ASSESSMENT AGAINST ADG & DCP

State Environmental Planning Policy (SEPP) No. 65 – Design Quality of Residential Apartment Development

The SEPP requires consideration of the Apartment Design Guide (ADG) which supports the 9 design quality principles by giving greater detail as to how those principles might be achieved. The table below addresses the relevant matters.

Design Quality Principles

Principle	Control	Comment
Design quality principles The development satisfies the 9 design quality principles.		
1. Context & neighbourhood character	Good design responds and contributes to its context. Context is the key natural and built features of an area, their relationship and the character they create when combined. It also includes social, economic, health and environmental conditions. Responding to context involves identifying the desirable elements of an area's existing or future character. Well designed buildings respond to and enhance the qualities and identity of the area including the adjacent sites, streetscape and neighbourhood. Consideration of local context is important for all sites, including sites in established areas, those undergoing change or identified for change.	The development is part of a broader development site encompassing Stage 1 to the north-west (being a 27 storey mixed use development). The development has an interface with Stage 1 across the pedestrian link. The proposed design provides access to the ground level courtyards via the through site link; which is a similar arrangement to the approved Stage 1 development. The site is the final stage of the mixed use development across the site. It is consistent with the maximum building envelopes approved by the Concept DA, which set maximum floor space, maximum height of building and minimum setbacks. The proposal is subject to a Design Excellence Competition. As a result, the proposal demonstrates a high quality architectural design. The site is within an area undergoing transition in close proximity to mixed use / residential developments which are completed / under construction. The site benefits from being located near educational facilities, Macquarie Centre, the Macquarie University Metro Station and the Macquarie Park Corridor. In this context, the proposal offers a layout and design that enhances the qualities of the area and demonstrates that the proposal is

		compatible with the various features of the neighbourhood. The building has been architecturally designed and is considered to support the social, economic, health and environmental identity of Macquarie Park.
2. Built form & scale	Good design achieves a scale, bulk and height appropriate to the existing or desired future character of the street and surrounding buildings. Good design also achieves an appropriate built form for a site and the building's purpose in terms of building alignments, proportions, building type, articulation and the manipulation of building elements. Appropriate built form defines the public domain, contributes to the character of streetscapes and parks, including their views and vistas, and provides internal amenity and outlook.	The site planning and massing of the proposal, with a 5 storey podium structure and 3 towers results in a built form which complements the transitioning character of the area. The tallest tower (Building C) addresses the intersection of Talavera and Herring Road, where it is stepped over an 'Arrival Plaza' which creates a distinct entry into the site from the intersection. The Building A lobby is located on the eastern corner of the site and is accessed from the pathway from the corner of Herring and Talavera Road. Clear visibility to this lobby is maintained through the articulation of this elevation and wider pathways and open spaces along the eastern boundary. The entry to Tower B is clearly visible and identifiable from the corner of Talavera Road and the through site link. A retail space (with an option for multiple retail tenancies or 1 large retail tenancy) is provided along the Talavera Road frontage. The elevation facing the M2 Motorway includes a sleeved car park which is partially above ground, which is not dissimilar to other developments, including Stage 1, along the M2. The built form, height and scale of the proposed development have been resolved by a thorough evaluation of the site's surrounding context, topography and environmental characteristics, with an emphasis on amenity for future residents. Specific consideration was also given to ensuring appropriate building separation is provided.

Figure 1: Extract of the North Elevation showing the sleeved car parking levels facing the M2 Motorway.

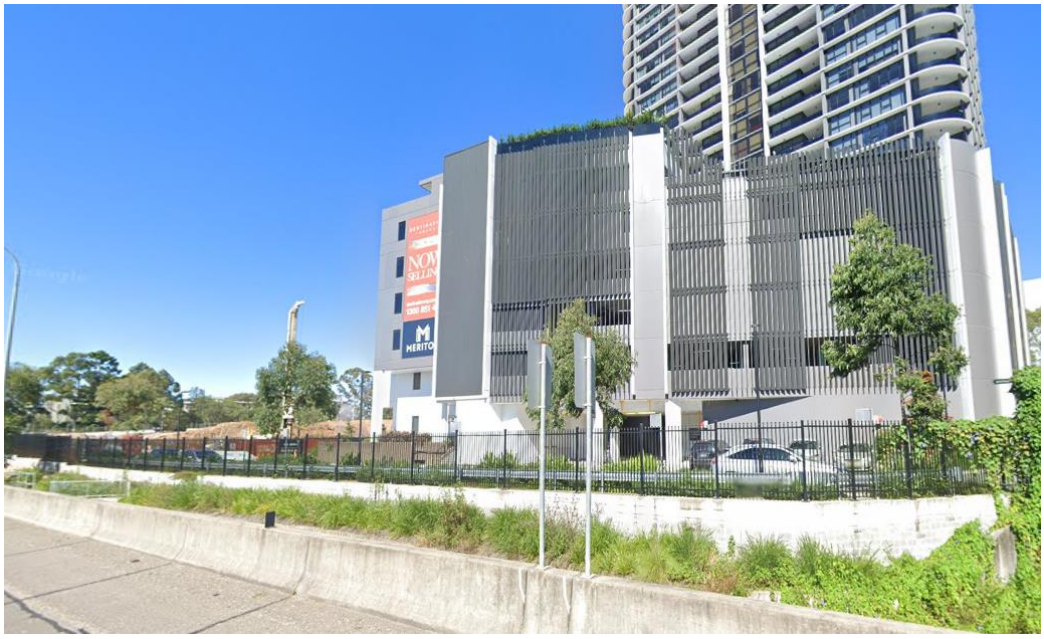


Figure 2: Photograph taken from M2 Motorway showing the above grade parking structure of Stage 1.

3. Density	Good design achieves a high level of amenity for residents and each apartment, resulting in a density appropriate to the site and its context. Appropriate densities are consistent with the area's existing or projected population. Appropriate densities can be sustained by existing or proposed infrastructure, public transport, access to jobs, community facilities and the environment.	The proposed 1,036 apartments achieve a high level of design quality and are an appropriate development outcome for this site. The proposed density is capable of being sustained as the site is well serviced by infrastructure, public transport, facilities and public open space. The proposal provides sufficient facilities within the development, including a child care centre, multiple pool and gym facilities and a variety of communal open space areas. The proposal is consistent with the Greater Sydney Regional Plan and creates the opportunity to place residents within 30 minutes of their jobs as the site is conveniently located within walking distance of educational establishments,

		Macquarie Centre and the Macquarie Park Corridor.
4. Sustainability	Good design combines positive environmental, social and economic outcomes. Good sustainable design includes use of natural cross ventilation and sunlight for the amenity and liveability of residents and passive thermal design for ventilation, heating and cooling reducing reliance on technology and operation costs. Other elements include recycling and reuse of materials and waste, use of sustainable materials and deep soil zones for groundwater recharge and vegetation.	The proposal utilises sustainable design techniques to achieve natural cross ventilation and access to sunlight to support the amenity of occupants. The use of building articulation and orientation enhance the passive efficiency of the building in terms of passive heating, passive cooling, natural lighting and natural ventilation. Ecologically sustainable design commitments include rainwater irrigation, recycled water for fire pump testing, efficient irrigation (drip irrigation, timers and moisture sensors), at least 50% locally indigenous pr “one-drop” water efficient plants, re-usable formwork, water-based and low-emission paints, fitout materials using recycled content, sustainably sourced timber, solar powered lighting for common areas, motion-sensor lighting, air quality monitors for efficient car park ventilation systems, light coloured roof and vegetated roofs. The accompanying BASIX Certificates demonstrate that the targets for sustainability are achieved through the efficient use of energy and water resources which are incorporated into the design of the building. Deep soil is located along the perimeters of the site to reinforce open space and suitable planting, including native plant species to minimise waster use. The proposal demonstrates appropriate waste management during the demolition, construction and ongoing use phases.
5. Landscape	Good design recognises that together landscape and buildings operate as an integrated and sustainable system, resulting in attractive developments with good amenity. A positive image and contextual fit of well designed developments is achieved by contributing to the landscape character of the streetscape and neighbourhood.	The proposal will provide appropriately sited landscaping elements which are of a high quality design and are capable of being sustained and maintained. The proposed landscaping will complement the presentation of the built form as viewed from the public domain and will enhance the amenity of the private and common open space areas.

