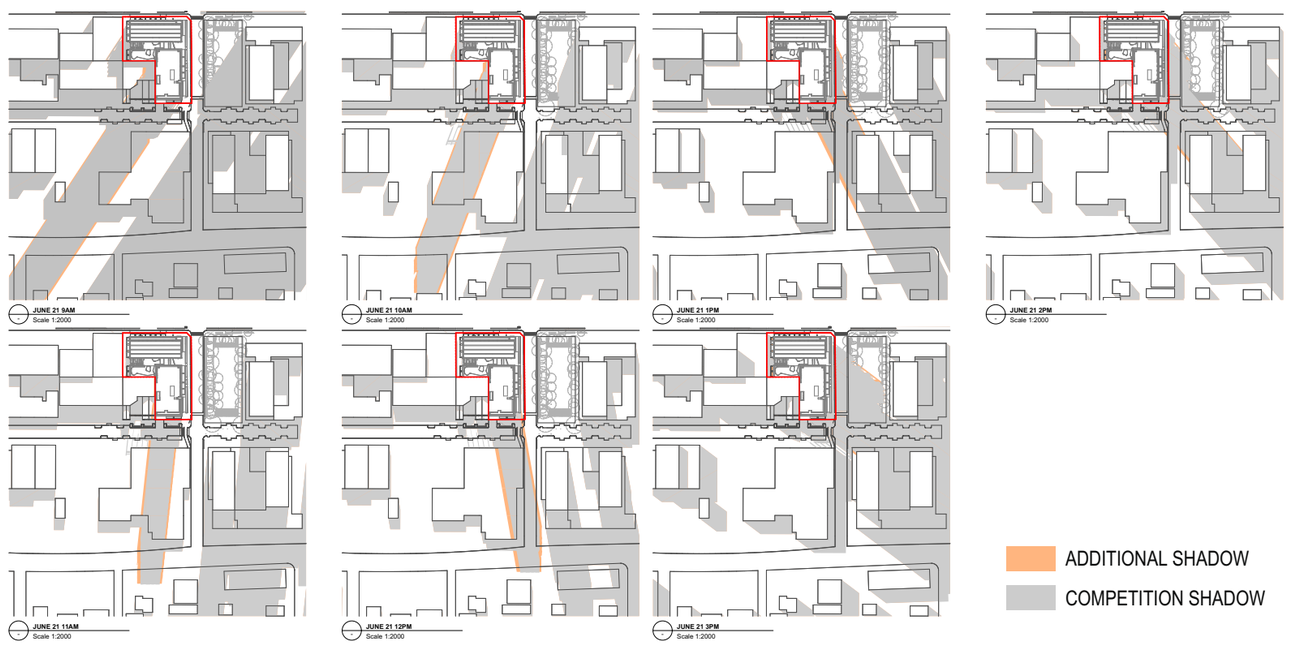
DESIGN INTEGRITY PANEL

COMPETITION SCHEME



DESIGN REFINEMENT





SETBACKS

Jury

Comment 03

Subject to support from the consent authority, support is given to exploring encroachment into setbacks, particularly to the east and west, where this offers opportunity to improve residential amenity and building articulation, provided it does not result in adverse impacts on the surrounding development, does not result in blank walls and can still comply with the relevant NCC standards. One potential area to investigate this would be to reconfigure the south-eastern apartment so that the balcony wraps around the lift core (within the setback) and makes better use of the premium eastern façade, which offers views to the park and Sydney Harbour. It is important that any change maintains the strong verticality of the eastern façade and does not have significant adverse overshadowing impacts.

Deepened Façade Geometry: Enhanced articulation improved solar access, daylight penetration, and visual depth while strengthening market appeal.

Setback Encroachments: Selective projections into eastern and western setbacks maximised northern aspect, improved apartment outlook, façade modulation, and spatial efficiency with better structural alignment and negligible overshadowing impact.

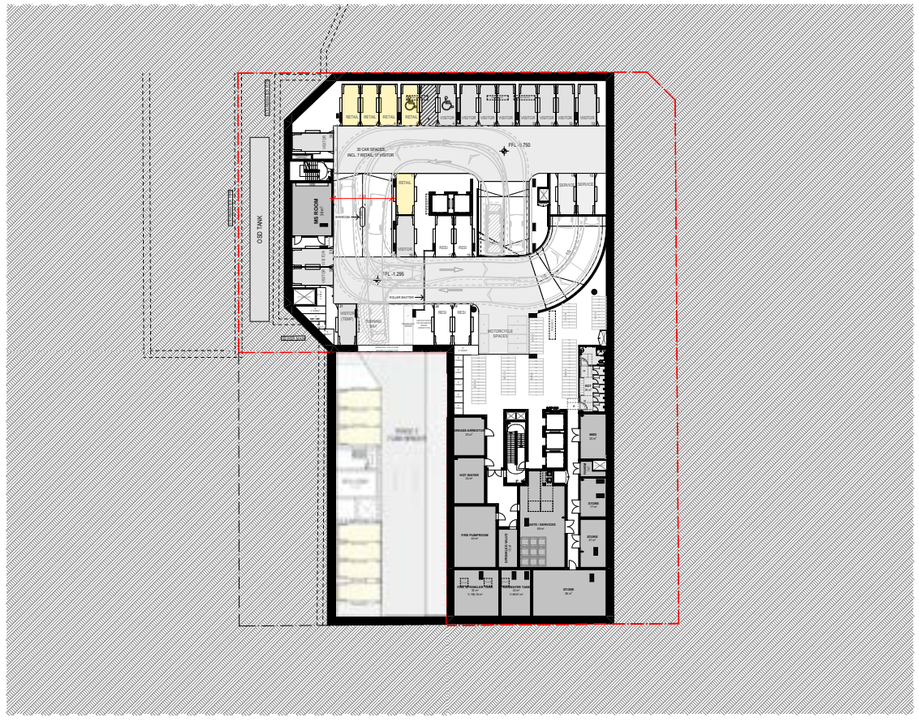
South-Eastern Balcony Reconfiguration: Balcony extended to capture premium park and river views, enhanced amenity and reinforced the façade's vertical rhythm.

Improved Apartment Planning: Increased dual-aspect dwellings and optimised layouts enhanced livability and overall residential value. Boutique layouts offered greater flexibility and individuality compared with the more standardised, "box-like" configurations of the adjacent Deicorp development. Refined scheme increased the proportion of 3-bedrooms dwellings, catering to downsizers and intergenerational families.

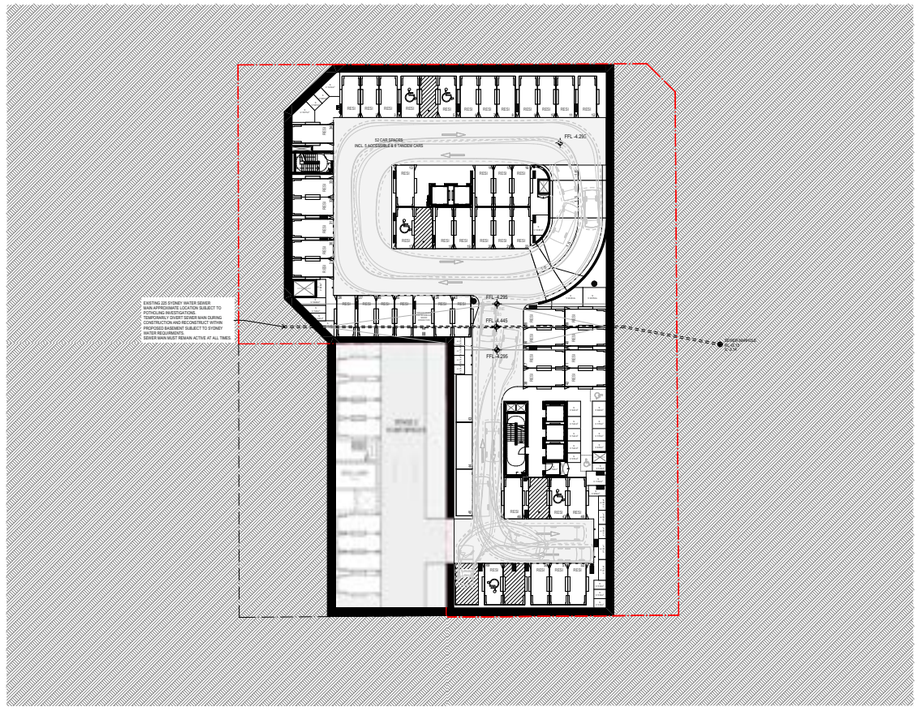
II DEVELOPMENT ANALYSIS OF 10-12 SPENCER STREET

ii DEVELOPMENT ANALYSIS OF 10-12 SPENCER STREET

DEVELOPMENT POTENTIAL ANALYSIS



BASEMENT 1

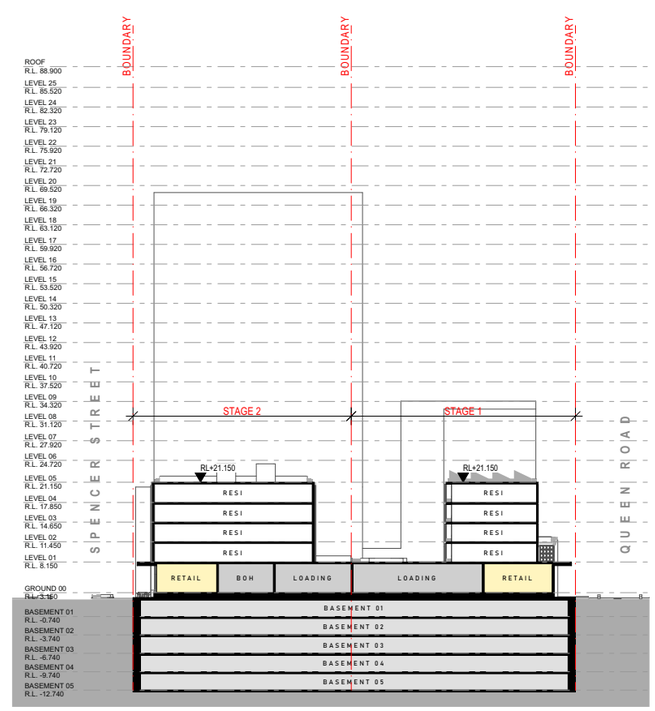


BASEMENT 2-5

The proposal anticipates future redevelopment of adjoining land and is designed not to prejudice reasonable outcomes on neighbouring sites.

Tower siting, setbacks and interface articulation support fair daylight, outlook and privacy performance, while core/service placement creates a robust boundary condition for future build-out. At ground level, public-domain and pedestrian links remain legible and do not rely on permanent low-scale neighbours. The scheme therefore supports orderly precinct intensification and remains effective as both a standalone building and part of a future consolidated context.