	Good landscape design enhances the development's environmental performance by retaining positive natural features which contribute to the local context, co-ordinating water and soil management, solar access, micro-climate, tree canopy, habitat values and preserving green networks. Good landscape design optimises useability, privacy and opportunities for social interaction, equitable access, respect for neighbours' amenity and provides for practical establishment and long term management.	Key design features include generous ground level private open spaces, native plant species to minimise water use, planting of replacement trees and buffer screen planting to soften the boundaries.
6. Amenity	Good design positively influences internal and external amenity for residents and neighbours. Achieving good amenity contributes to positive living environments and resident well being. Good amenity combines appropriate room dimensions and shapes, access to sunlight, natural ventilation, outlook, visual and acoustic privacy, storage, indoor and outdoor space, efficient layouts and service areas and ease of access for all age groups and degrees of mobility.	The design of the proposal is considered to provide a suitable level of amenity through a carefully considered spatial arrangement and layout. In light of the future occupants within the site, as well as the surrounding properties, the proposal achieves a suitable level of internal amenity through providing appropriate room dimensions and shapes, access to sunlight, natural ventilation, outlook, visual and acoustic privacy, storage, indoor and outdoor space, efficient layouts and service areas. The spaces are accessible for the residential occupants and visitors. The communal open space areas offer a mix of active and passive spaces, outdoor dining areas and play areas including gyms and pools.
7. Safety	Good design optimises safety and security within the development and the public domain. It provides for quality public and private spaces that are clearly defined and fit for the intended purpose. Opportunities to maximise passive surveillance of public and communal areas promote safety. A positive relationship between public and private spaces is achieved through clearly defined secure access points and well lit and visible areas that are easily	The application includes an assessment of the proposal against the Crime Prevention Through Environmental Design (CPTED) guidelines. This demonstrates that the proposal has been designed to incorporate the CTPED design principles of natural surveillance, access control, territorial enforcement and space management. The proposal reflects good design that optimises safety and security. The proposal is considered to be satisfactory in terms of future residential occupants overlooking

	maintained and appropriate to the location and purpose.	communal spaces while maintaining internal privacy. The development enhances resident and public safety through its built form, opportunities for passive surveillance and lighting. The entrance and exit access points to parking levels with different users are segregated and well-defined with suitable access control points.
8. Housing diversity & social interaction	Good design achieves a mix of apartment sizes, providing housing choice for different demographics, living needs and household budgets. Well designed apartment developments respond to social context by providing housing and facilities to suit the existing and future social mix. Good design involves practical and flexible features, including different types of communal spaces for a broad range of people and providing opportunities for social interaction among residents.	The proposed mix of apartment sizes and communal spaces cater to the anticipated market and demographic demand in the area. The communal open space areas within the site are easily accessible by residents and encourage community and a sense of ownership.
9. Aesthetics	Good design achieves a built form that has good proportions and a balanced composition of elements, reflecting the internal layout and structure. Good design uses a variety of materials, colours and textures. The visual appearance of a well designed apartment development responds to the existing or future local context, particularly desirable elements and repetitions of the streetscape.	The proposed development is considered to be appropriate in terms of the composition of building elements, textures, materials, finishes and colours, and reflects the use, internal design and structure of the resultant buildings. The distinct and contemporary architecture assists in setting a high quality standard for the transitioning character of this locality and creates a desirable streetscape. In response to the site constraints (in terms of proximity to the M2, potential bushfire affectation and wind impacts) the applicant has provided detailed façade sections to demonstrate how the amenity and safety of occupants are protected. The applicant has also demonstrated that the selection of white paint on the external facades is suitable for this site and development due to its robustness. Refer to further discussion in the Assessment report.

ADG Requirement		Proposal	Compliance
Controls			
2F **Building Separation**	**Up to 4 storeys/12 m:** 12 m between habitable rooms/balconies 9 m between habitable rooms/balconies and non-habitable rooms 6 m between non-habitable rooms	Achieved	Yes
	5 to 8 storeys/up to 25 m: 18 m between habitable rooms/balconies 13 m between habitable rooms/balconies and non-habitable rooms 9 m between non-habitable rooms	Achieved	
	Nine storeys and above/over 25 m: 24 m between habitable rooms/balconies 18 m between habitable rooms/balconies and non-habitable rooms 12 m between non-habitable rooms	Achieved	
Siting the Development			
3A **Site analysis**	Satisfy the site analysis guidelines - Appendix 1.	The application is accompanied by a site analysis which examines the opportunities and constraints of the site.	Yes
3B **Orientation**	Where an adjoining property does not currently receive the required hours of solar access, the solar access is not to be reduced by more than 20%.	The surrounding site comprise a mix of mixed use, commercial and retail developments. The proposal proposes slender tower forms which foster fast moving shadows and enable corridors of sunlight to reach surrounding properties and the public domain.	Yes
	4 hours of solar access should be retained to solar collectors on neighbouring buildings.	There are no affected solar collectors.	N/A
3C **Public domain interface**	Ground level courtyards to have direct access, if appropriate.	Direct access is provided to 3 ground level apartments in Building B via the through site link.	Yes
	Ground level courtyards to be above street level for visual privacy.	Achieved. Courtyards feature suitable levels and fencing to achieve privacy.	Yes

ADG Requirement		Proposal	Compliance
	Balconies and windows to overlook the public domain.	Balconies & windows are suitably placed to view public spaces, in particular to the through site link.	Yes
	Front fences to be visually permeable with maximum 1 m height, and limited length.	Front fences not proposed.	N/A
	Entries to be legible.	Entries are clear and legible.	Yes
	Raised terraces to be softened by landscaping.	Landscape screening is provided where there are changes in level.	Yes
	Mailboxes to be located in lobbies, perpendicular to the street or within the front fence.	Mailboxes are located in the lobbies.	Yes
	Basement carpark vents not to be visually prominent.	Carpark vents are integrated into the building design.	Yes
	Substations, pump rooms, garbage storage rooms and other service rooms should be located in the basement car parks or out of view.	The substation is located at the 'rear' of the site near the vehicular entry points fronting the private road. Services are integrated into the building fronting the internal road (gas, water, fire hydrant booster and fire control room). The garbage chute, storage rooms and bulky waste rooms are located in the basement.	Yes
	Ramping for accessibility to be minimised.	Achieved. Access is at-grade.	Yes
	Durable, graffiti resistant and easily cleanable materials should be used.	Suitable materials are proposed as discussed in detail in the Design Excellence discussion in the Assessment Report.	Yes, condition recommended to be imposed regarding management of graffiti. See **Condition 51**.
	On sloping sites, protrusion of car parking should be minimised.	The development follows the slope of the land and avoids the protrusion of any parking levels.	Yes
3D Communal and public open space	Communal open space (COS) >25% of the site.	Required: 3,332.5m^2 Provided: 3,913.64m^2 (29%) COS provided on the podium and rooftops.	Yes
	Direct sunlight to >50% of communal open space for 2 hours between 9am and 3pm.	Achieved. See Drawing Nos. A0751 & A0752.	Yes
	Minimum dimension of 3m.	Dimensions are greater than 3m.	Yes
	Direct and equitable access.	Access is suitable.	Yes

ADG Requirement		Proposal	Compliance
	If communal open space cannot be located on Ground level, provide on the podium or roof.	COS areas provided on podium and rooftop.	Yes
	If communal open space can't be achieved, provide on rooftop of a common room, provide larger balconies, or demonstrate proximity to public open space and facilities.	N/A	N/A
	Range of activities (e.g., seating, BBQ, play area, gym or common room).	A range of passive and active spaces are proposed.	Yes
	Visual impacts minimised from ventilation, substations and detention tanks.	Ventilation/exhaust services are hidden from view. The substation is integrated into the façade at the 'rear' of the building fronting the private road. A detention tank is located in the basement.	Yes
	Maximise safety.	The COS is suitably designed to foster the safety of residents and visitors.	Yes
	Public Open Space, where provided, is to be well connected and adjacent to street.	N/A	N/A
3E **Deep soil zones**	Minimum area = 7% of site area. Preferred area = 15%. If over 1,500 m^2 then minimum dimensions of 6 m.	Minimum required 7% = 933.1m^2. Provided: 1,384m^2 (10.38%) Minimum dimensions are achieved.	Yes
3F **Visual privacy**	Building Separation: refer to 2F above. Separation distances between buildings on the same site depending on the type of room as to reflect Figure 3F.2.	Yes Yes	Yes
	Direct lines of sight should be avoided for windows and balconies across corners.	Direct lines of sight are avoided.	Yes
	Appropriate design solutions should be in place to separate POS and habitable windows to common areas.	POS areas are suitably separated or screened from common areas.	Yes
	Note: When adjacent to a lower density residential zone an additional 3 m rear side setback is required.	N/A Adjoining sites are also zoned B4 Mixed Use.	N/A
3G	Connect to and activate the public domain.	Access points and pedestrian links are direct and easily identifiable.	Yes

ADG Requirement		Proposal	Compliance
Pedestrian access and entries	Easy to identify access. Internal pedestrian links to be direct.	Integrated connections are provided to the lobby, COS areas and apartments.	
3H **Vehicle access**	Access points are safe and create quality streetscapes.	One vehicular access point is provided via the private road at the 'rear' of the site. Sufficient space and sight lines are provided to accommodate resident, visitors, staff and service vehicles. Internal loading areas are provided which do not obstruct vehicular movements of large vehicles, including for waste collection and deliveries. The proposed traffic management measures ensure safety. The design does not detract from the quality of the streetscape.	Yes
	The need for large vehicles to enter or turn around within the site should be avoided.	Suitable access and manoeuvring space is provided on-site for waste and loading vehicles.	Yes
3J **Bicycle and car parking**	Sites within 800 m of a railway station are to comply with the minimum requirements of the Guide to Traffic Generating Developments.		
	< 20 units 1 space for each unit An additional 0.2 space for each 2 bed unit An additional 0.5 space per 3 bed unit 0.2 space for visitor parking	N/A	N/A
	>20 units Metropolitan Sub-Regional Centres: 0.6 spaces per 1 bed unit. 0.9 spaces per 2 bed unit. 1.4 spaces per 3 bed unit. 1 space per 5 units (visitor parking)	N/A	N/A The parking rates set out in the Ryde DCP 2014 apply, as discussed below.
	At least 1 loading dock.	Loading dock provided.	Yes
	Conveniently located and sufficient numbers of bicycle and motorbike spaces.	Residential bicycle parking spaces are provided in the parking areas from Ground Level to Level 4. Motorbike spaces = Nil It is not considered necessary to provide motorbike spaces.	Satisfactory
Designing the building			
4A	Living rooms and private open space receive minimum 2 hours	The applicant states that 731/1036 (70.56%) of apartments receive at least 2 hours of direct sunlight to	Yes

ADG Requirement		Proposal	Compliance
Solar and daylight access	direct sunlight between 9 am to 3 pm in mid-winter > 70% of units. (Minimum 1m^2 of direct sunlight measures at 1m above floor level is achieved for at least 15 minutes).	their living room and private open space area.	
	Maximum number with no sunlight access < 15%.	147 (14.19%) of apartments receive no sunlight.	Yes
	Suitable design features for operable shading to allow adjustment and choice.	Roofs, terraces and slab overhangs act as horizontal shading devices to reduce high altitude direct sunlight. All facades integrate vertical screens and panels as filters to mitigate excessive exposure to heat and glare.	Yes
4B **Naturally ventilation**	All habitable rooms naturally ventilated. Number of naturally cross ventilated units in the first 9 storeys > 60%.	All habitable rooms are ventilated. 64.4% of apartments are cross ventilated (87/137 in the first 9 storeys, being Ground level to Level 8 inclusive).	Yes.
	Depth of cross over apartments < 18 m.	No cross over apartments.	N/A
	The area of unobstructed window openings should be equal to at least 5% of the floor area served.	The window areas are satisfactory.	Yes
4C **Ceiling heights**	2.7 m for habitable 2.4 m for non-habitable	Achieved. Achieved.	Yes
	For mixed use buildings, 3.3m for ground and first floor to promote future flexibility of use.	Residential lobbies are over 8m in height. Retail premises are 7.6m in height.	Yes
4D Apartment size and layout	Studio > 35m^2 1 bed > 50m^2 2 bed > 70m^2 3 bed > 90m^2 + 5m^2 for each unit with more than 1 bathroom.	- Minimum area achieved. Minimum area achieved. Minimum area achieved. Noted.	Yes
	Habitable Room Depths: limited to 2.5m x ceiling height (6.75m with 2.7m ceiling heights)	Maximum room depth achieved.	Yes
	Open Plan Layouts that include a living, dining room and kitchen – maximum 8m to a window.	All apartments are open plan layout. Maximum 8m to a window.	Yes
	Bedroom sizes (excl wardrobe space): Master - 10m^2 Other - 9m^2	Minimum are achieved.	Yes

ADG Requirement		Proposal	Compliance
	Minimum dimensions: 3m	Minimum dimensions achieved.	Yes
	Living rooms/dining areas have a minimum width of: 3.6m – Studio or 1 bedroom 4.0m – 2 or 3 bedroom	Minimum areas achieved.	Yes
	Cross-over/cross-through: minimum 4m wide.	No cross over apartments.	N/A
4E **Private open space and balconies**	Studio > 4 m^2 1 bed > 8 m^2 and 2 m depth 2 bed >10 m^2 and 2 m depth 3 bed >12 m^2 and 2.4 m depth Ground level/ podium apartments > 15 m^2 and 3m depth	- Minimum area & depth achieved. Minimum area & depth achieved. Minimum area & depth achieved. Minimum area & depth achieved.	Yes
	Extension of the living space.	The POS is an extension of the living room.	Yes
	A/C units should be located on roofs, in basements, or fully integrated into the building design.	Dedicated plant rooms are provided which ensure that air conditioning units are integrated into the building design.	Yes
4F **Common circulation and spaces**	Maximum number of apartments off a circulation core on a single level – 8 to 12.	Building A: 4-6 apartments Building B: 5-8 apartments Building C: 5-10 apartments	Yes
	Buildings over 10 storeys - maximum of 40 units sharing a single lift.	Building A: 191 apartments share 4 lifts, being a ratio of 1 lift to 48 apartments. Building B: 339 apartments share 4 lifts, being a ratio of 1 lift to 85 apartments. Building C: 506 apartments share 7 lifts, being a ratio of 1 lift to 72 apartments. (It is noted that separate lifts are provided for the retail premises, restaurant and child care centre). The applicant states that the lift design has been coordinated with the lift suppliers. The lift sizes are appropriate for the expected population. Fast-moving lifts with smart technology systems to satisfy peak hour timings and other travel requirements have been assumed. Features such as level selection are to be included.	No. However, satisfactory as discussed at **Section 6** of the Assessment report.
	Daylight and natural ventilation to all common circulation areas above ground level.	Achieved. Common circulation areas (corridors) are glazed to allow daylight to penetrate these communal spaces and are openable to enable ventilation.	Yes