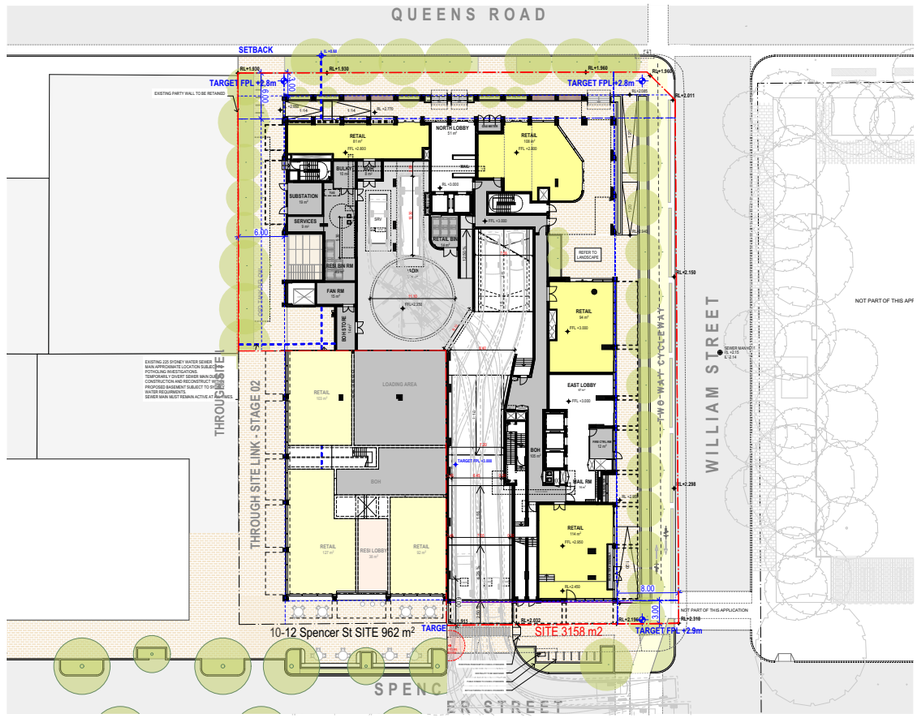
	Parking		
	Total	Retail	Resi
B5	**8**	0	8
B4	**8**	0	8
B3	**8**	0	8
B2	**8**	0	8
B1	**7**	7	0
	39	**7**	**32**



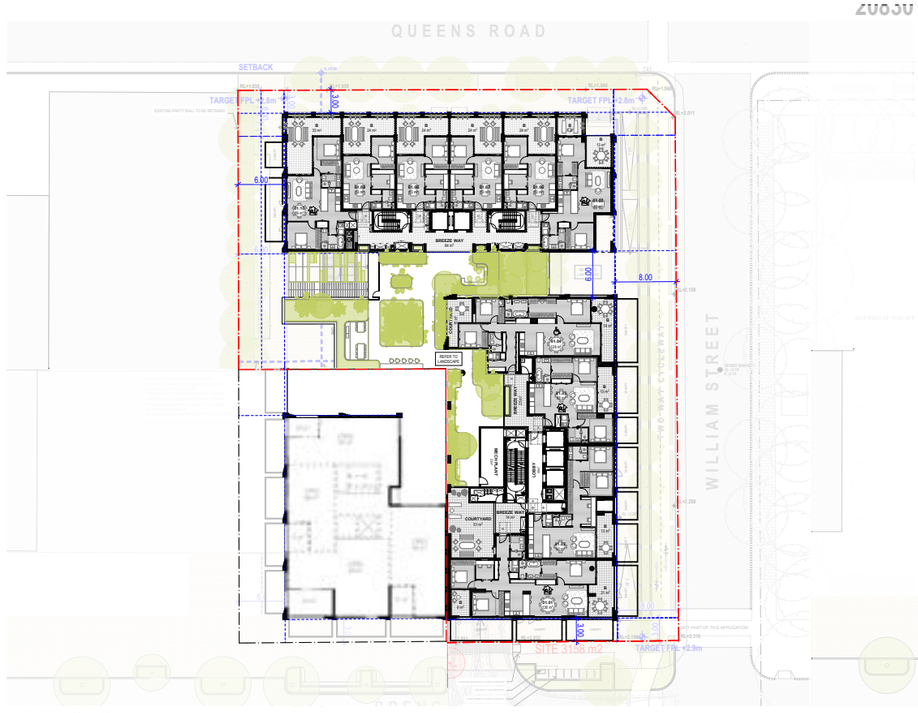
SECTION B

ii DEVELOPMENT ANALYSIS OF 10-12 SPENCER STREET

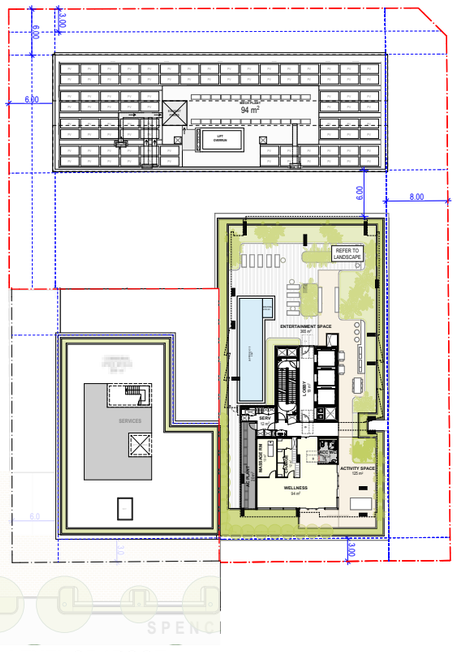
DEVELOPMENT POTENTIAL ANALYSIS



GROUND LEVEL



LEVEL 01-04



LEVEL 05 / ROOF

The design recognises likely future intensification of adjacent sites and maintains compatibility with that scenario.

Envelope planning and interface treatment avoid adversely affecting neighbouring development potential or imposing unnecessary constraints. Openings, articulation and landscape buffers moderate edge impacts, and key amenity spaces are oriented to reduce reliance on undeveloped adjoining land.

The proposal treats current boundaries as interim conditions and supports long-term precinct integration, while maintaining amenity and public-domain quality

Site Area	961	sqm approx
Total GFA	1772	sqm approx
FSR	1.8	:1
Height	18.70	m to roof
	21.80	m to overrun
Setbacks	0	m north
(approx)	3	m south
	0	m east
	6	m west
Communal	259	sqm approx
Open space	27%	

	Total GFA	Retail GFA	Resi GFA	Resi NSA
GL	360	322	38	
L1	353	0	353	323
L2	353	0	353	323
L3	353	0	353	323
L4	353	0	353	323
	1772	**322**	**1450**	**1292**

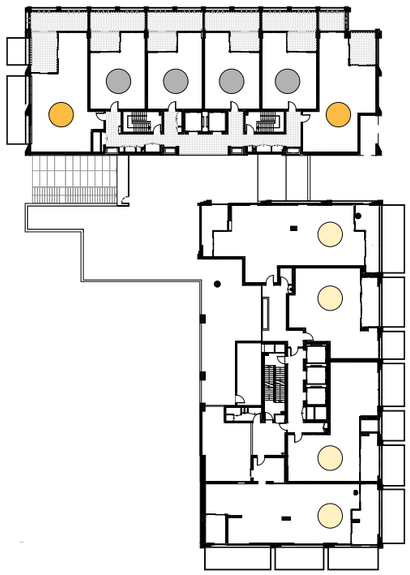
	1 BED	2 BED	3 BED	TOTAL
GL				
L1	1	2	1	4
L2	1	2	1	4
L3	1	2	1	4
L4	1	2	1	4
	4	**8**	**4**	**16**
	25%	**50%**	**25%**	**100%**

	Solar	Nil Solar Cross Vent
GL		
L1	4	0	3
L2	4	0	3
L3	4	0	3
L4	4	0	3
	16	**0**	**12**
	100%	**0%**	**75%**

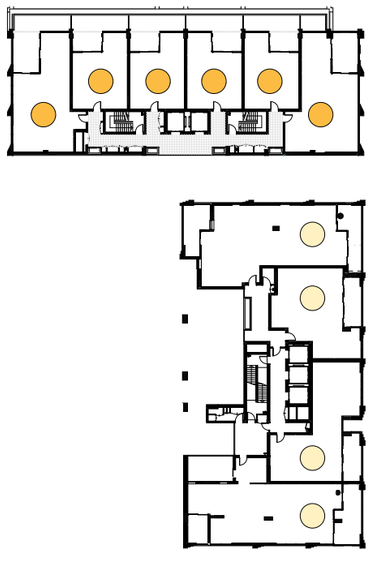
III ADG ASSESSMENT TABLES

iii ADG ASSESSMENT TABLES

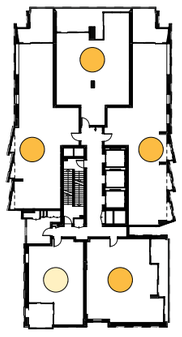
SOLAR ACCESS



01 LEVEL 01
SCALE: 1:300@A1



02 TYPICAL LEVEL 02-04
SCALE: 1:300@A1



03 TYPICAL LEVEL 06-21
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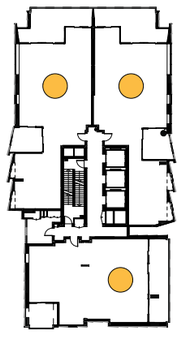


04 TYPICAL LEVEL 23-25
SCALE: 1:300@A1

≥ 2 HOUR SUN
< 2 HOUR SUN
NO SUN

>2HR SOLAR	97/134	71%
<2HR SOLAR	33/134	23%
NO SOLAR	4/134	3%

Solar access is optimised by providing more units towards the northern aspect. All other units face east or west, receiving direct solar access throughout the remainder of the year. No single-aspect south-facing apartments are proposed. Apartments not achieving the minimum requirements typically have large private open spaces, achieve adequate natural ventilation and access to key views of surrounding natural features and public open spaces.

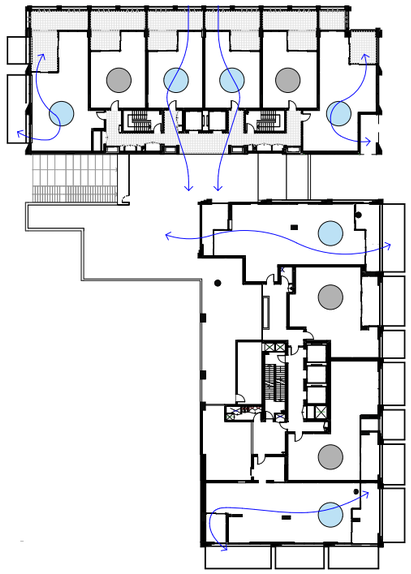
4 apartments receive no direct sunlight to living rooms between 9am - 3pm in mid-winter due to deep wintergardens and are covered by balconies above. Despite this, these are north facing apartments with generous open spaces. Wintergardens can be treated as extensions of the internal living area that will receive direct solar amenity throughout the year.

NOT TO SCALE. REFER TO ARCHITECTURAL DRAWING SET

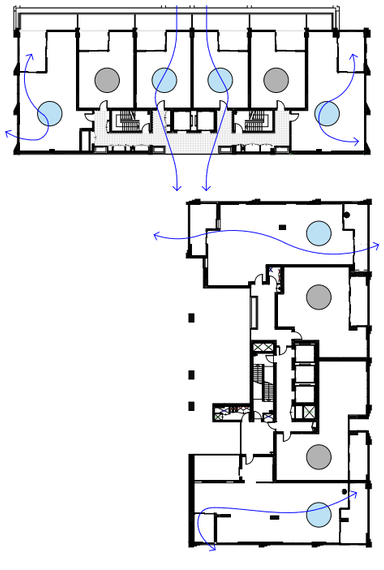
iii ADG ASSESSMENT TABLES

NATURAL VENTILATION

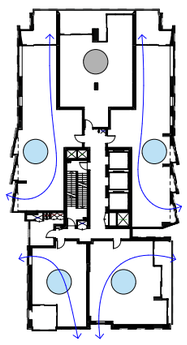
TOTAL CROSS-VENT: **101 APTS / 75%**
TOTAL FIRST 9 STOREYS: **36 APTS OF 55 / 65%**



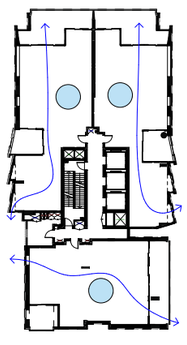
01 LEVEL 01
SCALE: 1:300@A1



02 TYPICAL LEVEL 02-04
SCALE: 1:300@A1



03 TYPICAL LEVEL 06-22
SCALE: 1:300@A1



04 TYPICAL LEVEL 23-25
SCALE: 1:300@A1

NOTE:
CROSS VENTILATION ONLY APPLIES TO FIRST 9 STOREY (ADG)

CROSS VENTILATION
NO CROSS VENTILATION

NATURAL CROSS VENTILATION 65%
36 / 55 units (first 9 storeys)

Natural ventilation is achieved by optimising floorplates to achieve dual aspect apartments to all building corners and cross through apartments in order to maintain good solar access in mid-winter as well as orientation to views.

Due to the proximity of the proposed development to Queens Road, traffic noise may impact the internal amenity, and an alternative means of fresh air ventilation may be required for residential spaces on noise-affected facades. Refer to the acoustic report.