ADG Requirement		Proposal	Compliance
	Corridors greater than 12m from the lift core to be articulated by more foyers, or wider areas/higher ceiling heights at apartment entry doors.	Achieved.	Yes
	Maximise dual aspect apartments and cross over apartments.	Dual aspect apartments are provided.	Yes
	Primary living room and bedroom windows are not to open directly onto common circulation spaces.	Achieved.	Yes
	Direct and legible access.	Achieved.	Yes
	Tight corners and spaces to be avoided.	Achieved.	Yes
	Well lit at night.	Achieved.	Yes
	For larger development – community rooms for owners meetings or resident use should be provided.	The proposal does not provide any meeting rooms for the purpose of community rooms. It is expected that the future strata / owners corporation will provide suitable meeting facilities off-site as needed. However, the proposal does provide various communal open space areas for resident use.	Yes
4G Storage	Studio > 4m^3 1 bed > 6m^3 2 bed > 8m^3 3 bed >10m^3 Min 50% within the apartment.	- Minimum area provided. Minimum area provided. Minimum area provided. Storage provided in the apartments and basement levels.	Yes
4H Acoustic privacy	Window and door openings orientated away from noise sources.	Window and door opening appropriately placed.	Yes
	Noise sources from garage doors, driveways, services, communal open space and circulation areas to be 3m from bedrooms.	Bedrooms are suitably separated from noisy areas.	Yes
	Separate noisy and quiet spaces.	Habitable spaces are appropriately separated.	Yes
	Provide double/acoustic glazing, acoustic seals, materials with low noise penetration.	Acoustic treatments are recommended in the accompanying DA Acoustic Assessment.	Yes
4J Noise and pollution	In noisy or hostile environments, the impacts of external noise and pollution are to be minimised	Acoustic treatments are recommended in the accompanying DA Acoustic Assessment.	Yes

ADG Requirement		Proposal	Compliance
	through the careful siting and layout of buildings. To mitigate noise transmission: Limit the number and size of openings facing the noise sources. Use double or acoustic glazing, acoustic louvres or enclosed balconies (winter gardens). Use materials with mass and/or sound insulation (e.g., solid balcony balustrades, external screens or soffits).	Refer to further discussion in the Assessment report.	
Configuration			
4K Apartment mix	Provide a variety of apartment types. Flexible apartment mix.	9 x 1 bed 0.9% 151 x 1 bed + study: 14.5% 579 x 2 bed: 55.9% 256 x 3 bed: 24.7% 41 x 4 bed: 4.0%	Yes
4L Ground floor apartments	Maximise street frontage activity. Direct street access to ground floor apartments. Ground floor apartments to deliver amenity and safety for residents.	Achieved. Achieved for Building B apartments fronting the through site link. Achieved.	Yes
4M Facades	Front building facades are to provide visual interest whilst respecting the character of the local area. Building services are to be integrated into the overall façade. Provide design solutions which consider scale and proportion to the streetscape and human scale.	Façade design achieves visual interest. Building services are appropriately placed and integrated. The scale and proportion of the podium and towers is in proportion with the streetscape and human scale.	Yes
4N Roof design	Roof treatments are to be integrated into the building design and positively respond to the street.	The design of the tower rooftops includes a mix of lift and stair overruns (which are designed to be recessive), communal open space areas, private open space areas and complementary landscaping.	Yes
4O Landscape design - site area	< 850m^2 = 1 medium tree per 50m^2 of deep soil zone. 850m^2 to 1,500m^2 = 1 large tree or 2 medium trees per 90m^2 of DSZ. >1,500m^2 = 1 large tree or 2 medium trees per 80m^2 of deep soil zone.	- - Required: 17 large trees or 35 medium trees (based on 1,384m^2 of deep soil provided at the ground level.) Provided: 79 new trees throughout the perimeter deep soil zones.	Yes

ADG Requirement		Proposal	Compliance
		Shrubs and groundcovers are also proposed. The podium also accommodates the planting of 43 new trees.	
4P Planting on structures	Provide sufficient soil volume, depth and area.	Sufficient soil is provided.	Yes
	Provide suitable plant selection.	Suitable plants are selected.	Yes
	Provide suitable irrigation and drainage systems and maintenance.	Suitable maintenance is proposed.	Yes
	Enhance the quality and amenity of communal open space with green walls, green roof and planter boxes, etc.	Communal open space is appropriately embellished.	Yes
4Q Universal design	Adaptable housing should be provided in accordance with Council's policy. Benchmark of 20% of the apartments incorporating the Liveable Housing Guideline's silver level universal design features.	Ryde DCP 2014 requires 10% of apartments to be adaptable. 104 (10%) apartments are adaptable.	Yes
	Flexible design solutions to accommodate the changing needs of occupants.	The design of the apartments and overall development foster accessibility for all users.	Yes
4R Adaptive reuse	New additions to existing buildings are contemporary and complementary and enhance an area's identity and sense of place.	N/A	N/A
4S Mixed use	Provide active street frontages and encourage pedestrian movement.	The design considers activation to all frontages and direct and legible pedestrian movements.	Yes
	Residential entries separate and clearly defined.	Separate residential lobbies are provided.	
	Landscaped communal open space to be at podium or roof level.	Achieved.	
4T Awnings and signage	Awnings to be continuous and complement the existing street character.	Achieved. Awnings are integrated into the building façade and positioned to provide variable dimensions and finishes for pedestrian protection.	N/A
	Provide protection from sun and rain, wrapped around the secondary frontage.	Achieved.	Yes
	Gutters and down pipes to be integrated and concealed.	Provided.	Yes. Also addressed in **Condition 39**.

ADG Requirement		Proposal	Compliance
	Lighting under awnings is to be provided.	Provided.	Yes
	Signage is to be integrated and in scale with the building.	N/A. No signage is proposed.	N/A
	Legible and discrete way finding is to be provided.	Provided.	Yes
Performance			
4U Energy efficiency	The development is to incorporate passive solar design. Heating and cooling infrastructure are to be centrally located (e.g., basement).	Passive solar measures are incorporated. Adequate natural light is provided to all habitable rooms. The accompanying Ecologically Sustainable Design (ESD) Report prepared by Integreco states that high efficiency heating and cooling will be used.	Yes
4V Water management and conservation	Rainwater collection and reuse. Drought tolerant plants. Water sensitive urban design measures. Detention tanks should be located under paved areas, driveways or in basement car parks.	Rainwater is reused. Provided. WSUD is incorporated into the development. A detention tank is located in the basement.	Yes
4W Waste management	Waste storage should be discreetly located away from the front of the development or in the basement. Waste cupboard within each dwelling. Waste and recycling rooms are to be in convenient and accessible locations related to each vertical core.	Waste storage is located in the basement. Each apartment is provided with a bin storage area. Waste rooms are accessible.	Yes
4X Building maintenance	The design is to provide protection from weathering. Enable ease of maintenance. The materials are to reduce ongoing maintenance costs.	The building is designed to be well maintained in the long term. Refer to further discussion in the Assessment report.	Yes

Ryde Development Control Plan (DCP) 2014

The proposal has been assessed against the following relevant sections of the Ryde DCP 2014 as follows:

Ryde DCP 2014 Control	Comment	Compliance
Part 4.5: Macquarie Park Corridor		
2.0 Vision		
'Macquarie Park will mature into a premium location for globally competitive businesses with strong links	The proposal is consistent with the vision for Macquarie Park	Yes