NOT TO SCALE. REFER TO ARCHITECTURAL DRAWING SET

iii ADG ASSESSMENT TABLES
COMMUNAL OPEN SPACE

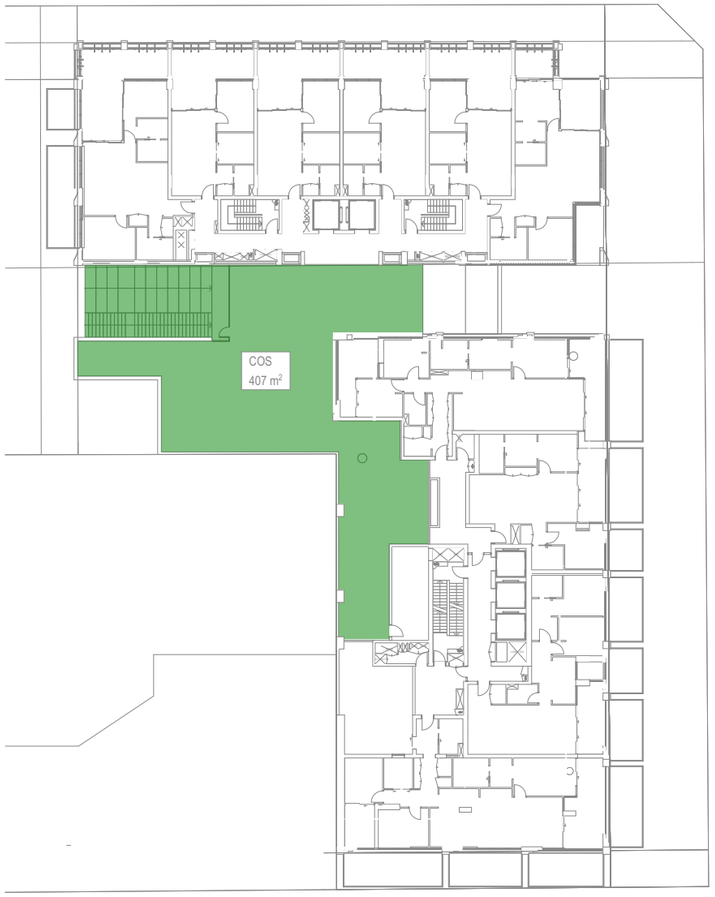
SITE AREA: **3,158.4 m²**
MINIMUM COS: **25% / 790 m²**
MINIMUM COS TO ACHIEVE 2HR OF SOLAR ACCESS: **395 m²**

PROVIDED COS: **874 m² (27% OF SITE AREA)**

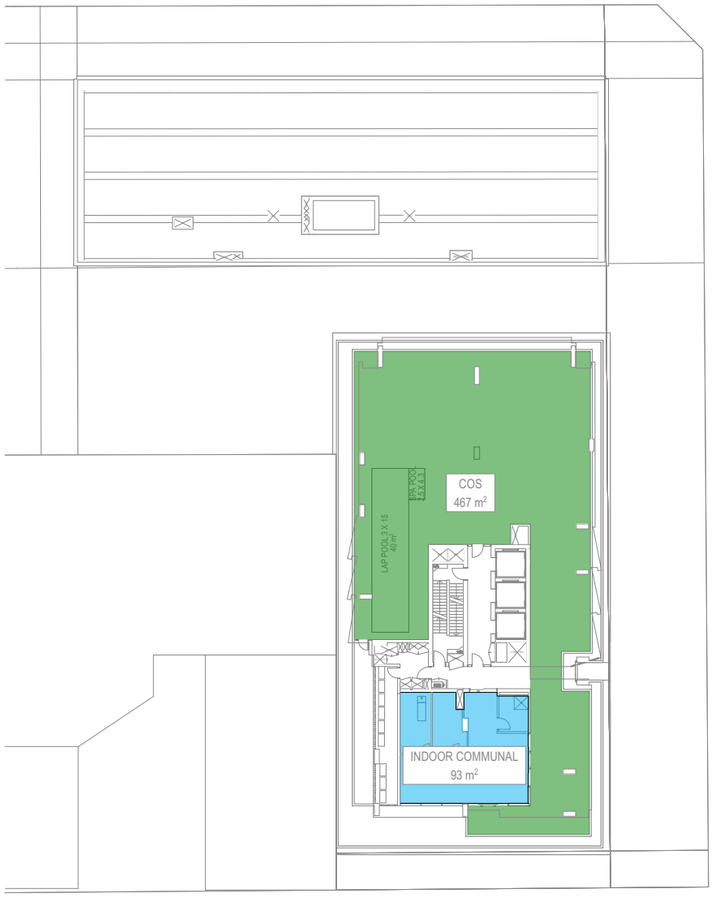
SUMMARY

OUTDOOR COMMUMAL SPACE
INDOOR COMMUNAL SPACE

L1 COMMUNAL OUTDOOR	407 m²
L5 COMMUNAL OUTDOOR	467 m²
L5 COMMUNAL INDOOR	93 m²
TOTAL COMMUNAL OPEN SPACE	**874 m²**
TOTAL COMMUNAL AREA	**967 m²**



01 LEVEL 01
SCALE: 1:200@A1



02 LEVEL 05
SCALE: 1:200@A1

COMMUNAL OPEN SPACE	27% 874 m²

Communal open space is proposed at the L1 and L5 podium roof top level with an aspect towards key views and direct solar access.

Communal open space represents 27% of the site area, and is supported by an additional 93sqm of indoor communal facilities which is offerred as an additional bonus aobve the minimum required communal open space under the ADG.

Further to this, residents have access to generous private open spaces such as balconies and wintergardens. Common lobbies are extended by breezeways and courtyards which add to the variety of activities and social interaction reserved for residents only, while a public pedestrian-focused and landscaped ground plane supports the network of available open spaces to residents and visitors within the site extents.

NOT TO SCALE. REFER TO ARCHITECTURAL DRAWING SET

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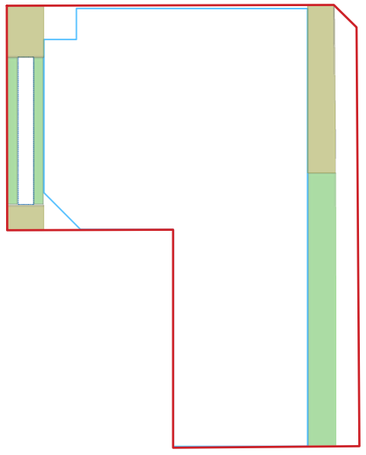
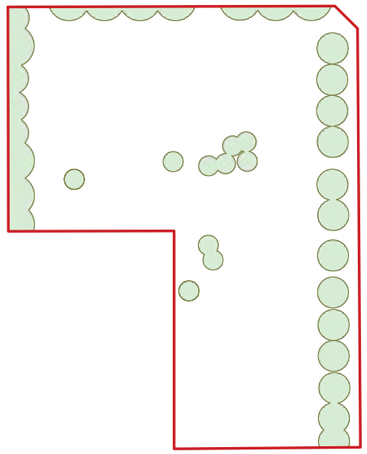
DEEP SOIL



DEEP SOIL

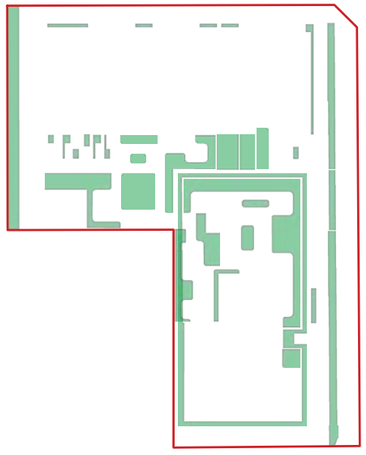
DEEP SOIL 6m = 196m^2 6%

DEEP SOIL ON STRUCTURE = 287m^2 9%



TREE CANOPY

PROPOSED CANOPY COVERAGE= 527m^2 16%



LANDSCAPE AREA

LANDSCAPE AREA = 633m^2 20%

NOT TO SCALE. REFER TO LANDSCAPE DRAWING SET

DEEP SOIL	6% 196 m^2

Deep soil zones are provided within the east and west setbacks at the ground level to support landscape outcomes and long-term street tree canopy growth in accordance with the Apartment Design Guide (ADG).

Deep soil areas represent approximately 6% of the site area outside of the basement footprint which is contained within the podium building outline above ground.

This is also supported by dedicated landscaped area which make up approximately 633 sqm which contributes to the overall site landscape provision, enhances visual amenity, supports biodiversity outcomes, and reinforces the green character of the development.

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SCHEDULES

ADG REF.	ITEM DESCRIPTION		NOTES
ADG COMPLIANCE TABLE			
PART 2	**DEVELOPING THE CONTROLS**		
2F	**BUILDING SEPARATION**		
	Objective: • ensure that new development is scaled to support the desired future character with appropriate massing and spaces between buildings • assist in providing residential amenity including visual and acoustic privacy, natural ventilation, sunlight and daylight access and outlook • provide suitable areas for communal open spaces, deep soil zones and landscaping.		
	Design Guidance		
	Up to four storeys/12 metres 12m between habitable rooms/balconies 9m between habitable and non-habitable rooms 6m between non-habitable rooms	CONSIDERED	6m building separation proposed between buildings. Window openings are strategically placed to ensure no habitable rooms are facing each other. Privacy screens are proposed to prevent overlooking between private and communal open space. Apartments receive adequate access to generous private open space with an aspect to views, solar access and natural ventilation.
	Five to eight storeys/up to 25 metres 18m between habitable room/balconies 12m between habitable and non-habitable rooms 9m between non-habitable rooms	CONSIDERED	Tower floorplate considers adjacent future development, 1-3m building separation is provided to the western boundary in lieu of 0m setback as per the DCP. Openings are oriented north or south to mitigate impact to privacy whilst providing rooms access to light, ventilation and outlooks to surrounding views.
	Nine storeys & above 24m between habitable room/balconies 18m between habitable and non-habitable rooms 12m between non-habitable rooms	CONSIDERED	As above
PART 3	**SITING THE DEVELOPMENT**		
3A	**SITE ANALYSIS**		
3A.1	**Objective**: Site analysis illustrated that design decisions have been based on opportunities and constraints of the site conditions and their relationship to the surrounding context.		
	Design Guidance		
	Each element in the Site Analysis Checklist is addressed.	YES	
3B	**ORIENTATION**		
3B.1	**Objective:** Building types and layouts respond to the streetscape and site while optimising solar access within the development		
	Design Guidance		
	Buildings along the street frontage define the street by facing it and incorporating direct access from the street	YES	
	Where the street frontage is to the east or west, rear buildings are orientated to the north	YES	
	Where the street frontage is to the north or south, overshadowing to the south is minimised & buildings behind the street frontage are orientated to the east and west.	YES	
3B.2	**Objective:** Overshadowing of neighbouring properties is minimised during mid-winter.		
	Design Guidance		
	Living areas, private open space & communal open space receive solar access in accordance with section 3D Communal & Public Open Space and section 4A Solar & Daylight Access.	CONSIDERED	The proposed overshadowing is largely consistent with that of the envisaged DCP envelope, with only minor additional shadow resulting from the setback variations, which will not result in any material impact.
	Solar access to living rooms, balconies & private open spaces of neighbours are considered.	CONSIDERED	
	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%.	CONSIDERED	
	If the proposal will reduce the solar access of neighbours, building separation is increased beyond minimums contained in 3F Visual Privacy.	YES	
	Overshadowing is minimised to the south or downhill by increased upper level setbacks.	N/A	
	Buildings are orientated at 90 deg to the boundary with neighbouring properties to minimise overshadowing & privacy impacts, particularly where minimum setbacks are used & where buildings are higher than the adjoining development.	CONSIDERED	Future development is considered. Increased setbacks are provided with stratefy window placement and orientation to minimise privacy impacts whilst maintaining access to views, light and natural ventilation
	A minimum of 4 hours of solar access is retained to solar collectors 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.		
	Design Guidance		
	Terraces, balconies and courtyard apartments have direct street entry, where appropriate.	N/A	
	Changes in level between private terraces, front gardens & dwelling entries above the street level provide surveillance & improve visual privacy for ground level dwellings.	N/A	
	Upper level balconies & windows overlook the public domain.	YES	
	Front fences & walls along street frontages use visually permeable materials & treatments. Height of solid fences or walls is limited to 1m.	N/A	