to the university and research institutions and an enhanced sense of identity. The Corridor will be characterised by a high-quality, well-designed, safe and liveable environment that reflects the natural setting, with three accessible and vibrant railway station areas providing focal points. Residential and business areas will be better integrated, and an improved lifestyle will be forged for all those who live, work and study in the area.'	as the development comprises well designed residential apartments and non-residential uses in close proximity to public transport, public open space, educational and commercial uses, shops and services. The development complements the character of the immediately surrounding area which is undergoing transition.	
3.2 Urban Structure Plan		
Macquarie Park Corridor will include new residential communities around the North Ryde and Macquarie University Stations while the Commercial Core will be centred on the Macquarie Park Station and Waterloo Road. Intensive development centred on Waterloo Road is proposed to transition through the Business Park areas to the lower scaled residential areas adjoining the Macquarie Park Corridor.	The site is located within the mixed use area within the urban structure plan and will contribute to the development of residential and complementary land uses that will complement the employment and educational facilities within the Macquarie Park Corridor.	Yes
4.0 Access Network		
4.1 Streets		
Provide new public streets and pedestrian connections in accordance with Figure 4.1.1 Access Network.	N/A	N/A
Lighting, paving and street furniture, landscaped setbacks and tree planting are to be provided as required in the Macquarie Park Corridor Public Domain Technical Manual.	Multi function poles with street lighting, granite paving and small street trees are required under the Macquarie Park Corridor Public Domain Technical Manual. Council's Public Domain raises no objection to the proposal subject to **Condition 58**.	Yes
4.3 Bicycle Network		
a) Provide dedicated cycle access in accordance with *Ryde Bicycle Strategy 2014* in accordance with *Figure 4.3.1 Indicative Cycleways.* b) The Regional Bicycle Network is to be implemented as on-street shared cycleways in accordance with the *Macquarie Park Public Domain Technical Manual*. The Regional Bicycle Network comprises: i. Waterloo Road; ii. Delhi Road; iii. Epping Road; iv. Lane Cove Road; v. Khartoum Road; vi. The M2; and vii. Shrimptons Creek pathways. c) The Local Bicycle Network is to be implemented as on-street shared ways in accordance with the Macquarie Park Public Domain Technical Manual. The Local Bicycle Network comprises: i. Lyon Park Road; ii. Talavera Road; iii. Wicks Road; and Proposed new roads in accordance with the Ryde Bicycle Strategy 2014.	N/A	N/A
4.4 Sustainable Transport **Travel Plans**		

A Framework Travel Plan (FTP) is required to be submitted to Council for approval together with a DA for all development that exceeds 10,000m^2 new floor space.	The proposal has a total floor space of 103,635m^2. The accompanying Transport Impact Statement provided the following objectives for a FTP: • High modal share for public transport, cycling and walking to work (target mode share split is 40%). • To ensure adequate facilities are provided at the site to enable staff and visitors to commute by sustainable transport modes. • To reduce the number of car journeys associated with business travel by staff and visitors. • To facilitate the sustainable and safe travel of new employees and visitors. • To raise awareness of sustainable transport amongst staff. The requirement for the preparation of a FTP prior to the issue of an Occupation Certificate is addressed by **Condition 206** imposed by Council's Traffic Section.	Yes
For all development the FTP must also: Identify measures in an Action Plan that will implement the 40% public transport / 60% private transport target for the journey to work, including appointing a Travel Plan Coordinator, minimising drive alone trips to work, encouraging walking, cycling, car sharing, car pooling and public transport use.	Satisfied, as above.	Yes
Parking Rates		
Bicycle parking and end-of-trip facilities are to be provided in accordance with the Ryde DCP 2014 Part 9.3 Parking Controls.	Bicycle parking areas are provided. This is consistent with the minimum requirements under Part 9.3 of the RDCP 2014, detailed below.	Yes
Parking is to be provided in accordance with the RDCP 2014 Part 9.3 Parking Controls.	The proposal complies with the required residential (maximum), visitor, car share, child care centre, and non-residential parking spaces. Refer to details in **Section 7** of the Assessment report.	Yes
Car Sharing Parking		
All parking spaces for car share schemes are to be: i. Publicly accessible 24 hours a day 7 days per week. ii. Located together in the most convenient locations. iii. Located near and with access from a public road and integrated with the streetscape	21 spaces proposed. Achieved. Suitably sited on Basement Level 4 and the Ground Level. Located in internal basement. Secure access and suitable paths of travel are provided.	Yes

through appropriate landscaping where the space is external. iv. Designated for use only by car share vehicles by signage. v. Parking spaces for car share schemes located on private land are to be retained as common property by the Owners Corporation of the site.	Achieved. Addressed by **Condition 74, 205 and 229**.	
5.0 Public Domain **5.2 New Open Space**		
Provide public open space as shown in Figure 5.1.1 Proposed Open Space Network and in accordance with sections 5.3 and 5.6 of this Part. To vary public open space requirements, refer to master plan controls under Clause 8.1 Site Planning and Staging.	The site is not required to provide any new publicly accessible open space.	N/A
5.8 Street Trees, Front Setback Tree Planting and Significant Trees		
Street trees and front setbacks must be provided in accordance with the Street Tree Key Plan in the Macquarie Park Public Domain Technical Manual, and their health guaranteed for min. 5 years.	4 trees are to be retained. 35 trees are to be removed. Replacement trees in the front setback areas are required to be planted.	Satisfactory.
At grade parking is not permitted in the front setback.	All parking is within the internal / basement car parking levels.	Yes
5.10 Art in Publicly Accessible Spaces		
Art must be included in all new development with more than 10,000m² new floor space in the amount of 0.1% of the construction cost of the works capped at $1,500,00.00.	The proposal has a floor space of 103,635m². and triggers this requirement for public art.	Yes
Art must be located within the site so as to be publicly accessible (i.e., viewed or experienced from publicly accessible places).	The site is capable of accommodating art work.	Yes
A site specific Arts Plan is to be submitted together with the development application. i. Arts project description and statement of artistic intent. ii. Thematic framework for the artwork. Suggested themes arising from the history of the Macquarie Park Corridor are: ▪ Innovation and / or technology ▪ Transport (train, bus, car) and people movement ▪ History of Macquarie Park Corridor e.g. market gardening ▪ Future of Macquarie Park ▪ Natural environment e.g. water iii. Concept drawing and descriptions of proposed art works including: ▪ Proposed location ▪ Whether or not the artwork is integrated into the building design, landscape or other site features (including the building façade, paving, lighting design, outdoor seating, play equipment and the like) ▪ Proposed use of materials with particular information to be provided on robustness, durability, and low maintenance iv. Implementation (detailing at what stage the artwork will be implemented etc) v. Preliminary construction details with particular emphasis on public safety considerations.	The accompanying Concept Public Artwork report is satisfactory. **Condition 57** requires a detailed plan to be submitted to Council for approval prior to the issue of any Construction Certificate for above ground works.	Yes
6.0 Implementation – Infrastructure, Facilities and Public Domain Improvements		

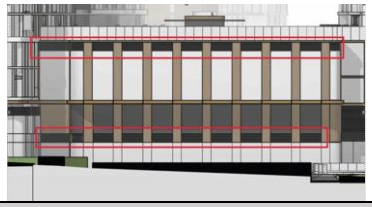
Floor Space Ratios and Height of Buildings are to comply with the Ryde LEP 2014.	Complies. Also refer to assessment against Ryde LEP 2014 in the Assessment report. FSR and height of buildings are also consistent with the Concept Plan Approval LDA2020/0187.	Yes
The public land such as the road verge adjoining a development site is to be embellished and dedicated to Council as part of any new development. The design and construction of the works are to be undertaken in accordance with the Macquarie Park Public Domain Technical Manual and Section 4 of this Part.	Public domain improvements are addressed by Council's Public Domain Officers.	Yes
7.0 Built Form **7.1 Site Planning and Staging**		
Sites are to be planned to allow for the future provision of new streets and open spaces in accordance the Figure 4.1.1 Access Network and Figure 5.1.1 Proposed Open Space Network.	New roads or pedestrian connections are not required under Ryde DCP 2014. The proposal will not impact on the provision of public open space or the proposed access networks within Macquarie Park.	N/A
7.4 Setbacks and Build-to Lines		
Minimum setbacks and build-to lines must be provided as shown Figure 7.3.2 Active Frontage and Setback Control Drawing – summarised as follows: i. Zero setbacks / build-to lines to Primary Active Frontage; ii. 5m setback to all existing and new streets unless otherwise specified; iii. 10m setback to Waterloo Road and Talavera Road; iv. 10m green setbacks to the M2 tollway and Epping Road; and v. 5m built form setback to all parks (existing and proposed – subject to providing a Riparian Corridor in accordance with the NSW Office of Water's Guidelines for Riparian Corridors on Waterfront Land).	Setbacks are consistent with the Concept Plan Approval LDA2020/0187. This includes a setback of 10m to Talavera Road, 5m to the M2 On-ramp and a 10m green setback to Waterloo Road.	Yes
Underground parking is not permitted to encroach into the front setback areas unless it can be demonstrated that the basement is designed to support significant mature trees and deep root planting.	The basement levels satisfy the above setbacks.	Yes
Awnings, canopies, balconies, sun shading and screening elements can project forward of the street setback line.	Awnings project into the setback area to provide all weather protection.	Yes
60% of the street setback area is to be soft landscaping. Existing mature trees are to be retained where possible. Paved areas are to relate to the materials and finishes of the adjacent streetscape. At grade car parking must not be located within this setback	This is achieved as a substantial deep soil zone is provided in the front setback area.	Yes
7.5 Awnings and Canopies **Entry Canopies**		
Entry canopies and discontinuous awnings may be provided to building entries not located along Active Frontages. Entry canopies may be glazed or solid, and are to be coordinated with a soffit height of minimum 3.6m.	Entry canopies are suitably located.	Yes
7.6 Rear and Side Setbacks		