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	Length of solid walls is limited along street frontages.	YES	
	Opportunities for casual interaction between residents & the public domain is provided for. Design solutions may include seating at building entries, near letter boxes & in private courtyards adjacent to streets.	YES	
	In developments with multiple buildings and/or entries, pedestrian entries & spaces associated with individual buildings/entries are differentiated to improve legibility for residents, using the following design solutions: Architectural detailing; Changes in materials; Plant Species; Colours; Opportunities for people to be concealed are minimised.	YES	
3C.2	**Objective:** Amenity of the public domain is retained and enhanced.		
	Design Guidance		
	Planting is used to soften the edges of any raised terraces to the street, for example above sub-basement car parking.	YES	
	Mail boxes are located in lobbies, perpendicular to the street alignment or integrated into front fences where individual street entries are provided.	YES	
	The visual prominence of underground car park vents is minimised & located at a low level where possible.	YES	
	Substations, pump rooms, garbage storage areas & other service requirements are located in basement car parks or out of view.	YES	
	Ramping for accessibility is minimised by building entry location & setting ground floor levels in relation to footpath levels.	YES	
	Durable, graffiti resistant & easily cleanable materials are used.	YES	
	Where development adjoins public parks, open space or bushland, the design positively addresses this interface & uses the following design solutions: Street access, pedestrian paths & building entries are clearly defined; Paths, low fences & planting are clearly delineate between communal/private open space & the adjoining public open space; Minimal use of blank walls, fences & ground level parking.	YES	
	On sloping sites protrusion of car parking above ground level is minimised by using split levels to step underground car parking.	N/A	
3D	**COMMUNAL & 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.		
	Design Guidance	CONSIDERED	
	1. Communal open space has a minimum area equal to 25% of the site.	YES	Site Area 3158.4sqm Minimum required Communal Open Space 789.6sqm (25%) Achieved: 874sqm (27%)
	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).	NO	Reduced winter solar access results from site orientation and surrounding built form within an established urban context. The space has been configured to capture available sunlight throughout the day in targeted areas such as the proposed through-site link,and is supported by wind mitigation, considered landscaping, and varied seating areas to enhance comfort and usability. All private open space are genrous and have direct solar access in mid-winter, ensuring overall residential amenity is maintained across the development.
	Design Guidance		
	Communal open space is consolidated into a well-designed, easily identified & usable area.	YES	
	Communal open space have a minimum dimension of 3m. Larger developments should consider greater dimensions.	YES	
	Communal open space are co-located with deep soil areas.	NO	Whilst deep soil areas are located within the Publicly accessible open spaces at ground level, communal open spaces proposed on structures are supported by landscaped areas designed for a variety of plants and trees.
	Direct, equitable access are provided to communal open space areas from common circulation areas, entries & lobbies.	YES	
	Where communal open space cannot be provided at ground level, it is provided on a podium or roof.	YES	
	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 need to: 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 & facilities and/or provide contributions to public open space.	N/A	
3D.2	**Objective:** Communal open space is designed to allow for a range of activities, respond to site conditions and be attractive.		
	Design Guidance		
	Facilities are provided within communal open spaces & common spaces for a range of age groups (see 4F Common Circulation & Spaces), incorporating the following: Seating for individuals or groups; Barbeque areas; Play equipment or play areas; Swimming pools, gyms, tennis courts or common rooms.	YES	
	Location of facilities responds to microclimate & site conditions with access to sun in winter, shade in summer & shelter from strong winds & down drafts.	YES	
	Visual impacts of services are minimised, including location of ventilation duct outlets from basement car parks, electrical.	YES	
3D.3	**Objective:** Communal open space is designed to maximise safety.		
	Design Guidance		
	Communal open space & public domain should be readily visible from habitable rooms & private open space areas while maintaining visual privacy. Design solutions include: Bay windows; Corner windows; Balconies	YES	
	Communal open space is well lit.	YES	
	Communal open space/facilities that are provided for children & young people are safe and contained.	YES	
3D.4	**Objective:** Public open space, where provided, responds to the existing pattern & uses of the neighbourhood.		
	Design Guidance		
	Public open space is well connected with public streets along at least one edge.	YES	
	POS is connected with nearby parks & other landscape elements.	YES	

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	POS is linked through view lines, pedestrian desire paths, termination points & the wider street grid.	YES	
	Solar access is provided year round along with protection from strong winds.	YES	
	Opportunities for a range of recreational activities is provided for all ages.	YES	
	Positive street address & active street frontages are provided adjacent to POS.	YES	
	Boundaries are clearly defined between POS & private areas.	YES	
3E	**DEEP ZOIL ZONES**		
3E.1	**Objective:** Deep soil zones are suitable for healthy plant and tree growth, improve residential amenity and promote management of water and air quality.		
	Design Guidance		
	1. Deep soil zones are to meet the following minimum requirements: Deep soil zones are to meet the following minimum requirements: Site Area (sqm) / Minimum Dim (m) / Deep Soil Zone (% of site area) less than 650 / - / 7 650-1500 / 3 greater than 1500 / 6		Site Area 3158.4sqm Minimum required Deep Soil area: 221.1sqm (7%) Achieved: 196sqm (6%) - minimum 6m The total deep soil offering is supplemented by an additional adjoining 287sqm of deep soil on structure to support 527sqm of the proposed canopy coverage (16% of sie area) over the ground plane. The development further offers 25% of communal open space which includes 686sqm of landscaped area to support te objective for deep soil zones.
	Design Guidance		
	On some sites it may be possible to provide larger deep soil zones, depending on the site area & context: 10% of the site as deep soil on sites with an area of 650sqm - 1,500sqm; 15% of the site as deep soil on sites greater than 1,500sqm.	YES	
	Deep soil zones are located to retain existing significant trees & to allow for the development of healthy root systems, providing anchorage & stability for mature trees. Design solutions may include: Basement & sub-basement car park design that is consolidated beneath building footprints; Use of increased front & 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.	YES	
	Achieving the design criteria may not be possible on some sites including where: location & building typology have limited or no space for deep soil at ground level (e.g. central business district, constrained sites, high density areas, or in centres); there is 100% site coverage or non-residential uses at ground floor level. Where a proposal does not achieve deep soil requirements, acceptable stormwater management is achieved & alternative forms of planting provided.	YES	
3F	**VISUAL PRIVACY**		
3F.1	**Objective:** Adequate building separation distances are shared equitably between neighbouring sites, to achieve reasonable levels of external & internal visual privacy.		
	Design Guidance		
	1. Separation between windows & balconies is provided to ensure visual privacy is achieved. Minimum required separation distances from buildings to the side & rear boundaries are as follows: Building Height (m) / Habitable Rooms & Balconies (m) / Non-Habitable Rooms (m) up to 12 (4 storeys) / 6 / 3 up to 25 (5-8 storeys) / 9 / 4.5 12 / 6	YES	Whilst the building does not meet 12m internal building separation between the north and south buildings (6m proposed), visual privacy is achieved by careful window and opening placement so that there is no direct overlooking between habitable rooms & balconies. Facade screen treatment is applied to further improve visual privacy. Further to this, all apartments are east, west or north facing, receiving high level of solar, cross ventilation as well as view amenity.
	Design Guidance		
	Generally as the height increases, one step in the built from is desirable due to building separations. Any additional steps do not cause a 'ziggurat' appearance.	YES	
	For residential buildings next to commercial buildings, separation distances are measured as follows: Retail, office spaces & commercial balconies use the habitable room distances; Service & plant areas use the non-habitable room distances.	YES	
	New development are located & oriented to maximise visual privacy between buildings on site & for neighbouring buildings. Design solutions include: site layout & building are orientated to minimise privacy impacts (see 3B Orientation); on sloping sites, apartments on different levels have appropriate visual separation distances (see pg. 63 figure 3F.4).	YES	
	Apartment buildings have an increased separation distance of 3m (in addition to 3F-1 Design Criteria) when adjacent to a different zone that permits lower density residential development, to provide for a transition in scale & increased landscaping (pg. 63 figure 3F.5).	YES	
	Direct lines of sight are avoided for windows & balconies across corner.	YES	
	No separation is required between blank walls.	YES	

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3F.2	**Objective:** Site & Building design elements increase privacy without compromising access to light & air and balance outlook & views from habitable rooms & private open spaces.	
	Design Guidance	
	Communal open space, common areas & access paths are separated from private open space & windows to apartments, particularly habitable room windows. Design solutions include: setbacks; solid or partially solid balustrades on 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 & outlook in another; raising apartments or private open space above the public domain or communal open space; planter boxes incorporated into walls & balustrades to increase visual separation; pergolas or shading devices to limit overlooking of lower apartments or private open space; on constrained sites where it can be demonstrated that building layout opportunities are limited, fixed louvres or screen panels on windows and/or balconies.	YES
	Bedrooms, living spaces & other habitable rooms are separated from gallery access & other open circulation space by the apartment's service areas.	YES
	Balconies & private terraces are located in front of living rooms to increase internal privacy areas are at the façade line..	YES
	Windows are offset from the windows of adjacent buildings.	YES
	Recessed balconies and/or vertical fins are used between adjacent balconies.	YES
3G	**PEDESTRIAN ACCESS AND ENTRIES**	
3G.1	**Objective:** Building entries & pedestrian access connects to add addresses the public domain.	
	Design Guidance	
	Multiple entries (including communal building entries & individual ground floor entries) activate the street edge.	YES
	Entry locations relate to the street & subdivision pattern, and the existing pedestrian network.	YES
	Building entries are clearly identifiable. Communal entries are clearly distinguishable from private entries.	YES
	Where street frontage is limited, a primary street address should be provided with clear sight lines and pathways to secondary building entries.	YES
3G.2	**Objective:** Access, entries & pathways are accessible and easy6 to identity.	
	Design Guidance	YES
	Building access areas including lift lobbies, stairwells & hallways are clearly visible from the public domain & communal spaces.	YES
	The design of ground floors & underground car parks minimise level changes along pathways & entries.	YES
	Steps & ramps are integrated into the overall building & landscape design.	YES
	For large developments 'way finding' maps are provided to assist visitors & residents.	YES
	For large developments electronic access & audio/video intercom are provided to manage access.	YES
3G.3	**Objective:** Large sites provide pedestrian link for access to streets & connection to destinations.	
	Design Guidance	
	Pedestrian links through sites facilitate direct connections to open space, main streets, centres & public transport.	YES
	Pedestrian links are direct, have clear sight lines, are overlooked by habitable rooms or private open spaces of dwellings, are well lit & contain active uses, where appropriate.	YES
3H	**VEHICLE ACCESS**	
3H.1	**Objective:** Vehicle access points are designed & located to achieve safety, minimise conflicts between pedestrians & vehicles and create high quality streetscapes.	
	Design Guidance	
	Car park access is integrated with the building's overall facade. Design solutions include: materials & colour palette minimise visibility from street; security doors/gates minimise voids in the facade; where doors are not provided, visible interiors reflect facade design, and building services, pipes & ducts are concealed.	YES
	Car park entries are located behind the building line.	YES
	Vehicle entries are located at the lowest point of the site, minimising ramp lengths, excavation & impacts on the building form and layout.	YES
	Car park entry & access are located on secondary streets or lanes where available.	YES
	Vehicle standing areas that increase driveway width & encroach into setbacks are avoided streetscape.	N/A
	Access point is located to avoid headlight glare to habitable rooms.	YES
	Adequate separation distances are provided between vehicle entries & street intersections.	YES
	The width & number of vehicle access points are limited to the minimum.	YES
	Visual impact of long driveways is minimised through changing alignments & screen planting.	YES
	The need for large vehicles to enter or turn around within the site is avoided.	YES
	Garbage collection, loading & servicing areas are screened.	YES
	Clear sight lines are provided at pedestrian & vehicle crossings.	YES
	Traffic calming devices, such as changes in paving material or textures, are used where appropriate.	YES
	Pedestrian & vehicle access are separated & distinguishable. Design solutions include: Changes in surface materials; Level changes; Landscaping for separation.	YES

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3J	**BICYCLE AND CAR PARKING**		
3J.1	**Objective:** Carparking is provided based on proximity to public transport in metropolitan Sydney & centres in regional areas.		
	Design Guidance		
	1. For development in the following locations: on sites that are within 800m of a railway station or light rail stop in the Sydney Metropolitan Area; or on land zoned, and sites within 400m of land zoned, B3 Commercial Core, B4 Mixed Use or equivalent in a nominated regional centre the minimum car parking requirement for residents & visitors is set out in the Guide to Traffic Generating Developments, or the car parking requirement prescribed by the relevant council, whichever is less. The car parking needs for a development must be provided off street.	YES	
	Design Guidance		
	Where a car share scheme operates locally, car share parking spaces are provided within the development.	N/A	
	Where less car parking is provided in a development, council do not provide on street resident parking permit.	YES	
3J.2	**Objective:** Parking & facilities are provided for other modes of transport.		
	Design Guidance		
	Conveniently located & sufficient numbers of parking spaces are provided for motorbikes & scooters.	YES	
	Secure undercover bicycle parking is provided & easily accessible from both public domain & common areas.	YES	
	Conveniently located charging stations are provided for electric vehicles, where desirable.	NO	
3J.3	**Objective:** Carpark design & access is safe and secure.		
	Design Guidance		
	Supporting facilities within car parks, including garbage, plant & switch rooms, storage areas & car wash bays can be accessed without crossing car parking spaces.	YES	
	Direct, clearly visible & well-lit access is provided into common circulation areas.	YES	
	Clearly defined & visible lobby or waiting area is provided to lifts & stairs.	YES	
	For larger car parks, safe pedestrian access is clearly defined & circulation areas have good lighting, colour, line marking and/or bollards.	YES	
3J.4	**Objective:** Visual & environmental impacts of underground carparking ae minimised.		
	Design Guidance		
	Excavation minimised through efficient car park layouts & ramp design.	YES	
	Car parking layout is well organised, using a logical, efficient structural grid & double loaded aisles.	YES	
	Protrusion of car parks do not exceed 1m above ground level. Solution include stepping car park levels or using split levels on sloping sites.	YES	
	Natural ventilation is provided to basement & sub-basement car parking.	YES	
	Ventilation grills or screening devices for car parking openings are integrated into the facade & landscape design.	YES	
3J.5	**Objective:** Visual & environmental impacts of on-grade car parking are minimised.		
	Design Guidance		
	Parking is located on the side or rear of the lot away from the primary street frontage.	YES	
	Cars are screened from view of streets, buildings, communal and private open space areas.	YES	
	Safe and direct access to building entry points is provided.	YES	
	Parking is incorporated into the landscape design of the site, by extending planting and materials into the car park space.	YES	
	Stormwater run-off is managed appropriately from car parking surfaces.	YES	
	Bio-swales, rain gardens or on site detention tanks are provided, where appropriate.	YES	
	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.	YES	
3J.6	**Objective:** Visual & environmental impacts of above ground enclosed car parking are minimised.		
	Design Guidance		
	Exposed parking should not be located along primary street frontages.	YES	
	Screening, landscaping and other design elements including public art should be used to integrate the above ground car parking with the facade. Design solutions may include: - Car parking that is concealed behind the facade, with windows integrated into the overall facade design (approach should be limited to developments where a larger floor plate podium is suitable at lower levels) - Car parking that is 'wrapped' with other uses, such as retail, commercial or two storey Small Office/Home Office (SOHO) units along the street frontage (see figure 3J.9) - Positive street address and active frontages should be provided at ground level.	YES	
PART 4	**DESIGNING THE BUILDING**		
4A	**SOLAR AND DAYLIGHT ACCESS**		
4A.1	**Objective**: To optimise number of apartments receiving sunlight to habitable rooms, primary windows & private open.		
	Design Criteria		
	1. Living rooms & private open spaces of at least 70% of apartments in a building receive a minimum of 2 hrs direct sunlight between 9am - 3pm at mid-winter in Sydney Metropolitan Area and in Newcastle and Wollongong local government areas.	YES	72% (97/134) of apartments meet the minimum requirements. There are no apartments that are south facing single aspect apartments. All apartments have an orientation to the east, west or north.

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	2. In all other areas, living rooms & private open spaces of at least 70% of apartments in a building receive a minimum of 3 hrs direct sunlight between 9 am - 3 pm at mid-winter.	N/A	
	3. A maximum of 15% of apartments in a building receive no direct sunlight between 9 am - 3 pm at mid-winter.	YES	3% (4/134) of apartments receive no direct sunlight to living rooms between 9am - 3pm in mid-winterdue to deep wintergardens and are covered by balconies above. Despite this, these are north facing apartments with generous open spaces. Wintergardens can be treated as extensions of the internal living area that will receive direct solar amenity throughout the year.
	Design Guidance		
	The design maximises north aspect. The number of single aspect south facing apartments is minimised.	YES	
	Single aspect, single storey apartments have a northerly or easterly aspect.	YES	
	Living areas are located to the north and service areas to the south & west of apartments.	YES	
	There are less than 15% of total apartments proposed with south facing aspect receiving no solar access.	YES	
	To optimise direct sunlight to habitable rooms & balconies a number of the following design features are used: Dual aspect apartments, Shallow apartment layouts, Two storey &mezzanine level apartments, Bay window.	YES	
	To maximise the benefit to residents of direct sunlight within living rooms & private open spaces, a minimum of 1sqm of direct sunlight, measured at 1m above floor level, is achieved for at least 15 minutes.	YES	
	Achieving the design criteria may not be possible 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; significant views are oriented away from the desired aspect for direct sunlight	N/A	
	Design drawings need to demonstrate how site constraints & orientation preclude meeting Design Criteria & how the development meets the objective.	YES	
4A.2	**Objective**: Daylight access is maximised where sunlight is limited.		
	Design Guidance		
	Courtyards, skylights & high level windows (with sills of 1,500mm or greater) are used only as a secondary light source in habitable rooms.	N/A	
	Where courtyards are used: Use is restricted to kitchens, bathrooms & service areas; Services are concealed with appropriate detailing & materials to visible walls; Courtyards are fully open to the sky; Access is provided to the light well from communal area for cleaning & maintenance; Acoustic privacy, fire safety & minimum privacy separation distances (see 3F Visual Privacy) are achieved.	N/A	
	Opportunities for reflected light into apartments are optimised through: Reflective exterior surfaces on buildings opposite south facing windows; Positioning windows to face other buildings or surfaces (on neighbouring sites or within site) that will reflect light; Integrating light shelves into the design; Light coloured internal finishes.	N/A	
4A.3	**Objective**: Design incorporates shading & glare control, particularly for warmer months.		
	Design Guidance		
	A number of the following design features are used: Balconies or sun shading that extend far enough to shade summer sun, but allow winter sun to penetrate living areas; Shading devices such as eaves, awnings, balconies, pergolas, external louvres & planting; Horizontal shading to north facing windows; Vertical shading to east & particularly west facing windows; Operable shading to allow adjustment & choice; High performance glass that minimises external glare off windows, with consideration given to reduce tint glass or glass with a reflectance level below 20% (reflective films are avoided).	YES	
4B	**NATURAL VENTILATION**	**YES**	
4B.1	**Objective**: All habitable rooms are naturally ventilated.		
	Design Guidance		
	The building's orientation maximises capture & use of prevailing breezes for natural ventilation in habitable rooms.	YES	
	Depths of habitable rooms support natural ventilation.	YES	
	The area of unobstructed window openings should be equal to at least 5% of the floor area served.	YES	
	Light wells are not the primary air source for habitable rooms.	YES	
	Doors & openable windows maximise natural ventilation opportunities by using the following design solutions: Adjustable windows with large effective openable areas; Variety of window types that provide safety & flexibility such as awnings & louvres; Windows that occupants can reconfigure to funnel breezes into apartment, such as vertical louvres, casement windows & externally opening doors.	YES	
4B.2	**Objective**: The layout and design of single aspect apartments maximises natural ventilation.		
	Design Guidance		
	Apartment depths limited to maximise ventilation & airflow.	YES	
	Natural ventilation to single aspect apartments is achieved with the following design solutions: Primary windows are augmented with plenums and light wells (generally not suitable for cross ventilation); Stack effect ventilation, solar chimneys or similar used to naturally ventilate internal building areas or rooms such as bathrooms & laundries; Courtyards or building indentations have a width to depth ratio of 2:1 or 3:1 to ensure effective air circulation & avoid trapped smells.	N/A	
4B.3	**Objective**: Number of apartments with natural cross ventilation is maximised to create comfortable indoor environments for residents.		
	Design Criteria		
	1. At least 60% of apartments are naturally cross ventilated in the first nine storeys of the building. Apartments at ten storeys or greater are deemed to be cross ventilated only if any enclosure of the balconies at these levels allows adequate natural ventilation and cannot be fully enclosed.	YES	65% (36/55) apartments in the first 9 storeys. Including a combination of corner dual aspect or tri-aspect apartments, cross through apartments, and cross through apartments with access to breezeways. Apartments in proximity to Queens Road may be impacted with traffic noise, Refer to acoustic engineer's report for alternate ventilation recommendations.

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	2. Overall depth of a cross-over or cross-through apartment does not exceed 18m, measured glass line to glass line.	NO	Apartments longer than 18m occur at building ends with 3 aspects, increasing amenity access to views, light and natural ventilation to all rooms
	The building includes dual aspect apartments, cross through apartments & corner apartments, and limited apartment	YES	
	In cross-through apartments, external window & door opening sizes/areas on one side of an apartment (inlet side) are approximately equal to the external window & door opening sizes/areas on the other side of the apartment (outlet side).	YES	
	Apartments are designed to minimise the number of corners, doors & rooms that might obstruct airflow.	YES	
	Apartment depths, combined with appropriate ceiling heights, maximise cross ventilation & airflow.	YES	
4C	**CELING HEIGHTS**		
4C.1	**Objective**: Ceiling heights achieves sufficient natural ventilation & daylight access.		
	Design Criteria		
	Measured from finished floor level to finished ceiling level, minimum ceiling heights are: Minimum Ceiling Height for apt and mixed-used buildings (m) Habitable rooms Habitable rooms 2.7 Non-habitable rooms 2.4 For 2 storey apts 2.7 for the main living area floor where its area does not exceed 50% of the apt area Attic spaces If located in mixed-used area 3.3 for ground and first floor to promote future flexibility of use These minimums do not preclude higher ceilings if desired	YES	
4C.2	Objective: Ceiling height increases the sense of space in apartments & provides for well-proportioned rooms.		
	Design Guidance		
	A number of the following design solutions are used: Hierarchy of rooms in apartment is defined using changes in ceiling heights & alternatives such as raked or curved ceilings, or double height spaces; Well-proportioned rooms are provided, for example, smaller rooms feel larger & 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 & coordination of bulkhead location above non-habitable areas, such as robes or storage, can assist.	YES	
4C.3	**Objective**: Ceiling heights contribute to the flexibility of building use over the life of the building.		
	Design Guidance		
	Ceiling heights of lower level apartments should be greater than the minimum required by Design Criteria allowing flexibility & conversion to non-residential uses.	N/A	
4D	**APARTMENT SIZE AND LAYOUT**		
4D.1	**Objective**: The layout of rooms within the apartment is functional, well organised & provides a high standard of amenity.		
	Design Criteria		
	1. Apartments have the following minimum internal areas: Apartment Type — Minimum Internal Area (sqm) Studio 35 1 Bedroom 50 2 Bedroom 70 3 Bedroom 90 The minimum internal areas include only one bathroom. Additional bathrooms increase the minimum internal area by 5sqm each. A fourth bedroom & further additional bedrooms increase the minimum internal area by 12sqm each	YES	
	2. Every habitable room has 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 & air is not borrowed from other rooms	YES	
	Design Guidance		
	Kitchens should not be located as part of the main circulation space in larger apartments (such as hallway or entry space).	YES	
	A window is visible from any point in a habitable room.	YES	
	Where minimum areas or room dimensions are not met, apartments demonstrate that they are well designed and demonstrate the usability & functionality of the space with realistically scaled furniture layouts & circulation areas.	N/A	
4D.2	**Objective**: Environmental performance of the apartment is maximised.		
	Design Criteria		
	1. Habitable room depths are limited to a maximum of 2.5 x the ceiling height.	NO	Apartments not achieving this ratio provide additional operable windows to provide adequate light and ventilation to deep areas of the floorplate
	2. In open plan layouts (living, dining & kitchen are combined) maximum habitable room depth is 8m from a window.	YES	
	Design Guidance		
	Greater than minimum ceiling heights allow for proportional increases in room depth up to the permitted max depths.	N/A	
	All living areas & bedrooms are located on the external face of building.	YES	
	Where possible: bathrooms & laundries have external openable window; main living spaces are oriented toward the primary outlook & aspect and away from noise sources.	YES	

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4D.3	**Objective**: Apartment layouts are designed to accommodate a variety of household activities & needs.		
	Design Criteria		
	1. Master bedrooms have a minimum area of 10sqm & other bedrooms 9sqm (excluding wardrobe space).	YES	
	2. Bedrooms have a minimum dimension of 3m (excluding wardrobe space).	YES	
	3. Living rooms or combined living/dining rooms have a minimum width of: - 3.6m for studio & 1 bedroom apartments - 4m for 2 & 3 bedroom apartments	YES	
	4. The width of cross-over or cross-through apartments are at least 4m internally to avoid deep narrow apartment layouts.	YES	
	Design Guidance		
	Access to bedrooms, bathrooms & laundries is separated from living areas minimising direct openings between living & service areas.	YES	
	All bedrooms allow a minimum length of 1.5m for robes.	YES	
	Main bedroom of apartment or studio apartment is provided with a wardrobe of minimum 1.8m L x 0.6m D x 2.1m H.	YES	
	Apartment layouts allow flexibility over time, design solutions include: - Dimensions that facilitate a variety of furniture arrangements & removal - Spaces for a range of activities & privacy levels between different spaces within the apartment - Dual master apartments - Dual key apartments (Note: dual key apartments which are separate but on the same title are regarded as two sole occupancy units for the purposes of the BCA & for calculating mix of apartments) - Room sizes and proportions or open plans (rectangular spaces, are more easily furnished than square spaces) - Efficient planning of circulation by stairs, corridors & through rooms to maximise the amount of usable floor space in rooms	YES	
4E	**PRIVATE OPEN SPACE AND BALCONIES**		
4E.1	**Objective:** Apartments provide appropriately sized private open space and balconies to enhance residential amenity.		
	Design Criteria		
	1. All apartments are required to have primary balconies as follows:	YES	