Buildings are to be set back 10m from the rear boundary and 5m from a side boundary unless a proposed new road is shown on the site.	Achieved.	Yes
Awnings, canopies, balconies, sun shading and screening elements may project into the rear setback zones	N/A	N/A
Basement car park structures should not encroach into the minimum required rear or side setback zone unless the structure can be designed to support mature trees and deep root planting.	Basement levels are clear of the setbacks.	Yes
Above ground portions of basement car-parking structures are discouraged and deep soil planting is promoted.	Parking structures are sleeved within the podium levels and are screened from view. Suitable deep soil planting is provided at the front and sides of the site.	Satisfied.
Natural ground level is to be retained throughout side and rear setbacks, wherever possible. Refer to Section 8.4 Topography and Building Interface for controls.	Achieved. The perimeter of the site integrates with the existing levels and recently approved levels for the private road to the rear and through site link to the north-west.	Yes
7.7 Building Separation		
Commercial: Provide minimum 20m separation between buildings facing each other within a site. Commercial: Provide minimum 10m separation between buildings perpendicular to each other within a site. Residential: Provide building separation as per the Apartment Design Guide.	N/A N/A Achieved	Yes
7.8 Building Bulk and Design		
The floorplate of buildings above 8 storeys is not to exceed 2,000m², unless it can be demonstrated that slender building forms are achieved through courtyards, atria, articulation or architectural devices.	The floor plates are less than 2,000m². Slender tower forms are achieved.	Yes
Buildings are to address the street and are to have a street address.	The overall development addresses Talavera Road. The development is also suitably presented to the through site link to the north-west and to the M2 on-ramp.	Yes
Facade design is to i. Reflect and respond to the orientation of the site using elements such as sun shading and other passive environmental controls where appropriate. ii. Provide building articulation such as well design roof forms, expressed vertical circulation etc. iii. Express corner street locations by giving visual prominence to parts of the façade (e.g. a change in building articulation, material or colour, or roof expression).	The design incorporates passive solar controls that satisfy BASIX requirements and will contribute to thermal comfort and internal amenity for occupants. Strong articulation is provided. The podium includes features which offer a strong presence to the street corners. The residential towers (Buildings B and C) are also site at the street corners to emphasise the facades.	Yes Yes N/A Yes

iv. Integrate and co-ordinate building services such as roof plant, parking and mechanical ventilation with the overall façade and building design and be screened from view. v. Roof forms, building services and screening elements are to occur within the overall height controls. Refer to Ryde LEP 2014 for height controls. vi. Ventilation louvres and car park entry doors are to be coordinated with the overall façade design.	Building services are incorporated into the façade and screened from view. Yes The car park entry is screened from view by landscaping, screening and the entry lobby.	Yes Yes
The distance of any point on a habited floor from a source of natural daylight should not exceed 12m (such as from the core to an external window). i. Atria and courtyards are to be used to promote access to natural light, pedestrian links and slender building forms. ii. Arrange courtyards and atria to respond to street lot & solar orientation. iii. The preferred height to width ratio of atria is 3:1.	Natural daylight is provided to habitable rooms and internal corridors.	Yes
Buildings are to be designed to be flexible – car parking above the ground level is to have a floor to ceiling height of not less than 2.7m.	No above ground car parking is proposed.	N/A
8.0 Site Planning and Staging **8.2 Site Coverage, Deep Soil Areas and Private Open Space**		
A minimum 20% of a site must be provided as deep soil area. Deep soil areas must be at least 2 m deep. For the purpose of calculating deep soil areas, only areas with a minimum dimension of 20m x 10m may be included.	10.38% (933m^2) of the site is provided as deep soil area according to definition in the DCP (with a minimum depth of 2m). (It is noted that the podium planting has a depth of up to 1m only). The deep soil is not provided dimensions of 20m x 10m. However, parts of the setback areas have substantial dimensions such as: - 25m x 3-10m and 47m x 6.5m in the setback to the M2 on-ramp - 27m x 7m, 22m x 8m and 27m x 8m in the setback to Talavera Road - 20m x 7.5m to the through site link - 92.5m 4.5m to the M2 Motorway frontage The overall development is considered to offer sufficient landscaping throughout the site, including at ground level, podium level and at the communal open space areas of each tower.	No. Variation supported as discussed in **Section 6** of the Assessment report.

A minimum 20% of the site area is to be provided as Landscaped Area. Landscaped Area is defined as: Area on the site not occupied by any buildings, except for swimming pools or open air recreation facilities, which is landscaped by way of gardens, lawns, shrubs or trees and is available for use and enjoyment by the occupants of the building, excluding areas used for driveways, parking areas or drying yards.	More than 20% of the site is embellished with landscaping.	Yes
Solar access to communal open spaces is to be maximised. Communal courtyards must receive a minimum of 3 hours direct sunlight between 9 am and 3 pm on the 21st of June.	Communal open space areas are provided at the podium, terraces and rooftops, which achieve sufficient solar access.	Yes
Appropriate shading is to be provided so that communal spaces are useable during summer.	Shading has been incorporated into the design of communal open spaces. These spaces are considered to be usable during summer.	Yes
Communal open spaces are to incorporate the primary deep soil area where possible.	Due to the podium and tower form of the development, COS areas are not provided in the deep soil areas, with the exception of the green buffer strip which adjoins the through site link to the north-west. This design is consistent with the ADG and is satisfactory in this instance.	Satisfactory
Landscaping is to contribute to water efficiency and effective stormwater management. Landowners are to consult with Council for requirements to address stormwater quality.	Landscaping and stormwater management are considered acceptable. Recycled water is to be used for irrigation.	Yes
8.3 Planting on Structures		
Provide optimum conditions for plant growth by providing appropriate irrigation and drainage methods. Design planters to provide the largest possible volume of soil, in accordance with the recommended standards outlined in the DCP. Tree / Canopy diameter / Soil Volume / Soil Depth / Soil Area Large / 16m / 150m^3 / 1.3m / 10m x 10m Medium / 8m / 35m^3 / 1m / 6mx6m Small / 4m / 9m^3 / 800mm / 3.5m x 3.5m Shrubs / - / - / 500-600mm / - Ground Cover / - / - / 300-450mm / - Turf / - / - / 100-300mm / - .	Planting on structures is proposed at the podium level and the terrace and rooftop communal open space areas. Council's Consultant Landscape Architect has reviewed the proposal, and no objection.	Yes
8.4 Topography and Building Interface		
Level changes across sites are to be resolved within the building footprint. i. Where buildings are built to the street boundary (i.e. zero setbacks, refer to Section 7.4 Setbacks and Build-to Lines), a level transition must be provided between the building and the adjacent footpath. This level must be maintained for a minimum depth of 10 m into the building.	N/A	Yes