Apartment Type	Minimum Area (sqm)	Minimum Depth (m)
Studio	4	-
1 Bedroom	8	2
2 Bedroom	10	2

	The minimum balcony depth to be counted as contributing to the balcony area is 1m 2. For apartments at ground level or on podium or similar, a private open space is provided instead of a balcony. It must have minimum area of 15sqm & minimum depth of 3m.	YES	
	Design Guidance	YES	
	Increased communal open space are provided where the number or size of balconies are reduced.	N/A	
	Storage areas on balconies is additional to the minimum balcony size.	N/A	
	Balcony use may be limited in some proposals where: consistently high wind speeds at 10 storeys & above; close proximity to road, rail or other noise sources; exposure to significant levels of aircraft noise; heritage & adaptive reuse of existing buildings.	N/A	Wind studies indicate that designed balconies are useable.
	In these situations Juliet balconies, operable walls, enclosed wintergardens, and bay windows are appropriate. Other amenity benefits for occupants are provided in the apartments or in the development or both. Natural ventilation is also demonstrated.	N/A	
4E.2	**Objective:** Primary private open space & balconies area appropriately located to enhance liveability for residents.		
	Design Guidance		
	Primary open space & balconies are located adjacent to the living room, dining room or kitchen to extend the living space.	YES	
	POS & balconies predominantly face north, east or west.	YES	
	POS & balconies are orientated with the longer side facing outwards or be open to the sky to optimise daylight access into adjacent rooms.	YES	
4E.3	**Objective**: Private open spaces & balcony design is integrated into & contributes to the overall architectural from & detail of the building.		
	Design Guidance		
	Solid, partially solid or transparent fences & balustrades are selected to respond to the location. They are designed to allow views & passive surveillance of the street while maintaining visual privacy & allowing for a range of uses on the balcony. Solid & partially solid balustrades are preferred.	YES	
	Full width full height glass balustrades alone are generally not desirable.	YES	
	Projecting balconies are integrated into the building design. The design of soffits are considered.	YES	
	Operable screens, shutters, hoods & pergolas control sunlight & wind.	YES	
	Balustrades are set back from the building or balcony edge where overlooking or where safety is an issue.	YES	
	Downpipes & balcony drainage are integrated with the overall facade & building design.	YES	

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	Air-conditioning units are located on roofs, in basements, or fully integrated into the building design.	YES	
	Where clothes drying, storage or air conditioning units are located on balconies, they are screened & integrated in the building design.	N/A	
	Ceilings of apartments below terraces are insulated to avoid heat loss.	YES	
	Water & gas outlets are provided for primary balconies & private open space.	N/A	All electric offering to target sustainability goals
4E.4	**Objective**: Private open spaces & balcony design maximises safety.		
	Design Guidance		
	Changes in ground levels or landscaping are minimised.	YES	
	Balcony design & detailing avoids opportunities for climbing & falling.	YES	
4F	**COMMON CIRCULATION & SPACES**		
4F.1	Objective: Common circulation spaces achieve food amenity & properly service the number of apartments.		
	Design Criteria		
	1. The maximum number of apartments off a circulation core on a single level is eight.	YES	
	2. For buildings of 10 storeys & over, the maximum number of apartments sharing a single lift is 40.	YES	
	Design Guidance		
	Greater than minimum requirements for corridor widths and/or ceiling heights allow comfortable movement & access particularly in entry lobbies, outside lifts & at apartment entry doors.	YES	
	Daylight & natural ventilation are provided to all common circulation spaces that are above ground.	YES	
	Windows are provided in common circulation spaces & are adjacent to the stair or lift core or at the ends of corridors.	YES	
	Longer corridors greater than 12m in length from the lift core are articulated. Design solutions include: Series of foyer areas with windows & spaces for seating; Wider areas at apartment entry doors & varied ceiling heights.	YES	
	Common circulation spaces maximise opportunities for dual aspect apartments, including multiple core apartment buildings & cross over apartments.	YES	
	Achieving Design Criteria for the number of apartments off a circulation core may not be possible. Where development is unable to achieve this, a high level of amenity for common lobbies, corridors & apartments is demonstrated, including: Sunlight & natural cross ventilation in apartments; Access to ample daylight & natural ventilation in common circulation spaces; Common areas for seating & gathering; Generous corridors with greater than minimum ceiling heights; Other innovative design solutions that provide high levels of amenity	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	
	Primary living room or bedroom windows do not open directly onto common circulation spaces, open or enclosed. Visual & acoustic privacy from common circulation spaces to any other rooms are carefully controlled	N/A	
4F.2	Objective: Common circulation spaces promote safety and provide for social interaction between residents.		
	Design Guidance		
	Direct & legible access are provided between vertical circulation points & apartment entries by minimising corridor or gallery length to give short, straight, clear sight lines.	YES	
	Tight corners & spaces are avoided.	YES	
	Circulation spaces are well lit at night.	YES	
	Legible signage are provided for apartment numbers, common areas & general wayfinding.	YES	
	Incidental spaces, e.g. space for seating in a corridor, at a stair landing, or near a window are provided.	YES	
	In larger developments, community rooms for activities such as owners corporation meetings or resident use, are provided & are co-located with communal open space.	YES	Internal communal area is provided on Level 5 within the outdoor communal area.
4G	**STORAGE**		
4G.1	**Objective:** Adequate, well designed storage is provided in each apartment.		
	Design Criteria		
	1. In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided: Apartment Type — Storage Size (cubic m) Studio — 4 1 Bedroom — 6 2 Bedroom — 8 3 Bedroom — 10 At least 50% of the required storage is to be located within the apartment.	YES	A minimum of 1 storage cage per apartment is provided within the basement levels ranging from 4-20 cubic metres.
	Design Guidance		
	Storage is accessible from either circulation or living areas.	YES	
	Storage provided on balconies (in addition to the minimum balcony size) is integrated into the balcony design, weather proofed & screened from view from the street.	N/A	
	Left over space such as under stairs is used for storage.	N/A	
4G-2	**Objective:** Additional storage is conveniently located, accessible & nominated for individual apartments		
	Design Guidance		
	Storage not located in apartments is secure and clearly allocated to specific apartments	YES	
	Storage is provided for larger & less frequently accessed items	YES	

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	Storage space in internal or basement car parks is provided at the rear or side of car spaces or in cages, such that allocated car parking remains accessible	YES
	If communal storage rooms are provided they are accessible from common circulation areas of the building	N/A
	Storage not located in apartment is integrated into the overall building design & not visible from public domain	YES
4H	**ACOUSTIC PRIVACY**	
4H.1	**Objective:** Noise transfer is minimised through the siting of buildings & building layout.	
	Design Guidance	
	Adequate building separation is provided within the development & from neighbouring buildings/adjacent uses (see 2F Building Separation & 3F Visual Privacy).	YES
	Window & door openings are orientated away from noise sources.	YES
	Noisy areas within buildings including building entries & corridors are located next to or above each other while quieter areas are located next to or above quieter areas.	YES
	Storage, circulation areas & non-habitable rooms are located to buffer noise from external sources.	YES
	The number of party walls (shared with other apartments) are limited & are appropriately insulated.	YES
	Noise sources such as garage doors, driveways, service areas, plant rooms, building services, mechanical equipment, active communal open spaces & circulation areas should be located at least 3m away from bedrooms.	YES
4H.2	**Objective:** Noise impacts are mitigated within apartments through layout & acoustic treatments.	
	Design Guidance	
	Internal apartment layout separates noisy spaces from quiet spaces, using a number of the following design solutions: - Rooms with similar noise requirements are grouped together - Doors separate different use zones - Wardrobes in bedrooms are co-located to act as sound buffers.	YES
	Where physical separation cannot be achieved, noise conflicts are resolved using the following design solutions: Double or acoustic glazing; Acoustic seals; Use of materials with low noise penetration properties; Continuous walls to ground level courtyards where they do not conflict with streetscape or other amenity requirements.	YES
4J	**NOISE & POLLUTION**	
4J.1	**Objective:** In noisy or hostile environments impacts of external noise & pollution are minimised through careful siting & layout.	
	Design Guidance	
	To minimise impacts the following design solutions are used: - Physical separation between buildings & the noise or pollution source - Residential uses are located perpendicular to the noise source & 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 & communal open spaces - Non-residential uses are located at lower levels vertically separating residential component from noise or pollution source. Setbacks to the underside of residential floor levels are increased, relative to traffic volumes & other noise sources - Buildings respond to both solar access & noise - Where solar access is away from noise source, non-habitable rooms will provide a buffer; Where solar access is in the same direction as the noise source, dual aspect apartments with shallow building depths are preferred - Landscape design reduces the perception of noise & acts as a filter for air pollution generated by traffic & industry.	YES
	Where developments are unable to achieve Design Criteria, alternatives are considered in the following areas: Solar & daylight access, Private open space & balconies, Natural cross ventilation.	YES
4J.2	**Objective:** Appropriate noise shielding or attenuation techniques for building design, construction & choice of materials are used to mitigate noise transmission.	
	Design Guidance	
	Design solutions to mitigate noise include: - Limiting the number & 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 & soffits.	YES
4K	**APARTMENT MIX**	
4K.1	**Objective:** A range of apartment types & sizes is provided to cater for different household types now & into the future.	
	Design Guidance	
	A variety of apartment types is provided.	YES
	The apartment mix is appropriate, taking into consideration: - Distance to public transport, employment & education centres - Current market demands & projected future demographic trends - Demand for social & affordable housing - Different cultural & socioeconomic groups.	YES

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	Flexible apartment configurations are provided to support diverse household types & stages of life including single person households, families, multi-generational families & group households.	YES	
4K.2	**Objective:** The apartment mix is distributed to suitable locations within the building.		
	Design Guidance		
	Different apartment types are located to achieve successful facade composition & to optimise solar access.	YES	
	Larger apartment types are located on ground or roof level where there is potential for more open space, and on corners where more building frontage is available.	YES	
4L	**GROUND FLOOR APARTMENTS**		
4L.1	**Objective:** Street frontage activity is maximised where ground floor apartments are located.		
	Design Guidance		
	Direct street access are provided to ground floor apartments.	N/A	No ground level apartments are proposed
	Activity is achieved through front gardens, terraces & the facade of the building. Design solutions include: - Both street, foyer & other common internal circulation entrances to ground floor apartments - Private open space is next to the street - Doors & windows face the street.	N/A	
	Retail or home office spaces are located along street frontages.	YES	
	Ground floor apartment layouts support SOHO use & provide opportunities for future conversion into commercial or retail areas. In these cases higher floor to ceiling heights & easy conversion to ground floor amenities are provided.	N/A	
4L.2	Objective: Design of ground floor apartments delivers amenity & safety for residents.		
	Design Guidance		
	Privacy & safety are provided without obstructing casual surveillance. Design solutions include: - Elevating private gardens & terraces above the street level by 1-1.5m (see pg. 109 Figure 4L.4) - Landscaping & private courtyards - Window sill heights minimise sight lines into apartments - Integrating balustrades, safety bars or screens with exterior design.	YES	
	Solar access is maximised through: - High ceilings & tall windows - Trees & shrubs allow solar access in winter & shade in summer.	YES	
4M	**FACADES**		
4M.1	**Objective**: Building facades provide visual interest along the street while respecting the character of the local area.		
	Design Guidance		
	Design solutions for front building facades include: - Composition of varied building elements - Defined base, middle & top of buildings - Revealing & concealing certain elements. - Changes in texture, material, detail and colour to modify the prominence of elements.	YES	
	Building services are integrated within the overall façade.	YES	
	Building facades are well resolved with appropriate scale & proportion to streetscape & with consideration of human scale. Solutions include: - Well composed horizontal & vertical elements - Variation in floor heights to enhance the human scale - Elements that are proportional & arranged in patterns - Public artwork or treatments to exterior blank walls - Grouping of floors or elements such as balconies & windows on taller buildings.	YES	
	Building facades relate to key datum lines of adjacent buildings through upper level setbacks, parapets, cornices, awnings or colonnade heights.	YES	
	Shadow is created on the facade throughout the day with building articulation, balconies & deeper window reveals.	YES	
4M.2	**Objective:** Building functions are expressed by the façade.		
	Design Guidance		
	Building entries are clearly defined.	YES	
	Important corners are given visual prominence through change in articulation, materials or colour, roof expression or changes in height.	YES	
	Apartment layout is expressed externally through facade features such as party walls & floor slabs.	YES	
4N	**ROOF DESIGN**		
4N.1	**Objective:** Roof treatments are integrated into the building design & positively respond to the street.		
	Design Guidance		
	Roof design relates to the street. Design solutions include: - Special roof features & 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 pitched from complementary to adjacent buildings.	YES	
	Roof treatments are integrated with the building design. Design solutions include: - Roof design is in proportion to the overall building size, scale & from - Roof materials compliment the building, Service elements are integrated.	YES	