ii. Where buildings are set back from the street boundary, entries are to be provided at street level wherever possible. An accessible path of travel is to be provided from the street through the main entry door of all buildings. Where necessary, stairs and ramps are to be integrated with the landscape design of front setbacks.	The podium levels step down with the slope of the land and appropriate accessible paths of travel are provided which ensure access to the residential lobbies, restaurant, retail premises and child care lobby. Achieved.	
Natural ground level is to be retained for a zone of 4m from the side and rear property boundaries. Retaining walls, cut and fill are not permitted within this zone. The maximum height of retaining walls within the front, side and rear setbacks is not to exceed 1.2 m.	Suitable ground levels are achieved with regard to natural ground level, as well as recent approvals for the Stage 1 component of the site (including the through site link) and the private access road along the side and rear of the site. Retaining structures are avoided as the podium levels and landscaped setback areas cater to the change in levels.	Yes
Publicly accessible open spaces under private ownership (courtyards, forecourts) must be provided at footpath level. Where level changes cannot be avoided due to topography, the finished level of the open space must not exceed 1.2 m above footpath level.	Access to forecourts (such as the 'Arrival Plaza' at the southern corner) are suitably catered for by the use of ramps and landscaped setback areas cater to the change in levels.	Yes
8.5 Site Facilities		
Residential: Provide either communal or individual laundry facilities to each dwelling, and at least one external clothes drying area. The public visibility of this area should be minimised. Clothes drying is only permitted on balconies that are permanently screened from view from the public domain. Provide storage to dwellings in accordance with SEPP 65 requirements. Lockable mail boxes are to be provided in a location visible from the public domain. Mailboxes are to be integrated with the design of building entries and to Australia Post standards.	Each dwelling has an internal laundry. **Condition 227** is recommended to be imposed restricting clothes drying on balconies, where visible from the public domain. Storage is provided in accordance with the ADG. Mail boxes are provided in the lobbies. **Condition 177** is recommended requiring the design and access to the mail boxes to be in accordance with the requirements of Australia Post.	Yes
8.6 Vehicular Access		
Vehicular access is not permitted along streets identified as 'Active Frontages' (refer to Section 7.3 Active Frontages).	Vehicular access is not proposed along Talavera Road.	Yes
Where practicable, vehicle access is to be from secondary streets.	Vehicular access is via the private access road at the rear (via the M2 on-ramp along the south-east boundary of the site).	Yes
Potential pedestrian/vehicle conflict is to be minimised by: i. limiting the width and number of vehicle access points ii. ensuring clear site lines at pedestrian and vehicle crossings	A dedicated entry and egress vehicular access point is provided. Clear sight lines are achieved.	Yes

iii. utilising traffic calming devices iv. separating and clearly distinguishing between pedestrian and vehicular accessways	Not required. Separate access is achieved for pedestrians and vehicles.	
The appearance of car parking and service vehicle entries is to be improved by: i. locating or screening garbage collection, loading and servicing areas visually away from the street ii. setting back or recessing car park entries from the main façade line iii. avoiding black holes in the façade by providing security doors to car park entries iv. where doors are not provided, it is to be ensured that the visible interior of the car park is incorporated into the façade design and material selection and that building services pipes and ducts are concealed, and v. returning the façade material into the car park entry recess for the extent visible from the street as a minimum.	 Loading is contained within the sleeved parking areas. Achieved. Achieved. A security door is provided. Recommended to be addressed in **Condition 1**.	Yes
The width of driveways is to be determined in accordance with the requirements of Ryde DCP 2014 and the relevant Australian Standards.	The driveway widths satisfies the relevant Australian Standards and satisfy the use of the development and its scale for residential and non-residential access purposes.	Yes
8.7 Onsite Parking **Basement parking**		
Basement parking areas should be located directly under building footprints to maximise opportunities for deep soil areas unless the structure can be designed to support mature plants and deep root plants.	Achieved	Yes
Basement parking areas must not extend forward of the building line along a street.	Achieved	Yes
Along active frontages, basement parking must be located fully below the level of the footpath. Refer to Section 7.3 Active Frontages.	Parking is not visible from Talavera Road.	Yes
Basement parking should be contained wholly beneath ground level along public streets.	Achieved.	Yes
Where this cannot be achieved due to topography, the parking level must protrude no more than 1.2 m above ground level for no more than 60% of the building frontage along a public street (Refer to Figures 8.7.1 and 8.7.2).	Achieved. See above.	N/A
Ventilation grills or screening devices of car park openings are to be integrated into the overall façade and landscape design of the development.	Basement vents and horizontal exhaust risers are integrated into the podium façade, outlined in red below (see Elevation drawing A1082). 	Yes
8.8 Fencing		
Fencing is not permitted on the perimeter boundary of sites. Security should be provided within buildings.	No fencing is proposed along the street boundary.	Yes
9.0 Environmental Performance		

9.1 Wind Impact		
Buildings shall not create uncomfortable or unsafe wind conditions in the public domain which exceeds the Acceptable Criteria for Environmental Wind Conditions. Carefully locate or design outdoor areas to ensure places with high wind level are avoided. All applications for buildings over 5 storeys in height shall be accompanied with a wind environment statement. For buildings over 9 storeys and for any other building which may be considered an exposed building shall be accompanied by a wind tunnel study report. Refer to Council for documentation and report requirements. Calculation rules – refer to the DCP for acceptable criteria for environmental wind conditions.	The accompanying Wind Environment Assessment and subsequent modelling report prepared by Windtech recommends treatment strategies to address wind impacts. This is discussed in detail in **Section 6** of the Assessment report. These recommendations were also considered by the Design Integrity Panel. The recommendations demonstrate that the outdoor spaces are appropriately located and the building will not create uncomfortable or unsafe wind conditions in the public domain. Refer to **Conditions 37 and 169**.	Yes
9.2 Noise and Vibration		
An Acoustic Impact Assessment report prepared by a suitably qualified acoustic consultant is required to be submitted with all development applications for commercial, industrial, retail and community buildings, with the exception of applications minor building alterations. Development is to comply with all relevant statutory regulations.	The accompanying DA Acoustic Report prepared by Acoustic Logic has been reviewed by Council's Environmental Health Officer and no objection is raised.	Yes
Where light industrial and commercial development adjoins residential development, the use of mechanical plant equipment and building services will be restricted and must have appropriate acoustic insulation. Loading and unloading facilities must not be located immediately adjacent to residential development.	N/A The proposed development is mixed use residential and non-residential and adjoins existing/approved residential developments. Achieved. Loading facilities are accessed via the private road at the rear of the site and contained within the sleeved basement.	Yes
Retail premises must limit any spruiking and the playing of amplified music or messages so as not to disturb the amenity of other public and private places.	Noted. This application does not seek approval for the occupation of the retail premises.	N/A
Air conditioning ducts shall not be situated immediately adjacent to residential development.	Dedicated plant rooms are provided throughout each residential level of the development. This ensures that adjacent residential development is not adversely impacted. **Condition 243** is recommended to ensure that appropriate noise attenuation measures are implemented, if required.	Yes
9.4 Soil Management		
Development is to be designed and constructed to integrate with the natural topography of the site to minimise the need for excessive sediment disturbance and prevent soil loss.	The proposal steps down with the slope of the land. The proposed Sediment and Erosion Management Plans	Yes

Effective site management and maintenance practices are to be followed to prevent soil loss. Ensure that suspended Solid concentrations in stormwater leaving the site do not exceed more than 50 mg/litre. An Erosion and Sediment Control Plan (ESCP), prepared by a suitably qualified environmental engineer, is required to be submitted in support of all development proposals requiring development consent under the Ryde Local Environmental Plan, (other than for minor building modifications) including: Demolition; Excavation; Trenching and Building. The ESCP must make reference to the entire construction and post construction period, and all devices must be installed prior to commencement of any demolition or construction works on-site.	ensure that appropriate soil management is to be implemented.	