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4N.2	**Objective:** Opportunities to use roof space for residential accommodation & open space are maximised.	
	Design Guidance	
	Habitable roof space are provided with good levels of amenity. Design solutions include: - Penthouse apartments - Dormer or clerestory windows - Openable skylights.	YES
	Open space is provided on roof tops subject to acceptable visual & acoustic privacy, comfort levels, safety & security considerations.	YES
4N.3	**Objective:** Roof design incorporates sustainability features.	
	Design Guidance	
	Roof design maximises solar access to apartments during winter & provides shade during summer. Design solutions include: - Roof lifts to the north - Eaves & overhangs shade walls & windows from summer sun	YES
	Skylights & ventilation systems are integrated into the roof design.	YES
4O	**LANDSCAPE DESIGN**	
4O.1	**Objective:** Landscape design is viable & sustainable.	
	Design Guidance	
	Landscape design is environmentally sustainable & can enhance environmental performance by incorporating: - Diverse & appropriate planting - Bio-filtration gardens - Appropriately planted shading trees - Areas for residents to plant vegetables & herbs - Composting - Green roofs or walls.	YES
	Ongoing maintenance plans are prepared.	YES
	Microclimate is enhanced by: - Appropriately scaled trees near the eastern & western elevations for shade - Balance of evergreen & deciduous trees to provide shading in summer & sunlight access in winter - Shade structures such as pergolas for balconies & courtyards.	YES
	Tree & shrub selection considers size at maturity & the potential for roots to compete (refer below):	YES

Site Area (sqm)	Recommended Tree Planting
Up to 850	1 medium tree per 50sqm of deep soil zone
Between 850-1500	1 large tree or 2 medium trees per 90sqm of deep soil zone
Greater than 1500	1 large tree or 2 medium trees per 80sqm of deep soil zone

4O.2	**Objective:** Landscape design contributes to streetscape & amenity.	
	Design Guidance	
	Landscape design responds to the existing site conditions including: - Changes of levels - Views - Significant landscape features including trees & rock outcrops.	YES
	Significant landscape features are protected by: - Tree protection zones - Appropriate signage & fencing during construction.	YES
	Plants selected are endemic to region & reflect local ecology.	YES
4P	**PLANTING ON STRUCTURES**	
4P.1	**Objective:** Appropriate soil profiles are provided.	
	Design Guidance	
	Structures are reinforced for additional saturated soil weight.	YES
	Soil volume is appropriate for plant growth, including: - Modifying depths & widths according to planting mix & irrigation frequency - Free draining & long soil life span - Tree anchorage.	YES
	Minimum soil standards for plant sizes should be provided in accordance with:	YES

Plant Type	Definition	Soil Volume (cubic m)	Soil Depth	Soil Area (m)
Large trees	12-18m high, up to 16m crown spread at maturity.	150	1200mm	10 x 10 or equivalent
Medium trees	8-12m high, up to 8m crown spread at maturity.	35	1000mm	6 x 6 or equivalent
Small trees	6-8m high, up to 4m crown spread at maturity.	9	800mm	3.5 x 3.5 or equivalent
Shrubs			500-600mm	
Ground cover				
Turf				

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4P.2	**Objective:** Plant growth is optimised with appropriate selection & maintenance.	
	Design Guidance	
	Plants are suited to site conditions, considerations include: - Drought & wind tolerance - Seasonal changes in solar access - Modified substrate depths for a diverse range of plants - Plant longevity	YES
	A landscape maintenance plan is prepared.	YES
	Irrigation & drainage systems respond to: - Changing site conditions - Soil profile & planting regime - Whether rainwater - Stormwater or recycled grey water is used.	YES
4P.3	**Objective:** Planting on structures contributes to the quality & amenity of communal & public open spaces.	
	Design Guidance	
	Building design incorporates opportunities for planting on structures. Design solutions include: - Green walls with specialised lighting for indoor green walls - Wall design that incorporates planting - Green roofs - particularly where roofs are visible from the public domain - Planter boxes.	YES
	Note: structures designed to accommodate green walls should be integrated into the building facade & consider the ability of the facade to change over time	YES
4Q	**UNIVERSAL DESIGN**	
4Q.1	**Objective:** Universal design features are included in apartment design to promote flexible housing for all community members.	
	Design Guidance	
	Developments achieve a benchmark of 15% of the total apartments incorporating the Liveable Housing Guideline's .	YES
4Q.2	**Objective:** A variety of apartments with adaptable designs are provide.	
	Design Guidance	
	Adaptable housing should be provided in accordance with the relevant council policy.	YES
	Design solutions for adaptable apartments include: - Convenient access to communal and public areas - High level of solar access - Minimal structural change & residential amenity loss when adapted - Larger car parking spaces for accessibility -Parking titled separately from apartments or shared car parking arrangements	YES
4Q.3	**Objective:** Apartment layouts are flexible & accommodate a range of lifestyle needs.	
	Design Guidance	
	Flexible design solutions include: - Rooms with multiple functions - Dual master bedroom apartments with separate bathrooms - Larger apartments with various living space options - Open plan 'loft' style apartments with only a fixed kitchen, laundry & bathroom	YES
4R	**ADAPTIVE REUSE**	
4R.1	**Objective:** New additions to existing buildings are contemporary, complementary & enhance area's identity & sense of place. members.	
4R.2	**Objective:** Adapted buildings provide residential amenity but does not precluding future adaptive reuse members.	
4S	**MIXED USE**	
4S.1	**Objective:** Mixed use developments are provided in appropriate locations & provide active street frontages that encourage pedestrian movement.	
	Design Guidance	
	Mixed use development are concentrated around public transport & centres.	YES
	Mixed use developments positively contribute to the public domain. Design solutions include: - Development addresses the street, Active frontages provided - Diverse activities & uses - Avoiding blank walls at the ground level - Live/work apartments on the ground floor level, rather than commercial.	YES

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4S.2	**Objective:** Residential levels of the building are integrated within the development. Safety & amenity is maximised.	
	Design Guidance	
	Residential circulation areas are clearly defined. Solutions include: - Residential entries separated from commercial entries & directly accessible from the street - Commercial service areas separated from residential components - Residential car parking & communal facilities separated or secured - Security at entries & safe pedestrian routes are provided - Concealment opportunities are avoided.	YES
	Landscaped communal open space are provided at podium or roof.	YES
4T	**AWNING AND SIGNAGE**	
4T.1	**Objective:** Awnings are well located and complement & integrate with the building design.	
	Design Guidance	
	Awnings are located along streets with high pedestrian activity & active frontages.	YES
	A number of the following design solutions are used: - Continuous awnings are maintained & provided in areas with an existing pattern - Height, depth, material & from complements existing street character - Protection from sun & rain is provided - Awnings are wrapped around secondary frontages of corner sites - Awnings are retractable in areas without an established pattern.	YES
	Awnings are located over building entries for address & public domain amenity Capable of complying.	YES
	Awnings relate to residential windows, balconies, street tree planting, power poles & street infrastructure.	YES
	Gutters & down pipes are integrated and concealed.	YES
	Lighting under awnings is provided for pedestrian safety.	YES
4T.2	**Objective:** Signage responds to context & desired streetscape character.	
	Design Guidance	
	Signage is integrated into building design & respond to scale, proportion & detailing of the development.	YES
	Legible and discrete wayfinding should be provided for larger developments.	YES
	Signage is limited to being on & below awnings, and single facade sign on primary street frontages.	YES
4U	**ENERGY EFFICIENCY**	
4U.1	**Objective:** Development incorporates passive environmental design.	
	Design Guidance	
	Adequate natural light is provided to habitable rooms.	YES
	Well located, screened outdoor areas are provided for clothes drying.	NO
4U.2	Objective: Development incorporates passive environmental design.	
	Design Guidance	
	A number of the following design solutions are used: - Use of smart glass or other on north & west elevations -Thermal mass maximised in floors & walls of north facing rooms - Polished concrete floors, tiles or timber rather than carpet - Insulated roofs, walls & floors. Seals on window & door openings - Overhangs & shading devices such as awnings, blinds & screens.	YES
	Provision of consolidated heating & cooling infrastructure is located in a centralised location (e.g. basement)	YES
4U.3	**Objective:** Adequate natural ventilation to minimise the need for mechanical ventilation.	
	Design Guidance	
	A number of the following design solutions are used: - Rooms with similar usage are grouped together - Natural cross ventilation for apartments is optimised - Natural ventilation is provided to all habitable rooms & as many non-habitable rooms, common areas & circulation spaces as possible.	YES
4V	**WATER MANAGEMENT AND CONSERVATION**	
4V.1	**Objective:** Potable water is minimised.	
	Design Guidance	
	Water efficient fittings, appliances & wastewater reuse are incorporated.	YES
	Apartments are individually metered.	YES
	Rainwater is collected, stored & reused on site.	YES
	Drought tolerant, low water use plants are used within landscaped areas.	YES

iii ADG ASSESSMENT TABLES

ADG VERIFICATION TABLES

4V.2	**Objective:** Urban stormwater is treated on site before being discharged to receiving waters.	
	Design Guidance	
	Water sensitive urban design systems are designed by a suitably qualified professional.	YES
	A number of the following design solutions are used: - Runoff is collected from roofs & balconies in water tanks and plumbed into toilets, laundry & irrigation - Porous & open paving materials is maximised - On site stormwater & infiltration, including bio-retention systems such as rain gardens or street tree pits.	YES
4V.3	**Objective:** Flood management systems are integrated into site.	
	Design Guidance	
	Detention tanks are located under paved areas, driveways or in basements.	YES
	On large sites, parks or open spaces are designed to provide temporary on site detention basins.	YES
4W	**WASTE MANAGEMENT**	
4W.1	**Objective:** Waste storage facilities are designed to minimise impacts on streetscape, building entry & amenity of residents.	
	Design Guidance	
	Adequately sized storage areas for rubbish bins are located discreetly away from the front of the development or in basement car park	YES
	Waste & recycling storage areas are well ventilated.	YES
	Circulation design allows bins to be easily manoeuvred between storage & collection points.	YES
4W-2	**Objective:** Domestic waste is minimised by providing safe & convenient source separation & recycling.	
	Design Guidance	
	All dwellings have a waste & recycling cupboard or temporary storage area of sufficient size to hold two days' worth of waste & recycling	YES
	Communal waste & recycling rooms are in convenient & accessible locations related to each vertical core	YES
	For mixed use developments, residential waste & recycling storage areas & access is separate & secure from other uses	YES
	Alternative waste disposal methods such as composting is provided	YES
4X	**BUILDING MAINTENANCE**	
4X-1	**Objective:** Building design detail provides protection from weathering.	
	Design Guidance	
	A number of the following design solutions are used:, Roof overhangs to protect walls, Hoods over windows & doors to protect openings, Detailing horizontal edges with drip lines to avoid staining surfaces, Methods to eliminate or reduce planter box leaching, Appropriate design & material selection for hostile locations	YES
4X-2	**Objective:** Systems & access enable ease of maintenance.	
	Design Guidance	
	Window design enables cleaning from the inside of the building	YES
	Building maintenance systems are incorporated & integrated into the design of the building from, roof & facade	YES
	Design does not require external scaffolding for maintenance access	YES
	Manually operated systems such as blinds, sunshades & curtains are used in preference to mechanical systems	YES
	Centralised maintenance, services & storage are provided for communal open space areas within the building	YES
4X-3	**Objective:** Material selection reduces ongoing maintenance costs.	
	Design Guidance	
	A number of the following design solutions are used: Sensors to control artificial lighting in common circulation & spaces, Natural materials that weather well & improve with time, such as face brickwork, Easily cleaned surfaces that are graffiti resistant, Robust & durable materials & finishes in locations which receive heavy wear & tear such as common circulation areas & lift interiors	YES