Ryde DCP 2014 Control	Comment	Compliance
Part 7: Environment		
Part 7.1: Energy Smart, Water Wise		
(a) Energy efficiency performance report (b) Details of hot water system, insulation, energy and water efficient appliances and water storage. (c) Site Analysis.	The application is accompanied by a BASIX, Thermal Comfort and Ecologically Sustainable Development Report and the required information is detailed on the plans.	Yes
Part 7.2 Waste Minimisation and Management		
2.3 All Developments		
(a) Developments must provide space for onsite waste containers.	Provided in the basement.	Yes
(b) Compliant size of storage areas and number of storage containers.	Size and number of storage containers is provided.	
(c) Space to be provided for bulk waste where appropriate.	Provided in the basement.	
(d) Storage of green waste provided.	There is no provision for green waste. The Owners Corporation will be responsible for maintenance of the landscaping in common areas. See **Condition 25**.	
(e) Stored within the boundaries of the site.	Provided in the basement.	
(f) Site Waste Minimisation and Management Plan (SWMMP) required.	SWMMP submitted.	
(g) Located to provide easy, direct and convenient access.	Suitably located.	
(h) Storage areas visible from the street are to complement the design of the development and streetscape.	Storage areas are within the basement and screened from view.	
(i) No incineration devices.	No incineration devices.	
(j) Collection point identified on plan.	Shown on plans.	
(k) Path for wheeling bin collection not less than 14:1.	Achieved.	
(l) Complies with Australian Standard AS 2890.2-2002 Parking Facilities – Part 2: Off-street commercial vehicle facilities.	Complies with AS.	
(m) Complies with the Building Code of Australia and relevant Australian Standards.	Complies with BCA & AS.	

2.4 Demolition and Construction		
(a) Demolition must comply with AS and WorkCover.	N/A No demolition proposed.	Yes
(b) Demolition work plan submitted.	N/A No demolition proposed.	
(c) Dedicated area on site for stockpile of materials taking into account environmental factors and amenity impacts.	Plan shows suitable area for stockpile of waste.	
(d) Construction materials to be stored away from the waste materials on site.	Yes, condition recommended (**Condition 68**).	
2.9 Mixed Use Developments (in addition to 2.3 above)		
(a) Separate waste and recycling storage, handling and collection systems for the residential and commercial areas.	Achieved.	Yes
(b) Waste management systems to efficiently operate without conflict between the systems within the development and surrounding land uses.	Achieved.	Yes
(c) Easily accessible to users and waste collection staff.	Achieved.	Yes
(d) The waste management systems are to comply with the relevant requirements for those developments under this part.	Achieved.	Yes
(e) Noise from the operation of waste collection is not to impact on residents, with consideration given to siting of equipment and the collection area, and appropriate measures to mitigate potential daily noise impacts.	Achieved. Waste services are provided within the sleeved basement.	Yes
(f) Commercial tenants to be discouraged from using residential waste facilities (e.g., via signage, separate keys and locking systems).	Achieved. Separate non-residential waste storage and collection catered for.	Yes
(g) Details to be clearly identified in the site waste minimisation and management plan.	Achieved.	Yes
Part 8: Engineering		
Part 8.1 Construction Activities		
2.1.2 Erosion and sediment control plan to be submitted.	Erosion and sediment control plans provided.	Yes
Part 8.2 Stormwater and Floodplain Management		
2.0 Stormwater Drainage. To ensure the collection and conveyance of stormwater runoff on property is undertaken in a manner to preserve the amenity of the land, prevent damage to property and without jeopardising public safety.	Reviewed by Council's Development Engineer and City Works section. Satisfactory, subject to conditions. See **Conditions 64-67 & 75-76**.	Yes
3.0 Water Sensitive Urban Design	WSUD measures proposed including treating water prior to discharging, a rainwater tank to be used for irrigation and 1 car wash bay, filter swales to protect stormwater runoff from external landscaped areas.	Yes
4.0 Flooding and Overland Flow Applies to land identified as "Flood Planning Area" on the Flood Planning Map within Ryde LEP 2014, and other land at or below the flood planning level.	The site is identified as at risk of flooding. Refer to **Section 6.1** of the Assessment report for further discussion. Council's Development Engineering and City Works section have reviewed the proposal and no objection is raised.	Satisfactory.

Part 8.3 Driveways		
2.0 Design Standards. Layout and design of the driveway and parking facility shall take into account the design standards.	The proposal is consistent with the design standards.	Yes
3.2 Disused footway crossings that become redundant are to be removed and footway restored.	The crossing is to be replaced and footway restored.	Yes
4.0 Designing internal access roads and parking spaces		
4.1 (a) General: The design of all parking spaces, circulation roads and manoeuvring areas on the property must confirm to the minimum requirements of AS2890.1-2004 and AS2890.2-2002.	The proposal is consistent with the design criteria.	Yes
4.2 Design of Parking Spaces		
(a) Parking spaces and driveway widths for all vehicles shall comply with A.S.2890. (b) Vehicles (85th percentile) to enter and leave designated parking space in a single 3 point turn manoeuvre. A 99th percentile vehicle for disabled vehicles. (c) Enter and leave in a forward direction.	Suitable widths are provided. Suitable space for manoeuvring is provided. All vehicles enter and exit in a forward direction.	Yes
4.3 Gradient for Cars and Small Rigid Trucks		
(a) The access driveway from the centreline of the public road to the parking space is to be designed to minimise entry hazards from the road, account for pedestrian safety and prevent scraping of vehicles using the access.	Driveway access is safe and includes specific traffic safety measures including ensuring that sight lines are not obstructed where the driveway and private access road meet the public road.	Yes
Part 9.2 Access for People with Disabilities		
An accessible path of travel from the street to unit. 10% apartments adaptable.	The proposal is accompanied by a BCA Compliance Report prepared by J2 BCA Consulting which demonstrates that the development is capable of complying with the BCA. An accessible path of travel is provided. 104 (10%) adaptable apartments are provided.	Yes

Part 9.3 Parking Controls

The proposal complies with the required residential (maximum), visitor, car share, child care centre, and non-residential parking spaces.

Refer to details in Section 7 of the Assessment report.

Part 9.5 Tree Preservation

Three trees within the site are proposed to be retained (Trees 3, 4 and 9). Two trees located along the boundary shared with RMS are proposed to be retained (Trees 7 and 8). 12 trees within the site are proposed to be removed (Trees 18, 19, 20, 21, 22, 23, 27, 28, 30, 31, 32 and 44). Two exempt trees along the common boundary with RMS are to be removed (exempt Trees 5 and 6). It is noted that other trees on the site have since been removed under previous applications.

Council's Landscape Architect and Arborist has considered the trees on site and agrees with the trees proposed to be removed and retained, with the exception of Trees 31 and 32 which are Sydney Blue Gums and are required to be retained

Refer to the detailed assessment at **Section 6** of the Assessment report.

Overall, the proposal provides a favourable balance between the built form, retention of existing trees on the site and adjoining sites and the planting of new trees and landscaping which is in keeping with the desired future character of the locality to foster a green environment.

4.0 Development Applications c. Trees removed as a consequence of Development Application approval must be replaced, in accordance with Section 6 of the Urban Forest Technical Manual, to effectively maintain the Urban Forest canopy.	The proposal is for: 3 trees to be retained. 12 trees in the site to be removed. 79 replacement trees are to be planted in the perimeter deep soil areas and 43 new trees on the podium site. This is supported, with the exception of Trees 31 & 32 which are required to be retained.	Yes, subject to **Condition 105**.
5.0 Construction Activities a. All reasonable efforts are to be taken to protect trees from damage during construction. b. Tree protection zones are to be fenced off to ensure that they are not disturbed and to prevent vehicles, building materials, and refuse being placed in those locations. c. Fences for tree protection zones are to be erected prior to any demolition or construction work. d. Trees that are to remain on the site are to be protected against damage during construction. e. Installation of Services: Trenches for services shall be located outside the dripline of all trees that must be retained on the property and all trees on adjoining public and private lands.	Tree protection measures are provided for trees to be retained on the site and adjoining properties. Conditions of consent have been provided by Council's Consultant Landscape Architect. See **Conditions 108-112**.	Yes