IV HEIGHT PLANE

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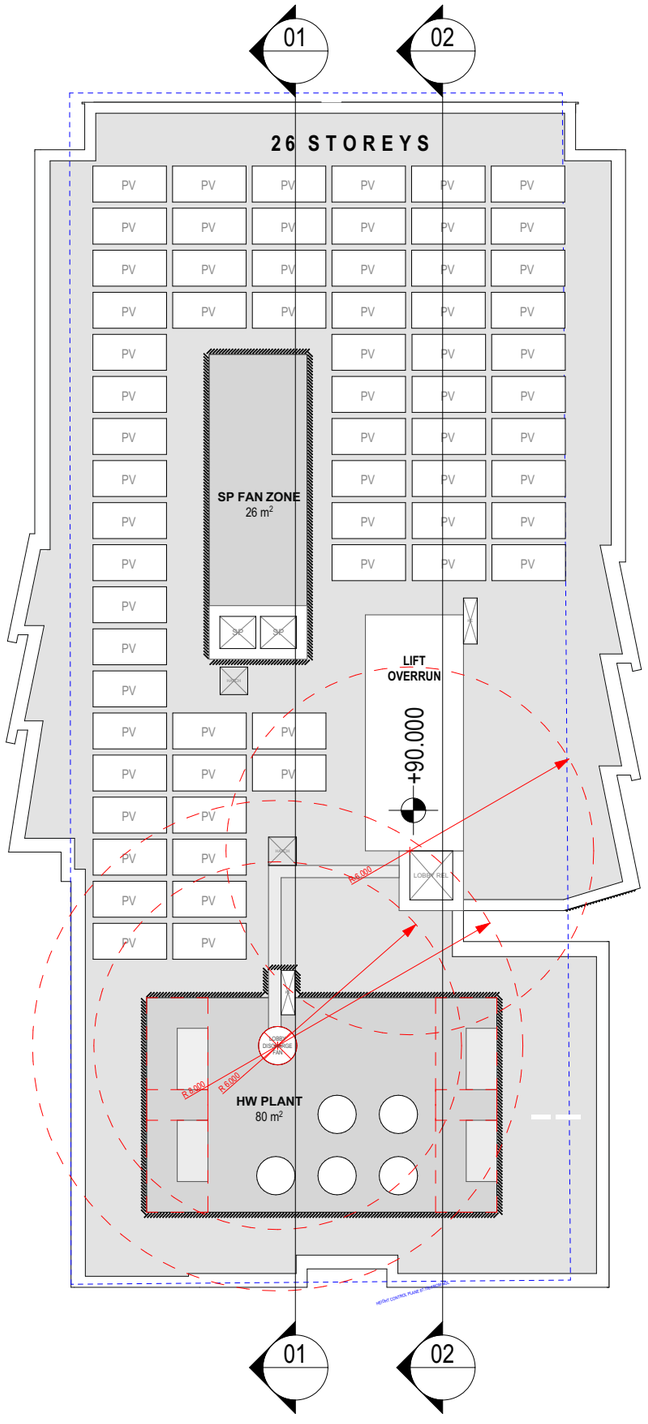
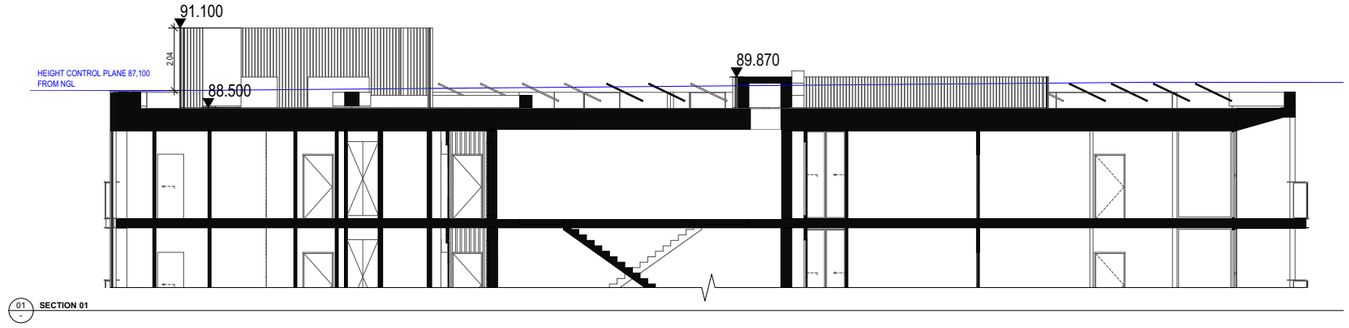
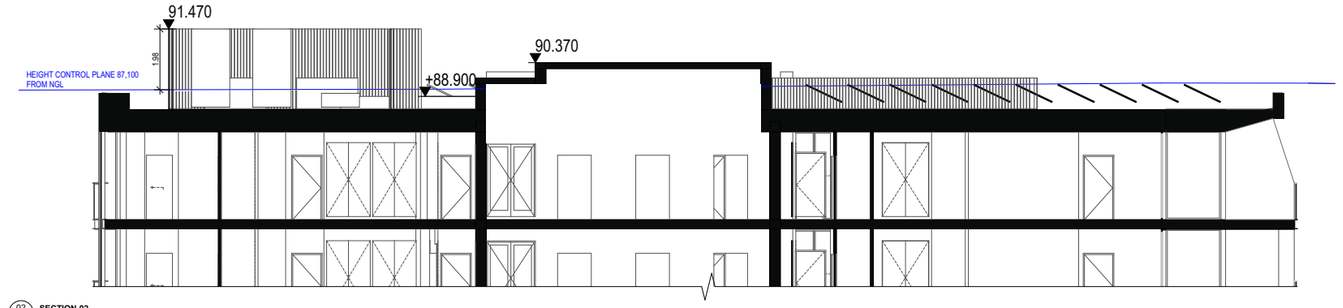
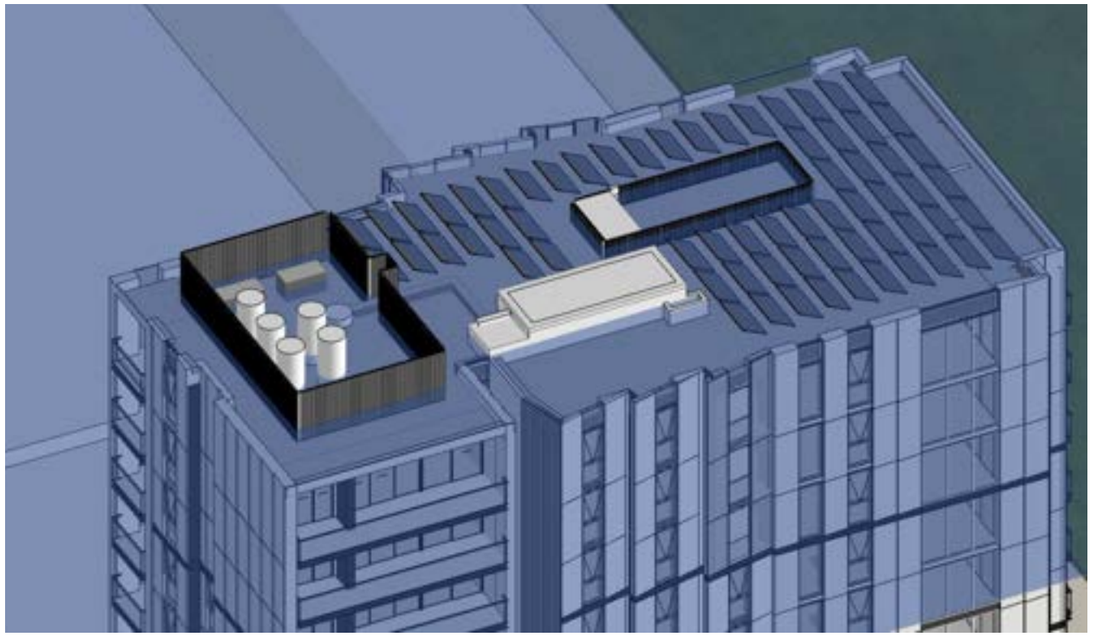


ROOF PLAN

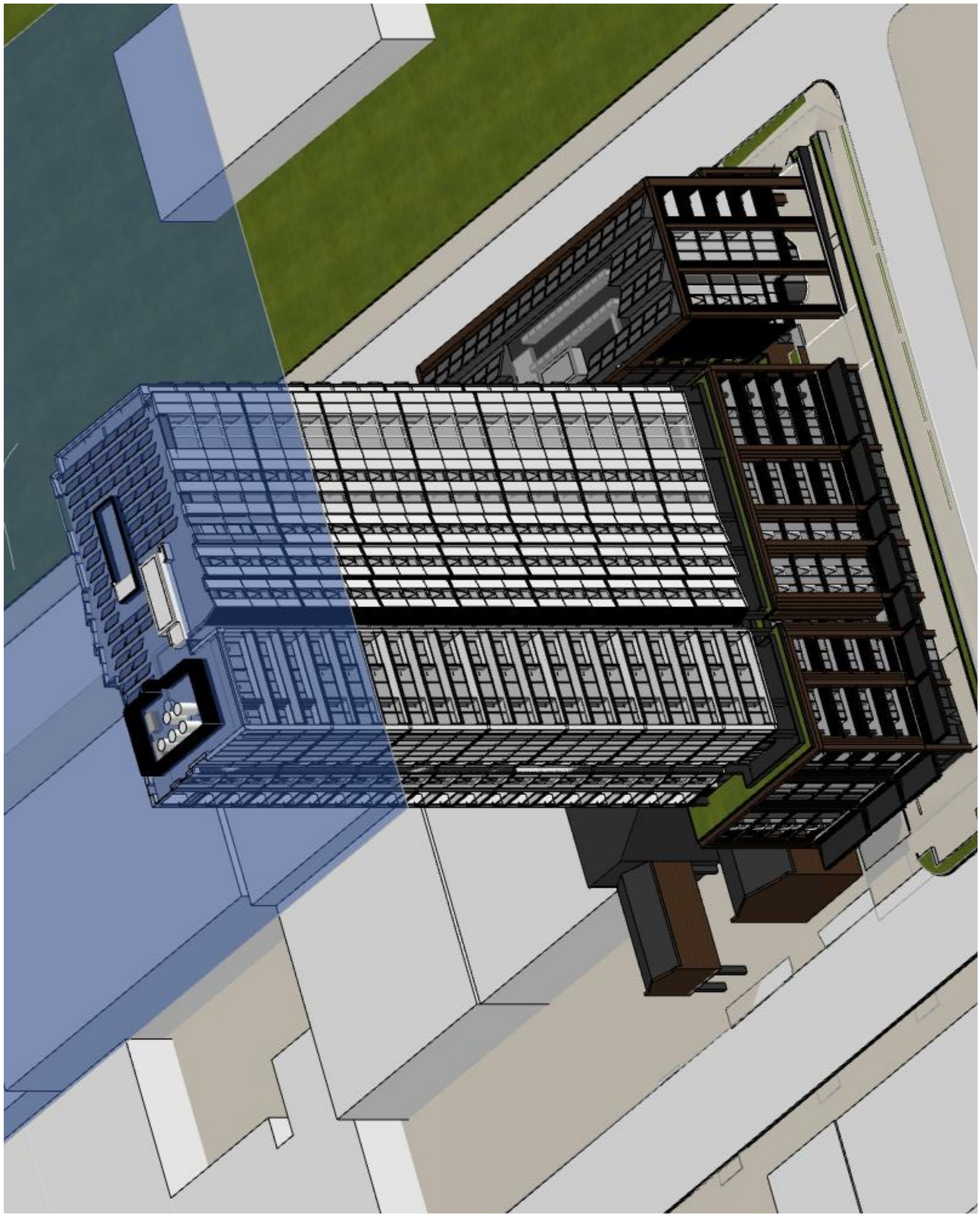






260107 AXO Height Breach Zoom

IV HEIGHT PLANE



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